Final Environmental Impact Report

Trails at Lyons Canyon Project State Clearinghouse No. 2022060346

JULY 2025

Prepared for:

LOS ANGELES COUNTY DEPARTMENT OF REGIONAL PLANNING

LA COUNTY PLANNING

320 West Temple Street
Los Angeles, California 90012

Prepared by:

DUDEK

225 South Lake Avenue, Suite 225-M210
Pasadena, California 91101

Printed on 30% post-consumer recycled material.

Table of Contents

SECTION **PAGE NO.**

1 Introduction 1-1
1.1 Purpose 1-1
1.2 Environmental Review Process 1-1
1.2.1 Notice of Preparation and Scoping Meeting 1-1
1.2.2 Draft Environmental Impact Report 1-1
1.2.3 Final Environmental Impact Report 1-2
1.2.4 Los Angeles County Regional Planning Commission Hearing 1-2
1.3 Organization of Final EIR 1-2

2 Response to Comments 2-1
2.1 Introduction 2-1
2.2 List of Commenters 2-1
2.3 Lead Agency Responses 2-4
2.4 Topical Response-1: Fire Protection and Safety 2-6
2.4.1 Efficacy of Defensible Space and Ignition Resistant Construction to Develop Fire Safe Communities 2-6
2.4.2 Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires 2-13
2.4.3 Project Compliance with Applicable Regulations 2-17
2.4.4 Project Wildfire Evacuation Modeling 2-34
2.5 Comments and Responses 2-41
Response to Comment Letter A1 2-47
Response to Comment Letter A2 2-53
Response to Comment Letter A3 2-60
Response to Comment Letter A4 2-63
Response to Comment Letter A5 2-69
Response to Comment Letter A6 2-87
Response to Comment Letter A7 2-97
Response to Comment Letter A8 2-125
Response to Comment Letter A9 2-133
Response to Comment Letter A10 2-149
Response to Comment Letter O1 2-152
Response to Comment Letter O2 2-193
Response to Comment Letter O3 2-199
Response to Comment Letter O4 2-214
Response to Comment Letter O5 2-216
Response to Comment Letter O6 2-218

Response to Comment Letter 07 2-227
Response to Comment Letter 08 2-238
Response to Comment Letter 09 2-240
Response to Comment Letter 010 2-243
Response to Comment Letter 011 2-247
Response to Comment Letter 012 2-250
Response to Comment Letter 013 2-255
Response to Comment Letter 014 2-259
Response to Comment Letter 015 2-271
Response to Comment Letter 016 2-283
Response to Comment Letter 017 2-287
Response to Comment Letter 018 2-293
Response to Comment Letter 019 2-297
Response to Comment Letter 020 2-300
Response to Comment Letter 021 2-305
Response to Comment Letter 023 2-359
Response to Comment Letter 024 2-365
Response to Comment Letter 025 2-377
Response to Comment Letter 026 2-395
Response to Comment Letter 027 2-413
Response to Comment Letter 028 2-425
Response to Comment Letter 029 2-453
Response to Comment Letter 030 2-477
Response to Comment Letter 031 2-501
Response to Comment Letter I1 2-523
Response to Comment Letter I2 2-528
Response to Comment Letter I3 2-530
Response to Comment Letter I4 2-532
Response to Comment Letter I5 2-534
Response to Comment Letter I6 2-539
Response to Comment Letter I7 2-543
Response to Comment Letter I8 2-549
Response to Comment Letter I9 2-554
Response to Comment Letter I10 2-556
Response to Comment Letter I11 2-559
Response to Comment Letter I12 2-563
Response to Comment Letter I13 2-567
Response to Comment Letter I14 2-571
Response to Comment Letter I15 2-574
Response to Comment Letter I16 2-576
Response to Comment Letter I17 2-579

Response to Comment Letter I18 2-582
Response to Comment Letter I19 2-584
Response to Comment Letter I20 2-586
Response to Comment Letter I21 2-588
Response to Comment Letter I22 2-590
Response to Comment Letter I23 2-592
Response to Comment Letter I24 2-594
Response to Comment Letter I25 2-596
Response to Comment Letter I26 2-598
Response to Comment Letter I27 2-600
Response to Comment Letter I28 2-603
Response to Comment Letter I29 2-607
Response to Comment Letter I30 2-610
Response to Comment Letter I31 2-612
Response to Comment Letter I32 2-615
Response to Comment Letter I33 2-618
Response to Comment Letter I34 2-620
Response to Comment Letter I35 2-623
Response to Comment Letter I36 2-629
Response to Comment Letter I37 2-632
Response to Comment Letter I38 2-635
Response to Comment Letter I39 2-640
Response to Comment Letter I40 2-642
Response to Comment Letter I41 2-645
Response to Comment Letter I42 2-650
Response to Comment Letter I43 2-653
Response to Comment Letter I44 2-662
Response to Comment Letter I45 2-667
Response to Comment Letter I46 2-677
Response to Comment Letter I47 2-683
Response to Comment Letter I48 2-693
Response to Comment Letter I49 2-699
Response to Comment Letter I50 2-704
Response to Comment Letter I51 2-707
Response to Comment Letter I52 2-713
Response to Comment Letter I53 719
Response to Comment Letter I54 2-723
Response to Comment Letter I55 2-727
Response to Comment Letter I56 2-733
Response to Comment Letter I57 2-737
Response to Comment Letter I58 2-741

Response to Comment Letter I59 2-745
Response to Comment Letter I60 2-771
Response to Comment Letter I61 2-781
Response to Comment Letter I62 2-797
Response to Comment Letter I63 2-803
Response to Comment Letter I64 2-809
Response to Comment Letter I65 2-815
Response to Comment Letter I66 2-821
Response to Comment Letter I67 2-825
Response to Comment Letter I68 2-833
Response to Comment Letter I69 2-838
2.6 References 2-839

3 Revisions to the Draft EIR 3-1
3.1 Introduction 3-1
3.2 Revisions to the Draft EIR 3-1
Table of Contents 3-1
Appendices, Page TOC-xiii 3-1
Acronyms and Abbreviations 3-1
Acronyms, Page ACR-iv 3-1
Executive Summary 3-2
ES.4, Environmental Impacts and Mitigation Measures, Pages ES-14 through ES-94 3-2
Chapter 1, Introduction 3-22
Section 1.3.1, Notice of Preparation, Page 1-7 3-22
Chapter 2, Environmental Setting 3-23
Section 2.2, Project Site, Page 2-4 3-23
Section 2.5.2, Public Services, Page 2-8 3-23
Chapter 3, Project Description 3-23
Section 3.1, Project Summary, Page 3-2 3-23
Section 3.2.1, Land Use Entitlements, Page 3-6 3-24
Section 3.2.1, Land Use Entitlements, Page 3-7 3-24
Section 3.6.1, Discretionary Actions, Page 3-21 3-25
Section 3.6.2, Other Permits and Approvals, Page 3-22 3-25
Figure 3-2, Vesting Tentative Tract Map No. 83301, Page 3-27 3-26
Section 4.4, Biological Resources 3-26
Section 4.4.5, Impact Analysis, Pages 4.4-54 and 4.4-55 3-26
Section 4.4.5, Impact Analysis, Page 4.4-57 3-27
Section 4.4.7, Mitigation Measures, Page 4.4-69 3-28
Section 4.4.7, Mitigation Measures, Page 4.4-75 3-30
Section 4.4.7, Mitigation Measures, Page 4.4-79 3-31
Section 4.4.7, Mitigation Measures, Page 4.4-81 3-33

Section 4.4.7, Mitigation Measures, Page 4.4-90 3-41
Section 4.4.7, Mitigation Measures, Page 4.4-92 3-42
Section 4.4.7, Mitigation Measures, Pages 4.4-93 and 4.4-94 3-42
Section 4.8, Greenhouse Gas Emissions 3-44
Section 4.8.4, Methodology, page 4.8-27 3-44
Section 4.8.5, Impact Analysis, Pages 4.8-30 and 4.8-31 3-45
Section 4.8.5, Impact Analysis, page 4.8-34 3-47
Section 4.9, Hazards and Hazardous Materials 3-48
Section 4.9.1, Existing Conditions, Page 4.9-1 3-48
Section 4.9.5, Impact Analysis, Page 4.9-21 3-49
Section 4.10, Hydrology and Water Quality 3-49
Section 4.10.1, Existing Conditions, Page 4.10-2 3-49
Section 4.10.5, Impact Analysis, Page 4.10-22 3-49
Section 4.10.5, Impact Analysis, Pages 4.10-23 3-50
Section 4.10.5, Impact Analysis, Page 4.10-26 3-51
Section 4.10.5, Impact Analysis, Page 4.10-27 3-51
Section 4.10.5, Impact Analysis, Page 4.10-28 3-52
Section 4.10.5, Impact Analysis, Pages 4.10-29 and 4.10-30 3-52
Section 4.10.5, Impact Analysis, Pages 4.10-33 3-52
Section 4.10.5, Impact Analysis, Pages 4.10-33 and 4.10-34 3-53
Section 4.10.6, Cumulative Impact Analysis, Pages 4.10-34 and 4.10-35 3-53
Section 4.10.6, Cumulative Impact Analysis, Pages 4.10-36 and 4.10-37 3-54
Section 4.10.6, Cumulative Impact Analysis, Page 4.10-38 3-54
Section 4.10.9, References, Pages 4.10-40 and 4.10-41 3-55
Section 4.11, Land Use and Planning 3-55
Section 4.11.5, Impact Analysis, Pages 4.11-15 through 4.11-42 3-55
Section 4.12, Mineral Resources 3-66
Section 4.12.1, Existing Conditions, Page 4.12-3 3-66
Section 4.12.5, Impact Analysis, Page 4.12-7 3-66
Section 4.12.5, Impact Analysis, Page 4.12-8 3-66
Section 4.15, Public Services 3-67
Page 4.15-1 3-67
Section 4.15.1, Existing Conditions, Page 4.15-6 3-67
Section 4.15.1, Existing Conditions, Pages 4.15-10 and 4.15-11 3-68
Section 4.15.1, Regulatory Requirements, Page 4.15-22 3-68
Section 4.15.5, Impact Analysis, Page 4.15-41 3-68
Section 4.15.5, Impact Analysis, Page 4.15-42 3-69
Section 4.15.5, Cumulative Impact Analysis, Pages 4.15-50 and 4.15-51 3-69
Section 4.15.9, References, Pages 4.15-55 and 4.15-56 3-70
Section 4.19, Utilities and Service Systems 3-70
Section 4.19.5, Impact Analysis, Page 4.19-22 3-70

Section 4.19.5, Impact Analysis, Page 4.19-23 3-70
Section 4.19.5, Impact Analysis, Pages 4.19-28 and 4.19-29 3-71
Section 4.19.9, References, Page 4.19-38 3-71
Section 4.20, Wildfire 3-71
Section 4.20, Wildfire, Page 4.20-1 3-71
Section 4.20.5, Impact Analysis, Page 4.20-26 3-71
Section 4.20.6, Cumulative Impact Analysis, Page 4.20-54 3-72
Section 4.20.7, Mitigation Measures, Pages 4.20-62 and 4.20-63 3-72
Chapter 6, Alternatives 3-74
Section 6.4.3, Previously Approved Project—Lyons Canyon Ranch Project, Page 6-29 3-74
Section 6.4.3, Previously Approved Project—Lyons Canyon Ranch Project, Page 6-32 3-74
Section 6.5.3, Alternative C – Reduced Footprint Alternative, Page 6-64 3-74
Appendix B-1, Air Quality and Greenhouse Gas Emission Calculations 3-74
Appendix C, Biota Report 3-75
Section 5.5, Impacts to Jurisdictional Waters, pages 98-99 3-75
Section 5.7, Impacts to SEA Protected Trees, page 101 3-76
Section 6.1, MM-BIO-1: On-Site Habitat Preservation, pages 109 through111 3-76
Section 6.2, MM-BIO-2: Off-Site Habitat Preservation, pages 111 through 119 3-78
Section 6.3, MM-BIO-3: Habitat Mitigation and Monitoring Plan, pages 119 through 123 3-87
Section 6.4, MM-BIO-4: Biological Monitoring, page 124 3-91
Section 6.6, MM-BIO-6: Invasive Species Prevention, page 125 3-92
Section 6.7, MM-BIO-7: Landscaping Plan, pages 125 and 126 3-93
Section 6.8, MM-BIO-8: Homeowners' Association Covenants, Conditions, and Restrictions, page 126 3-93
Section 6.9, MM-BIO-9: Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation, pages 127 and 128 3-94
Section 6.10, MM-BIO-10: Crotch Bumble Bee Habitat Preservation and Minimization Measures, pages 128 and 129 3-95
Section 6.11, MM-BIO-11: Special-Status Wildlife Relocation Plan, page 130 3-97
Section 6.12, MM-BIO-12: Nesting Bird Avoidance, pages 130 and 131 3-97
Section 6.13, MM-BIO-13: Lighting Plan, pages 131 and 132 3-98
Section 6.14, MM-BIO-14: Jurisdictional Waters Compensation, page 132 3-99
Section 6.15, MM-BIO-15: Roosting Bat Survey, page 132 3-99
Section 6.16, MM-BIO-16: SEA Protected Trees Replacement / Compensation, page 132 and 133 3-99
Appendix M-2, Wildfire Evacuation Plan 3-100
Section 4.1, Evacuation Assumptions and Scenarios, Page 20 3-100
Section 4.1, Evacuation Assumptions and Scenarios, Page 22 3-101
Section 4.2, Potential for Project Evacuation Impact on Existing Conditions, Pages 26 and 27 3-101

4 Mitigation Monitoring and Reporting Program 4-1

FIGURES

4.13-3 Area of Lot 22 In Which Mobile Construction Equipment Noise Mitigation is Required 4-43
4.20-2 Fuel Modification Plan 4-45

TABLES

2.1. List of Commenters 2-1
1 Consistency with Applicable Regulations 2-17
2 Mitigation Measures 2-26
Vegetation Communities Preserved on the Project Site 4-4
In-Kind Vegetation Communities Preserved Off-Site in the Santa Susana Mountains and Simi Hills Significant Ecological Area 4-17
Out-of-Kind Vegetation Communities Preserved Within the Santa Susana Mountains and Simi Hills Significant Ecological Area 4-18
Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area 4-19
Assessor's Parcels Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067 4-20
Mitigation Credits Required to be Purchased from a County-Approved Mitigation Bank 4-21
Summary of Individual Species Replacement Quantities 4-25
Table within MM-4.4-9: Impacts to SEA Resource Category Communities and Proposed Preservation for the Trails at Lyons Canyon Project Using APNs 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067 4-41

ATTACHMENTS

A Appendix B-1, Air Quality and GHG Emissions Calculations
B Additional Transportation Analysis
C Figure3-2B Vesting Tentative Tract Map No 8330
D Evacuation Analyisis Tech Memo

INTENTIONALLY LEFT BLANK

1 Introduction

1.1 Purpose

In accordance with the California Environmental Quality Act (CEQA) as amended (California Public Resources Code Sections 21000, et seq.) and State CEQA Guidelines (California Code of Regulations Title 14, Chapter 3, Sections 15000, et seq.), the Los Angeles County Department of Regional Planning (County) has prepared this Final Environmental Impact Report (EIR) for the proposed Trails at Lyons Canyon Project (Project). As required by Section 15132 of the State CEQA Guidelines, this Final EIR consists of the following: the Draft EIR and appendices (incorporated herein by reference); copies of comment letters received on the Draft EIR during the formal public review period; a list of persons, organizations, and public agencies commenting on the Draft EIR; responses to all comments received on the Draft EIR during the formal public review period; and revisions to the Draft EIR. Additionally, the Mitigation Monitoring and Reporting Program is included in this Final EIR.

1.2 Environmental Review Process

As defined in CEQA Guidelines Section 15050, the County is the Lead Agency responsible for preparing the EIR for the Project.

1.2.1 Notice of Preparation and Scoping Meeting

In accordance with Section 15082(a) of the State CEQA Guidelines, the County circulated a Notice of Preparation (NOP) for a 30-day public review. The public review period began on June 16, 2022, and ended on July 15, 2022. The NOP was distributed to the State Clearinghouse, public agencies, special districts, responsible and trustee agencies, and other interested parties; and filed with the Los Angeles County Clerk. A copy of the NOP and comment letters received during the public review period are included as Appendix A-1 and Appendix A-2 of the Draft EIR, respectively. NOP Comments are summarized in Table 1-1, Notice or Preparation and Comment Letters Summary, in Chapter 1, Introduction of the Draft EIR. Additionally, pursuant to California Public Resources Code Section 21083.9 and Section 15082(c) of the State CEQA Guidelines, a virtual Scoping Meeting was held on June 29, 2022, at 6:00 PM that was made available through the County's website at: https://planning.lacounty.gov/ceqa/notices, and a specific link to the scoping meeting was included in the NOP. A video recording of the Scoping Meeting is available through the County's website at: https://case.planning.lacounty.gov/case/view/2021-001195. Scoping Meeting comments are summarized in Table 1-2, Scoping Meeting Comments Summary, in Chapter 1, Introduction, of the Draft EIR.

1.2.2 Draft Environmental Impact Report

The Draft EIR was circulated for public review on December 10, 2024, for a period of 60 days ending on February 7, 2025. A Notice of Completion (NOC) and Notice of Availability (NOA) of the Draft EIR was submitted to the State Clearinghouse; posted at the County Clerk's office; and published in *The Signal* newspaper. The NOA was also printed on County letterhead and mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously requested such notice in writing. In addition, a thumb drive with electronic copies of the Draft EIR and appendices were made available for public review at the Stevenson Ranch Library (25950 The Old Road Stevenson Ranch, CA 91381). Hard copies of the Draft EIR and appendices were

made available for public review at the County's main office (320 W. Temple Street, Los Angeles, CA 90012). The NOA, Draft EIR, and appendices were also posted to the County's website: https://bit.ly/3xYekD8.

In light of the recent Hughes Fire (which constituted an "unusual circumstance" under Section 15105(a) of the State CEQA Guidelines), the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. The County continued to accept additional comment letters through March 18, 2025. As such, the public review period for this Draft EIR exceeded the 45-day minimum required per Section 15105(a) of the State CEQA Guidelines. An updated NOA alerting the public of the formal public review period extension was submitted to the State Clearinghouse; posted at the County Clerk's office; and published in *The Signal* newspaper. The updated NOA was also printed on County letterhead and mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously requested such notice in writing. In addition, hard copies of the Draft EIR and appendices were relocated from the County's main office to the Stevenson Ranch Library. The updated NOA was also posted to the County's website: https://bit.ly/3xYekD8.

1.2.3 Final Environmental Impact Report

The Final EIR addresses the comments received on the Draft EIR during the public review period and includes minor changes to the text of the EIR in accordance with comments that necessitated revisions. This Final EIR is made available to the Regional Planning Commission for potential certification as the environmental document for the proposed Project. All agencies who commented on the Draft EIR will be provided with a written response, pursuant to State CEQA Guidelines Section 15088(b). The Final EIR is posted on the County's website at: https://bit.ly/3xYekD8.

The minor clarifications, modifications, and editorial corrections that were made to the Draft EIR are shown in Chapter 3, Revisions to the Draft EIR, of this Final EIR. None of the revisions that have been made to the Draft EIR resulted in new significant impacts; none of the revisions resulted in a substantial increase in the severity of an environmental impact identified in the Draft EIR; and none of the revisions brought forth a feasible Project alternative or mitigation measure that is considerably different from those set forth in the Draft EIR. Furthermore, the revisions do not cause the Draft EIR to be flawed such that it precludes meaningful public review. As none of the criteria for recirculation set forth in State CEQA Guidelines Section 15088.5 have been met, and recirculation of the Draft EIR is not warranted.

1.2.4 Los Angeles County Regional Planning Commission Hearing

A public hearing will be held before the Los Angeles County Regional Planning Commission on Wednesday, July 30, 2025. The Notice of Public Hearing before the Regional Planning Commission was published in *The Signal* newspaper and on the County's website (https://bit.ly/3ZRaFSg). At the conclusion of this public hearing, the Los Angeles County Regional Planning Commission may certify the EIR; adopt findings relative to the Project's environmental effects after implementation of mitigation measures; and approve, deny, or modify the Project.

1.3 Organization of Final EIR

This Final EIR is organized in the following sections:

- **Chapter 1, Introduction.** This chapter describes CEQA requirements, the environmental review process, and organization of this Final EIR.

- **Chapter 2, Response to Comments.** This chapter provides a list of agencies, organizations, and interested persons commenting on the Draft EIR, copies of comment letters received during the public review period, and individual responses to written comments.
- **Chapter 3, Revisions to the Draft EIR.** This section contains revisions to the Draft EIR text as a result of comments received by agencies, organizations, and interested persons as described in Chapter 2, and/or errors and omissions discovered subsequent to release of the Draft EIR for public review.
- **Chapter 4, Mitigation Monitoring and Reporting Program.** This chapter provides the full Mitigation Monitoring and Reporting Program for the Project and reflects any revisions provided in Chapter 3, Revisions to the Draft EIR. The Mitigation Monitoring and Reporting Program lists all of the proposed mitigation measures by environmental issue and identifies the action required, mitigation timing, responsible party for implementing the mitigation measure, and monitoring agency responsible for ensuring each mitigation measure is implemented.

INTENTIONALLY LEFT BLANK

2 Response to Comments

2.1 Introduction

State California Environmental Quality Act (CEQA) Guidelines Section 15088 states that "The lead agency shall evaluate comments on environmental issues received from persons who reviewed the draft EIR and shall prepare a written response. The Lead Agency shall respond to comments raising significant environmental issues received during the noticed comment period and any extensions and may respond to late comments."

The Los Angeles County Department of Regional Planning (County) circulated the Draft Environmental Impact Report (EIR) for the Trails at Lyons Canyon Project (Project) for public review on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire (which constituted an "unusual circumstance" under Section 15105(a) of the State CEQA Guidelines), the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. The County continued to accept additional comment letters through March 18, 2025. As such, the public review period for this Draft EIR exceeded the 45-day minimum required per Section 15105(a) of the State CEQA Guidelines. This chapter of the Final EIR includes a copy of each comment letter provided during the public review period for the Draft EIR, and the County's responses to those comments.

2.2 List of Commenters

As shown in Table 2-1, List of Commenters, the County received a total of 110 comment letters on the Draft EIR during the extended public review period, which included the 91-day review period in addition to letters received for an additional 8 days. Comment letters are organized into three categories: Category A (written comments from public agencies), Category O (written comments from organizations), and Category I (written comments from individuals). For reference purposes, each comment letter has been assigned a corresponding letter based on category and numbered in order of date received, starting with the earliest date. In turn, each specific comment within a particular letter has also been numbered and bracketed. For example, the third comment in letter "A3" is identified as "Comment A3-3." The corresponding response uses the same convention, so the reader can match each response to the comments to which it refers. The bracketed letter precedes responses to the letter's comments.

Table 2.1. List of Commenters

Comment Letter	Name	Type	Date Received
Agencies			
A1	Los Angeles County Sanitation Districts	Local Agency	January 3, 2025
A2	Santa Monica Mountains Conservancy	Local Agency	February 4, 2025
A3	LA County Library	Local Agency	February 5, 2025
A4	Los Angeles County Sheriff's Department	Local Agency	February 6, 2025
A5	California Department of Transportation, District 7	State Agency	February 7, 2025
A6	California Department of Conservation, Geologic Energy and Management Division	State Agency	February 26, 2025
A7	Los Angeles Regional Water Quality Control Board	Regional Agency	March 6, 2025
A8	California Department of Fish and Wildlife, South Coast Region	State Agency	March 10, 2025

Table 2.1. List of Commenters

Comment Letter	Name	Type	Date Received
A9	City of Santa Clarita	Local Agency	March 10, 2025
A10	LA County Library	Local Agency	March 18, 2025
Organizations			
01	Yuhaaviatam of San Manuel Nation	Organization	January 6, 2025
02	Endangered Habitats League	Organization	January 9, 2025
03	Sierra Club, Santa Clarita Valley Group	Organization	January 26, 2025
04	Holiday Inn Express and Suites Valencia – Santa Clarita	Organization	January 30, 2025
05	Team SchlickArt	Organization	January 30, 2025
06	SCV Locations Inc.	Organization	January 30, 2025
07	Santa Clarita Organization for Planning and the Environment (SCOPE)	Organization	January 31, 2025
08	Friends of the Santa Clara River	Organization	February 1, 2025
09	Sierra Club, Santa Clarita Valley Group	Organization	February 2, 2025
010	Sierra Club, Angeles Chapter, Wildland Urban Wildfire Committee	Organization	February 3, 2025
011	Summit West Public Relations & Marketing	Organization	February 3, 2025
012	Endangered Habitats League	Organization	February 3, 2025
013	California Native Plant Society, Los Angeles/Santa Monica Mountains Chapter	Organization	February 4, 2025
014	Princess Creative Experiences & Design, Princess Cruises	Organization	February 4, 2025
015	Advocates for the Environment	Organization	February 5, 2025
016	California Wildlife Foundation/California Oaks	Organization	February 7, 2025
017	Thompson Reality Advisors	Organization	February 7, 2025
018	Yuhaaviatam of San Manuel Nation	Organization	February 10, 2025
019	Santa Clarita Valley Chamber of Commerce	Organization	February 10, 2025
020	American Family Funding	Organization	February 10, 2025
021	Law Offices of Marcella A. Bell	Organization	February 10, 2025
022	Endangered Habitats League	Organization	February 13, 2025
023	Endangered Habitats League	Organization	February 21, 2025
024	Heritage Oak Enterprises, LLC	Organization	February 28, 2025
025	Santa Clarita Organization for Planning and the Environment (SCOPE)	Organization	March 6, 2025
026	Friends of the Santa Clara River	Organization	March 7, 2025
027	SCV Oak Conservancy	Organization	March 7, 2025
028	California Native Plant Society, Los Angeles/Santa Monica Mountains Chapter	Organization	March 10, 2025
029	Center for Biological Diversity	Organization	March 10, 2025
030	Sierra Club, Angeles Chapter, Wildland Urban Wildfire Committee	Organization	March 10, 2025

Table 2.1. List of Commenters

Comment Letter	Name	Type	Date Received
O31	Santa Clarita Organization for Planning and the Environment (SCOPE)	Organization	March 10, 2025
Individuals			
I1	Thomas Brown	Individual	January 24, 2025
I2	Jennifer Mateus	Individual	February 2, 2025
I3	Kevin Corcoran	Individual	February 2, 2025
I4	James Kiswardy	Individual	February 2, 2025
I5	Shannon Mast	Individual	February 3, 2025
I6	Deanna Hanashiro	Individual	February 3, 2025
I7	Nancy Strong	Individual	February 3, 2025
I8	Annette Lucas	Individual	February 4, 2025
I9	Catherine Flynn	Individual	February 4, 2025
I10	Stephanie Correnti	Individual	February 4, 2025
I11	Randy Martin	Individual	February 4, 2025
I12	Roger Haring	Individual	February 5, 2025
I13	Stacy Fortner	Individual	February 5, 2025
I14	Jennifer Jenkins	Individual	February 5, 2025
I15	Janet Kubler	Individual	February 6, 2025
I16	Kathy Gonzales	Individual	February 6, 2025
I17	Glenda Nowakowski	Individual	February 6, 2025
I18	James Kiswardy	Individual	February 6, 2025
I19	Gina M. Romero	Individual	February 6, 2025
I20	Mike Monroe	Individual	February 7, 2025
I21	Victoria Reaves	Individual	February 7, 2025
I22	Chris Koll	Individual	February 7, 2025
I23	Mitchell Van Bekkum	Individual	February 7, 2025
I24	Matthew Cormier	Individual	February 7, 2025
I25	Michele Figg	Individual	February 7, 2025
I26	Sue Arellano	Individual	February 7, 2025
I27	Kevin MacDonald	Individual	February 10, 2025
I28	Marisa Smith	Individual	February 11, 2025
I29	Kamilla Kravets	Individual	February 12, 2025
I30	Kathleen Lindsey	Individual	February 12, 2025
I31	Robert Allison	Individual	February 13, 2025
I32	David Mault	Individual	February 13, 2025
I33	Christy Ito	Individual	February 14, 2025
I34	Maria Bueno-Dailey	Individual	February 15, 2025
I35	Phyllis Montello	Individual	February 15, 2025
I36	Naomi Privett	Individual	February 16, 2025
I37	Brett Rateaver	Individual	February 16, 2025
I38	Louis Romero	Individual	February 18, 2025

Table 2.1. List of Commenters

Comment Letter	Name	Type	Date Received
I39	Teresa Jones	Individual	February 19, 2025
I40	Saleh Hawatmeh	Individual	February 20, 2025
I41	Ivy and Rodel Manalang	Individual	February 20, 2025
I42	Susan Stone	Individual	February 21, 2025
I43	Susan Stone	Individual	February 22, 2025
I44	John Powell	Individual	February 22, 2025
I45	G. Wise	Individual	February 22, 2025
I46	Kim Engeseth-Gmai	Individual	February 24, 2025
I47	Kathy Gonzales and Norma Conklin	Individual	February 26, 2025
I48	Tiffany Hedgpeth	Individual	March 2, 2025
I49	Lynne Winner	Individual	March 6, 2025
I50	Kevin Stulp	Individual	March 6, 2025
I51	Ingrid Van Dorn	Individual	March 6, 2025
I52	Thomas Brennan	Individual	March 6, 2025
I53	Karen Piolatto	Individual	March 7, 2025
I54	Celebrity Manger ICM	Individual	March 7, 2025
I55	Judith Adams	Individual	March 7, 2025
I56	Becky Christensen	Individual	March 7, 2025
I57	Rachelle	Individual	March 7, 2025
I58	Gigi Maki	Individual	March 7, 2025
I59	Wendy Pedlow	Individual	March 8, 2025
I60	Martin Tripp	Individual	March 8, 2025
I61	Michael Ramos	Individual	March 8, 2025
I62	Petition Opposing Lyons Ranch Project	Individual	March 8, 2025
I63	June Wells	Individual	March 8, 2025
I64	Pamela Stickles	Individual	March 9, 2025
I65	Kimberly Wedding	Individual	March 9, 2025
I66	Catherine Flynn	Individual	March 10, 2025
I67	Bonnie Traylor	Individual	March 10, 2025
I68	Julie Benson Krumrine	Individual	March 12, 2025
I69	Jennifer Peterson	Individual	March 14, 2025

2.3 Lead Agency Responses

All responses to comments on the Draft EIR represent a good-faith, reasoned effort to address the environmental issues identified by the comments. Responses focus on comments that raise important environmental issues or pertain to the adequacy of the analysis in the Draft EIR or to other aspects pertinent to the potential effects of the Project on the environment pursuant to CEQA. Comments that address policy issues, opinions, or other topics beyond the purview of the Draft EIR or CEQA are noted as such for the public record. Where appropriate, the information

and/or revisions suggested in the comment letters have been incorporated into the Final EIR. All revisions made to the content of the Draft EIR are included in Chapter 3, Revisions to the Draft EIR, of this Final EIR.

All comments received on the Draft EIR have been carefully reviewed and evaluated for any environmental issues received from public agencies, individuals, and organizations. After careful review, it was determined that none of the public comments on the Draft EIR would require significant new information to be added such that a recirculation of the Draft EIR would be required, either in its entirety or in part. State CEQA Guidelines Section 15088.5, Recirculation of an EIR Prior to Certification, describes the thresholds for recirculation of an environmental impact report. Pursuant to Section 15088.5, a lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR but before certification. New information can include a disclosure showing that a new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented, a substantial increase in the severity of an environmental impact, a feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project (but the project's proponents decline to adopt it), or the Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. The Draft EIR revisions and information presented in this document do not constitute significant new information, as defined in State CEQA Guidelines Section 15088.5; this information merely clarifies, amplifies and makes insignificant modifications to an adequate EIR. Information presented in the Draft EIR, and this document supports this determination. As such, the Draft EIR is not required to be recirculated.

2.4 Topical Response-1: Fire Protection and Safety

In response to comments made during the 91-day public review period for the Project's Draft EIR, this Topical Response addresses issues related to the following topics: (1) Efficacy of Defensible Space and Ignition Resistant Construction to Develop Fire Safe Communities, (2) Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires, (3) Project Compliance with Applicable Regulations, and (4) Project Wildfire Evacuation Modeling. For more information on the Project's potential to exacerbate existing wildfire hazards as evaluated pursuant to the CEQA, the reader is directed to the Fire Protection Plan (FPP) (see Appendix M-1 of the Draft EIR) and Wildfire Evacuation Plan (WEP) (see Appendix M-2 of the Draft EIR); Section 4.20, Wildfire, of the Draft EIR; and Chapter 3, Revisions to the Draft EIR, of this Final EIR, which includes revisions to the WEP and Section 4.20, Wildfire of the Draft EIR.

The Project is located within a designated Very High Fire Hazard Severity Zone (FHSZ) within a State Responsibility Area (SRA), as mapped by the California Department of Forestry and Fire Protection (CAL FIRE). Furthermore, the Project site is in an area described as a wildland–urban interface (WUI), which is the area where wildland and urban development intersect (see Draft EIR Section 4.20.1, Existing Conditions). Historical wildfire trends indicate that the most active wildfire risk season covers the summer and fall months, from late May to late September, with an intense fall season characterized by fewer but larger fires, extending from September to early November. However, there are risks of wildfire throughout the year in southern California, as evidenced by the recent Palisades and Eaton fires, which occurred in January 2025.

Therefore, the Project has been designed with the objective of constructing a new, fire-resistant community that is suitable for its location within a Very High FHSZ. The Project would be required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires, such as with ignition-resistant building materials and defensible space requirements. Furthermore, as evaluated through the Draft EIR, the Project would be required to implement mitigation measures, which would be additionally protective, going above and beyond the regulatory requirements.

2.4.1 Efficacy of Defensible Space and Ignition Resistant Construction to Develop Fire Safe Communities

2.4.1.1 New Subdivisions are More Resilient and Defensible to Wildfire Hazards

The Project's proposed development of higher-density housing with highly maintained, irrigated vegetative landscaping between homes and the perimeter fuel modification zones (FMZs) would keep an active flaming front at great distances from structures and support defensibility for the existing fire environment. These features make the Project substantially more resilient to potential fire hazards than low- to medium-density developments where vegetation is allowed to grow between structures. This point is well-established in relevant scientific literature. For example, Dr. Alexandra D. Syphard, Ph.D., a fire expert who has studied fire conditions in San Diego County, has consistently maintained that low- to medium-density developments that are interspersed or inter-mixed with wildland vegetation have the highest risk of fire-related damage (Syphard et al. 2013; Syphard et al. 2017; Syphard

et al. 2020).[1] Although her research occurred in San Diego County, the general topography and vegetation present in the study areas is similar to those found across Southern California, including Santa Clarita and the greater Los Angeles County.

The Project would remove wildland fuels and replace it with ignition resistant buildings, irrigated landscaping, and paved streets. The FMZs would be maintained on a regular basis to provide additional areas of protection by removing flashy fuels. The Project would also restore over 15 acres of ignition prone upland mustard in the On-site Conservation Area to oak woodlands. As such, the Project is expected to provide an overall decrease in wildfire ignition in the vicinity of the Project and would be expected to be a barrier to wildfire spread.

As discussed below in Section 2.4.1.2, there are studies that provide evidence that lower density developments are more likely to be affected by wildfire than newer clustered master planned communities, such as the proposed Trails at Lyons Canyon Project. Section 3.2, Project Characteristics, of the Draft EIR, discusses that this Project would be a clustered development in the northeast portion of the Project site, which includes a fuel managed perimeter interface with the adjacent open space. Table 3-1, Lot Summary for Vesting Tentative Tract No. 83301, of the Draft EIR, shows that the residential density of the proposed Project is 2.18 dwelling units per acre (du/ac)[2] when considering the development of 510 units across 223.34 gross acres of the Project site. However, the residential uses are clustered within 41.47 gross acres in the northeast portion of the site, which results in residential density of 12.3 du/acre within the 41.47 gross acres where the residential dwelling units would be located. For comparison, the development project that was previously approved on the Project site included 186 residential units, resulting in 0.83 du/acre density for the Project site, and 3.45 du/ac when considering residential lot acreage.[3] When comparing the two development proposals, the proposed Project is 163% denser than the previously approved project.

Figures 4 through 6 of Section 2.2.5, Analysis of Wildfire Risk from Adding New Residents, of the FPP, demonstrate examples of low, moderate, and higher density developments in the WUI, and the fire protective features higher density development maintains.

Thus, the Draft EIR and its associated FPP (see Appendix M-1 of the Draft EIR) accurately reflect Dr. Syphard's long-held position that low-density development, when inter-mixed with wildland fuels, are at the highest risk of fire damage. Dr. Syphard asserts that higher density and clustered development built with ignition-resistant building materials and defensible space requirements (as incorporated into the proposed Project), fare much better because defensible space reduces the flame length and spread of fire, and ignition resistant construction limits ember intrusion and increases the time it takes for a structure to catch fire. The private access road is provided located along the perimeter of the Project site would provide emergency responder access, including the fire department,

1 Dr. Syphard is a research scientist who has spent nearly 3 decades analyzing the drivers and impacts of global change, particularly focusing on wildfire across diverse ecosystems. Dr. Syphard has concentrated intensely on wildfire risk to communities and identifying the best approaches for balancing fire risk reduction with biodiversity conservation. Her current research focuses on the interactions among wildfire patterns, fire-climate relationships, land use change and urban growth, vegetation dynamics, invasive species, social vulnerability, and species' range shifts (CBI 2024).

2 Through the use of State Density Bonus Law, the Project is able to exceed the two dwelling units per acre development standard of the H2 designation.

3 An EIR (State Clearinghouse No. 2003031086) was certified in August 2009 for the Lyons Canyon Ranch Project (hereinafter, referred to as the "Previously Approved Project") located at the same Project site (Los Angeles County Project Tentative Tract Map [TTM] No. 53653, Conditional Use Permit R200500088, and Oak Tree Permit ROAK200500039). The Previously Approved Project included 93 single-family detached residential units, 93 senior units, approximately 129 acres of natural open space lots, and 1.39 acres of recreation lots. An additional 46.67 acres would remain as disturbed open space (i.e., graded cut and fill-slope areas, recreation areas, detention/debris basin lots, and on-site trails), for a total of approximately 170 acres of total on-site disturbed/undisturbed open space.

to the developed and undeveloped portions of the Project site. Additionally, this road would serve as a fire break between the Project and the adjacent wildland area around the Project site. Furthermore, the residential development is proposed to be strategically located on the flattest portion of the Project site, away from topographic features that pose a high fire risk, such as ridgelines and canyons.

Ignition-resistant construction materials and other fire-hardening measures significantly improve the ability of structures (and people) to survive wildfires. For example, in an article titled, "The Importance of Building Construction Materials Relative to Other Factors Affecting Structure Survival During Wildfire," International Journal of Disaster Risk Reduction, Vol. 21 (2017), Dr. Syphard states that the results of her study "confirm the expectation that building construction and design play important roles in structure survival during large wind-driven fire events in San Diego County." In this same article, Dr. Syphard recommends that owners of older homes retrofit them with the most current and stringent fire-hardening components, such as double-paned windows. Dr. Syphard then draws the following conclusion:

> "The data in our study show that newer buildings are more likely to be constructed using the materials and design that our data show to be empirically associated with structural survival. This is an encouraging sign for new construction in the region, and it helps to explain why structure age was one of the most important variables in the landscape analysis. Clearly, building ordinances adopted by [San Diego] county are effectively changing the design of new housing to become more fire resilient."

Furthermore, the Los Angeles Times newspaper article, "Could this Irvine neighborhood be the blueprint for a more fire-resistant L.A.?" (Flemming 2025), summarizes the case study of Orchard Hills, a master-planned community constructed in 2014 under the requirements of California Building and Fire Codes (CBC and CFC), respectively including CBC Chapter 7A and the defensible space requirements of CFC Chapter 49. These codes provide very strict construction and vegetation requirements that have evolved over approximately 20 years to include a focus on ignition resistance in the WUI. Chapter 7A was added to the CBC in 2008, following multiple large fires that caused significant destruction. During the 2020 Silverado Fire, the Orchard Hills community faced similar conditions to those of the 2025 Palisades and Eaton Fires. Of the experts interviewed for this newspaper article, the author interviewed Sean Doran, a fire captain with the Orange County Fire Authority and Bobby Simmons, the city of Irvine's emergency services manager. The article details how the Orchard Hills community's FMZ and ignition resistant construction features (e.g., boxed eaves, Class A roofs, etc.) created a fire-hardened community, which ultimately was able to evacuate safely and lose no structures during the fire, despite other areas that lost five structures, and incurred damage to 11 structures during the 2020 Silverado Fire.

Moreover, as Palisades resident and architect Michael Kovac shares in the Orange County Register article, "California rules will require more fire-resistant homes in Palisades, Altadena," his home was the only one on his block to survive the 2025 Palisades Fire, which he attributes to a focus on building a fire safe home (Orange County Register 2025). The architect describes the ignition resistant features of his Palisades home, which are similar to those that the Project will incorporate, and required by current building and fire codes. The article goes on to cite a memorandum to the California Building Industry Association that provides an analysis of State Fire Marshal property loss data and found that homes built after 2010, "on average, for the nine worst property-loss fires dating back to 2017, only approximately 1% of the homes and apartments destroyed, damaged, or affected were new dwellings (built after 1/1/10) even though new dwellings make up roughly 7% of the state's total housing stock" (Orange County Register 2025; CBIA 2022a).

Similar to these examples, the Trails at Lyons Canyon Project includes a multi-layered fire protection system that is based on ignition-resistant buildings and landscapes, adherence to stringent fire and building codes, as detailed in Table 1, Consistency with Applicable Regulations, below, including fire-fighting water availability,[4] and adequate emergency response timeframes.[5] The Trails at Lyons Canyon Project, like other new, master-planned communities, should not be compared with older, less restrictive communities that were not in compliance with newer building and fire codes, nor conducting ongoing maintenance for fuel modification. Current codes have been developed through the International Code Council by committees to review significant fires, identify factors contributing to loss, and adopt codes to mitigate such factors.[6] Other new, nearby communities built to newer codes, such as those in the Castaic community during the 2025 Hughes Fire, have performed extremely well during wildfires.

Additionally, when assessing the drivers of human caused ignitions in Southern California, powerlines, arson, and equipment use were identified to be the dominant form of human-caused ignitions (Syphard and Keeley 2015). As stated in Section 4.20, Wildfire, of the Draft EIR, the Project will underground powerlines, and have included MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction Related Fire Prevention Measures to reduce the risk of ignition during the construction of the Project.

Because of their compliance with updated and more stringent building codes, newer subdivisions and master planned communities are therefore easier to defend than older subdivisions. Deploying fire fighters to new communities offers safe refuge due to the fire safety features, including wide FMZs and ignition-resistant structures. These requirements have become part of the fire and building codes because they were found to be effective and important for protecting structures from ignition in post-fire assessments conducted by public agencies charged with fire protection. This is why newer communities are considered for contingency temporary refuge (Rancho Santa Fe Fire Protection District 2008). Newer subdivisions in California are built up to the most recent CBC and CFC requirements.

Following destructive fires in the early 2000's, assessment teams were formed by CAL FIRE and local fire agencies to evaluate every home that was damaged or lost as well as, for the first time, homes that were saved. The most influential wildfires were the 2003 Cedar Fire (270,686 acres), 2007 Witch Fire (162,070 acres), and the 2007 Zaca Fire (240,358 acres). The resulting data revealed that most homes lost were the result of embers penetrating the attic or other openings, and that the buildings or homes lost were typically situated amongst heavy, unmaintained landscape fuels (Cal OES 2023). Saved homes were strongly linked to maintained fuel buffers and newer, more resistant construction materials and methods such as ember resistant vents, boxed eaves, and other methods described in the Project's FPP (see Appendix M-1 of the Draft EIR). These fire protection features are effective, as evidenced by numerous newer master planned communities in Southern California that have been subjected to wildfire and performed well. Examples in southern California include Cielo in Rancho Santa Fe and 4S Ranch in San Diego during the 2007 Witch Fire (FEMA 2021), and others in Orange, Los Angeles, Ventura, and other counties. Older communities, not constructed to or compliant with newer building and fire codes (CBC Chapter

4 Draft EIR Appendix L-1, Hydraulic Analysis and Draft EIR Appendix L-7, Water Availability Form, prepared by Santa Clarita Valley Water Agency

5 Per Draft EIR Appendix M-1, the Project would meet the County's response time standard for suburban areas with a total estimated response time of 7 minutes and 19 seconds from Station 124. As stated in Section 4.20, Wildfire, the County utilized a different method to calculate response times that resulted in 8 minutes and 36 seconds; however, the LACoFD determined that a new fire station is not required for the Project, and that payment of the Fire Facility Fee would ensure that the Project would not substantially impact the services from Station 124.

6 https://cdn-www-v2.iccsafe.org/products-and-services/i-codes/code-development/.

7A and CFC Chapter 49) throughout California continue to be the largest contributors to fire-destroyed homes, as occurred during the 2018 Camp Fire and 2025 Palisades and Eaton Fires.[7]

2.4.1.2 Project-Specific Fire-Resistant Design Features

As discussed above, the proposed Project is designed with defensibility against fire as a fundamental tenet, with the objective of constructing a new community built to last. The following list provides a summary of the various design features and measures the Project would employ to facilitate a defensible and fire-safe development that reduces risks to life and property of its residents due to potential wildfire exposure.

Construction Features and Materials

The following lists fire-resistant design features relating to the construction of the Project.

- The Project meets the current Los Angeles County Fire Code, including enhanced ignition resistant construction materials and methods; CFC requirements; and State Title 14 (Fire Safe Regulations, SRA) requirements.
- The Project provides a customized FMZ around the Project perimeter in compliance with State and County standards and provides defensible space around each structure in compliance with code requirements, including site-wide landscape vegetation restrictions.
- Suppression and protection capabilities will be enhanced through the Project's contribution of $2,000,000 dollars to the Consolidated Fire Protection District of Los Angeles County to fund the purchase of two new fire engines that would enhance the emergency response capabilities for the community.
- The Project will use ignition-resistant construction materials, as required by code for development in a Very High FHSZ, to create fire-hardened structures, including:
  - Exterior walls of all structures and garages would be constructed with approved non-combustible (stucco, masonry, or approved cement fiber board) or ignition-resistant material from grade to underside of roof system. Wood shingle and shake wall covering will be prohibited. Any unenclosed under-floor areas would have the same protection as exterior walls. Per CBC, Chapter 7A, exterior wall coverings are to extend from top of foundation to the underside of roof sheathing and terminate at 2-inch nominal solid wood blocking between rafters at all roof overhangs, or in the case of enclosed eaves, terminate at the enclosure). The underside of any cantilevered or overhanging appendages and floor projections would maintain the ignition-resistant integrity of exterior walls, or the projection would be required to be enclosed to grade.
  - Per the CBC, eaves and soffits would meet the requirements of State Fire Marshal 12-7A-3 or be protected by ignition-resistant materials or non-combustible construction on the exposed underside.
  - No use of paper-faced insulation or combustible installation in attics or other ventilated areas. Exterior construction of the Project would include materials that comply with Chapter 7A of the CBC, such as noncombustible material, ignition resistant material, or fire retardant treated wood. There would be no use of plastic, vinyl (with the exception of vinyl windows with metal reinforcement and welded corners), or untreated wood on the exterior.

[7] Further evidence can be found in the Institute for Business and Home Safety Mega Fires – The Case for Mitigation (2007) report, which discusses findings from the 2007 Witch Creek Fire in Rancho Bernardo, and the National Institute of Standards and Technology publication NIST Technical Note 1796, A Case Study of a Community Affected by the Witch and Guejito Fires: Report #2 – Evaluating the Effects of Hazard Mitigation Actions on Structure Ignitions.

- All roofs would be a Class "A" listed and fire-rated roof assembly, installed per manufacturer's instructions, for approval from the County. Roofs would be made tight with no gaps or openings on ends or in valleys, or elsewhere between roof covering and decking, in order to prevent intrusion of flame and embers. Any openings on ends of roof tiles would be enclosed to prevent intrusion of burning debris. When provided, roof valley flashings would not be less than 0.019 inches (No. 26 gage galvanized sheet) corrosion-resistant metal installed over a minimum 36-inch-wide underlayment consisting of one layer of 72-pound American Society for Testing and Materials 3909 cap sheet running the full length of the valley.
- No vents in soffits, cornices, rakes, eaves, eave overhangs or between rafters at eaves or in other overhang areas. Gable end and dormer vents to be at least 10 feet from property line or provided alternative design resistant to ember penetration. Vents in allowed locations to be protected with wire mesh having no openings greater than 0.125 inches. Vent openings would not exceed 144 square inches. Vents would be designed to resist the intrusion of any burning embers or debris.
- Vents would not be placed on roofs unless they are approved for Class "A" roof assemblies (and contain an approved baffle system (such as Brandguard or O'Hagin vents) to stop intrusion of burning material) or are otherwise approved.
- Turbine vents would be prohibited.
- Exterior glazing in windows (and sliding glass doors, garage doors, or decorative or leaded glass in doors) to be dual pane with one tempered pane, or glass block or have a 20-minute fire rating. Glazing to comply with CBC Chapter 7-A.
- Any vinyl frames to have welded corners and metal reinforcement in the interlock area to maintain integrity of the frame certified to American National Standards Institute/American Architectural Manufacturers Association/National Wood Window and Door Association 101/I.S 2 97 requirements.
- Skylights to be tempered glass.
- Rain gutters and downspouts to be non-combustible. They would be designed to prevent the accumulation of leaf litter or debris, which can ignite roof edges.
- Doors to conform to SFM standard 12-7A-1 or would be of approved noncombustible construction or would be solid core wood having stiles and rails not less than 1.375 inches thick or have a 20-minute fire rating. Doors to comply with CBC, Chapter 7-A. Garage doors to be solid core 1.75-inch-thick wood or metal, to comply with code.
- Decks and their surfaces, stair treads, landings, risers, porches, balconies to comply with language in CBC, Chapter 7-A, and be ignition-resistant construction, heavy timber, exterior approved fire-retardant wood, or approved non-combustible materials.
- Decks or overhangs projecting over vegetated slopes are not permitted. Decks would be designed to resist failing due to the weight of a firefighter during fire conditions. There would be no plastic or vinyl decking or railings. The ends of decks to be enclosed with the same type of material as the remainder of the deck.
- There would be no combustible awnings, canopies, or similar combustible overhangs.
- No combustible fences to be allowed within 5 feet of structures on any lots. The first 5 feet from a structure would be non-combustible or meet the same fire resistive standards as walls.
- All chimneys and other vents on heating appliances using solid or liquid fuel, including outdoor fireplaces and permanent barbeques and grills, to have spark arrestors that comply with the County

Fire Code. The code requires that openings would not exceed 0.25 inches. Arrestors would be visible from the ground.

- Any liquid propane gas (LPG) tanks (except small barbecue and outdoor heater tanks), firewood, hay storage, storage sheds, barns, and other combustibles would be located at least 30 feet from structures, and, within the FMZ, 30 feet from flammable vegetation. There would be no flammable vegetation under or within 30 feet of LPG tanks, or tanks would be enclosed in an approved ignition-resistant enclosure with 10 feet clearance of flammable vegetation around it. In no case would a tank be closer than 10 feet from the structure (consultant recommendation). County Fire Code requires 10 feet of clearance of native vegetation, weeds, and brush from under and around LPG tanks.
- Storage sheds, barns, and outbuildings to be constructed of approved non-combustible materials, including non-combustible Class A roofs and would be subject to the same restrictions as the main structure on the lot.
- Additionally, any of the above-listed non-habitable structures (i.e., outbuildings, storage sheds, barns, separate unattached garages) that are 500 square feet or less in size and 10 or more feet from an adjacent structure would not be required to include automatic fire sprinklers. Locations, and required FMZs, would be subject to approval of County Fire Marshal and the Building Official based on size of the structure.

Water Supply

Water supply would be adequate to provide fire-fighting water resources throughout the Project site via fire hydrants and a gravity fed water tank, which would connect to community-wide system and add to available water supplies in the local water system (see Appendix L-2 and L-3 as well as Section 4.19, Utilities and Service Systems of the Draft EIR). The Project's water tank is designed to the standards and requirements of the Santa Clarita Valley Water Agency Water Master Plan, which requires 2,500 gallons per minute for 2 hours for fire-related water storage (see Appendix L-1 in Section 4.19, Utilities and Service Systems, of the Draft EIR). The Project would improve water supply availability to the Project site, which is currently undeveloped and has no water infrastructure, as compared to the existing condition. In addition, the Project would develop various off-site water infrastructure improvements, which further would assist the local water system. These improvements include:

- New Zone Valve between Newhall and Valencia in The Old Road
- 2,950 feet of 18-inch water main in The Old Road
- 4,000 feet of 12-inch water main in The Old Road
- Pump Station 4 Upgrades (within footprint of Pump Station 4):
  - 1,975 gallons per minute (gpm) firm capacity (820 gpm increase)
  - Upsize/replace 50 feet of on-site 6-inch pump station pipelines to 8-inch
  - Upsize/replace 190 feet of on-site 8-inch pump station pipelines to 10-inch
- Pump Station 5 Upgrades:
  - 1,225 gpm firm capacity (366 gpm increase) (Appendix L-1 of the Draft EIR).
  - The Project will implement the Project-specific FPP, which has been reviewed by the Los Angeles County Fire Department (LACoFD).

Other Safety Features

The Project includes fire-resistant design features to reduce potential ignition sources, maintain safe firefighter access and occupant ingress and egress routes, prevent fire encroachment, and provide awareness to the Project occupants, as described below.

- The Project will underground proposed electrical lines, which is a leading ignition source for large wildfires.
- All on-site roads would be constructed to County standards.
- The Project would include a 28-foot-wide private access road that will be used for LACoFD access, as well as two primary ingress/egress roadways for residential traffic to access The Old Road and Interstate (I) 5.
- The Project would be a more defensible higher density development when compared to less dense developments, as discussed above in Section 2.4.1.1, New Subdivisions are More Resilient and Defensible to Wildfire Hazards.
- The Project's proposed site plan creates large ignition resistant landscape/fuel break, which enables law enforcement and fire personnel options and flexibility for firefighting and evacuation or temporary refuge.
- Through implementation of MM-4.20-1, the Homeowner's Association (HOA) will actively pursue resident education and awareness to ensure an aware and ready populace, including registration with Ready LA County.

2.4.2 Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires

As presented in Appendix M-1, Trails at Lyons Canyon Project Fire Protection Plan (FPP), of the Draft EIR, an analysis was conducted to evaluate fire behavior variables and to objectively predict flame lengths, intensities, and spread rates for five modeling scenarios. These scenarios include predictions of point-specific fire behavior based on wind direction and speed, fuel moisture, terrain, and vegetation types. Modeling scenario locations were selected to better understand different fire behavior that may be experienced on or adjacent to the site.

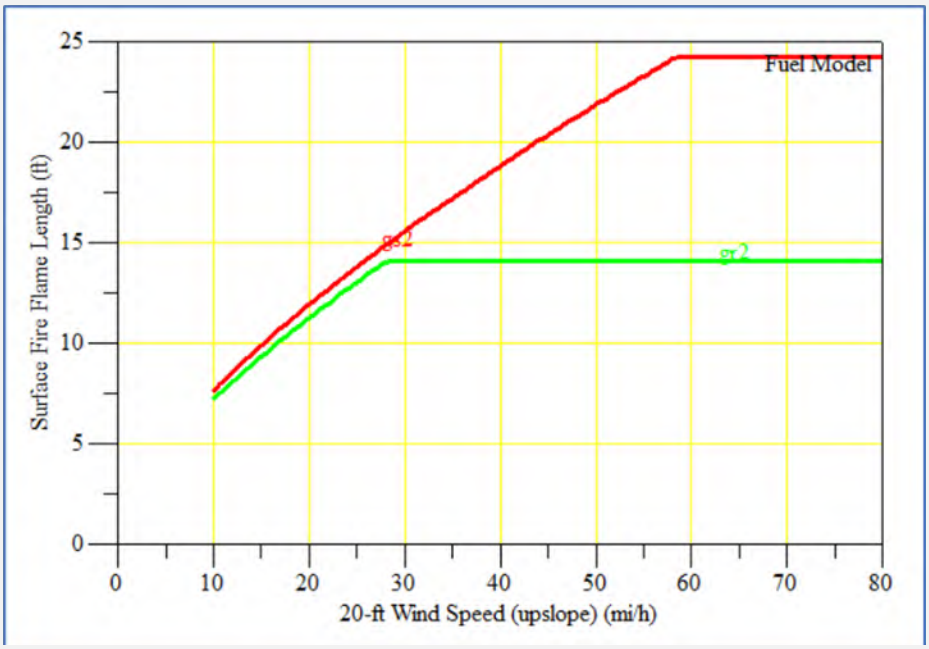
Local weather conditions were assessed using historical weather observations from nearby Remote Automatic Weather Stations (RAWS), specifically the Newhall Pass RAWS. Data from the RAWS was evaluated from August 1 through November 30 for each year between 1998 and 2020 (extent of available data record) for 97th percentile weather conditions and from June 1 through September 30 for each year between 1998 and 2020 for 50th percentile weather conditions.

2.4.2.1 Explanation of 50th and 97th Percentile Weather Conditions

Weather data from the Newhall Pass RAWS was analyzed using the FireFamilyPlus software package to determine weather and fuel moisture inputs for 50th and 97th percentile weather. 50th percentile weather represents the median weather value and depicts typical or average conditions for a given location over a specified time frame. The 50th percentile weather conditions reflect a typical wildfire event that happens under normal or expected conditions, such as an average summer wildfire with an onshore wind direction. Conversely, 97th percentile weather conditions are utilized as an industry standard to represent extreme or unusually high weather events, often used to represent rare but significant occurrences (IFTDSS 2025; NWCG 2025). In the context of Southern California, 97th percentile weather conditions correspond with extreme Santa Ana wind events that lead to extreme wind speeds and critically low fuel moistures. These weather conditions are more commonly associated with highly destructive wildfires that may cause widespread damage to the natural and built environment.

Using the 97th percentile weather for fire behavior modeling allows fire managers and planners to prepare for high-risk situations that are severe, yet more likely to occur year after year. In addition, wildfire planning efforts designed around 97th percentile fire behavior represent a very conservative level of risk mitigation, and therefore are also appropriate for mitigating more extreme weather conditions. While weather conditions surpassing 97th percentile are possible as evident during the 2025 Palisades and Eaton Fires (representing wind speeds of 99th to 100th percentile), the wind speeds observed during these extremely rare events exceed the limitations and intended use of the fire modeling systems. Additionally, weather data from the Newhall RAWS station shows that only one wind event since 2005 has resulted in sustained wind speeds exceeding 60 mph near the Project site[8] (October 21, 2007), with no events reaching sustained wind speeds above 70 mph at the Newhall location. In addition, vegetation types have a maximum potential fire intensity. Therefore, flame lengths in wildland fuels often reach or approach their maximum height when wind speeds reach 50 mph to 60 mph (See Exhibit 1 below). Therefore, the 97th percentile weather conditions utilized for the Project's fire behavior analysis are considered sufficient for wildfire mitigation planning and hazard/risk assessments. This is observed in other hazard assessments such as CAL FIRE's Fire Hazard Severity Zone Model, which utilizes 95th percentile weather conditions.

Exhibit: 1: Relationship between wind speed and flame length for grass-shrub fuel types



Source: BehavePlus 6.0.0

Notes: The red line represents a grass-shrub fuel model, which reaches maximum flame length at about 57 mph, while the green line represents a grass fuel model, which reaches maximum flame length at about 28 mph.

2.4.2.2 Trails at Lyons Canyon Project-Specific Analysis

As described in Appendix M-1, FPP, of the Draft EIR, the Project's fire behavior analysis assessed fire behavior in wildland fuels and post-project FMZs. Output metrics of fire behavior include flame length, fireline intensity, rate of spread, and airborne ember spotting distance. The analysis measured the impact of wind strength on fire behavior,

8 NEWHALL PASS RAWS STATION ID 45454 (2005-2025).

with greater wildfire intensity modeled to occur during 97th percentile weather with sustained wind speeds of 18 mph and gusts of 50 mph. As BehavePlus is a point-based system and measures wildfire behavior at specific locations, factors such as fire suppression and water supply were not considered. Instead, the results provide estimates of expected fire behavior without considering wildfire suppression factors. Additionally, BehavePlus and other fire modeling systems are limited in their ability to model fire behavior of structure fires. Currently, there are no standardized methods for measuring fire behavior as a result of burning structures. This is largely due to the underlying methods for calculating fire behavior, which rely on empirical measurements of specific wildland fuel types and sizes, rather than the complex urban fuels present within structures. In addition, no standardized methods exist to model the potential for structure ignitions as a result of direct fire exposure, or from airborne embers as both are influenced by diverse factors such as construction materials, design, ventilation, and the condition of nearby structure-adjacent ornamental vegetation.

2.4.2.3 Comparison

During both the Palisades and Eaton Fires of January 2025, wildfire was driven into communities by extreme Santa Ana winds exceeding 80 mph. For context, these extreme wind speeds with gusts exceeding 80 mph surpassed 97th percentile conditions and have only been observed six times since 2005[9] in the vicinity of the Palisades and Eaton Fires. This rare level of extreme weather combined with other factors, such as outdated home construction and dense urban vegetation without enforced or prevalent fuel modification, can contribute to urban conflagrations. Structural conflagration is defined as fire encompassing all of a given structure. A built environment conflagration can result from wildfires, where fire spreads uncontrollably from structure to structure. In both the Palisades and Eaton Fires, structures themselves became the main driver of wildfire spread (IBHS 2025). While methods for modeling the potential for structural conflagration and the resulting fire behavior are currently being researched, the key factors listed below are common community characteristics believed to have contributed to widespread structure losses during the Eaton and Palisades Fires (IBHS 2025). The Project's comparison to these features is also provided.

- The majority of the construction in the Palisades and Eaton neighborhoods took place in the 1950s, before the introduction of California's Chapter 7A, which regulates building standards in wildfire-prone areas.

  The Project's proposed structures would be built utilizing the most current construction methods designed to reduce wildfire exposure and reduce the likelihood for structure fires to spread into off-site areas. Construction methods intended to reduce wildfire exposure would comply with the wildfire protection and ignition resistant building construction requirements contained in the Los Angeles County Building Code and the 2022 CBC including the following: CBC, Chapter 7A; Los Angeles County Building Code, Chapter 7A; Los Angeles County Residential Code, Section R327; Los Angeles County Referenced Standards Code, Chapter 12-7A 7A, Materials and Construction Methods for Exterior Wildfire Exposure.

- Connective fuels laced between homes and hazardous plant species (palms, cypress, pines) created pathways for structure-to-structure fire spread and contributed of extreme fire behavior within the Palisades and Eaton communities.

  The Project will require highly maintained, irrigated vegetative landscaping between homes and perimeter Fuel Modification Zones to reduce the rate of spread of the fire, to keep an active

9 BEVERLY HILLS RAWS STATION ID 45442 (2005-2025).

flaming front of the fire (e.g. the zone of a moving fire where the combustion is primarily flaming) at great distances from structures and support defensibility for the existing fire environment. Additionally, the Project would provide a fire access road around the perimeter of the Project site that would also contribute to the separation of an active flaming front from proposed structures.

- Narrow roadways and road blockages caused by parked and abandoned vehicles prevented and slowed emergency response and limited direct wildfire suppression efforts.

  All of the Project's on-site roads would facilitate emergency ingress and ingress and would be constructed to County standards. The Project includes a 28-foot-wide private access road that would be used for LACoFD access, as well as two primary ingress/egress roadways for residential traffic to access The Old Road and I-5. During an evacuation, Project occupants would utilize The Old Road for approximately 1 mile and use Lyons Avenue for approximately 0.13 miles to access I-5 North and 0.28 miles to access I-5 South. This differs from the evacuation scenario during the Palisades Fire, in which evacuees were forced to head west along Sunset Boulevard, which is approximately 2.35 miles between Temescal Canyon and SR-1 (Pacific Coast Highway). Additionally, the number of dwelling units that evacuated via Sunset Boulevard under the Palisades Fire, as compared to the number of dwelling units that would evacuate via The Old Road, is considerably higher. Under the cumulative evacuation scenario for the Project, there are approximately 1,494 households and 610 occupied hotel rooms evacuating within the study area, whereas Pacific Palisades, where the Palisades Fire originated, had approximately 9,698 households (U.S. Census Bureau 2020) with at least half of households within the community of Pacific Palisades located west of Temescal Canyon Road and evacuating west along Sunset Boulevard. This is more than double the number of households as compared to households within the Project's study area. Moreover, SR-1, in Pacific Palisades, has less capacity than I-5 near the Project site. SR-1 averages two lanes in either direction, whereas I-5 averages four or more lanes in either direction near the Project site, allowing for more cars to evacuate out of the area. Evacuees could also use The Old Road to Calgrove Boulevard. Additionally, as discussed below in Section 2.4.3.1, Attorney General's Guidance, the Project provides alternative plans for evacuation, which include relocating a portion of the Project's population to the interior of the Project's development area and/or sheltering-in-place in the most extreme circumstances.

The community's fire-smart design in accordance with current and updated regulations are believed to mitigate the potential for structure loss from wildfire. Additionally, the State Fire Marshal's data shows that homes constructed according to CBC Chapter 7A standards significantly reduce fire risks for properties located in the WUI and FHSZs (CBIA 2022b). Additionally, the risk of major structural damage is greatly minimized when homes are part of a well-planned and mitigated master-planned community, such as the Project (FEMA 2023). According to the Office of the State Fire Marshal (OSFM) Property Loss Data, no master-planned community built after the adoption of CBC Chapter 7A has experienced significant structural losses. Therefore, newer, code-compliant master planned communities, such as the Trails at Lyons Canyon, provide a baseline level of high wildfire safety when designed to updated fire code requirements.

2.4.3 Project Compliance with Applicable Regulations

Section 4.20.2, Regulatory Requirements, of the Draft EIR, provides a summary of the applicable federal, state, and county regulations that address wildfire hazards. In summary, the Project is required to comply with all building and fire codes that are applicable at the time of building permit approval and construction. Currently, relevant codes include the International Fire Code and the Los Angeles County Fire Code (Title 32 of the Los Angeles County Municipal Code, hereby referred to as "County Fire Code"), which adopts with amendments the CFC, Chapter 7A of the CBC, the California Residential Code (Section 237), and would be subject to the provisions in California Public Resources Code (PRC) Section 4291 as well as LACoFD guidelines for fuel modification plans (FMPs). These codes include provisions for fuel modification, use of ignition-resistant building materials, and defensible space for fire prevention and safety to aid in the protection of residents and structures.

As stated in Section 4.20, Wildfire, of the Draft EIR, there are many regulations in place to protect people and structures from loss, injury, or death as a result of wildfire occurrence as well as preventative requirements for new and existing developments to reduce the risk of exacerbating wildfire hazards. Table 1, Consistency with Applicable Regulations, provides a brief description of how the Project complies with applicable regulations.

Table 1. Consistency with Applicable Regulations

Applicable Regulations	Project Compliance Features
Federal	
International Fire Code (IFC) International Wildland-Urban Interface Code (IWUIC)	The International Fire Code provides minimum standards that are then adopted into state and local fire codes, as California has incorporated these minimum standards into the California Code of Regulations, which includes the California Building Code (CBC) and California Fire Code (CFC). The Project satisfies the requirements of the International Fire Code and International Wildland–Urban Interface Code through the application of compliant ignition resistant construction methods and materials, implementing fuel modification zones (Section 603, Defensible Space, of the IWUIC), and ensuring there are sufficient egress and access points (Chapters 5 and 10 of the IFC).
State	
California Health and Safety Code	The Project satisfies the requirements of Division 12, Fires and Fire Protection of the California Health and Safety Code, by abating hazards (e.g., weeds and debris) through the implementation of fuel modification zones and defensible space, providing occupants with necessary emergency procedure information, and ensuring there are sufficient egress and access points.
California Public Resources Code sections: 4290, 4291 California Government Code Title 5, Part 1	The Project satisfies the requirements of the California Public Resources Code Sections 4290 and 4291, and the California Government Code Title 15, Part 1, by ensuring there is sufficient defensible space surrounding the Project. The defensible space includes 200 feet of fuel modification surrounding the Project structures, and sufficient roadside fuel modification (10 feet) along the access road to the water tank. The Project is able to satisfy the requirement of 200 feet of defensible space surrounding the structures in the western portion of the Project, mirroring the fire access road. Although, in areas of the Project that 200 feet of defensible space is not feasible, such as in the eastern portions of the Project site, alternative means and methods that meet CCR Title 14 are utilized. A fuel modification plan, which has been reviewed by the LACoFD, detailing all defensible space surrounding the Project site is included in Figure 4.20-2, Fuel Modification Plan, of the Draft EIR Section 4.20, Wildfire.

Table 1. Consistency with Applicable Regulations

Applicable Regulations	Project Compliance Features
California Code of Regulations (CCR) Title 14; Natural Resources, Division 1.5, Department of Forestry and Fire Protection, Chapter 7, Fire Protection	The Project satisfies the requirements of CCR Title 14 by implementing code-compliant alternative means and methods in the area(s) of the Project site where less than 100 feet of defensible space is provided on site. A total of 16 residential lots located within Lot 5 of the Project's tentative tract map do not achieve 100 feet of defensible space on site, and instead comply with CCR Title 14 by utilizing additional fire prevention construction methods, listed in the Draft EIR as MM-4.20-2, such as dual-pane, tempered windows; 1-hour fire-rated exterior walls and doors; ember resistant vents; and a 6-foot-tall concrete wall in between the structures and open space.
California Code of Regulations (CCR) Title 19: Public Safety, Division 1, State Fire Marshal	The Project satisfies the requirements of CCR Title 19, Division 1, through the completion of the Project's FPP, Appendix M-1 of the Draft EIR, and the WEP, Appendix M-2 of the Draft EIR. The FPP evaluates and identifies the potential fire risk associated with the Project's land uses and identifies requirements for water supply, fuel modification and defensible space, access, building ignition and fire resistance, and fire protection systems, among other pertinent fire protection criteria. The purpose of the Project's FPP is to generate and memorialize the fire safety requirements and standards of the LACoFD along with Project-specific measures based on the Project site, its intended use, and its fire environment. The purpose of the Project's WEP is to evaluate the Project's consistency with relevant emergency evacuation plans and emergency response plans, disclose the prevention and minimization regulations and measures applicable to the Project, and determine evacuation times for the existing and post-Project conditions, as well as provide emergency preparedness information and resources to increase occupant preparedness and facilitate efficient evacuation in the event of an emergency. Information is provided addressing evacuation organization, planning and preparedness, evacuation routes, contingencies, potential shelter-in-place, and other related topics. Additionally, as part of MM-4.20-1, Wildfire Education Program, of the Draft EIR, the Project would provide a robust wildfire and evacuation education and outreach program. Revisions to the WEP and MM-4.20-1 are included in Chapter 3, Revisions to the Draft EIR, of this Final EIR.
Local	
County of Los Angeles Operational Area Emergency Response Plan (OA ERP)	The WEP has been prepared to evaluate the Project's consistency with relevant emergency evacuation plans and emergency response plans, including the County's OA ERP; disclose the prevention and minimum regulations and measures applicable to the Project; and determine evacuation times for the existing and post-Project conditions, as well as provide emergency preparedness information and resources to increase occupant preparedness and facilitate efficient evacuation in the event of an emergency. Revisions to the WEP are included in Chapter 3, Revisions to the Draft EIR, of this Final EIR.
California Code of Regulations (CCR) Title 24: California Building Standards Code	The Project satisfies the requirements of CCR Title 24, including Parts 2 and 9, the County Code Title 20 (Division 1) and 26, including Chapter 7A, and the County Fire Code, including Title 32, Section 4908. The Project's infrastructure components, including water supply, fire hydrants, automatic sprinkler systems, and residential hazard detectors (e.g., carbon monoxide or smoke) will all be code compliant. Additionally, the Project structures will be built utilizing the most current
California Code of Regulations (CCR) Title	

Table 1. Consistency with Applicable Regulations

Applicable Regulations	Project Compliance Features
24 Part 2: California Building Code California Code of Regulations (CCR) Title 24 Part 9: California Fire Code County Code Title 20: Utilities, Division 1: Water County Code Title 26, Building Code County Code Title 26, Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure County of Los Angeles Fire Code County of Los Angeles Fire Code, Title 32, Section 4908	ignition resistant and fire protective construction methods, including but not limited to: Class A fire-rated roofing, ember resistant venting, multi-pane glazing with a minimum of tempered pane windows meeting the requirements of State Fire Marshall 12-7A-2. All residential structures will include code compliant, automatic, interior fire sprinkler systems. The Project will build all roadways to satisfy the roadway width requirements of the California Fire Code Title 24, Part 9, Section 503, as adopted by the Los Angeles County Fire Code as Section 503.2.1, which states that fire apparatus access roads shall have an unobstructed width of not less than 20 feet. The Project will also include 10 feet of roadside fuel modification on both sides of the roadways to satisfy the roadside clearance requirements of the LA County Fire Code (Los Angeles County Fire Code, Title 32, Section 325.10, Roadway Clearance). The Project will supply a gravity fed water tank that complies with fire flow requirements, as well as code compliant fire hydrants that are properly spaced and meet fire flow regulations. The Project will satisfy the requirements of the California Code of Regulations, Title 24 Part 9: California Fire Code, Chapter 33, Fire Safety During Construction and Demolition, through the application of MM-4.20-4, Construction Fire Protection Plan and MM-4.20-5, Construction Related Fire Prevention Measures. The implementation of these measures will reduce the possibility of fires during all phases of construction activities by including precautionary measures such as limiting hot work during Red Flag Warning Days, including spark arresters on all equipment, and including approved temporary roadways surfaces for fire access and fuel modification zones prior to bringing combustible materials on site. The Project would also comply with Title 32 Section 326 of the 2022 County Fire Code, Activities in Wildfire Risk Areas, which provides safeguards to prevent the occurrence of fire and control the spread of fires that may be caused by activities in a wildfire risk area, through the application of requiring spark arresters installed in or attached to the exhaust pipe of any construction equipment. As described further in this Memorandum and in Section 4.20, Wildfire, of the Draft EIR, the Project will comply with defensible space requirements, vertical clearance, roadside fuel modification, and code complaint alternative materials and methods (AM&M) when defensible space requirements are not able to be met.

2.4.3.1 Attorney General's Guidance

The California Office of the Attorney General issued Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act (Guidance) (California Office of the Attorney General 2022) outlining the Attorney General's recommendations for "best practices" for analyzing and mitigating wildfire impacts of development projects under the California Environmental Quality Act (CEQA). The Guidance is intended to help local governments' evaluation and approval considerations for development projects in fire-prone areas, and to help guide project designs in a way that minimizes the potential for wildfire ignition and incorporates emergency access and evacuation measures.

The Guidance states that evacuation modeling and planning should be considered for certain projects located in High or Very High FHSZs, as projects in these areas have the potential to present an increased risk of ignition and/or evacuation impacts. The Guidance encourages evacuation modeling and planning prior to project approval to provide greater flexibility regarding design modifications if the evaluation demonstrates such changes are required.

The Project is in an area designated as a Very High FHSZ, is within an SRA, and is adjacent to open space areas. However, the Project does not include land uses that could represent elevated fire hazards (e.g., industrial, manufacturing, battery storage), but instead includes residential and recreational uses that are typical of the development in the surrounding community. The Project has been designed in a manner that minimizes fire risks on the Project site. In addition to code-compliant construction as discussed above, the Project includes a 28-foot-wide private access road along the northern and western perimeter that would provide for exceptional accessibility to the built structures and contribute to the defensible space and also includes "A" Street and "B" Street that connect to The Old Road. From The Old Road, access to the Project site is provided by the northbound/southbound I-5 Freeway to the east, with freeway access ramps via Lyons Avenue or Calgrove Boulevard, each located approximately 1.0 mile from the Project site. Proximity to the I-5 allows for expedient access to the Project site for emergency responders.

The WEP, prepared as Appendix M-2 to the Draft EIR, includes modeling and the analysis of several evacuation scenarios that address existing conditions, cumulative projects and/or the Project, incorporates elements and performs analysis contemplated by the Guidance. Revisions to the WEP and the evacuation modeling are shown in Chapter 3, Revisions to the Draft EIR, of this Final EIR. The Project's evacuation modeling is discussed in greater detail below and in Section 4, Summary of Project Wildfire Evacuation Modeling, of this Topical Response.

The Guidance provides that evacuation modeling and analysis should include the following:

- Assessment of the timing for evacuation and evaluation of the capacity of roadways to accommodate project and community evacuation and simultaneous emergency access.

  Project Compliance: Analysis of evacuation timing is summarized in Section 4.20, Wildfire, of the Draft EIR and is also detailed in Section 4.2 of the WEP (Appendix M-2 of the Draft EIR). As shown in Chapter 3, Revisions to the Draft EIR, of this Final EIR, Section 4.20 of the Draft EIR and Sections 4.1 and 4.2 of the WEP have been revised to reflect an updated Evacuation Analysis Technical Memorandum (included as Attachment D of this Final EIR). The revised Evacuation Analysis Technical Memorandum (originally included as Appendix C of the WEP) was revised to include four additional hotels (six total existing hotels),

as well as an additional cumulative residential project (i.e., Aidlin Hills).[10] These additional hotels were added due to an adjustment in the evacuation zone boundaries to correspond with the County's SV-PICO disaster response and evacuation zone.[11] As with the original Draft EIR analysis, all additional residential and hotel uses included in the revised analysis were assumed to be fully occupied, even though it is fair to assume less than full occupancy due to vacancy, travel, seasonality, evening employment, etc.

- Identification of alternative plans for evacuation.

  Project Compliance: Alternative plans for evacuation (e.g., partial evacuation, shelter-in-place), as summarized in Section 4.20, Wildfire, of the Draft EIR and also in Section 3.1.3 of the WEP (Appendix M-2 of the Draft EIR), include contingency options for when it would not be safe to evacuate, such as during a short-notice evacuation. As the Project would comply with the ignition resistance construction (i.e., CBC Chapter 7A as adopted by the County) and defensible space (i.e., CFC Chapter 49 as adopted by the County) requirements, the level of fire safety would allow for alternative plans for evacuation, which includes using alternative evacuation routes, such as the perimeter fire lane for emergency vehicle access (which is a private/gated road that would be available during evacuations, in addition to "A" Street and "B" Street), relocating a portion of the Project's population to the interior of the Project's development area, or sheltering-in-place in the most extreme circumstances.

- Evaluation of the Project's impacts on existing evacuation plans.

  Project Compliance: As discussed in Section 4.20, Wildfire, of the Draft EIR, and detailed further in Appendix M-2, the County does not have a Countywide evacuation plan; rather, evacuation procedures are outlined in the Operational Area (OA) Emergency Operations Plan (EOP). The County would coordinate a centralized emergency operation in the event of an emergency/disaster (County of Los Angeles 2023, 2025). As a component of the Project, emergency vehicle access via "A" Street and "B" Street would be provided, in addition to the private access road that would encircle the outer edge of the development area. To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, which requires the preparation of Project area-specific procedures for wildfire evacuations that would be provided to residents and occupants. Specifically, MM-4.20-1 requires provision of biannual emails and mailers with reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires; establishment of a community website dedicated to wildfire awareness and prevention and evacuation; provision of community workshops and webinars; provision of "new resident" packets that include information about how to build a "go-bag," tools to prepare a household evacuation plan, and a list of agencies and resources for receiving trusted information; provision of emergency alert information; maintenance of trail signage for fire-safe hiking activities; and establishment of a fire safety oversight committee.

- Consideration of the adequacy of emergency access, including the Project's proximity to existing fire services and the capacity of existing services.

  Project Compliance: As disclosed in Section 4, Evacuation Road Network in Appendix M-2, emergency access is provided in a manner consistent with the fire code requirements. Short-term Project-related

[10] All residential and hotel uses were assumed to be 100% occupied with no shelter in place. The number of evacuating vehicles was calculated by taking the total number of residential units and multiplying it by the average vehicle ownership (2.01 vehicles per household) for residential land uses and one vehicle per hotel room.

[11] The County of Los Angeles adopted new disaster response and evacuation zones in November 2022, which is after the issuance of the Project's Notice of Preparation in June 2022. The time of the publication of the Notice of Preparation sets the baseline physical environmental conditions, per CEQA Guidelines 15125.

construction activities have the potential to temporarily impact emergency vehicle access to the Project site. As discussed in Section 4.17, Transportation, of the Draft EIR, to ensure adequate safeguards for pedestrian, bicycle, and vehicular circulation and emergency vehicle access during short-term construction activities, MM-4.17-1 (Construction Traffic Management Plan) is required. MM-4.17-1 requires preparation of a Construction Traffic Management Plan, prepared in accordance with the County's Traffic Control Requirements, to provide temporary traffic controls and access within the County public rights-of-way when temporary disruption of traffic is anticipated. As discussed in Section 4.15, Public Services, and Appendix I-1 of the Draft EIR, the LACoFD indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site. Furthermore, as detailed in Table 7 of the FPP in Appendix M-1 of the Draft EIR, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from Fire Station 124. The Project Applicant would pay the Fire Facility Fee, which, as detailed in the General Plan EIR, typically constitutes full mitigation for development impacts associated with the need for additional fire protection services or facilities. Furthermore, the Project Applicant would provide an additional community benefit contribution in the amount of $2,000,000 to be used by the LACoFD towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area. This funding will be used for the County's procurement of two fire engines (Type 1 triple combination pumpers) including outfitting, equipment, and communication costs.

2.4.3.2 Fire Safety Requirements

Roadways

The Project includes various improvements and amenities that improve fire response and fire safety. The LACoFD has reviewed the FPP (Appendix M-1 of the Draft EIR), which details the fire protection approach and the individual requirements that provide fire safety. The Project's circulation system would consist of both public and private roads, with each being built to the respective standards and maintained by a funded entity (public roads maintained by the County, private roads maintained by the HOA). The Project would maintain "A" Street and "B" Street (40 feet wide), which connect to The Old Road as the primary access for emergency response and evacuation. All fire access and vehicle roadways to and within the Project would be constructed of asphalt or concrete and in accordance with County Public Works standards and designed and maintained to support the imposed loads of fire apparatus (not less than 75,000 pounds) that may respond, including Type I engines, Type III engines, and ladder trucks. The gated private access road that surrounds the Project would be a hardened defensible space and provide a wider egress route in the event of an evacuation, which would be 28 feet wide unobstructed, exceeding the minimum 20-foot requirement for accessible roadways (26-foot width in the vicinity of a hydrant). The road would be a private access road that is meant for emergency vehicle access only and would also provide pedestrian access that connects to on-site trails. The road would be gated and no parking is proposed or would be permitted along the roadside. All on-site roadways meet or exceed the required 20-foot width for LACoFD access, per County Fire Code Section 503.2.1, Dimensions.

Water Supply and Infrastructure

As discussed further in Section 4.20, Wildfire, of the Draft EIR, the Project would include sufficient emergency water supply, a key component to fighting wildfire and protecting structures. Providing water where it is not currently

available, especially when it is provided in a protected environment like the ignition resistant landscapes of a new master planned community, enables firefighters to protect homes and work to control a wildfire's advancement. The Project would provide fire hydrants that meet flow, volume, and duration specifications at intervals designed to assist in fighting structural fires. These hydrants provide opportunities for wildland fire engines to stage, fill engine tanks, set up dip tanks for helicopter firefighting efforts, and sustain a fire fight. The final number and location of the fire hydrants on the Project site would be determined by LACoFD in compliance with County Code requirements. The Project would provide an up to 2-million-gallon water tank in the southwest portion of the development area, which would be installed at the Project site to assure reliable fire flow water pressure for the Project uses on site. Project-internal waterlines would supply sufficient fire flows and pressure to meet the demands for required on-site fire hydrants and interior fire sprinkler systems for all structures. Water supply would meet the minimum fire flow required within the adopted fire code which may be up to a 2-hour fire flow requirement of 2,500 gallons per minute with 20 pounds per square inch residual pressure throughout the public system which must be over and above the daily maximum water consumption requirements for this development.

As part of the larger water system, the up to 2-million-gallon water tank, designed to County storage regulations and water agency requirements for fire flow, will provide additional water resources to the Project and surrounding vicinity by providing a new elevated storage tank on the west side of I-5. The water tank would be maintained by the Santa Clarita Valley Water Agency. Additionally, interconnecting piping between two existing water systems would allow for greater flexibility by the water agency to move water in ways it is not able to do today. The storage tank would hold a volume of water roughly equivalent to approximately 13.3 hours of flow at 2,500 gallons per minute as described in Appendix M-1, FPP, of the Draft EIR (Fire Flow Code). Once filled, as the tank delivers water by gravity, it is not dependent on electricity to distribute much of the water for use and can be utilized despite a potential power outage. Additionally, Castaic Lake is approximately 10 miles north of the Project site and is also a potential resource to provide water to the LACoFD Air Operations equipment, including their firefighting CL-415 Super Scoopers (County of Los Angeles Fire Department 2025).

Defensible Space

The Project would provide a large area of converted open space to developed landscapes and a perimeter fire access road, which would serve as a fuel break and offer opportunities for fighting and controlling wildfires before they encroach upon existing nearby neighborhoods. Development of the Project would alter potential future fire behavior at the property due to the creation of defensible space and conversion of fuels (i.e., vegetation) into ignition-resistant development. In addition to ignition-resistant construction measures, including ember resistant vents to minimize the potential for structure fires from airborne embers, the Project has provided a customized FMP that includes 200-foot-wide FMZs to meet the Los Angeles County Fire Code (Section 325.2.1). Additionally, as stated in Section 4.20, Wildfire, of the Draft EIR, in the event the full 200 feet is not achievable on site, LACoFD requires the neighboring property to provide brush thinning to achieve the remaining fuel modification (i.e., the on-site fuel modification is 150 feet, the neighboring property would be required to provide brush thinning for the remaining 50 feet). Furthermore, where the full 200 feet of fuel modification is not maintained by the Project, as detailed in MM-4.20-2, Alternative Materials and Methods, of Section 4.20, Wildfire, of the Draft EIR, the Project would provide enhanced construction features (e.g., walls, windows, and vents). As detailed in MM-4.20-2, these enhanced construction features would be required for 16 residences in the southeastern portion of the Project site.

Per correspondence with the City of Santa Clarita, while there is no current agreement in place, it is anticipated that the Applicant would work with the City to acquire the necessary access and indemnity agreements to conduct the required off-site brush clearance (McKenna, pers. comm. 2024). The City indicated they are not opposed to allowing access for brush clearance. However, without confirmation of an agreement with the City for off-site brush clearance,

MM-4.20-2 is included to ensure that additional fire protection measures are implemented to effectuate the same level of protection as a 200-foot on-site FMZ. Ultimately it is anticipated that those 16 residences would be doubly protected by both enhanced building materials and brush clearance (once final approval from the City is granted).

An important component of a fire protection system for the Project is the provision for fire-resistant landscapes and modified vegetation buffers. FMZs are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from advancing fire by strategically placing thinning zones, restricted vegetation zones, and irrigated zones adjacent to each other on the perimeter of the WUI exposed structures.

The Project would provide 200 feet of FMZ along residential areas as additional protection from wildland fire. FMZs provide managed and maintained separation between structures and infrastructure and unmaintained wildland areas. This separation/setback is considered an FMZ and defensible space because it enables firefighters to safely position themselves at the development edge and begin tactical protection efforts between the development footprint and wildland areas at the WUI. FMZs essentially "starve" advancing wildfire of its fuel source through the outer thinning zones, where vegetation is reduced so that no more than 50% of the ground is covered by plant canopy and includes removal of the highest flammability species. The second zone of the FMZ is an inner irrigated zone, which removes all native plants and replaces them with fire resistive species that are kept irrigated and with high internal moisture, which results in more difficult ignition. As described in the FPP, Appendix M-1, of the Draft EIR, the Project would include Zones A, B, and C. Zone A would include a total 30 feet of irrigated vegetation, Zone B would include a total of 70 feet of irrigated vegetation, and Zone C would include an additional 100 feet of thinned vegetation. Furthermore, for those homes with less than 200 feet of FMZ within the Project site, Alternative Materials and Methods, as described in MM-4.20-2, would further reduce conductive heat and ember protrusion, which also aids in preventing fire spread within the community.

As detailed in MM-4.20-3, Annual Fuel Modification Zone Inspection, the Project's FMZs would provide access for maintenance and for firefighting and would be inspected annually in May/June to confirm they are maintained to function as intended. FMZs are effective because fire behavior is affected as a wildfire burns into the thinned zone—flame lengths drop, spread rates are reduced, and intensity of fire decreases. This process continues as fire burns into the irrigated zone where flame lengths, spread rates, and intensity are reduced substantially and wildfires become spotty and with much lower heat output. FMZs or "brush management" was initially made part of the PRC 4290 and 4291 to protect natural resources from fires originating in neighboring developed areas. FMZs have since become focused on protecting communities and structures, but they continue to have the same benefit of buffering preserved open space areas from accidental ignitions within communities. Positioning the low plant density, irrigated zone directly adjacent to the structures provides a significant buffer between a house or other vegetation.

The same way that FMZs set back a wildland fire from structures, the FMZs set back a structure fire from the more burnable native plants. Embers can be generated by a structure fire and can be blown over the FMZs into native fuels, but the inclusion of automatic sprinklers in every building is very effective at controlling structure fires to the room of origin and minimizes the potential for structure loss. This protective feature, combined with the presence of staffed fire stations in proximity to the Project site, significantly reduces the potential for a structure fire to reach a size that would produce significant fire and embers. As described in Appendix N-1 of the DEIR, FPP, the closest fire station to the Project site, LACoFD Station 124, is located at 25870 Hemingway Avenue, Stevenson Ranch, approximately 2.6 miles away from the entrance of the Project site. The total response time is calculated in the FPP, using the conservative ISO method, as 7 minutes and 55 seconds, including dispatch time, which conforms with the County's response time standard for "suburban areas" from existing fire stations.

Mitigation Measures

As discussed in the Draft EIR's Appendix M-1, FPP, and in Table 2, Mitigation Measures, below, the Project implements ample fire protection features, both required and code-exceeding to assist with the prevention of structural ignition in the event of an encroaching fire, but also to reduce risks of the spread of a fire in the unlikely event one were to ignite on site. Table 2 provides a full list of code-exceeding fire safety features that are included as mitigation measures in the Draft EIR. In addition, please note that, in response to comments received during the Draft EIR public review period, MM-4.20-1, Wildfire Education Program, has been revised to include additional clarifications and requirements related to senior housing. As shown in Table 2, text from the mitigation measure that has been removed is shown in strikethrough (i.e., ~~strikethrough~~), and text that has been added is shown as double underlined (i.e., <u>underline</u>). The strikethrough/underline revisions to MM-4.20-1 are also included in Chapter 3, Revisions to the Draft EIR, of this Final EIR, while MM-4.20-1 as revised is included in Chapter 4, Mitigation Monitoring and Reporting Program, of this Final EIR. The revisions to MM-4.20-1 do not constitute significant new information requiring recirculation of the Draft EIR as defined in State CEQA Guidelines Section 15088.5. As shown in Table 2, MM-4.20-1 as revised is not considerably different from the version of MM-4.20-1 previously analyzed in the Draft EIR. No new significant environmental impacts or a substantial increase in the severity of environmental impacts would occur from these revisions. Instead, the revisions merely clarify and strengthen the conditions of an already adequate mitigation measure.

Table 2. Mitigation Measures

Measure	Code Exceeding Mitigation Measures	Summary of Mitigation Measure Benefits
MM-4.20-1	**Wildfire Education Program.** The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions for the Project shall require that the HOA include a Fire Safety Coordinator position as part of the HOA Board, who shall be responsible for preparing and implementing ~~prepare~~ an educational program with wildfire-related information, including the Wildfire Evacuation Plan (WEP) and the Fire Protection Plan (FPP) requirements, to be provided to all residents and occupants, including residents and occupants of the senior affordable housing units. Similarly, the Property Manager(s) of the senior affordable housing shall serve as the Fire Safety Coordinator for the affordable housing residents and shall be responsible for preparing and implementing an educational program with wildfire-related information, including the WEP and the FPP requirements to be provided to all residents and occupants. ~~, including the Wildfire Evacuation Plan (WEP) and the Fire Protection Plan (FPP) requirements~~. The Covenants, Conditions, and Restrictions will be submitted to the County of Los Angeles (County) prior to issuance of certificate of occupancy. The educational program shall be prepared in easy-to-understand, graphically based materials and shall be annually reviewed and updated, as appropriate, in order to maintain high wildfire awareness. Program features shall include, but may not be limited to, the following: 1. Biannual email and mailers: Residents and occupants of all dwelling units on the Project site, including the senior affordable housing rental units, shall be provided with biannual emails and mailers, in April and in August, that include information such as reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires. Links to various resources on where to get trusted information, such as the Los Angeles County Fire Department (LACoFD), 211 Los Angeles County, and Ready Los Angeles County, shall be provided and updated annually, as necessary. Additionally,	As detailed in Section 4.20, Wildfire, of the Draft EIR, and Chapter 3, Revisions to the Draft EIR, of this Final EIR, evacuation modeling has been prepared for the Project to determine whether the Project would adversely affect evacuations in the Project area. While the Project may increase evacuation times relative to existing conditions, the modeling results demonstrate that evacuation timeframes for Project residents and existing residents of nearby communities would fall within acceptable evacuation timeframes. Nevertheless, as described in Appendix M-2, a substantial level of awareness by residents is required in order to reduce and/or avoid problems with an effective evacuation, and reducing potential impediments to successful evacuations requires focused and repeated information through a strong educational outreach program. As such, to support successful evacuation from the Project site, MM-4.20-1 has been set forth and requires the preparation of Project area-specific procedures for wildfire evacuations that would be provided to homeowners.

Table 2. Mitigation Measures

Measure	Code Exceeding Mitigation Measures	Summary of Mitigation Measure Benefits
	at least once a year, information on the following shall be provided in the email and mailer: (1) how to notify the County Office of Emergency Management (OEM) and Health and Human Services of special needs and/or required accommodations (Accessible Alert LA County, CERT programs, or other), for transportation or other special services; and (2) how to prepare for evacuation of pets and how to register for assistance with pet evacuations. 2. Website: A dedicated community website shall be developed and maintained by the HOA with more detailed information and resources about wildfire awareness, prevention, and evacuation. The website address shall be sent to all residents of the Project, including occupants of the senior affordable housing units. The website shall serve as a centralized resource for the fire and evacuation education program and include information from the FPP and WEP. In addition to general emergency preparedness education, the website shall include information that is included in emails, mailers, and workshops/webinars. The website shall have up-to-date fire watch and red flag warning alerts, as well as information on restrictions during fire weather conditions. Residents shall also be able to use the website to sign up for an annual residential defensible space inspection from the HOA fire safety. 3. New resident packet: All residents and new residents in the future shall be presented with a wildfire awareness and safety package upon purchase or rental of a residence. Within the package will be a USB drive with the WEP, FPP (which includes information on the regional fire hazard, how to build a go-bag, and tools to prepare a household evacuation plan), and a list of agencies and resources for receiving trusted information. 4. Emergency alert campaign: Residents shall be encouraged to sign up for Alert LA County. Alert LA County is the mass	

Table 2. Mitigation Measures

Measure	Code Exceeding Mitigation Measures	Summary of Mitigation Measure Benefits
	notification system for emergency alerts, weather alerts, health notifications, building alerts, and other updates from County, state, and federal agencies. Reminders shall be sent out in the biannual mailers and emails, on the community website, in the workshops, and in the new resident package. 5. Trail signage: Signs shall be placed at the new trailhead to provide all users with information about how to safely use the trail and shall include restrictions on smoking and firearm usage. Signs shall be evaluated annually by the HOA to ensure proper maintenance. 6. HOA fire safety committee: The HOA shall establish a fire safety committee, which shall include the owner and property manager(s) from the senior housing that is responsible for overseeing the maintenance of community-wide fire protection features. Residents will be able to report fire hazards or hazardous fuel conditions to the HOA committee for remediation. The committee shall be responsible for the coordination of the third party fuel modification zone (FMZ) inspections and the volunteer residential defensible space inspections. The committee shall also be responsible for the creation and distribution of the educational program for the Project. The committee shall serve as a communication link between LACoFD and the community. 7. Senior Housing Carpool Program: The Fire Safety Coordinator shall be responsible for creating a senior housing carpool program available for all residents on the Project site, including the senior affordable rental units. The program shall ensure that all seniors who are not able to safely evacuate on their own are accounted for and transported during an emergency evacuation.	
MM-4.20-2	**Alternative Materials and Methods.** Prior to the execution of any contract with a construction contractor, the Project	Within certain areas of the Project site, achievement of the required 200-foot FMZ would not be feasible. The development

Table 2. Mitigation Measures

Measure	Code Exceeding Mitigation Measures	Summary of Mitigation Measure Benefits
	Applicant/Developer shall ensure that the following requirements shall be placed on the construction contractor's contract specification: All residential structures shall be built using ignition-resistant materials pursuant to the most recent Los Angeles County (County) Fire and Building Codes (Chapter 7A, focusing on structure ignition resistance from flame impingement and flying embers in areas designated as high fire hazard areas). The following are additional ignition-resistant construction requirements, beyond existing code requirements: 1 The 16 residences included in the southeastern portion of the Project site (within Lot 5 of the Tentative Tract Map) adjacent to the off-site open space area shall include the following features for additional fire prevention, protection, and suppression (Figure 4.20-2, Fuel Modification Zones, of the Draft EIR): i. Windows on structures facing the open space areas shall include dual panes, with both panes tempered. ii. Exterior walls and doors shall be constructed to a standard of minimum 1-hour fire rated with one layer of 5/8-inch type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side of the framing, from the foundation to the roof, for all exterior walls of each building. iii. Exterior vents shall be ember-resistant (recommend BrandGuard, O'Hagin, or similar vents approved by LACoFD). iv. A solid 6-foot-tall wall shall be constructed of concrete masonry units between on-site structures and off-site open space. Proof of compliance shall be provided to the County prior to issuance of a certificate of occupancy for homes that require these additional fire prevention, protection, and suppression features.	footprint would be clustered within flatter areas of the Project site to avoid prominent ridgelines; however, this configuration necessitates placement of structures closer than 200 feet to the property line, and the HOA would not have access or approvals to conduct fuel modification and vegetation thinning outside of the Project site boundaries. Areas of reduced FMZ would be generally located near the Project site's eastern boundary. The on-site FMZ in this area ranges from 54 feet to 75 feet in width. Provision of reduced on-site FMZs would be considered a significant impact, as the Project itself would not provide adequate on-site buffer to keep wildfire from encroaching on site or moving off site. However, in areas of reduced on-site FMZ, neighboring property owners would be required by LACoFD to provide brush thinning to achieve the full 200-foot FMZ for the Project. Additionally, while a majority of the FMZ is accommodated on site, where there is less than 100 feet of FMZ on site (Figure 4.20.2, Fuel Modification Plan), MM-4.20-2 has been set forth to ensure that additional fire protection measures are implemented to effectuate the same level of protection as a 200-foot on-site FMZ, even though off-site fuel modification would occur to attain the 200 feet. LACoFD recognizes the additional fire protection measures but does not provide approval of alternative materials and methods approaches to reducing FMZ, requiring the full FMZ width of 200 feet and requiring the neighboring property owner to provide that vegetation management.

Table 2. Mitigation Measures

Measure	Code Exceeding Mitigation Measures	Summary of Mitigation Measure Benefits
MM-4.20-3	**Annual Fuel Modification Zone Inspection.** The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions shall require annual fuel modification inspections to be conducted to confirm and document compliance with fuel modification maintenance requirements, as defined in the Los Angeles County Fire Department (LACoFD) approved fuel modification plan. The HOA shall obtain a fuel modification zone (FMZ) inspection and report in May/June of each year to document and certify that vegetation management activities throughout the Project site have been performed. If the FMZ areas are not compliant, the HOA shall have a specified period to correct any noted issues, and re-inspection shall be required to achieve the annual certification of compliance. Documentation of compliance shall be retained by the HOA and provided to LACoFD upon request.	In order to ensure the effectiveness of the FMZs over the lifetime of the Project site operations, annual maintenance is required. As detailed in Appendix M-1 and MM-4.20-3, the Project's HOA shall maintain the on-site FMZ and obtain an FMZ inspection and report from a qualified LACoFD-approved third-party inspector in May/June of each year certifying that vegetation management activities throughout the Project site have been performed. If the FMZ areas are not compliant, the Project HOA would have a specified period to correct any noted issues so that a re-inspection could occur, and certification can be achieved. This would ensure that the on-site FMZ would be maintained in accordance with the maintenance agreement and provide long-term fire protection both to the Project and the surrounding area. Because off-site FMZ (i.e., brush thinning) may not be controlled by the HOA due to access privileges or other constraints, off-site brush thinning would be enforced by LACoFD, and the Project HOA would assist with this annual maintenance to the extent the neighboring property owner allows. As detailed in Section 3.6.2, Other Permits and Approvals, of Chapter 3, Project Description, the Project Applicant would enter into a license agreement with the City of Santa Clarita to allow the Project's HOA to conduct off-site brush thinning on City property (McKenna 2024).
MM-4.20-4	**Construction Fire Prevention Plan.** Prior to the commencement of construction activities, the Project Applicant/Developer shall prepare a construction fire protection plan (CFPP) that requires the training of construction personnel and provides details related to fire-suppression procedures and equipment to be used on site during construction. The construction FPP shall be consistent with the requirements in California Building Code Chapter 33 and California Fire Code Chapter 33, shall be subject to review and approval of the Los Angeles County Fire Department (LACoFD), and shall include the following:	As detailed in Section 2.2.5 of Appendix M-1, research indicates that the type of clustered, master planned developments like the Project site are not associated with increased vegetation ignitions. Syphard and Keeley (2015) summarize all wildfire ignitions included in the CAL FIRE FRAP database, dating back over 100 years. They found, in the case of one Southern California county (San Diego County), equipment-caused fires were by far the most numerous, and these also accounted for most of the area burned, followed closely by the area burned by power line fires. This pattern is consistent beyond San Diego County and is applicable in Los Angeles County. Ignitions classified as equipment-caused frequently resulted from exhaust or sparks from power saws or other equipment with gas or electrical motors, such as lawn

Table 2. Mitigation Measures

Measure	Code Exceeding Mitigation Measures	Summary of Mitigation Measure Benefits
	▪ Protocols for conducting mandatory Project-specific environmental awareness training for all on-site construction workers, including the requirement to conduct the training prior to any grubbing or ground disturbance, and requirements for ongoing training to occur prior to commencement of each phase of construction. ▪ Requirements to conduct and document construction worker trainings, which shall include protocols for minimizing potential ignition activities, vegetation clearing, parking requirements/restrictions, equipment/vehicle idling restrictions, smoking restrictions, initial attack firefighting, proper use of gas-powered equipment and storage of flammable fuels, use of spark arrestors, fire reporting, and hot work restrictions. ▪ LACoFD-approved construction work restrictions during red flag warnings and high to extreme fire danger days. ▪ Specifications for access to adequate water supplies and/or water trucks to service construction activities. ▪ Documentation of emergency contact information and protocols for on-site emergency response communication to on-site workers, coordination with local fire agencies, and reporting/documentation procedures for actions taken. Designation of an on-site fire awareness coordinator with itemized description of their role and responsibility for ensuring compliance with the construction FPP, including demonstration of compliance with applicable plans and policies established by state and local agencies and documentation of completion of required construction worker trainings.	mowers, trimmers, or tractors, and were associated with lower density housing. In San Diego County, and in areas like the Project site in Los Angeles County, ignitions were more likely to occur close to roads and structures and at intermediate structure densities. The Project would comply with LACoFD requirements for activities in hazardous fire areas and MM-4.20-4 (requiring the Project to prepare a construction fire prevention plan prior to commencement of construction activities) designates fire safety measures to reduce the possibility of fires during the construction phase.
MM-4.20-5	**Construction-Related Fire Prevention Measures.** Prior to the execution of any contract with a construction contractor and issuance of grading permits, the Project Applicant/Developer shall ensure that the following requirements shall be placed on the construction contractor's contract specification:	The Project would be required to comply with LACoFD/ County and state requirements for construction activities in hazardous fire areas, including fire safety practices, to reduce the possibility of fires during construction activities. Prior to any ground disturbance, surveys would be conducted for utility locations within the street or right-of-way and for potential methane from any historic oil well abandonment practices. The Project would comply with 2022

Table 2. Mitigation Measures

Measure	Code Exceeding Mitigation Measures	Summary of Mitigation Measure Benefits
	▪ All required fuel modification for each phase of construction activity shall be implemented prior to commencement of that phase and prior to combustible building materials being delivered to the site. ▪ Prior to bringing lumber onto the Project site, improvements within the active development area shall be in place, including utilities, operable fire hydrants, an approved, temporary roadway surface, and fuel modification zones (FMZs) established pursuant to the construction CFPP and Los Angeles County Fire Department (LACoFD) requirements. ▪ All temporary construction power lines shall only be allowed in areas that have been cleared of combustible vegetation. ▪ All-new permanent power lines shall be installed underground for fire safety purposes.	County Fire Code Chapter 33, Fire Safety During Construction and Demolition, designating fire safety measures to reduce the possibility of fires during all phases of construction activities. The 2022 County Fire Code Chapter 33 includes precautionary measures, such as, but not limited to, fire watch/fire guards during hot works and heavy machinery activities (e.g., welding), spark arresters on all equipment, fire access during construction, water supply via hose lines attached to hydrants or a water tender pursuant to LACoFD requirements, red flag period restrictions, on-site fire prevention resources, and others. The Project would also implement MM-4.20-5, which requires improvements within the active development area to be in place, including utilities, operable fire hydrants, an approved temporary roadway surface, and FMZs established pursuant to the Construction FPP and LACoFD requirements prior to bringing lumber onto the Project site. The Project would also comply with Title 32 Section 326 of the 2022 County Fire Code, Activities in Wildfire Risk Areas, which provides safeguards to prevent the occurrence of fire and control the spread of fires that may be caused by activities in a wildfire risk area. To prevent ignitions from construction-based machinery, the Project would adhere to Section 326.12.1 of the 2022 County Fire Code, which prohibits the use or operation of any tractor, construction equipment, engine, machinery, or any steam, oil, or gasoline-operated stationary or mobile equipment, from which a spark or fire may originate, unless such equipment is provided with a qualified device or spark arrester installed in or attached to the exhaust pipe, which would prevent the escape of fire or sparks.

Contingency Planning

Early evacuation is the preferred approach to responding to a wildfire emergency. When this is not possible, such as when a fire ignites nearby or otherwise does not enable enough time to fully evacuate, then temporary refuge is an important contingency plan. Although it is not recommended, in the unlikely event of an unsafe evacuation, the Project (like most new master planned communities incorporating ignition-resistant construction and FMZs, as well as responding fire and law enforcement personnel) would be able to direct residents to temporarily refuge or shelter in place in their homes if it is determined to be safer than evacuating. Ignition and ember resistant residential structures set back from wildfire by appropriate FMZ and defensible space result in the ability to temporarily refuge as a contingency option.

Evacuation of Senior Populations

The Project would provide approximately 47 units of affordable housing for individuals aged 55 years and over. The Project does not propose or include a nursing home, residential care facility for the elderly, assisting living facility, board and care facility, or other living accommodations where there may be cognitive or physical limitations that could impede mobility; therefore, it is expected that occupants of these units would evacuate similarly to all others within the Project site where there likely would be seniors living in the non-senior affordable housing units, given the demographic profile of residents in the Santa Clarita Valley area, with residents between 55 and 79 accounting for approximately 26% of the Santa Clarita[12] demographic, and residents aged 55 and 65 accounting for approximately 14% of the City's demographic (U.S. Census Bureau 2023). The very-low-income senior apartment building would be built to applicable building and fire codes and would have safe evacuation structures and signage in place to direct individuals out of the building.

As discussed in the WEP (Appendix M-2) and detailed in MM-4.20-1 of the Draft EIR, the Project's HOA would provide information to occupants, including senior renters, regarding notifying the County OEM and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, CERT programs, or other), transportation, or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been augmented through the development of the Final EIR to include additional requirements related to the Senior Housing. The Property Manager(s) of the senior affordable housing shall serve as the Fire Safety Coordinator for the affordable housing residents and shall be responsible for preparing and implementing an educational program with wildfire-related information, including the WEP and the FPP requirements to be provided to all residents and occupants. Additionally, the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program in which all seniors who are not able to safely evacuate on their own, including mobility-challenged individuals, are accounted for and transported during an emergency evacuation.

Project Effect on Surrounding Communities

As analyzed further in the FPP, Appendix M-1 of the Draft EIR, the addition of humans to a WUI area provides the opportunity for additional human-made ignitions, though research indicates that master planned communities built to the most recent fire and building codes, especially Chapter 7A standards, are not associated with increased vegetation ignitions. Recent research is discussed in further detail in Section 2.4.1, Efficacy of Defensible Space and Ignition Resistant Construction to Develop Fire Safe Communities.

[12] Although the Project is not within the Santa Clarita City Limits, Census data was used from the City of Santa Clarita as a reasonable assumption that the Project demographics will reflect those of the neighboring cities.

Figures 4 through 6 in the FPP, Appendix M-1 of the Draft EIR, demonstrate that higher density housing provides a singular interface, as opposed to lower density housing providing for more structural exposure to wildlands. The Project is a planned ignition-resistant community, clustered-designed to include professionally managed and maintained fire protection components, current and more stringent fire code-compliant safety features and specific measures provided where ignitions have the potential to occur (such as roadways without roadside vegetation management and the exterior of the Project in the wildland interface). Therefore, the development of the Project would not be expected to materially increase the risk of vegetation ignitions.

The inclusion of the Project's fire protection features would have a beneficial effect on the wildfire ignition risk reduction. The fire safety features protect the Project site, its structures and their occupants from wildfires as well as reduce the risk of wildfire originating from the Project site and spreading to existing nearby development. Fire safety features that would enhance the Project's ability to reduce wildfire ignition and spread include ignition-resistant and maintained landscape, FMZs surrounding the perimeter of the Project, annual FMZ inspections, ignition-resistant building materials used for the Project structures, interior fire sprinklers, fire access roads, buried powerlines, nearby fire stations, and sufficient fire flow provided to the Project through fire hydrants and the water tank.

Additionally, the Draft EIR has included measures to address the potential for increased trail usage with the objective of minimizing hazards to the environmental resources (e.g., biological resources), which would also serve to reduce potential for wildfire generation due to hikers along the existing trail system. As required in MM 4.20-1, signs shall be placed at the new trailhead to provide all users with information about how to safely use the trail and shall include restrictions on smoking and firearm usage. Signs shall be evaluated annually to ensure proper maintenance. Furthermore, MM 4.4-1 discussed in Section 4.4, Biological Resources, of the Draft EIR, requires that off-trail activities (e.g., hiking, biking, horseback riding) shall be prohibited; signage shall be placed in visible locations that prohibits smoking; and that gasoline-powered maintenance equipment shall be prohibited.

Regarding air contaminants resulting from potential future wildfire events, per State CEQA Guidelines Section 15064(d)(3), "An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable." As stated on page 4.20-4 in Section 4.20, Wildfire, of the Draft EIR, based on an analysis of fire history records, it is expected that there would be wildland fires within 5 miles of the Project site on average every year, and at least every 10 years. However, it is speculative to assume that all such fire events would affect or originate from the Project site and to attempt to quantify the scope of potential fire damage (i.e., number of structures burned, etc.). Furthermore, the potential for the Project to exacerbate wildfire risks (due to slope, prevailing winds, and other factors) and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire is addressed under Threshold 4.20(b) beginning on page 4.20-8 in Section 4.20 of the Draft EIR. As determined therein, with mitigation, the Project would not exacerbate wildfire risk or related smoke exposure, and as such, the Project would also not result in significant secondary impacts regarding health impacts.

2.4.4 Project Wildfire Evacuation Modeling

2.4.4.1 Evacuation Planning and Implementation in Los Angeles County

As stated in Section 4.20, Wildfire, of the Draft EIR, the Project's WEP was prepared based on the Los Angeles County's Office of Emergency Management's Operations Area Emergency Response Plan (ERP) and current County of Los Angeles Operational Area Emergency Operations Plan (OAEOP). It is important to understand that the law enforcement and fire agencies charged with managing evacuations would not refer to a project-specific evacuation

plan when implementing an emergency evacuation. These agencies follow internal pre-wildfire plans, and utilize experience, situation awareness, and available resources to move people from areas of higher, to areas of lower, potential risk.

Furthermore, as stated in Section 4.20, Wildfire, of the Draft EIR, large-scale evacuations are complex, multijurisdictional efforts that require coordination between many agencies and organizations. Emergency services and other public safety organizations play key roles in ensuring that an evacuation is effective, efficient, and safe. Evacuation during a wildfire is not necessarily directed by the fire agency, except in specific areas where fire personnel may enact evacuations on scene. The Los Angeles County Sheriff's Department, California Highway Patrol (CHP), and other cooperating law enforcement agencies (i.e., neighboring jurisdictions such as the City of Los Angeles Police Department via California's Master Mutual Aid Agreement) have primary responsibility for evacuations. These agencies work closely within the unified Incident Command (IC) system, with the County OES, and responding LACoFD personnel who assess fire behavior and spread, which should ultimately guide evacuation decisions. To that end, LACoFD, law enforcement agencies, Public Works, Planning, Emergency Services Departments, and California Department of Transportation (Caltrans), amongst others, have worked together within a County pre-fire mitigation task force to address wildland fire evacuation planning for Los Angeles County.

Additionally, as outlined in Section 4.20, Wildfire, and Appendix M-2 of the Draft EIR, CAL FIRE's "Ready, Set, Go" program has been widely adopted for preparing residents to respond quickly to evacuation orders and is the preparedness program the HOA would follow as part of its Wildfire Education Program (MM-4.20-1). The County's robust emergency notification system (Ready LA County) available to help manage evacuations, combined with the Ready, Set, Go program, can prepare residents to be ready, which entails gathering necessities and preparing for an eventual evacuation by getting set to leave or to temporarily refuge in their residence. Residents are then ready to enact an evacuation quickly once they are told to leave. The program provides for an aware and ready populace, which results in higher success probabilities than with an unprepared populace, whether a phased evacuation occurs or a temporary on-site refuge is implemented. Oftentimes during an evacuation, populations will be evacuated in "zones". Evacuation zones are areas of land with defined boundaries, that are then named and used when determining evacuation orders for clear and efficient evacuations. The County utilizes Genasys Protect to determine their evacuation zones. The Project site is within the zone STV-E109. A complete map of evacuation zones can be found at the following link: https://protect.genasys.com/zones/US-CA-XLA-STV-E109?z=12.045490660848428&latlon=34.36240379348301%2C-118.61560286894053

2.4.4.2 Project-Specific Evacuation Plan

As detailed in the Project's WEP, the Project-specific evacuation plan focuses on preparing the residents so they are familiar with direction they may be given during a wildfire emergency and does not conflict with any adopted evacuation plans, resulting in compliance with CEQA. The WEP incorporates concepts and protocols practiced throughout Los Angeles County, including basic protocols set forth in the County's Operation Area EOP and ERP and the California Master Mutual Aid Agreement, which dictate who is responsible for an evacuation effort and how regional resources will be requested and coordinated. In addition, the Project's WEP includes standards that can be integrated into a regional evacuation plan when and if the area officials and stakeholders (e.g., LACoFD, County OES, CAL FIRE, OEM, LACSD, and others) complete one. The Project's Evacuation Plan has been reviewed by the LACoFD.

Evacuation routes are determined by 1) jointly prepared pre-wildfire plans (e.g., LACoFD, Cal Fire, and others) that indicate the likely fire scenario, and how traffic can be moved from an area; and 2) in real time, using data reflecting fire location, movement, and projected path considering downstream traffic and most vulnerable populations. As

indicated above, real-time evacuations in the County are primarily managed by the Los Angeles County Sheriff's Department (LACSD). LACSD relies on input and situational awareness provided by the Incident Command and supporting agencies. LACSD coordinates with Caltrans and CHP for road management during evacuations. The pre-prepared evacuation plans, such as the Project's WEP, are guidance documents only and meant for resident awareness and preparedness. The County's emergency service agencies have separately prepared regional wildfire response plans that guide emergency responses and evacuation procedures. Actual field conditions supersede prepared subdivision-specific evacuation plans, but these plans help educate local residents about what to expect in an evacuation scenario.

Evacuation Modeling Substantiation of Methodology

As described in Section 4.20, Wildfire, and in the WEP (Appendix M-2 of the Draft EIR), the evacuation modeling was based on a set of assumptions that were intended to provide a comprehensive analysis of evacuation conditions. As shown in Chapter 3, Revisions to the Draft EIR, of this Final EIR, Section 4.20 of the Draft EIR and Sections 4.1 and 4.2 of the WEP have been revised to reflect an updated Evacuation Analysis Technical Memorandum (included as Attachment D of this Final EIR). The Evacuation Analysis Technical Memorandum (originally included as Appendix C of the WEP) was revised to include four additional hotels (for a total of six existing hotel uses), as well as an additional cumulative residential project (i.e., Aidlin Hills). These additional hotels were added due to an adjustment in the evacuation zone boundaries to correspond with the County's SV-PICO disaster response and evacuation zone.[13]

To analyze the evacuation events, the Evacuation Analysis Technical Memorandum includes simulations using VISSIM, which is a multimodal traffic flow modeling software used to simulate different traffic conditions and is the industry standard for evacuation simulations. In VISSIM simulations, roadway capacity is accounted for, and each vehicle in the traffic system is individually tracked through the model and comprehensive measures of effectiveness, such as average vehicle speed and queueing, are collected on every vehicle during each 0.1-second of the simulation. This software enables drivers' behaviors during an evacuation to be replicated. A total of 20 simulations were conducted to yield a reasonable sample size to determine the performance of the study area roadways and impacts during evacuation scenarios.

The Evacuation Analysis Technical Memorandum includes a conservative set of assumptions for the Project. The majority of the land uses on the west side of I-5 in the Project vicinity, including the applicable cumulative projects and proposed Project, are residential. The evacuation modeling assumed that the evacuation would occur at night, when all Project residents and the residents in the surrounding community and applicable cumulative projects are assumed to be at home, and hotels within the Project evacuation area are occupied with hotel guests, and thus all vehicles associated with these land uses would need to evacuate.[14] The modeling did not assume any sheltering-in-place.

The revised evacuation modeling assumes the simultaneous evacuation of six hotels at an assumed 100% occupancy, including a total of 610 hotel rooms resulting in 630 vehicles evacuated. This is a conservative assumption because the Santa Clarita Valley Economic Development Corporation's Economic Snapshot for 2024 states an average hotel occupancy rate across the Santa Clarita Valley of 85.6% (SCVEDC 2024). Further, even

[13] The County of Los Angeles adopted new disaster response and evacuation zones in November 2022, which is after the issuance of the Project's Notice of Preparation in June 2022. The time of the publication of the Notice of Preparation sets the baseline physical environmental conditions, per CEQA Guidelines 15125.

[14] As the evacuation modeling assumed a nighttime evacuation, all commercial and retail uses, including those north of Pico Canyon Road/Lyons Avenue, are assumed to be closed.

though the evacuation modeling assumes full occupancy of the Project's proposed 510 residential units, the units in the surrounding residential land uses, and the units in the cumulative projects, the State Department of Finance's residential vacancy rate in 2025 for the City of Santa Clarita is 2.6% and for the County of Los Angeles is 2.5%. Therefore, the evacuation modeling assumptions of 100% residential occupancy and 100% hotel occupancy were used to provide a worst-case scenario.

Given that the majority of the hours of the day would not reflect this conservative scenario (e.g., residents and hotel guests would be in other locations for work/recreation/dining/errands), it is likely that fewer vehicles would be present on the Project site and within the surrounding communities when an evacuation order is given. The evacuation analysis assumed that non-lodging-related commercial land uses are closed when the evacuation order is issued, thus these land uses are not included in the evacuation analysis.

The simulation area used for the evacuation modeling is expansive and includes existing land uses bounded by the following limits: Pico Canyon Service Road to the west, I-5 to the east, Pico Canyon Road to the north, and the Project's southern boundary to the south. As previously mentioned, subsequent to the issuance of the Notice of Preparation for the Project, the County of Los Angeles adopted new disaster response and evacuation zones. The revised evacuation modeling includes an updated study area that includes the Project's evacuation zone, STV-E109, and the adjacent STV-PICO evacuation zone, which includes the hotels and existing residential community to the north.

As discussed above and in Section 2.4.3.1, Attorney General's Guidance, the Evacuation Analysis Technical Memorandum that is an appendix to the WEP was revised to include the Project's evacuation zone, STV-E109, and the adjacent evacuation zone to the north STV-PICO. The use of these new evacuation zones required the modeling of three additional existing hotels, resulting in a total of six hotels modeled in the evacuation analysis. All of these hotels, as well as one additional cumulative residential project, are located within STV-PICO. Thus, all existing and reasonably foreseeable residential and hotel uses within the STV-E109 and STV-PICO are reflected in the revised analysis (refer to Chapter 3, Revisions to the Draft EIR, including Attachment D, Evacuation Analysis Technical Memorandum). The evacuation modeling makes an additional conservative assumption that both the STV-E109 and the STV-PICO evacuation zones would be evacuated simultaneously, resulting in a mass evacuation that does not account for phasing or evacuation management by emergency providers.

The adjacent evacuation zones to the south are primarily preserved open space with limited development, including the Oak Tree Gun Club, a recycling center, and a topsoil supplier, which are uses that would be closed during the nighttime evacuation scenario; therefore, these uses would not contribute to additional evacuation traffic and were thus not included in the study area for the evacuation model. Additionally, the evacuation zone to the north (STV-Constitution) includes two properties along Pico Canyon Road—one being an elementary school and the other a commercial facility—both of which are unlikely to be occupied during a nighttime evacuation. Although there is a residential pocket within this zone, if a fire were approaching from the open space area, it is reasonable to assume that residents would evacuate via Constitution Avenue and northbound The Old Road. As a result, this area would not share the same evacuation route as the Project site.

Additionally, the Project's evacuation modeling considers the existing roadway conditions, including existing available evacuation routes, number of available lanes and capacity. Specifically, regarding comments submitted during public review of the Draft EIR about The Old Road being only two lanes, the model has considered the number of lanes and available capacity in the estimated evacuation times provided in the revised WEP (see Chapter 3, Revisions to the Draft EIR, of this Final EIR) and impacts were determined to be less than significant.

In summary, the modeling software used and the assumptions related to the evacuation scenarios provide an appropriately conservative analysis of evacuation at the Project site and surrounding areas.

Modeling Evacuation Scenarios and Estimating Evacuation Time

Safely undertaking large-scale evacuations is a complicated process that involves many factors that cannot necessarily be determined in advance. A large-scale evacuation may take several hours or more and require moving people long distances to designated areas. Furthermore, evacuations are fluid and timeframes may vary widely depending on numerous factors, including, among other things, the number of vehicles evacuating, the road capacity to accommodate those vehicles, occupants' awareness and preparedness, evacuation messaging and direction, and on-site law enforcement control. In short, a variety of factors may make a longer evacuation perfectly safe. That is why a multifaceted approach to fire-resilient development is required and is incorporated into the Project.

As detailed in Section 4.20, Wildfire, of the Draft EIR, and in Appendix M-2, WEP (including revisions shown in Chapter 3, Revision to the Draft EIR, of this Final EIR) to maintain a conservative approach, the evacuation model evaluated all five evacuation scenarios under a mass evacuation of the study area; therefore, the reported evacuation times would decrease in a phased evacuation approach. As described above and in the FPP, Appendix M-1 of the Draft EIR, the Project has extensive fire safety features, such as hardened corridors and roadside fuel modification to ensure occupants would be diverted from at risk areas during an evacuation.

Table 3, Evacuation Time Summary, shows the changes to evacuation times for the Project and nearby land uses as a result of modeling revisions. The modeling revisions were conducted to account for an evacuation of additional existing hotel land uses (610 occupied hotel rooms resulting in 630 evacuating vehicles). The evacuation data from the Draft EIR are shown in strikethrough (i.e., ~~strikethrough~~), while the revised data that have been included as part of this Final EIR are shown as double underlined (i.e., underline). This information is also included in Chapter 3, Revisions to the Draft EIR, of the Final EIR. The revisions to the evacuation modeling resulted in a slight increase in overall evacuation times under Scenarios 1, 3, 4, and 5. However, the evacuation time increase for surrounding land uses due to Project implementation, as discussed in the WEP and Section 4.20, Wildfire, of the Draft EIR (i.e., 37 minutes), has not changed. The 37-minute increase represents the difference between Scenario 1 (46 minutes) and Scenario 3 (1 hour 23 minutes), as well as the difference between Scenario 4 (1 hour 3 minutes) and Scenario 5 (1 hour 40 minutes) as detailed in Table 3.

Table 3. Evacuation Time Summary

Scenario	Total Evacuation Vehicles	Evacuation Time	
		Nearby Land Uses	Project
Scenario 1 – Existing Land Uses	~~1,960~~ 2,330	~~43~~ 46 minutes	N/A
Scenario 2 – Proposed Project Only	1,040	N/A	50 minutes
Scenario 3 – Existing Land Uses with Proposed Project	~~3,000~~ 3,370	1 hour ~~20~~ 23 minutes	1 hour ~~26~~ 29 minutes
Scenario 4 – Existing Land Uses with Cumulative Projects	~~2,060~~ 2,640	~~57 minutes~~ 1 hour 3 minutes	N/A
Scenario 5 – Existing Land Uses with	~~3,100~~ 3,680	1 hour ~~34~~ 40 minutes	1 hour ~~38~~ 43 minutes

Table 3. Evacuation Time Summary

Scenario	Total Evacuation Vehicles	Evacuation Time	
		Nearby Land Uses	Project
Cumulative Projects and Project			

FEMA has provided a general guideline for reasonable community evacuations from an emergency condition of 1 hour and 30 minutes (i.e., a total of 90 minutes), which the County has chosen to use as the timeframe for considering whether the Project would substantially impair an adopted emergency response plan or emergency evacuation plan. Attachment D, Evacuation Analysis Technical Memorandum, of this Final EIR, includes the detailed results of the revised evacuation modeling for the Project and surrounding areas. These results are also summarized above in Table 3, above. Using VISSIM—a microscopic, multimodal traffic flow modeling software used to simulate different traffic conditions—the revised analysis determined that it would require 46 minutes (Scenario 1) for all existing uses (a 3-minute increase compared to Draft EIR analysis), and it would require 50 minutes (Scenario 2) to evacuate the Project's population. For evacuation of the Project site, modeling assumes vehicular traffic would use both available egress routes on site, and all traffic would move north along The Old Road to simulate conditions similar to the 2016 Sage Fire, which included the closure of The Old Road to southbound traffic. Under Scenario 3, where both existing land uses in the area and the Project site would be evacuated simultaneously, it is estimated to take 1 hour and 23 minutes to evacuate surrounding land uses and 1 hour and 29 minutes to evacuate the Project site, an increase of 3 minutes compared to the Draft EIR analysis. As discussed in Section 4.20, Wildfire, of the Draft EIR, the Project would increase evacuation times for existing populations by up to 37 minutes for the surrounding land uses when compared to existing conditions.

The revisions to Attachment D, Evacuation Analysis Technical Memorandum, of this Final EIR, do not constitute significant new information requiring recirculation of the Draft EIR as defined in State CEQA Guidelines Section 15088.5. As shown in Table 3 above, the revised analysis is not considerably different from the evacuation modeling previously presented in the Draft EIR. The evacuation time for Scenario 2 (the Project) did not increase from the evacuation modeling previously presented in the Draft EIR. The increase of 3 minutes to 6 minutes in evacuation times across Scenarios 1, 3, and 4, when compared to the total evacuation time, represents a minor increase in overall evacuation time and Scenarios 1, 3, and 4 would remain below the 90-minute timeframe used in the Draft EIR. As such, the increases in evacuation times presented herein do not substantially alter the impact analysis or conflict with the significance conclusions of the Draft EIR.

Regarding increases in evacuation time under Scenario 5 (which includes existing land uses and cumulative projects), when compared to the evacuation times presented in the Draft EIR, the increase of 5 minutes represents an approximately 5% increase for the Project (i.e. 98 minutes to 103 minutes), and the increase of 6 minutes for nearby uses (i.e. 94 to 100 minutes) represents an approximately 6% increase. As previously stated, the analysis is conservative, as it does not consider any phased evacuation, traffic control measures, or altering of evacuation routes, and assumes that all nearby residents and hotel patrons would be home and evacuating at the same time. Thus, the evacuation times presented in the revised Scenario 5 still substantially conform with the 90-minute timeframe presented in the Draft EIR. No new significant environmental impacts or a substantial increase in the severity of environmental impacts would occur from these revisions.

As described in Section 2.4.1, Efficacy of Defensible Space and Ignition Resistant Construction to Develop Fire Safe Communities, above, there are extensive safety features that would be implemented by the proposed Project. The

Project's fire-resistant design features include ignition resistant construction methods, hardened structures and corridors, including a perimeter fire access lane, FMZs, and roadside fuel modification, and alternative means and methods for areas of the Project that are unable to provide 100 feet of defensible space, proximity to I-5, and sufficient fire flow for firefighting efforts via an up to 2-million-gallon water tank.

Emergency personnel who issue evacuation orders can consider the additional time needed to implement an evacuation when determining when and where to issue evacuation orders. Risk to nearby development, including the Project or existing communities, is assessed on a regular basis in a wildfire event. Hours or days of lead time may be available to assess risk and make evacuation determinations. Peak occupancy conditions typically do not occur as all residents are not typically at home while maximum occupancy at industrial, commercial, and office uses is also occurring. Existing land uses within the Project vicinity and the Project are primarily residential; therefore, the Project WEP's (Appendix M-2 of the Draft EIR, as revised per Chapter 3, Revisions to the Draft EIR, of this Final EIR) worst-case nighttime evacuation modeling scenario that considers peak occupancy of residential and hotel uses within the Project's evacuation area is the most conservative scenario to evaluate the Project's evacuation impacts. Moreover, drifting smoke, awareness of the risk, road closures, or other factors result in people avoiding the area in a fire event. Additionally, as described in Appendix M-2, WEP, of the Draft EIR, the Project is designed to allow people to shelter-in-place or take temporary refuge within the Project site, which could reduce evacuating traffic from the site.

2.5 Comments and Responses

This section presents all comments received on the Draft EIR and responses to all comments received. Where a comment is addressed in Topical Response-1, that topical response is indicated.

INTENTIONALLY LEFT BLANK

Comment Letter A1

LOS ANGELES COUNTY SANITATION DISTRICTS
Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
(562) 699-7411 • www.lacsd.org

January 3, 2025

Ref. DOC 7380719

VIA EMAIL Eaguirre@planning.lacounty.gov

Ms. Erica G. Aguirre, Principal Planner
County of Los Angeles Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, CA 90012

Dear Ms. Aguirre:

Second Response to Trails at Lyons Canyon Project

The Santa Clarita Valley Sanitation District (District) received a Notice of Availability of a Draft Environmental Impact Report (DEIR) for the subject project on December 5, 2024. Previous comments submitted by the District in correspondence dated July 13, 2022 (copy enclosed), still apply to the subject project with the following updated information: A1-1

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the District, for conveyance to the District's 24-inch diameter Valencia Trunk Sewer. A1-2

2. The expected average wastewater flow from the part of the project site, described in the DEIR as 510 residential units, and 4,540 square feet of recreation center, is 102,174 gallons per day. A1-3

3. All other information concerning Districts' facilities and sewerage service contained in the document is current. A1-4

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2742, or phorsley@lacsd.org. A1-5

Very truly yours,

Patricia Horsley

Patricia Horsley
Environmental Planner
Facilities Planning Department

PLH:plh

Enclosure

cc: D. Hatch
A. Howard

DOC 7398169.SCV

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
(562) 699-7411 • www.lacsd.org

July 13, 2022

Ref. DOC 6601299

Ms. Erica Gutierrez, AICP, Principal Planner
County of Los Angeles
Department of Regional Planning
Subdivisions Section
320 West Temple Street, 13th Floor
Los Angeles, CA 90012

Dear Ms. Gutierrez:

NOP Response to Trails at Lyons Canyon Project

The Santa Clarita Valley Sanitation District (District) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report for the subject project on June 16, 2022. The proposed project is located within the jurisdictional boundary of the District. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the District, for conveyance to either or both the District's District No. 32 Main Trunk Sewer, located in a private right-of-way southeast of the intersection of Orchard Village Road and Wiley Canyon Road, or the Valencia Trunk Sewer, located in Orchard Village Road south of Wiley Canyon Road. The District's 18–inch diameter District No. 32 Main Trunk Sewer has a capacity of 3.3 million gallons per day (mgd) and conveyed a peak flow of 0.1 mgd when last measured in 2018. The District's 24-inch diameter Valencia Trunk Sewer has a capacity of 5.3 mgd and conveyed a peak flow of 1.9 mgd when last measured in 2018.

2. The District operates two water reclamation plants (WRPs), the Saugus WRP and the Valencia WRP, which provide wastewater treatment in the Santa Clarita Valley. These facilities are interconnected to form a regional treatment system known as the Santa Clarita Valley Joint Sewerage System (SCVJSS). The SCVJSS has a capacity of 28.1 mgd and currently processes an average recycled flow of 18.4 mgd.

3. The expected average wastewater flow from the part of the project site, described in the NOP as 504 residential units, is 98,280 gallons per day. In order to estimate the volume of wastewater the remaining project will generate, go to www.lacsd.org, under Services, then Wastewater Program and Permits, select Will Serve Program, and scroll down to click on the Table 1, Loadings for Each Class of Land Use link for a copy of the Districts' average wastewater generation factors.

4. The District is empowered by the California Health and Safety Code to charge a fee to connect facilities (directly or indirectly) to the District's Sewerage System or to increase the strength or quantity of wastewater discharged from connected facilities. This connection fee is used by the District for its capital facilities. Payment of a connection fee may be required before this project is permitted to discharge to the District's Sewerage System. For more information and a copy of the Connection Fee Information Sheet, go to www.lacsd.org, under Services, then Wastewater (Sewage) and select Rates & Fees. In determining the impact to the Sewerage System and applicable connection fees, the District will determine the user category (e.g. Condominium, Single Family Home, etc.) that best represents the actual or anticipated use of the

A1-6

DOC 6628281.SCV

parcel(s) or facilities on the parcel(s) in the development. For more specific information regarding the connection fee application procedure and fees, the developer should contact the District's Wastewater Fee Public Counter at (562) 908-4288, extension 2727.

5. In order for the District to conform to the requirements of the Federal Clean Air Act (CAA), the capacities of the District's wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CAA. All expansions of District's facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the District's treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise the developer that the District intends to provide this service up to the levels that are legally permitted and to inform the developer of the currently existing capacity and any proposed expansion of District's facilities.

A1-6 Cont.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2743, or mandyhuffman@lacsd.org.

Very truly yours,

Mandy Huffman

Mandy Huffman
Environmental Planner
Facilities Planning Department

MNH:mnh

cc: A. Schmidt
A. Howard

DOC 6628281.SCV

INTENTIONALLY LEFT BLANK

Response to Comment Letter A1

Los Angeles County Sanitation Districts
Patricia Horsley, Environmental Planner
January 3, 2025

A1-1 This introductory comment identifies the commenter and notes review of the Draft EIR. Additionally, the comment notes a copy of comments previously made on the Notice of Preparation (NOP) is enclosed to this comment letter (included as Comment A1-6). The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

A1-2 Regarding wastewater conveyance pipelines, Section 4.19, Utilities and Service Systems, of the Draft EIR accurately describes wastewater flow from the Project site to a local sewer line that connects to the Santa Clarita Valley Sanitation District 24-inch diameter line and does not conflict with the information provided in this comment (Draft EIR, pages 4.19-6 and 4.19-21). The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

A1-3 Regarding the expected average wastewater flow, the Draft EIR analyzed the Project's potential impacts to wastewater conveyance and treatment within Section 4.19, Utilities and Service Systems. In accordance with this comment, revisions to Section 4.19 of the Draft EIR have been made to reflect the average anticipated wastewater flow (i.e. 102,174 gallons per day), as included in Chapter 3, Revision to the Draft EIR, of this Final EIR. These revisions disclose the Project's average wastewater flow of 102,174 gallons per day (or approximately 0.1 million gallons per day [mgd]), as determined by the Santa Clarita Valley Sanitation District, and the analysis in the EIR has been updated accordingly. The approximately 0.1 mgd, as provided by the Los Angeles County Sanitation Districts, compared to 0.33 mgd of peak flow assessed in the Draft EIR, represents a decrease in wastewater flows when compared to what was stated in the Draft EIR. Given the information provided by the Los Angeles County Sanitation Districts, the average flow would constitute 1.0% of the available treatment capacity serving the Project site, as opposed to the 4.0% stated in the Draft EIR. The conclusion of less than significant impacts stated in the Draft EIR would not be changed by this data. The Project would not result in the relocation or construction of a wastewater treatment facility, the relocation or construction of which would cause significant environmental impacts. This addition does not change the analysis or impact conclusions in the Draft EIR, nor does this result in any new significant impacts or the need for new or altered mitigation measures.

A1-4 The comment states all other information related to wastewater facilities and service is current. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

A1-5 The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

A1-6 The comment represents a NOP comment letter from the Santa Clarita Valley Sanitation District dated July 13, 2022. The letter includes information based on Project Description provided in the Project's NOP. However, since the release of the NOP, the Project Description changed, including the number of residential units. As such, the analysis presented in Section 4.19, Utilities and Service Systems, of the Draft EIR is based on the will serve letter from the Los Angeles County Sanitation Districts (see Appendix

L-6 to the Draft EIR), which adequately describes the potential impacts to wastewater facilities and service capacity supporting the Project site, starting on page 4.19-22 of Section 4.19 to the Draft EIR. See Response to Comment A1-3 for more discussion. In addition, the NOP comment letter was not included in Table 1-1, Notice of Preparation and Comment Letters Summary, of the Draft EIR. As such, a revision to Table 1-1 has been made accordingly to state that the NOP comment letter was received, as included in Chapter 3, Revisions to the Draft EIR, of this Final EIR. Given the above discussion, the Draft EIR was supported by analysis contained in Appendix L-5 and L-6 to the Draft EIR. This addition does not change the analysis or impact conclusions in the Draft EIR, nor does this result in any new significant impacts or the need for new or altered mitigation measures. The addition merely clarifies the NOP comment letter was received and addressed in the EIR.

Comment Letter A2

STATE OF CALIFORNIA–THE NATURAL RESOURCES AGENCY GAVIN NEWSOM, *Governor*

SANTA MONICA MOUNTAINS CONSERVANCY
LOS ANGELES RIVER CENTER & GARDENS
570 WEST AVENUE TWENTY-SIX, SUITE 100
LOS ANGELES, CALIFORNIA 90065
PHONE (323) 221-8900
FAX (323) 221-9001
WWW.SMMC.CA.GOV

January 27, 2025

Erica Aguirre, AICP
Principal Planner, Subdivisions
Los Angeles County Regional Planning Department
320 West Temple Street, 13th Floor
Los Angeles, California 90012

Comments on Draft Environmental Impact Report
for The Trails at Lyons Canyon Project, Project No. 2021-001195- (5)
Case No(s). Vesting Tentative Tract Map No. 83301 (RPPL 2021003061),
Conditional Use Permit No. RPPL 2021003113
Zone Change No. RPPL 2021003163, Oak Tree Permit No. RPPL 2021003070
SCH No. 2022060346

Dear Ms. Aguirre:

The Santa Monica Mountains Conservancy (Conservancy) finds that the proposed project for 510 dwelling units (462 condominiums and 47 senior affordable apartments) in the Santa Susana Mountains/Simi Hills Significant Ecological Area as currently mitigated would result in significant biological impacts to both oak woodlands and the Santa Susana Mountains ecosystem carrying capacity. A2-1

The Conservancy concurs that Draft Environmental Impact Report's (DEIR) reduced footprint Alternative C is the Environmentally Superior Alternative. However, the selected Alternative C footprint unnecessarily creates an extensive need to export dirt, and it inexplicably makes a public trail system not part of the project even though there is more than ample space and terrain for such use north and west of the proposed development footprint. A2-2

These footprint design decisions appear to be rooted in intentionally making the case that Alternative C can only partially meet the Project Objectives. That case cannot be sufficiently made because an equivalent scale reduced development footprint can easily be shifted northward and a bit westward resulting in even less biological impacts, less-to-zero export of soil, and a full public trail system. It is obvious that that Project Objectives can be met with a revised reduced footprint alternative that does a substantially better job of avoiding biological impacts and the multiple impacts of hauling thousands of cubic yards of dirt offsite. The range of DEIR alternatives will remain inadequate without a more strategically configured reduced footprint alternative. A2-3 A2-4

For all intents and purposes, any project that eliminates 23 acres of oak woodland, 100 acres of chaparral, and 35 acres of coastal sage scrub and cuts down 265-plus SEA protected trees cannot have biological impacts that can be mitigated below a level of significance. The protection of 467 off-site acres that can never be developed, and the planting of 772 native trees, is most welcomed, but it does virtually nothing scientifically supportable to offset the above loss of ecosystem capacity in the Santa Susana Mountains. If the proposed protected offsite acreage possessed the terrain and legal access characteristics to make it potentially developable, the value of the mitigation would be exponentially greater. The DEIR will remain inadequate until it concludes that the proposed project would result in unavoidable significant adverse biological impacts, requiring an expanded statement of overriding considerations. Most importantly, a better-crafted reduced footprint alternative, with greatly reduced habitat and native tree impacts, could be mitigated below a level of biological impact significance.

A2-5

A2-6

Deferred mitigation is not allowed under the California Environmental Quality Act. The DEIR includes a provision that allows the applicant to forgo undetermined percentages of the planting and seven-year monitoring of 772 native trees if the applicant contends that there is insufficient suitable area onsite to accommodate the trees. Instead, the applicant would pay into the County's oak tree mitigation fund. That County fund mitigation option is inadequately defined to permit adequate monitoring compliance, and it is deferred. The DEIR includes no analysis of how, and in what measure, the County oak tree mitigation fund biologically mitigates for the loss of SEA protected trees. The DEIR will remain inadequate until it eliminates the option for the loss of protected trees to be mitigated via the County's oak tree mitigation fund.

A2-7

The DEIR will also remain inadequate if it allows for the counting of existing sapling protected trees in the open space areas towards the mitigation requirement of planting 772 trees. Those sapling trees are extant and merely counting and mapping them does not help mitigate the loss of mature trees. We emphatically urge the County not to go down the road of allowing any existing oak trees to count towards required numbers of newly planted replacement trees.

A2-8

The FEIR must include language that prohibits the planting of any of the 772 mitigation trees within any portion of any either any Fire Department required fuel modification zone or otherwise landscaped area associated with the proposed development. Oak trees in fuel modification zones and in semi-formal landscaped areas on graded slopes and pads do not provide the range of ecological benefits of oak trees in undisturbed oak woodland conditions. We urge the County to require strong unambiguous FEIR mitigation and conditioning language that does not allow the planting of any of the 772 native mitigation trees in any portion of any either any Fire Department required fuel

A2-9

modification zone or otherwise landscaped area associated with the proposed development.

A2-9 Cont.

Probably the two most intense infestations of the Gold Spotted Oak Borer (GSOB) insect in Los Angeles County are with five miles of the subject project in Whitney, East, and Rice Canyons. The Final FEIR must include some analysis of how GSOB could factor into the efficacy of the proposed project mitigation measures.

A2-10

The proposed direct impacts to 4.94 acres of jurisdictional waters is significant and easily avoidable via slightly reduced footprint alternatives. The Conservancy urges the County to require all mitigation associated with jurisdictional waters to be implemented in the Santa Clara River watershed. The County can make that requirement and not leave it up to the California Department of Fish and Wildlife in the post FEIR period. If the applicant cannot mitigate for those impacts in the vast Santa Clara River watershed, then the applicant has the option of further avoiding such impacts to reduce the required mitigation acreage and other requirements.

A2-11

Please address any correspondence to Paul Edelman, Deputy Director of Natural Resources and Planning, at (310) 589-3200, extension 128, edelman@smmc.ca.gov, or at the above letterhead address.

A2-12

Sincerely,

STEVE VERES
Chairperson

INTENTIONALLY LEFT BLANK

Response to Comment Letter A2

Santa Monica Mountains Conservancy
Steve Veres, Chairperson
February 4, 2025[15]

A2-1 Regarding the subject line of the comment letter, the Project does not require a zone change. Therefore, Zone Change No. RPPL 2021003163 is not applicable to the Project. All other associated Project numbers identified in this comment are correct.

Regarding the number of dwelling units, as stated in Chapter 3, Project Description of the Draft EIR, the Project would provide a total of 71 affordable dwelling units. The 510 total dwelling units include 24 for-sale inclusionary condominium units for moderate- and middle-income levels and 47 very low-income, rental senior citizen apartment units (with one manager's unit, for a total of 48 units within one multifamily building) and 438 market-rate condominium units.

Regarding the Project's biological resource impacts, substantial evidence provided within Section 4.4, Biological Resources of the Draft EIR and the Biota Report (included as Appendix C of the Draft EIR) supports the conclusion that implementation of required mitigation measures would reduce the impact to oak woodlands and the Santa Susana Mountains Ecosystem to a less than significant level. These mitigation measures are detailed beginning on page 4.4-69 in Section 4.4 of the Draft EIR and include MM-4.4-1 (On-Site Habitat Preservation), MM-4.4-2 (Habitat Mitigation and Monitoring Plan), MM-4.4-3 (Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation), MM-4.4-4 (Biological Monitoring), MM-4.4-5 (Demarcation of Disturbance Limits), MM-4.4-6 (Invasive Species Prevention), MM-4.4-7 (Landscaping Plan), MM-4.4-8 (Crotch's Bumble Bee Habitat Preservation and Minimization Measures), MM-4.4-9 (Off-Site Habitat Preservation), MM-4.4-10 (Special-Status Wildlife Relocation Plan), MM-4.4-11 (Nesting Bird Avoidance), MM-4.4-12 (Lighting Plan), MM-4.4-13 (Homeowners' Association Covenants, Conditions, and Restrictions), MM-4.4-14 (Jurisdictional Waters Compensation), MM-4.4-15 (Roosting Bat Survey), and MM-4.4-16 (SEA Protected Trees Replacement/Compensation).

A2-2 Regarding earthwork and export quantities under Alternative C, as discussed on page 6-58 in Chapter 6, Alternatives, of the Draft EIR, the approximately 28-acres of development represents a 67% reduction in the development footprint when compared to the Project. The Alternative C footprint location is specifically designed and sited to be adjacent to the existing roadway, to help preserve riparian habitat and non-riparian streams and other biological resources (including native habitats, protected trees, oak woodlands, special-status plants, and rare plants), and to avoid a FEMA Flood Zone A. As a result of the reduced development footprint, grading activities would not be balanced on-site as the total acres developed would not be able to accommodate balancing of materials on-site. The estimate for total export of 136,000 cubic cards under Alternative C (resulting from approximately 529,000 cubic yards of cut and 393,000 cubic yards of fill) was provided by United Civil Inc., a civil engineering firm[16]. Therefore, the quantity of export is not considered "unnecessary" given the lack of a development footprint to balance the cubic yardage of cut within Alternative C.

---

15 Note that although Comment Letter A2 is dated January 27, 2025, the letter was not received by the County until February 4, 2025.

16 UCI is a reputable engineering firm and UCI's staff includes 5 registered civil engineers and 5 Master of Science in Civil Engineering degrees.

Regarding a public trail system, expanding the Alternative C development footprint to incorporate a paved access road that would function as a multi-use trail would result in encroachment into intermittent streambed/drainage areas within a FEMA Flood Zone A, which Alternative C was specifically designed to avoid. Furthermore, the development footprint under Alternative C would not extend as far south as the Project's development footprint. Accessing the existing non-dedicated trails located within the southern portion of the Project site (which the Project is proposing to preserve and dedicate to the County), would require additional grading within the on-site open space area to construct a new access trail. As Alternative C is designed primarily to be outside of a FEMA Flood Zone A and to reduce potential impacts to biological resources, which include streambed/drainage areas, by minimizing the grading and development footprint, a new public trail system was determined to be counterproductive to the preservation of biological resources as part of Alternative C.

A2-3 Regarding Alternative C's ability to meet Project objectives, a shifted development footprint ("northward and a bit westward") would not change any of the Project objective determinations included on pages 6-58 and 6-59 of Chapter 6, Alternatives, of the Draft EIR. As discussed on page 6-59 of the Draft EIR, Alternative C would not satisfy objective 4 ("Provide substantial homeownership opportunities for middle-income families in an area proximate to existing residential uses and infrastructure") or objective 6 ("Provide a comprehensive trail network, including publicly accessible trailhead, that provides connections for the public to access existing open space areas and established trails"). All other Project objectives under Alternative C would be satisfied or partially satisfied. Regarding objective 4, shifting the development footprint of Alternative C would have no effect on homeownership opportunities, as all the proposed units would remain rental units under this Alternative. Furthermore, regarding objective 6, shifting the development footprint northward and westward would not create any new opportunities for a public trail system, as the existing non-dedicated trail network located in the southern portion of the Project site would not be connected to the Project site, as it would be more difficult to access and would increase biological resource impacts.

Regarding the potential for a shifted Alternative C development footprint to reduce biological resource impacts, as discussed on pages 6-62 through 6-64 in Chapter 6, Alternatives of the Draft EIR, Alternative C would reduce mitigation requirements and would reduce overall impacts to biological resources under its current configuration and location. Shifting the Alternative C development footprint northward and westward would result in encroachment into intermittent streambed/drainage areas within a FEMA Flood Zone A, which this alternative was designed to avoid. As such, the shifted location would not reduce, to the maximum extent possible, the impacts intended to be avoided by the design of Alternative C. Additionally, the commenter did not provide any evidence that shifting the development footprint would further reduce biological resource impacts or reduce the amount of required soil export. Regardless, any potential reductions would not result in the alternative satisfying additional Project objectives.

A2-4 The range of reasonable alternatives analyzed in Chapter 6, Alternatives of the Draft EIR, including Alternative C, satisfies the requirements set forth in Section 15126.6 of the CEQA Guidelines (14 CCR 15126.6). As discussed on page 6-1 in Chapter 6 of the Draft EIR, "Pursuant to Section 15126.6(b) of the CEQA Guidelines, an alternatives discussion must focus on 'alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.'" As summarized on page 6-75 of the Draft EIR, Alternative C would reduce impacts when compared to the Project for most environmental topics. Although mitigation measures would still be

required for biological resources impacts, mitigation requirements would be reduced proportionally due to a less overall impacted area under Alternative C.

A2-5 As discussed in page 4-59 in Section 4.4, Biological Resources of the Draft EIR, considering both the On-Site Conservation Area and Off-Site Conservation Area, the Project results in the preservation of 611.13 acres of natural open space that would support numerous plant and wildlife species, including the special-status species found on the Project site and in the vicinity. Mitigation measures for the On-Site Conservation Area (including MM-4.4-1, On-Site Habitat Preservation, and MM-4.4-2, Habitat Mitigation and Monitoring Plan, beginning on page 4.4-69 of the Draft EIR) are proposed to require a Conservation Management Plan and Habitat Mitigation and Monitoring Plan that would preserve, maintain, and restore habitats within the area that has trails that are already being used by the public. The Off-Site Conservation Area includes numerous streams, and many acres of sensitive woodland habitats associated with uplands and riparian areas. The six off-site parcels[17] proposed for preservation are immediately adjacent to the Santa Clarita Woodlands Park that is managed by the Mountains Recreation and Conservation Authority. Regarding the developability of the off-site parcels, these parcels are privately owned. Even if it would require terrain modification (i.e., grading) and/or development of a new access road, all privately-owned parcels have the potential to developed in the future. As such, these parcels would be a valuable addition to the preserved lands within the Santa Susana Mountains/Simi Hills SEA by preserving sensitive resources and habitat linkages in the region. The preservation of such habitats at the mitigation to impact ratios shown on page 4.4-87 of the Draft EIR adequately mitigate the impacts to less than significant.

A2-6 Section 4.4, Biological Resources of the Draft EIR and the Biota Report included as Appendix C provide a comprehensive disclosure of the existing biological conditions on the Project site and the quantified impacts of Project development. The impacts and mitigation are analyzed pursuant to the requirements of CEQA and the CEQA Guidelines as well as the County's SEA Ordinance, which exceeds the typical analysis under CEQA and requires mitigation for all impacts to biological resources, sensitive or not. Section 4.4, Biological Resources of Draft EIR and Biota Report were reviewed by the Department of Regional Planning's Senior Biologist and the SEATAC on June 3, 2025, who made several recommendations with regards to the Project and Biota Report. The proposed mitigation measures, which include the preservation of 466.7 off-site acres, would reduce potential biological resources impacts to less than significant.

Regarding a reduction of habitat and native tree impacts, as discussed on pages 6-62 through 6-64 of Chapter 6, Alternatives, of the Draft EIR, the Alternative C footprint location and configuration already substantially reduces the impacts to biological resources when compared to the Project and fully satisfies the requirements of CEQA Guidelines Section 15126.6(a), which states that an EIR must "describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." See response A2-3 for additional discussion about why shifting the location of Alternative C would not result in fewer impacts to biological resources when compared to Alternative C's currently proposed location.

[17] As stated on page 4.4-84 of the Draft EIR, the six off-site parcels include Assessor's Parcel Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067.

A2-7 Regarding replacement trees and the County's Protected Tree Fund, the Draft EIR contains MM-4.4-16, SEA Protected Trees Replacement/Compensation, which states that the payment into the County's Protected Tree Fund is only to be used as a "last resort" should there not be enough locations within the Conservation Area (on site and off site), or Project landscaped areas for planting replacement trees. As shown in Figure 3-7, Landscape Plan, of the Draft EIR, all 772 SEA replacement trees required per MM-4.4-16, SEA Protected Tree Replacement/Compensation, could be feasibly planted in the On-Site Conservation Area. As stated in MM-4.4-2, Habitat Mitigation and Monitoring Plan, those plantings in the On-Site Conservation Area are required as part of the establishment of 15.2 acres of *Quercus agrifolia* forest and woodland alliance in areas that are currently non-native *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands. In order to meet the obligations of the two mitigation measures, the 772 SEA replacement trees shall be located within Conservation Areas that would be preserved in perpetuity via conservation easement, and it has been demonstrated through the Draft EIR that these trees can be adequately accommodated on site. Therefore, the potential payment into the County's Protected Tree Fund would only be necessary if during the implementation of those two mitigation measures it is determined, with concurrence by the Forester with the Fire Department or County Biologist (per Section 22.102.070(F)(5) of the County Code), that the capacity for the site has been reached. Thus, if mitigation trees are deemed impossible by the County Forester, only then a contribution to the fund may be made in the amount equivalent to the protected resource loss.

Additionally, the County's Protected Tree Fund is codified in Section 22.102.070(F)(5) of the County Code as a viable option for mitigation for the replacement of the impacted trees. As stated therein, the Project Applicant would need to calculate the resource value of each removed tree using an industry standard (i.e., the International Society of Arboriculture's "Guide for Plant Appraisal"). This would be approved by the County Forester of the Los Angeles County Fire Department after implementation of the Protected Tree Replacement Plan. Section 22.102.070(F)(5)(a) of the County Code then provides a list of purposes for which the funds can be used. The purposes listed provide for replacement, maintenance, and preservation of native trees, or the educating the public on protection for native trees. As such, the Protected Tree Fund does not defer mitigation but provides distinct options that provide adequate mitigation for the trees impacted by the Project.

A2-8 Regarding sapling trees, saplings are often browsed upon by herbivores (e.g., mule deer and desert cottontail), which can lead to the immature trees not reaching maturity. As stated in MM-4.4-16, "replacement trees need to be nurtured and maintained in a healthy condition and be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees" (see pages 4.4-93 and 4.4-94 of the Draft EIR). Given this, MM-4.4-16 has been revised to remove the following statement, "Undersized, naturally sprouted trees of the same species growing on site may be protected or transplanted as replacement trees" from the consideration of replacement trees, as shown in Chapter 3, Revisions to the Draft EIR, of the Final EIR. Moreover, as shown in Figure 3-7, Landscape Plan, of the Draft EIR, all 772 SEA replacement trees required per MM-4.4-16, SEA Protected Tree Replacement/Compensation, could be feasibly planted in the On-Site Conservation Area, which excludes any areas of the Project site that are impacted by development, including exclusion of fuel modification areas. As stated in MM-4.4-2, Habitat Mitigation and Monitoring Plan, those plantings in the Onsite Conservation Area are required as part of the establishment of 15.2 acres of *Quercus agrifolia* forest and woodland alliance in areas that are currently non-native

Brassica nigra–Centaurea melitensis herbaceous semi-natural stands. Further, please see response provided above to Comment A2-7.

A2-9 As stated in MM-4.4-16, SEA Protected Trees Replacement/Compensation (beginning on page 4.4-93 of the Draft EIR), the Conservation Management Plan required by MM-4.4-1, On-Site Habitat Preservation, will include a Protected Tree Replacement Plan that shall dictate the establishment of replacement trees within the On-Site Conservation Area. As stated in the Chapter 3, Project Description, of the Draft EIR, the Conservation Area is defined as natural open space which does not include areas in the fuel modification zone or any landscaped area.

A2-10 As stated in MM-4.4-1, On-Site Habitat Preservation (beginning on page 4.4-69 of the Draft EIR), the Conservation Management Plan will require that arborists certified by the International Society of Arboriculture must conduct surveys every five years that shall include an assessment of potential infestations of invasive shothole borer beetle and other pathogens or invasive insects, which would include the gold spotted oak borer since it is an invasive insect, that can threaten native habitat. As such, MM-4.4-1 comprehensively addresses the potential for gold spotted oak borer on the existing trees as well as proposed mitigation trees. Further, except for certain specific statutory exceptions, CEQA does not require the analysis of the existing environment's impact on the Project; rather, the analysis should evaluate the Project's impact on the environment (*California Building Industry Association v. Bay Area Air Quality Management District* [2015] 62 Cal.4th 369, Case No. S213478). The implementation of the Project would not exacerbate any risks associated with gold spotted oak borer, which is an existing environmental condition located, as noted by the commenter, approximately five miles away from the Project site.

A2-11 Regarding Project alternatives with a reduced footprint relative to the jurisdictional waters on site, the Draft EIR includes Alternative C, Reduced Footprint Alternative, which presents a 67% reduction in the development footprint when compared to the Project. This alternative is included to specifically address concerns related to biological resources impacts. Moreover, this alternative would cluster development closer to The Old Road and includes avoidance of most riparian habitat and non-riparian streams, and substantial avoidance of other biological resources, including native habitats, protected trees, oak woodlands, special-status plants, and rare plants. Additionally, as depicted in Figure 6-3, Alternative C Site Plan Development Footprint, this alternative would include avoidance of most riparian habitat and non-riparian streams, and substantial avoidance of other biological resources. The green layer on Figure 6-3 represents CDFW jurisdictional delineation features such as non-riparian streams and riparian habitat. Further discussion of this alternative is provided on pages 6-56 through 6-72 in Chapter 6, Alternatives, of the Draft EIR.

Additionally, the On-Site and Off-Site Conservation Areas required per MM-4.4-1, On-Site Habitat Preservation, and MM-4.4-9, Off-Site Habitat Preservation, preserve adequate mitigation acreage of streams that are located within the Santa Clara River watershed. MM-4.4-2, Habitat Mitigation and Monitoring Plan, provides enhancement opportunities for the stream located within the On-Site Conservation Area. In summary, it is anticipated that all Project-related biological impacts will be mitigated to less than significant levels within the Santa Clara River watershed.

A2-12 This comment providing contact information is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

INTENTIONALLY LEFT BLANK

Comment Letter A3

From:	Veronica Zaragoza
To:	Erica G. Aguirre
Subject:	questions re: Notice of Availability of DEIR for the Trails at Lyons Canyon Project No. 2021-001195-(5)
Date:	Wednesday, February 5, 2025 12:02:27 PM
Attachments:	Notice of Completion & Availability of Draft Environmental Impact Report.pdf image001.png image002.png image003.png image004.png image005.png image006.png

Good morning Erica,

I am in the process of reviewing the DEIR for the Trails at Lyons Canyon project, and the notice states comments must be received by this Friday 2/7. There is quite a bit of information that needs to be updated as it relates to the Library, but I won't have that completed by Friday. What are my other options for submitting the revisions? Will there be another opportunity to provide comments at a later date? Please advise,

A3-1

Thank you.

LA COUNTY LIBRARY
Curiosity Welcomed

LACountyLibrary.org
IMLS National Medal
2023 Winner

VERONICA ZARAGOZA | *she/her/hers*
Staff Services Supervisor
Support Services
7400 Imperial Hwy, Downey, CA 90242
P: 562.940.8455
E: vzaragoza@library.lacounty.gov
**Please note, our office is closed on Fridays.*
LA County Library belongs to our communities and serves as a portal to learn, grow, and succeed.
View our Strategic Plan
The County of Los Angeles Land Acknowledgment

Response to Comment Letter A3

LA County Library
Veronica Zaragoza, Staff Services Supervisor
February 5, 2025

A3-1 Regarding the public comment period on the Draft EIR, the Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. The commenter noted that information related to the Library would need to be updated but did not provide specific information at the time the comment letter was sent. Any additional comments received during the public review extension are responded to within this Final EIR section. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

Comment Letter A4

OFFICE OF THE SHERIFF

COUNTY OF LOS ANGELES

HALL OF JUSTICE

ROBERT G. LUNA, SHERIFF

February 6, 2025

Ms. Erica G. Aguirre, AICP, Principal Planner
LA County Department of Regional Planning
320 West Temple Street. 13th Floor
Los Angeles, CA 90012

Dear Ms. Aguirre:

TRAILS AT LYONS CANYON PROJECT (TR 83301)
NOTICE OF COMPLETION AND AVAILABILITY
DRAFT ENVIRONMENTAL IMPACT REPORT
BACK CHECK COMMENTS

Thank you for inviting the Los Angeles County Sheriff's Department (Department) to review and comment on the December 2024 Draft Environmental Impact Report (DEIR), for the Proposed Trails at Lyon Canyon Project (Project). The project site is bordered by Interstate 5 (I-5) immediately to the east, residential uses on Sagecrest Circle on the north, open space land within the unincorporated County land on the south and a vacant land within the Santa Susana Mountains by the west. The project proposes to develop 510 dwelling units with a mix of attached and detached dwelling units, and detached condominium units, and an affordable senior housing apartments within 41.47 acres; 1.13 acres for a recreational center; 10.73 acres of debris basin lots maintained by the Los Angeles County Flood Control District (LACFCD); 21.72 acres of HOA-maintained open space; 152.9 acres of landscaped and natural open space; 1.43 acres of water tank and frontage; and 4.10 acres for Street A and Street B, which would be the public roadways. A4-1

The Department has reviewed the DEIR and has no other comments at this time. However, should additional and/or new information become available for the proposed Project, we would request the opportunity to provide comments. A4-2

211 WEST TEMPLE STREET, LOS ANGELES, CALIFORNIA 90012

A Tradition of Service
Since 1850

Also, for future reference, the Department provides the following updated address and contact information for all requests for reviews, comments, law documents, and other related correspondence:

Jennifer Fang, Acting Bureau Director
Facilities Planning Bureau
Los Angeles County Sheriff's Department
211 West Temple Street
Los Angeles, California 90012

Attention: Planning Section

A4-3

Should you have any questions regarding this matter, please contact me, at (323) 526-5657, or your staff may contact Mr. Ryan Erasmo, of my staff, at (323) 526-5614.

Sincerely,

ROBERT G. LUNA, SHERIFF

Jennifer Fang, Acting Bureau Director
Facilities Planning Bureau

Response to Comment Letter A4

Los Angeles County Sheriff's Department
Robert G. Luna, Sheriff
February 6, 2025

A4-1 The comment accurately describes the Project description as defined by the Vesting Tentative Tract Map No. 83301. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

A4-2 The comment states no additional comments are provided and requests that should additional information become available, the Department receive notification. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

A4-3 The comment provides updated contact information. Regarding the updated contact information, the comment has been received. New notices to the Sheriff's Department, to the extent there are any, will be addressed to the Acting Bureau Director, as requested. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter A5

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 266-3574
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life

February 7, 2025

Erica G. Aguirre, AICP
Principal Planner, Subdivisions
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, California 90012

RE: Trails at Lyons Canyon Project – Draft Environmental Impact Report (DEIR)
SCH# 2022060346
GTS #07-LA-2022-04707
Vic. LA 5 PM R49.71

Dear Erica G. Aguirre,

Thank you for including the California Department of Transportation (Caltrans) in the review process for the above referenced project. The Project site, which is a total of 233.49 gross acres in unincorporated Los Angeles County, in the northern foothills of the Santa Susana Mountains within the Santa Clarita Valley. The Project includes several entitlements for the creation of 37 lots for the development of 510 dwelling units with a mix of attached and detached for-sale condominium units, including 24 affordable for-sale units, 47 affordable senior rental apartments, and one manager's unit; a recreational center and swimming pool; two on-site public streets; private driveways and fire lanes, including multi-purpose trails that would be open to the public; several debris basins; five-foot-wide pedestrian walkways, a water tank, and both improved and natural and preserved open space. The proposed development is clustered in northeasterly portion of the Project site, and includes several on-site block and retaining walls. The Project includes approximately 150 acres of unimpacted natural open space on-site, of which approximately 144 acres would be preserved and maintained in perpetuity through a conservation easement. Off-site Project components include sidewalk improvements, a retaining wall adjacent to The Old Road directly east of the Project site, improvements to The Old Road fronting the Project site, and fuel modification (brush thinning). The Project would include several off-site utility infrastructure component improvements, including utility water lines, upgrades to two existing pump stations, upsizing of existing sewer pipelines, and the construction of three manholes within The Old Road. Additionally, the

A5-1

"Provide a safe and reliable transportation network that serves all people and respects the environment."

Project includes the vacation of excess right-of-way in the Old Road and acquisition of an adjacent County-owned parcel (APN: 2826-022-901). The total earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site adjacent parcel adjacent to The Old Road that includes manufactured slopes. The grading would be balanced on-site, and no import or export of soil would be required for the Project. Several on-site access and utility easements are proposed.

A5-1 Cont.

After reviewing the DEIR, Caltrans has the following comments:

A5-2

The DEIR states that the proposed project will result in a significant and unavoidable transportation impact due to exceeding Vehicle Miles Travelled (VMT) impact thresholds. Caltrans concurs that the project creates a significant VMT impact as proposed, but does not concur that it is unavoidable. Currently, the project is designed in a way that induces a high number of vehicle trips per household due to being a low density, exclusively residential, car-oriented development. The proposed project extends the exurban area and sprawls into the Wildland Urban Interface (WUI) as designated by the California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP), increasing wildfire risks in addition to the significant Vehicle Miles Travelled (VMT) impacts. The Lead Agency is encouraged to integrate transportation and land uses in a way that reduces VMT and Greenhouse Gas (GHG) emissions by facilitating the provision of more proximate goods and services to shorten trip lengths and achieve a high level of non-motorized travel and transit use. Building and zoning for a better balance between housing and employment opportunities can help mitigate commuting distances and create compact, walkable communities. Caltrans recommends the following to more effectively address the significant VMT impact that this project will create as currently proposed:

A5-3

A5-4

A5-5

- Provide for a mixture of land use types within the Project's new zoning area to allow for adaptive reuse in the future. This can allow goods, services, and jobs to be created closer to where the project's residents live.

- Increase density, both vertically and horizontally. Land use developments, like the one proposed, should not sprawl across huge areas of land. By bringing the built environment closer together, and building up instead of out, it becomes possible to greatly reduce energy use, improve walkability, allow for adaptive reuse, and generate real value for the community.

A5-6

- Reduce the amount of car parking whenever possible, as abundant car parking enables and encourages driving. Research looking at the relationship between land-use, parking, and transportation indicates that the amount of car parking

A5-7

supplied can undermine a project's ability to encourage public transit and active modes of transportation. For any project to better promote public transit and reduce vehicle miles traveled, we recommend the implementation of Transportation Demand Management (TDM) strategies as an alternative to building too much parking. A5-7 Cont.

- Rates of car ownership and vehicle miles traveled (VMT) are significantly lower for senior and low-income households. Seeing as this project is includes both, there is sufficient justification to reduce the amount of car parking provided even further. This can help the project promote greater affordability and help achieve regional housing and transportation goals. A5-8
- There should be no more than one car parking space per unit, and at least one long-term bicycle parking space per unit. A5-9
- Caltrans recommends upgrading the proposed Class 2 bike facility on the entirety of the Old Road to a Class 4. High-visibility green paint should also be added at conflict points. The addition of these countermeasures will create a safer and more comfortable active transportation route. A5-10
- Provide an on-site transportation hub and work with local transit operators to provide high quality service to the stop. A5-11
- Ensure robust Wi-Fi availability to all units to encourage teleworking. A5-12
- Gated developments divide communities, limit transportation choices, and increase VMT. For these reasons they should be avoided. If walls are still to be allowed, numerous gates and access points should be provided for people walking or riding bicycles to be able to reach their homes and other destinations easily. A5-13
- Due to the significant VMT, a contribution should be made to the Lead Agency's VMT Mitigation Fund (if established) with the purpose of funding safer infrastructure for people walking, riding bikes, and taking transit throughout the Project area. The most effective methods to reduce pedestrian and bicyclist exposure to cars and trucks is through physical design and geometrics. These methods include the construction of physically separated facilities such as Class IV bike lanes, wide sidewalks, pedestrian refuge islands, landscaping, street furniture, and reductions in crossing distances through roadway narrowing. A5-14
- Additional alternative mitigation measures should be considered and implemented to reduce the impact on VMT, as reducing the project's current A5-15

impacts are critical to developing infrastructure that is both environmentally and economically sustainable. Following construction, a study needs to be conducted to confirm that the proposed mitigation measures are sufficiently offsetting the Project generated VMT. If not, new and/or additional mitigation measures need to be implemented.

A5-15 Cont.

By implementing these recommendations, the Trails at Lyons Canyon Project can enhance regional connectivity, improve safety for all users, reduce VMT, and support sustainable transportation choices.

A5-16

Additionally, construction of the proposed project would involve deliveries of materials, components, and supplies to the various sites, and will involve oversized trucks. As a result, prior to issuance of building or grading permits for the project site, the applicant shall prepare a Construction Traffic Management Plan (CTMP) for review and approval by Lead Agency staff to reduce any impacts to less than significant levels. The CTMP needs to specify the duration of construction period and provide construction analysis on significant impacts due to increase in construction truck traffic on highways not designated as truck routes. It should also specify any work that would affect the freeways and its facilities, and that Caltrans has the jurisdiction for review and approval. Transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a transportation permit from Caltrans.

A5-17

A5-18

Finally, the proposed development adjoins The Old Road, which Caltrans relinquished to the County of Los Angeles in 1970. Any work within State Right-of-Way will require an Encroachment Permit from Caltrans and must meet all mandatory design standards and specifications.

A5-19

If you have any questions, please contact project coordinator Anthony Higgins, at anthony.higgins@dot.ca.gov and refer to GTS #07-LA-2022-04707.

A5-20

Sincerely,

Anthony Higgins

Anthony Higgins
Acting LDR Branch Chief

Cc: State Clearinghouse

"Provide a safe and reliable transportation network that serves all people and respects the environment."

Response to Comment Letter A5

California Department of Transportation, District 7
Anthony Higgins, Acting LDR Branch Chief
February 7, 2025

A5-1 This introductory comment identifies the commenter and states a summary of the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

A5-2 As detailed on page 4.17-22 of Section 4.17, Transportation, of the Draft EIR, in order to mitigate the Project-level residential VMT per capita impacts to less than significant, residential vehicle miles traveled (VMT) per capita would need to be reduced by 48%. Implementation of MM-4.17-2, Transportation Demand Management (TDM) Program, would achieve a VMT reduction of 7.45%, as detailed in Table 4.17-5, Project Baseline VMT with Mitigation, and as such, the Project would result in a Residential VMT per Capita of 19.0, which still exceeds the significance threshold of 10.6 VMT per capita. No combination of feasible mitigation measures would reduce the Project-level impact below the County's threshold of significance for VMT. Appendix J, Mitigation Measures Feasibility Analysis, of Appendix J, Transportation Impact Analysis, of the Draft EIR, provides an evaluation of the feasibility of all TDM measures of the 2021 California Air Pollution Control Officers Association (CAPCOA) publication, *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. This analysis provides justification for why additional mitigation measures could not reduce the Project's significant and unavoidable VMT impact to less than significant with mitigation. Additionally, Alternative B of Chapter 6, Alternatives (Draft EIR, page 6-43), was proposed to reduce VMT impacts by proposing a mixed-use alternative of 361 dwelling units, 49,000 square feet of retail uses, a recreational center, open space, and on-site trails. However, even under Alternative B, Project-level VMT impacts would not be reduced to less than significant levels, and Alternative B was not the environmentally-superior alternative.

A5-3 As detailed on page 4.17-22 of the Draft EIR, "while the immediately adjacent City of Santa Clarita's residential VMT/capita is 24.1, the baseline residential VMT per capita is 12.7 for Los Angeles County in analysis year 2022." As such, the Project's VMT prior to mitigation (20.5) would be below the adjacent City of Santa Clarita's residential VMT/capita, demonstrating that the Project's VMT rate is actually lower than the VMT rate in the immediately abutting jurisdiction.

The Project's proposed land uses comply with the County of Los Angeles' General Plan land use and zoning designations. The Project site is designated as H2-Residential 2 in the General Plan, and the Project's proposed land uses comply with the County's land use and zoning designations. Within land designated H2-Residential 2, density-controlled development (clustering) is encouraged on lands with significant environmental and or topographical features or resources, in order to preserve open space for protection of these natural features or resources. Pursuant to the Density-Controlled Development Conditional Use Permit being sought by the Applicant, the Project's residential uses would be clustered within the northeastern portion of the Project site. Table 3-1, Lot Summary for Vesting Tentative Tract No. 83301, of the Draft EIR, shows that the residential density of the Project is 2.18 dwelling units per acre (du/ac) when considering the development of 510 units across 223.34 gross acres of the Project site. However, the residential uses are clustered within 41.47 gross acres in the northeast portion of the site, which results in an average residential density of 12.3 du/acre. As detailed on page 3-2 of Chapter 3, Project

Description, of the Draft EIR, the Project's density (dwelling units [du]/acre) for individual lots range from 7.7 du/acre to 64 du/acre, and as such, the Project is not a low-density development.

In addition to providing residential land uses, including attached and detached condominiums, single-family homes and very-low-income senior apartments, the Project provides recreational amenities, trails, and preserved open space that would be open to the public. An access road would be provided outside of the Project site's residential development to provide pedestrian, hiking, and bicycling access to the public from the Project's trailhead at the northeast corner of the site. The Project would offer non-vehicular circulation throughout the Project site, such as sidewalks, a Class III bicycle route (as implemented by MM-4.17-2), trails, and pathways. Therefore, the Project would not be an exclusively residential, car-oriented development. Furthermore, Alternative B, of Chapter 6, Alternatives (Draft EIR, page 6-43), was proposed to reduce VMT impacts by proposing a mixed-use alternative of 361 dwelling units, 49,000 square feet of retail uses, a recreational center, open space, and on-site trails. Even though Alternative B proposed commercial uses in addition to the Project's proposed land uses, Project-level VMT impacts would not be reduced to less than significant levels.

As described in Section 3.2, Project Characteristics, of the Draft EIR, it is discussed that the Project would be a clustered development in the northeast portion of the Project site, which includes a fuel managed perimeter interface with the adjacent open space. As discussed in Topical Response-1, higher density and clustered development built with ignition-resistant building materials and defensible space requirements, (as incorporated into the Project) fare much and are more defensible than older neighborhoods built to previous, outdated standards. This is because the defensible space reduces the flame length and potential for spread of fire, and ignition-resistant construction limits opportunities for ember intrusion into structures. See Section 2.4.1.2, of Topical Response-1 for a discussion on how modern subdivisions and master planned communities are easier to defend against wildfires than older subdivisions, even those in wildland-urban interfaces or in FHSZs.

A5-4 There are several mitigation measures set forth in the Draft EIR that reduce VMT and GHG emissions. Regarding measures to achieve a high level of non-motorized travel and transit use and walkable communities, MM-4.17-2, TDM Program, requires inclusion of a Class III bicycle route on-site, which would provide connectivity to the County's future Class II bicycle lane along the Project frontage. Additionally, MM-4.17-2 requires an e-Bikeshare System, community-based traveling planning (such as a rideshare program for school children), carpool/vanpool incentives, and a subsidized or discounted transit program. The Project would offer non-vehicular circulation throughout the Project site, such as sidewalks, a Class III bicycle route (as implemented by MM-4.17-2), trails, and pathways, which would reduce VMT and GHG emissions.

Section 4.8.7, Mitigation Measures, of Section 4.8, Greenhouse Gas Emissions, details eight mitigation measures that would also reduce GHG emissions. For example, MM-4.8-5, Encourage Electric Vehicles, on page 4.8-63, requires the installation of dedicated 208/240 branch circuits and electric vehicle (EV) charging stations, thereby encouraging reductions in GHG emissions from vehicular sources. As detailed in Section 4.8, the Project would result in less than significant GHG impacts with mitigation.

In addition, the Project would provide 510 dwelling units and is located in an area that has employment opportunities nearby. Therefore, the Project would balance housing and employment opportunities, thereby reducing commuting distances and creating a compact, walkable community. For example, there are currently existing commercial uses along The Old Road directly adjacent to the Project site's

northern boundary and several employment-generating land uses further north of the Project site, north of Lyons Avenue and Pico Canyon Road, and along Lyons Avenue to the east, within the City of Santa Clarita These commercial uses offer goods and services in proximity to the Project site's future residents. Additionally, see Response to Comment A5-3 for a discussion of the Project's clustering that helps create a compact, walkable community. See also Response to Comment A5-3 for a discussion of how Alternative B, a mixed-use alternative proposed in the Draft EIR to reduce VMT impacts, would not result in less than significant VMT impacts.

A5-5 The Project site provides a mixture of land use types, including recreational amenities, trails, preserved open space, and residential uses, including attached and detached dwelling units and affordable senior housing. The Project's land uses comply with the County of Los Angeles' General Plan land use designation and the County's zoning designations. The Project site has an H2-Residential 2 land use designation, which allows up to two dwelling units per acre. However, the H2-Residential 2 land use designation encourages density-controlled development on-site to preserve open space. See Response to Comment A5-3 for details on the Project's proposed on-site density. The preservation of open space limits the available space for providing additional land uses on-site.

The Project has been designed and includes land uses that are consistent with existing zoning regulations on the Project site. The Project's zoning designations on-site are primarily (97%) Heavy Agricultural A-2-2 and A-2-1, which allow for uses such as single-family residences, crops, animal hospitals, dairies, dog kennels, and oil wells. A small portion (3%) of the Project site is designated as C-3-DP and C-3 (see Table 3-2, Proposed Residential Dwelling Units, of Chapter 3, Project Description, of the Draft EIR). These zoning regulations limit the amount and density of non-residential uses for goods, services, and employment within the Project site.

Additionally, see Response to Comment A5-3 for a discussion of how Alternative B, a mixed-use alternative proposed in the Draft EIR to reduce VMT impacts, would not result in less than significant VMT impacts.

A5-6 As detailed on Page 3-6 of Chapter 3, Project Description, the Project is designed in a configuration defined by the County as "density-controlled development" (Section 22.140.170 [Density-Controlled Developments], of the Zoning Code). As such, even though the Project site is 233.49 gross acres, development of the Project's dwelling units would be concentrated within 41.47 gross acres. This results in a Project site density ranging from 7.7 du/acre to 64 du/acre, and as such, the Project is not a low-density development and does not sprawl across huge areas of land. Additionally, the Project's proposed development is situated in the northeastern corner of the Project site, proximate to off-site residential and commercial uses and The Old Road and I-5. The Project's future residents and visitors would use existing roadways and transit facilities and connect to the on-site pedestrian and bike facilities to the network in the Project site vicinity and thereby reduce vehicular VMT. Additionally, see Response to Comment A5-3 for a discussion of how Alternative B, a mixed-use alternative proposed in the Draft EIR to reduce VMT impacts, would not result in less than significant VMT impacts. Lastly, adaptive reuse is not applicable to the Project as there are no existing buildings on-site to be adapted.

A5-7 The Project complies with the required amount of vehicular parking per Chapter 22.112, Parking, and Chapter 22.120.080, Density Bonus Parking, of the County Code. The Project would implement TDM measures through implementation of MM-4.17-2, TDM Program, which would reduce the Project's VMT and reliance on single occupancy vehicles with a Class III bicycle route on-site, an e-Bikeshare system,

community-based traveling planning (such as a rideshare program for school children), carpool/vanpool incentives, and a subsidized or discounted transit program. Additionally, the Project would implement MM-4.8-5, Encourage Electric Vehicles, which would provide EV charging stations and infrastructure.

Additionally, according to CAPCOA guidance, "when limiting parking supply, a best practice is to do so at sites that are located near high quality alternative modes of travel, such as a rail station, frequent bus line, or in a high density area with multiple walkable locations nearby" (CAPCOA 2024). As the Project site is not located near high quality alternative modes of travel, this measure is not applicable to the Project.

A5-8 The Project's very-low-income affordable senior housing complies with the required amount of vehicular parking per Title Chapter 22.120.080, Density Bonus Parking, of the County Code, including for the very-low-income senior affordable housing proposed on-site. See Response to Comment A5-7 regarding limiting parking supply and how this measure is not applicable to the Project.

A5-9 As stated in Response to Comment A5-7, the Project complies with the required amount of vehicular parking per County Code requirements. See Response to Comment A5-7 regarding limiting parking supply and how this measure is not applicable to the Project. Additionally, the Project complies with the bicycle parking requirements per Section 22.112 of the County Code.

A5-10 Existing bicycle facilities in the vicinity of the Project site include a Class II bike lane on The Old Road, north of Sagecrest Circle. Figure 4.17-2, Existing and Planned Bicycle Facilities, in Section 4.17, Transportation of the Draft EIR identifies the existing and planned bicycle facilities in the Project's study area. The County Bicycle Master Plan (2012) as well as the Santa Clarita Non-Motorized Transportation Plan (2020) indicates that a Class II bike lane is planned in the study area along The Old Road, south of Sagecrest Circle; along Pico Canyon Road, west of The Old Road; and along Calgrove Boulevard, east of The Old Road. The Project includes a Class III bike route on "A" Street, "B" Street, and the private access road proposed on-site, and the Project's proposed improvements to The Old Road (Draft EIR, page 3-17) would be consistent with the 2012 Los Angeles County Bicycle Master Plan and Santa Clarita Non-Motorized Transportation, and the Project would not preclude or interfere with any future transportation improvements would be implemented within the public right-of-way along The Old Road. As the Project would be consistent with the County's 2012 Bicycle Master Plan and Santa Clarita's 2020 Non-Motorized Transportation Plan, further improvements (such as upgrading the entirety of The Old Road to a Class IV bicycle lane and painting high-visibility green paint), that are not strictly in conformance with said plans, are not necessary.

A5-11 As required by MM-4.17-2, the Project would provide households with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles, thereby reducing household VMT. The Project would also create a ridesharing program for school children. The provision of high-quality transit service would require regional or local agency implementation and substantial changes to current transit practices. As depicted on Figure 4.17-1, Transit Routes, of the Draft EIR, the nearest local service bus route to the Project site is 0.6-mile north of the Project site, at Pico Canyon Road. This VMT reduction measure is applicable for larger plans and at a community scale per the CAPCOA guidance (see Measures T-25, Extend Transit Network Coverage or Hours, and T-26, Increase Transit Service Frequency, CAPCOA Measures Feasibility Analysis of Appendix J of the Draft EIR), not individual development projects at this smaller scale. The Project would

provide an on-site pedestrian and bike network, which would connect to the existing transit facilities such as bus stops located along The Old Road, north of Chiquella Lane.

The Project would not preclude or interfere with any future improvements that the County or City of Santa Clarita may implement within the public right-of-way along The Old Road to create a transportation hub or high-quality service bus stop at the Project site frontage or at the Project site.

A5-12 The Project would not preclude or interfere with the ability of future Project residents to procure robust Wi-Fi to their residences. While Wi-Fi availability depends on coverage of internet suppliers in the area at the time of Project occupation, as the Project site is located proximate to residential and commercial uses in an urban environment, it is very likely that the Project site would have access to robust Wi-Fi to their residences.

A5-13 The Project would not be a gated development. The main access roads to the site, at "A" Street and "B" Street, are not gated and would provide public access to both vehicular and non-vehicular traffic. An emergency access road would be provided from The Old Road into the Project site, which would be gated and unavailable for vehicular access (except for emergency or maintenance vehicles) but would be available for pedestrian, hiking, and bicycling access via the proposed trailhead at the northeast corner of the Project site. Therefore, the project design includes multiple access points for people walking or riding bicycles and is not a gated development that would divide communities, limit transportation choices, or increase VMT. Additionally, through implementation of MM-4.17-2, the Project would include a Class III bike route on the fire access road loop ("A" Street, "B" Street, and the access road on the northwest periphery of the Project site) and improve the connectivity in the Project area. While a retaining wall would be provided along a portion of the Project site boundary fronting The Old Road (between "A" Stret and "B" Street), the wall is necessary for erosion and drainage purposes. As stated above, there are numerous access points from The Old Road into the Project site and the retaining wall segment would not divide communities, limit transportation choices, or increase VMT. As detailed on Figure 3-6, Circulation Plan, of Chapter 3, the Project would maintain circulation throughout the Project site and surrounding areas.

A5-14 While the County is currently exploring the creation of a VMT Mitigation Fund which could be in the form of a VMT fee program or mitigation bank program for development projects such as this Project, the County does not currently have an established VMT Mitigation Fund that is applicable for the Project at this time. Per *Tracy First v. City of Tracy (2009) 177 Cal. App. 4th 912, 938* , the payment of fees is not required when there is no evidence that the mitigation would actually occur. There must be a plan, enforceable by the lead agency, that ensures that the required mitigation funds would actually go towards mitigating the impacts. In summary, the Project would not be required to pay mitigation fees if there is not an established fund that ensures a nexus between the fee paid and the reduction in specific CEQA impacts from the Project.

As detailed in Section 4.17, Transportation, of the Draft EIR, the Project's physical design features and geometrics would encourage walking, riding bicycles, and using public transit. For example, the Project would provide a pedestrian access network to link areas within the Project site and to connect to off-site locations, including nearby commercial uses and on-site and off-site open space. See page 4.16-17 of Section 4.16, Recreation, of the Draft EIR, for more details on the on-site and off-site connectivity of the Project. The Project would include a recreational center on-site, which would be connected via sidewalks to the proposed on-site multi-use trail system that would lead to on-site nature trails and to

the County's regional trail system (see Figure 3-5, Conceptual Trails Map, of Chapter 3 of the Draft EIR). Additionally, the Project would include 2.59 acres of active and passive open space within the development area, as depicted on Figure 3-3, Active and Passive Open Space Plan, of Chapter 3. The active and passive open space areas may contain such uses as a dog park, landscaped open areas (see Figure 3-7, Landscape Plan, of Chapter 3 of the Draft EIR), parklets, picnic tables, activity space, and naturalized walking paths. Additionally, the Project would require implementation of a Class III bicycle lane through MM-4.17-2, TDM Program. As detailed on page 3-4 of Chapter 3 of the Draft EIR, the Project would include off-site development of an eight-foot-wide sidewalk along The Old Road fronting the Project site to provide safe pedestrian access in and out of the Project site. As such, the Project would provide construction of physically separated facilities, such as wide sidewalks, landscaping, and other pedestrian amenities.

The Project would not construct Class IV bicycle lanes within the Project site but would include a Class III bicycle route on the fire access road loop ("A" Street, "B" Street, and the private access on the northwest periphery of the Project site), through implementation of MM-4.17-2. The Project's proposed improvements to The Old Road (Draft EIR, page 3-17) would be consistent with the 2012 Los Angeles County Bicycle Master Plan and Santa Clarita Non-Motorized Transportation, and the Project would not preclude or interfere with any future transportation improvements would be implemented within the public right-of-way along The Old Road.

Regarding roadway widths, "A" Street and "B" Street would comply with County Code requirements and would include two parking lanes and two travel lanes and sidewalks and have been designed to reduce pedestrian crossing distances while complying with the minimum fire lane requirement widths.

A5-15 See Appendix J, Mitigation Measures Feasibility Analysis, of Appendix J, Transportation Impact Analysis, of the Draft EIR, for an evaluation of the feasibility of all TDM measures of the 2021 California Air Pollution Control Officers Association (CAPCOA) publication, Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. This appendix provides justification for why additional mitigation measures cannot reduce the Project's significant and unavoidable VMT impact to less than significant levels.

The Project requires implementation of MM-4.17-2, TDM Program, which would reduce VMT impacts but not to less than significant levels for Project level impacts. It should be noted that VMT impacts under the cumulative project scenario would be reduced to less than significant levels with implementation of MM-4.17-2. MM-4.17-2 details that the TDM Program shall be prepared subject to review and approval by LACDRP and Public Works to ensure that the TDM Program discourages single-occupancy vehicle trips and encourages alternative modes of transportation.

A5-16 The Project's proposed trail connections, on-site access road connection to The Old Road, TDM measures as implemented through MM-4.17-2, including Class III bicycle lanes and the County's plan to include Class II bicycle lanes on The Old Road fronting the Project site would support regional connectivity. Further, the Project would not prohibit implementation of future transit improvements, if deemed appropriate by the local transit agencies. Also, as detailed in Chapter 3, Revisions to the Draft EIR, mitigation requirements for MM-4.20-1, Wildfire Education Program, have been revised to include a Fire Safety Coordinator position as part of the HOA Board, and creation of a senior housing carpool program to ensure safe evacuation during emergency evacuations. The Project would construct roadways in accordance with County standards for roadway design and access. Furthermore, as

detailed on page 3-17 of Chapter 3 of the Draft EIR, The Old Road would be improved to include widening of The Old Road by 47 feet and would include an eight-foot sidewalk along the Project site's frontage, also supporting regional connectivity, safety for all users, and support transportation choices. For the reasons described above, the Project would support regional connectivity, safety for all users, VMT reductions, sustainable transportation choices

For more details on reducing VMT and supporting sustainable transportation choices, please see Response to Comments A5-5 through A5-15.

A5-17 MM-4.17-1, Construction Traffic Management Plan, of Section 4.17, Transportation, of the Draft EIR, requires a Construction Traffic Management Plan to be prepared in accordance with the County (Lead Agency) requirements for Temporary Traffic Controls For Lane Closures, Street Closures and Detours and supplemental to Part 6 of the Greenbook Standard Specifications for Public Works Construction, subject to County review and approval. MM-4.17-1 would reduce construction traffic impacts to less than significant levels. The Draft EIR provided an analysis of construction traffic impacts (Draft EIR, page 4.17-20). MM-4.17-1 requires that the Construction Traffic Management Plan identify designated transport routes for heavy trucks and haul trucks to be used throughout Project construction.

A5-18 Through MM-4.17-1, Construction Traffic Management Plan, of Section 4.17, Transportation, of the Draft EIR, the Project would comply with all applicable guidance and procure all necessary permits regarding transportation of heavy construction equipment and/or materials. In order to be responsive to this comment, a revision to the Draft EIR has been made to Section 3.6.2, Other Permits and Approvals, of Chapter 3, Project Description, as shown in Chapter 3, Revisions to the Draft EIR, of the Final EIR.[18]

A5-19 This comment stating Caltrans' requirement for an Encroachment Permit for any work within State Right-of-Way is acknowledged. The Project would not involve any modifications within State Right-of-Way, and as such, the Project would not require procurement of an Encroachment Permit from Caltrans.

A5-20 This comment concludes the letter and proves a point of contact. It is noted for the record and will be made available to the decision-makers for their review and consideration.

[18] This revision does not change the impact analysis or conclusions in the Draft EIR. Rather, this information merely clarifies information and conclusions that were already presented in the Draft EIR. As such, these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, do not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter A6

California
Department of Conservation
Geologic Energy Management Division

Gavin Newsom, Governor
Gabe Tiffany, Acting Director
715 P Street, MS 1803
Sacramento, CA. 95814
T: (916) 445-5986

02/26/2025

County: Los Angeles - Department of Regional Planning
Erica Aguirre
320 West Temple St, 13th Floor, Los Angeles, CA 90012, USA
EAguirre@planning.lacounty.gov

Construction Site Well Review (CSWR) ID: 1013194

Assessor Parcel Number(s): 2826022026, 2826022027, 2826022035, 2826023014, 2826041039

Property Owner(s): Corey Harpole

Project Location Address: West of The Old Road and South of Sagecrest Circle Stevenson Ranch, California 91381

Project Title: Trails at Lyons Canyon Project

Public Resources Code (PRC) § 3208.1 establishes well reabandonment responsibility when a previously plugged and abandoned well will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received and reviewed the above referenced project dated 2/19/2025. To assist local permitting agencies, property owners, and developers in making wise land use decisions regarding potential development near oil, gas, or geothermal wells, the Division provides the following well evaluation.

A6-1

The project is located in Los Angeles County, within the boundaries of the following fields:

Any Field

A6-2

Tentative site plans provided to CalGEM indicate that the well is located within 300 ft of planned

A6-3

dwellings and, if required, methane gas protection system will be employed above the well location. The well depth shall remain between 5 feet and 10 feet below grade to satisfy CalGEM regulations (CCR 1723.5). Although listed as a dry hole, historical well data indicate a non-producible oil and gas show between 9300 - 9400 ft. Future updates to the site plans including surveyed well location(s) in Latitude and Longitude, NAD 83 decimal format should be provided to CalGEM for evaluation.

A6-3 Cont.

Our records indicate there are 1 known oil or gas wells located within the project boundary as identified in the application.

- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 1
- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 0
- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 0
- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 0

A6-4

The Division categorically advises against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure.

There are no guarantees a well abandoned in compliance with current Division requirements as prescribed by law will not start leaking in the future. It always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. The Division acknowledges wells plugged and abandoned to the most current Division requirements as prescribed by law have a lower probability of leaking in the future, however there is no guarantees that such abandonments will not leak.

The Division advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations should be provided to the Division in Latitude and Longitude, NAD 83 decimal format. The Division expects any wells found leaking to be

A6-5

reported to it immediately.

Failure to plug and reabandon the well may result in enforcement action, including an order to perform reabandonment well work, pursuant to PRC § 3208.1, and 3224. A6-5 Cont.

PRC § 3208.1 give the Division the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment, or if the well is not accessible or visible. Responsibility for re-abandonment costs may be affected by the choices made by the local permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for reabandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with Division requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.

2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be reabandoned, or to follow the advice of the supervisor or district deputy not to undertake the construction, then the person or entity causing the construction over or near the well shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.

3. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, then the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the reabandonment.

A6-6

No well work may be performed on any oil, gas, or geothermal well without written approval from the Division. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. The Division also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR §1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet A6-7

below grade. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from the Division is required before work can start.

A6-7 Cont.

The Division makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements near oil or gas wells, the Division recommends that information regarding the above identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.

A6-8

2. The Division recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

A6-9

As indicated in PRC § 3106, the Division has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to the Division's authority to order work on wells pursuant to PRC §§ 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC §§ 3236, 3236.5, and 3359 for violations within the Division's jurisdictional authority. The Division does not regulate grading, excavations, or other land use issues.

A6-10

If during development activities, any wells are encountered that were not part of this review, the property owner is expected to immediately notify the Division's construction site well review engineer in the Northern district office, and file for Division review an amended site plan with well casing diagrams. The District office will send a follow-up well evaluation letter to the property owner and local permitting agency.

A6-11

Should you have any questions, please contact me at (805) 937-7246 or via email at Trey.Powell@conservation.ca.gov.

A6-12

Sincerely,

Trey Powell
Northern District Deputy

cc: Erica Aguirre - Plan Checker

Wells Not Abandoned to Current Division Requirements as Prescribed by Law & Projected to be Built Over or Have Future Access Impeded

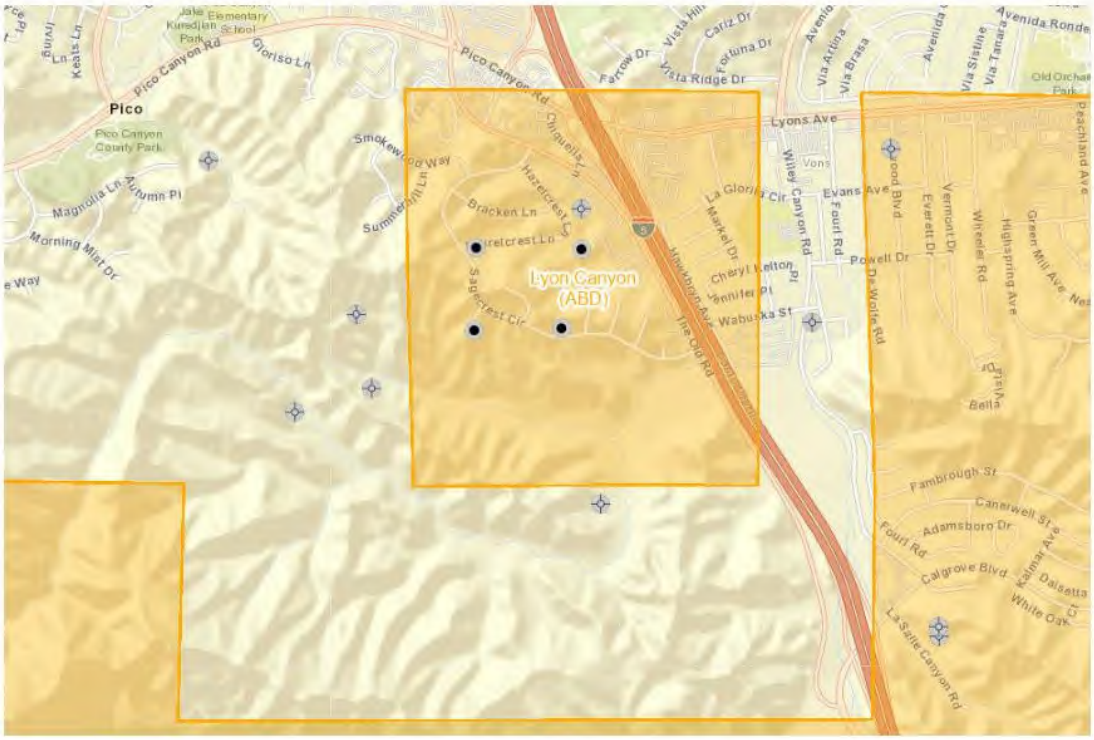
The wells listed below are not abandoned to current Division requirements as prescribed by law, and based upon information provided, are projected to be built over or have future access impeded. **The Division expects these wells to be reabandoned in compliance with current California law, prior to development activities.**

API	Well Designation	Operator	Well Evaluations
0403706017	Ayers 1	The Sun Drilling Co.	"1. Hole fluid is not to current standards (CCR section 1723. (b)) 2. Base of Fresh Water plug is not to current standards (CCR section 1723.2 (b)) 3. Hydrocarbon zone plug is not to current standards (CCR Section 1723.1)

A6-13

From: Jeffries, Randall@DOC <Randall.Jeffries@conservation.ca.gov>
Sent: Thursday, December 26, 2024 10:45 AM
To: Foreshee, Blake@DOC
Cc: Jeffries, Randall@DOC
Subject: FW: CEQA Review: Trails at Lyons Canyon Project

Follow Up Flag: Flag for follow up
Flag Status: Flagged



A6-13
Cont.

SCH Number

2022060346

https://ceqanet.opr.ca.gov/2022060346/2

Lead Agency

1

Los Angeles County Department of Regional Planning

Document Title

Trails at Lyons Canyon Project

Document Type

EIR - Draft EIR

Received

12/10/2024

Present Land Use

Zoning: Heavy Agricultural (A-2-2 and A-2-1); Unlimited Commercial-Development Program (General Commercial [C-3] and C-3-DP). General Plan: Residential 2 (H2)

Document Description

The Project site is located in unincorporated Los Angeles County, in the northern foothills of the Santa Susana Mountains within the Santa Clarita Valley. The Project includes several entitlements for the creation of 37 lots for the development of 510 dwelling units with a mix of attached and detached for-sale condominium units, including 24 affordable for-sale units, 47 affordable senior rental apartments, and one manager's unit; a recreational center and swimming pool; two on-site public streets; private driveways and fire lanes, including multi-purpose trails that would be open to the public; several debris basins; five-foot-wide pedestrian walkways, a water tank, and both improved and natural and preserved open space. The proposed development is clustered in northeasterly portion of the Project site, and also includes several on-site block and retaining walls. The Project includes 150 acres of natural open space on-site, of which approximately 144 acres would be preserved and maintained in perpetuity through a conservation easement. Off-site Project components include sidewalk improvements, a retaining wall adjacent to The Old Road directly east of the Project site, improvements to The Old Road fronting the Project site, and fuel modification (brush thinning). The Project would include several off-site utility infrastructure component improvements, including utility water lines, upgrades to two existing pump stations, upsizing of existing sewer pipelines, and the construction of three manholes within The Old Road. Additionally, the Project includes the vacation of excess right-of-way in the Old Road and acquisition of an adjacent County-owned parcel (APN: 2826-022-901). The Project would require approximately 1,500,000 cubic yards of cut and 1,300,000 cubic yards of fill for a total of 2,800,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. There is expected to be 15% shrinkage on the over excavation for a total of 200,000 cubic yards. The total earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site adjacent parcel adjacent to The Old Road that includes manufactured slopes. The grading would be balanced on-site, and no import or export of soil would be required for the Project. Several on-site access and utility easements are proposed.

A6-13 Cont.

2

If your Division identifies a potential program impact from this project, please provide your comments to the lead agency by **FEBRUARY 7, 2025**. Send a copy of your comment to the State Clearinghouse at state.clearinghouse@opr.ca.gov and include OLRA@conservation.ca.gov , jan.perez@conservation.ca.gov so that we can file your comment in our records. Be sure to include the project number (SCH #) on all correspondence.

Randall "Randy" Jeffries
Oil and Gas Program Analyst | CEQA Unit
Geologic Energy Management

California Department of Conservation
715 P. Street, MS 1803, Sacramento, CA 95814
C: (916) 917-3683
E: Randall.Jeffries@conservation.ca.gov

CONFIDENTIALITY NOTICE: This communication with its contents may contain confidential and/or legally privileged information. It is solely for the use of the intended recipient(s). Unauthorized interception, review, use or disclosure is prohibited and may violate applicable laws including the Electronic Communications Privacy Act. If you are not the intended recipient, please contact the sender and destroy all copies of the communication.

A6-13
Cont.

INTENTIONALLY LEFT BLANK

Response to Comment Letter A6

California Department of Conservation, Geologic Energy Management Division
Trey Powell, Northern District Deputy
February 26, 2025

A6-1 This introductory comment identifies the Project location, Assessor's Parcels Numbers (APNs), Site Well Review ID Number, and the applicable well abandonment code within the Public Resources Code for informational purposes. This comment also describes the role of the California Department of Conservation, Geologic Energy Management Division (CalGEM), and introduces comments that follow. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

A6-2 The comment restates the Project's location within Los Angeles County and does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

A6-3 This comment regarding site plans and the identified on-site well requests for future updates to site plans to be provided in the latitude and longitude, NAD 83 decimal format. In response to this comment, the Project Applicant will provide the requested data to CalGEM. This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

A6-4 This comment states that there is an on-site well planned for abandonment and states that CalGEM advises against building over or impeding access to abandoned wells to allow for well servicing equipment. The location of the existing abandoned oil well on the Project site is provided on Figure 2-5, Special Management Areas, Figure 3-2, Vesting Tentative Tract Map No. 83301, and 4.12-1, Mineral Resource Zones in the Draft EIR. However, it is acknowledged that the Draft EIR does not identify the location of the well in the context of the post-Project development. The detail sheet of the Vesting Tentative Tract Map No. 83301, which includes this development area and identifies the location of the abandoned well in the context of the surrounding land uses, has been included in Chapter 3, Revisions to the Draft EIR, and is included as Figure 3-2B in Attachment C of this Final EIR. This detail sheet identifies the location of the abandoned oil well as being on an unpaved property with no structures between residential pad #16 and #17, adjacent to an internal street. As shown, the development of the Project would not impede access to the abandoned well and would allow all necessary equipment to reach the well site from the public street or access way without disturbing the integrity of any surrounding infrastructure.

A6-5 This comment advises that all wells identified on the Project site be tested for liquid and gas leakage and requests that the surveyed location of the well provided in the latitude and longitude, NAD 83 decimal format. As described in Appendix F, Phase I Environmental Site Assessment to the Draft EIR, the oil well (drilled in January 1961) was an exploratory and was never a productive, oil-producing well before it was abandoned/plugged in February/March 1961, just months after being drilled. Nevertheless, as required in MM-4.9-2 in Section 4.9, Hazards and Hazardous Materials, of the Draft EIR, prior to issuance of a grading permit, the Applicant shall retain a California registered design professional, such as a licensed civil engineer and/or licensed petroleum engineer to evaluate the exact location, condition, and abandonment status of the well on the Project site. A summary report detailing the findings of the well conditions and abandonment status must be submitted to the Los Angeles Department of Public Works (Public Works) Building Official and CalGEM for review and

approval prior to issuance of a grading permit. Further, as required in MM-4.9-3 in Section 4.9, Hazards and Hazardous Materials, of the Draft EIR, the Applicant must conduct methane gas testing for the presence of methane gas emissions within 300 feet of the plugged well, in accordance with CalGEM and Public Works standards for methane gas assessment guidelines. Therefore, the mitigation measures in the Draft EIR are adequate to satisfy the requirements of this comment.

A6-6 This comment summarizes Public Resources Code (PRC) section 3208.1 regarding the authority of CalGEM to order or permit well re-abandonment. The well would be abandoned in compliance with all applicable regulations, and as required in MM-4.9-3, the Applicant must submit documentation to Public Works that ensures compliance with the proper abandonment standards and necessary approvals from CalGEM regarding the appropriate well abandonment, which must be satisfied prior to commencement of construction grading. As stated in Response to Comment A6-5, the location of the abandoned oil well would be located on an unpaved property with no structures between residential pads #16 and #17, adjacent to an internal street. The development of the Project would not impede access to the abandoned well and would allow all necessary equipment to reach the well site from the public street or access way without disturbing the integrity of any surrounding infrastructure.

A6-7 This comment states that no work may be performed on wells without written approval from CalGEM and summarizes regulatory law relating to well casings. Please refer to responses A6-5 and A6-6 above.

A6-8 This comment recommends that information relating to the well planned for abandonment be sent to the appropriate County recorder for inclusion in the title information of the property. As stated in Response to Comment A6-4, the detail sheet of the Vesting Tentative Tract Map No. 83301, which includes this development area and identifies the location of the abandoned well in the context of the surrounding land uses, has been included in Chapter 3, Revisions to the Draft EIR, of this Final EIR. Therefore, the location of this well will be included as an encumbrance on the property (lot specific) and will be provided to the Los Angeles County Recorder for inclusion on the title information for the property.

A6-9 This comment regarding soils containing hydrocarbons does not express adequacy concerns related to the environmental analysis in the Draft EIR. Please refer to Section 4.9.5, Impact Analysis in Section 4.9, Hazards and Hazardous Materials, of the Draft EIR for a summary discussion of how the Project would comply with applicable regulations related to the potential for hydrocarbons in soils.

A6-10 This comment summarizing sections of the PRC as they relate to CalGEM's authority does not express adequacy concerns related to the environmental analysis in the Draft EIR.

A6-11 As identified by CalGEM (see Comment A6-13) and as analyzed in the Draft EIR, the plugged subsurface oil well (Ayers 1 – API 0403706017) is the only known well on the property; there are no other identified wells onsite. It is speculative to assume there are unidentified wells on the Project site. However, in accordance with Section 22.140.400(G)(1) of the County Code, the County requires that all CalGEM requirements be fulfilled related to the plugging and abandonment of a well; removal of equipment, trash, and other waste materials; and well site and lease restoration. As such, if during Project development activities, any unknown wells are encountered, the construction contractor would be required to comply with all applicable regulations and coordinate with CalGEM accordingly.

A6-12 This comment provides a conclusion statement with contact information. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

A6-13 This comment states that the identified well on the Project site is API 0403706017. The Draft EIR identifies the plugged subsurface oil well (Ayers 1 – API 03706017); the number of the well is updated in Chapter 3, Revisions to the Draft EIR, of this Final EIR. This comment states that the well has not been abandoned to current CalGEM requirements, which is acknowledged and discussed in the Draft EIR. However, this comment states that the well is projected to be built over or have future access impeded. As stated in Response to Comment A6-5, the location of the abandoned oil well would be located on an unpaved property with no structures between residential pads #16 and #17, adjacent to an internal street. The development of the Project would not impede access to the abandoned well and would allow all necessary equipment to reach the well site from the public street without disturbing the integrity of any surrounding infrastructure. The remainder of the comment includes an email that is internal to CalGEM and does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter A7

California Water Boards

Gavin Newsom
Governor

Yana Garcia
Secretary for Environmental Protection

Los Angeles Regional Water Quality Control Board

March 6, 2025

Erica G. Aguirre, AICP
Principal Planner, Subdivisions
County of Los Angeles Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, California 90012

Dear Ms. Aguirre

COMMENT LETTER TO THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE TRAILS AT LYONS CANYON PARK PROJECT

Thank you for the opportunity to comment on Los Angeles County Department of Regional Planning's Draft Environmental Impact Report for the Trails at Lyons Canyon Park Project (project). The proposed project would involve the creation of 37 lots for the development of 510 dwelling units, a recreational center, improved open space, preservation of open space, and off-site circulation and utility improvements. The proposed project site comprises 233.49 gross acres in the unincorporated County community of Santa Clarita. A7-1

Our comments are submitted in compliance with CEQA *Guidelines* §15096, which requires California Environmental Quality Act responsible agencies to focus on shortcomings in the Draft Environmental Impact Report (DEIR), and on additional alternatives or mitigations which should be included. A7-2

The State Water Board and the Regional Water Quality Control Boards (Regional Water Boards) regulate discharges to protect the quality of water of the State, broadly defined as "the chemical, physical, biological, bacteriological, radiological, and other properties and characteristics of water which affects its use"[1]. If the proposed project has any of the following discharges, the project proponent is required to obtain a permit from the State or Regional Water Boards: A7-3

[1] California Water Code, §13050.

Discharge Type	Types of Permits involved
• Discharge of dredge and fill materials	- Clean Water Act (CWA) §401 water quality certification for federal waters; or Waste Discharge Requirements for non-federal waters.
• Wastewater discharges	- CWA §402 National Pollutant Discharge Elimination System permit, e.g. storm water permit.
• Other discharges	- Waste Discharge Requirements or other permits for discharges that may affect groundwater quality and other waters of the State, such as operation of proposed solid waste transfer facilities, and other proposed project activities.

A7-3 Cont.

Discharges into impaired waters of the State may contribute or exasperate existing impaired waters and may serve to cause and contribute loading to downstream waters as well.

Early consultation is encouraged, as project reconfiguration may be required to avoid and minimize impacts to State waters.

A7-4

Effects of Urban Development on Water Quality

Watersheds are complex natural systems in which physical, chemical, and biologic components interact to create the beneficial uses of water on which our economy and well-being depend. Poorly planned urban development upsets these natural interactions and degrades water quality through a web of interrelated effects. The primary impacts of poorly planned development projects on water quality are:

- **Direct impacts** – the direct physical impacts of filling and excavation on wetlands, riparian areas, and other waters;
- **Pollutants** – the generation of urban pollutants during and after construction;
- **Hydrologic Modification** – the alteration of flow regimes and groundwater recharge by impervious surfaces and stormwater collector systems;
- **Watershed-level effects** – the disruption of watershed-level aquatic functions, including pollutant removal, floodwater retention, and habitat connectivity.

A7-5

These impacts typically degrade water quality, increase peak flows and flooding, and destabilize stream channels, resulting in engineered solutions to the disrupted flow patterns and, ultimately, near-total loss of natural functions and values in the affected basins. Many examples of such degradation exist in California and elsewhere.

The Water Boards are mandated to prevent such degradation. CEQA establishes the process to provide the information we need to do so. A7-5 Cont.

Scope and Level of Needed Analyses A7-6

The EIR for this project should characterize all project-specific, cumulative, direct, and indirect impacts of this project on the quality of waters of the state as defined above and identify alternatives and other mitigation measures to reduce and eliminate such impacts. The Los Angeles Water Quality Control Board (Los Angeles Water Board) has reviewed the DEIR and has the following comments.

1. Alternatives Analysis A7-7

   The alternatives provided in Section 6 of the DEIR do not examine waters of the state. Please include an alternatives analysis consistent with the requirements of section 230.10 of the State Supplemental Dredge or Fill Guidelines that allows the Los Angeles Water Board to determine whether the proposed project is the Least Environmentally Damaging Practicable Alternative (LEDPA).

   This proposed project qualifies as Tier 3. Tier 3 projects include any discharge of dredged or fill material that directly impacts more than two-tenths (0.2) of an acre or 300 linear feet of waters of the state, rare, threatened or endangered species habitat in waters of the state, wetlands or eel grass beds, or Outstanding National Resource Waters or Areas of Special Biological Significance, and is not a project that inherently cannot be located at an alternate location. Tier 3 projects must provide an analysis of off-site and on-site alternatives. A7-8

   This alternative analysis must be submitted as part of the permit application for a CWA 401 Water Quality Certification or Waste Discharge Requirements.

2. Identification of Affected Waters

   Section 4.4-26 erroneously assumes that the jurisdiction of the Los Angeles Water Board is the same as the jurisdiction of the U.S. Army Corps of Engineers. The Los Angeles Water Board does not use the Ordinary High Water Mark to determine its jurisdiction. The Los Angeles Water Board will need to verify the delineation of waters of the state within the proposed project site. Additionally, the Los Angeles Water Board is requesting to visit the proposed project site to determine if there are other waters of the state that have not been identified in the DEIR. A7-9

3. Characterization of Impacts

   The Los Angeles Water Board believes that avoidance is the best strategy for managing potential water quality impacts. For unavoidable impacts, understanding how pollution pathways will operate is essential to managing them. A7-10

According to the DEIR, 0.62 acres of the 1.11 acres of waters present in the project site are being impacted. That is 56% of the waters within the project area. However, the report does not explicitly state what is happening to each body of water. The document states that "the proposed development would locally alter the drainage pattern of Lyons Creek and its tributary creeks within the northeastern portion of the Project site." This does not provide adequate details needed to analyze potential impacts to waters of the state and their associated beneficial uses. A7-11

From the maps provided, it appears that some water is being undergrounded into pipes. If this is being proposed, it must be clearly stated and analyzed in the report. Undergrounding water can fragment aquatic habitats by creating artificial landscapes which are movement barriers for most species. Habitat connectivity is critical to biodiversity maintenance and will become more so because of climate change. The ability of aquatic populations to move across the landscape may be critical to their survival in coming decades. A7-12

Please:

a. Specify the causes, natures, and magnitude of all proposed impacts to each waterbody. Provide a level of analyses commensurate with the size and complexity of the project and its potential water quality impacts. A7-13

b. Quantify impacts as definitively as feasible, using appropriate modeling and adequate data. Modeling approaches should be documented; and data deficiencies or other factors affecting the reliability of the results identified and characterized. A7-14

c. Identify whether impacts will be temporary or permanent. A7-15

4. Mitigation

Section 4.10.7 Mitigation Measures states, "No mitigation is required." This is incorrect. The Los Angeles Water Board will require compensatory mitigation for permanent loss and ecological degradation of waters of the state at a minimum of 3:1 ratio for streams and 5:1 ratio for wetlands. While we support the mitigation cited in MM-4.4-3, this cannot be applied toward mitigation for loss to waters of the state. A7-16

The compensatory mitigation must ensure that there is no net loss of the overall abundance, diversity, and condition of aquatic resources, based on the watershed profile. The Los Angeles Water Board allows mitigation in the form of establishment, re-establishment, rehabilitation, or enhancement. The Los Angeles Water Board does not accept preservation as compensatory mitigation.

MM-4.4-14 also states that mitigation could be acquired off-site through mitigation banks. Please state which mitigation bank(s) the project proponent plans to use and which type of credits they plan on purchasing. Without this information, the Los Angeles Water Board cannot determine whether the compensatory mitigation is satisfactory. A7-17

Please include the proposed mitigation in the EIR. Final compensatory mitigation is subject to approval by the Los Angeles Water Board. A7-18

5. Level of Significance

The Los Angeles Water Board believes that section 4.10. Hydrology and Water Quality is not adequate and does not account for the environmental impacts of altering and relocating streams and tributaries. A7-19

Regarding Threshold 4.10a – As stated above, the mitigation currently proposed in MM-4.4-14 is not adequate and does not ensure that the impacts to water quality will be Less Than Significant with Mitigation. Additionally, the proposed project is located in Reach 6 of the Santa Clara River which is impaired for Chlorpyrifos, Coliform Bacteria, Diazinon, Toxicity, and Chloride. While the DEIR recognizes the impairments that exist in the waters within the project site, it fails to properly analyze how the proposed project could contribute to those impairments. A7-20

Regarding Threshold 4.10c – The Los Angeles Water Board disagrees with the conclusion that this proposed project would result in Less Than Significant Impacts. The DEIR has not analyzed how the proposed project would alter each waterbody within the project site, therefore, proper analysis has not been conducted to conclude what the water quality impacts would be from this construction. Disturbances to natural watershed dynamics caused by urban developments degrade water quality through a complex of interrelated causes and effects. Unmanaged, these pollution pathways ultimately destroy the physical, chemical, and biological integrity of the watersheds in which they occur, diminishing or destroying the beneficial uses. A7-21

Regarding Section 4.10.8 – The analysis conducted to determine the Level of Significance After Mitigation has failed to identify the impacts to beneficial uses and the inherent impacts of constructing a housing development in a Significant Ecological Area. While the DEIR recognizes the beneficial uses that exist in the project area, it fails to properly analyze how the proposed project could impact the beneficial uses. A7-22

Please be aware, as a permitting authority, the Los Angeles Water Board has the discretion to approve a project only if the applicant has demonstrated the following: A7-23

a. A sequence of actions has been taken to first avoid, then to minimize, and lastly compensate for adverse impacts that cannot be practicably avoided or minimized to waters of the state;
b. The potential impacts will not contribute to a net loss of the overall abundance, diversity, and condition of aquatic resources in a watershed

(or multiple watersheds when compensatory mitigation is permitted in another watershed)

c. The discharge of dredged or fill material will not violate water quality standards and will be consistent with all applicable water quality control plans and policies for water quality control; and

d. The discharge of dredged or fill material will not cause or contribute to significant degradation of waters of the state.

A7-23 Cont.

Based on the information contained in the DEIR, it appears these requirements have not been met.

A7-24

Again, thank you for this chance to comment. We welcome the opportunity to work with you and the project proponent to make this project an example of environmental sustainability in California. We would be happy to make our team available to meet and discuss the project and its final design. If we may clarify any of our comments or be of further assistance, please contact Hope Sexton or Celine Gallon by email at Hope.Sexton@waterboards.ca.gov or Celine.Gallon@waterboards.ca.gov.

A7-25

Sincerely,

Elisha Wakefield

Elisha Wakefield
Senior Environmental Scientist
Elisha.Wakefield@waterboards.ca.gov
213-576-6785

Response to Comment Letter A7

Los Angeles Regional Water Quality Control Board
Elisha Wakefield, Senior Environmental Scientist
March 6, 2025

A7-1 This comment accurately describes Project components; however, please note that the title of the Project is Trails at Lyons Canyon, not Trails at Lyons Canyon Park. This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

A7-2 This comment, referencing the CEQA Guidelines for the process for a Responsible Agency, does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR and therefore it would not be appropriate to provide a response as part of this EIR.

A7-3 This comment regarding discharge types does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. As stated on page 3-22 of Chapter 3, Project Description, of the Draft EIR, the Project is required to obtain a Clean Water Act Section 401 Water Quality Certification (WQC) from the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board).

A7-4 Regarding early consultation, the State Water Resources Control Board requires applicants to request a "Pre-filing Meeting" with the appropriate Water Board a minimum of 30 days prior to submitting an application for a WQC, pursuant to the Clean Water Act Section 401 Certification Rule. As such, it is required that the Project will have early consultation with the Los Angeles Water Board and the Project and its impacts will be discussed at that time.

A7-5 This comment is a general statement regarding the effects of urban development on water quality and does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

A7-6 Impacts to waters of the state and water quality are discussed in detail in Sections 4.4, Biological Resources, and 4.10, Hydrology and Water Quality, of the Draft EIR, and mitigation measures to reduce impacts to less than significant are provided in Section 4.4.

A7-7 Consistent with CEQA Guidelines Section 15126.6(a), an EIR must describe a reasonable range of alternatives that could feasibly attain most of the basic project objectives and would avoid or substantially lessen any of the project's significant effects. The range of alternatives is governed by a "rule of reason" that requires an EIR to set forth only those alternatives necessary to permit a reasonable choice. An EIR need not consider every conceivable alternative to a project. Rather, the alternatives must be limited to ones that meet the project objectives, are feasible, and would avoid or substantially lessen at least one of the significant environmental effects of the project.

As stated in Sections 4.4, Biological Resources, and 4.10, Hydrology and Water Quality, of the Draft EIR, with incorporation of mitigation from Section 4.4, all impacts related to waters of the state would be less than significant. As stated in Chapter 6, Alternatives, of the Draft EIR, there are three alternatives considered: Alternative A, No Project/Current Land Use Buildout; Alternative B, Mixed Use Project; and Alternative C, Reduced Footprint. Pursuant CEQA Guidelines Section 15126.6(d), the Draft EIR has

included sufficient information about each alternative to allow for meaningful evaluation, analysis, and comparison with the Project, and a matrix displaying the major characteristics and significant environmental effects of each alternative has been provided (Draft EIR, pages 6-72 and 7-73). Additionally, the alternatives analysis considers impacts to waters of the state for each of the three alternatives considered in Chapter 6, Alternatives, of the Draft EIR. As stated on page 6-37 of Chapter 6, Alternatives, of the Draft EIR, under Alternative 1 (No Project/No Build Alternative), the Project site would remain in its existing condition and potential temporary and permanent impacts to biological resources, including waters of the state, would not occur. Thus, impacts to waters of the state under Alternative A would be less than under the Project. As stated on page 6-47 of Chapter 6, Alternatives, of the Draft EIR, under Alternative B (Mixed Use Project), future development would have the same development footprint as proposed for the Project. Therefore, all potential biological resource impacts for Alternative B, including potential impacts to waters of the state, would be the same as the Project. As stated on page 6-64 of Chapter 6, Alternatives, of the Draft EIR, under Alternative C (Reduced Footprint Alternative), although development of the access road to the water tank would still result in direct impacts to waters of the state, Alternative C's smaller development footprint would substantially reduce direct impacts to waters of the state by avoiding the Flood Zone A High-Risk/Special Flood Hazard Area (SFHA) of the Project site. Thus, impacts to waters of the state under Alternative C would be reduced compared to the Project. As such, the Alternatives, as written in the Draft EIR, satisfy CEQA requirements.

Importantly, as stated on page 23 of the State Water Resources Control Board's *Implementation Guidance for the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, dated April 2020, the alternatives analysis to identify the least environmentally damaging practicable alternative (LEDPA) pursuant to section 230.10 is distinct from an alternative analysis required to comply with other statutory or regulatory requirements, such as the CEQA (SWRCB 2020). Although a complete application package for a WQC from the Los Angeles Water Board will require an alternative analysis to specifically focus on impacts to waters of the state pursuant to section 230.10 of the State Supplemental Dredge or Fill Guidelines, this would be completed outside of the CEQA process. In summary, the Draft EIR has been drafted to satisfy CEQA requirements, but the Los Angeles Water Board may have more requirements imposed upon the Project through the WQC permitting process. The alternatives provided in Chapter 6, Alternatives, of the Draft EIR can be used in the alternatives analysis to identify the LEDPA and will include a summary of the alternatives' ability to achieve the State Water Resources Control Board's standards set for each of the criteria established for the Project.

A7-8 It is understood that the Project meets Tier 3 and the alternative analysis included in the WQC application package section 230.10 of the State Supplemental Dredge or Fill Guidelines to the Los Angeles Water Board will meet the criteria of that tier. As stated above in Response to Comment A7-7, "[a]lthough a complete application package for a WQC from the Los Angeles Water Board will require an alternative analysis to specifically focuses on impacts to waters of the state pursuant to section 230.10 of the State Supplemental Dredge or Fill Guidelines, this would be completed outside of the CEQA process."

A7-9 As stated in Section 4.4.4 of the Draft EIR, the jurisdictional delineation for the Project was conducted using the U.S. Army Corp of Engineer's (USACE) 2008 *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* for streams. The State and the Los Angeles Water Boards do not have published standard methodologies for delineating

streams, and therefore, the USACE method for delineating streams from the 1987 *Wetlands Delineation Manual* and 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement* was used in the Draft EIR. Similarly, methodologies set forth in the USACE's 1987 *Wetlands Delineation Manual* and 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement*, along with the Regional Water Quality Control Board's (RWQCB) 2019 *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* were used to evaluate potential federal wetland habitats. Given the use of the RWQCB and USACE methods, waters of the state the limits of those waters on the Project site have been accurately identified and defined. Further, before submitting the Water Quality Control (WQC) application package, the Project Applicant's team will coordinate and meet with the Los Angeles Water Board at the Project site so their input on their jurisdictional limits can be incorporated, as is typical in the WQC permitting process.

A7-10 The Draft EIR does not identify any unavoidable impacts related to waters of the state, and this comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

A7-11 Section 4.10, Hydrology and Water Quality, of the Draft EIR discusses the changes to the hydrology of the Project site due to Project implementation. As discussed on page 4.10-30, because a portion of the proposed area of development is within a flood zone, the Project would redirect flows. The Project includes an engineered storm drainage system to collect and treat runoff from the developed site and to provide flood control protection. The two regional and five smaller desilting basins would capture flows from surrounding undeveloped land and convey flows through the Project site, within the storm drainage system, to the existing culvert under I-5, as identified in Figure 4.10-7, Proposed Drainage and Water Quality Infrastructure, and in Figure 4.10-9, Floodplain Comparison, of the Draft EIR. The proposed basins would capture sediment and reduce flows to the pre-project conditions before releasing flows to the downstream drainage network, as further detailed in Appendix G-3 and Appendix G-4 of the Draft EIR. As illustrated in Figure 4.10-9, following construction, all flooding within the Project site would be contained within the proposed debris basins and storm drains.

Further, Section 4.4, Biological Resources, of the Draft EIR, states that direct impacts to potential jurisdictional waters and associated riparian vegetation would occur due to vegetation removal and grading. Thus, the waters of the state would be directly removed and this impact is detailed by feature in Table 4.4-14, Proposed On-Site and Off-Site Impacts to Potential Waters of the United States (USACE and RWQCB Jurisdiction) in Section 4.4, Biological Resources (Draft EIR, page 4.4-54). While this detail suffices for purposes of addressing applicable CEQA threshold questions, additional detail can be provided to the Los Angeles Water Board as part of the WQC application package, which requires a separate application process that is outside of the CEQA process.

A7-12 As stated under Response A7-11, the Draft EIR includes a clear description of the proposed engineered storm drainage system. Regarding the potential for undergrounding water to impact aquatic habitats, no aquatic wildlife species were identified on the Project site, as detailed in Appendix F of Appendix C, Biota Report, of the DEIR. As stated in Section 4.4.1, Existing Conditions, of the Draft EIR, the streams on the Project site were often dry so the streams are not expected to function as corridors for aquatic wildlife (Draft EIR, pages 4.4-25 and 4.4-26).

A7-13 Direct and indirect impacts to potential jurisdictional waters, including waters of the state, and associated riparian vegetation are analyzed under Threshold 4.4c, starting on page 4.4-54 of Section 4.4, Biological Resources, of the Draft EIR, which includes quantification of impacts using appropriate modeling and adequate data. As stated in that analysis, direct impacts would occur due to vegetation removal and grading. Additional analysis of impacts to water quality is found in Section 4.10, Hydrology and Water Quality, of the Draft EIR. As shown in Table 4.4-14, Proposed On-Site and Off-Site Impacts to Potential Waters of the United States (USACE and RWQCB Jurisdiction), only 0.62 acres of waters of the state would be impacted. The impact analysis under Threshold 4.4c has been revised as shown in Chapter 3, Revisions to the Draft EIR, of this Final EIR to specify that grading would cause fill to occur within the impacted areas. However, as detailed on page 4.4-54 of the DEIR, with implementation of MM-4.4-1, MM-4.4-3, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-9, and MM-4.4-14, impacts to jurisdictional waters would be reduced from potentially significant to less than significant with mitigation. Additionally, Table 4.4-15 of the Draft EIR details the proposed direct impacts to California Department of Fish and Wildlife (CDFW) jurisdictional streams and associated riparian habitat on the Project site. As provided in Chapter 3 of this Final EIR, analysis has been added under Threshold 4.4c to clarify and confirm that direct impacts to CDFW jurisdictional streams and SEA Water Resources would be reduced to less than significant with implementation of MM-4.4-1, MM-4.4-3, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-9, and MM-4.4-14.

A7-14 See Response to Comment A7-13 regarding the quantified impacts to waters of the state. Regarding the methodology for the modeling and use of adequate data, the analysis of impacts to water quality in Section 4.10, Hydrology and Water Quality, of the Draft EIR is informed by the *Hydrology Report for Tract No. 83301* (Appendix G-2 of the Draft EIR) and *Lyons Canyon Drainage Concept Report- Volume 1, Regional Flood Protection and Debris Management Tract No. 83301* (Appendix G-3 of the Draft EIR), which provide sufficient data to quantify Project impacts.

A7-15 Regarding identification of impacts to waters of the state as being temporary or permanent, see page 4.4-54 of the Draft EIR, under the "Direct Impacts" header. There are no temporary direct impacts to jurisdictional waters. All direct impacts are evaluated as permanent impacts to potential jurisdictional waters and associated riparian vegetation due to vegetation removal and grading.

A7-16 The comment erroneously states that Section 4.10, Hydrology and Water Quality, of the Draft EIR should have mitigation measures to mitigate "ecological degradation of waters of the state." Impacts regarding waters of the state are detailed in Section 4.4, Biological Resources, of the Draft EIR. Specifically, as required in MM-4.4-14, Jurisdictional Waters Compensation, of the Draft EIR, mitigation for up to 4.94 acres of direct impacts to jurisdictional waters shall be implemented through on-site enhancement of remaining jurisdictional waters and/or off-site acquisition, such as mitigation bank credits and/or turnkey projects with mitigation banks. This mitigation would meet the 3:1 ratio for streams that the Los Angeles Water Board requires. Therefore, the Draft EIR does not rely on preservation as compensatory mitigation. Because the Project does not have wetland waters on-site (see Table 4.4-4, Summary of Potential USACE Jurisdiction for the Project Site and Off-Site Fuel Modification Zones on page 4.4-25 of the Draft EIR), meeting the stated 5:1 ratio for wetlands is not applicable to the Project. Therefore, with implementation of MM-4.4-14, there would be no net loss of the overall abundance, diversity, and condition of aquatic resources.

A7-17 As stated in MM-4.4-14, Jurisdictional Waters Compensation, of the Draft EIR (page 4.4-92), the specifics of mitigation bank(s) and credits to purchase would be detailed during the Clean Water Act

Section 401 WQC permitting process with the Los Angeles Water Board. MM-4.4-14 is adequate as written for the purposes of CEQA, as it includes clear performance standards to ensure adequate mitigation pursuant to CEQA by requiring a minimum number of credits that must be purchased prior to the issuance of the grading permit. The Project Applicant has had discussions with the manager (i.e. CDFW South Coast Region) of the Peterson Ranch Mitigation Bank, located within Los Angeles County, on the purchase of fully entitled credits to satisfy the compensatory mitigation needed for impacts to jurisdictional waters. According to CDFW, the Peterson Ranch Mitigation Bank is currently open, and the Project site is within the appropriate service area (CDFW 2025). Discussions were also had about funding a turnkey mitigation project (i.e., establishment of riparian habitat) should credits not be available at the time of the jurisdictional waters permitting. The compensatory mitigation must be approved by the Los Angeles Water Board prior to the issuance of the WQC.

A7-18 As stated in MM-4.4-14, Jurisdictional Waters Compensation, of the Draft EIR (page 4.4-92), mitigation for up to 4.94 acres of direct impacts to jurisdictional waters shall be implemented through on-site enhancement of remaining jurisdictional waters and/or off-site compensatory mitigation, such as mitigation bank credits and/or turnkey projects with mitigation banks (please refer to Response to A7-17, above). As stated in Response A7-17, compensatory mitigation must be approved by the Los Angeles Water Board prior to the issuance of the WQC.

A7-19 Section 4.10, Hydrology and Water Quality Threshold 4.10a, of the DEIR includes a robust analysis of water quality impacts for both short-term construction and long-term operational impacts, supported by substantial evidence. The analysis does not rely solely on MM 4.4-14. As stated under Threshold 4.10a related to the potential to violate water quality standards or degrade water quality:

- Pursuant to California Health and Safety Code, Division 20, Chapter 6.95, the contractors would be required to prepare and implement Hazardous Materials Business Plan (HMBP) that would require that hazardous materials to be properly used and stored in appropriate containers, that spill prevention measures are implemented, and that spill response procedures are in place to respond to accidental releases. The California Fire Code would also require measures for the safe storage and handling of hazardous materials.
- Construction activities must be conducted in compliance with SCAQMD Rule 403 – Fugitive Dust, which would minimize wind and water erosion at the site. Compliance with the SWRCB regulations requires preparation and implementation of a SWPPP, in accordance with the NPDES Construction General Permit.
- County Code Appendix J-Grading requires preparation of a site-specific SWPPP and Erosion Sediment Control Plan, which would be prepared prior to earthwork activities and would be implemented during Project construction. The Erosion Sediment Control Plan must include BMPs to address transport of sediment and protect properties from erosion, flooding, or the deposition of mud, debris, or construction-related pollutants.
- The proposed water quality BMP and storm drainage system design would ensure that there would be no contact between stormwater from the developed Project site and the adjacent undeveloped land, thereby ensuring that no undeveloped areas would be subject to erosion or associated siltation due to Project operations.
- The proposed water quality BMPs would be sized to have sufficient capacity to treat 1.5-times the design volume generated on-site, based on the 85th percentile rainfall, which would ensure adequate treatment capacity in accordance with the County's LID Manual requirements.

- The Project would be required to comply with the MS4 permit as administered by the County of Los Angeles, in addition to the statewide water quality program administered by the RWQCB including the Porter-Cologne Water Quality Control Act. Discharges of the Project covered under the MS4 permit requirements would be required to adhere with the Waste Load Allocations assigned to MS4 discharges for applicable TMDLs, including the TMDLs in the Upper Santa Clarita River Watershed Management Area.

Therefore, the Project's water quality BMPs and compliance with applicable laws and regulations would ensure that operation of the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, and impacts would be less than significant.

Further, regarding MM-4.4-14 adequately ensuring that water quality impacts would be less than significant, see Response to Comment A7-16, A7-17, and A7-18 above.

A7-20 Regarding the impacts of the Project on Santa Clara River water quality impairments, bacteria was addressed in Threshold 4.10a, under Operations (Draft EIR, page 4.10-23). However, additional text has been added to the Draft EIR's impact evaluation with respect to chlorpyrifos, diazinon, toxicity, and chloride, as included in Chapter 3, Revisions to the Draft EIR, of the Final EIR. These revisions do not change the impact conclusions in the Draft EIR, nor do they result in any new significant impacts or the need for new or altered mitigation measures.

A7-21 Regarding the significance finding of Threshold 4.10c, of Section 4.10, Hydrology and Water Quality, of the DEIR, CEQA Guidelines Section 15151 – Standards for Adequacy of an EIR, states:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

The discussion under Threshold 4.10c fulfills the requirements of CEQA with respect to impacts due to alteration of water bodies. Specifically, regarding alterations to each water body, the first paragraph under Threshold 4.10c(i) (Construction) indicates the Project would require construction activities, including grading and removing vegetation, that would alter existing drainage patterns and flows within the Project site and could generate erosion and siltation on site and off site (Draft EIR, page 4.10-26). The second paragraph under Threshold 4.10c(i) (Draft EIR, page 4.10-26) describes in detail how erosion-related impacts during alteration of existing drainage patterns would be addressed with Project implementation.

Threshold 4.10c(i), under the "Operations" threshold, indicates that the proposed development would locally alter the drainage pattern of Lyons Creek and its tributary creeks within the northeastern portion of the Project site (Draft EIR, page 4.10-27). The following paragraphs under Threshold 4.10c(i) describe in detail how stormwater runoff impacts would be addressed in association with alteration of Lyons Creek and its tributaries (Draft EIR, pages 4.10-27 and 4.10-28).

Threshold 4.10c(ii) (Construction) indicates the Project would include grading and removing vegetation, that would alter existing drainage patterns and flows within the Project site that would increase the rate of surface flows which could contribute to flooding during construction activities (Draft EIR, page 4.10-29). The following paragraph under Threshold 4.10c(ii) describes in detail how grading contours would be established in compliance with County Code and FEMA Special Flood Hazard Area federal regulations. In addition, the text indicates that the proposed debris basins would remove substantial quantities of sediment from the previously burned area, thus reducing the potential for adverse impacts to downstream drainages and Lyons Creek (Draft EIR, page 4.10-29).

In addition, Threshold 4.10c(iii) describes how the Project would reduce 50-year peak flow rates at the downstream end of the Project site, thus preventing exceedance of the capacity of downstream drainage infrastructure and any related environmental impacts associated with those potential exceedances (Draft EIR, page 4.10-29).

In summary, the Draft EIR adequately fulfills the CEQA Guidelines Section 15151 with respect to impacts due to alteration of water bodies, and no revisions to significance findings under Threshold 4.10c of the Draft EIR are necessary.

A7-22 Regarding potential impacts to beneficial uses, as indicated in Response to Comment A7-20, the discussions under Thresholds 4.10a, 4.10c, 4.10e, 4.10g, and 4.10h of Section 4.10.5, Impact Analysis, of the DEIR fulfill this section of the CEQA Guidelines with respect to water quality impacts and protection of beneficial uses. It should be noted that Section 4.10.8 is intended to provide a summary of the significance finding. Details of the respective impact analyses are included in Section 4.10.5, Impact Analysis of Section 4.10, Hydrology and Water Quality, of the Draft EIR.

The thresholds of significance listed in Section 4.10.3 and analyzed in Section 4.10.5 of the Draft EIR do not include references to beneficial uses. Table 4.10-1, Beneficial Use Designations for Water Bodies in the Project Area, in Section 4.10, Hydrology and Water Quality, of the Draft EIR, lists applicable beneficial uses for informational purposes and provides context with respect to water quality conditions of the Upper Santa Clara River. As stated in Response A7-19, Threshold 4.10a includes a robust analysis of water quality impacts for both short-term construction and long-term operational impacts. Further, discussions under Thresholds 4.10c, 4.10e, 4.10g, and 4.10h describe how water quality would be protected during Project construction and operations, such that significant adverse water quality impacts would not occur.

As discussed in Section 4.10.2, Regulatory Section, Section 303 of the Clean Water Act (Beneficial Use and Water Quality Objectives), beneficial use designations serve as the basis for establishing water quality objectives and discharge conditions and prohibitions, which are addressed through the NPDES permit program. For all water quality related objectives for CWA purposes, including the NPDES, the state must achieve water quality standards in effect at the state level as well as the regional level. As stated under Threshold 4.10h of the Draft EIR, the County of Los Angeles as a Permittee under the Los Angeles County NPDES MS4 Permit is required to implement stormwater BMPs that comply with water quality objectives, including capturing and treating stormwater runoff. An LID Plan has been developed for the Project as required under the Los Angeles Regional Water Quality Control Board NPDES MS4 Permit and in accordance with the Los Angeles County Public Works LID Manual, included as Appendix G-1 to the Draft EIR. The LID Plan, which has been reviewed and approved by the Los Angeles County Public Works, includes biofiltration for water quality treatment. As such, compliance with the NPDES MS4 permit and LID requirements would ensure that the Project is consistent with the Basin Plan's

water quality objectives. Further, the Clean Water Act Section 401 Water Quality Certification process, completed subsequent to the CEQA process, could add additional BMPs to be further protective of water quality, to the satisfaction of the Los Angeles Regional Water Quality Control Board.

In response to the comment, text has been added to Thresholds 4.10a, 4.10c, 4.10g, and 4.10h to clarify that water quality impacts (already described) would potentially impact beneficial uses of the Upper Santa Clara River as included in Chapter 3, Revisions to the Draft EIR, of this Final EIR. These revisions do not change the impact conclusions in the Draft EIR, nor do they result in any new significant impacts or the need for new or altered mitigation measures.

Regarding potential impacts related to development within an SEA, Section 4.4, Biological Resources, of the Draft EIR and the Biota Report (included as Appendix C to the Draft EIR) prepared for the Project detail the impact and mitigation analyses that meet the requirements of the County's SEA Ordinance and the County's SEA Ordinance Implementation Guide (LACDRP 2020). Moreover, the County's SEA Technical Advisory Committee found the Project to be consistent with the SEA Ordinance as modified by their recommendations. As such, the impact and mitigation analysis in the Draft EIR is a culmination of the input of the biological consultants, the County, and the SEA Technical Advisory Committee, all of which was conducted in strict accordance with applicable County ordinances and review protocols.

A7-23 As stated in Section 4.4, Biological Resources, of this Draft EIR, the Project is required to obtain a Clean Water Act Section 401 WQC from the Los Angeles Water Board, which has discretion to approve a project only if it satisfies the applicable requirements, as summarized in this comment. Pursuant to Section 4.4, Biological Resources, of the Draft EIR, the Project has been sited to impact 0.62 acres of the 1.11 acres of waters of the state on the Project site, which minimizes impacts to waters of the state. MM-4.4-2, Habitat Mitigation and Monitoring Plan (Draft EIR, page 4.4-71), provides for the restoration and enhancement of the remaining waters of the state on the Project site and MM-4.4-14, Jurisdictional Waters Compensation, provides for up to 4.94 acres of enhancement/restoration offsite, meeting the 1:1 establishment for impacts. As such, the Project would compensate for adverse impacts and would not contribute to a net loss of the overall abundance, diversity, and condition of aquatic resources in the watershed. As demonstrated by the analyses in Thresholds 4.10a, 4.10c, 4.10e, 4.10g, and 4.10h in Section 4.10.5, Impact Analysis, of Section 4.10, Hydrology and Water Quality, of the Draft EIR, the Project would not have a significant impact on water quality standards and would not conflict with any applicable water quality control plans and policies for water quality control, and would not result in significant degradation of waters of the state.

A7-24 Draft EIR Section 4.4, Biological Resources, and Section 4.10, Hydrology and Water Quality, provide a thorough description of the existing conditions, the impacts to 0.62 acres of waters of the state, and no-net loss compensatory mitigation for those impacts. As stated in Response to Comment A7-23, the Project avoids, minimizes, and compensates for its impacts to waters of the state. As stated in Response to Comment A7-16, MM-4.4-2 and MM-4.4-14 (Draft EIR, pages 4.4-71 and 4.4-92, respectively) provide for no net loss of aquatic resources. As stated above in Response to Comment A7-22, the Project would not have a significant impact on water quality standards and would not conflict with any applicable water quality control plans and policies for water quality control or have a significant impact on water quality and would not degrade waters of the state. As such, the Draft EIR has demonstrated that the Project has met Los Angeles Water Board's requirements.

A7-25 This comment providing contact information has been received by the County Department of Regional Planning for future notification purposes.

Comment Letter A8

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

March 10, 2025

Erica Aguirre
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, California 90012
EAguirre@planning.lacounty.gov

SUBJECT: DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE TRAILS AT LYONS CANYON PROJECT, SCH NO. 2022060346, LOS ANGELES COUNTY, CA

Dear Erica Aguirre:

The California Department of Fish and Wildlife (CDFW) reviewed the Draft Environmental Impact Report (DEIR) from the Los Angeles County Department of Regional Planning (County; Lead Agency) for the Trails at Lyons Canyon Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines[1].

A8-1

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Fish & G. Code, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Conserving California's Wildlife Since 1870

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

CDFW may also act as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (LSA; Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law[2] of any species protected under the California Endangered Species Act (CESA; Fish & G. Code, § 2050 et seq.) or the Native Plant Protection Act (NPPA; Fish & G. Code, §1900 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: NUWI Lyons Canyon, LLC

Objective: The Project proposes the construction of a housing development consisting of 510 dwelling units, a recreational center, debris basins, a water tank, an access road, internal public roadways, and 21.78 acres of a Homeowner Association (HOA) maintained open space with a trail system. Off-site Project components would include sidewalk improvements, a retaining wall and improvements to The Old Road, water and sewer infrastructure improvements, and fuel modification activities. Additionally, a private driveway and fire lane surrounding the residential development would serve as a multi-purpose trail and connect to trails in the southern portion of the Project site.

A8-1
Cont.

The on-site Project impact area, including the Project development footprint, fuel modification zones, and debris basins, would total 83.17 acres; off-site improvements would total 6.17 acres of impact. Approximately 150 acres would remain as natural open space on the Project site. Over 144 acres and 62% of the Project site would be preserved and maintained in perpetuity through a conservation easement. The Project would also provide 466.70 acres of off-site conservation in the Santa Susana Mountains/Simi Hills Significant Ecological Area.

Location: The Project site is located in unincorporated Los Angeles County, in the northern foothills of the Santa Susana Mountains, within the western region of the Santa Clarita Valley. The site lies south of Sagecrest Circle, west of The Old Road, and north of Calgrove Boulevard and Ed Davis Park in Towsley Canyon. Assessor's Parcel Numbers associated with this Project include 2826-022-026, 2826-022-027, 2826-022-035, 2826-023-014, and 2826-041-039. Development would be clustered within the northeastern portion of the Project site.

Timeframe: Construction of the Project is anticipated to commence in the second quarter of 2025 and be completed in the fourth quarter of 2029.

[2] "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

Biological Setting: The Project site occurs entirely within the Santa Susana Mountains and Simi Hills Significant Ecological Area (SEA). The topography is varied and characterized by hillside and valley terrain with moderate to steep slopes. Most of the Project site was burned by the Sage Fire in 2016.

Field surveys of the Project site and off-site areas (Study Area) included a general biological survey, vegetation mapping, protected tree mapping, and jurisdictional delineation in 2020; focused surveys were conducted for Crotch's bumble bee (*Bombus crotchii*; CESA candidate), western burrowing owl (*Athene cunicularia hypugaea*; CESA candidate), coastal California gnatcatcher (*Polioptila californica californica*; Endangered Species Act (ESA)-listed threatened, Species of Special Concern (SSC)), least Bell's vireo (*Vireo bellii pusillus*; ESA- and CESA-listed endangered), southwestern willow flycatcher (*Empidonax traillii extimus*; ESA- and CESA-listed endangered), and special-status bats in 2021; focused surveys for special-status plants were conducted in 2021 and 2022; and a general biological survey, tree survey, and tree inventory were updated in 2023. Survey results for western burrowing owl, coastal California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher were negative. Crotch's bumble bee was detected in the southwest portion of the Project site within the on-site Conservation Area, outside of the Project footprint. The results from all surveys were included in the *Biota Report Trails at Lyons Canyon*, prepared by DUDEK and dated December 2024.

Special-status wildlife species detected on the Project site include:

- Crotch's bumble bee,
- California glossy snake (*Arizona elegans occidentalis*; SSC),
- Cooper's hawk (*Accipiter cooperii*; Watch List (WL)),
- southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*; County sensitive),
- yellow warbler (*Setophaga petechia*; SSC),
- pallid bat (*Antrozous pallidus*; SSC),
- western mastiff bat (*Eumops perotis californicus*; SSC),
- hoary bat (*Lasiurus cinereus*; SSC),
- San Diego desert woodrat (*Neotoma lepida intermedia*; SSC),
- California mountain lion (*Puma concolor californica*; CESA candidate), and
- American badger (*Taxidea taxus*; SSC).

Special-status wildlife species not detected, but with moderate or high potential to occur on the Project site include:

- monarch butterfly (*Danaus plexippus*; Federal candidate),
- California legless lizard (*Anniella* sp.; SSC),
- coastal whiptail (*Asplidoscelis tigris stejnergeri*; SSC),
- Blainville's horned lizard (*Phrynosoma blainvillii*; SSC),
- Bell's sparrow (*Artemisiospiza belli belli*; WL),
- western burrowing owl, and

A8-2

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*; SSC).

Special status plant species detected on the Project site include:

- club-haired mariposa-lily (*Calochortus clavatus* var. *clavatus*; California Rare Plant Rank (CRPR) 4.3),
- Peirson's morning-glory (*Calystegia peirsonii*; CRPR 4.2),
- Plummer's mariposa lily (Calochortus plummerae; CRPR 4.2),
- slender mariposa lily (*Calochortus clavatus* var. *gracilis*; CRPR 1B.2),
- southern California black walnut (*Jugulans californica*; CRPR 4.2), and
- scarlet keckiella (*Keckiella ternate*; Sensitive Local Native Resource).

Vegetation communities observed in the Study Area include:

- California walnut grove,
- Coast live oak woodland and forest,
- Goodding's willow-red willow riparian woodland and forest,
- chamise chaparral and disturbed chamise chaparral,
- California sagebrush-(purple sage) scrub and disturbed California sagebrush-(purple sage) scrub,
- wild oats and annual brome grasslands,
- mulefat thickets,
- upland mustards of star-thistle fields,
- salt grass flats,
- Palmer's goldenbush scrub,
- thick-leaf yerba santa scrub,
- Davidson's wild buckwheat/doveweed annual grassland,
- California buckwheat scrub,
- needle grass-melic grass grassland, and
- basket bush-rive hawthorn-desert olive patches.

A8-2 Cont.

The DEIR includes mitigation measures specific to on- and off-site habitat preservation, on-site habitat establishment and restoration for sensitive plants, salvage and translocation of sensitive plants, seeds, and bulbs. Measures are also included for biological monitoring before and during construction, demarcation of disturbance limits, invasive species prevention, and landscaping. Biologically- focused measures include those for Crotch's bumble bee, special status wildlife relocation, nesting bird avoidance, lighting, homeowner's restrictions, jurisdictional waters compensation, roosting bat surveys, and SEA protected tree replacement/compensation.

A8-3

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially

A8-4

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

significant, direct and indirect impacts on fish and wildlife (biological) resources. Additional comments or other suggestions are also included to improve the document.

A8-4 Cont.

COMMENT # 1: Habitat Mitigation

Issue: Habitat intended as mitigation, as currently described, is not adequately protected.

Specific impact: CDFW's role in the compensatory mitigation process is not clearly described in MM-4.4-1 and MM-4.4-9. Without adequate in-perpetuity funding, the mitigation lands could lose their habitat value and no longer mitigate the impacts of the Project. The Project could continue to have significant unmitigated impacts.

Why impact would occur: Both measures require the development of Conservation Management Plans for the mitigation lands, and both indicate that CDFW will review the proposed easement holder(s) per Government Code section 65967(c). However, neither measure requires the Project proponent to include CDFW as a party to the easement, nor do they require coordination with CDFW during the off-site property selection process or the development of Conservation Management Plans. Without CDFW's involvement in the habitat mitigation lands acquisition process, the mitigation strategy could fall short of the requirements for CESA and LSA permitting.

A8-5

Furthermore, MM-4.4-1 states, "[f]unding for implementation of the tasks in the CMP shall be provided by a traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the [HOA] or other equivalent mechanism(s)." MM-4.4-9 does not explicitly require an endowment, but it does state that, "[t]he entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b)." Funding for the protection and management of mitigation lands must be guaranteed in perpetuity, in order to ensure their continued habitat value. Community facilities districts, landscape management districts, and contractual obligations with an HOA do not sufficiently guarantee the availability of funding in perpetuity. Any of these funding mechanisms can be dismantled in the future, leaving the long-term management of the land as well as the management of the easement unfunded.

Evidence impact may be significant: The EIR identifies conservation of habitat as a key factor in reducing the Project's impacts to biological resources to less than significant. Considering that the loss of habitat resulting from the Project is permanent, the conservation of replacement habitat must also be permanent. Without guaranteed funding for future management, the continued habitat value of the conserved land is not assured, and the impact is not mitigated to less than significant. As such, the Project may have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

A8-6

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

Recommended Potentially Feasible Mitigation Measure(s)

Recommendation #1: CDFW Involvement. CDFW recommends that the Project proponent and the County include CDFW in all aspects of compensatory mitigation planning, including off-site property selection, development of the Conservation Management Plans for the on-site and off-site conservation areas, calculations of endowment fund amounts, and selection of easement and endowment holders. CDFW recommends that the County include CDFW's involvement as a requirement in MM-4.4-1 and MM-4.4-9.

Recommendation #2: Third Party Beneficiary. CDFW recommends that MM-4.4-1 and MM-4.4-9 be amended to add a requirement that CDFW be included as a third-party beneficiary to each conservation easement.

Recommendation #3: In Perpetuity Funding. CDFW recommends MM-4.4-1 and MM-4.4-9 be amended to require an endowment as the funding mechanism for the in-perpetuity management of the conservation easements. The County should not consider alternative funding mechanisms.

A8-7

COMMENT # 2: Crotch's Bumble Bee

Issue: The Project may result in unmitigated impacts to Crotch's bumble bee.

Specific impact: The Project will result in the permanent removal of vegetation communities supporting suitable nesting and foraging habitat for Crotch's bumble bee. Additionally, ground disturbing activities could result in direct impacts, including death or injury of individual bees, collapse of burrows, nest abandonment, and reduced nest success.

A8-8

Why impact would occur: The mitigation measure for this species falls short of guaranteeing impacts to Crotch's bumble bee will be disclosed and mitigated. Mitigation Measure (MM)-4.4-8 begins by requiring the Project proponent to consult with CDFW regarding the need for an Incidental Take Permit, then requires a Pre-Construction Survey pursuant to stated procedures. However, the fourth paragraph of the Pre-Construction Survey requirement states:

> *If Crotch's bumble bee nests are not detected, no further mitigation would be required. The mere presence of foraging Crotch's bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests…The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.*

A8-9

CDFW disagrees with the conclusions in this paragraph. Foraging Crotch's bumble bees should be considered as evidence that the site is occupied. While bees can forage

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

some distance away from the nest, they can also forage near it. Nests are difficult to detect, and even the most thorough survey cannot guarantee avoidance. Therefore, if there are foraging bees, it should indicate that nests may be present throughout the Project site. Though gynes may be highly mobile and able to independently disperse, this dispersion may occur within the boundaries of the construction footprint. Furthermore, once they have selected their overwintering location, any movement from their hibernacula or other disturbance by Project activities would be considered take.

A8-9 Cont.

A8-10

The final paragraph of MM-4.4-8 states, in part:

> *If the above measures are followed, it is assumed that the project shall not need to obtain authorization from CDFW through the California Endangered Species Act Incidental Take Permit process.*

A8-11

CDFW also disagrees with the County's conclusion. Crotch's bumble bee is a year-round resident. There is no time of year that a project could occur that would not result in the risk of taking the species, as the species may have both an overwintering and active foraging presence within a site.

Finally, the second, third, and fourth paragraphs of MM-4.4-8 include habitat assessment and focused survey methodology. The measure states these required surveys are based on recommendations described in the *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (California Department of Fish and Wildlife, 2023); however, the methodology for the habitat assessment departs from the cited survey protocol.

A8-12

If the County discounts the potential for Crotch's bumble bee to be impacted by the Project, departs from the established survey protocol, and requires an Incidental Take Permit only in the event a nest is located, impacts to Crotch's bumble bee will remain significant and not fully mitigated.

A8-13

Evidence impact may be significant: The California Fish and Game Commission accepted a petition to list Crotch's bumble bee as endangered under CESA, determining on September 30, 2022, that the listing "may be warranted" and advancing the species to the candidacy stage of the CESA listing process. Additionally, Crotch's bumble bee is listed as an invertebrate of conservation priority under the California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List (California Department of Fish and Wildlife, 2024), and is classified as endangered by the International Union for Conservation of Nature. As such, the Project may have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or United States Fish and Wildlife Service (USFWS).

A8-14

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

Recommended Potentially Feasible Mitigation Measure(s)

Recommendation #4: Revisions to MM-4.4-8. CDFW recommends the following changes to MM-4.4-8, with deletions represented by ~~strikeout~~ and insertions by **bold**.

> MM-4.4-8 Crotch's Bumble Bee Habitat Preservation and Minimization Measures
>
> Incidental Take Permit. The Applicant shall consult with the California Department of Fish and Wildlife on obtaining an Incidental Take Permit (ITP), per California Fish and Game Code 2081, for the take of Crotch's bumble bee. **The Applicant shall provide the County with a copy of the ITP, or proof that an ITP is not required, prior to issuance of a grading permit.** Mitigation for direct impacts to Crotch's bumble bee ~~will~~ **shall** be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished through the preservation of on-site suitable habitat (MM-4.4-1) and off-site suitable habitat (MM-4.4-9). The Applicant shall be obligated to implement all minimization and avoidance measures conditions that are included in the ITP.
>
> ~~Pre-Construction~~ **Focused** Survey. ~~A pre-construction~~ **Focused** survey**s** for Crotch's bumble bee (Bombus crotchii) shall be conducted within the construction footprint prior to the start of ground-disturbing construction activities ~~occurring during the Crotch's bumble bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch's bumble bee are located within the construction area.~~ The ~~preconstruction~~ **focused** survey**s** shall include a habitat assessment and focused surveys, both of which shall be ~~based on recommendations~~ **as** described in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction.
>
> The habitat assessment shall, at a minimum, include historical and current species occurrences; document potential habitat on site including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and human-made structures that may support bumble bee colonies, such as rock walls, rubble, and furniture. The habitat assessment shall be repeated prior to February 1 in each year that ground-disturbing activities will occur to determine if **foraging,** nesting**, or overwintering** resources are present within the impact area. If **foraging,** nesting**, or overwintering** resources are present in the impact area, focused surveys shall be conducted.
>
> The focused survey shall be performed by a biologist with expertise in surveying for bumble bees and include at least three survey passes that are not on

A8-15

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

sequential days or in the same week, preferably spaced 2 to 4 weeks apart. The timing of these surveys shall coincide with the colony active period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, rainy, or drizzling), and surveyors shall wait at least 1 hour following rain. Optimal surveys are conducted when there are sunny to partly sunny skies and ambient temperatures are greater than 60° Fahrenheit. Surveys may be conducted earlier than April 1 if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up to 5 minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after 5 minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point that would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). Identification shall include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in the U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation if able. The bee shall be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container shall be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly.

If Crotch's bumble bee nests are not detected, no further mitigation would be required. The mere presence of foraging Crotch's bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through

A8-15
Cont.

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

evaluation of topographic features or distribution of floral resources. The nest resources shall be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.

A written survey report shall be submitted to the County of Los Angeles (County) and CDFW within 30 days of the pre-construction survey. The report shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and detailed habitat assessment. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report.

If the above measures are followed, it is assumed that the project shall not need to obtain authorization from CDFW through the California Endangered Species Act Incidental Take Permit process. If the nest resources cannot be avoided, as outlined in this measure, the project applicant shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this California Environmental Quality Act document and shall be incorporated into the Habitat Mitigation and Monitoring Plan.

A8-15 Cont.

ADDITIONAL COMMENTS

Streambed Alteration. The DEIR acknowledges that the Project will result in alterations to the bed, channel, bank, and associated habitats of streams that run through the Project footprint. The DEIR also acknowledges that the Project will be subject to CDFW's regulatory authority pursuant to section 1600 et seq. of the Fish and Game Code. While we appreciate the inclusion of the jurisdictional delineation in the DEIR, CDFW will review and verify the stream impacts and appropriate compensatory mitigation during CDFW's Lake and Streambed Alteration Notification permitting process.

A8-16

Fencing in Preserve. Mitigation Measure *MM-4.4-1 On-Site Habitat Preservation* requires the preparation of a Conservation Management Plan as part of recording the conservation easement. Item 5 indicates that "no fencing or other barriers to wildlife

A8-17

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

movement shall be installed." CDFW recommends the requirement be amended to make it clearer that the type of fencing that is precluded is fencing that represents a barrier to wildlife movement; fencing that keeps people on trails or out of sensitive habitat areas but that does not affect wildlife movement (split rail fencing, for example) is not precluded.

A8-17 Cont.

Burrowing Owl. The second paragraph of Mitigation Measure *MM-4.4-4 Biological Monitoring* indicates burrowing owl has the potential to occur in the Project site and requires focused pre-construction surveys for burrowing owl. If burrowing owl are located, the measure requires a 500-foot buffer be established around the location of the burrow(s) and County Planning and CDFW shall be notified. The measure requires that, at that time, "CDFW shall be consulted regarding the potential need for an Incidental Take Permit per California Fish and Game Code 2081." CDFW recommends the Project proponent coordinate with CDFW well in advance of Project initiation, as significant modifications to the Project and mitigation measures may be required to obtain an Incidental Take Permit and the process can be lengthy.

A8-18

Bats. The third paragraph of Mitigation Measure *MM-4.4-4 Biological Monitoring* requires monitoring of colonial bat roosts to determine if Project activities are having a detrimental effect and reduction of construction activities in the proximity of the roost if the bats are exhibiting distress due to Project-generated noise. Mitigation Measure *MM-4.4-15 Roosting Bat Survey* requires surveys if Project construction initiates between June 1 and August 30. To improve clarity, CDFW suggests the County combine these surveys and monitoring requirements into one measure.

A8-19

Scientific Collecting Permit. Mitigation Measure MM-4.4-10 Special-Status Wildlife Relocation Plan requires the development of a wildlife relocation plan, and details information that shall be included in the plan. The measure specifies that any wildlife handling and relocation methodology from the Streambed Alteration Agreement issued by CDFW shall be incorporated into the plan. CDFW cautions the County, and the Project proponent, that any authorizations to capture and relocate wildlife contained in the Streambed Alteration Agreement apply only to activities governed by the Agreement. A Scientific Collecting Permit would be required to capture and relocate wildlife out of harm's way for activities not governed by the Agreement, or for activities governed by the Agreement if the Agreement does not contain such authorization.

A8-20

Mitigation and Monitoring Reporting Plan. CDFW recommends the Project's environmental document include mitigation measures recommended in this letter. CDFW has provided comments via a mitigation monitoring and reporting plan to assist in the development of feasible, specific, detailed (i.e., responsible party, timing, specific actions, location), and fully enforceable mitigation measures (CEQA Guidelines, § 15097; Pub. Resources Code, § 21081.6). The Lead Agency is welcome to coordinate with CDFW to further review and refine the Project's mitigation measures. Per Public Resources Code section 21081.6(a)(1), CDFW has provided a summary of our

A8-21 Cont.

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

suggested mitigation measures and recommendations in the form of an attached Draft Mitigation Monitoring and Reporting Plan (Attachment A).

A8-21 Cont.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB website[3] provides directions regarding the types of information that should be reported and allows on-line submittal of field survey forms.

In addition, information on special status native plant populations and sensitive natural communities, should be submitted to CDFW's Vegetation Classification and Mapping Program using the Combined Rapid Assessment and Relevé Form[4].

The County should ensure data collected for the preparation of the DEIR is properly submitted.

A8-22

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

A8-23

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist the County in identifying and mitigating Project impacts on biological resources. CDFW requests an opportunity to review and comment on any response that the County has to our comments and to receive notification of any forthcoming hearing date(s) for the Project (CEQA Guidelines, § 15073(e)).

A8-24

[3] https://wildlife.ca.gov/Data/CNDDB
[4] https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

Questions regarding this letter or further coordination should be directed to Kelly Fisher[5], Environmental Scientist. A8-25

Sincerely,

DocuSigned by:
5991E19EF8094C3...

Victoria Tang
Environmental Program Manager
South Coast Region

ATTACHMENTS

Attachment A: Draft Mitigation, Monitoring, and Reporting Program

ec: California Department of Fish and Wildlife
Victoria Tang
Jennifer Turner
Steve Gibson
Kelly Fisher

Office of Planning and Research
State.Clearinghouse@opr.ca.gov

REFERENCES

California Department of Fish and Wildlife. (2023). *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species*. Retrieved from https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline

California Department of Fish and Wildlife. (2024). *California Terrestrial and Vernal Pool Invertebrates of Conservation Priority List.*

[5] Phone: 858-354-5083; Email: kelly.fisher@wildlife.ca.gov

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

ATTACHMENT A: DRAFT MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

CDFW provides the following language to be incorporated into the MMRP for the Project.

Mitigation Measure	Timing	Responsible Party
Recommendation #1: CDFW Involvement. CDFW recommends that the Project proponent and the County include CDFW's CESA Program in all aspects of compensatory mitigation planning, including off-site property selection, development of the Conservation Management Plans for the on-site and off-site conservation areas, calculations of endowment fund amounts, and selection of easement and endowment holders. CDFW recommends that the County include CDFW's involvement as a requirement in MM-4.4-1 and MM-4.4-9.		
Recommendation #2: Third Party Beneficiary. CDFW recommends that MM-4.4-1 and MM-4.4-9 be amended to add a requirement that CDFW be included as a third-party beneficiary to each conservation easement.		
Recommendation #3: In Perpetuity Funding. CDFW recommends MM-4.4-1 and MM-4.4-9 be amended to require an endowment as the funding mechanism for the in-perpetuity management of the conservation easements. The County should not consider alternative funding mechanisms.		

A8-26

A8-27

A8-28

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

Mitigation Measure	Timing	Responsible Party
Recommendation #4: Revisions to MM-4.4-8, as follows: Mitigation Measure MM-4.4-8 Crotch's Bumble Bee Habitat Preservation and Minimization Measures Incidental Take Permit. The Applicant shall consult with the California Department of Fish and Wildlife on obtaining an Incidental Take Permit (ITP), per California Fish and Game Code 2081, for the take of Crotch's bumble bee. The Applicant shall provide the County with a copy of the ITP, or proof that an ITP is not required, prior to issuance of a grading permit. Mitigation for direct impacts to Crotch's bumble bee shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished through the preservation of on-site suitable habitat (MM-4.4-1) and off-site suitable habitat (MM-4.4-9). The Applicant shall be obligated to implement all minimization and avoidance measures conditions that are included in the ITP. Focused Survey. Focused surveys for Crotch's bumble bee (Bombus crotchii) shall be conducted within the construction footprint prior to the start of ground-disturbing construction activities. The focused surveys shall include a habitat assessment and focused surveys, both of which shall be as described in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction. The habitat assessment shall be repeated in each year that ground-disturbing activities will occur to determine if foraging, nesting, or overwintering resources are present	Prior to Project initiation	County

A8-29

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

Mitigation Measure	Timing	Responsible Party
within the impact area. If foraging, nesting, or overwintering resources are present in the impact area, focused surveys shall be conducted. The focused survey shall be performed by a biologist with expertise in surveying for bumble bees and include at least three survey passes that are not on sequential days or in the same week, preferably spaced 2 to 4 weeks apart. The timing of these surveys shall coincide with the colony active period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling), and surveyors shall wait at least 1 hour following rain. Optimal surveys are conducted when there are sunny to partly sunny skies and ambient temperatures are greater than 60° Fahrenheit. Surveys may be conducted earlier than April 1 if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up to 5 minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after 5 minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point that would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). Identification shall include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in the U.S.		

A8-29
Cont.

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

Mitigation Measure	Timing	Responsible Party
National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation if able. The bee shall be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container shall be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly. If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources shall be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). A written survey report shall be submitted to the County of Los Angeles (County) and CDFW within 30 days of the pre-construction survey. The report shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and detailed habitat assessment. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information shall be		

A8-29
Cont.

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

Mitigation Measure	Timing	Responsible Party
submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this California Environmental Quality Act document and shall be incorporated into the Habitat Mitigation and Monitoring Plan.		
ADDITIONAL COMMENTS		
Streambed Alteration. The DEIR acknowledges that the Project will result in alterations to the bed, channel, bank, and associated habitats of streams that run through the Project footprint. The DEIR also acknowledges that the Project will be subject to CDFW's regulatory authority pursuant to section 1600 et seq. of the Fish and Game Code. While we appreciate the inclusion of the jurisdictional delineation in the DEIR, CDFW will review and verify the stream impacts and appropriate compensatory mitigation during CDFW's Lake and Streambed Alteration Notification permitting process.		
Fencing in Preserve. Mitigation Measure *MM-4.4-1 On-Site Habitat Preservation* requires the preparation of a Conservation Management Plan as part of recording the conservation easement. Item 5 indicates that "no fencing or other barriers to wildlife movement shall be installed." CDFW recommends the requirement be amended to make it clearer that the type of fencing that is precluded is fencing that represents a barrier to wildlife movement; fencing that keeps people on trails or out of sensitive		

A8-29 Cont.

A8-30

A8-31

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

Mitigation Measure	Timing	Responsible Party
habitat areas but that does not affect wildlife movement (split rail fencing, for example) is not precluded.		
Burrowing Owl. The second paragraph of Mitigation Measure *MM-4.4-4 Biological Monitoring* indicates burrowing owl has the potential to occur in the Project site and requires focused pre-construction surveys for burrowing owl. If burrowing owl are located, the measure requires a 500-foot buffer be established around the location of the burrow(s) and County Planning and CDFW shall be notified. The measure requires that, at that time, "CDFW shall be consulted regarding the potential need for an Incidental Take Permit per California Fish and Game Code 2081." CDFW recommends the Project proponent coordinate with CDFW well in advance of Project initiation, as significant modifications to the Project and mitigation measures may be required to obtain an Incidental Take Permit and the process can be lengthy.		
Bats. The third paragraph of Mitigation Measure *MM-4.4-4 Biological Monitoring* requires monitoring of colonial bat roosts to determine if Project activities are having a detrimental effect and reduction of construction activities in the proximity of the roost if the bats are exhibiting distress due to Project-generated noise. Mitigation Measure *MM-4.4-15 Roosting Bat Survey* requires surveys if Project construction initiates between June 1 and August 30. To improve clarity, CDFW suggests the County combine these survey and monitoring requirements into one measure.		
Scientific Collecting Permit. Mitigation Measure MM-4.4-10 Special-Status Wildlife Relocation Plan requires the development of a wildlife relocation plan, and details information that shall be included in the plan. The measure specifies that any wildlife handling and relocation methodology from the Streambed Alteration Agreement issued		

A8-31 Cont.

A8-32

A8-33

A8-34

Docusign Envelope ID: BECC56C9-DA07-45D2-8DA1-5A0906196070

Mitigation Measure	Timing	Responsible Party
by CDFW shall be incorporated into the plan. CDFW cautions the County, and the Project proponent, that any authorizations to capture and relocate wildlife contained in the Streambed Alteration Agreement apply only to activities governed by the Agreement. A Scientific Collecting Permit would be required to capture and relocate wildlife out of harm's way for activities not governed by the Agreement, or for activities governed by the Agreement if the Agreement does not contain such authorization.		

A8-34
Cont.

Response to Comment Letter A8

California Department of Fish and Wildlife, South Coast Region
Victoria Tang, Environmental Program Manager
March 10, 2025

A8-1 This comment is introductory in nature and describes the role of the California Department of Fish and Wildlife (CDFW) and the general description of the Project. The comment does not express adequacy concerns related to the environmental analysis in the Draft EIR.

A8-2 This comment accurately identifies the Project's biological setting. These species are discussed in Appendix C, Biota Report, to the Draft EIR. The comment does not express adequacy concerns related to the environmental analysis in the Draft EIR.

A8-3 This comment accurately summarizes the required mitigation measures included in the Draft EIR to reduce impacts to biological resources. As stated in Section 4.4, Biological Resources, of the Draft EIR, the Project will require the implementation of MM-4.4-1 through MM-4.4-16, which address the topics included in this comment. As discussed below in Response to comment A8-6, both MM-4.4-1, On-Site Habitat Preservation and MM-4.4-9, Off-Site Habitat Preservation has been revised as shown in Chapter 3, Revisions to the Draft EIR to clarify that funding for the conservation easements shall be maintained in perpetuity. The comment does not express adequacy concerns related to the environmental analysis in the Draft EIR.

A8-4 The comments and suggestions provided by the CDFW are addressed below.

A8-5 Regarding the required conservation management plans and CDFW's role in the habitat mitigation lands acquisition process, Government Code section 65967(a) provides various options to determine the entity that could hold title to and manage that property, and the Government Code does not require CDFW to be a party to an easement. Importantly, it is not mandatory that CDFW be a part to the easement because the mitigation measures set forth in the Draft EIR are included in a Mitigation Monitoring and Reporting Program, which requires documentation and implementation of compliance. Therefore, the mitigation measures are enforceable as written. Further, as stated in Government Code section 65968(k), a state agency shall not require that a preferred/named entity be named as the entity to hold or manage the endowment funds. As discussed below in Response to Comment A8-6, both MM-4.4-1, On-Site Habitat Preservation and MM-4.4-9, Off-Site Habitat Preservation have been revised as shown in Chapter 3, Revisions to the Draft EIR of this Final EIR to clarify that funding for the conservation easements shall be maintained in perpetuity. As such, the mitigation measures are adequate as revised. As noted in the comment and stated in MM-4.4-1 and MM-4.4-9, CDFW shall review the conservation easement holder/entity. Further, it is understood that CDFW will have conditions as part of the Streambed Alteration Agreement (SAA) for the Project regarding compensatory mitigation for impacts to streams. It is expected that these conditions will expand CDFW's role in the conservation management plans required by MM-4.4-1 and MM-4.4-9. Therefore, the mitigation measures (as revised) adequately addresses the requirement for preparation of conservation management plans.

A8-6 Regarding in-perpetuity funding for the conservation easement, as required by MM-4.4-1, On-Site Habitat Preservation, the options for funding mechanisms stated in MM-4.4-1 (i.e. traditional

endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association or other equivalent mechanism[s]) are all legally binding. MM-4.4-1 has been revised as shown in Chapter 3, Revisions to the Draft EIR, to add a statement clarifying that the funding for the conservation easement shall be maintained in perpetuity. MM-4.4-9, Off-Site Habitat Preservation has also been revised to include the same language as MM-4.4-1 allowing for flexibility in funding mechanisms (i.e., traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association or other equivalent mechanism[s]) and to clarify that funding for the conservation easement shall likewise be maintained in perpetuity. As such, the mitigation measures' requirement for perpetual funding through contractual obligations, established districts, or an endowment is adequate for ensuring the management of conservation lands in-perpetuity because defaulting on the chosen mechanism would leave the liable entity at risk for legal action. Therefore, the mitigation measures, as revised, adequately address the requirement for in-perpetuity funding and ensure that conservation of habitat is permanent.

A8-7 Regarding CDFW involvement in the compensatory mitigation planning, the inclusion of CDFW as a third-party beneficiary to each conservation easement, and in-perpetuity funding for management of the conservation easement, please refer to Responses to Comment A8-5 and A8-6 above.

A8-8 Regarding impacts to Crotch's bumble bee related to the removal of vegetation communities supporting suitable habitat, as stated on page 4.4-42 of Section 4.4, Biological Resources, of the Draft EIR, 18.31 acres of foraging habitat (i.e. coastal scrub, oak woodland, herbaceous, and grassland habitats) for Crotch's bumble bee would be impacted by the Project. However, as stated in Section 4.4.5, Impact Analysis, of the Draft EIR, MM-4.4-1 and MM-4.4-9 would provide the preservation of 611.13 acres and would provide preserved land for foraging and nesting locations. MM-4.4-2 would improve the conditions of portions of the Conservation Area, thereby resulting in additional foraging opportunities. MM-4.4-4 would require monitoring to avoid any inadvertent impacts to potential foraging opportunities. MM-4.4-5 would delineate the Project footprint to help avoid any inadvertent impacts to foraging opportunities by avoiding additional impacts to native vegetation.

Regarding impacts to Crotch's bumble bee related to ground disturbing activities, as required in MM-4.4-8, Crotch's Bumble Bee Habitat Preservation and Minimization Measures, as detailed in Chapter 3, Revisions to the Draft EIR, MM-4.4-8, Crotch's Bumble Bee Habitat Preservation and Minimization Measures, has been revised to require that that focused surveys (instead of a pre-construction survey) be conducted prior to the start of ground-disturbing construction activities regardless of the time of year. Additionally, MM-4.4-4, Biological Monitoring, would require that a County-approved biologist be onsite during initial ground disturbing activity, which would provide further protection for the species. Therefore, the mitigation set forth in the Draft EIR adequately address the impacts to Crotch's bumble bee that could result from Project implementation.

A8-9 Regarding a pre-construction survey and the presence of foraging Crotch's bumble bees as evidence of site occupation, this comment sets the precedent that a single individual of a highly mobile species found foraging on a flower means that a project site is occupied by the species and would need an Incidental Take Permit (ITP). However, as stated in MM-4.4-8, the Applicant shall consult with CDFW on obtaining an ITP, per California Fish and Game Code 2081, for the take of Crotch's bumble bee. As defined in California Fish and Game Code, "take" is defined as hunt, pursue, catch, capture, or kill, which applies to the individuals and not to habitat. As such, MM-4.4-8 provides a methodology to

determine if the species is actively nesting on the Project site in order to determine if the species is currently occupying the Project site and provides avoidance and minimization measures in order to avoid take of the species. However, MM-4.4-1 and MM-4.4-9 still ensure the preservation of 611.13 acres that are expected to provide forage and nest locations, even if the focused surveys are negative for Crotch's bumble bee. This would compensate for the loss of foraging and potential nesting habitat for the species. Additionally, MM-4.4-2 would improve the conditions of portions of the Conservation Area by providing additional foraging opportunities. Therefore, the mitigation set forth in the Draft EIR adequately address the impacts to Crotch's bumble bee that could result from Project implementation. However, as detailed in Chapter 3, Revisions to the Draft EIR, MM-4.4-8, Crotch's Bumble Bee Habitat Preservation and Minimization Measures, has been revised to ensure that the Project Applicant provide the County with a copy of the ITP, or proof that an ITP is not required, prior to issuance of a grading permit. Additionally, instead of conducting a pre-construction survey for the Crotch's bumble bee, MM-4.4-8 has been revised to state that focused surveys shall be conducted prior to the start of ground-disturbing construction activities regardless of the time of year. See Chapter 3, Revisions to the Draft EIR, for specific revisions to MM-4.4-8.

A8-10 CDFW's statement that the presence of foraging Crotch's bumble bees should indicate that nests may be present throughout the Project site and overwintering gynes may be present is speculative. MM-4.4-8 provides a methodology to determine if the species is nesting on the Project site in order to avoid direct impacts to nest. There is currently no survey methodology established to determine the presence of overwintering gynes due to the lack of studies that address that portion of the species' lifecycle. As such, the determination whether or not one would be impacted cannot be made. However, MM-4.4-1 and MM-4.4-9 provide the preservation of 611.13 acres that may be used for overwintering. Therefore, the mitigation measures set forth in the Draft EIR adequately address the impacts to Crotch's bumble bee that could result from Project implementation.

A8-11 The statement referenced from MM-4.4-8 will be removed from the Final EIR since consultation with CDFW is already required by the mitigation measure. MM-4.4-8 provides a methodology to determine if the species is nesting on the Project site and whether or not the site is occupied. MM-4.4-8 provides avoidance and minimization measures to avoid take and consultation with CDFW on the need for an ITP should a nest need to be taken by the Project. Therefore, the mitigation set forth in the Draft EIR adequately addresses the impacts to Crotch's bumble bee that could result from Project implementation. However, as detailed in Response to Comment A8-9, see Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.4-8.

A8-12 Regarding departure from the established survey protocol, the survey method described in MM-4.4-8 is based on the recommendations in Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023), which provides guidance and recommendations. As stated in the CDFW document, "This document should not be interpreted as an order or mandatory protocol for species surveys," so the mitigation is not expected to be verbatim of those considerations. However, CDFW's revisions to MM-4.4-8 are accepted (see response A8-15) and have been updated in Chapter 3, Revisions to the Draft EIR, of this Final EIR.

A8-13 Regarding requirement for an ITP only in the event a nest is located and impacts to Crotch's bumble bee remain significant and not fully mitigated, as defined in California Fish and Game Code, "take" is defined as hunt, pursue, catch, capture, or kill, which applies to the individuals and not to habitat. MM-4.4-8 provides a methodology to determine if the species is nesting on the Project site in order to not

use speculation as to whether the site is occupied. CDFW will be consulted if a nest is found and if an ITP is required even though the avoidance and minimization measures required by MM-4.4-8 would otherwise avoid take of the species. As such, the mitigation set forth in the Draft EIR adequately reduce the impact to Crotch's bumble bee that could result from Project implementation to a less than significant level.

A8-14 Regarding potentially significant impacts to Crotch's bumble bee, please refer to the responses provided above for Comment A8-8 through A8-13.

A8-15 Regarding CDFW's recommended revisions to MM-4.4-8, Crotch's Bumble Bee Habitat Preservation and Minimization Measures, the revisions are accepted and have been updated in Chapter 3, Revisions to the Draft EIR, of this Final EIR.

A8-16 Regarding the Project's alterations to streambeds and associated habitats, as stated in the comment, the Draft EIR acknowledges the required permit process per section 1600 et seq. of the Fish and Game Code and that CDFW's determination of jurisdictional limits and required compensatory is at their discretion. This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

A8-17 Regarding placement of fencing within the On-Site Conservation Area, in order to be responsive to this comment, this clarification to MM-4.4-1 is accepted; Chapter 3, Revisions to the Draft EIR, of this Final EIR has been updated accordingly.

A8-18 Regarding the request for early coordination with CDFW regarding the need for an Incidental Take Permit for burrowing owl, as stated in Table 4.4-3, Special-Status Wildlife Species Occurring or That Have a Moderate or High Potential to Occur in the Project Site, of Section 4.4, Biological Resources, of the Draft EIR, the species was determined to have a moderate potential to occur as just a transient. Protocol surveys for the species were negative for any individuals or diagnostic sign of the species at burrows within the Project site (e.g., pellets, whitewash, and feathers). The Project site provides marginal habitat for the species, so it is not expected to support breeding or overwintering burrowing owl. However, the species can be opportunistic in choosing refugia in burrows or other suitable structures during dispersal and migration and could be present on site temporarily during those activities. As such. out of an abundance of caution, MM-4.4-4, Biological Monitoring, has a specific reference to burrowing owl due to the species being recently made a candidate for listing under the California Endangered Species Act. As requested in this comment, the Project Applicant will be coordinating with CDFW well in advance of the Project initiation, as part of the Streambed Alteration Agreement (SAA) process for the Project. It is expected that conditions may be applied that will expand CDFW's requirements for coordination related to the potential to obtain an Incidental Take Permit. As written, the mitigation set forth in the Draft EIR adequately addresses the impacts to burrowing owl that could result from Project implementation.

A8-19 Regarding CDFW's recommendation to combine MM-4.4-4, Biological Monitoring, and MM-4.4-15 Roosting Bat Survey, the roosting bat survey comes before the beginning of construction monitoring so the survey is being kept as a separate mitigation measure to ensure it is clear that it must be implemented prior to construction monitoring.

A8-20 Regarding a Scientific Collecting Permit (SCP), it is understood that an SCP would be required for special status wildlife handling outside of CDFW's jurisdictional areas. As written, the mitigation set forth in the Draft EIR adequately addresses the impacts to special status wildlife that could result from Project implementation.

A8-21 Regarding the CDFW's recommended revisions to required mitigation measures and the provided Mitigation Monitoring and Reporting Plan provided as Attachment A of the comment letter, CDFW's recommendations have been taken into consideration and the aforementioned revisions per those recommendations are included in Chapter 3, Revisions to the Draft EIR, of this Final EIR.

A8-22 Regarding reporting to the California Natural Diversity Database (CNDDB), the Project Applicant will ensure that the results of the surveys conducted for this report are uploaded to the CNDBB website.

A8-23 Regarding filing fees, all applicable environmental document filing fees will be paid for by the Project Applicant, in compliance with the requirements of the Fish and Game Code. This comment does not express adequacy concerns related to the environmental analysis in the Draft EIR.

A8-24 The County's written responses to this comment letter will be provided to CDFW as part of this Final EIR, which is required to be provided to all commenting agencies at least 10 days prior to the public hearing to certify an EIR pursuant to CEQA Guidelines Section 15088(b). Certification of the Final EIR will be considered at a public hearing by the County's Regional Planning Commission. The CDFW will have the opportunity to comment on the Project and the County's provided responses at this hearing, which will be notified to CDFW and the public in compliance with state and local regulations, including the Ralph M. Brown Act (Government Code Section 54950, et seq.).

A8-25 This comment providing contact information is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR has been received by the County Department of Regional Planning for future notification purposes.

A8-26 This comment requests revisions to mitigation measures to require CDFW involvement in all aspects of compensatory mitigation planning. This comment has previously been addressed in Response to Comments A8-5 through A8-7.

A8-27 This comment requests revisions to mitigation measures to require that CDFW be a third-party beneficiary. This comment has previously been addressed in Response to Comment A8-6.

A8-28 This comment requests revisions to mitigation measures to require an endowment as the only funding mechanism. This comment has previously been addressed in Response to Comment A8-5 through A8-7.

A8-29 This comment requests revisions to MM-4.4-8. This comment was previously addressed in A8-15.

A8-30 This comment states that the Project requires an SAA and that CDFW has final say on impacts and mitigation. This comment was previously addressed in Response to Comment A8-16.

A8-31 This comment requests revisions to mitigation measure MM-4.4-1 related to fencing in the On-site Conservation Area. This comment has previously been addressed in Response to Comment A8-17.

A8-32 This comment states recommendations for consultation regarding burrowing owl. This comment has previously been addressed in Response to Comment A8-18.

A8-33 This comment states recommendations to combine MM-4.4-4, Biological Monitoring, and MM-4.4-15, Roosting Bat Survey. This comment has previously been addressed in Response to Comment A8-19.

A8-34 This comment states a SCP is required for special status wildlife handling. This comment has previously been addressed in Response to Comment A8-20.

Comment Letter A9

From: Ian Pari
To: Erica G. Aguirre
Subject: Comments on The Trail at Lyons Canyon DEIR
Date: Monday, March 10, 2025 5:01:34 PM

CAUTION: External Email. Proceed Responsibly.

Thank you for the opportunity to comment on the Draft EIR for The Trails at Lyons Canyon project (Project No. 2012-001195-5). The City of Santa Clarita has the following comments.

1. The list of study intersections should be expanded to include the following locations, which could be adversely impacted by project-related traffic.
   a. Pico Canyon Road & I-5 Southbound Ramps
   b. Lyons Avenue & I-5 Northbound Ramps
   c. Lyons Avenue & Wiley Canyon Road
   d. Calgrove Boulevard & I-5 Southbound Ramps
   e. Calgrove Boulevard & I-5 Northbound Ramps
   f. Calgrove Boulevard & Wiley Canyon Road

A9-1

2. The EIR should consider non-motorized connectivity to Towsley Canyon Park, specifically a connection from the intersection of The Old Road and Calgrove Boulevard to the Towsley Canyon Park entrance.

A9-2

3. The EIR should consider non-motorized connectivity to future Los Angeles County and Caltrans projects, including bicycle facilities along The Old Road, as cited in the Los Angeles County Bicycle Master Plan and the Caltrans Active Transportation Plan.

A9-3

If there are any questions regarding these comments or the need to discuss them further, please contact me at (661) 284-1402 ipari@santaclarita.gov. Thank you again for the opportunity to provide comments.

Ian Pari
Senior Traffic Engineer
City of Santa Clarita

Phone: (661) 284-1402
Email: ipari@santa-clarita.com
Web: http://www.santa-clarita.com

INTENTIONALLY LEFT BLANK

Response to Comment Letter A9

City of Santa Clarita
Ian Pari, Senior Traffic Engineer
March 10, 2025

A9-1 The comment references potential impact to certain intersections due to Project-related traffic. However, it should be noted that impacts by project-related traffic congestion are not considered to be impacts on the environment for the purposes of the transportation analysis pursuant to the California Environmental Quality Act (California Public Resources Code Section 21099[b][2]). Nevertheless, additional transportation analyses were conducted to include these study intersections (included as Attachment B of this Final EIR).[19] As detailed in Attachment B, based on the City of Santa Clarita's Local Transportation Assessment Guidelines, the Project is not expected to cause substantial operational changes at these intersections. In addition, the Project is not expected to extend I-5 off-ramp queues into the freeway mainline.

A9-2 The Project proposes to implement MM-4.17-2, Transportation Demand Management (TDM) Program, which includes a pedestrian access network linking areas within the Project site (parks, open space, and community center), while also connecting to off-site locations (open space). Specifically, the Project will construct concrete walkway along The Old Road to connect near the entrance of Riverdale Park and Open Space Taylor Trailhead in the City of Santa Clarita. The Los Angeles County Bicycle Master Plan (2012) indicates that a Class II bike lane is planned in the study area along The Old Road, south of Sagecrest Circle. This designation will remain in effect until the Los Angeles County Bicycle Master Plan update is finalized. The Project would include a Class III bicycle route on "A" Street, "B" Street, and the proposed private access road, which would improve the connectivity between The Old Road, the trails to the west, and would connect to the County's planned Class II bicycle lane along the Project frontage on The Old Road. Additionally, as shown on Figure 3-5, Conceptual Trails Map, of the Draft EIR (Draft EIR, page 3-33) the Project would include dedication of existing, non-dedicated trails on-site in the southern portion of the Project site. Specifically, one of the to-be-dedicated trails on-site would connect to an existing, off-site non-dedicated trail which would provide a non-motorized network connection to The Old Road.

Otherwise, the Towsley Canyon Park entrance and the intersection of The Old Road and Calgrove Boulevard are approximately 0.5 miles east of the Project's southern boundary. The Project will not preclude or interfere with any future improvements by the County of Los Angeles or the City of Santa Clarita to connect these locations.

A9-3 The Los Angeles County Bicycle Master Plan (2012) indicates that a Class II bike lane is planned in the study area along The Old Road, south of Sagecrest Circle. This designation will remain in effect until the Los Angeles County Bicycle Master Plan update is finalized. The Project would include a Class III bicycle route on "A" Street, "B" Street, and the proposed private access road, which would improve the connectivity between The Old Road, the trails to the west, and would connect to the County's planned Class II bicycle lane along the Project frontage on The Old Road. The Project would not preclude or

[19] These revisions do not change the impact conclusions in the Draft EIR. Rather, this information merely provides an analysis to address the comment letter. As such, this change would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

interfere with any future improvements that the County may implement within the public right-of-way along The Old Road. The California Department of Transportation's Active Transportation Plan (2022) has not proposed any bicycle facilities along The Old Road at the Project frontage.

Comment Letter A10

LA COUNTY LIBRARY

SKYE PATRICK
County Librarian

March 11, 2025

TO: Erica G. Aguirre
Department of Regional Planning

FROM: Skye Patrick
County Librarian

COMMENTS FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR THE TRAILS AT LYONS CANYON PROJECT, PROJECT NO. 2021-001195-(5)

The Draft Environmental Impact Report (DEIR) was reviewed, and the Library's comments are provided, as redlined in the attached file. Library has no additional comments. A10-1

If you have any questions or need additional information, please contact Elsa Muñoz at (562) 940-8450 or EMunoz@library.lacounty.gov.

SP:YP:GR:EM

Attachment

c: Grace Reyes, Administrative Deputy, LA County Library
Jesse Walker-Lanz, Assistant Director, Public Services, LA County Library
Ting Fanti, Departmental Finance Manager, Budget and Fiscal Services, LA County Library

https://lacounty.sharepoint.com/sites/publiclibrary/docs/staffservices/Documents/EIR/Lyons Canyon Project/redline/Lyons Canyon Project DEIR response.docx

7400 Imperial Hwy, Downey, CA 90242 | 562.940.8400 | LACountyLibrary.org

COUNTY OF LOS ANGELES SUPERVISORS

HILDA L. SOLIS, *Chair Pro Tem, 1st District*
HOLLY J. MITCHELL, *2nd District*
LINDSEY P. HORVATH, *3rd District*
JANICE HAHN, *4th District*
KATHRYN BARGER, *Chair, 5th District*

TABLE OF CONTENTS

H	Ambient Noise Measurement Data and Noise Modeling Worksheets for Construction, Off-Site Traffic and Stationary Sources,
I-1	Los Angeles County Fire Department Request for Information Letter
I-2	Los Angeles County Sherriff's Department Request for Information Letter
I-3	William S. Hart Union High School District Request for Information Letter
I-4	Newhall School District Request for Information Letter
I-5	Los Angeles County Department of Parks and Recreation Request for Information Letter
I-6	Los Angeles LA County Library Request for Information Letter
J	Transportation Impact Analysis
K	Confidential Assembly Bill 52 Consultation – Not for Public Review
L-1	Hydraulic Analysis
L-2	The Trails at Lyons Canyon Water Supply Assessment
L-3	Addendum to Water Supply Assessment
L-4	Sewer Area Study
L-5	Addendum to the Hydraulic Analysis and Sewer Area Study
L-6	Wastewater Will Serve Letter
L-7	Water Availability Letter
M-1	Fire Protection Plan
M-2	Evacuation Report
N-1	Alternative Project Site Letter
N-2	Output file of County of Los Angeles VMT Tool
N-3	Memorandum for VMT Analysis for Lyons Canyon Mixed Use Alternative
N-4	SEATAC Minutes

A10-2

Page 2 of 14 in Comment Letter A10

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
GSP	groundwater sustainability plan
GVWR	gross vehicle weight rating
GWMP	groundwater management plan
GWP	global warming potential
HAP	hazardous air pollutant
HCD	California Department of Housing and Community Development
HCP	habitat conservation plan
HFC	hydrofluorocarbons
HHMD	Health Hazardous Materials Division
HIA	health impact assessment
HMA	Hillside Management Area
HMBP	Hazardous Materials Business Plan
HMCIP	California Hazardous Material Incident Contingency Plan
HMMP	Habitat Mitigation and Monitoring Plan
HOA	Homeowners' Association
HRA	health risk assessment
HVAC	heating, ventilation, and air conditioning
HWCA	Hazardous Waste Control Act
Hz	hertz
I	Interstate
IPCC	Intergovernmental Panel on Climate Change
ips	inches per second
IQ	intelligence quotient
IRIS	Integrated Risk Information System
IRWMP	Integrated Regional Water Management Plan
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
IWMP	Idle Well Management Plan
kBTU	thousand British Thermal Units
kW	kilowatt
kWh	kilowatt-hours
LACBC	Los Angeles County Building Code
LACC	Los Angeles County Code
LACDPR	Los Angeles County Department of Parks and Recreation
LACDRP	Los Angeles County Department of Regional Planning
LACFCD	Los Angeles County Flood Control District
LACL	Los Angeles LA County Library
LACOE	Los Angeles County Office of Education
LACoFD	Los Angeles County Fire Department
LACSD	Los Angeles County Sanitation Districts
LACSMD	Los Angeles County Sewer Maintenance District
LACWWD	Los Angeles County Waterworks District

A10-2 Cont.

Table 1-1. Notice of Preparation and Comment Letters Summary

Sender of Comments	Date Received	General Summary of Comments	Addressed in Section(s)
Los Angeles LA County Library (LACL)	July 13, 2022	LACL states that the public library that will service the Project, Stevenson Ranch Library, does not currently meet minimum collection item requirements based on population of its service area. The comment states that the Project will have "a significant impact on library services since it will create a demand for additional materials and public access computers and will affect the library's capacity to serve the residents of the area". However, the commenter provides the cost estimate for the one-time Library Facilities Mitigation Fee to minimize the impact of residential projects on library services,	Section 4.15, Public Services
Los Angeles County Department of Parks and Recreation (DPR)	July 14, 2022	DPR requests changes to the NOP to include information regarding Los Angeles County multi-use trails. The requested changes relate to DPR's request for 20-foot-wide multi-use trail easements to be dedicated to the County for existing regional trails within the Project site.	Chapter 3.0, Project Description; Section 4.15, Public Services, Section 4.16, Recreation
Los Angeles County Fire Department (LACoFD)	July 15, 2022	LACoFD recommends discussion of erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance. The commenter also states that the Project must comply with all County Code and ordinance requirements.	Section 4.4, Biological Resources; Section 4.5, Cultural Resources; Section 4.9 Hazards and Hazardous Materials; Section 4.20, Wildfire
Los Angeles County Department of Public Works (Public Works)	July 19, 2022 *(NOTE: Comment received outside of NOP Public Review Period: June 16, 2022, through July 15, 2022)*	Public Works recommends that if the Project contains or lies within 300 feet of active, abandoned, or idle oil or gas wells, this be addressed and mitigated. Additionally, the commenter states that if operation involves the construction, installation, modification, or removal of any storage tanks, industrial waste treatment or disposal facilities, and/or storm water treatment facilities, the County's Environmental Programs Division must be contacted for required approvals and operating permits.	Section 4.9, Hazards and Hazardous Materials
City of Los Angeles—LA Sanitation and Environment, Wastewater Engineering Services Division	July 25, 2022 *(NOTE: Comment received outside of NOP Public Review*	The commenter states that based on the Project's location, the sewer infrastructure does not fall within the jurisdiction of the City of Los Angeles, and therefore they do not have details to offer in the analysis.	Section 4.19, Utilities and Service Systems

A10-2 Cont.

The Los Angeles LA County Library (LACL) provides library services to the County. The nearest LACL to the Project site is the Stevenson Ranch Library, located at 25950 The Old Road, in the community of Stevenson Ranch. The Stevenson Ranch Library is approximately 1.7 miles north of the Project site.

The Project's public service providers and the potential for the Project to generate environmental impacts associated with these public services, is discussed in Section 4.15, Public Services, of this Draft EIR.

2.5.3 Utilities

Water

The Project site is located within the service area of the Valencia Water Division of the Santa Clarita Valley Water Agency.

Wastewater

For wastewater, the Project site is located within the service boundaries of the Los Angeles County Sanitation Districts (LACSD), and specifically, the Santa Clarita Valley Sanitation District (SCVSD). Wastewater generated within the Santa Clarita Valley is treated by the SCVSD, which includes two existing water reclamation plants (WRPs), which are operated by the LACSD (LACSD 2021). These include the Saugus WRP and the Valencia WRP, which are interconnected, forming the Santa Clarita Valley Joint Sewerage System (SCVJSS). There are no sewer systems at the Project site. The existing off-site downstream sewer system consists of approximately 11,500 linear feet of gravity sewer pipe, ranging from 8- to 18-inches in diameter, before connecting to the 24-inch SCVSD Trunk Sewer.

A10-2 Cont.

Electrical

The Project site is within the service area of Southern California Edison (SCE) for electrical services. The Project site currently contains underground and overhead electrical distribution lines.

Natural Gas

The Project site is within the service area of Southern California Gas Company (SoCalGas). According to SoCalGas, there are existing facilities within the Project area (SoCalGas 2021).

Cable and Telecommunication

The Project site is within the service areas of AT&T and Charter for cable and telecommunication services.

Solid Waste

The Project site is within the service areas of the Sunshine Canyon Landfill and Chiquita Canyon Landfill. Three private solid waste haulers are permitted to collect residential, commercial, and industrial waste in the County.

2.6 Cumulative Projects

The CEQA Guidelines Section 15130 requires that a project's cumulative impacts be discussed when the incremental effects of the project are cumulatively considerable. According to CEQA Guidelines Section

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
Policy PS/F 5.9. Encourage the availability of trash and recyclables containers in new developments, public streets, and large venues.	**No Conflict.** All of the residential lots would contain pockets of open space for active and passive use. These discreet pockets of open space areas would be located throughout the northeast corner of the Project site and would contain trash receptacles.
Goal PS/6. A County with adequate public facilities	
Policy PS/F 6.6. Encourage the construction of utilities underground, where feasible.	**No Conflict.** As detailed in Chapter 3, Project Description, all utilities would be undergrounded at the Project site.
Policy PS/F 6.8. Encourage projects that incorporate onsite renewable energy systems.	**No Conflict.** The Project would implement mitigation measure MM-4.8-3 (discussed in further detail in Section 4.8, Greenhouse Gas Emissions, of this Draft EIR), which requires installation of a 7-kW solar photovoltaic system at the recreation center.
Goal PS/F 8. A comprehensive public library system.	
Policy PS/F 8.1. Ensure a desired level of library service through coordinated land use and facilities planning.	**No Conflict.** As detailed in the analysis of potential conflict with Policy PS/F 8.2 below, the Project would be required to comply with the Developer Fee Program for the LACL.
Policy PS/F 8.2. Support library mitigation fees that adequately address the impacts of new development.	**No Conflict.** As discussed in 4.15, Public Services, of this Draft EIR, the Stevenson Ranch Library would serve the Project site. Correspondence with the LACL indicated that based on LACL's service level guidelines, the Stevenson Ranch Library does not currently meet service standards for the population of the service area. To ensure that the Project pays its fair share of costs, the Applicant would comply with the Developer Fee Program for the LACL, as provided in Chapter 22.24864.050, Library Facilities Mitigation Fee, of the Zoning Code.
Housing Element	
Goal 3. A housing supply that ranges broadly in costs to enable all households, regardless of income, to secure adequate housing.	
Policy 3.1. Promote mixed-income neighborhoods and a diversity of housing types throughout the unincorporated Los Angeles County to increase housing choices for all economic segments of the population.	**No Conflict.** In addition to market-rate housing, the Project includes the development 71 deed-restricted, affordable units, representing 15% of the dwelling units on-site. Specifically, the Project would provide 47 very low-income senior housing units, one manager's unit, and 24 middle/moderate-income units, thus increasing a diversity of housing types in the Santa Clarita Valley.
Goal 11. Alignment of housing production with state and local sustainability goals in order to protect natural resources, reduce greenhouse gas emissions, and foster climate resilience.	
Policy 11.2. Ensure consistency with the County's Green Building Standards (Title 31) to enhance building design and construction and	**No Conflict.** As discussed in Section 4.6, Energy, of this Draft EIR, the Project would comply with standards in the CALGreen code by implementing energy efficient building designs, pre-wiring residences with electric vehicle charging ports, implementing solar-ready rooftops, reducing indoor and outdoor water demand, and installing energy-efficient appliances and equipment.

A10-2 Cont.

4.15 Public Services

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to public services, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts analysis, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports from the Los Angeles County Fire Department, Los Angeles County Sheriff's Department, Los Angeles County Department of Parks and Recreation, Los Angeles LA County Library, Los Angeles County Department of Regional Planning, the City of Santa Clarita Department of Parks, Recreation and Community Services, as well as the following:

Appendix A-2 Notice of Preparation Comment Letters, dated June/July 2022

Appendix I-1 Los Angeles County Fire Department Request for Information Letter, dated July 2021

Appendix I-2 Los Angeles County Sheriff's Department Request for Information Letter, dated June 2021

Appendix I-3 William S. Hart Union High School District Request for Information Letter, dated July 2021

Appendix I-4 Newhall School District Request for Information Letter, dated June 2021

Appendix I-5 Los Angeles County Department of Parks and Recreation Request for Information Letter, dated July 2021

Appendix I-6 Los Angeles LA County Library Request for Information Letter, dated September 2021

Appendix M-1 Fire Protection Plan, prepared by Dudek, dated November 2023

A10-2 Cont.

Other sources consulted are listed in Section 4.15.9, References.

4.15.1 Existing Conditions

This section describes the existing conditions in the Project site and surrounding areas and identifies the resources that could be affected by the Project.

Regional Setting

Fire Protection

The Los Angeles County Fire Department (LACoFD) provides 24-hour, all-risk emergency services (including fire protection/suppression and emergency medical response services) to unincorporated areas of the County of Los Angeles (County) as well as 60 incorporated cities within the County that have contracted with the department (LACoFD 2022a). The LACoFD's service area totals approximately 2,311 square miles and serves a population of approximately 4.1 million people. The LACoFD provides emergency services in response to a wide range of incidents including structure fires, wildfires, commercial fires, hazardous materials incidents, urban search and rescue, and swift water rescue. The LACoFD is comprised of the Emergency Operations Bureau, the Business Operations Bureau, and the Leadership and Professional Standards Bureau. The emergency operations field divisions are

agreements to benefit communities and create operational and economic efficiencies; and (2) the shortage of early care and education facilities in the unincorporated areas.

The Santa Clarita Valley is served by 6 Santa Clarita school districts. This includes the Castaic Union School District, Newhall School District, Sulphur-Springs School District, Acton-Agua Dulce School District, and Saugus Union School District for elementary schools as well as the William S. Hart High School District, responsible for Santa Clarita Junior High Schools (Middle Schools) and Santa Clarita High Schools. The Project site is located within the Newhall School District for elementary schools and the William S. Hart High School District for Middle School and High School. There are 10 elementary schools (K-6 grade) within the Newhall School District that served a total of approximately 5,831 students during the 2024 academic year (Public School Review 2024). The William S. Hart Union High School District serves grades 7 through 12. The William S. Hart Union High School District had approximately 22,228 students enrolled in their schools during the 2020/2021 academic year, including seven comprehensive high schools, a continuation school, middle college high school, independent study school, six junior high schools, an adult school, and a Regional Occupational Program (HUHSD 2022; NCES 2022).

Libraries

The Los Angeles LA County Library (LACL) system was established in 1912 and provides library services to over 3.4 million residents living in the unincorporated County and to residents of 44 cities within the County (LACL 2022a). The LACL has a service area of over 3,000 square miles (LACL 2022a). The LACL system is a special fund County department (LACL Fund) operating under the direction of the Board of Supervisors (County of Los Angeles 2021). Funding comes primarily from the Library's statutory share of the Countywide tax levy and voter-approved taxes (County of Los Angeles 2021). The County applies a library facilities mitigation fee to new residential developments in the unincorporated areas. This fee is intended to mitigate the significant adverse impacts of increased residential development on the LACL system (County of Los Angeles 2014). The LACL operates community libraries serving unincorporated areas of the County, including the communities of Santa Clarita Valley, as well as 49 incorporated cities (Appendix A-2). The LACL uses the following library service level guidelines to determine adequacy of community library services (Appendix A-2):

- Library Facility Space: 0.5 gross square foot per capita
- Land: 4:1 land to building ratio
- Collection Items: 2.75 items (e.g., books and other library material) per capita
- Public Access Computers: 1 computer per 1,000 capita

A10-2 Cont.

Other Public Facilities

Regional Trails

According to DPR, "regional trails extend over large expanses of land, providing a continuous route around or through areas such as mountain ranges, or around the rim of a valley" (County of Los Angeles 2013). The Santa Susana Mountains Trails Master Plan, a comprehensive trails planning document incorporating portions of the Santa Clarita Valley Planning Area east of I-5 and south of the Newhall Ranch Specific Plan Area, identifies two regional riding, hiking, and/or multi-use trails: the Santa Clara River Trail, located approximately 3.8 miles north of the Project site and the Rim of the Valley Trail, approximately 2.5 miles south (DPR 2018; HMDB 2022). Figure 4.1-1, Regional Trails Map, of Section 4.1, Aesthetics, shows the segments of these regional trails closest to the Project site.

Table 4.15-1. Parks within Two Miles of the Project Site

Facility Name	Address	Distance from Project site (Direction)	Park Classification	Acres
	Santa Clarita, CA 91321			
Valencia Glen Park	23750 Via Gavola Santa Clarita, CA 91355	2 miles (NE)	Local Park	7.3
MRCA				
Santa Clarita Woodlands Parks (County; MRCA; SMMC)	The Old Road and Towsley Canyon Road, Newhall	Adjacent (S)	Regional Park and Open Space	4,000
Mentryville	27201 Pico Canyon Road Stevenson Ranch, CA 91381	2.5 miles (NW)	Local (Historic) Park	69
SMCC				
Ed Davis Park in Towsley Canyon	24335 The Old Road Santa Clarita, CA 91321	Adjacent (S)	Regional Park	175

Source: DPR 2018, 2022b; City of Santa Clarita 2024.
Notes: S = south; SE = southeast; N = north; NE = northeast; NW = northwest; SMMC: Park acreages not available for all parks.

A10-2 Cont.

Libraries

The nearest LACL to the Project site is the Stevenson Ranch Library located at 25950 The Old Road in Stevenson Ranch. The Stevenson Ranch Library is approximately 1.7 miles north of the Project site and includes 11,551 sf of space, a collection of 52,66247,278 books, magazines, and media, and 210 public computers as of JulyJune 20224 (Appendix A-2). The Stevenson Ranch Library is open fivesix days per week, Monday through FridaySaturday, and is staffed by 34 full time staff (23 Librarians and 1 Library Assistant II) and 107 part-time staff (65 Library Associates and 42 Library Pages)(Appendix I-6). Amenities include a study rooms and a meeting room, free printing, laptop/hotspot kits available for checkout, and self-checkout kiosks (Appendix I-6).

Castaic Library, located at 27971 Sloan Canyon Road in the City of Castaic, is 10.6 miles from the project site and is the next closest library. Castaic Library has a facility size of 12,232 sf, a collection of 42,51537,145 books and other library materials, and 263 public access computers. Castaic Library serves the residents of unincorporated Castaic area of the County of Los Angeles (County), a population of 29,23228,485. Castaic Library staffing includes 3 full time staff (2 Librarians and 1 Library Assistant) and 4 part-time staff (3 Library Associates and 1 Library Pages). Amenities include a study rooms and a meeting room, printing, laptop/hotspot kits and Kindle eReaders available for checkout, a self-service homework center, and self-checkout kiosk (Appendix I-6).

Based on LACL's service level guidelines and according to LAPCL staff, the Stevenson Ranch Library does not currently meet service standards for the population of the service area and has a 5,27519,608 collection items, 4 public access computers, and 610 sf facility space deficit (Appendix A-2). However, a new library is planned within FivePoint Valencia, formerly referred to as Newhall Ranch, located in the Santa Clarita Valley Planning Area approximately 3.4 miles from the Project site. This project would be implemented over the course of the next 20 to 30 years and would be accessible to residents of the County

(Appendix I-6). Further, in efforts to minimize the impact of residential projects on library services in the County, the LACL collects a one-time Library Facilitates Mitigation Fee at the time building permits are requested for all new residential dwellings located within unincorporated areas of the County. The mitigation fee for Planning Area 1 (Santa Clarita Valley) for Fiscal Year 20224-235 is $1,096182 per dwelling unit (Appendix A-2). The LACL also collects an annual special tax levied upon parcels within the unincorporated areas of the County. The LACL's special tax rate for Fiscal Year 20224-235 is $33.2034.54 per parcel (Appendix A-2).

Other Public Facilities

Trails

Figure 4.15-2 illustrates the dedicated trails adjacent to and/or near the Project site, including the following: Taylor Trail (adjacent) to the southeast; the Towsley Trail (adjacent) and Wiley Canyon Trail (approximately 0.46 mile) to the southeast; the Don Mullally Trail (approximately 916 feet) to the south; and the Pico Canyon Trail (approximately 1.2 miles) to the northwest. There are also non-dedicated trails on and adjacent to the Project site, including Lyons Ranch Road, an unpaved road traversing through the Project site from the northeastern end, traveling south and eventually west, and continuing off-site. Other non-dedicated trails are located throughout the Project site's hillsides, generally meandering between Lyons Ranch and Towsley Canyon Road. The unmanaged non-dedicated trails on and adjacent to the Project site are often located on privately held land. Non-dedicated trails on private property do not constitute public and/or governmental facilities.

4.15.2 Regulatory Requirements

A10-2 Cont.

Federal

Fire Protection and Emergency Services

Occupational Safety and Health Administration

The federal Occupational Safety and Health Administration (OSHA) enforces provisions of the federal occupational safety and health act, which requires safety and health regulations for construction under Part No. 1926 of Title 29 Code of Federal Regulations (CFR). The fire related requirements of OSHA are specifically contained in Subpart F, Fire Protection and Prevention. Examples of general requirements related to fire protection and prevention include maintaining fire suppression equipment specific to construction on-site, providing a temporary or permanent water supply of sufficient volume, duration, and pressure, properly operate on-site firefighting equipment, and keeping storage sites free from accumulation of unnecessary combustible materials.

State

Fire Protection and Emergency Services

California Constitution

Section 35 of Article XIII of the California Constitution at Subdivision (a)(2) provides: "The protection of public safety is the first responsibility of local government and local officials have an obligation to give priority to the provision of adequate public safety services." Section 35 of Article XIII of the California Constitution was adopted by the voters in 1993 under Proposition 172. Proposition 172 directed the proceeds of a 0.50-percent sales tax to be expended

the advisory agency. If such park space is less than the total park space obligation required by the provisions of Section 21.24.340, the subdivider shall pay the park fees, in accordance with the provisions of Section 21.28.140, Park Fees Required When, Computation and Use, provide amenities to the park space equal in value to park fees, or do a combination of both.

Section 21.28.140, Park Fees Required When, Computation and Use

If all or any portion of the local park space obligation for a residential subdivision is not satisfied by the provision of local park space designated by the advisory agency pursuant to Section 21.24.350, this section provides park fees to be paid as a condition precedent to final approval of the subdivision.

Libraries

Los Angeles County Code, Title 22, Planning and Zoning

Chapter 22.264, Library Facilities Mitigation Fee

The purpose of this Chapter is to:

A. Implement goals and policies of the General Plan, which: (1) promote an equitable distribution of the costs and benefits of governmental actions (2) promote a distribution of population consistent with service system capacity and resource availability; (3) seek to maintain a balance between increased intensity of development and the capacity of needed public facilities; and (4) give priority to upgrading existing public facilities in areas lacking adequate facilities
B. Mitigate any significant adverse impacts of increased residential development upon public library facilities as required by the CEQA; and
C. Implement the Mitigation Fee Act

Pursuant to Section 22.264.030(B), no tract map, parcel map, Conditional Use Permit, other land use permit, or other entitlement, shall be approved unless payment of the Library Facilities Mitigation Fee is made a condition of approval for any such entitlement. The fee is a uniform fee within each library planning area, based on the estimated cost of providing the projected library facility needs in each library planning area, as identified in Table 22.264.050-A of Chapter 22.264. Within Planning Area 1 (Santa Clarita Valley), where the Project site is located, the Library Facilitates Mitigation Fee is $1,096182 per dwelling unit (Appendix A-2).

Other Public Facilities

County of Los Angeles Trails Manual

The County of Los Angeles Trails Manual (Trails Manual) provides guidance to County departments that interface with trail planning, design, development and maintenance of hiking, equestrian, and mountain biking trails. The Trails Manual was adopted by the Board of Supervisors on May 17, 2011, and was revised in June 2013 (County of Los Angeles 2013). The Trails Manual provides guidelines for implementation of multi-use trails within the unincorporated communities of the County and recognizes the existence of the broader regional trail network in the County and surrounding counties that provides access to recreational resources operated by federal, State, and local agencies. The Trails Manual sets the guidelines for reviewing plans and specifications for trails that are provided in conjunction with land use planning and the entitlement process for projects proposed for development

A10-2 Cont.

parks and other park-like amenities (including open space, dedicated trails, and recreational facilities), Project residents would be provided with immediate access to these facilities on-site. Therefore, for the reasons discussed above, including the provision of parks, trail, open space, and recreational amenities, and the adequate and/or above average condition of parks available to residents within Study Area #49 (as informed by the 2016 PNA), the Project would not be anticipated to create capacity or service level problems, or result in the need to construct new park facilities (beyond what the Project is already providing). Therefore, the Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities, the construction of which could cause significant environmental impacts, and impacts would be less than significant.

Threshold 4.15a(v): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Libraries?

The nearest LACL to the Project site is the Stevenson Ranch Library located at 25950 The Old Road in Stevenson Ranch. The Stevenson Ranch Library is approximately 1.7 miles north of the Project site and is a facility with 11,551 sf of space, a collection of 52,66247,278 books, magazines, and media, and 210 public computers as of June 20204 (Appendix I-6).

A10-2 Cont.

Construction

During Project construction, there would be a temporary increase in construction workers at the Project site. Some of these construction workers are expected to currently reside in the area and, therefore, would not place additional pressure on existing library facilities. Generally, any increase in demand for library facilities is anticipated to be negligible because construction workers are highly transient in their work location and likely would use libraries near their place of residence. Although there is potential for construction workers to use library facilities, any resulting increase in the use of these facilities would be temporary. Additionally, given the distance of approximately 2.0 miles from the Project site to the nearest library (Stevenson Ranch Library), it is unlikely that construction workers would have the time, within a 30-60-minute lunch break, to visit the library. Additionally, given the hours of library operations (from 10 AM to 8 PM), it is unlikely that there would be a sizable increase in demand at the Stevenson Ranch library during construction. While it is possible that construction workers would utilize library services after the workday, it would likely be limited in use. Therefore, for the reasons stated above, construction of the Project is not expected to increase demand on existing library facilities to a meaningful extent. As a result, the temporary impact on library facilities during construction would be less than significant.

Operation

As discussed above, the Project would have an estimated population of 1,785 new residents and 10 employees at the recreation center, as detailed in Section 4.14, Population and Housing, of this Draft EIR. These residents and employees would be serviced by the Stevenson Ranch Library– the nearest library to the Project site. The LACL service guidelines state that its ultimate goal is to provide a library facility that has 0.5 square feet of library space per capita, and one to three items of library materials per thousand people served (Appendix I-6). Under existing conditions, the Stevenson Ranch Library does not meet the does not meet the minimum requirements for the population service area, as the library has a deficiency of 5,27519,608 collection items, 4 public access computers, and 610 sf facility space, The increase in residents on the Project site would increase demands for library services provided at the Stevenson Ranch Library. Based on the

LACL's service level guidelines, the Project's projected population increase of 1,785 people would require an additional 4,909 collection items and two (2) additional public access computers; and according to the LACL, no additional library space is needed to serve the Project, and 893 sf of facility space. This would contribute to LACL's current deficiency at Stevenson Ranch Library as the library would need 10,28624,516 additional collection items, 6 public access computers, and 1,503 sf of facility space, to service the existing population plus the Project (Appendix A-2).

Future residential and nonresidential development associated with the Project would be required to pay the LACL's special tax rate of $33.2034.54 per parcel for the 20224-20235 fiscal year, which may increase annually. In an effort to minimize the impact of residential projects on library services, LACL also collects a one-time library facilities mitigation fee (County Code Section 22.24864.050 [Library Facilities Mitigation Fee]) at the time building permits are requested for all new residential dwelling units located within the unincorporated areas of the County (Appendix A-2). The current developer fee rate for the Santa Clarita Valley's unincorporated area is $1,096182 per dwelling unit (Appendix A-2). This is a one-time library facilities mitigation fee on new construction in the unincorporated County that would help offset demand for library services. This fee would amount to $558,960602,820 for development of 510 dwelling units on-site. In addition, correspondence with the LACL indicated that, while there are no plans to expand the Stevenson Ranch Library, plans have been set forth to build a new library within the new FivePoint Valencia development over the next 20 to 30 years (Appendix I-6). The required Library Facilities Mitigation Fee payment would ensure that the Project's impact on the library system would be less than significant. Therefore, impacts related to the Project's potential to create capacity of service level problems or result in substantial adverse physical impacts for library facilities would be less than significant.

Threshold 4.15a(vi): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Other public facilities addressed in response to this threshold include nearby regional trails (the Santa Clara River Trail and the Rim of the Valley Trail) and local dedicated trails (the Taylor Trail, Towsley Trail, Wiley Canyon Trail, and Don Mullally Trail). Potential Project impacts to trails are also discussed in Section 4.1, Aesthetics, and Section 4.16, Recreation, of this Draft EIR.

Construction

During Project construction, there would be a temporary increase in construction workers at the Project site. Some of these construction workers are expected to reside in the area and, therefore, would not place additional pressure on existing trail facilities. Generally, the increase in usage of nearby regional trails due to construction workers is anticipated to be negligible because construction workers are highly transient in their work location, often engage in physically intensive labor, and likely would use trails near their place of residence. In addition, as lunch break times are typically short (30 to 60 minutes), they are not long enough for construction workers to take advantage of trail facilities and return to work within the allotted time. As detailed in Section 4.1, Aesthetics, and depicted on Figure 4.1-1, Regional Trails Map, of Section 4.1, Aesthetics, the nearest regional trails to the Project site are the Santa Clara River Trail, located approximately 3.8 miles north of the Project site, and the Rim of the Valley Trail, approximately 2.3 miles south of the Project site (DPR 2018; HMDB 2022). Due to distance from these regional trails to the Project site, Project construction workers would not be likely to use these trails on a frequent basis, particularly given the fact that, as discussed in Section 4.15.1, Existing Conditions and depicted on Figure 4.1-2,

A10-2 Cont.

Threshold 4.15a(v): Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Libraries?

Regarding cumulative impacts from capacity problems, service level problems, or provision of new or physically altered governmental facilities related to libraries, cumulative public services impacts could occur if the Project, in combination with the Cumulative Projects, would result in capacity or service level impacts, or if buildout of the General Plan, as identified in the General Plan EIR, would result in a significant impact to library services at Stevenson Ranch Library, which the Project could thereby contribute to and/or exacerbate, resulting in a cumulatively considerable impact. The General Plan EIR does not identify an existing cumulative impact to library services (County of Los Angeles 2014). Development of the Project would not contribute to any cumulative public services impacts as other projects are implemented in the County for the reasons discussed below.

The Project and Cumulative Projects would result in a temporary increase in population during construction due to the influx of construction workers. Some of these construction workers are expected to reside in the area and, therefore, would not place additional pressure on existing library facilities. Generally, an increase is anticipated to be negligible because construction workers are highly transient in their work location, the nearest library is several miles from the Project site, library hours are not conducive to daily construction schedules, and likely would use libraries near their place of residence. Therefore, and for the reasons stated above, construction of the Project is not expected to increase demand on existing park facilities to residents of the Project and Cumulative Projects would be serviced by the Stevenson Ranch Library, while Cumulative Projects in the City of Santa Clarita would also be serviced by the Santa Clarita Public Library. Future residential and nonresidential development associated with the Project and Cumulative Projects within unincorporated Los Angeles County would be required to pay the LACL's special tax rate of $33.2034.54 per parcel for the 20224-20235 fiscal year, which may increase annually (Appendix A-2). Future residential development in the unincorporated County (including the Project and Cumulative Projects LA1 through LA13), would also be required to pay the County's library facilities mitigation fee (Zoning Code Section 22.24864.050). The fee for projects within the Santa Clarita Valley (Area 1) is $1,096182 per dwelling unit during preparation of this Draft EIR (Appendix A-2). Cumulative Projects within City of Santa Clarita would be subject to the City's Library Facilities and Technology Mitigation Fee. These one-time library facilities mitigation fees on new construction would help offset demand for library services due to population growth, both for the LACL system and City of Santa Clarita Library. In addition, correspondence with the LACL indicated that, while there are no plans to expand the Stevenson Ranch Library, plans have been set forth to build a new library within the new FivePoint Valencia development over the next 20 to 30 years, which could serve the Project and all of the Cumulative Projects (Appendix I-6). Additionally, as detailed in Table 2-2 of Chapter 2, Environmental Setting, Cumulative Project LA7 (Mission Village) would include development of one library. According to the LACL, developer fees collected for the Project would mitigate for impacts on the library system (Appendix I-6). As developer fees would be collect for the Project and Cumulative Projects in the City and County, these fees can similarly be assumed to mitigate for cumulative impacts through the provision of additional facilities, materials, and/or services.

For these reasons, the Project would not result in capacity or service level problems or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for library services. As such, cumulative impacts to libraries would be less than significant and would not be cumulatively considerable.

A10-2 Cont.

Response to Comment Letter A10

LA County Library
Skye Patrick, County Librarian
March 18, 2025[20]

A10-1 The comment notes there are proposed revisions to the Draft EIR, which are included as Comment A10-2. As such, see Response to Comment A10-2 for more details.

A10-2 The comment represents changes to the Draft EIR, including but not limited to revisions to data (e.g., library materials, facility space, and fees) provided by the LA County Library (LACL) in the existing conditions discussion and impact analysis under Section 4.15, Public Services, of the Draft EIR. Other proposed revisions include corrections related to typographical errors that do not change the analysis or impact conclusions in the Draft EIR, nor do they result in any new significant impacts or the need for new or altered mitigation measures.

The proposed revisions related to data corrections appear to update the Draft EIR to reflect conditions and conclusions based on data as recent as June 2024. These proposed revisions do not reflect inadequacy with the Draft EIR. The discussion provided in Section 4.15 is based on information from the LACL in a Request for Information Letter dated September 2021, which is included as Appendix I-6 to the Draft EIR. In addition, the LACL sent an NOP comment letter dated July 14, 2022, which provided anticipated fees required for the Project. Although the information presented in this comment reflects updated conditions, the Draft EIR was adequately prepared to meet the environmental baseline established upon the release of the NOP in accordance with CEQA Guidelines Section 15125(a)(1).

As a result of this comment, revisions to the Draft EIR have been made, as shown in Chapter 3, Revisions to the Draft EIR, of the Final EIR. See revisions to the Table of Contents, Acronyms and Abbreviations, Chapter 1 (Introduction), Chapter 2 (Environmental Setting), Section 4.11 (Land Use and Planning), and Section 4.15 (Public Services) of the Draft EIR. These revisions do not change the analysis or impact conclusions in the Draft EIR, nor does this result in any new significant impacts or the need for new or altered mitigation measures. These revisions merely provide updated information by the LACL to reflect anticipated conditions of LACL facilities (i.e., Stevenson Ranch Library) as a result of the Project and anticipated fees required of the Project Applicant. In addition, implementation of the Project would require payment of the Library Facilities Mitigation Fee (i.e., Developer Fee) for the proposed residential buildings.

[20] Note that although Comment Letter A10 is dated March 11, 2025, the letter was not received by the County until March 18, 2025.

INTENTIONALLY LEFT BLANK

Comment Letter O1

From: Erica G. Aguirre
Sent: Monday, January 6, 2025 2:14 PM
To: Eunice.Ambriz@sanmanuel-nsn.gov
Subject: RE: Trails at Lyons Canyon Project No. 2021-001195-(5) [COU-LA-2024-12]

Thank you, Ms. Eunice Ambriz. Received. O1-1

ERICA G. AGUIRRE, AICP (she/her/hers)
PRINCIPAL PLANNER, Subdivisions

From: Eunice Ambriz <Eunice.Ambriz@sanmanuel-nsn.gov>
Sent: Monday, January 6, 2025 11:58 AM
To: EDL-DRP BU-D Executive Office <executive@planning.lacounty.gov>
Subject: Trails at Lyons Canyon Project No. 2021-001195-(5) [COU-LA-2024-12]

CAUTION: External Email. Proceed Responsibly.

Dear Amy Bodek,

Thank you for contacting the Yuhaaviatam of San Manuel Nation (formerly the San Manuel Band of Mission Indians) regarding the above-referenced project. YSMN appreciates the opportunity to review the project documentation, which was received by the Cultural Resources Management Department on December 30, 2024. The proposed project is located outside of Serrano ancestral territory and, as such, YSMN will not be requesting to receive consulting party status with the lead agency or to participate in the scoping, development, or review of documents created pursuant to legal and regulatory mandates. O1-2

Regards,
Eunice

Eunice Ambriz
Cultural Resources Technician
Eunice.Ambriz@sanmanuel-nsn.gov
O:(909) 864-8933 x 50-2033
M:(909) 649-4867
26569 Community Center Dr Highland, California 92346
SAN MANUEL
BAND OF MISSION INDIANS

1

Response to Comment Letter O1

Yuhaaviatam of San Manuel Nation
Eunice Ambriz, Cultural Resources Technician
January 6, 2025

O1-1 The comment represents confirmation of receipt of the comment provided (see Comment O1-2). The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O1-2 The comment states the Project site is outside of ancestral territory and that the tribe will not be requesting to receive consulting party status with the lead agency. As such, no comments are made. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

Comment Letter 02

ENDANGERED HABITATS LEAGUE
DEDICATED TO ECOSYSTEM PROTECTION AND SUSTAINABLE LAND USE

January 9, 2025

LA County Department of Regional Planning
Attention: Erica G. Aguirre, AICP, Principal Planner, Subdivisions
320 West Temple Street, 13th Floor
Los Angeles, CA 90012

RE: Trails at Lyons Canyon, Project No. PRJ2021-001195, SEA Permit No. RPPL2021003113

Dear Ms. Aguirre:

Endangered Habitats League (EHL) appreciates the opportunity to comment. For your reference, EHL is a Southern California regional conservation group dedicated to ecosystem protection and sustainable land use. 02-1

As background, the project was approved in 2008 for estate development over most of the site and modified in 2015 for greater density. We understand that the original project could proceed under existing entitlements, without complying with the amended 2019 SEA Ordinance or (as part of a previously approved specific plan) with the 2022 updates to the Safety Element and Land Use Elements for fire safety. 02-2

In these regards, we commend the applicant's decision to re-plan on a smaller footprint, with more affordable, attached product types that better address today's housing needs. As a result, 62% of the on-site area would be conserved under easement as open space. While "clustering" was noted to occur to the extent feasible, the footprint still exceeds the limit for ministerial SEA compliance. For this reason, and due to large oak tree impacts, the project is seeking a SEA CUP to include off-site mitigation that exceeds the minimum ratios as well as compensatory oak tree planting. 465 acres would be conserved offsite in the same Santa Susana Mountains and Simi Hills Significant Ecological Area (SEA), which would be an important contribution to SEA protection. 02-3

Trails are also proposed. *EHL strongly recommends, however, that final trail placement be deferred until a resource management plan is completed, so that recreational activities avoid and minimize impacts to riparian and other sensitive resources.* The negative effects of recreation on wildlife are increasingly recognized and are best addressed by the resource management plan preceding trail siting. Please see enclosures for information on recreational impacts. 02-4

8424-A SANTA MONICA BLVD., #592, LOS ANGELES, CA 90069-4267 ♦ WWW.EHLEAGUE.ORG ♦ PHONE 213.804.2750 ♦ FAX 323.654.1931

In conclusion, while EHL generally only supports infill projects, we support approval of this re-design, in recognition of the major improvement in biological impacts, significant additional open space preservation through SEA compliance, and land-efficient housing products. We again request that a resource management plan guide trail placement. 02-5

Yours truly,

Dan Silver
Executive Director

Enclosures

California Fish and Wildlife, Recreation Special Issue; 29-51; 2020

Recreation-related disturbance to wildlife in California – better planning for and management of recreation are vital to conserve wildlife in protected areas where recreation occurs

ELIZABETH LUCAS*

California Department of Fish and Wildlife, Region 5, Natural Community Conservation Planning Program, San Diego, CA 92123, USA (Retired)

*Corresponding Author: libbylucas5@gmail.com

Expanding levels of authorized and unauthorized non-consumptive recreation increasingly threaten sensitive biological resources in areas protected primarily or solely to conserve them. As California's human population grows, recreational use in protected areas grows commensurately. The majority of the documented effects on wildlife from non-consumptive recreation are negative; they include detrimental changes in behavior, reproduction, growth, immune system function, levels of stress hormones, and finally, to the survival of individual animals and persistence of wildlife populations and communities. This paper provides insights from the recreation ecology literature into these recreation-related disturbances to insects, amphibians, reptiles, birds, and mammals from hiking, jogging, biking, horseback riding, boating, and off-highway/all-terrain vehicles. The documented evidence of these disturbances to wildlife reveals the flaw in the prevalent assumption that recreation is compatible with biological conservation, the dual-role protected areas' core function. This assumption usually rests on the expectations of (1) allowing only ecologically sound siting of recreational areas and ecologically acceptable types, levels, and timing of recreation, and (2) providing sufficient monitoring, management, and enforcement of recreation to ensure the perpetuation of viable populations of focal sensitive species. However, it is rare that these expectations are met. The ultimate essential outcome of the information provided in this paper is the cessation of the extant recreation-related exploitation of dual-role protected areas. This calls for a societal course change involving: widespread, long-term, and continual multimedia dissemination of the science-based information about recreation-related disturbance to wildlife; application of a science-based approach to siting recreational areas and allowing only ecologically acceptable types, levels, and timing of recreation; and, perpetual personnel and funding explicitly for management at levels commensurate with recreational pressure. These measures would also improve the often cited economic, educational, and recreational/health benefits of dual-role protected areas.

02-6

Key words: dual-role protected areas, enforcement, fragmentation, management, multimedia education, non-consumptive recreation, perpetual funding, planning and siting of trail networks, recreational disturbance to wildlife, unauthorized trails

Conserving habitats is a key strategy for conserving biodiversity worldwide (Pickering 2010). In California, the core function of many areas protected for conservation is to ensure the perpetuation of sensitive species (i.e., species whose persistence is jeopardized), as is appropriate for the nation's most biologically diverse state (CDFW 2015). The level of land conservation that California enjoys is intended to ensure that the state's globally renowned biodiversity remains intact. However, of all the states in the USA, California hosts the most listed species imperiled by recreation, in part because the strongest association of outdoor recreation is with urbanization (Czech et al. 2000), which is itself an important cause of endangerment (Reed et al. 2014). The anticipated growth of the state's human population from approximately 38 million in 2013 to 50 million by mid-century with a commensurate increase in recreational demands in protected areas will likely increase the continual challenge of conserving the state's wildlife (CDFW 2015).[1, 2] The dual role of protected areas to conserve biodiversity and provide nature-based recreational and educational opportunities for millions of people rests on the assumption that non-consumptive recreation is compatible with wildlife conservation, despite documented evidence to the contrary (Reed and Merenlender 2008; Larson et al. 2016; Hennings 2017; Dertien et al. 2018; Reed et al. 2019).[3] Ecologically sound types, levels, timing, and siting of recreation, and perpetual management of recreation at or exceeding a level commensurate with the recreational pressure, are vital to ensure the perpetuation of viable populations of focal sensitive species in "dual-role" protected areas.[4, 5]

O2-6 Cont.

[1] Protected areas include locally-owned lands (e.g., county and city reserves), state-owned lands (e.g., ecological reserves, wildlife areas, state parks), federally owned lands (e.g., national wildlife refuges, wilderness areas), and privately owned lands (e.g., conservation easements, conservancy lands, mitigation banks and lands). Here, the focus is on protected areas preserved primarily or solely for the perpetuation of sensitive species (e.g., ecological reserves, protected areas established pursuant to Natural Community Conservation Plans and/or Habitat Conservation Plans, mitigation banks and lands).

[2] Wildlife means all wild animals: insects, fish, amphibians, reptiles, birds, and mammals.

[3] In contrast to consumptive recreation (e.g., hunting, fishing), non-consumptive recreation is generally assumed not to directly extract a resource; it includes nature and wildlife viewing, beach-going, kayaking, hiking, biking, horseback riding, and wildlife photography (Reed and Merenlender 2008; CDFW 2016; Gutzwiller at el. 2017). From here forward, "recreation" means non-consumptive recreation, unless otherwise stated.

[4] Focal species are organisms whose requirements for survival represent factors important to maintaining ecologically healthy conditions; identified for the purpose of guiding the planning and management of protected areas in a tractable way, focal species include keystone species, umbrella species, flagship species, and indicator species (Soulé and Noss 1998; Marcot and Flather 2007). Here, the term "focal species" is intended to include those species encompassed by the guild surrogate approach of conservation; this approach entails one member or a subset of members serving as a surrogate for other members of the guild (Marcot and Flather 2007).

[5] From here forward, "management" includes monitoring, management, and enforcement with the necessary authority. The level of enforcement necessary is dependent on the level of continual management implemented; generally, the more the management, the less enforcement is necessary. In addition, monitoring and management encompass both the natural resources and human users of the protected areas. The fiscal support to be secured includes personnel and all program costs.

Insights from studies

Purpose.—The purpose of the following discussion is to provide insights to disturbances to several wildlife species from non-consumptive recreation. Accordingly, the insights are exclusively from studies that document recreation-related disturbance to wildlife. This approach reflects the evidence that the majority of documented responses of wildlife species to non-consumptive recreation are negative, as demonstrated in two systematic literature reviews (Reed et al. 2014; Larson et al. 2016) and a literature review of over 500 articles written and reviewed by the scientific community (Hennings 2017). The insights are intended to (1) illustrate that scientific studies provide clear evidence of recreation-related disturbance to wildlife, (2) elicit awareness of and concern about the disturbance, and (3) stimulate action to address it.

Sources and scope.—The 71 articles and 13 reports[6] reviewed about the recreation-related effects on wildlife generally reflect Larson et al.'s (2016) finding that studies about such effects focus on mammals (42%) and birds (37%), followed by invertebrates (12.4%), reptiles (5.5%), fish (5.1%), and amphibians (0.7%); there are no insights herein from studies of fish. Larson et al. (2016) found that some of the least-studied taxonomic groups (i.e., reptiles, amphibians, and invertebrates) had the greatest evidence for negative effects of recreation. While not all the studies selected for this paper address wildlife in California, all the studies' scenarios could occur in the state as do all species types among the studied taxa (i.e., insect, amphibian, reptile, bird, mammal).

Not all of the studies selected for this paper address sensitive species. This is primarily because current research on recreation-related effects on wildlife includes few species of conservation concern (Larson et al. 2016). However, sensitive species may experience greater levels of recreation-related disturbance than described for common species in the study insights herein. This is because many rare and isolated species are specialists, and they may be more sensitive to anthropogenic disturbance, including recreational activities, than common and widely distributed species (Bennett et al. 2013; Reilly et al. 2017). Recreation-related declines of common species warrant attention because of their functional ecological importance – local depletions of common species can have broad consequences within the food web (Säterberg et al. 2013; Baker et al. 2018; Reed et al. 2019). Recreation-related declines or disturbance in an important common prey species may affect the species in higher trophic levels (Reed et al. 2019). More than a quarter of species become functionally extinct before losing 30% of their individuals (Säterberg et al. 2013; Baker et al. 2018; Reed et al. 2019); here, functional extinction occurs when the population size of the depleted species is below the level at which another species goes extinct (Baker et al. 2018).

The scope of this paper does not include studies about snow-based recreation, though all of the 14 articles addressing snow-based recreation that Larsen et al. reviewed reveal that non-motorized and motorized snow-based activities (i.e., skiing, snowshoeing, snowmobiling) can have significant negative effects. Nor does the scope of this paper include studies exclusively about the effects of dogs on wildlife; however, a literature review on the effects of dogs on wildlife concludes that (1) people with dogs on leash, and even moreso

[6] All the articles are published in peer-reviewed journals. Some of the reports were peer reviewed and all were written by or contributed to by professionals in the fields of biology or ecology, though none of the reports were published in peer-reviewed journals to this author's knowledge (e.g., Burger 2012; Hennings 2017; Dertien et al. 2018; Reed et al. 2019). This paper does not cite all the articles and reports this author read. And, the totals exclude documents that are not explicitly about recreation-related effects on wildlife (e.g., Tinkler et al. 2019; Taff et al. 2019; Wolf et al. 2019) and all newspaper articles.

O2-6 Cont.

off leash, are more alarming and detrimental to wildlife than any non-motorized recreational user group without dogs, and (2) people with dogs substantially increase the amount of wildlife habitat affected (Hennings 2016). Hennings (2016) also asserts that wildlife does not appear to habituate to the presence of dogs; effects linger after dogs are gone because the scent of dogs repels wildlife.

Management measures.—The study insights focus on the documented recreation-related disturbance to wildlife, not on management measures to prevent or minimize the disturbance. However, many of the reviewed articles and reports identify such measures, which range from full prohibition of human access, to time-of-access restrictions (e.g., seasonal or diurnal/nocturnal restrictions), to various measures based on disturbance thresholds. Disturbance thresholds are thresholds of various measurable parameters above or below (depending on the parameter) which wildlife is disturbed. Examples of disturbance thresholds are distance between trails and nesting sites, density of active trails, number of recreationists, number of recreational events per time frame, and duration of recreation. These thresholds may be used to establish management measures such as minimum widths of spatial buffers between recreational trails and wildlife.

A common theme among the management measures is that continual proactive and adaptive management is needed to protect wildlife from recreational disturbance, and that access closures should occur if the management fails.[7] Adaptive management is a cornerstone of large-scale multi-species conservation (CDFW 2014). An example of proposed management measures is Dertien et al.'s (2018) recommendation for a precautionary approach that adopts maximum values of quantitative disturbance thresholds observed for the taxa of concern, while excluding the extreme values of the thresholds.[8] This approach stems from the gaps in knowledge about quantitative disturbance thresholds of recreation; such thresholds are lacking for many species, taxonomic groups, and sources of disturbance.

Regarding spatial buffers, a general rule of minimum thresholds for distance to trails cannot be established for some species, as individual variability within species can be high and can differ among populations, types of topography, and frequencies and types of human intrusion (González et al. 2006). For example, Dertien et al. (2018) recommended a 200-m minimum buffer for ungulates; however, this would be insufficient for the circumstances of Taylor and Knight's (2003) study further cited below in which they found that mule deer (*Odocoileus hemionus*) showed a 96% probability of flushing within 100 m of recreationists located off trails, and the probability of their flushing did not drop to 70% until perpendicular distance reached 390 m. Two additional factors that influence the determination of spatial buffers are "effect zones" (i.e., areas within which wildlife is disturbed by recreational ac-

O2-6 Cont.

[7] Based on section 13.5 of the California Fish and Game Code and the Natural Community Conservation Planning Act (i.e., section 2805 of Fish and Game Code), adaptive management generally means (1) improving management of biological resources over time by using new information gathered through monitoring, evaluation, and other credible sources as they become available, and (2) adjusting management strategies and practices accordingly to assist in meeting conservation and management goals (e.g., conservation of covered or focal species). Under adaptive management, program actions are viewed as tools for learning and to inform future actions.

[8] The central tenet behind the precautionary principle is that precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. Generally, the four central components of the principle are: taking preventive action in the face of uncertainty; shifting the burden of proof to the proponents of an activity; exploring a wide range of alternatives to possibly harmful actions; and increasing public participation in decision making (Kriebel et al. 2001). There are subtle differences between the precautionary principle and precautionary approach, but their consideration is beyond the scope of this paper.

tivities on trails) and the density of the trail networks. The effect zones can extend several hundred meters on either side of the trails (Reed et al. 2019). The smaller a protected area is and the denser its trail networks are, the greater the proportion of the protected area is occupied by effect zones, and the less likely it is that spatial buffers such as those Dertien et al. (2018) recommended will protect the focal species from recreational disturbance (Wilcove et al. 1986; Ballantyne et al. 2014).

There are many sources that provide information about management of recreation in protected areas, or guidance on the design or siting of trails/trail networks. These sources include management framework tools designed to address recreational use, though they vary in their attention to the needs of wildlife (Hennings 2017).

Insects

In a study of the effects of walkers, runners, and runners with dogs on the federally endangered Karner blue butterfly (*Lycaeides melissa samuelis*; Karners) at the Indiana Dunes National Lakeshore, USA, Bennett et al. (2013) found that (1) Karners flushed in the presence of recreationists as they would respond to natural agents, such as predators; (2) recreation restricted host-plant choice by reducing host-plant availability, effectively rendering the quality of habitat within 10 m of the trail unsuitable; (3) recreation had the potential to reduce oviposition rate of virtual females by 50%, and therefore population growth rates; (4) the frequency at which recreationists negatively affected the females (including their oviposition) varied substantially with habitat extent, number of recreationists, and sensitivity; and (5) habitat extent was the primary predictor variable. The authors concluded that Karners will experience less recreation-related disturbance the farther their habitat extends beyond trails.

In a study conducted near Palo Alto, California, USA focusing on 10 native oak woodland species of butterflies, Blair and Launer (1997) concluded that even small perturbations by hikers and joggers in a recreational area led to (1) a loss in the number of butterfly species (species richness) of the original oak-woodland community compared to the number of these species in a biological preserve with no recreation, and (2) a lower number of butterflies (abundance) in the recreational area compared to the biological preserve. The authors also concluded that multi-use areas may not adequately preserve butterfly species diversity.

Herpetofauna

Responses of the Iberian frog to recreational activities.—In a study involving field research in the Guadarrama Mountains in central Spain and simulation modelling to assess the effects of recreation on Iberian frogs (*Rana iberica*), an endemic species in decline, Rodríguez-Prieto and Fernández-Juricic (2005) measured frog abundance and response to human disturbance. The authors found that Iberian frog abundance (a population-level parameter): (1) was significantly affected mainly by study site location and distance to the nearest recreational area, a proxy for human disturbance; (2) was positively related to distance from recreational area (i.e., as distance decreased, abundance decreased); and (3) increased as number of humans decreased. With respect to the effects of repeated disturbances (e.g., human approaching with a steady pace) on the individual-level parameters of

O2-6
Cont.

flight initiation distance[9] and time to resume pre-disturbance activities, the study showed that: (1) frogs' flight initiation distances were longer in areas with less vegetation cover; (2) though the flight initiation distances did not vary with repeated human approaches, the number of repeated human approaches affected the frogs' time to resume pre-disturbance activities, with second and third approaches increasing the time it took frogs to reoccupy the disturbed spot; and (3) there was an 80% decrease in the frogs' stream-bank use with a 5-fold increase in the direct disturbances per hour, and a 100% decrease in stream bank use with a 12-fold increase in human disturbances per hour. The authors concluded that direct human disturbance affects this species at the population level, and that it needs to be considered as a potential factor affecting amphibian populations with low tolerance for disturbance.

Responses of the yellow-blotched map turtle to human disturbance.—In a study along a 300-m reach of the Pascagoula River in southeastern Mississippi, USA, Moore and Siegel (2006) studied the effects from boating, fishing, jet skis, and direct anthropogenic damage to nests on the nesting and basking behavior of the yellow-blotched map turtle (*Graptemys flavimaculata*), listed as threatened under the U.S. Endangered Species Act. With respect to human disturbance of nesting turtles, the authors found that numerous turtles waited several hours near a sandbar before emerging from the water onto the beach to nest, and turtles that attempted to nest upon emerging onto the beach frequently abandoned their efforts and retreated to the water—of a total of 79 nesting attempts, only 15 successfully completed oviposition. With respect to human disturbance of basking turtles, the authors found that the number of turtles disturbed differed significantly with the type of disturbance; specifically, anglers that remained in the basking vicinity caused the most disturbance, and jet-skis caused less than an expected amount of disturbance; this was likely because of the anglers' closeness (compared to the jet-skis) to the basking logs and the long periods they remained, both of which caused turtles to bask less. Moore and Siegel (2006) concluded that: the interruption of nesting activities may have a severe impact on the viability of this population of turtles through changes in numbers of clutches; and, the interruption of basking and consequent reduction in the turtles' body temperature has the potential to negatively affect the ability of all turtles to process and digest food, and the ability of females to develop eggs during the reproductive seasons.

Responses of the common wall lizard to tourism.—In a study of common wall lizards (*Podarcis muralis*) conducted in areas with high and low levels of tourism within the same habitat in the Guadarrama Mountains in central Spain, Amo et al. (2006) examined whether the lizards differed in several parameters upon each human approach. The authors found that: (1) regardless of the level of tourism, lizards usually exhibited anti-predator behavior by fleeing to hide in refuges upon approach of a human; (2) in comparison to lizards inhabiting areas of low tourism pressure, lizards inhabiting areas with high tourism pressure, and therefore presumably escaping to hide in refuges more often, showed a poorer body condition and higher intensity of tick infection at the end of the breeding period; and (3) the intensity of tick infection was higher in male than in female lizards. The authors speculated that the higher intensity of infection probably resulted from the cumulative costs of high frequency of flight, since anti-predatory behaviors such as flight are costly in terms of losing time for other activities, including feeding—nutritional status can affect the capacity

[9] The flight initiation distance is the distance from an approaching threat (e.g., recreationist) at which an animal initiates moving away to escape from the threat. This movement is a fitness/energy cost to the fleeing animal. For the Iberian frogs, this was the distance between an approaching human and the frog when the latter jumped into the water in response to the human's approach.

O2-6
Cont.

of lizards to mount an immune response to infection. Furthermore, lizards with poor body condition had low levels of immune response, which may aggravate the deleterious effects of anti-predatory behavior on body condition. Female lizards in poor body condition produced offspring of small size, and body size of infant lizards can affect their probability of survival. Additionally, females with blood parasites also showed reduced fat stores and produced smaller clutches. By these effects on infants and clutch sizes, tourism may also negatively affect the maintenance of lizards' populations.

Responses of various reptiles to recreationists.—In a study to systematically assess recreationists' direct and indirect effects on sensitive wildlife species in 14 NCCP/HCP protected areas in San Diego County, California, USA, Reed et al. (2019) integrated monitoring of both wildlife species and recreationists (e.g., hikers, mountain biker, horseback riders).[10] The authors found that recreation was associated with declines in reptilian species' richness, occupancy, habitat use, and relative activity in the NCCP/HCP protected areas. Of the three species (all lizards) for which statistical analyses were feasible, two exhibited negative relationships between occupancy and human recreation—the orange-throated whiptail (*Aspidoscelis hyperythra beldingi*, an NCCP/HCP-covered species) and common side-blotched lizard (*Uta stansburiana*).

Birds

General responses.—In Steven et al.'s (2011) review of 69 peer-reviewed articles (50 of which were research conducted in protected areas) of original research on the effects on birds from non-motorized nature-based recreation, 61 articles reported recreation as having negative effects (i.e., negative changes in physiology, behavior, abundance, and reproductive success, the latter including the number of nests, eggs laid, and/or chicks hatched or fledged). The single documented positive effect involved an increase in the abundance of corvids (e.g., crows and ravens) in campgrounds. Walking or hiking, standing or observing birds from viewing platforms or standing next to a nesting colony, dog walking, running, cycling/mountain biking, and canoeing were all reported as negatively affecting birds. A large majority (85–93 %) of the studies that examined the effects of a single person, groups of two or more people, and/or avian population-level responses, reported negative effects. The population-level responses entailed effects on density, abundance, and reproduction.

In a study using data collected in 112 urban parks throughout Melbourne, Australia, Bernard et al. (2018) tested whether birds responded differently to bikers and walkers. They found that: (1) relative to their response to walkers, four of the 12 focal species studied initiated escape from bikers at longer flight initiation distances and two escaped with greater intensity (i.e., more likely to involve flying); (2) no species responded less to bicycles than to walkers; and (3) the flight initiation distance did not differ in response to speed of bicycle travel, though the difference in the two speeds used was only 1 m/sec. In concluding that

02-6 Cont.

[10] An NCCP (Natural Community Conservation Plan) is a comprehensive, single- or multi-jurisdictional/utility plan that provides for regional habitat and species conservation at an ecosystem level while allowing local land use authorities to better manage growth and development. Upon issuing an NCCP Permit, the California Department of Fish and Wildlife (CDFW) can authorize take of selected state listed species and other species of concern, subject to the terms of coverage under the NCCP (CDFW 2015). An HCP (Habitat Conservation Plan) is the federal counterpart to an NCCP; the U.S. Fish and Wildlife Service prepares HCPs and issues HCP permits. The terms and conditions under which an NCCP/HCP's protected areas are conserved establish the types and levels of public access that are permitted (Burger 2012). The types and levels of public access vary among the NCCP/HCP protected areas from no access to guided-only access to open access. The species protected by NCCPs/HCPs are typically called covered species.

bikers can appear more or less threatening to birds than a single pedestrian, Bernard et al.'s (2018) results underscore that the responses of wildlife to recreational activities vary among species, sites, types of recreation, and exposure over time to the activities.

Songbirds.—Davis et al.'s (2010) study of the effects of mountain biking on golden-cheeked warblers (*Dendroica chrysoparia*, warblers) with nests near biking trails in the Fort Hood Military Base in Killeen, Texas, USA, and the Balcones Canyonlands Preserve in Austin, Texas, found direct and indirect effects. The direct effects included warblers flushing >20 m in response to encounters with passing mountain bikers. Indirect effects included abandonment of nests <2 m from the biking trails and a reduction in the quality of nesting habitat due to biking-related fragmentation and alteration of habitats. In comparison to the control sites, it was likely that habitat fragmentation resulting from trails in the biking sites caused the increased predation of warbler nests by rat snakes (*Elaphe obsoleta*) and other edge-adapted predators. The authors speculated that the biking sites, which were able to maintain viable populations of warblers at the time of the study, may not continue to do so with additional recreational use, fragmentation, and alteration of the habitats.

Forest birds.—Bötsch et al. (2018) examined how breeding-bird communities changed with distance to trails in four broad-leafed and mature forests in Switzerland and France; the forests were similar in size, structure, and trails, but widely different in levels of recreation (mostly walkers). The authors found that: in the forests with high levels of recreation, the density and species richness of birds decreased by 12.6% and 4.0%, respectively, at points close to trails compared to points farther away; cavity, ground, and open-cup nesters had fewer territories and species close to trails compared to farther away; and, above-ground foragers and ground foragers showed a similar pattern. None of these effects on density, species richness, nesting guild, or foraging guild occurred in the forests with low levels of recreation. Both high- and low-sensitivity species (i.e., long versus short flight initiation distances) had fewer territories and fewer species close to versus far from trails in forests with high levels of recreation; however, in forests with low levels of recreation, highly sensitive species exhibited only a slight tendency for fewer territories close to trails. The authors inferred from their findings that (1) human presence in forests disturbs avian community composition and abundance along trails in recreational areas, (2) the overall effect of recreational trails themselves depends mainly on recreational intensity and only slightly on species characteristics, and (3) the observed effects on birds in forests where recreation has occurred for decades suggest that habituation to humans has not outweighed the effects.

Raptors.—In a study along the Boise River in Idaho, USA, examining flight initiation distances of bald eagles (*Haliaeetus leucocephalus*) in response to actual and simulated walkers, joggers, anglers, bikers, and vehicles, Spahr (1990) found that the highest frequency of eagle flushing was associated with walkers, followed by anglers, bikers, joggers, and vehicles. Eagles were most likely to flush when recreationists approached slowly or stopped to observe them, and were less alarmed when bikers or vehicles passed quickly at constant speeds. However, the longest flight initiation distance was in response to bikers, followed by vehicles, walkers, anglers, and joggers. Hennings' (2017) literature review provides the following about bald eagles: pedestrians within 275 m caused a 79% eagle response rate; eagles did not resume eating for four hours after disturbance by walkers; a suggested minimum 600-m buffer around breeding eagles, beyond which response frequency dropped below 30%; an apparent threshold of about 20 daily recreational events after which eagles were slow to resume feeding, and after 40 events, feeding was uncommon; sub-adults were

O2-6 Cont.

less tolerant of disturbance than adult eagles; and recreation-related long-term effects can include reductions in survival, particularly during winter and especially for juveniles.

With respect to the tolerance (through habitat imprinting, genetic inheritance, or habituation) of golden eagle (*Aquila chrysaetos*) for recreational disturbance, Pauli et al. (2017) used an individual-based model[11] to assess the effects of walkers and off-highway vehicles on golden eagle populations. The primary modeling results indicated that, while golden eagles can develop tolerance for recreational disturbance, tolerance for even moderate levels of disturbance may not develop within a population at a sufficient rate to offset the effects of increased recreation on breeding golden eagles, particularly because this is a long-lived species with low recruitment. Pauli et al. (2017) conclude that, taken together, the simulation results suggest that recreation-related disturbance has a substantial effect on golden eagle populations and that increased recreation activity will exacerbate such effects. Given the results and the fact that non-motorized recreation decreases the probability of egg-laying in golden eagles (Spaul and Heath 2016), the authors asserted that trail management and a reduction in recreation activity within eagle territories are necessary to maintain golden eagle populations in locations where levels of recreation are increasing.

Shorebirds.—In a controlled study conducted in Scotland of the behavioral responses of the ruddy turnstone (*Arenia interpres*) to an approaching human, Beale and Monaghan (2004) found that birds supplemented with food flushed sooner from the human and searched for predators more frequently than birds not supplemented with food. That is, birds responding most were actually the least likely to suffer any fitness consequences associated with the disturbance. This study demonstrates the possibility of misconstruing the reasons for and implications of observed responses among all wildlife species. Traditionally and intuitively, species that readily flee from or avoid human disturbance are considered to be the most in need of protection from disturbance. However, species with little suitable habitat available nearby cannot show marked avoidance of disturbance even if the costs of reduced survival or reproductive success are high, whereas species with many nearby alternative sites to move to are likely to move away from disturbance even if the costs of the disturbance are low (Gill et al. 2001). It should not be assumed that the most responsive animals are the most vulnerable (Beale and Monaghan 2004). Gill et al. (2001) asserted that the absence of an obvious behavioral response does not rule out a population-level effect. In the same vein, it may be that species occurring in protected areas that are remnant fragments within urban landscapes are forced to utilize all components of the fragments, irrespective of their land-use intensity and land cover. This may occur if animals have nowhere else to go, and may be an explanation for instances when the relative abundance of birds is greater in urban and suburban reserves than in exurban reserves (Markovchick-Nicholls et al. 2008).

O2-6 Cont.

Mammals

General responses within NCCP/HCP protected areas in southern California.—In series of three studies about the responses of mammals to hikers and runners, bikers, horseback riders, dog walkers, and motorized vehicles, George and Crooks (2006), Patten et al. (2017), and Patten and Burger (2018) analyzed camera-trap data captured throughout areas protected under the 1995 County of Orange Central and Coastal NCCP/HCP (Orange County NCCP/HCP). All studies analyzed bobcat (*Lynx rufus*), coyote (*Canis latrans)*, and mule

[11] Individual-based models are simulation statistical tools that use empirical data to examine effects, such as anthropogenic population-level effects, that are difficult or impossible to study in a field setting.

deer, and Patten et al.'s (2017) analysis also considered mountain lion (*Puma concolor*), gray fox (*Urocyon cinereoargenteus)*, striped skunk (*Mephitis mephitis*), and northern raccoon (*Procyon lotor*). The authors found that: (1) mammal detections were negatively correlated with all types of recreationists; hikers and runners had the greatest negative association with wildlife, and equestrians had the least; (2) the overall trend is sharply negative: as human activity increased, mammalian activity decreased, regardless of species, type of human activity, or camera placement; (3) mammals were nearly four times as likely to be recorded on days with no human activity than on days with human activity at the same site; (4) detections of mammals decreased incrementally as the number of humans increased within a day, and fell to near zero probability at ≥60 humans per day; and (5) all seven species listed above exhibited short-term spatial displacement in response to events with more than 100 visitors.

Bobcats' negative associations were strongest with bikers, hikers, and domestic dogs. In areas of higher human activity, bobcat were detected less frequently along trails and appeared to show temporal displacement, becoming more nocturnal. Coyotes' overall activity was lower at the sites with the most recreation and was negatively associated with overall human, hiker, and biker visitations; and, a trend of temporal displacement in response to dogs was also evident. Generally, both bobcats and coyotes displayed a relatively wide range of activity levels at sites with low human use, but a lower and markedly restricted range of activity at those sites with the highest levels of recreation. Both coyotes and mule deer shifted their activities temporally over the long term. The mule deer's (a primary consumer) marked shift brought it into closer temporal alignment with its main predator (mountain lion) and the coyote's marked shift (secondary consumer) brought it into closer temporal alignment with a chief prey species (gray fox). These human-induced diel shifts involving animals in two trophic levels have important ramifications for predator–prey dynamics. Despite these studies' results, no evidence was found suggesting mammalian populations have declined in the Orange County NCCP/HCP protected areas between 2007 and 2016, even as human activity increased markedly across the study period. However, it is critical to consider this observation in light of: (1) the fact that, at least for the years 2007-2011, public access was controlled across most of the study area by permit-only entry, regular docent-led programs, and monthly self-guided wilderness access days—much higher levels of restrictions on public access than for most protected areas; (2) the authors' assertion that various mammalian species' avoidance behavior may yet drive mammalian populations downward upon further increase in human disturbance; and (3) the status of the Vail Colorado elk herd as recounted below—once a herd of 1,000 head diminished to 53 due to steadily increasing levels of recreation.

Overall, the results of the above three studies were similar to those of a study to assess recreationists' effects on sensitive wildlife species in 14 NCCP/HCP protected areas in San Diego County, for which Reed et al. (2019) used data from camera traps and a before-after-control-impact (BACI) experiment. Reed et al. found that bobcat, gray fox, mule deer, and northern raccoon were less active in areas with higher levels of human recreation. Bobcat habitat use was more strongly negatively associated with human recreation than urban development, which also decreased the probability of habitat use. The collective results for mule deer among the four studies suggest that mule deer may stop using some areas altogether if human recreation is too high. Reed et al. (2019) did not detect negative associations between human recreation and the habitat use or relative activity of the six following mammalian species of the 12 observed: coyote, striped skunk, ground squirrel, jackrabbit, brush rabbit

O2-6 Cont.

(*Sylvilagus bachmani*), and desert cottontail (*S. audubonii*). However, of special note are results from the protected area with the highest level of recreation (i.e., an average of 1,797 people per day) observed in the study, where the cameras captured only rabbits, and no other mid- to large-bodied wildlife species during 7.5 weeks of monitoring. Yet, this 2,449-ha protected area is considered a core biological area and regional wildlife corridor targeted for conservation (City of San Diego 2019). The BACI experiment conducted in another protected area showed a significant decrease in bobcat detection probability in a four-week period following a trail re-opening, suggesting that this species can modify its behavior (e.g., shift its activity patterns) rapidly after a change in human recreation. This is evidence that temporal closures have the potential to reduce disturbance during critical periods for some species. Although human recreation may not often extirpate mammalian species from urban habitat fragments, it can reduce habitat suitability and carrying capacity (Reed et al. 2019).

Responses to human voice.—Suraci et al. (2019) tested whether mammalian carnivores' responses to human voices alone can result in landscape-scale effects across wildlife communities, including cascading effects on the behavior of lower trophic level animals. The results of the study, which was conducted in the Santa Cruz Mountains of central California, USA, indicate that human voice alone does result in such effects. Where humans are absent or rare, large and medium-sized carnivores exhibit greater movement, activity, and foraging, while small mammals use less space and forage less. Where humans are present, the activity, foraging, and/or habitat use of large and medium-sized carnivores are suppressed, while small mammals increase their total space use and foraging intensity. The implications of these results are far-reaching, and include that, even in the absence of land development or habitat fragmentation, increased human presence can: (1) affect large carnivore movement, which could eventually limit carnivores' hunting and feeding behavior or force individuals to abandon high risk areas of their home range; (2) suppress activity of medium-sized carnivorous species; and (3) increase the abundance of small mammals that are prey to the large- and medium-sized predators, which could ultimately increase the abundance of small mammals in wildlife areas people visit (Suraci et al. 2019, citing other authors). Moreover, if the sublethal effects observed in the study in response to human voices alone are comparable to those effects (e.g., increased physiological stress, reduced reproductive success) that fear has been demonstrated to cause in predator-prey systems, they may amount to additional widespread but largely unmeasured effects of humans on wildlife populations (Suraci et al. 2019, citing other authors). Hennings (2017) provides additional insights about, and citations for studies on, the effects on wildlife from the human voice, concluding that conversational noise along trails can be very disturbing to wildlife.

Ungulates.—In a two-year study of elk (Cervus elaphus) in a herd near Vail in central Colorado, USA, Shively et al. (2005) found that elk reproductive success rebounded to pre-disturbance levels after the cessation of their exposure to back-country hikers during the calving season over the previous three years. Shively et al. concluded that, it seems prudent to protect elk during calving seasons, because, although the study provides evidence that elk reproduction can rebound from depressed levels when human disturbances are removed or reduced, there had been a linear decline in calf production in response to increasing levels of disturbance compared to controls without such disturbance, and it is not known if there is a threshold level of reproductive depression from which elk cannot recover. Recognizing that it is seldom easy to curb human activities that have become traditional, or to restore wildlife habitats once they have been developed, they recommended the continuation of

O2-6 Cont.

some closures imposed on parts of both the Vail and control elk herd study areas. However, a recent article in The Guardian reported that the number of elk in this same Vail herd dropped precipitously since the early 2010s with the steady increase in human recreation; once a herd of 1,000 head of elk, it had decreased to 53 at last count in February of 2019. The article explains that, for Bill Alldredge, one of the authors of the 2005 study, there is no other explanation than the increased levels of hiking, biking, and skiing in the area that supports this elk herd (Peterson 2019). This outcome adds to the already ample evidence that pregnant animals or those with young—especially mammals—are particularly sensitive to human disturbance (Hennings 2017).

In a study subjecting 13 captive female elk in the Starkey Experimental Forest and Range in Oregon, USA, to four types of recreational disturbances (all-terrain vehicles [ATV] riding, mountain biking, hiking, and horseback riding), Naylor et al. (2009) recorded the elk's resting, feeding, and travel times in response to the disturbances. The authors found travel time (a proxy for energy expense) increased in response to all four disturbances and was highest in mornings. The authors suggest that the elk's lesser response to each disturbance in afternoons was likely due to elk moving away from the disturbances in the mornings and avoiding them for the remainder of the day. Elk travel time was highest and feeding time lowest during ATV exposure, followed by exposure to mountain biking, hiking, and horseback riding. Resting decreased with exposure to mountain biking and hiking disturbance, and elk showed no evidence of habituation to mountain biking or hiking.

In a study of how bison (*Bison bison*), mule deer, and pronghorn (*Antilocapra americana*) responded to hikers and bikers on designated recreational trails at Antelope Island State Park in Great Salt Lake, Utah, USA, Taylor and Knight (2003) found the following: with respect to alert distance, flight initiation distance, and distance moved,[12] there was little difference in how each species responded to hikers versus mountain bikers (with an exception of mule deer flight distance), though each species exhibited its own degree of response in the three parameters tested; and all three species exhibited a 70% probability of flushing from on-trail recreationists within 100 m from designated trails. Trials were also conducted with only mule deer along a randomly chosen, off-trail route to assess the response of mule deer to hikers or bikers off designated trails. From these trials, the authors found that mule deer showed a 96% probability of flushing within 100 m of recreationists located off trails, and the probability of their flushing did not drop to 70% until perpendicular distance reached 390 m. There was little evidence of habituation to recreationists among the species at the time of the study. In fact, the pronghorn at the study site did not habituate to largely predictable recreational use over a three-year period following the opening of trails at the site, and used areas that were significantly farther from trails than they had prior to the start of recreational use.

Carnivores.—In a study of mammalian carnivores in 28 protected areas located in oak woodlands in northern California, USA, Reed and Merenlender (2008) found the following about carnivores' responses to recreationists. Generally, in paired comparisons of neighboring protected areas with and without recreation, the presence of dispersed, non-motorized recreation (hiking, biking, and horseback riding) led to a five-fold decline in the

[12] Alert distance is the distance from a stimulus at which an animal initiates vigilance behavior; more specifically in this context, it is the distance between a recreationist and an animal when the animal first becomes visibly alert to the recreationist. Flight initiation distance is defined in footnote #9. Distance moved is the distance an animal travels from its initial position until it stops (Taylor and Knight 2003).

O2-6 Cont.

density of native carnivores and a substantial shift in community composition from native to nonnative species. Specifically, a higher mean number of native species was detected in protected areas that did not permit recreation. By contrast, in protected areas that permitted recreation, more nonnative species were detected, domestic dogs were detected more frequently, and densities of coyotes and bobcats were more than five times lower. The authors concluded that the key variable for moderately sized protected areas (50–2000 ha) near urban development seems to be whether or not the site is open to public access.

In a study within three protected areas in Arizona, USA, Baker and Leberg (2018) found the following about how 11 mammalian carnivore species respond to varying levels of hiking, horseback riding, and border patrol activity. The study sites with the highest levels of human activity had significantly lower carnivore diversity, higher occupancy of common species (coyote, gray fox, and bobcat), and lower occupancy of all other carnivorous species. Generally, rare carnivores (e.g., mountain lion and kit fox, *Vulpes macrotis*), badgers (*Taxidea taxus*), and gray foxes avoided trails, whereas common species (except gray fox) preferred trails. Overall, edges of protected areas appeared to negatively affect occupancy of nearly all the study's species, and the presence alone of roads and trails, and not necessarily how much they are used, has a significant negative effect on the occupancy of most carnivorous species. In general, coyotes and bobcats were the carnivores least sensitive to human disturbance, gray foxes had a moderate negative association with human disturbance variables, and smaller carnivores and mountain lions seemed to be exceptionally vulnerable to human disturbance. Furthermore, the higher the level of overall disturbance in a protected area, the more sensitive carnivores were to disturbance variables.

O2-6 Cont.

Conclusions and Suggestions

With the expanding recreation-related disturbance to wildlife in protected areas, their dual role of conserving biological resources and providing nature-based recreational and educational opportunities for people presents a continual challenge to land managers and a continual threat to wildlife and the state's biodiversity, particularly sensitive species. The scientific literature provides clear evidence that recreation can disturb wildlife in several ways. Documented effects include detrimental changes to behavior, reproduction, growth, immune system function, levels of stress hormones, other physiological effects, and finally, the survival of individual animals and persistence of wildlife populations and communities. Having been observed on nearly every continent and in every major ecosystem on earth, recreation-related disturbance to wildlife is increasingly recognized as a threat to global biodiversity, and as having wide-ranging and, at times, profound implications for wildlife individuals, populations, and communities (Dertien et al. 2018). Yet, a prevalent assumption exists that non-consumptive recreation is compatible with wildlife conservation; sources that articulate this assumption in various ways include but are not limited to the Natural Community Conservation Plans/Habitat Conservation Plans (NCCPs/HCPs in the California Department of Fish and Wildlife's (CDFW) South Coast Region, Title 14 of the California Code of Regulations (§630(a)) about CDFW's ecological reserves, CDFW's 2016 State Wildlife Action Plan's Consumptive and Recreational Uses Companion Plan, Burger 2012, Larson et al. 2016, Dertien et al. 2018, and Reed et al. 2019. This assumption underlies the widespread acceptance of non-consumptive recreation in dual-role protected areas.

Is the assumption of compatibility flawed?—The assumption of compatibility rests on four expectations, which are often legal obligations (as with NCCPs/HCPs). First, recreation in protected areas is to occur only in ecologically sound locations. Second, only ecologically sound types, levels, and timing of recreation are acceptable. Third, monitoring is expected to regularly and reliably assess whether the types and levels of recreational activities in protected areas are disturbing the focal species to a degree that these activities should be curtailed or prohibited entirely. Fourth, changes in management are to occur promptly when monitoring determines them to be necessary (see footnote #5 for description of management). In short, the overarching expectation is that recreation would not hinder the achievement of the dual-role protected areas' primary conservation objective (i.e., perpetuation of viable populations of focal sensitive species). At least seven NCCPs/HCPs in the CDFW's South Coast Region explicitly deem recreation compatible or conditionally compatible; most articulate these expectations as conditions that recreational activities in protected areas must meet. Such activities are considered "conditionally compatible" with the protection of the covered species. However, the assumption of compatibility is flawed because: for example, designated trails and trail networks are often ecologically inappropriately planned, designed, or sited; and, even for authorized recreation, there is rarely adequate management to control the allowed types and levels of recreation such that they are compatible with conservation. While finding an appropriate balance between biodiversity conservation and recreation is complicated because recreation-related effects on wildlife vary among species and recreational activities (Larson et al. 2016), there are also societal factors at play that further complicate achieving an appropriate balance and compatibility.

O2-6 Cont.

Factors allowing inappropriate planning/siting and inadequate management - a societal conundrum.—The degree to which the above-listed expectations are met varies among NCCP/HCP permittees and other managers of dual-role protected areas, the primary limiting factors being fiscal constraints and each land manager's primary mission. As to the latter factor, for areas protected primarily or solely to conserve biological resources, a serious fundamental conflict with conservation arises when managers' primary mission is to provide recreational opportunities, and the protection of biological resources is a secondary or tertiary priority. As to fiscal constraints, land management budgets generally have not kept pace with the increasing levels of recreation in protected areas (CDFW 2015; Havlick et al. 2016). For example, the activities of the CDFW for resource assessment, conservation planning, and wildlife conservation at risk are "severely underfunded;" in 2005, maintenance, restoration, and management of CDFW's wildlife areas and ecological reserves were supported, on average, at the level of $13 per acre (0.40 ha) and one staff person per 10,000 acres. Many lands were operated at $1 per acre, with no dedicated staff (CDFW 2015—refer to Volume 1, Section 7.3). CDFW's fiscal shortfalls for managing its protected areas mirror the same among public agencies at the local, state, national, and international levels (CDFW 2015); these shortfalls result in continual grave shortages of management personnel and other resources.

California's State Wildlife Action Plan (CDFW 2015) and most of the literature about recreation-related ecological effects identify the economic, educational, and recreational/health benefits of protected areas. They also identify the benefits (e.g., economic) to protected areas from humans pursuing recreational activities. So, despite the documented recreation-related disturbance to wildlife, there seems to be an implicit assumption of a mutually beneficial relationship between protected areas and the humans who benefit from them. But,

the severe underfunding of management for protected areas renders mutual reciprocity in this relationship infeasible; the protected areas' wildlife are heavily on the losing side. This is particularly perplexing given the evidence that lack of adequate management negatively affects not only biological resources, but also societal benefits.

Regarding the human health benefits of protected areas, visible recreation-related damage to the terrain diminishes the level of benefit people enjoy while being in nature, as illustrated by a study examining the relationship between recreational impacts in protected areas and human mental/emotional states (Taff et al. 2019). The study's results demonstrate that, as visible recreation-related ecological impacts increased, sense of wellbeing and mental state decreased, especially in response to settings with unauthorized trails. Collectively, the results show that managing tourism in protected areas in a manner that reduces such impacts is essential to providing beneficial cultural ecosystem services related to human health and wellbeing (Taff et al. 2019). As Wolf et al. (2019) put it, the more attractive a site is, the more likely it is that it will be degraded, which in turn, may diminish the quality of the human experience, and thus, visitor satisfaction. To capitalize fully on the positive aspects of tourism (including recreation) for protected areas, the degradation of resources needs to be constrained to ecologically acceptable levels, and to levels beyond visitor perception (Davies and Newsome 2009; Wolf et al. 2019); otherwise, recreationists may think it unimportant to minimize their own impacts. Also diminishing the human experience are the closures to public access as a default reaction to lack of adequate management, and the liability resulting from injuries that can occur when people use unauthorized trails (Dertien et al. 2018).

There is a two-fold irony here: despite the prevalent emphasis on the societal benefits of protected areas and the purported reciprocal relationship between protected areas and humans, most agencies responsible for managing protected areas are chronically underfunded. And, promoting the pursuit of these societal benefits without protecting the dual-role protected areas' core function (biological conservation) from that pursuit actually undermines both the human experience and biological conservation. This is a societal conundrum that stems at least in part from a societal disconnection.

The factor of a societal disconnection.—A lack of public interest in and concern about protected areas figures into the societal conundrum. Public opposition to trail closures, caps on daily visitation, or reservation systems can be strong and could damage the support for conservation agencies and organizations (Reed et al. 2019), despite the ecological need for such measures for protected areas. A disconnection pervades our society with respect to recreation-related disturbance to wildlife (Marzano and Dandy 2012): 50% of 640 backcountry trail users surveyed in 2001 did not believe that recreation negatively affects wildlife, and recreationists generally held members of other user groups responsible for stress or negative effects on wildlife rather than holding members of their own recreational user group responsible (Taylor and Knight 2003). The results of a survey conducted in 2018 for the San Diego End Extinction (SDEE) initiative to elucidate what the San Diego public know, think, feel, and do in relation to species and habitat conservation, indicate that 71% of the 600 respondents are not knowledgeable about the problems San Diego's plants and wildlife face (Tinkler et al. 2019).[13] While the passage of California Proposition 68 in 2018 reflects the voters' broad support for clean water and access to open space, which were the main elements of the Proposition that promotional efforts emphasized, it is unclear how

[13] The respondents were San Diego County voters and were representative of the voter pool in terms of age, gender, ethnicity, and region, but voters tend to be less ethnically diverse and more educated than the San Diego County population overall (Tinkler et al. 2019).

O2-6
Cont.

much the biological conservation-related elements of the Proposition influenced voters.

Overall, it is probable that a large majority of the general public are unaware of or in denial about the disturbance to wildlife from non-consumptive recreation, much less the distinctions between areas protected primarily or solely for conservation and areas otherwise designated as open space (e.g., recreational fields, golf courses, small community parks). Information on these topics is not widely available, and what is in the literature, may not be reaching a broad audience even among conservation scientists and wildlife ecologists (Larson et al. 2016). What then can be done to address this unawareness as a step toward enabling dual-role protected areas to meet their conservation objectives despite the expanding recreational pressure?

Suggested plan of action.—To enable dual-role protected areas to meet their conservation objectives despite the expanding recreational pressure, the optimal approach is to: ensure that all recreational areas (e.g., trails and trail networks) are planned, designed, and sited using ecologically sound criteria; and, to continually employ sufficient proactive and adaptive management to prevent or at least minimize recreation-related disturbance to wildlife; such management would curtail the need for regular enforcement. This approach also has the potential to yield general public support for management, particularly if information provided about management challenges includes data and supporting graphics, specifically about fragmentation, to enhance the public's understanding of the challenges of poorly designed trail systems and the creation and use of unauthorized trails (Leung et al. 2011; Taff et al. 2019; Wolf et al. 2019). But this approach requires perpetual personnel and funding explicitly for management, which in turn points to the urgent need for public advocacy to secure fiscal support for management resources (i.e., fiscal support that is sustainable, perpetual, and at levels commensurate with the recreational pressure; footnote #5). How can this be achieved?

How people perceive their and others' recreation-related effects on wildlife may influence their general perspectives on such effects (Marzano and Dandy 2012). Shifting this perception-perspective nexus over time toward a common value of respecting wildlife may eventually mend some of the aforementioned societal disconnection. A shift in perspectives on the purpose of protected areas is also needed to one of understanding and acknowledging that their core function is conservation (Davies and Newsome 2009; Patten et al. 2017). The only chance there is of influencing people's perceptions is making the pertinent scientific information readily available. So, it is essential to implement a concerted campaign to disseminate science-based information about recreation-related disturbance to wildlife. Such a campaign needs to be well orchestrated, widespread, long-term, continual, and multimedia; this includes social media per Greer at al.'s (2017) conclusions about its efficacy in this context. In addition to the general public/voters (including recreationists), the following parties would be both the audience and the distributors within each of their fields and beyond: the media, environmental organizations, elected officials, policy and land-use decision makers, land management agencies and organizations, outdoor recreation merchants and associations, educational institutions, and researchers. The coverage would be framed as stories aimed to evoke appreciation for the diversity of sensitive species and the many ways they respond to our presence, and provide opportunities for what people can do to lessen the recreation-related disturbance to wildlife, which will benefit not only wildlife and other biological resources in the protected areas, but also the human experience there.

While the objectives of the campaign would be to influence people's perspectives in favor of wildlife and to modify recreational behaviors, policy, planning, and decision-

O2-6 Cont.

making accordingly, the final goal would be to cultivate support for and harness the power of advocacy to gain the political will and action needed to secure perpetual fiscal support for management resources. Implementing such a campaign would not be easy nor fast and would take diligent oversight, as suggested by William Craven, the chief consultant for nearly 20 years of California's Senate Natural Resources and Water Committee. In an interview with the California Native Plant Society, he stated, "the best way to achieve your policy objectives is to make sure your policy objectives are funded. For example, small but important programs for the [California Department of Fish and Wildlife] are literally budget dust in the California budget, but unless someone is there to pay attention and connect the dots between the budget and the state laws, we don't get a complete resolution… [P]ositive changes in state law that everyone works so hard to accomplish are really much more effective when someone monitors the budget process to make sure those changes get as much funding as possible" (CNPS 2020). But, it seems that the choices are either to never reverse or at least halt the downward trajectory of wildlife in protected areas experiencing damaging levels and types of recreation or to ambitiously implement such a campaign toward a societal course change (Waterman 2019 for the term "course change").

Several of the results of the survey conducted for the SDEE initiative hint at a potential to mobilize a critical mass of people who learn about the recreation-related disturbance to wildlife and the associated urgent need for resources to address it, and assist in information dissemination. While the survey conducted for the SDEE initiative revealed a knowledge deficit among the respondents regarding problems plants and wildlife face, its results also indicate that, over a 12-month period, 74% of respondents voted in favor of laws to protect the environment, 31% volunteered to improve the environment, and 21% donated money to protect San Diego County's environment; in addition, approximately 70% were willing to pay additional local taxes to protect the environment, and a majority of the respondents were willing to pay up to $50 per year (Tinkler et al. 2019).

One avenue available for advocacy to secure perpetual fiscal support specifically for management of protected areas is assessing recreational fees and taxes. With respect specifically to the management of CDFW-owned protected areas, CDFW's 2005 and 2015 State Wildlife Action Plans recommended implementation of recreational fees and taxes beyond fishing and hunting licenses that would allow non-consumptive recreationists to support wildlife conservation and management of the resources they use and enjoy (CDFW 2015, 2016). To generate funds for the management of all protected areas, a long-successful model could be employed: since the 1930s, hunters have been paying federal excise taxes on the sales of sport hunting and shooting equipment to generate funding for habitat conservation (CDFW 2015). Eighty years later, these taxes plus sales of angling equipment had generated more than $10 billion towards conservation (CDFW 2015). Thus, hunters and anglers have been the primary funding sources for conservation efforts in California and North America (CDFW 2015). Considering the disturbance to wildlife from non-consumptive recreationists, it is past time for them also to pay their way for the use of protected areas through paying taxes on equipment for hiking, biking, riding, etc. to support management of these activities. A secondary benefit of such fees and taxes is that they may establish a direct connection for recreationists between their use of protected areas and the costs of protecting the protected areas, and thereby possibly diminish their disconnection from their disturbance to wildlife.

Other avenues for advocacy to secure fiscal support for management of protected areas include bond measures and voluntary contribution funds (VCF), though neither would necessarily provide a reliably perpetual source of funding. VCFs are sponsored by legislators

O2-6 Cont.

to be enacted by the legislature; a VCF in this context would be explicitly and solely for the management of the protected areas in California, including CDFW's lands (with protected areas and management defined as described in footnotes #1 and #5, respectively). The funds must be administered such that they are made available timely. This would be similar to the VCF for California's Rare and Endangered Species Preservation Voluntary Tax Contribution Program which has funded work benefiting California's native at-risk plants, wildlife, and fish since 1983 (CDFW 2019) and now raises around $500,000 annually (FTB 2019).

Mainstream online and print media carried several articles in 2018 and 2019 about the overcrowding at and underfunding for the national parks (e.g., Simmonds et al. 2018; Waterman 2019; Wilson 2019); coverage such as this provides a good foundation of information. Articles like Yong's (2019) about the effects of the human voice alone on wildlife and Peterson's (2019) about the effects of hiking on elk represent steps in the right direction toward mainstream media honing in on specific impacts on wildlife from recreationists in protected areas. Coverage on species local to where people live is important and may make a stronger and more lasting impression with greater potential for shifting the perception-perspective nexus than species or settings remote from consumers of the media. Organizations like San Diego Zoo Global, which spearheaded the SDEE initiative (Tinkler et al. 2019), could significantly assist the campaign by engaging their media engines on behalf of local wildlife threatened by recreation.

A societal quid pro quo for protected areas?—At some point, the exploitation of protected areas resulting from recreation-related disturbance to wildlife, without commensurate reciprocity with care for the protected areas, may outweigh the benefits of public access to protected areas (Bennett et al. 2013). Many protected areas have already reached this point. Without adequate resources to combat the challenge of the obligation to conserve wildlife exposed to ecologically damaging levels and types of recreation, including unauthorized activities, the challenge will persist indefinitely at great risk of jeopardizing the protected areas' ability to meet their conservation objectives.

Regarding the pressure local, state, and federal government agencies have undergone for decades to acquire additional open space for recreation and to expand public access in existing protected areas (Wells 2000 in Reed and Merenlender 2008), elected officials and land-use decision makers need to address the demands, but not at the expense of biological conservation in protected areas. Some of the protected areas (e.g., the NCCP/HCP reserves) represent long-negotiated compromises for the sensitive species they are intended to protect in perpetuity. For some protected areas, no ecologically sound further compromise (e.g., expansion of public access) is possible; while recreation may be considered conditionally compatible in such protected areas, if open to public access at all, the extant levels of recreation may strain their ability to meet their conservation objectives. Protected areas that represent the final compromise for the species they support are particularly vulnerable to their wildlife values being compromised due to inadequate management (CDFW 2015). Ultimately, for wildlife that avoids human activity, it is unlikely that dual-role protected areas are entirely sufficient or justifiable for meeting conservation objectives; limiting or prohibiting recreation in strategic circumstances and locations within protected areas is necessary to achieve conservation objectives (Reed and Merenlender 2008; Bötsch et al. 2018; Dertien et al. 2018; Reed et al. 2019). Of course, this presumes sufficient management to maintain whatever recreational limits are set.

In summary, in the interest of wildlife in California and, more broadly, conservation within protected areas everywhere, the necessary actions with respect to non-consumptive

O2-6 Cont.

recreation are to: (1) widely and continually disseminate science-based information about the recreation-related disturbance to wildlife; (2) apply the science to all planning for, policy- and decision-making about, and management of, recreation in dual-role protected areas; and (3) secure perpetual fiscal support for management of recreation in dual-role protected areas commensurate with the recreational pressure.

ACKNOWLEDGMENTS

Sincere thanks to C. Beck (CDFW, retired), E. Pert (CDFW), H. Pert (CDFW), and B. Tippets (Southwest Wetlands Interpretive Association), each of whom provided valuable edits and constructive suggestions on this manuscript and a previous draft of it; their input resulted in substantial improvements.

LITERATURE CITED

Amo, L., P. López, and J. Martín, J. 2006. Nature-based tourism as a form of predation risk affects body condition and health state of *Podarcis muralis* lizards. Biological Conservation 131:402–409.

Baker A. D., and P. L. Leberg. 2018. Impacts of human recreation on carnivores in protected areas. PLoS ONE 13(4):e0195436.

Baker, D. J., S. T. Garnett, J. O'Connor, G. Ehmke, R. H. Clarke, J. C. G. Woinarski, and M. A. McGeoch. 2018. Conserving the abundance of nonthreatened species. Conservation Biology 33:319–328.

Ballantyne, M., O. Gudes, and C. M. Pickering. 2014. Recreational trails are an important cause of fragmentation in endangered urban forests: a case study from Australia. Landscape and Urban Planning 130:112–124.

Beale, C. M., and P. Monaghan. 2004. Behavioural responses to human disturbance: a matter of choice? Animal Behaviour 68:1065–1069.

Bennett V. J., V. S. Quinn, and P. A. Zollner. 2013. Exploring the implications of recreational disturbance on an endangered butterfly using a novel modelling approach. Biodiversity and Conservation 22:1783–1798.

Bernard, G. E., W. F. D. van Dongen, P. G. Guay, M. R. E. Symonds, R. W. Robinson, and M. A. Weston. 2018. Bicycles evoke longer flight-initiation distances and higher intensity escape behaviour of some birds in parks compared with pedestrians. Landscape and Urban Planning 178:276–280.

Blair, R. B., and A. E. Launer. 1997. Butterfly diversity and human land use: species assemblages along an urban gradient. Biological Conservation 80:113–125.

Bötsch, Y., Z. Tablado, D. Sheri, M. Kéry, R. F. Graf, and L. Jenni. 2018. Effect of recreational trails on forest birds: human presence matters. Frontiers in Ecology and Evolution 6(175).

Burger, J. C. 2012. An efficient monitoring framework and methodologies for adaptively managing human access on NCCP lands and other reserves in southern California. Final report to California Department of Fish and Wildlife for LAG #PO982014.

Cheptou, P. O., A. L. Hargreaves, D. Bonte, and H. Jacquemyn. 2017. Adaptation to fragmentation: evolutionary dynamics driven by human influences. Philosophical Transactions of the Royal Society B 372:20160037.

O2-6 Cont.

California Department of Fish and Wildlife (CDFW). 2014. Incorporation of Adaptive Management into Conservation Planning and Resource Management. Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=86989&inline (September 2019).

California Department of Fish and Wildlife (CDFW). 2015. California State Wildlife Action Plan, 2015 Update: A Conservation Legacy for Californians. Edited by Armand G. Gonzales and Junko Hoshi, PhD. Prepared with assistance from Ascent Environmental, Inc., Sacramento, CA, USA.

California Department of Fish and Wildlife (CDFW). 2016. SWAP's Consumption and Recreational Uses and Companion Plan.

California Department of Fish and Wildlife (CDFW). 2019. CDFW News. Available from: https://cdfgnews.wordpress.com/tag/rare-and-endangered-species-preservation/ (March 2019).

California Native Plant Society (CNPS). 2020. Flora 3(2):13–16.

City of San Diego. 2019. Natural Resources Management Plan for Mission Trails Regional Park, San Diego, California. Prepared by RECON Environmental, Inc., San Diego, CA, USA.

Czech, B., P. R. Krausman, and P. K. Devers. 2000. Economic associations among causes of species endangerment in the United States: associations among causes of species endangerment in the United States reflect the integration of economic sectors, supporting the theory and evidence that economic growth proceeds at the competitive exclusion of nonhuman species in the aggregate. BioScience 50:593–601.

Davies, C., and D. Newsome. 2009. Mountain bike activity in natural areas: impacts, assessment and implications for Management—a case study from John Forrest National Park, Western Australia. CRC for Sustainable Tourism Pty, Australia.

Davis, C. A., D. M. Leslie, Jr., W. D. Walter, and A. Graber. 2010. Mountain biking trail use affects reproductive success of nesting golden-cheeked warblers. Wilson Journal of Ornithology 122(3):465–474.

Dertien, J. S., C. L. Larson, and S. E. Reed. 2018. Adaptive management strategy for science-based stewardship of recreation to maintain wildlife habitat connectivity. Wildlife Conservation Society, Americas Program, Bronx, NY, USA.

Franchise Tax Board (FTB). 2019. Available from: https://www.ftb.ca.gov/file/personal/voluntary-contribution-funds/annual-contribution/rare-and-endangered-species-preservation.html (June 2019).

George, S. L., and K. R. Crooks. 2006. Recreation and large mammal activity in an urban nature reserve. Biological Conservation 133:107–117.

Gill, J., K. Norris, and W. Sutherland. 2001. Why behavioral responses may not reflect the population consequences of human disturbance. Biological Conservation 97:265–268.

Greer, K., K. Day, and S. McCutcheon. 2017. Efficacy and perception of trail use enforcement in an urban natural reserve in San Diego, California. Journal of Outdoor Recreation and Tourism 18:56–64.

González, L. M., B. E. Arroyo, A. Margalida, R. Sánchez, and J. Oria. 2006. Effect of human activities on the behaviour of breeding Spanish imperial eagles (*Aquila adalberti*): management implications for the conservation of a threatened species. Animal Conservation 9:85–93.

Gutzwiller, K. J., A. L. D'Antonio, and C. A. Monz. 2017. Wildland recreation disturbance:

O2-6 Cont.

broad-scale spatial analysis and management. Frontiers in Ecology and the Environment 15(9).
Havlick, D. G., E. Billmeyer, T. Huber, B. Vogt, and K. Rodman. 2016. Informal trail creation: hiking, trail running, and mountain bicycling in shortgrass prairie. Journal of Sustainable Tourism.
Hennings, L. 2016. The impacts of dogs on wildlife and water quality: a literature review. Metro Parks and Nature, Portland, OR, USA. Included in Hennings 2017 as Appendix 1.
Hennings, L. 2017. Hiking, mountain biking and equestrian use in natural areas: a recreation ecology literature review. Metro Parks and Nature, Portland, OR, USA.
Kriebel, D., J. Tickner, P. Epstein, J. Lemons, R. Levins, E. L. Loechler, M. Quinn, R. Rudel, T. Schettler, and M. Stoto. 2001. The precautionary principle in environmental science. Environmental Health Perspectives 109:871–876
Larson, C. L., S. E. Reed, A. M. Merenlender, and K. R. Crooks. 2016. Effects of recreation on animals revealed as widespread through a global systematic review. PLoS ONE 11(12):e0167259.
Leung, Y. F., T. Newburger, M. Jones, B. Kuhn, and B. Woiderski. 2011. Developing a monitoring protocol for visitor-created informal trails in Yosemite National Park, USA. Environmental Management 47:93–106.
Marcot, B. G., and C. H. Flather. 2007. Species-level strategies for conserving rare or little-known species. Pages 125–164 in M. G. Raphael and R. Molina, editors. Conservation of Rare or Little-known Species. Island Press, Washington, D.C., USA.
Markovchick-Nicholls, L., H. M. Regan, D. H. Deutschman, A. Widyanata, B. Martin, L. Noreke, and T. A. Hunt. 2008. Relationships between human disturbance and wildlife land use in urban habitat fragments. Conservation Biology 22:99–109.
Marzano, M., and N. Dandy. 2012. Recreationist behaviour in forests and the disturbance to wildlife. Biodiversity and Conservation 21:2967–2986.
Moore, M. J. C., and R. A. Seigel. 2006. No place to nest or bask: effects of human disturbance on the nesting and basking habits of yellow-blotched map turtles (Graptemys flavimaculata). Biological Conservation 130:386–393.
Naylor, L. M., M. J. Wisdom, and R. G. Anthony. 2009. Behavioral responses of North American elk to recreational activity. Journal of Wildlife Management 73:328–338.
Patten, M., and J. Burger. 2018. Reserves as double-edged sword: avoidance behavior in an urban-adjacent wildland. Biological Conservation 18:233–239.
Patten, M., J. Burger, and M. Mitrovich. 2017. Assessing Effectiveness of Adaptive Recreation Management Strategies and Evaluation of Core NCCP/HCP Habitat Areas. Final Report for California Department of Fish and Wildlife Local Assistance Grant #P1482109.
Pauli, B. P., R. J. Spaul, and J. A. Heath. 2017. Forecasting disturbance effects on wildlife: tolerance does not mitigate effects of increased recreation on wildlands. Animal Conservation 20:251–260.
Peterson, C. 2019. Americans' love of hiking has driven elk to the brink, scientists say. The Guardian. August 25. Available from: https://www.theguardian.com/environment/2019/aug/25/hiking-elk-driven-to-brink-colorado-vail.
Pickering, C. M. 2010. Ten factors that affect severity of environmental impacts of visitors

O2-6 Cont.

to protected areas. Ambio 39(1):70–77
Reed, S. E., and A. M. Merenlender. 2008. Quiet, nonconsumptive recreation reduces protected area effectiveness. Conservation Letters 1:146–154.
Reed, S. E., C. L. Larson, K. R. Crooks, A. M. Merenlender. 2014. Wildlife Response to Human Recreation on NCCP Reserves in San Diego County. Wildlife Conservation Society Agreement No/LAG #: P1182112.
Reed, S. E., C. L. Larson, and K. R. Crooks. 2019. Effects of Human Use of NCCP Reserves on Reptile and Mammal Species in San Diego. Wildlife Conservation Society Agreement No/LAG #: P1582100.
Reilly, M. L., M. W. Tobler, D. L. Sonderegger, and P. Beier. 2017. Spatial and temporal response of wildlife to recreational activities in the San Francisco Bay ecoregion. Biological Conservation 207:117–126.
Rodríguez-Prieto I., and E. Fernández-Juricic. 2005. Effects of direct human disturbance on the endemic Iberian frog *Rana iberica* at individual and population levels. Biological Conservation 123:1–9.
Säterberg, T., S. Sellman, and B. Ebenman. 2013. High frequency of functional extinctions in ecological networks. Nature 499:468–470.
Shively, K. J., A. W. Alldredge, and G. E. Phillips. 2005. Elk reproductive response to removal of calving season disturbance by humans. Journal of Wildlife Management 69:1073–1080.
Simmonds, C., A. McGivney, P. Reilly, B. Maffly, T. Wilkinson, G. Canon, M. Wright, and M. Whaley. 2018. Crisis in our national parks: how tourists are loving nature to death. The Guardian. November 18. Available from: https://www.theguardian.com/environment/2018 /nov/20/national-parks-america-overcrowding-crisis-tourism-visitation-solutions.
Soulé, M. E., and R. F. Noss. 1998. Rewilding and biodiversity: complimentary goals of continental conservation. Wild Earth 8(3):19–28.
Spahr, R. 1990. Factors affecting the distribution of bald eagles and effects of human activity on bald eagles wintering along the Boise River. Thesis, Boise State University, ID, USA.
Spaul, R. J., and Heath, J. A. 2016. Non-motorized and motorized recreation in shrubsteppe habitats affects the breeding behavior and reproductive outcome of a protected species. Ecology and Evolution 6:8037–8049.
Steven, R., C. Pickering, and J. G. Castley. 2011. A review of the impacts of nature-based recreation on birds. Journal of Environmental Management 92:2287–2294.
Suraci, J. P., M. Clinchy, L. Y. Zanette, and C. W. Wilmers. 2019. Fear of humans as apex predators has landscape-scale impacts from mountain lions to mice. Ecology Letters 22:1578–1586.
Taff, B. D., J. Benfield, Z. D. Miller, A. D'Antonio, and F. Schwartz. 2019. The role of tourism impacts on cultural ecosystem services. Environments 6:43.
Taylor, A. R., and R. L. Knight. 2003. Wildlife responses to recreation and associated visitor perceptions. Ecological Applications 13:951–963.
Tinkler, T., M. Ahearne, and M. J. Schumann. 2019. Collaborative species and habitat conservation efforts in San Diego County: a systematic needs assessment to guide the San Diego End Extinction Initiative. Environment 1.
Waterman, J. 2019. Our national parks are in trouble: blame overcrowding, invasive spe-

O2-6 Cont.

cies, climate change and money woes. The New York Times. November 22. Available from: https://www.nytimes.com/2019/11/22/opinion/sunday/national-parks-crowding-climate.html.

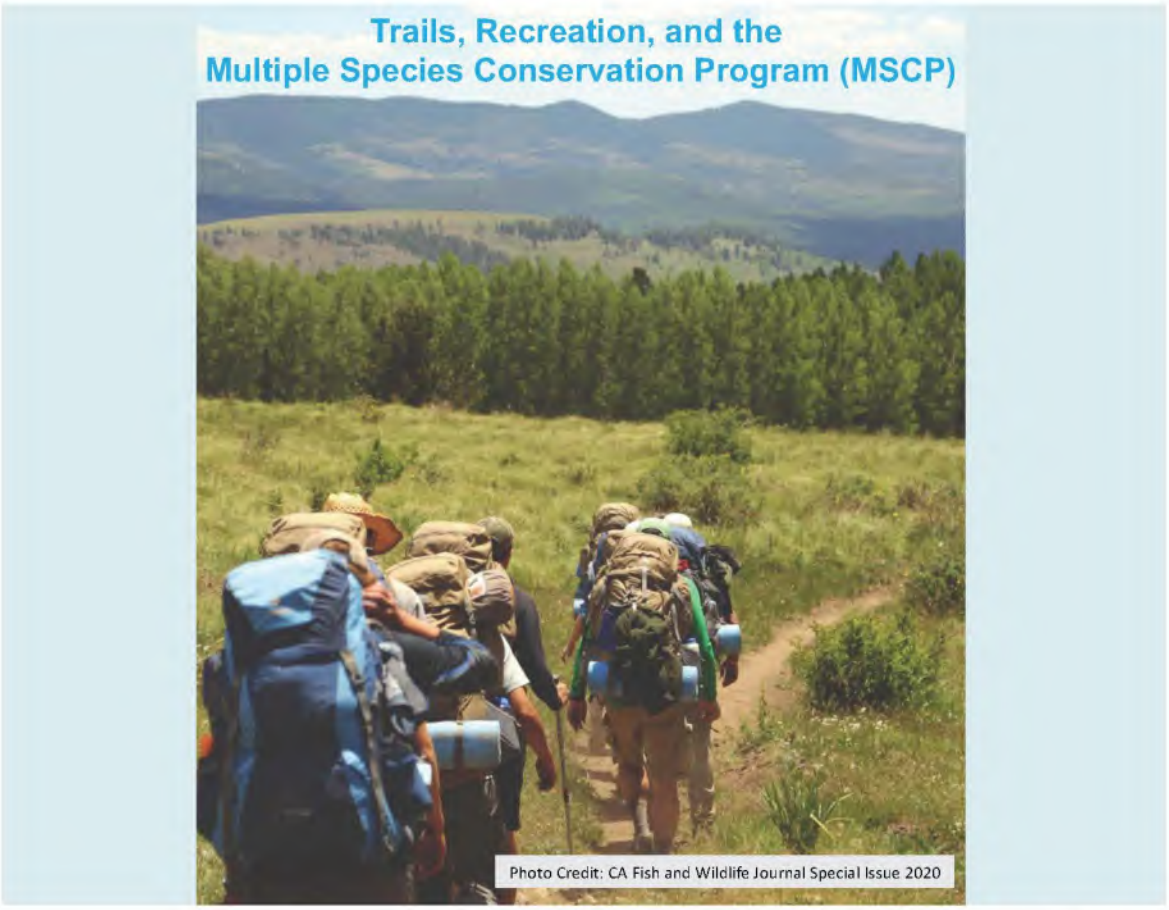
Wilcove, D. S., C. H. McLellan, and A. P. Dobson. 1986. Habitat fragmentation in the temperate zone. Pages 237–256 in M. E. Soulé, editor. Conservation Biology: the Science of Scarcity and Diversity. Sinauer Associates, Inc. Sunderland, MA, USA.

Wilson, M. 2019. What do we owe our national parks? The Atlantic. July 4. Available from: https://www.theatlantic.com/letters/archive/2019/07/national-park-maintenance-problems-arent-new/593293/.

Wolf, I. D., D. B. Croft, and R. J. Green. 2019. Nature conservation and nature-based tourism: a paradox? Environments 6:104.

Yong, E. 2019. The disturbing sound of a human voice. The Atlantic. July 17.

O2-6 Cont.



02-7

Page 26 of 39 in Comment Letter 02

Assumption of Compatibility is Flawed

There is a prevalent assumption that recreation is conditionally compatible with biological conservation. In the NCCP program, this assumption generally rests on the conditions that:

- siting of recreational trails will be done ecologically appropriately;
- only ecologically acceptable types, levels, and timing of recreation are allowed;
- sufficient monitoring, management, and enforcement of recreation occur; and
- prompt changes in management will occur when monitoring determines changes are necessary.

However, it is **rare** that these conditions are met. And, documented evidence of trail- and recreation-related disturbances to wildlife reveals the flaw in this assumption.

Van Dam Peak area, Poway – Credit: Jeffrey Schmidt

Meadowbrook Ecological Reserve, Poway – Credit: Jeffrey Schmidt

2

O2-7 Cont.

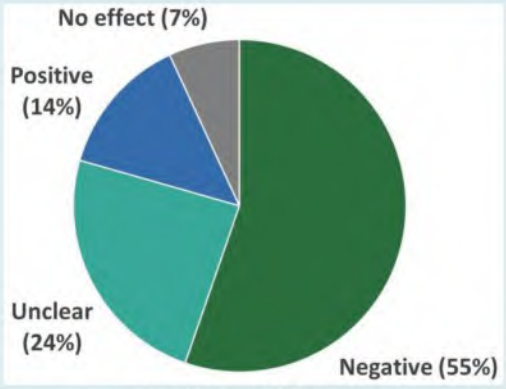
Page 27 of 39 in Comment Letter O2

Trail- & Recreation-related Disturbance to Wildlife...

The majority of the documented effects on wildlife from recreation are negative (Larson et al. 2016).

They include detrimental changes to:

- behavior (e.g., vigilance, foraging, hunting);
- reproduction;
- growth;
- immune system function;
- levels of stress hormones;
- the survival of individual animals; and ultimately
- the persistence of wildlife populations and communities.



Larson et al. 2019 TNC ppt

3

O2-7 Cont.

Page 28 of 39 in Comment Letter O2

Trail- & Recreation-related Disturbance to Wildlife...

Some effects are easily seen, like trailkill, trail-related removal of vegetation, erosion, habitat fragmentation, and wildlife flushing), but most are unseen or not observed without study.

Baja CA tree frogs run over by mountain bike. Credit: JPrice, CDFW, Reserve Manager

San Diego horned lizard, an MSCP covered species, run over by mountain bike. Credit: JPrice, CDFW, Reserve Manager

Butterflies—In Indiana, walkers, runners, and runners with dogs were shown to negatively affect the federally endangered Karner blue butterfly (Bennett et al. 2013).

Karner Blue Butterfly on host plant

Reptiles—Hiking, mountain biking, and horseback riding were associated with declines in the # of reptilian species, and in their occupancy, habitat use, and relative activity on conserved lands within 14 MSCP reserves in the County and City of San Diego (Reed et al., 2019).

Orange throated whiptail, an MSCP covered species – one of the negatively affected species.

4

O2-7 Cont.

Page 29 of 39 in Comment Letter O2

Trail- & Recreation-related Disturbance to Wildlife...

Songbirds—In Texas, mountain biking had direct and indirect effects on golden-cheeked warblers near biking trails (Davis et al. 2010).

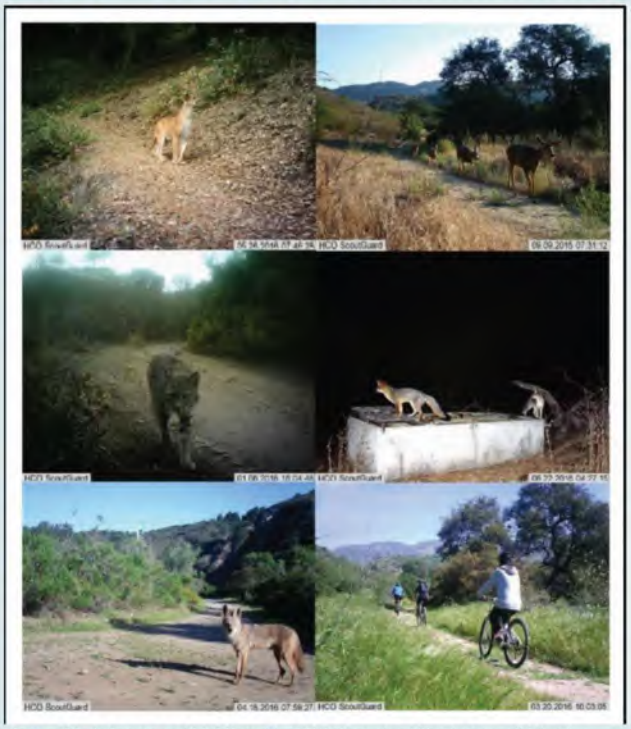
Mammals—

In Orange County NCCP/HCP reserves, three studies of the responses of mammals to hikers and runners, bikers, horseback riders, dog walkers, and motorized vehicles revealed that:

- mammal detections were negatively correlated with all types of recreationists;
- the overall trend is sharply negative: as human activity increased, mammalian activity decreased;
- mammals were nearly four times as likely to be recorded on days with no human activity than on days with human activity;
- detections of mammals decreased incrementally as the number of humans increased within a day, and fell to near zero probability at >60 humans per day; and
- all seven species exhibited short-term spatial displacement in response to events with more than 100 visitors (George and Crooks 2006; Patten et al. 2017; Patten and Burger 2018).

* * * * * *

High levels of human recreation on conserved lands within the same 14 MSCP reserves mentioned previously caused bobcat, gray fox, mule deer, and northern raccoon to be less active (Reed et al. 2019).



Patten, M., J. Burger, and M. Mitrovich. 2017. Assessing Effectiveness of Adaptive Recreation Management Strategies and Evaluation of Core NCCP/HCP Habitat Areas. Final Report for California Department of Fish and Wildlife LAG #P1482109.

5

O2-7 Cont.

Page 30 of 39 in Comment Letter O2

Trail- & Recreation-related Disturbance to Wildlife…

Mammals….

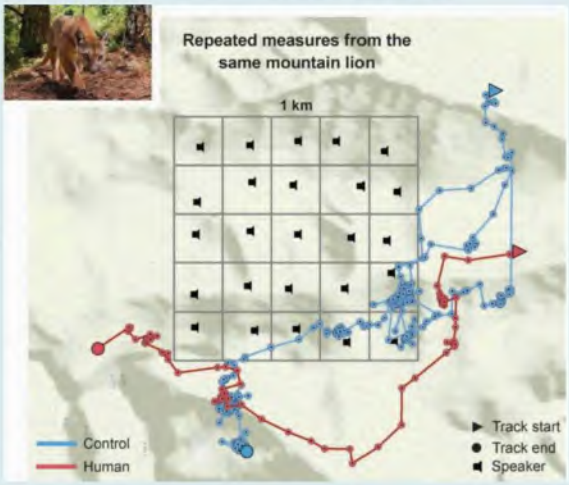
In Vail, Colorado, the number of elk in a herd dropped precipitously from 1,000 in the early 2010s to 53 in February of 2019 with the steady increase in levels of hiking, biking, and skiing (Shively et al. 2005; Peterson 2019).

Elk - Larson et al. 2019 TNC ppt

Mammalian Carnivores—

In the Santa Cruz Mountains of central CA, the response of mammalian carnivores to the human voice alone can result in landscape-level effects across wildlife communities (Suraci et al. 2019).

Suraci et al. 2019



6

O2-7 Cont.

Page 31 of 39 in Comment Letter O2

Trail- & Recreation-related Disturbance to Wildlife...

Mammalian Carnivores—

In comparisons of neighboring 28 protected areas in northern CA with and without hiking, biking, and horseback riding, ….in the protected areas that permitted these activities, there was a five-fold decline in the density of native mammalian carnivores and a substantial shift in community composition from native to nonnative species (Reed and Merenlender 2008).

Within three protected areas in Arizona, 11 mammalian carnivore species respond to varying levels of hiking, horseback riding, and border patrol activity. The study sites with the highest levels of human activity had significantly lower carnivore diversity, higher occupancy of common species (coyote, gray fox, and bobcat), and lower occupancy of all other carnivorous species (Baker and Leberg 2018).

Gray fox – photo credit: Ernie Cowen, SDUT 9-8-19

7

O2-7 Cont.

Page 32 of 39 in Comment Letter O2

Effects of Trails Alone

As described before, the study in Arizona of the **11** mammalian carnivores illustrated that the mere presence of trails, even in the absence of humans, can compromise protected areas' ability to sustain sensitive species. Beyond the loss of habitat from building trails, trails alone can negatively affect the ability of sensitive species to thrive.

One reason for this in urban areas is that trails cause fragmentation on protected areas within already fragmented landscapes.

The greater the proportion of a protected area occupied by effect zones, the fewer options there are for wildlife to move to disturbance-free areas. Consequently, fragmentation is a major threat to biodiversity, which underscores the high ecological cost of poorly planned and sited trails and unauthorized trails.

Trail density is a main factor influencing how wildlife respond to trail users and the ability of wildlife to disperse or reach seasonally important habitats such as breeding grounds (D'Acunto et al. 2018). And, some wildlife avoid trails, so don't go beyond them.

Carlsbad Highlands Ecological Reserve

8

O2-7 Cont.

Page 33 of 39 in Comment Letter O2

Unauthorized Trails – examples

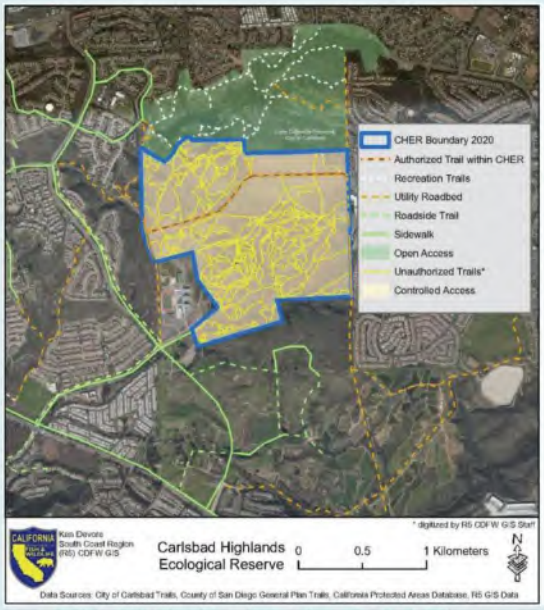
(1 hectare = 2.47 acres; 1 kilometer = 0.62 miles)

- Unauthorized trails comprise a mean of 45% (range: 8–85%) of the 1,206 km of trails mapped in 19 NCCP/HCP conserved areas in San Diego County (Reed et al. 2014).
- The 191-ha Carlsbad Highlands Ecological Reserve in Carlsbad has 4 km of legal hiking trails and 27.4 km of unauthorized mountain biking trails. Mountain biking is prohibited in this ER as it is in 123 of the other 136 ERs statewide (Lucas 2020). *
- Of the 32.22 km mapped trails on a 257-ha portion of the 350-ha Del Mar Mesa Preserve in the City of San Diego, 21.98 km are considered unauthorized (Reed et al. 2014).

Prevent the creation and use of unauthorized trails in the first place. Continual management is needed to accomplish this.

Restore the habitat lost to unauthorized trails, ideally with the assistance of well-organized local volunteer contingents (e.g., e mountain biking community).

* "All ecological reserves are maintained for the primary purpose of developing a statewide program for protection of rare, threatened, or endangered native plants, wildlife, aquatic organisms, and specialized terrestrial or aquatic habitat types. Visitor uses are dependent upon the provisions of applicable laws and upon a determination by the [Fish and Game] commission that opening an area to such visitor use is compatible with the purposes of the property" (Title 14, California Code of Regulations §630(a) states).



Carlsbad Highlands Ecological Reserve, Carlsbad, California. The yellow lines represent the unauthorized trails. Their associated effect zones occupy most, if not all of, the Ecological Reserve. (Credit: Ken Devore, South Coast Region (R5), GIS, CDFW 2017) (Lucas 2020).

9

O2-7 Cont.

Page 34 of 39 in Comment Letter O2

Disturbance Thresholds

Disturbance thresholds are predetermined levels of various measurable indicators above or below (depending on the indicator) which wildlife is disturbed (Hennings 2017).

These thresholds may be used to establish management measures such as minimum widths of spatial buffers between recreational trails and wildlife, but they can be tricky to determine for broad application (González et al. 2006). Exceedance of a threshold may trigger the implementation of further management measures (Hennings 2017). Examples of disturbance thresholds are:

- distance between people and wildlife or between trails and nesting sites (i.e., the distance within which wildlife species avoid people or trails);
- density of active trails above which wildlife alters its use of habitat;
- number of recreationists per day over which wildlife abundance decreases,
- duration and time of recreation; and
- number of recreational events per unit time (Hennings 2017; Dertien et al. 2018).

The majority of the research indicates that more visitors will generally cause more wildlife effects (Hennings 2017). However, since recreational impacts vary nonlinearly with use in a variety of ecosystems, a small number of visitors can have a disproportionate impact on sensitive species (Reed and Merenlender 2008).

Ultimately, for wildlife that avoids human activity, it is unlikely that dual-role protected areas are entirely sufficient or justifiable for meeting conservation objectives; limiting or prohibiting recreation in strategic circumstances and locations within protected areas is necessary to achieve conservation objectives (Bötsch et al. 2018; Dertien et al. 2018; Reed et al. 2019).

Effective planning for protected areas preserved primarily or solely for the perpetuation of viable populations of sensitive species: provide separate areas for conservation (e.g., NCCP reserves) and recreational activities (i.e., parks). Credit: Landscape Conservation Planning Program, CDFW 2020 (Lucas 2020).

10

O2-7 Cont.

Page 35 of 39 in Comment Letter O2

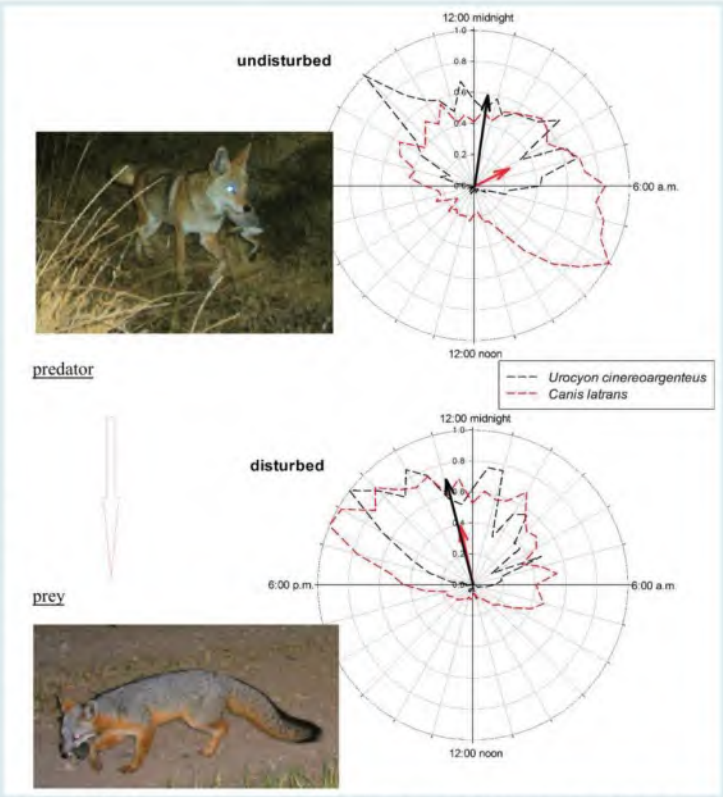
Recreation in the Dark...

After-dark recreation, such as night riding, poses a dual threat to wildlife that are normally active during the day but are shifting their activities to the night because of daytime recreational pressure. The dual daytime/nighttime recreational pressure increases encounters with competitors and even further reduces the time available for foraging and breeding (Reilly et al. 2017).

Generally, temporal shifts by wildlife involve disruptions to both the shifting wildlife and to the wildlife naturally active during the time frame the shifting wildlife move into. In this way, such shifts set both groups of wildlife up for conflict and competition, disrupt predator/ prey dynamics, reduce feeding/hunting time and success, and disrupt breeding and other activities (Gaynor 2018).

Temporal shifts can also result in spatial shifts and thus potentially cause further ecological disruptions. **Thus, temporal shifts are disruptive not only to individuals, but also to communities, and ultimately, populations** (Gaynor 2018).

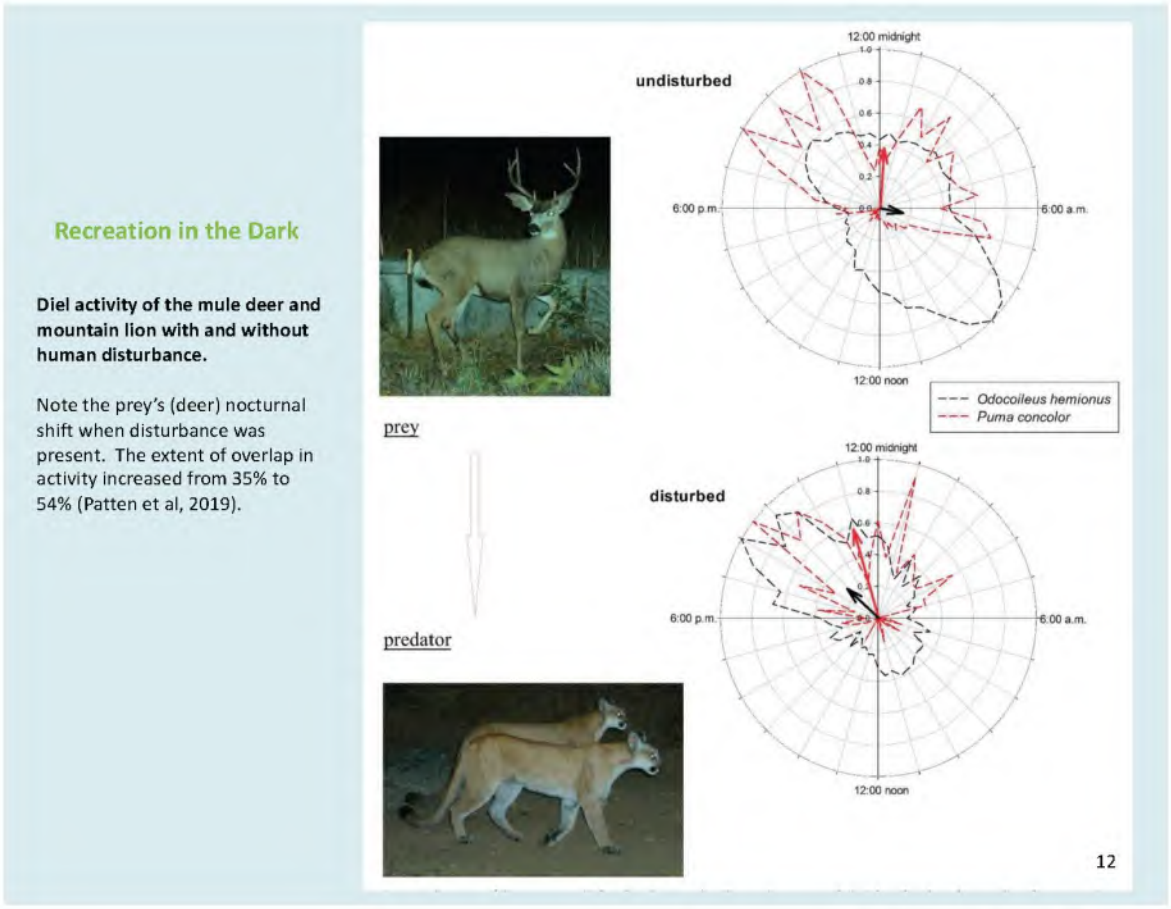
11



Diel activity of the gray fox and coyote with or without human disturbance. Arrows indicate time (direction) and proportional magnitude (length) of mean activity, and the "net" displays the spread of activity on a 24-h clock, binned at 30-min. intervals. Note the predator's (the coyote) nocturnal shift when disturbance was present. The extent of overlap in activity increased from 33% to 45% (Patten et al 2019).

O2-7 Cont.

Page 36 of 39 in Comment Letter O2



O2-7 Cont.

Page 37 of 39 in Comment Letter O2

Comparing Types of Recreation

It is difficult to make defensible generalized comparisons of the effects on wildlife among different types of recreation, partly because of the diversity of recreational activities, study methodologies, and observed responses (Monz et al. 2013).

Therefore, generalized comparisons of the effects on wildlife among different types of recreation are ill advised. **The differences among types of recreation in their effects on wildlife are less important than the negative association for wildlife of human presence, irrespective of type of recreation** (Patten and Burger 2018).

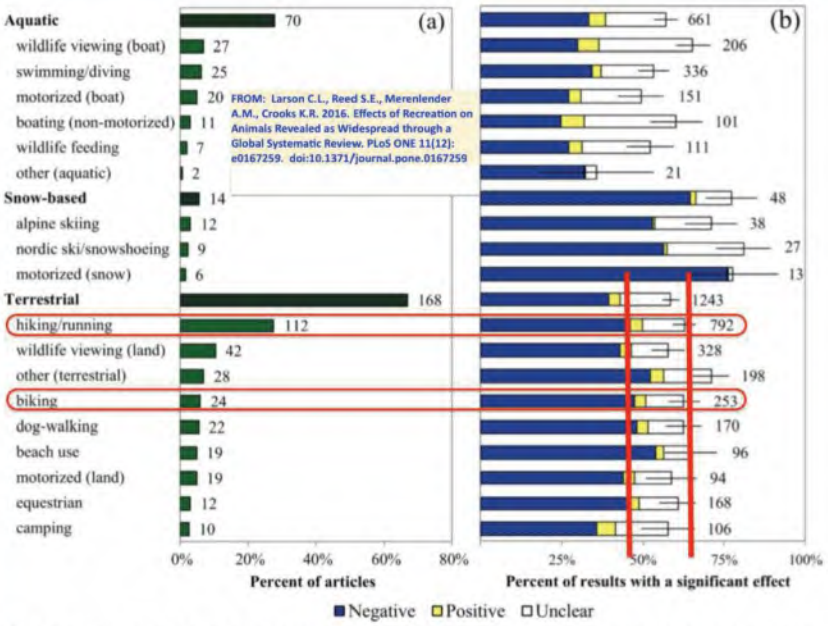


Fig 5. Recreation activities in the articles included in this review. Panel (a) shows the percent of articles that included each recreation activity (numbers of articles follow the bars), and panel (b) shows the percent of results in which a statistically significant effect of recreation on an animal species was observed (number of results follow the bars). Total percentages are divided into negative, positive, and unclear effects of recreation. Error bars show standard error for the sum of all effects.

Larson et al. 2016

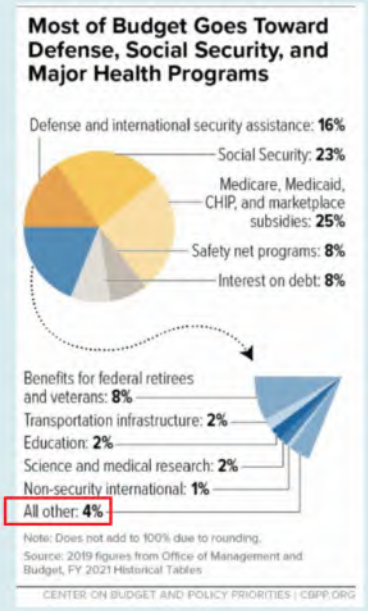
13

O2-7 Cont.

Page 38 of 39 in Comment Letter O2

Closing Thoughts

- **With respect to sensitive wildlife species forced to ever smaller areas by development and human activity, recreationists' needs are not equivalent to the species' needs for the lands conserved expressly for them to perpetually thrive in viable populations.**
- Enormous effort and considerable expense have gone into preserving lands In SD County in perpetuity for biological conservation. Already within fragmented landscapes, and subject to several other anthropogenic stressors, wildlife exposed to too many trails and too many people on the trails are at great risk. This is why it's critical that we address this issue. Unless we do, it is another inconvenient truth that conserved lands may not achieve their intended purpose.
- The presence of individuals of a sensitive species doesn't mean the local population is healthy or viable.
- The lack of an observable response to human presence does not = no effect.
- The most responsive animals are not necessarily the most vulnerable to disturbance.
- Not all public lands are meant to have public access - people do not need to be on every ridgeline or in every canyon (Mitrovich 2019).
- Not all open space lands have the same purpose.
- Despite their motivation (e.g., enjoy nature, get exercise outdoors in open space), all recreationists disturb wildlife.
- The mantra "leave no trace" (LNT) doesn't apply well to recreational disturbance to wildlife because people are often unaware of the disturbance they cause. And, it's not at all clear that the LNT program has altered visitors' behavior to a sufficient degree to effect a meaningful change for wildlife; consider Greer et al.'s paper re: Del Mar Mesa.



Need more $$$$ for perpetual management.

14

O2-7 Cont.

Page 39 of 39 in Comment Letter O2

INTENTIONALLY LEFT BLANK

Response to Comment Letter O2

Endangered Habitats League
Dan Silver, Executive Director
January 9, 2025

O2-1 This introductory comment identifies the commenter. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O2-2 Regarding the previous approved project (Lyons Canyon Ranch Project), an EIR (State Clearinghouse No. 2003031086) was certified in August 2009 and the project applicant initiated the process to record the approved tentative tract map. The application for the previously approved project expired, and this expiration occurred after the Project Applicant for the currently-proposed Project submitted their application. Therefore, prior to its expiration, the previously approved project could have been implemented instead of the Project. Nevertheless, the Project is afforded protections through the vesting map (Vesting Tentative Tract Map [VTTM] No. 83301) and is therefore not subject to the 2022 updates to the Safety Element and Land Use Element for fire safety. Nevertheless, the Draft EIR includes an analysis of the Project's potential to conflict with the applicable policies of the 2022 update to the Safety Element. The Project is subject to the 2019 SEA Ordinance and analysis is contained within Section 4.4, Biological Resources and page 4.11, Land Use and Planning of the Draft EIR. That analysis demonstrates that the Project does not conflict with the SEA ordinance as asserted. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O2-3 The comment expresses support for the Project's features minimizing impacts to biological resources, open space, and the Significant Ecological Area when compared to the previously approved project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O2-4 Regarding trail placement and impacts to biological resources, the Draft EIR addresses impacts related to trail maintenance and activities. The Project would not construct new trails in the southern portion of the Project site. The Project would, however, construct a private-gated access road that would run along the outer northern and western edge of the development area. This access road would serve a multi-use trail system. A new publicly-accessible trailhead would be constructed near the gated connection of the access road to The Old Road at the northeastern corner of the Project site. Trailhead signage would be posted at this access point at The Old Road, as implemented through MM-4.20-1, of Section 4.20, Wildfire, of this Draft EIR (Draft EIR page 3-11). Moreover, the Project would facilitate the dedication of existing non-dedicated trails. Figure 3-5, Conceptual Trails Map, illustrates the Project's proposed trail network, existing non-dedicated trails to be dedicated, existing dedicated trials (managed by the City of Santa Clarita or the County), and existing non-dedicated trails. Several existing non-dedicated trails are located within the southern portion of the site (within the designated natural open space portion of the Project site) and would remain with implementation of the Project. With implementation of the Project, an existing non-dedicated trail would be dedicated the County, as shown in green/purple striping on Figure 3-5. As a result of the Project, the County or the City of Santa Clarita would be responsible for the maintenance of these trails.

The comment recommends trail placement after a resource management plan is complete. Although the Project does not include a "resource management plan," the Project would implement a Conservation Management Plan. For the purposes of this Response to Comment, it is assumed that the commenter is referring to the proposed Conservation Management Plan. As detailed in the Draft EIR, mitigation measure MM-4.4-1, On-Site Habitat Preservation, includes a Conservation Management Plan as part of the conservation easement recording, which would be submitted for County approval and identify the required resource management activities and the entities that shall be responsible for managing those activities. The Conservation Management Plan would set forth various requirements that would be implemented by the entity that holds the conservation easement and/or manages and stewards the Conservation Area, including but not limited to no grading, no off-trail activities, and signage provisions (see Draft EIR pages 4.4-70 and 4.4-71 for more details). Furthermore, CEQA Guidelines Section 15126.4 does not allow for deferred action as suggested by the comment. Instead, as demonstrated in the Draft EIR, MM-4.4-1 outlines specific performance standards that the mitigation measure will achieve.

Additionally, the Draft EIR identifies and incorporates appropriate measures to ensure impacts to biological resources are addressed prior to the issuance of a grading permit (see MM-4.4-1). The comment notes the inclusion of general information regarding recreational impacts (included as Comment O2-7). As such, see Response to Comment O2-7, below, for further discussion.

O2-5 The comment expresses support for the Project as proposed. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O2-6 Regarding the attachment on recreation-related disturbances to wildlife, the comment does not specifically express environmental concerns related to the Draft EIR's analysis. Nevertheless, the Draft EIR includes impact analyses that consider the Project's potential effects of the proposed trail network on wildlife. The proposed trail network is part of the Project, as detailed in Chapter 3 of the Draft EIR. As such, the impact analysis, especially the analysis contained within Section 4.4, Biological Resources, encompasses the potential effects associated with the whole of the Project.

O2-7 Regarding the attachment on trails and recreational activities and conservation programs, the comment does not specifically express environmental concerns related to the Draft EIR's analysis. Nevertheless, the Draft EIR includes impact analyses that consider the Project's potential effects of the proposed trail network on wildlife. The proposed trail network is part of the Project, as detailed in Chapter 3 of the Draft EIR. As such, the impact analysis, especially the analysis contained within Section 4.4, Biological Resources, encompasses the potential effects associated with the whole of the Project.

Comment Letter 03

3250 Wilshire Blvd Suite 1106
Los Angeles, CA 90010

(213) 387-4287 phone
www.sierraclub.org

SIERRA CLUB

Erica G. Aguirre, AICP
January 8, 2025

County of Los Angeles
Principal Planner, Subdivisions
LA County Dept. of Regional Planning
320 West Temple Street, 13th Floor, Los Angeles, CA 90012
State Clearinghouse No. 2022060346

Project: Proposed Trails at Lyons Canyon; State Clearinghouse No. 2022060346
Requested Entitlements:
Vesting Tentative Tract Map No. 83301 (RPPL2021003061)
Zone Change No. RPPL2021003163
Administrative Housing Permit No. RPPL2021003105
SEA Conditional Use Permit No. RPPL2021003113 SEA Oak Tree Permit No. RPPL2021003070
Environmental Assessment No. RPPL2021003071

03-1

Dear Ms. Aguirre:

Though this proposal has been somewhat reduced in scale from the original that was approved by the County several years ago, there remain a number of important reasons to reject this proposed project. Therefore, we offer the following comments:

03-2

Aesthetics: We are very concerned about the aesthetic impacts of the development on those who are residing north of the project and those who enjoy recreational activities at Ed Davis Park, Towsley Canyon, Riverdale Park & Open Space, and Santa Clarita Woodlands Park to the south. The proposed project includes buildings that are up to four-stories high. The effects of light and glare must be carefully considered in relation to the wildlife in those areas, in addition to those living in and adjacent to this proposed development.

03-3

Air Quality: The Santa Clarita Valley already has some of the worst air quality in the nation, including non-attainment for Ozone, $PM_{2.5}$ and PM_{10}. The proposed project will contribute to our worsening air quality overall and, due to its canyon setting and immediate proximity to the I-5 Freeway, result in a high concentration of pollutants for those living in the area. Efforts to reduce particulates during construction would have to include measures that do not require the use of potable water.

03-4

Biological Resources: We appreciate your listing in the DEIR the many biological resources in the SEA in which this project is located. The Sierra Club continues to oppose projects in SEAs and we believe that the proposed project will substantially degrade the quality of the environment in the Santa Clarita Valley in contravention to the County's Area Plan and the City of Santa Clarita's OVOV General Plan. The development area is part of a major wildlife linkage corridor and the proposed project will drastically interfere with the abundance of wildlife species' movement and

03-5

SIERRA CLUB

foraging within the Santa Susana watershed. It will reduce the habitat of numerous plant species which may very well result in elimination of species. The damage to the oak woodlands through the removal and/or encroachment of 454 Protected Trees, including 316 oak trees (of which 30 are Heritage), as well as the loss of 138 non-oak SEA protected trees would be a devastating loss for which there is no acceptable mitigation (including the DEIR's mitigation attempt of planting various other trees on the property). 03-5 Cont. 03-6

This project is in a Significant Ecological Area (63) and we do not believe that this impact can be mitigated. We are opposed to building in SEAs! We request that the County include an alternative that does not fill the majority of the canyon with development farthest from the Old Road access point. 03-7

Paleontological Resources: Impacts to potential paleontological resources as a result of the proposed project must be addressed. Unfortunately, the DEIR completely missed the need for an Invertebrate Paleontologist to be involved in the project. This is very concerning because it shows that the drafters of the DEIR do not understand the geology of the area. The material being built on is all marine! The proposed development lies in the upper Pico and lower Saugus formations. There are marine fossils in this area that are rare and should be protected. If development of any kind is allowed a qualified Invertebrate Paleontologist should be at the scene in order to preserve specimens. Specimens should then be donated to Los Angeles County Natural History Museum. 03-8

Geology and Soils: The proposed project is on a very unstable and geologically active area subject to landslides and liquefaction—even though the DEIR says there is no mitigation needed for these serious concerns. It is also prone to tectonic uplift and includes a well-researched and well-known over-turned fault complex (basic geology students study this area as an area of extreme instability). These facts were not included in the DEIR for the project nor did the DEIR contain detailed information about the anticlines/synclines in the area. Also missing in the DEIR is the mention of the active tectonic shifting nearby. To the southwest the mountains are rising on a level similar with that of the tectonic force required to create the Himalaya Mountains. Rock beds are upside down due to the force and faulting associated with the San Gabriel fault. These problems were not sufficiently addressed in the DEIR—thus casting doubt on the credibility of its assertions. Additionally, the proposed movement of 2.8 million cubic yards of earth in such an area would be irresponsible. All in all, housing anyone in this area (especially senior citizens) is unthinkable. 03-9 03-10 03-11

Greenhouse Gas Emissions: Greenhouse Gas Emissions must be better addressed in the DEIR. Rooftop solar, electric-only appliances, LED lighting, energy and electric vehicle charging stations should be a requirement on every building and home. The Sierra Club requests that green building standards be included as conditions of any approval that might be considered. 03-12

Hazards and Hazardous Materials: The potential for loss of life and property with a project of this size in this location is very high. As we write this letter, the Newhall Pass is ablaze with the Hurst Fire. Evacuations have just been called for the area nearby the proposed Trails at Lyons Canyon. As with all wildfires in the area, the freeway often is been clogged with traffic and shut down due on a fairly regular basis. One of our more recent fires made it impossible for people to rapidly exit the valley using the freeway and the surface streets, including The Old Road. Traffic is 03-13

SIERRA CLUB

often brought to a crawl for hours and is at a stand-still now for the Hurst Fire. This project has two means of ingress/egress, both of which connect directly to The Old Road. Residents of this project may have no means of escape when a very high fire occurs in the area, which experience tells us it will (as we can see by turning on the news today). The DEIR tries to make some good suggestions such as: HOA Fire lessons for homeowners and presence of a fire station on the site, but these will not solve the problem for those in danger when another fire roars through this area. Additionally, there must be at least two ways in/out of the proposed development to help with evacuation. 03-13 Cont. 03-14 03-15

Hydrology and Water Quality: California is in a drought crisis and is rapidly transforming to an arid climate. With that in mind, we urge a rigorous study of the hydrology and impact on water quality with this project. We cannot afford to give up more of our precious water resources to a proposed development in a high-fire zone. 03-16

Land Use and Planning: The proposed project as described in the DEIR makes some attempts at trying to mitigate land use concerns, but it truly appears to be the antithesis of good planning. The Sierra Club acknowledges the need for housing, including the inclusion of affordable units, and supports infill projects as opposed to sprawl. However, this project will intrude into natural areas near preserved open space in a Very High Fire Hazard Severity Zone. It would supplant true undisturbed natural habitat with "improved open space." The project will also offer relatively few affordable units which does not even come close to approaching our standards for this time of situation. 03-17 03-18

Noise: We support a rigorous noise study that considers the noise generated by the I-5 corridor at peak periods. 03-19

Population and Housing: Housing costs in the Santa Clarita Valley are exorbitant and seniors, in particular, need dwelling units that will remain truly affordable for many years. Many seniors need subsidized or very low-income housing. That should be considered as this project is reviewed. 03-20

Public Services: We have noted that in some of the planning reports the project offers very little in the way of parks and recreational opportunities. We request that the project, if approved, be required to offer more than the standard required to offset the loss of natural resources. 03-21

Recreation: Amenities offered within this project will come at the cost of loss of natural recreation areas to the south of the property. Evaluation of the bikeway on The Old Road as identified in the County's Master Plan must consider the impact of this project as stated in the DEIR. 03-22

Transportation: A thorough transportation study should be conducted and public transportation should be included in the design of the site. 03-23

Tribal Cultural Resources: The Santa Clarita Valley was home to the Tatavium peoples and it is very likely that there be tribal artifacts and perhaps remains in the project area. We support the careful study and respect for tribal requirements. 03-24

SIERRA CLUB

Utilities and Service Systems: Wastewater and storm drainage are a concern in this pristine canyon. The availability of potable water is a serious concern. We do not have enough water as it is…Castaic Lake closed for water maintenance this week and residents received calls to stop watering their lawns because of the lack of water. How can we agree to the development of an area of pristine wilderness in a high fire zone with a high need for water when we are in such an urgent water crisis? 03-25

Wildfire: Again, the potential for loss of life and property with a project of this size in this location is very high. The freeway has been clogged with traffic and shut down due to accidents on a fairly regular basis. In fact, today as we write this letter to you, the Newhall Pass is ablaze with the Hurst Fire (very close to the southern portion of this proposed development). As with all wildfires in the area, fires make it impossible for people to rapidly exit the valley using the freeway and the surface streets, including The Old Road. Traffic is brought to a crawl for hours/days. This project has two means of ingress/egress, both of which connect directly to The Old Road. Residents of this project may have no means of escape when a very high fire occurs in the area, which experience tells us it will. The presence of a fire station on the site and HOA trainings on Fire Danger while well-intentioned, will have little impact when another fire roars through this area. 03-26 03-27

In conclusion, the Sierra Club is extremely concerned about the lasting damage to this canyon and the surrounding areas. We are strongly opposed to any building in an SEA. We are strongly opposed to building in a Very High Fire Hazard Severity Zone. 03-28

Thank you for the opportunity to submit our comments on the proposed Trails of Lyons Canyon project.

Sincerely,

Katherine Solomon
Conservation Chair
Sierra Club, Santa Clarita Valley Group
Contact: kpsquires@gmail.com

Sandra Cattell
Chair
Sierra Club, Santa Clarita Valley Group
Contact: sumcatt@yahoo.com

Response to Comment Letter O3

Sierra Club, Santa Clarita Valley Group
Katherine Solomon, Conservation Chair and Sandra Cattell, Chair
January 26, 2025[21]

O3-1 Regarding the subject line of the comment letter, the Project does not require a zone change; therefore, Zone Change No. RPPL 2021003163 is not applicable to the Project. All other associated Project numbers identified in this comment are correct and applicable. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O3-2 This comment states general opposition to the Project and will be forwarded to the Regional Planning Commission for their review and consideration. Comments related to the environmental analysis contained in Draft EIR are addressed below in subsequent responses.

O3-3 With regard to impacts on views from private residences to the north of the Project site, such impacts are typically not considered significant under CEQA (*Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477,14 Cal.Rptr.3d 308). As stated by the court in *Banker's Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego* (2006) 139 Cal.App.4th 249, 42 Cal.Rptr.3d 537,, "obstruction of a few private views in a project's immediate vicinity is not generally regarded as a significant environmental impact," because under CEQA, "the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons" (*Banker's Hill v. City of San Diego, supra,* 139 Cal.App.4th at 279). Such conclusions are consistent with the inquiries set forth in County's adopted CEQA Guidelines, which ask whether projects would "substantially degrade the existing visual character or quality of public views" of the site and its surroundings. In light of these considerations, the County has determined that it is appropriate that the Draft EIR focuses the aesthetic impact analysis on potential impacts to public views, rather than private views. However, this comment is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

Regarding public views, the Draft EIR includes analysis of the potential aesthetic impacts related to construction and operation of the Project. This analysis considers potential lighting and glare impacts (refer to pages 4.1-37 through 4.1-40 in Section 4.1, Aesthetics of the Draft EIR) as well as impacts to scenic vistas and public views from off-site recreation areas. Regarding views from Ed Davis Park, Towsley Canyon, Riverdale Park & Open Space, and Santa Clarita Woodlands Park to the south, recreationists in these areas would primarily be limited to marked trails and trailhead areas. As discussed on page 4.1-17 in Section 4.1, Aesthetics of the Draft EIR, a visibility analysis was used to determine visibility of the Project site in the local vicinity where the Project features would have the highest potential to result in a visual impact. Regarding views from the off-site recreation areas, available views to portions of the Project site would generally be limited to Taylor Trail (located in close proximity to the south and east of the Project site; see Figure 4.1-3, Visibility Analysis, on page 4.1-53 of the Draft EIR) and the more distant Don Mullally trail to the south of the Project site (see label for "Ed Davis Park at Towsley Canyon" on Figure 4.1-3 on page 4.1-53 of the Draft EIR). From these trail

[21] Note that although Comment Letter O3 is dated January 8, 2025, the letter was not sent to the County via email until January 26, 2025.

segments, only between approximately 1% and 20% of the Project site would be visible—the remaining balance of the site would be obscured or blocked by intervening terrain.

As supported by the Project impact analysis provided under Threshold 4.1a (see pages 4.1-19 through 4.1-27 in the Draft EIR), the Project would not result in a substantial adverse effect on a scenic vista available from either Taylor Trail or Don Mullally Trail. Construction impacts would be less than significant with mitigation incorporated (i.e., MM-4.1-1, Visual Shield Plan; Draft EIR, page 4.1-45), and operational impacts would be less than significant. As discussed on page 4.1-45 of the Draft EIR, MM-4.1-1 requires preparation and implementation of a Visual Shielding Plan to improve the overall aesthetic quality of construction areas. This includes establishment of one or more designated staging areas for the storage of construction equipment and vehicles, stockpiles, waste bins, and other construction-related materials strategically placed away from publicly-maintained trails and open-space areas to the south, as well as temporary, opaque fencing and/or cloth screening along the Project-site boundary in the vicinity of the Taylor Trailhead and where the western leg of the Taylor Trail intersects with the Project site.

Furthermore, as supported by the Project impact analysis provided under Threshold 4.1d (see pages 4.1-29 through 4.1-34 in the Draft EIR), the Project would not substantially degrade the existing visual character or quality of the Project site and surrounding areas (including off-site recreation areas). Construction impacts would be less than significant with mitigation incorporated (i.e., MM-4.1-1), and operational impacts would be less than significant. Reasoning for these impact determinations discussed in Section 4.1 of the Draft EIR include the limited nature of visibility from dedicated trails in the Project site vicinity (including Taylor Trail and Don Mullally Trail), the high-quality nature and cohesiveness of design exhibited by on-site development and landscaped areas, the preservation of approximately 150 acres of the Project site as natural open space, the inclusion of on-site pocket parks and HOA-maintained open spaces, compliance with existing regulations, and implementation of MM-4.1-1.

Regarding potential light and glare impacts, due to the limited use of construction lighting, as well as the use of predominantly non-reflective building materials, which would not result in a substantial source of lighting or glare, the Project would not adversely affect day or nighttime views in the area, and short-term construction impacts would be less than significant (Draft EIR, pages 4.1-27 and 4.1-38). Furthermore, with the Project's use of non-reflective building material and residential clustering to limit the Project's development footprint and compliance with applicable provisions of the Zoning Code, California Vehicle Code, and California Building Code, Project lighting and materials would be contained within the Project site and would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Therefore, the impact associated with lighting and glare during operation would be less than significant (Draft EIR, pages 4.1-38 through 4.1-40).

Although the Project's lighting and glare impacts from a visual resources perspective would be less than significant without mitigation, indirect impacts to mammals, including bats, could occur from new lighting established by the completed Project and its operations (Draft EIR, pages 4.4-46 and 4.4-56 in Section 4.4, Biological Resources). As such, implementation of MM-4.4-12, Lighting Plan, is required. As discussed on page 4.4-91 of the Draft EIR, the lighting plan must identify the type, layout, and luminaire wattage of all exterior fixtures to be employed in association with the Project and must demonstrate compliance with Chapter 22.80 (Rural Outdoor Lighting District) of the County Code. Per MM-4.4-12, outdoor lighting must be fully shielded so that bulbs and lenses are not visible and must cause no light trespass into native habitats or skyward. Furthermore, Project structures must utilize

non-reflective materials to avoid glare intruding into native habitats. As stated on pages 4.4-46 and 4.4-56 of the Draft EIR. implementation of MM-4.4-12 would reduce indirect impacts to wildlife from lighting during operation of the Project to less than significant.

03-4 Potential impacts related to air quality are addressed in Section 4.3, Air Quality, of the Draft EIR. The Draft EIR recognizes that the Project region (specifically, the South Coast Air Basin Attainment [SCAB]) has been designated as a national nonattainment area for O_3 and $PM_{2.5}$ and a California nonattainment area for O_3, PM_{10}, and PM $_{2.5}$ (see Table 4.3-2 on pages 4.3-14 and 4.3-14 of the Draft EIR). As noted on page 4.3-42 of the Draft EIR, construction and operation of the Project would generate VOC and NO_x emissions (which are precursors to ozone [O_3]) and emissions of PM_{10} and $PM_{2.5}$. As indicated in Table 4.3-14 on page 4.3-41 of the Draft EIR, Project-generated construction emissions would exceed the South Coast Air Quality Management District (SCAQMD) emission-based significance thresholds for VOC and NO_x during construction activities prior to mitigation. However, with implementation of MM-4.3-1 (requiring that heavy-duty diesel-powered construction equipment greater than 50 horsepower must be equipped with California Air Resources Board [CARB]-certified Tier 4 Final or better diesel engines), emissions would be reduced to below levels of significance.

As discussed on page 4.3-66 of the Draft EIR, construction activities associated with the Project would result in temporary sources of on-site fugitive dust and construction equipment emissions. As demonstrated in Table 4.3-12, Estimated Maximum Daily Operational Criteria Air Pollutant Emissions—Unmitigated (page 4.3-39), and Table 4.3-18, Localized Assessment of Project Construction Emissions—Unmitigated (page 4.3-48), the Project would result in PM_{10} and $PM_{2.5}$ emissions that would be below the mass daily regional thresholds and concentration-based air pollutant thresholds, respectively. The Project would be required to comply with SCAQMD Rule 403 for fugitive dust watering. Additionally, as stated in Section 4.19, Utilities and Service Systems under Threshold 4.19b, which specifically addresses sufficient water supplies, the Project would result in less than significant impacts related to water supply.

03-5 The commenter's statement regarding development within an SEA is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

The Project's potential to conflict with the Santa Clarita Valley Area Plan "One Valley, One Vision" (OVOV) is addressed in Section 4.11, Land Use and Planning, of the Draft EIR. As demonstrated within Table 4.11-2 on pages 4.11-43 through 4.11-62, the Project would not conflict with applicable OVOV policies. Overall, with implementation of mitigation measures from applicable Draft EIR sections and topics (i.e., Section 4.3, Air Quality; Section 4.4, Biological Resources; Section 4.8, Greenhouse Gas Emissions; Section 4.13, Noise; Section 4.17, Transportation; Section 4.20, Wildfire), Project impacts due to a conflict with the OVOV adopted for the purpose of avoiding or mitigated an environmental effect would be less than significant with mitigation.

Potential Project impacts related to wildfire corridors and movement of wildlife species are addressed under Threshold 4.4d in Section 4.4, Biological Resources of the Draft EIR (Draft EIR, page 4.4-56). As discussed therein, the Project has the potential to impact local wildlife movement by impeding localized movement from undeveloped land in the southern portion of the Project site, privately owned undeveloped lands to the west, and dedicated open space associated with Santa Clarita Woodlands Park and the Rivendale Open Space, to the undeveloped box canyon located within the northwestern portion of the Project site, which extends an additional approximately 0.5 miles to the

northwest before terminating at existing single-family development associated with the Stevenson Ranch development. However, dedication of the On-Site Conservation Area (as required per MM-4.4-1, On-Site Habitat Preservation, as managed in perpetuity through a conservation easement) would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space. Preserving this connection would contribute to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and San Gabriel Mountains to the east. Dedication of the On-Site Conservation Area would therefore preserve, and thereby avoid further encroachment on, movement opportunities between regional conserved habitat blocks and reduce potential Project impacts to SEA resources. As such, with the implementation of MM-4.4-1, impacts to the SEA resources and wildlife movement due to habitat fragmentation would be reduced to less than significant.

03-6 Potential impacts to vegetation communities, including special status plant species, sensitive natural communities, and the potential to convert oak woodlands, are addressed in Section 4.4, Biological Resources of the Draft EIR. While the Project would result in direct and indirect impacts to special-status plant species and vegetation communities, the Project would implement required mitigation measures to reduce these impacts to a less than significant level and would not result in the elimination of any sensitive or special-status plant species. Required mitigation to address these impacts includes preservation of vegetation communities in On-Site and Off-Site Conservation Areas (per MM-4.4-1, On-Site Habitat Preservation and MM-4.4-9, Off-Site Habitat Preservation) as well as a Special-Status Plant Mitigation and Monitoring Plan that provides guidance and methods to preserve special-status plants (per MM-4.4-3, Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation).

This comment incorrectly states the number of SEA Protected Tree removals and encroachments. As stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR, a total of 334 SEA-Protected Trees would be impacted by the Project, including 232 oak trees (22 of which are Heritage Trees). The 334 SEA-Protected Tree impacts would be comprised of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin. The 53 SEA-Protected Trees that would be located within a debris basin would not be removed but are considered as removals for mitigation purposes. This is because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding.

As discussed on page 4.4-56 in Section 4.4. of the Draft EIR, direct Project impacts would occur to a total of 14.52 acres of oak woodlands. This requires 3:1 mitigation resulting in the need to preserve 43.56 acres. With the implementation of MM-4.4-1, the remaining oak woodland within the On-Site Conservation Area would be preserved in perpetuity. MM-4.4-9 would require the preservation of off-site oak woodland. The Project would comply with Section 22.102.070, Protected Tree Permit of the Los Angeles County Code. The intent of the tree protection regulations set forth therein is to encourage the responsible management of trees in an SEA. In accordance with MM-4.4-16, SEA Protected Tree Replacement/Compensation, the Project's required Conservation Management Plan must include a Protected Tree Replacement Plan that will dictate the establishment of required replacement trees. As

shown on page 4.4-93 in Section 4.4 of the Draft EIR, of the 772 required replacement trees, 574 would be oak trees. Per MM-4.4-16, the replacement trees must be nurtured and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. Furthermore, MM-4.4.2, Habitat Mitigation and Monitoring Plan, requires 10 years of monitoring and maintenance of the habitat to help the ecosystem as a whole to become established. Furthermore, MM-4.4-4, Biological Monitoring, MM-4.4-5, Demarcation of Disturbance Limits, MM-4.4-6, Invasive Species Prevention, and MM-4.4-7, Landscaping Plan, would avoid and minimize inadvertent impacts to SEA Resources. The Project's required mitigation would reduce potential oak woodlands impacts to below a level of significance under CEQA.

03-7 The commenter's general opposition to development within SEAs is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration. However, the County's SEA Program is not intended to entirely prevent development within SEAs. Rather, SEAs are places where the County deems it important to facilitate a balance between development and biological resource conservation. Per the SEA Ordinance Implementation Guide: "The SEA Program does not change the land use designation or the zoning of a property; rather it uses guidance and biological review and the application of certain development standards to balance the preservation of the County's natural biodiversity with private property rights"(County of Los Angeles 2020).

With regard to Project alternatives, the Draft EIR includes an analysis of Alternative C, Reduced Footprint Alternative, which presents a 67% reduction in the development footprint when compared to the Project. This analysis is provided on pages 6-56 through 6-72 in Chapter 6, Alternatives, of the Draft EIR. This alternative would cluster development closer to The Old Road and includes avoidance of most riparian habitat and non-riparian streams within a FEMA Flood Zone A, and substantial avoidance of other biological resources, including native habitats, protected trees, oak woodlands, special-status plants, and rare plants.

03-8 The geological units mapped within the Project site are detailed on pages 4.7-1 through 4.7-3 in Section 4.7-1, "Existing Conditions" of the Geology and Soils section of the Draft EIR. As stated therein, both the Pico and Saugus formations include marine sedimentary rock units. Potential impacts to paleontological resources are addressed on page 4.7-20 and 4.7-21 of 4.7.5 in Section 4.7.5 in the "Impact Analysis" portion of the Geology and Soils section. Both the Pico and Saugus formations are analyzed in the aforementioned section. Regarding qualifications, Dudek's paleontologists meet the professional standards set forth in Murphey and others (2019) and by the Society of Vertebrate Paleontology (SVP) for Paleontological Principal Investigator and Qualified Professional Paleontologist, respectively (Murphey 2019; SVP 2010). The SVP requirements for a Paleontological Principal Investigator sets the benchmark for industry standards and is quoted below:

> "A QUALIFIED PROFESSIONAL PALEONTOLOGIST (Principal Investigator, Project Paleontologist) is a practicing scientist who is recognized in the paleontological community as a professional and can demonstrate familiarity and proficiency with paleontology in a stratigraphic context. A paleontological Principal Investigator shall have the equivalent of the following qualifications:
>
> > 1. A graduate degree in paleontology or geology, and/or a publication record in peer reviewed journals; and demonstrated competence in field techniques, preparation, identification, curation, and reporting in the state or geologic province

> in which the project occurs. An advanced degree is less important than demonstrated competence and regional experience.
>
> 2. At least two full years professional experience as assistant to a Project Paleontologist with administration and project management experience; supported by a list of projects and referral contacts.
>
> 3. Proficiency in recognizing fossils in the field and determining their significance.
>
> 4. Expertise in local geology, stratigraphy, and biostratigraphy.
>
> 5. Experience collecting vertebrate fossils in the field."

By this definition, a Paleontological Principal Investigator would have the training to recognize potentially significant invertebrate fossils if they are discovered by the paleontological monitor. Furthermore, given that invertebrate fossils in the fossil record are more common as compared to vertebrate fossils, the majority of paleontological monitors would have more experience recognizing and salvaging invertebrate fossils over vertebrate fossils, as invertebrates are much more frequently encountered during construction monitoring. Regarding the paleontological sensitivity or potential of a rock unit, the SVP states:

> "Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional significant paleontological resources."

Whereas the majority of identifiable vertebrate fossils are considered significant, not all identifiable invertebrate fossils are considered significant. As required in MM-4.7-1, "Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Qualified Paleontologist that meets the standards of the Society for Vertebrate Paleontology (2010)." Therefore, no change to the recommended mitigation is required given the known potential for discovery of paleontological resources, whether invertebrate or vertebrate.

03-9 An analysis regarding seismically induced liquefaction and landslide potential is provided in Section 4.7, Geology and Soils, of the Draft EIR (see Thresholds 4.7a[iii] and [iv] on pages 4.7-14 through 4.7-16). Existing site conditions and geotechnical hazards were in large part based on a thorough geotechnical investigation and report that was prepared by California licensed geotechnical engineers and engineering geologists (provided as Appendix E-1 of the Draft EIR). As indicated in the Geotechnical Report and discussed on page 4.7-14 and 4.7-15, the potential for liquefaction is present within the alluvial portions of the Project site, and liquefaction-induced ground settlement of up to 1.75 inches could occur if the site soils were to liquefy, if not addressed by geotechnical measures (e.g., soil compaction and foundation design). However, implementation of the Project would not exacerbate any liquefaction hazards that may be present. In particular, recommendations identified in the Project's Geotechnical Report include measures such as ground improvements (i.e., removal of site soils and recompaction to building code standards) and structural design measures (i.e., foundation and floor slab construction design), which would be required as part of the Project design consistent with current geotechnical engineering practices and Los Angeles County Building Code (LACBC) and California Building Code (CBC) requirements. Implementation of these recommended measures would reduce the potential for liquefaction and associated liquefaction-induced ground failure impacts for all proposed improvements. According to Public Works' Geotechnical Materials Engineering Division (GMED), structural measures alone constitute an acceptable approach for up to 4-inches of total

seismic induced settlement (see page 4.7-15 of the Draft EIR). Therefore, impacts associated with liquefaction would be less than significant and no mitigation is required.

As stated on page 4.7-15 in Section 4.7, Geology and Soils of the Draft EIR, the Project site includes existing landslides and remnant debris flow deposits. The Project would include substantive earthwork activities that would include large volumes of cut and fill, which if not done appropriately could subject the proposed development to landslide hazards. However, as discussed on page 4.7-15 of the Draft EIR, based on a review of the existing conditions and proposed grading plans, the proposed building lots were determined by the California licensed geotechnical engineers and engineering geologists to have acceptable separation, either vertical or horizontal, from natural slopes and potential debris flow source areas. Furthermore, as discussed on page 4.7-16 of the Draft EIR, recommendations from the Geotechnical Report would be included as part of the Final Geotechnical Engineering Investigation Report and the geotechnical slope stability design measures (e.g., slope inclinations, fill compaction, and drainage improvements) implemented in accordance with LACBC and CBC requirements as approved by the Public Works GMED. Compliance and implementation of slope stability standards and the LACBC and CBC would minimize potential for the Project to exacerbate seismically induced landslides to a less than significant level prior to mitigation.

As stated on page 4.7-13 of the Draft EIR, the Project site is not transected by any Holocene-active faults nor are there any within close proximity to the site and there is little probability of surface fault rupture occurring at the site. The Draft EIR does acknowledge on page 4.7-14 that the site is located in a seismically active region and likely to experience a seismic event(s) in the future. However, implementation of the Project would not exacerbate seismic conditions and with adherence to current building code standards any damage incurred from a seismic event would be minimized.

03-10 As discussed in the Draft EIR on page 4.7-14 of Section 4.7, Geology and Soils, the Project site is located in a seismically active area with numerous Holocene-active faults in the region. These faults along with the structural geomorphic forming of the mountains and valleys throughout most of the state are all expressions of the tectonic forces from the transform tectonic plate boundary of the Pacific and North American plates. All related geotechnical hazards (i.e., seismicity, groundshaking, liquefaction, dynamic settlement, soil and bedrock stability, and earthquake induced landslides) were evaluated as part of Geotechnical Report (Appendix E-1 of the Draft EIR) and summarized in Section 4.7, Geology and Soils of the Draft EIR (see Section 4.7.1 Existing Conditions beginning on page 4.7-1). Implementation of the Project would not exacerbate any seismic conditions or have any effect at all on the tectonic forces ongoing deep beneath the ground surface. Adherence to current building code standards and geotechnical practices would ensure that all improvements are designed and constructed to minimize damage from underlying geotechnical conditions and seismic activity that could occur during project operation.

03-11 As discussed on page 3-19 of Chapter 3, Project Description of the Draft EIR, the total Project earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site parcel adjacent to The Old Road that would be constructed with manufactured slopes. The grading would balance onsite, and as such, no import or export of soils would be required for the Project. The Project would be required to comply with the standards set forth in Appendix J, Grading of the LACBC, which are applicable to grading, excavation, and earthwork construction, including fills and embankments, and the control of runoff from graded sites, including erosion sediments and

construction-related pollutants. The Project would also be subject to a Conditional Use Permit (RPPL2021003113) for grading exceeding 100,000 cubic yards.

The analysis provided in Section 4.7, Geology and Soils, of the Draft EIR, supports the determination that there would be no significant geology and soils impacts associated with earth movement. As discussed on page 4.7-14 of the Draft EIR, prior to issuance of a grading or building permit, the Project Applicant would be required to submit a final design-level geotechnical report to the County. The report would be submitted to Los Angeles County Public Works for review and approval. Prior to filing the Final Map, the Applicant would be required to comply with any conditions contained within Public Works' issuance of a Geology and Soils Report Approval Letter for the Project, made in response to the final design-level geotechnical report, and as it may be subsequently amended or modified by Public Works' GMED. The final geotechnical report, which is also required by the CBC, would be based on the final Project design and would require final approval by the GMED prior to issuance of a grading permit. The Sierra Club comments that it would be unthinkable to provide housing here, particularly for senior citizens, presumptively because of earthwork. However, Section 4.7 of the Draft EIR supports the determination that there would be no significant geology and soil impacts associated with earth movement.

03-12 Potential impacts related to greenhouse gas emissions are addressed in Section 4.8, Greenhouse Gas Emissions, of the Draft EIR. As stated on page 4.8-36 of the Draft EIR, the Project would include solar roof installations in accordance with Title 24 requirements. Additionally, implementation of MM-4.8-3, Energy Conservation, requires sustainability features such as a 7-kilowatt (kW) solar photovoltaic electric generating system at the Project's on-site recreation center building. As stated on page 4.8-53 of the Draft EIR, through implementation of MM-4.8-3, the Project would use Light-Emitting Diode (LED) lighting or other high efficiency lightbulbs for outdoor lighting. As stated on page 4.8-63 of the Draft EIR, per MM-4.8-2, Electrify Buildings, all the Project's buildings must be powered fully by electricity, with no natural gas infrastructure or appliances. As stated on page 4.8-36 of the Draft EIR, the Project would include electric vehicle charging stations in accordance with the County's Green Building Code as well as per MM-4.8-5, Encourage Electric Vehicles, which exceeds Code requirements. As discussed on page 4.8-37 of the Draft EIR, the Project would be built to all of the County's Green Building Standards. As stated on pages 4.8-64 and 4.8-65 of the Draft EIR, with implementation of required mitigation measures, Project impacts related to greenhouse gas emissions would be less than significant.

03-13 Regarding potential for loss of life and property associated with wildfire events, as stated on page 4.20-35 of Section 4.20, Wildfire, of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones on and off site and would not exacerbate the existing fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 and required through implementation of MM-4.20-2, Alternative Materials and Methods, and MM-4.20-3, Annual Fuel Modification Zone Inspection, as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, Wildfire Education Program, would reduce potential impacts related to wildfire to a less than significant level.

Regarding evacuation in the event of a wildfire, please refer to the response provided above in Topical Response-1. As discussed therein, the County would coordinate a centralized emergency operation in the event of an emergency/disaster. To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, which requires the preparation of Project-area-specific procedures for wildfire evacuations for all vulnerable populations that would be provided to homeowners.

A Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR) was prepared to evaluate the Project's consistency with relevant emergency evacuation plans and emergency response plans, disclose the prevention and minimization regulations and measures applicable to the Project, and determine evacuation times for the existing and post-Project conditions, as well as provide emergency preparedness information and resources to increase occupant preparedness and facilitate efficient evacuation in the event of an emergency. Importantly, emergency personnel who issue evacuation orders can consider the additional time needed to implement an evacuation when determining when and where to issue evacuation orders. Risk to nearby development, including the Project or existing communities, is assessed on a regular basis in a wildfire event. Hours or days of lead time may be available to assess risk and make evacuation determinations. Moreover, drifting smoke, awareness of the risk, road closures, or other factors result in people avoiding the area in a fire event.

In short, a variety of factors may make a longer evacuation perfectly safe. That is why a multifaceted approach to fire-resilient development is required and is incorporated into the Project. The Project's fire-resistant design features include ignition resistant construction methods, hardened structures and corridors, including a perimeter fire access lane, fuel modification zones, roadside fuel modification, and sufficient fire flow for firefighting efforts. Additionally, the Project is designed to allow people to shelter-in-place or take temporary refuge within the Project site (which could reduce evacuating traffic from the Project site).

Regarding ingress/egress to the Project site, as discussed on page 4.20-45 in Section 4.20, Wildfire, of the Draft EIR, the Project's internal circulation consists of a loop roadway system that connects both the primary and secondary access points along The Old Road, which satisfies secondary access requirements detailed in Los Angeles County Code of Ordinances Title 21, Chapter 21.24, Design Standards, Part 1, Access. The Project also includes a 28-foot-wide private emergency access road along the northern and western perimeter for emergency vehicle access.

03-14 The commenter is correct in the assertion that the Project, in accordance with MM-4.20-1, Wildfire Education Program, would require wildfire education for homeowners (see discussion on page 4.9-25 in Section 4.9, Hazards and Hazardous Materials, of the Draft EIR for further details). However, as discussed on page 4.15-33 in Section 4.15, Public Services, of the Draft EIR, the Los Angeles County Fire Department (LACoFD) determined that a new on-site fire station is not required for the Project. However, as the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. Furthermore, as discussed in Section 2.4.1.2, Project Specific Fire-Resistant Design Feature, of Topical Response-1, in addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area.

03-15 As discussed on page 4.20-45 in Section 4.20, Wildfire, of the Draft EIR, the Project's internal circulation consists of a loop roadway system that connects both the primary and secondary access

points along The Old Road, which satisfies secondary access requirements detailed in Los Angeles County Code of Ordinances Title 21, Chapter 21.24, Design Standards, Part 1, Access.

03-16 An analysis of the Project's potential hydrology and water quality impacts in accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the State CEQA Guidelines is provided in Section 4.10, Hydrology and Water Quality, of the Draft EIR (see Section 4.10.5, Impact Analysis, beginning on page 4.10-21 as well as Section 4.10.6, Cumulative Impact Analysis, beginning on page 4.10-34 of the Draft EIR). The analysis is supported by several technical studies, referenced on page 4.10-1 of the Draft EIR, which are included as appendices to the Draft EIR. As summarized on pages 4.10-39 and 4.10-40 of the Draft EIR, Project impacts related to hydrology and water quality would be less than significant and no mitigation is required.

In addition, Section 4.19, Utilities and Service Systems, addresses water supply availability under Threshold 4.19b beginning on page 4.19-25 of the Draft EIR. As supported by the Project-specific Water Supply Assessment (WSA) (included as Appendix L-2 of the Draft EIR) and the Addendum to the WSA (provided as Appendix L-3 of the Draft EIR) prepared by the Santa Clarita Valley Water Agency, the analysis determined that the Project would have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years. (Additional discussion related to the Project's WSA is included below in Response to Comment O3-25.)

03-17 As stated in Chapter 3, Project Description on page 3-4 of the Draft EIR, General Plan land use designation for the Project site is H2-Residential 2, which would allow for development of the Project as currently proposed with incentives and waivers proposed, and no legislative actions. Regarding disturbance of natural areas/habitat, as discussed in Section 4.11, Land Use and Planning, on page 4.11-53 of the Draft EIR, while the Project includes developed areas and improved open space areas, approximately 150 acres of the Project site would be maintained as natural open space, of which approximately 144.43 acres would be placed within a conservation easement. The Project's proposed off-site conservation area further preserves an additional 466.7 acres of natural open space adjacent to existing publicly owned lands within the same SEA as the Project. Regarding the Project's location within a Very High Fire Hazards Severity Zone (VHFHSZ), potential impacts related to wildfire are discussed in detail in Section 4.20, Wildfire, of the Draft EIR (beginning on page 4.20-22). As discussed therein, potential wildfire impacts would be less than significant with mitigation incorporated. A more detailed response related to wildfire concerns is provided above Topical Response-1.

03-18 Regarding affordable housing standards, as discussed in Chapter 3, Project Description, on pages 3-9 and 3-10 of the Draft EIR, the Project includes affordable housing in compliance with the County's Inclusionary Housing ordinance (IHO) (Title 22 – Planning and Zoning, Division 6 – Development Standards, Chapter 22.121 – Inclusionary Housing, of the Zoning Code), which requires a minimum 5% for-sale affordable housing set aside. The Project's 510 total dwelling units include 24 for-sale inclusionary condominium units for moderate- and middle-income levels and 47 very low-income, rental senior citizen apartment units (with one manager's unit, for a total of 48 units within one multifamily building) and 438 market-rate condominium units. Therefore, the Project with the County's IHO requirements. Additionally, in accordance with both State law and the County's Zoning Code, the Project includes additional affordable housing for very-low-income seniors.

03-19 Based on the absence of significant Project-related traffic noise impacts on local roadways, it was not necessary to evaluate the effect of adding Project trips to I-5 (because Project trip contributions to I-5

represented a far smaller percentage increase to existing trips along I-5). As discussed in Section 4.13, Noise, on page 4.13-7 of the Draft EIR, long-term ambient measurement results for receptor 5 (R5) capture traffic noise contributions from I-5 and The Old Road at an existing representative residential neighborhood in the immediate Project vicinity as part of the characterization of existing community noise levels along this transportation corridor. The 24-hour sound level measurements capture transportation peak hours for these roadways. In addition, based upon roadway traffic data from the transportation analysis (provided as Appendix J of the Draft EIR), existing and existing plus Project traffic noise exposure along Project roadway segments (including segments of The Old Road adjacent to I-5) were modeled using worksheets based upon the Federal Highway Administration Traffic Noise Model. Based upon this modeling, the existing (without Project) traffic noise exposure was compared to the "with Project" traffic noise exposure along roadways to which the Project would primarily contribute trips, to determine if a significant Project-related traffic noise increase would occur. All noise modeling worksheets are provided in Appendix H of the Draft EIR.

03-20 As discussed above in Response to Comment 03-18, the Project includes affordable housing for very-low-income seniors (47 dwelling units). However, social and economic effects, such as the cost of housing, are not environmental impacts that CEQA requires the Lead Agency or Project Applicant to analyze or mitigate. According to State CEQA Guidelines Section 15064(e) "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Thus, economic and social implications of the Project are not within the scope of required environmental analysis. This comment is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

03-21 As discussed in Section 4.15, Public Services, on page 4.15-39 of the Draft EIR, the Project would dedicate approximately 150 acres of preserved open space supporting an on-site network of trail facilities which connect to other dedicated facilities located within parks adjacent and near to the Project site, as well as approximately 24 acres of HOA-maintained open space and active and passive open space areas located throughout the Project site. The Project would also provide a recreation center on 1.13-acres in the central portion of the Project site. Furthermore, pursuant to the County's Quimby Code (Sections 21.24.340, 21.240.350, and 21.28.140 of the County Code), the Project would be required to pay an in-lieu fee, which could be used for the purpose of acquiring local park land or developing new or rehabilitating existing parks (see page 4.15-40 of the Draft EIR). As stated on page 4.15-41 of the Draft EIR, due to the provision of parks, trail, open space, and recreational amenities, and the adequate and/or above average condition of existing parks available in proximity to the Project site, the Project would not create capacity or service level problems, or result in the need to construct new park facilities (beyond what the Project is already providing).

03-22 The Project would not result in the loss of any natural recreation areas to the south of the Project site. Regarding existing on-site trails located within the southern portion of the Project site, the Project site is private property. While the existing on-site trails are being utilized by the public, these trails are located on private land and are therefore being used without the land owner's permission. However, with implementation of the Project, existing on-site trails within the southern portion of the Project site would be preserved and made available to the public. See Section 4.16.5, Impact Analysis, of Section 4.16, Recreation, of the Draft EIR, for information on the less than significant recreational impacts of the Project. As detailed in this analysis, the Project would result in less than significant impacts

regarding increase of the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Regarding bikeway evaluation, while the Project would expand The Old Road and implement bike lane improvements abutting the Project site, implementation of the Project would not interfere with or otherwise prevent future construction of other bicycle facilities along The Old Road as identified in the Los Angeles County Bicycle Master Plan.

03-23 A Project-specific Transportation Impact Analysis (TIA) was prepared by a senior transportation planner at Fehr and Peers, an experienced traffic engineering firm, under the supervision of a registered professional traffic engineer and is provided as Appendix J of the Draft EIR. The TIA was used to help analyze the Project's potential transportation impacts (see the impact analysis provided in Section 4.17, Transportation, of the Draft EIR beginning on page 4.17-15). Regarding consideration of public transit, as stated on page 4.17-2 of the Draft EIR, there are four local and four express Santa Clarita Transit bus routes in the Project site vicinity. Section 4.17 of the Draft EIR includes an analysis of the Project's potential to conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including public transit (refer to Threshold 4.17a beginning on page 4.17-15 of the Draft EIR). The Project would implement a Transportation Demand Management (TDM) Program in accordance with MM-4.17-2, which includes strategies that emphasize the use of alternative travel modes, such as cycling and public transit. For example, in accordance with MM-4.17-2, the Project Applicant will provide subsidized/discounted daily or monthly public transit passes to encourage public transit use. Additionally, as stated on page 4.17-21 of the Draft EIR, with implementation of MM 4.17-1, the Project's impacts related to Southern California Association of Government's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, the County of Los Angeles General Plan, the County's TIA Guidelines, and One Valley One Vision related to impacts to the circulation system, including transit, roadway, bicycle, and pedestrian facilities, would be less than significant.

03-24 Section 4.18, Tribal Cultural Resources, of the Draft EIR describes the existing conditions of the Project site and vicinity related to tribal cultural resources (TCRs), identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts analysis, mitigation measures, level of significance after mitigation, and references (see Section 4.18, Tribal Cultural Resources of the Draft EIR beginning on page 4.18-1). As discussed on page 4.18-12 of the Draft EIR, the Project complied with all applicable Assembly Bill (AB) 52 requirements, including engaging in formal consultation with the Fernandeño Tataviam Band of Mission Indians. Table 4.18-1 on page 4.8-5 of the Draft EIR summarizes the results of the AB 52 process for the Project. As noted in Table 4.18-1, a request for formal consultation from the Fernandeño Tataviam Band of Mission Indians was received on July 25, 2022. Formal AB 52 consultation with the Fernandeño Tataviam Band of Mission Indians was concluded on December 5, 2022. The confidential AB 52 consultation results are on file with the County. As summarized on pages 4.18-15 and 4.15-16 of the Draft EIR, Project impacts related to TCRs would be less than significant with mitigation incorporated.

03-25 Potential impacts related to the availability of sufficient water supplies and the relocation or construction of new or expanded water, wastewater treatment, and stormwater drainage facilities are discussed in Section 4.19, Utilities and Service Systems (see impact analysis beginning on page 4.19-19 of the Draft EIR). Additional analysis of potential hydrology and water quality impacts related to stormwater drainage is provided in Section 4.10, Hydrology and Water Quality (see impact analysis

beginning on page 4.10-21 of the Draft EIR). As discussed therein, all potential impacts would be less than significant, and no mitigation is required.

Regarding water availability and the current water crisis, in preparing the Project's WSA, the Santa Clarita Valley Water Agency Water (SCV Water) considered the urban water shortage contingency planning analysis set forth in the 2020 Urban Water Management Plan and 2020 Water Shortage Contingency Plan in determining the sufficiency of water supplies for the Project, in addition to all existing and planned future uses in SCV Water's service area. These documents also explain how SCV Water's reliability planning provisions of these adopted documents assist SCV Water in responding to drought conditions, including the severe drought conditions that currently exist (Draft EIR, page 4-33 and Appendix L-2). As stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's WSA concludes that the total projected water supplies available to SCV Water's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

03-26 Regarding comments related to wildfire and evacuation concerns, please refer to the response provided above for Comment 03-13, as well as Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

03-27 Regarding the presence of an on-site fire station and the required wildfire education program, please see response provided above for Comment 03-14. As stated above, LACoFD determined that a new on-site fire station is not required and is thus not included as part of the Project. As stated on pages 4.20-28 in Section 4.20, Wildfire, of the Draft EIR, implementation of MM-4.20-1 would ensure that a strong educational outreach program for wildfire and evacuation is provided for the Project, thus supporting successful evacuations in the event of a wildfire emergency.

03-28 This conclusionary statement does not express adequacy concerns related to the environmental analysis in the Draft EIR. The commenter's opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

INTENTIONALLY LEFT BLANK

Comment Letter O4

From: Karina Winkler
To: Erica G. Aguirre
Subject: The Trails at Lyons Canyon
Date: Thursday, January 30, 2025 1:33:33 PM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre,

I am writing to express my enthusiastic support for The Trails at Lyons Canyon development. This project represents a critical step forward in addressing our community's need for affordable senior housing while preserving the natural beauty of our region.

The inclusion of 71 affordable housing units for very-low-income seniors is a highlight of this project. These homes will provide a safe, comfortable, and accessible living environment for some of our most vulnerable residents, allowing seniors to age in place with dignity. This much-needed housing will ease the burden on many families in our area who are seeking affordable options for their aging loved ones.
Equally impressive is the project's commitment to open space preservation. By dedicating 176 acres of the 233-acre site to natural and improved open space, The Trails at Lyons Canyon will protect the local environment and enhance our community's quality of life. This open space will not only safeguard natural habitats but also provide opportunities for recreation and connection to nature, ensuring that the area's natural beauty is preserved for future generations.

O4-1

In addition to these benefits, the project is designed with thoughtful planning to integrate seamlessly into the surrounding area, minimizing environmental impact while addressing housing and community needs. This balance of progress and preservation makes The Trails at Lyons Canyon a model for responsible development.

Please consider this thoughtful project, as it will bring much-needed senior affordable housing and greater access to public open space to the Santa Clarita Valley.

Thanks.

Karina Winkler | **General Manager**
Holiday Inn Express & Suites Valencia - Santa Clarita
27501 Wayne Mills Pl.Valencia,Ca 91355
Hotel: 661-284-2101 Fax: 661-284-3550

Response to Comment Letter O4

Holiday Inn Express and Suites Valencia – Santa Clarita
Karina Winkler, General Manager
January 30, 2025

O4-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

Comment Letter 05

From: Lindsay Schlick
To: Erica G. Aguirre
Cc: Lindsay Schlick
Subject: The Trails at Lyons Canyon - Project No.: PRJ2021-001195
Date: Thursday, January 30, 2025 5:00:49 PM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre,

As a longtime Santa Clarita resident and local business owner, I wanted to share my support for The Trails at Lyons Canyon project. I see this development as a great opportunity for our community—one that balances responsible growth with environmental preservation, much-needed housing, and enhanced fire safety measures.

One of the standout features of this project is its commitment to fire safety. With ignition-resistant building materials, interior fire sprinkler systems, and a well-maintained fuel modification zone, this development takes wildfire prevention seriously. The addition of drought-tolerant, low-fuel perimeter landscaping further reinforces its proactive approach to safety—something that's so important for communities in fire-prone areas like ours.

Beyond safety, I appreciate that The Trails at Lyons Canyon is designed with the community in mind. By preserving 176 acres of open space and creating housing opportunities for families and seniors, this project is thoughtfully planned to meet real needs while respecting the surrounding environment.

For these reasons, I hope the Planning Commission will approve this project. It's a smart, forward-thinking addition to Santa Clarita that prioritizes both safety and sustainability.

05-1

Best wishes,

Stay beautiful, inside and out!

Lindsay & Brian Schlick & Team SchlickArt!
SchlickArt.com
Tel (Lindsay) : 661 313 3907
Tel: (Brian) : 661 309 5326
lindsay@schlickart.com
brian@schlickart.com

**At SchlickArt we operate a boutique studio concentrating on quality portraiture, not quantity.
We book our sessions well in advance to ensure your photoshoot is customized just for you…
Short notice cancelations put us in a very tough position because it is impossible to create a customized shoot on short notice…
**We also have to issue a cancelation stipend to our hair and makeup artists every time there are cancelations!
With that said, we have a strict $250 cancelation/rescheduling fee for any cancelations/rescheduling within three weeks of your session.
Thank you for valuing and respecting our schedule. And we look forward to seeing you at your appointment.

Response to Comment Letter O5

Team SchlickArt
Lindsay and Brian Schlick
January 30, 2025

O5-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

Comment Letter 06

From: Karen Bryden
To: Erica G. Aguirre
Subject: Trails at Lyons Canyon
Date: Thursday, January 30, 2025 6:41:20 PM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre:

As a resident of Stevenson Ranch near this project location, I am writing to express my support for The Trails at Lyons Canyon. I believe this development will bring significant benefits to our community.

One of the most commendable aspects of this project is its commitment to preserving open space. By dedicating 83% of the property as protected open space, The Trails at Lyons Canyon will ensure that 616 acres remain natural and undeveloped, providing a sanctuary for local wildlife and a place for residents to connect with nature.

The inclusion of 510 new homes, with 71 units designated as affordable housing for **very-low-income seniors** and middle-income working families, addresses the pressing need for attainable housing in our area. This thoughtful approach ensures that our community remains inclusive and diverse, providing opportunities for individuals and families to live and thrive here.

In comparison to the 2009 plan, which proposed large luxury estate homes spread across 230+ acres, I specifically like that Lyons Canyon offers a more sustainable and community-focused alternative. The previous plan posed significant fire risks and disturbed sensitive ridgelines, whereas the current proposal reduces development impact and preserves more open space.

Additionally, the project plans to connect to over 20 miles of adjacent hiking and nature trails, enhancing recreational opportunities for all residents. This integration promotes a healthy lifestyle and fosters a sense of community among trail users, as an avid hacker I am very excited about the trail enhancements.

I would strongly urge the Planning Commission to approve it. This development represents a balanced and forward-thinking approach to growth, benefiting both current and future residents and again , I believe this project will be a positive addition to our community.

I appreciate your time and consideration of this project

Thank you.

Warmest Regards~

Karen L Bryden
President
SCV Locations Inc
661-510-6366
Scvlocations.com

06-1

Response to Comment Letter O6

SCV Locations Inc.
Karen L Bryden, President
January 30, 2025

O6-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

Comment Letter 07

SCOPE
Santa Clarita Organization for Planning and the Environment
TO PROMOTE, PROTECT AND PRESERVE THE ENVIRONMENT, ECOLOGY AND QUALITY OF LIFE IN THE SANTA CLARITA VALLEY
POST OFFICE BOX 1182, SANTA CLARITA, CA 91386

1-31-25

Erica Aguirre, Senior Planner
Los Angeles County Dept of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Via email to: EAguirre@planning.lacounty.gov

Re: Request for extension and for a hard copy of the DEIR to be supplied to the Stevenson Ranch Library - Lyons Canyon Project, Project No. 2021-001195-(5), Case No(s). Vesting Tentative Tract Map No. 83301 (RPPL 2021003061), and all accompanying permits

07-1

Dear Ms. Aguirre:

Please enter this request and comment into the Administrative record for this project.

Formed in 1987 by local residents, Santa Clarita Organization for Planning and the Environment is the oldest local planning and conservation group in the Santa Clarita Valley. We have long focused on protecting the Santa Clara River, our oak resource and water and air quality in the SCV.

07-2

First the outcome of this proposal is very important to the community because of it many impacts on schools, the increased wildfire danger, and its proximity to Towsley Canyon Open Space, a well-known and cherished hiking area. Issues such as sanitation and water capacity, not to mention the loss of native oaks, all make it a serious concern to the community. Yet when we went to the Stevenson Ranch Library, thinking there would be a hard copy of the EIR to read and discuss with interested members of the community, all that was available was a flash drive. This is not what was advertised in your notice of availability and is not sufficient public availability of the document for the following reasons:

07-3

- Newer computers no longer have slots for usb ports, so the flash drive is useless
- Downloads are extremely slow, especially if they contain large maps.
- Maps are difficult to read on small computer screens and difficult to review at a working group meeting.

We therefore ask that you provide a hard copy of the DEIR to the Stevenson Ranch Library and that you extend the comment period for another 30 days after its arrival there, so that the interested public has a document available for review and the time to review it.

07-4

Further, many of our members and several of our Board members were affected by the Hughes fire. While their houses did not burn, they had to evacuate for several days and suffered the anxiety and expense of that experience. It was also very time consuming to move livestock, pets and personal items out of the fire area and then have to move them back in again. As a result, we lost considerable time that would have otherwise been spent reviewing this document.

07-5

We hope that you will honor these requests and advise us of your response as soon as possible. 07-5 Cont.

Last, we provided a timely response to the Notice of Preparation for this DEIR on July 15th, 2022 (attached) However, for some reason it was not included in the NOP comment letter section. We do have a record of submitting this comment that can be provided upon request. We ask that you circulate our letter as an omission to everyone that received the DEIR notification. 07-6

Thank you in advance for addressing these issues.

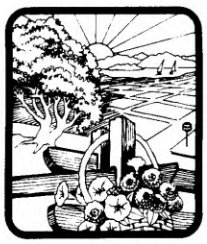
Sincerely,

Lynne Plambeck
President

Attachment 1

SCOPE NOP Comment Letter

SCOPE
Santa Clarita Organization for Planning and the Environment
TO PROMOTE, PROTECT AND PRESERVE THE ENVIRONMENT, ECOLOGY AND QUALITY OF LIFE IN THE SANTA CLARITA VALLEY
POST OFFICE BOX 1182, SANTA CLARITA, CA 91386



7-15-22

Erica Gutierrez, Senior Planner
Los Angeles County Dept of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Via email to: egutierrez@planning.lacounty.gov

Re: Notice of Preparation of a Draft Environmental Impact Report
Lyons Canyon Project, Project No. 2021-001195-(5), Case No(s). Vesting Tentative Tract Map No. 83301 (RPPL 2021003061), and all accompanying permits

07-7

Dear Ms. Gutierrez:

Formed in 1987 by local residents, Santa Clarita Organization for Planning and the Environment is the oldest local planning and conservation group in the Santa Clarita Valley. We have long focused on protecting the Santa Clara River, our oak resource and water and air quality in the SCV.

07-8

This NOP must be re-issued and re-circulated
According to a recent Subdivision Committee Report (dated June 9th, prior to the NOP being circulated), this project plans to remove and/or encroach on 454 SEA Protected Trees including 316 oak trees (30 of which are Heritage Trees), and 138 non-oak, non-heritage SEA protected trees. The NOP did not disclose this information.

07-9

The high number of tree removals would affect comments on biological impacts, GHG gases (carbon sequestration), fire hazard and possibly other section. The public is thus prejudiced by this failure to disclose. This is important information that the public would need and want to know when making comments on the NOP under Title 14, Section 15082(a) of the California Code of Regulations. Since the County was aware of this information prior to the circulation of the NOP, we believe this constitutes non-compliance of the above section and a failure of public transparency. We therefore ask that the NOP be **re-issued and re-circulated with the information included about the number of trees to be removed.**

07-10

Future Notices
Please provide us all future notices related to this project at the above address.

07-11

Project Alternatives
This new proposed project supersedes a smaller, more environmentally sensitive project that was approved in this same location in 2006. Since an approved project is obviously a viable alternative, the previous project, along with a no project alternative should be considered and evaluated in the EIR.

07-12

Biological Resources

Mountain Lion

This area is known and identified habitat for the Southern California Mountain Lion, now being considered for CA endangered species status. Studies examining how this substantial loss of habitat will affect this iconic mammal must be conducted. 07-13

Listed Flora and Fauna

The previous project EIR listed many endangered and threatened plants, reptiles and bird species that inhabit this site. New surveys for these species must be conducted. 07-14

Oak and SEA Tree Resource

SEA Trees, and especially oaks, are a keystone species for the California chaparral ecosystem. Many animals depend on them. How will such a substantial removal affect this wildlife corridor habitat? An up to date oak tree report must be provided. 07-15

Significant Ecological Area Ordinance

We believe that this proposal does not comply the County SEA ordinance. Please address this issue. 07-16

Wildlife Corridor area

This area is part of the wildlife corridor between the Santa Susanna and San Gabriel Mountains. Surveys of the corridor use must be provided. Please describe how the loss of this habitat will affect the wildlife corridor and the animals that use it. 07-17

These substantial impacts to biological impacts are significant and will require a statement of over-riding consideration if the project is allowed to move forward. 07-18

Fire Hazard

This project is located entirely within a VHFHZ fire designation. As temperatures continue to increase due to climate change and wildfires increase in chaparral areas, such locations become more and more dangerous for residential housing. We therefore believe that this is a highly inappropriate location for new housing; that it doesn't comply with the General Plan Safety Element, evacuation requirements or the County Fire Code. In the last two decades at least three fast moving major wildfires have occurred in the immediate vicinity of this proposed project, along with several smaller ones, the most recent being in 2016, requiring the evacuation of the Post Office facility on the Old Road near this project. We believe that it is time that the County pays serious attention to avoiding approvals such as this project that are located in a high fire hazard zone and thus avoid putting future residents at risk as well as creating a massive expense for the County to fight fires when they occur. 07-19

Sage Fire July 2016 – very close to the proposed location of this project, required 2000 evacuations 07-20

Sage Fire - 2016 07-21

Fire must be considered a significant impact. The County must look carefully at any burden of proof it might consider as a means to ignore these impacts. 07-22

GH Gases and Climate Change

We see that the NOP states a Climate Change chapter will be included in the EIR. We note that there is no nearby public transportation to this auto oriented project. In addition to generation of GHG by transportation, it is imperative that the EIR address the loss of Oaks and its affect on carbon sequestration resulting from the substantial destruction of trees in this proposal. 07-23 07-24

If the goal is to minimize global warming, climate scientists often stress the importance of afforestation, or planting new forests, and reforestation, or regrowing forests. But there is a third approach to managing existing forests: proforestation, a term coined by climate scientist William Moomaw to describe the preservation of older existing forests. (Moomaw was a lead author of five major reports of the Intergovernmental Panel on Climate Change, which was awarded the Nobel Peace Prize in 2007.) All of these strategies have a role to play. This naturalist has helped show just how much more valuable proforestation (not cutting down trees in the first place) is than was first thought.[1] 07-25

Maintaining our County tree cover is essential to reducing climate change, air pollution[2] and reducing the urban heat island effect. Mature trees are especially effective at removing carbon from the atmosphere. According to the Arbor Day Foundation, **trees help reduce the effects of climate change.** 07-26

> *Trees absorb carbon dioxide (CO^2), removing and storing the carbon while releasing the oxygen back into the air. In one year, an acre of mature trees absorbs the amount of CO^2 produced by a car driven 26,000 miles. During one year, a mature tree will absorb more than 48,000 pounds of carbon dioxide from the atmosphere and release oxygen in exchange.*[3]

To conform to its Climate Action Plan, the County should also require full electrification of all housing and facilities in this project. 07-27

Water Supply

Although we are aware you have received a Water Supply Assessment (WSA) from the local water agency stating that there is adequate water to supply this project, we do not concur. The SCV is currently in a drought and under a stage 2 cutback. The State of California has ordered a 20% cutback of water use and has forbidden watering of non-functional turf (lawns). As climate warming increases, impacts to the Sierra snowpack on which we depend for 50% of our water supply in the SCV will continue to be reduced or even become non-existent forcing extreme water cutbacks. The WSA did not disclose the extent of future cutbacks that may occur, used old reports and failed to make clear the extent of well closures from PFAS, perchlorate and volatile organic compounds (VOCs) pollution in our valley. We see that you will include an analysis of water supply in the EIR and ask that these issues be analyzed as required by law. 07-28

The SCV Water Agency received substantial public opposition to its WSA for this project. 07-29

Consistency with General Plan requirements

The EIR should detail how this project will comply with the LA County General Plan, including the Safety Element, the Climate Action Plan, the SEA Ordinance, Hillside Management, etc., including most notably the One Valley, One Vision area plan update that purports to reduce density in County 07-30

[1] The Old Man and the Tree, Smithsonian, Jan 2022, https://www.smithsonianmag.com/science-nature/the-old-man-and-the-tree-180979242/

[2] **Oak trees in Southern U.S. cities are natural urban air filters, Trees remove black carbon, or soot, from the atmosphere**, National Science Foundation, Sept., 2019 , https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=299154

[3] Arbor Day Foundation, https://www.arborday.org/trees/treefacts/

areas and increase density within the City of Santa Clarita, especially near transportation corridors. This project is not consistent with these plans and ordinances.

07-30 Cont.

We concur with the other EIR categories that the County has listed for inclusion in the NOP.

07-31

Thank you in advance for your careful consideration of our comments.

Sincerely,

Lynne Plambeck
President

INTENTIONALLY LEFT BLANK

Response to Comment Letter O7

Santa Clarita Organization for Planning and the Environment (SCOPE)
Lynne Plambeck, President
January 31, 2025

O7-1 This comment presents the subject of the letter, including a request for an extension of the public review period of the Draft EIR. The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments will be received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O7-2 The comment is introductory in nature and does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. Regarding the administrative record, this comment has been received and is included as part of the Final EIR, as represented by these responses to comments.

O7-3 Regarding impacts to schools, see Section 4.15, Public Services, of the Draft EIR determined less than significant impacts would occur. As discussed on page 4.15-38 of the Draft EIR, school districts impose fees on new residential and commercial development to compensate for the impact that a project would have on existing school facilities or services, as set forth in Senate Bill (SB) 50 and Section 65996 of the California Government Code. The Project would be required to pay fees to affected school districts. These fees are imposed to finance construction or reconstruction of school facilities needed to accommodate students coming from new developments. Payment of SB 50 fees by the Project Applicant is considered by the State to represent full mitigation to all potential impacts to school services and facilities.

Regarding impacts related to wildfire, Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a VHFHSZ. As discussed in Section 4.20, impacts were determined to be less than significant with the implementation of mitigation measures MM-4.20-1 through MM-4.20-5. Please refer to Topical Response-1, which addresses issues related to wildfire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Regarding impacts to open space (i.e., Towsley Canyon), as discussed on pages 4.4-59 and 4.4-60 in Section 4.4, Biological Resources, of the Draft EIR, as a result of its clustered design, the Project permanently preserves approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area. Habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. As discussed in further detail in Section 4.4 of the Draft EIR, with implementation of required mitigation measures MM-4.4-1 through MM-4.4-16, all potential biological resource impacts would be reduced to a less than significant level. Furthermore, the Project would not encroach into park areas of Towsley Canyon. However, existing non-dedicated trails on the southern

portion of the Project site would remain with implementation of the Project and would connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon.

Regarding impacts to sanitation and water capacity, Section 4.19, Utilities and Service Systems, of the Draft EIR determined impacts would be less than significant. The Project would be adequately served by wastewater facilities. As detailed on pages 4.19-21 through 4.19-22, the Project would connect to existing infrastructure and comply with applicable regulations to reduce impacts associated with wastewater conveyance and treatment. Moreover, as supported by analysis contained in the Sewer Area Study (Appendix L-5 of the Draft EIR), the Project would contribute to a small percentage of available treatment capacity. Regarding water availability, in preparing the Project's Water Supply Assessment (WSA), the Santa Clarita Valley Water Agency Water (SCV Water) considered the urban water shortage contingency planning analysis set forth in the 2020 Urban Water Management Plan and 2020 Water Shortage Contingency Plan in determining the sufficiency of water supplies for the Project, in addition to all existing and planned future uses in SCV Water's service area. These documents also explain how SCV Water's reliability planning provisions of these adopted documents assist SCV Water in responding to drought conditions, including the severe drought conditions that currently exist (see page 4-33 in Appendix L-2 of this Draft EIR). As stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's WSA concludes that the total projected water supplies available to SCV Water's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

Regarding impacts to native oak trees, a total of 334 SEA-Protected Trees would be impacted by the Project, including 232 oak trees (22 of which are Heritage Trees). Therefore, the Project would comply with Section 22.102.070, Protected Tree Permit of the Los Angeles County Code. Additionally, the Project would incorporate mitigation measures to reduce impacts to oak trees. As detailed further in Section 4.4, Biological Resources, of the Draft EIR, implementation of MM-4.4-1 would require preservation of the remaining oak woodland within the On-Site Conservation Area and MM-4.4-9 would require the preservation of off-site oak woodland. Pursuant to MM-4.4-16, SEA Protected Tree Replacement/Compensation, the Project's required Conservation Management Plan must include a Protected Tree Replacement Plan that will dictate the establishment of required replacement trees. As shown on page 4.4-93 of the Draft EIR, of the 772 required replacement trees, 574 would be oak trees. Additional mitigation is incorporated to reduce impacts to oak trees, as detailed further in Section 4.4 of the Draft EIR. Given this, the Project's required mitigation would reduce potential oak woodlands impacts to below a level of significance under CEQA.

07-4 This comment requests that hard copies of the Draft EIR be provided to the Stevenson Ranch Library. Regarding accessibility and the availability of the Draft EIR to review during the public review period, it should be noted that the Notice of Availability (NOA), dated December 10, 2024, stated digital and/or hard copies of the Draft EIR would be available at Stevenson Ranch Library. A hard copy of the Draft EIR was also available at County Planning's main office and was available for viewing. County staff did not receive any requests from the public for a hard copy. In any case, an updated NOA was released on February 6, 2025, which extended public review for an additional 31 days. See Response to Comment 07-1 for more information. The updated NOA specified the reviewing locations for the Draft EIR, including digital copies, which are viewable/downloadable online. In addition, a hard copy of the documents was made available at Stevenson Ranch Library during normal business hours.

07-5 This comment states the recent Hughes fire limited the public's availability to review the Draft EIR and requests an extended review period. Please see Response to Comment O7-1, above, for details on the review period extension.

07-6 This comment states that the NOP comment letter provided by the commenter was not included in the Draft EIR. This NOP comment letter, dated July 15, 2022, has been received and revisions to the Draft EIR are reflected in Chapter 3, Revisions to the Draft EIR, of this Final EIR. Further, the NOP comment letter is included within this Final EIR as part of Comment Letter O7. See responses to the NOP comment letter, included as Responses to Comments O7-7 through O7-31.

07-7 This comment is introductory in nature. The comment does not express adequacy concerns related to the environmental analysis in the Draft EIR.

07-8 This comment is introductory in nature. The comment does not express adequacy concerns related to the environmental analysis in the Draft EIR.

07-9 State CEQA Guidelines Section 15082(a)(1) through (4) states the notice of preparation shall provide the responsible and trustee agencies, the Office of Planning and Research and county clerk with sufficient information describing the project and the potential environmental effects to enable the responsible agencies to make a meaningful response, including at a minimum: a description of the project, location of the project, and probable environmental effects of the project. A project description necessary for evaluation and review is required for an EIR, as outlined in CEQA Guidelines Section 15124. For the purposes of releasing the NOP, the lead agency is not required to disclose a comprehensive discussion of the Project. Instead, an NOP is required immediately after deciding that an environmental impact report is needed for a project (i.e., a potentially significant impact is determined). The NOP for the Project meets the requirements outlined in the CEQA Guidelines and adequately summarized the components to be analyzed in the Draft EIR (i.e., probable environmental effects of the project). Furthermore, the NOP included Table 1, Environmental Analysis Overview, which noted the potential impacts to biological resources within the Santa Susana Mountains/ Simi Hills Significant Ecological Area (SEA), including but not limited to oak trees. This initial determination was made due to the Project site's location within an area of natural and improved open space known to contain existing oak trees. As such, a potentially significant impact was anticipated to occur, and an EIR was prepared. Given this, the NOP adequately disclosed a potential environmental impact and notified the public that the Project's effects would be analyzed in the Draft EIR.

Moreover, as demonstrated in the Draft EIR, a description of the Project, in compliance with the provisions outlined in CEQA Guidelines Section 15124 was provided for public review. Chapter 3, Project Description, of the Draft EIR adequately discloses the Project's plans to remove and/or encroach on existing trees. For informational purposes, the number of trees listed in the NOP comment letter does not reflect the Project's proposal. Instead, as detailed on page 3-14 of Chapter 3 of the Draft EIR, 334 SEA-Protected Trees would be impacted, comprising of 265 removals, 16 encroachments, and 53 SEA-Protected Trees that would be located within a debris basin. For more analysis on the potential impacts to protected trees, see Section 4.4, Biological Resources, of the Draft EIR.

The comment asserts the NOP required recirculation. However, as demonstrated above, the NOP met specified requirements and no modifications to, or recirculation of the NOP are required.

07-10 As discussed above in Response to Comment O7-9, the NOP complied with the necessary requirements needed for notification consistent with CEQA Guidelines Section 15082. The NOP adequately informed the public of the potential scope of the environmental impacts, including a brief discussion on each environmental topic area. In addition to the NOP, the County conducted a virtual (online) public scoping meeting for all interested parties to comment on the scope and content of the Draft EIR. As a result, the Draft EIR includes analysis on all 20 environmental topic areas, including biological resources, greenhouse gas emissions, and wildfire. The comment asserts the NOP requires recirculation. However, as demonstrated above, the NOP met specified requirements and no modifications to, or recirculation of the NOP are required.

07-11 The comment requests all future notices related to the Project. The NOA and updated NOA was distributed to the commenter. The comment does not express adequacy concerns related to the environmental analysis in the Draft EIR.

07-12 The previously approved project (Lyons Canyon Ranch Project) was approved with a certified EIR (State Clearinghouse No. 2003031086) in August 2009. The application for the previously approved project expired, and this expiration occurred after the Project Applicant for the currently-proposed Project submitted their application. Therefore prior to its expiration, the previously approved project could have been implemented instead of the Project. As further described in Chapter 6, Alternatives, of the Draft EIR, this alternative was eliminated from further analysis because, although the previously approved project would partially satisfy the Project Objectives overall, it would not avoid the significant unavoidable VMT impact that would result from the Project. Although the previously approved project would have fewer dwelling units, the previously approved project would also result in more significant environmental impacts than the Project (Draft EIR, page 6-29). Moreover, a No Project Alternative was analyzed in the Draft EIR, as is required by CEQA Guidelines Section 15126.6(e). See the discussion presented under Section 6.5.1, Alternative A – No Project/No Build Alternative, for analysis in comparison to the Project.

07-13 The Draft EIR analyzes the potential for mountain lion habitat in the Project site's local vicinity within Section 4.4, Biological Resources. This section of the Draft EIR includes discussion on existing conditions confirming the presence of this species and analysis on the potential impacts to this species. Table 4.4-12 details the potential impacts to habitat for special-status mammals, including mountain lions. As detailed in Section 4.4, Biological Resources, starting on page 4.4-47 of the Draft EIR, indirect and direct impacts to mountain lion habitat were identified. With the incorporation of mitigation measures MM-4.4-1, -2, -4, -5, -6, -7, and -13, impacts would be reduced to a less than significant level.

07-14 The Draft EIR analyzes the impacts biological resources, including flora and fauna in the Project site's local vicinity, within Section 4.4, Biological Resources. As detailed in Appendix C, Biota Report, of the Draft EIR, field surveys were conducted on the Project site from May 2020 through April 2022, consisting of 55 survey days. In addition, Dudek conducted one survey in January 2023 and another in February 2023 to determine if there had been any changes to on-site biological resources as previously documented. See Table 2, Summary of Biological Surveys for the Project, of Appendix C to the Draft EIR for more information.

07-15 Section 4.4, Biological Resources, of the Draft EIR analyzes the potential impacts to biological resources, including impacts to oak trees, SEA Protected Trees, and wildlife corridor impacts. Thresholds 4.4e and 4.4f detail the Project's potential to convert oak woodlands and potential to conflict with local policies and ordinances associated with the Significant Ecological Area. Additionally, the comment requests an

oak tree report. See the Sensitive Ecological Area Protected Tree Report, which has been included as Appendix A of Appendix C to the Draft EIR.

Regarding wildlife corridors, see the discussion presented under Threshold 4.4d in Section 4.4 of the Draft EIR, which includes an analysis of the Project's potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors (see page 4.4-56 of the Draft EIR). As discussed therein, dedication of the Project's On-Site Conservation Area (per MM-4.4-1, On-Site Habitat Preservation, as managed in perpetuity through a conservation easement) would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space, therefore preserving and avoiding further encroachment on movement opportunities between regional conserved habitat blocks. Furthermore, as stated on page 4.4-48 in Section 4.4, Biological Resources, of the Draft EIR, only one indicator species (greater roadrunner) is expected to have a high usage of the Project site during regional movement. Even with removal of SEA protected Trees, wildlife movement from northwest and west to the south is expected to remain functional despite some constriction along its northern edge by the Project since there are geographic features (ridges and canyons), with hiking trails, within the Project's On-Site Conservation Area that have connectivity to Rivendale Open Space, which is adjacent to the open space in Towsley Canyon. These two open space areas are the closest to the Calgrove Boulevard underpass, which could facilitate movement beneath I-5 and into Wildwood Canyon Open Space and Gates King Open Space. As such, with implementation of MM-4.4-1, impacts to the wildlife movement due to habitat fragmentation would be reduced to less than significant.

In summary, impacts to biological resources as a result of the Project were determined to be less than significant with mitigation incorporated.

07-16 The Draft EIR provides discussion on the County' SEA Ordinance, which includes existing policies and regulations governing the Significant Ecological Areas. The Draft EIR accurately describes the existing conditions, noting the Project site occurs entirely within the Santa Susana Mountains and Simi Hills Significant Ecological Area, as detailed in Figure 4.4-2 of the Draft EIR (Draft EIR, page 4.4-1). Discussion is provided to establish existing biological resources, including SEA Protected Trees and other biological resources. Moreover, the EIR includes a regulatory setting with discussion on the SEA Ordinance, which states the need for a SEA Conditional Use Permit among other provisions of the County Code. Throughout Section 4.4, Biological Resources, of the Draft EIR, analysis is provided to demonstrate the Project's compliance with the SEA Ordinance and implementing guidelines. When impacts were identified, mitigation was incorporated to reduce the severity of those effects. The Biota Report, Appendix C of the Draft EIR, was thoroughly vetted with the Regional Planning Biologist before going to the Significant Ecological Areas Technical Advisory Committee (SEATAC) on June 3, 2025. The minutes of that SEATAC meeting documents that SEATAC determined the Biota Report was adequate, with minor revisions to be included in the Draft EIR, and that the Project, as modified, is consistent with the SEA Ordinance.

07-17 Section 4.4, Biological Resources, of the Draft EIR analyzes the potential impacts to biological resources, including potential impacts to wildlife corridors. The Draft EIR accurately describes the existing conditions, noting the Project site's location within the vicinity of designated wildlife corridors (Draft EIR, page 4.4-1). As part of the Project, a Conservation Area is proposed, which would preserve 144.43

acres of native arid scrub, chaparral, oak woodland, herbaceous, and grassland communities on site. The Conservation Area would be contiguous with large tracts of conserved open natural space that provide habitat suitability. Additionally, the Conservation Area represents a significant topographical component of a viable wildlife corridor that can benefit long-term movement between the Santa Susana Mountains/Simi Hills and the San Gabriel Mountains. Please also refer to the response provided above for Comments O7-15 regarding potential impacts to a wildlife corridor.

O7-18 Section 4.4, Biological Resources, of the Draft EIR determined all impacts to biological resources would be less than significant or less than significant with mitigation incorporated. The impact analysis was based on the thresholds of significance based on Appendix G of the CEQA Guidelines. The Project would not result in significant and unavoidable impacts related to biological resources. See Section 4.4, Biological Resources, of the Draft EIR for more information.

O7-19 The Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a Very High Fire Hazard Severity Zone within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, additional fire protection measures, such as those governing safe building standards, must be provided for Project approval. As such, Section 4.20 adequately analyzes the potential effects of Project implementation and incorporates mitigation measures to reduce significant impacts. Please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

The Project Applicant submitted a preliminary application pursuant to SB 330 on March 18, 2021. The preliminary application granted a vested right to proceed with the Project, subject to the ordinances, policies, and standards in effect at the time. This date is prior to the adoption of the updated General Plan Safety Element (i.e., July 2022). Additionally, the NOP was published on June 16, 2022, which is also prior to the adoption of the updated General Plan Safety Element. Nonetheless, the General Plan Safety Element goals and policies discussed in the Draft EIR reference the updated version of the Safety Element. However, conformance to "new" Safety Element policies is not a Project requirement. An analysis of the Project's potential to result in a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 4.11, Land Use and Planning, of the Draft EIR (beginning on page 4.11-14). This includes an analysis of goals and policies included in the updated version of the Safety Element. However, an analysis of applicable goals and policies from the version of the Safety Element that was in effect at the time the Project was vested and the NOP was published (i.e., the 2015 version of the Safety Element) has been added to Table 4.11-1 in Section 4.11 of the Draft EIR, as included in Chapter 3, Revisions to the Draft EIR, of this Final EIR.

Furthermore, as stated on page 4.11-39 in the analysis of Policy S 4.1, the Project site is adjacent to existing built development (i.e., commercial and residential uses) to the north and appurtenant to The Old Road and I-5 (a major highway) to the east. Furthermore, the MRCA Santa Clarita Woodlands Park, including Ed Davis Park in Towsley Canyon, is located southwest of the Project site. Southeast of the Project site's boundary is the City of Santa Clarita's Taylor Trail Wilderness and Open Space and Rivendale Park and Open Space. These land uses are publicly owned and established land uses that are not subject to potential development and would not change with implementation of the Project. As such, the Project is considered adjacent to existing development to the north and east, and settled

uses are also located east and south of the Project site. The analyses provided in Table 4.11-1 in Section 4.11 for General Plan policies LU 1.10 (from the Land Use Element) and S 4.1 (from the Safety Element) have been revised to clarify this information. As stated above, analysis of applicable Safety Element goals and policies from the 2015 version of the Safety Element has been added to this Final EIR. Please refer to Chapter 3 of this Final EIR for the revised text.[22] With implementation of applicable mitigation, Project impacts due to a conflict with the County's General Plan adopted for the purpose of avoiding or mitigated an environmental effect would be less than significant.

07-20 The Draft EIR includes discussion under Section 4.20, Wildfire, related to fire history and fire perimeter data. The fires mentioned by the commenter are discussed in Section 4.20. Additionally, see Appendix B, Fire History, of Appendix M-1 to the Draft EIR for more information.

07-21 The Draft EIR analyzes the Project's potential to exacerbate existing conditions within a very high fire hazard zone in Section 4.20, Wildfire. The fire hazard designation does not prohibit the development of the Project. Instead, additional fire protection measures, such as those governing safe building standards, must be incorporated into Project designs. As such, Section 4.20, Wildfire, of the Draft EIR, adequately analyzes the potential effects of Project implementation and incorporates mitigation measures to reduce significant impacts. Please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Regarding impacts to public services, the Draft EIR determined the Project would not create capacity or service level problems given that the Project would comply with existing codes and regulations governing fire safety, the provision of existing mutual aid agreements which would serve the Project site, the Project's payment of applicable fees to offset costs, the regulatory requirements governing adequate services, and the incorporation of mitigation measures MM-4.20-1 and MM-4.20-3 would reduce impacts to a less than significant level.

07-22 The comment states that impacts related to wildfire should be significant. The Draft EIR presents an analysis of potential impacts related to wildfire and identifies significant impacts within Section 4.20, Wildfire; however, after the incorporation of mitigation measures MM-4.17-1 and MM-4.20-1 through MM-4.20-5, impacts would be reduced to a less than significant level.

07-23 Section 4.8, Greenhouse Gas Emissions, of the Draft EIR is the section of the EIR where potential impacts related to climate change are addressed. Regarding nearby public transportation in the Project site's vicinity, see discussion outlining existing conditions under Section 2.5.1, Public Transit and Bicycle Routes. Moreover, see the impact analysis under Section 4.17, Transportation, for details on the Project's effect on applicable programs, plans, ordinances, or policies addressing the circulation system, including transit.

07-24 The Draft EIR's methodology under Section 4.8, Greenhouse Gas Emissions, addresses the loss of sequestered carbon that would result from removal of oak trees on site during construction. The Draft

[22] These revisions do not change the impact conclusions in the Draft EIR. Rather, this information merely clarifies information and supports conclusions that were already presented in the Draft EIR. As such, this change would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

EIR used the i-Tree planting calculator to determine the changes in GHGs, criteria pollutants, and energy from tree planting and/or removal. The data from i-Tree was entered into California Emissions Estimator Model (CalEEMod) Version 2022.1 to quantify the loss of carbon from trees removed as well as the carbon sequestered from trees planted. (Draft EIR, pages 4.8-27 and 4.8-29). In addition, the Draft EIR notes the potential gain of sequestered carbon that would result from planting and growth of trees on site. The quantities of trees to be planted are shown in Section 4.4.7 of the Draft EIR and the planting schedule of the landscaping plan.

07-25 See Response to Comment 07-24, above, for a summary discussion on the Draft EIR's analysis regarding greenhouse gas emissions, climate change, and trees.

07-26 See Response to Comment 07-24, above, for discussion on the Draft EIR's analysis regarding greenhouse gas emissions, climate change, and trees. Regarding the heat island effect, see the analysis of the Project's potential to conflict with Policy LU 11.2 on page 4.11-19, and Policy CO-8.1.3 on page 4.11-56 of Section 4.11, Land Use and Planning, of the Draft EIR. As detailed therein, approximately one-quarter of the Project site would be planted with restored native habitat planting, including indigenous oak trees. The Project would utilize tree canopy cover in its landscaping throughout the developed area and would retain open space acreage which would reduce the urban heat island effect. Additionally, the Project would conserve approximately 611 acres of natural open space in perpetuity, through implementation MM-4.4-1, On-Site Habitat Preservation and MM-4.4-9, Off-Site Habitat Preservation, and the Project would plant several more trees than removed with Project implementation. Additionally, heat island effects are discussed in Table 4.8-14, Relevant Greenhouse Gas-Related Laws and Regulations (Draft EIR, page 4.8-49). As discussed therein, the Project would be subject to California Green Building Standards Code Section 106.11.2, which requires roofing materials to meet standards to reduce roof heat island effects. Lastly, the Project would require implementation of MM-4.8-3, Energy Conservation, which requires installation of cool pavement, which would reduce heat island effects at the Project site as well.

07-27 All of the Project's buildings are proposed to be all electric in accordance with mitigation measure MM-4.8-2, as described in Section 4.8, Greenhouse Gas Emissions, of the Draft EIR. This is consistent with the County's Climate Action Plan 2045.

07-28 The Draft EIR provides analysis on the Project's impacts related to water supply and drought conditions within various scenarios. Regarding water availability and the current water crisis, in preparing the Project's Water Supply Assessment , the Santa Clarita Valley Water Agency Water (SCV Water) considered the urban water shortage contingency planning analysis set forth in the 2020 Urban Water Management Plan and 2020 Water Shortage Contingency Plan in determining the sufficiency of water supplies for the Project, in addition to all existing and planned future uses in SCV Water's service area. These documents also explain how SCV Water's reliability planning provisions of these adopted documents assist SCV Water in responding to drought conditions, including the severe drought conditions that currently exist (see page 4-33 in Appendix L-2 of this Draft EIR). As stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's Water Supply Assessment concludes that the total projected water supplies available to SCV Water's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five-year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

Groundwater well closures due to perchlorate, per- and polyfluoroalkyl substances (PFAS), and volatile organic compounds (VOCs) are addressed in detail in the WSA in Section 4.2, Water Quality Constituents of Interest in the WSA (see discussion beginning page 4-2 in Appendix L-2 of the Draft EIR), Section 4.6, Water Quality Impacts on Reliability (see discussion beginning page 4-14 in Appendix L-2 of the Draft EIR), and Section 4.7, Review of Pending Water Quality Permitting for Saugus Wells (see discussion beginning page 4-15 in Appendix L-2 of the Draft EIR). As stated on page 4-15 of the WSA (Appendix L-2 of the Draft EIR):

> "Overall, the plans being developed for groundwater operation will allow SCV Water to meet near term and long-term demand within the SCV Water service area. The loss of capacity of wells impacted by water quality issues and removed from service in the near term will be met by near-term excess capacity in non-impacted wells, other water sources including imported water supplies, and/or through the installation of replacement well(s), if necessary, until remediation alternatives, including wellhead treatment, and [Department of Drinking Water] approval is obtained for restoration of the impacted supply. Therefore, no anticipated change in reliability or supply due to water quality is anticipated based on the present data…"

As such, well closures due to water quality issues have been considered in the WSA analysis and are not anticipated to interfere with water supply availability to SCV Water's service area, including the Project.

07-29 The commenter's statement that SCV Water's received public opposition to its Water Supply Assessment for this Project is acknowledged.

07-30 Section 4.11, Land Use and Planning, and Section 4.8, Greenhouse Gas Emissions, of the Draft EIR provides impact analysis on the Project's consistency with the Los Angeles County General Plan, Climate Action Plan, SEA Ordinance, and Hillside Management. See also Response to Comment 07-19. The comment asserts the Project is not consistent. See Section 4.11 and 4.8 for more discussion and analysis providing substantial evidence that the Project would be consistent.

07-31 The comment is a conclusionary statement regarding the scope of the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter 08

Friends of the Santa Clara River
PO Box 7713 Ventura, California 93006 (805) 320-2265
www.fscr.org

2-1-25

Erica Aguirre, Senior Planner
Los Angeles County Dept. of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Via email to: EAguirre@planning.lacounty.gov

Extension request - Lyons Canyon Project, Project No. 2021-001195-(5), Case No(s). Vesting Tentative Tract Map No. 83301 (RPPL 2021003061), and all accompanying permits

08-1

Dear Ms. Aguirre:

The Friends of the Santa Clara River were formed in 1993 to advocate for preservation and protection of the Santa Clara River Watershed. We commented on this protect in 2008 in its previous iteration because it would affect two tributaries that feed the Santa Clara River and remove many trees that would affect the health of the watershed. The previous project proposed the removal of 160 oaks. Now this project proposes an even greater destruction of some 350 trees while still impacting the tributaries. This is not acceptable.

08-2

08-3

Many of our Board members were affected by the Hughes fire and the other conflagrations that occurred recently the Los Angeles and Ventura areas. While their houses did not burn, they had to evacuate for several days and suffered the anxiety and expense of that experience. It was also very time consuming to move livestock, pets and personal items out of the fire area and then have to move them back in again. But houses of friends in other areas did burn, necessitating humanitarian efforts to aid them. As a result, we were not able to focus on providing comments for this important and impactful project.

08-4

We hope that you will honor this request and advise us of your response as soon as possible. Please enter this correspondence/comment into the administrative record for this project.

08-5

Barbara Wampole
Vice President

1

Response to Comment Letter O8

Friends of the Santa Clara River
Barbara Wampole
February 1, 2025

O8-1 This comment presents the subject of the letter, including a request for an extension of the public review period of the Draft EIR. The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. In light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments will be received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O8-2 The comment is introductory in nature and does not express environmental concerns related to the environmental analysis contained in the Draft EIR. Impacts to tributaries and trees as a result of the Project are presented in the Draft EIR, see Section 4.4, Biological Resources.

O8-3 The comment's opposition regarding potential impacts to trees on site is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration. For informational purposes, the Project would impact 334 SEA-Protected Trees, including 232 protected oak trees. The 334 SEA-Protected Tree impacts would be comprised of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin. The 53 SEA-Protected Trees that would be located within a debris basin would not be removed but are considered as removals for mitigation purposes. This is because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding. Given this, the Project is seeking an Oak Tree Permit, which includes a requirement for tree replacement in compliance with the SEA Ordinance (Draft EIR, page 3-5). As detailed in Section 4.4, Biological Resources, of the Draft EIR, the Project would result in 318 SEA Protected Tree removals. The 318 SEA Protected Trees would be replaced in accordance with the Los Angeles County SEA Ordinance, codified in Chapter 22.102, Significant Ecological Areas, of the County Code, resulting in 772 replacement trees. Per MM-4.4.16, SEA Protected Trees Replacement/Compensation, should there not be enough locations within the Project's Conservation Area (on-site and off-site) or Project landscaped areas for replacement trees, the Project Applicant must pay into the County's Protected Tree Fund (see page 4.4-94 in Section 4.4, Biological Resources of the Draft EIR). The Protected Tree Fund is codified in Section 22.102.070(F)(5) of the County Code as a viable option for mitigation for the replacement of the impacted trees. As noted in Section 22.102.070(F)(5)(a) of the County Code, these funds shall be used for establishing and planting native trees on public lands; maintaining existing native trees on public lands; purchasing native tree woodlands; purchasing sensitive native trees of ecological, cultural, or historic significance; or outreach and educational programs to promote woodland establishment and protection (with no more than 20 % of the funds collected to be used for outreach and educational programs).

O8-4 The comment is in regard to the public review period for the Draft EIR during the Hughes Fire. This comment is similar to Comment O8-1, above. As such, see Response to Comment O8-1 for more discussion.

O8-5 This comment provides a conclusory statement. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

Comment Letter 09

From: Katherine Solomon
To: Erica G. Aguirre
Subject: Request for 30 day extension
Date: Sunday, February 2, 2025 8:20:54 AM

CAUTION: External Email. Proceed Responsibly.

Re: Request for Extension of time to Review Draft Environmental Impact Report
Lyons Canyon Project, Project No. 2021-001195-(5), Case No(s). Vesting Tentative Tract Map No. 83301 (RPPL 2021003061), Conditional Use Permit No. RPPL 2021003113, Housing No. RPPL 2021003105, Zone Change No. RPPL2021003163, Oak Tree Permit No. RPPL2021003070, and Environmental Assessment No. 2021003071. 09-1

It is really important that info and lessons learned (from our local round of devastating fires) be included in this project, since it is in a very high fire hazard zone. 09-2

Thank you,
Katherine Solomon
Conservation Chair
Santa Clarita Sierra Club

Response to Comment Letter O9

Sierra Club, Santa Clarita Valley Group
Katherine Solomon, Conservation Chair
February 2, 2025

09-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. In light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments will be received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

09-2 The Draft EIR includes discussion on fire history within 5 miles of the Project site and discloses the Project site's location within a Very High Fire Hazard Severity Zone. The comment's assertion to include recent fire history (i.e., Hughes Fire) is not required to be included in the Draft EIR. Nevertheless. at the time of releasing the Draft EIR (December 2024), fire history data was detailed within the EIR to adequately establish existing conditions within the Project site's vicinity. The data collected were from CAL FIRE's Fire and Resources Assessment Program (FRAP) database, which provides fire history information and fire perimeter data dating to the late 1800s for all fires over 10 acres in size (Draft EIR, page 4.20-4). For more information see Appendix B, Fire History, of Appendix M-1 to the Draft EIR. Even though the Hughes Fire occurred after the release of the Draft EIR, the fire perimeter did not overlap with the Project site. As such, the existing conditions of the Project site did not change. Therefore, the impacts related to wildfire would not change the conclusions detailed in Section 4.20, Wildfire. Moreover, the Draft EIR incorporates mitigation measures to reduce impacts related to wildfire. See Section 4.20.7 for more details on MM-4.20-1 through MM-4.20-5. Additionally, please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Comment Letter 010

3250 Wilshire Boulevard
Suite 1106
Los Angeles, CA 90010

SIERRA CLUB
FOUNDED 1892

(213) 387-4297 phone
(213) 387-5383 fax
www.sierraclub.org

WILDLAND URBAN WILDFIRE COMMITTEE

February 3, 2025

Erica G. Aguirre, Principal Planner
Los Angeles County Dept. of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Sent via email to: EAguirre@planning.lacounty.gov

Re: Request for Extension of time to Review Draft Environmental Impact Report
Lyons Canyon Project, Project No. 2021-001195-(5), Case No(s). Vesting Tentative Tract Map No. 83301 (RPPL 2021003061), Conditional Use Permit No. RPPL 2021003113, Housing No. RPPL 2021003105, Zone Change No. RPPL2021003163, Oak Tree Permit No. RPPL2021003070, and Environmental Assessment No. 2021003071.

010-1

Dear Ms. Aguirre:

The Sierra Club Angeles Chapter Wildland Urban Wildfire Committee (Wildfire Committee) was formed to address land use planning and safety policies related to the increasing intensity and frequency of wildfires in the Wildland-Urban Interface (WUI).[1] Our mission is to assess the risks associated with building in the Very High Fire Hazard Severity Zones (VHFHSZs) in Los Angeles and Orange counties and influence decision makers to reduce those dangers while protecting the environment through education, organizing, and policy change. Oftentimes projects are considered and approved in spite of the wildfire risk to current and future residents, wildlife, and habitat and there is a failure to consider the huge cost to the public.

010-2

Several members of our group have been severely impacted by the Palisades, Eaten, Hurst, and Kenneth fires, and now also by the Hughes Fire. Several have been required to evacuate and have either had friends who lost their houses or have been impacted by PHOS-CHEK, which must be cleaned up prior to their return. The resulting anxiety, dislocation, and financial burden has made it impossible to provide a detailed review of this project by February 7. **We are therefore asking for a 30-day extension of the review period.**

We know that the fires are also a major focus for the county at this time, so we hope you will agree to this extension.

010-3

The project as described in the DEIR is located in the northern foothills of the Santa Susana Mountains in unincorporated Los Angeles County, contiguous to The Old Road on the east; west of Interstate 5 (I-5); just south of Sagecrest Circle; and north of Calgrove Boulevard near Ed Davis Park in Towsley Canyon Open Space and the Woodlands and Lyons Canyon Significant Ecological Areas. It proposes the development of 504 residential units, subdivided into 23 lots within 233.18 acres, 460,000 cubic yards of cut, and 1,260,000 cubic yards of fill for a total of 2,720,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. There is expected to be 15 percent shrinkage on the over excavation for a total of 200,000 cubic yards. The total earth movement will be 2,805,000 cubic yards.

010-4

[1] WUI is defined as areas adjacent to or of transition between wildlands and human development and its associated infrastructure in which severe wildfire hazards are increasingly likely due to flammable native and non-native wildland vegetation, hazardous weather patterns, and steep topography. These areas have been designated as Very High Fire Hazard Severity Zones by Cal Fire.

On July 15, 2022, we submitted a comment on the NOP (which is included in the DEIR) raising concerns that the number of trees to be removed and/or encroached on (454 SEA Protected Trees including 316 oak trees (30 of which are Heritage Trees), and 138 non-oak, non-heritage SEA protected trees).

We know that the county cares about its oak woodlands and open spaces, and would therefore want the public to have the opportunity to thoroughly review this DEIR.

Thank you for your attention to this matter.

010-5

Sincerely,

Gina K. Thornburg

Gina K. Thornburg, Phd
Member

WILDLAND URBAN WILDFIRE COMMITTEE, Angeles Chapter, Sierra Club

Response to Comment Letter O10

Sierra Club, Angeles Chapter, Wildland Urban Wildfire Committee
Gina K. Thornburg, PhD
February 3, 2025

O10-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. In light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments were received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O10-2 This comment is introductory in nature and does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. However, regarding impacts related to wildfire, the Draft EIR adequately discloses the potential impacts anticipated as a result of the Project. Moreover, the Draft EIR incorporates mitigation measures to reduce impacts related to wildfire. See Section 4.20.7, Mitigation Measures in Section 4,20, Wildfires of the Draft EIR for more details on MM-4.20-1 through MM-4.20-5. Additionally, see Section 3.2.6, Fuel Modification, for details on the Project's proposed design and infrastructure improvements to ensure fire safety, which are in compliance with LA County Fire Department's Fuel Modification Guidelines. Additionally, please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

O10-3 This comment is in regard to the public review period during the Hughes Fire and other fires throughout the Los Angeles County. This comment is similar to Comment O10-1, above. As such, see Response to Comment O10-1 for more discussion.

O10-4 This comment accurately describes the Project site's location. However, the comment's summary of the Project description is not correct. See Section ES.3.1, Project Overview, for a summary of the Project or Chapter 3, Project Description, of the Draft EIR for more details.

O10-5 This comment notes a previously submitted comment letter on the NOP, raising concerns for the Project's potential impacts to trees. This comment was received and summarized in Table 1-1 of the Draft EIR. The comment, however, does not identify the correct number of trees affected by the Project. As stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR, 334 SEA-Protected Trees would be impacted, comprising of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin. Additionally, the comment requests an opportunity to review the Draft EIR. This comment is similar to Comment O10-1, above. As such, see Response to Comment O10-1 for more discussion.

INTENTIONALLY LEFT BLANK

Comment Letter O11

From: Barbara Myler
To: Erica G. Aguirre
Subject: Trails at Lyons Canyon
Date: Monday, February 3, 2025 10:53:42 PM
Importance: High

CAUTION: External Email. Proceed Responsibly.

Subject: Trails at Lyons Canyon

Dear Ms. Aguirre:

As a decades-long Stevenson Ranch resident, I am writing to express my strong support for The Trails at Lyons Canyon project. As a resident of the Santa Clarita Valley, I believe this development will bring significant benefits to our community.

One of the most commendable aspects of this project is its commitment to preserving open space. By dedicating 83% of the property as protected open space, The Trails at Lyons Canyon will ensure that 616 acres remain natural and undeveloped, providing a sanctuary for local wildlife and a place for residents to connect with nature.

Additionally, the project plans to connect to over 20 miles of adjacent hiking and nature trails, enhancing recreational opportunities for all residents. This integration promotes a healthy lifestyle and fosters a sense of community among trail users.

The inclusion of 510 new homes, with 71 units designated as affordable housing for very-low-income seniors and middle-income working families, addresses the pressing need for attainable housing in our area. This thoughtful approach ensures that our community remains inclusive and diverse, providing opportunities for individuals and families to live and thrive here.

O11-1

In comparison to the 2009 plan, which proposed large luxury estate homes spread across 230+ acres, Lyons Canyon offers a more sustainable and community-focused alternative. The previous plan posed significant fire risks and disturbed sensitive ridgelines, whereas the current proposal reduces development impact and preserves more open space.

For these reasons, I wholeheartedly support The Trails at Lyons Canyon project and urge the Planning Commission to approve it. This development represents a balanced and forward-thinking approach to growth, benefiting both current and future residents.

Thank you for your time and attention.
~Barbara

Barbara C. Myler
President/CEO

Summit West Public Relations & Marketing
Valencia Jazz & Blues Concert Series
P.O. Box 55133
Valencia, CA 91385
cell: 661.373.8700
email: Barbara@SummitWestPR.com

Page 2 of 2 in Comment Letter O11

Response to Comment Letter O11

Summit West Public Relations & Marketing
Barbara C. Myler, President/CEQ
February 3, 2025

O11-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

INTENTIONALLY LEFT BLANK

Comment Letter 012

From:	Dan Silver
To:	Erica G. Aguirre
Cc:	Joshua Huntington
Subject:	Trails at Lyons Canyon, Project No. PRJ2021-001195, SEA Permit No. RPPL2021003113
Date:	Monday, February 3, 2025 3:42:58 PM
Attachments:	EHL-Lyons Canyon-1.9.25.pdf Recreation-related disturbance to wildlife in California better planning for and management of .pdf Trails, Recreation, MSCP presentation.pdf

CAUTION: External Email. Proceed Responsibly.

Dear Ms Aguirre:

EHL wishes to rescind the comments submitted on January 9, 2025 (see below). We will submit replacement comments later. Confirmation would be appreciated. 012-1

Thank you and apologies for the inconvenience,
Dan

======

January 9, 2025

LA County Department of Regional Planning
Attention: Erica G. Aguirre, AICP, Principal Planner, Subdivisions
320 West Temple Street, 13th Floor
Los Angeles, CA 90012

RE: Trails at Lyons Canyon, Project No. PRJ2021-001195, SEA Permit No. RPPL2021003113

Dear Ms. Aguirre:

Please find comments and enclosure attached, and let me know if additional information would be helpful. 012-2

Yours truly,
Dan Silver

Dan Silver, Executive Director
Endangered Habitats League
8424 Santa Monica Blvd., Suite A 592
Los Angeles, CA 90069-4267

213-804-2750
dsilverla@me.com
https://ehleague.org

Response to Comment Letter O12

Endangered Habitats League
Dan Silver, Executive Director
February 3, 2025

O12-1 All comments received on the Draft EIR have been responded to in accordance with Section 15088 of the State CEQA Guidelines. This comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O12-2 The enclosed comment letter referred to in this portion of the email is included as Comment Letter O2. This comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. Responses to Comment Letter O2 are provided above.

Comment Letter 013

CALIFORNIA
NATIVE PLANT SOCIETY

Los Angeles /Santa Monica Mountains Chapter
15811 Leadwell Street
Van Nuys, California 91406-3113

Erica G. Aguirre
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, CA 90012

VIA ELECTRONIC MAIL: *eaguirre@planning.lacounty.gov*

February 4, 2025

RE: **LADRP 24-148**
State Clearinghouse #2022060346
Trails at Lyons Canyon DEIR

REQUEST FOR PUBLIC COMMENT PERIOD EXTENSION;

LACK OF ELECTRONIC ACCESS TO DEIR;

REPEAT REQUEST FOR NOTIFICATIONS

Dear Ms. Aguirre;

California Native Plant Society (CNPS) is a science, policy, and planning based statewide organization that is 60 years in existence. We work closely with governance, academia, planners, developers, and non-profit organizations to encourage sustainable planning, conservation, and horticultural use of California native plants. CNPS employs the most state-of-the art science and design in our work.

O13-1

Our engagement throughout the state involves working with districts to promote use of native trees and plants to encourage urban and wildland forest health, water conservation, and ecological connectivity between open space and cities. CNPS has a long and vibrant history working in the Santa Clarita Valley and throughout Los Angeles County, collaborating with communities, groups, and agencies.

CNPS respectfully requests the following pertinent to this proposed project and future public notice:

1) *REQUEST FOR PUBLIC COMMENT EXTENSION PERIOD TO LADRP 24-148 - TRAILS AT LYONS CANYON DEIR.* Our organization has been deeply impacted both personally and mission by the many recent wind events and fires in Los Angeles County. The public comment period for this project was lain during both the holiday season and a time of disaster. The project itself, lead agency - LA DRP, project proponent - New Urban West, and communities of the county will benefit from granting additional time for review, analyses, and remarks to the DEIR. The project is complex and ambitious: Ample and appropriate time for review will be most equitable for all.

O13-2

2) *REQUEST FOR ELECTRONIC ACCESS TO DEIR.* Our reviewers have been unable to download and open many of the links and components related to the DEIR. We have attempted access numerous times on both late model Apple and Personal Computer operating systems, to no avail. The same issue is apparent with each

O13-3

try: The link starts to upload, then freezes despite refreshing and reloading. We believe this technical issue is not on our end due to multiple attempts on different types of computers. Each effort to open links of the attachments was either through listed ones or within several of the documents here: https://lacdrp.legistar.com/LegislationDetail.aspx?ID=6782087&GUID=5E5124BA-88AB-461D-9C50-EA16E494810A&Options=ID|Text|&Search=24-148https://urldefense.proofpoint.com/v2/url?u=https-3A__lacdrp.legistar.com_LegislationDetail.aspx-3FID-3D6782087-26GUID-3D5E5124BA-2D88AB-2D461D-2D9C50-2DEA16E494810A-26Options-3DID-257CText-257C-26Search-3D24-2D148&d=DwQF-g&c=Oo8bPJf7k7r_cPTz1JF7vEiFxvFRfQtp-j14fFwh71U&r=26nGuH0CC1732bdGis6_QLeZ-xAaYlg9H9yTrFHHgH8&m=DgKNkqa5iWsK0OJeEQxbHQLAhuwoJg8hDV0uXvjoCeFjfbDeSkTHjPkg8bV5E6lu&s=ssCbWONtmS15FNi_Ci0zfpJoxN7EgQLSHGMpQ0RyNmg&e=
We appreciate your attention to resolving this important public access challenge.

O13-3
Cont.

3). CNPS has requested several times over the years to LA DRP to be added to all public planning notifications. We have not received announcements except on rare occasion soon following each following each repeated request. In the case of LA DRP 24-148 - Trails at Lyons Canyon, the concerns of this letter would have been addressed in timely manner, instead of the last week of the public comment period. Please reinstate this request to have the following CNPS contacts remain on LA DRP notification lists:

- bwilce@cnps.org
- jfarewell88@gmail.com
- native.conservation@gmail.com
- njensen@cnps.org

O13-4

Sincerely,

Joseph Farewell

Joseph Farewell, Conservation Co-Chair
Los Angeles/Santa Monica Mountains Chapter (LA/SMM(
California Native Plant Society (CNPS)

Cc: Nick Jenson, Statewide Conservation Director - CNPS
Bill Neill, President - LA/SMM CNPS
Brendan Wilce, Conservation Program Coordinator - CNPS

Response to Comment Letter O13

California Native Plant Society, Los Angeles/Santa Monica Mountains Chapter
Joseph Farewell, Conservation Co-Chair
February 4, 2025

O13-1 This introductory comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O13-2 The Notice of Availability (NOA) was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. In light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91) days ending on March 10, 2025. All comments received during the 91-day public comment period have been included and responded to in this Final EIR. This comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O13-3 All links to Project documents provided on the County's website have been in working order throughout the entirety of the public review period. The County has not received any other comments or inquiries related to difficulties accessing the links provided on the County's website. For informational purposes, please note that in addition to the County's website, the Draft EIR, appendices, and all applicable notices are available for download on the Office of Land Use and Climate Innovation's CEQAnet Web Portal (https://ceqanet.opr.ca.gov/2022060346/2).

O13-4 The provided email contacts have been added to the distribution list for this Project. The mailing address was also added on the courtesy list for notification of County projects. At this time, the County does not maintain a general email notification system for County projects. However, prior to receipt of this comment letter on February 4, 2025, the County did not receive any comments or notification requests from the California Native Plant Society specific to this Project. The public noticing for this Project has complied with and will continue to comply with all substantive and procedural requirements of CEQA and the State CEQA Guidelines. Details regarding the Notice of Preparation process in accordance with Section 15082(a) of the State CEQA Guidelines are included in Chapter 1, Introduction, beginning on page 1-4 of the Draft EIR. Regarding the NOA of the Draft EIR, in accordance with Section 15087(a) of the State CEQA Guidelines, on December 10, 2024, an NOA of the Draft EIR was submitted to the State Clearinghouse, posted at the County Clerk's office, and published in The Santa Clarita Valley Signal. The NOA was mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously provided comments or requested notice of the Project in writing.

As discussed above in Response to Comment O13-1, after receipt of this comment letter, the Draft EIR formal public review period was extended for an additional 31 days. As such, on February 7, 2025, an updated NOA was submitted to the State Clearinghouse, posted at the County Clerk's office, and published in The Santa Clarita Valley Signal. The updated NOA was also mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously provided comments or requested notice of the Project writing (including the California Native Plant Society).

INTENTIONALLY LEFT BLANK

Comment Letter 014

From: Robb, Becki (PCL)
To: Erica G. Aguirre
Subject: Trails at Lyons Canyon
Date: Tuesday, February 4, 2025 11:33:26 AM
Attachments: image001.png

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre:

I am writing to express my strong support for **The Trails at Lyons Canyon** project. As a resident of the **Santa Clarita Valley**, I believe this development will bring meaningful benefits to our community.

One of the most notable aspects of this project is its **commitment to open space preservation**. By designating **83% of the property—616 acres—as protected open space**, The Trails at Lyons Canyon will maintain a natural sanctuary for local wildlife while providing residents with a place to connect with nature.

Additionally, the project will **integrate with over 20 miles of adjacent hiking and nature trails**, enhancing recreational opportunities for all. This thoughtful design promotes a **healthy, active lifestyle** and fosters a **strong sense of community** among trail users. The plan also includes **510 new homes**, with **71 units designated as affordable housing** for **very-low-income seniors and middle-income working families**, helping to address the critical need for attainable housing in our region.

Compared to the **2009 proposal**, which planned for **large luxury estates on 230+ acres**, the **new plan is far more sustainable and community-oriented**. The previous concept presented **higher fire risks** and **disrupted sensitive ridgelines**, whereas the current proposal **minimizes development impact and prioritizes environmental preservation**.

This project reflects a **balanced and forward-thinking approach to growth**, benefiting both current and future residents. I fully support **The Trails at Lyons Canyon** and urge the **Planning Commission** to approve this much-needed development.

014-1

Thank you.

Becki Robb
Sr. Director of Events & Special Projects
Princess Creative Experiences & Design | Princess Cruises
661-754-6516
brobb@hagroup.com

The information contained in this email and any attachment may be confidential and/or legally privileged and has been sent for the sole use of the intended recipient. If you are not an intended recipient, you are not authorized to review, use, disclose or copy any of its contents. If you have received this email in error please reply to the sender and destroy all copies of the message. Thank you.

To the extent that the matters contained in this email relate to services being provided by Princess Cruises and/or Holland America Line (together "HA Group") to Carnival Australia/P&O Cruises Australia, HA Group is providing these services under the terms of a Services Agreement between HA Group and Carnival Australia.

Response to Comment Letter O14

Princess Creative Experiences & Design, Princess Cruises
Becki Robb, Sr. Director of Events & Special Projects
February 4, 2025

O14-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

INTENTIONALLY LEFT BLANK

Comment Letter 015

February 5, 2025

Advocates for the Environment

A non-profit public-interest law firm
and environmental advocacy organization

Erica G. Aguirre
Principal Planner
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, CA 90012

Via U.S. Mail and email to EAguirre@planning.lacounty.gov

Re: Comments on the Draft Environmental Impact Report for the Trails at Lyons Canyon Project, SCH No. 2022060346

Dear Ms. Aguirre:

Advocates for the Environment submits the comments in this letter regarding the proposed Trails at Lyons Canyon Project (**Project**), located west of The Old Road and south of Sagecrest Circle in the unincorporated Los Angeles County (**County**). This Project proposes to construct 510 dwelling units with a mix of attached and detached for-sale condominium units, among other developments on the 233.49-acre Project Site. 015-1

We have reviewed the Environmental Impact Report (**DEIR**) released in December 2024, and submit comments regarding the sufficiency of the DEIR's analysis under the California Environmental Quality Act (**CEQA**). 015-2

CEQA Greenhouse Gas Significance Analysis

The DEIR derived its greenhouse gas (**GHG**) significance thresholds from the CEQA Appendix G Guidelines: whether the Project would generate GHG emissions that may have a "significant effect on the environment," and whether the Project would "conflict with an applicable plan, policy, or regulation" for the reduction of GHG emissions. (EIR, p. 4.8-23.) The County used CalEEMod to quantify the Project's annual emissions, which were reported to be 4,086.57 metric tons carbon dioxide equivalent (**MTCO2e**) per year, after mitigation. (EIR, p. 4.8-34.) As the basis for its significance determination, the County chose a significance threshold based on a GHG efficiency metric of 2.42 MTCO2e per service population. (EIR, p. 4.8-35.) The DEIR concluded that the Project's GHG emissions would be less than significant after mitigation, calculating the mitigated Project's GHG efficiency at 2.28 MTCO2e per service population. (EIR, p. 4.8-35.) However, the DEIR underestimated the Project's potential GHG emissions and therefore its conclusion that the Project's GHG emissions after mitigation is not supported by substantial evidence. Furthermore, as discussed below, under current statutory and case law, it is not sufficient to mitigate the Project's GHG impacts down to the 015-3 015-4 015-5

10211 Sunland Blvd., Shadow Hills, CA 91040 (818) 650-0030 X101 dw@aenv.org

level of significance. The standard for mitigating cumulative impacts such as GHG emissions is "fair share." In this case, fair-share mitigation is mitigation down to a net-zero level. 015-5 Cont.

The County Should Require the Project to be Net-Zero

Given the current regulatory context and technological advancements, a net-zero significance threshold is feasible and supportable. GHG emissions from buildings, including indirect emissions from offsite generation of electricity, direct emissions produced onsite, and from construction with cement and steel, amounted to 21% of global GHG emissions in 2019. (IPCC Sixth Assessment Report, Climate Change 2022, WGIII, Mitigation of Climate Change, p. 9-4.) This is a considerable portion of global GHG emissions. 015-6

It is much more affordable to construct new building projects to be net-zero than to obtain the same level of GHG reductions by expensively retrofitting older buildings to comply with climate change regulations. Climate damages will keep increasing until we reach net zero GHG emissions, and there is a California state policy requiring the state to be net-zero by 2045. It therefore is economically unsound to construct new buildings that are not net-zero. 015-7

Environmental groups have achieved tremendous outcomes by litigation under CEQA. Two of the largest mixed-use development projects in the history of California, Newhall Ranch (now FivePoint Valencia), and Centennial (part of Tejon Ranch) decided to move forward as net-zero communities after losing CEQA lawsuits to environmental groups. The ability for these large projects to become net-zero indicates that it is achievable, even for large-scale developments. The Applicant for this Project should do the same. 015-8

We urge the County to adopt net-zero as the GHG significance threshold for this Project. This threshold is well-supported by plans for the reduction of GHG emissions in California, and particularly the CARB Climate Change Scoping Plans. The CARB 2017 Scoping Plan states that "achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development." (CARB 2017 Scoping Plan, p. 101.) Additionally, the CARB 2022 Scoping Plan reaffirms the necessity of a net zero target by expressing: "it is clear that California must transition away from fossil fuels to zero-emission technologies with all possible speed … in order to meet our GHG and air quality targets." (CARB 2022 Scoping Plan, p. 184.) CARB further encourages a net-zero threshold in its strategies for local actions in Appendix D to the 2022 Scoping Plan. (CARB 2022 Scoping Plan, Appendix D p. 24-26.) 015-9

Moving this Project forward as a net-zero project would not only be the right thing for the County to do, but also would help protect the County and the Applicant from CEQA litigation. 015-10

015-11

10211 Sunland Blvd., Shadow Hills, CA 91040 (818) 650-0030 X101 dw@aenv.org

The Project Conflicts with Applicable Plans, Policies, and Regulations

The DEIR included a discussion of the County's 2045 Climate Action Plan (**CAP**), County Green Building Standards, the County's General Plan and Santa Clarita Valley Area Pla, One Valley One Vision (**OVOV**), LA County's Our County Sustainability Plan, Southern California Association of Governments (**SCAG**) Regional Transportation Plan/Sustainable Communities Plan (**Connect SoCal**), the California Air Resources Board (**CARB**) 2022 Scoping Plan, Statewide 2030, 2045, and 2050 GHG reduction targets in SB 32, Executive Oder S-3-05, and AB 1279. This significance analysis violates CEQA by erroneously overlooking the Project's conflict with the 2017 CARB Scoping Plan, which was not analyzed. 015-12

The 2017 CARB Scoping Plan is still an applicable plan for the reduction of GHG emissions. The 2017 Scoping Plan was developed to facilitate California's compliance with SB 32, which requires statewide GHG emissions to be reduced to 40% below 1990 levels by 2030. (Health & Safety Code § 38566.) Although CARB has since created an updated Scoping Plan with more stringent goals, 2030 has not passed and so the goals set forth in the 2017 Scoping Plan are still valid and applicable. The DEIR did not discuss how the Project is consistent with any of the goals, including the 2050 goal of 80% below 1990 levels. The 2017 Scoping Plan also sets out statewide goals for total GHG emissions targets of 6 MTCO2e/capita by 2030, and 2 MTCO2e/capita by 2050 (CARB Scoping Plan, p. 99). Although the Project would achieve the 2030 target, it would exceed the 2050 target, which would need to be achieved well within the Project's lifetime.[1] The DEIR did not include strategies to reduce the Project's GHG efficiency over time, and therefore it would not be consistent with the 2017 Scoping Plan's 2050 goal. 015-13 015-14

The County did not provide enough evidence to support its finding of less-than-significant impact, and the Project would likely have a significant GHG impact under the second threshold because it is inconsistent with several of the applicable plans for the reduction of GHGs. 015-15

GHG Emissions Estimate Was Underreported

The County used a combination of the i-Tree Planting Calculator and CalEEMod to quantify the Project's estimated GHG emissions. However, the DEIR did not explain the rationale for rejecting a portion of the CalEEMod outputs in favor of the outputs from the i-Tree Planting Calculator instead, and did not provide sufficient evidence to support its estimations. 015-16

[1] $2027 + 30\ years = 2057$
The first year of Project operations is 2027. (DEIR, p. 4.8-28.)
The Project lifetime is expected to be 30 years. (DEIR, p. 4.8-30.)

10211 Sunland Blvd., Shadow Hills, CA 91040 (818) 650-0030 X101 dw@aenv.org

Without a full accounting of all GHG emissions sources the Project would generate, the estimation of emissions is potentially misleading of the true GHG impact, leading to a significance determination based on incomplete data. 015-17

The DEIR Should Have Accounted for Soil Carbon Accumulation by Vegetation Type

The estimate that was provided by CalEEMod could have been underestimated because at least one critical section in the CalEEMod report was missing. In particular, the section for soil carbon accumulation by vegetation type was missing values in the operational CalEEMod outputs. Removing vegetation from the Project site, as would be required to for site preparation, and particularly the removal of hundreds of trees, reduces the land's ability to act as a sink to sequester carbon and may even become a source of GHG emissions if the soil is degraded through construction activities or operations. CalEEMod analysis also accounts for variation in soil type for carbon sequestration, so the types of vegetation that will remain on the Project site during operation, if any, is important to include, not only in the DEIR itself, but in the CalEEMod calculations. 015-18

The Project proposes to remove many trees, which also alters the ability for soil carbon storage and should be accounted for in this soil carbon accumulation by vegetation portion of the CalEEMod analysis. The extent to which vegetation makes a difference in the quantification of GHG emissions should be known to the public and the decision-makers by including it in the CalEEMod report. 015-19

Loss of Carbon Sequestration Was Underestimated

The DEIR accounted for the potential loss of sequestered carbon from the tree removal that the Project would cause. (EIR, p. 4.8-27.) An active growing period of 30 years was assumed to reflect the Project lifetime. However, when a tree is removed, it does not merely represent the future loss of carbon sequestration for the duration of operations, but also a loss in carbon storage that was sequestered over the course of the trees' life time so far, and potentially different carbon sequestration capacity based on the tree's age and species. Further, the DEIR does not discuss or account for the indirect emissions of the disposal of the trees that are removed. Different outcomes would lead to differing amounts of GHG impact, but several possibilities include incineration, landfill, or composting. 015-20

The Project should reduce the carbon impact by opting to compost the removed biomass rather than burn or let it decompose in the landfill. Still, even composting would have an associated GHG release associated with it, given that the trees would break down and release the carbon that was stored throughout the trees' lifetimes. But the DEIR did not include any information on the GHG impact of disposing the trees. Thus, the GHG emissions due to tree 015-21

10211 Sunland Blvd., Shadow Hills, CA 91040 (818) 650-0030 X101 dw@aenv.org

removal was underestimated. The amount of trees that the Project would remove would increase carbon emissions, particularly if the removed trees would be landfilled or burned. The Project did not account for the full indirect impact of cutting and removing the trees and what would be done with them. The ultimate use of the trees could be an additional source of emissions that tips it past the chosen significance threshold, even with implementation of mitigation measures.

015-21 Cont.

Another indication of underreporting is that the DEIR was not consistent in its description of the number of trees to be removed. The DEIR states that 485 trees would be removed (EIR, p. 4.8-30) but then only accounts for 377 trees to be removed in the emissions estimates in Table 4.8-7. (EIR, p. 4.8-31.) Accordingly, the estimate may only account for a portion of the trees to be removed.

015-22

Further, the County does not support its calculations of carbon sequestration by substantial evidence. The DEIR did not provide sufficient information for decision-makers and the public about the i-Tree Planting Calculator that was used to determine the loss of carbon sequestration due to removing trees. The DEIR's explanation of the methodology is overly simplified and does not provide information on each tree to be removed or explain how the model accounts for the current ages of the trees or individual lifespans of different tree species. The DEIR did not provide enough information about the ages or species of the trees to be to planted or removed to adequately assess potential sequestration loss in comparison to gain. Therefore, the inputs to the model may not be specific enough to provide an accurate estimation.

015-23

The DEIR calculated and amortized the impact of tree removal as a one-time release of GHG emissions. However, the DEIR should also account for the "operational" impact of tree removal, because if the existing trees were not removed, they would continue to sequester more carbon as they grow for the duration of the Project. Therefore, the DEIR's estimations should include two aspects of tree removal, both "operational" (sequestration that would occur but for the Project) and "construction" (the release of carbon that was sequestered already based on the current age and species of each tree cut at the time of the tree removal). The failure to do so constitutes misleading and underestimated emissions associated with a loss of carbon sequestration.

015-24

Gain of Carbon Sequestration Was Unsupported

The County subtracted GHG emissions from the overall estimate based on the assumption that carbon would be sequestered by new trees that the Project would cause to be planted. But the DEIR did not include any information on the methodology used for the i-Tree Planting Calculator that was used to estimate emissions reductions that the DEIR claimed would be achieved through tree planting. Without the modeling information disclosed, and no

015-25

015-26

10211 Sunland Blvd., Shadow Hills, CA 91040 (818) 650-0030 X101 dw@aenv.org

indication of the ages or size of each tree to be planted, there is insufficient information to support discounting the estimated GHG emissions based on tree planting that is expected to occur. For this reason, discounting a certain amount of emissions savings based on planting trees is an unsupported methodology, particularly when the DEIR does not justify its methods with more information about the capacity for tree sequestration of each tree that it is planting. Therefore, the methodology of subtracting project emissions due to tree planting functions as an offset that is not supported by substantial evidence to reduce the Project's emissions to the degree claimed.

015-26 Cont.

Additionally, The DEIR's estimated GHG emission quantifications did not accurately reflect the CalEEMod output, with no justification as to the discrepancies. The main difference between the estimated quantification in the DEIR and the CalEEMod output is that the DEIR did not acknowledge that the CalEEMod outputs estimated that the carbon "sequestered" due to planting vegetation and trees would be approximately 109 MTCO2e reduced. Instead of using this CalEEMod estimate alongside all of the other CalEEMod outputs obtained for the Project's estimated emissions, the DEIR used a different source for its tree calculations, coming up with a higher amount of carbon sequestered, amortized to 131 MTCO2e reduced per year. The DEIR does not provide an explanation for why the number that was determined by CalEEMod was rejected in favor of this larger number, potentially overestimating the carbon emission reductions from planting trees.

015-27

Fair Share Mitigation

The County, as the CEQA lead agency, is required to make a determination of a project's significance before mitigation. (Lotus v. Dept. of Transportation (2014) 223 Cal.App.4th 645, 658.) Once a lead agency finds a significant cumulative impact, it is required to mitigate the impact to the fair share extent. (*Napa Citizens for Honest Gov't v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 364; CEQA Guidelines, § 15130(a)(3).) GHG impact is inherently cumulative, so a significant GHG impact requires fair-share mitigation. Here, because the Project was determined to have a potential significant cumulative impact, the County is required to mitigate to the fair-share degree, not merely to the level of the adopted significance threshold.

015-28

Here, the unmitigated Project emissions would exceed the chosen significance threshold, and therefore have a significant cumulative GHG impact. The County chose a significance threshold based on an efficiency metric of 2.42 MTCO2e per service population per year. (DEIR, p. 4.8-26.) DEIR estimated that before the implementation of mitigation measures, the Project would contribute to approximately 6,424.56 MTCO2e, with a GHG efficiency of 3.58 MTCO2e per service population per year. (DEIR, p. 4.8-32.) This GHG efficiency exceeds the chosen threshold of 2.42 MTCO2e per service population per year. The DEIR concluded that

015-29

10211 Sunland Blvd., Shadow Hills, CA 91040 (818) 650-0030 X101 dw@aenv.org

"GHG emissions generated by the Project would have a potentially significant impact on the environment and mitigation is required." (DEIR, p. 4.8-33.) Due to this significant impact, CEQA requires the Project to include mitigation measures which would reduce GHG emissions to the fair share extent in order to have a mitigated impact which is less-than-significant.

015-29 Cont.

The Project Would Have a Significant Impact Even After Mitigation

The DEIR's conclusion that the Project would have a less-than-significant GHG impact after mitigation is not supported by substantial evidence. Without mitigation, the Project would exceed this threshold and have overall emissions of 6,424.56 MTCO2e, but once they implement the mitigation measures (some of which have been quantified), the GHG efficiency metric would fall below the threshold, and emissions would fall to 4,086.57 MTCO2e per year. Yet, because the proposed mitigation measures do not represent the Project's fair share of emissions reductions, the Project would continue to have a significant impact after mitigation despite falling below the GHG efficiency threshold after mitigation. The County would need to include more mitigation to the fair share extent in order to support its finding of less-than-significant impact after mitigation.

015-30

More Mitigation Is Necessary to Reduce the Fair Share of GHG Impact

The fair share extent of the Project's cumulative impact on GHG emissions is the equivalent to the Project's contribution to GHG emissions. Therefore, to the extent feasible, this Project should incorporate mitigation measures which would fully reduce the Project's GHG impact. The adopted mitigation measures are not representative of the Project's fair-share emissions reductions because the mitigation measures do not account for the Project's entire contribution to GHG impact.

The mitigation measures incorporated into this Project include the following: (1) construction emission reductions, (2) building electrification measures, (3) energy conservation measures, (4) 100% zero-carbon electricity, (5) providing EV chargers in homes, (6) transportation demand management plans, (7) water use and conservation measures, (8) encouraging electric landscape equipment. These mitigation measures, some of which were quantified, were deemed to reduce the Project's GHG emissions from 6,424.56 MTCO2e down to 4,086.57 MTCO2e. The mitigation overall would reduce the Project's impact by about 36%.[2]

015-31

Therefore, the Project's impact would remain significant until the DEIR is able to demonstrate full mitigation of the Project's contribution to cumulative GHG impact. It is

[2] $(6{,}424.56\ MTCO2e - 4{,}086.57\ MTCO2e) \div 6{,}424.56\ MTCO2e = 0.3639\ or\ approx\ 36.4\%$

10211 Sunland Blvd., Shadow Hills, CA 91040 (818) 650-0030 X101 dw@aenv.org

insufficient to reduce the significant impact to marginally lower of a GHG intensity based on a few of the most readily available measures.

015-31 Cont.

There are more mitigation measures that would further reduce the Project's impact, including installing solar panels on rooftop surfaces, native landscaping to reduce water usage, and community-based measures. The County could also improve the transportation demand management plan by including nearby bike lanes and other measures to increase alternative modes of transportation for the residents. If there are no more feasible mitigation measures, the County should enter into an agreement with the applicant to purchase carbon offsets to the extent feasible for the Project's remaining lifetime GHG impact, 122,597.1 MTCO2e.[3]

015-32

015-33

015-34

CEQA Geology and Soils Significance Analysis

The Geology and Soils analysis violates CEQA because the County did not adequately consider the potentially significant impact of soil erosion or the loss of topsoil. The County did not discuss the increased likelihood of soil erosion due to the tree removal proposed by the Project. The threshold that the County adopted was whether the Project could result in "substantial soil erosion or the loss of topsoil" (DEIR, p. 4.7-17.) The Project could result in substantial erosion and the loss of topsoil on the site. When vegetation and trees are removed in the process of grading for the undeveloped site, soil becomes highly susceptible to erosion, which can be further worsened by rain and wind.

The Project would remove hundreds of trees, and even though it would plant more trees, it may take a while for the root systems to have a meaningful impact on reducing erosion. This section of the DEIR discusses measures to ensure that appropriate water and hydrology measures are taken with respect to erosion, but those water measures are largely irrelevant to the geology impact and do not adequately address the potential for erosion impact itself, including the damage it may cause to the landscape and surrounding areas. The County should have considered the increased risk of erosion due to tree removal, and its failure to do so amounts to an inadequate impact analysis.

015-35

Conclusion

For the reasons given in this letter, the DEIR is not in conformance with CEQA requirements. Notably, the DEIR failed as an informational document for decision makers and the public, the significance analysis was inadequate, proposed mitigation measures were inadequate, and the County should have either mitigated to the fair share extent or concluded that the Project would contribute to a significant environmental impact, even after mitigation.

015-36

[3] $4{,}086.57\ MTCO2e\ per\ year \times 30\ years = 122{,}597.1\ MTCO2e$

10211 Sunland Blvd., Shadow Hills, CA 91040 (818) 650-0030 X101 dw@aenv.org

Please put Advocates for the Environment on the list of interested parties to receive updates about the progress of this potential project approval. We make this request under Public Resources Code, section 21092.2. 015-37

Sincerely,

Dean Wallraff, Attorney at Law
Executive Director, Advocates for the Environment

10211 Sunland Blvd., Shadow Hills, CA 91040 (818) 650-0030 X101 dw@aenv.org

INTENTIONALLY LEFT BLANK

Response to Comment Letter O15

Advocates for the Environment
Dean Wallraff, Attorney at Law, Executive Director
February 5, 2025

O15-1 This introductory comment identifies the commenter. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR, and therefore it would not be appropriate to provide a response as part of this EIR.

O15-2 The County acknowledges the comment as an introduction to comments that follow. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR, and therefore it would not be appropriate to provide a response as part of this EIR.

O15-3 The comment restates information contained in the Draft EIR and does not express any environmental concerns related to the environmental analysis contained in the Draft EIR and therefore it would not be appropriate to provide a response as part of this EIR.

O15-4 The County acknowledges the comment as an introduction to comments that follow, which are addressed in Response to Comments O15-18, O15-20, O15-21, and O15-24.

O15-5 The County acknowledges the comment as an introduction to comments that follow, which are addressed in Response to Comments O15-28 through O15-30, and O15-36.

O15-6 Regarding a net-zero significance threshold, see Response to Comment O15-10, below.

O15-7 The County notes that the comment provides verbatim background information from a published report and does not raise an environmental issue within the meaning of CEQA, and therefore it would not be appropriate to provide a response as part of this EIR. The comment will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

O15-8 The Project does provide new buildings and does not include retrofitting new buildings. As described in Response to Comment O15-10, net zero for new buildings is not the threshold of significance for the Project. Notwithstanding the commenter's position that there should be a different threshold of significance than the one the County chose for use with this Project, substantial evidence supports the threshold of significance that the County is utilizing for the Project.

O15-9 As detailed on page 4.8-23 of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, the State CEQA Guidelines "do not establish specific thresholds of significance [...]. Rather, the State CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA." Therefore, even if other projects have applied a threshold, such as "net-zero" to a project, that does not "indicate that it is achievable" or necessary to implement for the Project. As detailed in Section 4.8,Greenhouse Gas Emissions, the Draft EIR utilizes an efficiency metric threshold which is based on the County's 2045 Climate Action Plan (CAP), which is consistent with the intent and methodology of the South Coast Air Quality Management District's (SCAQMD's) intent and methodology of their recommended Tier 4 approach detailed in a proposal, issued in September 2010 (Draft EIR, page 4.8-24). As detailed on page 4.8-26, the 2045 CAP efficiency metric threshold reflects the trajectory planned for in the state's

2022 Scoping Plan and AB 1279. As the Project achieves the efficiency metric threshold (Page 4.8-11, Project Operational GHG Emissions – Mitigated, on pages 4.8-34 and 4.8-35 of the Draft EIR), it would not interfere with attainment of the 2030, 2045, and 2050 statewide emission reduction targets, and therefore not interfere with the state's and the County's ability to achieve the mid-term and long-term GHG reduction targets.

With regard to the projects referenced by the commenter (Newhall Ranch and Tejon Ranch projects) Appendix D, Local Actions, of CARB's 2022 Scoping Plan notes that "[…] the Newhall and Tejon Ranch projects do not necessarily represent the type of development that California most needs to simultaneously tackle the housing and climate crises […]" (CARB 2022). Further, CARB's 2017 Scoping Plan and the 2022 Scoping Plan both caution against using net-zero targets for all projects. According to the 2017 Scoping Plan (CARB 2017):

"Achieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."

See Response to Comment O15-10 below for further details regarding the commenter's proposed net-zero threshold.

O15-10 See Response to Comment O15-9 regarding the County's discretion to determine the appropriate thresholds of significance for GHG emissions. Additionally, while the County had not yet adopted the 2045 CAP or other quantitative threshold at the time the Notice of Preparation (i.e., June 16, 2022), the Project Applicant submitted a preliminary application pursuant to SB 330 on March 18, 2021. The preliminary application granted a vested right to proceed with the Project, subject to the ordinances, policies, and standards in effect at the time. This date is prior to the adoption of the County's 2045 CAP (i.e., June 25, 2024). As described in the Draft EIR (see pages 4.8-23 through 4.8-26), the significance threshold developed for the Project was based on the 2045 CAP goal to reduce emissions 40% by 2030 and 50% by 2035 compared to 2015 levels. The goals in the 2045 CAP are consistent with the 2022 Scoping Plan Scenario to achieve the AB 1279 target of 85% below 1990 levels by 2045. This exceeds the state target of 40% below 1990 levels by 2030 (SB 32). As such, the 2045 CAP's 2030 target is in line with, and more stringent than, the SB 32 target for the state. In addition, the 2035 target of 50% below 2015 levels (equivalent to 57% below 1990 levels) puts the County on the trajectory to achieve carbon neutrality by 2045, consistent with state targets.

The County rejects the comment's suggestion to apply a net-zero threshold for this Project its use of the efficiency metric threshold based on the 2045 CAP is appropriate and supported by substantial evidence. While application of a net-zero threshold may be appropriate for some larger projects, it is not appropriate to apply such a threshold to projects where the vast majority of operational GHG emissions result from mobile-source emissions like the Project. The County finds it is not currently feasible to entirely mitigate the Project's mobile-source GHG emissions due to current jurisdictional and technological constraints. Nonetheless, the County has required all feasible mitigation measures to reduce the Project's GHG emissions to the maximum extent practicable and anticipates that the Project's GHG emissions will reduce over time as more stringent regulations come into effect and technology improves and becomes more widespread.

The 2022 Scoping Plan also notes that jurisdictions considering a net-zero target should carefully consider the implications it may have on emissions in neighboring communities and beyond. Appendix D of the 2022 Scoping Plan states:

> "Jurisdictions should also avoid creating targets that are impossible to meet as a basis to determine significance. For example, a net-zero target may imply that the GHG emissions of any project that are not reduced or offset to zero would be considered potentially significant. This may lead to undue burdens and frustrate project approval processes, which may be particularly problematic for residential development in climate-smart, infill areas. In addition, some jurisdictions have more land capacity to remove and store carbon, while others host GHG-emitting facilities that serve necessary functions and will take time to transition to new technology [...] Ultimately, a net-zero target that makes it more difficult to achieve statewide goals by prohibiting or complicating projects that are needed to support the state's climate goals, like infill development or solar arrays, is not consistent with the state's goals" (CARB 2022).

CARB further says that net-zero thresholds of significance may be considered "absent consistency with an adequate, geographically specific GHG reduction plan" (CARB 2022). The County has adopted a geographically-specific GHG reduction plan in its 2045 CAP, and while the Project is not subject to the 2045 CAP due to the vesting date of the Project's application, the Project has nevertheless utilized an efficiency metric that meets the targets of the 2045 CAP which is consistent with state targets.

Additionally, the Project demonstrates that it would not conflict with the majority of 2017 and 2022 Scoping Plans emission reduction strategies, as detailed in Table 4.8-13, starting on page 4.8-42 of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR. For the above-mentioned reasons, the use of a net-zero threshold is not necessary for the Project.

015-11 Please see Responses to Comments O15-9 and O15-10 regarding the County's discretion to determine the appropriate thresholds of significance for GHG emissions and use of a net-zero threshold. The County acknowledges the comment and notes it expresses the opinions of the commenter; however, it does not raise an issue related to the adequacy of any specific section or analysis of the Draft EIR. In response to litigation, the very two projects referenced by the commenter as being net-zero have been involved in extensive CEQA litigation, so the commenter's assumption that net-zero gives CEQA litigation protection is unfounded. This comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

015-12 The comment discusses the Draft EIR discussion of applicable GHG reduction plans. The comment restates information contained in the Draft EIR and does not raise an environmental issue within the meaning of CEQA, and therefore it would not be appropriate to provide a response as part of this EIR. This comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

015-13 As shown in Draft EIR Section 4.8.5 (pages 4.8-41 through 4.8-49) and Table 4.8-13 in Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, the Draft EIR includes an analysis of the potential to conflict with CARB's 2017 Scoping Plan and, as summarized in Section 4.8.5 of the Draft EIR, the Project would not conflict with CARB's 2008, 2014, and 2017 Scoping Plans. Therefore, the commenter's assertion is incorrect that the Project was not evaluated against the 2017 Scoping Plan.

Furthermore, as stated in Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, the efficiency metric used for the Project "reflects the trajectory planned for in the state's Scoping Plan, 2017 Scoping Plan Update, and 2022 Scoping Plan (i.e., AB 32, SB 32, and AB 1279)" (Draft EIR, page 4.8-35), and the Project's efficiency would be below the efficiency metric threshold, and thus would not interfere with the state's and the County's ability to achieve the mid-term and long-term GHG reduction targets (Draft EIR, page 4.8-35).

015-14 Please see Response to Comment 015-13 regarding CARB's 2017 Scoping Plan. Regarding applying the Project's efficiency to the 2017 Scoping Plan's statewide goal of 6 metric tons of carbon dioxide equivalent (MT CO_2e)/capita by 2030 and no more than 2 MT CO_2e/capita by 2050, it should be noted that, per CARB's 2017 Scoping Plan, "These goals are appropriate for the plan level (city, county, subregional, or regional level, as appropriate), but not for specific individual projects because they include all emission sectors in the state" (CARB 2017). As such, it is not appropriate to apply either standard to the Project.

015-15 Regarding evidence to support findings of a less than significant impact regarding Threshold 4.8b, as detailed in Section 4.8.5, Impact Analysis, of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, the Project would not conflict with the County's 2045 CAP, the County's General Plan (including the Santa Clarita Valley Area Plan), the County's Green Building Standards, Our County Sustainability Plan, SCAG's RTP/SCS (Connect SoCal), CARB's Scoping Plan and statewide 2030, 2045, and 2050 GHG reduction targets identified in SB 32, EO S-3-05, and AB 1279 and statewide strategies that reduce GHG emissions, with mitigation (Draft EIR, starting on page 4.8-35). As discussed under Threshold 4.8a, implementation of MM-4.8-1 through MM-4.8-8 and MM-4.17-2 would reduce potentially significant GHG emissions impacts to less than significant (Draft EIR, pages 4.8-30 through 4.8-35). As such, the Project's potential to conflict with applicable plans, policies, or regulations would result in a less-than-significant impact with mitigation and the Draft EIR provides substantial evidence to support its findings. The commenter erroneously states that the Project "is inconsistent with several of the applicable plans for the reduction of GHGs." It should be noted that the threshold specifically asks whether the Project would "conflict with an applicable plan [...]" and does not require an analysis of consistency of the Project to applicable plans. Nonetheless, as detailed on page 4.8-49 of the Draft EIR, "based on the analysis in Table 4.8-13, the Project would not conflict with a majority of the applicable strategies and measures in the Scoping Plan but may partially conflict with a couple of the recommended strategies of the Scoping Plan." Thus, overall, the Project would result in a less than significant impact with mitigation regarding the potential to conflict with an applicable plan, policy, or regulation for the purpose of reducing GHG emissions.

015-16 The County acknowledges the comment as an introduction to comments that follow. See Response to Comment 015-23 for further details.

015-17 The County acknowledges the comment as an introduction to comments that follow. See Response to Comments 015-18 through 015-27 for further details.

015-18 In response to this comment regarding soil carbon accumulation, revisions to the Draft EIR have been made to Section 4.8.4, Methodology, and Section 4.8-5 (Tables 4.8-7 through 4.8-9 and accompanying text) of Section 4.8, Greenhouse Gas Emissions, as shown in Chapter 3, Revisions to the Draft EIR, of this Final EIR. The revisions account for variation in soil type for carbon sequestration and a small increase in the number of tree removals assumed in the Draft EIR's CalEEMod analysis for GHG

emissions (discussed in further detail below in Response to Comment O15-22). As detailed in Chapter 3 of this Final EIR, these revisions would result in a total of 4,113.41 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year including all other operational emission sources from Table 4.8-11 in Section 4.8, Greenhouse Gas Emissions of the Draft EIR. When the revised mitigated annual emissions of 4,113.41 MT CO_2e per year are divided by the Project's service population of 1,795 persons, the Project would have a revised GHG efficiency of 2.29 MT CO_2e/person/year (an increase of 0.01 MT CO_2e/Service Person/year when compared to the Project efficiency detailed Table 4.8-11 of the Draft EIR). However, even after this slight increase, the Project's mitigated efficiency metric would not exceed the significance threshold of 2.42 MT/SP/yr, and thus, the impact would remain less than significant with mitigation incorporated. These revisions do not change the impact conclusions in the Draft EIR, nor do they result in any new significant impacts or the need for new or altered mitigation measures.[23]

O15-19 In response to this comment regarding removal of trees, which affects soil carbon storage within CalEEMod, revisions to the Draft EIR have been made to Section 4.8.5 of Section 4.8, Greenhouse Gas Emissions, as shown in Chapter 3, Revisions to the Draft EIR, of the Final EIR. See Response to Comment O15-18 and O15-20.

O15-20 The GHG analysis provided in Section 4.8, Greenhouse Gas Emissions of the Draft EIR and Chapter 3, Revisions to the Draft EIR of this Final EIR relied on the i-Tree planting calculator, as recommended by CalEEMod, to determine the changes in GHGs from tree planting and/or removal. The data from i-Tree was entered into CalEEMod to quantify the loss of carbon from trees removed as well as the carbon sequestered from trees planted. Revisions to the Draft EIR have been made to Section 4.8, Greenhouse Gas Emissions, as shown in Chapter 3, Revisions to the Draft EIR, of this Final EIR to account for variation in soil type for carbon sequestration and a small increase in the number of tree removals assumed in the Draft EIR's CalEEMod analysis for GHG emissions. Please refer to Response to Comments O15-18 and O15-22 for further discussion. The removal of trees is a one-time loss of carbon, which is based on the size, health, and type of tree. With that said, it was assumed that the trees removed were fully mature at the time of removal. Conservatively, no additional sequestration would occur beyond the point where the trees were removed.[24]

O15-21 Regarding indirect emissions of the disposal of the trees that are removed, the Draft EIR includes quantification of the average daily worker trips, vendor truck trips, and haul truck trips associated with removal of trees on-site. Per Section 20.87.040(A)(2) of the County Code, 100% of land-clearing debris must be recycled or reused. "Land clearing debris" includes shrubs, trees, and tree trunks (County of Los Angeles 2024). Additionally, any facility that processes the trees would be subject to separate permitting and would be required to account for those emissions at their facility. Regardless, all the carbon stored in the trees was assumed to be released into the atmosphere when removed. This is conservative as any type of recycling or reuse would sequester the carbon from the trees into the soil.

O15-22 The Draft EIR's CalEEMod calculations, which informed the analysis provided in Section 4.8, Greenhouse Gas Emissions, evaluated the removal of 377 trees (Draft EIR page 4.8-31). However, according to Appendix C, Significant Ecological Area Protected Tree Report, of Appendix C, Biota Report,

[23] These revisions do not change the conclusions in the Draft EIR. Rather, these revisions merely clarify information that supports conclusions that were already presented in an adequate Draft EIR. As such, these changes would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, do not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

[24] Ibid.

of the Draft EIR, a total of 443 trees would be removed from the Project site (including both protected and non-protected trees subject to direct removals and or located within proposed debris basins). Therefore, the Draft EIR's GHG analysis underestimated the number of trees to be removed. As such, in response to this comment, revisions to the Draft EIR have been made to Section 4.8.5 of Section 4.8, Greenhouse Gas Emissions, as shown in Chapter 3, Revisions to the Draft EIR, of the Final EIR.[25] As detailed in Chapter 3 of this Final EIR, these revisions would result in a total of 4,113.41 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year including all other operational emission sources from Table 4.8-11 in Section 4.8, Greenhouse Gas Emissions of the Draft EIR. When the revised mitigated annual emissions of 4,113.41 MT CO_2e per year are divided by the Project's service population of 1,795 persons, the Project would have a revised GHG efficiency of 2.29 MT CO_2e/person/year (an increase of 0.01 MT CO_2e/Service Person/year when compared to the Project efficiency detailed Table 4.8-11 of the Draft EIR). However, even after this slight increase, the Project's mitigated efficiency metric would not exceed the significance threshold of 2.42 MT/SP/yr, and thus, the impact would remain less than significant with mitigation incorporated. . These revisions do not change the impact conclusions in the Draft EIR, nor do they result in any new significant impacts or the need for new or altered mitigation measures.

015-23 A discussion of i-Tree, which was used for estimating carbon loss and sequestration for the Project, was provided in Section 4.8.4 (pages 4.8-27 and 4.8-29) in Section 4.8, Greenhouse Gas Emissions, of the Draft EIR. The existing tree information used in i-Tree was taken from the inventory found in Appendix A to Appendix C, Biota Report, of the Draft EIR, and the details of which trees would be removed are included in Table 4.8-7, Released Carbon from Trees Removed. As detailed in Response to Comment O15-22, a revised tree count of removals has been included in Table 4.8-7, as shown in Chapter 3, Revisions to the Draft EIR, of the Final EIR. Furthermore, a revised tree count of proposed plantings has been included in Table 4.8-8, Planted Trees Sequestered Carbon, as shown in Chapter 3, Revisions to the Draft EIR, of the Final EIR. The revised i-Tree output calculations, including the model assumptions for both trees removed and planted, are included as Attachment A (Appendix B-1, Air Quality and Greenhouse Gas Emission Calculations) of this Final EIR. While sufficient information was provided in the Draft EIR regarding i-Tree, in order to be responsive to this comment, additional information on i-Tree methodology has been provided on page 4.8-27 of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, as shown in Chapter 3, Revisions to the Draft EIR, of the Final EIR.

015-24 Please see Response to Comments O15-22 and O15-23 for a complete response regarding this topic.

015-25 Please see Response to Comment O15-23 for a complete response regarding this topic.

015-26 As stated on page 3-13 in Chapter 3, Project Description of the Draft EIR, a total of 856 ornamental trees and 772 native/mitigation trees would be planted on site. The Project's landscape plan, which provides a visual of the trees to be planted, is included as Figure 3-7, Landscape Plan, in Chapter 3 of the Draft EIR. While the exact diameter at breast height (dbh) is not known at this time of the design of the Project for trees to be planted, for modeling purposes, the revised i-Tree modeling used the i-Tree default value of a one-inch dbh. The revisions to the i-Tree modeling are included in Tables 4.8-7 and

[25] Ibid.

4.8-8, as shown in Chapter 3, Revisions to the Draft EIR, of the Final EIR.[26] Therefore, the carbon sequestration modeled for the Project is adequate.

015-27 Tables 4.8-7 and 4.8-8 of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, show the carbon released and sequestered by tree type based on the i-Tree outputs for the Project. This data is also found in the i-Tree output in Appendix B-1 to the Draft EIR. These calculations were carried forward in Tables 4.8-9 and 4.8-11 of the Draft EIR. The commenter is correct that CalEEMod also includes the CO_2 avoided from tree planting within i-Tree. Tables 4.8-7, 4.8-8, 4.8-9, and 4.8-11 of the Final EIR have been revised to reflect CO_2 avoided as represented in i-Tree and CalEEMod, as shown in Chapter 3, Revisions to the Draft EIR, of the Final EIR. Please also refer to Response to Comment 015-20 regarding use of the i-Tree planting calculator, as recommended by CalEEMod.

015-28 Regarding making a determination of a project's significance before mitigation, see pages 4.8-33 and 4.8-61 of Section 4.8 of the Draft EIR. Further, *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645 and *Napa Citizens for Honest Gov't v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342 do not support the commenter's claim that a significant GHG impact "requires fair-share mitigation." CEQA Guidelines provide an EIR may determine that a project's contribution to a significant cumulative impact will be less than significant if the project is required to implement or fund its fair share of a mitigation measure designed to alleviate the cumulative impact, but a "fair share mitigation" is not the only way a significant cumulative impact may be reduced to less than significant. (See CEQA Guidelines, Section 15130(a)(3).)

The Project would not result in a significant cumulative impact. As stated on page 4.8-62 of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, design features and mitigation measures that reduce GHG emissions at a project level also reduce the potential cumulative impact. The Project would have a potentially significant cumulative impact prior to mitigation and a less than significant cumulative impact with mitigation. Specifically, MM-4.8-1 through MM-4.8-8 (detailed in Section 2.8.7, Mitigation Measures, of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR) are identified to reduce Project-generated construction and operational GHG emissions from various Project emission sources, while implementation of MM-4.17-2, Transportation Demand Management (TDM) Program (identified in Section 4.17, Transportation, of the Draft EIR), would also reduce GHG emissions through implementation of a TDM program. Refer to "Overview of GHG Reductions with Mitigation Measures" on page 4.8-24 of the Draft EIR for further discussion of how the required mitigation measures would effectively reduce the Project's GHG emissions. As detailed on page 4.8-25 of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, the 2045 CAP efficiency metric threshold used for the Project is consistent with the SB 32 target of a 40% reduction of GHG emission below 1990 levels and the 48% reduction below 1990 levels is consistent with the 2022 Scoping Plan Scenario to achieve the AB 1279 target of 85% below 1990 levels by 2045. As the Project would be below the efficiency metric with mitigation and would not conflict with applicable plans, policies, or regulations for the purposes of reducing GHG emissions, it would not result in a cumulative GHG impact. As such, additional mitigation is not required to reduce cumulative impacts to less than significant.

[26] Ibid.

015-29 As detailed on page 4.8-62 of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, the Project would have a potentially significant cumulative impact regarding the potential to generate GHG emissions that may have a significant effect on the environment prior to mitigation and a less than significant cumulative impact with mitigation. As detailed on page 4.8-25 of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, the 2045 CAP efficiency metric threshold used for the Project is consistent with the SB 32 target of a 40% reduction of GHG emission below 1990 levels and the 48% reduction below 1990 levels is consistent with the 2022 Scoping Plan Scenario to achieve the AB 1279 target of 85% below 1990 levels by 2045. Additionally, as detailed on page 4.8-26 of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, "If the Project achieves the 2029 efficiency metric threshold, the Project would not interfere with the state's ability to achieve GHG reduction targets per SB 32 and AB 1279 and would demonstrate progress toward attaining 2050 targets per EO S-3-05." As the Project achieves the efficiency metric threshold with mitigation, the Project would not result in a cumulatively considerable impact, and no additional mitigation measures are required. Please also refer to Response to Comment 015-28 above.

015-30 See Response to Comments 015-28 and 015-29. No additional mitigation is needed beyond what is proposed in the Draft EIR to reduce Project-level or cumulative GHG emissions to a less than significant level.

015-31 As discussed in Response to Comments 015-28 and 015-29 and detailed in Section 4.8.5, Impact Analysis, and Section 4.8.6, Cumulative Impact Analysis, of the Draft EIR and Chapter 3, Revisions to the Draft EIR of this Final EIR, the Project has mitigated GHG project-level and cumulative impacts to less than significant levels, and no additional mitigation is needed.

015-32 As detailed in Response to Comment 015-29, above, no additional mitigation measures are required to reduce Project- or cumulative-level impacts to less than significant for GHG other than those included in Section 4.8.7, Mitigation Measures, of the Draft EIR. Regarding solar panels on rooftop surfaces, the Project would be subject to Title 24 requirements, which requires solar panels on residential uses, and MM-4.8-3, Energy Conservation, requires installation of a 7-kilowatt solar photovoltaic electric generating system at the recreation center (Draft EIR, 4.8-63). Additionally, MM-4.8-4, Utilize 100% Zero-Carbon Electricity, requires the use of 100% zero-carbon electricity procured through Southern California Edison Green Rate or other electricity provider for residences and the recreational center (Draft EIR, page 4.8-63). Regarding native landscaping, MM-4.8-6, Water Use Efficiency and Water Conservation, requires planting of native and drought-tolerant plant species only and other water conservation measures (Draft EIR, pages 4.8-63 and 4.8-64). Regarding community-based measures, the Project is only required to mitigate its own impacts; however, there are mitigation measures that may have community benefits, including but not limited to MM-4.8-3, MM-4.8-6, MM-4.8-8 (Landscape Maintenance Equipment Emission Reduction), and MM-4.17-2 (Transportation Demand Management Program), which would reduce GHG emissions. Additional community-based mitigation measures are not necessary as the existing mitigation reduces GHG emissions to less than significant levels.

015-33 Regarding bicycle lanes and other measures to increase alternative modes of transportation, MM-4.17-2, TDM Program, requires inclusion of a Class III bicycle route on-site, which would provide connectivity to the County's future Class II bicycle lane along the Project frontage. Additionally, MM-4.17-2 requires an e-Bikeshare System, community-based traveling planning (such as a rideshare program for school children), carpool/vanpool incentives, and a subsidized or discounted transit program. The Project would offer non-vehicular circulation throughout the Project site, such

as sidewalks, a Class III bicycle route (as implemented by MM-4.17-2), trails, and pathways, which would reduce VMT impacts and GHG emissions.

015-34 As detailed in Section 4.8.5, Impact Analysis, and Section 4.8.6, Cumulative Impact Analysis, of the Draft EIR and Chapter 3, Revisions to the Draft EIR of this Final EIR, the Project has mitigated GHG project-level and cumulative impacts to less than significant levels, and no additional mitigation is needed, as detailed further in Response to Comments 015-28 and 015-29.

015-35 The Project's potential to result in substantial soil erosion or the loss of topsoil during construction activities is detailed on page 4.7-17 of Section 4.7, Geology and Soils, of the Draft EIR. The analysis addresses impacts due to construction activities and land disturbance, including site preparation activities (including removal of trees and vegetation). As detailed in Section 4.7, the County would require submittal of a Storm Water Pollution Prevention Plan (SWPPP) that is required to be submitted to the Los Angeles Regional Water Quality Control Board prior to construction, in adherence to the conditions set forth under the National Pollutant Discharge Elimination System (NPDES) General Construction permit (Draft EIR, page 4.7-17). The SWPPP would incorporate best management practices (BMPs) that include erosion control measures during construction that would reduce the potential for erosion and loss of topsoil to occur to less than significant during construction. As the SWPPP would be site-specific, the SWPPP would be required to ensure that all potential erosion and loss of topsoil from vegetation removal on-site would comply with the conditions of the NPDES General Construction permit, resulting in less than significant erosion and topsoil impacts during construction.

Once constructed, operation of the Project would have a more limited degree of erosion potential because the proposed improvements would reduce the amount of soils that are exposed and susceptible to erosion, including in areas subject to tree and vegetation removal. As discussed beginning on page 4.7-17 of the Draft EIR, development would include the construction of drainage control features which would be designed to minimize erosion consistent with drainage control regulatory requirements. The Project would be required to have a Standard Urban Storm Water Mitigation Plan in place during the operational life of the Project in accordance with NPDES permit provisions that would include operational BMPs, developed consistent with the County's Low Impact Design Ordinance, that would control stormwater runoff and is protective of landscaped areas. In addition, the Project would implement design measures (i.e., stability fills and backdrains), as appropriate, to reduce erosion on constructed slopes, as detailed in the Geotechnical Report (Appendix E-1), consistent with and required by the Los Angeles County Building Code and California Building Code. The Los Angeles County Building Code, specifically Appendix J, includes requirements for vegetation and irrigation of cut slopes that must be provided by both a California licensed Geotechnical Engineer and a Landscape Architect. Irrigation systems must be able to sustain proposed plantings and provide a "permanent and effective method of erosion control." Building Codes J110.5 and J110.7 include requirements for planting and irrigation plans for slopes. Building Codes J110.6 and J110.7 also include requirements for preventative rodent control programs to ensure that rodent burrowing does not occur which can lead to erosion.

Additionally, an analysis of erosion impacts due to indirect impacts to the South Fork of the Santa Clara River and on-site drainages is detailed on page 4.4-55 of Section 4.4, Biological Resources, of the Draft EIR. MM-4.4-4, Biological Monitoring, requires identification and corrective actions to be taken on any erosion control measures that have the potential to negatively impact biological resources (Draft EIR, 4.4-77). The analysis in the Draft EIR is adequate, and no revisions are required.

015-36 This comment is understood to be a summary of previous comments. Please see Response to Comments above for specific responses.

015-37 The commenter has been added to the Project's mailing list for future CEQA notices on this Project.

Comment Letter 016

CALIFORNIA WILDLIFE FOUNDATION

California Wildlife Foundation/California Oaks, 201 University Avenue, H-43 Berkeley, CA 94710, (510) 763-0282

February 7, 2025

Erica Aguirre, Senior Planner
Los Angeles County Department of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Sent via email to: EAguirre@planning.lacounty.gov

Re: Trails at Lyons Canyon Project, State Clearinghouse Number 2022060346

Dear Ms. Aguirre:

The California Oaks program of the California Wildlife Foundation works to conserve oak ecosystems because of their critical role in sequestering carbon, maintaining healthy watersheds, providing plant and wildlife habitat, and sustaining cultural values. California Wildlife Foundation/California Oaks is writing this letter at the request of Santa Clarita Organization for Planning and the Environment (SCOPE) regarding the oak impacts of the proposed Trails at Lyons Canyon Project. We have also been in communication with Endangered Habitats League about the proposed project's misalignment with the county's new Safety and Land Use Elements. Both of these organizations are members of California Oaks Coalition. 016-1 016-2

The Los Angeles County General Plan articulates a no-net-loss policy for its oaks and oak woodlands. In reviewing the Draft Environmental Impact Report (DEIR), we offer that the proposed project runs counter to this policy. Specifically, we disagree with the assertion on page 4.4 67 of the DEIR, which states that the proposed mitigation measures will result in impacts that are less-than-significant. The oaks proposed to be removed should be replaced at a level that will offset the lost biomass and canopy of the removed trees and the substantial temporal loss of growth habitat structure and diversity. Trees planted need to be spaced in a manner that promotes their long-term growth and restores the area that has been damaged. The current restoration and conservation proposal will not achieve these habitat goals and will thus degrade habitat in a Significant Ecological Area, impacting oak ecosystems as well as the flora, fauna, and fungi that depend upon them. Saplings that survive will require many years to provide the habitat that the proposed project will destroy. The conservation easements of the proposed project do not advance the county's no-net loss goal. 016-3

California Wildlife Foundation/California Oaks agrees with Endangered Habitats League's concern that this project sets a bad precedent for the county's new Safety and Land Use Elements, which prohibit density increases and subdivisions in high fire hazard zones. We understand that the new application was completed before these new provisions went into effect. However, the recent firestorms underscore the importance of planning decisions that minimize rather than exacerbate risks. Additionally, the project is adjacent to existing development on one side only. Approval of this project would set a bad precedent for development in protected areas. 016-4 016-5

www.californiaoaks.org Oaks

California Wildlife Foundation/California was recently asked to assist the county develop an informational pamphlet to encourage residents to keep oaks standing to further the no-net-loss goal. We offer that the devastating fires in January diminished many oak woodlands and oak-forested lands. These losses should inform all planning decisions. The proposed Trails at Lyons Canyon tree removals will further degrade the county's canopy and pose risks to the project's residents that the General Plan is meant to ameliorate. 016-6

Sincerely,

Janet Cobb
Executive Officer, California Wildlife Foundation
jcobb@californiawildlifefoundation.org

Angela Moskow
California Oaks Program Director
amoskow@californiaoaks.org

cc: Lynne Plambeck, lynnep1@juno.com, SCOPE
Dan Silver, dsilverla@me.com, Endangered Habitats League

Response to Comment Letter O16

California Wildlife Foundation/California Oaks
Janet Cobb, Executive Director and Angela Moskow, California Oaks Program Director
February 7, 2025

O16-1 This introductory statement correctly identifies the Project's State Clearinghouse Number and states that it is writing its comments at the request of the Santa Clarita Organization for Planning and the Environment (SCOPE). This comment does not express adequacy concerns related to the environmental analysis in the Draft EIR.

O16-2 Regarding consistency with the County's General Plan Safety Element and Land Use Element, please refer to Comment O16-4, below.

O16-3 Policy C/NR 4.1 of the County's General Plan seeks to "preserve and restore oak woodlands and other native woodlands that are conserved in perpetuity with a goal of no net loss of existing woodlands." The SEA Category for Coast live oak woodland and forest is Category 3, which means "Vulnerable natural communities that are G3/S3 (NatureServe 2023), sensitive local native resources, and oak woodlands" (Draft EIR Page 4.4-33). The recommended preservation ratios for Category 3 SEA Resources, in accordance with the SEA Condition Use Permit, is 3:1. As stated in MM-4.4-1 (On-Site Habitat Preservation), of Section 4.4, Biological Resources of the Draft EIR, 10.28 acres of *Quercus agrifolia* Forest and Woodland would be preserved in the On-Site Conservation Area. As stated in MM-4.4-9 (Off-Site Habitat Preservation), over 80 acres of oak woodland would be preserved offsite. As stated in MM-4.4-16, 574 oaks would be planted for impacts to 219 oaks within the areas that are proposed for restoration in MM-4.4-2 (Habitat Mitigation and Monitoring Plan). MM-4.4-16 requires seven years of monitoring to ensure that the replacement trees grow and become established. MM-4.4.2 requires 10 years of monitoring and maintenance of the habitat to help the ecosystem as a whole to become established in the On-Site Conservation. As such, substantial evidence supports the Draft EIR determinations that impacts to oaks and oak woodlands will be less than significant with mitigation. The Project would preserve and restore oaks and oak woodlands and meet the goal of no net loss stated in the General Plan, consistent with the recommended preservation ratios for Category 3 SEA Resources, in accordance with the SEA Condition Use Permit, and impacts to oaks and oak woodlands would be less than significant.

O16-4 The Project Applicant submitted a preliminary application pursuant to SB 330 on March 18, 2021. The preliminary application granted a vested right to proceed with the Project, subject to the ordinances, policies, and standards in effect at the time. The General Plan Safety Element goals and policies discussed in the Draft EIR reference the updated version of the Safety Element. However, conformance to "new" Safety Element policies (such as Policy S 4.1) is not a Project requirement. An analysis of the Project's potential to result in a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 4.11, Land Use and Planning, of the Draft EIR (beginning on page 4.11-14). An analysis of applicable goals and policies from the version of the Safety Element that was in effect at the time the Project was vested and the NOP was published (i.e., the 2015 version of the Safety Element) has been added to Table 4.11-1 in Section 4.11, Land Use and Planning, of the Draft EIR, as included in Chapter 3, Revisions to the Draft EIR, of this Final EIR. As drafting of the General Plan Land Use Element coincided with preparation of the Draft EIR, the analysis provided in the Draft EIR

references the applicable iteration of the Land Use Element. Further, the updated Land Use Element did not include any revisions to goals and policies. As such, the Land Use Element goals and policies referenced and evaluated in the Draft EIR are still relevant and applicable.

Regarding wildfire hazards, as stated on page 4.20-53 in Section 4.20, Wildfire, of the Draft EIR, with implementation of the regulatory standards and MM-4.20-1, Wildfire Education Program, which requires an emphasis on education and preparedness for wildfire and evacuation; MM-4.20-2, Alternative Materials and Methods, which requires enhanced construction features to protect homes where the FMZ is less than 100 feet within the Project site; MM-4.20-3, Annual Fuel Modification Zone Inspection, which requires the maintenance of the Project's buffer between structures and unmaintained open space; and MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction-Related Fire Prevention Measures, both of which detail measures to reduce the risk of ignition on the Project site during construction, the Project would reduce the exposure of people and structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires to less than significant with mitigation. For a more detailed response related to wildfire risk, please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

016-5 Regarding adjacency to existing development, as stated in Section 4.11, Land Use and Planning, on page 4.11-39 of the Draft EIR, the Project site is adjacent to existing development (i.e., commercial, and residential uses) to the north, while The Old Road and I-5 (a major highway) run parallel to the Project site to the east, followed by urban development and land uses. As such, the Project is adjacent to existing development to the north and east. Furthermore, the Mountains Recreation and Conservation Authority (MRCA) Santa Clarita Woodlands Park, including Ed Davis Park in Towsley Canyon, is located southwest of the Project site. Southeast of the Project site's boundary is the City of Santa Clarita's Taylor Trail Wilderness and Open Space and Rivendale Park and Open Space. These land uses are publicly owned and established land uses that are not subject to potential development and would not change with implementation of the Project. See also Response to Comment O16-4. As such, the Project is considered adjacent to existing development to the north and east.

016-6 The concerns expressed in this conclusory statement related to oak trees and the potential to conflict with the General Plan are addressed above in Response O16-3.

Comment Letter O17

From: Di Thompson
To: Erica G. Aguirre
Subject: The Trails at Lyons Canyon
Date: Friday, February 7, 2025 9:22:40 AM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre,

I am writing to express my enthusiastic support for The Trails at Lyons Canyon development. This project represents a critical step forward in addressing our community's need for affordable senior housing while preserving the natural beauty of our region.

The inclusion of 71 affordable housing units for very-low-income seniors is a highlight of this project. These homes will provide a safe, comfortable, and accessible living environment for some of our most vulnerable residents, allowing seniors to age in place with dignity. This much-needed housing will ease the burden on many families in our area who are seeking affordable options for their aging loved ones.

Equally impressive is the project's commitment to open space preservation. By dedicating 176 acres of the 233-acre site to natural and improved open space, The Trails at Lyons Canyon will protect the local environment and enhance our community's quality of life. This open space will not only safeguard natural habitats but also provide opportunities for recreation and connection to nature, ensuring that the area's natural beauty is preserved for future generations.

In addition to these benefits, the project is designed with thoughtful planning to integrate seamlessly into the surrounding area, minimizing environmental impact while addressing housing and community needs. This balance of progress and preservation makes The Trails at Lyons Canyon a model for responsible development.

Please consider this thoughtful project, as it will bring much-needed senior affordable housing and greater access to public open space to the Santa Clarita Valley.

Very respectfully,

O17-1

Di Thompson, Realtor
Chair, Santa Clarita Valley Chamber of Commerce

Page 2 of 2 in Comment Letter 017

Response to Comment Letter O17

Thompson Reality Advisors
Di Thompson, Realtor
February 7, 2025

O17-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

INTENTIONALLY LEFT BLANK

Comment Letter 018

From: Eunice Ambriz
To: Erica G. Aguirre
Subject: RE: UPDATED NOTICE OF AVAILABILITY OF DRAFT EIR FOR THE TRAILS AT LYONS CANYON PROJECT - EXTENDED DEADLINE: MONDAY, MARCH 10, 2025
Date: Monday, February 10, 2025 11:48:27 AM
Attachments: image001.png

CAUTION: External Email. Proceed Responsibly.

Dear Erica,

Thank you for contacting the Yuhaaviatam of San Manuel Nation (formerly the San Manuel Band of Mission Indians) regarding the above-referenced project. YSMN appreciates the opportunity to review the project documentation, which was received by the Cultural Resources Management Department on February 6, 2025. The proposed project is located outside of Serrano ancestral territory and, as such, YSMN will not be requesting to receive consulting party status with the lead agency or to participate in the scoping, development, or review of documents created pursuant to legal and regulatory mandates.

018-1

Regards,
Eunice

From: Erica G. Aguirre <EAguirre@planning.lacounty.gov>
Sent: Thursday, February 6, 2025 1:16 PM
Subject: UPDATED NOTICE OF AVAILABILITY OF DRAFT EIR FOR THE TRAILS AT LYONS CANYON PROJECT - EXTENDED DEADLINE: MONDAY, MARCH 10, 2025

UPDATED NOTICE OF AVAILABILITY OF DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE TRAILS AT LYONS CANYON PROJECT

PROJECT NO. 2021-001195-(5) VESTING TENTATIVE TRACT MAP NO. 83301 (RPPL2021003061) CONDITIONAL USE PERMIT NO. RPPL2021003113 HOUSING PERMIT NO. RPPL2021003105 OAK TREE PERMIT NO. RPPL2021003070 ENVIRONMENTAL ASSESSMENT NO. RPPL2021003071 STATE CLEARINGHOUSE NO. 2022060346

018-2

To whom it may concern:

EXTENDED PUBLIC REVIEW PERIOD

The purpose of this notice is to inform you that, in light of the recent Hughes Fire, the formal public review period for the Draft Environmental Impact Report (Draft EIR) will be extended for an additional 31 days (for a total of 91 days) to **Monday, March 10, 2025.** The Hughes Fire presented "unusual circumstances," displacing many people from their homes and thereby potentially making it more difficult for some members of the public to timely submit comments during the original 60-day public review period (State CEQA Guidelines, Section 15105). All comments received by the closing of the extended public review period will be considered in the Final EIR.

PROJECT SITE
The project site, which is a total of 233.49 gross acres, is located in unincorporated Los Angeles County, in the northern foothills of the Santa Susana Mountains within the Santa Clarita Valley. It is located south of Sagecrest Circle, west of The Old Road, and north of Calgrove Boulevard and Ed Davis Park in Towsley Canyon. The project site consists of five Assessor's Parcel Numbers: 2826-041-039, 2826-023-014, 2826-022-026, 2826-022-027, and 2826-022-035. Development would be clustered within the northeasterly portion of the project site.

BRIEF OVERVIEW OF THE PROPOSED PROJECT
The proposed project includes several requested entitlements for the creation of 37 lots for the development of 510 dwelling units. This would include a mix of two- and three-story attached and detached for-sale condominium units, including affordable for-sale condominium units, and a four-story affordable senior rental apartment building. The proposed project would include both improved and natural and preserved open space (approximately 75% of the project site). The total earth movement would be approximately 2,845,000 cubic yards. The grading would be balanced onsite, and as such, no import or export of soil is proposed. *For a complete project description and vicinity map, please see the full Notice of Completion and Availability and Draft EIR (released on December 10, 2024) here:* https://bit.ly/3xYekD8.

SUMMARY OF ENVIRONMENTAL IMPACTS
The proposed project would result in a significant and unavoidable environmental impact to Transportation. All other environmental factors, including Aesthetics, Agriculture and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire, would result in less than significant impacts or less than significant impacts with mitigation.

PUBLIC HEARING
A public hearing on the proposed project and the Final EIR will be scheduled before the Los Angeles County Department of Regional Planning Commission at a time and date to be determined after the close of the Draft EIR public review period.

REVIEWING LOCATIONS
The Draft EIR can be viewed or downloaded at the following website: https://bit.ly/3xYekD8. Additionally, to ensure public access to the Draft EIR, digital and/or hard copies of the document are available for review at the following locations during normal business hours:

- Stevenson Ranch Library *(digital and hard copies available here)*
  25950 The Old Road

018-2 Cont.

Stevenson Ranch, California 91381

As well as by appointment at:

- Department of Regional Planning (*digital copies only, hard copy available upon request)*
  320 West Temple Street, 13th Floor
  Los Angeles, California 90012

Written comments must be received or postmarked on or before **Monday, March 10, 2025**. Written comments can be provided via email to my attention: **Erica G. Aguirre, AICP, Principal Planner** at: eaguirre@planning.lacounty.gov, or by mail to:

Attention: Ms. Erica G. Aguirre, AICP
Principal Planner, Subdivisions
Los Angeles County Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, California 90012

Should you have any comments, questions, or concerns, please do not hesitate to get in touch via email or call me at: (213) 893-7020 or (213) 974-6433.
Thank you,

018-2 Cont.

ERICA G. AGUIRRE, AICP (she/her/hers)
PRINCIPAL PLANNER, Subdivisions
Office: (213) 974-6433 • Direct: (213) 893-7020
Email: eaguirre@planning.lacounty.gov

Los Angeles County Department of Regional Planning
320 West Temple Street, 13th Floor, Los Angeles, CA 90012
planning.lacounty.gov

LA COUNTY PLANNING SHAPING TOMORROW

Our field offices are currently open to the public. Please visit planning.lacounty.gov for information about available services, public meeting schedules, and planning projects.

INTENTIONALLY LEFT BLANK

Response to Comment Letter O18

Yuhaaviatam of San Manuel Nation
Eunice Ambriz, Cultural Resources Technician
February 10, 2025

O18-1 The comment confirms the Project site is outside of ancestral territory. As such, no comments are made. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O18-2 The Updated Notice of Availability is included in the record of correspondence. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter 019

From: Ivan Volschenk (Evolve)
To: Erica G. Aguirre
Subject: The Trails at Lyons Canyon
Date: Monday, February 10, 2025 11:58:03 AM
Attachments: image001.png

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre,

On behalf of the Santa Clarita Valley Chamber of Commerce, the largest and oldest business organization in the Santa Clarita Valley, I am writing to express our Board's strong support for The Trails at Lyons Canyon. We believe this project will bring significant economic and community benefits while addressing the urgent need for price-attainable and affordable housing.

One of the most commendable aspects of this development is its dedication to preserving open space. The Trails at Lyons Canyon will protect 83% of the property—616 acres—as permanent open space, ensuring that local wildlife and natural landscapes remain undisturbed. Additionally, the project will integrate with over 20 miles of adjacent hiking and nature trails, further enhancing recreational opportunities and promoting a healthy, active lifestyle for residents.

The economic benefits of this project cannot be overstated. By introducing 510 new homes—including 71 designated affordable housing units for very-low-income seniors and middle-income working families—The Trails at Lyons Canyon will help sustain a robust workforce by allowing essential workers, young professionals, and families to remain in our community. Housing affordability has become a growing challenge in Santa Clarita, and this development takes a thoughtful and responsible approach to ensuring inclusivity and economic stability.

019-1

Additionally, The Trails at Lyons Canyon offers a more sustainable and community-focused alternative to previous development proposals. The prior 2009 plan, which included luxury estate homes spread across over 230 acres, posed significant fire risks and disrupted sensitive ridgelines. By comparison, the current plan minimizes environmental impact, enhances fire safety measures, and preserves more open space, making it a far better solution for both current and future residents.

For these reasons, I strongly urge the Planning Commission to approve The Trails at Lyons Canyon. This project reflects a balanced approach to responsible growth, economic opportunity, and environmental preservation—aligning perfectly with the needs and values of the Santa Clarita Valley.

Thank you for your time and consideration. Please do not hesitate to reach out if you have any questions.

Sincerely,

Ivan Volschenk
President & CEO
Santa Clarita Valley Chamber of Commerce

SANTA CLARITA VALLEY
CHAMBER OF COMMERCE®

661-702-6977 | www.scvchamber.com | hello@scvchamber.com

The information contained in this e-mail message is intended only for the personal and confidential use of the recipient(s) named above. This message is privileged and confidential. If the reader of this message is not the intended recipient or an agent responsible for delivering it to the intended recipient, you are hereby notified that you have received this document in error and that any review, dissemination, distribution, or copying of this message is strictly prohibited. If you have received this communication in error, please notify us immediately by e-mail, and delete the original message.

Response to Comment Letter O19

Santa Clarita Valley Chamber of Commerce
Ivan Volschenk, President and CEO
February 10, 2025

O19-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

INTENTIONALLY LEFT BLANK

Comment Letter 020

From: Sue Nevius
To: Erica G. Aguirre
Subject: Trails at Lyons Canyon
Date: Monday, February 10, 2025 11:26:23 AM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre,

I am writing to express support for The Trails at Lyons Canyon development. I have lived and worked in Santa Clarita for almost 20 years, and this project represents a critical step forward in addressing our community's need for affordable senior housing while preserving the natural beauty of our region.

The inclusion of 71 affordable housing units for very-low-income seniors is a highlight of this project. These homes will provide a safe, comfortable, and accessible living environment for some of our most vulnerable residents, allowing seniors to age in place with dignity. This much-needed housing will ease the burden on many families in our area who are seeking affordable options for their aging loved ones.

Equally impressive is the project's commitment to open space preservation. By dedicating 176 acres of the 233-acre site to natural and improved open space, The Trails at Lyons Canyon will protect the local environment and enhance our community's quality of life. This open space will not only safeguard natural habitats but also provide opportunities for recreation and connection to nature, ensuring that the area's natural beauty is preserved for future generations. 020-1

In addition to these benefits, the project is designed with thoughtful planning to integrate seamlessly into the surrounding area, minimizing environmental impact while addressing housing and community needs. This balance of progress and preservation makes The Trails at Lyons Canyon a model for responsible development.

Thank you for your consideration as this project will bring much-needed senior affordable housing and greater access to public open space to the Santa Clarita Valley.

Sue Nevius
Marketing Manager
Direct: 661-505-4323
Cell: 714-600-5410
Email: Sue@affloans.com

AMERICAN FAMILY FUNDING

American Family Funding
A Division of American Pacific Mortgage
A Direct Lender
28015 Smyth Drive
Santa Clarita, CA 91355

Response to Comment Letter O20

American Family Funding
Sue Nevius, Manager
February 10, 2025

O20-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

Comment Letter O21

From: Marcella Bell
To: Erica G. Aguirre
Subject: PROJECT NO. 2021-001195-(5)
Date: Monday, February 10, 2025 7:45:57 PM
Attachments: LAC Planning.pdf
Importance: High

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre:

We received the attached letter in the mail with very important information about a project that will have significant impact on our community. O21-1

However important this information is, I was surprised when opened since the envelope is non-official and could have easily been mistaken for a realtor's advertisement or some other type of junk mail. There was no indication that the notice was from a county department, nor did it contain any information on the envelope that would lead anyone to want to open it to access the information inside. This is not helpful for your process of public information nor is it helpful for those of us in the community that would need to be aware of the potential impact of proposed developments. O21-2

County Planning should resend the notice in an official county envelope so that proper notice is given to the community. For the future, County Planning should consider using only envelopes that are indicative of who they're from and what they are for. Thank you. O21-3

Marcella Bell on behalf of Rocco & Carmela Coduti

Marcella A. Bell
Law Offices of Marcella A. Bell
3580 Wilshire Blvd., Suite 2020
Los Angeles, CA 90010
213-637-9838 direct
213-637-9810 main
213-637-8658 fax
mbell@lawofficemab.com

This e-mail message may contain legally privileged and/or confidential information. If you are not the intended recipient, or the employee or agent responsible for delivery of this message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this e-mail message is strictly prohibited. If you have received this message in error please immediately notify the sender and delete this e-mail message from your computer.

021-4

Page 2 of 4 in Comment Letter 021

LA COUNTY PLANNING

AMY J. BODEK, AICP
Director,
Regional Planning

DENNIS SLAVIN
Chief Deputy Director,
Regional Planning

**UPDATED NOTICE OF COMPLETION AND AVAILABILITY
OF DRAFT ENVIRONMENTAL IMPACT REPORT FOR
THE TRAILS AT LYONS CANYON PROJECT
PROJECT NO. 2021-001195-(5)
VESTING TENTATIVE TRACT MAP NO. 83301 (RPPL2021003061)
CONDITIONAL USE PERMIT NO. RPPL2021003113
HOUSING PERMIT NO. RPPL2021003105
OAK TREE PERMIT NO. RPPL2021003070
ENVIRONMENTAL ASSESSMENT NO. RPPL2021003071
STATE CLEARINGHOUSE NO. 2022060346**

Los Angeles County Department of Regional Planning, acting in the capacity of "Lead Agency" under Los Angeles County's ("County's") Environmental Guidelines, Chapter III, Section 304, filed a "Notice of Completion and Availability" of a Draft Environmental Impact Report ("EIR") for the Trails at Lyons Canyon Project ("Project") on December 10, 2024, with a 60-day public review period. This document was prepared in accordance with, and pursuant to, the California Environmental Quality Act ("CEQA"), as amended; Public Resources Code, Section 21000 et seq.; and the "Guidelines for Implementation of the California Environmental Quality Act" (State CEQA Guidelines), California Code of Regulation, Title 14, Chapter 15000 et seq., (including Section 15160).

EXTENDED PUBLIC REVIEW PERIOD

The purpose of this notice is to inform you that, in light of the recent Hughes Fire, the formal public review period for the Draft EIR will be extended for an additional 31 days (for a total of 91 days) to **Monday, March 10, 2025.** The Hughes Fire presented "unusual circumstances," displacing many people from their homes and thereby potentially making it more difficult for some members of the public to timely submit comments during the original 60-day public review period (State CEQA Guidelines, Section 15105). All comments received by the closing of the extended public review period will be considered in the Final EIR.

021-5

PROJECT SITE

The Project site, which is a total of 233.49 gross acres, is located in unincorporated Los Angeles County, in the northern foothills of the Santa Susana Mountains within the Santa Clarita Valley. It is located south of Sagecrest Circle, west of The Old Road, and north of Calgrove Boulevard and Ed Davis Park in Towsley Canyon. The Project site consists of five Assessor's Parcel Numbers ("APN") 2826-041-039, 2826-023-014, 2826-022-026, 2826-022-027, and 2826-022-035. Development would be clustered within the northeasterly portion of the Project site.

BRIEF OVERVIEW OF THE PROPOSED PROJECT

The Project includes several requested entitlements for the creation of 37 lots for the development of 510 dwelling units with a mix of two- and three-story attached and detached for-sale condominium units, including affordable for-sale condominium units, and a four-story affordable senior rental apartment building. The dwelling units will range in height from 26 to 38 feet high for the condominiums and 45 feet high for the senior living rental apartment building. The Project includes the development of 291 buildings and the following features and amenities: two 57- to 64-foot-wide onsite public streets, 26- to 36-foot-wide private driveways and fire lanes providing access to all units, five-foot-wide pedestrian walkways throughout the development, several debris basins, a water tank, a 4,540 square-foot recreational center, and an outdoor swimming pool. The Project meets required parking standards including a two-car garage for each proposed condominium dwelling unit and surface parking for the senior apartment dwelling units, additional uncovered and guest parking spaces throughout the development, and bicycle parking. The

320 West Temple Street, Los Angeles, CA 90012 • 213-974-6411 • TDD: 213-617-2292
@LACDRP • planning.lacounty.gov

Page 3 of 4 in Comment Letter 021

Project also includes concrete block walls and privacy fencing from 3.5 to six feet high, and several retaining walls from three to 17.5 feet high. Several on-site access and utility easements are proposed. The Project would include both improved and natural and preserved open space (approximately 75% of the Project site). The total earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site adjacent parcel adjacent to The Old Road that includes manufactured slopes. The grading would be balanced onsite, and as such, no import or export of soil is proposed. *For a complete project description and vicinity map, please see the full Notice of Completion and Availability (dated December 10, 2025) here:* https://bit.ly/3xYekD8.

SUMMARY OF ENVIRONMENTAL IMPACTS
The Project would result in a significant and unavoidable environmental impact to Transportation. All other environmental factors, including Aesthetics, Agriculture and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire, would result in less than significant impacts or less than significant impacts with mitigation.

PUBLIC HEARING
A public hearing on the proposed Project and the Final EIR will be scheduled before the Los Angeles County Department of Regional Planning Commission at a time and date to be determined after the close of the Draft EIR public review period.

REVIEWING LOCATIONS
The Draft EIR can be viewed or downloaded at the following website: https://bit.ly/3xYekD8. Additionally, to ensure public access to the Draft EIR, digital and/or hard copies of the document are available for review at the following locations during normal business hours:

- Stevenson Ranch Library *(hard and digital copies available here)*
  25950 The Old Road
  Stevenson Ranch, California 91381

As well as by appointment at:

- Department of Regional Planning (*digital copy only)*
  320 West Temple Street, 13th Floor
  Los Angeles, California 90012

Written comments must be received or postmarked on or before **Monday, March 10, 2025**. Written comments can be provided via email to eaguirre@planning.lacounty.gov, or by mail to:

Erica G. Aguirre, AICP
Principal Planner, Subdivisions
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, California 90012

Should you have any questions, please call (213) 974-6433.

O21-5
Cont.

Response to Comment Letter O21

Law Offices of Marcella A. Bell
Marcella A. Bell on behalf of Rocco and Carmela Coduti
February 7, 2025

O21-1 This introductory statement does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

O21-2 The public noticing for the Draft EIR Notice of Availability (NOA) has been conducted in conformance with the substantive and procedural requirements of CEQA and the State CEQA Guidelines. Specifically, in accordance with Section 15087(a) of the State CEQA Guidelines, on December 10, 2024, an NOA of the Draft EIR was submitted to the State Clearinghouse, posted at the County Clerk's office, and published in The Santa Clarita Valley Signal. The NOA was also printed on County letterhead and mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously requested such notice in writing. In addition, a thumb drive with electronic copies of the Draft EIR and appendices were made available for public review at the Stevenson Ranch Library (25950 The Old Road Stevenson Ranch, CA 91381). Hard copies of the Draft EIR and appendices were made available for public review at County Planning's main office (320 W. Temple Street, Los Angeles, CA 90012). The NOA, Draft EIR, and appendices were also posted to the County's website.

In light of the recent Hughes Fire, the Draft EIR formal public review period was extended for an additional 31 days (for a total of 91 days) to March 10, 2025. As such, on February 7, 2025, an updated NOA was submitted to the State Clearinghouse, posted at the County Clerk's office, and published in The Santa Clarita Valley Signal. The updated NOA was also printed on County letterhead and mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously requested such notice in writing. In addition, hard copies of the Draft EIR and appendices were relocated from County Planning's main office to the Stevenson Ranch Library. The updated NOA was also posted to the County's website. As such, the County has complied with all applicable noticing requirements for the NOA and updated NOA.

O21-3 As discussed above in Response to Comment O21-2, public noticing for the Draft EIR NOA and updated NOA has been conducted in conformance with the substantive and procedural requirements of CEQA and no additional noticing actions are required. This comment is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

O21-4 This is an attachment showing a scanned copy of the envelope used for the updated NOA mailing. As stated above, public noticing for the Draft EIR NOA and updated NOA has been conducted in conformance with the substantive and procedural requirements of CEQA and no additional noticing actions are required.

O21-5 This is an attachment showing a scanned copy of the updated NOA. As stated above, public noticing for the Draft EIR NOA and updated NOA has been conducted in conformance with the substantive and procedural requirements of CEQA and no additional noticing actions are required.

INTENTIONALLY LEFT BLANK

Comment Letter 022

ENDANGERED HABITATS LEAGUE
DEDICATED TO ECOSYSTEM PROTECTION AND SUSTAINABLE LAND USE

February 13, 2025

LA County Department of Regional Planning
Attention: Erica G. Aguirre, AICP, Principal Planner, Subdivisions
320 West Temple Street, 13th Floor
Los Angeles, CA 90012

RE: Trails at Lyons Canyon, Project No. PRJ2021-001195, SEA Permit No. RPPL2021003113

Dear Ms. Aguirre:

Endangered Habitats League (EHL) appreciates the opportunity to comment on the project and its CEQA documentation. For your reference, EHL is a Southern California regional conservation group dedicated to ecosystem protection and sustainable land use. We have been stakeholders in several County planning initiatives. 022-1

These comments supersede and replace previous comments. 022-2

The project was approved in 2008 for development of estates over most of the site and modified in 2015 for greater density. It is our understanding that this project had all necessary entitlements to proceed. The decision of the applicant to withdraw the prior project and re-plan on a smaller footprint brings advantages. The modestly smaller footprint (a 20% reduction) is more consolidated and provides greater on-site open space (now about 60%). With a state-authorized density bonus, there would be more affordable, attached product types. SEA compliance through a CUP would result in several hundred acres of offsite conservation (within the same SEA). However, highly adverse impacts would occur to hundreds of oaks and other sensitive resources. 022-3 022-4

We note that if the density yield of the current (post-withdrawal), underlying zoning were maintained, rather than increased, greater clustering could have been obtained. This alternative should be evaluated in the DEIR as an environmentally superior project. 022-5

EHL is particularly concerned over fire hazard. The project is within a Very High Fire Hazard Severity Zone. In 2022, the Board of Supervisors made the wise and prescient decision to limit putting more and more life and property at risk of wildfire. In fire danger zones, this reasonable compromise for housing would allow infill to continue but stop expansion of the wildland-urban interface (WUI) – where ignitions occur. If we learn anything from the Palisades and Eaton fires, it is that in the chaos of a windstorm-driven fire emergency, variables cannot be controlled and evacuation does not go according to plan. Alerts are faulty and people perish. 022-6

8424-A SANTA MONICA BLVD., #592, LOS ANGELES, CA 90069-4267 ♦ WWW.EHLEAGUE.ORG ♦ PHONE 213.804.2750 ♦ FAX 323.654.1931

The good news is that in its new Area Plans, the County is succeeding in meeting all its housing obligations – for all income levels – in safe locations. 022-7

Due to the date of its completed application, this project is exempt from the updated 2022 Safety and Land Use Elements. *However, it is imperative to recognize that under today's standards, it would not comply and could not be approved.* Rather than being "generally surrounded"[1] by existing built development, visually, it is a *protruding thumb* jutting into surrounding natural land. It adjoins the actual existing community on only a small fraction of its perimeter. Even if a freeway is considered "development," only about a *third* of its perimeter would be adjoining. While the qualifier "generally" gives some leeway to being *completely* surrounded, the project does not come close to passing a common-sense test of compliance. It also would not meet the state definition of infill (surrounded on 75%). *Rather, it markedly expands the wildland-urban interface in a dangerous way.* Only a much smaller project, closely adhering to the freeway and the housing to the north might conceivable considered to be "generally surrounded." 022-8

It is essential to recognize this non-compliance so that a disastrous precedent for progressive WUI expansion is not set. To do otherwise would void the purpose and intent of the updated Safety and Land Use Elements to strike a *balance* on growth in fire zones by limiting it to more defensible locations *within* exiting communities. According to the 2022 motion (enclosed) by Supervisor Barger and passed unanimously, 022-9

> The Safety Element acknowledges the need to limit further development into the wildland-urban-interface. This acknowledgment is critical to reduce fire frequency, protect life and property, and reduce future fire-related costs to the taxpayer.

If Trails at Lyons Canyon is said to comply, it would set a precedent for *unlimited* WUI expansion on the basis of single-sided adjacency.

EHL has not reviewed the project's evacuation plan. This requires an independent traffic engineer expert in such situations. The County should retain such expertise (or require a peer reviewer of the County's choice paid for by the applicant) to objectively assess road capacities, the boundaries of the evacuation area, worst case scenarios, etc. In our experience, evacuation studies prepared by consultants to the applicant are extraordinarily unreliable. (Such critiques are available upon request.) With the density increase and proposal for senior housing, fire evacuation for this site becomes even more fraught and problematic. 022-10

Trails are also proposed. *EHL strongly recommends, however, that final trail placement be deferred until a resource management plan is completed, so that recreational activities avoid* 022-11

[1] Dictionary definitions and synonyms for "surrounded":
To extend on all sides of simultaneously; encircled; confine on all sides; enclosed; to be on every side of

and minimize impacts to riparian and other sensitive resources. The negative effects of recreation on wildlife are increasingly recognized and are best addressed by the resource management plan preceding trail siting. Please see enclosures for information on recreational impacts. 022-11 Cont.

To conclude and summarize, we recognize that re-planning resulted in overall improvement in site design and more land-efficient housing products. SEA compliance would yield a large contribution to SEA protection. Nevertheless, the project is a holdover from bad planning practices of the past, most saliently in regards to fire safety. These bad practices are now superseded by better approaches to meet housing demand and should not be repeated. Specifically, the project's non-compliance with the current Safety and Land Use Elements must be clearly recognized so as not to set a precedent that renders these vital safeguards meaningless. As noted above, to provide an adequate range of choices for consideration, we recommend development of an alternative that clusters the current (post-withdrawal) density yield on a smaller footprint. In any case, independent traffic engineering expertise should be brought to bear on evacuation planning. If, ultimately, any project is approved, we also request that a resource management plan *precede* and guide trail placement. 022-12, 022-13, 022-14, 022-15, 022-16

Thank you for considering these comments.

Yours truly,

Dan Silver
Executive Director

Enclosures

AGN. NO.

MOTION BY SUPERVISOR KATHRYN BARGER April 5, 2022

Update to the County's Safety Element

The Safety Element is just one component of the County's overall General Plan. The Safety Element Update factually focuses on the full range of potential hazards, with the goal of reducing the potential short and long-term risk of death, injuries, property damage, and economic and social dislocation resulting from fire, flood, droughts, earthquakes, landslides, and climate change in the County's unincorporated areas.

The Safety Element is required to be updated for two reasons. First, the State of California recently passed legislation requiring the Safety Element to address climate change and hazard risk reduction. The second reason is to integrate safety planning with our policies dealing with growth and future housing production. Recently enacted legislation (Senate Bill 1035) requires the Housing Element and Safety Element to be updated at the same time to ensure that we are not planning for new growth in hazard areas, particularly fire hazard zones. Additionally, Senate Bill 1241, enacted in 2012, requires development in fire hazard areas to have additional wildfire protections.

The Safety Element also recognizes that disadvantaged communities are uniquely vulnerable to climate-related hazards. This policy emphasis is appropriately reflected in a concerted effort to enhance the safety of existing at-risk communities through Resilience Hubs, Microgrids, Cooling Centers, and Community Wildfire Protection Plans.

O22-17

Although fires are a natural part of the wildland ecosystem, development in wildland areas can potentially increase the danger of wildfires to residents, property, and the environment, which are increasing, again, in part due to climate change.

The Safety Element acknowledges the need to limit further development into the wildland-urban-interface. This acknowledgment is critical to reduce fire frequency, protect life and property, and reduce future fire-related costs to the taxpayer.

-- MORE --

MOTION

SOLIS _____

KUEHL _____

HAHN _____

BARGER _____

MITCHELL _____

MOTION BY SUPERVISOR KATHRYN BARGER
April 5, 2022
Page 2

However, the Safety Element, in a nod to the ongoing housing and homeless crises, achieves the necessary balance with mitigating environmental hazards, while also recognizing areas that are suitable for and already committed to development. New subdivisions or general assembly uses that are generally surrounded by existing or planned development and address the need for evacuation and emergency response, can continue to be developed.

Accordingly, to meet these goals, the County should make slight revisions to Policies S4.1, S4.20, and L1.10 as identified in redline below:

> Policy S 4.1: Prohibit new subdivisions in VHFHSZs unless: (1) the new subdivision is generally surrounded by existing or entitled development or is located in an existing approved specific plan or is within the boundaries of a communities facility district adopted by the County prior to January 1, 2022, including any improvement areas and future annexation areas identified in the County resolution approving such district; (2) the County determines there is sufficient secondary egress; and (3) the County determines the adjoining major highways and street networks are sufficient for evacuation as well as safe access for emergency responders under a range of emergency scenarios, as determined by the County. Discourage new subdivisions in all other FHSZs.
>
> Policy S 4.20: Prohibit new and intensification of existing general assembly uses in VHFHSZs unless: (1)the use is located in an existing approved specific plan or (2) the County determines there is sufficient secondary egress and the County determines the adjoining major highways and street networks are sufficient for evacuation, as well as safe access for emergency responders under a range of emergency scenarios, as determined by the County. Discourage new general assembly uses in all other FHSZs
>
> Policy L 1.10: Prohibit plan amendments that increase density of residential land uses within mapped fire and flood hazard areas unless generally surrounded by existing built development and the County determines the adjoining major highways and street networks can accommodate evacuation as well as safe access for emergency responders under a range of emergency scenarios, as determined by the County.

Understanding the need to balance environmental protection, limiting extreme hazards, and supporting the protection of existing or planned development:

O22-17
Cont.

-- MORE --

MOTION BY SUPERVISOR KATHRYN BARGER
April 5, 2022
Page 3

I, THEREFORE, MOVE that the Board of Supervisors:

1. Indicate your intent to adopt the Negative Declaration associated with Environmental Assessment No. RPPL2021005522, finding that there is no substantial evidence that the project will have a significant effect on the environment;

2. Indicate your intent to approve the Project (Plan Amendment No. RPPL2021011001) with slight revisions to Policies S 4.1, S 4.20, and L 1.10 ;

3. Find that the Project, with these revisions, is consistent with the goals, policies, and principles of the General Plan; In the interest of public health, safety, and general welfare and in conformity with good zoning practice, and consistent with other provisions of Title 22 of the Los Angeles County Code (County Code); and

4. Instruct County Counsel to prepare the final documents for the Project and bring them back to the Board for their consideration.

O22-17
Cont.

# # #

SUP:KB:ast

California Fish and Wildlife, Recreation Special Issue; 29-51; 2020

Recreation-related disturbance to wildlife in California – better planning for and management of recreation are vital to conserve wildlife in protected areas where recreation occurs

ELIZABETH LUCAS*

California Department of Fish and Wildlife, Region 5, Natural Community Conservation Planning Program, San Diego, CA 92123, USA (Retired)

*Corresponding Author: libbylucas5@gmail.com

Expanding levels of authorized and unauthorized non-consumptive recreation increasingly threaten sensitive biological resources in areas protected primarily or solely to conserve them. As California's human population grows, recreational use in protected areas grows commensurately. The majority of the documented effects on wildlife from non-consumptive recreation are negative; they include detrimental changes in behavior, reproduction, growth, immune system function, levels of stress hormones, and finally, to the survival of individual animals and persistence of wildlife populations and communities. This paper provides insights from the recreation ecology literature into these recreation-related disturbances to insects, amphibians, reptiles, birds, and mammals from hiking, jogging, biking, horseback riding, boating, and off-highway/all-terrain vehicles. The documented evidence of these disturbances to wildlife reveals the flaw in the prevalent assumption that recreation is compatible with biological conservation, the dual-role protected areas' core function. This assumption usually rests on the expectations of (1) allowing only ecologically sound siting of recreational areas and ecologically acceptable types, levels, and timing of recreation, and (2) providing sufficient monitoring, management, and enforcement of recreation to ensure the perpetuation of viable populations of focal sensitive species. However, it is rare that these expectations are met. The ultimate essential outcome of the information provided in this paper is the cessation of the extant recreation-related exploitation of dual-role protected areas. This calls for a societal course change involving: widespread, long-term, and continual multimedia dissemination of the science-based information about recreation-related disturbance to wildlife; application of a science-based approach to siting recreational areas and allowing only ecologically acceptable types, levels, and timing of recreation; and, perpetual personnel and funding explicitly for management at levels commensurate with recreational pressure. These measures would also improve the often cited economic, educational, and recreational/health benefits of dual-role protected areas.

022-18

Key words: dual-role protected areas, enforcement, fragmentation, management, multimedia education, non-consumptive recreation, perpetual funding, planning and siting of trail networks, recreational disturbance to wildlife, unauthorized trails

Conserving habitats is a key strategy for conserving biodiversity worldwide (Pickering 2010). In California, the core function of many areas protected for conservation is to ensure the perpetuation of sensitive species (i.e., species whose persistence is jeopardized), as is appropriate for the nation's most biologically diverse state (CDFW 2015). The level of land conservation that California enjoys is intended to ensure that the state's globally renowned biodiversity remains intact. However, of all the states in the USA, California hosts the most listed species imperiled by recreation, in part because the strongest association of outdoor recreation is with urbanization (Czech et al. 2000), which is itself an important cause of endangerment (Reed et al. 2014). The anticipated growth of the state's human population from approximately 38 million in 2013 to 50 million by mid-century with a commensurate increase in recreational demands in protected areas will likely increase the continual challenge of conserving the state's wildlife (CDFW 2015).[1, 2] The dual role of protected areas to conserve biodiversity and provide nature-based recreational and educational opportunities for millions of people rests on the assumption that non-consumptive recreation is compatible with wildlife conservation, despite documented evidence to the contrary (Reed and Merenlender 2008; Larson et al. 2016; Hennings 2017; Dertien et al. 2018; Reed et al. 2019).[3] Ecologically sound types, levels, timing, and siting of recreation, and perpetual management of recreation at or exceeding a level commensurate with the recreational pressure, are vital to ensure the perpetuation of viable populations of focal sensitive species in "dual-role" protected areas.[4, 5]

O22-18 Cont.

[1] Protected areas include locally-owned lands (e.g., county and city reserves), state-owned lands (e.g., ecological reserves, wildlife areas, state parks), federally owned lands (e.g., national wildlife refuges, wilderness areas), and privately owned lands (e.g., conservation easements, conservancy lands, mitigation banks and lands). Here, the focus is on protected areas preserved primarily or solely for the perpetuation of sensitive species (e.g., ecological reserves, protected areas established pursuant to Natural Community Conservation Plans and/or Habitat Conservation Plans, mitigation banks and lands).

[2] Wildlife means all wild animals: insects, fish, amphibians, reptiles, birds, and mammals.

[3] In contrast to consumptive recreation (e.g., hunting, fishing), non-consumptive recreation is generally assumed not to directly extract a resource; it includes nature and wildlife viewing, beach-going, kayaking, hiking, biking, horseback riding, and wildlife photography (Reed and Merenlender 2008; CDFW 2016; Gutzwiller at el. 2017). From here forward, "recreation" means non-consumptive recreation, unless otherwise stated.

[4] Focal species are organisms whose requirements for survival represent factors important to maintaining ecologically healthy conditions; identified for the purpose of guiding the planning and management of protected areas in a tractable way, focal species include keystone species, umbrella species, flagship species, and indicator species (Soulé and Noss 1998; Marcot and Flather 2007). Here, the term "focal species" is intended to include those species encompassed by the guild surrogate approach of conservation; this approach entails one member or a subset of members serving as a surrogate for other members of the guild (Marcot and Flather 2007).

[5] From here forward, "management" includes monitoring, management, and enforcement with the necessary authority. The level of enforcement necessary is dependent on the level of continual management implemented; generally, the more the management, the less enforcement is necessary. In addition, monitoring and management encompass both the natural resources and human users of the protected areas. The fiscal support to be secured includes personnel and all program costs.

Insights from studies

Purpose.—The purpose of the following discussion is to provide insights to disturbances to several wildlife species from non-consumptive recreation. Accordingly, the insights are exclusively from studies that document recreation-related disturbance to wildlife. This approach reflects the evidence that the majority of documented responses of wildlife species to non-consumptive recreation are negative, as demonstrated in two systematic literature reviews (Reed et al. 2014; Larson et al. 2016) and a literature review of over 500 articles written and reviewed by the scientific community (Hennings 2017). The insights are intended to (1) illustrate that scientific studies provide clear evidence of recreation-related disturbance to wildlife, (2) elicit awareness of and concern about the disturbance, and (3) stimulate action to address it.

Sources and scope.—The 71 articles and 13 reports[6] reviewed about the recreation-related effects on wildlife generally reflect Larson et al.'s (2016) finding that studies about such effects focus on mammals (42%) and birds (37%), followed by invertebrates (12.4%), reptiles (5.5%), fish (5.1%), and amphibians (0.7%); there are no insights herein from studies of fish. Larson et al. (2016) found that some of the least-studied taxonomic groups (i.e., reptiles, amphibians, and invertebrates) had the greatest evidence for negative effects of recreation. While not all the studies selected for this paper address wildlife in California, all the studies' scenarios could occur in the state as do all species types among the studied taxa (i.e., insect, amphibian, reptile, bird, mammal).

Not all of the studies selected for this paper address sensitive species. This is primarily because current research on recreation-related effects on wildlife includes few species of conservation concern (Larson et al. 2016). However, sensitive species may experience greater levels of recreation-related disturbance than described for common species in the study insights herein. This is because many rare and isolated species are specialists, and they may be more sensitive to anthropogenic disturbance, including recreational activities, than common and widely distributed species (Bennett et al. 2013; Reilly et al. 2017). Recreation-related declines of common species warrant attention because of their functional ecological importance – local depletions of common species can have broad consequences within the food web (Säterberg et al. 2013; Baker et al. 2018; Reed et al. 2019). Recreation-related declines or disturbance in an important common prey species may affect the species in higher trophic levels (Reed et al. 2019). More than a quarter of species become functionally extinct before losing 30% of their individuals (Säterberg et al. 2013; Baker et al. 2018; Reed et al. 2019); here, functional extinction occurs when the population size of the depleted species is below the level at which another species goes extinct (Baker et al. 2018).

The scope of this paper does not include studies about snow-based recreation, though all of the 14 articles addressing snow-based recreation that Larsen et al. reviewed reveal that non-motorized and motorized snow-based activities (i.e., skiing, snowshoeing, snowmobiling) can have significant negative effects. Nor does the scope of this paper include studies exclusively about the effects of dogs on wildlife; however, a literature review on the effects of dogs on wildlife concludes that (1) people with dogs on leash, and even moreso

O22-18 Cont.

[6] All the articles are published in peer-reviewed journals. Some of the reports were peer reviewed and all were written by or contributed to by professionals in the fields of biology or ecology, though none of the reports were published in peer-reviewed journals to this author's knowledge (e.g., Burger 2012; Hennings 2017; Dertien et al. 2018; Reed et al. 2019). This paper does not cite all the articles and reports this author read. And, the totals exclude documents that are not explicitly about recreation-related effects on wildlife (e.g., Tinkler et al. 2019; Taff et al. 2019; Wolf et al. 2019) and all newspaper articles.

off leash, are more alarming and detrimental to wildlife than any non-motorized recreational user group without dogs, and (2) people with dogs substantially increase the amount of wildlife habitat affected (Hennings 2016). Hennings (2016) also asserts that wildlife does not appear to habituate to the presence of dogs; effects linger after dogs are gone because the scent of dogs repels wildlife.

Management measures.—The study insights focus on the documented recreation-related disturbance to wildlife, not on management measures to prevent or minimize the disturbance. However, many of the reviewed articles and reports identify such measures, which range from full prohibition of human access, to time-of-access restrictions (e.g., seasonal or diurnal/nocturnal restrictions), to various measures based on disturbance thresholds. Disturbance thresholds are thresholds of various measurable parameters above or below (depending on the parameter) which wildlife is disturbed. Examples of disturbance thresholds are distance between trails and nesting sites, density of active trails, number of recreationists, number of recreational events per time frame, and duration of recreation. These thresholds may be used to establish management measures such as minimum widths of spatial buffers between recreational trails and wildlife.

A common theme among the management measures is that continual proactive and adaptive management is needed to protect wildlife from recreational disturbance, and that access closures should occur if the management fails.[7] Adaptive management is a cornerstone of large-scale multi-species conservation (CDFW 2014). An example of proposed management measures is Dertien et al.'s (2018) recommendation for a precautionary approach that adopts maximum values of quantitative disturbance thresholds observed for the taxa of concern, while excluding the extreme values of the thresholds.[8] This approach stems from the gaps in knowledge about quantitative disturbance thresholds of recreation; such thresholds are lacking for many species, taxonomic groups, and sources of disturbance.

O22-18 Cont.

Regarding spatial buffers, a general rule of minimum thresholds for distance to trails cannot be established for some species, as individual variability within species can be high and can differ among populations, types of topography, and frequencies and types of human intrusion (González et al. 2006). For example, Dertien et al. (2018) recommended a 200-m minimum buffer for ungulates; however, this would be insufficient for the circumstances of Taylor and Knight's (2003) study further cited below in which they found that mule deer (*Odocoileus hemionus*) showed a 96% probability of flushing within 100 m of recreationists located off trails, and the probability of their flushing did not drop to 70% until perpendicular distance reached 390 m. Two additional factors that influence the determination of spatial buffers are "effect zones" (i.e., areas within which wildlife is disturbed by recreational ac-

[7] Based on section 13.5 of the California Fish and Game Code and the Natural Community Conservation Planning Act (i.e., section 2805 of Fish and Game Code), adaptive management generally means (1) improving management of biological resources over time by using new information gathered through monitoring, evaluation, and other credible sources as they become available, and (2) adjusting management strategies and practices accordingly to assist in meeting conservation and management goals (e.g., conservation of covered or focal species). Under adaptive management, program actions are viewed as tools for learning and to inform future actions.

[8] The central tenet behind the precautionary principle is that precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. Generally, the four central components of the principle are: taking preventive action in the face of uncertainty; shifting the burden of proof to the proponents of an activity; exploring a wide range of alternatives to possibly harmful actions; and increasing public participation in decision making (Kriebel et al. 2001). There are subtle differences between the precautionary principle and precautionary approach, but their consideration is beyond the scope of this paper.

tivities on trails) and the density of the trail networks. The effect zones can extend several hundred meters on either side of the trails (Reed et al. 2019). The smaller a protected area is and the denser its trail networks are, the greater the proportion of the protected area is occupied by effect zones, and the less likely it is that spatial buffers such as those Dertien et al. (2018) recommended will protect the focal species from recreational disturbance (Wilcove et al. 1986; Ballantyne et al. 2014).

There are many sources that provide information about management of recreation in protected areas, or guidance on the design or siting of trails/trail networks. These sources include management framework tools designed to address recreational use, though they vary in their attention to the needs of wildlife (Hennings 2017).

Insects

In a study of the effects of walkers, runners, and runners with dogs on the federally endangered Karner blue butterfly (*Lycaeides melissa samuelis*; Karners) at the Indiana Dunes National Lakeshore, USA, Bennett et al. (2013) found that (1) Karners flushed in the presence of recreationists as they would respond to natural agents, such as predators; (2) recreation restricted host-plant choice by reducing host-plant availability, effectively rendering the quality of habitat within 10 m of the trail unsuitable; (3) recreation had the potential to reduce oviposition rate of virtual females by 50%, and therefore population growth rates; (4) the frequency at which recreationists negatively affected the females (including their oviposition) varied substantially with habitat extent, number of recreationists, and sensitivity; and (5) habitat extent was the primary predictor variable. The authors concluded that Karners will experience less recreation-related disturbance the farther their habitat extends beyond trails.

In a study conducted near Palo Alto, California, USA focusing on 10 native oak woodland species of butterflies, Blair and Launer (1997) concluded that even small perturbations by hikers and joggers in a recreational area led to (1) a loss in the number of butterfly species (species richness) of the original oak-woodland community compared to the number of these species in a biological preserve with no recreation, and (2) a lower number of butterflies (abundance) in the recreational area compared to the biological preserve. The authors also concluded that multi-use areas may not adequately preserve butterfly species diversity.

Herpetofauna

Responses of the Iberian frog to recreational activities.—In a study involving field research in the Guadarrama Mountains in central Spain and simulation modelling to assess the effects of recreation on Iberian frogs (*Rana iberica*), an endemic species in decline, Rodríguez-Prieto and Fernández-Juricic (2005) measured frog abundance and response to human disturbance. The authors found that Iberian frog abundance (a population-level parameter): (1) was significantly affected mainly by study site location and distance to the nearest recreational area, a proxy for human disturbance; (2) was positively related to distance from recreational area (i.e., as distance decreased, abundance decreased); and (3) increased as number of humans decreased. With respect to the effects of repeated disturbances (e.g., human approaching with a steady pace) on the individual-level parameters of

O22-18
Cont.

flight initiation distance[9] and time to resume pre-disturbance activities, the study showed that: (1) frogs' flight initiation distances were longer in areas with less vegetation cover; (2) though the flight initiation distances did not vary with repeated human approaches, the number of repeated human approaches affected the frogs' time to resume pre-disturbance activities, with second and third approaches increasing the time it took frogs to reoccupy the disturbed spot; and (3) there was an 80% decrease in the frogs' stream-bank use with a 5-fold increase in the direct disturbances per hour, and a 100% decrease in stream bank use with a 12-fold increase in human disturbances per hour. The authors concluded that direct human disturbance affects this species at the population level, and that it needs to be considered as a potential factor affecting amphibian populations with low tolerance for disturbance.

Responses of the yellow-blotched map turtle to human disturbance.—In a study along a 300-m reach of the Pascagoula River in southeastern Mississippi, USA, Moore and Siegel (2006) studied the effects from boating, fishing, jet skis, and direct anthropogenic damage to nests on the nesting and basking behavior of the yellow-blotched map turtle (*Graptemys flavimaculata*), listed as threatened under the U.S. Endangered Species Act. With respect to human disturbance of nesting turtles, the authors found that numerous turtles waited several hours near a sandbar before emerging from the water onto the beach to nest, and turtles that attempted to nest upon emerging onto the beach frequently abandoned their efforts and retreated to the water—of a total of 79 nesting attempts, only 15 successfully completed oviposition. With respect to human disturbance of basking turtles, the authors found that the number of turtles disturbed differed significantly with the type of disturbance; specifically, anglers that remained in the basking vicinity caused the most disturbance, and jet-skis caused less than an expected amount of disturbance; this was likely because of the anglers' closeness (compared to the jet-skis) to the basking logs and the long periods they remained, both of which caused turtles to bask less. Moore and Siegel (2006) concluded that: the interruption of nesting activities may have a severe impact on the viability of this population of turtles through changes in numbers of clutches; and, the interruption of basking and consequent reduction in the turtles' body temperature has the potential to negatively affect the ability of all turtles to process and digest food, and the ability of females to develop eggs during the reproductive seasons.

Responses of the common wall lizard to tourism.—In a study of common wall lizards (*Podarcis muralis*) conducted in areas with high and low levels of tourism within the same habitat in the Guadarrama Mountains in central Spain, Amo et al. (2006) examined whether the lizards differed in several parameters upon each human approach. The authors found that: (1) regardless of the level of tourism, lizards usually exhibited anti-predator behavior by fleeing to hide in refuges upon approach of a human; (2) in comparison to lizards inhabiting areas of low tourism pressure, lizards inhabiting areas with high tourism pressure, and therefore presumably escaping to hide in refuges more often, showed a poorer body condition and higher intensity of tick infection at the end of the breeding period; and (3) the intensity of tick infection was higher in male than in female lizards. The authors speculated that the higher intensity of infection probably resulted from the cumulative costs of high frequency of flight, since anti-predatory behaviors such as flight are costly in terms of losing time for other activities, including feeding—nutritional status can affect the capacity

[9] The flight initiation distance is the distance from an approaching threat (e.g., recreationist) at which an animal initiates moving away to escape from the threat. This movement is a fitness/energy cost to the fleeing animal. For the Iberian frogs, this was the distance between an approaching human and the frog when the latter jumped into the water in response to the human's approach.

O22-18
Cont.

of lizards to mount an immune response to infection. Furthermore, lizards with poor body condition had low levels of immune response, which may aggravate the deleterious effects of anti-predatory behavior on body condition. Female lizards in poor body condition produced offspring of small size, and body size of infant lizards can affect their probability of survival. Additionally, females with blood parasites also showed reduced fat stores and produced smaller clutches. By these effects on infants and clutch sizes, tourism may also negatively affect the maintenance of lizards' populations.

Responses of various reptiles to recreationists.—In a study to systematically assess recreationists' direct and indirect effects on sensitive wildlife species in 14 NCCP/HCP protected areas in San Diego County, California, USA, Reed et al. (2019) integrated monitoring of both wildlife species and recreationists (e.g., hikers, mountain biker, horseback riders).[10] The authors found that recreation was associated with declines in reptilian species' richness, occupancy, habitat use, and relative activity in the NCCP/HCP protected areas. Of the three species (all lizards) for which statistical analyses were feasible, two exhibited negative relationships between occupancy and human recreation—the orange-throated whiptail (*Aspidoscelis hyperythra beldingi*, an NCCP/HCP-covered species) and common side-blotched lizard (*Uta stansburiana*).

Birds

General responses.—In Steven et al.'s (2011) review of 69 peer-reviewed articles (50 of which were research conducted in protected areas) of original research on the effects on birds from non-motorized nature-based recreation, 61 articles reported recreation as having negative effects (i.e., negative changes in physiology, behavior, abundance, and reproductive success, the latter including the number of nests, eggs laid, and/or chicks hatched or fledged). The single documented positive effect involved an increase in the abundance of corvids (e.g., crows and ravens) in campgrounds. Walking or hiking, standing or observing birds from viewing platforms or standing next to a nesting colony, dog walking, running, cycling/mountain biking, and canoeing were all reported as negatively affecting birds. A large majority (85–93 %) of the studies that examined the effects of a single person, groups of two or more people, and/or avian population-level responses, reported negative effects. The population-level responses entailed effects on density, abundance, and reproduction.

In a study using data collected in 112 urban parks throughout Melbourne, Australia, Bernard et al. (2018) tested whether birds responded differently to bikers and walkers. They found that: (1) relative to their response to walkers, four of the 12 focal species studied initiated escape from bikers at longer flight initiation distances and two escaped with greater intensity (i.e., more likely to involve flying); (2) no species responded less to bicycles than to walkers; and (3) the flight initiation distance did not differ in response to speed of bicycle travel, though the difference in the two speeds used was only 1 m/sec. In concluding that

022-18 Cont.

[10] An NCCP (Natural Community Conservation Plan) is a comprehensive, single- or multi-jurisdictional/utility plan that provides for regional habitat and species conservation at an ecosystem level while allowing local land use authorities to better manage growth and development. Upon issuing an NCCP Permit, the California Department of Fish and Wildlife (CDFW) can authorize take of selected state listed species and other species of concern, subject to the terms of coverage under the NCCP (CDFW 2015). An HCP (Habitat Conservation Plan) is the federal counterpart to an NCCP; the U.S. Fish and Wildlife Service prepares HCPs and issues HCP permits. The terms and conditions under which an NCCP/HCP's protected areas are conserved establish the types and levels of public access that are permitted (Burger 2012). The types and levels of public access vary among the NCCP/HCP protected areas from no access to guided-only access to open access. The species protected by NCCPs/HCPs are typically called covered species.

bikers can appear more or less threatening to birds than a single pedestrian, Bernard et al.'s (2018) results underscore that the responses of wildlife to recreational activities vary among species, sites, types of recreation, and exposure over time to the activities.

Songbirds.—Davis et al.'s (2010) study of the effects of mountain biking on golden-cheeked warblers (*Dendroica chrysoparia*, warblers) with nests near biking trails in the Fort Hood Military Base in Killeen, Texas, USA, and the Balcones Canyonlands Preserve in Austin, Texas, found direct and indirect effects. The direct effects included warblers flushing >20 m in response to encounters with passing mountain bikers. Indirect effects included abandonment of nests <2 m from the biking trails and a reduction in the quality of nesting habitat due to biking-related fragmentation and alteration of habitats. In comparison to the control sites, it was likely that habitat fragmentation resulting from trails in the biking sites caused the increased predation of warbler nests by rat snakes (*Elaphe obsoleta*) and other edge-adapted predators. The authors speculated that the biking sites, which were able to maintain viable populations of warblers at the time of the study, may not continue to do so with additional recreational use, fragmentation, and alteration of the habitats.

Forest birds.—Bötsch et al. (2018) examined how breeding-bird communities changed with distance to trails in four broad-leafed and mature forests in Switzerland and France; the forests were similar in size, structure, and trails, but widely different in levels of recreation (mostly walkers). The authors found that: in the forests with high levels of recreation, the density and species richness of birds decreased by 12.6% and 4.0%, respectively, at points close to trails compared to points farther away; cavity, ground, and open-cup nesters had fewer territories and species close to trails compared to farther away; and, above-ground foragers and ground foragers showed a similar pattern. None of these effects on density, species richness, nesting guild, or foraging guild occurred in the forests with low levels of recreation. Both high- and low-sensitivity species (i.e., long versus short flight initiation distances) had fewer territories and fewer species close to versus far from trails in forests with high levels of recreation; however, in forests with low levels of recreation, highly sensitive species exhibited only a slight tendency for fewer territories close to trails. The authors inferred from their findings that (1) human presence in forests disturbs avian community composition and abundance along trails in recreational areas, (2) the overall effect of recreational trails themselves depends mainly on recreational intensity and only slightly on species characteristics, and (3) the observed effects on birds in forests where recreation has occurred for decades suggest that habituation to humans has not outweighed the effects.

Raptors.—In a study along the Boise River in Idaho, USA, examining flight initiation distances of bald eagles (*Haliaeetus leucocephalus*) in response to actual and simulated walkers, joggers, anglers, bikers, and vehicles, Spahr (1990) found that the highest frequency of eagle flushing was associated with walkers, followed by anglers, bikers, joggers, and vehicles. Eagles were most likely to flush when recreationists approached slowly or stopped to observe them, and were less alarmed when bikers or vehicles passed quickly at constant speeds. However, the longest flight initiation distance was in response to bikers, followed by vehicles, walkers, anglers, and joggers. Hennings' (2017) literature review provides the following about bald eagles: pedestrians within 275 m caused a 79% eagle response rate; eagles did not resume eating for four hours after disturbance by walkers; a suggested minimum 600-m buffer around breeding eagles, beyond which response frequency dropped below 30%; an apparent threshold of about 20 daily recreational events after which eagles were slow to resume feeding, and after 40 events, feeding was uncommon; sub-adults were

O22-18 Cont.

less tolerant of disturbance than adult eagles; and recreation-related long-term effects can include reductions in survival, particularly during winter and especially for juveniles.

With respect to the tolerance (through habitat imprinting, genetic inheritance, or habituation) of golden eagle (*Aquila chrysaetos*) for recreational disturbance, Pauli et al. (2017) used an individual-based model[11] to assess the effects of walkers and off-highway vehicles on golden eagle populations. The primary modeling results indicated that, while golden eagles can develop tolerance for recreational disturbance, tolerance for even moderate levels of disturbance may not develop within a population at a sufficient rate to offset the effects of increased recreation on breeding golden eagles, particularly because this is a long-lived species with low recruitment. Pauli et al. (2017) conclude that, taken together, the simulation results suggest that recreation-related disturbance has a substantial effect on golden eagle populations and that increased recreation activity will exacerbate such effects. Given the results and the fact that non-motorized recreation decreases the probability of egg-laying in golden eagles (Spaul and Heath 2016), the authors asserted that trail management and a reduction in recreation activity within eagle territories are necessary to maintain golden eagle populations in locations where levels of recreation are increasing.

Shorebirds.—In a controlled study conducted in Scotland of the behavioral responses of the ruddy turnstone (*Arenia interpres*) to an approaching human, Beale and Monaghan (2004) found that birds supplemented with food flushed sooner from the human and searched for predators more frequently than birds not supplemented with food. That is, birds responding most were actually the least likely to suffer any fitness consequences associated with the disturbance. This study demonstrates the possibility of misconstruing the reasons for and implications of observed responses among all wildlife species. Traditionally and intuitively, species that readily flee from or avoid human disturbance are considered to be the most in need of protection from disturbance. However, species with little suitable habitat available nearby cannot show marked avoidance of disturbance even if the costs of reduced survival or reproductive success are high, whereas species with many nearby alternative sites to move to are likely to move away from disturbance even if the costs of the disturbance are low (Gill et al. 2001). It should not be assumed that the most responsive animals are the most vulnerable (Beale and Monaghan 2004). Gill et al. (2001) asserted that the absence of an obvious behavioral response does not rule out a population-level effect. In the same vein, it may be that species occurring in protected areas that are remnant fragments within urban landscapes are forced to utilize all components of the fragments, irrespective of their land-use intensity and land cover. This may occur if animals have nowhere else to go, and may be an explanation for instances when the relative abundance of birds is greater in urban and suburban reserves than in exurban reserves (Markovchick-Nicholls et al. 2008).

O22-18
Cont.

Mammals

General responses within NCCP/HCP protected areas in southern California.—In series of three studies about the responses of mammals to hikers and runners, bikers, horseback riders, dog walkers, and motorized vehicles, George and Crooks (2006), Patten et al. (2017), and Patten and Burger (2018) analyzed camera-trap data captured throughout areas protected under the 1995 County of Orange Central and Coastal NCCP/HCP (Orange County NCCP/HCP). All studies analyzed bobcat (*Lynx rufus*), coyote (*Canis latrans)*, and mule

[11] Individual-based models are simulation statistical tools that use empirical data to examine effects, such as anthropogenic population-level effects, that are difficult or impossible to study in a field setting.

deer, and Patten et al.'s (2017) analysis also considered mountain lion (*Puma concolor*), gray fox (*Urocyon cinereoargenteus)*, striped skunk (*Mephitis mephitis*), and northern raccoon (*Procyon lotor*). The authors found that: (1) mammal detections were negatively correlated with all types of recreationists; hikers and runners had the greatest negative association with wildlife, and equestrians had the least; (2) the overall trend is sharply negative: as human activity increased, mammalian activity decreased, regardless of species, type of human activity, or camera placement; (3) mammals were nearly four times as likely to be recorded on days with no human activity than on days with human activity at the same site; (4) detections of mammals decreased incrementally as the number of humans increased within a day, and fell to near zero probability at ≥60 humans per day; and (5) all seven species listed above exhibited short-term spatial displacement in response to events with more than 100 visitors.

Bobcats' negative associations were strongest with bikers, hikers, and domestic dogs. In areas of higher human activity, bobcat were detected less frequently along trails and appeared to show temporal displacement, becoming more nocturnal. Coyotes' overall activity was lower at the sites with the most recreation and was negatively associated with overall human, hiker, and biker visitations; and, a trend of temporal displacement in response to dogs was also evident. Generally, both bobcats and coyotes displayed a relatively wide range of activity levels at sites with low human use, but a lower and markedly restricted range of activity at those sites with the highest levels of recreation. Both coyotes and mule deer shifted their activities temporally over the long term. The mule deer's (a primary consumer) marked shift brought it into closer temporal alignment with its main predator (mountain lion) and the coyote's marked shift (secondary consumer) brought it into closer temporal alignment with a chief prey species (gray fox). These human-induced diel shifts involving animals in two trophic levels have important ramifications for predator–prey dynamics. Despite these studies' results, no evidence was found suggesting mammalian populations have declined in the Orange County NCCP/HCP protected areas between 2007 and 2016, even as human activity increased markedly across the study period. However, it is critical to consider this observation in light of: (1) the fact that, at least for the years 2007-2011, public access was controlled across most of the study area by permit-only entry, regular docent-led programs, and monthly self-guided wilderness access days—much higher levels of restrictions on public access than for most protected areas; (2) the authors' assertion that various mammalian species' avoidance behavior may yet drive mammalian populations downward upon further increase in human disturbance; and (3) the status of the Vail Colorado elk herd as recounted below—once a herd of 1,000 head diminished to 53 due to steadily increasing levels of recreation.

Overall, the results of the above three studies were similar to those of a study to assess recreationists' effects on sensitive wildlife species in 14 NCCP/HCP protected areas in San Diego County, for which Reed et al. (2019) used data from camera traps and a before-after-control-impact (BACI) experiment. Reed et al. found that bobcat, gray fox, mule deer, and northern raccoon were less active in areas with higher levels of human recreation. Bobcat habitat use was more strongly negatively associated with human recreation than urban development, which also decreased the probability of habitat use. The collective results for mule deer among the four studies suggest that mule deer may stop using some areas altogether if human recreation is too high. Reed et al. (2019) did not detect negative associations between human recreation and the habitat use or relative activity of the six following mammalian species of the 12 observed: coyote, striped skunk, ground squirrel, jackrabbit, brush rabbit

022-18
Cont.

(*Sylvilagus bachmani*), and desert cottontail (*S. audubonii*). However, of special note are results from the protected area with the highest level of recreation (i.e., an average of 1,797 people per day) observed in the study, where the cameras captured only rabbits, and no other mid- to large-bodied wildlife species during 7.5 weeks of monitoring. Yet, this 2,449-ha protected area is considered a core biological area and regional wildlife corridor targeted for conservation (City of San Diego 2019). The BACI experiment conducted in another protected area showed a significant decrease in bobcat detection probability in a four-week period following a trail re-opening, suggesting that this species can modify its behavior (e.g., shift its activity patterns) rapidly after a change in human recreation. This is evidence that temporal closures have the potential to reduce disturbance during critical periods for some species. Although human recreation may not often extirpate mammalian species from urban habitat fragments, it can reduce habitat suitability and carrying capacity (Reed et al. 2019).

Responses to human voice.—Suraci et al. (2019) tested whether mammalian carnivores' responses to human voices alone can result in landscape-scale effects across wildlife communities, including cascading effects on the behavior of lower trophic level animals. The results of the study, which was conducted in the Santa Cruz Mountains of central California, USA, indicate that human voice alone does result in such effects. Where humans are absent or rare, large and medium-sized carnivores exhibit greater movement, activity, and foraging, while small mammals use less space and forage less. Where humans are present, the activity, foraging, and/or habitat use of large and medium-sized carnivores are suppressed, while small mammals increase their total space use and foraging intensity. The implications of these results are far-reaching, and include that, even in the absence of land development or habitat fragmentation, increased human presence can: (1) affect large carnivore movement, which could eventually limit carnivores' hunting and feeding behavior or force individuals to abandon high risk areas of their home range; (2) suppress activity of medium-sized carnivorous species; and (3) increase the abundance of small mammals that are prey to the large- and medium-sized predators, which could ultimately increase the abundance of small mammals in wildlife areas people visit (Suraci et al. 2019, citing other authors). Moreover, if the sublethal effects observed in the study in response to human voices alone are comparable to those effects (e.g., increased physiological stress, reduced reproductive success) that fear has been demonstrated to cause in predator-prey systems, they may amount to additional widespread but largely unmeasured effects of humans on wildlife populations (Suraci et al. 2019, citing other authors). Hennings (2017) provides additional insights about, and citations for studies on, the effects on wildlife from the human voice, concluding that conversational noise along trails can be very disturbing to wildlife.

Ungulates.—In a two-year study of elk (Cervus elaphus) in a herd near Vail in central Colorado, USA, Shively et al. (2005) found that elk reproductive success rebounded to pre-disturbance levels after the cessation of their exposure to back-country hikers during the calving season over the previous three years. Shively et al. concluded that, it seems prudent to protect elk during calving seasons, because, although the study provides evidence that elk reproduction can rebound from depressed levels when human disturbances are removed or reduced, there had been a linear decline in calf production in response to increasing levels of disturbance compared to controls without such disturbance, and it is not known if there is a threshold level of reproductive depression from which elk cannot recover. Recognizing that it is seldom easy to curb human activities that have become traditional, or to restore wildlife habitats once they have been developed, they recommended the continuation of

O22-18 Cont.

some closures imposed on parts of both the Vail and control elk herd study areas. However, a recent article in The Guardian reported that the number of elk in this same Vail herd dropped precipitously since the early 2010s with the steady increase in human recreation; once a herd of 1,000 head of elk, it had decreased to 53 at last count in February of 2019. The article explains that, for Bill Alldredge, one of the authors of the 2005 study, there is no other explanation than the increased levels of hiking, biking, and skiing in the area that supports this elk herd (Peterson 2019). This outcome adds to the already ample evidence that pregnant animals or those with young—especially mammals—are particularly sensitive to human disturbance (Hennings 2017).

In a study subjecting 13 captive female elk in the Starkey Experimental Forest and Range in Oregon, USA, to four types of recreational disturbances (all-terrain vehicles [ATV] riding, mountain biking, hiking, and horseback riding), Naylor et al. (2009) recorded the elk's resting, feeding, and travel times in response to the disturbances. The authors found travel time (a proxy for energy expense) increased in response to all four disturbances and was highest in mornings. The authors suggest that the elk's lesser response to each disturbance in afternoons was likely due to elk moving away from the disturbances in the mornings and avoiding them for the remainder of the day. Elk travel time was highest and feeding time lowest during ATV exposure, followed by exposure to mountain biking, hiking, and horseback riding. Resting decreased with exposure to mountain biking and hiking disturbance, and elk showed no evidence of habituation to mountain biking or hiking.

In a study of how bison (*Bison bison*), mule deer, and pronghorn (*Antilocapra americana*) responded to hikers and bikers on designated recreational trails at Antelope Island State Park in Great Salt Lake, Utah, USA, Taylor and Knight (2003) found the following: with respect to alert distance, flight initiation distance, and distance moved,[12] there was little difference in how each species responded to hikers versus mountain bikers (with an exception of mule deer flight distance), though each species exhibited its own degree of response in the three parameters tested; and all three species exhibited a 70% probability of flushing from on-trail recreationists within 100 m from designated trails. Trials were also conducted with only mule deer along a randomly chosen, off-trail route to assess the response of mule deer to hikers or bikers off designated trails. From these trials, the authors found that mule deer showed a 96% probability of flushing within 100 m of recreationists located off trails, and the probability of their flushing did not drop to 70% until perpendicular distance reached 390 m. There was little evidence of habituation to recreationists among the species at the time of the study. In fact, the pronghorn at the study site did not habituate to largely predictable recreational use over a three-year period following the opening of trails at the site, and used areas that were significantly farther from trails than they had prior to the start of recreational use.

Carnivores.—In a study of mammalian carnivores in 28 protected areas located in oak woodlands in northern California, USA, Reed and Merenlender (2008) found the following about carnivores' responses to recreationists. Generally, in paired comparisons of neighboring protected areas with and without recreation, the presence of dispersed, non-motorized recreation (hiking, biking, and horseback riding) led to a five-fold decline in the

[12] Alert distance is the distance from a stimulus at which an animal initiates vigilance behavior; more specifically in this context, it is the distance between a recreationist and an animal when the animal first becomes visibly alert to the recreationist. Flight initiation distance is defined in footnote #9. Distance moved is the distance an animal travels from its initial position until it stops (Taylor and Knight 2003).

O22-18
Cont.

density of native carnivores and a substantial shift in community composition from native to nonnative species. Specifically, a higher mean number of native species was detected in protected areas that did not permit recreation. By contrast, in protected areas that permitted recreation, more nonnative species were detected, domestic dogs were detected more frequently, and densities of coyotes and bobcats were more than five times lower. The authors concluded that the key variable for moderately sized protected areas (50–2000 ha) near urban development seems to be whether or not the site is open to public access.

In a study within three protected areas in Arizona, USA, Baker and Leberg (2018) found the following about how 11 mammalian carnivore species respond to varying levels of hiking, horseback riding, and border patrol activity. The study sites with the highest levels of human activity had significantly lower carnivore diversity, higher occupancy of common species (coyote, gray fox, and bobcat), and lower occupancy of all other carnivorous species. Generally, rare carnivores (e.g., mountain lion and kit fox, *Vulpes macrotis*), badgers (*Taxidea taxus*), and gray foxes avoided trails, whereas common species (except gray fox) preferred trails. Overall, edges of protected areas appeared to negatively affect occupancy of nearly all the study's species, and the presence alone of roads and trails, and not necessarily how much they are used, has a significant negative effect on the occupancy of most carnivorous species. In general, coyotes and bobcats were the carnivores least sensitive to human disturbance, gray foxes had a moderate negative association with human disturbance variables, and smaller carnivores and mountain lions seemed to be exceptionally vulnerable to human disturbance. Furthermore, the higher the level of overall disturbance in a protected area, the more sensitive carnivores were to disturbance variables.

O22-18 Cont.

Conclusions and Suggestions

With the expanding recreation-related disturbance to wildlife in protected areas, their dual role of conserving biological resources and providing nature-based recreational and educational opportunities for people presents a continual challenge to land managers and a continual threat to wildlife and the state's biodiversity, particularly sensitive species. The scientific literature provides clear evidence that recreation can disturb wildlife in several ways. Documented effects include detrimental changes to behavior, reproduction, growth, immune system function, levels of stress hormones, other physiological effects, and finally, the survival of individual animals and persistence of wildlife populations and communities. Having been observed on nearly every continent and in every major ecosystem on earth, recreation-related disturbance to wildlife is increasingly recognized as a threat to global biodiversity, and as having wide-ranging and, at times, profound implications for wildlife individuals, populations, and communities (Dertien et al. 2018). Yet, a prevalent assumption exists that non-consumptive recreation is compatible with wildlife conservation; sources that articulate this assumption in various ways include but are not limited to the Natural Community Conservation Plans/Habitat Conservation Plans (NCCPs/HCPs in the California Department of Fish and Wildlife's (CDFW) South Coast Region, Title 14 of the California Code of Regulations (§630(a)) about CDFW's ecological reserves, CDFW's 2016 State Wildlife Action Plan's Consumptive and Recreational Uses Companion Plan, Burger 2012, Larson et al. 2016, Dertien et al. 2018, and Reed et al. 2019. This assumption underlies the widespread acceptance of non-consumptive recreation in dual-role protected areas.

Is the assumption of compatibility flawed?—The assumption of compatibility rests on four expectations, which are often legal obligations (as with NCCPs/HCPs). First, recreation in protected areas is to occur only in ecologically sound locations. Second, only ecologically sound types, levels, and timing of recreation are acceptable. Third, monitoring is expected to regularly and reliably assess whether the types and levels of recreational activities in protected areas are disturbing the focal species to a degree that these activities should be curtailed or prohibited entirely. Fourth, changes in management are to occur promptly when monitoring determines them to be necessary (see footnote #5 for description of management). In short, the overarching expectation is that recreation would not hinder the achievement of the dual-role protected areas' primary conservation objective (i.e., perpetuation of viable populations of focal sensitive species). At least seven NCCPs/HCPs in the CDFW's South Coast Region explicitly deem recreation compatible or conditionally compatible; most articulate these expectations as conditions that recreational activities in protected areas must meet. Such activities are considered "conditionally compatible" with the protection of the covered species. However, the assumption of compatibility is flawed because: for example, designated trails and trail networks are often ecologically inappropriately planned, designed, or sited; and, even for authorized recreation, there is rarely adequate management to control the allowed types and levels of recreation such that they are compatible with conservation. While finding an appropriate balance between biodiversity conservation and recreation is complicated because recreation-related effects on wildlife vary among species and recreational activities (Larson et al. 2016), there are also societal factors at play that further complicate achieving an appropriate balance and compatibility.

O22-18
Cont.

Factors allowing inappropriate planning/siting and inadequate management - a societal conundrum.—The degree to which the above-listed expectations are met varies among NCCP/HCP permittees and other managers of dual-role protected areas, the primary limiting factors being fiscal constraints and each land manager's primary mission. As to the latter factor, for areas protected primarily or solely to conserve biological resources, a serious fundamental conflict with conservation arises when managers' primary mission is to provide recreational opportunities, and the protection of biological resources is a secondary or tertiary priority. As to fiscal constraints, land management budgets generally have not kept pace with the increasing levels of recreation in protected areas (CDFW 2015; Havlick et al. 2016). For example, the activities of the CDFW for resource assessment, conservation planning, and wildlife conservation at risk are "severely underfunded;" in 2005, maintenance, restoration, and management of CDFW's wildlife areas and ecological reserves were supported, on average, at the level of $13 per acre (0.40 ha) and one staff person per 10,000 acres. Many lands were operated at $1 per acre, with no dedicated staff (CDFW 2015—refer to Volume 1, Section 7.3). CDFW's fiscal shortfalls for managing its protected areas mirror the same among public agencies at the local, state, national, and international levels (CDFW 2015); these shortfalls result in continual grave shortages of management personnel and other resources.

California's State Wildlife Action Plan (CDFW 2015) and most of the literature about recreation-related ecological effects identify the economic, educational, and recreational/health benefits of protected areas. They also identify the benefits (e.g., economic) to protected areas from humans pursuing recreational activities. So, despite the documented recreation-related disturbance to wildlife, there seems to be an implicit assumption of a mutually beneficial relationship between protected areas and the humans who benefit from them. But,

the severe underfunding of management for protected areas renders mutual reciprocity in this relationship infeasible; the protected areas' wildlife are heavily on the losing side. This is particularly perplexing given the evidence that lack of adequate management negatively affects not only biological resources, but also societal benefits.

Regarding the human health benefits of protected areas, visible recreation-related damage to the terrain diminishes the level of benefit people enjoy while being in nature, as illustrated by a study examining the relationship between recreational impacts in protected areas and human mental/emotional states (Taff et al. 2019). The study's results demonstrate that, as visible recreation-related ecological impacts increased, sense of wellbeing and mental state decreased, especially in response to settings with unauthorized trails. Collectively, the results show that managing tourism in protected areas in a manner that reduces such impacts is essential to providing beneficial cultural ecosystem services related to human health and wellbeing (Taff et al. 2019). As Wolf et al. (2019) put it, the more attractive a site is, the more likely it is that it will be degraded, which in turn, may diminish the quality of the human experience, and thus, visitor satisfaction. To capitalize fully on the positive aspects of tourism (including recreation) for protected areas, the degradation of resources needs to be constrained to ecologically acceptable levels, and to levels beyond visitor perception (Davies and Newsome 2009; Wolf et al. 2019); otherwise, recreationists may think it unimportant to minimize their own impacts. Also diminishing the human experience are the closures to public access as a default reaction to lack of adequate management, and the liability resulting from injuries that can occur when people use unauthorized trails (Dertien et al. 2018).

There is a two-fold irony here: despite the prevalent emphasis on the societal benefits of protected areas and the purported reciprocal relationship between protected areas and humans, most agencies responsible for managing protected areas are chronically underfunded. And, promoting the pursuit of these societal benefits without protecting the dual-role protected areas' core function (biological conservation) from that pursuit actually undermines both the human experience and biological conservation. This is a societal conundrum that stems at least in part from a societal disconnection.

The factor of a societal disconnection.—A lack of public interest in and concern about protected areas figures into the societal conundrum. Public opposition to trail closures, caps on daily visitation, or reservation systems can be strong and could damage the support for conservation agencies and organizations (Reed et al. 2019), despite the ecological need for such measures for protected areas. A disconnection pervades our society with respect to recreation-related disturbance to wildlife (Marzano and Dandy 2012): 50% of 640 backcountry trail users surveyed in 2001 did not believe that recreation negatively affects wildlife, and recreationists generally held members of other user groups responsible for stress or negative effects on wildlife rather than holding members of their own recreational user group responsible (Taylor and Knight 2003). The results of a survey conducted in 2018 for the San Diego End Extinction (SDEE) initiative to elucidate what the San Diego public know, think, feel, and do in relation to species and habitat conservation, indicate that 71% of the 600 respondents are not knowledgeable about the problems San Diego's plants and wildlife face (Tinkler et al. 2019).[13] While the passage of California Proposition 68 in 2018 reflects the voters' broad support for clean water and access to open space, which were the main elements of the Proposition that promotional efforts emphasized, it is unclear how

[13] The respondents were San Diego County voters and were representative of the voter pool in terms of age, gender, ethnicity, and region, but voters tend to be less ethnically diverse and more educated than the San Diego County population overall (Tinkler et al. 2019).

O22-18
Cont.

much the biological conservation-related elements of the Proposition influenced voters.

Overall, it is probable that a large majority of the general public are unaware of or in denial about the disturbance to wildlife from non-consumptive recreation, much less the distinctions between areas protected primarily or solely for conservation and areas otherwise designated as open space (e.g., recreational fields, golf courses, small community parks). Information on these topics is not widely available, and what is in the literature, may not be reaching a broad audience even among conservation scientists and wildlife ecologists (Larson et al. 2016). What then can be done to address this unawareness as a step toward enabling dual-role protected areas to meet their conservation objectives despite the expanding recreational pressure?

Suggested plan of action.—To enable dual-role protected areas to meet their conservation objectives despite the expanding recreational pressure, the optimal approach is to: ensure that all recreational areas (e.g., trails and trail networks) are planned, designed, and sited using ecologically sound criteria; and, to continually employ sufficient proactive and adaptive management to prevent or at least minimize recreation-related disturbance to wildlife; such management would curtail the need for regular enforcement. This approach also has the potential to yield general public support for management, particularly if information provided about management challenges includes data and supporting graphics, specifically about fragmentation, to enhance the public's understanding of the challenges of poorly designed trail systems and the creation and use of unauthorized trails (Leung et al. 2011; Taff et al. 2019; Wolf et al. 2019). But this approach requires perpetual personnel and funding explicitly for management, which in turn points to the urgent need for public advocacy to secure fiscal support for management resources (i.e., fiscal support that is sustainable, perpetual, and at levels commensurate with the recreational pressure; footnote #5). How can this be achieved?

How people perceive their and others' recreation-related effects on wildlife may influence their general perspectives on such effects (Marzano and Dandy 2012). Shifting this perception-perspective nexus over time toward a common value of respecting wildlife may eventually mend some of the aforementioned societal disconnection. A shift in perspectives on the purpose of protected areas is also needed to one of understanding and acknowledging that their core function is conservation (Davies and Newsome 2009; Patten et al. 2017). The only chance there is of influencing people's perceptions is making the pertinent scientific information readily available. So, it is essential to implement a concerted campaign to disseminate science-based information about recreation-related disturbance to wildlife. Such a campaign needs to be well orchestrated, widespread, long-term, continual, and multimedia; this includes social media per Greer at al.'s (2017) conclusions about its efficacy in this context. In addition to the general public/voters (including recreationists), the following parties would be both the audience and the distributors within each of their fields and beyond: the media, environmental organizations, elected officials, policy and land-use decision makers, land management agencies and organizations, outdoor recreation merchants and associations, educational institutions, and researchers. The coverage would be framed as stories aimed to evoke appreciation for the diversity of sensitive species and the many ways they respond to our presence, and provide opportunities for what people can do to lessen the recreation-related disturbance to wildlife, which will benefit not only wildlife and other biological resources in the protected areas, but also the human experience there.

While the objectives of the campaign would be to influence people's perspectives in favor of wildlife and to modify recreational behaviors, policy, planning, and decision-

O22-18
Cont.

making accordingly, the final goal would be to cultivate support for and harness the power of advocacy to gain the political will and action needed to secure perpetual fiscal support for management resources. Implementing such a campaign would not be easy nor fast and would take diligent oversight, as suggested by William Craven, the chief consultant for nearly 20 years of California's Senate Natural Resources and Water Committee. In an interview with the California Native Plant Society, he stated, "the best way to achieve your policy objectives is to make sure your policy objectives are funded. For example, small but important programs for the [California Department of Fish and Wildlife] are literally budget dust in the California budget, but unless someone is there to pay attention and connect the dots between the budget and the state laws, we don't get a complete resolution… [P]ositive changes in state law that everyone works so hard to accomplish are really much more effective when someone monitors the budget process to make sure those changes get as much funding as possible" (CNPS 2020). But, it seems that the choices are either to never reverse or at least halt the downward trajectory of wildlife in protected areas experiencing damaging levels and types of recreation or to ambitiously implement such a campaign toward a societal course change (Waterman 2019 for the term "course change").

Several of the results of the survey conducted for the SDEE initiative hint at a potential to mobilize a critical mass of people who learn about the recreation-related disturbance to wildlife and the associated urgent need for resources to address it, and assist in information dissemination. While the survey conducted for the SDEE initiative revealed a knowledge deficit among the respondents regarding problems plants and wildlife face, its results also indicate that, over a 12-month period, 74% of respondents voted in favor of laws to protect the environment, 31% volunteered to improve the environment, and 21% donated money to protect San Diego County's environment; in addition, approximately 70% were willing to pay additional local taxes to protect the environment, and a majority of the respondents were willing to pay up to $50 per year (Tinkler et al. 2019).

One avenue available for advocacy to secure perpetual fiscal support specifically for management of protected areas is assessing recreational fees and taxes. With respect specifically to the management of CDFW-owned protected areas, CDFW's 2005 and 2015 State Wildlife Action Plans recommended implementation of recreational fees and taxes beyond fishing and hunting licenses that would allow non-consumptive recreationists to support wildlife conservation and management of the resources they use and enjoy (CDFW 2015, 2016). To generate funds for the management of all protected areas, a long-successful model could be employed: since the 1930s, hunters have been paying federal excise taxes on the sales of sport hunting and shooting equipment to generate funding for habitat conservation (CDFW 2015). Eighty years later, these taxes plus sales of angling equipment had generated more than $10 billion towards conservation (CDFW 2015). Thus, hunters and anglers have been the primary funding sources for conservation efforts in California and North America (CDFW 2015). Considering the disturbance to wildlife from non-consumptive recreationists, it is past time for them also to pay their way for the use of protected areas through paying taxes on equipment for hiking, biking, riding, etc. to support management of these activities. A secondary benefit of such fees and taxes is that they may establish a direct connection for recreationists between their use of protected areas and the costs of protecting the protected areas, and thereby possibly diminish their disconnection from their disturbance to wildlife.

Other avenues for advocacy to secure fiscal support for management of protected areas include bond measures and voluntary contribution funds (VCF), though neither would necessarily provide a reliably perpetual source of funding. VCFs are sponsored by legislators

O22-18
Cont.

to be enacted by the legislature; a VCF in this context would be explicitly and solely for the management of the protected areas in California, including CDFW's lands (with protected areas and management defined as described in footnotes #1 and #5, respectively). The funds must be administered such that they are made available timely. This would be similar to the VCF for California's Rare and Endangered Species Preservation Voluntary Tax Contribution Program which has funded work benefiting California's native at-risk plants, wildlife, and fish since 1983 (CDFW 2019) and now raises around $500,000 annually (FTB 2019).

Mainstream online and print media carried several articles in 2018 and 2019 about the overcrowding at and underfunding for the national parks (e.g., Simmonds et al. 2018; Waterman 2019; Wilson 2019); coverage such as this provides a good foundation of information. Articles like Yong's (2019) about the effects of the human voice alone on wildlife and Peterson's (2019) about the effects of hiking on elk represent steps in the right direction toward mainstream media honing in on specific impacts on wildlife from recreationists in protected areas. Coverage on species local to where people live is important and may make a stronger and more lasting impression with greater potential for shifting the perception-perspective nexus than species or settings remote from consumers of the media. Organizations like San Diego Zoo Global, which spearheaded the SDEE initiative (Tinkler et al. 2019), could significantly assist the campaign by engaging their media engines on behalf of local wildlife threatened by recreation.

A societal quid pro quo for protected areas?—At some point, the exploitation of protected areas resulting from recreation-related disturbance to wildlife, without commensurate reciprocity with care for the protected areas, may outweigh the benefits of public access to protected areas (Bennett et al. 2013). Many protected areas have already reached this point. Without adequate resources to combat the challenge of the obligation to conserve wildlife exposed to ecologically damaging levels and types of recreation, including unauthorized activities, the challenge will persist indefinitely at great risk of jeopardizing the protected areas' ability to meet their conservation objectives.

Regarding the pressure local, state, and federal government agencies have undergone for decades to acquire additional open space for recreation and to expand public access in existing protected areas (Wells 2000 in Reed and Merenlender 2008), elected officials and land-use decision makers need to address the demands, but not at the expense of biological conservation in protected areas. Some of the protected areas (e.g., the NCCP/HCP reserves) represent long-negotiated compromises for the sensitive species they are intended to protect in perpetuity. For some protected areas, no ecologically sound further compromise (e.g., expansion of public access) is possible; while recreation may be considered conditionally compatible in such protected areas, if open to public access at all, the extant levels of recreation may strain their ability to meet their conservation objectives. Protected areas that represent the final compromise for the species they support are particularly vulnerable to their wildlife values being compromised due to inadequate management (CDFW 2015). Ultimately, for wildlife that avoids human activity, it is unlikely that dual-role protected areas are entirely sufficient or justifiable for meeting conservation objectives; limiting or prohibiting recreation in strategic circumstances and locations within protected areas is necessary to achieve conservation objectives (Reed and Merenlender 2008; Bötsch et al. 2018; Dertien et al. 2018; Reed et al. 2019). Of course, this presumes sufficient management to maintain whatever recreational limits are set.

In summary, in the interest of wildlife in California and, more broadly, conservation within protected areas everywhere, the necessary actions with respect to non-consumptive

O22-18
Cont.

recreation are to: (1) widely and continually disseminate science-based information about the recreation-related disturbance to wildlife; (2) apply the science to all planning for, policy- and decision-making about, and management of, recreation in dual-role protected areas; and (3) secure perpetual fiscal support for management of recreation in dual-role protected areas commensurate with the recreational pressure.

ACKNOWLEDGMENTS

Sincere thanks to C. Beck (CDFW, retired), E. Pert (CDFW), H. Pert (CDFW), and B. Tippets (Southwest Wetlands Interpretive Association), each of whom provided valuable edits and constructive suggestions on this manuscript and a previous draft of it; their input resulted in substantial improvements.

LITERATURE CITED

Amo, L., P. López, and J. Martín, J. 2006. Nature-based tourism as a form of predation risk affects body condition and health state of *Podarcis muralis* lizards. Biological Conservation 131:402–409.

Baker A. D., and P. L. Leberg. 2018. Impacts of human recreation on carnivores in protected areas. PLoS ONE 13(4):e0195436.

Baker, D. J., S. T. Garnett, J. O'Connor, G. Ehmke, R. H. Clarke, J. C. G. Woinarski, and M. A. McGeoch. 2018. Conserving the abundance of nonthreatened species. Conservation Biology 33:319–328.

Ballantyne, M., O. Gudes, and C. M. Pickering. 2014. Recreational trails are an important cause of fragmentation in endangered urban forests: a case study from Australia. Landscape and Urban Planning 130:112–124.

Beale, C. M., and P. Monaghan. 2004. Behavioural responses to human disturbance: a matter of choice? Animal Behaviour 68:1065–1069.

Bennett V. J., V. S. Quinn, and P. A. Zollner. 2013. Exploring the implications of recreational disturbance on an endangered butterfly using a novel modelling approach. Biodiversity and Conservation 22:1783–1798.

Bernard, G. E., W. F. D. van Dongen, P. G. Guay, M. R. E. Symonds, R. W. Robinson, and M. A. Weston. 2018. Bicycles evoke longer flight-initiation distances and higher intensity escape behaviour of some birds in parks compared with pedestrians. Landscape and Urban Planning 178:276–280.

Blair, R. B., and A. E. Launer. 1997. Butterfly diversity and human land use: species assemblages along an urban gradient. Biological Conservation 80:113–125.

Bötsch, Y., Z. Tablado, D. Sheri, M. Kéry, R. F. Graf, and L. Jenni. 2018. Effect of recreational trails on forest birds: human presence matters. Frontiers in Ecology and Evolution 6(175).

Burger, J. C. 2012. An efficient monitoring framework and methodologies for adaptively managing human access on NCCP lands and other reserves in southern California. Final report to California Department of Fish and Wildlife for LAG #PO982014.

Cheptou, P. O., A. L. Hargreaves, D. Bonte, and H. Jacquemyn. 2017. Adaptation to fragmentation: evolutionary dynamics driven by human influences. Philosophical Transactions of the Royal Society B 372:20160037.

O22-18 Cont.

California Department of Fish and Wildlife (CDFW). 2014. Incorporation of Adaptive Management into Conservation Planning and Resource Management. Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=86989&inline (September 2019).

California Department of Fish and Wildlife (CDFW). 2015. California State Wildlife Action Plan, 2015 Update: A Conservation Legacy for Californians. Edited by Armand G. Gonzales and Junko Hoshi, PhD. Prepared with assistance from Ascent Environmental, Inc., Sacramento, CA, USA.

California Department of Fish and Wildlife (CDFW). 2016. SWAP's Consumption and Recreational Uses and Companion Plan.

California Department of Fish and Wildlife (CDFW). 2019. CDFW News. Available from: https://cdfgnews.wordpress.com/tag/rare-and-endangered-species-preservation/ (March 2019).

California Native Plant Society (CNPS). 2020. Flora 3(2):13–16.

City of San Diego. 2019. Natural Resources Management Plan for Mission Trails Regional Park, San Diego, California. Prepared by RECON Environmental, Inc., San Diego, CA, USA.

Czech, B., P. R. Krausman, and P. K. Devers. 2000. Economic associations among causes of species endangerment in the United States: associations among causes of species endangerment in the United States reflect the integration of economic sectors, supporting the theory and evidence that economic growth proceeds at the competitive exclusion of nonhuman species in the aggregate. BioScience 50:593–601.

Davies, C., and D. Newsome. 2009. Mountain bike activity in natural areas: impacts, assessment and implications for Management—a case study from John Forrest National Park, Western Australia. CRC for Sustainable Tourism Pty, Australia.

Davis, C. A., D. M. Leslie, Jr., W. D. Walter, and A. Graber. 2010. Mountain biking trail use affects reproductive success of nesting golden-cheeked warblers. Wilson Journal of Ornithology 122(3):465–474.

Dertien, J. S., C. L. Larson, and S. E. Reed. 2018. Adaptive management strategy for science-based stewardship of recreation to maintain wildlife habitat connectivity. Wildlife Conservation Society, Americas Program, Bronx, NY, USA.

Franchise Tax Board (FTB). 2019. Available from: https://www.ftb.ca.gov/file/personal/voluntary-contribution-funds/annual-contribution/rare-and-endangered-species-preservation.html (June 2019).

George, S. L., and K. R. Crooks. 2006. Recreation and large mammal activity in an urban nature reserve. Biological Conservation 133:107–117.

Gill, J., K. Norris, and W. Sutherland. 2001. Why behavioral responses may not reflect the population consequences of human disturbance. Biological Conservation 97:265–268.

Greer, K., K. Day, and S. McCutcheon. 2017. Efficacy and perception of trail use enforcement in an urban natural reserve in San Diego, California. Journal of Outdoor Recreation and Tourism 18:56–64.

González, L. M., B. E. Arroyo, A. Margalida, R. Sánchez, and J. Oria. 2006. Effect of human activities on the behaviour of breeding Spanish imperial eagles (*Aquila adalberti*): management implications for the conservation of a threatened species. Animal Conservation 9:85–93.

Gutzwiller, K. J., A. L. D'Antonio, and C. A. Monz. 2017. Wildland recreation disturbance:

O22-18
Cont.

broad-scale spatial analysis and management. Frontiers in Ecology and the Environment 15(9).
Havlick, D. G., E. Billmeyer, T. Huber, B. Vogt, and K. Rodman. 2016. Informal trail creation: hiking, trail running, and mountain bicycling in shortgrass prairie. Journal of Sustainable Tourism.
Hennings, L. 2016. The impacts of dogs on wildlife and water quality: a literature review. Metro Parks and Nature, Portland, OR, USA. Included in Hennings 2017 as Appendix 1.
Hennings, L. 2017. Hiking, mountain biking and equestrian use in natural areas: a recreation ecology literature review. Metro Parks and Nature, Portland, OR, USA.
Kriebel, D., J. Tickner, P. Epstein, J. Lemons, R. Levins, E. L. Loechler, M. Quinn, R. Rudel, T. Schettler, and M. Stoto. 2001. The precautionary principle in environmental science. Environmental Health Perspectives 109:871–876
Larson, C. L., S. E. Reed, A. M. Merenlender, and K. R. Crooks. 2016. Effects of recreation on animals revealed as widespread through a global systematic review. PLoS ONE 11(12):e0167259.
Leung, Y. F., T. Newburger, M. Jones, B. Kuhn, and B. Woiderski. 2011. Developing a monitoring protocol for visitor-created informal trails in Yosemite National Park, USA. Environmental Management 47:93–106.
Marcot, B. G., and C. H. Flather. 2007. Species-level strategies for conserving rare or little-known species. Pages 125–164 in M. G. Raphael and R. Molina, editors. Conservation of Rare or Little-known Species. Island Press, Washington, D.C., USA.
Markovchick-Nicholls, L., H. M. Regan, D. H. Deutschman, A. Widyanata, B. Martin, L. Noreke, and T. A. Hunt. 2008. Relationships between human disturbance and wildlife land use in urban habitat fragments. Conservation Biology 22:99–109.
Marzano, M., and N. Dandy. 2012. Recreationist behaviour in forests and the disturbance to wildlife. Biodiversity and Conservation 21:2967–2986.
Moore, M. J. C., and R. A. Seigel. 2006. No place to nest or bask: effects of human disturbance on the nesting and basking habits of yellow-blotched map turtles (Graptemys flavimaculata). Biological Conservation 130:386–393.
Naylor, L. M., M. J. Wisdom, and R. G. Anthony. 2009. Behavioral responses of North American elk to recreational activity. Journal of Wildlife Management 73:328–338.
Patten, M., and J. Burger. 2018. Reserves as double-edged sword: avoidance behavior in an urban-adjacent wildland. Biological Conservation 18:233–239.
Patten, M., J. Burger, and M. Mitrovich. 2017. Assessing Effectiveness of Adaptive Recreation Management Strategies and Evaluation of Core NCCP/HCP Habitat Areas. Final Report for California Department of Fish and Wildlife Local Assistance Grant #P1482109.
Pauli, B. P., R. J. Spaul, and J. A. Heath. 2017. Forecasting disturbance effects on wildlife: tolerance does not mitigate effects of increased recreation on wildlands. Animal Conservation 20:251–260.
Peterson, C. 2019. Americans' love of hiking has driven elk to the brink, scientists say. The Guardian. August 25. Available from: https://www.theguardian.com/environment/2019/aug/25/hiking-elk-driven-to-brink-colorado-vail.
Pickering, C. M. 2010. Ten factors that affect severity of environmental impacts of visitors

022-18 Cont.

to protected areas. Ambio 39(1):70–77
Reed, S. E., and A. M. Merenlender. 2008. Quiet, nonconsumptive recreation reduces protected area effectiveness. Conservation Letters 1:146–154.
Reed, S. E., C. L. Larson, K. R. Crooks, A. M. Merenlender. 2014. Wildlife Response to Human Recreation on NCCP Reserves in San Diego County. Wildlife Conservation Society Agreement No/LAG #: P1182112.
Reed, S. E., C. L. Larson, and K. R. Crooks. 2019. Effects of Human Use of NCCP Reserves on Reptile and Mammal Species in San Diego. Wildlife Conservation Society Agreement No/LAG #: P1582100.
Reilly, M. L., M. W. Tobler, D. L. Sonderegger, and P. Beier. 2017. Spatial and temporal response of wildlife to recreational activities in the San Francisco Bay ecoregion. Biological Conservation 207:117–126.
Rodríguez-Prieto I., and E. Fernández-Juricic. 2005. Effects of direct human disturbance on the endemic Iberian frog *Rana iberica* at individual and population levels. Biological Conservation 123:1–9.
Säterberg, T., S. Sellman, and B. Ebenman. 2013. High frequency of functional extinctions in ecological networks. Nature 499:468–470.
Shively, K. J., A. W. Alldredge, and G. E. Phillips. 2005. Elk reproductive response to removal of calving season disturbance by humans. Journal of Wildlife Management 69:1073–1080.
Simmonds, C., A. McGivney, P. Reilly, B. Maffly, T. Wilkinson, G. Canon, M. Wright, and M. Whaley. 2018. Crisis in our national parks: how tourists are loving nature to death. The Guardian. November 18. Available from: https://www.theguardian.com/environment/2018 /nov/20/national-parks-america-overcrowding-crisis-tourism-visitation-solutions.
Soulé, M. E., and R. F. Noss. 1998. Rewilding and biodiversity: complimentary goals of continental conservation. Wild Earth 8(3):19–28.
Spahr, R. 1990. Factors affecting the distribution of bald eagles and effects of human activity on bald eagles wintering along the Boise River. Thesis, Boise State University, ID, USA.
Spaul, R. J., and Heath, J. A. 2016. Non-motorized and motorized recreation in shrubsteppe habitats affects the breeding behavior and reproductive outcome of a protected species. Ecology and Evolution 6:8037–8049.
Steven, R., C. Pickering, and J. G. Castley. 2011. A review of the impacts of nature-based recreation on birds. Journal of Environmental Management 92:2287–2294.
Suraci, J. P., M. Clinchy, L. Y. Zanette, and C. W. Wilmers. 2019. Fear of humans as apex predators has landscape-scale impacts from mountain lions to mice. Ecology Letters 22:1578–1586.
Taff, B. D., J. Benfield, Z. D. Miller, A. D'Antonio, and F. Schwartz. 2019. The role of tourism impacts on cultural ecosystem services. Environments 6:43.
Taylor, A. R., and R. L. Knight. 2003. Wildlife responses to recreation and associated visitor perceptions. Ecological Applications 13:951–963.
Tinkler, T., M. Ahearne, and M. J. Schumann. 2019. Collaborative species and habitat conservation efforts in San Diego County: a systematic needs assessment to guide the San Diego End Extinction Initiative. Environment 1.
Waterman, J. 2019. Our national parks are in trouble: blame overcrowding, invasive spe-

022-18
Cont.

cies, climate change and money woes. The New York Times. November 22. Available from: https://www.nytimes.com/2019/11/22/opinion/sunday/national-parks-crowding-climate.html.

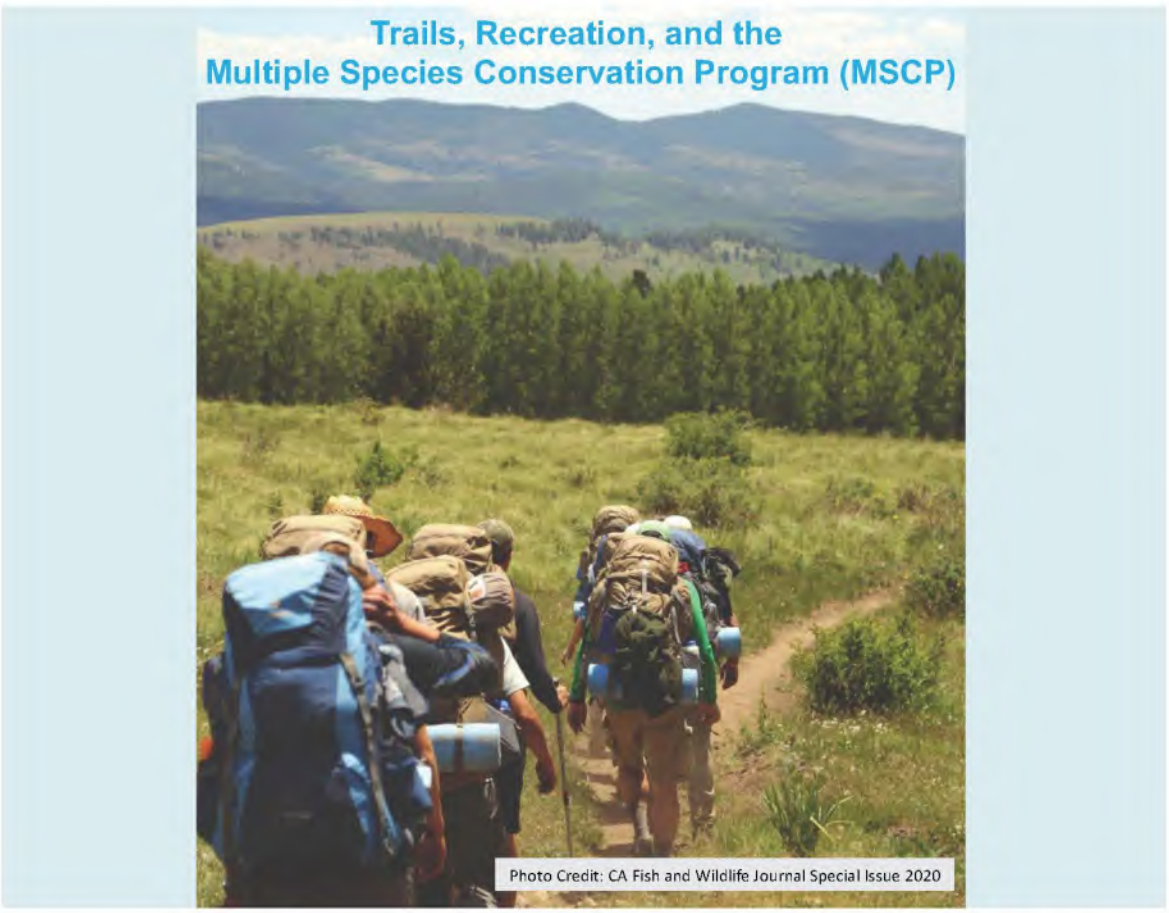
Wilcove, D. S., C. H. McLellan, and A. P. Dobson. 1986. Habitat fragmentation in the temperate zone. Pages 237–256 in M. E. Soulé, editor. Conservation Biology: the Science of Scarcity and Diversity. Sinauer Associates, Inc. Sunderland, MA, USA.

Wilson, M. 2019. What do we owe our national parks? The Atlantic. July 4. Available from: https://www.theatlantic.com/letters/archive/2019/07/national-park-maintenance-problems-arent-new/593293/.

Wolf, I. D., D. B. Croft, and R. J. Green. 2019. Nature conservation and nature-based tourism: a paradox? Environments 6:104.

Yong, E. 2019. The disturbing sound of a human voice. The Atlantic. July 17.

O22-18
Cont.



022-19

Page 30 of 43 in Comment Letter 022

Assumption of Compatibility is Flawed

There is a prevalent assumption that recreation is conditionally compatible with biological conservation. In the NCCP program, this assumption generally rests on the conditions that:

- siting of recreational trails will be done ecologically appropriately;
- only ecologically acceptable types, levels, and timing of recreation are allowed;
- sufficient monitoring, management, and enforcement of recreation occur; and
- prompt changes in management will occur when monitoring determines changes are necessary.

However, it is **rare** that these conditions are met. And, documented evidence of trail- and recreation-related disturbances to wildlife reveals the flaw in this assumption.

Van Dam Peak area, Poway – Credit: Jeffrey Schmidt

Meadowbrook Ecological Reserve, Poway – Credit: Jeffrey Schmidt

2

022-19 Cont.

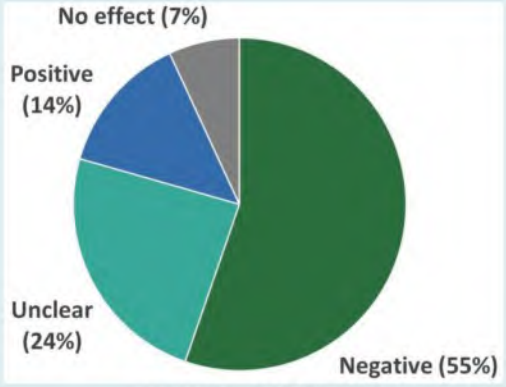
Page 31 of 43 in Comment Letter 022

Trail- & Recreation-related Disturbance to Wildlife...

The majority of the documented effects on wildlife from recreation are negative (Larson et al. 2016).

They include detrimental changes to:

- behavior (e.g., vigilance, foraging, hunting);
- reproduction;
- growth;
- immune system function;
- levels of stress hormones;
- the survival of individual animals; and ultimately
- the persistence of wildlife populations and communities.



Larson et al. 2019 TNC ppt

3

O22-19 Cont.

Page 32 of 43 in Comment Letter O22

Trail- & Recreation-related Disturbance to Wildlife...

Some effects are easily **seen**, like **trailkill**, trail-related removal of vegetation, erosion, habitat fragmentation, and wildlife flushing), but **most are unseen or not observed without study**.

Baja CA tree frogs run over by mountain bike. Credit: JPrice, CDFW, Reserve Manager

San Diego horned lizard, an MSCP covered species, run over by mountain bike. Credit: JPrice, CDFW, Reserve Manager

Butterflies—In Indiana, walkers, runners, and runners with dogs were shown to negatively affect the federally endangered Karner blue butterfly (Bennett et al. 2013).

Karner Blue Butterfly on host plant

Reptiles—Hiking, mountain biking, and horseback riding were associated with declines in the # of reptilian species, and in their occupancy, habitat use, and relative activity on conserved lands within 14 MSCP reserves in the County and City of San Diego (Reed et al., 2019).

Orange throated whiptail, an MSCP covered species – one of the negatively affected species.

4

022-19 Cont.

Page 33 of 43 in Comment Letter 022

Trail- & Recreation-related Disturbance to Wildlife...

Songbirds—In Texas, mountain biking had direct and indirect effects on golden-cheeked warblers near biking trails (Davis et al. 2010).

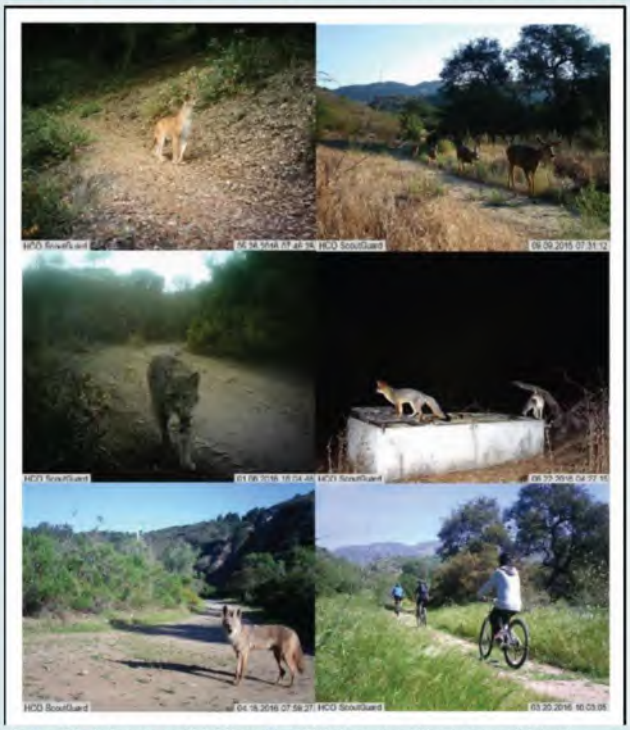
Mammals—

In Orange County NCCP/HCP reserves, three studies of the responses of mammals to hikers and runners, bikers, horseback riders, dog walkers, and motorized vehicles revealed that:

- mammal detections were negatively correlated with all types of recreationists;
- the overall trend is sharply negative: as human activity increased, mammalian activity decreased;
- mammals were nearly four times as likely to be recorded on days with no human activity than on days with human activity;
- detections of mammals decreased incrementally as the number of humans increased within a day, and fell to near zero probability at >60 humans per day; and
- all seven species exhibited short-term spatial displacement in response to events with more than 100 visitors (George and Crooks 2006; Patten et al. 2017; Patten and Burger 2018).

* * * * * *

High levels of human recreation on conserved lands within the same 14 MSCP reserves mentioned previously caused bobcat, gray fox, mule deer, and northern raccoon to be less active (Reed et al. 2019).



Patten, M., J. Burger, and M. Mitrovich. 2017. Assessing Effectiveness of Adaptive Recreation Management Strategies and Evaluation of Core NCCP/HCP Habitat Areas. Final Report for California Department of Fish and Wildlife LAG #P1482109.

5

022-19 Cont.

Page 34 of 43 in Comment Letter 022

Trail- & Recreation-related Disturbance to Wildlife...

Mammals....

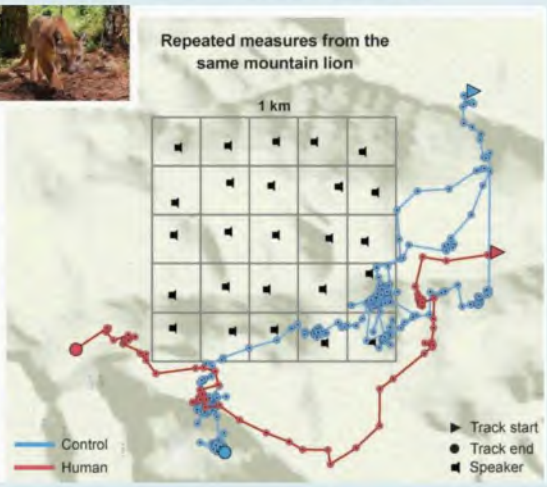
In Vail, Colorado, the number of elk in a herd dropped precipitously from 1,000 in the early 2010s to 53 in February of 2019 with the steady increase in levels of hiking, biking, and skiing (Shively et al. 2005; Peterson 2019).

Elk - Larson et al. 2019 TNC ppt

Mammalian Carnivores—

In the Santa Cruz Mountains of central CA, the response of mammalian carnivores to the human voice alone can result in landscape-level effects across wildlife communities (Suraci et al. 2019).

Suraci et al. 2019



6

022-19 Cont.

Page 35 of 43 in Comment Letter 022

Trail- & Recreation-related Disturbance to Wildlife...

Mammalian Carnivores—

In comparisons of neighboring 28 protected areas in northern CA with and without hiking, biking, and horseback riding, ...in the protected areas that permitted these activities, there was a five-fold decline in the density of native mammalian carnivores and a substantial shift in community composition from native to nonnative species (Reed and Merenlender 2008).

Within three protected areas in Arizona, **11** mammalian carnivore species respond to varying levels of hiking, horseback riding, and border patrol activity. The study sites with the highest levels of human activity had significantly lower carnivore diversity, higher occupancy of common species (coyote, gray fox, and bobcat), and lower occupancy of all other carnivorous species (Baker and Leberg 2018).

Gray fox – photo credit: Ernie Cowen, SDUT 9-8-19

7

022-19 Cont.

Page 36 of 43 in Comment Letter 022

Effects of Trails Alone

As described before, the study in Arizona of the 11 mammalian carnivores illustrated that the mere presence of trails, even in the absence of humans, can compromise protected areas' ability to sustain sensitive species. Beyond the loss of habitat from building trails, trails alone can negatively affect the ability of sensitive species to thrive.

One reason for this in urban areas is that trails cause fragmentation on protected areas within already fragmented landscapes.

The greater the proportion of a protected area occupied by effect zones, the fewer options there are for wildlife to move to disturbance-free areas. Consequently, fragmentation is a major threat to biodiversity, which underscores the high ecological cost of poorly planned and sited trails and unauthorized trails.

Trail density is a main factor influencing how wildlife respond to trail users and the ability of wildlife to disperse or reach seasonally important habitats such as breeding grounds (D'Acunto et al. 2018). And, some wildlife avoid trails, so don't go beyond them.

Carlsbad Highlands Ecological Reserve

8

022-19 Cont.

Page 37 of 43 in Comment Letter 022

Unauthorized Trails – examples

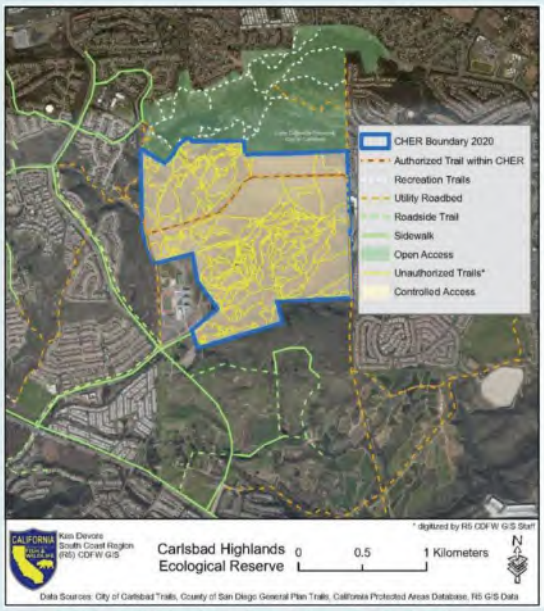
(1 hectare = 2.47 acres; 1 kilometer = 0.62 miles)

- Unauthorized trails comprise a mean of 45% (range: 8–85%) of the 1,206 km of trails mapped in 19 NCCP/HCP conserved areas in San Diego County (Reed et al. 2014).
- The 191-ha Carlsbad Highlands Ecological Reserve in Carlsbad has 4 km of legal hiking trails and 27.4 km of unauthorized mountain biking trails. Mountain biking is prohibited in this ER as it is in 123 of the other 136 ERs statewide (Lucas 2020). *
- Of the 32.22 km mapped trails on a 257-ha portion of the 350-ha Del Mar Mesa Preserve in the City of San Diego, 21.98 km are considered unauthorized (Reed et al. 2014).

Prevent the creation and use of unauthorized trails in the first place. Continual management is needed to accomplish this.

Restore the habitat lost to unauthorized trails, ideally with the assistance of well-organized local volunteer contingents (e.g., e mountain biking community).

* "All ecological reserves are maintained for the primary purpose of developing a statewide program for protection of rare, threatened, or endangered native plants, wildlife, aquatic organisms, and specialized terrestrial or aquatic habitat types. Visitor uses are dependent upon the provisions of applicable laws and upon a determination by the [Fish and Game] commission that opening an area to such visitor use is compatible with the purposes of the property" (Title 14, California Code of Regulations §630(a) states).



Carlsbad Highlands Ecological Reserve, Carlsbad, California. The yellow lines represent the unauthorized trails. Their associated effect zones occupy most, if not all of, the Ecological Reserve. (Credit: Ken Devore, South Coast Region (R5), GIS, CDFW 2017) (Lucas 2020).

9

022-19 Cont.

Page 38 of 43 in Comment Letter 022

Disturbance Thresholds

Disturbance thresholds are predetermined levels of various measurable indicators above or below (depending on the indicator) which wildlife is disturbed (Hennings 2017).

These thresholds may be used to establish management measures such as minimum widths of spatial buffers between recreational trails and wildlife, but they can be tricky to determine for broad application (González et al. 2006). Exceedance of a threshold may trigger the implementation of further management measures (Hennings 2017). Examples of disturbance thresholds are:

- distance between people and wildlife or between trails and nesting sites (i.e., the distance within which wildlife species avoid people or trails);
- density of active trails above which wildlife alters its use of habitat;
- number of recreationists per day over which wildlife abundance decreases,
- duration and time of recreation; and
- number of recreational events per unit time (Hennings 2017; Dertien et al. 2018).

The majority of the research indicates that more visitors will generally cause more wildlife effects (Hennings 2017). However, since recreational impacts vary nonlinearly with use in a variety of ecosystems, a small number of visitors can have a disproportionate impact on sensitive species (Reed and Merenlender 2008).

Ultimately, for wildlife that avoids human activity, it is unlikely that dual-role protected areas are entirely sufficient or justifiable for meeting conservation objectives; limiting or prohibiting recreation in strategic circumstances and locations within protected areas is necessary to achieve conservation objectives (Bötsch et al. 2018; Dertien et al. 2018; Reed et al. 2019).

Effective planning for protected areas preserved primarily or solely for the perpetuation of viable populations of sensitive species: provide separate areas for conservation (e.g., NCCP reserves) and recreational activities (i.e., parks). Credit: Landscape Conservation Planning Program, CDFW 2020 (Lucas 2020).

10

O22-19 Cont.

Page 39 of 43 in Comment Letter O22

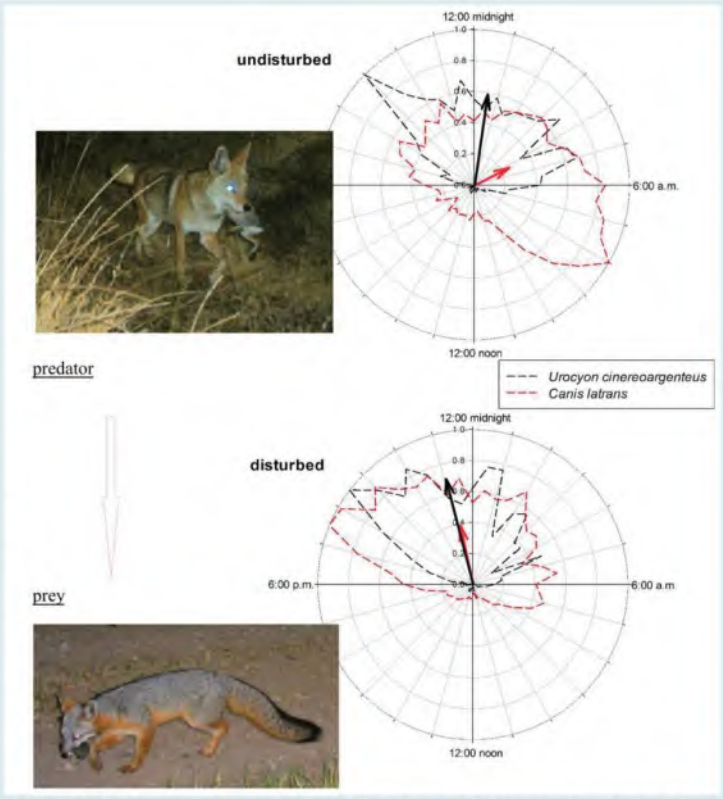
Recreation in the Dark...

After-dark recreation, such as night riding, poses a dual threat to wildlife that are normally active during the day but are shifting their activities to the night because of daytime recreational pressure. The dual daytime/nighttime recreational pressure increases encounters with competitors and even further reduces the time available for foraging and breeding (Reilly et al. 2017).

Generally, temporal shifts by wildlife involve disruptions to both the shifting wildlife and to the wildlife naturally active during the time frame the shifting wildlife move into. In this way, such shifts set both groups of wildlife up for conflict and competition, disrupt predator/ prey dynamics, reduce feeding/hunting time and success, and disrupt breeding and other activities (Gaynor 2018).

Temporal shifts can also result in spatial shifts and thus potentially cause further ecological disruptions. **Thus, temporal shifts are disruptive not only to individuals, but also to communities, and ultimately, populations** (Gaynor 2018).

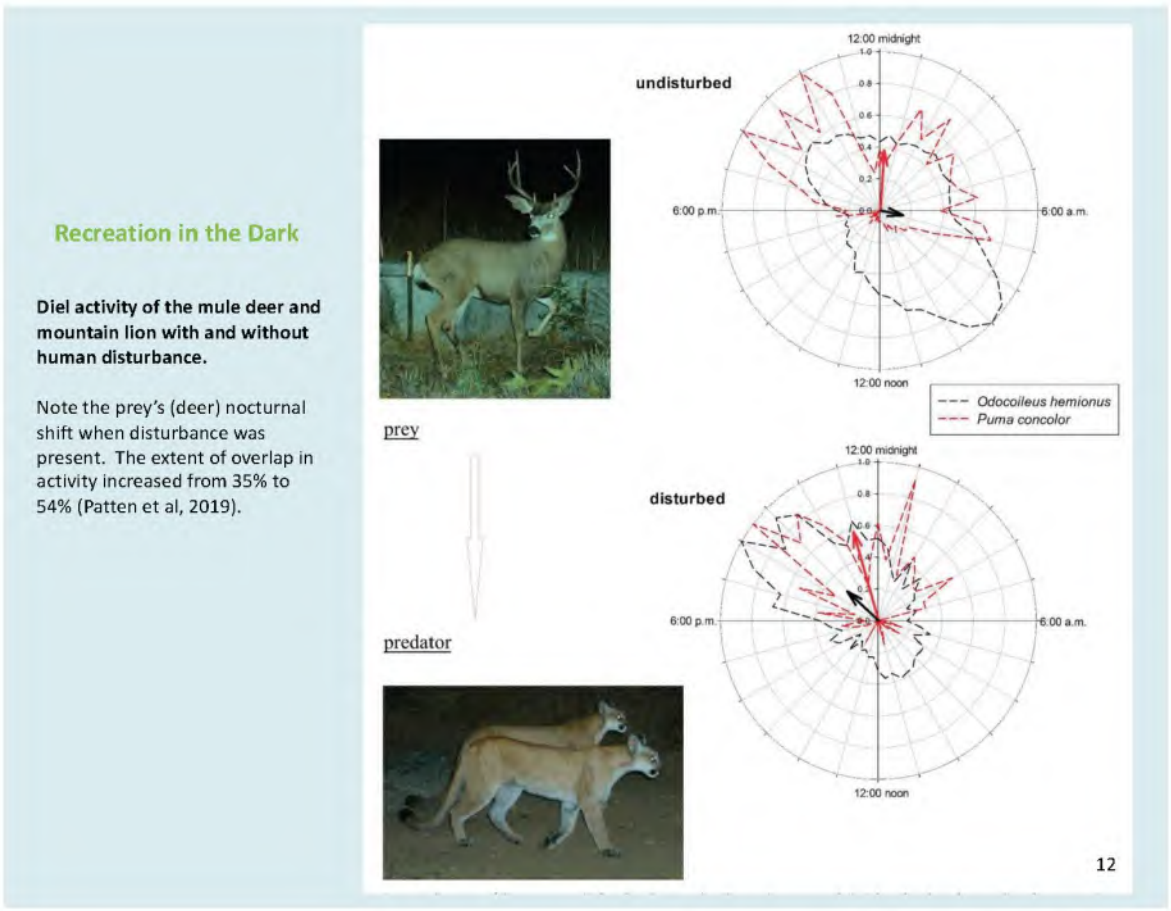
11



Diel activity of the gray fox and coyote with or without human disturbance. Arrows indicate time (direction) and proportional magnitude (length) of mean activity, and the "net" displays the spread of activity on a 24-h clock, binned at 30-min. intervals. Note the predator's (the coyote) nocturnal shift when disturbance was present. The extent of overlap in activity increased from 33% to 45% (Patten et al 2019).

022-19
Cont.

Page 40 of 43 in Comment Letter 022



022-19 Cont.

Page 41 of 43 in Comment Letter 022

Comparing Types of Recreation

It is difficult to make defensible generalized comparisons of the effects on wildlife among different types of recreation, partly because of the diversity of recreational activities, study methodologies, and observed responses (Monz et al. 2013).

Therefore, generalized comparisons of the effects on wildlife among different types of recreation are ill advised. **The differences among types of recreation in their effects on wildlife are less important than the negative association for wildlife of human presence, irrespective of type of recreation** (Patten and Burger 2018).

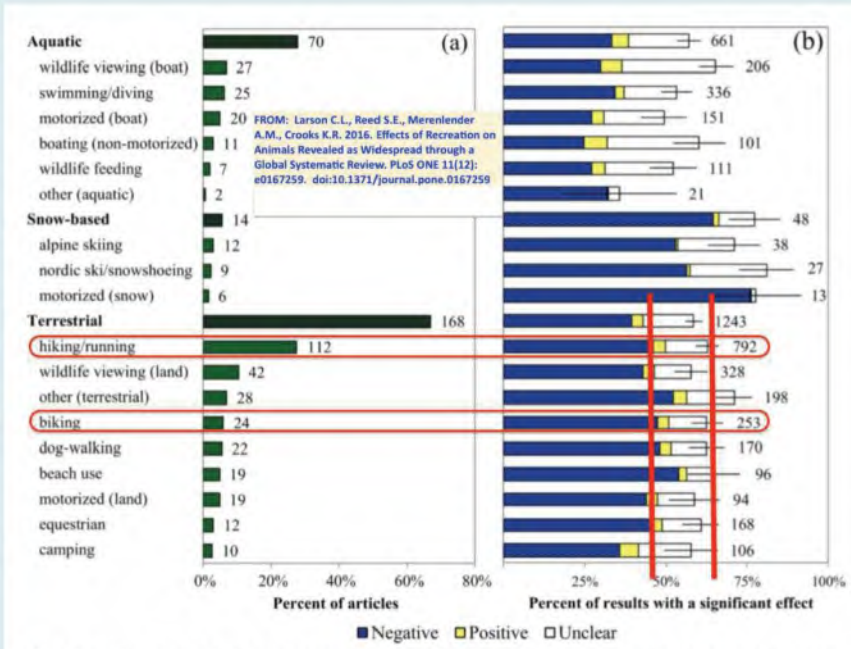


Fig 5. Recreation activities in the articles included in this review. Panel (a) shows the percent of articles that included each recreation activity (numbers of articles follow the bars), and panel (b) shows the percent of results in which a statistically significant effect of recreation on an animal species was observed (number of results follow the bars). Total percentages are divided into negative, positive, and unclear effects of recreation. Error bars show standard error for the sum of all effects.

Larson et al. 2016

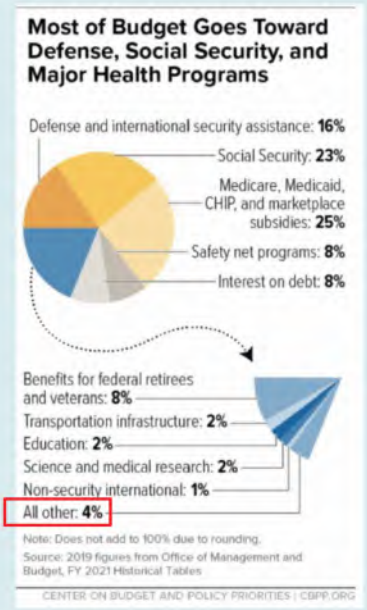
13

O22-19 Cont.

Page 42 of 43 in Comment Letter O22

Closing Thoughts

- **With respect to sensitive wildlife species forced to ever smaller areas by development and human activity, recreationists' needs are not equivalent to the species' needs for the lands conserved expressly for them to perpetually thrive in viable populations.**
- Enormous effort and considerable expense have gone into preserving lands In SD County in perpetuity for biological conservation. Already within fragmented landscapes, and subject to several other anthropogenic stressors, wildlife exposed to too many trails and too many people on the trails are at great risk. This is why it's critical that we address this issue. Unless we do, it is another inconvenient truth that conserved lands may not achieve their intended purpose.
- The presence of individuals of a sensitive species doesn't mean the local population is healthy or viable.
- The lack of an observable response to human presence does not = no effect.
- The most responsive animals are not necessarily the most vulnerable to disturbance.
- Not all public lands are meant to have public access - people do not need to be on every ridgeline or in every canyon (Mitrovich 2019).
- Not all open space lands have the same purpose.
- Despite their motivation (e.g., enjoy nature, get exercise outdoors in open space), all recreationists disturb wildlife.
- The mantra "leave no trace" (LNT) doesn't apply well to recreational disturbance to wildlife because people are often unaware of the disturbance they cause. And, it's not at all clear that the LNT program has altered visitors' behavior to a sufficient degree to effect a meaningful change for wildlife; consider Greer et al.'s paper re: Del Mar Mesa.



Need more $$$$ for perpetual management.

14

022-19 Cont.

Page 43 of 43 in Comment Letter 022

INTENTIONALLY LEFT BLANK

Endangered Habitats League
Dan Silver, Executive Director
February 13, 2025

022-1 This introductory statement does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

022-2 All comments received during the public comment period have been included and responded to in this Final EIR. This comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

022-3 The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. It should be noted that the applicant for the Project differs from the applicant of the previously approved project and certified EIR (State Clearinghouse No. 2003031086) located at the same Project site (Los Angeles County Project TTM No. 53653, Conditional Use Permit R200500088, and Oak Tree Permit R0AK200500039). Additionally, the previous applicant did not withdraw the previously approved project and re-plan on a smaller footprint. Instead, the application for the previously approved project expired, and this expiration occurred after the Project Applicant for the currently-proposed Project submitted their application. Therefore, prior to its expiration, the previously approved project could have been implemented instead of the Project.

022-4 Regarding potential impacts to oak trees and other sensitive biological resources, please refer to the impacts analysis beginning on page 4.4-40 in Section 4.4, Biological Resources, of the Draft EIR. Section 4.4 of the Draft EIR and the Biota Report included as Appendix C provide a comprehensive cataloguing of the existing biological conditions on the Project site. The impacts and mitigation are analyzed and proposed through the context of the County's Significant Ecological Areas (SEA) Ordinance, which exceeds the typical analysis under CEQA and provides mitigation for all impacts to biological resources. As discussed therein, implementation of required mitigation measures would reduce all biological resource impacts to a less than significant level. This includes potential impacts to a candidate, sensitive, or special status species, sensitive natural communities (including oak woodlands), protected wetlands, and resources. Regarding oak tree impacts, as stated in MM-4.4-16, SEA Protected Trees Replacement/Compensation (beginning on page 4.4-93 of the Draft EIR), the Conservation Management Plan required by MM-4.4-1, On-Site Habitat Preservation, will include a Protected Tree Replacement Plan that shall dictate the establishment of replacement trees. Removal of any SEA Protected Tree shall result in a minimum of two replacement plantings with 10:1 for Heritage Trees (which include coast live oak and valley oak). In accordance with County Code Section 22.102.070(F)(4) and as stated in MM-4.4-16, at a minimum, the County requires that the replacement trees need to be nurtured and maintained in a healthy condition and be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. Furthermore, MM-4.4.2, Habitat Mitigation and Monitoring Plan, requires 10 years of monitoring and maintenance of the habitat to help the ecosystem as a whole to become established. See Section 4.4.7 of Section 4.4, Biological Resources, of the Draft EIR for the requirements of mitigation measures MM-4.4-1 through MM-4.4-16, which would reduce biological resources impacts to less than significant.

022-5 The Project is consistent with the density limitation of the General Plan Land Use designation, State Density Bonus Law, and the County Code's provision for Density Controlled Development. Nonetheless,

the Draft EIR includes an analysis of Alternative C, Reduced Footprint Alternative, which presents a 67% reduction in the development footprint when compared to the Project. This analysis is provided on pages 6-56 through 6-72 in Chapter 6, Alternatives, of the Draft EIR. This alternative would cluster development closer to The Old Road and includes avoidance of most riparian habitat and non-riparian streams, and substantial avoidance of other biological resources, including native habitats, protected trees, oak woodlands, special-status plants, and rare plants. As stated on page 6-75 of the Draft EIR, Alternative C would be the environmentally superior alternative.

022-6 Please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a Very High FHSZ. A discussion of fire history within 5 miles of the Project site, as well as wind conditions, is provided in Section 4.20.1, Existing Conditions beginning on page 4.20-3 of the Draft EIR. As stated on page 4.20-35 of the Draft EIR, the most common type of fire anticipated in the vicinity of the Project site is a wind-driven fire from the east/south/southeast, moving through the chaparral and sage scrub on the adjacent lands. To analyze the Project site's fire behavior pre- and post-development, the BehavePlus fire modeling system was used to model on-site fire behavior (Appendix M-1 of the Draft EIR). The program simulates rate of fire spread, spotting distance, scorch height, tree mortality, fuel moisture, wind adjustment factor, and other variables. As stated on page 4.20-35 of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones (FMZs) on and off site and would not exacerbate the fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 and required through MM-4.20-2, Alternative Materials and Methods and MM-4.20-3, Annual Fuel Modification Zone Inspection as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, Wildfire Education Program, would reduce potential impacts related to wildfire spread to less than significant.

022-7 The Project would construct 510 total residential dwelling units of which 71 units would be affordable dwelling units (24 for sale condominiums and 47 rental apartment units), representing approximately 15% of the Project's base number of dwelling units.

The County is very far from succeeding in meeting all its housing obligations, in contrast to the assertion made by the commenter. As stated on page 4.14-16 in Section 4.14, Population and Housing, of the Draft EIR, unincorporated Los Angeles County has been allocated a total of 90,052 housing units for the planning period between 2021 and 2029. The County has only attained 5,160 (5.7%) of its current Regional Housing Needs Allocation (RHNA) even though the County is 50% through the 6th Cycle (HCD 2025). Similarly, only 9,201 (33.8%) of the County's 5th Cycle RHNA goals were attained through housing production between 2013 and 2021 (HCD 2025). The Project's construction schedule is anticipated to be completed by 2029; thus, housing units will be available to be occupied within the timeframe of the 6th Cycle (2021-2029). Therefore, the Project will help the County achieve its regional housing needs, including very low-income housing and moderate/middle-income households.

022-8 As recognized in this comment, the Project was vested and the NOP was published prior to the adoption of the updated General Plan Safety Element (i.e., July 2022) and Land Use Element (i.e., May 2024).

Nonetheless, the General Plan Safety Element goals and policies discussed in Section 4.11, Land Use and Planning, of Draft EIR reference the updated version of the Safety Element. However, conformance to "new" Safety Element policies (including Policy S 4.1) is not a Project requirement. The Final EIR includes an analysis of applicable goals and policies from the version of the Safety Element that was in effect at the time the Project was vested and the NOP was published (i.e., the 2015 version of the Safety Element). This analysis has been added to Chapter 3, Revisions to the Draft EIR of this Final EIR.[27] As drafting of the updated General Plan Land Use Element coincided with preparation of the Draft EIR, the analysis provided in the Draft EIR references the previous iteration of the Land Use Element. However, the updated Land Use Element did not include any revisions to goals and policies. As such, the Land Use Element goals and policies referenced in the Draft EIR are still relevant and applicable.

An analysis of the Project's potential to result in a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 4.11, Land Use and Planning, of the Draft EIR (beginning on page 4.11-14). The goals and policies included in Table 4.11-1 are the same goals and policies included in the updated versions of the Safety Element and Land Use Element. As stated on page 4.11-15 in the analysis of Policy LU 1.10 and on page 4.11-39 in the analysis of Policy S 4.1, the Project site is adjacent to existing built development (i.e., commercial and residential uses) to the north and appurtenant to The Old Road and I-5 (a major highway) to the east, followed by urban development and land uses. Furthermore, the Mountains Recreation and Conservation Authority (MRCA) Santa Clarita Woodlands Park, including Ed Davis Park in Towsley Canyon, is located southwest of the Project site. Southeast of the Project site's boundary is the City of Santa Clarita's Taylor Trail Wilderness and Open Space and Rivendale Park and Open Space. These land uses are publicly owned and established land uses that are not subject to potential development and would not change with implementation of the Project. As such, the Project is considered adjacent to existing development to the north and east, and settled uses are also located east and south of the Project site. The analyses provided in Table 4.11-1 in Section 4.11 for General Plan policies LU 1.10 (from the Land Use Element) and S 4.1 (from the Safety Element) have been revised to clarify this information. Furthermore, as stated above, analysis of applicable Safety Element goals and policies from the 2015 version of the Safety Element has been added to this Final EIR. Please refer to Chapter 3 of this Final EIR for the revised text.

Furthermore, Land Use Element Policy LU 1.10 states: "*Prohibit plan amendments* (emphasis added) that increase density of residential land uses within mapped fire and flood hazard areas unless generally surrounded by existing built development and the County." Plan amendments refer to General Plan amendments. The Project would not require a General Plan amendment and thus would not conflict with this policy. This clarification has been added to Chapter 3 of this Final EIR.[28] Additionally, the Project is consistent with the zoning designations on-site. Finally, please note that a conflict between a project and an applicable policy is not necessarily a significant impact under CEQA unless the inconsistency will result in an adverse physical change to the environment that is a "significant

[27] This revision does not change the impact analysis or conclusions in the Draft EIR. Rather, this information merely clarifies information and conclusions that were already presented in the Draft EIR. As such, this change would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

[28] This clarification does not change the impact analysis or conclusions in the Draft EIR. Rather, this information merely clarifies information and conclusions that were already presented in the Draft EIR. As such, this change would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

environmental effect" as defined by State CEQA Guidelines Section 15382. As provided in State CEQA Guidelines Section 15126.2 "an EIR shall identify and focus on the significant effects of the proposed project on the environment." A significant impact to the environment may occur if the Project conflicts with a policy intended to protect the environment and would consequently result in environmental impacts. It should also be noted that the above-referenced CEQA threshold explicitly asks whether the Project would cause a significant environmental due to a *conflict* (emphasis added) with a goal or policy for the purpose of avoiding or mitigating an environmental effect, and not if the Project is *consistent* with a goal or policy. As discussed in detail in Section 4.20, Wildfire, of the Draft EIR, with implementation of required mitigation measures, the Project would not result in any significant environmental effects related to wildfire. A more detailed response related to fire safety and protection is provided in Topical Response-1. With implementation of applicable mitigation, Project impacts due to a conflict with the County's General Plan adopted for the purpose of avoiding or mitigated an environmental effect would be less than significant.

022-9 Please refer to the response provided above for Comment O22-8. A more detailed response regarding potential fire hazards is provided in Topical Response-1.

022-10 The Project's Wildfire Evacuation Plan (included as Appendix M-2 of the Draft EIR) was prepared based on the Los Angeles County's Office of Emergency Management's Operations Area Emergency Response Plan and current County of Los Angeles Operational Area Emergency Operations Plan and in consideration of the Attorney General-issued Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act. During preparation of the Draft EIR and Wildfire Evacuation Plan, the Wildfire Evacuation Plan was reviewed and approved by qualified County staff and a qualified third-party technical reviewer of the County's choice that was paid for by the applicant, as requested in the comment.

A more detailed response related to the Wildfire Evacuation Plan is included in Topical Response-1 (specifically, please refer to Section 2.4.3.1, Attorney General's Guidance, the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements, and Section 2.4.4, Project Wildfire Evacuation Modeling of the Topical Response).

022-11 Regarding trail placement and impacts to biological resources, the Draft EIR addresses impacts related to trail maintenance and activities. It should be noted that the Project would not construct new trails in the southern portion of the Project site. The Project would construct a private-gated access road that would run along the outer northern and western edge of the development area. This access road would serve as multi-use trail system for emergency and maintenance purposes. A new publicly-accessible trailhead would be constructed near the gated connection of the access road to The Old Road at the northeastern corner of the Project site. Trailhead signage would be posted at this access point at The Old Road, as implemented through MM-4.20-1, of Section 4.20, Wildfire, of this Draft EIR (Draft EIR, page 3-11). Moreover, the Project would facilitate the dedication of existing non-dedicated trails located in the southern portion of the Project site. Figure 3-5, Conceptual Trails Map, illustrates the Project's proposed trail network, existing non-dedicated trails to be dedicated, existing dedicated trails (managed by the City of Santa Clarita or the County), and existing non-dedicated trails. Several existing non-dedicated trails are located within the southern portion of the site (within the designated natural open space portion of the Project site) and would remain with implementation of the Project. With implementation of the Project, an existing non-dedicated trail would be dedicated to the County or City

of Santa Clarita, as shown in green/purple striping on Figure 3-5. As a result of the Project, the County or the City of Santa Clarita would be responsible for the maintenance of these trails.

The comment recommends trail placement after a resource management plan is complete. Although the Project does not include a "resource management plan," the Project would implement a Conservation Management Plan. It is assumed that the commenter is referring to the proposed Conservation Management Plan. As detailed in the Draft EIR, MM-4.4-1, On-Site Habitat Preservation, includes a Conservation Management Plan as part of the conservation easement recording, which would be submitted for County approval and identify the required resource management activities and the entities that shall be responsible for managing those activities. The Conservation Management Plan would set forth various requirements that would be implemented by the entity that holds the conservation easement and/or manages and stewards the Conservation Area, including but not limited to no grading, no off-trail activities, and signage provisions (see Draft EIR pages 4.4-70 and 4.4-71 for more details). Furthermore, CEQA Guidelines Section 15126.4 does not allow for deferred action as suggested by the comment. Instead, as demonstrated in the Draft EIR, MM-4.4-1 outlines specific performance standards that the mitigation measure will achieve. Additionally, the Draft EIR identifies and incorporates appropriate measures to ensure impacts to biological resources are addressed prior to the issuance of a grading permit (see MM-4.4-1).

Regarding the attachment provided by the commenter on trails and recreational activities and conservation programs, the comment does not specifically express environmental concerns related to the Draft EIR's analysis. Nevertheless, the Draft EIR includes impact analyses that consider the Project's potential effects of the proposed trail network on wildlife. The proposed trail network is part of the Project, as detailed in Chapter 3, Project Description, of the Draft EIR. As such, the impact analysis, especially the analysis contained within Section 4.4, Biological Resources, of the Draft EIR encompasses the potential effects associated with the whole of the Project.

O22-12 Please refer to Response to Comment O22-3 for discussions on the previously approved project. Regarding biological resources in an SEA, please see Response to Comment O22-4. Regarding fire safety, please refer to Topical Response-1. Regarding the County's housing obligation, please refer to the response provided above for Comment O22-7.

O22-13 Regarding the General Plan Safety and Land Use Elements, please refer to the response provided above for Comment O22-8.

O22-14 Regarding an alternative with a smaller development footprint, please refer to the response provided above to Comment O22-5.

O22-15 Please refer to Response to Comment O22-10 regarding independent traffic engineering expertise to bear on evacuation planning. Additionally, a detailed response related to evacuation planning and the Project's WEP is provided in Topical Response-1 (specifically, please refer to Section 2.4.3.1, Attorney General's Guidance and Section 2.4.4, Project Wildfire Evacuation Modeling of Topical Response-1).

O22-16 Regarding trail placement and impacts to biological resources, please see the response provided above for Comment O22-11.

022-17 Regarding the Motion by Supervisor Kathryn Barger, the attachment does not specifically express environmental concerns related to the Draft EIR's analysis and therefore no further response is required or provided.

022-18 Regarding the article on recreation-related disturbances to wildfire, the attachment does not specifically express environmental concerns related to the Draft EIR's analysis and therefore no further response is required or provided.

022-19 Regarding the attachment on trails and recreational activities and conservation programs, the attachment does not specifically express environmental concerns related to the Draft EIR's analysis and therefore no further response is required or provided.

Comment Letter 023

From:	Dan Silver
To:	Erica G. Aguirre
Cc:	Thuy Hua; Joshua Huntington
Subject:	Trails at Lyons Canyon, Project No. PRJ2021-001195, SEA Permit No. RPPL2021003113 - Supplemental comments
Date:	Friday, February 21, 2025 9:48:12 AM

CAUTION: External Email. Proceed Responsibly.

February 21, 2025

LA County Department of Regional Planning
Attention: Erica G. Aguirre, AICP, Principal Planner, Subdivisions
320 West Temple Street, 13th Floor
Los Angeles, CA 90012

RE: Trails at Lyons Canyon, Project No. PRJ2021-001195, SEA Permit No. RPPL2021003113 - Supplemental comments

Dear Ms. Aguirre:

In our letter of February 13, 2025, we noted the inconsistency of the project with Safety Element Policy S 4.1 and with Land Use Element Policy LU 1.1 in regard to the requirements to be "generally surrounded" by built or entitled development. The Draft EIR's analysis of General Plan consistency is found in Table 4.11-1. This analysis falsely states that there is no conflict between the project and these two policies. Its analysis completely ignores the "generally surrounded" requirement, nor does it address whether or not the project is bound by the policies in the first place. 023-1

Yours truly,
Dan Silver

Dan Silver, Executive Director
Endangered Habitats League
8424 Santa Monica Blvd., Suite A 592
Los Angeles, CA 90069-4267

213-804-2750
dsilverla@me.com
https://ehleague.org

INTENTIONALLY LEFT BLANK

Response to Comment Letter O23

Endangered Habitats League
Dan Silver, Executive Director
February 21, 2025

O23-1 The Project Applicant submitted a preliminary application pursuant to SB 330 on March 18, 2021. The preliminary application granted a vested right to proceed with the Project, subject to the ordinances, policies, and standards in effect at the time. This date is prior to the adoption of the updated General Plan Safety Element (i.e., July 2022). As such, the Project is not subject to the updated Safety Element.

Nonetheless, the General Plan Safety Element goals and policies discussed in Section 4.11, Land Use and Planning of Draft EIR reference the updated version of the Safety Element. However, conformance to "new" Safety Element policies (including Policy S 4.1) is not a Project requirement. The Final EIR includes an analysis of applicable goals and policies from the version of the Safety Element that was in effect at the time the Project was vested and the NOP was published (i.e., the 2015 version of the Safety Element). This analysis has been added to Chapter 3, Revisions to the Draft EIR of this Final EIR.[29] As drafting of the updated General Plan Land Use Element coincided with preparation of the Draft EIR, the analysis provided in the Draft EIR references the previous iteration of the Land Use Element. However, the updated Land Use Element did not include any revisions to goals and policies. As such, the Land Use Element goals and policies referenced in the Draft EIR are still relevant and applicable.

An analysis of the Project's potential to result in a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 4.11, Land Use and Planning, of the Draft EIR (beginning on page 4.11-14). The goals and policies included in Table 4.11-1 are the same goals and policies included in the updated versions of the Safety Element and Land Use Element. As stated on page 4.11-15 in the analysis of Policy LU 1.10 and on page 4.11-39 in the analysis of Policy S 4.1, the Project site is adjacent to existing built development (i.e., commercial and residential uses) to the north and appurtenant to The Old Road and I-5 (a major highway) to the east, followed by urban development and land uses. Furthermore, the Mountains Recreation and Conservation Authority (MRCA) Santa Clarita Woodlands Park, including Ed Davis Park in Towsley Canyon, is located southwest of the Project site. Southeast of the Project site's boundary is the City of Santa Clarita's Taylor Trail Wilderness and Open Space and Rivendale Park and Open Space. These land uses are publicly owned and established land uses that are not subject to potential development and would not change with implementation of the Project. As such, the Project is considered adjacent to existing development to the north and east, and settled uses are also located east and south of the Project site. The analyses provided in Table 4.11-1 in Section 4.11 for General Plan policies LU 1.10 (from the Land Use Element) and S 4.1 (from the Safety Element) have been revised to clarify this information. Furthermore, as stated above, analysis of applicable Safety Element goals and policies from the 2015 version of the Safety Element has been added to this Final EIR. Please refer to Chapter 3 of this Final EIR for the revised text.

[29] This revision does not change the impact analysis or conclusions in the Draft EIR. Rather, this information merely clarifies information and conclusions that were already presented in the Draft EIR. As such, this change would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

Furthermore, Land Use Element Policy LU 1.10 states: "*Prohibit plan amendments* (emphasis added) that increase density of residential land uses within mapped fire and flood hazard areas unless generally surrounded by existing built development and the County." Plan amendments refer to General Plan amendments. The Project would not require a General Plan amendment and thus would not conflict with this policy. This clarification has been added to Chapter 3 of this Final EIR.[30] Additionally, the Project is consistent with the zoning designations on-site. Finally, please note that a conflict between a project and an applicable policy is not necessarily a significant impact under CEQA unless the inconsistency will result in an adverse physical change to the environment that is a "significant environmental effect" as defined by State CEQA Guidelines Section 15382. As provided in State CEQA Guidelines Section 15126.2 "an EIR shall identify and focus on the significant effects of the proposed project on the environment." A significant impact to the environment may occur if the Project conflicts with a policy intended to protect the environment and would consequently result in environmental impacts. It should also be noted that the above-referenced CEQA threshold explicitly asks whether the Project would cause a significant environmental due to a *conflict* (emphasis added) with a goal or policy for the purpose of avoiding or mitigating an environmental effect, and not if the Project is *consistent* with a goal or policy.

As discussed in detail in Section 4.20, Wildfire, of the Draft EIR, with implementation of required mitigation measures, the Project would not result in any significant environmental effects related to wildfire. A more detailed response related to fire safety and protection is provided in Topical Response-1. With implementation of applicable mitigation, Project impacts due to a conflict with the County's General Plan adopted for the purpose of avoiding or mitigated an environmental effect would be less than significant.

.

[30] This clarification does not change the impact analysis or conclusions in the Draft EIR. Rather, this information merely clarifies information and conclusions that were already presented in the Draft EIR. As such, this change would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

Comment Letter O24

February 28, 2025

Sent Via Email to: eaguirre@planning.lacounty.gov

Ms. Erica G. Aguirre, AICP
Principal Planner, Subdivisions
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th floor
Los Angeles, CA 90012

RE: Response to Draft of Environmental Impact Report for Trails at Lyons Canyon Project
No. 2021-001195-(5)

Dear Ms. Aguirre,

I and many others in the area are deeply concerned with the Environmental Impact Report for the proposed Trails at Lyons Canyon Project. Several critical issues have come to light that necessitate further examination and consideration.

O24-1

- Fire safety is crucial. Wildfires in Pacific Palisades and Altadena highlight the vulnerability of building communities in high fire zones. The Palisades and Altadena fires demonstrated how developments relying solely on vegetation reduction for fire mitigation provide insufficient protection (L.A. Times What Plants Survived? 2/1/25). Our office building is the closest improvement to this planned development and therefore we could be the most impacted in this area. As you are probably aware, there have been significant fires in the area in the last 20 years. In fact, we have had to evacuate the building no less than 3 times.

- The environmental proposal should implement factors used in the successful defense against the Silverado fire. The Orchard Hills community suffered no damage and no deaths. This community was developed through a collaboration between the developer, the fire authority, and a fire behavior analyst. Fire mitigation was achieved with three tiers of fuel modification and by adhering to stringent construction standards which included the use of tempered glass windows, fire-rated exterior doors, cement walls, vinyl fences, and fire retardant-covered wood (L.A. Times A Blueprint for a More Fire-Resistant L.A. 2/16/25).

O24-2

- In contrast, the current proposal suggests installing only the minimum number of fire hydrants. Are we willing to accept development standards that do not adequately

O24-3

ensure the safety of the residents? LA County Fire noted in July 2022 that fire response times for this area are inadequate. O24-3 Cont.

- Besides the fire safety parameters, it is recommended to build and staff a fire station before granting company approval, especially considering recent incidents in Altadena and the Palisades. O24-4

It is important to note that **seven** wildfires have occurred within five miles of the proposed development over the past ten years, with three being significant. The Santa Ana winds blow through Lyons Canyon. It is evident that stringent mitigation measures are necessary for placing a development in a high-severity fire zone when these winds are present. O24-5

- The project calls for the removal of 334 SEA protected trees including the removal of 22 Heritage Oaks. Santa Clarita Valley has already lost many heritage oaks. As denoted by our name, we proudly had a Heritage Oak on our property. Unfortunately, ours died several years back. While some of these trees will die over the next several years, these protected trees should not be removed. No one in two or three generations will ever see trees this old again. Instead, in compliance with the County Oak Ordinance, an alternative should be presented that will protect these trees. O24-6

    - https://www.latimes.com/lifestyle/newsletter/2025-02-01/what-trees-survived-in-our-terrible-fires-and-why-didnt-they-burn-lat-plants

    - https://www.latimes.com/california/story/2025-02-19/could-this-irvine-neighborhood-be-the-blueprint-for-a-more-fire-resistant-l-a

- Lyons Canyon is situated adjacent to a preserved open space. The canyon serves as a natural habitat for deer, coyotes, bobcats and mountain lions. Hence any development in this area will significantly affect their habitats and migration patterns. O24-7

- This report claims the impact on Public Services is minimal or mitigated. The proposed property located in the unincorporated L.A. County lacks public transportation, affecting seniors who rely on it. Additionally, placing seniors at high risk with difficult evacuation in crises like wildfires or earthquakes might not be wise. The Altadena wildfire highlighted chaotic attempts to rescue seniors from a retirement home. If a proposal is finalized, better planning for evacuation is needed. As noted, we are right next to the development and realize how much the added density will harm the area. O24-8 O24-9

- The project calls for a senior apartment 45 feet taller than neighborhood buildings, which are only two floors. The height does not match the neighborhood. A two-floor O24-10

building would be in keeping with the neighborhood. How will seniors evacuate if there is no electricity? One of the main reasons we purchased the location 20+ years ago was because it was next to an open area with a fantastic view. Is it fair to building something taller than we were allowed to build?

O24-10 Cont.

- The plans call for two entrances/exits onto the Old Road. Note the only two ways to exit the valley for the west side of Santa Clarita are the Old Road and the 5 freeway. The recent evacuation of Castaic caused a severe traffic jam on the Old Road and on the 5 freeway. It took hours for fleeing residents to exit the valley to the south. The placement of another development feeding onto the two-lane Old Road would create a blockage for the 21, 972 residents of Stevenson Ranch and the businesses north of Lyons Canyon. This would make our potential evacuation even more perilous!

O24-11

- The project claims a "less than significant impact on noise" citing a 2022 study. However, since then, additional lanes have been added to the nearby 5 freeway increasing traffic noise. Combined with the proposed outdoor pool, parking lots, and resident noise, this will negatively affect noise levels on existing trails and for Sunset Pointe Neighbors. Again, being right next to the development, our peaceful area will be severely impacted.

O24-12

Further consideration is required before approval of the environmental report due to the placement of seniors and residents in a wildfire risk zone. Mitigation based on new information from the Silverado, Palisades and Altadena fires is very important. Alternative proposals regarding the number of SEA trees removed need to be considered. The disturbance of wildlife habitats and migration should be studied along with the availability of public transportation, an updated noise study and preparation of workable evacuation plans.

O24-13

Sincerely,

Ronald Morgan, member

Heritage Oak Enterprises, LLC

24961 The Old Road

INTENTIONALLY LEFT BLANK

Response to Comment Letter O24

Heritage Oak Enterprises, LLC
Ronald Morgan
February 28, 2025

O24-1 The commenter's specific concerns are addressed in further detail below.

O24-2 Please refer to Topical Response-1, which includes summaries of the Project's compliance with applicable regulations, fire safety features, and research on the efficacy of defensible space and ignition resistant construction to develop fire safe communities. While defensible space and conversion of fuels (i.e. vegetation) are critical components of the Project's fire protection system, the Project does not rely solely on vegetation management. The Project includes a multi-layered fire protection system that is based on ignition resistant buildings and landscapes, adherence to stringent codes, fire-fighting water availability, swift emergency response, and sound evacuation planning that includes a contingency option for residents who may be directed to temporarily shelter within the community during a wildfire evacuation. Similar to the Orchard Hills community referenced in this comment, Project design involved collaboration between the Project Applicant, the fire authority (i.e., the Los Angeles County Fire Department [LACoFD]), and fire behavior analysts.

Regarding development standards, the Project satisfies the requirements of California Code of Regulations Title 24, including Parts 2 and 9, the County Code Title 20 (Division 1) and 26 (including Chapter 7A), and the County Fire Code including Title 32, Section 4908. The Project's infrastructure components, including water supply, fire hydrants, automatic sprinkler systems, and residential hazard detectors (e.g., carbon monoxide or smoke) would all be code compliant. The final number and location of the fire hydrants will be determined by the LACoFD in compliance with County Code, Title 32, Fire Code, Appendix C, Fire Hydrant Locations and Distribution requirements. Additionally, the Project structures would be built utilizing the most current ignition resistant and fire protective construction methods, including but not limited to: Class A fire-rated roofing, ember resistant venting, multi-pane glazing with a minimum of one tempered pane windows meeting the requirements of State Fire Marshall 12-7A-2. All residential structures would include code compliant automatic, interior fire sprinkler systems. As detailed in Table 2-3, Code Exceeding Measures, of Topical Response-1, the Project also includes additional ignition-resistant construction requirements, beyond existing code requirements.

O24-3 Regarding development standards for fire safety, please refer to the response provided above for Comment O24-2. Regarding response times, as discussed in Section 4.15, Public Services, of the Draft EIR, the LACoFD indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site (see page 4.15-31 in the Draft EIR). Further, as detailed in Table 7 of the Fire Protection Plan included as Appendix M-1 of the Draft EIR, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from the closest Fire Station 124. As noted in Section 4.15a of the Draft EIR, implementation of Mitigation Measures MM-4.17-1 and MM-4,20-1 to 4.20-5 would reduce the fire protection impact to less than significant.

O24-4 As discussed on page 4.15-33 in Section 4.15, Public Services, of the Draft EIR, the LACoFD determined that a new on-site fire station is not required for the Project. However, as the Project is located within

a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. Furthermore, as discussed in Section 2.4.1.2, Project Specific Fire-Resistant Design Feature, and Section 2.4.3.1, Attorney General's Guidance, of Topical Response-1, in addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area.

024-5 As discussed in Response to Comment 024-3, stringent mitigation measures are proposed. Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a VHFHSZ. A discussion of fire history within 5 miles of the Project site, as well as wind conditions, is provided in Section 4.20.1, Existing Conditions beginning on page 4.20-3 of the Draft EIR. As stated on page 4.20-35 of the Draft EIR, the most common type of fire anticipated in the vicinity of the Project site is a wind-driven fire from the east/south/southeast, moving through the chaparral and sage scrub on the adjacent lands. To analyze the Project site's fire behavior pre- and post-development, the BehavePlus fire modeling system was used to model on-site fire behavior (Appendix M-1 of the Draft EIR). The program simulates rate of fire spread, spotting distance, scorch height, tree mortality, fuel moisture, wind adjustment factor, and other variables. As stated on page 4.20-35 of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones (FMZs) on and off site and would not exacerbate the fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 and required through MM-4.20-2, Alternative Materials and Methods and MM-4.20-3, Annual Fuel Modification Zone Inspection as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, Wildfire Education Program, would reduce potential impacts related to wildfire spread to less than significant.

024-6 The comment erroneously states that the "project calls for the removal of 334 SEA-protected trees". As stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR, the 334 SEA-Protected Tree impacts would be comprised of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin. The 53 SEA-Protected Trees that would be located within a debris basin would not be removed but are considered as removals for mitigation purposes. This is because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding. As such, for mitigation purposes, the Project would result in 318 SEA Protected Tree removals. The 318 SEA Protected Trees would be replaced in accordance with the Los Angeles County SEA Ordinance, codified in Chapter 22.102, Significant Ecological Areas, of the County Code, resulting in 772 replacement trees. Per MM-4.4.16, SEA Protected Trees Replacement/Compensation, should there not be enough locations within the Project's Conservation Area (on-site and off-site) or Project landscaped areas for replacement trees, the Project Applicant must pay into the County's Protected

Tree Fund (see page 4.4-94 in Section 4.4, Biological Resources of the Draft EIR). The Protected Tree Fund is codified in Section 22.102.070(F)(5) of the County Code as a viable option for mitigation for the replacement of the impacted trees.

Regarding a potential alternative to reduce impacts to SEA Protected Trees, Chapter 6, Alternatives, of the Draft EIR includes analysis of Alternative C, Reduced Footprint Alternative (beginning on page 6-56 of the Draft EIR). The approximately 28-acres of development under Alternative C represents a 67% reduction in the development footprint when compared to the Project. This would reduce direct impacts to SEA Protected Trees and would avoid impacts to the following tree species altogether: Fremont cottonwood, red willow, and arroyo willow. However, as stated on page 6-46 of the Draft EIR, Alternative C would still result in direct tree impacts to SEA Protected Trees (including heritage trees), and mitigation would still be required to reduce impacts to less than significant.

Furthermore, Alternative C would not reduce impacts to all environmental topic areas. For example, multi-family buildings under Alternative C would be 56 feet in height. This would increase the height of on-site buildings by 11 feet when compared to the Project's maximum height for buildings (which would be 45 feet at one portion of the Project site—the senior housing apartment building (see page 6-60 of the Draft EIR). In addition, as discussed on pages 6-69 and 6-70 of the Draft EIR, the preserved natural open space on-site would not be made available to the public, and no publicly accessible trailhead would be provided on-site under Alternative C. The lack of trail access/publicly accessible open space on-site under Alternative C would increase the park pressure of facilities within the Santa Clarita Valley area when compared to the Project. Finally, as stated on page 6-58 of the Draft EIR, Alternative C would not eliminate the significant unavoidable impact related to baseline residential VMT per capita and would not satisfy all Project objectives.

024-7 Regarding habitat preservation for local wildlife species, the Project would provide approximately 150 acres of on-site natural open space. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR). Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement.

The Draft EIR provides a specific analysis of potential impacts to the California mountain lion, which is a state candidate for listing as endangered or threatened. As detailed in the analysis provided in Section 4.4, Biological Resources on pages 4.4-47 through 4.4-49 of the Draft EIR, implementation of MM-4.4-1 (On-Site Habitat Preservation), MM-4.4-2 (Habitat Mitigation and Monitoring Plan), MM-4.4-4 (Biological Monitoring), MM-4.4-5 (Demarcation of Disturbance Limits), MM-4.4-6 (Invasive Species Prevention), and MM-4.4-7 (Landscaping Plan) would reduce impacts to mountain lion to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources. With implementation of MM-4.4-13 (Homeowners' Association Covenants, Conditions, and Restrictions), impacts to mountain lions from human influence would be reduced to less than significant.

Regarding specific impacts to deer, coyotes, bobcats, and mountain lions, in accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the CEQA Guidelines, the Draft

EIR analysis of the Project's potential adverse effects on wildlife species is focused on species identified as a candidate, sensitive, or special status species. Deer, coyote, and bobcat species are not considered candidate, sensitive, or special status species. As such, the Project would not result in significant impacts to these species. However, mitigation measures applicable to the California Mountain lion, particularly those related to habitat preservation, would also benefit deer, coyote and bobcat species. For example, the On-Site Conservation Area required per MM-4.4-1 would provide suitable live-in, breeding, foraging, cover, and dispersal habitat for a variety of wildlife species. The On-Site Conservation Area would also protect in perpetuity a valuable (and presently unprotected) connection between large tracts of adjacent conserved natural open space associated with the City of Santa Clarita's Woodlands Park and Rivendale Park and Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west wildlife movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and the San Gabriel Mountains to the west; this would preserve and avoid substantial loss of connectivity within the SEA. In addition, MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants on which wildlife species forage.

Regarding potential impacts to migratory patterns, Section 4.4, Biological Resources, of the Draft EIR includes an analysis of the Project's potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors (see page 4.4-56 of the Draft EIR). As discussed therein, dedication of the Project's On-Site Conservation Area (per MM-4.4-1, as managed in perpetuity through a conservation easement) would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space, therefore preserving and avoiding further encroachment on movement opportunities between regional conserved habitat blocks. As such, with implementation of MM-4.4-1, impacts to the wildlife movement due to habitat fragmentation would be reduced to less than significant.

024-8 Potential impacts to public services in accordance with the County's Environmental Checklist Form and Appendix G of the State CEQA Guidelines are discussed in Section 4.15, Public Services, of the Draft EIR (see impact analysis beginning on page 4.15-29 of the Draft EIR). As discussed therein, public service impacts related to fire protection, sheriff protection, schools, parks, libraries, and public trails (i.e. "other public facilities") were determined to be less than significant with mitigation incorporated.

Regarding public transit, as stated on page 4.17-2 in Section 4.17, Transportation, of the Draft EIR, there are four local and four express Santa Clarita Transit bus routes in the Project site vicinity. The Project would not preclude the installation of a bus stop on The Old Road that could potentially also serve the commenter's adjacent property's employees.

024-9 Regarding evacuation of senior populations, please refer to Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living or convalescent facilities which would necessarily require care facilities and support staff.

As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page on page 4.20-62 in Section 4.20, Wildfire of the Draft EIR, the Project's HOA would provide information to occupants regarding notifying the County Office of

Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents. MM-4.20-1 has further been revised to require that the HOA's fire safety committee include the property manager from the senior housing, and to require that the Fire Safety Coordinator/committee shall be responsible for creating a senior housing carpool program. The carpool program would ensure that all seniors who are not able to safely evacuate on their own are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.

024-10 As stated on page 4.1-35 of Section 4.1, Aesthetics, of the Draft EIR, the senior housing building would not exceed the height limitations of the applicable C-3-DP zone. As discussed on pages 4.1-31 and 4.1-32 of the Draft EIR, the senior housing building would be screened by proposed landscaping or otherwise obstructed from view by topography and/or other proposed development, and the building would be predominantly light sand in color, with earthy brown and/or jewel-toned embellishments incorporated into the trims, eaves, corbels, and doors. As further detailed in Section 4.1, Aesthetics, of the Draft EIR, the senior housing building would incorporate design elements from both the Wrightian and Irving Gill architectural styles and would be scaled and finished to blend into the surrounding residential community. These architectural styles, together with a coordinated color palate, would help achieve a cohesiveness of design across the developed, northern portion of the Project site, which would contribute to the visual quality of the Project site as viewed from public vantage points. The commenter notes that the purchase of his firm's adjacent building was because of its "fantastic view." CEQA does not protect private views. The Project's impact on public views are analyzed on pages 4.1-29 through_4.1-34 of the Draft EIR.

Regarding evacuation of senior populations, please refer to the response provided above for Comment 024-9.

024-11 As discussed on page 4.20-45 in Section 4.20, Wildfire, of the Draft EIR, the Project's internal circulation consists of a loop roadway system that connects both the primary and secondary access points along The Old Road, which satisfies secondary access requirements detailed in Los Angeles County Code of Ordinances Title 21, Chapter 21.24, Design Standards, Part 1, Access. The Project also includes a 28-foot-wide private access road along the northern and western perimeter for emergency vehicle access.

A detailed response related to evacuation is provided in Topical Response-1. As discussed therein, the County would coordinate a centralized emergency operation in the event of an emergency/disaster. To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. Specifically, MM-4.20-1 requires provision of biannual emails and mailers with reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires; establishment of a community website dedicated to wildfire awareness and prevention and evacuation; provision of community workshops

and webinars; provision of "new resident" packets that include information about how to build a "go-bag," tools to prepare a household evacuation plan, and a list of agencies and resources for receiving trusted information; provision of emergency alert information; maintenance of trail signage for fire-safe hiking activities; and establishment of a fire safety oversight committee.

A Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR) was prepared to evaluate the Project's consistency with relevant emergency evacuation plans and emergency response plans, disclose the prevention and minimization regulations and measures applicable to the Project, and determine evacuation times for the existing and post-Project conditions, as well as provide emergency preparedness information and resources to increase occupant preparedness and facilitate efficient evacuation in the event of an emergency.

Importantly, emergency personnel who issue evacuation orders can consider the additional time needed to implement an evacuation when determining when and where to issue evacuation orders. Risk to nearby development, including the Project or existing communities, is assessed on a regular basis in a wildfire event. Hours or days of lead time may be available to assess risk and make evacuation determinations. Moreover, drifting smoke, awareness of the risk, road closures, or other factors result in people avoiding the area in a fire event.

In short, a variety of factors may make a longer evacuation perfectly safe. That is why a multifaceted approach to fire-resilient development is required and is incorporated into the Project. The Project's fire-resistant design features include ignition resistant construction methods, hardened structures and corridors, including a perimeter fire access lane, fuel modification zones, roadside fuel modification, and sufficient fire flow for firefighting efforts. Additionally, the Project is designed to allow people to shelter-in-place or take temporary refuge within the Project site (which could reduce evacuating traffic from the Project site).

024-12 Under Section 15125 of the State CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of a project to provide the "baseline condition" against which project-related impacts are compared. Generally, the baseline condition is the physical condition that exists when the NOP was published, which was June 16, 2022, for this Project. Field measurements for noise used in the Draft EIR analysis (included in Appendix H of the Draft EIR) were taken on June 13, 2022, and June 14, 2022, which coincides with publication of the NOP. As such, the noise measurements reflect the appropriate baseline conditions for the Project. It is assumed that the comment refers to the addition of one High Occupancy Vehicle (HOV) lane in each direction to Interstate (I)-5 due to LA Metro's I-5 North County Enhancements Project. The addition of HOV travel lanes to I-5 would not affect the existing distance between the freeway's vehicular noise sources and the nearby receptors, as the lanes would be added in the central portion of the freeway (i.e. the former median of I-5) and not adjacent to The Old Road. As detailed in Table A-1, Existing and Predicted Future Noise Levels, of Appendix A of the *Draft Supplemental Environmental Impact Report/Environmental Reevaluation prepared for the I-5 North County Enhancements Project*, the HOV lanes would result in a 0 to 1 decibel (dB) increase in noise levels at all receptors located on The Old Road during future conditions (Caltrans 2013). An increase in 0 to 1 dB is not perceptible to the human ear—a 3 dBA increase is "barely perceptible" for most people (Draft EIR, 4.13-4). Consequently, the additional HOV lane would result in a negligible change to the noise environment.

Additionally, operational noise impacts from the Project, including from the proposed new residences and recreational amenity uses were analyzed in the Draft EIR, starting on page 4.13-25 of the Draft EIR. As stated on page 4.13-26, the on-site recreation center and associated parking is located internal to the site, with multiple rows of structures between this location and any of the exterior Project site boundaries. Consequently, noise associated with residents enjoying the recreation center would be effectively blocked from propagation off-site by the surrounding on-site structures. Additionally, Table 4.13-16, Stationary Noise Source Levels Compared to Noise Ordinance, on page 4.13-27 of the Draft EIR, and Table 4.13-17, Stationary Noise Source Modeling Results Compared to Ambient Noise Levels, on page 4.13-28 of the Draft EIR, detail the noise levels to sensitive receptors (i.e. residences nearest the Project site in Sunset Pointe) and determined that modeled noise levels were below the daytime and nighttime threshold limits.

O24-13 Specific comments related to fire safety/evacuation, tree removals, wildlife, public transit, and noise are addressed above in Response to Comments O24-2 to O24-12 in further detail.

INTENTIONALLY LEFT BLANK

Comment Letter 025

Shannon Mast
26050 Salinger Lane
Stevenson Ranch, CA 91381
shannlyn@gmail.com
661-644-5018

3-6-25

Erica Aguirre, Senior Planner
Los Angeles County Dept. of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Sent via email to: EAguirre@planning.lacounty.gov

Re: Public Comment on Draft Environmental Impact Report
Lyons Canyon Project, Project No. 2021-001195-(5)

Dear Ms. Aguirre,

I am writing to ask that you do **NOT grant approval** to the proposed Lyons Canyon project. It is a **wildly inappropriate time to approve a project of this nature**. During the comment period for this project two communities in LA County were severely affected by urban wildfires (Altadena and the Pacific Palisades). The loss of life and property was horrifying. It is important that the government and developers take time to learn from the Eaton and Palisades fires BEFORE moving forward with development in the area of the proposed Lyons Canyon project. LA County must be given time to complete its investigations of the Eaton and Palisade fires! In addition, aside from these recent fires, there are a host of other reasons not to grant approval to the Lyons Canyon project. 025-1

A. Fire Hazard
This project is located entirely in a Very High Fire Hazard Severity Zone. While this is already a very, very serious safety concern, it will inevitably worsen as the effects of Climate Change continue to intensify. The current building codes do not yet reflect implications from the Eaton and Palisades fires, the evacuation routes are insufficient and our evacuation warning systems are deeply flawed (as evidenced by the death toll in Altadena and the messages sent to SCV residents in error during the recent Hurst fire). In addition, the documents indicate Lyons Canyon would be serviced by the existing Stevenson Ranch Fire Station. If approved, a project of this nature should have its own fire station, built at the developers expense. Additionally, this project has the potential to facilitate fire spread to nearby communities. Furthermore, Lyons Canyon would put senior housing in a VHFHSZ, including seniors in units that would be serviced by elevators which may not work in a fire or in a power outage…that is clearly not safe. 025-2 025-3 025-4 025-5

B. The Lyons Canyon Project conflicts with the Santa Clarita Valley Area Plan.
The SCV Area Plan located section titled "Climate Change…" calls for "limiting urban sprawl into outlying hillside areas" and a "continuation of the City's open space acquisition policies to 025-6

create a continuous greenbelt along the city."[1] This project conflicts with these goals. Since the time the SCV Area Plan was updated in 2012 Climate Change had become a much bigger issue, making the plan to address Climate Change in SCV even more important than at the time the plan was updated.

C. Significant Ecological Area

The proposed development is in a Significant Ecological Area. Development in SEA should be done with extra caution. The developers assertions that the impacts to the SEA are insignificant are flawed. They have not satisfied their burden of proof. For example, the California Department of Fish and Wildlife Notice of Preparation Comment letter outlines many recommended steps that were not taken, including a wildlife camera study. Further studies are needed before it can reasonably be concluded that the impact to the SEA are "insignificant".

D. Biological Resources[2]

1. Mountain Lion
   It is well known that the Southern California Mountain Lion inhibits this area. The Southern California Mountain Lion is currently being considered for CA Endangered Species Status. Consequently, LA County should require the developer to follow the CDFW's recommendations in their Notice of Preparation Comment letter before any decisions regarding Lyons Canyon are made.
2. Listed Flora and Fauna
   The previous project EIR listed many endangered and threatened plants, reptiles and bird species that inhabit this site. New surveys for these species must be conducted.
3. Oak and SEA Tree Resource
   SEA Trees and especially oaks, are a keystone species for the California chaparral ecosystem. Many animals depend on them. How will such a substantial removal affect this wildlife corridor habitat? What actions are being taken to save as many Heritage Oaks as possible? Details of the plan for each individual Heritage Oak should be provided. Trees help reduce the effects of climate change. Climate Change is a very serious issue that LA County should do all it can to combat.
4. Wildlife Corridor Area
   This area is part of the wildlife corridor between the Santa Susanna and the San Gabriel Mountains. Surveys of the corridor use must be provided. Please describe how the loss of this habitat will affect the wildlife corridor and the animals that use it.

F. Water Supply

The Water Availability Form Section 1 Part B indicates "Facilities to serve the project are NOT reasonably expected to be available within the next 5 years based on the capital facility plans of the agency."

G. Transportation

The Transportation Impact Analysis indicates "the project's transportation impact is considered significant and unavoidable as no combination of feasible mitigation measures reduces the impact below the County's threshold of significance." Traffic, air quality and Climate Change accelerating Greenhouse gas emissions are serious issues. All of these things will be

O25-6 Cont.
O25-7
O25-8
O25-9
O25-10
O25-11
O25-12
O25-13
O25-14
O25-15
O25-16

[1] https://planning.lacounty.gov/long-range-planning/santa-clarita-valley-area-plan/, PDF pg. 171, doc. pg. 163, Items 1 and 10

[2] This section of my comment is a restatement of the Biological Resources section of SCOPE's comment on the Notice of Preparation of a DEIR, with a few changes/additions. SCOPE's comment was dated 7-15-22 and emailed to egutierrez@planning.lacounty.gov.

exasperated by the lack of space in nearby schools forcing families to travel over the 1-5 to access public schools. Additionally, why is senior housing being considered in an area that lacks public transit and has no services for seniors? 025-16 Cont. 025-17

H. Schools

As indicated by the William S. Hart UHSD Request for Information Letter Rancho Pico Junior High has "no room for expansion" and West Ranch High School has "limited room for Expansion. Adding portables would remove court space." There are no other Junior High or High Schools in the area. The Newhall School District Request for Information Letter indicate similar issues at the elementary school level. Additional information should be requested from the Newhall School District to clarify, how far would students need to travel to access their public education? Travelling long distances to school creates hardship for families and increases transportation impacts. 025-18 025-19

I. Hospitals

As Nextdoor and SCV Mom Connection posts clearly indicate, the public is already concerned about Santa Clarita only having one hospital and not having a pediatric trauma center. This development would further strain our inadequate hospital access. 025-20

J. Sheriffs

As indicated by the LA County Sheriff's Notice of Preparation Comment Letter, the Sheriffs at the Santa Clarita Station are already "understaffed". Adding another development, especially far from their station, would further compound this issue. 025-21

K. Oil Wells

There is a mapped capped oil well in the project area. Are there others unmapped? How will associated health and safety concerns be addressed. 025-22

For the reasons listed above I strongly urge you to NOT approve the Lyons Canyon Project. If you do opt to approve it, please require the following: 025-23

A. A new fire station, built at the developer's expense.
B. Construction to be done using the most advanced "home hardening" techniques, and that construction utilizes concrete, steel or fiber cement NOT traditional combustible materials like wood. 025-24
C. No senior housing above the ground level 025-25
D. A wildlife baseline study with cameras 025-26
E. New surveys for the Flora and Fauna (in addition to the wildlife baseline study with cameras) 025-27
F. Preserving and enhancing (with fauna) the underpass at Calgrove that is used by wildlife.
G. Details for the plan for each individual Heritage Oak. Efforts to build around them should be taken. Efforts to relocate them should be taken as a last resort. 025-28
H. A formal statement from SCV Water indicating they will have water to service Lyons Canyon. The included statement from SCV Water indicates otherwise. 025-29
I. A formal statement from the City of Santa Clarita indicating they will update bus routes to service the project. 025-30
J. A formal statement from the W.S. Hart District and the Newhall School district indicating where Lyons Canyons residents will attend public schools. 025-31
K. A plan to address items I, J and K listed above. 025-32

Thank you in advance for your careful consideration of my comments. O25-33

Sincerely,
Shannon Mast
Santa Clarita resident
SCOPE member
shannlyn@gmail.com

Response to Comment Letter O25

Santa Clarita Organization for Planning and the Environment (SCOPE)
Shannon Mast, SCOPE Member
March 6, 2025

O25-1 A detailed response related to fire protection and safety is provided in Topical Response-1, which addresses issues related compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. Recent fires in the region do not necessitate additional or revised Draft EIR analysis. Nonetheless, due to recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025, and as such, the Final EIR has allowed additional time to further consider the Project. Additional comments received during this extension period have been received and responded to accordingly.

The Draft EIR adequately analyzes impacts related to wildfire within Section 4.20, Wildfire, and incorporates mitigation measures to reduce significant impacts. See Section 4.20.7 for more details on MM-4.20-1 through MM-4.20-5. At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity (Draft EIR, page 4.20-4). Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. Therefore, the recent fire activity does not change the conclusions detailed in Section 4.20, Wildfire. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires of Topical Response-1.

Specific comments are addressed below in further detail. The commenter's general opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

O25-2 Please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. As discussed therein, the County would coordinate a centralized emergency operation in the event of an emergency/disaster. To support successful evacuation from the Project site, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents. MM-4.20-1 has further been revised to require that the HOA's fire safety committee include the property manager from the senior housing, and to require that the Fire Safety Coordinator/committee shall be responsible for creating a senior housing carpool program. The carpool program would ensure that all seniors who are not able to safely evacuate on their own are accounted for and transported during an emergency evacuation. Specifically, MM-4.20-1 requires provision of biannual emails and mailers with reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires; establishment of a community website dedicated to wildfire awareness and prevention and evacuation; provision of community workshops and webinars; provision of "new resident" packets that include information about how to build a "go-bag," tools to prepare a

household evacuation plan, and a list of agencies and resources for receiving trusted information; provision of emergency alert information; maintenance of trail signage for fire-safe hiking activities; and establishment of a fire safety oversight committee.

A Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR) was prepared to evaluate the Project's consistency with relevant emergency evacuation plans and emergency response plans, disclose the prevention and minimization regulations and measures applicable to the Project, and determine evacuation times for the existing and post-Project conditions, as well as provide emergency preparedness information and resources to increase occupant preparedness and facilitate efficient evacuation in the event of an emergency.

Importantly, emergency personnel who issue evacuation orders can consider the additional time needed to implement an evacuation when determining when and where to issue evacuation orders. Risk to nearby development, including the Project or existing communities, is assessed on a regular basis in a wildfire event. Hours or days of lead time may be available to assess risk and make evacuation determinations. Moreover, drifting smoke, awareness of the risk, road closures, or other factors result in people avoiding the area in a fire event.

In short, a variety of factors may make a longer evacuation safe. That is why a multifaceted approach to fire-resilient development is required and is incorporated into the Project. The Project's fire-resistant design features include ignition resistant construction methods, hardened structures and corridors, including a perimeter fire access lane, fuel modification zones, roadside fuel modification, and sufficient fire flow for firefighting efforts. Additionally, the Project is designed to allow people to shelter-in-place or take temporary refuge within the Project site (which could reduce evacuating traffic from the Project site).

Regarding development standards, the Project satisfies the requirements of California Code of Regulations Title 24, including Parts 2 and 9, the County Code Title 20 (Division 1) and 26 (including Chapter 7A), and the County Fire Code including Title 32, Section 4908. The Project's infrastructure components, including water supply, fire hydrants, automatic sprinkler systems, and residential hazard detectors (e.g., carbon monoxide or smoke) would all be code compliant. The final number and location of the fire hydrants will be determined by the Los Angeles County Fire Department in compliance with County Code, Title 32, Fire Code, Appendix C, Fire Hydrant Locations and Distribution requirements. Additionally, the Project structures would be built utilizing the most current ignition resistant and fire protective construction methods, including but not limited to: Class A fire-rated roofing, ember resistant venting, multi-pane glazing with a minimum of one tempered pane windows meeting the requirements of State Fire Marshall 12-7A-2. All residential structures would include code compliant automatic, interior fire sprinkler systems. As detailed in Table 2-3, Code Exceeding Measures, of Topical Response-1, the Project also includes additional ignition-resistant construction requirements, beyond existing code requirements.

025-3 As discussed on page 4.15-29 in Section 4.15, Public Services, of the Draft EIR, the Project site is primarily served by Los Angeles County Fire Department (LACoFD) Fire Station 124, located at 25870 Hemingway Avenue in Stevenson Ranch. Additionally, Fire Station 73, located at 24875 Railroad Avenue, would provide back-up services. Given this, the comment accurately notes the Draft EIR's discussion of fire stations serving the Project site.

As discussed on page 4.15-33 in Section 4.15, of the Draft EIR, the LACoFD determined that a new on-site fire station is not required for the Project. However, as the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. In addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area.

025-4 As discussed in Section 4.20, Wildfire, of the Draft EIR, and in Topical Response-1, to analyze the Project site's fire behavior pre- and post-development, the BehavePlus fire modeling system was used to model on-site fire behavior (Appendix M-1 of the Draft EIR). The program simulates rate of fire spread, spotting distance, scorch height, tree mortality, fuel moisture, wind adjustment factor, and other variables. As stated on page 4.20-35 of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones on and off site and would not exacerbate the fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 and required through MM-4.20-2, Alternative Materials and Methods and MM-4.20-3, Annual Fuel Modification Zone Inspection as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, Wildfire Education Program, would reduce potential impacts related to wildfire spread.

025-5 Regarding evacuation of senior populations during an emergency event, please refer to Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living or convalescent facilities, which would necessarily require care facilities and support staff.

As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page on page 4.20-62 in Section 4.20, Wildfire, of the Draft EIR, the Project's HOA would provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents. MM-4.20-1 has further been revised to require that the HOA's fire safety committee include the property manager from the senior housing, and to require that the Fire Safety Coordinator/committee shall be responsible for creating a senior housing carpool program. The carpool program would ensure that all seniors who are not able to safely evacuate on their own are accounted

for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.[31]

025-6 The Project site is adjacent to existing developed uses to the north and the east. As stated on page 2-4 of Chapter 2, Environmental Setting of the Draft EIR, the General Plan land use designation of H2-Residential 2 encompasses the entire Project site and is included in the Santa Clarita Valley Area Plan, also known as "One Valley One Vision" (OVOV). Item 1 from Chapter 4 of the OVOV states: "Delineation of areas designated for urban use and non-urban (rural) use in order to limit urban sprawl into outlying hillside areas and to encourage urban infill development" (County of Los Angeles 2012, page 163). The OVOV specifically designates the Project site for urban use. The land use designations of OVOV define the H2-Residential 2 land use category as "urban residential," allowing a permitted residential density of up to two dwelling units per acre. According to the OVOV plan, the H2-Residential 2 designation provides for residential neighborhoods at densities that require urban services, providing a transition between higher density, urban development and rural communities throughout the planning area. As such, the Project would not be considered urban sprawl and would not conflict with Item 1 of the OVOV.

Item 10 of Chapter 4 of the OVOV states: "Continuation of the City's open space acquisition policies to create a continuous greenbelt around the Valley and along the Santa Clara River, supported by a City voter-approved ballot measure to provide funding for land purchases" (County of Los Angeles 2012, page 163). The Project site is located within the unincorporated County and not in the City of Santa Clarita. The City of Santa Clarita boundary is located east of the Project site, across I-5. However, the Project would provide approximately 150 acres of on-site natural open space within the unincorporated County. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR) to allow wildlife connectivity. Additional open space would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement, which would not eliminate a continuous greenbelt around the valley. As such, the Project would not conflict with Item 10 of the OVOV.

In addition, please note that an analysis of the Project's potential to result in a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 4.11, Land Use and Planning, of the Draft EIR (beginning on page 4.11-14). This includes an analysis of applicable objectives and policies from the "Goals, Objectives, and Policies" sections of the OVOV. As demonstrated within Table 4.11-2 of the Draft EIR, the Project would not conflict with applicable OVOV policies and objectives.

025-7 Potential impacts to Significant Ecological Area (SEA) resources are analyzed in Section 4.4., Biological Resources, of the Draft EIR. Regarding California Department of Fish and Wildlife (CDFW) recommendations, the CDFW NOP comment letter was a preliminary letter submitted prior to their review of the Draft EIR and applicable technical reports. On March 10, 2025, CDFW provided an

[31] These revisions do not change the impact analysis or conclusions in the Draft EIR. Rather, this information merely clarifies information and conclusions that were already presented in the Draft EIR. As such, these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, do not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

updated comment letter specifically on the Draft EIR analysis, including suggested revisions to mitigation measures required to reduce potential impacts to biological resources. This letter is included as Comment Letter A8 in this Final EIR. As discussed in further detail above in Response to Comment Letter A8, Chapter 3, Revisions of Draft EIR, of the Final EIR incorporates the applicable revisions suggested by CDFW. With implementation of required mitigations measures (incorporating suggested revisions by CDFW), impacts to SEA resources, including mountain lion, would be less than significant.

Regarding a wildlife camera study, CDFW's NOP comment letter suggests that the purpose of the wildlife camera study was to aid in identification of areas that may be important to wildlife movement between the Project site and adjacent habitat and to capture any mountain lion potentially moving through the Project site. As detailed in the analysis provided in pages 4.4-47 through 4.4-49 of Section 4.4, Biological Resources, of the Draft EIR, mountain lions are assumed to be present on-site. As such, the Draft EIR includes mitigation to address potentially significant impacts to mountain lions, including required preservation of suitable habitat. Implementation of required mitigation measures would reduce impacts to mountain lions to less than significant.

Regarding wildlife movement, Threshold 4.4d in Section 4.4, Biological Resources, of the Draft EIR includes an analysis of the Project's potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors (see page 4.4-56 of the Draft EIR). As discussed therein, dedication of the Project's On-Site Conservation Area (per MM-4.4-1, On-Site Habitat Preservation, as managed in perpetuity through a conservation easement) would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space, therefore preserving and avoiding further encroachment on movement opportunities between regional conserved habitat blocks. As such, with implementation of MM-4.4-1, impacts to the wildlife movement due to habitat fragmentation would be reduced to less than significant.

025-8 Regarding CDFW recommendations and potential impacts to mountain lion, please refer to the response provided above for Comment 025-7.

025-9 The Draft EIR analyzes the impacts to biological resources, including flora and fauna in the Project site's local vicinity, within Section 4.4, Biological Resources. As detailed on page 23 in Appendix C, Biota Report, of the Draft EIR, field surveys were conducted on the Project site from May 2020 through April 2022, consisting of 55 survey days. In addition, Dudek conducted one survey in January 2023 and another in February 2023 to determine if there had been any changes to on-site biological resources as previously documented. See Table 2, Summary of Biological Surveys for the Project, of Appendix C to the Draft EIR for more information.

025-10 Section 4.4, Biological Resources, of the Draft EIR analyzes the potential impacts to biological resources, including impacts to oak trees, SEA Protected Trees, and wildlife corridor impacts. Thresholds 4.4e and 4.4f detail the Project's potential to convert oak woodlands and potential to conflict with local policies and ordinances associated with the Significant Ecological Area. Please refer to the response provided above for Comment 025-7 regarding impacts to a wildlife corridor. As stated on page 4.4-48 in Section 4.4, Biological Resources, of the Draft EIR, only one indicator species (greater roadrunner) is expected to have a high usage of the Project site during regional movement. Even with removal of SEA protected Trees, wildlife movement from northwest and west to the south is expected to remain functional despite

some constriction along its northern edge by the Project since there are geographic features (ridges and canyons), with hiking trails, within the Project's On-Site Conservation Area that have connectivity to Rivendale Open Space, which is adjacent to the open space in Towsley Canyon. These two open space areas are the closest to the Calgrove Boulevard underpass, which could facilitate movement beneath I-5 and into Wildwood Canyon Open Space and Gates King Open Space. In summary, impacts to biological resources as a result of the Project were determined to be less than significant with mitigation incorporated.

025-11 The Significant Ecological Area (SEA) Protected Tree Report (included in Appendix C, Biota Report, of the Draft EIR), includes a comprehensive tree inventory, where International Society of Arboriculture certified arborists mapped and evaluated all trees that met the minimum requirements for protection under the County's SEA Ordinance, including all Heritage Trees. In total, 51 Heritage Trees are located on the Project site, and of those, 22 Heritage Trees would be directly impacted by the Project. The 22 Heritage Tree impacts comprise 14 removals, 5 encroachments, and 3 trees that are located within debris basins. It should be noted that the 3 trees located within debris basins would not be removed but are considered impacted due to the potential of future damage as a result of the creation of the debris basins and any associated flooding. The remaining 29 Heritage Trees would not be directly impacted by the Project.

In addition to a tree inventory, the certified arborists performed a Heritage Tree relocation-potential evaluation of 26 trees that were identified as removal or encroachment trees. As discussed on page 11 of the Protected Tree Report (Appendix C to the Draft EIR), the relocation potential evaluations consisted of external observations of the general health and structure of the tree, overall tree size, location, absence or presence of trunk wounds or decay, potential for root rot, and potential for the absence or presence of pests/diseases or other species-specific pathogens. Furthermore, trees considered as relocation candidates must meet at least minimal requirements (e.g., suitable size) that will increase their survival following the boxing, storage, and replanting process. An additional important consideration for relocation candidate trees is their health and structural condition. The site must be in an accessible location and have no observable soil impediments (rockbound roots, utilities), and the tree must have no observable chronic pest infestations or disease infections. As stated on page 21 of the SEA Protected Tree Report (Appendix C to the Draft EIR), none of the Heritage Trees on site are considered viable candidates for relocation. Individual photographs of the 14 impacted removal Heritage Trees evaluated for their relocation potential can be found in Appendix D of the SEA Protect Tree Report (Appendix C of the Draft EIR).

025-12 The Project would plant more trees (1,628 trees) than it would remove (443 trees) as a result of required replacement trees for SEA Protected Tree removals and other proposed landscaping trees. As discussed on pages 4.8-27 and 4.8-29 in Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, the Draft EIR used the i-Tree planting calculator, as recommended by CalEEMod, to determine the changes in greenhouse gas emissions, criteria pollutants, and energy from tree planting and/or removal. The analysis provided in the Draft EIR determined that Project impacts related to air quality and GHG emissions would be less than significant with mitigation incorporated for and Project impacts related to energy would be less than significant (refer to Draft EIR Sections 4.3, Air Quality, 4.6, Energy, and 4.8, Greenhouse Gas Emissions for further discussion).

025-13 Section 4.4, Biological Resources, of the Draft EIR analyzes the potential impacts to biological resources, including potential impacts to wildlife corridors. The Draft EIR accurately describes the existing conditions,

noting the Project site's location within the vicinity of designated wildlife corridors (Draft EIR, page 4.4-1). As part of the Project, a Conservation Area is proposed, which would preserve 144.43 acres of native arid scrub, chaparral, oak woodland, herbaceous, and grassland communities on site. The Conservation Area would be contiguous with large tracts of conserved open natural space that provide habitat suitability. Additionally, the Conservation Area represents a significant topographical component of a viable wildlife corridor that can benefit long-term movement between the Santa Susana Mountains/Simi Hills and the San Gabriel Mountains. Please also refer to the responses provided above for Comments O25-7 and O25-10 regarding potential impacts to a wildlife corridor.

O25-14 Regarding water supply and the Water Availability Form (provided as Appendix L-7 of the Draft EIR), the notation on the form regarding availability of facilities to serve the Project is referring to off-site water conveyance improvements required to serve the Project. As discussed on page 3-18 of Chapter 3, Project Description, of the Draft EIR, in coordination with the Santa Clarita Valley Water Agency, the Project would require various off-site water infrastructure improvements to service the Project site. The required improvements are listed therein. Under the form's attached "Santa Clarita Valley Water Agency Conditions for Water Availability," item No. 7 confirms that the Santa Clarita Valley Water Agency can provide safe and reliable water service to Project site and fully expects to be able to continue providing safe and reliable water service into the future. Furthermore, as stated on page 4.19-28 of Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's Water Supply Assessment (included as Appendix L-2 and Appendix L-3) confirms that the total projected water supplies available to the Santa Clarita Valley Water Agency service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

O25-15 The Project would have a significant and unavoidable transportation impact related to vehicle miles traveled (VMT). The Project was forecast to generate 20.5 VMT per capita (see Draft EIR page 4.17-22). The Project was thus determined to exceed the County's threshold of 10.6 residential VMT per capita by 9.9 VMT per capita. With implementation of MM-4.17-2 (Transportation Demand Management [TDM] Program), VMT impacts would be reduced to the point that the Project would generate 19 VMT per capita, which would still exceed the County's threshold of 10.6 VMT per capita. Thus, despite implementation of all feasible mitigation, the Project would have a significant and unavoidable impact on VMT. Automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of the transportation analysis (California Public Resources Code Section 21099[b][2]). However, the Draft EIR analyses of potential air quality and GHG emission impacts (which use the California Emission Estimator Model [CalEEMod] to estimate emissions from the Project) include consideration of Project-generated mobile source emissions (i.e., vehicle trips from residents, students, employees, delivery trips, etc.). As stated on page 4.3-27 in Section 4.3, Air Quality, of the Draft EIR, the unmitigated trip length (20.5 VMT per capita) from the transportation impact analysis was assumed for the residential land uses based on the VMT analysis. Annual VMT and trips were estimated and input into CalEEMod which can convert annual data into trips and VMT per day. Furthermore, the Draft EIR considers air quality impacts associated with traffic-congested roadways and intersections, taking into consideration the existing regional environmental setting. For example, as discussed beginning on page 4.3-48 of the Draft EIR, the air quality analysis considered traffic-congested roadways and intersections, which have the potential to generate localized high levels of carbon monoxide (CO). As determined by the analyses set forth in Draft EIR Sections 4.3, Air Quality,

and 4.8, Greenhouse Gas Emissions, the Project's air quality and GHG emission impacts would be less than significant with mitigation incorporated.

025-16 The VMT per capita provided in the analysis accounts for all daily vehicle trips and VMT from a resident, which includes trips and VMT to and from local public schools. The Project would implement MM-4.17-2, Transportation Demand Management (TDM) Program, which requires implementing actions to reduce the Project's VMT per capita, including creating a ridesharing program for school children. Additionally, the VMT generated by trips made to schools is not considered regionally significant, since it is usually within a 3-to-5-mile radius of residential developments. As stated on page 4.13-36 of Chapter 4.15, Public Services, of the Draft EIR, middle and high school age students on the Project site would attend Rancho Pico Junior High School and the West Rancho High School within the William S. Hart Union High School District. As stated on page 4.13-38 of the Draft EIR, Rancho Pico Junior High School and West Rancho High School have capacity to serve students from the Project site. Both of these schools are within a 3-to-5-mile radius of the Project. Although originally within the assigned boundary to attend Pico Canyon Elementary School within the Newhall School District, the Newhall School District may consider boundary changes, which would change the elementary school that would service the Project site (see page 4.15-37 of the Draft EIR). However, ultimately, students from the Project site would attend an elementary school in the Newhall School District, and all elementary schools in the Newhall School District are within a 3-to-5-mile radius of the Project site. As such, the transportation analysis appropriately captures vehicle trips to local public schools and provides mitigation to reduce VMT to the extent feasible. The Project would be required to pay fees to affected school districts. These fees are imposed to finance construction or reconstruction of school facilities needed to accommodate students coming from new developments. Payment of Senate Bill 50 fees by the Project Applicant is considered by the State to represent full mitigation to all potential impacts to school services and facilities. Additionally, please refer to Response to Comment 025-18 below.

025-17 The affordable senior apartment units provided on-site are not proposed to be assisted living or convalescent facilities, which would necessarily require care facilities and support staff. However, as stated on page 4.17-2 in Section 4.17, Transportation, of the Draft EIR, there are four local and four express Santa Clarita Transit bus routes in the Project site vicinity with the closest bus stop located at the intersection of The Old Road and Chiquella Lane, approximately 0.6-mile walking distance to the north of the Project site, which is served by Santa Clarita Transit Route 5 and 6 (Santa Clarita Transit 2025). Additionally, the Project would develop on-site infrastructure to support residential uses, including a 1.13-acre recreation center. The Project site is also within an approximately 1-to-2-mile radius of existing commercial and retail services, including Vons, Walmart, and Valencia Plaza.

025-18 The letter from William S. Hart Union High School District (provided as Appendix I-3 of the Draft EIR) indicated that there is existing design capacity at Rancho Pico Junior High and West Ranch High School to accept students from the Project site without the need for new or expanded facilities (see page 4.13-38 of the Draft EIR). However, although originally within the assigned boundary to attend Pico Canyon Elementary School, based on new construction and the potential for future student generation on the west side of I-5 (where the Project site is located), the Newhall School District may consider boundary changes, which would change the elementary school that would service the Project site (see page 4.15-37 of the Draft EIR). However, ultimately, elementary school age children on the Project site would attend an elementary school within the Newhall School District.

As discussed on page 4.15-38 of the Draft EIR, school districts impose fees on new residential and commercial development to compensate for the impact that a project would have on existing school facilities or services, as set forth in Senate Bill (SB) 50 and Section 65996 of the California Government Code. The Project would be required to pay fees to both affected school districts, as set forth in the development fee program outlined in the Newhall School District and the William S. Hart Union High School District School Facilities Need Analyses. These fees are imposed to finance construction or reconstruction of school facilities needed to accommodate students coming from new developments. Alternatively, developers have the option to (1) enter into mitigation agreements with a district to provide funding to Newhall School District and the William S. Hart Union High School District to offset the costs to provide capacity for the new students from the project; or (2) request the formation of a community facilities district. Payment of SB 50 fees by the Project Applicant is considered by the State to represent full mitigation to all potential impacts to school services and facilities.

025-19 As stated above in response to 025-16, all elementary schools in the Newhall School District are within a 3-to-5-mile radius of the Project site. As such, the transportation analysis appropriately captures vehicle trips to local public schools.

025-20 Impacts to hospitals are not an identified environmental resource topic with the State or local CEQA guidelines. Moreover, the local hospital in the vicinity (i.e., Henry Mayo Newhall Hospital) is not publicly owned and therefore, is not considered a public service. Nevertheless, this comment will be provided to the decision makers for their review and consideration as part of this Final EIR.

025-21 An analysis of potential impacts to the Los Angeles Sheriff's Department (LASD) is provided beginning on page 4.15-34 of Section 4.15, Public Services, of the Draft EIR. As stated therein, staffing requirements change over time and LASD's staffing would need to be responsive to the demand for maintaining acceptable service ratios. Regarding funding for staffing, the Project Applicant and/or developer would be required to pay the County's law enforcement facilities mitigation fee per Section 22.266, Law Enforcement Facilities Fee, of the Zoning Code, which explicitly applies to the unincorporated urban expansion areas of Santa Clarita, Newhall, and Gorman. For Zone 1 (Santa Clarita Zone), the Law Enforcement Facilities Mitigation Fee is $467 per single family dwelling unit, and $337 per multi-family dwelling unit (Zoning Code Table 22.266.050[A] [Law Enforcement Facilities Mitigation Fee]) (see page 4.15-35 of the Draft EIR). The impact of the Project with respect to sheriff protection services would be less than significant.

025-22 As discussed on page 4.9-21 of Section 4.9, Hazards and Hazardous Materials, of the Draft EIR, and as identified by the California Department of Conservation Geologic Energy Management Division (CalGEM; see Comment A6-13 in Comment Letter A6 of this Final EIR) there is one identified plugged subsurface oil well (Ayers 1 – API 03706017), previously owned by the Sun Drilling Company, that could be a source of potential adverse effects. As discussed in Appendix F, Phase I Environmental Site Assessment to the Draft EIR, the oil well (drilled in January 1961) was an exploratory well and was never a productive, oil-producing well before it was abandoned/plugged in February/March 1961, just months after being drilled. There are no other identified wells onsite. The Project would place residential units within 300 feet of the abandoned well. As such, implementation of MM-4.9-2, Well Assessment, would be required. MM-4.9-2 requires that, prior to issuance of a grading permit, the Project Applicant shall retain a California-registered design professional, such as a licensed civil engineer and/or licensed petroleum engineer to evaluate the exact location, condition, and abandonment status of the well on the Project site pursuant to Section 110.4 of the Los Angeles County Building Code (LACBC).

MM-4.9-2 ensures that evaluation of the abandonment of the well is documented and approved by Public Works for safety, which would ensure compliance with Section 110.4 of the LACBC. Additionally, to ensure that methane gas hazards associated with the plugged well do not present a risk to future occupants, implementation of MM-4.9-3, Methane Gas Survey and Remediation, would be required. MM-4.9-3 requires that the Applicant conduct a methane gas survey for the potential of methane gas emissions on the Project site, in accordance with CalGEM and Department of Toxic Substances Control methane assessment guidelines prior to the issuance of grading permits. The methane survey would inform of the requirements for any further remediation and closure or removal of the oil well. Implementation of MM-4.9-2 and MM-4.9-3 would reduce impacts associated with the presence of the plugged oil well, including potential methane gas hazards, to a less-than-significant level.

As stated above, CalGEM has confirmed that there is one identified plugged oil well on the Project site; there are no other identified wells. It is speculative to assume there are unidentified wells on the Project site. However, in accordance with Section 22.140.400(G)(1) of the County Code, the County requires that all CalGEM requirements be fulfilled related to the plugging and abandonment of a well; removal of equipment, trash, and other waste materials; and well site and lease restoration. As such, if during Project development activities, any unknown wells are encountered, the construction contractor would be required to comply with all applicable regulations and coordinate with CalGEM accordingly.

025-23 The commenter's general opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR. Regarding a new fire station, please refer to the response provided above to Comment O25-3.

025-24 Regarding development standards for fire safety, please refer to the response provided above to Comment O25-2.

025-25 Regarding senior housing and evacuation of senior populations, please refer to the response provided above for Comment O25-5.

025-26 Regarding a wildlife camera study and surveys for flora and fauna, please refer to the responses provided above for Comments O25-7 and O25-9.

025-27 Regarding potential impacts to a wildfire corridor, please refer to the response provided above for Comments O25-7 and O25-10. No additional mitigation required.

025-28 Regarding potential impacts to Heritage Trees, please refer to the response provided above for comment O25-11.

025-29 Regarding water supply and the Water Availability Form provided by the Santa Clarita Valley Water Agency, please refer to the response provided above for Comment O25-14.

025-30 New bus routes to serve the Project are not a Project requirement. The City of Santa Clarita has provided comments on the Draft EIR (refer to Comment Letter A9 above) and has not requested any coordination regarding updated bus routes. However, as required by MM-4.17-2, Transportation Demand Management (TDM) Program, the Project would provide households with customized information, incentives, and support to encourage the use of alternative transportation in place of single-occupancy vehicles. The Project would also create a ridesharing program for school children. The Project would

also provide an on-site pedestrian and bike network, which would connect to existing transit facilities such as bus stops located along The Old Road, north of Chiquella Lane.

The provision of high-quality transit service would require regional or local agency implementation and substantial changes to current transit practices. However, the Project would not preclude or interfere with any future improvements that the County or City of Santa Clarita may implement within the public right-of-way along The Old Road to create a transportation hub or high-quality service bus stop at the Project site frontage or at the Project site.

025-31 Please refer to the discussion provided above for Comments 025-16 and 025-18 regarding public schools. The Project Applicant/Developer must pay school fees in accordance with SB 50, which is full mitigation under CEQA.

025-32 Please refer to the responses provided above for Comments 025-20, 025-21, and 025-22 regarding items I, J, and K, respectively.

025-33 Specific comments are addressed above in further detail. This conclusory statement does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter 026

Friends of the Santa Clara River
PO Box 7713 Ventura, California 93006 (805) 320-2265
www.fscr.org

3-7-25

Erica Aguirre, Senior Planner
Los Angeles County Dept. of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Via email to: EAguirre@planning.lacounty.gov

Lyons Canyon Project, Project No. 2021-001195-(5), Case No(s). Vesting Tentative Tract Map No. 83301 (RPPL 2021003061), and all accompanying permits

Dear Ms. Aguirre:

The Friends of the Santa Clara River were formed in 1993 to advocate for preservation and protection of the Santa Clara River Watershed. We commented on this project in 2008 in its previous iteration because it would affect two tributaries that feed the Santa Clara River and remove many trees, also affecting the health of the watershed. The previous project proposed the removal of 160 oaks. Now this project proposes an even greater destruction, with impacts to 312 SEA-protected trees including oak, walnut, cottonwood, willow, and elderberry trees (251 removals, 50 trees located within debris basins, and 11 encroachments) and to 22 heritage oak trees (14 removals, three trees located within debris basins, and five encroachments). The removal of 265 SEA-protected trees and impacts to 53 trees within a proposed debris basin, amounting to 318 trees. The Project would also impact several SEA resource categories including natural vegetation and grassland and increased impacts to the tributaries. This is not acceptable.

026-1
026-2
026-3

Map Act Issues

Apparently, the developer is relying on the zone change granted for the previous 2006 tract application that has since expired. We believe this project should apply for a new zone change since the old project was never built and all entitlements expired. The developer should not be able to use an expired map for this much denser and impactful project. A new zoning change approval should be required to ensure consistency[1].

026-4

[1] Title 21, Subdivisions, of the Los Angeles County Code (County Code), sets forth the general provisions and requirements for compliance with the Subdivision Map Act. As set forth in Chapter 21.38, Vesting Tentative Map of the County Code, when a subdivider files a vesting tentative map for a subdivision whose proposed development is inconsistent with the Zoning Ordinance, the County may deny or may approve it conditioned on the subdivider obtaining the necessary change in the Zoning Ordinance in order to eliminate the inconsistency.

Since the project also requires a conditional use permit due to its impacts on a Hillside Management Area and Significant Ecological Area, the County has the discretion to say no to this project. **We therefore ask the County to protect the greenbelt around the City as they promised they would do in the Climate section of the OVOV, by saying no to this project.** 026-5

While the DEIR finds that there will be no significant impacts after mitigation except in the area of transportation, we do not concur. We ask how the less dense previous project could have had so many significant impacts, but somehow this more dense, increased units and grading could have less. We include by reference the previous EIR, and all related studies to show that significant impacts to noise aesthetics, air pollution and biology exist. Greenhouse Gas generation should also be considered a significant impact. We include by reference all documents from the proceeding project as they already exist in the County files. 026-6 026-7

Watershed Issues

We object to the continued impacts on tributaries of the Santa Clara River such as that envisioned by this project without a cumulative impact analysis for the whole watershed. Piecemeal concreting and elimination of tributaries such as is occurring in the proposed before your department is reducing flow and re-charge to the Santa Clara River as well as causing water quality problems. We request that a cumulative impacts study be conducted before any further modification to Santa Clara River tributaries is permitted. 026-8

As described in the DEIR, the undeveloped Project site is traversed by blue-line Lyons Creek, which trends east- southeast across the central portion of the site and then turns north before exiting the property in the northeast portion of the site. An east-trending tributary blue-line creek flows into Lyons Canyon Creek in the northern part of the site. Two large offsite tributary watersheds and several small offsite watersheds drain through the project area to the existing box culvert under the freeway and into Wiley Creek and the South Fork of the Santa Clara River. The project is located in a flood hazard zone in the mouth of Lyon's canyon.[2]

The Project would require approximately 1,500,000 cubic yards of cut and 1,300,000 cubic yards of fill for a total of 2,800,000 cubic yards of grading with 1,345,000 cubic yards of over excavation,[3] destroying the tributaries in the project area. The DEIR concludes that construction of the Project would have the potential to result in local soil erosion during excavation, grading, trenching, and soil stockpiling.

The Project's proposed flood control facilities include two regional debris basins and five smaller desilting basins, as well as placing the tributaries in storm drains. 026-9

Inconsistency with the One Valley One Vision Santa Clarita Area Plan and the County 2035 General Plan

As described above, the project's impacts to the watershed would be inconsistent with the following GP policies. 026-10

Policy LU-1.3.6. Encourage retention of natural drainage patterns and the preservation of significant riparian areas, both of which are commonly located in hillside areas.

[2] DEIR, 2-10-28 27 acres along Lyons Canyon Creek is within a FEMA Zone A, High Risk/Special Flood Hazard Area (Figure 4.10-6, Flood Hazard Zones). FEMA Zone A is also referred to as the 100-year flood zone, or area that will be inundated by a flood event having a 1% chance of being equaled or exceeded in any given year.

[3] DEIR 4.10-22

Policy LU-7.3.2. Maintain stormwater runoff onsite by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas and use of drainage areas as design elements, where feasible and reasonable.

Policy LU-7.3.3. Seek methods to decrease impermeable site area where reasonable and feasible, in order to reduce stormwater runoff and increase groundwater infiltration, including use of shared parking and other means as appropriate.

Policy LU-7.3.4. Implement best management practices for erosion control throughout the construction and development process.

Policy LU-7.3.5. Limit development within flood-prone areas to minimize down-stream impacts.

O26-10 Cont.

County of Los Angeles General Plan Conservation and Natural Resources Element

Chapter 9 of Los Angeles County General Plan 2035 is the Conservation and Natural Resources Element which outlines goals and policies for local water resources:

Policy C/NR 5.1. Support the LID philosophy, which seeks to plan and design public and private development with hydrologic sensitivity, including limits to straightening and channelizing natural flow paths, removal of vegetative cover, compaction of soils, and distribution of naturalistic BMPs at regional, neighborhood, and parcel-level scales.

Policy C/NR 6.1. Support the LID philosophy, which incorporates distributed, post-construction parcel-level stormwater infiltration as part of new development.

County of Los Angeles General Plan Safety Element

Chapter 12 of the Los Angeles County General Plan 2035 is the Safety Element. The Safety Element outlines Flood Hazards related policies. (2015)

Policy S 2.1. Discourage development in the County's Flood Hazard Zones.

Policy S 2.4. Ensure that developments located with the County's Flood Hazard Zones are sited and designed to avoid isolation from essential services and facilities in the event of flooding.

Policy S 2.5. Ensure that the mitigation of flood related property damage and loss limits impacts to biological and other resources.

Policy S 2.6. Work cooperatively with public agencies with responsibility for flood protection, and with stakeholders in planning for flood and inundation hazards.

O26-11

It is evident that this last policy is not occurring due to the substantial community opposition to this project.

O26-12

Impacts to hydrology meet the CEQA Level of Significance and should be listed as a Significant Impact

Significant Impacts to the natural hydrology:

CEQA Threshold 4.10c: Substantially alter the existing drainage pattern of the site or area, including through the alteration of a federal 100-year flood hazard area or County Capital Flood floodplain2; the alteration of the course of a stream or river; or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

As described above, this project significantly alters the course of Lyons Creek and tributaries by forming debris basins and engineering storm drains which would bury the natural flow underground.

O26-13

CUP Burden of Proof

Contrary to the requirements of a CUP, this project adversely affects the health, peace, comfort and welfare of the surrounding community by significantly increasing the traffic and noise, significantly impacting the biological resources of the area, significantly impacting the aesthetic views of the area by grading down hillsides and removing important geologic features and removing a significant number of oaks which help to clean the air. O26-14

The loss of oaks, ridgelines and viewshed is also materially detrimental to the use, enjoyment and valuation of property of other persons located in the vicinity of the site as well as those that must pass by it on the freeway every day by significantly impacting the natural beauty of the area that lies immediately adjacent to a regional park. O26-15

This project jeopardizes, endangers and constitutes a menace to the public health safety or general welfare by placing housing in a high fire prone wildfire area. Fires have already burned through this area three times in the last 15 years. Fires burned right to the edge of houses in the neighboring community, requiring evacuations. The wildfire section of the DEIR also names many other fires that have occurred in a five-mile radius of the project. Wildfire must be considered a significant impact, both because of the danger to future residents and the increased danger of human caused ignition from locating housing in this area. O26-16

We do not believe that this project will meet the Burden of Proof required by the proposed issuance of the Zone Change that should have been required, a Conditional Use permit and a Statement of Over-riding Considerations for significant unmitigable impacts to biology, aesthetics, geologic formations, air quality, traffic and noise as should be found in the EIR which erroneously mis-states these impacts. O26-17

One required finding of the CUP that states:
"The proposed project is conveniently served by (or provides) neighborhood shopping and commercial facilities, can be provided with essential public services without imposing undue costs on the total community and is consistent with the objectives and policies of the General Plan."

Is not possible to meet this finding since it is factually untrue. Residents would have to hire uber or other means to access these services since they are several miles away. There is no bus route in this area, the project is not accessible by bus.

This finding is untrue on its face, since there are no nearby shopping or commercial opportunities. O26-18

We do not believe that further consideration should be afforded a project in a Very High Fire Severity Hazard Zone

This project should not be considered until all reports and analysis from the recent Eaten and Palisades fires are available for review so that lessons learned can be incorporated into the planning for this project. It is inconceivable to us that the County would consider placing additional residences in an area that the DEIR admits to be a fire problem area due to the wind tunnel effect created by canyons and mountains. Most of the deaths in the Eaten fire were seniors or disabled people that could not escape. Now the County will place seniors in this dangerous situation, full-well knowing the outcome when wildfire occurs? O26-19

This project will only provide the pad for a fire station in this area, NOT the fire station itself. The Development Monitoring System requires a fire station within 1.5 miles of new development proposals. The nearest station is 3 miles away. The long response time would enable a fire to get out of control and into the surrounding natural areas.

We therefore request that any approval of this discretionary permit require that the developer help provide an actual fire station and that no units be built until the fire station is in place. We believe the County must work to avoid the situation that has occurred in the past, i.e., the station lot is designated but there is no funding for the station itself, so houses are built without the required fire protection. Such an occurrence would be extremely dangerous in this high fire prone area. 026-20

The County should require that buyers be warned of the severe fire danger they face and the resulting difficulty they will have in obtaining fire insurance for their residence on their Real Estate Purchase Agreement. 026-21 We also urge the County to require some mitigation for the costs of fighting the fires that will threaten this neighborhood in the future. Failure to do so puts an unfair burden on existing residents and therefore does not meet the burden of proof required for a CUP. 026-22

Conclusion

We oppose this project because it will destroy the natural function of several tributaries of the Santa Clara River, fails to disclose many of the significant impacts of the project as required by CEQA. 026-23 It will not meet the burden of proof for a CUP, and is inconsistent with the SCV General Plan and the County General Plan, especially due to its impact on the tributaries to the Santa Clara River. 026-24 It should require a zone change and designation of significant impacts which cannot be mitigated. 026-25 Also, we especially oppose the approval of this project for the common sense reason that it is in a very high fire severity zone and will put seniors in danger. 026-26

Thank you for your attention to our concerns.

Sincerely,

James M. Danza, MS, AICP
Chair, Friends of the Santa Clara River

INTENTIONALLY LEFT BLANK

Response to Comment Letter O26

Friends of the Santa Clara River
James M. Danza, MS, AICP, Chair
March 7, 2025

026-1 Although the Project site was previously approved for development, the Project is proposed by a different applicant and is separate and distinct from the previously approved project and certified EIR (State Clearinghouse No. 2003031086). The comment does not raise adequacy concerns with the environmental analysis contained in the Draft EIR for the Project, and therefore it would not be appropriate to provide a response as part of this EIR.

026-2 As stated above, although located on the same Project site, the Project is separate and distinct from the previously approved project and certified EIR (State Clearinghouse No. 2003031086). A comparison to the previously approved project was not conducted, nor is it required. Refer to Section 6.4.3, previously approved project-Lyons Canyon Ranch Project, of the Draft EIR for an overview of why this project was not considered as an alternative to the proposed Project.

This comment accurately summarizes the potential SEA Protected Tree impacts associated with the Project. An analysis of potential impacts to SEA Protected Trees is provided in Section 4.4, Biological Resources, of the Draft EIR. In accordance with MM-4.4-16, SEA Protected Tree Replacement/ Compensation, the Project's required Conservation Management Plan must include a Protected Tree Replacement Plan that would dictate the establishment of required replacement trees for SEA Protected Tree removals. As shown on page 4.4-93 in Section 4.4, Biological Resources, of the Draft EIR, at a minimum, the removal of any SEA Protected Tree shall result in a minimum of two replacement plantings with a 10:1 replacement ratio for Heritage Trees with specific requirements to ensure that the plantings do not fail within a monitoring period of 7 years. As stated on pages 4.4-57 and 4.4-58 of the Draft EIR, MM-4.4-16 adequately addresses requirements and recommendations set forth in the SEA Ordinance and SEA Ordinance Implementation Guide and reduces proposed impacts to SEA Protected Trees to below a level of significance under CEQA.

026-3 Potential Project impacts to SEA Resources, including vegetation, grassland, and SEA Water Resources (such as tributaries), are addressed in Section 4.4, Biological Resources, of the Draft EIR. Table 4.4-13 on page 4.4-51 of the Draft EIR summarizes the Project's on-site and off-site direct impacts to vegetation communities and land covers. As stated on page 4.4-50 of the Draft EIR, with implementation of MM-4.4-1, On-Site Habitat Preservation, the remaining vegetation communities on the Project site outside of the Project footprint, within the On-Site Conservation Area, would be preserved in perpetuity. MM-4.4-9, Off-Site Habitat Preservation, would provide preservation of communities or appropriate similar communities with comparable ecological value in off-site parcels that would have conservation easements established. MM-4.4-2, Habitat Mitigation and Monitoring Plan, would be implemented to restore and enhance these preserved vegetation communities. As such, MM-4.4-1, MM-4.4-2, and MM-4.4-9 would provide sufficient preservation to comply with the SEA Ordinance, and direct impacts to sensitive vegetation communities would be reduced to less than significant under CEQA. Furthermore, with implementation of MM-4.4-4, Biological Monitoring, MM-4.4-5, Demarcation of Disturbance Limits, and MM-4.4-6, Invasive Species Prevention, inadvertent direct impacts to sensitive vegetation communities would be reduced to less than significant.

Regarding potential impacts to tributaries (i.e., streams), as discussed under Threshold 4.4c in Section 4.4, Biological Resources, of the Draft EIR, MM-4.4-14, Jurisdictional Waters Compensation, would require off-site compensation to offset the loss of on-site jurisdictional waters that are obtained by the implementation of MM-4.4-1 and MM-4.4-9. MM-4.4-1, On-Site Habitat Preservation, would demonstrate recordation of a conservation easement for the Conservation Area, with the remaining on-site jurisdictional waters. MM-4.4-3, Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation, would provide a program to collect, propagate, and disseminate these species into the Conservation Area. MM-4.4-9, Off-Site Habitat Preservation, may provide additional preservation of jurisdictional waters in off-site parcels. MM-4.4-4, Biological Monitoring, would provide monitoring to avoid any inadvertent impacts to potential jurisdictional waters and the implementation of mitigation measures. MM-4.4-5, Demarcation of Disturbance Limits, would delineate the Project footprint to help avoid any inadvertent impacts to jurisdictional waters and to confine impacts to the approved limits of construction. MM-4.4-6, Invasive Species Prevention, and MM-4.4-7, Landscaping Plan, would avoid and minimize the introduction of non-native plant species to jurisdictional waters. Implementation of these required mitigation measures would reduce impacts to jurisdictional waters, including streams and riparian habitats that are considered SEA Water Resources, to less than significant.

026-4 The comment states that a zone change is required for the Project. As discussed on page 2-5 of Chapter 2, Environmental Setting, of the Draft EIR, the Project site contains the following zoning designations: Heavy Agricultural (A-2-2 and A-2-1) and Unlimited Commercial-Development Program (General Commercial [C-3] and C-3-DP). As further detailed on page 3-21 of Chapter 3, Project Description, of the Draft EIR, the Project requests multiple conditional use permits (CUPs), but a zone change is not required. The discussion presented on page 3-5 of Chapter 3, Project Description, of the Draft EIR is in regard to the CUPs required to ensure consistency with the site's zoning designations.

It should be noted that the Applicant for the Project differs from the applicant of the previously approved project and certified EIR (State Clearinghouse No. 2003031086) located on the same site (Los Angeles County Project TTM No. 53653, Conditional Use Permit R200500088, and Oak Tree Permit ROAK200500039). Additionally, the previous applicant did not withdraw the previously approved project and re-plan on a smaller footprint. Instead, the application for the previously approved project expired, and this expiration occurred after the Project Applicant for the currently-proposed Project submitted its application. Moreover, as discussed on page 6-29 of Chapter 6, Alternatives, of the Draft EIR, the EIR for the previously approved project was certified in August 2009 and the project proponent initiated the process to record the approved tract map. The vesting tentative tract map for the previously approved project expired prior to recordation of a Final Map, and this expiration occurred after the Project Applicant for the currently-proposed Project submitted their application. Therefore, prior to its expiration, the previously approved project could have been implemented instead of the Project. The zone change of A-2-1/A-2-2 to C- 3-DP for the expired prior-approved project, however, was effectuated by the County; as such, the current Project site has 9.3 acres of C-3-DP zoning on-site and a new zone change is thus not required to effectuate the Project.

026-5 Consideration of the Project's required conditional use permits (CUPs) for development with a Hillside Management Area and development within a County's designated SEA will be made in accordance with the requirements set forth in Los Angeles County Code, including Chapter 22.102, Significant Ecological Areas, Chapter 22.104, Hillside Management Areas, and Chapter 22.158, Conditional Use Permits. Regarding protection of the greenbelt around the City of Santa Clarita, the Project would provide

approximately 150 acres of on-site natural open space within the unincorporated County. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR). Additional open space would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement. As such, the Project would protect lands within the greenbelt.

This comment will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

026-6 The Project has been analyzed in accordance with Section 15151 of the State CEQA Guidelines, which defines the standards for EIR adequacy. The Draft EIR provides the environmental information necessary for the County to make a final decision on the requested discretionary actions to be considered as part of the Project. The Draft EIR is not a tiered document and, as such, there is no obligation that the findings of the Draft EIR be tethered to the findings of a previous environmental document for a separate and distinct project. A comparison to the previously approved project was not conducted, nor is it required. Refer to Section 6.4.3, previously approved project-Lyons Canyon Ranch Project, of the Draft EIR for an overview of why this project was not considered as an alternative to the proposed Project. Furthermore, since the time of the previous approval (i.e., 2009), in addition to changes to the project being proposed, there have been changes to existing circumstances, including but not limited to environmental conditions, regulatory requirements, case law, etc., which have resulted in the impact determinations set forth in the Draft EIR.

026-7 Potential impacts related to greenhouse gas (GHG) emissions are addressed in Section 4.8, Greenhouse Gas Emissions, of the Draft EIR and Chapter 3, Revisions to the Draft EIR of this Final EIR. As discussed therein, with implementation of MM-4.8-1 through MM-4.8-8 and MM-4.17-2, Project-related GHG emission impacts were determined to be less than significant with mitigation. Revisions to the Draft EIR have been made to Section 4.8.4, Methodology, and Section 4.8-5 (Tables 4.8-7 through 4.8-9 and accompanying text) of Section 4.8, Greenhouse Gas Emissions, as shown in Chapter 3, Revisions to the Draft EIR, of this Final EIR. The revisions account for variation in soil type for carbon sequestration and a small increase in the number of tree removals assumed in the Draft EIR's CalEEMod analysis for GHG emissions. As detailed in Chapter 3 of this Final EIR, these revisions would result in a total of 4,113.41 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year including all other operational emission sources from Table 4.8-11 in Section 4.8, Greenhouse Gas Emissions of the Draft EIR. When the revised mitigated annual emissions of 4,113.41 MT CO_2e per year are divided by the Project's service population of 1,795 persons, the Project would have a revised GHG efficiency of 2.29 MT CO_2e/person/year (an increase of 0.01 MT CO_2e/Service Person/year when compared to the Project efficiency detailed Table 4.8-11 of the Draft EIR). However, even after this slight increase,

the Project's mitigated efficiency metric would not exceed the significance threshold of 2.42 MT/SP/yr, and thus, the impact would remain less than significant with mitigation incorporated. [32]

Furthermore, as stated on page 4.8-61 of the Draft EIR, the Project would support achievement of the SB 32, EO S-3-05, and AB 1279 goals through compliance with the County's 2045 Climate Action Plan and with support of the strategies identified in Southern California Association of Government's 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy to reduce per capita GHG emissions. The Project would also not conflict with the County's General Plan, One Valley One Vision, County's Green Building Standards, and Our County Sustainability Plan. Therefore, as supported by the analysis and determinations provided in Section 4.8, Greenhouse Gas Emissions, of the Draft EIR and Chapter 3, Revisions to the Draft EIR, of this Final EIR, impacts related to GHG emissions generated by the Project would be less than significant with mitigation incorporated.

026-8 With respect to Project development potentially reducing flow and recharge to the Santa Clara River, the Project's introduction of more impermeable groundcover in upland areas that feed into a stormwater system that directs flow into the South Fork Santa Clara River (after passing through detention basins that decrease water velocity, allowing sediment and pollutants to settle out) would not decrease water availability for the Santa Clara River. As discussed under Threshold 4.10b in Section 4.10, Hydrology and Water Quality, of the Draft EIR, the Project would construct seven primary flood control facilities, including two regional debris basins and five smaller desilting basins. Lot 14 would contain a 3.97-acre debris basin (Basin A), Lot 15 would contain a 3.76-acre debris basin (Basin B), and Lots 19 (Basin C) and 33 through 36 (Basins J, F, G, and E, respectively) would contain five desilting basins for a total of 3.0 acres, as shown on Figure 4.10-7, Proposed Drainage and Water Quality Infrastructure, of the Draft EIR. These facilities would retain water during storm events and result in some percolation given that the facilities are earthen, and there would be no significant impacts related to groundwater infiltration. As discussed under Threshold 4.10c, the Project's Drainage Concept Report, which was reviewed and approved by Los Angeles County Public Works, determined that the proposed basins would reduce the existing 50-year peak flow rate at the Caltrans culvert under I-5 from 1,656 cubic feet per second (cfs) to 1,218 cfs, a reduction in peak flow rate of 438 cfs (as included in Appendix G-3 of the Draft EIR). This slight decrease in flow rates ensures that there would be no potential for increased erosion downstream. However, while these basins are effective in reducing peak flow rates, they are not designed to facilitate infiltration to surrounding soils and therefore do not control or reduce the overall volume of stormwater (EPA 2021). Thus, the amount of water in the system would not be reduced, and the amount of water reaching the Santa Clara River would not be substantively altered, as post-development runoff would still feed into a stormwater system that directs flow into the Santa Clara River. Additionally, the proposed debris basins and desilting basins would remove 48.8 acre-feet of sediment from the previously burned areas, reducing the potential for sediment to impact the capacity of the downstream drainage network.

Regarding cumulative impacts to the Santa Clara River watershed, a discussion of cumulative impacts in accordance with Section 15130 of the CEQA Guidelines is provided in the Draft EIR, including in Section 4.4, Biological Resources, and Section 4.10, Hydrology and Water Quality. Pages 4.10-34,

[32] These revisions do not change the conclusions in the Draft EIR. Rather, these revisions merely clarify information that supports conclusions that were already presented in an adequate Draft EIR. As such, these changes would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, do not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

4.10-35, and 4.10-38 in Section 4.10 of the Draft EIR address cumulative water quality impacts with respect to construction and operations. As discussed, the Project and any cumulative project that has the potential to impact hydrology and water quality would be required to comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit and its required Stormwater Pollution Prevention Plan (SWPPP), the NPDES municipal separate storm sewer systems (MS4) best management practices (BMP) requirements, the erosion and sediment control plan (ESCP) to address transport of sediment and protect properties from erosion, and the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program, all of which are designed to prevent impacts to water quality and have procedures in place for responding to spills. While it is possible that cumulative projects that contribute flows to the South Fork of the Santa Clara River could result in releases of sediment and/or pollutants that could adversely affect water quality, the responsible parties associated with the Project and the other cumulative projects would be required to control runoff and respond to spills to the same or similar established regulatory standards from the County, as discussed in Section 4.10, Hydrology and Water Quality, and in Section 4.9, Hazards and Hazardous Materials, of this Draft EIR. Once constructed, the cumulative projects would incorporate on-site runoff management infrastructure, water quality BMPs, and adequate connections to the existing stormwater drainage system. Therefore, compliance with water quality regulations would ensure that the cumulative impacts would not be considerable.

As discussed on page 4.4-65 in Section 4.4, Biological Resources, of the Draft EIR, the Project's contribution to cumulative impacts to jurisdictional aquatic resources, including streams and riparian habitat within the Santa Clara River watershed, is primarily addressed through compensatory mitigation at a ratio of 1:1, or as required by the regulatory agencies, through the preservation, enhancement, and/or restoration of jurisdictional waters and associated riparian vegetation. As discussed above in the response provided for Comment O26-3, implementation of MM 4.4-1, MM-4.4-4 though MM-4.4-7, MM-4.4-9, and MM-4.4-14 would result in adequate compensatory mitigation and would reduce the Project's impacts to jurisdictional aquatic resources to less than significant. As a result, the Project's impacts to jurisdictional waters would not substantially diminish or threaten to eliminate any of these resources on a regional basis. Furthermore, all cumulative projects would be subject to existing and/or future permit restrictions that satisfy regulatory/resource agency requirements. Therefore, the Project's incremental effect on jurisdictional aquatic resources would not be cumulatively considerable and cumulative impacts on these resources would be less than significant with mitigation.

O26-9 This comment summarizes impacts analyzed in the Draft EIR and does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. The comment notes that the Project would have the potential to result in soil erosion during construction activities. Potential impacts related to soil erosion during the construction phase are addressed under Thresholds 4.10a and 4.10c(i) in Section 4.10, Hydrology and Water Quality, of the Draft EIR. As stated therein, County Code Appendix J-Grading requires preparation of a site-specific SWPPP and Erosion Sediment Control Plan (ESCP), which would be prepared prior to all earthwork activities and would be implemented during Project construction and grading activities including the grading activities of the existing flood zone. The ESCP must include BMPs to address transport of sediment and protect properties from erosion, flooding, or the deposition of mud, debris, or construction-related pollutants. The SWPPP must include BMPs, including erosion control measures and proper handling of petroleum products, such as proper petroleum product storage and spill response practices, to prevent pollution in stormwater discharge. The construction-phase BMPs would ensure effective control of not only sediment discharge, but also

of pollutants associated with sediments, such as nutrients, heavy metals, and pesticides. Additionally, all Project construction activities are required to comply with Los Angeles County Public Work's grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during the rainy season, as well as inspections to ensure that sedimentation and erosion is minimized. Through compliance with these existing regulations, the Project would not result in significant soil erosion or siltation impacts during the construction phase.

Further, for clarity, additional text has been added to Section 4.10, Hydrology and Water Quality, of the Draft EIR (as provided in Chapter 3, Revisions to the Draft EIR, of this Final EIR) specifying that stormwater runoff east of I-5 would flow toward Wiley Canyon Creek, Newhall Creek, and the South Fork of the Santa Clara River. This revision does not change the impact conclusions in the Draft EIR. Rather, this information merely clarifies information and supports conclusions that were already presented in the Draft EIR. As such, this change would not result in a new significant impact or a substantial increase in the severity of a previously identified significant impact.

026-10 An analysis of the Project's potential to result in a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (including applicable policies from the General Plan and Santa Clarita Valley Area Plan, referred to as "One Valley, One Vision" [OVOV]) is provided under Threshold 4.11b in Section 4.11, Land Use and Planning, of the Draft EIR (see Tables 4.11-1 and 4.11-2). Specifically, General Plan Policy LU-1.3.6 is addressed beginning on page 4.11-43 in Table 4.11-1 of the Draft EIR, while Policies LU-7.3.2, LU-7.3.3, LU-7.3.4, and LU-7.3.5 are addressed beginning on page 4.11-47 in Table 4.11-1 of the Draft EIR. An analysis of the Project's potential to result in a significant environmental impact due to a conflict with General Plan Policies C/NR 5.1 and C/NR 6.1 is included on pages 4.11-26 and 4.11-27 in Table 4.11-1 of the Draft EIR. As discussed in further detail therein, the Project would not conflict with any of these General Plan policies. It should be noted that a conflict between a project and an applicable policy is not necessarily a significant impact under CEQA unless the inconsistency will result in an adverse physical change to the environment that is a "significant environmental effect" as defined by State CEQA Guidelines Section 15382. As provided in State CEQA Guidelines Section 15126.2 "an EIR shall identify and focus on the significant effects of the proposed project on the environment." A significant impact to the environment may occur if the Project conflicts with a policy intended to protect the environment and would consequently result in environmental impacts. It should also be noted that the above-referenced CEQA threshold explicitly asks whether the Project would cause a significant environmental effect due to a *conflict* (emphasis added) with a goal or policy for the purpose of avoiding or mitigating an environmental effect, and not if the Project is *consistent* with a goal or policy.

026-11 The General Plan Safety Element goals and policies addressed in Section 4.11, Land Use and Planning, under Threshold 4.11b of the Draft EIR reference the updated (i.e., 2022) version of the Safety Element. An analysis of the Project's potential to result in a significant environmental impact due to a conflict with any of the applicable goals and policies from the version of the Safety Element that was in effect at the time the Project was vested and the Notice of Preparation was published (i.e., the 2015 version of the Safety Element) has been added to Table 4.11-1 in Section 4.11, Land Use and Planning, of the Draft EIR, as included in Chapter 3, Revisions to the Draft EIR, of this Final EIR. As discussed in further detail in Chapter 3 of this Final EIR, the Project would not conflict with any of the applicable

policies from the 2015 version of the General Plan Safety Element, including Policies S 2.1, S 2.4, S 2.5, and S 2.6.

026-12 See Chapter 3 of this Final EIR which demonstrates that the Project would not conflict with the 2015 version of the General Plan Safety Element Policy S 2.6. While the Final EIR demonstrates that there is no conflict with this policy, as discussed above in Response to Comment 026-10, a conflict between a project and an applicable policy is not necessarily a significant impact under CEQA unless the inconsistency will result in an adverse physical change to the environment that is a "significant environmental effect" as defined by State CEQA Guidelines Section 15382. Opposition to the Project from some members of the community does not preclude the ability to work collaboratively with stakeholders. Further, such opposition from community members and/or community advocacy groups does not constitute a significant environmental effect.

An analysis of the Project's potential to result in a significant environmental impact due to a conflict with General Plan Policy S 2.6 from the 2015 Safety Element has been added to Table 4.11-1 in Section 4.11, Land Use and Planning, of the Draft EIR, as included in Chapter 3, Revisions to the Draft EIR, of this Final EIR. As discussed therein, the Project Applicant/Developer will work cooperatively with all applicable public agencies with responsibility for flood protection and with stakeholders for flood and inundation hazards, including the County and FEMA. The Draft EIR includes a description of the FEMA Flood Zone A High-Risk/Special Flood Hazard Area (SFHA) on the Project site. An analysis of potential Project impacts related to flooding, including development within a SFHA, is provided in Section 4.10, Hydrology and Water Quality, of the Draft EIR. As stated on page 4.10-28 of the Draft EIR, following construction, all flooding within the Project site would be contained within the proposed debris basins and storm drains. As such, the proposed floodplain would be limited to the basin ponding areas. A Conditional Letter of Map Revision (CLOMR), which was requested in May 2024 (included as Appendix G-4 of the Draft EIR), would be processed through and approved by FEMA prior to the approval of storm drain plans and construction of the proposed channel and basins. A Letter of Map Revision (LOMR) would be processed through and approved by FEMA upon completion of the drainage improvements to officially revise the Flood Insurance Rate Maps (FIRM) to remove the Project site from being within the SFHA. The County's Floodway Map would also be revised in accordance with Los Angeles County Public Works' Floodplain Management Plan requirements, which include measures to review and update flood risk hazards when new data becomes available. Upon completion of the Project, no additional flood proofing or flood insurance requirements would be required for occupants of the Project site. As such, the Project would not conflict with this policy.

026-13 The impact analysis for Threshold 4.10c(i) is addressed beginning on page 4.10-26 in Section 4.10, Hydrology and Water Quality, of the Draft EIR. Regarding operational impacts related to soil erosion/siltation, as stated on page 4.10-27 of the Draft EIR, during storm events, all stormwater flows from outside of the Project's developed footprint would be directed into the Project's flood control facilities, which includes two regional debris basins and five smaller desilting basins, which would allow for settlement of debris and would then pass clear flows into the on-site storm drainage system to the outfall in the existing box drainage culvert at The Old Road. The Project would not alter the potential for soil erosion or siltation from areas outside of the graded/developed footprint. The proposed water quality BMP and storm drainage system design, in accordance with MS4 permit requirements, County standards and OVOV policies, would ensure that there would be no contact between stormwater from the developed Project site and the adjacent undeveloped land, thereby ensuring that no undeveloped

areas would be subject to erosion or associated siltation due to Project operations. It is acknowledged that the Project would alter surface water features and would increase impervious surface area within the Project site. However, Draft EIR Threshold 4.10(c)(i) demonstrates that such alteration does not result in a significant effect related to erosion or siltation under the Project. Through the incorporation of the regional debris basins, smaller desilting basins, stormwater drainage facilities, and compliance with regulations, the operation of the Project would not substantially alter the existing drainage pattern of the site, including through alteration of a flood zone (discussed further in response to Threshold 4.10c.[iv] beginning on page 4.10-30 of the Draft EIR); alteration of a stream or river; or additional impervious surfaces, in a manner that would result in erosion or siltation, and impacts would be less than significant.

Please refer to Response to Comments O26-3, O26-8, and O26-12, above regarding potential impacts to on-site tributaries and soil erosion/siltation during Project construction. As discussed above, the Draft EIR adequately analyzes the potential impacts related to streams and riparian habitat (including Lyons Canyon Creek and associated tributaries), and no significant impacts would occur.

O26-14 The County's required findings for a CUP are not tethered to CEQA and are beyond the scope of the required analysis set forth in the Draft EIR. However, this comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR. Regarding environmental impacts under CEQA, as discussed in further detail below, the Draft EIR adequately analyzes potential impacts related to transportation (Section 4.17, Transportation), noise (Section 4.13, Noise), biological resources (including oak tree removals; Section 4.4, Biological Resources), aesthetics (Section 4.1, Aesthetics), unique geologic features (Section 4.7, Geology and Soils), and air quality (Section 4.3, Air Quality).

Traffic (i.e. automobile delay), as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17, Transportation, of the Draft EIR and the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19; please also refer to Response to Comment Letter A9 from the City of Santa Clarita).

Please refer to Section 4.13, Noise, of the Draft EIR for a detailed analysis of the Project's potential noise impacts. Regarding the generation of substantial temporary increase in ambient noise levels in the vicinity of the Project, mitigation measures would be required to reduce impacts from construction activity to less than significant. Upon implementation of MM-4.13-1, Simultaneous Equipment Operation Limit for Portion of Lot 22, MM-4.13-2, Staging Areas and Stationary Equipment, MM-4.13-3, Stationary Equipment Construction Noise Barrier, and MM-4.13-4, Temporary Noise Barrier for On-Site Phases, impacts regarding generation of substantial temporary increases in ambient noise levels in the vicinity of the Project in excess of standards established in the County's General Plan and noise ordinance would be less than significant. The Project would result in less than significant impacts regarding generation of substantial permanent increases in ambient noise levels and generation of excessive groundborne vibration or groundborne noise levels and would result in no impacts regarding

excessive noise levels due to proximity to a private airstrip, airport land use plan, public airport, or public use airport.

Please refer to Section 4.4, Biological Resources, of the Draft EIR for a detailed analysis of the Project's potential biological resource impacts, including impacts related to oak tree removals. As discussed therein, impacts related to candidate, sensitive, or special status plant/wildlife species, sensitive natural communities, movement of fish or wildlife species, wildlife corridors, wildlife nursery sites, oak/native woodlands, and potential conflicts with any local policies or ordinances protecting biological resources would be less than significant with mitigation incorporated. There would be no impact related to a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional, or local habitat conservation plan. As such, the Project would not result in any significant biological resource impacts.

Regarding oak tree removals and cleaning the air, the Project would plant more trees than it would remove as a result of required replacement trees for SEA Protected Tree removals and other proposed ornamental landscaping trees. As discussed on pages 4.8-27 and 4.8-29 in Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, the Draft EIR used the i-Tree planting calculator, as recommended by CalEEMod, to determine the changes in greenhouse gas emissions from tree planting and/or removal. The analyses provided in Section 4.3, Air Quality and Section 4.8 Greenhouse Gas Emissions of the Draft EIR and Chapter 3, Revisions to the Draft EIR of the Final EIR determined that Project impacts related to air quality and greenhouse gas emissions would be less than significant with mitigation incorporated.

Please refer to Section 4.1, Aesthetics, of the Draft EIR for a detailed analysis of the Project's potential aesthetic impacts, including impacts to public views. As stated on page 4.1-32 of the Draft EIR, while the existing hillside closest to The Old Road would be graded to accommodate two- to three-story attached homes within Lots 7 (to the east) and 6 (toward the Project-site center), this area would remain elevated in comparison to public vantage points along The Old Road, I-5, Taylor Trail trailhead, and the Taylor Trail segment closest to The Old Road. Grading activities occurring on the hillside, as well as elsewhere throughout the Project site, would incorporate required drainage and erosion control measures, and would be designed in accordance with the standards set forth in the California Building Code, which, in addition to minimizing risks from erosion, would ensure graded areas remain visually compatible with the existing terrain.

As discussed on page 4.1-24 in Section 4.1, Aesthetics, of the Draft EIR, the Project would comply with existing County requirements and laws regulating development in visually sensitive areas such as hillsides. Pursuant to Chapter 22.140.170 (Density-Controlled Development) of the Zoning Code, the Project would employ a density-controlled development program that would cluster development in the lower-lying, northeastern area of the Project site closest to the I-5 corridor. The Project would conserve approximately 150 acres of the Project site as natural open space. The natural open space would be contiguous and concentrated in the southern/southwestern portion of the Project site and would include many of the Project site's important visual resources, include Hillside Management Areas, oak woodland habitat, and the on-site County-designated significant ridgeline. The Project would also be required to comply with Chapter 22.104 (Hillside Management Areas) of the Zoning Code and would implement design features to comply with applicable Hillside Design Guidelines standards (Chapter 22.104, Appendix I), which would further minimize any impacts to hillside areas which could potentially degrade the quality of scenic viewsheds. Although grading in hillside areas would still be required for Project implementation, development would largely be located on the flattest portion of the Project site,

with most of the Project falling within the 0-24.99% slope range (in compliance with the Hillside Design Guidelines Design Measure 1.2). The clustered design would allow for the preservation of contiguous open space on the southern portion of the Project site (including hillsides and a County-designated significant ridgeline), as well as improved open space and landscaped areas ribboned through the developed northern portions of the Project site. As analyzed in Section 4.1 of the Draft EIR, with implementation of mitigation measures, the Project would not result in a significant impact related to aesthetics.

Potential impacts to a unique geologic feature are addressed under Threshold 4.7g in Section 4.7, Geology and Soils, of the Draft EIR. As stated on page 4.7-20 of the Draft EIR, the Geotechnical Report for the Project (provided as Appendix E-1 of the Draft EIR) did not identify any unique geologic features on-site, meaning that the on-site deposits and features do not represent the best example of its type locally or regionally; do not embody distinctive characteristics of a geologic principle that is exclusive to the regional context; do not provide a key piece of geologic information important to geologic history; nor used as a teaching tool. As such, the Project would not result in direct or indirect impacts to a unique geologic feature.

026-15 As stated above in Response to 026-14, the County's required findings for a CUP are not tethered to CEQA and are beyond the scope of the required analysis set forth in the Draft EIR. However, this comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Regarding potential CEQA impacts related to the "loss of oaks, ridgelines and viewshed," the Draft EIR includes analysis of the potential visual resource impacts in Section 4.1, Aesthetics. This analysis considers potential lighting and glare impacts as well as impacts to scenic vistas and public views from I-5, The Old Road, and off-site park/recreation areas. As stated on page 4.1-24 of the Draft EIR, the Project would conserve approximately 150 acres of the Project site as natural open space. The natural open space would be contiguous and concentrated in the southern/southwestern portion of the Project site (adjacent to existing off-site park/recreation areas) and would include many of the Project site's important visual resources, include Hillside Management Areas, oak woodland habitat, and the on-site, County-designated significant ridgeline. As stated on page 4.1-36 of the Draft EIR, at a minimum, removal of any SEA Protected Tree (including protected oak tress) would require mitigation in the form of two replacement plantings for non-heritage trees and ten replacement plantings for heritage trees, which would require 772 replacement trees to be planted. In accordance with MM-4.4-16, SEA Protected Tree Replacement/Compensation, the required replacement trees would be planted where suitable growing conditions are present and would remain in perpetuity, growing to provide verdant canopy coverage that mimics the valued visual elements of the existing SEA Protected Trees proposed for removal. As determined by the analysis set forth in Section 4.1 of the Draft EIR, impacts related to aesthetics would be less than significant with mitigation incorporated.

026-16 Regarding the placement of housing within a "high fire prone wildfire areas," the existing Very High Fire Hazard Severity Zone (VHFHSZ) designation does not prohibit the development of the Project. Instead, additional fire protection measures, such as those governing safe building standards, must be provided for Project approval. In addition to the analysis provided in Section 4.20, Wildfire, of the Draft EIR (as supported by the Fire Protection Plan [see Appendix M-1 of the Draft EIR] and Wildfire Evacuation Plan [see Appendix M-2 of the Draft EIR]), a detailed response related to wildfire is provided above in Topical Response-1. Topical Response-1 addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire

evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

The analysis provided in Section 4.20, Wildfire, of the Draft EIR takes into consideration both fire history and the likely rate of wildfire occurrence on the Project site (see page 4.20-4 of the Draft EIR). As stated on page 4.20-35 of the Draft EIR, based on fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones on and off site and would not exacerbate the existing fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 and required through MM-4.20-2, Alternative Materials and Methods, and MM-4.20-3, Annual Fuel Modification Zone Inspection, as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, Wildfire Education Program, would reduce potential for impacts associated with an on-site fire spreading to off-site areas.

As stated above in Section 2.4.1 of Topical Response-1, the Project's proposed development of higher density housing with highly maintained, irrigated vegetative landscaping between homes and the perimeter fuel modification zones (FMZs) would keep an active flaming front at great distances from structures and support defensibility for the existing fire environment. Furthermore, modern subdivisions and master planned communities are easier to defend than older subdivisions. Various fire agencies across Southern California have indicated that newer communities, even those in the wildland–urban interface or in FHSZs, require significantly less resources to defend against wildfire than older communities not built to the current fire and building standards required in the California Fire Code.

Additionally, when assessing the drivers of human caused ignitions in Southern California, powerlines, arson, and equipment use were identified to be the dominant form of human-caused ignitions. As stated on page 4.20-37 of the Draft EIR, the Project would underground powerlines. Furthermore, required mitigation measures MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction Related Fire Prevention Measures are included to reduce the risk of ignition during the construction of the Project. As discussed further in Section 4.20, Wildfire, of the Draft EIR, after incorporation of required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

026-17 As stated above in Response to 024-4, the Project does not require a zone change. The County's required findings for a CUP are not tethered to CEQA and are beyond the scope of the required analysis set forth in the Draft EIR. Furthermore, the impact determinations set forth in the Draft EIR are not "erroneous" or "misstated." Please refer to Response to Comment 026-14 above regarding potential impacts to biological resources, aesthetics, unique geological features, air quality, traffic, and noise.

The Project would have one significant and unavoidable impact, necessitating a Statement of Overriding Consideration. This impact is discussed in Section 4.17, Transportation, of the Draft EIR and is related to vehicle miles traveled (VMT). VMT measures how much actual auto travel (additional miles driven) a project would create. The Project was forecast to generate 20.5 VMT per capita (see Draft EIR page 4.17-22). The Project was thus determined to exceed the County's threshold of 10.6 residential VMT per capita by 9.9 VMT per capita. With implementation of MM-4.17-2 (Transportation Demand Management [TDM] Program), VMT impacts would be reduced to the point that the Project would generate 19 VMT per capita, which would still exceed the County's threshold of 10.6 VMT per capita.

Thus, despite implementation of all feasible mitigation, the Project would have a significant and unavoidable impact on VMT.

026-18 As stated above, the County's required findings for a CUP are not tethered to CEQA and are beyond the scope of the required analysis set forth in the Draft EIR. The Project site is within an approximately 1-to-2-mile radius of existing shopping and retail services, including Vons, Walmart, and Valencia Plaza. In addition to ride-share services, walking, and biking, Project residents would be able to use privately-owned passenger vehicles to access these services. This policy does not require access by transit and the Project would not preclude transit adding new bus service to The Old Road or other nearby roadways.

026-19 In light of the recent fire activity, and specifically the Hughes Fire, the Draft EIR formal public review period was extended for an additional 31 days (for a total of 91 days) to March 10, 2025. As such, additional time was given to consider and comment on the Project.

Regarding development in a very high fire hazard severity zone and evacuation of senior populations during an emergency event, please refer to Topical Response-1. It should be noted that the Project does not propose or include a nursing home, residential care facility for the elderly, assisting living facility, board and care facility, or other living accommodations where there may be cognitive or physical limitations that could impede mobility. It is expected that occupants of the senior affordable housing units would evacuate similarly to all others within the Project site, where there likely will be seniors living in the Project's market rate units.

As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page 4.20-62 in Section 4.20, Wildfire, of the Draft EIR, the Project's HOA would provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents, including residents of the senior housing apartment complex. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to ensure that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program that shall ensure that all seniors who are not able to evacuate safety on their own are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.[33]

026-20 As discussed on page 4.15-33 in Section 4.15, Public Services, of the Draft EIR, the Los Angeles County Fire Department (LACoFD) determined that a new on-site fire station is not required for the Project, nor is a building pad for a fire station a part of the Project scope. The commenter referenced a Development

[33] These revisions do not change the impact analysis or conclusions in the Draft EIR and would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, do not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

Monitoring System (DMS). The DMS was required by the previous General Plan and is an outdated tracking/analysis system that the County of Los Angeles no longer uses. The Project is subject to the 2015 General Plan and Santa Clarita Valley Area Plan, neither of which require the DMS. However, as the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. Furthermore, as discussed in Section 2.4.1.2, Project Specific Fire-Resistant Design Feature, and Section 2.4.3.1, Attorney General's Guidance, of Topical Response-1, in addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area.

Regarding response times, the LACoFD indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is within 2.6 miles and is the nearest to the Project site (see page 4.15-31 in the Draft EIR). Further, as detailed in Table 7 of the Fire Protection Plan included as Appendix M-1 of the Draft EIR, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from the closest Fire Station 124.

026-21 In California, a Natural Hazard Disclosure (NHD) is required by the California Civil Code Section 1103, requiring sellers to inform home buyers about specific natural hazards that may impact the property. The NHD statement must include details about whether the property is located in designated hazard zones, such as areas prone to flooding, wildfires, or earthquakes. The NHD must be provided before the transfer of title or the close of escrow, giving the buyer time to consider the information. Furthermore, in accordance with AB 38, sellers of a residential property located in a VHFHSZ are required to complete a new home hardening disclosure including vegetation management compliance to disclose to buyer certain aspects of the property that may be particularly susceptible to wildfire risk. The disclosure contains a general notice about home hardening and requires the seller to answer questions specifying which home hardening features the home lacks that make the home vulnerable to wildfire and flying embers based on the seller's actual knowledge. Finally, per MM-4.20-1, Wildfire Education Program, the Homeowners' Association (HOA) Covenants, Conditions, and Restrictions for the Project shall require that the HOA prepare an educational program with wildfire-related information to be provided to all residents and occupants, including the Wildfire Evacuation Plan and the Fire Protection Plan (FPP) requirements. The Covenants, Conditions, and Restrictions will be submitted to the County prior to issuance of certificate of occupancy. The educational program shall be prepared in easy-to-understand, graphically based materials and shall be annually reviewed and updated, as appropriate, in order to maintain high wildfire awareness.

026-22 Please see Response to Comment 026-20 above regarding payment of a Fire Facility Fee and community benefit contribution. As stated above, the County's required findings for a CUP are not

tethered to CEQA and are beyond the scope of the required analysis set forth in the Draft EIR. This comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

026-23 The Draft EIR adequately discloses and analyzes all Project impacts in accordance with CEQA. Please refer to Response to Comment O26-3 and Response to Comment O26-8 above regarding potential impacts to tributaries. The commenter's opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

026-24 As stated above, the County's required findings for a CUP are not tethered to CEQA and are beyond the scope of the required analysis set forth in the Draft EIR. Please refer to Response to Comments O26-10 through O26-12 regarding the Project's potential to conflict with applicable General Plan and OVOV policies.

026-25 As stated above in Response to Comment O26-4, the Project does not require a zone change. With the exception of the Project's significant impact related to VMT (which would remain significant and unavoidable even after implementation of feasible mitigation, as discussed above in Response to Comment O26-17), all potentially significant impacts of the Project would be reduced to a less than significant level due to compliance with existing regulatory requirements and/or implementation of required mitigation measures.

026-26 Please refer to Response to Comment O26-19 regarding senior populations and the location of the Project within a VFHSZ.

Comment Letter 027

From: Cynthia Harris
To: Erica G. Aguirre
Subject: Lyons Canyon Project No. 2021-001195-(5),
Date: Sunday, March 9, 2025 7:08:08 PM

CAUTION: External Email. Proceed Responsibly.

3-7-25

Erica Aguirre, Senior Planner
Los Angeles County Dept of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Dear Ms. Aguirre:

As a person that has worked on oak tree preservation in the Santa Clarita Valley for many years, I would like to focus my comments in this area.

According to the Notice of Availability this project consists of an approximately 233-acre project site located in the northern foothills of the Santa Susana Mountains in unincorporated Los Angeles County. It is located on the Old Road adjacent to Ed Davis Park in Towsley Canyon Open Space on the South and a housing tract on the North. The project includes the development of 504 residential units in a mix of attached and detached dwelling units, and senior housing, associated infrastructure. The project would require up to 1,460,000 cubic yards of cut and 1,260,000 cubic yards of fill for a total of 2,720,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. Due to expected shrinkage of 200,000 cubic yards, the total earth movement will be 2,805,000 cubic yards. 027-1

The project site is located within the Santa Susana Mountains/Simi Hills Significant Ecological Area (SEA). The project site is relatively undisturbed for much of the property, with species that may qualify as protected trees under the Los Angeles County SEA Ordinance Implementation Guide and the Los Angeles County Oak Tree ordinance. 027-2

ENTITLEMENTS REQUESTED include:
Conditional Use Permits ("CUPs"): For development with the County's designated Santa Susana Mountains/Simi Hills Significant Ecological Area, including impacts to a total of 334 SEA-protected trees (265 removals, and 53 within a proposed debris basin,1 and 16 encroachments). Specifically, there are impacts to 312 non-heritage SEA-protected trees including oak, walnut, cottonwood, willow, and elderberry trees (251 removals, 50 trees located within debris basins, and 11 encroachments) and to 22 heritage oak trees (14 removals, three trees located within debris basins, and five encroachments). The removal of 265 SEA-protected trees and impacts to 53 trees within a proposed debris basin, amounting to 318 trees, would require planting of 772 native/mitigation replacement trees within the conservation and landscaped areas on-site. The Project would impact several SEA resource categories including oak woodland, natural vegetation and grassland. 027-3

Non-compliance with Los Angeles County Oak Ordinance 027-4

According to requirements of the County Oak Ordinance the developer must follow these

requirements:
ii. Evaluation of the physical structure of each tree as follows:
(1) The circumference and diameter of the trunk, measured four and one-half feet above natural grade;
(2) The diameter of the tree's canopy, plus five feet, establishing the protected zone;
(3) Aesthetic assessment of the tree, considering factors such as but not limited to symmetry, broken branches, unbalanced crown, excessive horizontal branching; and
(4) Recommendations to remedy structural problems where required.
iii. Evaluation of the health of each tree as follows:
(1) Evidence of disease, such as slime flux, heart rot, crown rot, armillaria root fungus, exfoliation, leaf scorch, and exudations;
(2) Identification of insect pests, such as galls, twig girdler, borers, termites, pit scale, and plant parasites;
(3) Evaluation of vigor, such as new tip growth, leaf color, abnormal bark, deadwood, and thinning of crown;
(4) Health rating based on the archetype tree of the same species; and
(5) Recommendations to improve tree health, such as insect or disease control, pruning, and fertilization.
iv. Evaluation of the applicant's proposal as it impacts each tree shown on the site plan, including suggested mitigating and/or future maintenance measures where required and the anticipated effectiveness thereof.
3. In addition to the above facts, at least one of the following findings apply:
a. That the removal or relocation of the oak trees proposed is necessary as continued existence at present locations frustrates the planned improvement or proposed use of the subject property to such an extent that:
i. Alternative development plans cannot achieve the same permitted density or that the cost of such alternative would be prohibitive, or
ii. Placement of such oak trees precludes the reasonable and efficient use of such property for a use otherwise authorized;

The purpose of the LA County Oak Ordinance is to protect its oak resource, not to find a way to allow its destruction. The above requirements were not followed by the project proponent. While it is very difficult to find (it is buried in an appendix to the biota appendix C report with no page numbers and the required details are in yet another appendix (appendix A of the Protected Tree report) to the report without page numbers), protected tree report was provided, the report does not contain all the data required by the ordinance. The maps provided are aerials and tree numbers are so small as to be unreadable, thus making it impossible to provide suggestions as to possible alternative project configurations to save them or determine whether the number declared in poor health and slated for removal might be merely trees which the development requires to be removed anyway. There are no photographs of trees claimed to be in poor health to verify their status as in previous reports, no evaluation of vigor as required by item 3 above, (even a fire damaged oak, can and often does come back), and no recommendations to improve tree health (Item 5). There is no alternative analysis to show why this is the only project configuration that will provide the requested density (Item i) or why the oak tree placement precludes the reasonable use of this project. In fact, the previously proposed 2009 project approved for this area would have done just that, but it is not included as an alternative.
I also note (and will repeat under the GHG section), that DEIR includes a provision that allows the applicant to forgo undetermined percentages of the planting and seven-year monitoring of 772 native replacement trees if the applicant contends that there is insufficient

O27-4 Cont.

O27-5

O27-6

O27-7

Comment Letter O27

suitable area onsite to accommodate the trees. This does not conform to the requirement of the County Oak Ordinance. Instead, the applicant would pay into the County's oak tree mitigation fund. That County fund mitigation option is inadequately defined to permit adequate monitoring compliance, and it is deferred. Deferred mitigation is not allowed under the California Environmental Quality Act.

O27-7 Cont.

The DEIR includes no analysis of how, and in what measure, the County oak tree mitigation fund biologically mitigates for the loss of SEA protected trees. This is a DEIR deficiency.

There is no provision in the County Oak Ordinance to allow for the counting of existing sapling protected trees in the open space areas towards the mitigation requirement of planting 772 trees as proposed in the DEIR. Those are existing sapling trees and merely counting and mapping them does not help mitigate the loss of mature trees.

O27-8

Inadequate Discussion of the effect of oak destruction on Greenhouse gases

First, the DEIR states that for purposes of existing conditions for GHG emissions, it considers the scientific basis of GHG emissions and climate change with a global consideration. This is inappropriate because this project is located in an defined air basin and in a valley where air pollution accumulates and backs up against a mountain range, thus creating severe health effects for local residents. Therefore, a global consideration minimizes and precludes any relevant effects peculiar to this region. The report also relies on a 2018 report for discussion of temperature increase, now substantially outdated and understated. According to an ongoing temperature analysis led by scientists at NASA's Goddard Institute for Space Studies (GISS), the average global temperature on Earth has increased by at least 1.1° Celsius (1.9° Fahrenheit) since 1880. The majority of the warming has occurred since 1975, at a rate of roughly 0.15 to 0.20°C per decade. This understatement matters because it substantially minimizes the ongoing threat of increasing GHG gases and the temperature increases they cause, thus inaccurately minimizing the need for reduction and mitigation.

O27-9

The 2008 California Air Resources Board's AB 32 Scoping Plan recognized the significant contribution that terrestrial greenhouse gas storage will make in meeting the state's GHG emissions reduction goals: "This plan also acknowledges the important role of terrestrial sequestration in our forests, rangelands, wetlands, and other land resources." When these natural resources are impacted due to land use change, potentially five GHGs are directly or indirectly released into the atmosphere. Review of the DEIR finds that the project fails to comprehensively analyze or feasibly and proportionally mitigate terrestrial conversion vegetation and soil organic carbon direct/indirect GHG emissions pursuant to CEQA requirements. Specifically, the failure to fully account for the foreseeable carbon dioxide (CO2), methane (CH4), nitrous oxide (N O), black carbon and hydrofluorocarbon emission effects due to biomass disposal decomposition, combustion and transportation, and the soil CO emissions associated with ground disturbing activities. These DEIR omissions represent a failure to proceed in the manner prescribed by CEQA.

O27-10

While the DEIR does make an attempt to quantify the CO2 gases generated by the loss of trees proposed for removal (see table 4.8-7) it appears to underestimate the CO2 emissions, (an oak tree can sequester 10,994 CO2 equivalent over its lifespan), it neglects to quantify the other GHG gases generated by this tree destruction. CEQA § 15364.5 states that "Greenhouse gas" or "greenhouse gases" includes but is not limited to: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. In 2016 Senate Bill 1383 designated methane, black carbon and hydrofluorocarbon short-lived climate pollutants. Upon the disposal of impacted vegetation, the decomposition of biomass does in all cases result in CO2 and CH4 biogenic emissions and the combustion of biomass does in all cases result in

O27-11

O27-12

Comment Letter O27

CO2, CH4, N O and black carbon biogenic emissions. CEQA doesn't differentiate between anthropogenic and biogenic GHG emissions. O27-12 Cont.

• Please provide the following project information: What GWP values did the DEIR use for calculating CH4, NO, black carbon and hydrofluorocarbon emissions? O27-13

The DEIR claims that the loss of these oaks will be mitigated by replanting. However, the DEIR includes a provision that allows the applicant to forgo undetermined percentages of the planting and seven-year monitoring of 772 native trees if the applicant contends that there is insufficient suitable area onsite to accommodate the trees. Instead, the applicant would pay into the County's oak tree mitigation fund. That County fund mitigation option is inadequately defined to permit adequate monitoring compliance, and it is deferred. Thus, the carbon sequestered by replanted trees is inaccurate, since trees may not be replanted at all. It should be noted that such deferred mitigation is not allowed under the California Environmental Quality Act. O27-14

Alternatives

As required by the County Oak Ordinance and CEQA, a reduced footprint alternative, with greatly reduced habitat and native tree loss should be provided. Such an option was already requested by the CA Dept. of Fish and Wildlife in its NOP letter dated July 12th, 2022 (page14). This information was not provided even though it is obviously feasible, since the previous 2009 DR Horton project (Vesting Tentative Tract Map No. 53653, available in the County records) proposed exactly such a reduced footprint. O27-15

Conclusion

I am grateful to the Planning Department for extending the comment period as it is difficult to provide comments over the holidays. It is also imperative that the County include analysis from the recent horrific Eaten and Palisades fires in the Los Angeles County area to make sure they can protect future residents, especially seniors, in this Very High Fire Severity Area if development is approved. O27-16

I believe that this project will remove far in excess of the number of protected trees that is allowed under the County Oak and SEA ordinances. I believe a redesign of this project is warranted and should be required. We cannot afford to lose any more of these important native trees. O27-17

Very Truly Yours,
Cynthia Neal-Harris,
(661) 547 5378
Past -President SCV Oak Converency

Response to Comment Letter O27

ESCV Oak Conservancy
Cynthia Neal-Harris, Past President
March 7, 2025

027-1 This is an introductory comment that summarizes the Project Description and does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

027-2 This comment is accurate. As stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR, there are 849 trees on the Project site, of which 664 are Significant Ecological Area (SEA)-Protected Trees. The SEA Protected Trees include southern California black walnut, Fremont cottonwood, coast live oak, scrub oak, valley oak, red willow, arroyo willow, and blue elderberry. This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

027-3 This comment accurately summarizes tree impacts as identified in the Draft EIR. Impacts to SEA resources, including oak woodland, grassland, and other vegetation communities, are addressed in Section 4.4, Biological Resources, of the Draft EIR. As stated on pages 4.4-58 and 4.4-59 of the Draft EIR, the Project's On-Site Conservation Area preserves 144.43 acres of natural open space, representing approximately 62% of the Project site. In addition, the Project's off-site land/habitat preservation program within the Santa Susana Mountains/Simi Hills SEA (the "Off-Site Conservation Area") results in the permanent preservation of an additional 465.39 acres of category 1-4 SEA vegetation resource communities, including 27.47 acres of oak woodland riparian habitat and 54.91 acres of non-riparian oak woodland habitat. As a result, the Project preserves SEA resources at a significantly higher impact-to-preservation ratio than is required by the SEA ordinance and implementing guidelines. Across all SEA vegetation resource categories (excluding developed areas), the Project preserves 560.20 acres in excess of the requirements of the SEA ordinance and implementing guidelines. In total, considering both the On-site Conservation Area and Off-Site Conservation Area, the Project results in the preservation of 611.13 acres of natural open space (excludes developed areas) containing sensitive SEA resources.

027-4 The Significant Ecological Area Protected Tree Report, included in Appendix C, Biota Report, of the Draft EIR, provides the methodology for the tree survey and assessment, which includes using the Guide for Plant Appraisal, published by the International Society of Arboriculture, and in accordance with guidance given in the County's SEA Ordinance. Further, as explained on 4.11-65 and 4.11-66 of the Draft EIR, although oak trees are proposed for removal, the Project is not contrary to the intent and purpose of the Los Angeles County Oak Tree Ordinance because the majority of the remaining oak trees would be preserved and dedicated in open space areas and the Project includes mitigation to require replacement oak tree plantings and maintenance. Per MM-4.4-16, SEA Protected Tree Replacement/Compensation, of the 772 required replacement trees, 574 must be oak trees. Per MM-4.4-16, the replacement trees must be nurtured and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. Therefore, as specifically analyzed in Threshold 4.4f of Section 4.4, Biological Resources, of the Draft EIR, the Draft EIR includes an analysis of oak resources that is consistent with the Los Angeles County Oak Tree Ordinance (Los Angeles County Code, Title 22, Ch. 22.174).

027-5 Appendix A, Tree Location Exhibit, of Appendix C, Significant Ecological Area Protected Tree Report, of Appendix C, Biota Report, of the Draft EIR, provides 19 sheets that show the location of the trees. Those maps allow the reader to obtain the tree identification number. The document has been provided in PDF format, which can be zoomed to enlarge the content to any degree that the viewer requires. Appendix D, Tree Information Matrix, of the Significant Ecological Area Protected Tree Report provides a table that can be used to identify the conditions and characteristics of all oaks that meet the protected tree size requirement. Appendix E, Tree Impact Mapbook, of the Significant Ecological Area Protected Tree Report provides 19 sheets that illustrate the canopy of each of the mapped trees with the Project impact footprint. The Significant Ecological Area Protected Tree Report provides the methodology for the tree survey and assessment, which includes using the Guide for Plant Appraisal, published by the International Society of Arboriculture, and in accordance with guidance given in the County's SEA Ordinance. As discussed on page 10 in Section 3.1, Tree Inventory, of the Significant Ecological Area Protected Tree Report, an evaluation of vigor is included in the evaluation of tree health, pursuant to the Council of Tree and Landscape Appraisers' Guide for Plant Appraisal. Appendix F, Tree Protection Measures, of the Significant Ecological Area Protected Tree Report provides measures to improve the conditions for the remaining trees on the Project site. As such, the Draft EIR includes an analysis of oak resources that is consistent with the Los Angeles County Oak Tree Ordinance (Los Angeles County Code, Title 22, Ch. 22.174).

027-6 Chapter 6, Alternatives, of the Draft EIR evaluates a full range of alternatives, including Alternative C, Reduced Footprint Alternative, which presents a 67% reduction in the development footprint when compared to the Project. This analysis is provided on pages 6-56 through 6-72 in Chapter 6, Alternatives, of the Draft EIR. This alternative would cluster development closer to The Old Road and includes avoidance of most riparian habitat and non-riparian streams, and substantial avoidance of other biological resources, including native habitats, protected trees, oak woodlands, special-status plants, and rare plants. As stated on page 6-75 of the Draft EIR, Alternative C would be the environmentally superior alternative. A comparison to the previously approved project was not conducted, nor is it required. Refer to Section 6.4.3, Previously Approved Project-Lyons Canyon Ranch Project, in Chapter 6, Alternatives of the Draft EIR for an overview of why this project was not considered as an alternative to the proposed Project.

027-7 Regarding replacement trees, as shown in Figure 3-7, Landscape Plan, of the Draft EIR, the replacement SEA protected trees are proposed to be planted in the Onsite Conservation Area, which excludes any areas of the Project site that are impacted by development, including exclusion of fuel modification areas. As stated in MM-4.4-2, Habitat Mitigation and Monitoring Plan, those plantings in the Onsite Conservation Area are required as part of the establishment of 15.20 acres *Quercus agrifolia* forest and woodland alliance in areas that are currently non-native *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands. If it is found during the implementation of MM-4.4-2 that the 772 replacement trees needed exceeds the carrying capacity of the proposed establishment area, then the Protected Tree Fund would be used. The Protected Tree Fund is codified in County Ordinance 22.102.070, Protected Tree Permit, which includes defined uses of the funds for offsetting the loss of protected trees, therefore mitigating those losses. Furthermore, CEQA Guidelines Section 15126.4 does not allow for deferred action as suggested by the comment. Instead, as demonstrated in the Draft EIR, MM-4.4-2 outlines specific performance standards that the mitigation measure will achieve. The County's Protected Tree Fund is codified in Section 22.102.070(F)(5) of the County Code as a viable option for mitigation for the replacement of impacted trees. As stated therein, the Project Applicant

would need to calculate the resource value of each removed tree using an industry standard (i.e., the International Society of Arboriculture's "Guide for Plant Appraisal"). Section 22.102.070(F)(5)(a) of the County Code then provides a list of purposes for which the funds can be used, at the County's discretion. The options listed provide for replacement, maintenance, and preservation of native trees, or educating the public on protection for native trees. As such, the Protected Tree Fund does not defer mitigation but provides distinct options that provide adequate mitigation for the trees impacted by the Project. MM-4.4-16, SEA Protected Trees Replacement/Compensation, of the Draft EIR states that the payment into the County's Protected Tree Fund is only to be used as a "last resort" should there not be enough locations within the Conservation Area (on-site and off-site), or Project landscaped areas for planting replacement trees (see page 4.4-94 in Section 4.4, Biological Resources of the Draft EIR).

027-8 As stated on pages 21 and 22 in Chapter 3, SEA Protected Trees, of the SEA Ordinance Implementation Guide, "Removal of any SEA Protected Tree will require mitigation in the form of two replacement plantings and should be planted in an area of the Project site where there is suitable habitat and where the trees will be able to remain in perpetuity. Specifically, in accordance with MM-4.4-16, these trees must be nurtured and maintained in a condition of good health and must be monitored for a period of 7 years. If any of these trees fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. Please also see Response to Comment O27-7, above.

027-9 The comment states that the consideration of greenhouse gas (GHG) emissions and climate change in a global context is inappropriate because the project is in a defined air basin. The comment appears to confuse the analysis of GHG emissions with how air pollutants and transport are addressed. Toxic air contaminants are a localized issue, criteria air pollutants are a regional issue, and GHG emissions are a global issue. It is important to note that GHGs are not trapped by regional air basins. This is explained in detail in the Draft EIR, Section 4.3.1, for toxic air contaminants and criteria air pollutants and Section 4.8.1 for GHGs.

027-10 While climate change is an ever-evolving topic of research and discussion, the report cited in Section 4.8.1 of the Draft EIR is from the International Panel on Climate Change, the foremost body on climate change research worldwide. The data presented in the Draft EIR is still relevant. Regardless, the data presented in Draft EIR Section 4.8.1 do not change the significance determination methodology that the County relied upon to determine significance as it is based on statewide goals for GHG emissions reductions.

027-11 In response to this comment regarding soil carbon accumulation, revisions to the Draft EIR have been made to Section 4.8.4, Methodology, and Section 4.8-5 (Tables 4.8-7 through 4.8-9 and accompanying text) of Section 4.8, Greenhouse Gas Emissions, as shown in Chapter 3, Revisions to the Draft EIR, of the Final EIR. The revisions account for variation in soil type for carbon sequestration and a small increase in the number of tree removals assumed in the Draft EIR's CalEEMod analysis for greenhouse gas emissions. As detailed in Chapter 3 of this Final EIR, these revisions would result in a total of 4,113.41 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year including all other operational emission sources from Table 4.8-11 in Section 4.8, Greenhouse Gas Emissions of the Draft EIR. When the revised mitigated annual emissions of 4,113.41 MT CO_2e per year are divided by the Project's service population of 1,795 persons, the Project would have a revised GHG efficiency of 2.29 MT CO_2e/person/year (an increase of 0.01 MT CO_2e/Service Person/year when compared to the Project efficiency detailed Table 4.8-11 of the Draft EIR). However, even after this slight increase, the Project's

mitigated efficiency metric would not exceed the significance threshold of 2.42 MT/SP/yr, and thus, the impact would remain less than significant with mitigation incorporated.[34]

027-12 While it is not known what exactly will be done with the trees once they are removed from the site, per Section 20.87.040(A)(2) of the County Code, 100% of land-clearing debris must be recycled or reused. "Land clearing debris" includes shrubs, trees, and tree trunks (County of Los Angeles 2024). The standard practice for green waste in the County is to chip, compost, or use as alternative daily cover. The trees would not be landfilled as is typical for green waste management in the County. There is a chipping/grinding and composting facility within 20 miles of the Project site. Therefore, the wood waste would be diverted from the landfill and would not result in additional indirect emissions. As the actual end use of the trees was not fully known, it was conservatively assumed that the carbon in the trees would be fully released during construction and removal. This is conservative as there is no additional carbon or emissions associated with any potential disposal of the trees and any type of recycling or reuse would sequester the carbon from the trees into the soil. Any facility that processes the trees would have been permitted separately and those emissions are accounted for at that facility. The transport emissions from hauling the trees was included in the GHG emissions in the Draft EIR, as included in Table 4.3-5, Construction Scenario Assumptions, of Section 4.3, Air Quality (Draft EIR, page 4.3-23).

027-13 The global warming potential used in the Draft EIR is found in Section 4.8.1, page 4.8-3, which is taken from CalEEMod and IPCC Fourth Assessment Report. As detailed in the Draft EIR, the GWP for CH_4 is 25 (so emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the IPCC Fourth Assessment Report. According to CalEEMod Version 2022.1 User Guide, the most common GHGs emitted by land use developments and linear construction projects, which are quantified by CalEEMod, are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), and as such, the other pollutants included in the comment letter are not provided in CalEEMod or in the Draft EIR (CAPCOA 2023).

027-14 MM-4.4-16, SEA Protected Trees Replacement/Compensation, of the Draft EIR states that the payment into the County's Protected Tree Fund is only to be used as a "last resort" should there not be enough locations within the Conservation Area (on-site and off-site), or Project landscaped areas for planting replacement trees (see page 4.4-94 in Section 4.4, Biological Resources of the Draft EIR). As shown in Figure 3-7, Landscape Plan, of the Draft EIR, many SEA Protected trees are proposed to be planted in the On-Site Conservation Area. As stated in MM-4.4-2, Habitat Mitigation and Monitoring Plan, those plantings in the On-Site Conservation Area are required as part of the establishment of 15.20 acres *Quercus agrifolia* forest and woodland alliance in areas that are currently non-native *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands. As stated in MM-4.4-16, the Project is required to plant oak trees within the On-Site Conservation Area. In order to meet the obligations of the two mitigation measure, oaks must be planted on site, so the potential payment into the County's Protected Tree Fund would only be necessary if during the implementation of those two mitigation measures it is determined, with concurrence by the Forester with the Fire Department or County Biologist (per Section

[34] These revisions do not change the impact conclusions in the Draft EIR, nor do they result in any new significant impacts or the need for new or altered mitigation measures. Rather, this information merely clarifies information and conclusions that were already presented in the Draft EIR. As such, these changes would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, do not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

22.102.070[F][5] of the County Code), that the capacity for the site has been reached. As such, it is reasonable to assume for estimation purposes that 772 mitigation trees would be planted.

As noted, the County's Protected Tree Fund is codified in Section 22.102.070(F)(5) of the County Code as a viable option for mitigation for the replacement of impacted trees. As stated therein, the Project Applicant would need to calculate the resource value of each removed tree using an industry standard (i.e., the International Society of Arboriculture's "Guide for Plant Appraisal"). Section 22.102.070(F)(5)(a) of the County Code then provides a list of purposes for which the funds can be used, at the County's discretion. The options listed provide for replacement, maintenance, and preservation of native trees, or the educating the public on protection for native trees. As such, the Protected Tree Fund does not defer mitigation but provides distinct options that provide adequate mitigation for the trees that are potentially impacted by the Project.

027-15 The Draft EIR includes an analysis of Alternative C, Reduced Footprint Alternative, which presents a 67% reduction in the development footprint when compared to the Project. This analysis is provided on pages 6-56 through 6-72 in Chapter 6, Alternatives, of the Draft EIR. Alternative C would cluster development closer to The Old Road and includes avoidance of most riparian habitat and non-riparian streams, and substantial avoidance of other biological resources, including native habitats, protected trees, oak woodlands, special-status plants, and rare plants. However, Alternative C would still result in direct tree impacts to SEA Protected Trees (including heritage trees), and mitigation would still be required to reduce impacts to less than significant. As stated above, although located on the same Project site, the Project is separate and distinct from the previously approved project and certified EIR. A comparison to the previously approved project was not conducted, nor is it required. Refer to Section 6.4.3, previously approved project-Lyons Canyon Ranch Project for an overview of why this project was not considered as an alternative to the proposed Project.

027-16 A detailed discussion of the Eaton and Palisades fires is provided above in Topical Response-1 (please refer to Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires). As stated therein, during both the Eaton and Palisades Fires of January 2025, the wildfires were driven into communities by extreme Santa Ana winds exceeding 80 mph. This rare level of extreme weather combined with other factors, such as home constructed according to outdated building codes and dense urban vegetation, without enforced or prevalent fuel modification, to produce urban conflagrations. The Project's proposed structures would be built utilizing the most current construction methods designed to reduce wildfire exposure and reduce the likelihood for structure fires to spread into offsite areas, including requirements set forth in California Building Code Chapter 7A. According to the Office of the State Fire Marshal, no master-planned community built after the adoption of California Building Code Chapter 7A has experienced significant structural losses. Regarding senior populations, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who will be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents, including residents of the senior housing apartment complex. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to ensure that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program that shall ensure that all seniors who are not able to safely evacuate on their own are accounted for and transported

during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.

027-17 Neither the SEA Ordinance, codified in County Code Chapter 22.102, Significant Ecological Areas, nor the Oak Tree Permit Ordinance, codified in County Code Section 22.174, Oak Tree Permits, restrict the total number of tree removals allowed for a given project. As detailed in Section 4.4, Biological Resources, of the Draft EIR, the Project would result in 318 SEA Protected Tree removals. Per MM-4.4-16, SEA Protected Tres Replacement/Conservation, the 318 SEA Protected Trees would be replaced in accordance with SEA Ordinance requirements, resulting in 772 replacement trees. As stated on page 4.4-93 in Section 4.4 of the Draft EIR, the required replacement trees must be seedlings of the same species being removed and shall be planted within an area where suitable growing conditions are present and where the trees shall be able to remain in perpetuity. The replacement trees must be nurtured and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. As stated on pages 4.4-57 and 4.4-58 of the Draft EIR, MM-4.4-16 adequately addresses requirements and recommendations set forth in the SEA Ordinance and SEA Ordinance Implementation Guide and reduces proposed impacts to SEA Protected Trees to below a level of significance under CEQA. As such, no redesign of the Project is required to further mitigate for proposed tree removals.

Comment Letter 028

CALIFORNIA
NATIVE PLANT SOCIETY

Los Angeles /Santa Monica Mountains Chapter
15811 Leadwell Street
Van Nuys, California 91406-3113

Erica G. Aguirre
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, CA 90012

VIA ELECTRONIC MAIL: *eaguirre@planning.lacounty.gov*
1 SEP March 10, 2025

RE: **LADRP 24-148**
State Clearinghouse #2022060346
Trails at Lyons Canyon DEIR
PRJ 2021-001195-(5)

DEIR COMMENTS

Dear Ms. Aguirre;

California Native Plant Society (CNPS) is a science, policy, and planning based statewide organization that is 60 years in existence. We work closely with governance, academia, planners, developers, and non-profit organizations to encourage sustainable planning, conservation, and horticultural use of California native plants. CNPS employs the most state-of-the art science and design in our work.

028-1

Our engagement throughout the state involves working with districts to promote use of native trees and plants to encourage urban and wildland forest health, water conservation, and ecological connectivity between open space and cities. CNPS has a long and vibrant history working in the Santa Clarita Valley and throughout Los Angeles County, collaborating with communities, groups, and agencies.

O28-1 Cont.

CNPS appreciates the opportunity to share our knowledge as it pertains to this project. We thank Los Angeles County Department of Regional Planning for extending the comment period based on conflicts imposed by the year-end holidays and ensuing wildfires of January.

O28-2

We understand and appreciate the Developer negotiated and redesigned a more compact built environment footprint than originally proposed. This type of design is commensurate with contemporary planning and environmental planning principles for all types of communities regardless of setting type.

O28-3

CNPS has several concerns about this proposed project despite design improvements already made. We encourage your department to consider making adjustments to the design, logistical, and construction elements of this planned community to incorporate into the FEIR.

O28-4

Biota: Avoidance and Surveys

CNPS appreciates the thorough vegetation mapping work done on the property. The maps show the richness of the existing native plant communities, identify the places that are disturbed and have non-native grasses, weeds, and, thus higher fire danger that are more suitable for construction.

O28-5

Over 90% of critical sage scrub habitat has been taken by development over the last 60 years. This vegetation type is essential to wildlife corridor and natural connections that support hundreds of species of flora and fauna. We recommend avoidance instead of mitigation of the

O28-6

sage scrub habitat areas located within the development footprint by realigning structures and roads as much as feasible to retain the existing islands of this plant community.

O28-6 Cont.

CNPS supports the Los Angeles County Oak Ordinance and strongly urge avoidance over mitigation of oaks located within the construction zones. Oaks are scientifically proven to be the best naturally occurring ember catchment mechanism, increase ambient humidity, lower ground and air temperatures, along with supporting over 600 species of plants, insects, and animals.

O28-7

Our gravest concern in reviewing the biota were the years and months selected to conduct biological surveys. Vegetation mapping was conducted in the hottest driest months of the year: September and October. Numerous plant communities were either senescent or had completed their life cycles by those months and so would not be part of data collection.

O28-8

The biological surveys were initiated in rain year 2020-2021. This was the driest year on record since 1924 and the precursor year to the most extreme drought on record in Southern California. For these reasons, we deem all the vegetation surveys, including rare plants as cursory, inadequate, and highly dubious. There is every reason these studies should not have been allowed the years they were done and postponed for completeness and accuracy, especially since The Trails has been proposed for years, many which had normal to high rainfall.

O28-9

<u>Fire Element</u>

The DEIR fails to recognize the following aspects that pertain to this development in the Very High Fire Severity Zone:

- There are no considerations given to protecting and evacuating the two vulnerable populations slated to reside at The Trails – Elderly and low-income. As evidenced in human losses during the recent

O28-10

Eaton and Palisades fires, the majority of deaths were aged, disabled, or otherwise carless individuals.

- Insurability of structures. This project may have no underwriters due to a combination of increased liability, losses, and location of the development.
- Lyons Canyon faces northeast, exactly from where wind driven Santa Ana events hail. The combination of the proposed urbanization of the site and vulnerability due to aspect is a tantamount threat to residents at The Trails.
- The adjacent thoroughfare, the Old Road, is two lane and likely to become immobilized by traffic during an incident requiring large-scale evacuation.
- The fire section of the analyses gives a high confidence level to Los Angeles County's success rate with evacuations. As evidenced during the Eaton incident, wind-driven events can fast overwhelm emergency responders, roads, and efficacy of maneuvers.

O28-10 Cont.

O28-11

O28-12

O28-13

O28-14

Grading

Our analyses find the grading for the more compact project design to be excessive and harmful to biota and the environment. The 2.845 million cubic yards that will be cut and filled at the site will encroach on and permanently alter canyons, hillsides, natural plant communities, and the numerous ephemeral drainages in the area.

Having a working familiarity of Lyons Canyon, the adjacent mountain and parkland regions, there are opportunities on this property for avoidance of harm to existing hillside natural communities. Development here is more suitable for the ruderal lowland areas. Benefits to developers of avoiding these special places on the parcel include less construction and maintenance costs, value-added features to marketing by retaining natural features instead of full buildout and urbanization of the footprint while retaining the negotiated building of 510 units.

O28-15

Hydrology

The north aspect of the Santa Susana Mountains, where Lyons Canyon is located, serves as one of the important sub-watersheds to the Santa Clara River. The many ephemeral streams in the canyon support hundreds of species of trees, plants, invertebrates, fungi, birds, and animals. This area is a matrix of numerous native habitat types that are old growth, with relative higher humidity due to the north-facing aspect and dense hydrated vegetation. 028-16

The project proposes to underground or engineer all these water features. There is no history of flooding in the area. The combination of engineering the existing hydrogeology and large scale vegetation removal associated with what we consider to be excessive and unnecessary alteration of the canyon by grading will markedly alter local humidity rates in the canyon, thereby increasing ambient temperatures and fire risk. 028-17

Retention and incorporation of the streams will support both the local ecosystem, increase marketability and social benefits of the Trails community. 028-18

Thank you for your attention to and consideration of our comments. 028-19

Sincerely,

Joseph Farewell

Joseph Farewell, Conservation Co-Chair
Los Angeles/Santa Monica Mountains Chapter (LA/SMM)
California Native Plant Society (CNPS)

Cc: Nick Jenson, Statewide Conservation Director - CNPS
Bill Neill, President - LA/SMM CNPS
Brendan Wilce, Conservation Program Coordinator - CNPS

INTENTIONALLY LEFT BLANK

Response to Comment Letter O28

California Native Plant Society, Los Angeles/Santa Monica Mountains Chapter
Joseph Farewell, Conservation Co-Chair
March 10, 2025

028-1 This introductory comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

028-2 As suggested by this comment, the Draft EIR formal public review period was extended for an additional 31 days (for a total of 91 days) to March 10, 2025. This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

028-3 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

028-4 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. The commenter's specific concerns are addressed below in responses to O28-5 through O28-19.

028-5 This commenter expresses support for the thorough vegetation mapping work done for the Project. This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

028-6 As detailed in Table 4.4-13, Impacts to Vegetation Communities on the Project Site and Off-Site, of Section 4.4, Biological Resources, of the Draft EIR, the Project would impact 4.89 acres of vegetation communities associated with sage scrub (*Artemisia californica–Salvia leucophylla* Shrubland and *Eriogonum fasciculatum* Shrubland) and preserve/avoid impacts to 38.67 acres of the habitat through implementation of MM-4.4-1, On-Site Habitat Preservation (Draft EIR, page 4.4-69). As such, consistent with the commenter's suggestion, more than 85% of the existing sage scrub habitat is avoided. Additionally, as implemented through MM-4.4-9, Off-Site Habitat Preservation (Draft EIR, page 4.4-81), the Project would require conservation of 4.62 acres of vegetation communities associated with sage scrub. The Alternatives section of the Draft EIR (Draft EIR, page 6-57) did consider an alternative that minimized impacts to sensitive biological resources on the Project site to the extent feasible, including native habitats, protected trees, oak woodlands, and rare plants. As shown in Table 6-2 (Draft EIR, page 6-33), Alternative C – Reduced Footprint Alternative would have a development footprint of 28.0 acres (approximately 27.7% of the Project footprint). However, in order to minimize impacts to the protected trees, oak woodlands, and rare plants, approximately 2.85 acres of coastal sage scrub (California buckwheat scrub and Palmer's goldenbush scrub) would still be impacted under this alternative (a reduction of 2.04 acres when compared to the Project).

028-7 As detailed in Table 4.4-7, Summary of SEA Protected Trees for the Study Area (Draft EIR, page 4.4-28), Table 4.4-16, Summary of Impacts to SEA Protected Trees (Non-Heritage) (Draft EIR, page 4.4-57), and Table 4.4-17, Summary of Impacts to SEA Heritage Trees (Draft EIR, page 4.4-58), 545 oaks were recorded on-site and 219 oaks would be removed, leaving 326 oaks remaining on the Project site. Additionally, as shown in Figure 3-7, Landscape Plan, of the Draft EIR, the replacement SEA protected trees are proposed to be planted in the Onsite Conservation Area, which excludes any areas of the

Project site that are impacted by development, including exclusion of fuel modification areas. As stated in MM-4.4-2, Habitat Mitigation and Monitoring Plan (Draft EIR, page 4.4-71), those plantings in the Onsite Conservation Area are required as part of the establishment of 15.20 acres *Quercus agrifolia* forest and woodland alliance in areas that are currently non-native *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands. Additionally, MM-4.4-9, Off-Site Habitat Preservation (Draft EIR, page 4.4-81), would require the preservation of approximately 467 acres of natural open space, which includes at least 50 acres of *Quercus agrifolia* woodland and forest.

028-8 Table 4.4-1, Vegetation Communities and Land Covers on the Project Site and Off-Site Fuel Modification Zones (Draft EIR, page 4.4-3), details the vegetation communities on the Project site. Due to vegetation characteristics, such as shrub and tree components, or evidence of plants throughout different plant stages, including remnant evidence of dead plants such as upland mustard and grasses, the analyses accurately surveyed vegetation at the Project site. Therefore, the surveys accurately describe the baseline environmental conditions, regardless of the season conducted.

028-9 As shown in Table 2, Summary of Biological Surveys for the Project, in Appendix C, Biota Report, of the Draft EIR, rare plant surveys were also conducted in the spring of 2022 following an average rain year. See also Response to Comment 028-8, above.

028-10 Regarding occupants of the senior affordable housing units, please refer to Section 2.4.3.2, Fire Safety Requirements (header of Evacuation of Senior Populations) in Topical Response-1, above. As stated therein, the Project does not propose or include a nursing home, residential care facility for the elderly, assisting living facility, board and care facility, or other living accommodations where there may be cognitive or physical limitations that could impede mobility. It is expected that occupants of the senior affordable housing units would evacuate similarly to all others within the Project site, where there likely will be seniors living in the Project's market rate units.

As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page 4.20-62 in Section 4.20, Wildfire, of the Draft EIR, the Project's HOA will provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation, including for those who are seniors, have cognitive or physical limitations that could impede mobility, or otherwise carless individuals. Occupants will be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who will be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents, including residents of the senior housing apartment complex. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to ensure that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program that shall ensure that all seniors who are not

able to safely evacuate on their own are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.[35]

028-11 Regarding insurability, State CEQA Guidelines Section 15064(e) states "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Thus, the relative insurability of structures is not within the scope of required environmental analysis pursuant to CEQA.

028-12 Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including topography and wind conditions (see Section 4.20.1, Existing Conditions, beginning on page 4.20-3 of the Draft EIR). As stated on page 4.20-35 of the Draft EIR, the most common type of fire anticipated in the vicinity of the Project site is a wind-driven fire from the east/south/southeast, moving through the chaparral and sage scrub on the adjacent lands. The BehavePlus fire modeling system was used to analyze the Project site's fire behavior pre- and post-development. The program simulates rate of fire spread, spotting distance, scorch height, tree mortality, fuel moisture, wind adjustment factor, and other variables. As stated on page 4.20-35 of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones (FMZs) on and off site and would not exacerbate the fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 above and required through MM-4.20-2, Alternative Materials and Methods, and MM-4.20-3, Annual Fuel Modification Zone Inspection, as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, Wildfire Education Program, would reduce potential impacts related to wildfire spread to less than significant.

028-13 Regarding evacuation in the event of a wildfire, please refer to the response provided above in Topical Response-1. As discussed therein, the County would coordinate a centralized emergency operation in the event of an emergency/disaster. To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to residents.

A Project-specific Wildfire Evacuation Plan (WEP) (see Appendix M-2 of the Draft EIR) was prepared to evaluate the Project's consistency with relevant emergency evacuation plans and emergency response plans, disclose the prevention and minimization regulations and measures applicable to the Project, and determine evacuation times for the existing and post-Project conditions, as well as provide emergency preparedness information and resources to increase occupant preparedness and facilitate efficient evacuation in the event of an emergency. As discussed in Section 5.2.1, Evacuation Modeling Substantiation of Methodology of Topical Repsone-1, the modeling considered the number of lanes and available capacity of the Old Road in the estimated evacuation times provided in the WEP. There is no evacuation timeframe threshold that projects must meet in order to avoid an impact under CEQA or to be consistent with codes, regulations or policies. Further, safety, not time, is the top priority when conducting evacuations, and increases in evacuation time do not necessarily generate a greater safety risk. A large-scale evacuation may take several hours or more and require moving people long distances to designated areas. Cited studies show that successful evacuations can be safely executed over 30

[35] These revisions do not change the impact analysis or conclusions in the Draft EIR. As such, these changes would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, do not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

minutes or 10 hours. Emergency personnel who issue evacuation orders can consider the additional time needed to implement an evacuation when determining when and where to issue evacuation orders. Risk to nearby development, including the Project or existing communities, is assessed on a regular basis in a wildfire event. Hours or days of lead time may be available to assess risk and make evacuation determinations. Moreover, drifting smoke, awareness of the risk, road closures, or other factors result in people avoiding the area in a fire event.

In short, a variety of factors may make a longer evacuation perfectly safe. That is why a multifaceted approach to fire-resilient development is required and is incorporated into the Project. The Project's fire-resistant design features include ignition resistant construction methods, hardened structures and corridors, including a perimeter fire access lane, fuel modification zones, roadside fuel modification, and sufficient fire flow for firefighting efforts.

028-14 Please refer to Response to Comment 028-13 regarding emergency evacuations. A discussion of recent wildfires is provided above in Topical Response-1 (Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires). As stated therein, during the Eaton fire of January 2025, the wildfire was driven into communities by extreme Santa Ana winds exceeding 80 mph. This rare level of extreme weather, with other contributing factors, such as outdated, fire-prone home construction and dense urban vegetation without enforced or prevalent fuel modification, combined to produce the urban conflagrations experienced in the Eaton and Palisades fires of January 2025. The Project's proposed structures would be built utilizing the most current construction methods designed to reduce wildfire exposure and reduce the likelihood for structure fires to spread into offsite areas, including requirements set forth in California Building Code Chapter 7A. According to the Office of the State Fire Marshal, no master-planned community built after the adoption of California Building Code Chapter 7A has experienced significant structural losses. The Project would also require highly maintained, irrigated vegetative landscaping between homes and perimeter Fuel Modification Zones to keep an active flaming front at great distances from structures and support defensibility for the existing fire environment. Therefore, modern code-compliant master-planned communities, such as the Project, provide a baseline level of high wildfire safety when designed to modern fire code requirements.

028-15 As discussed on page 3-19 of Chapter 3, Project Description, of the Draft EIR, the total Project earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site parcel adjacent to The Old Road that would be constructed with manufactured slopes. The grading would balance onsite, and as such, no import or export of soils would be required for the Project. The Project would be required to comply with the standards set forth in Appendix J, Grading of the LACBC, which are applicable to grading, excavation, and earthwork construction, including fills and embankments, and the control of runoff from graded sites, including erosion sediments and construction-related pollutants. The Project would also be subject to a Conditional Use Permit (RPPL2021003113) for grading exceeding 100,000 cubic yards in an A-2 zone.

The analysis provided in Section 4.7, Geology and Soils, of the Draft EIR supports the determination that there would be no significant geology and soils impacts associated with the Project's earth movement. As discussed on page 4.7-14 of the Draft EIR, prior to issuance of a grading or building permit, the Project Applicant would be required to submit a final design-level geotechnical report. The report would be submitted to Los Angeles County Public Works (Public Works) for review and approval. Prior to filing the Final Map, the Applicant would be required to comply with any conditions contained within Public Works' issuance of a Geology and Soils Report Approval Letter for the Project, made in

response to the final design-level geotechnical report, and as it may be subsequently amended or modified by Public Works' Geotechnical Materials Engineering Division (GMED). The final geotechnical report, which is also required by the California Building Code, would be based on the final Project design and would require final approval by the GMED prior to issuance of a grading permit.

Project impacts to sensitive vegetation communities, are addressed in Section 4.4, Biological Resources, of the Draft EIR. Table 4.4-13 on page 4.4-51 of the Draft EIR summarizes the Project's on-site and off-site direct impacts to vegetation communities and land covers. As stated on page 4.4-50 of the Draft EIR, with implementation of MM-4.4-1, On-Site Habitat Preservation, the remaining vegetation communities on the Project site outside of the Project footprint, within the On-Site Conservation Area, would be preserved in perpetuity. MM-4.4-9, Off-Site Habitat Preservation, would provide preservation of communities with comparable ecological value within the same Significant Ecological Area in off-site parcels that would be conserved in perpetuity via a conservation easement. MM-4.4-2, Habitat Mitigation and Monitoring Plan, would be implemented to restore and enhance these preserved vegetation communities. As such, MM-4.4-1, MM-4.4-2, and MM-4.4-9 would provide sufficient preservation to comply with the SEA Ordinance, and direct impacts to sensitive vegetation communities would be reduced to less than significant under CEQA. Furthermore, with implementation of MM-4.4-4, Biological Monitoring, MM-4.4-5, Demarcation of Disturbance Limits, and MM-4.4-6, Invasive Species Prevention, inadvertent direct impacts to sensitive vegetation communities would be reduced to less than significant.

Ephemeral drainages, as discussed under Threshold 4.4c in Section 4.4, Biological Resources, of the Draft EIR, MM-4.4-14, Jurisdictional Waters Compensation, would require off-site compensation to offset the loss of on-site jurisdictional waters (including ephemeral drainages) that are obtained by the implementation of MM-4.4-1 and MM-4.4-9. MM-4.4-1 would demonstrate recordation of an on-site conservation easement for the Conservation Area, which would result in preservation of the remaining on-site jurisdictional waters. MM-4.4-3, Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation, would provide a program to collect, propagate, and disseminate these species into the Conservation Area. MM-4.4-9 may provide additional preservation of jurisdictional waters in off-site parcels. MM-4.4-4 would provide monitoring to avoid any inadvertent impacts to potential jurisdictional waters and the implementation of mitigation measures. MM-4.4-5, Demarcation of Disturbance Limits, would delineate the Project footprint to help avoid any inadvertent impacts to jurisdictional waters and to confine impacts to the approved limits of construction. MM-4.4-6 and MM-4.4-7, Landscaping Plan, would avoid and minimize the introduction of non-native plant species to jurisdictional waters. Implementation of these required mitigation measures would reduce impacts to jurisdictional waters, including ephemeral drainages, to less than significant.

028-16 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. Regarding the diversity and water content of the vegetation on the Project site, Appendix C, Plant Compendium, and Appendix D, Wildlife Compendium, of Appendix C, Biota Report, of the Draft EIR documents the flora and fauna observed during all of the surveys listed in Table 2, Summary of Biological Surveys for the Project, in the Biota Report.

028-17 Regarding humidity in the canyon, MM-4.4-2, Habitat Mitigation and Monitoring Plan, requires establishment of 15.20 acres coast live oak woodlands in areas currently occupied by upland mustard that are along streams, which would be expected to increase canopy cover in the canyon and thus

increase shade and decrease photo-evaporation in the understory at the Project site. See Section 4.20, Wildfire, of the Draft EIR, for an analysis of fire risk at the Project site.

028-18 Regarding potential impacts to streams, please refer to Response to 028-15, above. Jurisdictional waters include streams and riparian habitat.

CEQA Guidelines Section 15064(e) states that "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Thus, the Draft EIR is not required to consider effects related to marketability or other strictly social benefits. However, this comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

028-19 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.is hereby provided to the Regional Planning Commission for their review and consideration

Comment Letter 029

March 10, 2025

Sent via email

Erica Aguirre, AICP
Principal Planner
Los Angeles County
320 West Temple Street, 13th Floor
Los Angeles, CA 90012
EAguirre@planning.lacounty.gov

Re: Comments on Draft Environmental Impact Report for the Trails at Lyons Canyon Project (SCH 2022060346)

Dear Ms. Aguirre,

On behalf of the Center for Biological Diversity ("Center"), we are submitting comments on the Draft Environmental Impact Report ("DEIR") for the proposed Trails at Lyons Canyon Project ("Project"). After reviewing the DEIR, the Center is concerned that it fails to adequately disclose, assess, and mitigate the Project's impacts to mountain lions and wildlife connectivity, wildfire risk, and vehicles miles travelled. The Center urges the County to recirculate a legally compliant EIR that fully analyzes, discloses, and mitigates all significant impacts and complies with the California Environmental Quality Act ("CEQA"). 029-1

The Center for Biological Diversity is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center and its members have worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in Southern California. 029-2

I. THE DEIR FAILS TO ADEQUATELY DISCLOSE, ASSESS, AND MITIGATE THE PROJECT'S IMPACTS TO MOUNTAIN LIONS AND WILDLIFE CONNECTIVITY

The DEIR fails to adequately assess the Project's impacts to local mountain lions, which are provisionally listed under the California Endangered Species Act ("CESA") (Yap et al., 2019). Mountain lion tracks and scat were detected in the Project area, yet the DEIR minimizes Project impacts, stating that "females of the species are not expected to establish natal dens in the Project site" (DEIR at 4.4-21). However, impacts to the species can occur beyond potential denning locations, which are difficult for even the most experienced experts to find in the field, even if the female is radiocollared. Clearly mountain lions use and move through the area. The Project area is likely within the home range of at least one mountain lion, and individuals who use the area could include dominant males, dispersing young, and/or females denning nearby. Impacts are significant regardless of denning or potential denning activity within the Project 029-3

area. In other words, whether or not a mountain lion den is in or near the Project area does not preclude significant impacts to the species or take of individuals, particularly a CESA candidate species that is known to be present in the Project area and is struggling from severe genetic isolation that is driven by lack of connectivity, vehicle strikes, rodenticide poisoning, disease, and poaching.

029-3 Cont.

The DEIR incorrectly states impacts to mountain lions will be reduced to less than significant, pointing to MM-4.4-1 and MM-4.4-9, which include onsite and offsite conservation easements that would include about 609 acres of habitat within the Significant Ecological Area (SEA). Although this sounds promising, it is unclear if these areas are vulnerable to development in the first place, which puts into question whether such easements would have additive conservation value to actually mitigate the Project's impacts. Also, it is not clear if such mitigation is even possible. There is no indication or proof of agreement with the entity that would hold and manage the easement, nor is there clarity as to how the management of any easements would be funded. The DEIR should include a clear source of funding and establish a minimum endowment of at least $1 million, or whatever minimum the easement holders determine is necessary to manage and protect the land. In addition, the Conservation Management Plan for the easements is improperly deferred.

029-4

The DEIR fails to consider the critical importance of wildlife connectivity for the long-term survival of mountain lions and many other species in the area (See 2021 Center Report, *California Connections: How Wildlife Connectivity Can Fight Extinction and Protect Public Safety* (Yap, Rose, Anderson, et al., 2021) for more information regarding the importance of wildlife connectivity for species survival). The DEIR fails to adequately disclose, assess, and mitigate the Project's impacts to wildlife connectivity. The DEIR fails to mention that the Project area is located immediately north of an area that has been identified by the California Department of Fish and Wildlife ("CDFW") as a "Priority Barrier to Habitat Connectivity" (CDFW, 2022). The DEIR also fails to mention that the Project area is located immediately south of a wildlife crossing, which is an underpass under I-5 where Lyons Creek flows. Although near a major freeway and development to the north, the creek and the undercrossing provide important connectivity for wildlife moving through the area. The Project area would develop land directly south of the crossing and channelize portions of the stream, which will further degrade live-in and move-through habitat for countless species, including mountain lions.

029-5

029-6

Protecting and restoring connectivity within the Transverse Range is crucial for local mountain lions to avoid extinction. The Project would remove mountain lion habitat and extend and fortify a movement barrier in an area where connectivity is already tenuous. Development in the area will further degrade any future connectivity restoration work at this priority barrier. The Project could push the local mountain lions further toward extinction.

029-7

In addition to establishing funded and adaptively managed conservation easements within the SEA where lands are vulnerable to development, mitigation should include the construction of at least one wildlife crossing that facilitates wildlife movement across I-5. Crossing placement and construction should be coordinated with National Park Service biologists, CDFW, the California Department of Transportation ("Caltrans"), and other local stakeholders. As currently

029-8

written, the DEIR fails to mitigate impacts to wildlife connectivity, mountain lions, and other sensitive species to less than significant and fails to comply with CEQA. 029-8 Cont.

II. THE DEIR FAILS TO ADEQUATELY DISCLOSE, ASSESS, AND MITIGATE THE PROJECT'S IMPACTS TO WILDFIRE RISK 029-9

Since 2015 California wildfires killed more than 230 people and destroyed more than 75,000 structures in the wildland urban interface ("WUI"), where homes extend into the natural landscape. Hundreds of thousands have had to evacuate their homes and endure power outages. Millions have been exposed to unhealthy levels of smoke and toxic air pollution. Meanwhile costs for fire suppression, loss of life, medical expenses, property damage, and indirect economic losses are in the hundreds of billions of dollars.

Most recently, on January 7, 2025 the world watched Los Angeles go up in flames. In a matter of 16 days, fires killed at least 28 people, destroyed more than 16,000 structures, damaged another 2,000 structures, and burned close to 50,000 acres of shrublands. Post-fire landslides have threatened communities and polluted nearby waters. 029-10

The costs of wildfires are skyrocketing. Researchers found that the 2018 California wildfires, which included the Camp Fire that burned through Paradise and the Woolsey Fire that burned through Ventura and Santa Barbara, resulted in $148.5 billion in losses (Wang et al., 2021). The calculations include direct and indirect costs, including loss of life, property damage, medical expenses, capital losses, and indirect economic losses. Experts estimate the costs of the 2025 Los Angeles fires could be more than $250 billion, though costs could rise as we continue to learn more about the extent of the damage and the long-term impacts of exposure to smoke and toxic air pollutants and contaminated drinking water.

CEQA requires an EIR to identify and analyze a project's significant environmental impacts, including those impacts caused or exacerbated "by bringing development and people into the area affected." (Pub. Resources Code, §§ 21002, 21002.1, subd. (a); CEQA Guidelines, § 15126.2, subd. (a).) The impacts of development in areas prone to wildfire specifically require consideration: "the EIR should evaluate any potentially significant direct, indirect, or cumulative environmental impacts of locating development in areas susceptible to hazardous conditions (e.g., floodplains, coastlines, *wildfire risk areas*), including both short-term and long-term conditions, as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazard areas." (CEQA Guidelines, § 15126.2, subd. (a), emphasis added.) 029-11

In 2018, the State officially recognized that introduction of development in the WUI increases ignition risk. (OPR 2018 Final Statement of Reasons – Update to CEQA Guidelines Checklist]; see also *Clews Land & Livestock, LLC v. City of San Diego* (2017) 19 Cal.App.5th 161, 193 [recognizing potential for significant environment effects when project brings new development to a wildfire prone area].) Moreover, as discussed in a 2021 Center Report, "*Built to Burn: California's Wildlands Developments are Playing with Fire*," policymakers must reckon with California's wildfire history and acknowledge that reckless land-use policies are increasing wildfire risk and putting more people in harm's way (Yap, Rose, Broderick, et al., 2021). 029-12

A California Court of Appeal also recently blocked development over wildfire concerns because the county failed to assess wildfire risk. (See *People ex rel. Bonta v. County of Lake* (2024)105 Cal.App.5th 1222, 1235 [finding that EIR must sufficiently discuss the project's potential adverse effect of human-cause ignitions and analyze in some detail how the project's design or mitigation measures alleviates such risks, and lead agency failed to utilize industry standard modeling tools or appropriate methodologies for its conclusory findings]). 029-13

The DEIR misleadingly states that "expansion of new development (built to increasingly stringent codes) buffers older fire-prone communities" without providing substantial evidence to support such claims. The DEIR points to an analysis that merely models potential wildfire risk of three communities based on the unfounded assumption that expanding the WUI with newer building codes could be protective for older structures. Given that the authors did not assess any communities that actually burned after newer structures were built, their conclusions are pure conjecture. The best way to protect existing communities is to minimize wildfire risk by retrofitting them with science-backed home hardening measures, not expand the WUI and increase ignition risk. 029-14

The science clearly shows that placing any new human presence in high fire-prone areas inevitably increases ignition risk. And while fire-resistant measures can reduce wildfire risk, they cannot make structures or communities fireproof. In an analysis that included more than 40,000 structures exposed to wildfire between 2013 and 2018 in California, many structures deemed "firesafe" were destroyed. And while an analysis conducted in the aftermath of the 2018 Camp Fire showed that new building codes improved home survival, with 38.5% of homes built to code undamaged compared to 11.5% of homes built prior to 2008, 61.5% of the homes built to fire-safety codes were still destroyed (Knapp et al., 2021). In addition, climate change is amplifying extreme weather conditions and wildfire risk (Goss et al., 2020; Swain, 2021; Swain et al., 2018, 2025). Hotter, drier and windier conditions and phenomena called "hydroclimate whiplash"—rapid swings between extremely wet weather and dangerous droughts—make the landscape more conducive to wildfire ignitions and spread (Swain et al., 2025). Such information must be analyzed when assessing wildfire risk in the WUI. The DEIR fails to adequately assess and mitigate the Project's impacts to wildfire risk. 029-15 029-16 029-17

Development in and near high fire-prone areas should be avoided. If unavoidable, mitigation measures should require structures to have ember-resistant vents, fire-resistant roofs, and irrigated defensible space immediately adjacent to structures and around communities. External sprinklers (not internal sprinklers, which are proposed in the DEIR) with an independent water source could reduce structures' flammability. Rooftop solar and clean energy microgrids could reduce fire risk from utilities' infrastructure during extreme weather. In addition, mitigation measures should include equitably retrofitting existing communities near the Project area with similar fire-resilient measures, providing wildfire personal protective equipment (e.g., N95 masks, air purifiers), and shelter-in-place facilities. Education and awareness for workers, new residents, and nearby communities should be provided and include how to reduce ignition risk. Maintenance and enforcement of ignition reduction measures should be funded and implemented in perpetuity. 029-18 029-19 029-20 029-21 029-22

A. Increased development in fire zones magnifies the threat of wildfire and puts more people at risk.

029-23

The Project would bring more development and human activity into fire-prone areas, thereby increasing ignition risk and endangering the lives of new residents and existing communities.

029-24

According to a report from Governor Gavin Newsom's Office, construction of more homes in the wildland-urban interface is one of the main factors that "magnify the wildfire threat and place substantially more people and property at risk than ever before" (Governor Newsom's Strike Force, 2019). Another 2019 study found that housing and human infrastructure in fire-prone wildlands are the main drivers of fire ignitions and structure loss (Syphard et al., 2019). Sprawl developments extending into habitats that are prone to fire have led to more frequent wildfires caused by human ignitions, like power lines, arson, improperly disposed cigarette butts, debris burning, fireworks, campfires, or sparks from cars or equipment (Alexandre, Stewart, Keuler, et al., 2016; Alexandre, Stewart, Mockrin, et al., 2016; Balch et al., 2017; Bistinas et al., 2013; Keeley et al., 1999; Keeley & Fotheringham, 2003; Keeley & Syphard, 2018; Radeloff et al., 2018; Syphard et al., 2007, 2012, 2019).

029-25

Almost all (95-97%) contemporary wildfires in California have been unintentionally caused by people and human infrastructure (Balch et al., 2017; Keeley & Syphard, 2018). For example, the 2017 Thomas Fire, 2017 Tubbs Fire, 2018 Camp Fire, 2018 Woolsey Fire, 2019 Kincade Fire, 2020 Bobcat Fire, 2020 Silverado Fire, and the 2020 Zogg Fire were found to have been caused by electrical transmission lines and electrical equipment. And although many of the 2020 fires were sparked by a lightning storm, the 2020 Apple Fire was caused by sparks from a vehicle, the 2020 El Dorado Fire was caused by pyrotechnics at a gender-reveal celebration, and the 2020 Blue Ridge Fire was likely caused by a house fire. Allowing the dismissal of fire hazard zoning and placing more homes and people in high fire-prone areas would only increase the potential likelihood of these ignition sources, as has been documented in multiple scientific studies (Balch et al., 2017; Bistinas et al., 2013; Keeley et al., 1999; Keeley & Fotheringham, 2003; Keeley & Syphard, 2018; Radeloff et al., 2018; Syphard et al., 2007, 2012, 2019).

B. Increased development in fire zones disrupts natural fire regimes and harms California's ecosystems and wildlife.

029-26

Wildlife and the habitats they rely on have also suffered from the last decade of unprecedented fires in the WUI. Fragmented populations of sensitive species, like mountain lions and steelhead trout, are especially vulnerable to the fires themselves as well as smoke inhalation and air pollution, post-fire landslides, and toxic runoff.

029-27

Wildfire is an important ecological process for many ecosystems. For millennia, Indigenous cultural burning and lightning strikes drove ecosystem-specific fire regimes. But the genocide of Native peoples and the criminalization of fire practices, along with 200 years of reckless land-use planning, have altered historical fire regimes (Steel et al., 2018; Williams et al., 2023). This, in combination with climate change causing more extreme fire weather, longer fire

seasons, and larger areas burned, has made wildfires more destructive to people and wildlife (Turco et al., 2023).

029-27 Cont.

Development in fire zones can disrupt natural fire regimes and lead to a dangerous feedback loop of deadly fires and habitat destruction. Most destruction to human communities from fire has been caused by human-ignited fires in mixed shrubland habitats (Syphard, 2020). Shrublands are adapted to infrequent (every 30 to 150 years or more), large, high-intensity crown fire regimes (Keeley & Fotheringham, 2001). However, if these regimes are disrupted, the habitats become degraded (Keeley, 2005, 2006; Syphard et al., 2018). When fires occur too frequently in shrubland habitats, type conversion occurs and the native shrublands are replaced by non-native grasses and forbs that burn more frequently and more easily, ultimately eliminating native habitats and biodiversity while increasing fire threat over time (Keeley, 2005, 2006; Safford & Van de Water, 2014; Syphard et al., 2009, 2018). This could have serious consequences for special-status species like Santa Ana suckers, mountain yellow-legged frogs, and western pond turtles that rely on native habitats for survival and exist in small, isolated patches due to overdevelopment (Sahagun, 2020). In addition, large-scale landscape changes due to vegetation-type conversion from shifts in natural fire regimes could impact wide-ranging species like mountain lions (Blakey et al., 2022; Jennings, 2018), whose populations are already struggling in much of the state due to lack of connectivity and genetic isolation (Benson et al., 2019; Gustafson et al., 2021).

029-28

029-29

The Project would amplify these harms by increasing unintentional human-driven wildfires that disrupt natural fire regimes, further degrade ecosystems, and threaten California's wildlife.

029-30

C. *Unintentional wildfires caused by poorly sited development cause poor air quality and harms people.*

As discussed in the Center for Biological Diversity's report, *The True Cost of Sprawl: Bad Planning Harms People, Wildlife and the Climate* (Reid-Wainscoat et al., 2024), unintentional wildfires due to human activity and ill-placed developments lead to increased occurrences of poor outdoor and indoor air quality from $PM_{2.5}$ from smoke (*e.g.*, Phuleria et al., 2005), which can have both acute and long-term health effects that disproportionately affect vulnerable populations, like children, the elderly, those with underlying chronic disease, low-income communities, and communities of color. Hospital visits for respiratory symptoms (*e.g.*, asthma, acute bronchitis, pneumonia, or chronic obstructive pulmonary disease) and cardiovascular symptoms (*e.g.*, congestive heart failure, ischemic heart disease, and myocardial infarction) have been shown to increase during and/or after fire events (Delfino et al., 2009; Künzli et al., 2006; Liu et al., 2015; Rappold et al., 2012; Reid, Brauer, et al., 2016; Viswanathan et al., 2006). In addition, epidemiologists recently found that increased exposure to wildfire smoke may also be linked to higher rates of dementia (B. Zhang et al., 2023; Z. Zhang et al., 2023). Researchers estimated that between 2008 and 2018 more than 50,000 premature deaths were caused by California wildfire smoke (Connolly et al., 2024). And wildland firefighters are suffering disproportionately high rates of cancer and other serious diseases, likely due to extreme smoke exposure (Hwang et al., 2023; Johnson & Lam, 2023), as well as mental health issues due to extended fire seasons and working extended shifts away from their families (Ashton et al.,

029-31

2018; Bransford et al., 2018; Del Real & Kang, 2018; Greene, 2018; Gutierrez, 2018; Simon, 2018).

Increases in wildfire also result in higher frequency and toxicity of smoke exposure to communities in the path of and downwind of the fires. This has become evident especially with the 2025 LA wildfires, where toxic air pollution and runoff from burned buildings and urban infrastructure are a growing concern. This can lead to harmful public health impacts due to increased air pollution not only from burned vegetation, but also from burned homes, commercial buildings, cars, etc. Buildings and structures often contain plastic materials, metals, and various stored chemicals that release toxic chemicals when burned, such as pesticides, solvents, paints, and cleaning solutions (Weinhold, 2011). During the 2018 Camp Fire that burned 19,000 structures, the smoke caused dangerously high levels of air pollution in the Sacramento Valley and Bay Area and the California Air Resources Board found that high levels of heavy metals like lead and zinc traveled more than 150 miles (CARB, 2021).

029-31 Cont.

D. More unintentional ignitions due to development in fire zones increases firefighting costs and strain on firefighters.

More development in fire-prone areas will necessitate significant firefighting costs from both state and local authorities. Cal Fire is primarily responsible for addressing wildfires when they occur, and its costs have continued to increase as wildfires in the wildland-urban interface have grown more destructive. The cost of fire suppression in areas managed by the California Department of Forestry and Fire (Cal Fire) has skyrocketed from $114 million in the 2000-2001 fiscal year to close to $3 billion for the 2020-2021 and 2021-2022 fiscal years combined (CalFire 2022). The Legislative Analyst's Office (LAO) reported that CalFire used an estimated $3.3 billion for wildfire protection and suppression in the 2022-2023 fiscal year (LAO 2023). This does not include the cost of lives lost, property damages, or clean up. As noted above, the vast majority of wildfires in California are unintentionally ignited by people in poorly-planned development in high fire prone areas (Balch et al., 2017; Keeley & Syphard, 2018). More development in high fire hazard areas will increase unintentional ignitions and associated fire suppression costs.

029-32

Climate change is increasing extreme weather and fire conditions, which, in combination with poorly planned development, has led to more ignitions and longer fire seasons that are increasing strain on over-burdened firefighters and first responders. According to Captain Michael Feyh of the Sacramento Fire Department, California no longer has a fire season (Simon, 2018); wildfires in California are now year-round because of increased human ignitions in fire-prone areas. Emergency calls to fire departments have tripled since the 1980s (Gutierrez & Cassidy, 2018), and firefighters (and equipment) are being spread thin throughout the state. Firefighters often work 24- to 36-hour shifts for extended periods of time (often weeks at a time), and are being kept away from their homes and families for more and more days out of the year (Ashton et al., 2018; Bransford et al., 2018; Del Real & Kang, 2018; Greene, 2018; Gutierrez, 2018; Simon, 2018). In addition, the firefighting force often must rely on volunteers to battle fires year-round. At its peak, more than 16,000 firefighters from the U.S., Canada, and Mexico, including prison systems, were combatting the 2025 LA wildfires.

029-33

029-34

The extended fire season is taking a toll on the physical, mental, and emotional health of firefighters, as well as the emotional health of their families (Ashton et al., 2018; Del Real & Kang, 2018; Simon, 2018). As mentioned above, wildland firefighters are suffering disproportionately high rates of cancer and other serious diseases, likely due to extreme smoke exposure (Hwang et al., 2023; Johnson & Lam, 2023). In addition, the physical and mental fatigue of endlessly fighting fires and experiencing trauma can lead to exhaustion, which can cause mistakes in life-or-death situations while on duty, and the constant worry and aftermath that family members endure when their loved ones are away working in life-threatening conditions can be harrowing (Ashton et al., 2018). According to psychologist Dr. Nancy Bohl-Penrod, the strain of fighting fires without having sufficient breaks can impact firefighters' interactions with their families, their emotions, and their personalities (Bransford et al., 2018). There have also been reports that suicide rates and substance abuse have increased among firefighters (Cart, 2022; Greene, 2018; Simon, 2018).

029-35

E. Wildfire disproportionately affects low-income and minority communities.

Wildfire impacts disproportionately affect low-income and minority communities. As discussed in the Center's 2021 Built to Burn report (Yap, Rose, Broderick, et al., 2021):

> Past environmental hazards have shown that those in at-risk populations (*e.g.*, low-income, elderly, disabled, non-English-speaking, homeless) often have limited resources for disaster planning and preparedness (Richards, 2019). Vulnerable groups also have fewer resources to have cars to evacuate, buy fire insurance, implement defensible space around their homes, or rebuild, and they have less access to disaster relief during recovery (Davis, 2018; Fothergill & Peak, 2004; Harnett, 2018; Morris, 2019; Richards, 2019).
>
> In addition, emergency services often miss at-risk individuals when disasters happen because of limited capacity or language constraints (Richards, 2019). For example, evacuation warnings are often not conveyed to disadvantaged communities (Davies et al., 2018). In the aftermath of wildfires and other environmental disasters, news stories have repeatedly documented the lack of multilingual evacuation warnings leaving non-English speakers in danger. (Axelrod, 2017; Banse, 2018; Gerety, 2015; Richards, 2019). Survivors are left without resources to cope with the death of loved ones, physical injuries and emotional trauma from the chaos that wildfires have inflicted on their communities.
>
> Health impacts from wildfires, particularly increased air pollution from fine particulates ($PM_{2.5}$) in smoke, also disproportionately affect vulnerable populations, including low-income communities, people of color, children, the elderly and people with pre-existing medical conditions (Delfino et al., 2009; Hutchinson et al., 2018; Jones et al., 2020; Künzli et al., 2006; Reid, Jerrett, et al., 2016).

029-36

Increased $PM_{2.5}$ levels during wildfire events have been associated with increased respiratory and cardiovascular emergency room visits and hospitalizations, which were disproportionately higher for low socioeconomic status communities and people of color (Hutchinson et al., 2018; Jones et al., 2020; Liu et al., 2017; Reid, Jerrett, et al., 2016). Similarly, asthma admissions were found to have increased by 34% due to smoke exposure from the 2003 wildfires in Southern California, with elderly and child age groups being the most affected (Künzli et al., 2006).

Farmworkers, who are majority people of color, often have less access to healthcare due to immigration or economic status. They are more vulnerable to the health impacts of poor air quality due to increased exposure to air pollution as they work. Yet farmworkers often have to continue working while fires burn, and smoke fills the air, or risk not getting paid (Herrera, 2018; Kardas-Nelson et al., 2020; Parshley, 2018).

029-36 Cont.

III. THE DEIR'S TRANSPORTATION SECTION FAILS TO SUFFICIENTLY MITIGATE SIGNIFICANT IMPACTS.

The DEIR concludes that there will be significant and unavoidable impacts from the increased vehicles miles traveled associated with the Project. The DEIR also acknowledges that the pedestrian and bicycle friendly infrastructure that it lists as mitigation measures will only reduce the daily residential VMT "from 20.5 to 19.0 under 2022 Project conditions, which still exceeds the significance threshold of 10.6 VMT per capita. To fully mitigate the remaining VMT impact, the Project would need to implement additional TDM measures to achieve an additional 44% reduction in VMT" (DEIR, 4.17-24).

029-37

Increasing a region's VMTs isn't just bad planning, it also undermines community health. Increased VMT increases emissions of air pollutants such as nitrogen oxides (NO_x), volatile organic compounds (VOCs), carbon monoxide, heavy metals, carbon dioxide and respirable particulate matter ($PM_{2.5}$). Increased VMT also leads to more ozone (O_3) production through the photochemical reactions of NO_x and VOCs emitted by vehicles (Lurmann et al., 2015). Short- and long-term exposure to several of these pollutants has been linked to premature mortality, compromised birth outcomes, heart disease and a host of respiratory illnesses (Mujtaba & Shahzad, 2021).

029-38

Another serious direct impact of increasing the number of cars on roads is automobile crashes, which are the leading cause of death among young people (15 to 19 years old) in the United States.[1] An estimated 42,915 people in the U.S. died in car crashes in 2021 alone and 3.4 million people are injured each year, which costs an estimated $473.2 billion annually as measured by wage and productivity losses, medical expenses, motor-vehicle damage, and employers' uninsured costs (Frumkin et al., 2004; U.S. Department of Transportation, 2022).[2]

029-39

[1] Center for Disease Control and Prevention. "Underlying Cause of Death, 2018-2021." https://wonder.cdc.gov

[2] NSC Injury Facts. "Costs of Motor-Vehicle Injuries." 2021. https://injuryfacts.nsc.org/all-injuries/costs/guide-to-calculating-costs/data-details/

Beyond the direct impacts, increased VMT has long term impacts on commuters. In 2019, the duration of the average daily commute in the United States increased to a new high of 55.2 minutes, and a record 9.8 percent of commuters reported daily commutes of at least 2 hours (Burd et al., 2021). These long commutes reduce time available to spend with family, friends, and community, and reduce opportunities for healthy recreation. The increase in inactivity and isolation can also lead to long-term health complications such as pre-diabetes, diabetes, obesity, asthma, isolation, stress and depression (Ewing et al., 2003; Leyden, 2003). 029-40

CEQA requires that mitigation must include concrete, specific, and enforceable actions. (*California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173 [City's urban decay mitigation measures were inadequate under CEQA to address the impact from the development of a 234-acre regional shopping center on undeveloped agricultural land because the measures did not ensure the city would take concrete, measurable actions].) The County may not defer mitigation measures to a later date unless the EIR provides specific reasons why they cannot be developed now and provides specific performance measures to evaluate their success. (*Preserve Wild Santee v. City of Santee* (2012) 210 CA 4th 260, 281 [mitigation measures that are so undefined that their effectiveness is impossible to determine are legally inadequate].) Unfortunately, the EIR's proposed mitigation fails to meet these standards. 029-41

However, in place of requiring specific mitigation measures, the EIR relies on mitigation measure MM-4.17-2. Transportation Demand Management ("TDM") Program, which will be prepared prior to issuance of a final map recordation for the Project. The EIR does not explain why mitigation for the TDM cannot be developed and adopted now. In its readiness to defer formulating a TDM, the EIR fails to adopt feasible, effective mitigation measures to reduce the Project's transportation impacts. It is the "policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures which will avoid or substantially lessen the significant environmental effects of such projects." (Pub. Res. Code § 21002.) Adoption of feasible mitigation measures would lower the Project's overall transportation impacts and its associated contribution to climate change, bad air quality and overall decreases community health. 029-42

Specifically, investment in public transit should be a priority of the Project. The DEIR acknowledges that "while high frequency transit is present along the I-5 corridor near the Project, there are no transit stops within a half-mile of the Project site that provide access to the high frequency transit service and there are no major transit stops (planned or existing) within a half-mile radius." (DEIR, 4.17-12).

To actually reduce VMT, the Project must invest in enhanced transit. Providing alternatives to single occupancy vehicle travel is essential to building an efficient, sustainable and equitable transportation system. Unfortunately, we have a long way to go if we are going to achieve this vision in the U.S. In 2013, it was reported that of all the U.S. daily commutes to work, 76.4% are of people driving alone (McKenzie, 2015). According to the Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2015, our collective daily transportation in the U.S. constitutes about 27% of the total greenhouse gasses released (U.S. Environmental Protection Agency, 2017) California's annual average emissions associated with passenger vehicles between 2000 and 2020 was approximately 110 million metric tons of CO2e. 029-43

To change these trends, government agencies need to invest in alternative modes of transportation to not only make them cheaper to use, but more efficient than driving. **Best practices for transportation options should include providing free public transit services for future residents and workers; implementing bus only lanes; optimizing bus routes to minimize overlap and ensuring coverage across the city in line with demand; and providing high-frequency, reliable services with regular bus stops for easy access.**

Studies indicate that free public transit services typically result in ridership increase from 20% to 60% in a matter of just a few months (Studenmund and Connor, 1982). Similarly, bus lanes that reduce total transit door-to-door travel times by 5%-15% will increase urban peak ridership 2%-9% (UCLA Institute of Transportation Studies, 2019). Lastly, ensuring accessibility and convenience is essential to increasing ridership. Providing more bus stops decreases the distance residents have to travel to access such services.

029-43 Cont.

It should be a priority of all governments to reduce VMTs with every new project, but instead this proposed sprawl development would steer the region in the opposite direction, eroding community and environmental health to build more single-occupancy vehicle infrastructure.

029-44

IV. CONCLUSION

Thank you for the opportunity to submit comments. The Center urges the County to complete a revised DEIR for public review that provides adequate analyses of the Project's impacts to mountain lions, wildfire risk, air quality, and vehicles miles travelled.

029-45

Please include the Center on your notice list for all future updates to the Plan and do not hesitate to contact the Center with any questions at the email listed below.

029-46

Sincerely,

Tiffany Yap, D.Env/PhD
Senior Scientist
Center for Biological Diversity
tyap@biologicaldiversity.org

J.P. Rose
Senior Attorney
Center for Biological Diversity
jrose@biologicaldiversity.org

References

Alexandre, P. M., Stewart, S. I., Keuler, N. S., Clayton, M. K., Mockrin, M. H., Bar-Massada, A., Syphard, A. D., & Radeloff, V. C. (2016). Factors related to building loss due to wildfires in the conterminous United States. *Ecological Applications*, *26*(7), 2323–2338.

Alexandre, P. M., Stewart, S. I., Mockrin, M. H., Keuler, N. S., Syphard, A. D., Bar-Massada, A., Clayton, M. K., & Radeloff, V. C. (2016). The relative impacts of vegetation, topography and spatial arrangement on building loss to wildfires in case studies of California and Colorado. *Landscape Ecology*, *31*(2), 415–430.

Ashton, A., Lillis, R., & Ramirez, W. (2018, August). 249 nights away at California fires: Firefighter families cope with a 'new normal.' *The Sacramento Bee*.

Axelrod, J. (2017, December). California Wildfires Spark Issues of Bilingual Emergency Communications. *American City and County*.

Balch, J. K., Bradley, B. A., Abatzoglou, J. T., Nagy, R. C., Fusco, E. J., & Mahood, A. L. (2017). Human-started wildfires expand the fire niche across the United States. *Proceedings of the National Academy of Sciences*, *114*(11), 2946–2951.

Banse, T. (2018, April). How Do You Say 'Evacuate' in Tagalog? In a Disaster, English Isn't Always Enough. *Northwest Public Broadcasting*.

Benson, J. F., Mahoney, P. J., Vickers, T. W., Sikich, J. A., Beier, P., Riley, S. P. D., Ernest, H. B., & Boyce, W. M. (2019). Extinction vortex dynamics of top predators isolated by urbanization. *Ecological Applications*, *29*(3), e01868–e01868.

Bistinas, I., Oom, D., Sá, A. C. L., Harrison, S. P., Prentice, I. C., & Pereira, J. M. C. (2013). Relationships between human population density and burned area at continental and global scales. *PLoS ONE*, *8*(12), 1–12.

Blakey, R. V., Sikich, J. A., Blumstein, D. T., & Riley, S. P. D. (2022). Mountain lions avoid burned areas and increase risky behavior after wildfire in a fragmented urban landscape. *Current Biology*, *32*(21), 4762-4768.e5.

Bransford, S., Medina, J., & Del Real, J. A. (2018, July). Firefighters Reflect on a Job Now 'Twice as Violent'. *The New York Times*.

Burd, C., Burrows, M., & McKenzie, B. (2021). *Travel Time to Work in the United States: 2019* (American Community Survey Reports). U.S. Department of Commerce, U.S. Census Bureau.

CARB. (2021). *Camp Fire Air Quality Data Analysis*.

Cart, J. (2022, June 13). Trial by fire: The trauma of fighting California's wildfires. *Cal Matters*. https://calmatters.org/series/california-firefighters-trauma-wildfires/

CDFW. (2022). *Restoring California's Wildlife Connectivity 2022*. California Department of Fish and Wildlife.

Connolly, R., Marlier, M. E., Garcia-Gonzales, D. A., Wilkins, J., Su, J., Bekker, C., Jung, J., Bonilla, E., Burnett, R. T., Zhu, Y., & Jerrett, M. (2024). Mortality attributable to PM 2.5 from wildland fires in California from 2008 to 2018. *Science Advances*, *10*(23), eadl1252. https://doi.org/10.1126/sciadv.adl1252

Davies, I. P., Haugo, R. D., Robertson, J. C., & Levin, P. S. (2018). The unequal vulnerability of communities of color to wildfire. *PLoS ONE*, *13*(11), 1–15.

Davis, M. (2018, December). A tale of two wildfires: Devastation highlights California's stark divide. *The Guardian*.

Del Real, J. A., & Kang, I. (2018, July). California Today: The Increasing Strain on State Firefighters. *The New York Times*. https://www.nytimes.com/2018/07/30/us/california-today-firefighters.html

Delfino, R. J., Brummel, S., Wu, J., Stern, H., Ostro, B., Lipsett, M., Winer, A., Street, D. H., Zhang, L., Tjoa, T., & Gillen, D. L. (2009). The relationship of respiratory and cardiovascular hospital admissions to the southern California wildfires of 2003. *Occupational and Environmental Medicine*, *66*(3), 189–197.

Ewing, R., Schmid, T., Killingsworth, R., Zlot, A., & Raudenbush, S. (2003). Relationship between urban sprawl and physical activity, obesity, and morbidity. *American Journal of Health Promotion*, *18*(1), 47–57.

Fothergill, A., & Peak, L. A. (2004). Poverty and disasters in the United States: A review of recent sociological findings. *Natural Hazards*, *34*, 89–110.

Frumkin, H., Frank, L., & Jackson, R. J. (2004). *Urban sprawl and public health: Designing, planning, and building for healthy communities* (First Edition). Island Press.

Gerety, R. M. (2015, September). Farm Workers in Wildfire Areas Aren't Always Aware of Evacuation Plans. *National Public Radio Morning Edition*.

Goss, M., Swain, D. L., Abatzoglou, J. T., Sarhadi, A., Kolden, C. A., Williams, A. P., & Diffenbaugh, N. S. (2020). Climate change is increasing the likelihood of extreme autumn wildfire conditions across California. *Environmental Research Letters*, *15*.

Governor Newsom's Strike Force. (2019). *Wildfires and Climate Change: California's Energy Future*.

Greene, D. (2018, August). California Firefighters Battle Exhaustion. *National Public Radio*. https://www.npr.org/2018/08/08/636603563/california-firefighters-battle-exhaustion

Gustafson, K. D., Gagne, R. B., Buchalski, M. R., Vickers, T. W., Riley, S. P. D., Sikich, J. A., Rudd, J. L., Dellinger, J. A., LaCava, M. E. F., & Ernest, H. B. (2021). Multi-population puma connectivity could restore genomic diversity to at-risk coastal populations in California. *Evolutionary Applications*.

Gutierrez, M. (2018, July). California blazes tax budgets, firefighters: 'Fatigue is starting to set in'. *SFChronicle*. https://www.sfchronicle.com/california-wildfires/article/California-blazes-tax-budgets-firefighters-13121282.php

Gutierrez, M., & Cassidy, M. (2018, August 11). As California burns, volunteer firefighters become harder to find. *SFChronicle*.

Harnett, S. (2018, September). Low-Income Communities Struggle to Recover After a Wildfire. *KQED*.

Herrera, J. (2018, November). As Wildire Smoke Fills the Air, Farmworkers Continue to Labor in the Fields. *Pacific Standard*.

Hutchinson, J. A., Vargo, J., Milet, M., French, N. H. F., Billmire, M., Johnson, J., & Hoshiko, S. (2018). The San Diego 2007 wildfires and Medi-Cal emergency department presentations, inpatient hospitalizations, and outpatient visits: An observational study of smoke exposure periods and a bidirectional case-crossover analysis. *PLoS Medicine*, *15*(7), e1002601.

Hwang, J., Chong, N.-S., Zhang, M., Agnew, R. J., Xu, C., Li, Z., & Xu, X. (2023). Face-to-face with scorching wildfire: Potential toxicant exposure and the health risks of smoke for

wildland firefighters at the wildland-urban interface. *The Lancet Regional Health - Americas*, *21*, 100482.

Jennings, M. (2018). *Effects of Wildfire on Wildlife and Connectivity*.

Johnson, J., & Lam. (2023, August 29). California's wildland firefighters are being poisoned by smoke. And we're doing little to protect them. *San Francisco Chronicle*. https://www.sfchronicle.com/projects/2023/firefighter-health/

Jones, C. G., Rappold, A. G., Vargo, J., Cascio, W. E., Kharrazi, M., McNally, B., & Hoshiko, S. (2020). Out-of-Hospital Cardiac Arrests and Wildfire-Related Particulate Matter During 2015-2017 California Wildfires. *Journal of the American Heart Association*, *9*(8), e014125.

Kardas-Nelson, M., Alvarenga, J., & Tuirán, R. A. (2020, October). Farmworkers forced to put harvest over health during wildfires. *Investigate West*.

Keeley, J. E. (2005). Fire as a threat to biodiversity in fire-type shrublands. In *Planning for biodiversity: Bringing research and management together. USDA Forest Service General Technical Report PSW-GTR-195*.

Keeley, J. E. (2006). Fire management impacts on invasive plants in the western United States. *Conservation Biology*, *20*(2), 375–384. https://doi.org/10.1111/j.1523-1739.2006.00339.x

Keeley, J. E., & Fotheringham, C. J. (2001). Historic fire regime in southern California shrublands. *Conservation Biology*, *15*(6), 1536–1548.

Keeley, J. E., & Fotheringham, C. J. (2003). Impact of Past Present and Future Fire Regimes on North American Mediterranean Shrublands. In *Fire and climatic change in temperate ecosystems of the Western Americas* (pp. 218–262).

Keeley, J. E., Fotheringham, C. J., & Morais, M. (1999). Reexamining fire suppression impacts on brushland fire regimes. *Science*, *284*(5421), 1829–1832.

Keeley, J. E., & Syphard, A. D. (2018). Historical patterns of wildfire ignition sources in California ecosystems. *International Journal of Wildland Fire*, *27*(12), 781.

Knapp, E. E., Valachovic, Y. S., Quarles, S. L., & Johnson, N. G. (2021). Housing arrangement and vegetation factors associated with single-family home survival in the 2018 Camp Fire, California. *Fire Ecology*, *17*.

Künzli, N., Avol, E., Wu, J., Gauderman, W. J., Rappaport, E., Millstein, J., Bennion, J., McConnell, R., Gilliland, F. D., Berhane, K., Lurmann, F., Winer, A., & Peters, J. M. (2006). Health effects of the 2003 Southern California wildfires on children. *American Journal of Respiratory and Critical Care Medicine*, *174*, 1221–1228.

Leyden, K. M. (2003). Social Capital and the Built Environment—The Importance of Walkable Neighborhoods. *American Journal of Public Health*, *93*(9), 1546–1551.

Liu, J. C., Pereira, G., Uhl, S. A., Bravo, M. A., & Bell, M. L. (2015). A systematic review of the physical health impacts from non- occupational exposure to wildfire smoke. *Environmental Research*, *136*, 120–132. https://doi.org/10.1016/j.envres.2014.10.015.A

Liu, J. C., Wilson, A., Mickley, L. J., Ebisu, K., Sulprizio, M. P., Wang, Y., Peng, R. D., Yue, X., Dominici, F., & Bell, M. L. (2017). Who among the elderly is most vulnerable to exposure to and health risks of fine particulate matter from wildfire smoke? *American Journal of Epidemiology*, *186*(6), 730–735.

Lurmann, F., Avol, E., & Gilliland, F. (2015). Emissions reduction policies and recent trends in Southern California's ambient air quality. *Journal of the Air & Waste Management Association*, *65*(3), 324–335. https://doi.org/10.1080/10962247.2014.991856

McKenzie, B. (2015). *Who Drives to Work? Commuting by Automobile in the United States: 2013* (American Community Survey Reports). U.S. Department of Commerce, U.S. Census Bureau.

Morris, B. (2019, April). How the Ultra-Wealthy are Making Themselves Immune to Natural Disasters. *LA Magazine*.

Mujtaba, G., & Shahzad, S. J. H. (2021). Air pollutants, economic growth and public health: Implications for sustainable development in OECD countries. *Environmental Science and Pollution Research*, *28*(10), 12686–12698. https://doi.org/10.1007/s11356-020-11212-1

Parshley, L. (2018, December). The Lingering Effects of Wildfires Will Disproportionately Hurt People of Color. *Vice*, 1–11.

Phuleria, H. C., Fine, P. M., Zhu, Y., & Sioutas, C. (2005). Air quality impacts of the October 2003 Southern California wildfires. *Journal of Geophysical Research*, *110*. https://doi.org/10.1029/2004JD004626

Radeloff, V. C., Helmers, D. P., Kramer, H. A., Mockrin, M. H., Alexandre, P. M., Bar-Massada, A., Butsic, V., Hawbaker, T. J., Martinuzzi, S., Syphard, A. D., & Stewart, S. I. (2018). Rapid growth of the US wildland-urban interface raises wildfire risk. *Proceedings of the National Academy of Sciences*, *115*(13), 3314–3319.

Rappold, A. G., Cascio, W. E., Kilaru, V. J., Stone, S. L., Neas, L. M., Devlin, R. B., & Diaz-Sanchez, D. (2012). Cardio-respiratory outcomes associated with exposure to wildfire smoke are modified by measures of community health. *Environmental Health: A Global Access Science Source*, *11*(71). https://doi.org/10.1186/1476-069X-11-71

Reid, C. E., Brauer, M., Johnston, F. H., Jerrett, M., Balmes, J. R., & Elliott, C. T. (2016). Critical review of health impacts of wildfire smoke. *Environmental Health Perspectives*, *124*(9), 1334–1343.

Reid, C. E., Jerrett, M., Tager, I. B., Petersen, M. L., Mann, J. K., & Balmes, J. R. (2016). Differential respiratory health effects from the 2008 northern California wildfires: A spatiotemporal approach. *Environmental Research*, *150*, 227–235.

Reid-Wainscoat, E., Rose, J. P., Yap, Tiffany A., & Prabhala, A. (2024). *The True Cost of Sprawl: Bad Planning Harms People, Wildlife and the Climate*. Center for Biological Diversity.

Richards, R. (2019, July). After the Fire: Vulnerable Communities Respond and Rebuild. *Center for American Progress*.

Safford, H. D., & Van de Water, K. M. (2014). Using Fire Return Interval Departure (FRID) analysis to map spatial and temporal changes in fire frequency on National Forest lands in California. *Pacific Southwest Research Station - Research Paper PSW-RP-266*, *January*, 1–59. https://doi.org/Res. Pap. PSW-RP-266

Sahagun, L. (2020, November). Rescue operations underway in the San Gabriel Mountains for rare species marooned by wildfire. *Los Angeles Times*, *2020*.

Simon, S. (2018, August). Constant Wildfires Leave California Firefighters Strained. *National Public Radio*.

Steel, Z. L., Koontz, M. J., & Safford, H. D. (2018). The changing landscape of wildfire: Burn pattern trends and implications for California's yellow pine and mixed conifer forests. *Landscape Ecology*, *33*(7), 1159–1176.

Studenmund, A. H., & Connor, D. (1982). The free-fare transit experiments. *Transportation Research Part A: General*, *16.4*, 261–269.

Swain, D. L. (2021). A Shorter, Sharper Rainy Season Amplifies California Wildfire Risk. *Geophysical Research Letters*, *48*(5), e2021GL092843.

Swain, D. L., Langenbrunner, B., Neelin, J. D., & Hall, A. (2018). Increasing precipitation volatility in twenty-first-century California. *Nature Climate Change*, *8*(5), 427–433. https://doi.org/10.1038/s41558-018-0140-y

Swain, D. L., Prein, A. F., Abatzoglou, J. T., Albano, C. M., Brunner, M., Diffenbaugh, N. S., Singh, D., Skinner, C. B., & Touma, D. (2025). Hydroclimate volatility on a warming Earth. *Nature Reviews Earth & Environment*, *6*(1), 35–50. https://doi.org/10.1038/s43017-024-00624-z

Syphard, A. D. (2020). *A Conversation About Fire Resliency*. Sierra Club Redwood Chapter Presentation.

Syphard, A. D., Brennan, T. J., & Keeley, J. E. (2018). Chaparral Landscape Conversion in Southern California. In *Valuing Chaparral* (pp. 323–346).

Syphard, A. D., Keeley, J. E., Massada, A. Bar., Brennan, T. J., & Radeloff, V. C. (2012). Housing arrangement and location determine the likelihood of housing loss due to wildfire. *PLoS ONE*, *7*(3), e33954.

Syphard, A. D., Radeloff, V. C., Hawbaker, T. J., & Stewart, S. I. (2009). Conservation threats due to human-caused increases in fire frequency in mediterranean-climate ecosystems. *Conservation Biology*, *23*(3), 758–769.

Syphard, A. D., Radeloff, V. C., Keeley, J. E., Hawbaker, T. J., Clayton, M. K., Stewart, S. I., Hammer, R. B., Syphard, A. D., Radeloff, V. C., Keeley, J. E., Hawbaker, T. J., Stewart,

S. I., & Hammer, R. B. (2007). Human influence on California fire regimes. *Ecological Society of America*, *17*(5), 1388–1402.

Syphard, A. D., Rustigian-romsos, H., Mann, M., Conlisk, E., Moritz, M. A., & Ackerly, D. (2019). The relative influence of climate and housing development on current and projected future fire patterns and structure loss across three California landscapes. *Global Environmental Change*, *56*, 41–55.

Turco, M., Abatzoglou, J. T., Herrera, S., Zhuang, Y., Jerez, S., Lucas, D. D., AghaKouchak, A., & Cvijanovic, I. (2023). Anthropogenic climate change impacts exacerbate summer forest fires in California. *Proceedings of the National Academy of Sciences*, *120*(25), e2213815120.

UCLA Institute of Transportation Studies. (2019). *Best Practices in Implementing Tactical Transit Lanes*. UCLA Institute of Transportation Studies.

U.S. Department of Transportation. (2022). *Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories 2021*. U.S. Department of Transportation.

U.S. Environmental Protection Agency. (2017). *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2015*. U.S. Environmental Protection Agency.

Viswanathan, S., Eria, L., Diunugala, N., Johnson, J., & Mc Clean, C. (2006). An analysis of effects of San Diego wildfire on ambient air quality. *Journal of the Air and Waste Management Association*, *56*(1), 56–67. https://doi.org/10.1080/10473289.2006.10464439

Wang, D., Guan, D., Zhu, S., Kinnon, M. M., Geng, G., Zhang, Q., Zheng, H., Lei, T., Shao, S., Gong, P., & Davis, S. J. (2021). Economic footprint of California wildfires in 2018. *Nature Sustainability*, *4*, 252–260.

Weinhold, B. (2011). Fields and forests in flames: Vegetation smoke and human health. *Environmental Health Perspectives*, *119*(9), A386–A393.

Williams, J. N., Safford, H. D., Enstice, N., Steel, Z. L., & Paulson, A. K. (2023). High-severity burned area and proportion exceed historic conditions in Sierra Nevada, California, and adjacent ranges. *Ecosphere*, *14*(1), e4397.

Yap, T. A., Rose, J. P., Anderson, I., & Prabhala, A. (2021). *California Connections: How Wildlife Connectivity Can Fight Extinction and Protect Public Safety*.

Yap, T. A., Rose, J. P., Broderick, P., & Prabhala, A. (2021). *Built to Burn: California's Wildlands Developments Are Playing With Fire*.

Yap, T. A., Rose, J. P., & Cummings, B. (2019). *A Petition to List the Southern California/Central Coast Evolutionarily Significant Unit (ESU) of Mountain Lions as Threatened under the California Endangered Species Act (CESA)*.

Zhang, B., Weuve, J., Langa, K. M., D'Souza, J., Szpiro, A., Faul, J., Mendes De Leon, C., Gao, J., Kaufman, J. D., Sheppard, L., Lee, J., Kobayashi, L. C., Hirth, R., & Adar, S. D. (2023). Comparison of Particulate Air Pollution From Different Emission Sources and Incident Dementia in the US. *JAMA Internal Medicine*.

Zhang, Z., Chen, L., Wang, X., Wang, C., Yang, Y., Li, H., Cai, M., & Lin, H. (2023). Associations of Air Pollution and Genetic Risk With Incident Dementia: A Prospective Cohort Study. *American Journal of Epidemiology*, *192*(2), 182–194.

Response to Comment Letter O29

Center for Biological Diversity
Tiffany Yap, D.Env/PhD, Senior Scientist and J.P. Rose, Senior Attorney
March 10, 2025

029-1 The commenter's statements regarding mountain lions and wildlife connectivity, wildfire risk, and vehicles miles traveled (VMT) are addressed below in responses O29-2 through O29-44.

Pursuant to State CEQA Guidelines Section 15088.5, a lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR but before certification. Significant new information can include a disclosure showing that a new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented, a substantial increase in the severity of an environmental impact, a feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project (but the project's proponents decline to adopt it), or the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. The Draft EIR has been prepared in conformance with the substantive and procedural requirements of CEQA and the State CEQA Guidelines. Specifically, the Draft EIR includes all of the required contents of an EIR and the associated required details and topics for analysis, as set forth in Sections 15120 through 15132 of the State CEQA Guidelines. While this Final EIR includes revisions as provided in Chapter 3, Revisions to the Draft EIR, no revisions are required as a result of this comment letter. The revisions provided in Chapter 3 of this Final EIR do not constitute significant new information requiring recirculation of the EIR as defined in CEQA Guidelines Section 15088.5. No new significant environmental impacts or a substantial increase in the severity of environmental impacts would occur from the revisions. Instead, the information merely clarifies, amplifies, and makes insignificant modifications to an adequate EIR. As such, recirculation of the Draft EIR is not warranted or required.

029-2 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

029-3 Regarding the Project's impacts to mountain lion, Section 4.4.5, Impact Analysis, of the Draft EIR provides a comprehensive analysis of not only natal dens, but also about the range size for individual mountain lions that have been tracked in the Project region, and wildlife movement and habitat linkages. Figures 4.4-6 and 4.4-7 of Section 4.4, Biological Resources, depict the probability of mountain lion habitat suitability at the Project site and nearby areas, and page 4.4-48 of Section 4.4details potential for suitable live-in, breeding, foraging, cover, and dispersal habitat for mountain lion at the Project site. As such, the Draft EIR does not understate the potential habitat and use of the Project site by mountain lions. As stated in Section 4.4.5, the Project contacted the Resource Conservation District of the Santa Monica Mountains regarding their Newhall Pass I-5 Wildlife Crossing feasibility study, which was focusing on potential crossings south of the Project, with the closest being near Towsley Canyon (Draft EIR, page 4.4-48). The analysis details that only one indicator species (greater roadrunner) was expected to have a high usage of the Project site during regional movement due to the on-site areas of chaparral and open woodland (Draft EIR, page 4.4-48). Please refer to Response to Comment O29-5 regarding wildlife connectivity.

029-4 As stated on page 4.4-47 of Section 4.4, Biological Resources, even if the entire Project site were part of the territory of a mountain lion, impacts by the Project would only consist of a very small percentage of its territory (i.e., 0.0009% of the average home range for an adult male and 0.12% of the average home range for a sub-adult male). MM-4.4-1, On-Site Habitat Preservation, and MM-4.4-9, Off-Site Habitat Preservation, provide sufficient mitigation habitat of parcels that could be legally developed.

As detailed in MM-4.4-1, a letter of intent shall be obtained from the Conservation Easement holder, and prior to issuance of a grading permit, the Applicant shall demonstrate recordation of a conservation easement to permanently preserve 144.43 acres of open space within the Project boundaries for long-germ conservation and management as a natural conservation area. Both MM-4.4-1, On-Site Habitat Preservation and MM-4.4-9, Off-Site Habitat Preservation have been revised as shown in Chapter 3, Revisions to the Draft EIR of this Final EIR to clarify that funding for the on-site and off-site conservation easements shall be maintained in perpetuity. The funding for the management of the preserved lands must be approved by the County. The framework of the Conservation Management Plans (CMPs) is provided in MM-4.4-1 and MM-4.4-9 and the final CMPs must be approved by the County to ensure the plans manage the preserved lands at an adequate level in perpetuity. Furthermore, funding for implementation of the tasks in the CMPs under both mitigation measures shall be provided by a traditional endowment, establishing a community facilities district, or landscape management district, or through contractual obligation with the Homeowners' Association or other equivalent mechanism(s). The Draft EIR is not required to include the source of funding and/or establishment of a minimum endowment. However, as shown in Chapter 3, Revisions to the Draft EIR, MM-4.4-1 and MM-4.4-9 both require in-perpetuity funding for the applicable conservation easement. CEQA Guidelines Section 15126.4 does not allow for deferred action as suggested by the comment. Instead, both MM-4.4-1 and MM-4.4-9 outline specific performance standards that the mitigation measure will achieve. Chapter 3, Revisions to the Draft EIR of this Final EIR identifies and incorporates appropriate measures to ensure impacts to biological resources are addressed prior to the issuance of a grading permit (see MM-4.4-1 and MM-4.4-9).

029-5 Regarding wildlife connectivity and habitat linkages, as stated in Section 4.4.1, Existing Conditions, the Project is located immediately adjacent to The Old Road and Interstate 5, which has been identified as a substantial barrier to east-west wildlife movement. The Draft EIR details the potential for wildlife connectivity impacts for the Project (Draft EIR, page 4.4-56) and cumulative projects (Draft EIR, pages 4.4-65 through 4.4-67). The Project-level and cumulative impact analyses detail that the Project would result in a potentially significant impact regarding the substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites prior to mitigation, but that implementation of MM-4.4-1 (On-Site Habitat Preservation), MM-4.4-4 (Biological Monitoring), MM-4.4-12 (Lighting Plan), and MM-4.4-15 (Roosting Bat Survey) would reduce the Project's impacts to less than significant. Both MM-4.4-1 and MM-4.4-9 have been revised as shown in Chapter 3, Revisions to the Draft EIR of this Final EIR to clarify that funding for the on-site and off-site conservation easements shall be maintained in perpetuity. Regarding use of specific citations requested to be used, the Project provided sufficient information to address Threshold 4.4d and uses different sources to make the same point. As stated in Section 4.4.5, the Project contacted the Resource Conservation District of the Santa Monica Mountains regarding their Newhall Pass I-5 Wildlife Crossing feasibility study, which includes "Priority Barrier to Habitat Connectivity" documented in the CDFW's Restoring California's Wildlife

Connectivity 2022 (CDFW 2022). The Newhall Pass I-5 Wildlife Crossing feasibility study focuses on potential crossings south of the Project, with the closest being near Towsley Canyon.

The commenter's statement regarding wildlife using the underpass under I-5 (i.e. a concrete culvert) that conveys waters from Lyons Canyon to the South Fork Santa Clara River does not take into context that the culvert's eastern end is within a fenced in lot that is surrounded by residential houses and waters enter a large concrete lined and bottomed culvert (Google Earth 2025). While there is a possibility of the culvert being used by wildlife, none of the tracked mountain lions used the crossing (Riley et al. 2021). This is exemplified by the Resource Conservation District of the Santa Monica Mountains conducting their Newhall Pass I-5 Wildlife Crossing study that focuses on the establishment of an aboveground crossing feature over Interstate 5 southerly of the Project site.

029-6 Direct and indirect impacts to potential jurisdictional waters, including waters of the state, and associated riparian vegetation are analyzed under Threshold 4.4c, starting on page 4.4-54 of Section 4.4, Biological Resources, of the Draft EIR, which includes quantification of impacts using appropriate modeling and adequate data. Additional analysis of impacts to water quality is found in Section 4.10, Hydrology and Water Quality, of the Draft EIR. As shown in Table 4.4-14, Proposed On-Site and Off-Site Impacts to Potential Waters of the United States (USACE and RWQCB Jurisdiction), only 0.62 acres of waters of the state would be impacted. However, as detailed on page 4.4-54, with implementation of MM-4.4-1, MM-4.4-3, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-9, and MM-4.4-14, impacts to jurisdictional waters would be reduced from potentially significant to less than significant with mitigation. Additionally, MM-4.4-1 and MM-4.4-9 provide sufficient mitigation habitat of parcels that could be legally developed that will preserve habitat for mountain lion and other species at the Project site, which is contiguous to other natural areas.

029-7 Please see Responses to Comments 029-4 and 029-5, above. Additionally, MM-4.4-1 and MM-4.4-9 provide sufficient mitigation habitat of parcels that could be legally developed that will preserve mountain lion habitat.

029-8 Please see Response to Comment 029-5, above, regarding funding and conservation easements. The barrier of I-5 is an existing environmental condition. As detailed on pages 4.4-47 and 4.4-48 of Section 4.4, Biological Resources, of the Draft EIR, the Project would not sever habitat linkages or disrupt wildlife movement with the implementation of mitigation measures MM-4.4-1, MM-4.4-2, MM-4.4-4 through MM-4.4-7, and MM-4.4-9. Therefore, additional mitigation measures, including construction of at least one wildlife crossing across I-5, are not necessary to reduce Project impacts to wildlife connectivity to less than significant. In addition to the fact that additional mitigation is not necessary to reduce impacts to wildlife connectivity to less than significant, the construction of a wildlife crossing over Interstate 5 (the Annenberg Wildlife Crossing over Interstate 101) has an estimated cost of approximately $92,000,000 (Caltrans 2025). The request to construct a wildlife crossing is not consistent with CEQA Guidelines Section 15041, which states that mitigation must have "rough proportionality" to the impacts of the Project. Please refer to Response to Comment 029-3 for more details on mountain lion impacts and the analysis under Threshold 4.4a, starting on page 4.4-40, for impacts to sensitive species. No revisions to the Draft EIR are necessary.

029-9 The commenter's specific concerns regarding wildfire risk are addressed in Response to Comments 029-10 through 029-39, below.

029-10 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. The information provided in this comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-11 The Draft EIR complies with Public Resources Code Sections 21002 and 21002.1(a) and CEQA Guidelines Section 15126.2(a) and includes analysis of potential environmental effects the Project might cause or risk exacerbating by bringing development and people into areas susceptible to hazardous conditions, including a Very High Wildfire Hazard Severity Zone (VHFHSZ; see Section 4.20, Wildfire, of the Draft EIR). In addition to the discussion and analysis provided in Section 4.20 of the Draft EIR, please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

029-12 As discussed under header "Project Effect on Surrounding Communities" under Section 2.4.3.2, Fire Safety Requirements of Topical Response-1, the inclusion of the Project's fire protection features would have a beneficial effect on wildfire ignition risk reduction. The fire safety features protect the Project site, its structures and their occupants from wildfires as well as reduce the risk of wildfire originating from the Project site and spreading to existing nearby development. Fire safety features that would enhance the Project's ability to reduce wildfire ignition and spread include ignition-resistant and maintained landscape, fuel modification zones (FMZs) surrounding the perimeter of the Project, annual FMZ inspections, ignition-resistant building materials used for the Project structures, interior fire sprinklers, fire access roads, buried powerlines, , and sufficient fire flow provided to the Project through fire hydrants and the water tank. Additionally, when assessing the drivers of human caused ignitions in Southern California, powerlines, arson, and equipment use were identified to be the dominant form of human-caused ignitions. As stated on page 4.20-37 of the Draft EIR, the Project would underground powerlines. Furthermore, required mitigation measures MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction Related Fire Prevention Measures, are included to reduce the risk of ignition during the construction of the Project. The information and reports cited in this comment are acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-13 Unlike the EIR at issue in *People ex rel. Bonta v. County of Lake* (2024) 105 Cal.App.4th 1222, section 4.20, Wildfire, of the Draft EIR includes a discussion of potential ignition sources (including human caused ignitions) and analyzes how the Project's design and mitigation measures would alleviate such risks (refer to the discussion beginning on page 4.20-35 of the Draft EIR). The analysis beginning on page 4.20-36 of the Draft EIR describes the multi-level approach the Project would take to lower the fire risk for not only the Project but also the surrounding area. Furthermore, as stated on page 4.20-39 of the Draft EIR, fire behavior modeling was conducted (using BehavePlus software package) as part of the Fire Protection Plan (included as Appendix M-1 of the Draft EIR) to document the type and intensity of the fire that would be expected to occur from east, south, and southeast of the Project site. Pre- and post-Project site characteristics were considered in fire behavior modeling inputs (i.e., topography, vegetation, and weather). The modeled fire behavior indicated that post-Project buildout, the existing potential fire behavior would be reduced and would not facilitate wildfire spread. The analysis also showed that post-development would reduce projected flame lengths to levels that would be manageable by firefighting resources for protecting the Project site's structures, especially given the

ignition resistance of the structures and the planned ongoing maintenance of the entire site landscape. Further, the Project's on-site roads and defensible space would be able to provide sufficient access for fire apparatus into a high-risk area that was previously limited. The modeling assumed the implementation of appropriate FMZs and fire protection features, as required by the County Fire Code, as well as implementation of MM-4.20-2, Alternative Materials and Methods, which requires enhanced construction features to protect homes where the FMZ is less than 100 feet within the Project site and must be maintained in perpetuity, as required by MM-4.20-3, Annual Fuel Modification Zone Inspection (which requires the maintenance of the Project's buffer between structures and unmaintained open space). As such, the Draft EIR does not fail to assess wildfire risks; rather, the Draft EIR appropriately does so in conformance with CEQA.

029-14 Please refer to the Response to Comments 029-12 and 029-13 above regarding potential ignition risk and ignition risk reduction.

Per CEQA Guidelines Section 15151, an EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision that intelligently takes account of environmental consequences, and "disagreement among exports does not make an EIR inadequate." Dr. Chris Dicus, lead author of the cited study, *"Temporal Changes to Fire Risk in Disparate WUI Communities in Southern California, USA"* referenced in the comment letter and Draft EIR is a Certified Senior Fire Ecologist, a California Registered Professional Forester, professor at California Polytechnic State University, and President Emeritus of the Association of Fire Ecology, among other qualifications that denote his expertise in the field of fire ecology. Further, the Draft EIR does not rely on the Project's potential to reduce risk of ignition for adjacent older communities to reach the significance conclusion of less than significant with mitigation. Rather, Section 4.20, Wildfire, of the Draft EIR, details the Project's fire environment, potential fire risk, consistency with applicable codes, and mitigation measures that support its significance conclusion, as described in Response to Comments 029-12 and 029-13 and Section 2.4, Topical Response-1, Fire Protection and Safety.

029-15 Please refer to the Response to Comments 029-12 and 029-13 above regarding ignition risk. While it is not possible to completely eradicate risk associated with wildfire, the analysis provided in Section 4.20, Wildfire, of the Draft EIR demonstrates that compliance with applicable regulatory requirements and implementation of required mitigation measures would reduce impacts related to wildfire to less than significant. A detailed response related to fire protection and safety is provided above in Topical Response-1. As discussed above in Section 2.4.1.1, New Subdivisions are More Resilient and Defensible to Wildfire Hazards, in Topical Response-1, ignition-resistant construction materials and other fire-hardening measures significantly improve the ability of structures (and people) to survive wildfires. Furthermore, as discussed above in Table 2-3, Code Exceeding Measures of Topical Response-1, in addition to existing code-requirements, through implementation of required mitigation measures (i.e., MM-4.20-1, Wildfire Education Program, MM-4.20-2, Alternative Materials and Methods, MM-4.20-3, Annual Fuel Modification Zone Inspection, MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction-Related Fire Prevention Measures), the Project would implement code-exceeding fire protection features to assist with the prevention of structural ignition in the event of an encroaching fire and to reduce risks of the spread of a fire in the event one were to ignite on site.

029-16 The analysis provided in Section 4.20, Wildfire, of the Draft EIR, acknowledges that wildland fires are a common natural hazard in Southern California and takes into consideration local and regional climate,

weather, and wind conditions that contribute to wildfire risk (refer to the Section 4.20.1, Existing Conditions, of the Draft EIR for a discussion of climate, weather, and wind conditions). An important component of a fire protection system for the Project is the provision for fire-resistant landscapes and modified vegetation buffers. FMZs are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from advancing fire by strategically placing thinning zones, restricted vegetation zones, and irrigated zones adjacent to each other on the perimeter of the wildland–urban interface exposed structures. To analyze the Project site's fire behavior pre- and post-development, the BehavePlus fire modeling system was used to model on-site fire behavior. Model inputs were determined based on on-site observations and data from nearby remote automated weather stations. As stated on page 4.20-35 of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required FMZ on and off site and would not exacerbate the fire hazard conditions. Regarding climate change, see the analysis included in Section 4.8, Greenhouse Gas Emissions, of the Draft EIR. As detailed in Section 4.8.5, Impact Analysis, of the Draft EIR and Chapter 3, Revisions to the Draft EIR of this Final EIR, the Project would result in less than significant impacts regarding GHG emissions with mitigation.

029-17 The discussion and analysis provided in Section 4.20, Wildfire, of the Draft EIR, as supported by the Fire Protection Plan (see Appendix M-1 of the Draft EIR) and Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR) includes an assessment of wildfire risk and demonstrates that compliance with applicable regulatory requirements and implementation of required mitigation measures would reduce Project impacts related to wildfire to less than significant. The conclusions in the Draft EIR are supported by substantial evidence (including facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts), as defined in Section 15384 of the CEQA Guidelines. Please refer to Topical Response-1 for a more detailed response concerning the efficacy of the analysis and required mitigation measures included in the Draft EIR.

029-18 As discussed above in Section 2.4.3, Project Compliance with Applicable Measures, the Project would be required to include the latest ignition- and ember-resistant construction materials and methods for roof assemblies, walls, vents, windows, and appendages, as mandated by the current fire and building codes (e.g., California Building Code Chapter 7A). The Project also includes additional fire prevention methods in accordance with MM-4.20-2, such as dual-pane, tempered windows, 1-hour fire-rated exterior walls and doors, ember resistant vents, and a 6-foot-tall concrete wall in between the structures and open space for 16 residences adjacent to the off-site open space area at the Project site. Project buildings would have National Fire Protection Association 13, 13R, or 13D automatic sprinklers, which have an extremely high success rate of controlling or suppressing interior structure fires as they can isolate a fire to the point of origin, limit its ability to spread to the rest of the building, and even extinguish a fire before the responding firefighters arrive, thus, damping the likelihood of ember production (Draft EIR page 4.20-39). The Project would also include highly maintained, irrigated vegetative landscaping between homes and on the perimeter of the wildland–urban interface (refer to header "Defensible Space" in Section 2.4.3.2, Fire Safety Requirements, of Topical Response-1, for additional details). As discussed header "Water Supply and Infrastructure" of Section 2.4.3.2, Fire Safety Requirements, of Topical Response-1, above, as part of the larger water system, the up to 2-million-gallon water tank, designed to County storage regulations and water agency requirements for fire flow, will provide additional water resources to the Project and surrounding vicinity by providing a new elevated storage tank on the west side of I-5. As a result, wildfire impacts are less than significant and additional mitigation, such as external sprinklers, are not required.

029-19 As stated on page 4.8-36 in Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, the Project would include solar roof installations in accordance with Title 24 requirements. Additionally, implementation of MM-4.8-3, Energy Conservation, requires a 7-kilowatt solar photovoltaic electric generating system at the Project's on-site recreation center building.

029-20 As discussed in Section 4.20, Wildfire, of the Draft EIR, MM-4.17-1 and MM-4.20-1 through MM-4.4.20 sufficiently mitigate all wildfire-related impacts to a less than significant level. The Project Applicant/Developer does not have a responsibility to retrofit or provide equipment to existing communities outside of the Project site, over which the Applicant/Developer has no control. As discussed above in under header "Project Effect on Surrounding Communities" under Section 2.4.3.2, Fire Safety Requirements of Topical Response-1, the inclusion of the Project's fire protection features would have a beneficial effect on the wildfire ignition risk reduction. The fire safety features protect the Project site, its structures and their occupants from wildfires as well as reduce the risk of wildfire originating from the Project site and spreading to existing nearby development. Fire safety features that would enhance the Project's ability to reduce wildfire ignition and spread include ignition-resistant and maintained landscape, fuel modification zones surrounding the perimeter of the Project, annual FMZ inspections, ignition-resistant building materials used for the Project structures, interior fire sprinklers, fire access roads, buried powerlines, nearby fire stations, and sufficient fire flow provided to the Project through fire hydrants and the water tank. No changes to the Draft EIR are required as a result of this comment.

029-21 In accordance with MM-4.20-1, Wildfire Education Program, the HOA's Covenants, Conditions, and Restrictions for the Project shall require that the HOA prepare an educational program with wildfire-related information to be provided to all residents and occupants, including the Wildfire Evacuation Plan and the Fire Protection Plan requirements. As stated in Section 4.20, Wildfire, for the Draft EIR, beginning on page 4.20-62, the education program features shall include, but may not be limited to biannual emails and mailers, a dedicated community website, and a new resident packet. The notifications, website and resident packets shall include information such as reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires. The HOA shall also establish a fire safety committee responsible for overseeing the maintenance of community-wide fire protection features. Residents will be able to report fire hazards or hazardous fuel conditions to the HOA committee for remediation. The committee shall be responsible for the coordination of the third party FMZ inspections and the volunteer residential defensible space inspections. The committee shall also be responsible for the creation and distribution of the educational program for the Project. The committee shall serve as a communication link between the Los Angeles County Fire Department (LACoFD) and the community.

029-22 In accordance with MM-4.20-3, Annual Fuel Modification Zone Inspection, the HOA Covenants, Conditions, and Restrictions shall require annual fuel modification inspections to be conducted to confirm and document compliance with fuel modification maintenance requirements, as defined in the LACoFD approved fuel modification plan. The HOA shall obtain an FMZ inspection and report in May/June of each year to document and certify that vegetation management activities throughout the Project site have been performed. If the FMZ areas are not compliant, the HOA shall have a specified period to correct any noted issues, and re-inspection shall be required to achieve the annual certification of compliance. Documentation of compliance shall be retained by the HOA and provided to LACoFD upon request, as detailed in MM-4.20-3.

029-23 Please see above Response to Comments 029-12, 029-13, 029-15, and 029-18. As stated above, the modeled fire behavior indicated that post-Project buildout, the existing potential fire behavior would be reduced and would not facilitate wildfire spread. The analysis also showed that post-development would reduce projected flame lengths to levels that would be manageable by firefighting resources for protecting the Project site's structures, especially given the ignition resistance of the structures and the planned ongoing maintenance of the entire site landscape.

029-24 Please see above Response to Comments 029-12, 029-13, 029-15 and 029-18 regarding fire ignition. The information and reports cited in this comment are acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-25 Please see above Response to Comments 029-12, 029-13, 029-15 and 029-18 regarding fire ignition. The information and reports cited in this comment are acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-26 As discussed in further detail below in Response to Comment 029-31, because the Project would not significantly increase the probability of ignition or the potential for fire spread, it would not introduce a new or intensified source of wildfire smoke that could have a substantial adverse effect on wildlife species (such as steelhead trout or mountain lion as referenced in the comment letter). Regarding post-fire landslides and toxic runoff, the Project site occupies steep, fire-prone terrain in the foothills of the Santa Susana Mountains where post-fire loss of vegetation could accelerate runoff, debris flows, and slope failures; however, as determined by the analysis provided in Section 4.20, Wildfire, under Threshold 4.20(d) (beginning on page 4.20-48 of the Draft EIR), both construction and long-term operation would avoid creating significant downslope or downstream hazards. During construction, compliance with the County Code, a site-specific geotechnical report, and a storm-water pollution prevention plan would require removal of unstable soils, engineered recompacting of cut slopes, installation of drainage controls, and best-management practices that prevent erosion and sediment transport. Fuel-modification activities mandated by the Fire Protection Plan retain root systems and replace or thin vegetation rather than clear-cutting, thereby maintaining slope stability. In operation, runoff from the developed footprint would be captured by two regional debris basins and five smaller basins sized to reduce the existing 50-year peak flow at the downstream Caltrans culvert by roughly 25%, while also trapping nearly 49 acre-feet of post-fire sediment. Cut slopes would be engineered for long-term stability, and the majority of the Project site—approximately 150 acres—would remain as natural open space, further buffering developed areas from slope failures. Because these design features, regulatory requirements, and mitigation measures (i.e., MM-4.20-1 through MM-4.20-3 and the geotechnical recommendations discussed in Section 4.7, Geology and Souls of the Draft EIR) collectively prevent post-fire instability, landslides, or flood hazards from increasing beyond baseline conditions, the Project would not result in significant impacts to wildlife related to post-fire landslides and toxic runoff.

029-27 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. The information provided in this comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-28 As detailed in Response to Comments 029-12, 029-13, and 029-15, above, as well as Response to Comment 029-31, below, the Project would not significantly increase the probability of ignition or the potential for fire spread. Furthermore, the Project footprint is limited to approximately one-third of the

Project site; the remaining two-thirds (approximately 150 acres) would be preserved as natural open space in perpetuity. Additionally, the Project would conserve in perpetuity approximately 467 acres of off-site natural open space through implementation of MM-4.4-9, Off-Site Habitat Preservation. Vegetation removal is therefore confined to the graded development pads and to FMZs. Treatment methods for FMZs—irrigation, selective thinning, and removal of highly flammable plant species—are designed to retain a mosaic of plant cover rather than clear-cut vegetation, thereby avoiding the type-conversion to non-native annual grasslands. The analysis provided in Section 4.4, Biological Resources, of the Draft EIR concludes that resulting habitat loss or modification (including habitat loss/modification due to FMZs) would be less than significant with implementation of mitigation. Specifically, the Draft EIR includes 16 required mitigation measures to reduce impacts to biological resources (i.e., MM-4.4-1 through MM-4.4-16) including: conserving in perpetuity 611.13 acres of on-site and off-site natural open space; requiring pre-construction surveys, planning, and biological monitoring during construction; measures protecting against invasive species establishment and spread; preparation of conservation management plans; the provision of an endowment for the permanent maintenance of all conservation areas; nesting bird avoidance; conducting a special status plant seed and bulb survey; and strategically locating development as close as possible to existing urban uses/infrastructure.

029-29 As discussed in Appendix F, of Appendix C, Biota Report, Santa Ana sucker and western pond turtle are not expected to occur on the Project site as there is no suitable habitat under existing conditions. Mountain yellow-legged frog did not have records in the Project vicinity so it was not analyzed in the Biota Report; however, the species would not be expected to occur on the Project site due to the lack of suitable habitat. California Mountain lion, including impacts related to habitat fragmentation, are addressed in Section 4.4, Biological Resources, of the Draft EIR. As detailed in the analysis provided in Section 4.4, Biological Resources, on pages 4.4-47 through 4.4-49 of the Draft EIR, implementation of MM-4.4-1 (On-Site Habitat Preservation), MM-4.4-2 (Habitat Mitigation and Monitoring Plan), MM-4.4-4 (Biological Monitoring), MM-4.4-5 (Demarcation of Disturbance Limits), MM-4.4-6 (Invasive Species Prevention), and MM-4.4-7 (Landscaping Plan) would reduce impacts to mountain lion to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources. With implementation of MM-4.4-13 (Homeowners' Association Covenants, Conditions, and Restrictions), impacts to mountain lions from human influence would be reduced to less than significant. Please also refer to Response to Comments 029-3, 029-4, and 029-5 above regarding impacts to mountain lion.

029-30 Please see Response to Comments 029-12, 029-13, 029-15, 029-26, 029-28, and 029-29 above as well as Response to Comment 029-31, below. Because the Project would not significantly increase the probability of ignition or the potential for fire spread, it would not substantially disrupt natural fire regimes, degrade ecosystems, and threaten wildlife.

029-31 The potential for the Project to exacerbate wildfire risks (due to slope, prevailing winds, and other factors) and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire is addressed under Threshold 4.20(b) beginning on page 4.20-8 in Section 4.20, Wildfire, of the Draft EIR. As determined therein, with mitigation, the Project would not exacerbate wildfire risk or related smoke exposure, and as such, the Project would also not result in significant secondary impacts regarding health impacts detailed in the comment letter. Additionally, although the Project site is within a VHFHSZ, the development footprint is intentionally clustered and

avoids prominent ridgelines, while approximately two-thirds of the property remains in open space. The proposed development footprint of the Project is sited close to existing developments north of the Project site (the Sunset Pointe residential community) and I-5 east of the Project site, thereby conserving open space proximate to other surrounding open space areas. Therefore, the Project site is not a poorly-sited development. The information provided in this comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-32 Please see above Response to Comments 029-12, 029-13, and 029-15 regarding potential ignitions. Regarding firefighting costs and strain on firefighters, the potential for the Project to create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection, is addressed in Section 4.15, Public Services, under Threshold 4.15a(i). As discussed therein, the impact of the Project with respect to fire protection and emergency medical services would be less than significant with mitigation incorporated. As stated on page 4.15-31 of the Draft EIR, the LACoFD indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site. Further, as detailed in Table 7 of the Fire Protection Plan included as Appendix M-1 of the Draft EIR, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from the closest Fire Station 124.

The Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements (Draft EIR, page 4.15-32). Furthermore, as discussed in Section 2.4.1.2, Project Specific Fire-Resistant Design Feature, and Section 2.4.3.1, Attorney General's Guidance, of Topical Response-1, in addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area. Furthermore, as discussed on page 4.15-33 in Section 4.15, Public Services, of the Draft EIR, the LACoFD determined that a new on-site fire station is not required for the Project. The information and reports cited in this comment are hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-33 Please see above Response to Comments 029-12, 029-13, 029-15, and 029-16. The information and reports cited in this comment are acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-34 Please see Response to Comment 029-32, above. The information provided in this comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-35 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EI, and therefore it would not be appropriate to provide a response as part of this EIR. The information provided in this comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-36 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. The information provided in this comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-37 This comment is accurate and does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

029-38 The Draft EIR includes analyses of potential air quality and greenhouse gas (GHG) emission impacts of Project-generated mobile source emissions (i.e., vehicle trips from residents, students, employees, delivery trips, etc.). As stated on page 4.3-27 in Section 4.3, Air Quality, of the Draft EIR, the unmitigated trip length (20.5 VMT per capita) from the Transportation Impact Analysis (included as Appendix J or the Draft EIR) was assumed for the residential land uses based on the VMT analysis. Annual VMT and trips were estimated and input into CalEEMod, which can convert annual data into trips and VMT per day. The analysis takes into consideration pollutants including nitrogen oxides, volatile organic compounds, sulfur dioxide, carbon monoxide, lead, and particulate matter (including smoke, soot, dust, salts, acids, and metals). Furthermore, the Draft EIR considers air quality impacts associated with traffic-congested roadways and intersections, taking into consideration the existing regional environmental setting. For example, as discussed beginning on page 4.3-48 of the Draft EIR, the air quality analysis considered traffic-congested roadways and intersections, which have the potential to generate localized high levels of carbon monoxide. As determined by the analyses set forth in Draft EIR Sections 4.3, Air Quality, and 4.8, Greenhouse Gas Emissions, the Project's air quality and GHG emission impacts would be less than significant with mitigation incorporated. A detailed explanation of health effects from criteria pollutants is included in the Draft EIR, on pages 4.3-43 through 4.3-45 of Section 4.3, Air Quality, of the Draft EIR.

029-39 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. However, the Draft EIR addresses the potential for roadway hazards in accordance with the County's Environmental Checklist Form and Appendix G of the State CEQA Guidelines. Specifically, Threshold 4.17c in Section 4.17, Transportation, of the Draft EIR addresses the potential for the Project to substantially increase hazards due to a road design feature or incompatible uses. As stated on Page 4.17-25 of the Draft EIR, a level of service (LOS) and queuing analysis was conducted to evaluate the ability of the Project access plan to accommodate the anticipated traffic levels at the driveway access points. As described in the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), both the north and south driveway approaches to The Old Road are projected to operate at an acceptable LOS and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project. In addition, a signal warrant analysis was conducted for the north and south driveways to see if they would trigger the need for a traffic signal. Using the California Manual on Uniform Traffic Control Devices methodology for Signal Warrant Analysis, the two driveways were tested to see if their volumes meet signal warrants. As shown in Table 11 of the Transportation Impact Analysis, both driveways do not trigger a signal warrant analysis under the Future plus Project conditions and would not substantially increase hazards due to the establishment of new driveways.

In addition, the Transportation Impact Analysis noted that Project access and circulation has been reviewed by Los Angeles County Public Works with respect to Caltrans/Los Angeles County standards to ensure that the Project does not substantially increase hazards due to a design feature. The County would also periodically review traffic operations in the Project vicinity once the Project is constructed to ensure that traffic operations are satisfactory. As such, the Project would not increase hazards due to a road design feature or incompatible uses and impacts would be less than significant.

The information provided in this comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-40 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. The information provided in this comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

029-41 MM-4.17-2, Transportation Demand Management (TDM) Program, discussed in Section 4.17, Transportation, of the Draft EIR is not improperly deferred or inadequate. As discussed in further detail below, MM-4.17-2 identifies specific mandatory components that must be included in the TDM Program. These components could be augmented by the County through the TDM Program preparation, but they cannot be reduced or eliminated. The component requirements include sufficient detail to analyze the quantitative and qualitative reductions resulting from implementation of MM-4.17-2.

Per CEQA Guidelines Section 15126.4(a)(1)(B), a mitigation measure's specific details "may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will considered, analyzed, and potentially incorporated in the mitigation measure." Finalization of this TDM Program is not feasible or practical at this time, as MM-4.17-2 includes minimum mandatory components and Section 15126.4(a)(1)(B) is satisfied by the mitigation measure as written and it is appropriate to finalize the TDM Program prior to final map recordation.

MM-4.17-2 meets all these necessary requirements. First, MM-4.17-2 commits the Project to the TDM Program and requires review and approval by the Los Angeles County Department of Regional Planning and Los Angeles County Public Works, thereby meeting the first criteria CEQA Guidelines Section 15126.4(a)(1)(B). Second, MM-4.7-2 requires TDM Strategies and VMT reduction measures that have been selected from the 2021 California Air Pollution Control Officers Association (CAPCOA) publication, Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity as well as the Fehr & Peers TDM+ tool. As identified on page 4.17-30 in Section 4.17, Transportation, of the Draft EIR, the TDM Program must include, but would not be limited to the following measures:

- **Locating the Project near a Bike Lane; Improving Bike Boulevard; Expand Bikeway Network:** The Project shall include a Class III bicycle route on the proposed "A" Street, "B" Street, and the gated private access road on-site, which would connect to Los Angeles County's future Class II bicycle lane along the Project frontage on The Old Road.

- **E-Bikeshare System:** The Project shall include an E-bike loaner program (separate from the publicly accessible options in the City of Santa Clarita) to provide residents with short-term access for trips. This program shall be active for five years following an initial deposit by the Project Applicant.
- **Provide Community-Based Traveling Planning:** The Project shall provide households with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles, thereby reducing household vehicle miles traveled (VMT). The Project shall create a ridesharing program for school children. Most school districts provide bussing services to public schools only. School Pool helps match parents to transport students to private schools or to schools where students cannot walk or bike and do not meet the requirements for bussing.
- **Carpool/Vanpool Incentives:** The Project shall include monetary assistance with fares or gas costs for carpool/vanpool users. This incentive shall be active for three years following an initial deposit by the Project Applicant.
- **Implement Subsidized or Discounted Transit Program:** The Project shall provide subsidized/discounted daily or monthly public transit passes. This incentive shall be active for three years following an initial deposit by the Project Applicant.

The effectiveness of these strategies is based on research documented in the CAPCOA guide and selection of VMT reduction percentage is based on specific characteristics of the Project at site level and community level. As detailed in Table 4.17-4 (Draft EIR, page 4.17-23), the reduction of TDM strategies are quantified and would reduce VMT by 7.45%, thereby meeting the second and third criteria of CEQA Guidelines Section 15126.4(a)(1)(B). TDM measures can only be implemented post-Project occupancy as these require participation from the residents. Third, the TDM strategies included in MM-4.17-2 use VMT reduction percentages which are based on specific characteristics of the Project at site level and community level. Because those VMT reductions are based on published guidance from the 2021 California Air Pollution Control Officers Association (CAPCOA) publication, Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity and the Project does not require any parking reduction for multi-family units, the Project's TDM Plan would not require achieving a certain point value per Section 22.112.130 of County's Zoning Code. However, the Project includes several on-site measures included in Table 22.112.130-A: Applicable On-Site TDM Measures from Ordinance No. 2024-0036 that will result in Project's VMT reduction. Therefore, it is reasonable to assume that the strategies included in MM 4-17-2 will achieve the estimated VMT reduction for Project's VMT impact and hence meet the performance standard established for the Project.

029-42 See Appendix J, Mitigation Measures Feasibility Analysis, of Appendix J, Transportation Impact Analysis, of the Draft EIR for an evaluation of the feasibility of all TDM measures of the 2021 CAPCOA publication, Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. This appendix provides justification for why additional mitigation measures cannot reduce the Project's significant and unavoidable VMT impact to less than significant levels.

029-43 Los Angeles County Metropolitan Transportation Authority (Metro), in coordination with Los Angeles County Public Works, is responsible for expanding and investing in transit expansion based on the current 2020 Long Range Transportation Plan for the County. Additionally, Metro Vison 2028 Strategic Plan aims to double the percent usage of transportation modes other than solo driving, including taking transit, walking, biking, ridesharing, and carpooling. Santa Clarita Transit is also responsible for

coordinating transit expansion in the Project vicinity based on their Transit Development Plan (which is currently being updated; City of Santa Clarita 2024). The Project would not impede implementation of any local or regional plan that improves transit and mobility for residents. Regarding alternatives to single occupancy vehicle travel, MM-4.17-2, TDM Program, requires inclusion of a Class III bicycle route on-site, which would provide connectivity to the County's future Class II bicycle lane along the Project frontage. Additionally, MM-4.17-2 requires an e-Bikeshare System, community-based traveling planning (such as a rideshare program for school children), carpool/vanpool incentives, and a subsidized or discounted transit program. The Project would offer non-vehicular circulation throughout the Project site, such as sidewalks, a Class III bicycle route (as implemented by MM-4.17-2), trails, and pathways, which would reduce VMT and GHG emissions. Regarding GHG emission reductions, Section 4.8.7, Mitigation Measures, of Section 4.8, Greenhouse Gas Emissions, details eight mitigation measures that would also reduce GHG emissions to less than significant. For example, MM-4.8-5, Encourage Electric Vehicles, on page 4.8-63 of the Draft EIR, requires the installation of dedicated 208/240 branch circuits and electric vehicle (EV) charging stations, thereby encouraging reductions in GHG emissions from vehicular sources.

The provision of high-quality transit service in the Project vicinity is coordinated and implemented by the local and regional transit agencies, such as Metro and Santa Clarita Transit. As depicted on Figure 4.17-1, Transit Routes, of the Draft EIR, the nearest local service bus route to the Project site is approximately 0.6-mile north of the Project site along The Old Road, just north of Chiquella Lane and south of Sagecrest Circle. The CAPCOA VMT reduction measures related to transit expansion and increased service frequency (see Measures T-25, Extend Transit Network Coverage or Hours, and T-26, Increase Transit Service Frequency, Appendix J, CAPCOA Measures Feasibility Analysis of Appendix J of the Draft EIR) are applicable for larger plans and at a community scale per the CAPCOA guidance, not individual development projects on this smaller scale. The Project would provide an on-site pedestrian and bike network, which would connect via existing and planned pedestrian and roadway infrastructure to the existing transit facilities such as bus stops located along The Old Road, north of Chiquella Lane. The Project would not preclude or interfere with any future improvements that the County or City of Santa Clarita may implement within the public right-of-way along The Old Road to create a transportation hub or high-quality service bus stop at the Project site frontage or at the Project site.

029-44 As noted above, both Metro and Santa Clarita Transit are responsible for expanding and investing in transit expansion in the Project vicinity. Specifically, Santa Clarita Transit, as part of the Draft 2024 Transit Development Plan, has proposed to streamline, expand, and increase the frequency of bus routes with stops to the north of the Project site (City of Santa Clarita 2024). The comment is noted and the Project's contribution in supporting transit and alternative transportation modes has been clarified in previous responses along with MM-4.17-2 which will be implemented to reduce the Project's VMT.

029-45 Specific comments regarding mountain lions (Response to Comments 029-3 through 029-8), wildfire risk (Response to Comments 029-9 through 029-18, and 029-20 through 029-34), VMT (Response to Comments 029-39 through 029-44), and air quality (Response to Comment 029-38) are addressed above. No revisions to the Draft EIR are required as a result of this comment letter.

029-46 The Center for Biological Diversity will continue to review notices on the Project in compliance with state and local regulations, including the Ralph M. Brown Act (Government Code Section 54950, et seq.).

Comment Letter 030

617 W. 7th Street
Suite 702
Los Angeles, CA 90017

SIERRA CLUB
FOUNDED 1892

(213) 728-7543
angeles.sierraclub@gmail.com
www.sierraclub.org/angeles

WILDLAND URBAN WILDFIRE COMMITTEE

March 10, 2025

Erica Aguirre, Senior Planner
Los Angeles County Dept of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Sent via email to: EAguirre@planning.lacounty.gov

Re: Trails at Lyons Canyon Project, Project No. 2021-001195-(5), Vesting Tentative Tract Map No. 83301 (RPPL2021003061), Conditional Use Permit No. RPPL2021003113, Housing Permit No. RPPL2021003105, Oak Tree Permit No. RPPL2021003070, Environmental Assessment No. RPPL2021003071, State Clearinghouse No. 2022060346

Dear Ms. Aguirre:

The Sierra Club Angeles Chapter Wildland Urban Wildfire Committee (Wildfire Committee) was formed to address land use planning and safety policies related to the increasing intensity and frequency of wildfires in the Wildland-Urban Interface (WUI).[1] Our mission is to assess the risks associated with building in the Very High Fire Hazard Severity Zones (VHFHSZs) in Los Angeles and Orange counties and influence decision-makers to reduce those dangers while protecting the environment and the public through education, organizing, and policy change. Oftentimes projects are considered and approved in spite of the wildfire hazard risk to current and future residents, wildlife, and habitat and there is a failure to consider the huge cost to the public. 030-1

The Project consists of an approximately 233-acre site in the northern foothills of the Santa Susana Mountains in unincorporated Los Angeles County. It is situated west of the Old Road, north of Ed Davis Park in Towsley Canyon Open Space in a VHFHSZ, and south of the master-planned community of Stevenson Ranch. The Project proposes to develop 510 residential units in a mix of attached and detached dwelling units, a recreational center, two public streets, private driveways and fire lanes, pedestrian walkways, debris basins, a water tank, an outdoor swimming pool, senior housing, and open space. The total number of buildings proposed is 291 in a VHFHSZ. The project would require up to 1,460,000 cubic yards of cut and 1,260,000 cubic yards of fill for a total of 2,720,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. Due to expected shrinkage of 200,000 cubic yards, the total earth movement will be 2,805,000 cubic yards. 030-2

The Project site is located within the Santa Susana Mountains/Simi Hills Significant Ecological Area (SEA). The Project site is relatively undisturbed for much of the property, with species that may qualify as protected trees under the Los Angeles County SEA Ordinance 030-3

[1] WUI is defined as areas adjacent to or of transition between wildlands and human development and its associated infrastructure in which severe wildfire hazards are increasingly likely due to flammable native and non-native wildland vegetation, hazardous weather patterns, and steep topography. These areas have been designated as Very High Fire Hazard Severity Zones by Cal Fire.

Implementation Guide and the Los Angeles County Oak Tree ordinance. The site consists of undeveloped hillsides and no paved roads, as well as an abandoned water tank, water wells, an abandoned and plugged oil well, electrical distribution lines, and other miscellaneous structures (page ES-99).

O30-3 Cont.

The Executive Summary of the DEIR states that the County will consider the following discretionary actions, among others:

1. Certification of the EIR

2. Vesting Tentative Tract Map No. 83301 to subdivide the Project site into 37 lots

3. Conditional Use Permits ("CUPs") for, among others,

   a. Development within the County's designated Santa Susana Mountains/Simi Hills Significant Ecological Areas

   b. Oak Tree Permit, including impacts to a total of 334 SEA-protected trees (265 removals, 53 within a proposed debris basin, and 16 encroachments). Specifically, there are impacts to 312 non-heritage SEA-protected trees including oak, walnut, cottonwood, willow, and elderberry trees (251 removals, 50 trees located within debris basins, and 11 encroachments) and to 22 heritage oak trees (14 removals, three trees located within debris basins, and five encroachments). The removal of 265 SEA-protected trees and impacts to 53 trees within a proposed debris basin, amounting to 318 trees is problematic, particularly given the robust ecosystem services that mature trees provide, including the ability of native species such as the Coast Live Oak to catch and extinguish embers driven by Santa Ana winds.[2] The Project would impact several SEA resource categories including oak woodland, natural vegetation, and grassland. The proposed mitigation of planting 772 native trees to replace those lost is insufficient and cannot replace the performance of stands of mature oak trees.

O30-4

Climate-Change Effects on Mediterranean-Climate Regions

Although the DEIR acknowledges that the Project site can anticipate regular fires nearby and acknowledges the history of fire on the site, it does not analyze the impacts that climate change is having on regions characterized by the Mediterranean climate regime, such as coastal Southern California, in which the Project site is situated. Wildfires are increasing in number and intensity in Mediterranean climates[3] and causing shifts in precipitation patterns. For example, in Southern

O30-5

[2] https://www.latimes.com/lifestyle/newsletter/2025-02-01/what-trees-survived-in-our-terrible-fires-and-why-didnt-they-burn-lat-plants

[3] Ruffault, J., Curt, T., Moron, V. et al. Increased likelihood of heat-induced large wildfires in the Mediterranean Basin. Sci Rep 10, 13790 (2020). https://doi.org/10.1038/s41598-020-70069-z; Richardson, D., Black, A.S., Irving, D. et al. Global increase in wildfire potential from compound fire weather and drought. npj Clim Atmos Sci 5, 23 (2022). https://doi.org/10.1038/s41612-022-00248-4

California, an exceptionally dry winter coincided with an extreme Santa Ana windstorm on January 7, 2025. If the winter had been normal for the Mediterranean climate pattern, with expected precipitation, the accumulated fuels may not have been as prone to ignition. The Sierra Club's position on anticipating the effects of climate change in planning decisions ask the County to take a long view: Consider that these unusual convergences of drought, winter, and wind could recur over the next 50 or more years. The DEIR mentions greenhouse gas emissions and drought-tolerant plants many times but does not appear to acknowledge that all seasons may experience drought now and into the future.

O30-5 Cont.

O30-6

Deny All Requested Discretionary Actions Until Proposed and Additional Mitigations Regarding the Plugged Oil Well Are Performed; Do Not Certify the EIR (RPPL2021003071)

In the center of the Project site is an abandoned and plugged oil well. The California Department of Conservation, Geologic Energy Management Division (CalGEM), in a public comment submitted after the NOP Public Review deadline, noted that there may be other oil wells on the Project site. There are significant and potentially dangerous hazards associated with abandoned oil wells, including methane leaks and a potential to explode during wildfires.[4] Methane leaks can lead to serious health problems. CalGEM advised against building on top of or "impeding access to oil, gas, or geothermal wells" (page 1-6). The DEIR is negligent in having performed only a desktop Phase 1 environmental site assessment. All requested discretionary actions should be denied until a Phase 2 environmental site assessment is done at the plugged oil well and within the proposed 300-foot radial area of development around it.

O30-7

Moreover, because of the potential for the presence of underground methane gas, the additional potential exists for vapor intrusion of methane or other volatile organic compounds (VOCs) into any structure built on the Project site. (However, the evaluation of methane vapor intrusion requires different protocols[5] than evaluating for the presence of other VOCs and their potential for vapor intrusion. Both types of evaluation may be required on this site, and the Sierra Club Angeles Chapter asks that you require such evaluations before proceeding with any discretionary permit approvals.) Additional remediation measures will be required if VOC contamination is found in the soil, groundwater, and/or soil vapor. For example, the soil management plan would have to adhere to accepted protocols for preventing the escape of fugitive dust during excavation, namely Rule 403 Fugitive Dust, from the South Coast Air Quality Management District,[6] and vapor-intrusion barriers would need to be engineered under any building that may be built on top of the Project site (because soil vapors migrate preferentially in the vadose zone along utility and sewer lines, they can then penetrate buildings[7]; if these vapors are generated by carcinogenic or other harmful substances, they may pose a risk to human health, depending on their concentration in the soil vapor; an evaluation of such soil

O30-8

[4] https://www.latimes.com/environment/story/2024-07-21/wildfires-pose-increasing-risk-to-california-oil-wells?_gl=1*1hk86bq*_gcl_au*MTAxNjc1MzczLjE3MzYyMjEzNDE.

[5] https://www.provectusenvironmental.com/marketing/tech_docs/Procedures_for_Evaluating_Potential_Methane_Hazard-Eklund2014.pdf

[6] https://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf

[7] https://www.epa.gov/sites/default/files/2015-09/documents/oswer-vapor-intrusion-technical-guide-final.pdf

vapor, potential for vapor intrusion, and impacts on human health must be performed before granting Project permits). O30-8 Cont.

The Wildfire Committee of the Sierra Club Angeles Chapter is particularly alarmed that the Soil Management Plan described in Mitigation Measure 4.9-1 (MM-4.9-1) would not include sampling and characterization of suspect materials unless they are "identified visually and/or from odors" during construction activities (page 4.9-18). While this protocol may be appropriate for materials that can be seen and smelled, methane gas is odorless in its natural state. The order of steps in MM-4.9-1 is backwards. A qualified environmental specialist should be hired by the developer now so that soil, groundwater, and soil-vapor sampling and testing can be conducted now, before any permits are granted, and so that the abandoned and plugged oil well can be tested for methane and other VOCs. Sampling and reporting of the findings should be communicated to the responsible authorities, such as the SCAQMD, the DTSC, the Water Quality Control Board, the Certified Unified Program Agency, interested parties, and the County, as soon as they are available. The public should have an opportunity to comment on the findings, and the responsible parties should hold a public hearing before the County reconsiders the discretionary approvals for the Project. O30-9

Mitigation Measures 4.9-2, Well Assessment, and 4.9-3, Methane Gas Survey and Remediation, should take place now, before project approval. The DEIR states these proposed mitigation measures would take place before a grading permit is issued. However, that is too late. Both of these mitigation measures presume the presence of only one plugged well. CalGEM, however, stated in its public comment on the NOP that more may be present. The entire Project site should be evaluated for the presence of other wells now before the County grants any discretionary approvals. The presence of methane and other plugged wells not only could present a hazard in case of wildfire, but also a public-health hazard to the Stevenson Ranch neighborhood to the north and to drivers in vehicles on the adjacent Interstate 5. O30-10

The statements on page 4.9-22 regarding radon are based on a false assumption, namely, that radon is of concern to human-health impacts only in subterranean spaces. This is blatantly false. Radon exposure inside buildings is the second leading cause of lung cancer in the U.S.[8] O30-11

We include by reference the significant impacts stated in the previous EIR, and all related studies to show that significant impacts from construction and operational noise and from traffic type and volume, and to biological resources, terrain, hydrological resources, aesthetics, and air quality persist. This is a larger project than the previously proposed project. We do not agree that these impacts can be mitigated to below significance, as described in the DEIR's proposed mitigation measures. The potential to generate additional human-caused wildfires in the area should also have been considered a significant impact. O30-12 O30-13 O30-14

Fire History at the Project Site

Consideration of the Trails at Lyons Canyon development (Project) disregards the growing hazard and frequency of massive wildfires in VHFHSZs, as well as urban conflagrations, driven O30-15

[8] https://www.epa.gov/radon/health-risk-radon

by climate change and the vulnerability of communities in the WUI. Urban conflagrations destroy, or nearly destroy, whole communities, such as Altadena and Pacific Palisades, when human-built structures in the WUI ignite and high winds drive embers deeper into neighborhoods at a speed that exceeds the capacity of fire-fighting personnel to extinguish[9] the flames.

Indeed, the history of wildfire at the Project site, according to the DEIR, reveals that 173 fires have burned within five miles of the site since the late 1890s, while seven have burned on the site, the most recent one being the 2016 Sage Fire. In the Sage Fire, out of a total of 850.9 burned acres, 216.5 were on the site. The DEIR states that "there will be wildland fires within 5 miles of the Project site on average every year, and at least every 10 years as observed in the fire history record." These fires, the DEIR acknowledges, are typically driven by Santa Ana winds. The Project site is characterized by "hillside and valley terrain with moderate to steep slopes" (p. 4.20-3), where channeling and funneling of wind can take place. The recent Eaton and Palisades fires caused property loss estimated to be in excess of $30 billion, burned 56 square miles, and caused 29 deaths, most of them elderly residents who could not evacuate.[10] Moreover, cardiovascular events may increase in the face of evacuation orders.[11] The Trails at Lyons Canyon Project proposes that almost 10% of the new units will be deed-restricted rental apartments for very-low-income senior citizens (see page 3-10 in the DEIR). Senior citizens, particularly low-income seniors, experience increased vulnerability to hazards.[12] Not only do they often have physical or medical impediments to evacuate but also they may not have enough money to afford to evacuate. Devastating wildfires have already occurred repeatedly in this immediate area and illustrate why we must stop building in these fire-prone zones:

1. The 2016 Sage Fire forced the evacuation of thousands of residents, threatening homes, charring hundreds of acres in a major wildlife corridor, and

2. The 2003 Simi Fire tore through this very project area, burning more than 98,000 acres.

These two mega fires are only two of a number of wildfires that have occurred in this area over the last decade, with the most recent fire occurring in the fall of 2020. The toll on public safety and the environment, in addition to the financial cost of fighting these blazes is no longer acceptable. Moreover, we need a full analysis of the lessons learned in the Eaton and Palisades fires. Hurricane-force winds ejecting embers across several miles made it impossible to effectively and safely fight these fires from the air and ground on the first day of the windstorm.

O30-15 Cont.

O30-16

O30-17

O30-18

O30-19

[9] https://www.npr.org/2025/01/13/nx-s1-5254083/insights-from-an-expert-on-large-urban-fires-and-how-to-prevent-them

[10] https://www.washingtonpost.com/weather/2025/02/09/la-fire-victims-california-palisades-altadena/

[11] https://www.sciencedirect.com/science/article/pii/S0143622823001649?via%3Dihub

[12] Adams, R. M., Evans, C. M., Mathews, M. C., Wolkin, A., & Peek, L. (2020). Mortality From Forces of Nature Among Older Adults by Race/Ethnicity and Gender. Journal of Applied Gerontology, 40(11), 1517-1526. https://doi.org/10.1177/0733464820954676; Mileti, Dennis S. (2004). *Disasters by Design: A Reassessment of Natural Hazards in the United States.* Washington, DC: Joseph Henry Press.

The DEIR fails to account for the toxic contaminants released from the burning of vehicle tires. Hundreds of vehicles burned in the Eaton and Palisades fires. When tires burn, they break down into many hazardous compounds, including gases, heavy metals, and oil. The average passenger car tire is estimated to produce over two gallons of oil when burned (Rubber Manufacturers Association, April 2003). The impacts to the neighboring community of Stevenson Ranch, and depending on the velocity and direction of winds at the time of the conflagration and thereafter, and to the wider Santa Clarita Valley and beyond, could be significant to human health. These impacts should be analyzed before any discretionary approvals are granted. 030-20

The Availability of Federal Resources and Cooperation Is Uncertain

The DEIR, on pages 4.20-5 and -6 presumes that federal-level fire plans and programs, and coordination with state and local authorities, will continue. For example, the Department of the Interior's National Fire Plan, the Rural Fire Assistance program, and the Federal Wildland Fire Management Policy have been important regulatory frameworks or guidelines for California. Moreover, access to FEMA funds, programs, and personnel have been critical to helping California households and fire victims on their paths to recovery. However, given the current political climate in Washington, DC, it is uncertain whether California can count on assistance of any kind from the federal government.[13] Therefore, we believe that the Project's environmental impacts should be reanalyzed using the presumption that no help is coming from the federal government or agencies. 030-21

We oppose this development in a VHFHSZ because it would put existing and future residents in harm's way in the event of a wind-driven wildfire, especially seniors. 030-22 It would also endanger existing residents as they attempt to evacuate on a residential street where many additional cars would add to an already difficult evacuation problem. 030-23

The Project Fails to Conform to the Los Angeles County General Plan 030-24

Goal LU-3: Healthy Neighborhoods. Healthy and safe neighborhoods for all residents.

Policy LU-3.3.2: In areas subject to wildland fire danger, ensure that land uses have adequate setbacks, fuel modification areas, and emergency access routes. 030-25

Policy LU-3.3.3: Through the development review process, ensure that all new residential development is provided with adequate emergency access and that subdivision and site designs permit ready access by public safety personnel.

As described above, access is inadequate to protect public safety and provide safe evacuation in a fast-moving, wind-driven wildfire. In fact, the evacuation plan estimates in a worst-case scenario that evacuation could take up to 37 minutes for vehicles. In a wind-driven fire, that length of time would be deadly. There was no discussion in the plan of how to get people out that 030-26

[13] https://www.forbes.com/sites/alisondurkee/2020/10/16/trump-administration-refuses-to-give-california-federal-aid-for-wildfires/; https://www.politico.com/news/2024/10/03/helene-trump-politics-natural-disaster-00182419

do not have cars or how to evacuate seniors from the third floors if the electricity goes out and the elevators stop working. We note that the great majority of deaths in the recent Eaton Fire were seniors and/or disabled people that could not get out. In light of that recent horrific disaster, it would be unconscionable to continue to consider senior housing in this area and to accept such an inadequate Evacuation Plan.

The Evacuation Plan is totally deficient in these areas and needs to be rewritten. Therefore, this project is not consistent with the General Plan Policies and Goals.

030-26 Cont.

Fuel Modification Will Affect Wildland, Open Space, and Habitat

Since this project site is located within Fire Zone 4, which is a VHFHSZ within the State Responsibility Area (SRA), a fuel modification plan for the perimeter portions of the proposed development envelope would be required and has been conceptually approved by the County Fire Department. This fuel modification will affect wildland and preserved open space and habitat.

030-27

Expense

Defending this area from wildfires will continue to be very expensive for the County. We ask that the Commission request a cost-of-services study for this development and begin to generate fees to ensure that adequate financing of fire services can be provided if this project is approved.

030-28

Conclusion

Experts agree that human-sparked wildfires are more frequent, faster spreading, and more destructive than those caused by nature.[14]

- Wildfires have become more destructive due to climate change, historic fire suppression, and development in wildlands.[15]
- When houses are built close to natural vegetation, they pose two problems related to wildfires. First, there will be more wildfires due to human ignitions. Second, wildfires that occur will pose a greater risk to lives and homes, and they will be hard to fight.[16]
- To stem the escalating loss of life and property, the state needs to curb development in high fire-hazard zones.[17]
- To stop the destruction of our communities by wildfire in our rapidly changing environment we must reduce the flammability of existing communities and prevent new ones from being built in VHFHSZs.[18]

030-29

[14] https://www.sciencemag.org/news/2020/12/human-sparked-wildfires-are-more-destructive-those-caused-nature
[15] Fanning the Flames: The Reality of Climate Change and Wildfires in California, https://www.youtube.com/watch?v=BFaDz_NyYX8
[16] https://www.pnas.org/content/115/13/3314
[17] https://www.latimes.com/projects/wildfire-california-fuel-breaks-newsom-paradise/

- California's increasingly deadly and destructive wildfires have become so unpredictable that government officials should consider banning new home construction in vulnerable areas.[19]
- The best way to prevent wildfire destruction and death is to stop building houses in the path of fire, particularly in zones, like the Project site, with a history of wildfire.[20]

O30-29 Cont.

Based on a robust body of research and evidence concluding that people and structures, including power-transmission lines, in and/or near wildland areas are the primary driver of destructive wildfires, the Wildfire Committee sponsored a resolution, which Sierra Club California adopted in 2020. The Los Angeles County Democratic Party passed a similar resolution shortly thereafter. Both new policies address the importance of restricting development in fire-prone areas:

- Sierra Club California: "supports policies that prohibit new building in Very High Fire Hazard Severity Zones, consistent with established Sierra Club infill policy, to respond to increasing intensity and frequency of devastating wildfires on lives, habitat, property, infrastructure, and the environment." (Adopted August 22, 2020)

- The Los Angeles County Democratic Party: "calls on our state leaders to reconsider the approval of increased developments in Very High Fire Hazard Severity Zones near or in wildland-urban interface areas, and seeks strong regulations and limits on new structures, as these buildings have been found to increase the size and destructive nature of our state's worst fires." (Adopted September 22, 2020)

O30-30

Public opinion supports the recommendations of scientists and fire experts to restrict building in fire-prone areas. A 2019 Analysis of Quality of Life Index by UCLA's Luskin School of Public Affairs found that 73% of those surveyed believe that the construction of new homes should be prohibited in high-risk fire areas. Only 20% of survey respondents disagreed.[21]

O30-31

For all the reasons listed above, the Wildfire Committee of the Sierra Club Angeles Chapter opposes further incursions into VHFHSZs, especially in areas that have limited evacuation routes and pose a serious danger to current and future residents. We also oppose such projects because of the rising costs associated with defending lives and property due to more frequent wildfires-turned-conflagrations, which are associated with the drier, hotter conditions characterizing our changing climate. As temperatures rise, drought becomes prolonged, and seasonal precipitation patterns shift. Those of us living in Southern California may not be able to avoid the effects of changing climate on our existing communities, seeking thoughtfully to mitigate those effects, but we can make wiser decisions and not build new communities in VHFHSZs, which will pose further problems, hazards, and risks to the region, its people, and its flora and fauna.

O30-32

O30-33

O30-34

[18] https://www.sierraclub.org/sites/www.sierraclub.org/files/sce/sierra-club-california/PDFs/GovNewsom_Wildfires_2019.pdf
[19] https://apnews.com/article/d2f76432db1749d4918e55624a47c654
[20] https://www.latimes.com/opinion/story/2019-11-29/california-wildfire-housing-ideas
[21] https://ucla.app.box.com/s/t8bb9h8lg48fbfp4l1yz1c6rs35tdmf5

Thank you for considering our comments. I 030-35

Sincerely,

Gina K. Thornburg, PhD
Member, Wildland Urban Wildfire Committee
Sierra Club, Angeles Chapter

INTENTIONALLY LEFT BLANK

Response to Comment Letter O30

Sierra Club, Angeles Chapter, Wildland Urban Wildfire Committee
Gina K. Thornburg, PhD, Member
March 10, 2025

030-1 This introductory statement does not express any adequacy concerns related to the environmental analysis contained in the Draft EIR.

030-2 This comment incorrectly identifies the cubic yardage associated with grading activities. As stated on page 3-19 in Chapter 3, Project Description, of the Draft EIR, the Project would require approximately 1,500,000 cubic yards of cut and 1,300,000 cubic yards of fill for a total of 2,800,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. There is expected to be 15% shrinkage on the over excavation for a total of 200,000 cubic yards. The total earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site adjacent parcel adjacent to The Old Road that includes manufactured slopes. This comment does not express any adequacy concerns related to the environmental analysis contained in the Draft EIR.

030-3 This comment accurately describes the Project location and existing conditions. This comment does not express any adequacy concerns related to the environmental analysis contained in the Draft EIR.

030-4 This comment accurately identifies several of the required discretionary actions associated with the Project. Regarding planting of mitigation trees, neither the SEA Ordinance, codified in County Code Chapter 22.102, Significant Ecological Areas, nor the Oak Tree Permit Ordinance, codified in County Code Section 22.174, Oak Tree Permits, restrict the total number of tree removals allowed for a given project. As detailed in Section 4.4, Biological Resources, of the Draft EIR, the Project would result in 318 SEA Protected Tree removals. Per MM-4.4-16, SEA Protected Trees Replacement/Conservation, the 318 SEA Protected Trees would be replaced in accordance with SEA Ordinance requirements, resulting in 772 replacement trees. As stated on page 4.4-93 in Section 4.4, Biological Resources, of the Draft EIR, the required replacement trees must be seedlings of the same species being removed and shall be planted within an area where suitable growing conditions are present and where the trees shall be able to remain in perpetuity. The replacement trees must be nurtured and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. As stated on pages 4.4-57 and 4.4-58 of the Draft EIR, MM-4.4-16 adequately addresses requirements and recommendations set forth in the SEA Ordinance and SEA Ordinance Implementation Guide and reduces proposed impacts to SEA Protected Trees to below a level of significance under CEQA.

Regarding native tree species and their ability to catch and extinguish wind-driven embers, the Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within a Very High Fire Hazard Severity Zone. It is understood that as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. An important component of a fire protection system for the Project is the provision for fire-resistant landscapes and modified vegetation buffers. Fuel modification zones (FMZs) are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from advancing fire by strategically placing

thinning zones, restricted vegetation zones, and irrigated zones adjacent to each other on the perimeter of the wildland–urban interface exposed structures.

The Project would provide 200 feet of FMZ along residential areas as protection from wildland fire.[36] Where 200 feet of FMZ is not possible, the Project would require FMZs provide managed and maintained separation between structures and infrastructure and unmaintained wildland areas. This separation/setback is considered an FMZ and defensible space because it enables firefighters to safely position themselves at the development edge and begin tactical protection efforts between the development footprint and wildland areas at the wildland urban interface. FMZs essentially "starve" advancing wildfire of its fuel source, through the outer thinning zones, where vegetation is reduced so that no more than 50% of the ground is covered by plant canopy and includes removal of the highest flammability species. The second zone of the FMZ is an inner irrigated zone, which removes all native plants and replaces them with fire resistive species that are kept irrigated and with high internal moisture, which results in more difficult ignition. FMZs are effective because fire behavior is affected as a wildfire burns into the thinned zone—flame lengths drop, spread rates are reduced, and intensity of fire decreases. This process continues as fire burns into the irrigated zone where flame lengths, spread rates, and intensity are reduced substantially and wildfires become spotty and with much lower heat output. As such, the Project would result in less than significant wildfire impacts.

030-5 The analysis provided in Section 4.20, Wildfire, of the Draft EIR, acknowledges that wildland fires are a common natural hazard in Southern California and takes into consideration local and regional climate, weather, and wind conditions that contribute to wildfire risk (refer to the Section 4.20.1, Existing Conditions, of the Draft EIR for a discussion of climate, weather, and wind conditions). However, in accordance with C*alifornia Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, Case No. S213478, it is the Project's impact on the environment and not the environment's impact on the Project that compels the required CEQA evaluation. Thus, the Draft EIR is not required to anticipate the potential impact of climate change (i.e., the environment) on the Project.

030-6 The Draft EIR does take into consideration existing and future drought conditions, specifically as it relates to water supply. Section 4.19, Utilities and Service Systems, of the Draft EIR considers the Project's impacts related to water supply and drought conditions within various scenarios. Regarding water availability and the current water crisis, in preparing the Project's Water Supply Assessment (Appendices L-2 and L-3 of the Draft EIR), the Santa Clarita Valley Water Agency Water (SCV Water) considered the urban water shortage contingency planning analysis set forth in the 2020 Urban Water Management Plan and 2020 Water Shortage Contingency Plan in determining the sufficiency of water supplies for the Project, in addition to all existing and planned future uses in SCV Water's service area. These documents also explain how SCV Water's reliability planning provisions of these adopted documents assist SCV Water in responding to drought conditions, including the severe drought conditions that currently exist (see page 4-33 in Appendix L-2 of this Draft EIR). As stated on page 4.19-28 in Section 4.19 of the Draft EIR, the Project's Water Supply Assessment concludes that the total

[36] Within certain areas of the Project site, achievement of the required 200-foot FMZ would not be feasible, as the Project Applicant does not currently have access or approvals to conduct fuel modification and vegetation thinning outside of the Project site boundaries. Areas of reduced FMZ would be generally located adjacent to 16 proposed homes along the Project site's southeastern boundary (within Lot 5 of the Tentative Tract Map). In the limited areas where a 200-foot FMZ is not feasible, MM-4.20-2, Alternative Materials and Methods, has been set forth to ensure that additional fire protection measures are implemented to effectuate the same level of protection as a 200-foot on-site FMZ. These measures include construction of a 6-foot-tall concrete masonry wall and enhanced building materials such as dual pane tempered windows and ember-resistant exterior vents. See Table 2, Code Exceed Measures of Topical Response-1 for further discussion.

projected water supplies available to SCV Water's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five-year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

030-7 As discussed on page 4.9-21 of Section 4.9, Hazards and Hazardous Materials, of the Draft EIR, and as identified by the California Department of Conservation Geologic Energy Management Division (CalGEM; see Comment A6-13 in Comment Letter A6 of this Final EIR) there is one identified plugged subsurface oil well (Ayers 1 – API 0403706017), that could be a source of potential adverse effects. The number of the well has been revised in Chapter 3, Revisions to the Draft EIR, of this Final EIR from API 03706017 to API 0403706017 at the direction of CalGEM (See Comment A6-13 in Comment Letter A6 of this Final EIR). There are no other identified oil wells on-site. The detail sheet of the Vesting Tentative Tract Map No. 83301, which includes this development area and identifies the location of the abandoned well in the context of the surrounding land uses, has been included in Chapter 3, Revisions to the Draft EIR, of this Final EIR. This detail sheet identifies the location of the abandoned oil well as being on an unpaved property with no structures between residential pads #16 and #17, adjacent to an internal street. As shown, the development of the Project would not impede access to the abandoned well and would allow all necessary equipment to reach the well site from the public street without disturbing the integrity of any surrounding infrastructure.

As discussed below in Response to Comment 030-8, the oil well (drilled in January 1961) was an exploratory and was never a productive, oil-producing well before it was abandoned/plugged in February/March 1961, just months after being drilled. Nevertheless, implementation of MM-4.9-2, Well Assessment, would be required (Draft EIR, page 4.9-34). MM-4.9-2 requires that, prior to issuance of a grading permit, the Project Applicant shall retain a California-registered design professional, such as a licensed civil engineer and/or licensed petroleum engineer to evaluate the exact location, condition, and abandonment status of the well on the Project site pursuant to Section 110.4 of the Los Angeles County Building Code (LACBC). MM-4.9-2 ensures that evaluation of the abandonment of the well is documented and approved by Los Angeles County Public Works for safety, which would ensure compliance with Section 110.4 of the LACBC. Additionally, to ensure that methane gas hazards associated with the plugged well do not present a risk to future occupants, implementation of MM-4.9-3, Methane Gas Survey and Remediation, would be required. MM-4.9-3 requires that the Applicant conduct a methane gas survey for the potential of methane gas emissions on the Project site, in accordance with California Department of Conservation Geologic Energy Management Division (CalGEM) and Department of Toxic Substances Control methane assessment guidelines prior to the issuance of grading permits. The methane survey would inform of requirements for any further remediation and closure or removal of the oil well. Implementation of MM-4.9-2 and MM-4.9-3 would reduce impacts associated with the presence of the plugged oil well, including potential methane gas hazards, to a less-than-significant level.

Furthermore, in accordance with Section 22.140.400(G)(1) of the County Code, the County requires that all CalGEM requirements be fulfilled related to the plugging and abandonment of a well; removal of equipment, trash, and other waste materials; and well site and lease restoration. As such, if during Project development activities, any unknown wells are encountered, the construction contractor would be required to comply with all applicable regulations and coordinate with CalGEM accordingly.

In addition, as stated on page 4.9-18 and page 4.9-21 of Section 4.9, Hazards and Hazardous Materials, of the Draft EIR, the Phase I environmental site assessment (ESA) did not reveal any

recognized environmental conditions (RECs) at the Project site and found no other hazardous materials sites located near the Project site that would constitute a potential hazard or REC that would be considered capable of adversely affecting the Project site. As such, a Phase II ESA was deemed not necessary. As stated on page 4.9-9 in Section 4.9 of the Draft EIR, per Title 26, Section 110.4, Methane Gas Hazards, of the County Code, buildings are not permitted within 300 feet of an oil well unless designed according to recommendations contained in a report prepared by a registered design professional to evaluate whether the well is properly abandoned. The Phase I ESA found that with the measures applied through MM-4.9-3, Methane Gas Survey and Remediation, methane impacts from the abandoned on-site oil well would be less than significant. Please refer to Response to Comment 030-8 below.

030-8 The purpose of the Phase I Environmental Site Assessment is to identify recognized environmental conditions (RECs), including historical recognized environmental conditions (HRECs), and controlled recognized environmental conditions (CRECs) that may exist at a property. The term "recognized environmental conditions [RECs]" means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property. Appendix F, Phase I Environmental Site Assessment to the Draft EIR did not identify any recognized environmental conditions (RECs) at the Project site.

Due to the presence of an exploratory oil well that was plugged in 1961, which was never a productive oil-producing well, the Project is subject to the Gas Hazard Mitigation Policy and Standards (GHMPS) of the Los Angeles County Building Code, which states that should a soil survey sampling result and/or determination be made that potential gas generation/migration exists at a site, a gas protection system is required. Appendix F, Phase I Environmental Site Assessment to the Draft EIR provides details about the history of the exploratory well. The fact that the exploratory well was drilled in January 1961, never produced oil, and was subsequently abandoned/plugged in February/March 1961, indicates that there were no available petroleum resources at the well site. Nevertheless, the Project is required to evaluate the potential for soil vapor that could lead to vapor intrusion is stated in MM-4.9-3. If soil gas is detected, MM-4.9-3, Methane Gas Survey and Remediation, requires that a gas protection system be installed at residences within 300 feet of the plugged oil well. Implementation of MM-4.9-3 includes appropriate protocols for addressing any potential hazards associated with the abandoned exploratory well and would reduce any impacts relating to the potential for soil vapor to a level of less than significant.

030-9 As stated on page 4.9-18 and page 4.9-21 of Section 4.9, Hazards and Hazardous Materials, of the Draft EIR, the Phase I ESA did not reveal any RECs at the Project site and found no other hazardous materials sites located near the Project site that would constitute a potential hazard or REC that would be considered capable of adversely affecting the Project site, including soils. As such, a Phase II ESA was deemed not necessary. In addition, as stated on page 4.9-22 of Section 4.9, Hazards and Hazardous Materials, of the Draft EIR, grading activity recommendations must be implemented to the satisfaction of Los Angeles County Public Works, which would include a soil gas investigation and installation of methane gas mitigation systems where methane levels exceed 5,000 parts per million by volume, should any such levels occur.

Regarding potential methane impacts, please refer to the response provided above for Comments 030-7 and 030-8.

030-10 Regarding potential methane impacts and MM-4.9-2 and MM-4.9-3, please refer to the response provided above for Comments 030-7 and 030-8.

030-11 As stated on page 4.9-22 of Section 4.9, Hazards and Hazardous Materials, the Draft EIR acknowledges that radon is a risk to residential properties and states that "the hazard is considered of greater concern where there is inadequate ventilation of an interior space such as subterranean garages or basements." The Draft EIR did not state that risks from radon are exclusive to subterranean spaces.

030-12 Although located at the same site, the currently proposed Project and Draft EIR are separate and distinct from the previously approved project and certified EIR (State Clearinghouse No. 2003031086). This Project has been analyzed in accordance with Section 15151 of the State CEQA Guidelines, which defines the standards for EIR adequacy. The Draft EIR is not a tiered document and is intended to provide the environmental information necessary for the County to make a final decision on the requested discretionary actions to be considered as part of the Project. As such, there is no obligation that the findings of the Draft EIR be tethered to the findings of a previous environmental document for a separate and distinct project. Furthermore, since the time of the previous approval (i.e., 2009), in addition to changes to the specific development components, site plan configuration, etc., there have been changes to existing circumstances, including but not limited to environmental conditions, regulatory requirements, and case law, which have resulted in the impact determinations set forth in the Draft EIR. The conclusions in the Draft EIR are appropriately supported by substantial evidence (including facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts), as defined in Section 15384 of the CEQA Guidelines.

Regarding environmental impacts under CEQA, as discussed in further detail below, the Draft EIR adequately analyzes potential impacts related to transportation (Section 4.17, Transportation), noise (Section 4.13, Noise), biological resources (Section 4.4, Biological Resources), aesthetics (Section 4.1, Aesthetics), hydrological resources, (Section 4.10, Hydrology and Water Quality), "terrain" (Section 4.7, Geology and Soils), and air quality (Section 4.3, Air Quality).

Please refer to Section 4.13, Noise, of the Draft EIR for a detailed analysis of the Project's potential noise impacts. Regarding generation of substantial temporary increase in ambient noise levels in the vicinity of the Project, mitigation measures would be required to reduce impacts from construction activity to less than significant. Upon implementation of mitigation measures, impacts regarding generation of substantial temporary increases in ambient noise levels in the vicinity of the Project in excess of standards established in the County's General Plan and noise ordinance would be less than significant. The Project would result in less than significant impacts regarding generation of excessive groundborne vibration or groundborne noise levels and would result in no impacts regarding excessive noise levels due to proximity to a private airstrip, airport land use plan, public airport, or public use airport.

Automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). The previous environmental document was subject to previous CEQA guidelines that have changed since preparation of that document, and level of service is no longer analyzed under CEQA. However, please refer to Section 4.17, Transportation, of the Draft EIR and the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

Please refer to Section 4.4, Biological Resources, of the Draft EIR for a detailed analysis of the Project's potential biological resource impacts, including impacts related to oak tree removals. As discussed therein, impacts related to candidate, sensitive, or special status plant/wildlife species, sensitive natural communities, movement of fish or wildlife species, wildlife corridors, wildlife nursery sites, oak/native woodlands, and potential conflicts with any local policies or ordinances protecting biological resources would be less than significant with mitigation incorporated. There would be no impact related to a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional, or local habitat conservation plan. As such, the Project would not result in any significant biological resource impacts.

Potential Project impacts related to geology and soils (i.e. "terrain") are addressed in Section 4.7, Geology and Soils, of the Draft EIR. As discussed therein, the Project site is not located within an Alquist–Priolo Earthquake Fault Zone, and no active faults underlie the site, so the risk of surface rupture is minimal. While strong seismic ground shaking is likely due to the site's location in a seismically active region, compliance with applicable building codes (e.g., California Building Code, Los Angeles County Building Code) and the preparation of a final geotechnical report would ensure structures are adequately designed. The Project would also implement geotechnical recommendations to address risks from liquefaction, landslides, erosion, and soil instability by removing or stabilizing loose materials and ensuring appropriate drainage and slope treatments. This would reduce geotechnical hazards to less than significant levels. The Project would also comply with the Hillside Management Area Ordinance, preserving a large portion of the site as open space and largely clustering new development to minimize the development footprint. Finally, although the Project could encounter high-sensitivity sedimentary formations, any significant paleontological resources would be protected through a monitoring plan and worker training in accordance with MM-4.7-1, Paleontological Monitoring and MM-4.7-2, Workers Environmental Awareness Program (WEAP); thus, potential impacts to fossil resources would be reduced to a less than significant level.

An analysis of the Project's potential hydrology and water quality impacts is provided in Section 4.10, Hydrology and Water Quality, of the Draft EIR (see Section 4.10.5, Impact Analysis, beginning on page 4.10-21). The analysis is supported by several technical studies, referenced on page 4.10-1 of the Draft EIR, which are included as appendices to the Draft EIR. The Project would comply with all applicable regulatory requirements and best management practices to avoid degrading water quality. During construction, compliance with dust control and runoff regulations, particularly the Storm Water Pollution Prevention Plan, Erosion and Sediment Control Plan, and various hazardous-materials handling rules, would prevent harmful discharges to nearby waterways. During operation, the Project's design includes debris basins, desilting basins, and biofiltration systems sized to exceed County low-impact development standards, thereby ensuring that stormwater is captured, treated, and safely conveyed without substantially increasing flow rates or sedimentation downstream. As summarized on pages 4.10-39 and 4.10-40, the Project's drainage and water-quality features, together with its conformance to existing regulations, would result in less-than-significant impacts to hydrological resources. In addition, as discussed in Section 4.4, Biological Resources (Threshold 4.4c), with implementation of MM-4.4-14, Jurisdictional Waters Compensation, there would be less than significant construction impacts regarding a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.

Please refer to Section 4.1, Aesthetics, of the Draft EIR for a detailed analysis of the Project's potential aesthetic impacts, including impacts to public views. As stated on page 4.1-32 of the Draft EIR, while the existing hillside closest to The Old Road would be graded to accommodate two to three-story attached homes within Lots 7 (to the east) and 6 (toward the Project-site center), this area would remain elevated in comparison to public vantage points along The Old Road, I-5, Taylor Trail trailhead, and the Taylor Trail segment closest to The Old Road. Grading activities occurring on the hillside, as well as elsewhere throughout the Project site, would incorporate required drainage and erosion control measures, and would be designed in accordance with the standards set forth in the California Building Code, which, in addition to minimizing risks from erosion, would ensure graded areas remain visually compatible with the existing terrain.

As discussed on page 4.1-24 in Section 4.1, Aesthetics, of the Draft EIR, the Project would comply with existing County requirements and laws regulating development in visually sensitive areas such as hillsides. Pursuant to Chapter 22.140.170 (Density-Controlled Development) of the County's Zoning Code, the Project would employ a density-controlled development program that would largely cluster development in the lower-lying, northeastern area of the Project site closest to the I-5 corridor. The Project would conserve approximately 150 acres of the Project site as natural open space, which exceeds the conservation area of the previously approved project. The natural open space would be contiguous and concentrated in the southern/southwestern portion of the Project site and would include many of the Project site's important visual resources, include Hillside Management Areas, oak woodland habitat, and the on-site County-designated significant ridgeline. The Project would also be required to comply with Chapter 22.104 (Hillside Management Areas) of the Zoning Code and would implement design features to comply with applicable Hillside Design Guidelines standards (Chapter 22.104, Appendix I), which would further minimize any impacts to hillside areas which could potentially degrade the quality of scenic viewsheds. Although grading in hillside areas would still be required for Project implementation, development would largely be located on the flattest portion of the Project site, with most of the Project falling within the 0-24.99% slope range (in compliance with the Hillside Design Guidelines Design Measure 1.2). The clustered design would allow for the preservation of contiguous open space on the southern portion of the Project site (including hillsides and a County-designated significant ridgeline), as well as improved open space and landscaped areas ribboned through the developed northern portions of the Project site. As analyzed in Section 4.1 of the Draft EIR, with implementation of mitigation measures, the Project would not result in a significant impact related to aesthetics.

As provided in Section 4.3, Air Quality, of the Draft EIR, the Project's air quality impacts were analyzed by comparing its emissions to South Coast Air Quality Management District (SCAQMD) thresholds. During construction, Project-generated nitrogen oxide (NO_x) emissions would exceed SCAQMD limits before mitigation. However, with implementation of enhanced emission controls for construction equipment (in accordance with MM-4.3-1, Construction Equipment, on page 4.3-53), NOx would be reduced below significance thresholds. On an operational level, anticipated emissions (including those from area sources, energy use, and vehicles) would remain under SCAQMD thresholds and would not conflict with the region's Air Quality Management Plan. A construction health risk assessment determined that, before mitigation, diesel emissions from construction equipment could exceed cancer risk thresholds for nearby residents. However, requiring Tier 4 Final and/or alternative-fueled construction equipment, in accordance with MM-4.3-1, would reduce cancer risk below significance levels. Operationally, the Project—primarily residential—would not emit substantial toxic air contaminants, and new residents living near I-5 would face a health risk below agency thresholds. Finally, the Project is unlikely to create nuisance odors. The analysis provided in

Section 4.3 the Draft EIR determined that Project impacts related to air quality would be less than significant with mitigation incorporated.

030-13 Please refer to Response to Comment 030-12, above. It should be noted that the Project's development footprint is smaller than the previously approved project, and that the overall Project site acreage is the same as the previously approved project. Additionally, the Project would result in approximately 467 acres of off-site conservation area, as required with implementation of MM-4.4-9, Off-Site Habitat Preservation (Draft EIR, page 4.4-81).

030-14 Neither the Draft EIR nor the certified EIR for the previously approved project determined that there would be significant unavoidable impact associated with wildfire. This comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR. Regarding human-caused wildfires, when assessing the drivers of human caused ignitions in Southern California, powerlines, arson, and equipment use were identified to be the dominant form of human-caused ignitions. As stated on page 4.20-37 of the Draft EIR, the Project would underground powerlines. Furthermore, required mitigation measures MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction Related Fire Prevention Measures, are included to reduce the risk of ignition during the construction of the Project. As discussed further in Section 4.20, Wildfire, of the Draft EIR, after incorporation of required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

030-15 At the time of releasing the Draft EIR (December 2024), fire history data was detailed within the Draft EIR to adequately establish existing conditions within the Project site's vicinity. The data collected was from CAL FIRE's Fire and Resources Assessment Program database, which provides fire history information and fire perimeter data dating to the late 1800s for all fires over 10 acres in size (Draft EIR, page 4.20-4). For more information see Appendix B, Fire History, of Appendix M-1 to the Draft EIR. Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed.

Nevertheless, due to recent fire activity in the County, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025 (for a total of 91 days). As such, the Final EIR has allowed additional time to consider the Project and the recent fire activity. Please refer to Section 2.4.2.3, Comparison, of Topical Response-1 above for a comparative analysis related to the recent Eaton and Palisades Fires. As discussed therein, during both the Eaton and Palisades Fires of January 2025, wildfire was driven into communities by extreme Santa Ana winds exceeding 80 mph. This rare level of extreme weather combined with other factors, such as outdated, fire-prone home construction and dense urban vegetation, without enforced or prevalent fuel modification, to produce urban conflagrations. Structural conflagration is defined as fire encompassing all of a given structure. A built environment conflagration can result from wildfires, where fire spreads uncontrollably from structure-to-structure. In both the Eaton and Palisades fires, structures themselves became the main driver of wildfire spread. While methods for modeling the potential for structural conflagration and the resulting fire behavior are currently being researched, the key factors discussed in Topical Response-1, Section 2.4.2.3, are common community characteristics believed to have contributed to widespread structure losses during the Eaton and Palisades Fires. The Project's comparison to these features is also provided. Additional consideration of recent fire activity in the region (as discussed in further detail above) does not change the conclusions detailed in Section 4.20, Wildfire, of the Draft EIR.

030-16 Please refer to Response to Comment 030-15, above, for information on the Eaton and Palisades fires. Regarding senior populations, please refer to Section 2.4.3.2, Fire Safety Requirements (header of Evacuation of Senior Populations) in Topical Response-1, above, above. As stated therein, the Project does not propose or include a nursing home, residential care facility for the elderly, assisting living facility, board and care facility, or other living accommodations where there may be cognitive or physical limitations that could impede mobility. It is expected that occupants of the senior affordable housing units would evacuate similarly to all others within the Project site, where there likely will be seniors living in the Project's market rate units. Stairs would provide an appropriate means of egress for senior affordable housing unit residents on the 2nd, 3rd, and 4th floors in the event of an emergency evacuation.

As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page 4.20-62 in Section 4.20, Wildfire, of the Draft EIR, the Project's Homeowners' Association will provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants will be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who will be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents, including residents of the senior housing apartment complex. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to ensure that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program that shall ensure that all seniors who are not able to evacuate safety on their own are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.[37]

030-17 The potential for the Project to exacerbate wildfire risks (due to slope, prevailing winds, and other factors) and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire is addressed under Threshold 4.20(b), beginning on page 4.20-8 in Section 4.20, Wildfire, of the Draft EIR. As determined therein, with mitigation, the Project would not exacerbate wildfire risk or related smoke exposure. Although the Project site is within a VHFHSZ, the development footprint is intentionally clustered on previously disturbed, minimizes impacts to steep slopes and avoids prominent ridgelines, while approximately two-thirds of the property remains in open space within a conservation easement (required through implementation of MM-4.4-1). All buildings would be constructed with the latest Los Angeles County Fire Code and California Building Code Chapter 7A ignition-resistant standards. A 200-foot-wide, Los Angeles County Fire Department-approved FMZ—comprising irrigated, thinned, and routinely maintained vegetation—would encircle the community; where the full width cannot be accommodated on-site, off-site brush thinning is mandated and additional hardened construction features, such as a six-foot concrete masonry heat-deflecting wall,

[37] These revisions do not change the impact analysis or conclusions in the Draft EIR. As such, these changes would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, do not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

are required (in accordance with MM-4.20-2). Annual third-party inspections funded by the HOA (in accordance with MM-4.20-3) will ensure that these zones are perpetually maintained.

Fire-behavior modeling performed with the BehavePlus system compared existing and post-project conditions under 97th percentile wind scenarios and demonstrated that, after development, flame lengths, spread rates, and fire-line intensities would be reduced by roughly half or more, yielding fire behavior that firefighting resources can manage. By converting continuous chaparral fuels to irrigated landscaping and hardscape, the Project effectively creates a permanent community-scale fuel break. Potential ignition sources are also strictly controlled: all new distribution lines will be undergrounded; every structure will contain interior sprinklers; construction activities are governed by a detailed Fire Prevention Plan (in accordance with MM-4.20-4) and construction-phase fuel-modification requirements (in accordance with MM-4.20-5); and an extensive resident education and fire-watch program administered by the HOA (in accordance with MM-4.20-1) would further reduce human-caused ignitions. Because the Project would not significantly increase the probability of ignition or the potential for fire spread, it would not introduce a new or intensified source of wildfire smoke that could disproportionately affect seniors. With implementation of MM-4.20-1 through MM-4.20-5, the Draft EIR therefore determined Threshold 4.20(b) to be less than significant. Please also see response to 030-16.

030-18 The Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The Draft EIR confirms the Project site is located within a VHFHSZ within a State Responsibility Area. A discussion of fire history within 5 miles of the Project site is provided in Section 4.20.1, Existing Conditions, beginning on page 4.20-4 of the Draft EIR. As stated on page 4.20-4 of the Draft EIR, the 2020 Elsmere Fire, 2020 Calgrove Fire, and 2019 Saddle Ridge Fire are the most recent wildfires within 5 miles of the Project site prior to posting the Draft EIR for public review. The 2016 Sage Fire is the most recent fire to have burned on the Project site. However, the VHFHSZ designation and relevant fire history do not prohibit development of the Project. Instead, additional fire protection measures, such as those governing safe building standards, must be provided for Project approval. Please refer to Topical Response-1, above, for a more detailed response related to fire protection and safety (including the Project's required and code-exceeding fire protection measures).

Regarding the financial cost of firefighting, as the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. Furthermore, as discussed in Section 2.4.1.2, Project Specific Fire-Resistant Design Feature, and Section 2.4.3.1, Attorney General's Guidance, of Topical Response-1, in addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area. The commenter's opposition to development in fire-prone areas is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

030-19 Please refer to the response provided above in Response to Comments 030-5 and 030-15.

030-20 Per State CEQA Guidelines Section 15064(d)(3), "An indirect physical change is to be considered only if that change is a reasonably foreseeable impact which may be caused by the project. A change which is speculative or unlikely to occur is not reasonably foreseeable." As stated on page 4.20-4 in Section 4.20, Wildfire, of the Draft EIR, based on an analysis of fire history records, it is expected that there will be wildland fires within 5 miles of the Project site on average every year, and at least every 10 years. However, it is speculative to assume that all such fire events would affect the Project site and to attempt to quantify the scope of potential fire damage (i.e., number of Project-site vehicles burned). Furthermore, as discussed above in Response to Comment 030-18, the Project would not significantly increase the probability of ignition or the potential for wildfire spread. No changes to the EIR are required as a result of this comment.

030-21 The wildfire analysis provided in Section 4.20, Wildfire, of the Draft EIR does not rely on the receipt of federal aid to reduce potentially significant wildfire impacts, nor does it substantively rely on compliance with federal regulations. California has incorporated minimum federal standards from the International Fire Code (IFC) and International Wildland-Urban Interface Code (IWUIC)into the California Code of Regulations, which includes the California Building Code and California Fire Code. Applicable state and local code standards are more stringent than the IFC and IWUIC standards and are not anticipated to become any less stringent in the future, regardless of the political climate at the federal level (particularly as California has a history of having more stringent regulations than the federal government) (Christopher 2024). No changes to the EIR are required as a result of this comment.

030-22 Regarding wildfire, please refer to Responses to Comments 030-4, 030-5, and 030-15 through 030-21, as well as Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, a summary of applicable research related to wildfire resilient communities, and seniors. Section 4.20, Wildfire, of the Draft EIR, includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a VHFHSZ. A discussion of wind conditions is provided in Section 4.20.1, Existing Conditions, of the Draft EIR. As stated on page 4.20-35 of the Draft EIR, the most common type of fire anticipated in the vicinity of the Project site is a wind-driven fire from the east/south/southeast, moving through the chaparral and sage scrub on the adjacent lands. However, as stated on page 4.20-35 of the Draft EIR, based on the fire behavior modeling, which takes into consideration 97th percentile wind conditions (refer to Section 2.4.4 of Topical Response-1 above for further discussion on modeled weather conditions), the Project would reduce wildfire hazard conditions with the implementation of the FMZs on and off site and would not exacerbate the fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 and required through MM-4.20-2 and MM-4.20-3, as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, would reduce potential impacts related to wildfire spread to less than significant. The commenter's opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

030-23 Please refer to Response to Comment 030-26, below, regarding emergency evacuation.

030-24 An analysis of the Project's potential to result in a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 4.11, Land Use and Planning, of the Draft EIR (beginning on page 4.11-14). A conflict between a project and an applicable policy is not necessarily a significant impact under CEQA unless the inconsistency will result in an adverse physical change to the environment that is a "significant environmental effect" as defined by State CEQA Guidelines Section 15382. As provided in State CEQA Guidelines Section 15126.2 "an EIR shall identify and focus on the significant effects of the proposed project on the environment." A significant impact to the environment may occur if the Project conflicts with a policy intended to protect the environment and would consequently result in environmental impacts. It should also be noted that the above-referenced CEQA threshold explicitly asks whether the Project would cause a significant environmental effect due to a *conflict* (emphasis added) with a goal or policy for the purpose of avoiding or mitigating an environmental effect, and not if the Project is consistent with or conforms to a goal or policy. With implementation of applicable mitigation, Project impacts due to a conflict with the County's General Plan adopted for the purpose of avoiding or mitigating an environmental effect would be less than significant.

Furthermore, the Project qualifies under the Housing Accountability Act (HAA; Government Code Section 65589.5). As such, while the Project is required to comply with applicable, objective general plan standards and criteria, subjective standards (i.e., those standards that involve personal or subjective judgment) are not applicable. A general goal related to healthy and safe neighborhoods (such as Goal LU-3 from the OVOV) is not an objective public health or safety standard and is thus not applicable to the Project and is not included in the analysis provided in Table 4.11-2 in Section 4.11, Land Use and Planning, of the Draft EIR. Nevertheless, the Project would not result in any significant health and safety impacts related to wildfire, including those related to emergency access or evacuation (as discussed in further detail below in Response to Comment 030-26).

030-25 The Project's potential to conflict with Policy LU-3.3.2 from the Santa Clarita Valley Area Plan (a component of the General Plan referred to as "One Valley, One Vision" [OVOV]) is analyzed in Table 4.11-2, Potential to Conflict with OVOV Policies and Objectives, beginning on page 4.11-44 of the Draft EIR. As discussed above in Response to Comment 030-4, the Project would provide 200 feet of FMZ along residential areas as additional protection from wildland fire.[38] Where 200 feet of FMZ is not possible, the Project would require FMZs provide managed and maintained separation between structures and infrastructure and unmaintained wildland areas. FMZs provide managed and maintained separation between structures and infrastructure and unmaintained wildland areas. This separation/setback is considered an FMZ and defensible space because it enables firefighters to safely position themselves at the development edge and begin tactical protection efforts between the development footprint and wildland areas at the wildland urban interface. The same way that FMZs setback a wildland fire from structures, the FMZs setback a structure fire from the more burnable native plants. Embers can be generated by a structure fire and can be blown over the FMZs into native fuels,

[38] Within certain areas of the Project site, achievement of the required 200-foot FMZ would not be feasible, as the Project Applicant does not currently have access or approvals to conduct fuel modification and vegetation thinning outside of the Project site boundaries. Areas of reduced FMZ would be generally located adjacent to 16 proposed homes along the Project site's southeastern boundary (within Lot 5 of the Tentative Tract Map). In the limited areas where a 200-foot FMZ is not feasible, MM-4.20-2, Alternative Materials and Methods, has been set forth to ensure that additional fire protection measures are implemented to effectuate the same level of protection as a 200-foot on-site FMZ. These measures include construction of a 6-foot-tall concrete masonry wall and enhanced building materials such as dual pane tempered windows and ember-resistant exterior vents. See Table 2, Code Exceed Measures of Topical Response-1 for further discussion.

but the inclusion of automatic sprinklers in every building is very effective at controlling structure fires to the room of origin and minimizes the potential for structure loss.

The Project would also provide emergency vehicle access via proposed "A" Street and "B" Street, in addition to a private drive and fire lanes within the residential lots (see Section 4.9, *Hazards and Hazardous Materials,* and Section 4.17, *Transportation*, of the Draft EIR for further details). As such, the Project would ensure that land uses have adequate setbacks, fuel modification areas, and emergency access routes.

030-26 Policy LU-3.3.3 is incorrectly numbered. This is referring to Policy LU-3.3.5. Regardless, the Project's potential to conflict with Policy 3.3.5 from the OVOV is analyzed in Table 4.11-2, Potential to Conflict with OVOV Policies and Objectives, beginning on page 4.11-44 of the Draft EIR. As discussed on page 4.20-45 in Section 4.20, Wildfire, of the Draft EIR, the Project's internal circulation consists of a loop roadway system that connects both the primary and secondary access points along The Old Road, which satisfies secondary access requirements detailed in Los Angeles County Code of Ordinances Title 21, Chapter 21.24, Design Standards, Part 1, Access. The Project also includes a 28-foot-wide access road along the northern and western perimeter for emergency vehicle access.

Please refer to Response to Comment 030-16 regarding evacuation of senior populations. As stated therein, Project does not propose or include a nursing home, residential care facility for the elderly, assisting living facility, board and care facility, or other living accommodations where there may be cognitive or physical limitations that could impede mobility. Stairs would provide an appropriate means of egress for senior affordable housing unit residents on the 2nd, 3rd, and 4th floors in the event of an emergency evacuation or if the electricity goes out and the elevators stop working. A detailed response related to evacuation is provided in Topical Response-1. As discussed therein, the County would coordinate a centralized emergency operation in the event of an emergency/disaster. To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to households. Specifically, MM-4.20-1 requires provision of biannual emails and mailers with reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires; establishment of a community website dedicated to wildfire awareness and prevention and evacuation; provision of community workshops and webinars; provision of "new resident" packets that include information about how to build a "go-bag," tools to prepare a household evacuation plan, and a list of agencies and resources for receiving trusted information; provision of emergency alert information; maintenance of trail signage for fire-safe hiking activities; and establishment of a fire safety oversight committee.

A Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR) was prepared to evaluate the Project's consistency with relevant emergency evacuation plans and emergency response plans, disclose the prevention and minimization regulations and measures applicable to the Project, and determine evacuation times for the existing and post-Project conditions, as well as provide emergency preparedness information and resources to increase occupant preparedness and facilitate efficient evacuation in the event of an emergency. However, there is no evacuation timeframe threshold that projects must meet in order to avoid an impact under CEQA or to be consistent with codes, regulations or policies. Further, safety, not time, is the top priority when conducting evacuations, and increases in evacuation time does not necessarily generate a greater safety risk. A large-scale evacuation may take several hours or more and require moving people long distances to designated areas. Cited studies

show that successful evacuations can be safely executed over 30 minutes or 10 hours. Emergency personnel who issue evacuation orders can consider the additional time needed to implement an evacuation when determining when and where to issue evacuation orders. Risk to nearby development, including the Project or existing communities, is assessed on a regular basis in a wildfire event. Hours or days of lead time may be available to assess risk and make evacuation determinations. Moreover, drifting smoke, awareness of the risk, road closures, or other factors result in people avoiding the area in a fire event.

In short, a variety of factors may make a longer evacuation perfectly safe. That is why a multifaceted approach to fire-resilient development is required and is incorporated into the Project. The Project's fire-resistant design features include ignition resistant construction methods, hardened structures and corridors, including a perimeter fire access lane, fuel modification zones, roadside fuel modification, and sufficient fire flow for firefighting efforts. Please also refer to Response to Comments 030-24 and 030-25, above.

030-27 In order to provide a conservative analysis, the Draft EIR considers FMZs to be impacted areas for the purposes of biological resource impacts and its associated mitigation requirements. Importantly, FMZs are open spaces that are not developed with structures and do still function to support locally present plant and wildlife species as well as other important ecosystem services. All biological resource associated impacts are fully mitigated as discussed in Section 4.4, Biological Resources, of the Draft EIR. The Project would also largely cluster development in the northeastern portion of the Project site, thereby minimizing the development footprint and the required FMZs adjacent to wildland areas at the Project site.

030-28 Please refer to Response to Comment 030-18, above regarding provision of fire services.

030-29 Specific comments regarding wildfire and the Project are addressed above in Response to Comments 030-4, 030-5, and 030-15 through 030-28. As stated above, the Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a VHFHSZ within a State Responsibility Area and includes consideration of local and regional fire history as well as factors such wind, weather, and climate, which influence wildfire conditions. The VHFHSZ designation does not prohibit the development of the Project. Instead, additional fire protection measures, such as those governing safe building standards, must be provided for Project approval. As such, Section 4.20 adequately analyzes the potential effects of Project implementation and incorporates mitigation measures to reduce significant impacts. This comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

030-30 This comment does not express any adequacy concerns related to the environmental analysis in the Draft EIR. However, as stated on page 4.20-37 of the Draft EIR, the Project would underground powerlines. Furthermore, required mitigation measures MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction Related Fire Prevention Measures, are included to reduce the risk of ignition during the construction of the Project. This comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

030-31 This comment does not express any adequacy concerns related to the environmental analysis in the Draft EIR, and therefore it would not be appropriate to provide a response as part of this EIR. This

comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

030-32 Please refer to Comment 030-26 above regarding evacuations. As discussed above in Response to Comment 030-22, the Project would not exacerbate existing fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 and required through MM-4.20-2 and MM-4.20-3, as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, would reduce potential impacts related to wildfire spread to less than significant. Furthermore, required mitigation measures MM-4.20-4 and MM-4.20-5 are included to reduce the risk of ignition during the construction of the Project. The commenter's opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

030-33 Please refer to Response to Comment 030-18 above regarding payments for fire services.

030-34 As discussed in Draft EIR Sections 4.4, Biological Resources, and 4.20, Wildfire, with implementation of required mitigation measures, the Project would not result in any significant impacts related to wildfire or biological resources. The comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

030-35 This comment does not express any adequacy concerns related to the environmental analysis in the Draft EIR, and therefore it would not be appropriate to provide a response as part of this EIR. This comment is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

INTENTIONALLY LEFT BLANK

Comment Letter 031

SCOPE
Santa Clarita Organization for Planning and the Environment
TO PROMOTE, PROTECT AND PRESERVE THE ENVIRONMENT, ECOLOGY AND QUALITY OF LIFE IN THE SANTA CLARITA VALLEY
POST OFFICE BOX 1182, SANTA CLARITA, CA 91386

3-10-25

Erica Aguirre, Senior Planner
Los Angeles County Dept of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Via email to: EAguirre@planning.lacounty.gov

Re: DEIR Comment letter - Lyons Canyon Project, Project No. 001195-(5), Case No(s). Vesting Tentative Tract Map No. 83301 (RPPL 2021003061), and all accompanying permits

Dear Ms. Aguirre:

SCOPE is a local planning and conservation group now celebrating 36 years of citizen participation in planning processes affecting the Santa Clarita Valley. Our focus continues to be the Santa Clara River, oaks, and significant ecological areas. But over our many years of service we have also addressed planning issues such as the sufficiency of services, building in wildfire areas and climate change. We intend to address all these areas in this comment letter. This comment letter is timely filed by March 10th. We appreciate the extended comment period since many of our members and Board member were affected by the Hughs Fire required evacuations. 031-1

We were involved and commented on all aspects of the previous project for this area that was approved in 2008. The previous project proposed the removal of 160 oaks. This project proposes an even greater destruction, with impacts to 312 SEA-protected trees including oak, walnut, cottonwood, willow, and elderberry trees (251 removals, 50 trees located within debris basins, and 11 encroachments) and to 22 heritage oak trees (14 removals, three trees located within debris basins, and five encroachments). The removal of 265 SEA-protected trees and impacts to 53 trees within a proposed debris basin, amounting to 318 trees, according to the Notice of Availability. 031-2

The Project proposes flood control facilities that include two regional debris basins and five smaller desilting basins, as well as placing the tributaries in storm drains, absently destroying the two tributaries that flow to the Santa Clara River. Most of the project is located in the floodplain of Lyon's Canyon creek in violation of several General Plan policies and goals, not to mention creating a safety concern for future residents. We assert that these modifications would not comply with Low Impact Development policies of the General Plan. 031-3

The Project would also impact several SEA resource categories including natural vegetation and grassland and increased impacts to the tributaries as stated above. This is not acceptable. 031-4

It is a more destructive and much larger project, but none of the issues brought up over a decade ago, have been resolved, particularly, and most egregiously, not the issue of placing housing and especially seniors in a Very High Fire Severity Hazard Zone. Instead, the DEIR has merely failed to disclose the many significant impacts disclosed in the previous project. 031-5

Property Ownership
It appears that the Santa Monica Mountains Conservancy owns the land required for one of the entrances to this project. The developer and the County must plan around this property. We don't believe that the County can condemn property on behalf of a private developer. This was not disclosed in the DEIR and must be addressed. 031-6

Density Bonus
This project does not appear to qualify for the number of waivers it is requesting under the CA density bonus housing law. It is NOT a transit project or in a transit district[1], as even the closest bus stop is over two miles away. Indeed, the only significant impact listed is to transportation. The number of low-income units thus does not warrant the number of waivers requested. 031-7 Further, putting seniors in a Very High Fire Hazard Severity Zone where they might lose their lives in a wildfire, as did many in the Eaten fire, then benefiting from placing them in danger with a density bonus is a cruel joke to play on them and the community at large. 031-8

GHG
We concur and incorporate by reference the comments of other organizations that have disputed the calculation of GHG sequestration lost by tree and habitat destruction. We assert that the DEIR purposely understates the increase caused by the destruction of 318 protected trees and any other undisclosed, non-protected trees and the loss of wildland grasses and other vegetation. We must stop cutting down our forests if we want to slow Climate warming. The City of Santa Clarita and the County was well aware of this fact when they approved their 2012 SC Area Plan, One Valley One Vision – climate action section. That plan states under actions to Address Climate Change in the Santa Clarita Valley: 031-9

"the land use plan developed for the Santa Clarita Valley was designed to address the related issues of urban sprawl, traffic congestion, air quality, watershed management, and open space preservation, in a manner that also addresses some of the issues of global warming. Specifically, the General Plan and Area Plan elements for land use, circulation, and open space and conservation set forth the following programs and objectives for the Valley[2]: 031-10

1. Delineation of areas designated for urban use and non-urban (rural) use in order to limit urban sprawl into outlying hillside areas and to encourage urban infill development; 031-11
This project is contrary to this GHG reduction goal because it sprawls out into green area, thus requiring expansions of roads, water lines and sewage.

9. Adoption of a goal to create two jobs for every new dwelling unit, and to balance job growth with housing growth in various locations throughout the Santa Clarita Valley to reduce commuting distances to employment; 031-12
This project is contrary to this GHG reduction goal because it does not create two jobs for every dwelling unit. In fact, the jobs-housing balance does not seem to be discussed in the DEIR.

10. Continuation of the City's open space acquisition policies to create a continuous greenbelt around the Valley and along the Santa Clara River, supported by a City voter-approved ballot measure to provide funding for land purchases; 031-13
This project is contrary to this GHG reduction goal because it sprawls out into green belt area that the County and City promised would be protected.

[1] Transit oriented district (TOD). A mixed use community within an approximately one-quarter to one-half mile radius of a significant transit facility station. Transit oriented districts are established to encourage a mix of residential, retail, office, open space, and public uses in close proximity to each other in order to contribute to a vibrant, safe, and revitalized walkable environment. Title 22 definitions (22.14)
[2] https://planning.lacounty.gov/long-range-planning/santa-clarita-valley-area-plan/. pg. 163 Items 1, 9,10 and 11)

11. Adoption by Los Angeles County of ordinances to promote use of green building materials and techniques, low impact development for stormwater control at the source, and drought-tolerant landscaping. P.163
This project is contrary to this GHG reduction goal because tie project does not abide by the low-impact ordinance where it channels Lyons' creek and tributaries into storm drains, removes ridgelines and destroys 318 protected trees in a significant ecological area.

031-14

Avoiding Tree Destruction
When the goal is to minimize global warming, climate scientists often stress the importance of afforestation, or planting new forests, and reforestation, or regrowing forests. But there is a third approach to managing existing forests: proforestation, a term coined by climate scientist William Moomaw to describe the preservation of older existing forests. (Moomaw was a lead author of five major reports of the Intergovernmental Panel on Climate Change, which was awarded the Nobel Peace Prize in 2007.) All of these strategies have a role to play. This naturalist has helped show just how much more valuable proforestation (not cutting down trees in the first place) is than was first thought.[3] Maintaining our County tree cover is essential to reducing climate change, air pollution[4] and reducing the urban heat island effect. Mature trees are especially effective at removing carbon from the atmosphere. According to the Arbor Day Foundation, **trees help reduce the effects of climate change.**

031-15

Trees absorb carbon dioxide (CO^2), removing and storing the carbon while releasing the oxygen back into the air. In one year, an acre of mature trees absorbs the amount of CO^2 produced by a car driven 26,000 miles. During one year, a mature tree will absorb more than 48,000 pounds of carbon dioxide from the atmosphere and release oxygen in exchange.[5]

- This project proposes to remove 318 protected trees. It should be re-designed to reduce tree removal. We request a reduced project alternative that avoids destruction of protected trees, and leaves the creek in a natural state

031-16

Wildfire - Fire Hazard
This project is located entirely within a VHFHZ fire designation. As temperatures continue to increase due to climate change and wildfires increase in chaparral areas, such locations become more and more dangerous for residential housing. We therefore believe that this is a highly inappropriate location for new housing; that it doesn't comply with the General Plan Safety Element, evacuation

Sage Fire - 2016

Sage Fire July 2016 – very close to the proposed location of this project, required 2000 evacuations

031-17

[3] The Old Man and the Tree, Smithsonian, Jan 2022, https://www.smithsonianmag.com/science-nature/the-old-man-and-the-tree-180979242/
[4] **Oak trees in Southern U.S. cities are natural urban air filters, Trees remove black carbon, or soot, from the atmosphere**, National Science Foundation, Sept., 2019 , https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=299154
[5] Arbor Day Foundation, https://www.arborday.org/trees/treefacts/

requirements or the County Fire Code. In the last two decades at least three fast moving major wildfires have occurred in the immediate vicinity of this proposed project, along with several smaller ones, the most recent being in 2016 which burned through this project, requiring the evacuation of the Post Office facility on the Old Road near this project. The DEIR describes many more. We believe that it is time that the County pays serious attention to avoiding approvals such as this project that are located in a high fire hazard zone and thus avoid putting future residents at risk as well as creating a massive expense for the County to fight fires when they occur.

- Fire must be considered a significant impact, as stated in our NOP comments. 95% of fires are caused by human impacts[6]. This project will add to those impacts. The County must look carefully at any burden of proof it might consider as a means to ignore these impacts. The DEIR notes in appendix M-1, pg. 12 that this project could facilitate fire spread, but fails to put this in the body of the DEIR. An EIR may not hide impacts in the Appendices. They must be fully disclosed to decision makers and the public in the DEIR itself.

Further, as demonstrated throughout the County, residents will have difficulty in obtaining fire insurance in this area.

- The developer must be required to notify future buyers that fire insurance will be difficult and expensive, if not impossible to obtain.

Evacuation Plan

The evacuation plan downplays the traffic delays and resulting dangers that would occur in a wind driven wild fire, stating that worst case scenario for vehicle evacuation would be 37 minutes. They do not discuss fire direction or that such warnings could come in the middle of the night as recently occurred in the Los Angeles wildfires. It does not discuss at all how residents without vehicles or disabled and seniors would be able to evacuate. The senior housing is proposed to be multi-story. How will seniors evacuate if electricity is cut off? There is no discussion of this at all. We remind the County and the developer that the majority of the people that lost their lives in the recent Eaton fire were seniors or disabled.

- A credible evacuation plan for this project must be developed before any project approval

Significant Impact to Aesthetics

The DEIR fails to disclose and discuss a significant impact to aesthetics. Aesthetics was identified as a significant impact in the previous EIR for a smaller project. It should have been identified as such for this project. We include by reference all documents for the previous project to assert this EIR disclose deficiency. This DEIR presents photos from locations particularly situated to diminish viewing impacts and only describes other impacts rather than fully disclosing the impacts with a photo. However, the viewshed from the freeway and the Taylor Trail will have significantly impacted by a view of housing rather than a significant ridgeline. A huge wall will also block the views. None of this complies with the SEA Ordinance. This is not disclosed in the DEIR and represents a deficiency of disclosure to the decionmakers.

Impacts to Significant Ecological Area are not acceptable under the SEA Ordinance

These areas were established by a public committee in the 1980s. The County has gradually allowed them to be widdled away and changed. We object.

SEA PROGRAM GUIDING PRINCIPLES

Biodiversity

- Recognize that biodiversity is important to creating a sustainable LA County.
- Identify and protect the places where biodiversity exists in LA County.
- Create new places where biodiversity can be woven through the urban fabric.
- Ensure that the legacy of [our] unique biotic diversity is passed on to future generations.

[6] https://www.nationalgeographic.com/environment/article/news-california-wildfire-arson-human-cause

031-17 Cont.
031-18
031-19
031-20
031-21
031-22
031-23

Resiliency

- Ensure that individual SEAs are able to thrive by reducing fragmentation, creating or preserving connectivity and habitat functionality.
- Monitor development in and preservation of SEAs to protect the SEAs.
- Encourage best practices for sustainable design in the SEAs that are aligned with resources.

This project does not meet these stated goals as it destroys much of the SEA designated area.

SEA Ordinance

It will also not meet the Burden of Proof required for any proposed development in a SEA.

22.102.050 - Burden of Proof.

In addition to information required in Section 22.158.050 (Findings and Decision) the Conditional Use Permit for Significant Ecological Areas shall substantiate to the Commission or Hearing Officer the following facts:

A. That the requested development is designed to be highly compatible with the biotic resources present, including by setting aside appropriate and sufficient undisturbed areas;

B. That the requested development is designed to maintain water bodies, watercourses, and their tributaries in a natural state;

C. That the requested development is designed so that wildlife movement corridors (migratory paths) are left in an undisturbed and natural state;

D. That the requested development retains sufficient natural vegetative cover and/or open spaces to buffer critical resource areas from said development;

E. That where necessary, fences, or walls are provided to buffer important habitat areas from development; and

F. That roads and utilities serving the proposed development are located and designed so as not to conflict with critical resources, habitat areas or migratory paths.

- These requirements are not meet as described in the project description and elsewhere in the EIR. This project will not meet the burden of proof for a project development in a SEA.

Services

Water Supply

The water availability form found in Appendix L7 states that SCV Water Agency does not have or expect the facilities to serve the project at this time and facilities are NOT reasonably expected to be available within the next 5 years based on the capital facility plans of the agency.

Also, the will serve letter will expire on May 28, 2026, according to the form, which is well in advance of the project's construction. A new will serve letter will be required.

"On April 5, 2022, the SCV Water Board directed staff to express the concern that new development is not achieving water use efficiencies as defined by the MWELO[7] standards. A study conducted for SCV Water of developments constructed after 2015, when MWELO was implemented, indicated trends of exceeding the MWELO defined irrigation targets by approximately 26%" On April 5, 2022, the SCV Water Board directed staff to express the concern that new development is not achieving water use efficiencies as defined by the MWELO standards. A study conducted for SCV Water of developments constructed after 2015, when MWELO was implemented, indicated trends of exceeding the MWELO defined irrigation targets by approximately 26%."[8] This means that new development is not achieving needed water use efficiencies to ensure that future water needs will be met. This information should have been in the body of the EIR, not hidden away in an appendix.

031-23 Cont.

031-24

031-25

031-26

[7] Model Water Efficient Landscape Ordinance (MWELO)

[8] Appendix L2 pg. 4

The County must require a landscaping plan that meets these standards. This appendix also states that enforcement of these standards is essential. This information should be disclosed in the body of the DEIR, not just an appendix

- Mitigation measures must ensure that there is enforcement and oversight of MWELO requirements and that an up to date will serve letter has been issued for this project.

031-26 Cont.

Schools

An EIR must do more than recount the number of school districts and students in the area. Its purpose is to disclose potential problems to the community and the decision-makers. This DEIR fails that goal by describing only generalities in the body of the document and hiding real information and problems in the appendices. The following issues represent real problems that should have been disclosed and most be solved for this outlaying urban sprawl project.

According to Appendix I-3 pg. 4, this project would generate students to West Ranch High School which has little room for expansion, and could do so only by removing court space. Junior High students would attend Rancho Pico has no extra space available. Both schools are very distant from the project site (West Ranch 4+ miles, Rio Norte about 8.5 miles). Students would have to be driven to the school as there is no public transportation available. This the GHG generation from this required transportation and additional traffic was not included in the GHG or air quality sections.

031-27

The Newhall School District letter was unclear, and an updated letter is needed. (Appendix I-4), but it appears that the children may have to be driven to the other side of the freeway to attend Wiley Canyon Elementary.

This information should have been in the body of the EIR, not hidden away in an appendix.

- An updated letter should be obtained from Newhall School District for clarification
- Discussions with the High School Districts should be initiated to ensure new students can be accommodated.

031-28

Sewer System

Appendix L-4 - DEXTER WILSON ENGINEERING, INC. PAGE 5

County owned 8-inch sewer facilities from Manholes 9, 10, 11, 12, and 13 will exceed the County's design criteria of 100% with the addition of the proposed Trails at Lyons Canyon development and future planned parcels. Mitigations will be required for these manholes and will be upgraded to 10-inch pipe prior to the connection of the proposed project. See page 6 for the capacity analysis of County owned sewer facilities.

City owned sewer facilities between Manholes 457, 451, and 452 (Segments 7 and 8) will exceed the City's design criteria of 50% for 8-inch through 12-inch sewer facilities. These segments will be upgraded by the City; the project will pay its fair share as articulated in the Appendix J Agreement. See Appendix I Tables 3, 4, and 5 for the capacity analysis of City owned sewer facilities.

- Sewer system in the area would need to be upgraded. An unsigned good faith bond agreement is included in the sewer report. That agreement and bond fee should be paid before any final approval of this project to ensure financial wherewithal to complete the project. Significant transportation impact
- Significant transportation impact per. Appendix J pg. 30 pg. 4Â

031-29

031-30

Sheriff' Services

According to the Sherriff's response letter in the appendix, "Average Stevenson Ranch response times for the month of May, 2021: Emergent calls – 7.7minutes, Priority calls – 16.5 minutes, and Routine calls – 81.3 minutes. The response times above are an average between our unincorporated areas, which include Stevenson Ranch, Castaic, and various unincorporated areas of Canyon Country, etc." [9] Since the project area is even further away than any other residences in the Stevenson Ranch

031-31

[9] DEIR Appendix I-2

community, response times would necessarily be longer. This information should have been in the body of the EIR, not hidden away in an appendix. 031-31 Cont.

Also, since the date of this memo, the Sheriff station has moved from its then location on Valencia Blvd., that was to closer to the project to its current location at 26201 Golden Valley Rd, Santa Clarita, CA 91350, 8.5 miles and approximately 19 minutes away according to google. The further distance would preclude meeting the requirements of the Los Angeles County General Plan 2035 (General Plan) EIR, which established an optimal service response time of 10 minutes or less for emergency response incidents, which is a crime that is presently occurring and is a life or death situation; 20 minutes or less for priority response incidents, which is a crime or incident that is currently occurring but which is not a life or death situation; and 60 minutes or less for routine response incidents, which is a crime that has already occurred and is not a life or death situation With both residences and businesses suffering a high crime rate along the I-5 corridor, a solution should be provided to shorten response times and ensure the safety of residents.[10] Again approval of this project will place seniors and others in danger. 031-32

- An updated response time study should be required for this project before the EIR is certified

Hospital Services

The SCV only has one hospital. If the County intends to promote additional senior housing units, it should be aware that health facilities to support them are limited. No information regarding hospital services was included in the DEIR. 031-33

Zone Change

Apparently, the developer is relying on the zone change granted for the previous 2006 tract application that has since expired. We believe this project must apply for a new zone change since the old project was never built and all entitlements expired. The developer should not be able to use an expired map for this much denser and impactful project. The DEIR at page 3-5 is confusing on this matter. It appears to state that once the tract map is granted, the zoning will conform. A new zoning change approval should be required to ensure consistency[11]. 031-34

Last, we provided a timely response to the Notice of Preparation for this DEIR on July 15th, 2022. However, for some reason it was not included in the NOP comment letter section. We do have a record of submitting this comment that can be provided upon request. We ask that you circulate our letter as an omission to everyone that received the DEIR notification. 031-35

Thank you in advance for addressing these issues.

Sincerely,

Lynne Plambeck
President

[10] https://signalscv.com/2025/02/20000-in-cash-and-jewelry-stolen-from-stevenson-ranch-home/, https://www.cbsnews.com/losangeles/news/stevenson-ranch-neighbors-claim-thieves-are-using-drones-to-case-their-homes/

[11] Title 21, Subdivisions, of the Los Angeles County Code (County Code), sets forth the general provisions and requirements for compliance with the Subdivision Map Act. As set forth in Chapter 21.38, Vesting Tentative Map of the County Code, when a subdivider files a vesting tentative map for a subdivision whose proposed development is inconsistent with the Zoning Ordinance, the County may deny or may approve it conditioned on the subdivider obtaining the necessary change in the Zoning Ordinance in order to eliminate the inconsistency.

INTENTIONALLY LEFT BLANK

Response to Comment Letter O31

Santa Clarita Organization for Planning and the Environment (SCOPE)
Lynne Plambeck, President
March 10, 2025

031-1 The comment is introductory in nature and does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

031-2 Regarding the previously approved project (Lyons Canyon Ranch Project), an EIR (State Clearinghouse No. 2003031086) was certified in August 2009. The commenter erroneously states the total impacts to oak trees from the previously approved project. The previously approved project would have resulted in 216 oak tree impacts (including 162 direct removals and 54 encroachments) (County of Los Angeles 2006). Comparatively, the Project would result in 232 oak tree impacts (Draft EIR, page 3-14), which is a small 7% increase in oak tree impacts (16 more trees) when compared to the previously approved project. In accordance with MM-4.4-16, SEA Protected Tree Replacement/Compensation, the Project's required Conservation Management Plan must include a Protected Tree Replacement Plan that will dictate the establishment of required replacement trees. As shown on page 4.4-93 of the Draft EIR, 574 of the required replacement trees would be oak trees. Additionally, unlike the previously approved project, the Project would employ a density-controlled development program that would largely cluster development in the lower-lying, northeastern area of the Project site closest to the Interstate (I)-5 corridor. The Draft EIR describes on pages 4.4-59 and 4.4-60 of Section 4.4, Biological Resources, that as a result of the Project's clustered design, the Project is able to permanently preserve approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area (MM-4.4-1, On-Site Habitat Preservation). The previously approved project's development footprint was spread throughout the Project site and did not utilize density-controlled development. The Project would conserve approximately 11% more natural open space on-site (through implementation of MM-4.4-1, On-Site Habitat Preservation), and would conserve 467 acres off-site in perpetuity (MM-4.4-9, Off-Site Habitat Preservation), of which the previously approved project did not propose. As detailed on page 6-32 of the Draft EIR, the Project would result in approximately 24 acres of less development footprint for the Project than the previously approved project and would allow for 47 acres of more open space footprint than the previously approved project. As such, while the Project would result in a small increase in oak-tree impacts that would be mitigated to a less than significant level, it would result in substantially increased conservation of natural open space on- and off-site and an overall reduction in biological resource impacts when compared to the previously approved project (Draft EIR, page 6-30). Additionally, the previously approved project would result in more significant environmental impacts than the Project overall (Draft EIR, page 6-29).

031-3 An analysis of the Project's potential to result in a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 4.11, Land Use and Planning, of the Draft EIR (beginning on page 4.11-14). General Plan policies related to low impact development (LID) include Policies C/NR 5.1, 5.6, and 6.1 (beginning on page 4.11-26 in Section 4.11 of the Draft EIR). As detailed in the analysis, the Project would not conflict with these policies. As stated on page 4.11-26 of the Draft EIR, water quality treatments across the Project site would use biofiltration units, including proposed modular wetlands to treat stormwater flow from building pads, and proposed Filterra units to treat flows

from streets. As stated on page 4.10-32 of the Draft EIR, the County's LID requirements would be satisfied by the biofiltration units that are sized to treat 1.5 times the volume generated onsite, based on 85th percentile rainfall. The treated flows would be discharged to an existing off-site box culvert in The Old Road at the northeast corner of the site. Additionally, the majority of the Project site would remain natural open space, which would allow most of the site to maintain its hydrologic sensitivity by limiting any changes to natural flow paths, and removal of vegetative cover and soil compactions. Overall, as demonstrated in Section 4.10, Hydrology and Water Quality, and summarized in Section 4.11, Land Use and Planning, the County's LID standards would be satisfied through these mechanisms, and the Project would not conflict with the County's LID Ordinance or other applicable General Plan policies related to LID.

Additionally, Threshold 4.1(e) in Section 4.10, Hydrology and Water Quality, of the Draft EIR includes an analysis of the Project's potential to conflict with the County's LID Ordinance (beginning on page 4.10-32 of the Draft EIR), which has determined that impacts would be less than significant, and no mitigation is required. Regarding development within a floodplain, the Draft EIR includes a description of the Federal Emergency Management Agency (FEMA) Flood Zone A High-Risk/Special Flood Hazard Area (SFHA) on the Project site. An analysis of potential Project impacts related to flooding, including development within a SFHA, is provided in Section 4.10 of the Draft EIR. As stated on page 4.10-28 of the Draft EIR, following construction, all flooding within the Project site would be contained within the proposed debris basins and storm drains. As such, the proposed floodplain would be limited to the basin ponding areas. A Conditional Letter of Map Revision (CLOMR), which was requested in May 2024 (included as Appendix G-4 of the Draft EIR), would be processed through and approved by FEMA prior to the approval of storm drain plans and construction of the proposed channel and basins. A Letter of Map Revision (LOMR) would be processed through and approved by FEMA upon completion of the drainage improvements to officially revise the Flood Insurance Rate Maps (FIRM) to remove the Project site from being within the SFHA. The County's Floodway Map would also be revised in accordance with Los Angeles County Public Works' Floodplain Management Plan requirements that includes measures to review and update flood risk hazards when new data becomes available. Upon completion of the Project, no additional flood proofing or flood insurance requirements would be required for occupants of the Project site.

Regarding potential impacts to tributaries, please refer to Response to Comment O31-4, below.

O31-4 Potential Project impacts to Significant Ecological Area (SEA) resources, including vegetation, grassland, and SEA Water Resources (such as tributaries), are addressed in Section 4.4, Biological Resources, of the Draft EIR. Table 4.4-13 on page 4.4-51 of the Draft EIR summarizes the Project's on-site and off-site direct impacts to vegetation communities and land covers. As stated on page 4.4-50 of the Draft EIR, with implementation of MM-4.4-1, On-Site Habitat Preservation, the remaining vegetation communities on the Project site outside of the Project footprint, within the On-Site Conservation Area, would be preserved in perpetuity. MM-4.4-9, Off-Site Habitat Preservation, would provide preservation of communities or appropriate similar communities with comparable ecological value in off-site parcels within the same Significant Ecological Area that would have conservation easements established. MM-4.4-2, Habitat Mitigation and Monitoring Plan, would be implemented to restore and enhance these preserved vegetation communities. As such, MM-4.4-1, MM-4.4-2, and MM-4.4-9 would provide sufficient preservation to comply with the SEA Ordinance, and direct impacts to sensitive vegetation communities would be reduced to less than significant under CEQA. Furthermore,

with implementation of MM-4.4-4, Biological Monitoring, MM-4.4-5, Demarcation of Disturbance Limits, and MM-4.4-6, Invasive Species Prevention, inadvertent direct impacts to sensitive vegetation communities would be reduced to less than significant.

Regarding potential impacts to tributaries (i.e., streams), as discussed under Threshold 4.4c in Section 4.4, Biological Resources, of the Draft EIR, MM-4.4-14, Jurisdictional Waters Compensation, would require off-site compensation to offset the loss of on-site jurisdictional waters that are obtained by the implementation of MM-4.4-1 and MM-4.4-9. MM-4.4-1 would demonstrate recordation of a conservation easement for the Conservation Area, which would result in preservation of the remaining on-site jurisdictional waters. MM-4.4-3, Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation, would provide a program to collect, propagate, and disseminate these species into the Conservation Area. MM-4.4-4 would provide monitoring to avoid any inadvertent impacts to potential jurisdictional waters and the implementation of mitigation measures. MM-4.4-5, Demarcation of Disturbance Limits, would delineate the Project footprint to help avoid any inadvertent impacts to jurisdictional waters and to confine impacts to the approved limits of construction. MM-4.4-6 and MM-4.4-7, Landscaping Plan, would avoid and minimize the introduction of non-native plant species to jurisdictional waters. MM-4.4-9, Off-Site Habitat Preservation, may provide additional preservation of jurisdictional waters in off-site parcels. Implementation of these required mitigation measures would reduce impacts to jurisdictional waters, including streams and riparian habitats that are considered SEA Water Resources, to less than significant.

031-5 The comment erroneously states that the Project is "more destructive and a much larger project" than the previously approved project. As detailed on page 6-32 of the Draft EIR, the Project would result in approximately 24 acres of less development footprint for the Project than the previously approved project and would allow for 47 acres of more open space footprint than the previously approved project. As such, the Project would result in substantially increased conservation of natural open space on- and off-site and an overall reduction in impacts when compared to the previously approved project (Draft EIR, page 6-30). CEQA requires a reasonable range of alternatives. The EIR need not discuss every alternative to the Project (Draft EIR, 6-24). Section 6.4, Alternatives Considered and Eliminated During the Planning Process, ultimately rejected the previously approved project from further analysis given that previously approved project would result in more significant environmental impacts than the Project overall (Draft EIR, page 6-29). The certified EIR for the previously approved project determined that the following topical areas would result in significant and unavoidable impacts: Aesthetics/Visual Resources; Air Quality; Biological Resources; Geology, Soils, and Seismicity; Noise; Sheriff Services; and Solid Waste. This is in comparison to one significant and unavoidable impact related to transportation under the Project.

Regarding fire hazards, the Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ) within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, additional fire protection measures, such as those governing safe building standards, must be provided for Project approval. As such, Section 4.20 of the Draft EIR adequately analyzes the potential effects of Project implementation and incorporates mitigation measures to reduce significant impacts. A more detailed response related to fire safety and protection is provided in Topical Response-1.

It should be noted that the Applicant for the Project differs from the applicant of the previously approved project and certified EIR (State Clearinghouse No. 2003031086) located on the same site (Los Angeles County Project TTM No. 53653, Conditional Use Permit R200500088, and Oak Tree Permit ROAK200500039). They are separate and distinct projects. The Draft EIR does not rely on analyses or tiering from the previously approved project and certified EIR. Thus, the Project's Draft EIR is not required to disclose the significant impacts of the previously approved project. The application for the previously approved project expired, and this expiration occurred after the Project Applicant for the subject Project submitted their application. Therefore, prior to its expiration, the previously approved project could have been implemented instead of the Project. No changes to the Draft EIR are required in response to this comment. Please also see Response to Comment 031-8 regarding senior residents on the Project site.

031-6 The Draft EIR describes the surrounding land uses, including the Santa Monica Mountains Conservancy (SMMC) and various open space and conservancy lands partnered with the County. Within the Project site's vicinity, land conservancies include the Mountain Recreation and Conservation Authority and the SMMC. The County has engaged with SMMC by including the agency in all public notices related to the Project. As demonstrated in Table 1-1, Notice of Preparation and Comment Letters Summary, in Section 1, Introduction, and Table 2-1, List of Commenters, SMMC received and commented on each stage of the environmental review process for the Project (see Comment Letter A2, above). However, the SMMC does not own any land required for one of the entrances to the Project, and SMMC did not include any comments stating differently (see Response to Comment Letter A2, above). Moreover, the Project would not condemn property managed by the SMMC. As such, no changes to the Draft EIR are required and the analysis is sufficient.

031-7 The Project would utilize the County's Inclusionary Housing and Density Bonus program and include affordable housing on site. As such, in compliance with the County's Inclusionary Housing Ordinance and detailed on page 3-9 of Chapter 3, Project Description, of the Draft EIR, the Project is required to provide a minimum of 5% affordable housing. As further described in Chapter 3, Project Description, of the Draft EIR, the Project proposes 510 total residential dwelling units, including 24 affordable for-sale condominium dwelling units. In addition, an approximately 10% set aside of 47 affordable senior rental apartments will be provided for very-low-income seniors. As stated on page 3-10 of the Draft EIR, in exchange for providing 10% of the Project's dwelling units as deed-restricted rental apartments to very-low-income seniors, the Project is able to increase the site's allowable density by 32.5% above the maximum base and to be granted two incentives and unlimited waivers. This Density Bonus program is allowed under state law and County Code. Given this, the provisions codified in State law and the County Code do not require accessibility to transit as asserted by the comment. Additionally, the comment correctly identifies the EIR's significant and unavoidable impact related to transportation. However, this does not relate to the Project's requested entitlements.

031-8 The Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire, including the placement of senior housing within a VHFHSZ. The EIR confirms the Project site is located within a VHFHSZ within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, additional fire protection measures, such as those governing safe building standards, must be provided for Project approval. During an evacuation event, Draft EIR MM-4.20-1, Wildfire Education Program, describes that the Project's HOA would provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human

Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. It should be noted that the affordable senior apartment units provided on-site are not proposed to be convalescent facilities (i.e., assisted living facility) which would necessarily require care facilities and support staff. However, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents, including residents of the senior housing apartment complex. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to ensure that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program that shall ensure that all seniors who are not able to safely evacuate on their own are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1. Regarding evacuation of senior populations during an emergency event, please refer to Section 2.4.3.2, Fire Safety Requirements (header of Evacuation of Senior Populations) in Topical Response-1, above. The Project would not exclude seniors from living in the Project (and unlawfully discriminate against them) as suggested by the commenter to avoid a "cruel joke."

031-9 The Draft EIR's methodology under Section 4.8, Greenhouse Gas Emissions, addresses the loss of sequestered carbon that would result from removal of oak trees on site during construction. The Draft EIR used the i-Tree planting calculator, as recommended by CalEEMod, to determine the changes in GHGs, criteria pollutants, and energy from tree planting and/or removal. The data from i-Tree was entered into CalEEMod to quantify the loss of carbon from trees removed as well as the carbon sequestered from trees planted, as further detailed on pages 4.8-27 and 4.8-29 of Section 4.8 to the Draft EIR. In addition, the Draft EIR notes the potential gain of sequestered carbon that would result from planting and growth of trees on site. The Draft EIR's CalEEMod calculations, which informed the analysis provided in Section 4.8, Greenhouse Gas Emissions, evaluated the removal of 377 trees (Draft EIR page 4.8-31). However, according to Appendix C, Significant Ecological Area Protected Tree Report, of Appendix C, Biota Report, of the Draft EIR, a total of 443 trees would be removed from the Project site (including both protected and non-protected trees subject to direct removal or located within proposed debris basins). Therefore, the Draft EIR's GHG analysis underestimated the number of trees to be removed. As such, in response to this comment, revisions to the Draft EIR have been made to Section 4.8.5 of Section 4.8, Greenhouse Gas Emissions, as shown in Chapter 3, Revisions to the Draft EIR, of the Final EIR.[39] As detailed in Chapter 3 of this Final EIR, these revisions would result in a total of 4,113.41 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year including all other operational emission sources from Table 4.8-11 in Section 4.8, Greenhouse Gas Emissions of the Draft EIR. When the revised mitigated annual emissions of 4,113.41 MT CO_2e per year are divided by the Project's service population of 1,795 persons, the Project would have a revised GHG efficiency of 2.29 MT CO_2e/person/year (an increase of 0.01 MT CO_2e/Service Person/year when compared to the Project efficiency detailed Table 4.8-11 of the Draft EIR). However, even after this slight increase, the Project's mitigated efficiency metric would

[39] These revisions do not change the conclusions in the Draft EIR. Rather, this information merely clarifies information and conclusions that were already presented in the Draft EIR. As such, these changes would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, do not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

not exceed the significance threshold of 2.42 MT/SP/yr, and thus, the impact would remain less than significant with mitigation incorporated.[40]

031-10 The Draft EIR analyzes potential conflicts with the County's General Plan and Santa Clarita Valley Area Plan (referred to as "One Valley One Vision" [OVOV]) within Tables 4.11-1 and 4.11-2 of Section 4.11, Land Use and Planning. As detailed in these tables, the Project would not conflict with the applicable GHG-related goals, policies, and objectives. Regarding particular provisions, see the following Responses to Comments 031-11 through 031-14 for more discussion.

031-11 The Project site has an "urban residential" land use designation where Density Controlled Development is permitted. As stated on page 2-4 of the Draft EIR, "[t]he land use designations of OVOV define the Residential 2 (H2) land use category as "urban residential." As stated on page 4.11-58 of Section 4.11, Land Use and Planning, of the Draft EIR, it was determined that the Project would not conflict with Policy CO-10.2.5, which states "Where appropriate, allow density transfers and density-controlled development (clustering) in accordance with the provisions of the Zoning Ordinance to encourage retention of open space, provided that all residential lots meet the minimum lot size requirements of a Community Standards District, where applicable." The analysis contained in Table 4.11-2 of the Draft EIR determined that the Project would not conflict as the Applicant is requesting approval of a density-controlled development CUP to retain approximately 175 acres of the approximately 233-acre Project site as conserved and improved open space. As such, the Project as proposed reduces the potential for sprawl and creates open space. Moreover, regarding expansion of roads, water lines, and sewage lines, the Draft EIR analyzes the potential impacts associated with utilities and service systems under Section 4.19, Utilities and Service Systems, in which impacts were determined to be less than significant. Thus, the Project does not conflict with this goal of delineating areas designated for urban use and non-urban (rural) use in order to limit urban sprawl into outlying hillside areas.

031-12 The goal related to a jobs-housing balance applies to the greater Santa Clarita Valley area as opposed to a requirement of each proposed development. The analysis contained in Section 4.14, Population and Housing, of the Draft EIR states the Project's housing and employment projections would not result in substantial unplanned housing growth when compared to anticipated buildout conditions. Moreover, a jobs-housing balance is not a required threshold of significance under CEQA within the County; see Section 4.14.3, Thresholds of Significance, of Section 4.14, Population and Housing, of the Draft EIR, for all applicable thresholds.

031-13 While the Project site is outside the boundaries of the City of Santa Clarita, the Project would not preclude the continuation of the City of Santa Clarita's open space acquisition policies. The Project proposes a substantial amount of open space and recreational facilities that support an open space vision for the local vicinity. Pursuant to Chapter 22.140.170 (Density- Controlled Development) of the Zoning Code, the Project would employ a density-controlled development program that would largely cluster development in the lower-lying, northeastern area of the Project site closest to the I-5 corridor, thereby resulting in open space conservation around the Project site, which would be connected to other areas west and south of the Project site. As discussed in Section 4.15, Public Services, on page 4.15-39 of the Draft EIR, the Project would dedicate approximately 150 acres of preserved natural

[40] These revisions do not change the conclusions in the Draft EIR. Rather, these revisions merely clarify information that support conclusions that were already presented in an adequate Draft EIR. As such, these changes would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, do not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

open space supporting an on-site network of trail facilities which connect to other dedicated facilities located within parks adjacent and near to the Project site, as well as approximately 24 acres of HOA-maintained open space and active and passive open space areas located throughout the Project site. The Project would also provide a recreation center for Project residents and their guests on 1.13-acres in the central portion of the Project site. Additional green space would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement. Furthermore, pursuant to the County's Quimby Code (Sections 21.24.340, 21.240.350, and 21.28.140 of the County Code), the Project would be required to pay an in-lieu fee, which could be used for the purpose of acquiring local park land or developing new or rehabilitating existing parks (see page 4.15-40 of the Draft EIR). Given that this is not a stated goal or policy, and not applicable to the Project, the comment does not raise adequacy concerns with the environmental analysis contained in the Draft EIR. Also, GHG emission impacts would be less than significant with mitigation for the Project; see Section 4.8.5, Impact Analysis, of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR and Chapter 3, Revisions to the Draft EIR, of this Final EIR, for more information.

031-14 Regarding the potential to conflict with the County's LID ordinance, please refer to Response to Comment O31-3, above. In addition, the Project would not affect the on-site County-designated significant ridgeline, which would be preserved on the southern portion of the Project site. Regarding use of green building materials, the Project would be required to comply with the Los Angeles County Green Building Standards, which implement and exceed the California Green Building Standards Code (CALGreen) that guarantees the use of green building materials. Also, GHG emission impacts would be less than significant with mitigation for the Project; see Section 4.8.5, Impact Analysis, of Section 4.8, Greenhouse Gas Emissions, of the Draft EIR and Chapter 3, Revisions to the Draft EIR, of this Final EIR, for more information. Please refer to Response to Comment O31-15 below regarding potential impacts to SEA Protected Trees.

031-15 The comment raises concern for the loss of trees as a result of the Project. The Draft EIR analyzes the impacts to protected trees and includes a Protected Tree Report (Appendix C) for more details. A total of 334 SEA-Protected Trees would be impacted by the Project, including 232 oak trees (22 of which are Heritage Trees). Therefore, the Project would be required to comply with Section 22.102.070, Protected Tree Permit, of the Los Angeles County Code. Additionally, the Project would incorporate mitigation measures to reduce impacts to oak trees to less than significant. As detailed further in Section 4.4, Biological Resources, implementation of MM-4.4-1 would require preservation of the remaining oak woodland within the On-Site Conservation Area and MM-4.4-9 would require the preservation of off-site oak woodland. MM-4.4-16, SEA Protected Tree Replacement/Compensation, the Project's required Conservation Management Plan must include a Protected Tree Replacement Plan that will dictate the establishment of required replacement trees. As shown on page 4.4-93 of the Draft EIR of the 772 required replacement trees, 574 would be oak trees. Additional mitigation is incorporated to reduce impacts to oak trees, as detailed further in Section 4.4, Biological Resources, of the Draft EIR. Given this, the Project's required mitigation would reduce potential oak woodlands impacts to below a level of significance under CEQA. For discussion on the carbon sequestration, see Response to Comment O31-9 for more details.

031-16 The comment requests a reduction in the number of trees proposed for removal. The comment states 318 protected trees are proposed for removal. However, of the 849 trees on the Project site, 664 trees

are SEA-Protected Trees and 334 SEA-Protected Trees would be impacted by the Project, including 265 removals, as stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR. This comment is similar to Comment O31-15. As such, see Response to Comment O31-15 above.

With regard to Project alternatives, the Draft EIR includes an analysis of Alternative C, Reduced Footprint Alternative on pages 6-56 through 6-72 in Chapter 6, Alternatives, which presents a 67% reduction in the development footprint when compared to the Project. This alternative would cluster development closer to The Old Road and includes avoidance of most riparian habitat and non-riparian streams, and substantial avoidance of other biological resources, including native habitats, protected trees, oak woodlands, special-status plants, and rare plants. This would reduce direct impacts to SEA Protected Trees and would avoid impacts to the following tree species altogether: Fremont cottonwood, red willow, and arroyo willow. However, as stated on page 6-46 of the Draft EIR, Alternative C would still result in direct tree impacts to SEA Protected Trees (including heritage trees), and mitigation would still be required to reduce impacts to less than significant.

O31-17 The Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a VHFHSZ within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, additional fire protection measures, such as those governing safe building standards, must be provided for Project approval. As such, Section 4.20 adequately analyzes the potential effects of Project implementation and incorporates mitigation measures to reduce significant impacts. Please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

The Project's Vesting Tentative Tract Map No. 83301 is a type of tentative map for a subdivision that, upon approval, grants a vested right to proceed with development in substantial compliance with the ordinances, policies, and standards in effect at the time the map application was deemed complete. The Project Applicant submitted a preliminary application pursuant to SB 330 on March 18, 2021. The preliminary application granted a vested right to proceed with the Project, subject to the ordinances, policies, and standards in effect at the time. This date is prior to the adoption of the updated General Plan Safety Element (i.e., July 2022). As such, the Project is not subject to the updated Safety Element. Nonetheless, the General Plan Safety Element goals and policies discussed in the Draft EIR reference the updated version of the Safety Element. However, conformance to "new" Safety Element policies is not a Project requirement. An analysis of the Project's potential to result in a significant environmental impact due to a conflict with any County land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect is provided in Section 4.11, Land Use and Planning, of the Draft EIR (beginning on page 4.11-14). This includes an analysis of goals and policies included in the updated version of the Safety Element. However, an analysis of applicable goals and policies from the version of the Safety Element that was in effect at the time the Project was vested and the NOP was published (i.e., the 2015 version of the Safety Element) has been added to Table 4.11-1 in Section 4.11 of the Draft EIR, as included in Chapter 3, Revisions to the Draft EIR, of this Final EIR.[41]

[41] This revision does not change the impact analysis or conclusions in the Draft EIR. Rather, this information merely clarifies information and conclusions that were already presented in the Draft EIR. As such, this change would not result in a new significant impact or in a substantial increase in the severity of a previously identified significant impact and, therefore, does not constitute significant new information as defined in CEQA Guidelines Section 15088.5(a) that would warrant recirculation of the Draft EIR.

031-18 The comment expresses opposition to the Project due to the Project site's location within a VHFHSZ. The fire hazard designation does not prohibit the development of the Project, and this designation would remain with or without the Project. Additional fire protection measures, such as those governing safe building standards must be provided for Project approval but would not occur in the No Project Alternative (i.e., Alternative A, No Project/No Build Alternative analyzed in Chapter 6, Alternatives of the Draft EIR). Section 4.20, Wildfire, of the Draft EIR adequately analyzes the fire history of the Project site's vicinity, the potential effects of Project implementation, and incorporates mitigation measures to reduce significant impacts. See Appendix B, Fire History, of Appendix M-1 to the Draft EIR for more information. Additionally, refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

031-19 The Draft EIR presents an analysis of potential impacts related to wildfire and identifies potentially significant impacts within Section 4.20, Wildfire; however, after the incorporation of mitigation measures MM-4.17-1 and MM-4.20-1 through MM-4.20-5, impacts would be reduced to a less than significant level. Please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. As discussed therein, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones on and off site and would not exacerbate the fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 are required through MM-4.20-2, Alternative Materials and Methods, and MM-4.20-3, Annual Fuel Modification Zone Inspection, as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, Wildfire Education Program, would reduce potential impacts related to wildfire to less than significant.

The Fire Protection Plan, included as Appendix M-1 of the Draft EIR, states on Page 2 that the Project site, in its current condition, may include characteristics that, under favorable weather conditions, could have the potential to facilitate fire spread. Once the Project community is built, the on-site fire potential will be lower than its current condition due to fire safety requirements that will be implemented on-site. This same analysis is summarized in Section 4.20 Wildfire of the Draft EIR; this information has been fully disclosed to the decision-makers and the public in compliance with CEQA.

031-20 CEQA Guidelines Section 15064(e) states "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Given that potential fire insurance would be paid for by future residents to provide coverage, this would constitute as an economic effect related to the Project's operation. Thus, fire insurance is not within the scope of required environmental analysis pursuant to CEQA. As mentioned above, the VHFHSZ designation does not prohibit the development of the Project. Instead, additional fire protection measures, such as those governing safe building standard must be provided for Project approval. See Topical Response 1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

031-21 Potential impacts related to emergency evacuation are addressed in Section 4.20, Wildfire of the Draft EIR and Chapter 3, Revisions to the Draft EIR, of this Final EIR. A detailed response related to emergency evacuation is provided in Topical Response-1, Section 2.4.4, Project Wildfire Evacuation Modeling. As discussed therein, the County would coordinate a centralized emergency operation in the event of an emergency/disaster.

Regarding senior populations, please refer to the header of Evacuation of Senior Populations in Section 2.4.3.2, Fire Safety Requirements, in Topical Response-1, above. As stated therein, the Project does not propose or include a nursing home, residential care facility for the elderly, assisting living facility, board and care facility, or other living accommodations where there may be cognitive or physical limitations that could impede mobility. It is expected that occupants of the senior affordable housing units would evacuate similarly to all others within the Project site where there likely will be seniors living in the Project's market rate units. See Response to Comment O31-8 for additional details on revisions to MM-4.20-1 to further facilitate senior evacuations.

As such, Appendix M-2, Wildfire Evacuation Plan, of the Draft EIR, with revisions as shown in Chapter 3, Revisions to the Draft EIR, of this Final EIR, suffices as a credible evacuation plan for this Project which has been developed prior to Project approval.

031-22 Draft EIR Section 4.1, Aesthetics, describes the Project's potential impacts to aesthetics and visual change. Within this section of the EIR, analysis was conducted to determine if significant impacts would occur based on the County's adopted CEQA Guidelines, which are outlined in Section 4.1.3, Thresholds of Significance. The Project's impacts were determined based on a methodology that considered visibility of the Project from public vantage points and effects on scenic vistas, regional trails, scenic resources, and visual quality and character, which is consistent with the recent updates to the CEQA guidelines since certification of the previously approved Draft EIR. See Section 4.1.5, Impact Analysis, for a detailed analysis of the Project's impacts to aesthetics.

Regarding the previously approved project's impacts, the Draft EIR is not a tiered document and is intended to provide the environmental information necessary for the County to make a final decision on the requested discretionary actions to be considered as part of the Project. As such, there is no obligation that the findings of the Draft EIR be tethered to the findings of a previous environmental document for a separate and distinct project. Furthermore, since the time of the previous approval (i.e., 2009), in addition to changes to the specific development components, site plan configuration, etc., there have been changes to existing circumstances, including but not limited to environmental conditions, regulatory requirements, and case law, which have resulted in the impact determinations set forth in the Draft EIR. The conclusions in the Draft EIR are supported by substantial evidence (including facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts), as defined in Section 15384 of the CEQA Guidelines.

With regard to impacts on views from private residences to the north of the Project site, such impacts are typically not considered significant under CEQA (*Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477,14 Cal.Rptr.3d 308). As stated by the court in *Banker's Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego* (2006) 42 Cal.Rptr.3d 537,139 Cal.App.4th 249, "obstruction of a few private views in a project's immediate vicinity is not generally regarded as a significant environmental impact," because under CEQA, "the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons" (*Banker's*

Hill v. City of San Diego, supra, 139 Cal.App.4th at 279). Such conclusions are consistent with the inquiries set forth in County's adopted CEQA Guidelines, which ask whether projects would "substantially degrade the existing visual character or quality of public views" of the site and its surroundings. Moreover, the Project was assessed based on the ability to be consistent with applicable zoning and other regulations governing scenic quality, lighting, glare, and shadows. The Draft EIR determined less than significant impacts would occur to all thresholds except for impacts related to public views and scenic quality regulations. As such, the EIR incorporated MM-4.1-1, Visual Shielding Plan, which requires the Applicant to prepare a Visual Shielding Plan to improve the overall aesthetic quality of construction areas, including the establishment of designated staging areas, visual shielding, maintenance and monitoring of the Project site. This mitigation measure would be implemented prior to the issuance of a grading permit following review and approval by the County. With the implementation of this mitigation measure, impacts would be reduced to a less-than-significant level.

Regarding public views, the Draft EIR includes analysis of the potential aesthetic impacts related to construction and operation of the Project. This analysis considers potential lighting and glare impacts (refer to pages 4.1-37 through 4.1-40 in Section 4.1, Aesthetics, of the Draft EIR) as well as impacts to scenic vistas and public views from off-site recreation areas. Regarding views from Ed Davis Park, Towsley Canyon, Riverdale Park & Open Space, and Santa Clarita Woodlands Park to the south, recreationists in these areas would primarily be limited to marked trails and trailhead areas. As discussed on page 4.1-17 in Section 4.1, Aesthetics, of the Draft EIR, a visibility analysis was used to determine visibility of the Project site in the local vicinity where the Project features would have the highest potential to result in a visual impact. Regarding views from the off-site recreation areas, available views to portions of the Project site would generally be limited to Taylor Trail (located in close proximity to the south and east of the Project site; see Figure 4.1-3, Visibility Analysis, on page 4.1-53 of the Draft EIR) and the more distant Don Mullally trail to the south of the Project site (see label for "Ed Davis Park at Towsley Canyon" on Figure 4.1-3 on page 4.1-53 of the Draft EIR). From these trail segments, only between approximately 1% and 20% of the Project site would be visible—the remaining balance of the site would be obscured or blocked by intervening terrain. As detailed in response to this comment and in the Draft EIR, all substantial evidence necessary to support a less than significant impact with mitigation to aesthetics has been provided.

031-23 The commenter's general opposition to development within SEAs is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR. However, the County's SEA Program is not intended to entirely prevent development within SEAs. Rather, SEAs are places where the County deems it important to facilitate a balance between development and biological resource conservation. Per the SEA Ordinance Implementation Guide: "The SEA Program does not change the land use designation or the zoning of a property; rather it uses guidance and biological review and the application of certain development standards to balance the preservation of the County's natural biodiversity with private property rights" (County of Los Angeles 2020). The Project site is designated as H2-Residential 2 in the General Plan, and the Project's proposed land uses comply with the County's land use and zoning designations.

The SEA Program Guiding Principles listed in this comment are applicable to the County's implementation of the SEA Program in general and are not specifically included in the conformance review process for specific development projects. However, the Project does not conflict with the SEA Program Guiding Principles listed. Section 4.4, Biological Resources, of the Draft EIR and the Biota

Report included as Appendix C provide a comprehensive disclosure of the existing biological conditions on the Project site and the quantified impacts of Project development. The impacts and mitigation are analyzed pursuant to the requirements of CEQA and the CEQA Guidelines as well as the County's SEA Ordinance, which exceeds the typical analysis under CEQA and requires mitigation for all impacts to biological resources, sensitive or not. Moreover, the SEA Technical Advisory Committee found the Project to be consistent with the SEA Ordinance as modified by their recommendations. Given this, the impact and mitigation analysis in the Draft EIR is a culmination of the input of the biological consultants, the County, and the SEA Technical Advisory Committee.

Through the establishment of the On-Site and Off-Site Conservation Areas required per MM-4.4-1, On-Site Habitat Preservation and MM-4.4-9, Off-Site Habitat Preservation, the Project would result in the preservation of 611.13 acres of natural open space containing sensitive SEA resources. Through the establishment of conservation easements, the conservations areas would be managed and preserved in perpetuity. The Project would also include improved open space and landscaped areas ribboned through the developed northern portions of the Project site.

The Project would not result in habitat fragmentation or result in significant unmitigated loss of contiguity or connectivity of the SEA because the Project design clusters proposed development adjacent to existing residential and commercial uses to the north and The Old Road/I-5 on the east, allowing preservation of natural open space in the On-Site Conservation Area and is positions furthest from the nearest wildlife undercrossing of the I-5. The Project would also maintain ecological and hydrological functions of water bodies, watercourses, and their tributaries since the existing hydrological paths within the proposed developed area are already affected by being routed into a culvert at the eastern project boundary. Additional effects of the Project on riparian habitats would be effectively mitigated by habitat improvements elsewhere within the onsite and offsite conservation areas.

Therefore, the Project would not destroy the SEA or conflict with the SEA Program's Guiding Principles related to biodiversity and resiliency.

031-24 The commenter's reference to "Section 22.102.050, Burden of Proof" of the County Code is incorrect. In 2019, the County adopted an ordinance changing various provisions of the SEA ordinance, including changing the SEA findings required and the corresponding section of the County Code. The commenter included a purported section of the County Code that is not the current County Code. For example, County Code Section 102.050, now relates to SEA Counseling, and not Burden of Proof. The commenter erroneously states the required criteria of findings for development within an SEA. Page 4.4-58, Impacts to Significant Ecological Areas, of the Draft EIR details an analysis of the findings pursuant to County Code Section 22.102.080.D, regarding the findings of the SEA Conditional Use Permit. See analysis from pages 4.4-58 through 4.4-64 of Section 4.4, Biological Resources, of the Draft EIR, for the Project's substantiation of fact for the SEA findings. As detailed therein, with mitigation, the Project would not conflict with the SEA Conditional Use Permit findings.

031-25 The Draft EIR provides analysis on the Project's impacts related to water supply and drought conditions within various scenarios. Regarding water availability and the current water crisis, in preparing the Project's Water Supply Assessment, the Santa Clarita Valley Water Agency Water (SCV Water) considered the urban water shortage contingency planning analysis set forth in the 2020 Urban Water Management Plan and 2020 Water Shortage Contingency Plan in determining the sufficiency of water supplies for the Project, in addition to all existing and planned future uses in SCV Water's service area.

These documents also explain how SCV Water's reliability planning provisions of these adopted documents assist SCV Water in responding to drought conditions, including the severe drought conditions that currently exist (see page 4-33 in Appendix L-2 of this Draft EIR). As stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's Water Supply Assessment concludes that the total projected water supplies available to SCV Water's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five-year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

Regarding the contents of Appendix L-7, Water Availability Form, of the Draft EIR, the form also states an approximately 2,000-foot pipeline along The Old Road is proposed. This is in reference to the Project's proposed off-site water infrastructure improvements. As detailed on page 3-18 of Chapter 3, Project Description, of the Draft EIR, the Project would require various off-site improvements in order to adequately serve the Project site. This includes, but is not limited to, 2,950 feet of 18-inch water main in The Old Road and 4,000 feet of 12-inch water main in The Old Road. These improvements would be completed by the Applicant in conjunction with SCV Water, and are identified on Figure 4.19-2, Off-Site Water Infrastructure, in Section 4.19, Utilities and Service Systems, of the Draft EIR.

Regarding the expiration of the will-serve letter, as the Project undergoes the County's plan check and permitting process, the Project Applicant will seek a new will serve letter in advance of the 2026 expiration date to demonstrate compliance with applicable regulations.

031-26 This comment is a quote from Appendix L-2, The Trails at Lyons Canyon Water Supply Assessment. This appendix was included as part of the Project's water supply analysis. Please note the letter from SCV Water is dated April 13, 2022. Appendix L-3, Addendum to Water Supply Assessment, is an updated letter dated May 8, 2023, in which SCV Water describes the subsequent changes to the Project do not alter the WSA's conclusion that it has sufficient supplies to serve the Project. Similar to Appendix L-2, the inclusion of Appendix L-3 adequately discloses the information necessary to analyze the Project's impacts related to water supply. As discussed in Response to Comment 031-25, the total projected water supplies available to SCV Water's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five-year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses. See Response to Comment 031-25 for more discussion.

Furthermore, regarding the Model Water Efficient Landscape Ordinance (MWELO), the Draft EIR includes discussion on the Project's compliance with applicable regulations. Section 4.8, Greenhouse Gas Emissions, demonstrates the Project's compliance within Table 4.8-14, as shown on page 4.8-54. The Project's proposed landscaping would comply with MWELO, which promotes water efficient landscaping in new developments and establishes an outdoor water budget for new and renovated landscaped areas that are 500 square feet or larger. Through implementation of MM-4.8-6, Water Use Efficiency and Water Conservation, the Project would result in water use efficiency and water conservation measures, including planting of drought-tolerant plant species. Moreover, implementation of the Project, including the proposed landscape plan, would be required to comply with applicable regulations, such as MWELO, and would be required to demonstrate compliance during the County's plan check and permitting process. Therefore, the Draft EIR adequately disclosed information regarding compliance with MWELO.

031-27 Appendix I-3, William S. Hart Union High School District Request for Information Letter, which was received on July 1, 2021, was used to inform the potential impacts to schools within the Project site's vicinity. Student enrollment for Rancho Pico Junior High School and West Ranch High School is detailed under the existing conditions discussion on page 4.15-8 of Section 4.15, Public Services, of the Draft EIR. As demonstrated in the impact analysis of Section 4.15 to the Draft EIR starting on page 4.15-37, the Project is anticipated to result in an additional 41 middle school students and 75 high school students. As shown in Appendix I-3, the Rancho Pico Junior High School and West Ranch High School have capacity for 347 additional students[42] and 388 additional students[43], respectively. As such, each school has sufficient capacity to accommodate students generated by the Project as shown by the number of students enrolled in the 2020/2021 school year.

Regarding the distance of the schools to the Project site, the Draft EIR defers to the school district to provide the schools to serve the Project site, as demonstrated by Appendix I-3. The analysis contained within the Draft EIR includes an assumption for school-based travel in the VMT model. For example, on page 4.17-23 of Section 4.17, Transportation, Table 4.17-4, TDM Strategies and VMT Reduction for the Project (MM-4.17-2), notes trip reduction programs, such as community-based travel planning, include ridesharing programs for school children. In addition, bussing services are assumed for students to public schools. As such, the greenhouse gas emissions generated from VMT to nearby schools have been captured in the impact analysis in Section 4.8, Greenhouse Gas Emissions, of the Draft EIR and Chapter 3, Revisions to the Draft EIR, of this Final EIR.

031-28 Similar to the discussion provided in Response to Comment 031-27, Appendix I-4, Newhall School District Request for Information Letter (dated June 29, 2021) was used to inform the potential impacts to schools within the Project site's vicinity. Based on the information provided, the Draft EIR considered the impacts to Pico Canyon Elementary School, as stated in Appendix I-4 and detailed under the existing conditions discussion on page 4.15-8 of Section 4.15, Public Services, of the Draft EIR. The elementary school has a total capacity of 850 students and 790 students were enrolled in the 2020/2021 school year. As demonstrated in Section 4.15, Impact Analysis, of Section 4.15, Public Services, of the Draft EIR, starting on page 4.15-37, the Project is anticipated to result in an additional 131 elementary school students. As such, the Draft EIR adequately disclosed that the Newhall School District may not have current capacity to accommodate students generated by the Project. However, based on new construction and the potential for future student generation on the west side of I-5 (where the Project site is located), the Newhall School District may consider boundary changes, which would change the elementary school that would service the Project site. Further, correspondence indicated that the Newhall School District has capacity to expand and/or modernize its facilities and could service the Project site; however, there are no plans for expansion at this time. Given this, and as discussed further on page 4.15-38 of the Draft EIR, school districts impose fees on new residential and commercial development to compensate for the impact that a project would have on existing school facilities or services, as set forth in SB 50 and Section 65996 of the California Government Code. Payment of the required school districts' development impact fees would ensure that impacts to service capacities of schools would be less than significant. In addition, payment of SB 50 fees by the Project Applicant is considered by the state to represent full mitigation to all potential impacts to school services and facilities. Therefore, impacts would be less than significant.

[42] 1200 - 853 = 347 (see Appendix I-3)
[43] 2600 – 2212 = 388 (see Appendix I-3)

Regarding high school students, see Response to Comment O31-27 for discussion on impacts to West Ranch High School.

O31-29 This provides information from Appendix L-4 of the Draft EIR and states the sewer system in the area requires upgrades. The Project includes off-site sewer infrastructure improvements, as detailed further on page 3-18 of Chapter 3, Project Description, of the Draft EIR. As discussed therein, the existing downstream sewer system consists of approximately 11,500 linear feet of gravity sewer pipe ranging in size from 8 inches to 18 inches before connecting to the 24-inch SCVSD Trunk Sewer. The Project would upsize an 8-inch pipeline to 10-inches and construct three manholes within The Old Road, near the northeastern boundary of the Project site. It is anticipated that the Project would generate a total flow rate of 0.525 cubic feet per second entering existing 8-inch sewer lines from one of the proposed manholes. The sewage would flow through 10 to 18- inch lines before terminating at the existing 24-inch SCVSD Trunk Sewer (diversion structure). Section 4.19, Utilities and Service Systems, of the Draft EIR determined impacts to wastewater capacity would be less than significant and the Project would be adequately served by wastewater facilities. As detailed on pages 4.19-21 through 4.19-22, the Project would connect to existing infrastructure and comply with applicable regulations to reduce impacts associated with wastewater conveyance and treatment. Furthermore, as supported by analysis contained in the Sewer Area Study (Appendix L-5 of the Draft EIR), which has been reviewed and approved by Los Angeles County Public Works, the Project would contribute to a small percentage of available treatment capacity. Please note that Government Code Section 66007(a), recently enacted, prohibits a local agency from requiring the payment of any fee related to a qualifying residential development project until the date of final inspection or the date the certificate of occupancy is issued. For utility service fees related to connections, a fee may be collected at the time an application for service is received, provided that those fees do not exceed the costs incurred by the utility provider resulting from the connection activities. The commenter's request for payment of fees for infrastructure prior to approval of the Project would appear to violate the law if followed. The comment does not relate to environmental impacts and is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

O31-30 The comment states the Project would have a significant transportation impact. As detailed further in Section 4.17, Transportation, of the Draft EIR, the Project would result in a significant and unavoidable transportation impact. This comment does not express specific concerns related to the adequacy of the environmental analysis in the Draft EIR.

O31-31 Appendix I-2, Los Angeles County Sheriff's Department (LASD) Request for Information Letter, which was received on June 28, 2021, was used to inform the potential impacts related to Sheriff protection services as a result of the Project. Section 4.15, Public Services, analyzes the Project's operational impacts related to Sheriff protection services, starting on page 4.15-35 of the Draft EIR. As discussed therein, the LASD does not maintain specific service level ratios. The LASD indicated that the average response times under current conditions for emergent and priority calls are within LASD's optimal average. Moreover, as discussed on page 4.15-3 of the Draft EIR, response times represent the range of time required to handle a service call, which is measured from the time a call is received until the time a patrol car arrives at the incident scene. Response time is variable, particularly because the nearest responding patrol car may be located anywhere within the station's patrol area and may not necessarily respond directly from the station itself. The Draft EIR included an adequate discussion of

response time for the purposes of assessing impacts to LASD services based on the information included in Appendix I-2.

031-32 The comment states concern for LASD response times based on the new LASD station located on Golden Valley Road in Santa Clarita. The Draft EIR discloses this new station on page 4.15-35 of Section 4.15, Public Services. This information was also provided in Appendix I-2 to the Draft EIR. The comment correctly cites the General Plan 2035 EIR's established optimal service response times. However, similar to the discussion presented in Response to Comment 031-31, response times represent the range of time required to handle a service call, which is measured from the time a call is received until the time a patrol car arrives at the incident scene. Response time is variable, particularly because the nearest responding patrol car may be located anywhere within the station's patrol area and may not necessarily respond directly from the station itself. As further detailed in the impact analysis contained in Section 4.15, Public Services, the Draft EIR accounts for the newly constructed station, payment of law enforcement mitigation fees, and the implementation of design features, which would result in less-than-significant impacts to LASD services. The same standard of service would be provided to all residents of the Project site, including seniors.

Furthermore, in accordance with *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, Case No. S213478, it is Project's impact on the environment and not the environment's impact on the Project that compels the required CEQA evaluation. Thus, the Draft EIR is not required to provide detailed analysis related to the existing environmental conditions (such as levels of crime) on future Project-site residents, including seniors.

031-33 Impacts to hospitals are not an identified environmental resource topic with the state or local CEQA guidelines. Moreover, the local hospital in the vicinity (i.e., Henry Mayo Newhall Hospital) is not publicly owned and, therefore, is not considered a public service. Nevertheless, this comment will be provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

031-34 The comment states that a new zone change is required. As discussed on page 2-5 of Chapter 2, Environmental Setting, of the Draft EIR, the Project site contains the following zoning designations: Heavy Agricultural (A-2-2 and A-2-1) and Unlimited Commercial-Development Program (General Commercial [C-3] and C-3-DP). As further detailed on page 3-21 of Chapter 3, Project Description, of the Draft EIR, the Project requests multiple conditional use permits (CUPs), but a zone change is not required. The discussion presented on page 3-5 of Chapter 3, Project Description, of the Draft EIR is in regard to the CUPs required to ensure consistency with the site's zoning designations.

It should be noted that the Applicant for the Project differs from the applicant of the previously approved project and certified EIR (State Clearinghouse No. 2003031086) located on the same site (Los Angeles County Project TTM No. 53653, Conditional Use Permit R200500088, and Oak Tree Permit ROAK200500039). Additionally, the previous applicant did not withdraw the previously approved project and re-plan on a smaller footprint. Instead, the vesting tentative tract map for the previously approved project expired prior to recordation of its associated final map, and this expiration occurred after the Applicant for the Project submitted their application. Moreover, as discussed on page 6-29 of Chapter 6, Alternatives, of the Draft EIR, the EIR for the previously approved project was certified in August 2009 and the project proponent initiated the process to record the approved tract map. As noted, the vesting tentative tract map for the previously approved project expired prior to recordation of its associated final map, and this expiration occurred after the Applicant for the Project submitted

their application. Therefore, prior to its expiration, the previously approved project could have been implemented instead of the Project. The zone change of A-2-1/A-2-2 to C- 3-DP for the now expired prior-approved, project, however, was effectuated by the County; as such, the current Project site has 9.3 acres of C-3-DP zoning on-site. No zone change is necessary or required.

031-35 This comment states that the NOP comment letter provided by the commenter was not included in the Draft EIR. This NOP comment letter, dated July 15, 2022, has been received and revisions to the Draft EIR are reflected in Chapter 3, Revisions to the Draft EIR, of this Final EIR. Further, the NOP comment letter is included within this Final EIR. The responses to the NOP comment letter are provided in Responses to Comments O7-7 through O7-31.

INTENTIONALLY LEFT BLANK

Comment Letter I1

From: Thomas Brown <bigbearbound@gmail.com>
Sent: Friday, January 24, 2025 8:41 AM
To: Erica G. Aguirre
Subject: Trails at Lyons Canyon (Project no. 2021-001195-(5)
Attachments: Trails at Lyons Canyon Comment Letter.pdf

Follow Up Flag: Flag for follow up
Flag Status: Flagged

CAUTION: External Email. Proceed Responsibly.

Please find my comments regarding this project in the attached letter. Also, please see a picture of the proposed development property as seen from my property which show the landscape that will be graded and removed. Thank you.

Thomas Brown
bigbearbound@gmail.com

I1-1

January 24, 2025

Thomas Brown
24550 Sagecrest Cir.
Stevenson Ranch, CA 91381
bigbearbound@gmail.com
661-645-3073

Erica G. Aguirre, AICP
Principal Planner, Subdivisions
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th floor
Los Angeles, CA 90012

Dear Members of the Environmental Impact Committee,

I am writing to express my deep concerns regarding the proposed development know as The Trails at Lyons Canyon (project no. 2021-001195-(5)), which is currently under consideration. While I understand the importance of economic growth and the need for progress, I believe it is essential to balance such initiatives with a responsible and sustainable approach that preserves both the natural beauty of our community and the well-being of its residents. I1-2

One of my primary concerns is the loss of numerous heritage oak trees that are currently on the proposed development site. These majestic trees are not just natural landmarks; they are an integral part of the local ecosystem, offering shade, reducing air pollution, and supporting a wide range of wildlife. Heritage oaks in particular take decades, if not centuries, to mature, and their loss would be irreplaceable. Their removal would also contribute to increased carbon emissions at a time when we should be working to reduce our environmental footprint. I urge the committee to consider alternatives that could preserve these historic trees, perhaps by adjusting the development footprint or implementing creative solutions like tree relocation or protection during construction. I1-3

Additionally, the beauty and serenity of the area, which many of us treasure, would be severely impacted by this development. The current landscape, with its open green spaces, rolling hills, and natural vegetation, is a defining feature of the community. The proposed project would change the character of the area, detracting from the quality of life for the surrounding residents and diminishing the sense of place that makes this community so special. It is important to remember that these aesthetic values are a significant part of what makes our home desirable and livable. I1-4

Another pressing concern is the limited infrastructure in the area, particularly the strain this development would place on our roads and public services. As it stands, the road network is already inadequate to handle current traffic volumes during peak hours, and the addition of new residents and businesses would only exacerbate this issue. Increased traffic congestion would I1-5

negatively affect both the environment and the daily lives of local residents, leading to longer commute times, more air pollution, and greater stress. Given the current state of infrastructure, I urge the committee to carefully consider how this development could impact traffic flow and whether sufficient upgrades would be made to accommodate the growth.

I1-5 Cont.

In conclusion, while I understand the need for development in our area, I urge the committee to carefully weigh the long-term consequences of this project on the local environment and community. The loss of heritage oak trees, the degradation of the area's natural beauty, and the strain on already limited infrastructure are all significant concerns that must be addressed. I encourage the committee to explore alternative solutions that would allow for responsible growth while preserving the natural and cultural assets that define our community.

I1-6

Thank you for your time and consideration. I look forward to your thoughtful deliberation on this matter and hope that you will prioritize sustainability and the long-term well-being of our community in your decision.

I1-7

Sincerely,
Thomas Brown

INTENTIONALLY LEFT BLANK

Response to Comment Letter I1

Thomas Brown
January 24, 2025

I1-1 The comment is introductory in nature, provides a photo of the Project site, and does not express environmental concerns related to the environmental analysis contained in the Draft EIR. Comments related to the environmental analysis contained in Draft EIR are addressed below in subsequent responses.

I1-2 The comment expresses opposition to the Project. The commenter's general opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

I1-3 The Draft EIR analyzes the Project's potential impacts associated with heritage oak tree removal (see Table 4.4-17, Summary of Impacts to Significant Ecological Area Heritage Trees, on page 4.4-58 of Section 4.4, Biological Resources, of the Draft EIR). It should be noted that the Project would result in the removal and encroachment of 22 heritage oak trees within the 233.39-acre Project site. In compliance with County ordinance requirements, MM-4.4-16, SEA Protected Trees Replacement/Compensation, would require the replacement of heritage oak trees at a rate of 10:1, which would mitigate impacts to heritage oak trees. The Project's requirements to replace impacted trees, including a summary of individual tree species replacement quantities, are provided on page 4.4-93 of the Draft EIR. In total. the Project is required to plant 772 replacement trees, over half of which must be oak species. In addition, Section 4.8, Greenhouse Gas Emissions, of the Draft EIR, addresses the loss of sequestered carbon as a result of the removal of trees on site. The Draft EIR's analysis also includes discussion on the potential gain of sequestered carbon that would result from the planting and growth of trees on site on page 4.8-31 in Section 4.8, Greenhouse Gas Emissions. The Project would also preserve oak trees within the development footprint, as depicted on Figure 3-7, Landscape Plan, of Chapter 3, Project Description. In addition to the Project preserving 29 heritage oaks of the 51 heritage oak trees on-site (see Table 4.4-7, Summary of SEA Protected Trees for the Study Area, on page 4.4-28 of the Draft EIR), the Project would permanently preserve via conservation easement approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area, which would help maintain ecosystem functions and support wildlife species.

The Draft EIR considers three Project alternatives, one of which would reduce the overall footprint of the proposed development. As further detailed in Chapter 6, Alternatives, of the Draft EIR, Alternative C, the Reduced Footprint Alternative, would reduce the development footprint from 83.18 acres to 28 acres and increase the natural open space from 150.31 acres to 205.18 acres (Draft EIR, page 6-33). This would reduce direct impacts to SEA Protected Trees (including Heritage Trees) and would avoid impacts to the following tree species altogether: Fremont cottonwood, red willow, and arroyo willow. Although all Project impacts to biological resources would be less than significant with implementation of all mitigation measures, Alternative C is included to specifically address concerns to biological resource impacts (Draft EIR, page 6-57). However, as stated on page 6-46 of the Draft EIR, Alternative C would still result in direct tree impacts to SEA Protected Trees, and mitigation would still be required to reduce impacts to less than significant. Furthermore, as discussed in Section 5.4, Candidates Suitable for Relocation (Heritage Trees) of the Significant Ecological Area Protected Tree Report (included as Appendix A of Appendix C, Biota Report, of the Draft EIR), arborists performed a heritage

tree relocation-potential evaluation of the 14 heritage trees proposed for direct removal. As stated therein, based on a variety of factors, including the overall health, structure, and size of the heritage trees, none of the 14 heritage trees proposed for direct removal are considered viable candidates for relocation. However, the Project would avoid and preserve 29 on-site heritage trees, and an additional 5 encroachment heritage trees would be protected in place.

I1-4 Draft EIR Section 4.1, Aesthetics, describes the Project's potential impacts to aesthetics and visual changes. Within this section of the EIR, analysis was conducted to determine if significant impacts would occur based on the County's adopted CEQA Guidelines, which are outlined in Section 4.1.3, Thresholds of Significance. Additionally, the Project's impacts were determined based on a methodology that considered visibility of the Project from public vantage points and effects on scenic vistas, regional trails, scenic resources, and visual quality and character. With regard to impacts on views from private residences to the north of the Project site, such impacts are typically not considered significant under CEQA (*Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477, 492, 14 Cal.Rptr.3d 308). As stated by the court in *Banker's Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego* (2006) 42 Cal.Rptr.3d 537,139 Cal.App.4th 249, "obstruction of a few private views in a project's immediate vicinity is not generally regarded as a significant environmental impact," because under CEQA, "the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons" (*Banker's Hill v. City of San Diego, supra,* 139 Cal.App.4th at 279). Such conclusions are consistent with the inquiries set forth in County's adopted CEQA Guidelines. Moreover, the Project was assessed based on the ability to be consistent with applicable zoning and other regulations governing scenic quality, lighting, glare, and shadows. The Draft EIR determined less than significant impacts would occur to all Aesthetics thresholds except for construction-related impacts related to public views (including scenic vistas) and the potential to conflict with scenic quality regulations. As such, the EIR incorporated MM-4.1-1, Visual Shielding Plan, which requires the Applicant to prepare a Visual Shielding Plan to improve the overall aesthetic quality of construction areas, including the establishment of designated staging areas, visual shielding, maintenance and monitoring of the Project site. This mitigation measure would be implemented prior to the issuance of a grading permit following review and approval by the County. MM-4.3-1, Construction Equipment, of Section 4.3, Air Quality, and MM-4.4-16, SEA Protected Tree Replacement/Compensation, from Section 4.4, Biological Resources are also required to reduce potentially significant aesthetic impacts related to smog and tree removals, respectively. With the implementation of these mitigation measures, aesthetic impacts would be reduced to a less-than-significant level.

I1-5 Level of service (automobile delay) is not included in the evaluation of transportation impacts in the Draft EIR, as level of service is no longer used by the County to determine the significance of a transportation impact under CEQA pursuant to Senate Bill 743. However, a level of service analysis was conducted for the Transportation Impact Analysis in accordance with the County's Transportation Impact Analysis Guidelines. See Section 4.17, Transportation, of the Draft EIR for more information about the Project's traffic impacts. Specifically, see Appendix J to the Draft EIR and the impact analysis regarding the Los Angeles County Public Works Transportation Impact Analysis Guidelines, which considers the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis (Appendix J), the Project is not anticipated to result in unacceptable or extended queuing at study intersection during operations (Draft EIR, pages 4.17-18 and 4.17-19). As such, Project implementation would be consistent with existing regulations governing road capacity.

Regarding the concern for traffic congestion and associated effects (e.g., air pollution), see Section 4.3, Air Quality, of the Draft EIR. The Draft EIR's analyses of potential air quality and GHG emission impacts (which use the California Emission Estimator Model [CalEEMod] to estimate emissions from the Project) include consideration of Project-generated mobile source emissions (i.e., vehicle trips from residents, students, employees, delivery trips, etc.). As stated on page 4.3-27 in Section 4.3, Air Quality, of the Draft EIR, the unmitigated trip length (20.5 VMT per capita) from the transportation impact analysis was assumed for the residential land uses based on the VMT analysis. Annual VMT and trips were estimated and input into CalEEMod which can convert annual data into trips and VMT per day. Furthermore, the Draft EIR considers air quality impacts associated with traffic-congested roadways and intersections, taking into consideration the existing regional environmental setting. For example, as discussed beginning on page 4.3-48 of the Draft EIR, the air quality analysis considered traffic-congested roadways and intersections, which have the potential to generate localized high levels of carbon monoxide (CO). Moreover, a roadway health risk assessment (Appendix B-2 to the Draft EIR) was performed to evaluate the health risks of the proximate I-5 freeway to future sensitive receptors of the Project. As determined by the analyses set forth in Draft EIR Sections 4.3, Air Quality, and 4.8, Greenhouse Gas Emissions, the Project's air quality and GHG emission impacts would be less than significant with mitigation incorporated.

I1-6 This comment provides a conclusory statement and summarizes the comments presented above. The comment does not express additional concerns related to the adequacy of the Draft EIR.

I1-7 This comment provides a conclusory statement. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter I2

From: Jennifer Mateus
To: Erica G. Aguirre
Subject: Proposed development adjacent to Towsley Canyon
Date: Sunday, February 2, 2025 10:39:10 AM

CAUTION: External Email. Proceed Responsibly.

To whom it may concern,

I am a twenty six year resident of Castaic and I would like to strongly oppose this plan. I2-1

I feel we already have a terrible traffic problem which was on full display with the Hughes fire. Adding more vehicles to this community would only make things worse. I2-2

I also have enjoyed Towsley Canyon for many years and have no desire to see structures built in that area. I ask that you leave what land we have left as is and let us enjoy it. I2-3

Sincerely,

Jennifer Mateus
Sent from my iPhone

Response to Comment Letter I2

Jennifer Mateus
February 2, 2025

I2-1 The commenter's general opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

I2-2 The Draft EIR analyzes the potential impacts of evacuation traffic under Threshold 4.20a in Section 4.20, Wildfire. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located in proximity to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

Regarding the Project's contribution to traffic congestion during non-emergency events, see Section 4.17, Transportation, of the Draft EIR for more information. Specifically, see Appendix J to the Draft EIR and the impact analysis regarding the Los Angeles County Public Works Transportation Impact Analysis Guidelines, which considers the Project's traffic contribution to queuing at nearby signalized intersections. However, operational deficiency is not considered a CEQA transportation impact. As detailed in the Transportation Impact Analysis (Appendix J), the Project is not anticipated to result in unacceptable or extended queuing at study intersection during operations (Draft EIR, pages 4.17-18 and 4.17-19). As such, Project implementation would be consistent with existing regulations governing road capacity.

I2-3 Although limited brush clearing is required in the adjacent Rivendale Park and Open Space area to comply with defensible space requirements, the Project's development would not encroach into park areas or Towsley Canyon to the south. The Project would facilitate the dedication of existing non-dedicated trails. Figure 3-5, Conceptual Trails Map, illustrates the Project's proposed trail network, existing non-dedicated trails to be dedicated, existing dedicated trials (managed by the City of Santa Clarita or the County), and existing non-dedicated trails. These on-site trails would connect to adjacent public open spaces outside of the Project's boundaries, including the City of Santa Clarita's Rivendale Park and Open Space in Towsley Canyon. The commenter's general opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

Comment Letter I3

From: Kevin Corcoran
To: Erica G. Aguirre
Subject: Lyons Canyon Project
Date: Sunday, February 2, 2025 7:04:46 PM

CAUTION: External Email. Proceed Responsibly.

Erica Aguirre, Senior Planner
Los Angeles County Dept of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012
Sent via email to: EAguirre@planning.lacounty.gov

Hello Ms. Aguirre:

I hike weekly in Towsley Canyon, a county open space area adjacent to the Lyons Canyon proposal, and want to express my concern that this project is being proposed in a Very High Fire Hazard Severity Zone immediately adjacent to this open space area. After all the severe fires in Los Angeles County this past month, it is obviously not safe to put high density housing in the wildland urban interface, and especially not in a deadend canyon. I3-1

So I am writing to you today to request an extension of the comment period for this project for an additional 30 days. I3-2

I think, in the wake of the recent LA County fires it is important to carefully evaluate this catastrophe and ensure that lessons learned are incorporated into any new project where the county would be placing housing in a similar dangerous situation. Fire history maps show that in the last 20 years Lyons Canyon has burned in two wildland fires, with several other fires on nearby adjacent land. So I sincerely hope, that for the well-being of our community, you will support this request. I3-3

Thank You,
Kevin Corcoran
Valencia CA

Response to Comment Letter I3

Kevin Corcoran
February 2, 2025

I3-1 Section 4.20, Wildfire, beginning on page 4.20-1 of the Draft EIR, addresses concerns for Project safety within a Very High Fire Hazard Severity Zone. This section of the Draft EIR is largely based on the evaluation and results of the Fire Protection Plan (included as Appendix M-1 to the Draft EIR) and the Wildfire Evacuation Plan (Appendix M-2). The EIR confirms the Project site is located within a Very High Fire Hazard Severity Zone within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, additional fire protection measures, such as those governing safe building standards and enhanced fuel modification, must be provided for Project approval. A detailed response regarding fire protection and safety is provided in Topical Response-1. The Draft EIR analysis determined that wildfire impacts would be less than significant with mitigation incorporated. See Section 4.20.7 of the Draft EIR for more details on MM-4.20-1 through MM-4.20-5.

Regarding fire hazards within a canyon, once developed, the portion of the Project site proposed for development would be graded and developed with residential uses, landscaping improvements, and recreational uses as stated on page 4.20-29 in Section 4.20, Wildfire, of the Draft EIR. Open space areas that would remain would include natural open space, open space subject to fuel modification zones, and trails. Therefore, the natural slopes and canyons adjacent to the Project site that would remain vegetated and ungraded and may serve to funnel or channel winds, thus potentially influencing wildfire behavior; however, the Project would not include features that modify the existing prevailing wind pattern. Grading within the development footprint would reduce slopes and potential for wind to exacerbate wildfire across the Project site. Additionally, see Section 3.2.6, Fuel Modification, in Chapter 3, Project Description, of the Draft EIR for details on the Project's proposed design and infrastructure improvements to ensure fire safety, which are in compliance with Los Angeles County Fire Department's Fuel Modification Guidelines. A detailed response regarding fire protection and safety is provided in Topical Response-1.

I3-2 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments have been received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

I3-3 This comment is similar in nature to Comment I3-1. As such, please see the discussion provided under Response to Comment I3-1. Moreover, the commenter's general opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

Comment Letter I4

From: James
To: Erica G. Aguirre
Subject: Towsley canyon development
Date: Sunday, February 2, 2025 9:14:37 AM

CAUTION: External Email. Proceed Responsibly.

This development is disgusting. You boneheads aren't gonna be happy until you turn this area into another Van Nuys. I4-1

Best Regards
James Kiswardy

c 661-855-0084

Response to Comment Letter I4

James Kiswardy
February 2, 2025

I4-1 This comment expresses opposition to the Project. The commenter's general opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

Comment Letter I5

2-3-25

Erica Aguirre, Senior Planner
Los Angeles County Dept of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Sent via email to: EAguirre@planning.lacounty.gov

Re: Request for Extension of time to Review Draft Environmental Impact Report
Lyons Canyon Project, Project No. 2021-001195-(5)

Dear Ms. Aguirre,

I am a Santa Clarita resident who is concerned about the Lyons Canyon proposed development. Its proximity to the beloved Open Space, Towsley Canyon, is unacceptable. It is disingenuous to claim Lyons Canyon would not have a significant negative impact on Towsley Canyon. Housing can be built in other locations, Towsley Canyon can not be moved. I5-1

Furthermore, it is gravely irresponsible to move forward with such dense housing in a Very High Fire Hazard Severity Zone given the tremendous loss of life and property due to the Eaton and Palisades fires. New housing is needed, but it must be built thoughtfully and safely! Governments and developers need time to process the implications of the Eaton and Palisades fires before they can reasonably move forward with new, safer communities in areas prone to wildfires. I5-2

During the current comment period, the Eaton, Palisades, Hurst and Hughes fires impacted local residents for multiple weeks. While only the Hughes fire was in Santa Clarita, all of these fires impacted Santa Clarita residents. Many of the residents of Santa Clarita work and have loved ones in the LA Metropolitan Area. The Hurst fire had SCV residents in Evacuation Warning Zones. I5-3

I am writing to respectfully request that you extend the current comment period an additional 30 days, and that you provide hard copies of all relevant documents to the Stevenson Ranch Library. Please give our community ample time to review documents and comment on the Lyons Canyon Proposed development. We owe it to our community and to future generations not to destroy significant ecological areas and build unsafe housing in Very High Fire Hazard Severity zones without taking the time to deeply consider the implications for doing so, and associated alternatives. I5-4

Thank you for your time and consideration!
Warm regards,
Shannon Mast
Santa Clarita resident
SCOPE member
shannlyn@gmail.com

Response to Comment Letter I5

Shannon Mast
February 3, 2025

I5-1 The Draft EIR determined the following topics would result in potentially significant impacts and require mitigation measures to reduce the potential impacts: Aesthetics, Agriculture and Forest, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Land Use and Planning, Noise, Public Services, Transportation, Tribal Cultural Resources, and Wildfire. All other topics would have no impact or less than significant impacts without mitigation. The Draft EIR determined a significant and unavoidable impact would occur under the topic of Transportation. For a summary of Project impacts, see Table ES-1 within Section ES.4, Environmental Impacts and Mitigation Measures. The commenter's general opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

Regarding impacts to open space, the Draft EIR describes on pages 4.4-59 and 4.4-60 of Section 4.4, Biological Resources, that as a result of the Project's clustered design, the Project is able to permanently preserve via conservation easement approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area. Habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. Furthermore, although limited brush clearing is required in the adjacent Rivendale Park and Open Space area to comply with defensible space requirements, the Project's development would not encroach into park areas or Towsley Canyon to the south. The Project would facilitate the dedication of existing non-dedicated trails. Existing non-dedicated trails on the southern portion of the Project site would remain with implementation of the Project and would connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon. See Figure 3-5, Conceptual Trails Map, of the Draft EIR, for details.

Regarding an alternative site for housing development, as stated in page 6-25 of Chapter 6, Alternatives, of the Draft EIR, one of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The Project site is located within the unincorporated Santa Clarita Valley region of Los Angeles County. The Project Applicant inquired with a licensed real estate broker based in the Santa Clarita Valley for the possibility of an available alternative site of approximately 233 acres, that could accommodate the Project's 510 residential units and allow for the preservation of protected open space in the Santa Clarita Valley. Per the real estate broker, no similar alternative site, which is proximate to freeway access, existing roadway infrastructure, and developed areas, is available for sale in the Santa Clarita Valley. As such, an alternative site would not be considered feasible and was ultimately rejected from further analysis in the EIR.

I5-2 A detailed response related to fire protection and safety is provided in Topical Response-1, which addresses issues related compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. Recent fires in the region do not necessitate additional or revised Draft EIR analysis. Nonetheless, in light of recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10,

2025. As such, additional time was provided for the public to consider, review, and submit comments on the Project. The Draft EIR adequately analyzes impacts related to wildfire within Section 4.20, Wildfire, and incorporates mitigation measures to reduce significant impacts. See Section 4.20.7 for more details on MM-4.20-1 through MM-4.20-5. This section of the Draft EIR is largely based on the evaluation and results of the Fire Protection Plan (Appendix M-1 to the Draft EIR) and the Wildfire Evacuation Plan (Appendix M-2 of the Draft EIR). At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity. The data collected was from CAL FIRE's Fire and Resources Assessment Program database, which provides fire history information and fire perimeter data dating to the late 1800s for all fires over 10 acres in size (Draft EIR, page 4.20-4). For more information see Appendix B, Fire History, of Appendix M-1 to the Draft EIR. Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. Therefore, the recent fire activity does not change the conclusions detailed in Section 4.20, Wildfire. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires, in Topical-Response-1.

I5-3 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments have been received during the public review extension. In addition to being viewable/downloadable online, an electronic copy of the Draft EIR was made available at the Stevenson Ranch Library starting on December 10, 2024. Hard copies of the Draft EIR and appendices were relocated from County Planning's main office to the Stevenson Ranch Library on February 7, 2025, and made available through March 10, 2025. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

I5-4 Regarding impacts to Significant Ecological Areas and impacts related to housing within a Very High Fire Hazard Severity Zone (VHFHSZ), see Section 4.4, Biological Resources, and Section 4.20, Wildfire, respectively, for more information on the Draft EIR's analysis. As stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR, the Project would result in impacts to 334 SEA-Protected Trees, which would comprise of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin. The 53 SEA-Protected Trees that would be located within a debris basin would not be removed but are considered as removals for mitigation purposes. This is because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding. As such, for mitigation purposes, the Project would result in 318 SEA Protected Tree removals. The 318 SEA Protected Trees would be replaced in accordance with the Los Angeles County SEA Ordinance, codified in Chapter 22.102, Significant Ecological Areas, of the County Code, resulting in 772 replacement trees. Per MM-4.4.16, SEA Protected Trees Replacement/Compensation, should there not be enough locations within the Project's Conservation Area (on-site and off-site) or Project landscaped areas for replacement trees, the Project Applicant must pay into the County's Protected Tree Fund (see page 4.4-94 in Section 4.4, Biological Resources, of the Draft EIR). The Protected Tree Fund is codified in Section 22.102.070(F)(5) of the County Code as a viable option for mitigation for

the replacement of the impacted trees. Additionally, see response to Comment I5-2 and refer to Topical Respnse-1 for a detailed response about development within VHFHSZs.

Regarding alternatives, Chapter 6, Alternatives, for the Draft EIR considers three alternatives to the Project, including Alternative C, Reduced Footprint Alternative (beginning on page 6-56 of the Draft EIR). Under Alternative C, the development footprint would be approximately 28-acres, which represents a 67% reduction when compared to the Project. This would reduce direct impacts to SEA Protected Trees. However, as stated on page 6-46 of the Draft EIR, Alternative C would still result in direct tree impacts to SEA Protected Trees, and mitigation would still be required to reduce impacts to less than significant.

Comment Letter I6

From: Deanna Hanashiro
To: Erica G. Aguirre
Subject: Request for Extension of time to Review Draft Environmental Impact Report Lyons Canyon Project, Project No. 2021-001195-(5).
Date: Monday, February 3, 2025 2:24:06 PM

CAUTION: External Email. Proceed Responsibly.

February 3, 2025

Erica Aguirre, Senior Planner
Los Angeles County Dept. of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Dear Ms. Aguirre,

Please allow an extension of the comment period for the Lyons Canyon Project for at least an additional 30 days to permit the County to finish its fire investigation and develop ways to address the fire danger described below. I6-1

We recently experienced the Hughes Fire threatening Castaic and Santa Clarita. The Pacific Palisades and Altadena (Eaton) fires had just destroyed the lives and livelihoods of many.

Fires have burned through the exact location of the Lyons Canyon Project. Will anyone even be able to obtain fire insurance in this proposed project area? Will the County place seniors and low-income people in density housing in a Very High Fire Hazard Severity Zone? I6-2

It is imperative that the community and the County have an adequate period after these fires to ensure adequate evacuation routes and all recommendations following the evaluation of the Eaton and Palisades Fires are incorporated into this project, especially since senior housing is proposed. I6-3

Please support this request to allow good planning and public safety.

Thank you,
Deanna Hanashiro
Santa Clarita resident

Sent from my iPad

INTENTIONALLY LEFT BLANK

Response to Comment Letter I6

Deanna Hanashiro
February 3, 2025

I6-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments have been received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

I6-2 A detailed response related to fire protection and safety is provided in Topical Response-1, which addresses issues related compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The placement of housing, including affordable and/or senior housing, within a Very High Fire Hazard Severity Zone (VHFHSZ) is not prohibited. Instead, additional fire protection measures, such as those governing safe building standards, must be provided for Project approval. Compliance with these measures would help improve fire safety conditions for all Project-site, regardless of age or income level. The Draft EIR adequately analyzes impacts related to wildfire within Section 4.20, Wildfire, and incorporates mitigation measures to reduce significant impacts. See Section 4.20.7 of the Draft EIR for more details on MM-4.20-1 through MM-4.20-5. This section of the Draft EIR is largely based on the evaluation and results of the Fire Protection Plan (Appendix M-1 to the Draft EIR) and the Wildfire Evacuation Plan (Appendix M-2 of the Draft EIR). At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity. The data collected was from CAL FIRE's Fire and Resources Assessment Program database, which provides fire history information and fire perimeter data dating to the late 1800s for all fires over 10 acres in size (Draft EIR, page 4.20-4). For more information see Appendix B, Fire History, of Appendix M-1 to the Draft EIR. Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed, and the recent fire activity does not change the conclusions detailed in Draft EIR Section 4.20. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires in Topical Response-1.

Regarding fire insurance, CEQA Guidelines Section 15064(e) states "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Thus, this operational component is not within the scope of the required environmental analysis pursuant to CEQA. This comment will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

As detailed in the Project description, an affordable senior living rental apartment building as well as for-sale inclusionary condominium units for moderate- and middle-income are proposed on site. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff. See the header of Evacuation of Senior Populations in Section 2.4.3.2, Fire Safety Requirements of Topical Response-1 regarding evacuation of senior populations. As stated above, compliance with additional fire protection measures required for developments with a VHFHSZ,

together with Project-specific mitigation measures (i.e., MM-4.20-1 through MM-4.20-5), would improve fire safety for all Project-site residents, regardless of age or income level, and would reduce wildfire impacts to a less than signfincat level.

I6-3 Evacuation routes and evacuation plans are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located in proximity to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

Similar to the discussion presented in Response to Comment I6-2, although fires occurred within the vicinity of the Project site, the conclusions contained within Section 4.20, Wildfire, of the Draft EIR are still adequate and applicable. Also, please see Response to Comment I6-1 regarding the public comment period extension.

Comment Letter I7

From: Nancy Strong
To: Erica G. Aguirre
Subject: Request for Extension of time to Review Draft Environmental Impact Report Lyons Canyon Project, Project No. 2021-001195-(5)
Date: Monday, February 3, 2025 4:45:19 PM

CAUTION: External Email. Proceed Responsibly.

2-3-25

Erica Aguirre, Senior Planner
Los Angeles County Dept of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Sent via email to: EAguirre@planning.lacounty.gov

Re: Request for Extension of time to Review Draft Environmental Impact Report Lyons Canyon Project, Project No. 2021-001195-(5)

Dear Ms. Aguirre,

I grew up in the Santa Clarita Valley and often hiked in the surrounding wild spaces. My daughter is raising her family just a few miles from the Lyons Canyon proposed development. A dense multi-story development adjacent to our treasured Towsley Canyon open space is unacceptable. It is disingenuous to claim Lyons Canyon would not have a significant negative impact on Towsley Canyon. Housing can be built in other locations, Towsley Canyon can not be moved. I7-1

Furthermore, it is tone deaf and irresponsible to move forward with such dense housing in a Very High Fire Hazard Severity Zone given the tremendous loss of life and property due to the Eaton and Palisades fires. New housing is needed, but it must be built thoughtfully and safely! Governments and developers need time to process the implications of the Eaton and Palisades fires before they can reasonably move forward with new, safer communities in areas prone to wildfires. I7-2

During the current comment period, the Eaton, Palisades, Hurst and Hughes fires impacted local residents for multiple weeks. While only the Hughes fire was in Santa Clarita, all of these fires impacted Santa Clarita residents. Many of the residents of Santa Clarita work and have loved ones in the LA Metropolitan Area. The Hurst fire had SCV residents in Evacuation Warning Zones. The grief and shock we have all experienced and continue to experience would be exacerbated by advancing the planning of more housing in wildlands before lessons learned can be incorporated into zoning and building regulations. I7-3

I am writing to respectfully request that you extend the current comment period an additional 30 days, and that you provide hard copies of all relevant documents to the Stevenson Ranch Library. Please give our community ample time to review documents and comment on the Lyons Canyon Proposed development. We owe it to our community and to future generations not to destroy significant ecological areas and build unsafe housing in Very High Fire Hazard Severity zones without taking the time to deeply consider the implications for doing so, and associated alternatives. I7-4

Thank you for your time and consideration!
Regards,
Nancy Strong
Concerned family of Santa Clarita

Nancy.Strong01@gmail.com

Response to Comment Letter I7

Nancy Strong
February 3, 2025

I7-1 The Draft EIR determined the following topics would require mitigation measures to reduce significant impacts: Aesthetics, Agriculture and Forest, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Land Use and Planning, Noise, Public Services, Transportation, Tribal Cultural Resources, and Wildfire. All other topics would have no impacts or less than significant impacts without mitigation. The Draft EIR determined a significant and unavoidable impact would occur under the topic of Transportation. For a summary of impacts, see Table ES-1 within Section ES.4, Environmental Impacts and Mitigation Measures. The commenter's general opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration.

Regarding impacts to open space, the Draft EIR describes on pages 4.4-59 and 4.4-60 of Section 4.4, Biological Resources, that as a result of the Project's clustered design, the Project is able to permanently preserve via conservation easement approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area. Habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. Furthermore, although limited brush clearing is required in the adjacent Rivendale Park and Open Space area to comply with defensible space requirements, the Project's development would not encroach into park areas or Towsley Canyon to the south. The Project would facilitate the dedication of existing non-dedicated trails. Existing non-dedicated trails on the southern portion of the Project site would remain with implementation of the Project and would connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon. See Figure 3-5, Conceptual Trails Map, of the Draft EIR for details.

Regarding an alternative site for housing development, as stated in page 6-25 of Chapter 6, Alternatives, of the Draft EIR, one of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The Project site is located within the unincorporated Santa Clarita Valley region of Los Angeles County. The Project Applicant inquired with a licensed real estate broker based in the Santa Clarita Valley for the possibility of an available alternative site of approximately 233 acres, that could accommodate the Project's 510 residential units and allow for the preservation of protected open space in the Santa Clarita Valley. Per the real estate broker, no similar alternative site, which is proximate to freeway access, existing roadway infrastructure, and developed areas, is available for sale in the Santa Clarita Valley. As such, an alternative site would not be considered feasible and was ultimately rejected from further analysis in the EIR.

I7-2 A detailed response related to fire protection and safety is provided in Topical Response-1, which addresses issues related compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. Recent fires in the region do not necessitate additional or revised Draft EIR analysis. Nonetheless, in light recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025.

As such, additional time was provided for the public to consider, review, and submit comments on the Project. The Draft EIR adequately analyzes impacts related to wildfire within Section 4.20, Wildfire, and incorporates mitigation measures to reduce significant impacts. See Section 4.20.7 for more details on MM-4.20-1 through MM-4.20-5. This section of the Draft EIR is largely based on the evaluation and results of the Fire Protection Plan (Appendix M-1 to the Draft EIR) and the Wildfire Evacuation Plan (Appendix M-2 of the Draft EIR). At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity. The data collected was from CAL FIRE's Fire and Resources Assessment Program database, which provides fire history information and fire perimeter data dating to the late 1800s for all fires over 10 acres in size (Draft EIR, page 4.20-4). For more information see Appendix B, Fire History, of Appendix M-1 to the Draft EIR. Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. Therefore, the impacts related to wildfire would not change the conclusions detailed in Section 4.20, Wildfire. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires in Topical Response-1.

I7-3 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments have been received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

I7-4 This comment is similar to Comment I7-3. As such, see Response to Comment I7-3 for discussion on the public comment period extension. In addition to being viewable/downloadable online, an electronic copy of the Draft EIR was made available at the Stevenson Ranch Library starting on December 10, 2024. Hard copies of the Draft EIR and appendices were relocated from County Planning's main office to the Stevenson Ranch Library on February 7, 2025, and made available through March 10, 2025. Regarding impacts to Significant Ecological Areas and impacts related to housing within a Very High Fire Hazard Severity Zone (VHFHSZ), see Section 4.4, Biological Resources, and Section 4.20, Wildfire, respectively for more information on the Draft EIR's analysis. As stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR, the Project would result in impacts to 334 SEA-Protected Tree, which would comprise of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin. The 53 SEA-Protected Trees that would be located within a debris basin would not be removed but are considered as removals for mitigation purposes. This is because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding. As such, for mitigation purposes, the Project would result in 318 SEA Protected Tree removals. The 318 SEA Protected Trees would be replaced in accordance with the Los Angeles County SEA Ordinance, codified in Chapter 22.102, Significant Ecological Areas, of the County Code, resulting in 772 replacement trees. Per MM-4.4.16, SEA Protected Trees Replacement/Compensation, should there not be enough locations within the Project's Conservation Area (on-site and off-site) or Project landscaped areas for replacement trees, the Project Applicant must pay into the County's Protected Tree Fund (see page 4.4-94 in Section 4.4, Biological Resources, of the Draft EIR). The Protected Tree Fund is codified in Section 22.102.070(F)(5) of the County Code as a viable option for mitigation for

the replacement of the impacted trees; the fund would be used only as a "last resort" in the event the Project's on-site and off-site Conservation Areas are deemed not to contain sufficient viable area for the 772 replacement tree plantings. Additionally, see response to Comment I5-3 for a detailed response about development within VHFHSZs.

Regarding alternatives, Chapter 6, Alternatives, for the Draft EIR considers three alternatives to the Project, including Alternative C, Reduced Footprint Alternative (beginning on page 6-56 of the Draft EIR). Under Alternative C, the development footprint would be approximately 28-acres, which represents a 67% reduction when compared to the Project. This would reduce direct impacts to SEA Protected Trees. However, as stated on page 6-46 of the Draft EIR, Alternative C would still result in direct tree impacts to SEA Protected Trees, and mitigation would still be required to reduce impacts to less than significant.

INTENTIONALLY LEFT BLANK

Comment Letter I8

From: Annette Lucas
To: Erica G. Aguirre
Subject: Lyons Trail No.2021-001195-(5)
Date: Tuesday, February 4, 2025 12:32:04 AM

CAUTION: External Email. Proceed Responsibly.

Erica Aguirre, Senior Planner Feb.4, 2025

Los Angeles County Dept. of Regional Planning

320 W. Temple St.

Los Angeles, CA 90012

Ms. Aquirre

Re: Lyons Canyon Project

No.2021-001195-(5)

As a resident of the city of Santa Clarita, in the County of Los Angeles I am requesting a 30 day extension for comments to the DEIR for The Lyons Canyon Trails. I8-1

I believe the 30 days would be a reasonable amount of time for an updated emergency response and evacuation for the Lyons Trail but I would like to request that the DEIR also look at the surrounding area. I8-2

The emergency response with the second proposed Wiley project on the opposite side of the I 5 freeway also use the same emergency departments. I8-3

The two projects add approximately 1,000 dwelling units in a very severe fire danger, which will add to the response time since they both rely on the same emergency departments and both include senior housing, I8-4

Just with the proposed Wiley project the Wiley/Calgrove neighborhoods are out of the 8 minute response time for the first unit to arrive and both projects add dangerous response time. I8-5

All emergency fire, medical, evacuation and sheriff response times need to be reviewed and updated by the LACFD, LAFD and LASD for the **Lyons project and** the proposed project on **Wiley Canyon combine.**. I8-6

The recent Palisades, Eaton and Hurst fires are examples of the devastation that can happen. Please let us have a 30 day extension to carefully go over the DEIR..

I8-7

Regards

Annette Lucas

Calgrovecorridor@aol.com

Sent from the all new AOL app for iOS

Response to Comment Letter I8

Annette Lucas
February 4, 2025

I8-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments have been received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

I8-2 The Draft EIR adequately analyzes the potential impacts associated with wildfire planning within Section 4.20, Wildfire, and revisions are not required in response to this comment. Specifically, the Draft EIR analyzes emergency response and evacuation under Threshold 4.20a in Section 4.20. Additional analysis related to emergency response is provided under Threshold 4.15a(i) in Section 4.15, Public Services, of the Draft EIR (please refer to the Response to Comment I8-3, below regarding fire and emergency response services). As stated on page 4.20-27 of the Draft EIR, detailed evacuation modeling has been prepared for the Project to determine whether the Project would adversely affect evacuations in the Project area. While the Project may increase evacuation times relative to existing conditions, the modeling results demonstrate that evacuation time limits for Project residents and existing residents of nearby communities would fall within established guidelines for evacuation time limits. With compliance with regulations and incorporation of MM-4.20-1, Wildfire Evacuation Plan, the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. A detailed response related to evacuation planning and the Project's Wildfire Evacuation Plan is provided in Topical Response-1. Discussion is provided to demonstrate that an updated Wildfire Evacuation Plan is not required.

I8-3 Section 4.15, Public Services, of the Draft EIR provides a discussion on cumulative effects to public services. The comment notes the Wiley Canyon Project, which has been included in Table 2-2, List of Cumulative Projects, and identified as SC1 (Draft EIR, page 2-13). As discussed in the cumulative impact analysis starting on page 4.15-44 of Section 4.15, impacts of the Project and other past, present, and reasonably foreseeable future projects were analyzed, as required by Section 15130 of the State CEQA Guidelines.

As detailed in Section 4.15, Public Services, of the DEIR, the geographic area for fire protection is the local Project site vicinity and the LACoFD service area, which is predominantly the unincorporated areas of the County, but also includes some incorporated cities, such as the City of Santa Clarita. A cumulative impact would occur if other related projects in the vicinity of the Project site would result in capacity or service level impacts in conjunction with the impacts of the Project, or if buildout of the General Plan, as identified in the General Plan EIR, would result in a significant impact to fire protection services, which the Project could thereby contribute to and/or exacerbate, resulting in a cumulatively considerable impact. Each cumulative project (including the Wiley Canyon Project), however, would be required to demonstrate compliance with CEQA prior to approval and would be required to mitigate its associated increase in need through the payment of the County's Development Fee Program, which would be used to fund the purchase of fire station sites, the construction of new stations, and the funding of certain capital equipment in compliance with the County Fire Code. Cumulative Projects SC1 through SC23 (which include the Wiley Canyon Project) would be subject to Santa Clarita Municipal

Code Section 17.57.025I(4), requiring two distinct means of vehicular access of at least 25 feet in width, exclusive of sidewalks, landscaping, and parking lanes.

In response to increasing demands for new facilities, equipment, and staffing created by new development, the County has implemented a Developer Fee Program to fund the purchase of fire station sites, the construction of new stations, and the funding of certain capital equipment in the high-growth areas of the County.

As identified in the General Plan EIR, while cumulative growth within the LACoFD service area would result in a need for additional fire protection services to serve new development, these impacts would be mitigated through the County's Developer Fee Program to fund the purchase of fire station sites, the construction of new stations, and the funding of certain capital equipment and compliance with the Fire Code within segments of the service area most likely to experience growth. Moreover, the California Constitution requires local agencies to provide public safety services, including fire protection and emergency medical services. Therefore, it is reasonable to conclude that the County and City of Santa Clarita would comply with that provision to ensure that public safety services are provided to Cumulative Projects within the LACoFD service area. In addition, the LACoFD participates in the California Fire Service and Rescue Emergency Mutual Aid System and thus, mutual aid agreements would ensure that cumulative projects would receive supplemental personnel and resources during a major emergency.

Similar to the Project, all Cumulative Projects, as well as other "projects" under CEQA proposed within the LACoFD service areas, would be required to assess the demands placed on local LACoFD stations, staff, and facilities needed to serve project-related growth and development, supported by the County's General Fund, Fire Facility Fees, taxes, and other revenues that are generated as a result of urban development. The LACoFD utilizes the developer fees to address their infrastructure and staffing requirements, as set forth in their 2022 Developer Fee Detailed Fire Station Plan, which addresses the cumulative demands on fire services. As the Project would comply with applicable State and local provisions pertaining to fire safety and emergency response, would pay applicable Developer fees, and would implement MM-4.17.1, Construction Traffic Management Plan, during construction, the Project's incremental contribution to fire protection and emergency response services would not be cumulatively considerable, and there would be a less than significant cumulative impact. Further, the Project Applicant would provide an additional community benefit contribution in the amount of $2,000,000, to be used by the LACoFD towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area. This funding will be used for the County's procurement of two fire engines (Type 1 triple combination pumpers) including outfitting, equipment, and communication costs.

I8-4 The Draft EIR discloses the Project site's location within a VHFHSZ, as illustrated in Figure 4.20-1, Regional Fire Hazard Zones. The commenter correctly notes the Wiley Canyon Project is also located within this fire hazard zone, and both include senior housing. As mentioned above in Response to Comment I8-3, a cumulative impact would occur if other related projects in the vicinity of the Project site would result capacity or service level impacts in conjunction with the impacts of the Project, or if buildout of the General Plan, as identified in the General Plan EIR, would result in a significant impact to fire protection services, which the Project could thereby contribute to and/or exacerbate, resulting in a cumulatively considerable impact. Each cumulative project (including the Wiley Canyon Project), however, would be required to demonstrate compliance with CEQA prior to approval and would be required to mitigate its associated increase in need.

A detailed response related to fire protection and safety is provided in Topical Response-1. As discussed therein, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from Fire Station 124. Given this, the Project would not result in a significant impact to fire protection services, and thus, the Project's cumulative impacts would not occur related to response times. Overall, the comment on cumulative impacts is similar to Comment I8-3. As such, see Response to Comment I8-3 for discussion on cumulative impacts.

Regarding senior housing safety during an evacuation event, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff.

I8-5 Regarding response times, Section 4.15, Public Services, and Appendix I-1 of the Draft EIR, states "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site. Further, as detailed in Table 7 of the FPP in Appendix M-1 of the Draft EIR, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from Fire Station 124. The Project Applicant would be required to pay the Fire Facility Fee, which, as detailed in the General Plan EIR, constitutes full mitigation for development impacts associated with the need for additional fire protection services or facilities. Further, the Project Applicant would provide an additional community benefit contribution in the amount of $2,000,000, to be used by the LACoFD towards its purchase of firefighting equipment to further enhance the LACoFD's continued provision of fire protection services within its jurisdiction, including the Project area. This funding will be used for the County's procurement of two fire engines (Type 1 triple combination pumpers) including outfitting, equipment, and communication costs. See Topical Response-1 – Fire Protection and Safety for more discussion.

I8-6 Section 4.15, Public Services, of the Draft EIR describes the cumulative effects to public services, including fire protection services (LACoFD) and Sheriff protection services. The comment asserts the cumulative impact to response times should be reviewed by the Los Angeles Fire Department. The City of Los Angeles does not have jurisdiction over the Project or the Wiley Canyon Project. Instead, the geographic area for fire protection is the local Project site vicinity and the LACoFD service area, which is predominantly the unincorporated areas of the County, but also includes some incorporated cities, such as the City of Santa Clarita. Similarly, the geographic area for Sheriff protection is the local Project site vicinity and the LASD service area, which is predominantly the unincorporated areas of the County (Cumulative Projects LA1 through LA14), but also includes incorporated cities, such as the Cumulative Projects within the City of Santa Clarita (SC1 through SC26). The preparation of the Draft EIR included coordination with LACoFD and LASD, as demonstrated from Appendix I-1 (Los Angeles County Fire Department Request for Information Letter) and Appendix I-2 (Los Angeles County Sheriff's Department Request for Information Letter). In addition, both agencies provided comment on the NOP, as shown in Table 1-1, Notice of Preparation and Comment Letter Summary. Given this, the Project and its potential cumulative effects have been appropriately reviewed by LACoFD and LASD staff in conformance with CEQA and County requirements.

Regarding cumulative effects and response times for fire protection services, see Response to Comment I8-3 for discussion on cumulative impacts to fire protection services. Notably, LACoFD has

reviewed the Project and would review the Wiley Canyon Project to demonstrate compliance with CEQA prior to approval. See Topical Response-1 for discussion on LACoFD's review and a summary of the Project's compliance with applicable regulations under Section 2.4.3, Project Compliance with Applicable Regulations, of Topical Response-1 of this Final EIR. Moreover, see Response to Comment I8-2 for discussion on evacuation planning.

I8-7 The comment is similar to Comment I8-1. As such, see Response to Comment I8-1 for discussion on a public review extension.

Comment Letter I9

From: Catherine Flynn
To: Erica G. Aguirre
Subject: Lyons Canyon Project
Date: Tuesday, February 4, 2025 6:32:06 AM

CAUTION: External Email. Proceed Responsibly.

Erica Aguirre, Senior Planner
Los Angeles County Dept of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

Sent via email to: EAguirre@planning.lacounty.gov

Re: Request for Extension of time to Review Draft Environmental Impact Report
Lyons Canyon Project, Project No. 2021-001195-(5),

Dear Ms. Aguirre:

I am writing to request an extension of the comment period for Lyons Canyon Project for an additional 30 days. I9-1

As a local resident and hiker, I am aware of the fire danger posed by building housing in risky areas and this area is one of them. Certainly after the Eaton and Palisades fires, officials and policy makers should be concerned about the safety of our communities. This project is in a Very High Fire Hazard Severity Zone and further discussion is warranted. I9-2

Residents need more time to comment on this project and I hope you will give us that. I9-3

Truly,
Catherine Flynn
Valencia, CA

Response to Comment Letter I9

Catherine Flynn
February 4, 2025

I9-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. As such, additional comments have been received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

I9-2 A detailed response related to fire protection and safety is provided in Topical Response-1, which addresses issues related compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. Recent fires in the region do not necessitate additional or revised Draft EIR analysis. Nonetheless, as stated above, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days). As such, additional time was provided for the public to consider, review, and submit comments on the Project.

The Draft EIR adequately analyzes impacts related to wildfire within Section 4.20, Wildfire, and incorporates mitigation measures to reduce significant impacts. See Section 4.20.7 for more details on MM-4.20-1 through MM-4.20-5. This section of the Draft EIR is largely based on the evaluation and results of the Fire Protection Plan (Appendix M-1 to the Draft EIR) and the Wildfire Evacuation Plan (Appendix M-2 of the Draft EIR). At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity. The data collected was from CAL FIRE's Fire and Resources Assessment Program database, which provides fire history information and fire perimeter data dating to the late 1800s for all fires over 10 acres in size (Draft EIR, page 4.20-4). For more information see Appendix B, Fire History, of Appendix M-1 to the Draft EIR. Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. Therefore, the recent fire activity does not change the conclusions detailed in Draft EIR Section 4.20. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires in Topical Response-1.

I9-3 The comment is similar to Comment I9-1. As such, see Response to Comment I9-1 for discussion on a public review extension.

Comment Letter I10

From: Stephanie Correnti, RD
To: Erica G. Aguirre
Subject: Request for Extension of tome to review Draft Environmental Impact Report Lyons Canyon Project Project No. 2021-001195-(5)
Date: Tuesday, February 4, 2025 10:01:33 AM

CAUTION: External Email. Proceed Responsibly.

February 4, 2025

Erica Aguirre, Senior Planner
Los Angeles County Dept of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

re: request for extension of time to review the Draft Environmental Impact Report for the Lyons Canyon Project. Project No. 2021-001195-(5).

Ms. Aguirre:

I live in the Santa Clarita Valley and watched with concern the recent outcomes of the Palisades, Altadena and closer to my residence, the Hughes fires. I10-1

If I am not incorrect there have been fires in the location of this proposed project in the past which has been designated as a Very High Fire Hazard Severity Zone. I10-2

Please allow an extension of the comment period for this project for at least an additional 30 days to permit the County to finish its fire investigation and develop ways to address this fire danger and ensure public safety. I10-3

Thank you for your time
Stephanie Correnti
25824 Nashua Way
Valencia, CA 91355

Response to Comment Letter I10

Stephanie Correnti
February 4, 2025

I10-1 The comment does not express any environmental concerns related to the analysis contained in the Draft EIR.

I10-2 A detailed response related to fire protection and safety is provided in Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The placement of housing within a Very High Fire Hazard Severity Zone is not prohibited. Instead, additional fire protection measures, such as those governing safe building standards, must be provided for Project approval.

The Draft EIR adequately analyzes impacts related to wildfire within Section 4.20, Wildfire, and incorporates mitigation measures to reduce significant impacts. See Section 4.20.7 of the Draft EIR for more details on MM-4.20-1 through MM-4.20-5. This section of the Draft EIR is largely based on the evaluation and results of the Fire Protection Plan (Appendix M-1 to the Draft EIR) and the Wildfire Evacuation Plan (Appendix M-2 of the Draft EIR). At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity. The data collected was from CAL FIRE's Fire and Resources Assessment Program database, which provides fire history information and fire perimeter data dating to the late 1800s for all fires over 10 acres in size (Draft EIR, page 4.20-4). For more information see Appendix B, Fire History, of Appendix M-1 to the Draft EIR. Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed and the recent fire activity would not change the conclusions detailed in Draft EIR Section 4.20, Wildfire. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires in Topical Response-1.

I10-3 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments have been received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

Comment Letter I11

From: Randy Martin
To: Erica G. Aguirre
Subject: Request for Extension of time to Review Draft Environmental Impact Report Lyons Canyon Project, Project No. 2021-001195-(5)
Date: Tuesday, February 4, 2025 10:29:06 PM

CAUTION: External Email. Proceed Responsibly.

2/4/25

Erica Aguirre, Senior Planner
Los Angeles County Dept of Regional Planning
320 W. Temple St.
Los Angeles, CA 90012

I live in Bridgeport and recently watched with horror the outcomes of the Palisades and Altadena fires. Tehn we had our own Hughes fire. Not the first or last. In fact many fires have burned through the exact location of this proposed project. Yet here we ago again, with a proposal in an agrea where residents will not even be able to obtain fire insurance. But this is even worse. Will the County place seniors and low-income folks in density housing in a Very High Fire Hazard Severity Zone after all these horrendous fires? I11-1

Please allow an extension of the comment period for this project for at least an additional 30 days to permit the County to finish its fire investigation and develop ways to address this fire danger. I11-2

It is important that the community and the County has an adequate time after these fires to ensure that evacuation routes are adequate, and that all recommendations that might be made after evaluation of the Eaten and Palisades fires, are incorporated into this project, especially because senior housing is proposed. I11-3

Dr Randy Martin, OMD
23812 Spinnaker Court
Valencia, CA 91355

INTENTIONALLY LEFT BLANK

Response to Comment Letter I11

Randy Martin
February 4, 2025

I11-1 A detailed response related to fire protection and safety is provided in Topical Response-1, which addresses issues related compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The placement of housing within a Very High Fire Hazard Severity Zone is not prohibited. Instead, additional fire protection measures, such as those governing safe building standards, must be provided for Project approval.

The Draft EIR adequately analyzes impacts related to wildfire within Section 4.20, Wildfire, and incorporates mitigation measures to reduce significant impacts. See Section 4.20.7 of the Draft EIR for more details on MM-4.20-1 through MM-4.20-5. This section of the Draft EIR is largely based on the evaluation and results of the Fire Protection Plan (Appendix M-1 to the Draft EIR) and the Wildfire Evacuation Plan (Appendix M-2 of the Draft EIR). At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity. The data collected was from CAL FIRE's Fire and Resources Assessment Program database, which provides fire history information and fire perimeter data dating to the late 1800s for all fires over 10 acres in size (Draft EIR, page 4.20-4). For more information see Appendix B, Fire History, of Appendix M-1 to the Draft EIR. Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed, and the recent fire activity does not change the conclusions detailed in Draft EIR Section 4.20. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires in Topical Response-1.

Regarding fire insurance, CEQA Guidelines Section 15064(e) states "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Thus, this operational component is not within the scope of the required environmental analysis pursuant to CEQA. This comment will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

As detailed in the Project description, an affordable senior living rental apartment building is proposed on site. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff. See the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1 regarding evacuation of senior populations.

I11-2 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments have been received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

I11-3 The Draft EIR adequately analyzes the potential impacts associated with wildfire planning within Section 4.20, Wildfire, and revisions are not required in response to this comment. Similar to the discussion presented in Response to Comment I11-1, even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not change and the recent fire activity does not change the conclusions detailed in Draft EIR Section 4.20. See Topical Response-1 for more discussion.

Comment Letter I12

From:	Roger Haring
To:	Erica G. Aguirre
Cc:	Katherine Solomon; Diane Trautman; Sandra Cattell; Lynne Plambeck
Subject:	2.5.2025: Public Concern for Lyon"s Canyon Project
Date:	Wednesday, February 5, 2025 9:09:51 PM
Attachments:	image.png image.png

CAUTION: External Email. Proceed Responsibly.

To whom it may concern in LA County Planning,

Please allow an extension of the comment period for this project for at least an additional 30 days to permit the County to finish its fire investigation and develop ways to address this fire danger. I12-1

It is important that the community and the County has an adequate time after these fires to ensure that evacuation routes are adequate, and that all recommendations that might be made after evaluation of the Eaton and Palisades fires (**SEE INCIDENT FACTS BELOW**), are incorporated into this project, especially because senior housing is proposed. I12-2

Question: How many large-mega wildfires does it take to "REFORM AND REDESIGN" the way in which housing-developments are built to interface with our southern California native landscapes...?!?!? I12-3

Answer: Just examine the number of wildfires within Los Angeles County over the last decade... I12-4

Incident Facts

Name Eaton Fire		**Start Date/Time** 2025-01-07	**Incident Status** Active
Location Near Altadena Drive and Midwick Drive, Altadena/Pasadena		**Type** Wildfire	**Cause** Under Investigation
Counties Los Angeles		**Administration Unit** Los Angeles County Fire Department	
Unified Command Agency(s)		**Size** 14,021	**Containment** 95%
Structures Threatened 55	**Structures Destroyed** 9,418	**Structures Damaged** 1,073	
Civilian Injuries	**Firefighter Injuries** 9	**Civilian Fatalities** 17	**Firefighter Fatalities**

Incident Facts

Name Palisades Fire		**Start Date/Time** 2025-01-07	**Incident Status** Active
Location Southeast of Palisades Drive, Pacific Palisades		**Type** Wildfire	**Cause** Under Investigation
Counties Los Angeles		**Administration Unit** Los Angeles City Fire Department	
Unified Command Agency(s)		**Size** 23,448	**Containment** 95%
Structures Threatened 12,317	**Structures Destroyed** 6,831	**Structures Damaged** 973	
Civilian Injuries 3	**Firefighter Injuries** 1	**Civilian Fatalities** 12	**Firefighter Fatalities**

I12-5

INTENTIONALLY LEFT BLANK

Response to Comment Letter I12

Roger Haring
February 5, 2025

I12-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments have been received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

I12-2 Evacuation routes and evacuation plans are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located in proximity to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

Furthermore, recent fires in the region do not necessitate additional or revised Draft EIR analysis. Nonetheless, in light of recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days), ending on March 10, 2025. As such, additional time was provided for the public to consider, review, and submit comments on the Project. At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity. The data collected was from CAL FIRE's Fire and Resources Assessment Program database, which provides fire history information and fire perimeter data dating to the late 1800s for all fires over 10 acres in size (Draft EIR, page 4.20-4). For more information see Appendix B, Fire History, of Appendix M-1 to the Draft EIR. Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. Therefore, the recent fire activity does not change the conclusions detailed in Section 4.20, Wildfire. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires in Topical Response-1.

Regarding evacuation of senior populations, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be retirement or convalescent facilities which would necessarily require care facilities and support staff.

I12-3 The comment presents a speculative question regarding wildfire and building resiliency. The Project as proposed is designed to meet current Los Angeles County Fire Code standards, including enhanced ignition resistant construction materials and methods. See Section 2.4.1.2, Project-Specific Fire-Resistant Design Features, and Section 2.4.3, Project Compliance with Applicable Regulations, of Topical Response-1 for additional details.

I12-4 Please refer to Response to Comment I12-2 above regarding fire history.

I12-5 This comment provides information on the Eaton and Palisades Fires. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. Please refer to Response to Comment I12-2 above regarding fire history.

Comment Letter I13

From: Stacy Fortner
To: Erica G. Aguirre
Subject: Lyons Canyon Project - Request for Extension of time to Review Draft Environmental Impact Report
Date: Wednesday, February 5, 2025 6:48:09 PM

CAUTION: External Email. Proceed Responsibly.

Stacy Fortner

28314 Lobelia Ln,

Valencia CA 91354

2-1-25

Erica Aguirre, Senior Planner

Los Angeles County Dept of Regional Planning

320 W. Temple St.

Los Angeles, CA 90012

Sent via email to: EAguirre@planning.lacounty.gov

Re: Request for Extension of time to Review Draft Environmental Impact Report

Lyons Canyon Project, Project No. 2021-001195-(5), Case No(s). Vesting Tentative Tract Map No. 83301 (RPPL 2021003061), Conditional Use Permit No. RPPL 2021003113, Housing No. RPPL 2021003105, Zone Change No. RPPL2021003163, Oak Tree Permit No. RPPL2021003070, and Environmental Assessment No. 2021003071.

Dear Ms. Aguirre:

I am writing to you today to request an extension on the comment period for this project for an additional 30 days for two reasons. I13-1

First, my very own neighborhood was required to evacuate in the Hughes fire. The I13-2

time loss and anxiety caused by this has made it difficult to focus my attention on this project and the DEIR. I13-2 Cont.

Second, this project is in a VERY High Fire Hazard Severity Zone. After the horrible conflagrations that occurred in Los Angeles causing the loss of some 15,000 homes and 29 lives, it is important to carefully evaluate this catastrophe and ensure that lessons learned are incorporated into any new project where the county would be placing housing in a similar danger situation. I13-4

I sincerely hope, that for the well-being of our community, you will support this request. I13-4

Blessings,
Stacy Fortner

"My personal super power is fearlessness fueled by my passion and dedication in support of the people and causes I believe in."

Response to Comment Letter I13

Stacy Fortner
February 5, 2025

I13-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days), ending on March 10, 2025. As such, additional comments have been received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

I13-2 This comment is similar to Comment I13-1. As such, see Response to Comment I13-1 for discussion on a public review extension.

I13-3 Regarding the location of the Project within a Very High Fire Hazard Severity Zone (VHFHSZ), Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a VHFHSZ. For a more detailed response related to potential wildfire hazards, please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within VHFHSZ. It is understood that as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. After incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

Recent fires in the region do not necessitate additional or revised Draft EIR analysis. However, as stated above, as a result of recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days). As such, additional time was provided for the public to consider, review, and submit comments on the Project. At the time of releasing the Draft EIR (December 2024), fire history data was detailed within Section 4.20, Wildfire, of the Draft EIR to adequately establish existing conditions within the Project site's vicinity (Draft EIR, page 4.20-4). Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. Therefore, the recent fire activity does not change the conclusions detailed in Section 4.20, Wildfire. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires of Topical Response-1.

I13-4 The comment is related to Comment I13-3. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. See Response to Comment I13-3, above. Additionally, see Topical Response-1 for a more detailed response related to fire protection and safety.

INTENTIONALLY LEFT BLANK

Comment Letter I14

From: Jennifer
To: Erica G. Aguirre
Subject: Lyon"s Canyon Project
Date: Wednesday, February 5, 2025 8:26:23 PM

CAUTION: External Email. Proceed Responsibly.

Please allow an extension of the comment period for this project for at least an additional 30 days to permit the County to finish its fire investigation and develop ways to address this fire danger. I14-1

It is important that the community and the County has an adequate time after these fires to ensure that evacuation routes are adequate, and that all recommendations that might be made after evaluation of the Eaten and Palisades fires, are incorporated into this project, especially because senior housing is proposed. I14-2

Thank you,
Jennifer Jenkins

INTENTIONALLY LEFT BLANK

Response to Comment Letter I14

Jennifer Jenkins
February 5, 2025

I14-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments have been received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

I14-2 Evacuation routes and evacuation plans are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located in proximity to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20, Wildfire, of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

Furthermore, recent fires in the region do not necessitate additional or revised Draft EIR analysis. However, in light of recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. As such, additional time was provided for the public to consider, review, and submit comments on the Project. At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity (Draft EIR, page 4.20-4). Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. Therefore, the recent fire activity does not change the conclusions detailed in Draft EIR Section 4.20. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires in Topical Response-1.

Regarding evacuation of senior populations, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be retirement or convalescent facilities which would necessarily require care facilities and support staff.

Comment Letter I15

From: Kubler, Janet E
To: Erica G. Aguirre
Subject: Lyon"s Canyon Project
Date: Thursday, February 6, 2025 10:28:58 AM

CAUTION: External Email. Proceed Responsibly.

I am concerned about the Lyons Canyon Project, in my local area. Please allow an extension of the comment period for this project for at least an additional 30 days to permit the County to finish its fire investigation and develop ways to address this fire danger. I15-1

It is important that the community and the County has an adequate time after these fires to ensure that evacuation routes are adequate, and that all recommendations that might be made after evaluation of the Eaten and Palisades fires, are incorporated into this project, especially because senior housing is proposed. I15-2

Janet E. Kübler, Ph.D.
25331 Via Artina
Valencia, CA 91355

Response to Comment Letter I15

Janet Kubler
February 6, 2025

I15-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. As such, additional comments have been received during the public review extension. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

I15-2 Evacuation routes are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located in proximity to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

Furthermore, recent fires in the region do not necessitate additional or revised Draft EIR analysis. However, in light of recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. As such, additional time was provided for the public to consider, review, and submit comments on the Project. At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity (Draft EIR, page 4.20-4). Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. Therefore, the recent fire activity does not change the conclusions detailed in Draft EIR Section 4.20. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires in Topical Response-1.

Regarding evacuation of senior populations, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be retirement or convalescent facilities which would necessarily require care facilities and support staff.

Comment Letter I16

From: Jazkg G
To: Erica G. Aguirre
Subject: Lyons Canyon Development
Date: Thursday, February 6, 2025 3:05:06 PM

CAUTION: External Email. Proceed Responsibly.

Subject: Request for Extension on Draft Environmental Study Response

Hello Ms. Aguirre,

I have been informed about a letter that was sent to some residents of Sunset Pointe regarding a Draft Environmental Study for the proposed Lyon Canyon development.. However, I did not receive this letter or any information indicating that I needed to respond. I understand that the deadline for comments is tomorrow, February 7th. I16-1

It seems that many residents may not be aware of this request. I have spoken with the developer, Urban West, about the developments occurring on the property south of Sunset Pointe over the last three years and with John Musella. I16-2

Could you please extend the deadline for comments until we have had a chance to review the information? Additionally, I do not receive The Signal, so I have not seen the article covering this topic yet. I16-3

Thank you for your attention to this matter.

Best regards,
Kathy Gonzales

Response to Comment Letter I16

Kathy Gonzales
February 6, 2025

I16-1 The public noticing for the Draft EIR Notice of Availability (NOA) has been conducted in conformance with the substantive and procedural requirements of CEQA and the State CEQA Guidelines. Specifically, in accordance with Section 15087(a) of the State CEQA Guidelines, on December 10, 2024, an NOA of the Draft EIR was submitted to the State Clearinghouse, posted at the County Clerk's office, and published in The Santa Clarita Valley Signal. The NOA was also printed on County letterhead and mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously requested such notice in writing. The County used a radius map to determine appropriate addresses for mailings within the Project site vicinity; however, please note that not all residences in Sunset Point were within the determined radius distance. In addition, a thumb drive with electronic copies of the Draft EIR and appendices were made available for public review at the Stevenson Ranch Library (25950 The Old Road Stevenson Ranch, CA 91381). Hardcopies of the Draft EIR and appendices were made available for public review at County Planning's main office (320 W. Temple Street, Los Angeles, CA 90012). The NOA, Draft EIR, and appendices were also posted to the County's website.

In light of the recent Hughes Fire, the Draft EIR formal public review period was extended for an additional 31 days (for a total of 91 days) to March 10, 2025. As such, on February 7, 2025, an updated NOA was submitted to the State Clearinghouse, posted at the County Clerk's office, and published in The Santa Clarita Valley Signal. The updated NOA was also printed on County letterhead and mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously requested such notice in writing. In addition, hardcopies of the Draft EIR and appendices were relocated from County Planning's main office to the Stevenson Ranch Library. The updated NOA was also posted to the County's website. As such, the County has complied with all applicable noticing requirements for the NOA and updated NOA.

I16-2 Please see the response provided above to Comment I16-1. The County used a radius map to determine appropriate addresses for mailings within the Project site vicinity; however, please note that not all residences in Sunset Point were within the determined radius.

I16-3 Please see the response provided above to Comment I16-1. The Draft EIR formal public review period was extended for an additional 31 days (for a total of 91 days) to March 10, 2025.

Comment Letter I17

From: Glenda Nowakowski
To: Erica G. Aguirre
Subject: Extension of Comment Period for Lyons Canyon Project
Date: Thursday, February 6, 2025 1:44:46 PM

CAUTION: External Email. Proceed Responsibly.

2-6-25

Erica Aguirre, Senior Planner

Los Angeles County Dept of Regional Planning

320 W. Temple St.

Los Angeles, CA 90012

Sent via email to: E.Aguirre@planning.lacounty.gov

Re: Request for Extension of Time to Review Draft Environmental Impact Report

Lyons Canyon Project, Project No. 2021-001195-(5), Case No(s). Vesting Tentative Tract Map No. 83301 (RPPL 2021003061), Conditional Use Permit No. RPPL 2021003113, Housing No. RPPL 2021003105, Zone Change No. RPPL2021003163, Oak Tree Permit No. RPPL2021003070, and Environmental Assessment No. 2021003071.

Dear Ms. Aguirre:

I am writing to you today to request an extension on the comment period for this project for an additional 30 days for two reasons. I17-1

First, this project is in a VERY High Fire Hazard Severity Zone. After the horrible conflagrations that occurred in Los Angeles causing the loss of some 15,000 homes and 29 lives, it is important to carefully evaluate this catastrophe and ensure that lessons learned are incorporated into any new project where the county would be placing housing in a similar danger situation. I17-2

Second, I was required to evacuate for two days in the Hughes fire. Many people have had to I17-3

focus their time and energy on this fire and the others nearby and are deeply concerned about this issue. An extension would allow them to catch their breath and send in their comments. I17-3 Cont.

I sincerely hope, that for the well-being of our community, you will support this request. I17-4

Glenda Nowakowski

--
Glenda Nowakowski
Pronouns: she, her

"There are times when you must speak, not because you are going to change the other person, but because if you don't speak, they have changed you."—Mary Quinn, aka Maud

Response to Comment Letter I17

Glenda Nowakowski
February 6, 2025

I17-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. All comments received during the public review period have been included and responded to within this Final EIR.

I17-2 Regarding the location of the Project within a Very High Fire Hazard Severity Zone (VHFHSZ), Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a VHFHSZ. For a more detailed response related to potential fire hazards, please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within VHFHSZ. It is understood that as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

I17-3 Please see the response provided above for Comment I17-1. The formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025.

I17-4 This conclusory statement does not express any adequacy concerns related to the environmental analysis in the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter I18

From: James
To: Erica G. Aguirre
Subject: Trails project
Date: Thursday, February 6, 2025 9:14:42 PM

CAUTION: External Email. Proceed Responsibly.

This city needs protection from people like you.

None of you are going to be happy until you turn this city into another Van Nuys. I18-1

Yuk !

James Kiswardy

c 661-855-0084

Response to Comment Letter I18

James Kiswardy
February 6, 2025

I18-1 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR, and therefore it would not be appropriate to provide a response as part of this EIR. However, the commenter's general opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I19

From: ginaromero@ca.rr.com
To: Erica G. Aguirre
Subject: Proposed Lyons Canyon Development in Santa Clarita Valley
Date: Thursday, February 6, 2025 10:52:31 PM

CAUTION: External Email. Proceed Responsibly.

To Erica Aguirre,

I am a long-time resident of the Sunset Pointe community in the Santa Clarita Valley. I am requesting a thirty-day extension to review the Environmental Impact Report for Trails at Lyons Canyon Project. I am also requesting a hard copy of the environmental report and all supporting documents be made available at the Stevenson Ranch Library so that I can access it. I19-1 I19-2

There are important concerns which we must be able to properly address and could not due to the recent fires. The restricted access of the Old Road and the entrance to the 5 FWY at Calgrove would make it impossible to exit the Santa Clarita Valley if a wildfire or earthquake of large magnitude hit this specific area. I have experienced both. I had to evacuate due to fire, twice and I was also affected by the 1994 earthquake which damaged the FWY. I19-3

The proposed Lyons Canyon Development is compact and would put people and homes at greater risks especially with yearly fires. To exist this area due to a natural disaster would be problematic. I19-4

Thank you,
Gina M. Romero

Response to Comment Letter I19

Gina M. Romero
February 6, 2025

I19-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. All comments received during the public review period have been included and responded to within this Final EIR.

I19-2 A thumb drive with electronic copies of the Draft EIR and appendices were made available for public review at the Stevenson Ranch Library (25950 The Old Road Stevenson Ranch, CA 91381) beginning on December 10, 2024. Hardcopies of the Draft EIR and appendices were made available for public review at County Planning's main office (320 W. Temple Street, Los Angeles, CA 90012). However, in light of this request, hardcopies of the Draft EIR and appendices were relocated from County Planning's main office to the Stevenson Ranch Library on February 7, 2025. As stated above in Response to Comment I19-1, the Draft EIR formal public review period was extended for an additional 31 days (for a total of 91 days) to March 10, 2025.

I19-3 Evacuation planning is adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which was prepared to evaluate the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions, as well as provide emergency preparedness information and resources to increase occupant preparedness and facilitate efficient evacuation in the event of an emergency. As stated on page 4.20-27 of the Draft EIR, detailed evacuation modeling has been conducted to determine whether the Project would adversely affect evacuations in the Project area. With compliance with regulations and incorporation of MM-4.20-1, Wildfire Evacuation Plan, the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. A more detailed response regarding emergency evacuation is provided in Topical Response-1 (see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

I19-4 Regarding the Project's "compact" development and fire risk, the Project's proposed development of higher density housing with highly maintained, irrigated vegetative landscaping between homes and the perimeter fuel modification zones would keep an active flaming front at great distances from structures and support defensibility for the existing fire environment. These features make the Project substantially more resilient to potential fire hazards than low- to medium-density developments where vegetation is allowed to grow between and among structures. This point is well-established in the scientific literature. Please refer to Section 2.4.1.1, New Subdivisions are More Resilient and Defensible to Wildfire Hazards, of Topical Response-1 for a more detailed response.

Comment Letter I20

From: Mike Monroe
To: Erica G. Aguirre
Subject: Trails at Lyons canyon
Date: Friday, February 7, 2025 7:15:20 PM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre:

I am writing to express my strong support for The Trails at Lyons Canyon project. As a resident of the Santa Clarita Valley I believe this development will bring significant benefits to our community. I20-1

One of the most commendable aspects of this project is its commitment to preserving open space. By dedicating 83% of the property as protected open space, The Trails at Lyons Canyon will ensure that 616 acres remain natural and undeveloped, providing a sanctuary for local wildlife and a place for residents to connect with nature. I20-2

Additionally, the project plans to connect to over 20 miles of adjacent hiking and nature trails, enhancing recreational opportunities for all residents. This integration promotes a healthy lifestyle and fosters a sense of community among trail users. I20-3

The inclusion of 510 new homes, with 71 units designated as affordable housing for very-low-income seniors and middle-income working families, addresses the pressing need for attainable housing in our area. This thoughtful approach ensures that our community remains inclusive and diverse, providing opportunities for individuals and families to live and thrive here. I20-4

In comparison to the 2009 plan, which proposed large luxury estate homes spread across 230+ acres, Lyons Canyon offers a more sustainable and community-focused alternative. The previous plan posed significant fire risks and disturbed sensitive ridgelines, whereas the current proposal reduces development impact and preserves more open space. I20-5

This development represents a balanced and forward-thinking approach to growth, benefiting both current and future residents. I support The Trails at Lyons Canyon project and urge the Planning Commission to approve it. I20-6

Thank you.

Mike Monroe, Valencia resident

Response to Comment Letter I20

Mike Monroe
February 7, 2025

I20-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I20-2 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I20-3 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I20-4 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I20-5 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I20-6 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I21

From: Victoria Reaves
To: Erica G. Aguirre
Subject: The Trails at Lyons Canyon
Date: Friday, February 7, 2025 10:16:59 AM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre,

I wanted to take a moment to express my strong support for The Trails at Lyons Canyon development. This project is an important step forward in addressing our community's need for affordable senior housing while also preserving the natural beauty of our region. I21-1

One of the most impactful aspects of this development is the inclusion of 71 affordable housing units for very-low-income seniors. These homes will provide a safe, comfortable, and accessible living environment, allowing seniors to age in place with dignity and security. This much-needed housing will ease the burden on families searching for affordable options for their loved ones. I21-2

Another key benefit is the project's commitment to open space preservation. Of the 233-acre site, 176 acres will be dedicated to natural and improved open space, protecting local habitats and providing opportunities for recreation and community connection. This thoughtful balance ensures that our region's natural beauty is safeguarded for future generations. I21-3

Beyond housing and conservation, the project has been designed to integrate seamlessly into the surrounding area, minimizing environmental impact while addressing essential community needs. It's a great example of responsible development that supports both people and the environment. I21-4

I encourage thoughtful consideration of this project, as it will bring much-needed affordable senior housing and expanded public open space to the Santa Clarita Valley. I21-5

Warm regards,
Victoria Reaves

Response to Comment Letter I21

Victoria Reaves
February 7, 2025

I21-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I21-2 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I21-3 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I21-4 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I21-5 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I22

From: Chris Koll
To: Erica G. Aguirre
Subject: The Trails at Lyons Canyon project
Date: Friday, February 7, 2025 2:58:36 PM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre,

As a local resident and a family of five, I am writing to express my strong support for The Trails at Lyons Canyon project. As a resident of the Santa Clarita Valley, I believe this development will bring significant benefits to our community. I22-1

One of the most commendable aspects of this project is its commitment to preserving open space. By dedicating 83% of the property as protected open space, The Trails at Lyons Canyon will ensure that 616 acres remain natural and undeveloped, providing a sanctuary for local wildlife and a place for residents to connect with nature. I22-2

Additionally, the project plans to connect to over 20 miles of adjacent hiking and nature trails, enhancing recreational opportunities for all residents. This integration promotes a healthy lifestyle and fosters a sense of community among trail users. I22-3

The inclusion of 510 new homes, with 71 units designated as affordable housing for very-low-income seniors and middle-income working families, addresses the pressing need for attainable housing in our area. This thoughtful approach ensures that our community remains inclusive and diverse, providing opportunities for individuals and families to live and thrive here. I22-4

In comparison to the 2009 plan, which proposed large luxury estate homes spread across 230+ acres, Lyons Canyon offers a more sustainable and community-focused alternative. The previous plan posed significant fire risks and disturbed sensitive ridgelines, whereas the current proposal reduces development impact and preserves more open space. I22-5

For these reasons, I wholeheartedly support The Trails at Lyons Canyon project and urge the Planning Commission to approve it. This development represents a balanced and forward-thinking approach to growth, benefiting both current and future residents. I22-6

Thank you for considering my perspective.

Sincerely,

Chris Koll

Response to Comment Letter I22

Chris Koll
February 7, 2025

I22-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I22-2 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I22-3 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I22-4 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I22-5 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I22-6 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I23

From: Mitchell van Bekkum
To: Erica G. Aguirre
Subject: The Trails at Lyons Canyon
Date: Friday, February 7, 2025 9:37:29 AM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre,

I am writing to express my enthusiastic support for The Trails at Lyons Canyon development. This project represents a critical step forward in addressing our community's need for affordable senior housing while preserving the natural beauty of our region. I23-1

The inclusion of 71 affordable housing units for very-low-income seniors is a highlight of this project. These homes will provide a safe, comfortable, and accessible living environment for some of our most vulnerable residents, allowing seniors to age in place with dignity. This much-needed housing will ease the burden on many families in our area who are seeking affordable options for their aging loved ones. I23-2

Equally impressive is the project's commitment to open space preservation. By dedicating 176 acres of the 233-acre site to natural and improved open space, The Trails at Lyons Canyon will protect the local environment and enhance our community's quality of life. This open space will not only safeguard natural habitats but also provide opportunities for recreation and connection to nature, ensuring that the area's natural beauty is preserved for future generations. I23-3

In addition to these benefits, the project is designed with thoughtful planning to integrate seamlessly into the surrounding area, minimizing environmental impact while addressing housing and community needs. This balance of progress and preservation makes The Trails at Lyons Canyon a model for responsible development. I23-4

Please consider this thoughtful project, as it will bring much-needed senior affordable housing and greater access to public open space to the Santa Clarita Valley. I23-5

Thanks.
Mitchell van Bekkum

Response to Comment Letter I23

Mitchell Van Bekkum
February 7, 2025

I23-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I23-2 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I23-3 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I23-4 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I23-5 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I24

From: Matthew Cormier
To: Erica G. Aguirre
Subject: PROJECT NO. 2021-001195-(5)
Date: Monday, February 10, 2025 6:57:42 AM

CAUTION: External Email. Proceed Responsibly.

Good Morning,

I have concerns that the evacuation report does not take into account already approved projects including Aidlin Hills into the calculations. There were also no calculations for the existing business in the area that would need to evacuate. I24-1

Response to Comment Letter I24

Matthew Cormier
February 7, 2025

I24-1 As shown in Chapter 3, Revisions to the Draft EIR of this Final EIR, both Appendix M-2 and Section 4.20 of the Draft EIR have been revised to include the Aidlin Hills project and existing businesses as detailed in Section 2.4.4, Project Wildfire Evacuation Modeling, of Topical Response-1, above.

Comment Letter I25

From: Michele Figg
To: Erica G. Aguirre
Subject: Request for Extension of time to Review Draft Environmental Impact Report Lyons Canyon Project, Project No. 2021-001195-(5)
Date: Friday, February 7, 2025 5:00:07 PM

CAUTION: External Email. Proceed Responsibly.

February 10, 2025

To Whom It May Concern:

I am a Valencia resident, and I am concerned about the proposed Lyons Canyon development, because it would have a significant negative impact on Towsley Canyon, an area that is used by Santa Claritans and Angelenos for its beautiful natural environment. I25-1

To build more housing in an area that is so vulnerable to yearly fires is a risk to both wildlife and human lives, not only in Towsley Canyon, but in Stevenson Ranch and surrounding residential areas. I25-2

Please extend the current comment period an additional 30 days, to allow Santa Claritans and Angelenos who have suffered horrendous fire losses this past month time to consider the implications of this project. I25-3

Thanking you for your consideration,

Michele Figg, Valencia Resident
michelefiggy@gmail.com

Response to Comment Letter I25

Michele Figg
February 7, 2025

I25-1 As discussed on pages 4.4-59 and 4.4-60 in Section 4.4, Biological Resources, of the Draft EIR, as a result of its clustered design, the Project would permanently preserve approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area. Habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. Furthermore, although limited brush clearing is required in the adjacent Rivendale Park and Open Space area to comply with defensible space requirements, the Project's development would not encroach into adjacent park areas or Towsley Canyon to the south. The Project would also facilitate the dedication of existing non-dedicated trails on the southern portion of the Project site, which would remain with implementation of the Project and would connect to off-site trails within Rivendale Park and Open Space and Ed David Park at Towsley Canyon. See Figure 3-5, Conceptual Trails Map, of the Draft EIR for details. As discussed in further detail in Section 4.4 of the Draft EIR, with implementation of required mitigation measures, all potential biological resource impacts would be reduced to a less than significant level.

I25-2 Regarding increased fire hazards to Towsley Canyon and surrounding residential areas, the potential for the Project to exacerbate wildfire spread is analyzed under Threshold 4.20b beginning on page 4.20-28 of the Draft EIR. To analyze the Project site's fire behavior pre- and post-development, the BehavePlus fire modeling system was used to model on-site fire behavior (see the Project's Fire Protec Plan, included as Appendix M-1 of the Draft EIR). The program simulates the rate of fire spread, spotting distance, scorch height, tree mortality, fuel moisture, wind adjustment factor, and other variables. As stated on page 4.20-35 of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones on and off site and would not exacerbate the fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 and required through MM-4.20-2, Alternative Materials and Methods and MM-4.20-3, Annual Fuel Modification Zone Inspection as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, Wildfire Education Program, would also reduce potential for impacts associated with an on-site fire spreading to off-site areas.

Additionally, when assessing the drivers of human caused ignitions in Southern California, powerlines, arson, and equipment use were identified to be the dominant form of human-caused ignitions. As stated on page 4.20-37 of the Draft EIR, the Project would underground powerlines. Furthermore, required mitigation measures MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction Related Fire Prevention Measures, are included to reduce the risk of ignition during the construction of the Project.

I25-3 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, considering the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. All comments received during the public review period have been included and responded to within this Final EIR.

Comment Letter I26

From: Sue Arellano
To: Erica G. Aguirre
Subject: Trails at Lyons Canyon
Date: Friday, February 7, 2025 12:13:56 PM

CAUTION: External Email. Proceed Responsibly.

Ms. Aguirre:

As a Santa Clarita resident, I am writing to voice my strong support for The Trails at Lyons Canyon development project. This thoughtful plan addresses two critical needs in our community: providing affordable housing for seniors and preserving open space. I26-1

Affordable housing for seniors is a growing need in our area, and this project's inclusion of 71 units specifically for very-low-income seniors is a significant step forward. These homes will provide security, stability, and community for seniors who might otherwise struggle to find appropriate housing. By addressing this critical need, The Trails at Lyons Canyon will have a lasting, positive impact on the lives of countless individuals and families. I26-2

Moreover, the project's commitment to preserving 151 acres of open space that will be deeded to the City of Santa Clarita is a tremendous benefit for our community. Protecting natural landscapes not only safeguards wildlife habitats but also promotes a healthier and more vibrant environment for all residents. This balance of development and conservation demonstrates a commitment to sustainable growth and a respect for the natural beauty of our area. I26-3

The Trails at Lyons Canyon sets an example for how development can address pressing community needs while preserving our environmental heritage. I respectfully urge the County to approve this project and allow our community to benefit from its significant contributions to affordable housing and open space preservation. I26-4

Thank you.

Sue Arellano
(661) 313-5670

Response to Comment Letter I26

Sue Arellano
February 7, 2025

I26-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I26-2 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I26-3 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I26-4 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I27

From: Kevin MacDonald
To: Erica G. Aguirre
Subject: The Trails at Lyons Canyon
Date: Monday, February 10, 2025 5:03:00 PM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre,

I am sending this letter to voice my strong support for The Trails at Lyons Canyon development project. This thoughtful plan addresses two critical needs in our community: providing affordable housing for seniors and preserving open space. I27-1

Affordable housing for seniors is a growing need in our area, and this project's inclusion of 71 units specifically for very low-income seniors is a significant step forward. We know many seniors who are struggling with rent and are on the verge of finding other alternatives. I27-2

These homes will provide security, stability, and community for seniors who might otherwise struggle to find appropriate housing. By addressing this critical need, The Trails at Lyons Canyon will have a lasting, positive impact on the lives of countless individuals and families. I27-3

This balance of development of low income housing and preserving open space demonstrates a commitment to sustainable growth and a respect for the natural beauty of our area. I27-4

The Trails at Lyons Canyon is an example of how development can address pressing community needs while preserving our environmental heritage. I27-5

I respectfully urge the County to approve this project and allow our community to benefit from its significant contributions to affordable housing and open space preservation. I27-6

Thank you for your consideration,

Kevin MacDonald

Response to Comment Letter I27

Kevin MacDonald
February 10, 2025

I27-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I27-2 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I27-3 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I27-4 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I27-5 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I27-6 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I28

From: marisa smith
To: Erica G. Aguirre
Subject: Towsley development
Date: Tuesday, February 11, 2025 8:42:20 AM

CAUTION: External Email. Proceed Responsibly.

Please extend comment period due to the recent fires. This development would increase our community's risk of wildfire spread. I28-1

The proposed development area also includes 22 Heritage Oaks and 210 other oak trees. What are the plans for these oaks? I28-2

Sent from my iPhone

INTENTIONALLY LEFT BLANK

Response to Comment Letter I28

Marisa Smith
February 11, 2025

I28-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, considering the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. All comments received during the public review period have been included and responded to within this Final EIR

The potential for the Project to exacerbate wildfire spread is analyzed under Threshold 4.20b beginning on page 4.20-28 of the Draft EIR. Once the Project is developed, the fire spread patterns on the Project site would be altered, since the Project would result in fuel modification to maintained structures and landscaping, substantially interrupting the continuous fuels across the Project site. The fire behavior modeling indicated that the projected flame lengths would be reduced to levels that would be manageable by firefighting resources. Additionally, the Project would be required to comply with all provisions in the Los Angeles County Code regulating development in a Very High Fire Hazard Severity Zone. With the conversion of the undeveloped landscape to ignition-resistant development and landscaping, wildfires may still encroach upon and drop embers on the Project site but would not be expected to burn through the Project site due to the lack of available readily ignitable fuels (e.g., all site landscaping will be low fire ignition potential, irrigated, and maintained versus unmaintained native vegetation) and the typical ember decay rate. Further, in the event of a fire starting on the Project site, the fire would not be anticipated to result in a wildfire that would spread to off-site wildlands due to the buffer created by the proposed fuel modification zones, ignition-resistant construction, landscape requirements, improvement of firefighting access, and increased wildfire risk awareness.

Additionally, when assessing the drivers of human caused ignitions in Southern California, powerlines, arson, and equipment use were identified to be the dominant form of human-caused ignitions. As stated on page 4.20-37 of the Draft EIR, the Project would underground powerlines. Furthermore, required mitigation measures MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction Related Fire Prevention Measures, are included to reduce the risk of ignition during the construction of the Project.

I28-2 Regarding oak trees, as shown in Table 2 on page 16 of the Protected Tree Report (included in Appendix C, Biota Report of the Draft EIR), there are 612 oak trees on the Project site. Of the 612 oak trees, 51 are considered Heritage Trees. The Project would impact 232 protected oak trees, including 22 Heritage Trees. The 232 protected oak tree impacts are comprised of 192 removals, 13 encroachments (trees that would not be removed but may be subject to root damage, soil excavation and compaction, grade changes, loss of canopy, and/or trunk wounds), and 27 protected oak trees that are located within a debris basin. It should be noted that the 27 protected oak trees located within the debris basin would not be removed but are considered removals for mitigation purposes because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding.

In accordance with County Code Chapter 22.174, Oak Tree Permits, the County requires permits prior to removing or damaging oaks. Native oak trees that are at least 8 inches in diameter (or, for trees with multiple trunks with a combined diameter measuring at least 12 inches) at 4.5 feet above grade, shall

not be cut, destroyed, removed, relocated, or damaged, unless an oak tree permit is first obtained as provided in the ordinance. The Project is required to plant replacement trees to mitigate for the proposed oak tree removals. In accordance with MM-4.4-16, SEA Protected Tree Replacement/Compensation, the Project's required Conservation Management Plan must include a Protected Tree Replacement Plan that will dictate the establishment of required replacement trees. As shown on page 4.4-93 in Section 4.4., Biological Resources, of the Draft EIR, of the 772 required replacement trees, 574 would be oak trees. Per MM-4.4-16, the replacement trees must be nurtured and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees.

Comment Letter I29

From: Kravets, Kamilla
To: Erica G. Aguirre
Subject: Comment about Lyons Canyon development
Date: Wednesday, February 12, 2025 1:10:04 PM

CAUTION: External Email. Proceed Responsibly.

Good afternoon,

I wanted to voice my concerns as a resident of Santa Clarita regarding the proposed Lyons Canyon ranch development. I29-1

I think it is an abhorrent idea for many reasons. While I recognize the need for more housing, particularly as a young person, this is a terrible spot to create housing. There are other, already developed areas all over Santa Clarita /Canyon country that would not encroach on wildlife and one of the most beautiful parks we have in the area. The Towsley canyon area and adjacent park area is my favorite park in the LA county area and I'm not alone in this. It is a very popular hiking/recreational area for many many visitors, tourists and locals alike. It is also home to numerous species of wildlife. I29-2

Moreover, it is there to help residents of nearby areas breathe and get enough oxygen despite the rising CO2 / bad air quality from nearby roads. You need parks and recreational areas with trees in order to breathe. I29-3

Moreover, this is a terrible area to develop form the standpoint of evacuation routes. We've seen the traffic and the chaos caused by the fires this year. The last thing anyone wants is to have people, particular elderly people (allegedly this development will include senior housing) to be trapped and not able to get out when there's a fire. I29-4

There are plenty of areas that could be bought and developed in canyon country and other areas. There are plenty of spots housing could be put, without putting entire communities at risk. I29-5

Please reconsider giving approval to this development. I29-6

Thank you for your time.

Kay

Sent from my iPhone

INTENTIONALLY LEFT BLANK

Response to Comment Letter I29

Kamilla Kravets
February 12, 2025

I29-1 The commenter's specific concerns are addressed below.

I29-2 The potential for an alternative Project-site location is addressed in Chapter 6, Alternatives, or the Draft EIR. As stated in page 6-25 of the Draft EIR, one of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The Project site is located within the unincorporated Santa Clarita Valley region of Los Angeles County. The Project Applicant inquired with a licensed real estate broker based in the Santa Clarita Valley for the possibility of an available alternative site of approximately 233 acres, that could accommodate the Project's 510 residential units and allow for the preservation of protected open space in the Santa Clarita Valley. Per the real estate broker, no similar alternative site, which is proximate to freeway access, existing roadway infrastructure, and developed areas, is available for sale in the Santa Clarita Valley. As such, an alternative site would not be considered feasible and was ultimately rejected from further analysis in the EIR.

Although limited brush clearing is required in the adjacent Rivendale Park and Open Space area to comply with defensible space requirements, the Project's development would not encroach into park areas or Towsley Canyon to the south. The Project would facilitate the dedication of existing non-dedicated trails. Existing non-dedicated trails on the southern portion of the Project site would remain with implementation of the Project and would connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon. As discussed on pages 4.4-59 and 4.4-60 in Section 4.4, Biological Resources, of the Draft EIR, as a result of its clustered design, the Project is able to permanently preserve via conservation easement approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area. Habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. Potential impacts to wildlife species are addressed in Section 4.4 of the Draft EIR. As discussed therein, with implementation of required mitigation measures, Project impacts related to special status wildlife species, migratory species, wildlife corridors, and native wildlife nursery sites would be less than significant.

I29-3 Potential impacts related to air quality and greenhouse gas emissions (including carbon dioxide) are addressed in Sections 4.3, Air Quality, and 4.8, Greenhouse Gas Emissions, of the Draft EIR. The analyses take into consideration mobile source emissions (i.e., automobiles) from local roadways. As stated on page 4.3-51 of Section 4.3 of the Draft EIR, with implementation of mitigation, the Project would result in less than significant impacts regarding exposure of sensitive receptors to substantial pollutant concentrations during construction and operation of the Project. Furthermore, in accordance with required mitigation measures MM-4.4-1, On-Site Habitat Preservation, and MM-4.4-9, Off-Site Habitat Preservation, the Project would preserve a substantial amount of open space through the required On-Site and Off-Site Conservation Areas, totaling approximately 611 acres. The Project would also plant at least 772 replacement trees, in addition to ornamental trees for landscaping.

I29-4 Evacuation routes and evacuation planning are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20, Wildfire, of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

Regarding the potential for Project site occupants to become "trapped," as discussed on page 4.20-45 in Section 4.20 of the Draft EIR, the Project's internal circulation consists of a loop roadway system that connects both the primary and secondary access points along The Old Road, which satisfies secondary access requirements detailed in Los Angeles County Code of Ordinances Title 21, Chapter 21.24, Design Standards, Part 1, Access. The Project also includes a 28-foot-wide private access road along the northern and western perimeter for emergency vehicle access.

Finally, the Project includes 47 affordable (very low-income) senior rental units in one multifamily building. Regarding evacuation of senior populations, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be retirement or convalescent facilities which would necessarily require care facilities and support staff.

I29-5 Regarding an alternative Project site location, please refer to the response provided above for Comment I29-2. Regarding risk to entire communities (presumably increased wildfire risk), as stated on page 4.20-35 in Section 4.20, Wildfire, of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones on and off site and would not exacerbate the fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 and required through MM-4.20-2, Alternative Materials and Methods and MM-4.20-3, Annual Fuel Modification Zone Inspection, as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, Wildfire Education Program, would reduce potential impacts related to wildfire spread.

I29-6 The commenter's general opposition to the Project is acknowledged for the record and will be provided to the decision makers for their review and consideration as part of this Final EIR.

Comment Letter I30

From: KATHLEEN LINDSEY
To: Erica G. Aguirre
Subject: PLANNED DEVELOPMENT SOUTH OF SAGECREST CIRCLE
Date: Wednesday, February 12, 2025 8:59:57 PM
Importance: High

CAUTION: External Email. Proceed Responsibly.

Your notice about a new development in our area was so Non-descript that I threw it out as an advertisement. I find It odd that it was not an official notice since the deadline is March 10th. Seems the planning commission is hoping to (sneak) one by us in Sunset Pointe. I30-1

Kathleen Lindsey
24833 Sagecrest Circle
Stevenosn Ranch, CA 91381

Response to Comment Letter I30

Kathleen Lindsey
February 12, 2025

I30-1 The public noticing for the Draft EIR Notice of Availability (NOA) has been conducted in conformance with the substantive and procedural requirements of CEQA and the State CEQA Guidelines. Specifically, in accordance with Section 15087(a) of the State CEQA Guidelines, on December 10, 2024, an NOA of the Draft EIR was submitted to the State Clearinghouse, posted at the County Clerk's office, and published in The Santa Clarita Valley Signal. The NOA was also printed on County letterhead and mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously requested such notice in writing. In addition, a thumb drive with electronic copies of the Draft EIR and appendices were made available for public review at the Stevenson Ranch Library (25950 The Old Road Stevenson Ranch, CA 91381). Hardcopies of the Draft EIR and appendices were made available for public review at County Planning's main office (320 W. Temple Street, Los Angeles, CA 90012). The NOA, Draft EIR, and appendices were also posted to the County's website.

Considering the recent Hughes Fire, the Draft EIR formal public review period was extended for an additional 31 days (for a total of 91 days) to March 10, 2025. As such, on February 7, 2025, an updated NOA was submitted to the State Clearinghouse, posted at the County Clerk's office, and published in The Santa Clarita Valley Signal. The updated NOA was also printed on County letterhead and mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously requested such notice in writing. In addition, hardcopies of the Draft EIR and appendices were relocated from County Planning's main office to the Stevenson Ranch Library. The updated NOA was also posted to the County's website. As such, the County has complied with all applicable noticing requirements for the NOA and updated NOA.

Comment Letter I31

From: Robert Allison
To: Erica G. Aguirre
Subject: Lyons Project
Date: Thursday, February 13, 2025 11:08:08 PM

CAUTION: External Email. Proceed Responsibly.

I oppose developing this high density project in an extreme fire zone, especially considering that the project is designed to attract the elderly, who would find evacuation risky in the event of an emergency, such as wildfire. I31-1

Robert Allison
Newhall, CA

Response to Comment Letter I31

Robert Allison
February 13, 2025

I31-1 Regarding fire hazards, please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within a Very High Fire Hazard Severity Zone. It is understood that as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20, Wildfire, of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed in further detail in Section 4.20 of the Draft EIR, compliance with applicable regulatory requirements and implementation of mitigation would reduce the Project's wildfire impacts to a less than significant level.

Regarding senior populations, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be retirement or convalescent facilities which would necessarily require care facilities and support staff.

Comment Letter I32

From: David Mault
To: Erica G. Aguirre
Subject: The trails at Lyons canyon development
Date: Thursday, February 13, 2025 7:35:59 PM

CAUTION: External Email. Proceed Responsibly.

Hello,
I live in Stevenson ranch in Southern oaks, and have having difficulty getting homeowners insurance, and I'm concerned about the increased rate of fires in our area. I32-1
I do not think it is a good idea to build more homes in a high risk fire zone, especially if there are seniors living there. We are already having enough trouble with the fires, evacuations, water, etc. I32-2
I do not think it is smart and object to this project. I32-3
Please take this into consideration

Thank you
David Mault

INTENTIONALLY LEFT BLANK

Response to Comment Letter I32

David Mault
February 13, 2025

I32-1 CEQA Guidelines Section 15064(e) states "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Thus, this operational component is not within the scope of required environmental analysis pursuant to CEQA. Regarding an increased rate of fires, the analysis provided in Section 4.20, Wildfire, of the Draft EIR takes into consideration both fire history and the likely rate of wildfire occurrence on the Project site (see page 4.20-4 of the Draft EIR). As discussed further in Section 4.20 of the Draft EIR, after incorporation of required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

I32-2 Please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within a Very High Fire Hazard Severity Zone. It is understood that as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20, Wildfire, of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements.

A detailed response related to evacuation planning and the Project's Wildfire Evacuation Plan (included as Appendix M-2 of the Draft EIR) is provided in Topical Response-1 (specifically, please refer to Section 2.4.3.1, Attorney General's Guidance, the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements, and Section 5, Summary of Project Wildfire Evacuation Modeling, of Topical Response-1).

Regarding senior populations, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements, in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be retirement or convalescent facilities which would necessarily require care facilities and support staff.

Regarding water supply and infrastructure, as stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's Water Supply Assessment concludes that the total projected water supplies available to Santa Clarita Valley Water Agency Water Agency's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses. As discussed further in Section 4.20, Wildfire, of the Draft EIR and under header "Water Supply and Infrastructure" of Section 2.4.3.2, Fire Safety Requirements, of Topical Response-1, above, the Project would also include sufficient emergency water supply, a key component to fighting wildfire and protecting structures. Providing water where it is not currently available, especially when it is provided in a protected environment like the ignition-resistant landscapes of a new master planned community, enables firefighters to protect homes and work to control a wildfire's advancement.

I32-3 The commenter's objection to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I33

From: Christy Ito
To: Erica G. Aguirre
Subject: The Lyons Project (Towsley Canyon)
Date: Friday, February 14, 2025 12:42:17 PM

CAUTION: External Email. Proceed Responsibly.

Hello,

I have been a resident of SCV since 1993, and even being a Realtor here, I still vehemently oppose the proposed 500+ unit project in the Towsley Canyon area! I33-1

Have you all not learned any lesson from all the wildfires we have had here in California? Building residential units backing up to wild lands and in a canyon that is located in a EXTREME HIGH FIRE SEVERITY ZONE is not only mindless, but irresponsible! I33-2

The relatively newly built homes in Five Points near Magic Mountain, and most recently the homes in Tesoro Highlands, CANNOT GET FIRE INSURANCE (or it is extremely expensive) This is why so many escrows have fallen out, those home are uninsurable. Tesoro Highlands was ordered evacuated in the recent Hughes fire. I33-3

Are any of you in the Planning Commission paying any attention???? PLEASE STOP THIS NONSENSE! I33-4

Sincerely,
Christy Ito

Response to Comment Letter I33

Christy Ito
February 14, 2025

I33-1 The commenter's opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I33-2 Please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within a Very High Fire Hazard Severity Zone. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20, Wildfire, of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

I33-3 CEQA Guidelines Section 15064(e) states "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Thus, this operational component is not within the scope of required environmental analysis pursuant to CEQA. Regarding evacuations, a detailed response related to evacuation planning and the Project's Wildfire Evacuation Plan (included as Appendix M-2 of the Draft EIR) is provided in Topical Response-1 (specifically, please refer to Section 2.4.3.1, Attorney General's Guidance and Section 2.4.4, Project Wildfire Evacuation Modeling of Topical Response-1).

I33-4 The commenter's opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I34

Erica G. Aguirre

From: Maria Bueno Dailey <mibdailey@gmail.com>
Sent: Saturday, February 15, 2025 10:08 PM
To: Erica G. Aguirre
Subject: The Trails at Lyons Canyon

Follow Up Flag: Follow up
Flag Status: Flagged

CAUTION: External Email. Proceed Responsibly.

To whom it may concern,

In the short time that I have lived here in the Santa Clarita Valley, the last 4 years, I have seen all the housing developments that have been going up and keep wondering how this is possible. I've always wondered how with only one hospital and so many residents if any natural disasters happens how are we going to be helped. And in light of all the recent and devastating fires that have happened it's frightening to think about the potential loss of life and property that could happen here. This whole housing development needs to be put on hold until the health and safety of humans, animals, and our open land are considered more seriously. What will it take to make us learn, how many more lives could potentially be lost before we wake up.

I34-1

I34-2

Concerned citizen,
Maria Bueno-Dailey
Stevenson Ranch resident

Sent from my iPad

1

Response to Comment Letter I34

Maria Bueno-Dailey
February 15, 2025

I34-1 Impacts to hospitals are not an identified environmental resource topic with the State or local CEQA guidelines. Moreover, the local hospital in the vicinity (i.e., Henry Mayo Newhall Hospital) is not publicly owned and therefore, is not considered a public service. Nevertheless, this comment will be provided to the decision makers for their review and consideration as part of this Final EIR.

Regarding recent fires, the analysis provided in Section 4.20, Wildfire, of the Draft EIR, takes into consideration both fire history and the likely rate of wildfire occurrence on the Project site (see page 4.20-4 of the Draft EIR). The Draft EIR adequately analyzes impacts related to wildfire within Section 4.20 and incorporates mitigation measures to reduce significant impacts. Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site did not change. As discussed in Section 4.20 of the Draft EIR, after incorporation of required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

For a more detailed response related to potential fire hazards, please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

I34-2 Regarding placing the development on hold for further consideration, the Draft EIR adequately analyzes all required environmental topics related to health and human safety (see Draft EIR Sections 4.3, Air Quality, 4.7, Geology and Soils, 4.8, Greenhouse Gas Emissions, 4.8, Hazards and Hazardous materials, 4.9, Hydrology and Water Quality, 4.13, Noise, and 4.20, Wildfire) as well as open space (see Draft EIR Section 4.4, Biological Resources). Furthermore, please note that in light of the recent fire activity, the Draft EIR formal public review period was extended for an additional 31 days (for a total of 91 days), to March 10, 2025. As such, additional time was given to consider and comment on the Project.

Comment Letter I35

From: Phyllis Montello
To: Erica G. Aguirre
Cc: RJ Home
Subject: New Development off Sunset Pointe, The Trails at Lyons Canyon
Date: Saturday, February 15, 2025 8:28:45 AM

CAUTION: External Email. Proceed Responsibly.

Good morning.

I am writing in regards to the proposed build reference above. I have many concerns that I need to share with you. I35-1

First, and foremost, the proposed area ALWAYS burns during a major fire. Since I have lived here, since 1998, there have been at least three major fires that have engulfed the proposed area, everything was scorched and many animals died.

Part of the proposed plan is senior living. Are there plans in place to secure the safe evacuation of all the seniors when the next fire occurs? When those three fires occurred, police came down the street telling us to evacuate immediately. How would you handle the senior evacuation? This is critical. We only had a short time to evacuate. Seniors are in walkers, wheelchairs, use canes, are bedridden, have medical conditions like dementia, rely on others for transportation, have slower reaction times, take critical medicines that if evacuated will probably be left behind, experience psychological damage when their home is destroyed, etc. I35-2

Will there be a fire station? Sufficient fire hydrants that can pump out enough water? Will there be enough water to handle Sunset Pointe and this proposed area, especially during a fire? I35-3

Will there be other escape routes/exits? If the only exit is on fire, where do the people go? God forbid if they cannot escape. Will these folks be able to secure home/fire insurance? We all know that the insurance companies are eager to drop us. I35-4

As a Red Cross volunteer, I have seen what disasters can do and what is needed to quickly respond. The proposal does not take all of this into consideration. Please consider all the risks and come up with proposed remediated actions. I35-5

I have learned, and am also concerned about, the environment. Apparently 334 protected trees, 22 heritage oaks, will be cut down, trees that are essential to our ecosystem. I35-6

I am sure that the homeowners living on Sagecrest Circle who will have their views destroyed are also very disappointed in this proposal. Why doesn't the county use our taxpayer dollars to buy this land and incorporated into the park and save this property, save the environment, protect our ecosystem? I35-7

Sincerely, a concerned, constituent of Sunset Pointe,

Phyllis Montello

INTENTIONALLY LEFT BLANK

Response to Comment Letter I35

Phyllis Montello
February 15, 2025

I35-1 The commenter's specific concerns are addressed below in Responses to I35-2 through I35-7.

I35-2 Regarding the placement of housing (including senior housing) within a Very High Fire Hazard Severity Zone (VHFHSZ), the Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a VHFHSZ and within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20, Wildfire, of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level. For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Regarding evacuations of seniors in the event of an emergency, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff.

Evacuation routes and evacuation planning are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations

of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

I35-3 As discussed on page 4.15-33 in Section 4.15, Public Services, of the Draft EIR, the Los Angeles County Fire Department (LACoFD) determined that a new on-site fire station is not required for the Project. However, as the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. In addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area.

As discussed further in Section 4.20, Wildfire, of the Draft EIR, the Project would include sufficient emergency water supply, a key component to fighting wildfire and protecting structures. The Project would provide fire hydrants that meet flow, volume, and duration specifications at intervals designed to assist in fighting structural fires. The final number and location of the fire hydrants will be determined by LACoFD. The Project would also provide an up to 2-million-gallon water tank in the southwest portion of the development area, which would be installed at the Project site to assure reliable fire flow water pressure for the Project uses onsite. Project-internal waterlines would supply sufficient fire flows and pressure to meet the demands for required onsite fire hydrants and interior fire sprinkler systems for all structures. Water supply will meet the minimum fire flow required within the adopted fire code. Please see header "Water Supply and Infrastructure" of Section 2.4.3.2, Fire Safety Requirements, of Topical Response-1, above, for additional details related to water supply infrastructure. Furthermore, As stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's Water Supply Assessment concluded that the total projected water supplies available to Santa Clarita Valley Water Agency Water's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses (such as Sunset Pointe).

Regarding "escape routes/exits," as discussed on page 4.20-45 in Section 4.20 of the Draft EIR, the Project's internal circulation consists of a loop roadway system that connects both the primary and secondary access points along The Old Road, which satisfies secondary access requirements detailed in County Code Title 21, Chapter 21.24, Design Standards, Part 1, Access. The Project also includes a 28-foot-wide private access road along the northern and western perimeter for emergency vehicle access. Please see Response to Comment I35-2 for additional discussion related to potential evacuations.

I35-4 CEQA Guidelines Section 15064(e) states "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Thus, discussion on fire insurance concerns for future occupants is not within the scope of the required environmental analysis pursuant to CEQA,

and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR

I35-5 Regarding response times, Section 4.15, Public Services, and Appendix I-1, Los Angeles County Fire Department Request for Information Letter, of the Draft EIR, states "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site. Further, as detailed in Table 7 of the FPP in Appendix M-1 of the Draft EIR, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from Fire Station 124. Regarding impacts related evacuation, please also refer to Response to Comments I35-2.

Furthermore, as discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page 4.20-62 in Section 4.20, Wildfire of the Draft EIR, the Project's HOA would provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents, including residents of the senior housing apartment complex. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to ensure that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program that shall ensure that all seniors who are not able to safely evacuate on their own, including mobility-challenged individuals, are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.

I35-6 The comment erroneously states that "334 protected trees, 22 heritage oaks, will be cut down." As stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR, the 334 SEA-Protected Tree impacts would be comprised of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin. The 53 SEA-Protected Trees that would be located within a debris basin would not be removed but are considered as removals for mitigation purposes. This is because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding. As such, for mitigation purposes, the Project would result in 318 SEA Protected Tree removals, including 17 Heritage Trees. The 318 SEA Protected Trees would be replaced in accordance with the Los Angeles County SEA Ordinance, codified in Chapter 22.102, Significant Ecological Areas, of the County Code, resulting in 772 replacement trees. Per MM-4.4-16, the replacement trees must be nurtured and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. Furthermore, MM-4.4.2, Habitat Mitigation

and Monitoring Plan, requires 10 years of monitoring and maintenance of the habitat to help the ecosystem as a whole to become established. As discussed in Section 4.4, Biological Resources, of the Draft EIR, the Project's required mitigation would reduce impacts related to oaks and other protected tree species to below a level of significance under CEQA.

I35-7 Draft EIR Section 4.1, Aesthetics, describes the Project's potential impacts to aesthetics and visual change. Within this section of the EIR, analysis was conducted to determine if significant impacts would occur based on the County's adopted CEQA Guidelines, which are outlined in Section 4.1.3, Thresholds of Significance. Additionally, the Project's impacts were determined based on a methodology that considered visibility of the Project from public vantage points and effects on scenic vistas, regional trails, scenic resources, and visual quality and character. Regarding impacts on views from private residences to the north of the Project site, such impacts are typically not considered significant under CEQA (*Mira Mar Mobile Community v. City of Oceanside* (2004) 119 Cal.App.4th 477,14 Cal.Rptr.3d 308). As stated by the court in B*anker's Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego* (2006) 42 Cal.Rptr.3d 537,139 Cal.App.4th 249, "obstruction of a few private views in a project's immediate vicinity is not generally regarded as a significant environmental impact," because under CEQA, "the question is whether a project will affect the environment of persons in general, not whether a project will affect particular persons" (*Banker's Hill v. City of San Diego, supra*, 139 Cal.App.4th at 279). Such conclusions are consistent with the inquiries set forth in County's adopted CEQA Guidelines. Moreover, the Project was assessed based on the ability to be consistent with applicable zoning and other regulations governing scenic quality, lighting, glare, and shadows. The Draft EIR determined less than significant impacts would occur to all thresholds except for construction-related impacts related to public views and scenic quality regulations. As such, the EIR incorporated MM-4.1-1, Visual Shielding Plan, which requires the Applicant to prepare a Visual Shielding Plan to improve the overall aesthetic quality of construction areas, including the establishment of designated staging areas, visual shielding, maintenance and monitoring of the Project site. This mitigation measure would be implemented prior to the issuance of a grading permit following review and approval by the County. With the implementation of this mitigation measure, impacts would be reduced to a less-than-significant level.

As discussed in Section 4.15, Public Services, on page 4.15-39 of the Draft EIR, the Project would include approximately 150 acres of open space supporting an on-site network of trail facilities, which connect to other dedicated facilities located within parks adjacent and near to the Project site, as well as approximately 24 acres of HOA-maintained open space and active and passive open space areas located throughout the Project site. The Project would also provide a recreation center on 1.13-acres in the central portion of the Project site. Furthermore, pursuant to the County's Quimby Code (Sections 21.24.340, 21.240.350, and 21.28.140 of the County Code), the Project would be required to pay an in-lieu fee, which could be used for the purpose of acquiring local park land or developing new or rehabilitating existing parks (see page 4.15-40 of the Draft EIR).

Comment Letter I36

From: Naomi Privett
To: Erica G. Aguirre
Subject: Lyons Project near Townsley Park!
Date: Sunday, February 16, 2025 10:41:02 PM

CAUTION: External Email. Proceed Responsibly.

Traffic, air Pollution, destroying Animal habitat, and 300 PROTECTED TREES
Are all concerns! And you saw the problems of people running for their lives on PCH! Do you want a replay of that???? Just say NO, PLEASE!!!!! Signed Naomi Privett!!!!!(A Senior, on a walker
With Lung Problems), and I live nearby!!!!
Sent from my iPhone

I36-1

INTENTIONALLY LEFT BLANK

Response to Comment Letter I36

Naomi Privett
February 16, 2025

I36-1 Automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, see Section 4.17, Transportation, of the Draft EIR for more information about the Project's traffic impacts. Specifically, see Appendix J to the Draft EIR and the impact analysis regarding the Los Angeles County Public Works Transportation Impact Analysis Guidelines, which considers the Project's traffic contribution to queuing at nearby signalized study intersections. As detailed in the Transportation Impact Analysis (Appendix J), the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19). As such, Project implementation would be consistent with existing regulations governing road capacity.

Regarding the concern for traffic congestion and associated effects (e.g., air quality), see Section 4.3, Air Quality, of the Draft EIR. The Draft EIR analyses of potential air quality and GHG emission impacts include consideration of Project-generated mobile source emissions (i.e., vehicle trips from residents, students, employees, delivery trips, etc.). As determined by the analyses set forth in Draft EIR Sections 4.3, Air Quality, and 4.8, Greenhouse Gas Emissions, the Project's air quality and GHG emission impacts would be less than significant with mitigation incorporated.

Regarding specific impacts to animal habitat, in accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the CEQA Guidelines, the Draft EIR analysis of the Project's potential adverse effects on wildlife species is focused on species identified as a candidate, sensitive, or special status species. However, mitigation measures applicable to the special status species, particularly those related to habitat preservation, would benefit all local wildlife species. For example, the On-Site Conservation Area required per MM-4.4-1 would provide suitable habitat for a variety of wildlife species. The On-Site Conservation Area would also protect in perpetuity a valuable (and presently unprotected) connection between large tracts of adjacent conserved natural open space associated with the City of Santa Clarita's Woodlands Park and Rivendale Park and Open Space, contributing to a contiguous corridor of conserved natural open space. In addition, MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants wildlife species forage on. As discussed in further detail in Section 4.4, Biological Resources, of the Draft EIR, all biological resource impacts would be reduced to less than significant with implementation of required mitigation measures.

As stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR, the 334 SEA-Protected Tree impacts would be comprised of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin. The 53 SEA-Protected Trees that would be located within a debris basin would not be removed but are considered as removals for mitigation purposes. This is because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding. As such, for mitigation purposes, the Project would result in 318 SEA Protected Tree removals. The 318 SEA Protected Trees would be replaced in accordance with MM-4.4.16, SEA Protected Trees

Replacement/Compensation, and Chapter 22.102, Significant Ecological Areas, of the County Code, resulting in 772 replacement trees. As discussed in Section 4.4 under Threshold 4.4f of the Draft EIR, implementation of MM-4.4-16 reduces impacts related to tree removal to a level of less than significant.

Wildfire evacuation is adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR). As stated on page 4.20-23 of the Draft EIR, the Project site is proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

Comment Letter I37

From: Brett Rateaver
To: Erica G. Aguirre
Subject: Lyons Canyon Project 2021-001195-(5) Comments/Feedback
Date: Sunday, February 16, 2025 4:17:23 PM

CAUTION: External Email. Proceed Responsibly.

Thank you for reading my comments regarding Lyons Canyon in SCV. I37-1

Our community has grown much too fast the past decade and can't absorb any other housing area. The crowding and traffic is already gridlock in many areas.

We have concerns about water availability and air quality. I37-2

The commute south 5 from SCV through the Newhall pass is one of the worst in So Cal especially with the recently added units of Lennar and Richmond behind Magic Mountain. I37-3

A new development like Lyons Canyon will dramatically lower the quality of SCV life for current and future residents alike. I37-4

Brett Rateaver
SCV Resident

Response to Comment Letter I37

Brett Rateaver
February 16, 2025

I37-1 As stated on page 4.14-16 in Section 4.14, Population and Housing, of the Draft EIR, unincorporated Los Angeles County has been allocated a total of 90,052 housing units for the planning period between 2021 and 2029. The County has only attained 5,160 (5.7%) of its current Regional Housing Needs Allocation (RHNA) even though the County is 50% through the 6th Cycle (HCD 2025). Similarly, only 9,201 (33.8%) of the County's 5th Cycle RHNA goals were attained through housing production between 2013 and 2021 (HCD 2025). The Project's construction schedule is anticipated to be completed by 2029; thus, housing units would be available to be occupied within the timeframe of the 6th Cycle (2021-2029). Therefore, the Project would assist the County in achieving its regional housing needs, including very low-income housing and moderate/middle-income households.

Automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17, Transportation, of the Draft EIR as well as the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

I37-2 As stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's Water Supply Analysis (Provided as in Appendix L-2 of the Draft EIR) concludes that the total projected water supplies available to SCV Water's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

The Draft EIR analyses of potential air quality impacts include consideration of Project-generated mobile source emissions (i.e., vehicle trips from residents, students, employees, delivery trips, etc.) as well as air quality impacts associated with traffic-congested roadways and intersections. As determined by the analyses set forth in Draft EIR Sections 4.3, Air Quality, the Project's air quality impacts would be less than significant with mitigation incorporated.

I37-3 Please see Response to Comment I37-1, above. As stated therein, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA.

I37-4 The commenter's opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I38

From: Louis Romero
To: Erica G. Aguirre
Subject: Trials at Lyons Canyon Project Comments
Date: Tuesday, February 18, 2025 12:55:11 PM

CAUTION: External Email. Proceed Responsibly.

Dear Erica,

I am writing to express my strong opposition to the proposed development in the northern foothills of the Santa Susana Mountains. As a resident living in close proximity to the project site, I am deeply frustrated, upset, and concerned about the severe and irreversible impacts this project will have on the community, the environment, and our quality of life. I38-1

First and foremost, this project represents massive overdevelopment in an area that cannot sustain such an intense increase in population and infrastructure. 510 dwelling units—along with roads, parking, and other additions—will dramatically alter the character of the area and bring overwhelming traffic congestion to our already strained roadways, particularly on The Old Road. I38-2 The additional noise, light pollution, and increased vehicular activity will degrade the peaceful nature of our community. I38-3

Furthermore, the environmental consequences of this project are staggering. The destruction of open space and the significant grading (totaling nearly 2.8 million cubic yards) will cause devastating impacts to local wildlife habitats, natural drainage patterns, and hillside stability. I38-4 The Santa Susana Mountains are home to a diverse ecosystem, and this project threatens to disrupt it permanently. Additionally, fuel modification (brush thinning) poses an increased wildfire risk, I38-5 a serious concern given our region's fire history.

Water scarcity is another major issue. Our local water resources are already under strain, and this development will only exacerbate shortages and place an unnecessary burden on infrastructure that is not equipped to support such a large influx of residents. I38-6

Beyond these concerns, my biggest question is: How do we know our comments are being taken seriously? Are they actually being considered in the decision-making process, or is this simply a formality before proceeding with an already approved project? How is this project being voted upon? Is there an opportunity for the community to truly have a say, or are we just being asked for feedback without any real impact on the outcome? I38-7

Additionally, I recently went to the library to review the project plans, and I was unable to obtain copies for personal review. This lack of transparency is deeply concerning and raises questions about whether the public is being given a fair opportunity to evaluate and respond to the full scope of this development. I38-8

This project is not wanted, not needed, and completely inappropriate for this area. I strongly urge you to reject this proposal and preserve the integrity of our community. The residents of this area deserve real answers, genuine consideration, and the ability to influence decisions that will dramatically affect our lives. I38-9

I look forward to a clear and detailed response addressing these concerns.

Thank you,

Louis Romero
661-510-7232

INTENTIONALLY LEFT BLANK

Response to Comment Letter I38

Louis Romero
February 18, 2025

I38-1 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I38-2 As stated on page 4.14-16 in Section 4.14, Population and Housing, of the Draft EIR, unincorporated Los Angeles County has been allocated a total of 90,052 housing units for the planning period between 2021 and 2029. The County has only attained 5,160 (5.7%) of its current Regional Housing Needs Allocation (RHNA) even though the County is 50% through the 6th Cycle (HCD 2025). Similarly, only 9,201 (33.8%) of the County's 5th Cycle RHNA goals were attained through housing production between 2013 and 2021 (HCD 2025). The Project's construction schedule is anticipated to be completed by 2029; thus, housing units will be available to be occupied within the timeframe of the 6th Cycle (2021-2029). Therefore, the Project would help the County achieve its regional housing needs, including very low-income housing and moderate/middle-income households.

As discussed within the impact analysis provided under Threshold 4.1d (see pages 4.1-29 through 4.1-34 in the Draft EIR) within Section 4.1, Aesthetics, of the Draft EIR, the Project would not substantially degrade the existing visual character or quality of the Project site and surrounding areas (including off-site recreation areas). Construction impacts would be less than significant with mitigation incorporated (i.e., MM-4.1-1), and operational impacts would be less than significant. Reasoning for these impact determinations discussed in Section 4.1 of the Draft EIR include the limited nature of visibility from dedicated trails in the Project site vicinity (including Taylor Trail and Don Mullally Trail), the high-quality nature and cohesiveness of design exhibited by on-site development and landscaped areas, the preservation of approximately 150 acres of the Project site as natural open space, the inclusion of on-site pocket parks and HOA-maintained open spaces, compliance with existing regulations, and implementation of MM-4.1-1, which requires a visual shielding plan during Project construction.

Automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17, Transportation, of the Draft EIR and the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections, especially along The Old Road. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

I38-3 Please refer to Section 4.13, Noise, of the Draft EIR for a detailed analysis of the Project's potential noise impacts. As discussed therein, generation of substantial temporary increases in ambient noise levels in the vicinity of the Project would require mitigation measures to reduce impacts from construction activity to less than significant levels. Upon implementation of mitigation measures, impacts regarding generation of substantial temporary increases in ambient noise levels in the vicinity of the Project in excess of standards established in the County's General Plan and noise ordinance would be less than significant. The Project would result in less than significant impacts regarding

generation of excessive ground borne vibration or ground borne noise levels and would result in no impacts regarding excessive noise levels due to proximity to a private airstrip, airport land use plan, public airport, or public use airport.

As discussed in Section 4.1, Aesthetics, the Project was assessed based on the ability to be consistent with applicable zoning and other regulations governing scenic quality, lighting, glare, and shadows. The Draft EIR determined less than significant impacts would occur to all thresholds except for impacts related to public views and scenic quality regulations. As such, the EIR incorporated MM-4.1-1, Visual Shielding Plan, which requires the Applicant to prepare a Visual Shielding Plan to improve the overall aesthetic quality of construction areas, including the establishment of designated staging areas, visual shielding, maintenance and monitoring of the Project site. This mitigation measure would be implemented prior to the issuance of a grading permit following review and approval by the County. With the implementation of this mitigation measure, impacts would be reduced to a less-than-significant level.

Regarding impacts relating to increased traffic congestion, please refer to the response provided above for Comment I38-2.

I38-4 Within Section 4.4, Biological Resources, on pages 4.4-59 and 4.4-60, the Draft EIR describes that, the Project's clustered design facilitates the permanent preservation approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area. Habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. However, existing non-dedicated trails on the southern portion of the Project site would remain with implementation of the Project and would connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon. See Figure 3-5, Conceptual Trails Map, for details. Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement.

As discussed on page 3-19 of Chapter 3, Project Description, of the Draft EIR, the total Project earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site parcel adjacent to The Old Road that would be constructed with manufactured slopes. The grading would be balanced on site, and as such, no import or export of soils would be required for the Project. The Project would be required to comply with the standards set forth in Appendix J, Grading of the Los Angeles County Building Code, which are applicable to grading, excavation, and earthwork construction, including fills and embankments, and the control of runoff from graded sites, including erosion sediments and construction-related pollutants. The Project would also be subject to a Conditional Use Permit (RPPL2021003113) for grading exceeding 100,000 cubic yards in an A-2 zone.

Furthermore, regarding hillside stability, as discussed in Section 4.7, Geology and Soils, on page 4.7-16 of the Draft EIR, recommendations from the Geotechnical Report (included as Appendix E-1 of the Draft EIR) would be included as part of the Final Geotechnical Engineering Investigation Report and the geotechnical slope stability design measures (e.g., slope inclinations, fill compaction, and drainage improvements) implemented in accordance with LACBC and California Building Code (CBC) requirements as approved by the Public Works GMED. Compliance and implementation of slope

stability standards and the LACBC and CBC would minimize potential for the Project to exacerbate seismically induced landslides to a less than significant level. No mitigation is required.

Regarding natural drainage patterns, as discussed in detail in Section 4.10, Hydrology and Water Quality, of the Draft EIR, the proposed water quality best management practices (BMPs) and storm drainage system design, in accordance with MS4 permit requirements, County standards and One Valley One Vision (OVOV) policies, would ensure that there would be no contact between stormwater from the developed Project site and the adjacent undeveloped land, thereby ensuring that no undeveloped areas would be subject to erosion or associated siltation due to Project operations. Through the incorporation of the regional debris basins, smaller desilting basins, stormwater drainage facilities, and compliance with applicable regulations, the operation of the Project would not substantially alter the existing drainage pattern of the site, including through alteration of a flood zone (discussed further in response to Threshold 4.10c.[iv] beginning on page 4.10-30 of the Draft EIR); alteration of a stream or river; or additional impervious surfaces, in a manner that would result in erosion or siltation, and impacts would be less than significant.

I38-5 Project compliance with required fuel modification regulations would not increase wildfire risk. Rather, fuel modification zones are designed to provide vegetation buffers that gradually reduce fire intensity and flame lengths from advancing fire by strategically placing thinning zones, restricted vegetation zones, and irrigated zones adjacent to each other on the perimeter of the wildland–urban interface-exposed structures. Please refer to header "Defensible Space" in Section 2.4.3.2, Fire Safety Requirements, , of Topical Response-1 for additional details.

I38-6 In preparing the Project's Water Supply Assessment (WSA), included as Appendices L-2 and L-3 within the Draft EIR, the Santa Clarita Valley Water Agency (SCV Water) considered the urban water shortage contingency planning analysis set forth in the 2020 Urban Water Management Plan and 2020 Water Shortage Contingency Plan in determining the sufficiency of water supplies for the Project, in addition to all existing and planned future uses in SCV Water's service area. These documents also explain how SCV Water's reliability planning provisions of these adopted documents assist SCV Water in responding to drought conditions, including the severe drought conditions that currently exist (see page 4-33 in Appendix L-2 of the Draft EIR). As stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's WSA concludes that the total projected water supplies available to SCV Water's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

I38-7 This comment letter has been received and included as part of the Final EIR, as represented by these responses to comments. Consistent with CEQA Guidelines Section 15132(d), all comments received during the public comment period have been included and responded to in this Final EIR. These comments are acknowledged for the record, all environmental comments are responded to, and the comments and responses will be forwarded to the Regional Planning Commission for their review and consideration. Certification of the Final EIR will be considered at a public hearing by the County's Regional Planning Commission. The commenter will have the opportunity to comment on the Project and the County's provided responses at this hearing, which will be notified to the public in compliance with state and local regulations, including the Ralph M. Brown Act (Government Code Section 54950, et seq.). The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR.

I38-8 The Draft EIR was initially made available to the public for review for a period of 60 days starting on December 10, 2024, and ending on February 7, 2025. However, in light of the recent Hughes Fire, the public review period was subsequently extended for an additional 31 days (for a total of 91) days ending on March 10, 2025. An electronic copy of the Draft EIR was made available at the Stevenson Ranch Library starting on December 10, 2024. In addition, hard copies of the Draft EIR and appendices were relocated from County Planning's main office to the Stevenson Ranch Library on February 7, 2025.

A detailed description of the Project is included in Chapter 3, Project Description, of the Draft EIR. Per Section 15124 of the State CEQ Guidelines, the description of a project "should not supply extensive detail beyond that needed for evaluation and review of environmental impacts." As such, the entirety of the Project's plans were not made available for public review. However, Figures 3-1 through 3-7 in Chapter 3, Project Description, of the Draft EIR were included to illustrate key visual components of the Project. For example, Figure 3-1, Conceptual Site Plan, illustrates the Project's proposed features and development footprint and Figure 3-2, Vesting Tentative Tract Map No. 83301, details the proposed subdivision. The Draft EIR analyzes the potential environmental impacts based on the information presented and illustrated in Chapter 3 of the Draft EIR, which includes the necessary information required per Section 15124 of the State CEQA Guidelines.

I38-9 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I39

From:	Teresa Jones
To:	Erica G. Aguirre
Subject:	Santa Clarita/Lyons 500 new homes?
Date:	Wednesday, February 19, 2025 9:32:24 PM
Attachments:	smime.p7s ATT00001.txt ATT00002.htm

NO PLEASE. I am a Santa Clarita resident, and we live in fear of the fires here. This is a high risk zone for fires, and to build 500 new homes ESPECIALLY for seniors is not prudent, and borderline negligent. I have a client whose elderly parents died in the recent fires, because they could not get out. Do you want blood on your hands? I39-1

I also read in the local paper that you made a remark complaining that no one had viewed the plans in downtown Los Angeles. We work. Downtown takes an hour and a half to drive from here. Please do not misread the situation. We care.. I39-2

Teresa Jones
teresajones@mac.com

Response to Comment Letter I39

Teresa Jones
February 19, 2025

I39-1 The Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a Very High Fire Hazard Severity Zone and within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, additional fire protection measures, such as those governing safe building standards, must be provided for Project approval. As such, Section 4.20 adequately analyzes the potential effects of Project implementation and incorporates mitigation measures to reduce significant impacts related to wildfire. Please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Regarding evacuation of senior populations, please refer to Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be retirement or convalescent facilities which would necessarily require care facilities and support staff.

I39-2 This statement does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. This comment will be forwarded to the Regional Planning Commission for their review and consideration.

Comment Letter I40

From: Lorre Czacherski
To: Erica G. Aguirre
Subject: Draft EIR Project No 2021-001195-(5)
Date: Thursday, February 20, 2025 7:46:34 PM

CAUTION: External Email. Proceed Responsibly.

Dear Ms Aguirre,

I reside in the Sunset Pointe development adjacent to the proposed site for The Trails At Lyons Canyon Project. My neighbor informed me of a notice that she received but apparently was not sent to all homeowners in Sunset Pointe. I have owned my property since 1996 and would expect to receive any notifications of this type. This project has a detrimental effect on our community and I object to the fact that no formal notice was not sent to all homeowners in Sunset Pointe. I have informed delivery through USPS and can confirm that no notice was received by me. I would request that proper notifications be sent to impacted members of the community with proper time lines to allow for proper communications on such a high visibility project. I40-1

Thank you for your consideration.

Saleh Hawatmeh
24841 Bracken Ln
Newhall, CA 91381
(661)255-6830 - home
(661)210-8837 - cell

Virus-free.www.avast.com

Response to Comment Letter I40

Saleh Hawatmeh
February 20, 2025

I40-1 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

The public noticing for the Draft EIR Notice of Availability (NOA) has been conducted in conformance with the substantive and procedural requirements of CEQA and the State CEQA Guidelines. Specifically, in accordance with Section 15087(a) of the State CEQA Guidelines, on December 10, 2024, an NOA of the Draft EIR was submitted to the State Clearinghouse, posted at the County Clerk's office, and published in The Santa Clarita Valley Signal. The NOA was also printed on County letterhead and mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously requested such notice in writing. The County used a radius map to determine appropriate addresses for mailings within the Project site vicinity; however, please note that not all residences in Sunset Point were within the determined radius distance. In addition, a thumb drive with electronic copies of the Draft EIR and appendices were made available for public review at the Stevenson Ranch Library (25950 The Old Road Stevenson Ranch, CA 91381). Hardcopies of the Draft EIR and appendices were made available for public review at County Planning's main office (320 W. Temple Street, Los Angeles, CA 90012). The NOA, Draft EIR, and appendices were also posted to the County's website.

In light of the recent Hughes Fire, the Draft EIR formal public review period was extended for an additional 31 days (for a total of 91 days) to March 10, 2025. As such, on February 7, 2025, an updated NOA was submitted to the State Clearinghouse, posted at the County Clerk's office, and published in The Santa Clarita Valley Signal. The updated NOA was also printed on County letterhead and mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously requested such notice in writing. In addition, hardcopies of the Draft EIR and appendices were relocated from County Planning's main office to the Stevenson Ranch Library. The updated NOA was also posted to the County's website. As such, the County has complied with all applicable noticing requirements for the NOA and updated NOA.

Comment Letter I41

From: Ivy Manalang
To: Erica G. Aguirre
Subject: Concerns regarding "The Trails" development on Old Road
Date: Thursday, February 20, 2025 7:42:09 PM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre,

I hope this email finds you well. I am reaching out regarding the proposed development, *The Trails*, on Lyons Old Road, which includes 500 new homes. As a concerned resident, I would like to bring attention to several key issues that could significantly impact the surrounding communities, particularly those in Sunset Pointe. I41-1

Environmental Impact
The development's proximity to open spaces and natural habitats raises concerns about potential disruptions to local wildlife and ecosystems. The impact on air and water quality due to increased construction activity and long-term residential use should also be thoroughly assessed. I41-2 I41-3

Traffic Concerns
With 500 new homes, the additional vehicles on local roads could create significant congestion, particularly on Calgrove/Lyons Avenue and surrounding streets. Given the already high traffic volume in the area, has there been a comprehensive traffic study to evaluate the potential strain on infrastructure and road safety? I41-4

Fire Hazard Risks
As you are aware, our region is highly susceptible to wildfires. Introducing a large-scale development in a high-risk fire zone raises concerns about evacuation routes, emergency response times, and the overall safety of both new and existing residents. How will the project address these critical fire safety issues? I41-5

Construction Noise and Disruptions
Extended periods of construction will inevitably bring noise, dust, and disturbances to neighboring communities. Residents of Sunset Pointe and nearby areas will be directly affected. Are there measures in place to mitigate excessive noise and dust pollution, particularly during early morning and late evening hours? I41-6

We appreciate the Department of Regional Planning's efforts to ensure responsible and sustainable development in our community. I would love the opportunity to discuss these concerns further and understand how they will be addressed in the planning process. Please let me know how we can stay informed and engaged in the review process. I41-7

Thank you for your time and consideration. I look forward to your response.

Best regards,

Ivy and Rodel Manalang

25026 Sargasso Ct.

(213) 447-4426

INTENTIONALLY LEFT BLANK

Response to Comment Letter I41

Ivy and Rodel Manalang
February 20, 2025

I41-1 As stated throughout the Draft EIR, the Project includes development of 510 dwelling units (not 500 as suggested in this comment). The commenter's specific concerns are addressed in further detail below.

I41-2 Regarding potential disruptions to local wildlife and ecosystems, the Project would provide approximately 150 acres of on-site natural open space. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR). The On-Site Conservation Area required per MM-4.4-1 would provide suitable habitat for a variety of wildlife species. The On-Site Conservation Area would also protect in perpetuity a valuable (and presently unprotected) connection between large tracts of adjacent conserved natural open space associated with the City of Santa Clarita's Woodlands Park and Rivendale Park and Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west wildlife movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and the San Gabriel Mountains to the west; this would preserve and avoid substantial loss of connectivity within the SEA. In addition, MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants wildlife species forage on. Habitat preservation would also be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement. As discussed in further detail under Threshold 4.4f in Section 4.4., Biological Resources, of the Draft EIR, with the implementation of required mitigation measures, impacts to natural open space areas and long-term maintenance of ecosystem functions would be reduced to less than significant.

I41-3 Potential impacts related to air quality are addressed in Sections 4.3, Air Quality, of the Draft EIR. As discussed in further detail in Section 4.3.4, Methodology of the Draft EIR, the air quality analysis takes into consideration both construction and operational emissions. The construction equipment mix and vehicle trips used for estimating the Project-generated construction emissions are shown in Table 4.3-5, Construction Scenario Assumptions, on page 4.3-23 of the Draft EIR. The analysis of operational emissions included consideration of areas sources (i.e. emissions from hearths, consumer product use, architectural coatings, and landscape maintenance equipment), energy sources (i.e. emissions associated with building electricity and natural gas usage), and mobile sources (i.e., vehicles traveling to and from the Project site). As determined by the analysis provided in Section 4.3 of the Draft EIR, implementation of MM-4.3-1, Construction Equipment, would reduce construction-related emissions to less than significant level. Operational emissions would be less than significant without mitigation.

An analysis of the Project's potential hydrology and water quality impacts, including construction and operational impacts, is provided in Section 4.10, Hydrology and Water Quality, of the Draft EIR (see Section 4.10.5, Impact Analysis, beginning on page 4.10-21 as well as Section 4.10.6, Cumulative Impact Analysis, beginning on page 4.10-34 of the Draft EIR). The analysis is supported by several

technical studies, referenced on page 4.10-1 of the Draft EIR, which are included as appendices to the Draft EIR. As summarized on pages 4.10-39 and 4.10-40 of the Draft EIR, Project impacts related to hydrology and water quality would be less than significant, and no mitigation is required.

I41-4 Automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17, Transportation, of the Draft EIR and the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

I41-5 Regarding the location of the Project within a Very High Fire Hazard Severity Zone (VHFHSZ), Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a VHFHSZ. For a more detailed response related to potential fire hazards, please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The Project has been designed with the objective of constructing a fire-resistant, modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

Evacuation routes are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with applicable regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a

more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

Regarding response times, as discussed in Section 4.15, Public Services, of the Draft EIR, the Los Angeles County Fire Department (LACoFD) indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site (see page 4.15-31 in the Draft EIR). Further, as detailed in Table 7 of the Fire Protection Plan included as Appendix M-1 of the Draft EIR, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from the closest Fire Station 124.

I41-6 Please refer to Section 4.13, Noise, of the Draft EIR for a detailed analysis of the Project's potential noise impacts. As discussed therein, in order to minimize construction-related noise in the vicinity of the Project site, several mitigation measures are required. MM-4.13-1 (Simultaneous Equipment Operation Limit for Portion of Lot 22) restricts the total quantity of mobile construction equipment allowed to operate at one time in a designated portion of Lot 22. MM-4.13-2 (Staging Areas & Stationary Equipment) stipulates that staging areas and stationary equipment cannot be placed in Lot 22 or near off-site sensitive uses, mandates the use of noise mufflers, and requires that equipment be oriented away from receptors to reduce noise impacts. MM-4.13-3 (Stationary Equipment Construction Noise Barrier) mandates that any stationary equipment located within 600 feet of the northern boundary in specific lots be enclosed by a noise barrier at least 10 feet high. Finally, MM-4.13-4 (Temporary Noise Barrier for On-Site Phases) requires temporary noise barriers when mobile or stationary equipment operates near occupied residences, with the size and placement of these barriers dependent on how close the residences are to the construction zone. Upon implementation of the required mitigation measures, impacts regarding generation of substantial temporary (i.e. construction-related) increases in ambient noise levels in the vicinity of the Project would be less than significant. The Project would result in less than significant impacts regarding substantial permanent (i.e. operational) increase in ambient noise levels and generation of excessive ground borne vibration or ground borne noise levels. The Project would result in no impacts regarding excessive noise levels due to proximity to a private airstrip, airport land use plan, public airport, or public use airport.

Regarding dust, as discussed on page 4.3-66 of the Draft EIR, construction activities associated with the Project would result in temporary sources of on-site fugitive dust and construction equipment emissions. However, as demonstrated in Table 4.3-12, Estimated Maximum Daily Operational Criteria Air Pollutant Emissions—Unmitigated (page 4.3-39 of Draft EIR), and Table 4.3-18, Localized Assessment of Project Construction Emissions (page 4.3-48 of Draft EIR), the Project would result in PM_{10} and $PM_{2.5}$ emissions that would be below the mass daily regional thresholds and concentration-based air pollutant thresholds, respectively. The Project would be required to comply with SCAQMD Rule 403 for fugitive dust watering. As stated on page 4.3-25 of the Draft EIR, dust control measures include, but are not limited to, maintaining stability of soil through pre-watering of site prior to clearing, grubbing, cut and fill, and earth-moving activities; stabilizing soil during and immediately after clearing, grubbing, cut and fill, and other earth-moving activities; stabilizing backfill during handling and at completion of activity; and pre-watering material prior to truck loading and ensuring that freeboard exceeds 6 inches.

I41-7 This concluding statement does not express any adequacy concerns related to the environmental analysis in the Draft EIR. The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I42

From: Susan Stone
To: Erica G. Aguirre
Subject: Concern regarding notification letter sent to Sunset Pointe residents
Date: Friday, February 21, 2025 4:19:52 PM

CAUTION: External Email. Proceed Responsibly.

Hi Ms. Aguirre,

I received the letter with a copy of the draft of the environmental report. I went to thirteen different houses and no one neighbor knew about the report. I believe that since the return address was "DUDEK" that most people thought it was an advertisement and threw the letter away without opening the envelope.

We do not have an HOA so I talked with the group interacting with public works regarding maintenance of our parks. None of them were aware of the report or the timeline.

Since the return address was not L.A. County, notification of Sunset Pointe neighborhood did not happen.

I42-1

Consideration should be given to resend the letter with an extension of the time limit. The return address needs to be from L.A. County so everyone can recognize it is not junk mail.

I42-2

Sincerely,
Susan Stone
661 373-1814

Response to Comment Letter I42

Susan Stone
February 21, 2025

I42-1 The public noticing for the Draft EIR Notice of Availability (NOA) has been conducted in conformance with the substantive and procedural requirements of CEQA and the State CEQA Guidelines. Specifically, in accordance with Section 15087(a) of the State CEQA Guidelines, on December 10, 2024, an NOA of the Draft EIR was submitted to the State Clearinghouse, posted at the County Clerk's office, and published in The Santa Clarita Valley Signal. The NOA was also printed on County letterhead and mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously requested such notice in writing. The County used a radius map to determine appropriate addresses for mailings within the Project site vicinity; however, please note that not all residences in Sunset Point were within the determined radius distance. In addition, a thumb drive with electronic copies of the Draft EIR and appendices were made available for public review at the Stevenson Ranch Library (25950 The Old Road Stevenson Ranch, CA 91381). Hardcopies of the Draft EIR and appendices were made available for public review at County Planning's main office (320 W. Temple Street, Los Angeles, CA 90012). The NOA, Draft EIR, and appendices were also posted to the County's website.

Considering the recent Hughes Fire, the Draft EIR formal public review period was extended for an additional 31 days (for a total of 91 days) to March 10, 2025. As such, on February 7, 2025, an updated NOA was submitted to the State Clearinghouse, posted at the County Clerk's office, and published in The Santa Clarita Valley Signal. The updated NOA was also printed on County letterhead and mailed to properties in the vicinity of the Project site, as well as all agencies, organizations, and individuals who had previously requested such notice in writing. In addition, hardcopies of the Draft EIR and appendices were relocated from County Planning's main office to the Stevenson Ranch Library. The updated NOA was also posted to the County's website. As such, the County has complied with all applicable noticing requirements for the NOA and updated NOA.

I42-2 Please see Response to Comment I42-1, above. The formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. The County has complied with all applicable noticing requirements for the NOA and updated NOA.

Comment Letter I43

February 22, 2025

Ms. Erica Aguirre, AICP
Principal Planner, Subdivisions
Department of Regional Planning
320 West Temple Street, 13th floor

Dr. Susan Stone
24584 Sagecrest Cir.
Stevenson Ranch, CA 91381

RE: Response to Draft of Environmental Impact Report For Trails at Lyons Canyon Project

Sent by email to Eaguirre@planning.lacounty.gov

Dear Ms. Aguirre,

I am deeply concerned with the Environmental Impact Report for the proposed Trails at Lyons Canyon Project. Several critical issues have come to light that necessitate further examination and consideration. I43-1

Fire safety is crucial. Wildfires in Pacific Palisades and Altadena highlight the vulnerability of building communities in high fire zones. The Palisades and Altadena fires demonstrated how developments relying solely on vegetation reduction for fire mitigation provide insufficient protection. These disasters showed how fires go from house to house leaving oak trees unburnt. (L.A. Times What Plants Survived? 2/1/25) .

The environmental proposal should implement factors used in the successful defense against the Silverado fire. The Orchard Hills community suffered no damage and no deaths. This community was developed through a collaboration between the developer, the fire authority, and a fire behavior analyst. Fire mitigation was achieved with three tiers of fuel modification and by adhering to stringent construction standards which included the use of tempered glass windows, fire-rated exterior doors, cement walls, vinyl fences, and fire retardant-covered wood (L.A. Times A Blueprint for a More Fire Resistant L.A. 2/16/25). In contrast, the current proposal suggests installing only the minimum number of fire hydrants. Are we willing to accept development standards that do not adequately ensure the safety of the residents? LA County Fire noted in July 2022 that fire response times for this area are inadequate. Besides the aforementioned fire safety parameters, it is recommended to build and staff a fire station before granting company approval, especially considering recent incidents in Altadena and the Palisades. I43-2 I43-3 I43-4

1https://latimes.com/lifestyle newsletter/2015-02-01/what-trees-survived-in-our-terrible-fires-and-why-didn't-they-burn-lat-plants
2https://www.latimes.com/California/story/2025-02-19/could-this-irvine-neighborhood-be-the-blueprint-for-a-more-fire-resistent-l-a [1]

[1]

INTENTIONALLY LEFT BLANK

Response to Comment Letter I43

Susan Stone
February 22, 2025

I43-1 The commenter's specific concerns are addressed in further detail below in Responses I43-2 through I43-13.

I43-2 Please refer to Topical Response-1, which includes summaries of the Project's compliance with applicable regulations, fire safety features, and research on the efficacy of defensible space and ignition resistant construction to develop fire safe communities. While defensible space and conversion of fuels (i.e. vegetation) are critical components of the Project's fire protection system, the Project does not rely solely on vegetation management. The Project includes a multi-layered fire protection system that is based on ignition resistant buildings and landscapes, adherence to stringent codes, fire-fighting water availability, swift emergency response, and sound evacuation planning that includes a contingency option for residents who may be directed to temporarily shelter within the community during a wildfire evacuation. Similar to the Orchard Hills community referenced in this comment, Project design involved collaboration between the Project Applicant, the fire authority (i.e., the Los Angeles County Fire Department [LACoFD]), and fire behavior analysts.

Regarding development standards, the Project satisfies the requirements of California Code of Regulations Title 24, including Parts 2 and 9, the County Code Title 20 (Division 1) and 26 (including Chapter 7A), and the County Fire Code including Title 32, Section 4908. The Project's infrastructure components, including water supply, fire hydrants, automatic sprinkler systems, and residential hazard detectors (e.g., carbon monoxide or smoke) would all be code compliant. Additionally, the Project structures would be built utilizing the most current ignition resistant and fire protective construction methods, including but not limited to: Class A fire-rated roofing, ember resistant venting, multi-pane glazing with a minimum of one tempered pane windows meeting the requirements of State Fire Marshall 12-7A-2. All residential structures would include code compliant automatic, interior fire sprinkler systems. As detailed in Table 2-3, Code Exceeding Measures, of Topical Response-1, the Project also includes additional ignition-resistant construction requirements, beyond existing code requirements.

I43-3 Regarding development standards for fire safety, please refer to the response provided above for Comment I43-2. Regarding response times, as discussed in Section 4.15, Public Services, of the Draft EIR, the LACoFD indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site (see page 4.15-31 in the Draft EIR). Further, as detailed in Table 7 of the Fire Protection Plan included as Appendix M-1 of the Draft EIR, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from the closest Fire Station 124. Further, the Project satisfies the requirements of California Code of Regulations Title 24, including Parts 2 and 9, the County Code Title 20 (Division 1) and 26 (including Chapter 7A), and the County Fire Code including Title 32, Section 4908. The Project's infrastructure components, including water supply, fire hydrants, automatic sprinkler systems, and residential hazard detectors (e.g., carbon monoxide or smoke) would all be code compliant. The final number and location of future fire hydrants will be determined by the Los Angeles County Fire Department in compliance with County Code requirements.

I43-4 As discussed on page 4.15-33 in Section 4.15, Public Services, of the Draft EIR, the LACoFD determined that a new on-site fire station is not required for the Project. However, as the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. Furthermore, as discussed in Section 2.4.1.2, Project Specific Fire-Resistant Design Feature, and Section 2.4.3.1, Attorney General's Guidance, of Topical Response-1, in addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area.

I43-5 Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a Very High Fire Hazard Severity Zone. A discussion of fire history within 5 miles of the Project site, as well as wind conditions, is provided in Section 4.20.1, Existing Conditions beginning on page 4.20-3 of the Draft EIR. As stated on page 4.20-35 of the Draft EIR, the most common type of fire anticipated in the vicinity of the Project site is a wind-driven fire from the east/south/southeast, moving through the chaparral and sage scrub on the adjacent lands. To analyze the Project site's fire behavior pre- and post-development, the BehavePlus fire modeling system was used to model on-site fire behavior (Appendix M-1 of the Draft EIR). The program simulates the rate of fire spread, spotting distance, scorch height, tree mortality, fuel moisture, wind adjustment factor, and other variables. As stated on page 4.20-35 of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones (FMZs) on and off site and would not exacerbate the fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 and required through MM-4.20-2, Alternative Materials and Methods and MM-4.20-3, Annual Fuel Modification Zone Inspection as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, Wildfire Education Program, would reduce potential impacts related to wildfire spread to less than significant.

I43-6 The comment erroneously states that the "project calls for the removal of 334 SEA-protected trees". As stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR, the 334 SEA-Protected Tree impacts would be comprised of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin. The 53 SEA-Protected Trees that would be located within a debris basin would not be removed but are considered as removals for mitigation purposes. This is because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding. As such, for mitigation purposes, the Project would result in 318 SEA Protected Tree removals. The 318 SEA Protected Trees would be replaced in accordance with the Los Angeles County SEA Ordinance, codified in Chapter 22.102, Significant Ecological Areas, of the County Code, resulting in 772 replacement trees. Per MM-4.4.16, SEA Protected Trees Replacement/Compensation, should

there not be enough locations within the Project's Conservation Area (on-site and off-site) or Project landscaped areas for replacement trees, the Project Applicant must pay into the County's Protected Tree Fund (see page 4.4-94 in Section 4.4, Biological Resources of the Draft EIR). The Protected Tree Fund is codified in Section 22.102.070(F)(5) of the County Code as a viable option for mitigation for the replacement of the impacted trees.

Regarding a potential alternative to reduce impacts to SEA Protected Trees, Chapter 6, Alternatives, of the Draft EIR includes analysis of Alternative C, Reduced Footprint Alternative (beginning on page 6-56 of the Draft EIR). The approximately 28-acres of development under Alternative C represents a 67% reduction in the development footprint when compared to the Project. This would reduce direct impacts to SEA Protected Trees and would avoid impacts to the following tree species altogether: Fremont cottonwood, red willow, and arroyo willow. However, as stated on page 6-46 of the Draft EIR, Alternative C would still result in direct tree impacts to SEA Protected Trees (including heritage trees), and mitigation would still be required to reduce impacts to less than significant.

Furthermore, Alternative C would not reduce impacts to all environmental topic areas. For example, multi-family buildings under Alternative C would be 56 feet tall. This would increase the height of on-site buildings by 11 feet when compared to the Project's maximum height for buildings (which would be 45 feet at one portion of the Project site—the senior housing apartment building (see page 6-60 of the Draft EIR). In addition, as discussed on pages 6-69 and 6-70 of the Draft EIR, the preserved natural open space on-site would not be made available to the public, and no publicly accessible trailhead would be provided on-site under Alternative C. The lack of trail access/publicly accessible open space on-site under Alternative C would increase the park pressure of facilities within the Santa Clarita Valley area when compared to the Project. Finally, as stated on page 6-58 of the Draft EIR, Alternative C would not eliminate the significant unavoidable impact related to baseline residential VMT per capita and would not satisfy all Project objectives.

I43-7 Regarding habitat preservation for local wildlife species, the Project would provide approximately 150 acres of on-site natural open space. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR). Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement.

The Draft EIR provides a specific analysis of potential impacts to the California mountain lion, which is a state candidate for listing as endangered or threatened. As detailed in the analysis provided in Section 4.4, Biological Resources on pages 4.4-47 through 4.4-49 of the Draft EIR, implementation of MM-4.4-1 (On-Site Habitat Preservation), MM-4.4-2 (Habitat Mitigation and Monitoring Plan), MM-4.4-4 (Biological Monitoring), MM-4.4-5 (Demarcation of Disturbance Limits), MM-4.4-6 (Invasive Species Prevention), and MM-4.4-7 (Landscaping Plan) would reduce impacts to mountain lion to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources. With implementation of MM-4.4-13 (Homeowners' Association Covenants, Conditions, and Restrictions), impacts to mountain lions from human influence would be reduced to less than significant.

Regarding specific impacts to deer, coyotes, bobcats, and mountain lions, in accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the CEQA Guidelines, the Draft EIR analysis of the Project's potential adverse effects on wildlife species is focused on species identified as a candidate, sensitive, or special status species. Deer, coyote, and bobcat species are not considered candidate, sensitive, or special status species. As such, the Project would not result in significant impacts to these species. However, mitigation measures applicable to the California Mountain lion, particularly those related to habitat preservation, would also benefit deer, coyote and bobcat species. For example, the On-Site Conservation Area required per MM-4.4-1 would provide suitable live-in, breeding, foraging, cover, and dispersal habitat for a variety of wildlife species. The On-Site Conservation Area would also protect in perpetuity a valuable (and presently unprotected) connection between large tracts of adjacent conserved natural open space associated with the City of Santa Clarita's Woodlands Park and Rivendale Park and Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west wildlife movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and the San Gabriel Mountains to the west; this would preserve and avoid substantial loss of connectivity within the SEA. In addition, MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants on which wildlife species forage.

Regarding potential impacts to migratory patterns, Section 4.4, Biological Resources, of the Draft EIR includes an analysis of the Project's potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors (see page 4.4-56 of the Draft EIR). As discussed therein, dedication of the Project's On-Site Conservation Area (per MM-4.4-1, as managed in perpetuity through a conservation easement) would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space, therefore preserving and avoiding further encroachment on movement opportunities between regional conserved habitat blocks. As such, with implementation of MM-4.4-1, impacts to the wildlife movement due to habitat fragmentation would be reduced to less than significant.

I43-8 Potential impacts to public services in accordance with the County's Environmental Checklist Form and Appendix G of the State CEQA Guidelines are discussed in Section 4.15, Public Services, of the Draft EIR (see impact analysis beginning on page 4.15-29 of the Draft EIR). As discussed therein, public service impacts related to fire protection, sheriff protection, schools, parks, libraries, and public trails (i.e. "other public facilities") were determined to be less than significant with mitigation incorporated.

Regarding public transit, as stated on page 4.17-2 in Section 4.17, Transportation, of the Draft EIR, there are four local and four express Santa Clarita Transit bus routes in the Project site vicinity.

I43-9 Regarding evacuation of senior populations, please refer to Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living or convalescent facilities which would necessarily require care facilities and support staff.

As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page on page 4.20-62 in Section 4.20, Wildfire, of the Draft EIR, the Project's HOA would provide information to occupants regarding notifying the County

Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to require that the HOA's fire safety committee include the property manager from the senior housing, and to require that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program. The carpool program would ensure that all seniors who are not able to safely evacuate on their own are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.

I43-10 As stated on page 4.1-35 of Section 4.1, Aesthetics, of the Draft EIR, the senior housing building would not exceed the height limitations of the applicable C-3-DP zone. As discussed on pages 4.1-31 and 4.1-32 of the Draft EIR, the senior housing building would be screened by proposed landscaping or otherwise obstructed from view by topography and/or other proposed development, and the building would be predominantly light sand in color, with earthy brown and/or jewel-toned embellishments incorporated into the trims, eaves, corbels, and doors. As further detailed in Section 4.1, Aesthetics, of the Draft EIR, the senior housing building would incorporate design elements from both the Wrightian and Irving Gill architectural styles and would be scaled and finished to blend into the surrounding residential community. These architectural styles, together with a coordinated color palate, would help achieve a cohesiveness of design across the developed, northern portion of the Project site, which would contribute to the visual quality of the Project site as viewed from public vantage points.

Regarding evacuation of senior populations, please refer to the response provided above for Comment I43-9.

I43-11 As discussed on page 4.20-45 in Section 4.20, Wildfire, of the Draft EIR, the Project's internal circulation consists of a loop roadway system that connects both the primary and secondary access points along The Old Road, which satisfies secondary access requirements detailed in Los Angeles County Code of Ordinances Title 21, Chapter 21.24, Design Standards, Part 1, Access. The Project also includes a 28-foot-wide private access road along the northern and western perimeter for emergency vehicle access.

A detailed response related to evacuation is provided in Topical Response-1. As discussed therein, the County would coordinate a centralized emergency operation in the event of an emergency/disaster. To support successful evacuation from the Project site, the Draft EIR identifies MM-4.20-1, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. Specifically, MM-4.20-1 requires provision of biannual emails and mailers with reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires; establishment of a community website dedicated to wildfire awareness and prevention and evacuation; provision of community workshops and webinars; provision of "new resident" packets that include information about how to build a "go-

bag," tools to prepare a household evacuation plan, and a list of agencies and resources for receiving trusted information; provision of emergency alert information; maintenance of trail signage for fire-safe hiking activities; and establishment of a fire safety oversight committee.

A Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR) was prepared to evaluate the Project's consistency with relevant emergency evacuation plans and emergency response plans, disclose the prevention and minimization regulations and measures applicable to the Project, and determine evacuation times for the existing and post-Project conditions, as well as provide emergency preparedness information and resources to increase occupant preparedness and facilitate efficient evacuation in the event of an emergency. Importantly, emergency personnel who issue evacuation orders can consider the additional time needed to implement an evacuation when determining when and where to issue evacuation orders. Risk to nearby development, including the Project or existing communities, is assessed on a regular basis in a wildfire event. Hours or days of lead time may be available to assess risk and make evacuation determinations. Moreover, drifting smoke, awareness of the risk, road closures, or other factors result in people avoiding the area in a fire event.

In short, a variety of factors may make a longer evacuation perfectly safe. That is why a multifaceted approach to fire-resilient development is required and is incorporated into the Project. The Project's fire-resistant design features include ignition resistant construction methods, hardened structures and corridors, including a perimeter fire access lane, fuel modification zones, roadside fuel modification, and sufficient fire flow for firefighting efforts.

I43-12 Under Section 15125 of the State CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of a project to provide the "baseline condition" against which project-related impacts are compared. Generally, the baseline condition is the physical condition that exists when the NOP was published, which was June 16, 2022 for this Project. Field measurements for noise used in the Draft EIR analysis (included in Appendix H of the Draft EIR) were taken on June 13, 2022, and June 14, 2022, which coincides with publication of the NOP. As such, the noise measurements reflect the appropriate baseline conditions for the Project. Any new lanes that may potentially be added in the future could increase traffic volumes on I-5, which would subsequently increase ambient noise levels. The Project would also contribute to an increase in ambient noise levels. However, because the Project contribution would not change regardless of traffic volume on I-5, the Project would contribute a smaller proportionate addition of Project traffic volumes if traffic volumes were to increase on I-5. Therefore, a reduced decibel increment would occur as compared to was presented in the Draft EIR (Table 4.13-19 of Section 4.13, Noise) and the analysis presented in the Draft EIR provides a conservative assessment of future operational conditions.

Additionally, operational noise impacts from the Project, including from the proposed new residences and recreational amenity uses were analyzed in the Draft EIR, starting on page 4.13-25 of the Draft EIR. As stated on page 4.13-26, the on-site recreation center is located internal to the site, with multiple rows of structures between this location and any of the exterior Project site boundaries. Consequently, noise associated with groups enjoying the recreation center, recreational noise at the outdoor pool, and noise from the dog park would be effectively blocked from propagation off-site by the surrounding on-site structures. Page 4.13-26 details that, usage of trails represent negligible additions to the noise environment and even passive recreational use of connected trails on and off-site by future residents would not be anticipated to result in noise levels that would be discernible from ambient noise levels, or to contribute to noise levels from stationary noise sources that would increase such levels by even

1 decibel. Additionally, Table 4.13-16, Stationary Noise Source Levels Compared to Noise Ordinance, on page 4.13-27 of the Draft EIR, and Table 4.13-17, Stationary Noise Source Modeling Results Compared to Ambient Noise Levels, on page 4.13-28 of the Draft EIR, detail the noise levels to sensitive receptors (i.e. residences nearest the Project site in Sunset Pointe) and determined that modeled noise levels were below the daytime and nighttime threshold limits.

I43-13 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, due to recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025, and as such, the Final EIR has allowed additional time to further consider the Project. Additional comments received during this extension period have been received and responded to accordingly. Specific comments related to fire safety/evacuation, tree removals, wildlife, public transit, and noise are addressed above in further detail.

INTENTIONALLY LEFT BLANK

Comment Letter I44

From: John Powell
To: Erica G. Aguirre
Subject: Lyon"s Canyon Project
Date: Saturday, February 22, 2025 12:28:55 PM

CAUTION: External Email. Proceed Responsibly.

Please don't add to our traffic woes while whittling away at the remaining natural areas. I44-1

John Powell
25460 Sheffield Lane
Santa Clarita 91350
661-755-0809

Response to Comment Letter I44

John Powell
February 22, 2025

I44-1 The Project would have a significant and unavoidable transportation impact related to vehicle miles traveled (VMT). The Project was forecast to generate 20.5 VMT per capita (see Draft EIR page 4.17-22). The Project was thus determined to exceed the County's threshold of 10.6 residential VMT per capita by 9.9 VMT per capita. With implementation of MM-4.17-2 (Transportation Demand Management [TDM] Program), VMT impacts would be reduced to the point that the Project would generate 19 VMT per capita, which would still exceed the County's threshold of 10.6 VMT per capita. Thus, despite implementation of all feasible mitigation, the Project would have a significant and unavoidable impact on VMT. Automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17 of the Draft EIR and the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

Regarding impacts to open space, the Draft EIR describes on pages 4.4-59 and 4.4-60 of Section 4.4, Biological Resources, that as a result of the Project's clustered design, the Project is able to permanently preserve via conservation easement approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage in accordance with MM-4.4-1, On-Site Habitat Preservation. Habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. However, existing non-dedicated trails on the southern portion of the Project site would remain with implementation of the Project and would connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon. See Figure 3-5, Conceptual Trails Map, for details. Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement.

Comment Letter I45

From: G. Wise
To: Erica G. Aguirre
Subject: Lyons Canyon Report Concern
Date: Saturday, February 22, 2025 8:43:23 PM

CAUTION: External Email. Proceed Responsibly.

Ms. Erica G. Aguirre, AICP

Principal Planner, Subdivisions
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th floor
Los Angeles, CA 90012

RE: Response to Draft of Environmental Impact Report for Trails at Lyons Canyon Project No. 2021-001195-(5)

Dear Ms. Aguirre,

I am deeply concerned with the Environmental Impact Report for the proposed Trails at Lyons Canyon Project. Several critical issues have come to light that necessitate further examination and consideration.

- Fire safety is crucial. Wildfires in Pacific Palisades and Altadena highlight the vulnerability of building communities in high fire zones. The Palisades and Altadena fires demonstrated how developments relying solely on vegetation reduction for fire mitigation provide insufficient protection (L.A. Times What Plants Survived? 2/1/25).

- The environmental proposal should implement factors used in the successful defense against the Silverado fire. The Orchard Hills community suffered no damage and no deaths. This community was developed through a collaboration between the developer, the fire authority, and a fire behavior analyst. Fire mitigation was achieved with three tiers of fuel modification and by adhering to stringent construction standards which included the use of tempered glass windows, fire-rated exterior doors, cement walls, vinyl fences, and fire retardant-covered wood (L.A.Times A Blueprint for a More Fire-Resistant L.A. 2/16/25).

- In contrast, the current proposal suggests installing only the minimum number of fire hydrants. Are we willing to accept development standards that do not adequately ensure the safety of the residents? LA County Fire noted in July 2022 that fire response times for this area are inadequate.

I45-1

I45-2

I45-3

- Besides the fire safety parameters, it is recommended to build and staff a fire station before granting company approval, especially considering recent incidents in Altadena and the Palisades. I45-4

It is important to note that **seven** wildfires have occurred within five miles of the proposed development over the past ten years, with three being significant. The Santa Ana winds blow through Lyons Canyon. It is evident that stringent mitigation measures are necessary for placing a development in a high-severity fire zone when these winds are present. I45-5

- The project calls for the removal of 334 SEA protected trees including the removal of 22 Heritage Oaks. Santa Clarita Valley has already lost many heritage oaks. These protected trees should not be removed. No one in two or three generations will ever see trees this old again. Instead, in compliance with the County Oak Ordinance, an alternative should be presented that will protect these trees. I45-6

  - https://www.latimes.com/lifestyle/newsletter/2025-02-01/what-trees-survived-in-our-terrible-fires-and-why-didnt-they-burn-lat-plants

  - https://www.latimes.com/california/story/2025-02-19/could-this-irvine-neighborhood-be-the-blueprint-for-a-more-fire-resistant-l-a

- Lyons Canyon is situated adjacent to a preserved open space. The canyon serves as a natural habitat for deer, coyotes, bobcats and mountain lions. Hence any development in this area will significantly affect their habitats and migration patterns. I45-7

- This report claims the impact on Public Services is minimal or mitigated. The proposed property located in the unincorporated L.A. County lacks public transportation, affecting seniors who rely on it. Additionally, placing seniors at high risk with difficult evacuation in crises like wildfires or earthquakes might not be wise. The Altadena wildfire highlighted chaotic attempts to rescue seniors from a retirement home. If a proposal is finalized, better planning for evacuation is needed. I45-8 I45-9

- The project calls for a senior apartment 45 feet taller than neighborhood buildings, which are only two floors. The height does not match the neighborhood. A two-floor building would be in keeping with the neighborhood. How will seniors evacuate if there is no electricity? I45-10

- The plans call for two entrances/exits onto the Old Road. Note the only two ways to exit the valley for the west side of Santa Clarita are the Old Road and the 5 freeway. The recent evacuation of Castaic caused a severe traffic jam on I45-11

the Old Road and on the 5 freeway. It took hours for fleeing residents to exit the valley to the south. The placement of another development feeding onto the two-lane Old Road would create a blockage for the 21, 972 residents of Stevenson Ranch and the businesses north of Lyons Canyon.

I45-11 Cont.

- The project claims a "less than significant impact on noise" citing a 2022 study. However, since then, additional lanes have been added to the nearby 5 freeway increasing traffic noise. Combined with the proposed outdoor pool, parking lots, and resident noise, this will negatively affect noise levels on existing trails and for Sunset Pointe Neighbors.

I45-12

Further consideration is required before approval of the environmental report due to the placement of seniors and residents in a wildfire risk zone. Mitigation based on new information from the Silverado, Palisades and Altadena fires is very important. Alternative proposals regarding the number of SEA trees removed need to be considered. The disturbance of wildlife habitats and migration should be studied along with the availability of public transportation, an updated noise study and preparation of workable evacuation plans.

I45-13

Sincerely, Mr. Wise

A concerned Sunset Point Homeowner

INTENTIONALLY LEFT BLANK

Response to Comment Letter I45

G. Wise
February 22, 2025

I45-1 The commenter's specific concerns are addressed in further detail below.

I45-2 Please refer to Topical Response-1, which includes summaries of the Project's compliance with applicable regulations, fire safety features, and research on the efficacy of defensible space and ignition resistant construction to develop fire safe communities. While defensible space and conversion of fuels (i.e., vegetation) are critical components of the Project's fire protection system, the Project does not rely solely on vegetation management. The Project includes a multi-layered fire protection system that is based on ignition resistant buildings and landscapes, adherence to stringent codes, fire-fighting water availability, swift emergency response, and sound evacuation planning that includes a contingency option for residents who may be directed to temporarily shelter within the community during a wildfire evacuation. Similar to the Orchard Hills community referenced in this comment, Project design involved collaboration between the Project Applicant, the fire authority (i.e., the Los Angeles County Fire Department [LACoFD]), and fire behavior analysts.

Regarding development standards, the Project satisfies the requirements of California Code of Regulations Title 24, including Parts 2 and 9, the County Code Title 20 (Division 1) and 26 (including Chapter 7A), and the County Fire Code including Title 32, Section 4908. The Project's infrastructure components, including water supply, fire hydrants, automatic sprinkler systems, and residential hazard detectors (e.g., carbon monoxide or smoke) would all be code compliant. Additionally, the Project structures would be built utilizing the most current ignition resistant and fire protective construction methods, including but not limited to: Class A fire-rated roofing, ember resistant venting, multi-pane glazing with a minimum of one tempered pane windows meeting the requirements of State Fire Marshall 12-7A-2. All residential structures would include code compliant automatic, interior fire sprinkler systems. As detailed in Table 2-3, Code Exceeding Measures, of Topical Response-1, the Project also includes additional ignition-resistant construction requirements, beyond existing code requirements.

I45-3 Regarding development standards for fire safety, please refer to the response provided above for Comment I45-2. Regarding response times, as discussed in Section 4.15, Public Services, of the Draft EIR, the LACoFD indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site (see page 4.15-31 in the Draft EIR). Further, as detailed in Table 7 of the Fire Protection Plan included as Appendix M-1 of the Draft EIR, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from the closest Fire Station 124. The Draft EIR concluded that Project impacts related to fire protection services would be less than significant with the implementation of MM-4.17-1, Construction Traffic Management Plan, MM-4.20-4, Construction Fire Prevention Plan, and MM-4.20-5, Construction-Related Fire Prevention Measures. Further, the Project satisfies the requirements of California Code of Regulations Title 24, including Parts 2 and 9, the County Code Title 20 (Division 1) and 26 (including Chapter 7A), and the County Fire Code including Title 32, Section 4908. The Project's infrastructure components, including water supply, fire hydrants, automatic sprinkler systems, and residential hazard detectors (e.g., carbon monoxide or smoke) would

all be code compliant. The final number and location of fire hydrants will be determined by the Los Angeles County Fire Department in compliance with County Code requirements.

I45-4 As discussed on page 4.15-33 in Section 4.15, Public Services, of the Draft EIR, the LACoFD determined that a new on-site fire station is not required for the Project. However, as the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. Furthermore, as discussed in Section 2.4.1.2, Project Specific Fire-Resistant Design Feature, and Section 2.4.3.1, Attorney General's Guidance, of Topical Response-1, in addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area.

I45-5 Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a Very High Fire Hazard Severity Zone. A discussion of fire history within 5 miles of the Project site, as well as wind conditions, is provided in Section 4.20.1, Existing Conditions, beginning on page 4.20-3 of the Draft EIR. As stated on page 4.20-35 of the Draft EIR, the most common type of fire anticipated in the vicinity of the Project site is a wind-driven fire from the east/south/southeast, moving through the chaparral and sage scrub on the adjacent lands. To analyze the Project site's fire behavior pre- and post-development, the BehavePlus fire modeling system was used to model on-site fire behavior (Appendix M-1 of the Draft EIR). The program simulates rate of fire spread, spotting distance, scorch height, tree mortality, fuel moisture, wind adjustment factor, and other variables. As stated on page 4.20-35 of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones (FMZs) on and off site and would not exacerbate the fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 and required through MM-4.20-2, Alternative Materials and Methods and MM-4.20-3, Annual Fuel Modification Zone Inspection as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, Wildfire Education Program, would reduce potential impacts related to wildfire spread to less than significant.

I45-6 The comment erroneously states that the "project calls for the removal of 334 SEA-protected trees". As stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR, the 334 SEA-Protected Tree impacts would be comprised of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin. The 53 SEA-Protected Trees that would be located within a debris basin would not be removed but are considered as removals for mitigation purposes. This is because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding. As such, for mitigation purposes, the Project would result in 318 SEA Protected Tree removals.

The 318 SEA Protected Trees would be replaced in accordance with the Los Angeles County SEA Ordinance, codified in Chapter 22.102, Significant Ecological Areas, of the County Code, resulting in 772 replacement trees. Per MM-4.4.16, SEA Protected Trees Replacement/Compensation, should there not be enough locations within the Project's Conservation Area (on-site and off-site) or Project landscaped areas for replacement trees, the Project Applicant must pay into the County's Protected Tree Fund (see page 4.4-94 in Section 4.4, Biological Resources of the Draft EIR). The Protected Tree Fund is codified in Section 22.102.070(F)(5) of the County Code as a viable option for mitigation for the replacement of the impacted trees.

Regarding a potential alternative to reduce impacts to SEA Protected Trees, Chapter 6, Alternatives, of the Draft EIR includes analysis of Alternative C, Reduced Footprint Alternative (beginning on page 6-56 of the Draft EIR). The approximately 28-acres of development under Alternative C represents a 67% reduction in the development footprint when compared to the Project. This would reduce direct impacts to SEA Protected Trees and would avoid impacts to the following tree species altogether: Fremont cottonwood, red willow, and arroyo willow. However, as stated on page 6-46 of the Draft EIR, Alternative C would still result in direct tree impacts to SEA Protected Trees (including heritage trees), and mitigation would still be required to reduce impacts to less than significant.

Furthermore, Alternative C would not reduce impacts to all environmental topic areas. For example, multi-family buildings under Alternative C would be 56 feet tall. This would increase the height of on-site buildings by 11 feet when compared to the Project's maximum height for buildings (which would be 45 feet at one portion of the Project site—the senior housing apartment building (see page 6-60 of the Draft EIR). In addition, as discussed on pages 6-69 and 6-70 of the Draft EIR, the preserved natural open space on-site would not be made available to the public, and no publicly accessible trailhead would be provided on-site under Alternative C. The lack of trail access/publicly accessible open space on-site under Alternative C would increase the park pressure of facilities within the Santa Clarita Valley area when compared to the Project. Finally, as stated on page 6-58 of the Draft EIR, Alternative C would not eliminate the significant unavoidable impact related to baseline residential VMT per capita and would not satisfy all Project objectives.

The two Los Angeles Times articles linked in this comment do not specifically address the Project or the Draft EIR analysis. However, these articles are included in the record and will be provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I45-7 Regarding habitat preservation for local wildlife species, the Project would provide approximately 150 acres of on-site natural open space. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR). Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement.

The Draft EIR provides a specific analysis of potential impacts to the California mountain lion, which is a state candidate for listing as endangered or threatened. As detailed in the analysis provided in Section 4.4, Biological Resources, on pages 4.4-47 through 4.4-49 of the Draft EIR, implementation

of MM-4.4-1 (On-Site Habitat Preservation), MM-4.4-2 (Habitat Mitigation and Monitoring Plan), MM-4.4-4 (Biological Monitoring), MM-4.4-5 (Demarcation of Disturbance Limits), MM-4.4-6 (Invasive Species Prevention), and MM-4.4-7 (Landscaping Plan) would reduce impacts to mountain lion to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources. With implementation of MM-4.4-13 (Homeowners' Association Covenants, Conditions, and Restrictions), impacts to mountain lions from human influence would be reduced to less than significant.

Regarding specific impacts to deer, coyotes, bobcats, and mountain lions, in accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the CEQA Guidelines, the Draft EIR analysis of the Project's potential adverse effects on wildlife species is focused on species identified as a candidate, sensitive, or special status species. Deer, coyote, and bobcat species are not considered candidate, sensitive, or special status species. As such, the Project would not result in significant impacts to these species. However, mitigation measures applicable to the California Mountain lion, particularly those related to habitat preservation, would also benefit deer, coyote and bobcat species. For example, the On-Site Conservation Area required per MM-4.4-1 would provide suitable live-in, breeding, foraging, cover, and dispersal habitat for a variety of wildlife species. The On-Site Conservation Area would also protect in perpetuity a valuable (and presently unprotected) connection between large tracts of adjacent conserved natural open space associated with the City of Santa Clarita's Woodlands Park and Rivendale Park and Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west wildlife movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and the San Gabriel Mountains to the west; this would preserve and avoid substantial loss of connectivity within the SEA. In addition, MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants on which wildlife species forage on.

Regarding potential impacts to migratory patterns, Section 4.4, Biological Resources, of the DEIR includes an analysis of the Project's potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors (see page 4.4-56 of the Draft EIR). As discussed therein, dedication of the Project's On-Site Conservation Area (per MM-4.4-1, as managed in perpetuity through a conservation easement) would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space, therefore preserving and avoiding further encroachment on movement opportunities between regional conserved habitat blocks. As such, with implementation of MM-4.4-1, impacts to the wildlife movement due to habitat fragmentation would be reduced to less than significant.

I45-8 Potential impacts to public services in accordance with the County's Environmental Checklist Form and Appendix G of the State CEQA Guidelines are discussed in Section 4.15, Public Services, of the Draft EIR (see impact analysis beginning on page 4.15-29 of the Draft EIR). As discussed therein, public services impacts related to fire protection, sheriff protection, schools, parks, libraries, and public trails (i.e. "other public facilities") were determined to be less than significant with mitigation incorporated.

Regarding public transit, as stated on page 4.17-2 in Section 4.17, Transportation, of the Draft EIR there are four local and four express Santa Clarita Transit bus routes in the Project site vicinity.

I45-9 Regarding evacuation of senior populations, please refer to Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living or convalescent facilities which would necessarily require care facilities and support staff.

As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page 4.20-62 in Section 4.20, Wildfire, of the Draft EIR, the Project's HOA would provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to require that the HOA's fire safety committee include the property manager from the senior housing, and to require that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program. The carpool program would ensure that all seniors who are not able to safely evacuate on their own are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1. With revisions to MM-4.20-1, operational impacts related to the substantial impairment of an adopted emergency response plan or emergency evacuation plan would remain less than significant.

I45-10 As stated on page 4.1-35 of Section 4.1, Aesthetics, of the Draft EIR, the senior housing building would not exceed the height limitations of the applicable C-3-DP zone. As discussed on pages 4.1-31 and 4.1-32 of the Draft EIR, the senior housing building would be screened by proposed landscaping or otherwise obstructed from view by topography and/or other proposed development, and the building would be predominantly light sand in color, with earthy brown and/or jewel-toned embellishments incorporated into the trims, eaves, corbels, and doors. As further detailed in Section 4.1, Aesthetics, of the Draft EIR, the senior housing building would incorporate design elements from both the Wrightian and Irving Gill architectural styles and would be scaled and finished to blend into the surrounding residential community. These architectural styles, together with a coordinated color palate, would help achieve a cohesiveness of design across the developed, northern portion of the Project site, which would contribute to the visual quality of the Project site as viewed from public vantage points.

Regarding evacuation of senior populations, please refer to the response provided above for Comment I45-9.

I45-11 As discussed on page 4.20-45 in Section 4.20, Wildfire, of the Draft EIR, the Project's internal circulation consists of a loop roadway system that connects both the primary and secondary access points along The Old Road, which satisfies secondary access requirements detailed in Los Angeles County Code of Ordinances Title 21, Chapter 21.24, Design Standards, Part 1, Access. The Project also

includes a 28-foot-wide private access road along the northern and western perimeter for emergency vehicle access.

A detailed response related to evacuation is provided in Topical Response-1. As discussed therein, the County would coordinate a centralized emergency operation in the event of an emergency/disaster. To support successful evacuation from the Project site, the Draft EIR identifies MM-4.20-1, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. Specifically, MM-4.20-1 requires provision of biannual emails and mailers with reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires; establishment of a community website dedicated to wildfire awareness and prevention and evacuation; provision of community workshops and webinars; provision of "new resident" packets that include information about how to build a "go-bag," tools to prepare a household evacuation plan, and a list of agencies and resources for receiving trusted information; provision of emergency alert information; maintenance of trail signage for fire-safe hiking activities; and establishment of a fire safety oversight committee.

A Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR) was prepared to evaluate the Project's consistency with relevant emergency evacuation plans and emergency response plans, disclose the prevention and minimization regulations and measures applicable to the Project, and determine evacuation times for the existing and post-Project conditions, as well as provide emergency preparedness information and resources to increase occupant preparedness and facilitate efficient evacuation in the event of an emergency. Importantly, emergency personnel who issue evacuation orders can consider the additional time needed to implement an evacuation when determining when and where to issue evacuation orders. Risk to nearby development, including the Project or existing communities, is assessed on a regular basis in a wildfire event. Hours or days of lead time may be available to assess risk and make evacuation determinations. Moreover, drifting smoke, awareness of the risk, road closures, or other factors result in people avoiding the area in a fire event.

In short, a variety of factors may make a longer evacuation perfectly safe. That is why a multifaceted approach to fire-resilient development is required and is incorporated into the Project. The Project's fire-resistant design features include ignition resistant construction methods, hardened structures and corridors, including a perimeter fire access lane, fuel modification zones, roadside fuel modification, and sufficient fire flow for firefighting efforts. Accordingly, operational wildfire evacuation impacts would be less than with significant with mitigation.

I45-12 Under Section 15125 of the State CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of a project to provide the "baseline condition" against which project-related impacts are compared. Generally, the baseline condition is the physical condition that exists when the NOP was published, which was June 16, 2022 for this Project. Field measurements for noise used in the Draft EIR analysis (included in Appendix H of the Draft EIR) were taken on June 13, 2022 and June 14, 2022, which coincides with publication of the NOP. As such, the noise measurements reflect the appropriate baseline conditions for the Project. Any potential additional lanes that consequently could increase volumes of traffic on I-5 would increase the future ambient (baseline) noise levels to which the Project contribution would add. However, because the Project traffic trip contribution is an absolute number (i.e., would be independent of traffic volume on I-5), the Project's trip contribution would represent a smaller proportionate addition of Project traffic volumes on I-5 if lanes are added and the future baseline traffic volumes were to increase on I-5. Therefore, if I-

5 baseline traffic volumes are greater than represented for 2022, the Project's trip contribution and relative increase in traffic noise over baseline conditions would be less than what is shown in the Draft EIR (Table 4.13-19 of Section 4.13, Noise) and the analysis presented there provides a conservative assessment of future operational conditions.

Additionally, operational noise impacts from the Project, including from the proposed new residences and recreational amenity uses were analyzed in the Draft EIR, starting on page 4.13-25 of the Draft EIR. As stated on page 4.13-26, the on-site recreation center is located internal to the site, with multiple rows of structures between this location and any of the exterior Project site boundaries. Consequently, noise associated with groups enjoying the recreation center, recreational noise at the outdoor pool, and noise from the dog park would be effectively blocked from propagation off-site by the surrounding on-site structures. Page 4.13-26 details that, usage of trails represent negligible additions to the noise environment and even passive recreational use of connected trails on and off-site by future residents would not be anticipated to result in noise levels that would be discernible from ambient noise levels, or to contribute to noise levels from stationary noise sources that would increase such levels by even 1 decibel. Additionally, Table 4.13-16, Stationary Noise Source Levels Compared to Noise Ordinance, on page 4.13-27 of the Draft EIR, and Table 4.13-17, Stationary Noise Source Modeling Results Compared to Ambient Noise Levels, on page 4.13-28 of the Draft EIR, detail the noise levels to sensitive receptors (i.e. residences nearest the Project site in Sunset Pointe) and determined that modeled noise levels were below the daytime and nighttime threshold limits.

I45-13 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, due to recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025, and as such, the Final EIR has allowed additional time to further consider the Project. Additional comments received during this extension period have been received and responded to accordingly. Specific comments related to fire safety/evacuation, tree removals, wildlife, public transit, and noise are addressed above in further detail.

INTENTIONALLY LEFT BLANK

Comment Letter I46

From: Kim Engeseth-Gmail
To: Erica G. Aguirre
Subject: Lyon"s Canyon Project
Date: Monday, February 24, 2025 2:28:08 PM

CAUTION: External Email. Proceed Responsibly.

Thank you for granting an extension of the comment period for this project. Its important for the County
to finish its fire investigation and develop ways to address the
fire danger posed to future residents of this project. I46-1

It is important that the community and the County have an adequate time after these fires to ensure that evacuation routes are adequate, and that all recommendations that might be made after evaluation of the Eaten and Palisades fires, are incorporated into this project, especially because senior housing is proposed. I46-2

INTENTIONALLY LEFT BLANK

Response to Comment Letter I46

Kim Engeseth
February 24, 2025

I46-1 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. As noted by the comment, in light of the recent Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025. Additional comments were accepted during the public review extension. The extension was not contingent on the completion of fire investigations associated with recent fires in Southern California. The Draft EIR adequately analyzes impacts related to wildfire within Section 4.20, Wildfire, and incorporates mitigation measures (MM-4.20-1 through MM-4.20-5) to reduce significant impacts. This section of the Draft EIR is largely based on the evaluation and results of the Fire Protection Plan (Appendix M-1 to the Draft EIR) and the Wildfire Evacuation Plan (Appendix M-2). At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity. The data collected was from CAL FIRE's Fire and Resources Assessment Program database, which provides fire history information and fire perimeter data dating to the late 1800s for all fires over 10 acres in size (Draft EIR, page 4.20-4). For more information see Appendix B, Fire History, of Appendix M-1 to the Draft EIR. Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. The recent fire activity in the region does not change the conclusions detailed in Draft EIR Section 4.20. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires in Topical Response-1.

For a more detailed response related to fire protection and safety in general, please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities and the region's fire history.

I46-2 Evacuation routes are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located in proximity to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations

of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

Regarding evacuation of senior populations, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be retirement or convalescent facilities which would necessarily require care facilities and support staff.

Comment Letter I47

2/26/2025

Sent Via Email to: eaguirre@planning.lacounty.gov

Ms. Erica G. Aguirre, AICP
Principal Planner, Subdivisions
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th floor
Los Angeles, CA 90012

RE: Response to Draft of Environmental Impact Report for Trails at Lyons Canyon
Project No. 2021-001195-(5)

Dear Ms. Aguirre,

I am deeply concerned with the Environmental Impact Report for the proposed Trails at Lyons Canyon Project. Several critical issues have come to light that necessitate further examination and consideration. I47-1

- Fire safety is crucial. Wildfires in Pacific Palisades and Altadena highlight the vulnerability of building communities in high-fire zones. The Palisades and Altadena fires demonstrated how developments relying solely on vegetation reduction for fire mitigation provide insufficient protection (L.A. Times What Plants Survived? 2/1/25).

- The environmental proposal should implement factors used in the successful defense against the Silverado fire. The Orchard Hills community suffered no damage and no deaths. This community was developed by collaborating with the developer, the fire authority, and a fire behavior analyst. Fire mitigation was achieved with three tiers of fuel modification and by adhering to stringent construction standards, which included the use of tempered glass windows, fire-rated exterior doors, cement walls, vinyl fences, and fire retardant-covered wood (L.A. Times A Blueprint for a More Fire-Resistant L.A. 2/16/25). I47-2

- In contrast, the current proposal suggests installing only the minimum number of fire hydrants. Are we willing to accept development standards that do not adequately ensure the safety of the residents? LA County Fire noted in July 2022 that fire response times for this area are inadequate. I47-3

- Besides the fire safety parameters, it is recommended to build and staff a fire station before granting company approval, especially considering recent incidents in Altadena and the Palisades. I47-4

It is important to note that **seven** wildfires have occurred within five miles of the proposed development over the past ten years, with three being significant. The Santa Ana winds blow through Lyons Canyon. It is evident that stringent mitigation measures are necessary for placing a development in a high-severity fire zone when these winds are present. I47-5

- The project calls for the removal of 334 SEA protected trees including the removal of 22 Heritage Oaks. Santa Clarita Valley has already lost many heritage oaks. These protected trees should not be removed. No one in two or three generations will ever see trees this old again. Instead, in compliance with the County Oak Ordinance, an alternative should be presented that will protect these trees. I47-6
    - https://www.latimes.com/lifestyle/newsletter/2025-02-01/what-trees-survived-in-our-terrible-fires-and-why-didnt-they-burn-lat-plants
    - https://www.latimes.com/california/story/2025-02-19/could-this-irvine-neighborhood-be-the-blueprint-for-a-more-fire-resistant-l-a
- Lyons Canyon is situated adjacent to a preserved open space. The canyon serves as a natural habitat for deer, coyotes, bobcats and mountain lions. Hence any development in this area will significantly affect their habitats and migration patterns. I47-7
- This report claims the impact on Public Services is minimal or mitigated. The proposed property located in the unincorporated L.A. County lacks public transportation, affecting seniors who rely on it. Additionally, placing seniors at high risk with difficult evacuation in crises like wildfires or earthquakes might not be wise. The Altadena wildfire highlighted chaotic attempts to rescue seniors from a retirement home. If a proposal is finalized, better planning for evacuation is needed. I47-8 I47-9
- The project calls for a senior apartment 45 feet taller than neighborhood buildings, which are only two floors. The height does not match the neighborhood. A two-floor building would be in keeping with the neighborhood. How will seniors evacuate if there is no electricity? I47-10
- The plans call for two entrances/exits onto the Old Road. Note the only two ways to exit the valley for the west side of Santa Clarita are the Old Road and the 5 I47-11

freeway. The recent evacuation of Castaic caused a severe traffic jam on the Old Road and on the 5 freeway. It took hours for fleeing residents to exit the valley to the south. The placement of another development feeding onto the two-lane Old Road would create a blockage for the 21, 972 residents of Stevenson Ranch and the businesses north of Lyons Canyon.

I47-11 Cont.

- The project claims a "less than significant impact on noise," citing a 2022 study. However, since then, additional lanes have been added to the nearby 5 freeway, increasing traffic noise. Combined with the proposed outdoor pool, parking lots, and resident noise, this will negatively affect noise levels on existing trails and for Sunset Pointe Neighbors.

I47-12

Further consideration is required before approval of the environmental report due to the placement of seniors and residents in a wildfire risk zone. Mitigation based on new information from the Silverado, Palisades and Altadena fires is very important. Alternative proposals regarding the number of SEA trees removed need to be considered. The disturbance of wildlife habitats and migration should be studied along with the availability of public transportation, an updated noise study and preparation of workable evacuation plans.

I47-13

Sincerely,

Residents of Sunset Pointe

Kathy Gonzales and Norma Conklin

24834 SageCrest Circle

Stevenson Ranch, CA 91381

INTENTIONALLY LEFT BLANK

Response to Comment Letter I47

Kathy Gonzales and Norma Conklin
February 26, 2025

I47-1 The commenter's specific concerns are addressed in further detail below.

I47-2 Please refer to Topical Response-1, which includes summaries of the Project's compliance with applicable regulations, fire safety features, and research on the efficacy of defensible space and ignition resistant construction to develop fire safe communities. While defensible space and conversion of fuels (i.e., vegetation) are critical components of the Project's fire protection system, the Project does not rely solely on vegetation management. The Project includes a multi-layered fire protection system that is based on ignition resistant buildings and landscapes, adherence to stringent codes, fire-fighting water availability, swift emergency response, and sound evacuation planning that includes a contingency option for residents who may be directed to temporarily shelter within the community during a wildfire evacuation. Similar to the Orchard Hills community referenced in this comment, Project design involved collaboration between the Project Applicant, the fire authority (i.e., the Los Angeles County Fire Department [LACoFD]), and fire behavior analysts.

Regarding development standards, the Project satisfies the requirements of California Code of Regulations Title 24, including Parts 2 and 9, the County Code Title 20 (Division 1) and 26 (including Chapter 7A), and the County Fire Code including Title 32, Section 4908. The Project's infrastructure components, including water supply, fire hydrants, automatic sprinkler systems, and residential hazard detectors (e.g., carbon monoxide or smoke) would all be code compliant. Additionally, the Project structures would be built utilizing the most current ignition resistant and fire protective construction methods, including but not limited to: Class A fire-rated roofing, ember resistant venting, multi-pane glazing with a minimum of one tempered pane windows meeting the requirements of State Fire Marshall 12-7A-2. All residential structures would include code compliant automatic, interior fire sprinkler systems. As detailed in Table 2-3, Code Exceeding Measures, of Topical Response-1, the Project also includes additional ignition-resistant construction requirements, beyond existing code requirements.

I47-3 Regarding development standards for fire safety, please refer to the response provided above for Comment I47-2. Regarding response times, as discussed in Section 4.15, Public Services, of the Draft EIR, the LACoFD indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site (see page 4.15-31 in the Draft EIR). Further, as detailed in Table 7 of the Fire Protection Plan included as Appendix M-1 of the Draft EIR, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from the closest Fire Station 124. Further, the Project satisfies the requirements of California Code of Regulations Title 24, including Parts 2 and 9, the County Code Title 20 (Division 1) and 26 (including Chapter 7A), and the County Fire Code including Title 32, Section 4908. The Project's infrastructure components, including water supply, fire hydrants, automatic sprinkler systems, and residential hazard detectors (e.g., carbon monoxide or smoke) would all be code compliant. The final number and location of fire hydrants will be determined by the Los Angeles County Fire Department in compliance with County Code requirements.

I47-4 As discussed on page 4.15-33 in Section 4.15, Public Services, of the Draft EIR, the LACoFD determined that a new on-site fire station is not required for the Project. However, as the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. Furthermore, as discussed in Section 2.4.1.2, Project Specific Fire-Resistant Design Feature, and Section 2.4.3.1, Attorney General's Guidance, of Topical Response-1, in addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area.

I47-5 Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a Very High Fire Hazard Severity Zone. A discussion of fire history within 5 miles of the Project site, as well as wind conditions, is provided in Section 4.20.1, Existing Conditions beginning on page 4.20-3 of the Draft EIR. As stated on page 4.20-35 of the Draft EIR, the most common type of fire anticipated in the vicinity of the Project site is a wind-driven fire from the east/south/southeast, moving through the chaparral and sage scrub on the adjacent lands. To analyze the Project site's fire behavior pre- and post-development, the BehavePlus fire modeling system was used to model on-site fire behavior (Appendix M-1 of the Draft EIR). The program simulates rate of fire spread, spotting distance, scorch height, tree mortality, fuel moisture, wind adjustment factor, and other variables. As stated on page 4.20-35 of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones (FMZs) on and off site and would not exacerbate the fire hazard conditions. The conversion of landscapes to ignition-resistant maintained areas, combined with the layered fire protection discussed in further detail in Topical Response-1 and required through MM-4.20-2, Alternative Materials and Methods and MM-4.20-3, Annual Fuel Modification Zone Inspection as well as the increased wildfire awareness facilitated by the Project HOA and required through MM-4.20-1, Wildfire Education Program, would reduce potential impacts related to wildfire spread to less than significant.

I47-6 The comment erroneously states that the "project calls for the removal of 334 SEA-protected trees". As stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR, the 334 SEA-Protected Tree impacts would be comprised of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin. The 53 SEA-Protected Trees that would be located within a debris basin would not be removed but are considered as removals for mitigation purposes. This is because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding. As such, for mitigation purposes, the Project would result in 318 SEA Protected Tree removals. The 318 SEA Protected Trees would be replaced in accordance with the Los Angeles County SEA Ordinance, codified in Chapter 22.102, Significant Ecological Areas, of the County Code, resulting in 772 replacement trees. Per MM-4.4.16, SEA Protected Trees Replacement/Compensation, should

there not be enough locations within the Project's Conservation Area (on-site and off-site) or Project landscaped areas for replacement trees, the Project Applicant must pay into the County's Protected Tree Fund (see page 4.4-94 in Section 4.4, Biological Resources of the Draft EIR). The Protected Tree Fund is codified in Section 22.102.070(F)(5) of the County Code as a viable option for mitigation for the replacement of the impacted trees.

Regarding a potential alternative to reduce impacts to SEA Protected Trees, Chapter 6, Alternatives, of the Draft EIR includes analysis of Alternative C, Reduced Footprint Alternative (beginning on page 6-56 of the Draft EIR). The approximately 28-acres of development under Alternative C represents a 67% reduction in the development footprint when compared to the Project. This would reduce direct impacts to SEA Protected Trees and would avoid impacts to the following tree species altogether: Fremont cottonwood, red willow, and arroyo willow. However, as stated on page 6-46 of the Draft EIR, Alternative C would still result in direct tree impacts to SEA Protected Trees (including heritage trees), and mitigation would still be required to reduce impacts to less than significant.

Furthermore, Alternative C would not reduce impacts to all environmental topic areas. For example, multi-family buildings under Alternative C would be 56 feet tall. This would increase the height of on-site buildings by 11 feet when compared to the Project's maximum height for buildings (which would be 45 feet at one portion of the Project site—the senior housing apartment building (see page 6-60 of the Draft EIR). In addition, as discussed on pages 6-69 and 6-70 of the Draft EIR, the preserved natural open space on-site would not be made available to the public, and no publicly accessible trailhead would be provided on-site under Alternative C. The lack of trail access/publicly accessible open space on-site under Alternative C would increase the park pressure of facilities within the Santa Clarita Valley area when compared to the Project. Finally, as stated on page 6-58 of the Draft EIR, Alternative C would not eliminate the significant unavoidable impact related to baseline residential VMT per capita and would not satisfy all Project objectives.

The two Los Angeles Times articles linked in this comment do not specifically address the Project or the Draft EIR analysis. However, these articles are included in the record and will be provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I47-7 Regarding habitat preservation for local wildlife species, the Project would provide approximately 150 acres of on-site natural open space. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR). Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement.

The Draft EIR provides a specific analysis of potential impacts to the California mountain lion, which is a state candidate for listing as endangered or threatened. As detailed in the analysis provided in Section 4.4, Biological Resources, on pages 4.4-47 through 4.4-49 of the Draft EIR, implementation of MM-4.4-1 (On-Site Habitat Preservation), MM-4.4-2 (Habitat Mitigation and Monitoring Plan), MM-4.4-4 (Biological Monitoring), MM-4.4-5 (Demarcation of Disturbance Limits), MM-4.4-6 (Invasive Species Prevention), and MM-4.4-7 (Landscaping Plan) would reduce impacts to mountain lion to less than significant and provide

the necessary preservation for the Project to be compatible with SEA Resources. With implementation of MM-4.4-13 (Homeowners' Association Covenants, Conditions, and Restrictions), impacts to mountain lions from human influence would be reduced to less than significant.

Regarding specific impacts to deer, coyotes, bobcats, and mountain lions, in accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the CEQA Guidelines, the Draft EIR analysis of the Project's potential adverse effects on wildlife species is focused on species identified as a candidate, sensitive, or special status species. Deer, coyote, and bobcat species are not considered candidate, sensitive, or special status species. As such, the Project would not result in significant impacts to these species. However, mitigation measures applicable to the California Mountain lion, particularly those related to habitat preservation, would also benefit deer, coyote and bobcat species. For example, the On-Site Conservation Area required per MM-4.4-1 would provide suitable live-in, breeding, foraging, cover, and dispersal habitat for a variety of wildlife species. The On-Site Conservation Area would also protect in perpetuity a valuable (and presently unprotected) connection between large tracts of adjacent conserved natural open space associated with the City of Santa Clarita's Woodlands Park and Rivendale Park and Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west wildlife movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and the San Gabriel Mountains to the west; this would preserve and avoid substantial loss of connectivity within the SEA. In addition, MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants on which wildlife species forage on.

Regarding potential impacts to migratory patterns, Section 4.4, Biological Resources, of the Draft EIR includes an analysis of the Project's potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors (see page 4.4-56 of the Draft EIR). As discussed therein, dedication of the Project's On-Site Conservation Area (per MM-4.4-1, as managed in perpetuity through a conservation easement) would protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space, therefore preserving and avoiding further encroachment on movement opportunities between regional conserved habitat blocks. As such, with implementation of MM-4.4-1, impacts to the wildlife movement due to habitat fragmentation would be reduced to less than significant.

I47-8 Potential impacts to public services in accordance with the County's Environmental Checklist Form and Appendix G of the State CEQA Guidelines are discussed in Section 4.15, Public Services, of the Draft EIR (see impact analysis beginning on page 4.15-29 of the Draft EIR). As discussed therein, public services impacts related to fire protection, sheriff protection, schools, parks, libraries, and public trails (i.e. "other public facilities") were determined to be less than significant with mitigation incorporated.

Regarding public transit, as stated on page 4.17-2 in Section 4.17, Transportation, of the Draft EIR, there are four local and four express Santa Clarita Transit bus routes in the Project site vicinity.

I47-9 Regarding evacuation of senior populations, please refer to Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living or convalescent facilities which would necessarily require care facilities and support staff.

As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page on page 4.20-62 in Section 4.20, Wildfire, of the Draft EIR, the Project's HOA would provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to require that the HOA's fire safety committee include the property manager from the senior housing, and to require that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program. The carpool program would ensure that all seniors who are not able to safely evacuate on their own are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.

I47-10 As stated on page 4.1-35 of Section 4.1, Aesthetics, of the Draft EIR, the senior housing building would not exceed the height limitations of the applicable C-3-DP zone. As discussed on pages 4.1-31 and 4.1-32 of the Draft EIR, the senior housing building would be screened by proposed landscaping or otherwise obstructed from view by topography and/or other proposed development, and the building would be predominantly light sand in color, with earthy brown and/or jewel-toned embellishments incorporated into the trims, eaves, corbels, and doors. As further detailed in Section 4.1, Aesthetics, of the Draft EIR, the senior housing building would incorporate design elements from both the Wrightian and Irving Gill architectural styles and would be scaled and finished to blend into the surrounding residential community. These architectural styles, together with a coordinated color palate, would help achieve a cohesiveness of design across the developed, northern portion of the Project site, which would contribute to the visual quality of the Project site as viewed from public vantage points.

Regarding evacuation of senior populations, please refer to the response provided above for Comment I47-9.

I47-11 As discussed on page 4.20-45 in Section 4.20, Wildfire, of the Draft EIR, the Project's internal circulation consists of a loop roadway system that connects both the primary and secondary access points along The Old Road, which satisfies secondary access requirements detailed in Los Angeles County Code of Ordinances Title 21, Chapter 21.24, Design Standards, Part 1, Access. The Project also includes a 28-foot-wide private access road along the northern and western perimeter for emergency vehicle access.

A detailed response related to evacuation is provided in Topical Response-1. As discussed therein, the County would coordinate a centralized emergency operation in the event of an emergency/disaster. To

support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. Specifically, MM-4.20-1 requires provision of biannual emails and mailers with reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires; establishment of a community website dedicated to wildfire awareness and prevention and evacuation; provision of community workshops and webinars; provision of "new resident" packets that include information about how to build a "go-bag," tools to prepare a household evacuation plan, and a list of agencies and resources for receiving trusted information; provision of emergency alert information; maintenance of trail signage for fire-safe hiking activities; and establishment of a fire safety oversight committee.

A Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR) was prepared to evaluate the Project's consistency with relevant emergency evacuation plans and emergency response plans, disclose the prevention and minimization regulations and measures applicable to the Project, and determine evacuation times for the existing and post-Project conditions, as well as provide emergency preparedness information and resources to increase occupant preparedness and facilitate efficient evacuation in the event of an emergency. Importantly, emergency personnel who issue evacuation orders can consider the additional time needed to implement an evacuation when determining when and where to issue evacuation orders. Risk to nearby development, including the Project or existing communities, is assessed on a regular basis in a wildfire event. Hours or days of lead time may be available to assess risk and make evacuation determinations. Moreover, drifting smoke, awareness of the risk, road closures, or other factors result in people avoiding the area in a fire event.

In short, a variety of factors may make a longer evacuation perfectly safe. That is why a multifaceted approach to fire-resilient development is required and is incorporated into the Project. The Project's fire-resistant design features include ignition resistant construction methods, hardened structures and corridors, including a perimeter fire access lane, fuel modification zones, roadside fuel modification, and sufficient fire flow for firefighting efforts.

I47-12 Under Section 15125 of the State CEQA Guidelines, an EIR must include a description of the existing physical environmental conditions in the vicinity of a project to provide the "baseline condition" against which project-related impacts are compared. Generally, the baseline condition is the physical condition that exists when the NOP was published, which was June 16, 2022 for this Project. Field measurements for noise used in the Draft EIR analysis (included in Appendix H of the Draft EIR) were taken on June 13, 2022 and June 14, 2022, which coincides with publication of the NOP. As such, the noise measurements reflect the appropriate baseline conditions for the Project. Any potential additional lanes that consequently could increase volumes of traffic on I-5 would increase the future ambient noise levels to which the Project contribution would add. However, because the Project contribution would not change regardless of traffic volume on I-5, the Project would contribute a smaller proportionate addition of Project traffic volumes if traffic volumes were to increase on I-5. Therefore, a reduced decibel increment would occur as compared to was presented in the Draft EIR (Table 4.13-19 of Section 4.13, Noise) and the analysis presented in the Draft EIR provides a conservative assessment of future operational conditions.

Additionally, operational noise impacts from the Project, including from the proposed new residences and recreational amenity uses were analyzed in the Draft EIR, starting on page 4.13-25 of the Draft EIR. As stated on page 4.13-26, the on-site recreation center is located internal to the site, with multiple

rows of structures between this location and any of the exterior Project site boundaries. Consequently, noise associated with groups enjoying the recreation center, recreational noise at the outdoor pool, and noise from the dog park would be effectively blocked from propagation off-site by the surrounding on-site structures. Page 4.13-26 details that, usage of trails represent negligible additions to the noise environment and even passive recreational use of connected trails on and off-site by future residents would not be anticipated to result in noise levels that would be discernible from ambient noise levels, or to contribute to noise levels from stationary noise sources that would increase such levels by even 1 decibel. Additionally, Table 4.13-16, Stationary Noise Source Levels Compared to Noise Ordinance, on page 4.13-27 of the Draft EIR, and Table 4.13-17, Stationary Noise Source Modeling Results Compared to Ambient Noise Levels, on page 4.13-28 of the Draft EIR, detail the noise levels to sensitive receptors (i.e. residences nearest the Project site in Sunset Pointe) and determined that modeled noise levels were below the daytime and nighttime threshold limits.

I47-13 The Notice of Availability was circulated on December 10, 2024, for a period of 60 days ending on February 7, 2025. However, due to recent fire activity, and specifically the Hughes Fire, the formal public review period for the Draft EIR was extended for an additional 31 days ending on March 10, 2025, and as such, the Final EIR has allowed additional time to further consider the Project. Additional comments received during this extension period have been received and responded to accordingly. Specific comments related to fire safety/evacuation, tree removals, wildlife, public transit, and noise are addressed above in further detail.

INTENTIONALLY LEFT BLANK

Comment Letter I48

From: Tiffany Hedgpeth
To: Erica G. Aguirre
Subject: Trails at Lyons Canyon Project - Draft EIR
Date: Sunday, March 2, 2025 6:24:40 PM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre, the following comments are being submitted with regard to the above-referenced project: I48-1

1. In recent years, fires have severely impacted numerous hiking trails throughout Los Angeles County. Not only is vegetation destroyed, and trails closed for long periods, but invasive species are the first to repopulate, covering the hillsides with mustard rather than California's natural and diverse vegetation. The proposed project will negatively impact the Taylor Trail and others at and in the vicinity of the project. I48-2

The project area, with its many oaks and peaceful surroundings - yet only steps from the Old Road and the freeway - is extremely popular for hiking, particularly for those persons residing in the Santa Clarita Valley. Further mitigation should be adopted to add new trails in the general location (away from and out of sight of the development) and to restore local habitat. I48-3

2. In the vicinity of the project area, fossilized marine life is embedded in the hills. I have personally observed large well-preserved seashells, which is amazing given that this area is far from the ocean and over 1300 feet above sea level. In addition to having a paleontologist onsite during grading, a survey should be performed before grading begins to identify areas where fossils may be present. Further mitigation may be warranted to preserve the fossils, including modification of the project to preserve unique resources. I48-4

I appreciate your attention to these comments. I48-5

Very truly yours,

Tiffany Hedgpeth
25900 Twain Place
Stevenson Ranch, CA 91381
(818)400-6871
tiffhedgpeth@gmail.com

INTENTIONALLY LEFT BLANK

Response to Comment Letter I48

Tiffany Hedgpeth
March 2, 2025

I48-1 This introductory statement does not express any adequacy concerns related to the environmental analysis contained in the Draft EIR. Comments related to the environmental analysis contained in Draft EIR are addressed below in subsequent responses to I48-2 through I48-4.

I48-2 The City of Santa Clarita's Taylor Trail Wilderness and Open Space and Rivendale Park and Open Space are located southeast of the Project site's boundary. These land uses are publicly owned and established land uses that are not subject to potential development and would not change with implementation of the Project.

Recreational facilities, including trails, are discussed in the Draft EIR starting on page 3-11 of Chapter 3, Project Description. As discussed therein, the Project would not construct new trails in the southern portion of the Project site. The Project would, however, construct a private-gated access road that would run along the outer northern and western edge of the development area, which would serve a multi-use trail system. A new publicly-accessible trailhead would be constructed near the gated connection of the access road to The Old Road at the northeastern corner of the Project site. Moreover, the Project would facilitate the dedication of existing non-dedicated trails. As illustrated in Figure 3-5, Conceptual Trails Map, the Project's proposed trail network consists of existing non-dedicated trails to be dedicated, existing dedicated trials (managed by the City of Santa Clarita or the County), and existing non-dedicated trails. Several existing non-dedicated trails are located within the southern portion of the site (within the designated natural open space portion of the Project site) and would remain with implementation of the Project. With implementation of the Project, an existing non-dedicated trail would be dedicated by the County, as shown in green/purple striping on Figure 3-5. As a result of the Project, the County or the City of Santa Clarita would be responsible for the maintenance of these trails. In addition, trailhead signage would be posted at this access point at The Old Road, as implemented through MM-4.20-1, of Section 4.20, Wildfire, of the Draft EIR (Draft EIR page 3-11).

I48-3 The Draft EIR includes analysis of the potential aesthetic impacts related to construction and operation of the Project. This analysis considers potential lighting and glare impacts (refer to pages 4.1-37 through 4.1-40 in Section 4.1, Aesthetics of the Draft EIR) as well as impacts to scenic vistas and public views from off-site recreation areas. Regarding views from Ed Davis Park, Towsley Canyon, Riverdale Park & Open Space, and Santa Clarita Woodlands Park to the south, recreationists in these areas would primarily be limited to marked trails and trailhead areas. As discussed on page 4.1-17 in Section 4.1, Aesthetics of the Draft EIR, a visibility analysis was used to determine visibility of the Project site in the local vicinity where the Project features would have the highest potential to result in a visual impact. Regarding views from the off-site recreation areas, available views to portions of the Project site would generally be limited to Taylor Trail (located in close proximity to the south and east of the Project site; see Figure 4.1-3, Visibility Analysis, on page 4.1-53 of the Draft EIR) and the more distant Don Mullally trail to the south of the Project site (see label for "Ed Davis Park at Towsley Canyon" on Figure 4.1-3 on page 4.1-53 of the Draft EIR). From these trail segments, only between approximately 1% and 20% of the Project site would be visible—the remaining balance of the site would be obscured or blocked by intervening terrain.

As supported by the Project impact analysis provided under Threshold 4.1a (see pages 4.1-19 through 4.1-27 in the Draft EIR), the Project would not result in a substantial adverse effect on a scenic vista available from either Taylor Trail or Don Mullally Trail. Construction impacts would be less than significant with mitigation incorporated (i.e., MM-4.1-1, Visual Shield Plan; Draft EIR, page 4.1-45), and operational impacts would be less than significant. As discussed on page 4.1-45 of the Draft EIR, MM-4.1-1 requires preparation in implementation of a Visual Shielding Plan to improve the overall aesthetic quality of construction areas. This includes establishment of one or more designated staging areas for the storage of construction equipment and vehicles, stockpiles, waste bins, and other construction-related materials strategically placed away from publicly-maintained trails and open-space areas to the south, as well as temporary, opaque fencing and/or cloth screening along the Project-site boundary in the vicinity of the Taylor Trailhead and where the western leg of the Taylor Trail intersects with the Project site.

Furthermore, as supported by the Project impact analysis provided under Threshold 4.1d (see pages 4.1-29 through 4.1-34 in the Draft EIR), the Project would not substantially degrade the existing visual character or quality of the Project site and surrounding areas (including off-site recreation areas). Construction impacts would be less than significant with mitigation incorporated (i.e., MM-4.1-1), and operational impacts would be less than significant. Reasoning for these impact determinations discussed in Section 4.1, Aesthetics, of the Draft EIR include the limited nature of visibility from dedicated trails in the Project site vicinity (including Taylor Trail and Don Mullally Trail), the high-quality nature and cohesiveness of design exhibited by on-site development and landscaped areas, the preservation of approximately 150 acres of the Project site as natural open space, the inclusion of on-site pocket parks and HOA-maintained open spaces, compliance with existing regulations, and implementation of MM-4.1-1.

Regarding oak trees, as shown in Table 2 on page 16 of the Protected Tree Report (included in Appendix C, Biota Report of the Draft EIR), there are 612 oak trees on the Project site. Of the 612 oak trees, 51 are considered Heritage Trees. The Project would impact 232 protected oak trees, including 22 Heritage Trees. The 232 protected oak tree impacts are comprised of 192 removals, 13 encroachments (trees that would not be removed but may be subject to root damage, soil excavation and compaction, grade changes, loss of canopy, and/or trunk wounds), and 27 protected oak trees that are located within a debris basin. It should be noted that the 27 protected oak trees located within the debris basin would not be removed but are considered removals for mitigation purposes because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding.

In accordance with County Code Chapter 22.174, Oak Tree Permits, the County requires permits prior to removing or damaging oaks. Native oak trees that are at least 8 inches in diameter (or, for trees with multiple trunks with a combined diameter measuring at least 12 inches) at 4.5 feet above grade, shall not be cut, destroyed, removed, relocated, or damaged, unless an oak tree permit is first obtained as provided in the ordinance. The Project is required to plant replacement trees to mitigate for the proposed oak tree removals. In accordance with MM-4.4-16, SEA Protected Tree Replacement/Compensation, the Project's required Conservation Management Plan must include a Protected Tree Replacement Plan that will dictate the establishment of required replacement trees. As shown on page 4.4-93 in Section 4.4., Biological Resources, of the Draft EIR, of the 772 required replacement trees, 574 would be oak trees. Per MM-4.4-16, the replacement trees must be nurtured

and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. Per MM-4.4.16, should there not be enough locations within the Project's Conservation Area (on-site and off-site) or Project landscaped areas for replacement trees, the Project Applicant must pay into the County's Protected Tree Fund (see page 4.4-94 in Section 4.4, Biological Resources, of the Draft EIR). The Protected Tree Fund is codified in Section 22.102.070(F)(5) of the County Code as a viable option for mitigation for the replacement of the impacted trees; the fund would be used only as a "last resort" in the event the Project's on-site and off-site Conservation Areas are deemed not to contain sufficient viable area for the 772 replacement tree plantings. However, as illustrated in Figure 3-7, Landscape Plan, in Chapter 3, Project Description of the Draft EIR, all 772 replacement trees are anticipated to be accommodated on site.

I48-4 The Draft EIR analyzes potential impacts to paleontological resources in Section 4.7, Geology and Soils. The geological units mapped within the Project site are detailed on pages 4.7-1 through 4.7-3 in Section 4.7-1, Existing Conditions, of Section 4.7. As stated therein, both the Pico and Saugus formations include marine sedimentary rock units. Potential impacts to paleontological resources are addressed on page 4.7-20 and 4.7-21 of Section 4.7. Whereas the majority of identifiable vertebrate fossils are considered significant, not all identifiable invertebrate fossils are considered significant. As required in MM-4.7-1, "Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Qualified Paleontologist that meets the standards of the Society for Vertebrate Paleontology (2010)." Additionally, in the event the Project encounters high-sensitivity sedimentary formations, any significant paleontological resources would be protected through a monitoring plan and worker training in accordance with MM-4.7-1, Paleontological Monitoring, and MM-4.7-2, Workers Environmental Awareness Program (WEAP). With implementation of these mitigation measures, potential impacts to fossils would be reduced to a less than significant level.

I48-5 The comment provides a conclusory statement and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR. The comment does not express additional concerns related to the adequacy of the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter I49

From: lynne winner
To: Erica G. Aguirre
Cc: lynne winner
Subject: LYONS CANYON PROJECT PROJECT NO 2021-001195-(5)
Date: Thursday, March 6, 2025 12:11:28 PM

CAUTION: External Email. Proceed Responsibly.

During Construction

Lyons Canyon project is located where two canyons meet and abuts a popular open space.. This project requires a large volume of cut and fill due to the numerous elevation changes. The terrain in this project would require grading that is almost triple of normal construction requirements and expectations.. I49-1

As noted in the Environmental Impact Report

- Landslide avoidance requires up to 16 feet of soil removal in some areas I49-2
- Air Quality concerns during grading include an impact on air quality and risk of lung disease through particulate matter that can be inhaled during grading. I49-3
- HMA and SEA require special conditions to be met for grading over 1,000,000 cubic yards of soil. I49-4
    - This project will require 2,800,000 cubic yards of grading with 1,345,000 cubic yards of over excavation
- Due to this project being located next to a popular open space, hiking at Towsley Canyon would be negatively affected by construction and grading. I49-5

Post Construction

Lyons Canyon Project is located next to Ed Davis Park in Towsley Canyon. This popular hiking area will be compromised aesthetically by this development. What is now a contiguous natural landscape would become a place marred by the extensive grading required for development. I49-6

Please note that I am against this project. I49-7

Respectfully,
Lynne Winner
31202 Quail Valley Road
Castaic, CA 91384

INTENTIONALLY LEFT BLANK

Response to Comment Letter I49

Lynne Winner
March 6, 2025

I49-1 The comment correctly notes grading activities are required for Project construction. As discussed on page 3-19 of Chapter 3, Project Description, of the Draft EIR, the total Project earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site parcel adjacent to The Old Road that would be constructed with manufactured slopes. The grading would balance onsite, and as such, no import or export of soils would be required for the Project. The Project would be required to comply with the standards set forth in Appendix J, Grading of the Los Angeles County Building Code (LACBC), of the Draft EIR, which are applicable to grading, excavation, and earthwork construction, including fills and embankments, and the control of runoff from graded sites, including erosion sediments and construction-related pollutants. The Project would also be subject to a Conditional Use Permit (RPPL2021003113) for grading exceeding 100,000 cubic yards in an A-2 zone. The comment does not express additional concerns related to the adequacy of the Draft EIR.

I49-2 Section 4.7, Geology and Soils, of the Draft EIR analyzes the Project's impacts related to landslides (see Thresholds 4.7a[iii] and [iv] on pages 4.7-14 through 4.7-16). As discussed therein, existing site conditions and geotechnical hazards were in large part based on a thorough geotechnical investigation and report that was prepared by California licensed geotechnical engineers and engineering geologists (provided as Appendix E-1 of the Draft EIR). As stated on page 4.7-15 in Section 4.7, Geology and Soils, of the Draft EIR, the Project site includes existing landslides and remnant debris flow deposits. Where observed, the debris flow deposits were estimated to be up to 16 feet, though test pit excavations revealed that much of the surficial materials on the slopes at the Project site up to a depth of 8 feet have been or may be creep-impacted, and susceptible to sloughing and/or sliding (Appendix E-1 of Draft EIR). The Project would include substantive earthwork activities that would include large volumes of cut and fill, which if not done appropriately could subject the proposed development to landslide hazards. However, as discussed on page 4.7-15 of the Draft EIR, based on a review of the existing conditions and proposed grading plans, the proposed building lots were determined by the California licensed geotechnical engineers and engineering geologists to have acceptable separation, either vertical or horizontal, from natural slopes and potential debris flow source areas. Furthermore, as discussed on page 4.7-16 of the Draft EIR, recommendations from the Geotechnical Report would be included as part of the Final Geotechnical Engineering Investigation Report and the geotechnical slope stability design measures (e.g., slope inclinations, fill compaction, and drainage improvements) implemented in accordance with LA County Building Code and California Building Code (CBC) requirements as approved by the Public Works Geotechnical and Materials Engineering Division. Compliance and implementation of slope stability standards and the LACBC and CBC would minimize potential for the Project to exacerbate seismically induced landslides to a less than significant level. No mitigation is required.

I49-3 Potential impacts related to air quality are addressed in Section 4.3, Air Quality, of the Draft EIR. The Draft EIR recognizes that the Project region (specifically, the South Coast Air Basin Attainment) has been designated as a national nonattainment area for ozone (O_3) and fine particulate matter ($PM_{2.5}$) and a California nonattainment area for ozone (O_3), coarse particulate matter (PM_{10}), and $PM_{2.5}$ (see Table 4.3-2 on pages 4.3-14 of the Draft EIR). As noted on page 4.3-42 of the Draft EIR, construction and operation of the Project would generate volatile organic compound (VOC) and nitrogen oxide (No_x)

emissions (which are precursors to O_3) and emissions of PM_{10} and $PM_{2.5}$. As indicated in Table 4.3-14 on page 4.3-41 of the Draft EIR, Project-generated construction emissions would exceed the South Coast Air Quality Management District's emission-based significance thresholds for VOC and NO_x during construction activities prior to mitigation. However, with implementation of MM-4.3-1 (requiring that heavy-duty diesel-powered construction equipment greater than 50 horsepower must be equipped with California Air Resources Board-certified Tier 4 Final or better diesel engines), emissions would be reduced to below levels of significance. With mitigation, all criteria air pollutant emissions would fall below South Coast Air Quality Management District's emission-based significance thresholds.

As discussed on page 4.3-66 of the Draft EIR, construction activities associated with the Project would result in temporary sources of on-site fugitive dust and construction equipment emissions. As demonstrated in Table 4.3-12, Estimated Maximum Daily Operational Criteria Air Pollutant Emissions—Unmitigated (page 4.3-39), and Table 4.3-18, Localized Assessment of Project Construction Emissions (page 4.3-48), the Project would result PM_{10} and $PM_{2.5}$ emissions that would be below the mass daily regional thresholds and concentration-based air pollutant thresholds, respectively. The Project would also be required to comply with SCAQMD Rule 403 for fugitive dust watering. Construction-related impacts are therefore less than significant.

I49-4 The Draft EIR states, on page 3-4 of Chapter 3, Project Description, that the Project requires approximately 1,500,000 cubic yards of cut and 1,300,000 cubic yards of fill for a total of 2,800,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. There is expected to be 15% shrinkage on the over excavation for a total of 200,000 cubic yards. The total earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site adjacent parcel adjacent to The Old Road that includes manufactured slopes. The grading would be balanced onsite, and as such, no import or export of soils is proposed. Furthermore, as stated on pages 3-5 and 3-6 of the Draft EIR, the Project is subject to a conditional use permit (CUP), which, among other components, applies to grading activities that exceed 100,000 cubic yards of earthwork within an agricultural land use, development in a Significant Ecological Area, and development within a Hillside Management Area. The Project must demonstrate compliance with Chapter 22.104, Hillside Management Areas, and Chapter 22.102, Significant Ecological Areas, of the County Code; however, these code sections do not include any "special conditions" related to grading in amounts over 1,000,000 cubic yards.

I49-5 Regarding views from Ed Davis Park, Towsley Canyon, Riverdale Park & Open Space, and Santa Clarita Woodlands Park to the south, recreationists in these areas would primarily be limited to marked trails and trailhead areas. As discussed on page 4.1-17 in Section 4.1, Aesthetics, of the Draft EIR, a visibility analysis was used to determine visibility of the Project site in the local vicinity where the Project features would have the highest potential to result in a visual impact. Regarding views from the off-site recreation areas, available views to portions of the Project site would generally be limited to Taylor Trail (located in close proximity to the south and east of the Project site; see Figure 4.1-3, Visibility Analysis, on page 4.1-53 of the Draft EIR) and the more distant Don Mullally trail to the south of the Project site (see label for "Ed Davis Park at Towsley Canyon" on Figure 4.1-3 on page 4.1-53 of the Draft EIR). From these trail segments, only between approximately 1% and 20% of the Project site would be visible—the remaining balance of the site would be obscured or blocked by intervening terrain.

As supported by the Project impact analysis provided under Threshold 4.1a (see pages 4.1-19 through 4.1-27 in the Draft EIR), the Project would not result in a substantial adverse effect on a scenic vista

available from either Taylor Trail or Don Mullally Trail. Construction impacts would be less than significant with mitigation incorporated (i.e., MM-4.1-1, Visual Shield Plan; Draft EIR, page 4.1-45), and operational impacts would be less than significant. As discussed on page 4.1-45 of the Draft EIR, MM-4.1-1 requires preparation in implementation of a Visual Shielding Plan to improve the overall aesthetic quality of construction areas. This includes establishment of one or more designated staging areas for the storage of construction equipment and vehicles, stockpiles, waste bins, and other construction-related materials strategically placed away from publicly-maintained trails and open-space areas to the south, as well as temporary, opaque fencing and/or cloth screening along the Project-site boundary in the vicinity of the Taylor Trailhead and where the western leg of the Taylor Trail intersects with the Project site.

Furthermore, as supported by the Project impact analysis provided under Threshold 4.1d (see pages 4.1-29 through 4.1-34 in the Draft EIR), the Project would not substantially degrade the existing visual character or quality of the Project site and surrounding areas (including off-site recreation areas). Construction impacts would be less than significant with mitigation incorporated (i.e., MM-4.1-1), and operational impacts would be less than significant. Reasoning for these impact determinations, discussed in Section 4.1, Aesthetics, of the Draft EIR include the limited nature of visibility from dedicated trails in the Project site vicinity (including Taylor Trail and Don Mullally Trail), the high-quality nature and cohesiveness of design exhibited by on-site development and landscaped areas, the preservation of approximately 150 acres of the Project site as natural open space, the inclusion of on-site pocket parks and HOA-maintained open spaces, compliance with existing regulations, and implementation of MM-4.1-1.

I49-6 This comment is similar to Comment I49-5, above. As such, see Response to Comment I49-5 for more discussion.

I49-7 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

INTENTIONALLY LEFT BLANK

Comment Letter I50

From: kevins56@aol.com
To: Erica G. Aguirre
Subject: Towsley Canyon Project
Date: Thursday, March 6, 2025 8:58:10 PM

CAUTION: External Email. Proceed Responsibly.

There is a post on Nextdoor encouraging everyone to write in opposition to this development.

I'm Kevin Stulp
28028 Hayward Dr
Castaic, CA 91384

I have no idea if my input is valid, or this is the correct way to address this: but as opposed to all the shrill opposition to new development, I highly encourage it. More housing equals more supply, less cost for anyone purchasing (I have 5 grown children priced out of the marketplace). We have plenty of increasing power (solar development) and if we would manage our water just a little better, plenty of water. I have no issue with the small amount of increased traffic this would incur. I50-1

Build!

Sincerely,
Kevin Stulp
3/6/25

Response to Comment Letter I50

Kevin Stulp
February 12, 2025

I50-1 The comment expresses support for the Project. The comment does not express any environmental concerns related to the environmental analysis contained in the Draft EIR. The commenter's support of the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I51

From: armo591@aol.com
To: Erica G. Aguirre
Subject: Lyons Canyon Project
Date: Friday, March 7, 2025 7:50:47 AM

CAUTION: External Email. Proceed Responsibly.

I have been made aware of the Lyons Canyons Project. I vote NO !!! I live in Stevenson Ranch and am aware of the fire danger! To build housing, including Senior Housing is very dangerous! You will be putting the lives of all the residents in danger, as well as those of us who already live in that area, especially west of the 5 freeway. The Old Road will be even more congested, especially trying to evacuate due to fire, earthquake, etc. I51-1

You will also be killing 200 Oak trees! We love our wildlife areas and you are further endangering the environment and the creatures who live there. They will not survive! I51-2

You need to find another area to build this development! With the recent fires in Altadena, Castaic, and Pacific Palisades, It shows you how dangerous it is to build in these areas. I51-3

You are not doing these future residents a favor either. Our insurance rates will be going up. They will have insurance rates going up, if they are even able to be insured at all! I51-4

Thank you, I51-5

Ingrid Van Dorn
25122 Steinbeck Ave Unit E
Stevenson Ranch, CA 91381
661 645-1895

INTENTIONALLY LEFT BLANK

Response to Comment Letter I51

Ingrid Van Dorn
March 7, 2025

I51-1 Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a Very High Fire Hazard Severity Zone (VHFHSZ). For a more detailed response related to fire protection and safety, please refer to Topical Response-1 (Section 2.4 of this Chapter), which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

Regarding evacuation of senior populations, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be retirement or convalescent facilities which would necessarily require care facilities and support staff.

I51-2 Evacuation routes and evacuation planning are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

I51-3 Regarding potential impacts to oak trees and other sensitive biological resources, please refer to the impacts analysis beginning on page 4.4-40 in Section 4.4, Biological Resources, of the Draft EIR. Section 4.4 of the Draft EIR and the Biota Report included as Appendix C provide a comprehensive cataloguing of the existing biological conditions on the Project site. The impacts and mitigation are analyzed and proposed through the context of the County's Significant Ecological Areas (SEA) Ordinance, which exceeds the typical analysis under CEQA and provides mitigation for all impacts to biological resources. As discussed therein, implementation of required mitigation measures would reduce all biological resource impacts to a less than significant level. This includes potential impacts to a candidate, sensitive, or special status species, sensitive natural communities (including oak woodlands), protected wetlands, and resources.

Regarding oak tree impacts, as stated in MM-4.4-16, SEA Protected Trees Replacement/Compensation (beginning on page 4.4-93 of the Draft EIR), the Conservation Management Plan required by MM-4.4-1, On-Site Habitat Preservation, will include a Protected Tree Replacement Plan that shall dictate the establishment of replacement trees. Removal of any SEA Protected Tree shall result in a minimum of two replacement plantings with 10:1 for Heritage Trees (which include coast live oak and valley oak). In accordance with County Code Section 22.102.070(F)(4) and as stated in MM-4.4-16, at a minimum, the County requires that the replacement trees need to be nurtured and maintained in a healthy condition and be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. Furthermore, MM-4.4.2, Habitat Mitigation and Monitoring Plan, requires 10 years of monitoring and maintenance of the habitat to help the ecosystem as a whole to become established. See Section 4.4.7 of Section 4.4, Biological Resources, of the Draft EIR for the requirements of mitigation measures MM-4.4-1 through MM-4.4-16, which would reduce biological resources impacts to less than significant.

Furthermore, regarding habitat preservation for local wildlife species, the Project would provide approximately 150 acres of on-site natural open space. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR). Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement.

I51-4 The potential for an alternative Project-site location is addressed in Chapter 6, Alternatives, or the Draft EIR. As stated in page 6-25 of the Draft EIR, one of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The Project site is located within unincorporated Santa Clarita Valley region of Los Angeles County. The Project Applicant inquired with a licensed real estate broker based in the Santa Clarita Valley for the possibility of an available alternative site of approximately 233 acres, which could accommodate the Project's 510 residential units and allow for the preservation of protected open space in the Santa Clarita Valley. Per the real estate broker, no similar alternative site, which is proximate to freeway access, existing roadway infrastructure, and developed areas, is available for sale in the Santa Clarita Valley. As such, an alternative site would not be considered feasible and was ultimately rejected from further analysis in the EIR.

A detailed discussion of the Eaton and Palisades fires is provided above in Topical Response-1 (please refer to Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires). As stated therein, during both the Eaton and Palisades Fires of January 2025, the wildfire was driven into communities by extreme Santa Ana winds exceeding 80 mph. This rare level of extreme weather combined with other factors, such as outdated home construction and dense urban vegetation, without enforced or prevalent fuel modification, to produce urban conflagrations. The Project's proposed structures would be built utilizing the most current construction methods designed to reduce wildfire exposure and reduce the likelihood for structure fires to spread into offsite areas, including requirements set forth in California Building Code Chapter 7A. According to the Office of the State Fire Marshal, no master-planned community built after the adoption of California Building Code Chapter 7A has experienced significant structural losses. The Project would also require highly maintained, irrigated vegetative landscaping between homes and perimeter Fuel Modification Zones to keep an active flaming front at great distances from structures and support defensibility for the existing fire environment. Therefore, modern, code-compliant master planned communities, such as the Project, provide a baseline level of high wildfire safety when designed to modern fire code requirements.

I51-5 Regarding fire insurance, CEQA Guidelines Section 15064(e) states "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Thus, this operational component is not within the scope of the required environmental analysis pursuant to CEQA, and therefore it would not be appropriate to provide a response as part of this EIR. This comment will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

INTENTIONALLY LEFT BLANK

Comment Letter I52

Thomas Brennan
26018 Franklin Lane
Stevenson Ranch, CA 91381
tbone630@gmail.com
March 6, 2025

Erica Aguirre, AICP
Principal Planner, Subdivisions
County of Los Angeles
Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, CA 90012

Subject: Opposition to the Proposed Lyons Canyon Project

Dear Ms. Aguirre,

I am writing to formally express my opposition to the proposed Lyons Canyon Project. As a Los Angeles County resident living within three miles of the proposed development, I urge the Department of Regional Planning to reject this project for the following reasons: I52-1

- **High Fire Risk**: The proposed development is too dense for a high-fire hazard zone, putting future residents and emergency responders at increased risk. I52-2
- **Incompatible Land Use**: A five-story structure adjacent to open space disrupts the natural landscape and negatively impacts the surrounding environment. I52-3
- **Poor Location for a Senior Facility**: The development is located along a busy highway with no safe or convenient access to retail services and essential amenities. I52-4
- **Environmental Concerns**: Excessive soil grading will be required to level the building site, leading to significant erosion and environmental disruption. I52-5
- **Destruction of Native Vegetation**: The project will result in the loss of native trees and vegetation in an ecologically sensitive area, further harming local wildlife and the natural ecosystem. I52-6

For these reasons, I strongly urge the Planning Commission to reject the proposed development. Thank you for your time and consideration. I look forward to your response. I52-7

Sincerely,
Thomas Brennan

INTENTIONALLY LEFT BLANK

Response to Comment Letter I52

Thomas Brennan
March 6, 2025

I52-1 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I52-2 Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a Very High Fire Hazard Severity Zone (VHFHSZ). For a more detailed response related to fire protection and safety, please refer to Topical Response-1 (Section 2.4 of this Chapter), which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

Furthermore, regarding the Projects density and fire risk, the Project's proposed development of higher density housing with highly maintained, irrigated vegetative landscaping between homes and the perimeter fuel modification zones would keep an active flaming front at great distances from structures and support defensibility for the existing fire environment. These features make the Project substantially more resilient to potential fire hazards than low- to medium-density developments where vegetation is allowed to grow between and among structures. This point is well-established in the scientific literature. Please refer to Section 2.4.1.1, New Subdivisions are More Resilient and Defensible to Wildfire Hazards, of Topical Response-1 for a more detailed response.

I52-3 There are no five-story buildings proposed as part of the Project. The tallest building proposed would be the senior housing building in Lot 10 (located near the northeastern corner of the Project site), which would be four stories and a maximum of 45 feet. As stated on page 4.1-35 of Section 4.1, Aesthetics, of the Draft EIR, the senior housing building would not exceed the height limitations of the applicable C-3-DP zone. The senior housing building would not be adjacent to open space areas to the south or west of the Project site. As discussed on pages 4.1-31 and 4.1-32 of the Draft EIR, the senior housing building would be screened by proposed landscaping or otherwise obstructed from view by topography and/or other proposed development, and the building would be predominantly light sand in color, with earthy brown and/or jewel-toned embellishments incorporated into the trims, eaves, corbels, and doors. As further detailed in Section 4.1 of Draft EIR, the senior housing building would incorporate design elements from both the Wrightian and Irving Gill architectural styles and would be scaled and finished to blend into the surrounding residential community. These architectural styles, together with a coordinated color palate, would help achieve a cohesiveness of design across the developed, northern portion of the Project site, which would contribute to the visual quality of the Project site as viewed from public vantage points.

I52-4 As stated on page 4.17-2 in Section 4.17, Transportation, of the Draft EIR there are four local and four express Santa Clarita Transit bus routes in the Project site vicinity. Additionally, regarding access to retail services and essential amenities, the Project would develop on-site infrastructure to support residential uses, including a 1.13-acre recreation center and a dog park, and would also be within an approximately 1-to-2-mile radius of existing commercial and retail services, including Vons, Walmart, and Valencia Plaza.

I52-5 As discussed on page 3-19 of Chapter 3, Project Description, of the Draft EIR, the total Project earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site parcel adjacent to The Old Road that would be constructed with manufactured slopes. The grading would balance onsite, and as such, no import or export of soils would be required for the Project. The Project would be required to comply with the standards set forth in Appendix J, Grading of the Los Angeles County Building Code, which are applicable to grading, excavation, and earthwork construction, including fills and embankments, and the control of runoff from graded sites, including erosion sediments and construction-related pollutants. The Project would also be subject to a Conditional Use Permit (RPPL2021003113) for grading exceeding 100,000 cubic yards in an A-2 zone.

The analysis provided in Section 4.7, Geology and Soils, of the Draft EIR supports the determination that there would be no significant geology and soils impacts associated with earth movement. As discussed on page 4.7-14 of the Draft EIR, prior to issuance of a building or grading permit, the Project Applicant would be required to submit a final design level geotechnical report. The report would be submitted to Public Works for review and approval. Prior to filing the Final Map, the Applicant would be required to comply with any conditions contained within Public Works' issuance of a Geology and Soils Report Approval Letter for the Project, made in response to the final design level geotechnical report, and as may be subsequently amended or modified by Public Works' Geotechnical Materials Engineering Division (GMED). The final geotechnical report, which is also required by the California Building Code, would be based on the final Project design and would require final approval by the GMED prior to issuance of a grading permit. The analysis throughout the Draft EIR includes all potential impacts that could occur as a result of the proposed soil grading. As such, the Draft EIR adequately evaluates impacts from grading.

I52-6 Regarding potential impacts to trees and vegetation, please refer to the impact analysis beginning on page 4.4-40 in Section 4.4, Biological Resources, of the Draft EIR. Section 4.4 of the Draft EIR and the Biota Report included as Appendix C provide a comprehensive cataloguing of the existing biological conditions on the Project site. The impacts and mitigation are analyzed and proposed through the context of the County's Significant Ecological Areas (SEA) Ordinance, which exceeds the typical analysis under CEQA and provides mitigation for all impacts to biological resources. As discussed therein, implementation of required mitigation measures would reduce all biological resource impacts to a less than significant level. This includes potential impacts to a candidate, sensitive, or special status species, sensitive natural communities (including oak woodlands), protected wetlands, and other resources. Regarding tree impacts, as stated in MM-4.4-16, SEA Protected Trees Replacement/Compensation (beginning on page 4.4-93 of the Draft EIR), the Conservation Management Plan required by MM-4.4-1, On-Site Habitat Preservation, will include a Protected Tree Replacement Plan that shall dictate the establishment of replacement trees. Removal of any SEA Protected Tree shall result in a minimum of two replacement plantings with 10:1 for Heritage Trees (which include coast live oak and valley oak). In accordance with County Code Section

22.102.070(F)(4) and as stated in MM-4.4-16, at a minimum, the County requires that the replacement trees need to be nurtured and maintained in a healthy condition and be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. Furthermore, MM-4.4.2, Habitat Mitigation and Monitoring Plan, requires 10 years of monitoring and maintenance of the habitat to help the ecosystem as a whole to become established. See Section 4.4.7 of Section 4.4, Biological Resources, of the Draft EIR for the requirements of mitigation measures MM-4.4-1 through MM-4.4-16, which would reduce biological resources impacts to less than significant.

Furthermore, regarding habitat preservation for local wildlife species, the Project would provide approximately 150 acres of on-site natural open space. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR). Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement.

I52-7 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

INTENTIONALLY LEFT BLANK

Comment Letter I53

From: Karen Piolatto
To: Erica G. Aguirre
Subject: Towsley Canyon project
Date: Friday, March 7, 2025 10:26:31 AM

CAUTION: External Email. Proceed Responsibly.

Hello,

I'm writing to express my concern over this project. The Santa Clarita Valley is already bursting at the seams with little or no regards to the infrastructure. Our roads and freeways are already congested. What happens if a wildfire breaks out. The Castaic evacuation was a terrible mess and I'm concerned there is a potential for the same at this location. Not to mention all the other developments that are already popping up. Many of those sites have one way in and out which leads to even more problems. Please reconsider your stance on this project. I53-1

Regards- Karen Piolatto
Sent from my

INTENTIONALLY LEFT BLANK

Response to Comment Letter I53

Karen Pialotto
March 7, 2025

I53-1 Section 4.19, Utilities and Service Systems, of the Draft EIR identifies existing utilities throughout the region and evaluates potential impacts to these utilities and infrastructure. As discussed within Section 4.19, impacts were determined to be less than significant. The Project would be adequately served by wastewater facilities. As detailed on pages 4.19-21 through 4.19-22, the Project would connect to existing infrastructure and comply with applicable regulations to reduce impacts associated with wastewater conveyance and treatment. Moreover, as supported by analysis contained in the County-approved Sewer Area Study (Appendix L-5 of the Draft EIR), the Project would contribute to a small percentage of available treatment capacity. Regarding water availability, as stated on page 4.19-28 in Section 4.19 of the Draft EIR, the Project's Water Supply Assessment concluded that the total projected water supplies available to Santa Clarita Valley Water Agency's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

Automobile delay and traffic congestion, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17, Transportation, of the Draft EIR as well as the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

The Draft EIR analyzes the potential impacts of evacuation traffic under Threshold 4.20a in Section 4.20, Wildfire. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. This design satisfies the secondary access requirements detailed in County Code Title 21, Chapter 21.24, Design Standards, Part 1, Access. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency

operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

The commenter's general opposition to the Project is acknowledged for the record and will be provided to the decision makers for their review and consideration as part of this Final EIR.

Comment Letter I54

From: celebritymanagericm@yahoo.com
To: Erica G. Aguirre
Subject: Stop Lyons Canyon Project !
Date: Friday, March 7, 2025 1:12:42 PM

CAUTION: External Email. Proceed Responsibly.

Dear Mr. Aguirre,

We work nearby Lyons Canyon project case 2021-001195 and constantly see fires go through that area how can anyone risk putting Senior Housing there !Ederly would have little chance of escaping a fire there along with highly congested Old Road with only 1 freeway ramp nearby. Nor would it be safe for any development.I cant watch another Eaton Fire with so many dying in fast moving fires of the area. Buy the land add a park or fire station. I54-1

Thank You for your help as you can do good with your job!

INTENTIONALLY LEFT BLANK

Response to Comment Letter I54

Celebrity Manger ICM
March 7, 2025

I54-1 The commenter's opposition to development is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Regarding development and the placement of senior housing within a Very High Fire Hazard Severity Zone (VHFHSZ), the Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a VHFHSZ and within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. As further evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level. For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Regarding senior housing safety during an evacuation event, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff.

Evacuation routes and evacuation plans are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency

operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

A detailed discussion of the Eaton and Palisades fires is provided above in Topical Response-1 (please refer to Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires). As stated therein, during both the Eaton and Palisades Fires of January 2025, the wildfire was driven into communities by extreme Santa Ana winds exceeding 80 mph. This rare level of extreme weather combined with other factors, such as outdated home construction and dense urban vegetation, without enforced or prevalent fuel modification, to produce urban conflagrations. The Project's proposed structures would be built utilizing the most current construction methods designed to reduce wildfire exposure and reduce the likelihood for structure fires to spread into offsite areas, including requirements set forth in California Building Code Chapter 7A. According to the Office of the State Fire Marshal, no master-planned community built after the adoption of California Building Code Chapter 7A has experienced significant structural losses. The Project would also require highly maintained, irrigated vegetative landscaping between homes and perimeter fuel modification zones to keep an active flaming front at great distances from structures and support defensibility for the existing fire environment. Therefore, modern code-compliant master planned communities, such as the Project, provide a baseline level of high wildfire safety when designed to modern fire code requirements.

As discussed in Section 4.15, Public Services, on page 4.15-39 of the Draft EIR, the Project would include approximately 150 acres of open space supporting an on-site network of trail facilities which connect to other dedicated facilities located within parks adjacent and near to the Project site, as well as approximately 24 acres of HOA-maintained open space and active and passive open space areas located throughout the Project site. The Project would also provide a recreation center on 1.13-acres in the central portion of the Project site. Furthermore, pursuant to the County's Quimby Code (Sections 21.24.340, 21.240.350, and 21.28.140 of the County Code), the Project would be required to pay an in-lieu fee, which could be used for the purpose of acquiring local park land or developing new or rehabilitating existing parks (see page 4.15-40 of the Draft EIR). As stated on page 4.15-41 of the Draft EIR, due to the provision of parks, trail, open space, and recreational amenities, and the adequate and/or above average condition of existing parks available in proximity to the Project site, the Project would not create capacity or service level problems, or result in the need to construct new park facilities (beyond what the Project is already providing).

As discussed on page 4.15-33 in Section 4.15, Public Services, of the Draft EIR, the Los Angeles County Fire Department (LACoFD) determined that a new on-site fire station is not required for the Project. However, as the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. In addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area.

Comment Letter I55

From: Judi Adams
To: Erica G. Aguirre
Subject: Comment on Lyons Canyon Project, No. 2021-001195-(50)
Date: Friday, March 7, 2025 9:41:58 PM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre:

I know I don't need to describe this project's location to you, so I will start with my objections and concerns about this development with over 500 residential units and a senior housing structure being proposed in a known high fire zone. I live in Stevenson Ranch and have had to evacuate twice in my 20 years and have had to pack and be ready to leave two additional times. Having a friend that lives in the Oakmont Senior Living Facility on Copper Hill during the recent Castaic fire, I know how stressful and disruptive it is to the elderly in such situation. They were given backpacks to fill with their most important belongings then congregate together to await instructions regarding possible evacuation. That is no way to ask the elderly to live. I55-1

This project site is also the natural home of many beautiful and priceless oak trees and other protected tree species which would need to be removed. This destruction of natural habitat would also impact a multitude of animals. This project would totally disrupt the ecological balance of this area. I55-2 I55-3

Other considerations are the traffic that would be impacted on a daily basis and even more worrisome, the dangers that would develop in the case of emergency evacuations during fires or earthquakes. There would be additional danger to seniors in a facility that loses electricity needed for elevators, oxygen concentrators and lift chairs during these emergencies. I55-4

I hope you will remember that for everyone who takes the time to write to you, there are many, many more that feel the same, but do not write.

Thank you in advance for seriously considering my objections to this project. I55-5

Judith S Adams
25409 Shelley Place
Stevenson Ranch, CA 91381
661-803-20908

INTENTIONALLY LEFT BLANK

Response to Comment Letter I55

Judith S. Adams
March 7, 2025

I55-1 Regarding the placement of housing (including senior housing) within a Very High Fire Hazard Severity Zone (VHFHSZ), the Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a VHFHSZ within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. As further evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level. For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Regarding senior housing safety during an evacuation event, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff.

As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page 4.20-62 in Section 4.20, Wildfire, of the Draft EIR, the Project's HOA would provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents, including residents of the senior housing apartment complex. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to ensure that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program that shall ensure that all seniors who are not able to safely evacuate on their own, including mobility-challenged individuals, are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.

I55-2 A total of 334 SEA-Protected Trees would be impacted by the Project, including 232 oak trees (22 of which are Heritage Trees). Therefore, the Project would comply with Section 22.102.070, Protected Tree Permit, of the Los Angeles County Code. Additionally, the Project would incorporate mitigation measures to reduce impacts to oak trees. As detailed further in Section 4.4, Biological Resources, of the Draft EIR, implementation of MM-4.4-1, On-Site Habitat Preservation, would require preservation of the remaining oak woodland within the On-Site Conservation Area and MM-4.4-9, Off-Site Habitat Preservation, would require the preservation of off-site oak woodland. In accordance with MM-4.4-16, SEA Protected Tree Replacement/Compensation, the Project Applicant/Developer is required to plant 772 replacement trees. Furthermore, the Project's required Conservation Management Plan must include a Protected Tree Replacement Plan that will dictate the establishment of required replacement trees. As shown, on page 4.4-93 of the Draft EIR, of the 772 required replacement trees, 574 would be oak trees. Additional mitigation is incorporated to reduce impacts to oak trees, as detailed further in Section 4.4 of the Draft EIR. Given this, the Project's required mitigation would reduce impacts related to oaks and other protected tree species to below a level of significance under CEQA.

I55-3 Regarding potential impacts to natural habitat and wildlife species, please refer to the impact analysis beginning on page 4.4-40 in Section 4.4, Biological Resources, of the Draft EIR. Section 4.4 of the Draft EIR and the Biota Report included as Appendix C provide a comprehensive cataloguing of the existing biological conditions on the Project site. The impacts and mitigation are analyzed and proposed through the context of the County's Significant Ecological Areas (SEA) Ordinance, which exceeds the typical analysis under CEQA and provides mitigation for all impacts to biological resources. As discussed therein, implementation of required mitigation measures would reduce all biological resource impacts to a less than significant level. This includes potential impacts to a candidate, sensitive, or special status species, sensitive natural communities (including oak woodlands), protected wetlands, and other SEA resources. Furthermore, MM-4.4.2, Habitat Mitigation and Monitoring Plan, requires 10 years of monitoring and maintenance of the habitat to help the ecosystem as a whole to become established.

As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR). Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement. See Section 4.4.7 of Section 4.4, Biological Resources, of the Draft EIR for the requirements of mitigation measures MM-4.4-1 through MM-4.4-16, which would reduce biological resources impacts to less than significant.

I55-4 Relating to traffic, automobile delay and traffic congestion, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17, Transportation, of the Draft EIR as well as the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

Evacuation routes and evacuation planning are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Section 2.4.3.1, Attorney General's Guidance and Section 2.4.4, Project Wildfire Evacuation Modeling).

Regarding evacuation of senior populations, please refer to Response to Comment I55-1.

I55-5 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

INTENTIONALLY LEFT BLANK

Comment Letter I56

From: beckyc1215@gmail.com
To: Erica G. Aguirre
Subject: Lyons Canyon project
Date: Friday, March 7, 2025 3:21:10 PM

CAUTION: External Email. Proceed Responsibly.

To county planning commission:
This project is a very bad idea! 1.. too much road congestion now, I can't imagine what it would be like with more homes there I56-1
2. Risk of Fire- we can't get insurance now - how are those homeowners going to get fire insurance? I56-2
3. Why destroy this beautiful open space? I56-3
Please, please do not approve this project.
Sincerely,
Becky Christensen
Stevenson Ranch

Sent from my iPhone

INTENTIONALLY LEFT BLANK

Response to Comment Letter I56

Becky Christensen
March 7, 2025

I56-1 The commenter's general opposition to the Project is hereby provided to the Regional Planning Cmmission for their review and consideration as part of this Final EIR.

Relating to road congestion, automobile delay and traffic congestion, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17, Transportation, of the Draft EIR as well as the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

I56-2 The Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The Draft EIR confirms the Project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ). For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The VHFHSZ designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

Regarding fire insurance, CEQA Guidelines Section 15064(e) states "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Thus, this operational component is not within the scope of required environmental analysis pursuant to CEQA and will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I56-3 Regarding impacts to open space, as discussed on pages 4.4-59 and 4.4-60 in Section 4.4, Biological Resources, of the Draft EIR, as a result of its clustered design, the Project is able to permanently preserve via conservation easement approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area. Habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. As discussed in further detail in Section 4.4 of the Draft EIR, with implementation of required mitigation measures MM-4.4-1 through MM-4.4-16, all potential

biological resource impacts would be reduced to a less than significant level. The Project would facilitate the dedication of existing non-dedicated trails. Existing non-dedicated trails on the southern portion of the Project site would remain with implementation of the Project and would connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon.

The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I57

From: R R
To: Erica G. Aguirre
Subject: Please Help Save Seniors and Families from Lyons Canyon Project
Date: Friday, March 7, 2025 1:39:28 PM

CAUTION: External Email. Proceed Responsibly.

Dear Erica Aguirre,

Just saw the Lyons Project #2021001195 and my heart sunk to think they are trying to put Senior Housing and Family housing next to one of highest fire risk areas. I do not want to relive seeing all the deaths and destruction from nearby Eaton fire that killed so many Seniors….Please you have the power to stop this and put something good there like an extension of a the beautiful Towsley park that so many enjoy in LA, or an Endangered Monarch Butterfly Wildflower park were kids and families could enjoy or Wildlife Center as the list goes on of the positive things you could do and be proud of ! Please stop this

I57-1

I57-2

Best wishes,
Rachelle

INTENTIONALLY LEFT BLANK

Response to Comment Letter I57

Rachelle
March 7, 2025

I57-1 Regarding development and the placement of senior housing within a Very High Fire Hazard Severity Zone (VHFHSZ), the Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a VHFHSZ and within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. As further evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level. For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Regarding senior housing safety during an evacuation event, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff.

A detailed discussion of the Eaton and Palisades fires is provided above in Topical Response-1 (please refer to Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires). As stated therein, during both the Eaton and Palisades Fires of January 2025, the wildfire was driven into communities by extreme Santa Ana winds exceeding 80 mph. This rare level of extreme weather combined with other factors, such as outdated home construction and dense urban vegetation, without enforced or prevalent fuel modification, to produce urban conflagrations. The Project's proposed structures would be built utilizing the most current construction methods designed to reduce wildfire exposure and reduce the likelihood for structure fires to spread into offsite areas, including requirements set forth in California Building Code Chapter 7A. According to the Office of the State Fire Marshal, no master-planned community built after the adoption of California Building Code Chapter 7A has experienced significant structural losses. The Project would also require highly maintained, irrigated vegetative landscaping between homes and perimeter fuel modification zones to keep an active flaming front at great distances from structures and support defensibility for the existing fire environment. Therefore, modern, code-compliant master-planned communities, such as the Project, provide a baseline level of high wildfire safety when designed to modern fire code requirements.

I57-2 Chapter 6, Alternatives, of the Draft EIR describes and evaluates alternatives to the Project pursuant to Section 15126.6 of the State CEQA Guidelines. Per Section 15126.6(a) of the State CEQA Guidelines, "An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision

making and public participation." Furthermore, per Section 15126.6(c), "The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects."

None of the alternatives suggested in this comment would accomplish most of the basic Project objectives, which are primarily related to the provision of housing (refer to page 6-2 in Chapter 6, Alternatives, of the Draft EIR for a complete list of Project objectives). However, the Project would permanently preserve via conservation easement approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area (as required per MM-4.4-1, On-Site Habitat Preservation). The Project would also facilitate the dedication of existing non-dedicated trails. Figure 3-5, Conceptual Trails Map, illustrates the Project's proposed trail network, existing non-dedicated trails to be dedicated, existing dedicated trials (managed by the City of Santa Clarita or the County), and existing non-dedicated trails. These on-site trails would connect to adjacent public open spaces outside of the Project's boundaries, including the City of Santa Clarita's Rivendale Park and Open Space in Towsley Canyon. Thus, the Project would preserve open space adjacent to Towsley Canyon that supports wildlife habitat (including habitat that is expected to provide foraging and breeding opportunities for monarch butterflies) and is accessible to children and families.

The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I58

From: Gigi Maki
To: Erica G. Aguirre
Subject: The Trails at Lyons Canyon
Date: Friday, March 7, 2025 4:45:56 PM

CAUTION: External Email. Proceed Responsibly.

When is the building on every square inch of Santa Clarita going to stop? I58-1

That space is already an open space, its not remaining open, it will be taken away.

Have you ever driven on the Old Road or the 5 Freeway, in an emergency (trying to get home or away from your home in a fire), during the rain, when the 5 freeway is dead stopped because of an accident or lane closures? Well let's add all those more people to an already overcrowded Santa Clarita who are always looking for a faster way out of here. I do and if it's not 1 hour or more going South and North it's shocking. I can't spend any more time commuting with more traffic! I58-2

Not to mention the fire hazard, have you not learned anything from the Eaton and Palisades fires? I58-3

We have been extremely lucky that something that severe has not happened here in some time, but if this site gets approved, there will be within the next few years and then who will pay to rebuild? Our beautiful city will be ruined.

This will put undue harm to the area and the residents who have lived here for quite some time and are angered by all the new building and congestion to our city. I58-4

STOP the Madness.

I object to this project.

INTENTIONALLY LEFT BLANK

Response to Comment Letter I58

Gigi Maki
March 7, 2025

I58-1 The commenter's general opposition to development is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Regarding impacts to open space, as discussed on pages 4.4-59 and 4.4-60 in Section 4.4, Biological Resources, of the Draft EIR, as a result of its clustered design, the Project is able to permanently preserve via conservation easement approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area (as required per MM-4.4-a, On-Site Habitat Preservation). Habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. As discussed in further detail in Section 4.4 of the Draft EIR, with implementation of required mitigation measures MM-4.4-1 through MM-4.4-16, all potential biological resource impacts would be reduced to a less than significant level (see Section 4.4.7 of Section 4.4 of the Draft EIR for the specific mitigation requirements). Although limited brush clearing is required in the adjacent Rivendale Park and Open Space area to comply with defensible space requirements, the Project's development would not encroach into park areas or Towsley Canyon to the south. The Project would facilitate the dedication of existing non-dedicated trails. Existing non-dedicated trails on the southern portion of the Project site would remain with implementation of the Project and would connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon.

I58-2 Relating to traffic, automobile delay and traffic congestion, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17, Transportation, of the Draft EIR as well as the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

Evacuation routes and evacuation planning are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

I58-3 The Draft EIR adequately analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The Draft EIR confirms the Project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ). For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The VHFHSZ designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

Further, a detailed discussion of the Eaton and Palisades fires is provided above in Topical Response-1 (please refer to Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires). As stated therein, during both the Eaton and Palisades Fires of January 2025, the wildfire was driven into communities by extreme Santa Ana winds exceeding 80 mph. This rare level of extreme weather combined with other factors, such as outdated home construction and dense urban vegetation, without enforced or prevalent fuel modification, to produce urban conflagrations. The Project's proposed structures would be built utilizing the most current construction methods designed to reduce wildfire exposure and reduce the likelihood for structure fires to spread into offsite areas, including requirements set forth in California Building Code Chapter 7A. According to the Office of the State Fire Marshal, no master-planned community built after the adoption of California Building Code Chapter 7A has experienced significant structural losses. The Project would also require highly maintained, irrigated vegetative landscaping between homes and perimeter Fuel Modification Zones to keep an active flaming front at great distances from structures and support defensibility for the existing fire environment. Therefore, modern, code-compliant master planned communities, such as the Project, provide a baseline level of high wildfire safety when designed to modern fire code requirements.

I58-4 Regarding traffic congestion, please refer to the response provided above for Comment I58-2.

The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Comment Letter I59

March 8, 2025

Ms. Erica Aguirre,
Principal Planner, Subdivisions
Los Angeles County Dept. of Regional Planning

320 W. Temples St., 13th Floor
Los Angeles CA 90012

Re: Response to draft of Environmental Impact Report for
Trails at Lyons Canyon Project No. 2021-001195-(5)

Dear Ms. Aguirre:

I have lived in Sunset Pointe for over 30 years. During that time, the population and traffic has increased tenfold and several fires have been a cause for concern. I59-1

To keep building in fire areas, without adequate protection is insane. Fire safety is crucial to all of us. The recent fires in the Palisades and Altadena demonstrate how vulnerable areas surrounded by brush are. Original plans called for a fire station. That seems to have been eliminated. On top of that, the plans call for only "minimal" number of fire hydrants. Didn't the recent fires teach us anything? A minimal # of hydrants, and the fact water is always a concern, is totally unsatisfactory, and frankly a danger to residents. It has also been reported that fire response by LA County Fire is inadequate. I59-2 I59-3
It boggles my mind that we continue to build in wildfire areas. With the significant winds this area is prone to, it would seem that if a development is considered, there would be more than adequate fire protections. I59-4

The project is situated next to a preserved open space. Continued removal of the protected oak trees is uncalled for. Regular citizens cannot remove oak trees but seems to be no problem getting around their protection if the county oks it. These trees are hundreds of years old and need to be protected before builders remove all of them from this area. The canyon is home to wildlife – bobcats, deer, coyotes, mountain lions, the occasional bear – and where are they all to go? People move in and complain about them in their neighborhood, asking for them to be eliminated. Why do we keep building in the few open spaces we have in this area? I59-5 I59-6 I59-7

The plans call for a senior building 4 stories high. Twice as high as the rest of the buildings. With the winds, we are constantly having our power cut. In the event of an emergency, these people may have problems evacuating, as well as having first responders trying to help them. Many senior rely on elevators and this would leave them highly vulnerable. I59-8

The report claims the impact on Public Services is minimal. This is not true. We are already overwhelmed with traffic. There is very little public transportation in the unincorporated areas. Seniors rely on that. The 5 freeway is jammed every day, regardless of how many lanes they add. The Old Road is not capable of easing that in its current configuration. The 5 freeway is the only way out of the valley for this side. Adding a couple thousand more residents will only add to the current chaos. I59-9

Further consideration should be required before approval is made. Why place seniors and residents in a wildfire risk area? Further study based on the Palisades and Altadena fires is a must. I am not a tree hugger, but I hate seeing all the oak trees in our neighborhoods being eliminated for more housing, that we frankly don't need. Water is also an issue, as we don't know from one year to the next how much will be available due to "climate change". I59-10 I59-11 I59-12

Sincerely,

Wendy Pedlow
25135 Hazelcrest Lane
Stevenson Ranch CA 91381
Sunset Pointe

INTENTIONALLY LEFT B LANK

Response to Comment Letter I59

Wendy Pedlow
March 8, 2025

I59-1 The comment does not raise any concerns about the adequacy of the environmental analysis within the Draft EIR. Section 4.14, Population and Housing, of the Draft EIR discusses growth trends in the Project site vicinity. Existing conditions related to transportation are provided in Section 4.17, Transportation, of the Draft EIR. However, please note that automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]).

Regarding recent fires, the analysis provided in Section 4.20, Wildfire, of the Draft EIR, takes into consideration both fire history and the likely rate of wildfire occurrence on the Project site (see page 4.20-4 of the Draft EIR). The Draft EIR adequately analyzes impacts related to wildfire within Section 4.20 and incorporates mitigation measures to reduce significant impacts. Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. As discussed in Section 4.20 of the Draft EIR, after incorporation of required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

I59-2 As stated above, the Draft EIR adequately analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The Draft EIR confirms the Project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ). For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The VHFHSZ designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant, modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. As further evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

Further, a detailed discussion of the Eaton and Palisades fires is provided above in Topical Response-1 (please refer to Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires). As stated therein, during both the Eaton and Palisades Fires of January 2025, the wildfire was driven into communities by extreme Santa Ana winds exceeding 80 mph. This rare level of extreme weather combined with other factors, such as outdated home construction and dense urban vegetation, without enforced or prevalent fuel modification, to produce urban conflagrations. The Project's proposed structures would be built utilizing the most current construction methods designed to reduce wildfire exposure and reduce the likelihood for structure fires to spread into offsite areas, including requirements set forth in California Building Code Chapter 7A. According to the Office of the State Fire Marshal, no master-planned community built after the adoption of California Building Code Chapter 7A has experienced significant structural losses.

The Project would also require highly maintained, irrigated vegetative landscaping between homes and perimeter Fuel Modification Zones to keep an active flaming front at great distances from structures and support defensibility for the existing fire environment. Therefore, modern, code-compliant master planned communities, such as the Project, provide a baseline level of high wildfire safety when designed to modern fire code requirements.

Regarding a fire station, as discussed on page 4.15-33 in Section 4.15, Public Services, of the Draft EIR, the Los Angeles County Fire Department (LACoFD) determined that a new on-site fire station is not required for the Project. However, as the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. Furthermore, as discussed in Section 2.4.1.2, Project Specific Fire-Resistant Design Feature, and Section 2.4.3.1, Attorney General's Guidance, of Topical Response-1, in addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area.

I59-3 As discussed further in Section 4.20, Wildfire, of the Draft EIR, the Project would include sufficient emergency water supply, a key component to fighting wildfire and protecting structures. The Project would provide fire hydrants that meet flow, volume, and duration specifications at intervals designed to assist in fighting structural fires. The final number and location of the fire hydrants will be determined by LACoFD. The Project would also provide an up to 2-million-gallon water tank in the southwest portion of the development area, which would be installed at the Project site to assure reliable fire flow water pressure for the Project uses onsite. Project-internal waterlines would supply sufficient fire flows and pressure to meet the demands for required onsite fire hydrants and interior fire sprinkler systems for all structures. Water supply will meet the minimum fire flow required within the adopted fire code. Please see header "Water Supply and Infrastructure" of Section 2.4.3.2, Fire Safety Requirements, of Topical Response-1, above, for additional details related to water supply infrastructure. Furthermore, as stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's Water Supply Assessment concluded that the total projected water supplies available to Santa Clarita Valley Water Agency's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

With regard to fire response times by LACoFD, as discussed in Section 4.15, Public Services, of the Draft EIR, LACoFD indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site (see page 4.15-31 in the Draft EIR). Further, as detailed in Table 7 of the Fire Protection Plan included as Appendix M-1 of the Draft EIR, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from the closest Fire Station 124.

I59-4 A discussion of wind conditions at Project site is provided in Section 4.20.1, Existing Conditions in Section 4.20, Wildfire, of the Draft EIR. As stated on page 4.20-35 of the Draft EIR, the most common type of fire anticipated in the vicinity of the Project site is a wind-driven fire from the east/south/southeast, moving through the chaparral and sage scrub on the adjacent lands. To analyze the Project site's fire behavior pre- and post-development, the BehavePlus fire modeling system was used to model on-site fire behavior (Appendix M-1 of the Draft EIR). The program simulates rate of fire spread, spotting distance, scorch height, tree mortality, fuel moisture, wind adjustment factor, and other variables. As stated on page 4.20-35 of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones on and off site and would not exacerbate the fire hazard conditions. Furthermore, in addition to required compliance with more stringent regulations related to building material and defensible space applicable to projects within a VHFHSZ, the Project is required to implement wildfire mitigation measures (listed in Section 4.20.7, Mitigation Measures, of Section 4.20 of the Draft EIR), which would implement additional protective measures beyond the regulatory requirements. Please refer to Table 2-2, Consistency with Applicable Regulations and Table 2-3, Code Exceeding Measures in Topical Response-1 for further details.

I59-5 Regarding impacts to open space, as discussed on pages 4.4-59 and 4.4-60 in Section 4.4, Biological Resources, of the Draft EIR, as a result of its clustered design, the Project is able to permanently preserve via conservation easement approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area. Habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. As discussed in further detail in Section 4.4 of the Draft EIR, with implementation of required mitigation measures MM-4.4-1 through MM-4.4-16, all potential biological resource impacts would be reduced to a less than significant level. The Project would facilitate the dedication of existing non-dedicated trails. Existing non-dedicated trails on the southern portion of the Project site would remain with implementation of the Project and would connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon.

Regarding oak tree impacts, as stated in MM-4.4-16, SEA Protected Trees Replacement/Compensation (beginning on page 4.4-93 of the Draft EIR), in order to mitigate impacts related to proposed tree removals, the Project Applicant/Developer is required to plant 772 replacement trees. As shown on page 4.4-93 of the Draft EIR, of the 772 required replacement trees, 574 would be oak trees. Furthermore, the Conservation Management Plan required by MM-4.4-1, On-Site Habitat Preservation, will include a Protected Tree Replacement Plan that shall dictate the establishment of replacement trees. Removal of any SEA Protected Tree shall result in a minimum of two replacement plantings with 10:1 for Heritage Trees (which include coast live oak and valley oak). In accordance with County Code Section 22.102.070(F)(4) and as stated in MM-4.4-16, at a minimum, the County requires that the replacement trees need to be nurtured and maintained in a healthy condition and be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. Furthermore, MM-4.4.2, Habitat Mitigation and Monitoring Plan, requires 10 years of monitoring and maintenance of the habitat to help the ecosystem as a whole to become established. See Section 4.4.7 of Section 4.4, Biological Resources, of the Draft EIR for the requirements of mitigation measures MM-4.4-1 through MM-4.4-

16, which would reduce biological resources impacts, including impacts related to oak tree removal, to less than significant.

I59-6 Regarding specific impacts to deer, coyotes, bobcats, bear, and mountain lions, in accordance with the County's Environmental Checklist Form (Initial Study) and Appendix G of the CEQA Guidelines, the Draft EIR analysis of the Project's potential adverse effects on wildlife species is focused on species identified as a candidate, sensitive, or special status species. Deer, coyote, and bobcat species are not considered candidate, sensitive, or special status species. Furthermore, as shown in the Wildlife Compendium (included as Appendix D of Appendix C, Biota Report of the Draft EIR), there are no bear species known to occur on the Project site. As such, the Project would not result in significant impacts to these species. However, mitigation measures applicable to the California Mountain lion, particularly those related to habitat preservation, would also benefit other wildlife species. For example, the On-Site Conservation Area required per MM-4.4-1 would provide suitable habitat for a variety of wildlife species. The On-Site Conservation Area would also protect in perpetuity a valuable (and presently unprotected) connection between large tracts of adjacent conserved natural open space associated with the City of Santa Clarita's Woodlands Park and Rivendale Park and Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west wildlife movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and the San Gabriel Mountains to the west; this would preserve and avoid substantial loss of connectivity within the SEA. In addition, MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants wildlife species forage on.

I59-7 Regarding impacts to open space, please refer to the response provided above for Comment I59-5.

I59-8 As stated on page 4.1-35 of Section 4.1, Aesthetics, of the Draft EIR, the senior housing building would not exceed the height limitations of the applicable C-3-DP zone. As discussed on pages 4.1-31 and 4.1-32 of the Draft EIR, the senior housing building would be screened by proposed landscaping or otherwise obstructed from view by topography and/or other proposed development, and the building would be predominantly light sand in color, with earthy brown and/or jewel-toned embellishments incorporated into the trims, eaves, corbels, and doors. As further detailed in Section 4.1, Aesthetics, of the Draft EIR, the senior housing building would incorporate design elements from both the Wrightian and Irving Gill architectural styles and would be scaled and finished to blend into the surrounding residential community. These architectural styles, together with a coordinated color palate, would help achieve a cohesiveness of design across the developed, northern portion of the Project site, which would contribute to the visual quality of the Project site as viewed from public vantage points.

Regarding senior housing safety during an evacuation event, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff. As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page 4.20-62 in Section 4.20, Wildfire of the Draft EIR, the Project's HOA would provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response

Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents, including residents of the senior housing apartment complex. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to ensure that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program that shall ensure that all seniors who are not able to safely evacuate on their own, including mobility-challenged individuals, are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.

I59-9 Automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17, Transportation, of the Draft EIR and the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19). Section 4.15, Public Services, of the Draft EIR, analyzes the Project's potential to create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for the following public services: fire protection, Sherriff protection, school, parks, libraires, and public trails. As discussed in further detail in Section 4.15, impacts related to these services would be less than significant with the incorporation of required mitigation measures.

I59-10 Regarding placement of seniors in a wildfire risk area, please refer to the response provided above for Comment I59-8.

Furthermore, a detailed discussion of the Eaton and Palisades fires is provided above in Topical Response-1 (please refer to Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires). As stated therein, during both the Eaton and Palisades Fires of January 2025, the wildfire was driven into communities by extreme Santa Ana winds exceeding 80 mph. This rare level of extreme weather combined with other factors, such as outdated home construction and dense urban vegetation, without enforced or prevalent fuel modification, to produce urban conflagrations. The Project's proposed structures would be built utilizing the most current construction methods designed to reduce wildfire exposure and reduce the likelihood for structure fires to spread into offsite areas, including requirements set forth in California Building Code Chapter 7A. According to the Office of the State Fire Marshal, no master-planned community built after the adoption of California Building Code Chapter 7A has experienced significant structural losses. The Project would also require highly maintained, irrigated vegetative landscaping between homes and perimeter Fuel Modification Zones to keep an active flaming front at great distances from structures and support defensibility for the existing fire environment. Therefore, modern,

code-compliant master planned communities, such as the Project, provide a baseline level of high wildfire safety when designed to modern fire code requirements.

I59-11 Regarding impacts to oak trees, please refer to the response provided above for Comment I59-5. Regarding housing needs, as stated on page 4.14-16 in Section 4.14, Population and Housing, of the Draft EIR, unincorporated Los Angeles County has been allocated a total of 90,052 housing units for the planning period between 2021 and 2029. The County has only attained 5,160 (5.7%) of its current Regional Housing Needs Allocation (RHNA) even though the County is 50% through the 6th Cycle (HCD 2025). Similarly, only 9,201 (33.8%) of the County's 5th Cycle RHNA goals were attained through housing production between 2013 and 2021 (HCD 2025). The Project's construction schedule is anticipated to be completed by 2029; thus, housing units would be available to be occupied within the timeframe of the 6th Cycle (2021-2029). Therefore, the Project would assist the County in achieving its regional housing needs, including very low-income housing and moderate/middle-income households.

I59-12 The Draft EIR provides analysis on the Project's impacts related to water supply and drought conditions within various scenarios. In preparing the Project's Water Supply Assessment (Appendices L-2 and L-3), the Santa Clarita Valley Water Agency (SCV Water) considered the urban water shortage contingency planning analysis set forth in the 2020 Urban Water Management Plan and 2020 Water Shortage Contingency Plan in determining the sufficiency of water supplies for the Project, in addition to all existing and planned future uses in SCV Water's service area. These documents also explain how SCV Water's reliability planning provisions of these adopted documents assist SCV Water in responding to drought conditions, including the severe drought conditions that currently exist (see page 4-33 in Appendix L-2 of this Draft EIR). As stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's Water Supply Assessment concludes that the total projected water supplies available to SCV Water's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five-year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

Comment Letter I60

From: M T
To: Erica G. Aguirre
Subject: Trails at Lyons Canyon Project
Date: Saturday, March 8, 2025 9:42:12 AM
Attachments: 2022060346_CDFW_Comment.pdf

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre,

I've been a resident of Santa Clarita for over 25 years and there have been many changes within the community and adjoining areas during this time.

While the Trails at Lyons Canyon Project has some positive aspects that include open areas, I am opposed to the project. I60-1

I'm retired now but still need to journey outside our valley on occasion. Traffic is challenging and projects such as this only contribute to further congestion and poorer air quality. I60-2

At least once a year we are exposed to some type of fire burning in the community and while this development doesn't increase the probability of a fire, there are considerations for adding more residences to high risk fire areas. I60-3

Evacuating from SCV isn't easy (14 and 5 freeways only), regardless of the circumstance and further construction just adds to the problem. I60-4

We are in a constant state of drought yet we continue to build. Why? We're never going to have more water! I60-5

The California Department of Fish & Wildlife has stated this project could impact mountain lions due to habitat loss. CDFW referred to a Draft Environmental Impact Report (DEIR) to have been completed by the
County of Los Angeles Department of Regional Planning (see attached). I'm late in my awareness of the Trails at Lyons Canyon Project and this report has likely been completed by now. Can I request this from you? From my point of view, we are running out of wilderness (homes) for our predators and building in these locations, where wildlife has been observed, should be discouraged at all costs. I60-6

I'm assuming that this project has evolved and improved from its inception but despite those changes it's difficult to buy into the project when the underlying foundation of where it's being built is flawed with issues that really aren't resolvable. I60-7

Best regards,
Martin Tripp

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Via Electronic Mail Only

July 12, 2022

Erica Gutierrez
Los Angeles County Department of Regional Planning
320 West Temple Streety, 13th Floor
Los Angeles, CA 90012
EGutierrez@planning.lacounty.gov

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Trails at Lyons Canyon Project, SCH #2022060346, Los Angeles County Department of Regional Planning, Los Angeles County

Dear Ms. Gutierrez:

The California Department of Fish and Wildlife (CDFW) has reviewed a Notice of Preparation (NOP) of Draft Environmental Impact Report (DEIR) from the Los Angeles County Department of Regional Planning (DRP) for the Trails at Lyons Canyon Project (Project). CDFW appreciates the opportunity to provide comments regarding aspects of the Project that could affect fish and wildlife resources and be subject to CDFW's regulatory authority under the Fish and Game Code.

I60-8

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Pub. Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect State fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 *et seq.*). Likewise, to the extent implementation of the Project as proposed may result in "take", as defined by State law, of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 *et seq.*), or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

Project Description and Summary

Objective: The Project proposes to develop 504 residential units subdivided into 23 lots within 233 acres. One lot would be designated for a fire station. Three lots would be designated to the Los Angeles County Flood Control District. Approximately 164 acres of natural and improved open space is proposed. The portion of the Project site that would be developed with residential uses would be located in the northerly portion of the Project site on approximately 40.33 acres. The natural and improved open space would predominantly be located within the westerly and southerly portions of the Project site. The Project would include internal driveways, sidewalks, and streets. Streets would provide public access throughout the developed portions of the Project site. The Project would include trails, a new water tank, and debris basins. The Project would require up to 1,460,000 cubic yards of cut and 1,260,000 cubic yards of fill for a total of 2,720,000 cubic yards of grading with 1,345,000 cubic yards of over excavation.

Location: The 233-acre Project site is located in the northern foothills of the Santa Susana Mountains in unincorporated Los Angeles County. The Project site is contiguous to The Old Road on the east, west of Interstate 5, south of Sagecrest Circle, and north of Calgrove Boulevard. The Project site is associated with Assessor's Parcel Number 2826-022-026, 2826-022-027, 2826-022-035, 2826-023-014, and 2826-041-039. The Project site is located within the Santa Susana Mountains/Simi Hills Significant Ecological Area (SEA). The Project site is relatively undisturbed for much of the property.

I60-8 Cont.

Comments and Recommendations

CDFW offers the comments and recommendations below to assist DRP in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. The DEIR should provide adequate and complete disclosure of the Project's potential impacts on biological resources [Pub. Resources Code, § 21061; CEQA Guidelines, §§ 15003(i), 15151]. CDFW looks forward to commenting on the DEIR when it is available.

Specific Comments

1) Impacts on Mountain Lion (*Puma concolor*). Mountain lions collared and tracked by the National Park Service have been documented in the proposed Project site. On August 9, 2021, a male mountain lion was captured on a wildlife camera less than one mile from the Project site (CDFW 2021). P32's dispersal path crossed through the Santa Susana Mountains close to the Project site before P32 was struck and killed by a vehicle in 2015. Multiple collared mountain lions have been tracked in the Santa Susana Mountains, including P16, P35, P38, and P39. Finally, the Project site is located near multiple predation sites in the Santa Susana Mountains (Benson et al. 2016). The Project could impact mountain lion due habitat loss, habitat fragmentation, introducing new barriers to movement, increasing vehicle strikes, and increasing fire risk. The Project could therefore exacerbate the challenges faced by mountain lion in the Santa Susana Mountains and southern California.

    a) Protection Status: The mountain lion is a specially protected mammal in the State (Fish and G. Code, § 4800). In addition, on April 21, 2020, the California Fish and Game Commission accepted a petition to list the Southern California/Central Coast

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

Evolutionary Significant Unit of mountain lion as threatened under CESA (CDFW 2020). As a CESA candidate species, the mountain lion in southern California is granted full protection of a threatened species under CESA.

b) Analysis and Disclosure. The DEIR should analyze the Project's potential impact and cumulative impact on mountain lion during both Project construction and for the Project's lifetime. The DEIR should analyze impact on mountain lion from the standpoint of the following:
   - Introducing new/additional barriers to movement;
   - Constraining/eliminating essential corridors and pinch points leading to severed migration;
   - Habitat loss, fragmentation, and encroachment;
     i. Discuss the number or acreage of landscape linkages/landscape blocks within the Project area and adjacent areas. CDFW recommends referencing CDFW's Natural Landscape Blocks dataset (DS 621) in the Biogeographic Information and Observation System (BIOS) (CDFW 2022a).
     ii. Discuss the acreage of mountain lion habitat suitability (a proxy for mountain lion permeability and use) within the Project area and adjacent areas. CDFW recommends referencing CDFW's Mountain Lion Habitat Suitability dataset (DS 2916) and Mountain Lion Predicted Habitat CWHW dataset (DS 2616).
     iii. Provide an analysis of current landscape intactness (current level of development) around the Project site, and how the Project may impact habitat connectivity or impede mountain lion movement across the landscape to adjacent habitats.
   - Increased human presence, traffic, noise, and lighting, as well as introduction of any livestock or animal keeping;
   - Increased fire risk; and
   - Use of herbicides, pesticides, and rodenticides.

I60-8 Cont.

CDFW recommends discussing Project's impact in relation to the South Coast Missing Linkages (DS 419), specifically the Santa Monica-Sierra Madre Connection. The undeveloped natural areas on both sides of the I-5 Freeway are important areas for maintaining and improving regional and State-wide connectivity. In addition, CDFW recommends such analysis include a wildlife camera study to aid in identification of areas that may be important to wildlife movement between the Project site and adjacent habitat. CDFW recommends DRP retain a qualified biologist to establish a robust wildlife camera study. Wildlife cameras should be deployed for a duration sufficient to capture any mountain lion potentially moving through the Project site. Wildlife camera study protocols and guidelines can be found on CDFW's Survey and Monitoring Protocols and Guidelines webpage (CDFW 2022b). DRP is welcome to consult with CDFW to develop a robust study design.

CDFW also recommends the DEIR evaluate the Project's cumulative impacts on both the Central Coast South (CC-S) mountain lion population and the Southern California/Central Coast Evolutionarily Significant Unit of mountain lion. Impacts should those listed above.

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

c) Avoidance. CDFW recommends DRP require the Project applicant to design the Project to fully avoid impacts on mountain lion. The DEIR should discuss how the Project has been designed to avoid impacts on mountain lion. CDFW recommends the DEIR provide maps of the Project design overlaid on important areas for wildlife movement so that CDFW may evaluate whether the Project has been designed to avoid impacts on mountain lion or whether the Project's impact would be less than significant impact on mountain lion.

d) Minimizing Impacts and Compensatory Mitigation. If the Project would have a significant impact on mountain lion, CDFW recommends DRP require the Project applicant to minimize the Project's impact through retaining and/or creating habitat and wildlife crossings that would facilitate mountain lion movement and dispersal. If avoiding and minimizing impacts is not feasible, CDFW recommends the DEIR include measures to fully compensate for loss of mountain lion habitat, corridors, and linkages. Appropriate mitigation may include obtaining appropriate take authorization under CESA (pursuant to Fish & Game Code, § 2080 et seq.).

e) CESA. CDFW considers adverse impacts to a species protected by CESA to be significant without mitigation under CEQA. As to CESA, take of any endangered, threatened, candidate species, or CESA-listed plant species that results from a project is prohibited, except as authorized by State law (Fish & G. Code §§ 2080, 2085; Cal. Code Regs., tit. 14, §786.9). Consequently, if the Project and any Project-related activity during the life of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the project proponent seek appropriate take authorization under CESA prior to implementing the project. Appropriate authorization from CDFW may include an Incidental Take Permit (ITP) or a Consistency Determination in certain circumstances, among other options [Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)]. Early consultation is encouraged, as significant modification to the project and mitigation measures may be required to obtain an ITP. Revisions to the Fish and Game Code, effective January 1998, may require that CDFW issue a separate CEQA document for the issuance of an ITP unless the Project's CEQA document addresses all project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an ITP.

I60-8 Cont.

2) Cumulative Impact. CDFW is aware of the Canyon View Estates project located adjacent to the proposed Project in the northern foothills of the Santa Susana Mountains[1]. Cumulative impacts on biological resources can result from collectively significant projects. The Project, when considered collectively with prior, concurrent, and probable future projects, may have a significant cumulative effect on biological resources. The Project may have a potential to substantially reduce the number or restrict the range of endangered, rare, or threatened species. Species that may be impacted by the Project include, but is not limited to, the biological resources described in this letter.

[1] Canyon View Estates Project/Project No. 2016-002179; Tract Map No. 74650; Conditional Use Permit No. 2016004409; Oak Tree Permit No. RPPL2017009209; and Environmental Assessment No. 20160044100. CEQA documents, including CDFW's comments on the Canyon View Estates Project available at: https://ceqanet.opr.ca.gov/2019089066/2

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

Accordingly, CDFW recommends the DEIR evaluate the Project's potential cumulative impacts on biological resources. The Project may have a "significant effect on the environment" if the possible effects of the Project are individually limited but cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects [Pub. Resources Code, § 21083(b)]. DRP's conclusions regarding the significance of the Project's cumulative impact should be justified and supported by evidence to make those conclusions. Specifically, if DRP concludes that the Project would not result in cumulative impacts on biological resources, DRP "shall identify facts and analysis supporting DRP's conclusion that the cumulative impact is less than significant" [CEQA Guidelines section § 15130(a)(2)]. When using a threshold of significance, the DEIR should briefly explain how compliance with the threshold means that the Project's impacts are less than significant. A threshold of significance is an identifiable quantitative, qualitative, or performance level of a particular environmental effect [CEQA Guidelines, § 15064.7]. Compliance with the threshold does not relieve DRP's obligation to consider substantial evidence indicating that the Project's environmental effects may still be significant [CEQA Guidelines, § 15064(b)(2)]. Alternatively, if DRP concludes that the Project might contribute to a significant cumulative impact, but the contribution will be rendered less than cumulatively considerable through implementation of mitigation measures, the DEIR should briefly explain how the contribution has been rendered by DRP to be less than cumulatively considerable. DRP "shall identify facts and analysis supporting DRP's conclusion that the contribution will be rendered less than cumulatively considerable" [CEQA Guidelines section, § 15130(a)(3)].

I60-8
Cont.

3) 164 Acres of Open Space. According to the NOP, the Project would include approximately 164 acres of natural and improved open space. The DEIR should discuss whether these 164 acres are being proposed as compensatory mitigation for potentially significant impacts on biological resources [CEQA Guidelines, § 15370(e)]. The DEIR should discuss why these 164 acres would be adequate to compensate for each biological resource impacted. There should be a nexus between the impacted biological resource and the compensatory mitigation provided (e.g., like-for-like, in-kind). In addition, if DRP determines that providing 164 acres of open space would avoid significant effects or mitigate effects to below a level of significance, the DEIR should explain the reasons for determining why effects would not be significant [CEQA Guidelines, §§ 15063(c)(3)(C); 15063(c)(5); 15064(f)(2)].

4) Fire. The Project proposes a new residential development in a 'Very High' Fire Severity Zone (VHFSZ) (County of Los Angeles 2022). Development in a VHFSZ and wildland urban interface could increase fire risk, frequency, and intensity. The DEIR should discuss how the Project may impact biological resources, open space, natural areas, and adjacent conserved land as a result of introducing and intensifying land use in a VHFSZ. In addition, the DEIR should discuss if the Project would require fuel modification (e.g., thinning, trimming, and removal of understory or mulch layer), provide maps showing potential fuel modification zones, and discuss how fuel modification may impact biological resources. Fuel modification may result in additional habitat loss and have perpetual impacts on biological resources. If the Project may require fuel modification, CDFW recommends DRP require the Project applicant to design the Project with features such as block walls or other alternatives. Block walls, for example, may reduce the extent and amount of vegetation and habitat that may need to be removed. Also, if the Project may require irrigation in fuel modification zones, CDFW recommends DRP require the Project applicant to provide an

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

irrigation plan such that water drains back into the development and not onto any adjacent open space, natural areas, and conserved lands. The DEIR should discuss how the Project has been designed to avoid or minimize impacts on biological resources resulting from potential fuel modification requirements.

5) Open Space and Natural Areas. According to the California Protected Areas Database Holdings dataset available in BIOS, the following protected areas are located adjacent to the Project site: Santa Clarita Woodlands Park, Ed Davis Park in Towsley Canyon, and Rivendale Ranch Open Space (CDFW 2022a). These and other unnamed open space and natural areas are managed by the Mountains Recreation and Conservation Authority, City of Santa Clarita, and Santa Monica Mountains Conservancy. The Project may encroach onto these lands and/or may impact these lands by increasing fire risk within the proposed development that can spread onto adjacent open space. Project-related fuel modification could also impact adjacent open space and natural areas.

   a) Analysis and Disclosure. CDFW recommends the DEIR discuss the Project's potential impact on open space and natural areas resulting from Project-related construction and activities, ground-disturbance activities (e.g., mobilization, parking, staging, and access), vegetation removal, fuel modification, spread of invasive species, altered hydrology, and altered habitat conditions (e.g., microclimate, soils, and slope). The DEIR should disclose the amount of open space and natural areas impacted as a result of the proposed Project.

   b) Avoidance and Setback. CDFW recommends the Project fully avoid encroaching onto open space/natural areas. Encroachment onto open space/natural areas creates an abrupt transition between two different land uses. Encroachment onto open space/natural areas could affect environmental and biological conditions and increase the magnitude of edge effects such as spread of non-native plants and pests (e.g., Argentine ants), fuel modification, and nighttime lighting. Edge effects can result in habitat type conversion (e.g., native to more non-native species) and reduce plant and wildlife species richness (Mitrovich et al. 2009). CDFW recommends DRP require the Project applicant to modify the Project so that impacts on open space/natural areas are completely avoided. The Project should be designed with effective setbacks adjoining open space/natural areas. The DEIR should include a discussion of how the chosen setback distance fully avoids encroachment onto open space/natural areas.

6) Streams and Associated Natural Communities. According to the U.S. Fish and Wildlife Service's (USFWS) National Wetlands Mapper, multiple streams are located within the Project site (USFWS 2022). Buildout of the Project may impact streams and associated natural communities as a result of grading and development. Streams could be channelized or diverted underground. Streams could become impaired because of streambank erosion resulting from Project construction and Project buildout. Natural communities adjacent to streams could be removed or degraded through habitat modification (e.g., loss of water source, encroachment by the Project, edge effects leading to introduction of non-native plants).

   a) Stream Delineation and Impact Assessment. The DEIR should provide a stream delineation, which should also identify culverts, ditches, and storm channels that may

I60-8 Cont.

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

transport water, sediment, pollutants, and discharge into any rivers, streams, and lakes[2]. The delineation should be conducted pursuant to the USFWS wetland definition adopted by CDFW (Cowardin et al. 1979). Be advised that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers' Section 404 permit and Regional Water Quality Control Board Section 401 Certification. In addition, the DEIR should disclose the total impacts (linear feet and/or acreage) including impacts resulting from fuel modification on any river, stream, or lake and associated natural communities.

b) Avoidance and Setbacks. CDFW recommends the Project avoid impacts on streams and associated natural communities by avoiding or minimizing Project-related development adjacent to streams. Herbaceous vegetation adjacent to streams protects the physical and ecological integrity of these water features and maintains natural sedimentation processes. CDFW recommends DRP require the Project applicant to modify the Project so that impacts on streams are avoided and/or minimized. The Project should be designed with effective setbacks adjoining streams and associated natural communities. The chosen setback distance should be disclosed in the DEIR so CDFW may assess potential impacts on biological resources.

c) Mitigation. If avoidance is not feasible, the DEIR should include measures to fully compensate for impacts on streams and loss of associated natural communities. Higher mitigation should be provided to compensate for impacts on streams supporting rare, sensitive, or special status fish, wildlife, and natural communities. In addition, the DEIR should be conditioned to require the Project/Project applicant to submit a Lake and Streambed Alteration (LSA) Notification to CDFW pursuant to Fish and Game Code Section 1600 et seq. As a Responsible Agency under CEQA, CDFW has authority over activities in streams and/or lakes that will divert or obstruct the natural flow, or change the bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream or use material from a streambed. For any such activities, the project applicant (or "entity") must notify CDFW[3]. Please visit CDFW's Lake and Streambed Alteration Program webpage for more information (CDFW 2022c).

I60-8 Cont.

7) Coastal California Gnatcatcher (*Polioptila californica californica*). The Project site may be within the coastal California gnatcatcher (gnatcatcher) range (Cooper et al. 2017; USFWS 2010). In addition, the Project site is adjacent to critical habitat for the gnatcatcher. Furthermore, based on review of aerial imagery, there appears to be vegetation consistent with coastal scrub within and around the Project site. Gnatcatchers are closely tied to coastal scrub vegetation for reproduction (USFWS 2010). During the non-breeding season, gnatcatchers may also occur in other nearby plant communities (USFWS 2010).

[2] "Any river, stream, or lake" includes those that are dry for periods of time (ephemeral/episodic) as well as those that flow year-round (perennial). This includes ephemeral streams and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a water body.
[3] CDFW's issuance of a LSA Agreement for a project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the environmental document of the local jurisdiction (lead agency) for the project. To minimize additional requirements by CDFW pursuant to section 1600 et seq. and/or under CEQA, the environmental document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement.

Page 8 of 20 in Comment Letter I60

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

a) Protection Status: Gnatcatcher is a California Species of Special Concern (SSC) and a species listed as threatened under the Endangered Species Act (ESA). CEQA provides protection not only for CESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Take of SSC could require a mandatory finding of significance (CEQA Guidelines, § 15065). As an ESA-listed species, gnatcatcher is considered an endangered, rare, or threatened species under CEQA (CEQA Guidelines, § 15380). Take under the ESA is more broadly defined than CESA. Take under ESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting.

b) Surveys. In preparation of the DEIR, CDFW recommends DRP require that a qualified biologist perform protocol-level surveys for gnatcatcher in order to determine if gnatcatcher is present. The qualified biologist should conduct surveys according to the Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines (USFWS 1997). The protocol should be followed for all surveys unless otherwise authorized by the USFWS in writing (USFWS 1997).

c) Disclosure and Mitigation. The DEIR should discuss the Project's potential impacts on gnatcatcher and habitat. The DEIR should provide measures to avoid those impacts or measures to mitigate for impacts if avoidance is not feasible. If the Project would result in habitat loss, CDFW recommends the Project Applicant provide replacement habitat to ensure no net loss.

I60-8 Cont.

8) Crotch's bumble bee (*Bombus crotchii*). Based on a search of the California Natural Diversity Database (CNDDB) in BIOS, there is a recent occurrence of Crotch's bumble bee within one mile of the Project site (CDFW 2022d)[4]. The Project site may support habitat for Crotch's bumble bee, which includes grasslands and scrub. The Project as proposed could grade and/or develop habitat that could support Crotch's bumble bee. The Project may result in temporal or permanent loss of suitable nesting and foraging habitat for Crotch's bumble bee. In addition, Project ground-disturbing activities and vegetation removal may cause death or injury of adults, eggs, and larva, burrow collapse, nest abandonment, and reduced nest success.

a) Protection Status. Crotch's bumble bee is listed as an invertebrate of conservation priority under the California Terrestrial and Vernal Pool Invertebrates of Conservation Priority (CDFW 2017). Crotch's bumble bee has a State ranking of S1/S2. This means that the Crotch's bumble bee is considered critically imperiled or imperiled and is extremely rare (often 5 or fewer populations). Also, Crotch's bumble bee has a very restricted range and steep population declines make the species vulnerable to extirpation from the State (CDFW 2017). Accordingly, Crotch's bumble bee meets the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Therefore, impacts to Crotch's bumble bee could require a mandatory finding

[4] A lack of current occurrences for Crotch's bumble bee within and/or adjacent to the Project site is likely due to an absence of focused surveys and not necessarily that Crotch's bumble bee is not present. Until recently, focused surveys for Crotch's bumble bee were not required for projects.

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

of significance by DRP [CEQA Guidelines, § 15065(a)(1)].

b) Surveys and Disclosure. CDFW recommends DRP retain a qualified biologist familiar with the species to survey the Project site for Crotch's bumble bee and habitat. Surveys for Crotch's bumble bee should be conducted during flying season when the species is most likely to be detected above ground, between March 1 to September 1 (Thorp et al. 1983). The DEIR should assess the Project's potential impact on Crotch's bumble bee, including impacts resulting from habitat loss.

c) Mitigation. The DEIR should include measures to first avoid impacts on Crotch's bumble bee. If the Project would impact Crotch's bumble bee and result in loss of habitat, CDFW recommends the DEIR provide measures to minimize direct impacts on Crotch's bumble bee and provide compensatory mitigation for loss of habitat.

9) Rare Plants. A qualified biologist should survey the entire Project site for rare plants in accordance with established protocol (see General Comment #3b). The qualified biologist should survey for species including, but not limited, to the following: San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*), a CESA-listed species; slender mariposa lily (*Calochortus clavatus* var. *gracilis*), a California Rare Plant Rank (CRPR) 1B.2 species; Plummer's mariposa lily (*Calochortus plummerae*), a CRPR 4.2 species; and Peirson's morning glory (*Calystegia piersonii*), a CRPR 4.2 species. I60-8 Cont.

CDFW recommends DRP require the Project applicant to design the Project to fully avoid impacts on rare plants and habitat, especially those that are CESA and/or ESA-listed. The DEIR should discuss and show how the Project has been designed to fully avoid impacts. If impacts cannot be avoided, the DEIR should fully disclose where impacts would occur and how many plants and acres of habitat would be impacted. The DEIR should be conditioned to provide compensatory mitigation for loss of individual rare plants as well as acres of habitat.

10) Sensitive Natural Communities. A qualified biologist should map all natural communities within the Project site as well as areas subject to off-site impacts such as edge effects in accordance with established protocol (see General Comment #3b and 3c). The qualified biologist should identify and map natural communities including, but not limited, to the following: California walnut groves (*Juglans californica* Alliance); California sycamore woodlands (*Platanus racemosa* Alliance); Fremont cottonwood forest and woodland (*Populus fremontii* Alliance); oak forest and woodland (*Quercus* genus Alliance); and willow riparian woodland and forest (*Salix* genus Alliance).

The DEIR should fully disclose where impacts would occur and how many acres of natural communities would be impacted. The DEIR should be conditioned to provide compensatory mitigation for impacts on Sensitive Natural Communities (see General Comment #3a). Due to the local/regional rarity and significance, compensatory mitigation should be higher for impacts on Sensitive Natural Communities with a State Rarity Ranking of S1 or S2 and/or a Sensitive Natural Community with an additional ranking of 0.1 or 0.2.

11) Nesting Birds. The Project proposes to develop within or adjacent to open space and natural areas that likely supports nesting birds and raptors. Accordingly, the Project may impact nesting birds and raptors. Project activities occurring during the bird and raptor nesting

Page 10 of 20 in Comment Letter I60

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment.

a) Protection Status. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). It is unlawful to take, possess, or needlessly destroy the nest or eggs of any raptor.

b) Avoidance. CDFW recommends that measures be taken to avoid impacts on nesting birds and raptors. CDFW recommends the DEIR include a measure whereby the Project avoids ground-disturbing activities (e.g., mobilizing, staging, drilling, and excavating) and vegetation removal during the avian breeding season which generally runs from February 15 through September 15 (as early as January 1 for some raptors) to avoid take of birds, raptors, or their eggs.

c) Minimizing Potential Impacts. If impacts on nesting birds and raptors cannot be avoided, CDFW recommends the DEIR include measures to minimize impacts on nesting birds and raptors. Prior to starting ground-disturbing activities and vegetation removal, CDFW recommends a qualified biologist conduct breeding bird and raptor surveys to identify nests occurring in the disturbance area and 100 feet from the disturbance area to the extent allowable and accessible. The qualified biologist should establish no-disturbance buffers to minimize impacts on those nests. CDFW recommends a minimum 300-foot no-disturbance buffer around active bird nests. For raptors, the no-disturbance buffer should be expanded to 500 feet and 0.5 mile for special status species, if feasible. Project personnel, including all contractors working on site, should be instructed on nesting birds, sensitivity of the area, and adherence to the no-disturbance buffers. Reductions in the buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors determined by a qualified biologist.

I60-8 Cont.

12) Loss of Bird and Raptor Nesting Habitat. The Project proposes to develop within or adjacent to open space and natural areas that likely supports nesting birds and raptors.

a) Analysis and Disclosure. CDFW recommends the DEIR discuss the Project's impact on nesting habitat. Edge effects and impacts due to fuel modification should also be discussed. The DEIR should disclose the acreage of nesting habitat that could be impacted and lost as a result of the proposed Project.

b) Minimizing Potential Impacts and Compensatory Mitigation. CDFW recommends the Project avoid and minimize development and encroachment onto nesting habitat. If avoidance is not feasible, CDFW recommends the DEIR provide compensatory mitigation for the loss of nesting habitat.

13) Bats. Bats may forage and roost in open space and natural areas in the vicinity of the Project area. Ground-disturbing activities and vegetation removal could impact bats and roosts. Extra noise, human activity, dust, ground vibrations, or the reconfiguration of large objects can disturb roosting bats which may have a negative impact on the animals.

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

a) Protection Status: Bats are considered non-game mammals and are afforded protection by State law from take and/or harassment (Fish & G. Code, § 4150; Cal. Code of Regs., § 251.1). In addition, some bats are considered SSC.

b) Analysis and Disclosure: In preparation of the DEIR, CDFW recommends DRP require that a qualified bat specialist identify potential daytime, nighttime, wintering, and hibernation roost sites and conduct bat surveys within these areas (plus a 100-foot buffer as access allows) to identify roosting bats and any maternity roosts. CDFW recommends using acoustic recognition technology to maximize detection of bats.

c) Avoidance and Minimization. If the Project would impact bats, CDFW recommends the DEIR provide measures to avoid/minimize impacts on bats, roosts, and maternity roosts. The DEIR should incorporate mitigation measures in accordance with California Bat Mitigation Measures (Johnston et al. 2004).

14) Los Angeles County Significant Ecological Areas (SEAs). The Project site is located within the Santa Susana Mountains/Simi Hills Significant Ecological Area (SEA). Los Angeles County Significant Ecological Areas are officially designated areas within Los Angeles County identified as having irreplaceable biological resources (LACDRP 2019). These areas represent the wide-ranging biodiversity of Los Angeles County and contain some of Los Angeles County's most important biological resources. The DEIR should discuss the Project's impact on the Santa Susana Mountains/Simi Hills SEA.

I60-8 Cont.

General Comments

1) Disclosure. The DEIR should provide an adequate, complete, and detailed disclosure about the effect which a proposed project is likely to have on the environment (Pub. Resources Code, § 20161; CEQA Guidelines, § 15151). Adequate disclosure is necessary so CDFW may provide comments on the adequacy of proposed avoidance, minimization, or mitigation measures, as well as to assess the significance of the specific impact relative to plant and wildlife species impacted (e.g., current range, distribution, population trends, and connectivity).

2) Mitigation Measures. Public agencies have a duty under CEQA to prevent significant, avoidable damage to the environment by requiring changes in a project through the use of feasible alternatives or mitigation measures [CEQA Guidelines, §§ 15002(a)(3), 15021]. Pursuant to CEQA Guidelines section 15126.4, an environmental document "shall describe feasible measures which could mitigate for impacts below a significant level under CEQA."

a) Level of Detail. Mitigation measures must be feasible, effective, implemented, and fully enforceable/imposed by the lead agency through permit conditions, agreements, or other legally binding instruments (Pub. Resources Code, § 21081.6(b); CEQA Guidelines, § 15126.4). A public agency "shall provide the measures that are fully enforceable through permit conditions, agreements, or other measures" (Pub. Resources Code, § 21081.6). CDFW recommends DRP provide mitigation measures that are specific and detailed (i.e., responsible party, timing, specific actions, location) in order for a mitigation measure to be fully enforceable and implemented successfully via a mitigation monitoring and/or reporting program (Pub. Resources Code, § 21081.6; CEQA Guidelines, § 15097).

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

b) Disclosure of Impacts. If a proposed mitigation measure would cause one or more significant effects, in addition to impacts caused by the proposed Project, the DEIR should include a discussion of the effects of proposed mitigation measures [CEQA Guidelines, § 15126.4(a)(1)]. In that regard, the DEIR should provide an adequate, complete, and detailed disclosure about the Project's proposed mitigation measure(s). Adequate disclosure is necessary so CDFW may assess the potential impacts of proposed mitigation measures.

3) Biological Baseline Assessment. An adequate biological resources assessment should provide a complete assessment and impact analysis of the flora and fauna within and adjacent to the Project area and where the Project may result in ground disturbance. The assessment and analysis should place emphasis on identifying endangered, threatened, rare, and sensitive species; regionally and locally unique species; and sensitive habitats. An impact analysis will aid in determining the Project's potential direct, indirect, and cumulative biological impacts, as well as specific mitigation or avoidance measures necessary to offset those impacts. CDFW also considers impacts to SSC a significant direct and cumulative adverse effect without implementing appropriate avoidance and/or mitigation measures. The DEIR should include the following information:

a) Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region [CEQA Guidelines, § 15125(c)]. The DEIR should include measures to fully avoid and otherwise protect Sensitive Natural Communities. CDFW considers Sensitive Natural Communities as threatened habitats having both regional and local significance. Natural communities, alliances, and associations with a State-wide rarity ranking of S1, S2, and S3 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by visiting the Vegetation Classification and Mapping Program - Natural Communities webpage (CDFW 2022e);

b) A thorough, recent, floristic-based assessment of special status plants and natural communities following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). Botanical field surveys should be comprehensive over the entire Project area, including areas that will be directly or indirectly impacted by the Project. Adjoining properties should also be surveyed where direct or indirect Project effects could occur, such as those from fuel modification, herbicide application, invasive species, and altered hydrology. Botanical field surveys should be conducted in the field at the times of year when plants will be both evident and identifiable. Usually, this is during flowering or fruiting. Botanical field survey visits should be spaced throughout the growing season to accurately determine what plants exist in the project area. This usually involves multiple visits to the Project area (e.g., in early, mid, and late-season) to capture the floristic diversity at a level necessary to determine if special status plants are present;

c) Floristic alliance- and/or association-based mapping and vegetation impact assessments conducted in the Project area and within adjacent areas. The Manual of California Vegetation (MCV), second edition, should also be used to inform this mapping and assessment (Sawyer et al. 2009). Adjoining habitat areas should be included in this assessment where the Project's construction and activities could lead to direct or indirect impacts off site;

I60-8 Cont.

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

d) A complete and recent assessment of the biological resources associated with each habitat type in the Project area and within adjacent areas. CDFW's California Natural Diversity Database should be accessed to obtain current information on any previously reported sensitive species and habitat (CDFW 2022f). An assessment should include a minimum nine-quadrangle search of the CNDDB to determine a list of species potentially present in the Project area. A nine-quadrangle search should be provided in the Project's CEQA document for adequate disclosure of the Project's potential impact on biological resources. Please see CNDDB Data Use Guidelines – Why do I need to do this? for additional information (CDFW 2011);

e) A lack of records in the CNDDB does not mean that rare, threatened, or endangered plants and wildlife do not occur. Field verification for the presence or absence of sensitive species is necessary to provide a complete biological assessment for adequate CEQA review [CEQA Guidelines, § 15003(i)];

f) A complete, recent, assessment of endangered, rare, or threatened species and other sensitive species within the Project area and adjacent areas, including SSC and California Fully Protected Species (Fish & G. Code, §§ 3511, 4700, 5050, and 5515). Species to be addressed should include all those which meet the CEQA definition of endangered, rare, or threatened species (CEQA Guidelines, § 15380). Seasonal variations in use of the Project area should also be addressed such as wintering, roosting, nesting, and foraging habitat. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, may be required if suitable habitat is present. See CDFW's Survey and Monitoring Protocols and Guidelines for established survey protocol (CDFW 2022g). Acceptable species-specific survey procedures may be developed in consultation with CDFW and USFWS; and,

I60-8 Cont.

g) A recent wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if Project implementation build out could occur over a protracted time frame or in phases.

4) Direct and Indirect Impacts on Biological Resources. The DEIR should provide a thorough discussion of direct and indirect impacts expected to adversely affect biological resources with specific measures to offset such impacts. The DEIR should address the following:

a) A discussion regarding Project-related indirect impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands [e.g., preserve lands associated with a Natural Community Conservation Plan (Fish & G. Code, § 2800 et. seq.)]. Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in areas adjacent to the Project, should be fully analyzed and discussed in the DEIR;

b) A discussion of both the short-term and long-term effects of the Project on species population distribution and concentration, as well as alterations of the ecosystem

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

supporting those species impacted [CEQA Guidelines, § 15126.2(a)];

c) A discussion of potential adverse impacts from lighting, noise, temporary and permanent human activity, and exotic species, and identification of any mitigation measures;

d) A discussion of post-Project fate of drainage patterns, surface flows, and soil erosion and/or sedimentation in streams and water bodies. The discussion should also address the potential water extraction activities and the potential resulting impacts on habitat (if any) supported by the groundwater. Measures to mitigate such impacts should be included; and

e) An analysis of impacts from proposed changes to land use designations and zoning, and existing land use designation and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the DEIR.

5) Project Description and Alternatives. To enable adequate review and comment on the proposed Project from the standpoint of the protection of fish, wildlife, and plants, CDFW recommends the following information be included in the DEIR:

a) A complete discussion of the purpose and need for, and description of the proposed Project;

b) Pursuant to CEQA Guidelines section 15126.6(a), an environmental document "shall describe a reasonable range of potentially feasible alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project." CEQA Guidelines section 15126.6(f)(2) states if the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion; and,

c) A range of feasible alternatives to the Project location to avoid or otherwise minimize direct and indirect impacts on sensitive biological resources and wildlife movement areas. CDFW recommends DRP select Project designs and alternatives that would avoid or otherwise minimize direct and indirect impacts on biological resources. CDFW also recommends DRP consider establishing appropriate setbacks from sensitive and special status biological resources. Setbacks should not be impacted by ground disturbance or hydrological changes from any future Project-related construction, activities, maintenance, and development. As a general rule, CDFW recommends reducing or clustering a development footprint to retain unobstructed spaces for vegetation and wildlife and provide connections for wildlife between properties and minimize obstacles to open space.

Project alternatives should be thoroughly evaluated, even if an alternative would impede, to some degree, the attainment of the Project objectives or would be more costly (CEQA Guidelines, § 15126.6). The DEIR "shall" include sufficient information about each alternative to allow meaningful evaluation, public participation, analysis, and comparison with the proposed Project (CEQA Guidelines, § 15126.6).

I60-8 Cont.

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

d) Where the Project may impact aquatic and riparian resources, CDFW recommends DRP select Project designs and alternatives that would fully avoid impacts to such resources. CDFW also recommends an alternative that would not impede, alter, or otherwise modify existing surface flow, watercourse and meander, and water-dependent ecosystems and natural communities. Project designs should consider elevated crossings to avoid channelizing or narrowing of watercourses. Any modifications to a river, creek, or stream may cause or magnify upstream bank erosion, channel incision, and drop in water level and cause the watercourse to alter its course of flow.

6) Data. CEQA requires that information developed in environmental impact reports be incorporated into a database which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special status species and sensitive natural communities detected by completing and submitting CNDDB Field Survey Forms (CDFW 2022h). To submit information on special status native plant populations and sensitive natural communities, the Combined Rapid Assessment and Relevé Form should be completed and submitted to CDFW's Vegetation Classification and Mapping Program (CDFW 2022i). DRP should ensure data collected for the preparation of the DEIR be properly submitted, with all data fields applicable filled out.

7) Compensatory Mitigation. The DEIR should include compensatory mitigation measures for the Project's significant direct and indirect impacts to sensitive and special status plants, animals, and habitats. Mitigation measures should emphasize avoidance and minimization of Project-related impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore inadequate to mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement and financial assurance and dedicated to a qualified entity for long-term management and monitoring. Under Government Code, section 65967, the Lead Agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves.

8) Long-term Management of Mitigation Lands. For proposed preservation and/or restoration, the DEIR should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective should be to offset Project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate endowment should be set aside to provide for long-term management of mitigation lands.

9) Wildlife Friendly Fencing. Fencing could obstruct wildlife movement and result in wildlife injury or mortality due to impalement and entanglement (e.g., chain link fencing). If the Project would include temporary and/or permanent fencing, prior to preparation of the DEIR, CDFW recommends DRP require the Project applicant to provide wildlife friendly fencing designs. Fencing designs should be disclosed and evaluated in the DEIR for potential impacts on biological resources and wildlife movement. The DEIR should discuss how

I60-8
Cont.

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

fencing proposed for the Project would minimize impacts on biological resources, specifically wildlife movement. CDFW supports the use of wildlife-friendly fencing. Wildlife-friendly fencing should be used and strategically placed in areas of high biological resource value in order to protect biological resources, habitat, and wildlife movement. CDFW recommends A Landowner's Guide to Wildlife Friendly Fences for information wildlife-friendly fences (MFWP 2012).

10) Use of Native Plants and Trees. If the Project would include landscaping, CDFW recommends DRP require the Project applicant to provide a native plant palette for the Project. The Project's landscaping plan should be disclosed and evaluated in the DEIR for potential impacts on biological resources such as natural communities adjacent to the Project site (e.g., introducing non-native, invasive species). CDFW supports the use of native plants for the Project especially considering the Project's location adjacent to protected open space and natural areas. CDFW strongly recommends avoiding non-native, invasive species for landscaping and restoration, particularly any species listed as 'Moderate' or 'High' by the California Invasive Plant Council (Cal-IPC 2022). CDFW supports the use of native species found in naturally occurring plant communities within or adjacent to the Project site. In addition, CDFW supports planting species of trees, such as oaks (*Quercus* genus), and understory vegetation (e.g., ground cover, subshrubs, and shrubs) that create habitat and provide a food source for birds. CDFW recommends retaining any standing, dead, or dying tree (snags) where possible because snags provide perching and nesting habitat for birds and raptors. Finally, CDFW supports planting species of vegetation with high insect and pollinator value.

I60-8 Cont.

11) Translocation/Salvage of Plants and Animal Species. Translocation and transplantation is the process of removing plants and wildlife from one location and permanently moving it to a new location. CDFW generally does not support the use of translocation or transplantation as the primary mitigation strategy for unavoidable impacts to endangered, rare, or threatened plants and animals. Studies have shown that these efforts are experimental and the outcome unreliable. CDFW has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving plants and animals and their habitats.

12) Wetland Resources. CDFW, as described in Fish and Game Code section 703(a), is guided by the Fish and Game Commission's (Commission) policies. The Wetlands Resources policy the Commission "…seek[s] to provide for the protection, preservation, restoration, enhancement, and expansion of wetland habitat in California" (CFGC 2020). Further, it is the policy of the Fish and Game Commission to strongly discourage development in or conversion of wetlands. It opposes, consistent with its legal authority, any development or conversion that would result in a reduction of wetland acreage or wetland habitat values. To that end, the Commission opposes wetland development proposals unless, at a minimum, project mitigation assures there will be 'no net loss' of either wetland habitat values or acreage. The Commission strongly prefers mitigation which would achieve expansion of wetland acreage and enhancement of wetland habitat values."

    a) The Wetlands Resources policy provides a framework for maintaining wetland resources and establishes mitigation guidance. CDFW encourages avoidance of wetland resources as a primary mitigation measure and discourages the development or type conversion of wetlands to uplands. CDFW encourages activities that would avoid the reduction of

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

wetland acreage, function, or habitat values. Once avoidance and minimization measures have been exhausted, a project should include mitigation measures to assure a "no net loss" of either wetland habitat values, or acreage, for unavoidable impacts to wetland resources. Conversions include, but are not limited to, conversion to subsurface drains, placement of fill or building of structures within the wetland, and channelization or removal of materials from the streambed. All wetlands and watercourses, whether ephemeral, intermittent, or perennial, should be retained and provided with substantial setbacks, which preserve the riparian and aquatic values and functions benefiting local and transient wildlife populations. CDFW recommends mitigation measures to compensate for unavoidable impacts be included in the DEIR and these measures should compensate for the loss of function and value.

b) The Fish and Game Commission's Water policy guides CDFW on the quantity and quality of the waters of this State that should be apportioned and maintained respectively so as to produce and sustain maximum numbers of fish and wildlife; to provide maximum protection and enhancement of fish and wildlife and their habitat; encourage and support programs to maintain or restore a high quality of the waters of this State; prevent the degradation thereof caused by pollution and contamination; and, endeavor to keep as much water as possible open and accessible to the public for the use and enjoyment of fish and wildlife. CDFW recommends avoidance of water practices and structures that use excessive amounts of water, and minimization of impacts that negatively affect water quality, to the extent feasible (Fish & G. Code, § 5650).

I60-8 Cont.

Conclusion

We appreciate the opportunity to comment on the NOP for the Trails at Lyons Canyon Project to assist the Los Angeles County Department of Regional Planning in preparing the Project's environmental document and identifying and mitigating Project impacts on biological resources. If you have any questions or comments regarding this letter, please contact Ruby Kwan-Davis, Senior Environmental Scientist (Specialist), at Ruby.Kwan-Davis@wildlife.ca.gov or (562) 619-2230.

Sincerely,

DocuSigned by:
B6E58CFE24724F5...

Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

ec: CDFW
Erinn Wilson-Olgin, Los Alamitos – Erinn.Wilson-Olgin@wildlife.ca.gov
Victoria Tang, Los Alamitos – Victoria.Tang@wildlife.ca.gov
Ruby Kwan-Davis, Los Alamitos – Ruby.Kwan-Davis@wildlife.ca.gov
Felicia Silva, Los Alamitos – Felicia.Silva@wildlife.ca.gov
Julisa Portugal, Los Alamitos – Julisa.Portugal@wildlife.ca.gov
Frederic (Fritz) Rieman, Los Alamitos – Frederic.Rieman@wildlife.ca.gov
Cindy Hailey, San Diego – Cindy.Hailey@wildlife.ca.gov

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

CEQA Program Coordinator, Sacramento – CEQACommentLetters@wildlife.ca.gov
Office of Planning and Research
State Clearinghouse, Sacramento – State.Clearinghouse@opr.ca.gov

References:

Benson, J.F., Sikich, J.A., and S. P. D. Riley. (2016). Individual and Population Level Resource Selection Patterns of Mountain Lions Preying on Mule Deer along an Urban-Wildland Gradient. PLOS ONE: https://doi.org/10.1371/journal.pone.0158006

[CFGC] California Fish and Game Commission. 2020. Policies. Retention of Wetland Acreage and Habitat Values. Accessed: https://fgc.ca.gov/About/Policies/Miscellaneous.

[CDFWa] California Department of Fish and Wildlife. 2022. California Protected Areas Database Holdings. Biogeographic Information and Observation System (BIOS 6). [Accessed 2022 July 1]. Accessed at: https://wildlife.ca.gov/Data/BIOS

[CDFWb] California Department of Fish and Wildlife. 2022. Survey and Monitoring Protocols and Guidelines. Available from: https://wildlife.ca.gov/Conservation/Survey-Protocols#377281285-mammals

[CDFWc] California Department of Fish and Wildlife. 2022. Lake and Streambed Alteration Program. Available from: https://wildlife.ca.gov/Conservation/LSA.

[CDFWd] California Department of Fish and Wildlife. 2022. California Natural Diversity Database (CNDDB) Government [ds45] Object TID 93217 *Bombus crotchii*. Biogeographic Information and Observation System (BIOS 6). [Accessed 2022 June 29]. Accessed at: https://wildlife.ca.gov/Data/BIOS

[CDFWe] California Department of Fish and Wildlife. 2022. Natural Communities. Available from: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities.

[CDFWf] California Department of Fish and Wildlife. 2022. California Natural Diversity Database. Available from: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data#43018408-cnddb-in-bios

CDFWg] California Department of Fish and Wildlife. 2022. Survey and Monitoring Protocols and Guidelines. Available from: https://wildlife.ca.gov/Conservation/Survey-Protocols

[CDFWh] California Department of Fish and Wildlife. 2022. Submitting Data to the CNDDB. Available from: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data

[CDFWi] California Department of Fish and Wildlife. 2022. Natural Communities - Submitting Information. Available from: https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities/Submit

[CDFW] California Department of Fish and Wildlife. 2021. CDFW's Comments for Revised Mitigated Negative Declaration for the Canyon View Estates Project, Vesting Tentative Tract Map No. 74650, SCH No. 2019089066, August 30, 2021 Available at: https://ceqanet.opr.ca.gov/2019089066/2

[CDFW] California Department of Fish and Wildlife. 2020. Notice of Findings - Mountain Lion ESU declared a candidate species. Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=178623&inline

[CDFW] California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959

I60-8 Cont.

DocuSign Envelope ID: C7FA3FEE-07F6-4DAC-8424-97006B190310

[CDFW] California Department of Fish and Wildlife. 2017. California Terrestrial and Vernal Pool Invertebrates of Conservation Priority. Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=157415&inline

[CDFW] California Department of Fish and Wildlife. 2011. CNDDB Data Use Guidelines. Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=27285&inline

[Cal-IPC] California Invasive Plant Council. 2022. The Cal-IPC Inventory. Accessed at: https://www.cal-ipc.org/plants/inventory/.

Cooper, D.S., Mongolo, J., and C. Dellith. 2017. Status of the California Gnatcatcher at the Northern Edge of Its Range. Western Birds 48:124–140, 2017; doi 10.21199/WB48.2.3

County of Los Angeles. 2022. Open Data. Fire Hazard Severity Zones. [Accessed 30 June 2022]. Available from: https://data.lacounty.gov/dataset/Fire-Hazard-SeverityZones/jwg2-9k5y

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Fish and Wildlife Service. FWS/OBS-79/31. Washington, DC.

Johnston, D., Tatarian, G., & Pierson, E. 2004. California Bat Mitigation Techniques, Solutions, and Effectiveness. Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=10334

[LACDRP] Los Angeles County Department of Regional Planning. 2019. Significant Ecological Areas Program. Maps. Available from: https://planning.lacounty.gov/site/sea/maps/

Mitrovich, M.J., Matsuda, T., Pease, K.H., and R.N. Fisher. (2009). Ants as a Measure of Effectiveness of Habitat Conservation Planning in Southern California. Conservation Biology *24(5)*: 1239-1248.

[MFWP] Montana Fish, Wildlife and Parks. 2012. A Landowner's Guide to Wildlife Friendly Fences: How to Build Fence with Wildlife in Mind. Second Edition Revised and Updated. Available from: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=134713&inline

Sawyer, J. O., Keeler-Wolf, T., and Evens J.M. 2009. A Manual of California Vegetation, 2nd ed. ISBN 978-0-943460-49-9.

Thorp, R.W., Horning, Jr, Donald, S., Dunning, L.L. 1983. Bumble Bees and Cuckoo Bumble Bees of California. Bulletin of the California Insect Survey 23.

[USFWS] United States Fish and Wildlife Service. 2022. Wetlands Mapper. [Accessed 30 June 2022]. Available from: https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper

[USFWS] United States Fish and Wildlife Service. 2010. Coastal California Gnatcatcher (*Polioptila californica californica*) 5-year Review: Summary and Evaluation. U.S. Fish and Wildlife Service Carlsbad Fish and Wildlife Office. Available from: https://ecos.fws.gov/docs/tess/species_nonpublish/1683.pdf

[USFWS] United States Fish and Wildlife Service. 1997. Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines February 28, 1997. Available from: https://wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds

I60-8 Cont.

Response to Comment Letter I60

Martin Tripp
March 8, 2025

I60-1 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I60-2 Automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, the Draft EIR analyses of potential air quality and GHG emission impacts (which use the California Emission Estimator Model [CalEEMod] to estimate emissions from the Project) include consideration of Project-generated mobile source emissions (i.e., vehicle trips from residents, students, employees, delivery trips, etc.). As stated on page 4.3-27 in Section 4.3, Air Quality, of the Draft EIR, the unmitigated trip length (20.5 vehicle miles traveled [VMT] per capita) from the transportation impact analysis was assumed for the residential land uses based on the VMT analysis. Annual VMT and trips were estimated and input into CalEEMod which can convert annual data into trips and VMT per day. Furthermore, the Draft EIR considers air quality impacts associated with traffic-congested roadways and intersections, taking into consideration the existing regional environmental setting. For example, in Section 4.3, as discussed beginning on page 4.3-48 of the Draft EIR, the air quality analysis considered traffic-congested roadways and intersections, which have the potential to generate localized high levels of carbon monoxide (CO). As determined by the analyses set forth in Draft EIR Sections 4.3, Air Quality, and 4.8, Greenhouse Gas Emissions, the Project's air quality and GHG emission impacts would be less than significant with mitigation incorporated.

I60-3 Regarding the placement of housing within "high fire risk areas," the existing Very High Fire Hazard Severity Zone (VHFHSZ) designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20, Wildfire, of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level. For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

The analysis provided in Section 4.20 of the Draft EIR takes into consideration both fire history and the likely rate of wildfire occurrence on the Project site (see page 4.20-4 of the Draft EIR). As stated on page 4.20-35 of the Draft EIR, based on fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones on and off site and would not exacerbate the existing fire hazard conditions.

I60-4 Evacuation routes and evacuation plans are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

I60-5 Regarding water availability and the current water crisis, in preparing the Project's WSA, the Santa Clarita Valley Water Agency (SCV Water) considered the urban water shortage contingency planning analysis set forth in the 2020 Urban Water Management Plan and 2020 Water Shortage Contingency Plan in determining the sufficiency of water supplies for the Project, in addition to all existing and planned future uses in SCV Water's service area. These documents also explain how SCV Water's reliability planning provisions of these adopted documents assist SCV Water in responding to drought conditions, including the severe drought conditions that currently exist (Draft EIR, page 4-33 and Appendix L-2). As stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's WSA concludes that the total projected water supplies available to SCV Water's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

I60-6 The Draft EIR provides a specific analysis of potential impacts to the California mountain lion, which is a state candidate for listing as endangered or threatened. As detailed in the analysis provided in Section 4.4, Biological Resources, on pages 4.4-47 through 4.4-49 of the Draft EIR, implementation of MM-4.4-1 (On-Site Habitat Preservation), MM-4.4-2 (Habitat Mitigation and Monitoring Plan), MM-4.4-4 (Biological Monitoring), MM-4.4-5 (Demarcation of Disturbance Limits), MM-4.4-6 (Invasive Species Prevention), and MM-4.4-7 (Landscaping Plan) would reduce impacts to mountain lion to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources. With implementation of MM-4.4-13 (Homeowners' Association Covenants, Conditions, and Restrictions), impacts to mountain lions from human influence would be reduced to less than significant. Furthermore, mitigation measures applicable to the California Mountain lion, particularly those related to habitat preservation, would also benefit other wildlife species. For example, the On-

Site Conservation Area required per MM-4.4-1 would provide suitable habitat for a variety of wildlife species. The On-Site Conservation Area would also protect in perpetuity a valuable (and presently unprotected) connection between large tracts of adjacent conserved natural open space associated with the City of Santa Clarita's Woodlands Park and Rivendale Park and Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west wildlife movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and the San Gabriel Mountains to the west; this would preserve and avoid substantial loss of connectivity within the SEA. In addition, MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants wildlife species forage on.

The Draft EIR is currently available on the County's website:

- https://lacdrp.legistar.com/LegislationDetail.aspx?ID=6782087&GUID=5E5124BA-88AB-461D-9C50-EA16E494810A&Options=ID|Text|&Search=24-148

The Draft EIR is also available on the State Clearinghouse's CEQAnet website:

- https://ceqanet.opr.ca.gov/2022060346/2

However, please note that the formal (extended) public review period for the Draft EIR ended on March 10, 2025, after a period of 91 days.

I60-7 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I60-8 This comment is an attachment of the letter submitted by the California Department of Fish and Wildlife (CDFW) on the Notice of Preparation, which is summarized in Table 1-1, Notice of Preparation and Comment Letters Summary in Chapter 1, Introduction of the Draft EIR. The letter itself is included in Appendix A-2 of the Draft EIR. CDFW's comments and recommendations are addressed and incorporated in Section 4.4, Biological Resources and Section 4.20, Wildfire, of the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter I61

Michael Ramos
26018 Franklin Ln
Stevenson Ranch, Ca, 91381
froinc3@gmail.com
805-746-3938
03/08/25

Erica G. Aguirre, AICP
Principal Planner, Subdivisions
County of Los Angeles Department of Regional Planning
320 West Temple Street, 13th Floor
Los Angeles, California 90012

Subject: Opposition to the Trails at Lyons Canyon Project

Dear Ms. Aguirre,

I am writing to formally express my opposition to the proposed Trails at Lyons Canyon development. As a resident and frequent user of the Taylor Trail and surrounding open spaces in Santa Clarita, I am deeply concerned about the environmental and community impacts this project will bring. I61-1

The Taylor Trail and adjacent natural areas serve as vital recreational spaces for hikers, mountain bikers, and families who rely on them for outdoor activities, mental well-being, and connection to nature. I61-2 This project, despite its proposed conservation efforts, will irreversibly alter the landscape, disrupt wildlife habitats, and diminish the open space that defines Santa Clarita's character. I61-3 The construction of roads, high-density housing, and large buildings will introduce increased traffic, noise pollution, and ecological fragmentation—eroding the very qualities that make this area so special. I61-4

Santa Clarita has long been known for its commitment to preserving open spaces, and allowing this development to proceed would contradict that legacy. Urban encroachment continues to threaten the natural beauty of our region, and we must take a stand to protect what remains. Instead of supporting this project, I urge the Department of Regional Planning to explore alternative solutions that prioritize conservation and responsible land management. I61-5

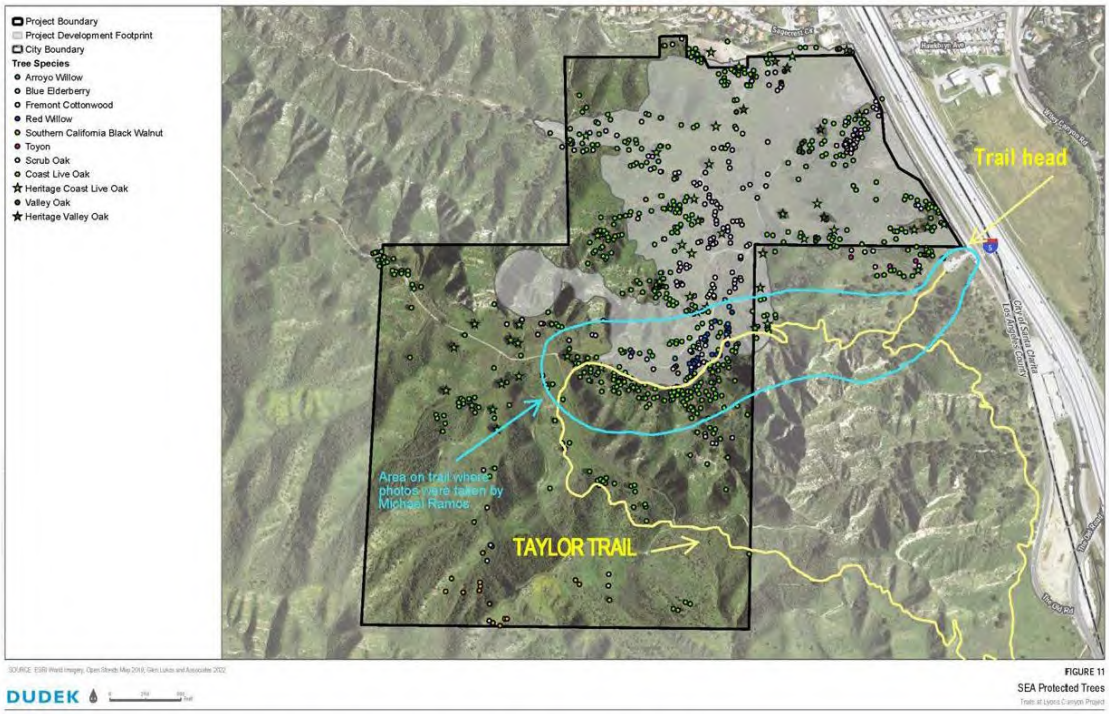
I respectfully ask that you consider the voices of local residents who cherish this land and deny approval of the Trails at Lyons Canyon project. Thank you for your time and consideration. I61-6

See attached photos demonstrating the community's use of the trail and the natural habitat at risk. I61-7

Sincerely,
Michael Ramos

The following photos were taken by myself (Michael Ramos) indicated inside of the **light blue line in the map below.**

The **yellow line** indicates the Taylor Trail path and trail head **in the map below**.



Map from file: **24-058 – Biota Report pg. 60, La County Planning**

https://lacdrp.legistar.com/LegislationDetail.aspx?ID=6651437&GUID=6F7952C7-2344-44C8-B427-95984695E1EE

I61-7 Cont.

Photos taken by Michael Ramos

I61-7
Cont.

Photos taken by Michael Ramos

I61-7
Cont.

Page 4 of 6 in Comment Letter I61

Photos taken by Michael Ramos

I61-7
Cont.

Bobcat sighting

Crows

Photos taken by Michael Ramos

I61-7
Cont.

Response to Comment Letter I61

Michael Ramos
March 8, 2025

I61-1 The comment expresses opposition to the Project. The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

Regarding impacts to adjacent open space areas, as discussed on pages 4.4-59 and 4.4-60 in Section 4.4, Biological Resources, of the Draft EIR, as a result of its clustered design, the Project is able to permanently preserve via conservation easement approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area. Habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. As discussed in further detail in Section 4.4 of the Draft EIR, with implementation of required mitigation measures MM-4.4-1 through MM-4.4-16, all potential biological resource impacts would be reduced to a less than significant level. Although limited brush clearing is required in the adjacent Rivendale Park and Open Space area to comply with defensible space requirements, the Project's development would not encroach into park areas or Towsley Canyon to the south. The Project would facilitate the dedication of existing non-dedicated trails. Existing non-dedicated trails on the southern portion of the Project site would remain with implementation of the Project and would connect to the off-site portions of Rivendale Park and Open Space and Ed David Park at Towsley Canyon.

I61-2 Regarding disturbance of natural areas/habitat, as discussed in Section 4.11, Land Use and Planning, on page 4.11-53 of the Draft EIR, while the Project includes developed areas and improved open space areas, approximately 150 acres of the Project site would be maintained as natural open space, of which 144.43 acres would be placed within a conservation easement. The Project's proposed off-site conservation area further preserves an additional 466.70 acres of natural open space adjacent to existing publicly owned lands within the same SEA as the Project.

In addition to providing residential land uses, including attached and detached condominiums, single-family homes and very-low-income senior apartments, the Project provides recreational amenities, trails, and preserved open space that would be open to the public. An access road would be provided outside of the Project site's residential development to provide pedestrian, hiking, and bicycling access to the public from the Project's trailhead at the northeast corner of the site. The Project would also include a recreational center on-site, which would be connected via sidewalks to the proposed on-site multi-use trail system that would lead to on-site nature trails and to the County's regional trail system (see Figure 3-5, Conceptual Trails Map, of Chapter 3, Project Description, of the Draft EIR). Additionally, the Project would include 2.59 acres of active and passive open space within the development area, as depicted on Figure 3-3, Active and Passive Open Space Plan, of Chapter 3. The active and passive open space areas would contain a dog park, landscaped open areas (see Figure 3-7, Landscape Plan, of Chapter 3 of the Draft EIR), parklets, picnic tables, activity space, and naturalized walking paths. Additionally, the Project would require implementation of a Class III bicycle lane through MM-4.17-2, TDM Program.

I61-3 Regarding impacts to open space, please refer to the response provided above for Comment I61-1. Furthermore, please refer to the impacts analysis beginning on page 4.4-40 in Section 4.4, Biological Resources, of the Draft EIR. Section 4.4 of the Draft EIR and the Biota Report included as Appendix C, provide a comprehensive cataloguing of the existing biological conditions on the Project site. The impacts and mitigation are analyzed and proposed through the context of the County's Significant Ecological Areas Ordinance, which exceeds the typical analysis under CEQA and provides mitigation for all impacts to biological resources. As discussed therein, implementation of required mitigation measures would reduce all biological resource impacts to a less than significant level. This includes potential impacts to a candidate, sensitive, or special status species, sensitive natural communities (including oak woodlands), protected wetlands, and other resources. See Section 4.4.7 of Section 4.4 of the Draft EIR for the requirements of mitigation measures MM-4.4-1 through MM-4.4-16. These mitigation measures, particularly those related to habitat preservation, would benefit both wildlife species and their habitat. For example, the On-Site Conservation Area required per MM-4.4-1 would provide suitable live-in, breeding, foraging, cover, and dispersal habitat for a variety of wildlife species. The On-Site Conservation Area would also protect in perpetuity a valuable (and presently unprotected) connection between large tracts of adjacent conserved natural open space associated with the City of Santa Clarita's Woodlands Park and Rivendale Park and Open Space, contributing to a contiguous corridor of conserved natural open space. In addition, MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants wildlife species forage on.

I61-4 Automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17, Transportation, of the Draft EIR and the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

Please refer to Section 4.13, Noise, of the Draft EIR for a detailed analysis of the Project's potential noise impacts. Regarding generation of a substantial temporary increase in ambient noise levels in the vicinity of the Project, mitigation measures would be required to reduce impacts from construction activity to less than significant. Upon implementation of the required mitigation measures, impacts regarding generation of substantial temporary (i.e. construction-related) increases in ambient noise levels in the vicinity of the Project would be less than significant. The Project would result in less than significant impacts regarding substantial permanent (i.e. operational) increase in ambient noise levels and generation of excessive ground borne vibration or ground borne noise levels. The Project would result in no impacts regarding excessive noise levels due to proximity to a private airstrip, airport land use plan, public airport, or public use airport.

The potential for the Project to result in habitat fragmentation is addressed under Threshold 4.4d and Threshold 4.4f in Section 4.4, Biological Resources, of the Draft EIR. As stated on page 4.4-56 of the Draft EIR, dedication of the On-Site Conservation Area (in accordance with MM-4.4-1, as managed in perpetuity through a conservation easement) will protect in perpetuity a valuable (but presently unprotected) connection between large tracts of conserved natural open space associated

with the Santa Clarita Woodlands Park and the Rivendale Open Space, contributing to a contiguous corridor of conserved natural open space that connects lands to the west to the Calgrove Boulevard undercrossing, a recognized undercrossing of I-5 that supports east/west movement between the Santa Susana Mountains/Simi Hills SEA and the Gateway Ranch Open Space, Gates King Open Space, and San Gabriel Mountains to the east. This would preserve access to and avoid further encroachment on movement opportunities between regionally conserved habitat blocks. As such, with the implementation of MM-4.4-1, impacts due to habitat fragmentation would be reduced to less than significant.

I61-5 Regarding impacts to open space, please refer to the response provided above for Comment I61-1.

The Draft EIR considers three alternatives, one of which would reduce the overall footprint of the proposed development. As further detailed in Chapter 6, Alternatives, of the Draft EIR, Alternative C, the Reduced Footprint Alternative, would reduce the development footprint from 83.18 acres to 28 acres and increase the natural open space from 150.31 acres to 205.18 acres (Draft EIR, page 6-33). Although all Project impacts to biological resources would be less than significant with implementation of all mitigation measures, Alternative C is included to specifically address concerns to biological resource impacts (Draft EIR, page 6-57).

However, Alternative C would not reduce impacts to all environmental topic areas. For example, multi-family buildings under Alternative C would be 56 feet tall. This would increase the height of on-site buildings by 11 feet when compared to the Project's maximum height for buildings (which would be 45 feet at one portion of the Project site—the senior housing apartment building; see page 6-60 of the Draft EIR). In addition, as discussed on pages 6-69 and 6-70 of the Draft EIR, the preserved natural open space on-site would not be made available to the public, and no publicly accessible trailhead would be provided on-site under Alternative C. The lack of trail access/publicly accessible open space on-site under Alternative C would increase the park pressure of facilities within the Santa Clarita Valley area when compared to the Project. Finally, as stated on page 6-58 of the Draft EIR, Alternative C would not eliminate the significant unavoidable impact related to baseline residential VMT per capita and would not satisfy all Project objectives.

I61-6 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I61-7 This comment includes a map and photos taken by the commenter. The comment does not raise any concerns about the adequacy of the environmental analysis within the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter I62

Petition Opposing Lyons Ranch Project

This is a 500+ unit development located just north of Towsley Canyon in a Very High Fire Severity Zone. It includes a three-story senior housing facility. It will remove hundreds of protected trees in a significant ecological area and require massive grading. The below signed individuals are very concerned about putting seniors in a dangerous fire area and removing so many native trees. We believe there is a critical need for further understanding and consideration of the risks involved, including: a high fire risk (7 fires in the area in the past 10 years within 5 miles of the proposed development, 3 of which were significant) and inadequate fire mitigation measures being proposed, the destruction of the natural habitat including the removal of 334 SEA protected trees (22 of which are Heritage Oaks), the proposed Senior Housing not supporting many elderly residents evacuating safely in a crisis (there may be no electricity for elevators, the already severely congested traffic during the recent evacuations would only worsen, and public services to this area are expected to be limited).

Printed Name	Signature	Date
[illegible]	[signature]	2/28/25
Edward E Yoo	EDWARD E Yoo	2/28/25
Tom Backman	[signature]	3/1/25

Petition Opposing Lyons Ranch Project

This is a 500+ unit development located just north of Towsley Canyon in a Very High Fire Severity Zone. It includes a three-story senior housing facility. It will remove hundreds of protected trees in a significant ecological area and require massive grading. The below signed individuals are very concerned about putting seniors in a dangerous fire area and removing so many native trees. We believe there is a critical need for further understanding and consideration of the risks involved, including: a high fire risk (7 fires in the area in the past 10 years within 5 miles of the proposed development, 3 of which were significant) and inadequate fire mitigation measures being proposed, the destruction of the natural habitat including the removal of 334 SEA protected trees (22 of which are Heritage Oaks), the proposed Senior Housing not supporting many elderly residents evacuating safely in a crisis (there may be no electricity for elevators, the already severely congested traffic during the recent evacuations would only worsen, and public services to this area are expected to be limited).

I162-1
I162-2
I162-3
I162-4
I162-5
I162-6

Printed Name	Signature	Date
Kenny Varanian		3/2/25
Mihir Shinghani		3/2/25
Ryan Gorman		03/02/25
Blaise Smith		3/2/25
Javier Lopez		3/2/25
Jocelyn Hall		3/2/25
Juan Garzon		3/2/25
Gabriella Garzon		3/2/25
Raj Arakaki		3/2/25

Petition Opposing Lyons Ranch Project

This is a 500+ unit development located just north of Towsley Canyon in a Very High Fire Severity Zone. It includes a three-story senior housing facility. It will remove hundreds of protected trees in a significant ecological area and require massive grading. The below signed individuals are very concerned about putting seniors in a dangerous fire area and removing so many native trees. We believe there is a critical need for further understanding and consideration of the risks involved, including: a high fire risk (7 fires in the area in the past 10 years within 5 miles of the proposed development, 3 of which were significant) and inadequate fire mitigation measures being proposed, the destruction of the natural habitat including the removal of 334 SEA protected trees (22 of which are Heritage Oaks), the proposed Senior Housing not supporting many elderly residents evacuating safely in a crisis (there may be no electricity for elevators, the already severely congested traffic during the recent evacuations would only worsen, and public services to this area are expected to be limited).

Printed Name	Signature	Date
Tania Marin		3.3.25
Melanie Lontoc	M.L	3.3.25
Mario D Leon		3.3.25
Diego Diego		3.3.25
Frank Rivera		3-2-25
Joshua Johnson		3-2-25
Rob		3/2/25
		3/2/25
KEVIN OUX DUAY		03.02.2025

Page 3 of 11 in Comment Letter I62

Petition Opposing Lyons Ranch Project

This is a 500+ unit development located just north of Towsley Canyon in a Very High Fire Severity Zone. It includes a three-story senior housing facility. It will remove hundreds of protected trees in a significant ecological area and require massive grading. The below signed individuals are very concerned about putting seniors in a dangerous fire area and removing so many native trees. We believe there is a critical need for further understanding and consideration of the risks involved, including: a high fire risk (7 fires in the area in the past 10 years within 5 miles of the proposed development, 3 of which were significant) and inadequate fire mitigation measures being proposed, the destruction of the natural habitat including the removal of 334 SEA protected trees (22 of which are Heritage Oaks), the proposed Senior Housing not supporting many elderly residents evacuating safely in a crisis (there may be no electricity for elevators, the already severely congested traffic during the recent evacuations would only worsen, and public services to this area are expected to be limited).

Printed Name	Signature	Date
Kyle Monaghan		3/2/25
Tania Madjid		3/2/25
Feliz Magana		3/2/25
Esmeralda Ramirez		3/2/25
Daniel Yoon		3/2/25
Efren Lopez		3/2/25
Leslie Contreras		3/2/25
Ruben Ramirez		3/2/25
Karen Valois	KAREN VALOIS	3/2/25

Petition Opposing Lyons Ranch Project

This is a 500+ unit development located just north of Towsley Canyon in a Very High Fire Severity Zone. It includes a three-story senior housing facility. It will remove hundreds of protected trees in a significant ecological area and require massive grading. The below signed individuals are very concerned about putting seniors in a dangerous fire area and removing so many native trees. We believe there is a critical need for further understanding and consideration of the risks involved, including: a high fire risk (7 fires in the area in the past 10 years within 5 miles of the proposed development, 3 of which were significant) and inadequate fire mitigation measures being proposed, the destruction of the natural habitat including the removal of 334 SEA protected trees (22 of which are Heritage Oaks), the proposed Senior Housing not supporting many elderly residents evacuating safely in a crisis (there may be no electricity for elevators, the already severely congested traffic during the recent evacuations would only worsen, and public services to this area are expected to be limited).

Printed Name	Signature	Date
Debra Levin		3/2/25
[illegible]		3/2/25
Maria Alba		3/2/25
Paula Alba		3/2/25
Noemi Knights	Noemi Knights	3/2/25
Hayden Juan-Thomas		3/2/25
Ramon Manuelle		3/2/2025
Jason Hoyt		3.2.2025
Virginia Bennett		3-2-25

Petition Opposing Lyons Ranch Project

This is a 500+ unit development located just north of Towsley Canyon in a Very High Fire Severity Zone. It includes a three-story senior housing facility. It will remove hundreds of protected trees in a significant ecological area and require massive grading. The below signed individuals are very concerned about putting seniors in a dangerous fire area and removing so many native trees. We believe there is a critical need for further understanding and consideration of the risks involved, including: a high fire risk (7 fires in the area in the past 10 years within 5 miles of the proposed development, 3 of which were significant) and inadequate fire mitigation measures being proposed, the destruction of the natural habitat including the removal of 334 SEA protected trees (22 of which are Heritage Oaks), the proposed Senior Housing not supporting many elderly residents evacuating safely in a crisis (there may be no electricity for elevators, the already severely congested traffic during the recent evacuations would only worsen, and public services to this area are expected to be limited).

Printed Name	Signature	Date
Sung Kim		3/2/25
Juan		3/4/25
Hyun		3/2/25
Laury Farrell		3/2/25
Wendy McKenzie		3/2/25
Alyssa Parks		3/2/25
Mary Ann Pascale		3/2/25
David Myrick		3/2/25
Benjamin Levin	B.L.	3/2/25

Page 6 of 11 in Comment Letter I62

Petition Opposing Lyons Ranch Project

This is a 500+ unit development located just north of Towsley Canyon in a Very High Fire Severity Zone. It includes a three-story senior housing facility. It will remove hundreds of protected trees in a significant ecological area and require massive grading. The below signed individuals are very concerned about putting seniors in a dangerous fire area and removing so many native trees. We believe there is a critical need for further understanding and consideration of the risks involved, including: a high fire risk (7 fires in the area in the past 10 years within 5 miles of the proposed development, 3 of which were significant) and inadequate fire mitigation measures being proposed, the destruction of the natural habitat including the removal of 334 SEA protected trees (22 of which are Heritage Oaks), the proposed Senior Housing not supporting many elderly residents evacuating safely in a crisis (there may be no electricity for elevators, the already severely congested traffic during the recent evacuations would only worsen, and public services to this area are expected to be limited).

Printed Name	Signature	Date
Garrett Heeran		3/2/25
LIZ UNO		3/2/25
[illegible] JUEM		3/2/25
RONAN JENKINS		3/2/25
TEDDY ATKINS		3/2/25
[illegible]		3-2-25
Melanie Ruadenier		3-2-25
Kim Castruita		3/2/25
JOSEPH LUTTA		3/2/25

Petition Opposing Lyons Ranch Project

This is a 500+ unit development located just north of Towsley Canyon in a Very High Fire Severity Zone. It includes a three-story senior housing facility. It will remove hundreds of protected trees in a significant ecological area and require massive grading. The below signed individuals are very concerned about putting seniors in a dangerous fire area and removing so many native trees. We believe there is a critical need for further understanding and consideration of the risks involved, including: a high fire risk (7 fires in the area in the past 10 years within 5 miles of the proposed development, 3 of which were significant) and inadequate fire mitigation measures being proposed, the destruction of the natural habitat including the removal of 334 SEA protected trees (22 of which are Heritage Oaks), the proposed Senior Housing not supporting many elderly residents evacuating safely in a crisis (there may be no electricity for elevators, the already severely congested traffic during the recent evacuations would only worsen, and public services to this area are expected to be limited).

Printed Name	Signature	Date
Jacob Mendoza	JCX	3/2/25
Bianca Galeota	BZ	3/2/25
David Cirricione		3/2/25
Dorothy Cienega	D. Cienega	3-2-25
Christopher Camps		3/2/25
Von Jones		3/2/25
Sean Ro Nay		3/2/25
Dylan Scott		3/2/25
Apoorva Bhatt		3/2/25

Petition Opposing Lyons Ranch Project

This is a 500+ unit development located just north of Towsley Canyon in a Very High Fire Severity Zone. It includes a three-story senior housing facility. It will remove hundreds of protected trees in a significant ecological area and require massive grading. The below signed individuals are very concerned about putting seniors in a dangerous fire area and removing so many native trees. We believe there is a critical need for further understanding and consideration of the risks involved, including: a high fire risk (7 fires in the area in the past 10 years within 5 miles of the proposed development, 3 of which were significant) and inadequate fire mitigation measures being proposed, the destruction of the natural habitat including the removal of 334 SEA protected trees (22 of which are Heritage Oaks), the proposed Senior Housing not supporting many elderly residents evacuating safely in a crisis (there may be no electricity for elevators, the already severely congested traffic during the recent evacuations would only worsen, and public services to this area are expected to be limited).

Printed Name	Signature	Date
Joel Guzman		3/2/25
Terri Shirley		3/2/25
Kim Kaloustian		3/2/25
Public Co Visit		3/2/25
Pedro		3/2/25
Herman Guerra		3/2/25
Linda Newton		3/2/25
MJ Hordov		3/2/25
Daniel Aukerman		3/2/25

Petition Opposing Lyons Ranch Project

This is a 500+ unit development located just north of Towsley Canyon in a Very High Fire Severity Zone. It includes a three-story senior housing facility. It will remove hundreds of protected trees in a significant ecological area and require massive grading. The below signed individuals are very concerned about putting seniors in a dangerous fire area and removing so many native trees. We believe there is a critical need for further understanding and consideration of the risks involved, including: a high fire risk (7 fires in the area in the past 10 years within 5 miles of the proposed development, 3 of which were significant) and inadequate fire mitigation measures being proposed, the destruction of the natural habitat including the removal of 334 SEA protected trees (22 of which are Heritage Oaks), the proposed Senior Housing not supporting many elderly residents evacuating safely in a crisis (there may be no electricity for elevators, the already severely congested traffic during the recent evacuations would only worsen, and public services to this area are expected to be limited).

Printed Name	Signature	Date
[illegible]	[illegible]	3/2/25
[illegible]	[illegible]	3/2/25
Jon Sigler	[illegible]	3/2/25
Alexa Sigler	[illegible]	3/2/25
Elise Sigler	[illegible]	3/2/25
Alyssa Siglar	[illegible]	3-2-25
Marcy Sherwood	[illegible]	3-2-25
Gore Fraser	[illegible]	3-2-25
Jesse Trujillo	[illegible]	03/02/25
Wendy Gonzalez	[illegible]	3/2/25
Cynthia Martin	[illegible]	3/2/25

Petition Opposing Lyons Ranch Project

This is a 500+ unit development located just north of Towsley Canyon in a Very High Fire Severity Zone. It includes a three-story senior housing facility. It will remove hundreds of protected trees in a significant ecological area and require massive grading. The below signed individuals are very concerned about putting seniors in a dangerous fire area and removing so many native trees. We believe there is a critical need for further understanding and consideration of the risks involved, including: a high fire risk (7 fires in the area in the past 10 years within 5 miles of the proposed development, 3 of which were significant) and inadequate fire mitigation measures being proposed, the destruction of the natural habitat including the removal of 334 SEA protected trees (22 of which are Heritage Oaks), the proposed Senior Housing not supporting many elderly residents evacuating safely in a crisis (there may be no electricity for elevators, the already severely congested traffic during the recent evacuations would only worsen, and public services to this area are expected to be limited).

Printed Name	Signature	Date
Tom Pinhas		3.2.25
Tim Barlesi		3/4/25
David Kella		3/2/25
Cameron Collier		3/2/25
Benjamin Fuchs		03/02/25
Tianna Bargielski		3/2/25
Taylor Bargielski		3/2/25
Don Hendricks		3/2/25
Si Hyun		3/2/25

INTENTIONALLY LEFT BLANK

Response to Comment Letter I62

Petition Opposing Lyons Ranch Project
March 8, 2025

I62-1 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR. Please note that the proposed senior housing building would be a total of four stories (not three stories as stated in this comment) with a maximum height of 45 feet (see Draft EIR page 3-9 in Chapter 3, Project Description).

I62-2 As stated on page 3-14 of Chapter 3, Project Description, of the Draft EIR, the 334 SEA-Protected Tree impacts would be comprised of 265 removals, 16 encroachments (trees that would not be removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds would be anticipated), and 53 SEA-Protected Trees that would be located within a debris basin. The 53 SEA-Protected Trees that would be located within a debris basin would not be removed but are considered as removals for mitigation purposes. This is because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding. As such, for mitigation purposes, the Project would result in 318 SEA Protected Tree removals. The 318 SEA Protected Trees would be replaced in accordance with MM-4.4.16, SEA Protected Trees Replacement/Compensation and Chapter 22.102, Significant Ecological Areas, of the County Code, resulting in 772 replacement trees. Per MM-4.4-16, the replacement trees must be nurtured and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. As discussed in Section 4.4, Biological Resources, under Threshold 4.4f of the Draft EIR, implementation of MM-4.4-16 reduces impacts related to tree removal to a level of less than significant.

Regarding grading, as discussed on page 3-19 of Chapter 3, Project Description, of the Draft EIR, the total Project earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site parcel adjacent to The Old Road that would be constructed with manufactured slopes. The grading would balance onsite, and as such, no import or export of soils would be required for the Project. The Project would be required to comply with the standards set forth in Appendix J, Grading of the Los Angeles County Building Code, which are applicable to grading, excavation, and earthwork construction, including fills and embankments, and the control of runoff from graded sites, including erosion sediments and construction-related pollutants. The Project would also be subject to a Conditional Use Permit (RPPL2021003113) for grading exceeding 100,000 cubic yards in an A-2 zone.

I62-3 Regarding the placement of housing (including senior housing) within a Very High Fire Hazard Severity Zone (VHFHSZ), the Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a VHFHSZ and within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant, modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would

implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level. For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Regarding evacuations of seniors in the event of an emergency, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff.

As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page 4.20-62 in Section 4.20, Wildfire, of the Draft EIR, the Project's HOA would provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents, including residents of the senior housing apartment complex. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to ensure that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program that shall ensure that all seniors who are not able to safely evacuate on their own, including mobility-challenged individuals, are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.

Regarding removal of trees on site, see Response to Comment I62-2 above.

I62-4 The Draft EIR adequately analyzes impacts related to wildfire within Section 4.20, Wildfire, and incorporates mitigation measures to reduce significant impacts. See Section 4.20.7 for more details on MM-4.20-1 through MM-4.20-5. This section of the Draft EIR is largely based on the evaluation and results of the Fire Protection Plan (included as Appendix M-1 to the Draft EIR) and the Wildfire Evacuation Plan (Appendix M-2). At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity. The data collected was from CAL FIRE's Fire and Resources Assessment Program database, which provides fire history information and fire perimeter data dating to the late 1800s for all fires over 10 acres in size (Draft EIR, page 4.20-4). For more information see Appendix B, Fire History, of Appendix M-1 to the Draft EIR.

Regarding the comment's assertion that the Draft EIR contains inadequate mitigation measures related to wildfire, the commenter does not provide any evidence or reasoning as to why the prescribed mitigation measures may be inadequate. As detailed in the analysis provided in Section 4.20, Wildfire, of the Draft EIR, the required mitigation measures applicable to wildfire would effectively reduce Project impacts to a less than significant level. Please also refer to Section 4.4, Code Exceeding Measures of Topical Response-1, for a discussion of the applicable wildfire mitigation measures and their relative benefits to the Project.

I62-5 Regarding potential impacts to natural habitat, please refer to the impact analysis beginning on page 4.4-40 in Section 4.4, Biological Resources, of the Draft EIR. Section 4.4 of the Draft EIR and the Biota Report included as Appendix C provide a comprehensive cataloguing of the existing biological conditions on the Project site. The impacts and mitigation are analyzed and proposed through the context of the County's Significant Ecological Areas (SEA) Ordinance, which exceeds the typical analysis under CEQA and provides mitigation for all impacts to biological resources. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR). In addition, MM-4.4.2, Habitat Mitigation and Monitoring Plan, requires 10 years of monitoring and maintenance of the habitat to help the ecosystem as a whole to become established. Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement. See Section 4.4.7 of Section 4.4, Biological Resources, of the Draft EIR for the requirements of mitigation measures MM-4.4-1 through MM-4.4-16, which would reduce biological resources impacts, including potential impacts to sensitive natural communities and other SEA resources, to less than significant.

Regarding removal of SEA-Protect Trees, see Response to Comment I62-2 above.

I62-6 Evacuation routes and evacuation planning are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency

operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

Regarding evacuation of senior populations, please refer to Response to Comment I62-3.

Regarding public services, as discussed in Section 4.15, Public Services, of the Draft EIR, the Los Angeles County Fire Department (LACoFD) indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site (see page 4.15-31 in the Draft EIR). Further, as detailed in Table 7 of the Fire Protection Plan included as Appendix M-1 of the Draft EIR, the Project would meet the County's response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from the closest Fire Station 124. As discussed in further detail under Threshold 4.15(i) of Section 4.15 of the Draft EIR, with the implementation of required mitigation measures, Project impacts with respect to fire protection and emergency medical services would be less than significant.

Comment Letter I63

From: June Wells
To: Erica G. Aguirre
Subject: TRAILS AT LYONS CANYON PROJECT
Date: Saturday, March 8, 2025 7:26:44 AM

CAUTION: External Email. Proceed Responsibly.

Hello,

As a resident of the nearby Trails at Lyons Canyon Project/ Towsley Canyon Project, I am deeply concerned about additional congestion this project will bring to our community. The location of the site project itself is one of the most fire prone locations in Santa Clarity and additional thoughts for safety should be considered here. Wildfires frequently occur within the vicinity of the project. That is deeply concerning given the project provides senior housing. The recent Hughes fire in Castaic was not an easy evacuation for the residents. We should also learn from the recent Eaton and Palisades fires. Prior to building more housing, additional resources for fire and earthquake safety should be planned ahead not after. Evacuation pathways of the new development alongside existing residents should be considered carefully. Additional fire stations should also be built to add resources to the already limited fire resource available to this community now. I63-1 I63-2 I63-3 I63-4 I63-5

With respect to affordable housing. Adding 59 on-site affordable housing to low income or very low income families is a drop in the bucket. This story is more of a "feel good" story rather than doing what actually makes sense. Lets face it, housing in California is not affordable any more to our median income earners. It hasn't been affordable in the last 5 years. Rather than providing one off affordable housing in 1 community, how about the county and the state figure out a way to make housing affordable and accessible to the median income earners in the state. That's the problem I implore the county and the state to solve. I63-6

Additionally, the environmental impact to our community is a high price to pay for this new development and not worth the cost, at least not to the local residents. I'm against this development and most local residents share that sentiment. I respectfully urge the county to open a forum to hear the concerns of our residents and reconsider this development. I63-7

Kind regards,
June Wells

INTENTIONALLY LEFT BLANK

Response to Comment Letter I63

June Wells
March 8, 2025

I63-1 Automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17 of the Draft EIR and the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

I63-2 The Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The Draft EIR takes into consideration both fire history and the likely rate of wildfire occurrence on the Project site (see page 4.20-4 of the Draft EIR). The Draft EIR analysis also considers that the Project site is located within a Very High Fire Hazard Severity Zone (VHFHSZ). The VHFHSZ designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant, modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level. For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Evacuation routes and evacuation plans are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the

Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

Regarding senior housing safety during an evacuation event, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff.

Recent fires in the region do not necessitate additional or revised Draft EIR analysis. However, in light of recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. As such, additional time was provided for the public to consider, review, and submit comments on the Project. At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity (Draft EIR, page 4.20-4). Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. Therefore, the recent fire activity does not change the conclusions detailed in Draft EIR Section 4.20, Wildfire. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires in Topical Response-1.

I63-3 The Project does not defer any analysis related to fire or earthquake safety. Regarding fire safety, please refer to Response to Comment I63-3 as well as Topical Response-1. The Project would also be required to provide financial resources to bolster fire protection and safety. As the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. Furthermore, as discussed in Section 2.4.1.2, Project Specific Fire-Resistant Design Feature, and Section 2.4.3.1, Attorney General's Guidance, of Topical Response-1, in addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area..

Regarding earthquake safety, as discussed in the Draft EIR on page 4.7-14 of Section 4.7, Geology and Soils, the Project site is located in a seismically active area with numerous Holocene-active faults in the region. These faults along with the structural geomorphic forming of the mountains and valleys throughout most of the state are all expressions of the tectonic forces from the transform tectonic plate boundary of the Pacific and North American plates. All related geotechnical hazards (i.e., seismicity, ground shaking, liquefaction, dynamic settlement, soil and bedrock stability, and earthquake induced landslides) were evaluated as part of Geotechnical Report (Appendix E-1 of the Draft EIR) and summarized in Section 4.7 of the Draft EIR (see Section 4.7.1 Existing Conditions beginning on page

4.7-1). Implementation of the Project would not exacerbate any seismic conditions or have any effect at all on the tectonic forces ongoing deep beneath the ground surface. Adherence to applicable building code standards and geotechnical practices would ensure that all improvements are designed and constructed to minimize damage from underlying geotechnical conditions and seismic activity.

I63-4 Regarding evacuation pathways (i.e., routes), please refer to Response to Comment I63-2.

I63-5 Section 4.15, Public Services, of the Draft EIR, starting on page 4.15-33, states LACoFD determined that a new on-site fire station is not required for the Project. However, please refer to Response to Comment I63-3 regarding payments to benefit fire protection services.

I63-6 Chapter 3, Project Description, of the Draft EIR states on pages 3-9 and 3-10 that the Project includes affordable housing in compliance with the County's Inclusionary Housing ordinance (IHO) (Title 22 – Planning and Zoning, Division 6 – Development Standards, Chapter 22.121 – Inclusionary Housing, of the Zoning Code), which requires a minimum five percent for-sale affordable housing set aside. The Project would provide 24 for-sale condominium dwelling units to be deed-restricted for moderate- or middle-income households in compliance with the County's IHO requirements. Additionally, in accordance with both State law and the County's Zoning Code, the Project includes additional rental affordable housing for very-low-income seniors. In total, the Project would provide a total of 71 affordable dwelling units (24 for-sale inclusionary condominium units for moderate- and middle-income levels and 47 very low-income, rental senior citizen apartment units), representing approximately 15% of the Project's base number of dwelling units. The comment's request for additional affordable housing on site is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR. However, social and economic effects, such as the cost of housing, are not environmental impacts that CEQA requires the Lead Agency or Project Applicant to analyze or mitigate. According to State CEQA Guidelines Section 15064(e) "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Thus, economic and social implications of the Project are not within the scope of required environmental analysis.

I63-7 The commenter's opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR. Moreover, certification of the Final EIR will be considered at a public hearing by the County's Regional Planning Commission. The commenter will have the opportunity to comment on the Project and the County's provided responses at this hearing, which will be notified to the public in compliance with state and local regulations, including the Ralph M. Brown Act (Government Code Section 54950, et seq.).

INTENTIONALLY LEFT BLANK

Comment Letter I64

From: pjstick@sbcglobal.net
To: Erica G. Aguirre
Subject: Trails at Lyons Canyon Public Comment
Date: Sunday, March 9, 2025 3:40:43 PM

CAUTION: External Email. Proceed Responsibly.

Hello, my name is Pamela Stickles, my husband and I are original owners at Sunset Pointe and are very concerned about this new housing project, Trails at Lyons Canyon. I64-1

We can't understand why anyone would build a development more than twice as big as ours, in an Extreme Fire Danger Zone, especially for seniors, with only two exits, no fire station, minimal fire hydrants, no plans for water in five years and knowing what has happened the Palisades and Eaton fires!!! I64-2

Over the years there's been a number of scary fires in this area and times where we had to evacuate. We know how stressful and difficult it is with our two exits and our neighborhood, which is less than half the size of the Trails at Lyons Canyon.
I hate to think how it will be when both neighborhoods have to evacuate in a hurry, everyone backed up on the Old Road and who's going to help those seniors, especially in the four story buildings?!!! I64-3

And with the fire station being eliminated, what kind of response are we going to have in this Extreme Fire Danger Zone? Emergency Services will be delayed due to distance and all the traffic! There was gridlock at the recent Castaic Fire. I64-4

After the Palisades and Eaton fire, all new homes should be built with extra fire protection and definitely more fire hydrants with water! I64-5

The water situation is also very concerning. There's been times we've been required to conserve and limit outside watering. Is there going to be enough water after this new development is built, especially when there's a fire!!! I64-6

And last but not least, Fire Insurance! Many people have had theirs canceled, have had a hard time getting it and it's getting more and more expensive!!! I64-7

It's my hope this builder realizes this Extreme Fire Danger Zone is NOT the place to build and decides to build in a safer place for all. I64-8

Please pass this on to the right person.
Thank you for your help and understanding, I64-9
Pam

Sent from my iPhone

INTENTIONALLY LEFT BLANK

Response to Comment Letter I64

Pamela Stickles
March 9, 2025

I64-1 The commenter's specific concerns are addressed below.

I64-2 Regarding the placement of development (including senior housing) within a Very High Fire Hazard Severity Zone (VHFHSZ), the Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a VHFHSZ and within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant, modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level. For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Regarding evacuations of seniors in the event of an emergency, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff.

Regarding ingress/egress to the Project site, as discussed on page 4.20-45 in Section 4.20, Wildfire, of the Draft EIR, the Project's internal circulation consists of a loop roadway system that connects both the primary and secondary access points along The Old Road, which satisfies secondary access requirements detailed in County Code Title 21, Chapter 21.24, Design Standards, Part 1, Access. The Project also includes a 28-foot-wide private access road along the northern and western perimeter for emergency vehicle access.

Regarding a new fire station, as discussed on page 4.15-33 in Section 4.15, Public Services, of the Draft EIR, the Los Angeles County Fire Department (LACoFD) determined that a new on-site fire station is not required for the Project. However, as the Project is located within a Consolidated Fire Protection District of Los Angeles County "Area of Benefit" (i.e., Area of Benefit 2, Santa Clarita Valley), the Project Applicant is subject to a Fire Facility Fee, equivalent to $1.4316 per square foot of new construction as of April 1, 2021 (subject to annual LACoFD review), to be used by LACoFD to fund the purchase of equipment, fire station sites, construction of new stations, and/or facility improvements. Furthermore, as discussed in Section 2.4.1.2, Project Specific Fire-Resistant Design Feature, and Section 2.4.3.1, Attorney General's Guidance, of Topical Response-1, in addition to the Project Applicant's payment of the LACoFD's Fire Facilities Fee payment, which represents full mitigation under CEQA of development

impacts associated with the need for additional fire protection services or facilities, the Project Applicant would further provide a community benefit contribution in the amount of $2,000,000 to be used by the Consolidated Fire Protection District of Los Angeles County towards its purchase of firefighting equipment to further enhance the District's continued provision of fire protection services within its jurisdiction, including the Project area.

As discussed further in Section 4.20 of the Draft EIR, the Project would include sufficient emergency water supply, a key component to fighting wildfire and protecting structures. The Project would provide fire hydrants that meet flow, volume, and duration specifications at intervals designed to assist in fighting structural fires. The final number and location of the fire hydrants will be determined by LACoFD. The Project would also provide an up to 2-million-gallon water tank in the southwest portion of the development area, which would be installed at the Project site to assure reliable fire flow water pressure for the Project uses onsite. Project-internal waterlines would supply sufficient fire flows and pressure to meet the demands for required onsite fire hydrants and interior fire sprinkler systems for all structures. Water supply will meet the minimum fire flow required within the adopted fire code. Please see header "Water Supply and Infrastructure" of Section 2.4.3.2, Fire Safety Requirements, of Topical Response-1, above, for additional details related to water supply infrastructure.

Regarding water availability, in preparing the Project's Water Supply Assessment (WSA), the Santa Clarita Valley Water Agency Water (SCV Water) considered the urban water shortage contingency planning analysis set forth in the 2020 Urban Water Management Plan and 2020 Water Shortage Contingency Plan in determining the sufficiency of water supplies for the Project, in addition to all existing and planned future uses in SCV Water's service area. These documents also explain how SCV Water's reliability planning provisions of these adopted documents assist SCV Water in responding to drought conditions, including the severe drought conditions that currently exist (Draft EIR, page 4-33 and Appendix L-2). As stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR, the Project's WSA concludes that the total projected water supplies available to SCV Water's service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses.

Recent fires in the region do not necessitate additional or revised Draft EIR analysis. Nonetheless, in light recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. As such, additional time was provided for the public to consider, review, and submit comments on the Project. At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity (Draft EIR, page 4.20-4). Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. Therefore, the impacts related to wildfire would not change the conclusions detailed in Section 4.20, Wildfire. Nonetheless, additional discussion regarding the Eaton and Palisades Fires is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires in Topical Response-1.

I64-3 Evacuation routes and evacuation plans are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and

minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

Regarding evacuations of seniors in the event of an emergency, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page 4.20-62 in Section 4.20, Wildfire of the Draft EIR, the Project's HOA would provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents, including residents of the senior housing apartment complex. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to ensure that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program that shall ensure that all seniors who are not able to safely evacuate on their own, including mobility-challenged individuals, are accounted for and transported during an emergency evacuations. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.

I64-4 This comment is similar to Comment I64-2. As such, see Response to Comment I64-2 for more discussion. A discussed in Section 4.15, Public Services, of the Draft EIR, LACoFD indicated that "the anticipated response time for fire incidents with or without the Project is near [the LACoFD's] response time goal of an 8-minute response time for the 1st-arriving unit" from Fire Station 124, which is the nearest to the Project site (see page 4.15-31 in the Draft EIR). Further, as detailed in Table 7 of the Fire Protection Plan included as Appendix M-1 of the Draft EIR, the Project would meet the County's

response time standard for suburban areas with a total estimate response time of 7 minutes and 19 seconds from the closest Fire Station 124.

I64-5 This comment is similar to Comment I64-2. As such, see Response to Comment I64-2 for more discussion.

I64-6 Please see Response to Comment I64-2 regarding water supply availability.

I64-7 CEQA Guidelines Section 15064(e) states "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Given that potential fire insurance would be paid for by future residents to provide coverage, this would constitute as an economic effect related to the Project's operation. Thus, fire insurance is not within the scope of required environmental analysis pursuant to CEQA. This comment will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

As mentioned above, the VHFHSZ designation does not prohibit the development of the Project. Instead, additional fire protection measures, such as those governing safe building standards and enhanced fuel modification must be provided for Project approval. See Topical Response 1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

I64-8 As discussed in Response to Comment I64-2, the placement of housing within a VHFHSZ is not prohibited. See Response to Comment I64-2 for more discussion.

I64-9 The commenter's opposition to the Project is acknowledged for the record and will be forwarded to the Regional Planning Commission for their review and consideration as party of this Final EIR.

Comment Letter I65

From: Kimberly Wedding
To: Erica G. Aguirre
Subject: Resident and Business owner - Response to Draft EIR for The Trails senior housing project
Date: Sunday, March 9, 2025 6:43:48 PM

CAUTION: External Email. Proceed Responsibly.

I hope you are doing well! Apologies, I thought this was sent over a week ago...

Dear Ms. Aguirre,

I am writing to express my opposition to the proposed Trails at Lyons Canyon Project. While I understand the need for development and housing, I believe this project is not in the best interest of the Santa Clarita Valley population for several reasons. Below, I have outlined my concerns regarding environmental impact, the need for medical services, and why a multi-use commercial space would be more advantageous for the population, local tax generation, and addressing environmental concerns. I65-1

Environmental Concerns

The proposed project would result in significant and unavoidable environmental impacts, particularly in transportation. I65-2 Given the recent Hughes Fire and the ongoing need to protect our natural environment along the foothills, I65-3 the development of 510 dwelling units on 233.49 acres of land is not the best use of this area. I65-4 The Santa Clarita Valley is known for its natural beauty, and preserving open space is crucial for maintaining this characteristic and promoting environmental sustainability.

Need for Medical Services

The current population of the Santa Clarita Valley already faces challenges in accessing medical services. The addition of 510 new dwelling units will increase the population density, exacerbating the existing strain on medical facilities and resources. Instead of focusing on residential development, efforts should be made to improve and expand medical services to ensure the well-being of the current and future residents of the valley. I65-5

Multi-Use Commercial Space

A multi-use commercial space would provide numerous benefits to the Santa Clarita Valley population, local tax generation, and could address environmental concerns with proper planning/design. Such a space could include a mix of retail, office, and recreational facilities that would not only generate local tax revenue but also create job opportunities for residents. This type of development would be more sustainable, as it would reduce the need for long commutes and decrease traffic congestion, ultimately leading to lower greenhouse gas emissions. I65-6

Additionally, a multi-use CRE project could incorporate eco-savvy building practices, such as using energy-efficient materials and renewable energy sources, further mitigating environmental impacts. I65-7 This approach would also allow for the preservation of more open I65-8

space, which is essential for maintaining the valley's natural beauty and biodiversity.

I65-8 Cont.

While the Trails at Lyons Canyon Project aims to address the need for housing, it is not the best solution for the Santa Clarita Valley population. Protecting the environment, addressing the need for medical services, and promoting sustainable development through a multi-use space should be the priority. I urge you to reconsider this project and explore alternatives that better serve the needs of our community.

I65-9

I65-10

Thank you for your time and consideration.

Sincerely,

Kimberly Santa Clarita, CA

Response to Comment Letter I65

Kimberly Wedding
March 9, 2025

I65-1 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR. Comments related to the environmental analysis contained in Draft EIR are addressed below in subsequent responses to I65-2 through I65-10.

I65-2 The Project would result in one significant and unavoidable impact, regarding inconsistency with CEQA Guidelines section 15064.3(b). The Project would result in a potentially significant impact under baseline conditions for vehicle miles traveled (VMT) on a Project level, as detailed under Threshold 4.17b of Section 4.17, Transportation, of the Draft EIR. The Project was forecast to generate 20.5 VMT per capita (see Draft EIR page 4.17-22). The Project was thus determined to exceed the County's threshold of 10.6 residential VMT per capita by 9.9 VMT per capita. With implementation of MM-4.17-2 (Transportation Demand Management [TDM] Program), VMT impacts would be reduced to the point that the Project would generate 19 VMT per capita, which would still exceed the County's threshold of 10.6 VMT per capita. Thus, despite the implementation of all feasible mitigation, the Project would have a significant and unavoidable impact on VMT.

I65-3 A detailed response related to fire protection and safety is provided in Topical Response-1, which addresses issues related compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. Recent fires in the region do not necessitate additional or revised Draft EIR analysis. Nonetheless, in light of recent fire activity, the formal public review period for the Draft EIR was extended for an additional 31 days (for a total of 91 days) ending on March 10, 2025. As such, additional time was provided for the public to consider, review, and submit comments on the Project. The Draft EIR adequately analyzes impacts related to wildfire within Section 4.20, Wildfire, and incorporates mitigation measures to reduce significant impacts. See Section 4.20.7 for more details on MM-4.20-1 through MM-4.20-5. This section of the Draft EIR is largely based on the evaluation and results of the Fire Protection Plan (Appendix M-1 to the Draft EIR) and the Wildfire Evacuation Plan (Appendix M-2 of the Draft EIR). At the time of releasing the Draft EIR (December 2024), fire history data was detailed within EIR to adequately establish existing conditions within the Project site's vicinity. Even though additional fires occurred after the release of the Draft EIR, the fire perimeters did not overlap with the Project site. As such, the existing conditions of the Project site have not changed. Therefore, the recent fire activity does not change the conclusions detailed in Section 4.20, Wildfire. Nonetheless, additional discussion regarding the recent fire activity is provided in Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires, of the Draft EIR.

Regarding the Project site's location, Chapter 6, Alternatives, of the Draft EIR analyzes the potential for an alternative site to the proposed development. As discussed therein, starting on page 6-25 of Chapter 6 to the Draft EIR, one of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The Project site is located within the unincorporated Santa Clarita Valley region of Los Angeles County. The Project Applicant inquired with a licensed real estate broker based in the Santa Clarita Valley for the possibility of an available alternative site of approximately 233 acres, which could accommodate the Project's 510

residential units and allow for the preservation of protected open space in the Santa Clarita Valley. Per the real estate broker, no similar alternative site, which is proximate to freeway access, existing roadway infrastructure, and developed areas, is available for sale in the Santa Clarita Valley. As such, an alternative site would not be considered feasible and was ultimately rejected from further analysis in the EIR.

I65-4 The Draft EIR describes on pages 4.4-59 and 4.4-60 of Section 4.4, Biological Resources, that as a result of the Project's clustered design, the Project is able to permanently preserve via conservation easement approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space acreage within the On-Site Conservation Area. Habitat linkages along Lyons Canyon between Rivendale Park and Open Space, Towsley Canyon, and conserved areas to the northwest and west would remain intact and accessible to wildlife due to the preservation of canyons and ridgelines within the On-Site Conservation Area. The Project would also incorporate new landscaping on site. As shown in Figure 3-7, Landscape Plan, of the Draft EIR and described within Chapter 3, Project Description, starting on page 3-13, the Project landscaping would use native, drought-tolerant, and climatically appropriate species. The overall planting palette, composed of shade and accent trees, screening shrubs and hedges, groundcovers, vines, and lawn, has been designed to reflect a distinctive sense of place for the Project. The plantings would provide seasonal interest and shade in the warmest times of the year and would be composed of safe, non-invasive, non-thorny, and non-toxic flowers, leaves, seeds, and sap. The overall planting palette would be primarily low maintenance and low water use, and plantings would be grouped and organized according to consistent seasonal maintenance practices, water use, and solar exposure. Approximately one-quarter of the Project site would be planted with restored native habitat planting, including indigenous oak trees. As such, the Project incorporates open space and landscaping components that help maintain the regional characteristic and promote sustainability.

I65-5 The analysis contained in Section 4.14, Population and Housing, of the Draft EIR determined the Project's housing and employment projections would not result in substantial unplanned housing growth when compared to anticipated buildout conditions. Operational activities associated with the Project would increase the demand for fire protection and emergency medical services. However, the Draft EIR determined the Project would not create capacity or service level problems given that the Project would comply with applicable codes and regulations governing fire safety, the provision of existing mutual aid agreements which would serve the Project site, the Project's payment of applicable fees to offset costs, the regulatory requirements governing adequate services, and the incorporation of mitigation measures MM-4.20-1 and MM-4.20-3 would reduce impacts to a less than significant level. Impacts to medical services, such as hospitals, are not an identified environmental resource topic with the State or local CEQA guidelines. Moreover, the local hospital in the vicinity (i.e., Henry Mayo Newhall Hospital) is not publicly owned and, therefore, is not considered a public service. Nevertheless, this comment will be provided to the decision makers for their review and consideration as part of this Final EIR.

I65-6 The comment recommends a multi-use commercial space as an alternative to the Project. While the Draft EIR does not consider an alternative with a mix of retail, office, and recreational uses, the Draft EIR proposes Alternative B within Chapter 6, Alternatives (Draft EIR, page 6-43), which includes a mix of retail, residential, and recreational uses. As discussed on page 6-1 in Chapter 6 of the Draft EIR, "Pursuant to Section 15126.6(b) of the CEQA Guidelines, an alternatives discussion must focus on 'alternatives to the project or its location which are capable of avoiding or substantially lessening any

significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.'" The Project would result in one significant and unavoidable impact, regarding inconsistency with CEQA Guidelines section 15064.3(b) resulting in a potentially significant impact under baseline conditions for VMT on a Project level, as detailed under Threshold 4.17b of Section 4.17, Transportation, of the Draft EIR. However, the Project's cumulative impacts with regard to VMT, as detailed in Threshold 4.17b of Section 4.17, would be less than significant with mitigation. A reasonable range of alternatives was analyzed in Chapter 6, Alternatives of the Draft EIR. Alternative B was proposed to reduce VMT impacts by proposing a mixed-use alternative of 361 dwelling units, 49,000 square feet of retail uses, a recreational center, open space, and on-site trails. Although Alternative B proposed commercial uses in addition to the residential and recreational land uses, Project-level VMT impacts under Alternative B would not be reduced to less than significant levels.

I65-7 The comment provides further recommendations for the proposed alternative discussed in Comment I65-6. It should be noted that the Project supports sustainable features, such as landscaping that would include native, drought-tolerant, and climatically appropriate species. As shown in Figure 3-7, Landscape Plan, of the Draft EIR and described within Chapter 3, Project Description, starting on page 3-13, the overall planting palette would be primarily low maintenance and low water use, and plantings would be grouped and organized according to consistent seasonal maintenance practices, water use, and solar exposure. In addition, the Draft EIR incorporates MM-4.8-5, Encourage Electric Vehicles (quantified), which would facilitate greater adoption and use of electric vehicles (EVs) by providing EV chargers in 92 single-family residential garages (which meets the CALGreen Tier 2 requirements). Similar to building electrification, electrification of the vehicle fleet reduces petroleum use and supports transition to a carbon neutral development by replacing fossil-fueled vehicles with a less GHG-intensive power source that can be generated using clean, renewable energy.

The Project would also use renewable solar power on site. As stated on page 4.6-21 of the Draft EIR, solar power would, at a minimum, be provided for newly built low-rise residential buildings, and non-residential buildings would be solar-ready to comply with Title 24 building energy efficiency standards. The Project must also include a 7-kilowatt solar system (which would generate 12,040 kilowatt hours per year) at the recreation center in accordance with MM-4.8-3, Energy Conservation. As discussed in Section 4.6, Energy of the Draft EIR, because the Project's construction and operational energy demands would constitute a very small share of regional supplies, comply with—or exceed—applicable efficiency standards, and are further reduced or decarbonized by Project design and mitigation measures, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would be less than significant.

I65-8 The comment expresses support for preservation of more open space on site. The Draft EIR includes an analysis of Alternative C, Reduced Footprint Alternative, which presents a 67% reduction in the development footprint when compared to the Project. This analysis is provided on pages 6-56 through 6-72 in Chapter 6, Alternatives, of the Draft EIR. This alternative would cluster development closer to The Old Road and includes avoidance of most riparian habitat and non-riparian streams within a FEMA Flood Zone A, and substantial avoidance of other biological resources, including native habitats, protected trees, oak woodlands, special-status plants, and rare plants. As stated on page 6-75 of the Draft EIR, Alternative C would be the environmentally superior alternative.

I65-9 The comment provides a conclusory statement and summarizes the comments presented above. The comment does not express additional concerns related to the adequacy of the Draft EIR.

I65-10 The comment expresses support for additional alternatives to the Project. As discussed in Response to Comment I65-6, a reasonable range of alternatives was considered in the Draft EIR. See Responses to Comments I65-6 and I65-8 for more discussion.

Comment Letter I66

From: Catherine Flynn
To: Erica G. Aguirre
Subject: Lyons Canyon
Date: Monday, March 10, 2025 3:38:21 PM

CAUTION: External Email. Proceed Responsibly.

Dear Planning Department,

As a longtime resident of Valencia, I am appalled that you would approve the Lyons Canyon project after the devastating fires in our county recently. I suppose memories are short so I will remind you that this area is considered a high risk fire zone. What company is going to offer these buyers fire insurance? As a taxpayer, I resent paying into an insurance system that rewards building in dangerous areas. I66-1 I66-2

As a regular hiker of Towsley Canyon, I dread the added congestion and the way development would change the entire wildlife area there. I certainly realize the need for additional housing in our county but surely there is a way to do it safely. This project replicates some of the previous mistakes planners and builders have made…before we understood that urban and suburban neighborhoods can burn unabated. I66-3 I66-4

Please deny this high density development in this unsuitable fire zone. I66-5

Thank you,
Catherine Flynn

INTENTIONALLY LEFT BLANK

Response to Comment Letter I66

Catherine Flynn
March 10, 2025

I66-1 Regarding the location of the Project within a Very High Fire Hazard Severity Zone (VHFHSZ), Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the location of the Project within a VHFHSZ. For a more detailed response related to potential fire hazards, please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The Project has been designed with the objective of constructing a fire-resistant, modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

A detailed discussion of the Eaton and Palisades fires is provided above in Topical Response-1 (please refer to Section 2.4.2, Project Fire Behavior Modeling and Relationship to 2025 Los Angeles Fires). As stated therein, during both the Eaton and Palisades Fires of January 2025, the wildfire was driven into communities by extreme Santa Ana winds exceeding 80 mph. This rare level of extreme weather combined with other factors, such as outdated home construction and dense urban vegetation, without enforced or prevalent fuel modification, to produce urban conflagrations. The Project's proposed structures would be built utilizing the most current construction methods designed to reduce wildfire exposure and reduce the likelihood for structure fires to spread into offsite areas, including requirements set forth in California Building Code Chapter 7A. According to the Office of the State Fire Marshal, no master-planned community built after the adoption of California Building Code Chapter 7A has experienced significant structural losses. The Project would also require highly maintained, irrigated vegetative landscaping between homes and perimeter Fuel Modification Zones to keep an active flaming front at great distances from structures and support defensibility for the existing fire environment. Therefore, modern, code-compliant master planned communities, such as the Project, provide a baseline level of high wildfire safety when designed to modern fire code requirements.

I66-2 CEQA Guidelines Section 15064(e) states "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Given that potential fire insurance would be paid for by future residents to provide coverage, this would constitute as an economic effect related to the Project's operation. Thus, fire insurance is not within the scope of required environmental analysis pursuant to CEQA. This comment will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

As mentioned above, the VHFHSZ designation does not prohibit the development of the Project. Instead, additional fire protection measures, such as those governing safe building standards and enhanced fuel modification must be provided for Project approval.

I66-3 Recreational facilities, including trails, are discussed in the Draft EIR starting on page 3-11 of Chapter 3, Project Description. As discussed therein, the Project would not construct new trails in the southern portion of the Project site. The Project would, however, construct a private-gated access road that would run along the outer northern and western edge of the development area, which would serve a multi-use trail system. A new publicly-accessible trailhead would be constructed near the gated connection of the access road to The Old Road at the northeastern corner of the Project site.

Relating to congestion, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to the Section 4.17, Transportation, of the Draft EIR and the Transportation Impact Analysis (Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

The Draft EIR includes analysis of the potential aesthetic impacts related to construction and operation of the Project. This analysis considers impacts to scenic vistas and public views from off-site recreation areas. As supported by the Project impact analysis provided under Threshold 4.1d (see pages 4.1-29 through 4.1-34 in the Draft EIR), the Project would not substantially degrade the existing visual character or quality of the Project site and surrounding areas (including off-site recreation areas). Furthermore, please refer to the impacts analysis beginning on page 4.4-40 in Section 4.4, Biological Resources, of the Draft EIR. Section 4.4 of the Draft EIR and the Biota Report, included as Appendix C, provide a comprehensive cataloguing of the existing biological conditions on the Project site. The impacts and mitigation are analyzed and proposed through the context of the County's Significant Ecological Areas Ordinance, which exceeds the typical analysis under CEQA and provides mitigation for all impacts to biological resources. As discussed therein, implementation of required mitigation measures would reduce all biological resource impacts to a less than significant level. This includes potential impacts to a candidate, sensitive, or special status species, sensitive natural communities, and other wildlife resources. See Section 4.4.7 of Section 4.4 of the Draft EIR for the requirements of mitigation measures MM-4.4-1 through MM-4.4-16. These mitigation measures, particularly those related to habitat preservation, would benefit both wildlife species and their habitat. For example, the On-Site Conservation Area required per MM-4.4-1 would provide suitable live-in, breeding, foraging, cover, and dispersal habitat for a variety of wildlife species. The On-Site Conservation Area would also protect in perpetuity a valuable (and presently unprotected) connection between large tracts of adjacent conserved natural open space associated with the City of Santa Clarita's Woodlands Park and Rivendale Park and Open Space, contributing to a contiguous corridor of conserved natural open space. In addition, MM-4.4-6 and MM-4.4-7 would minimize the introduction of non-native plant species that could compete for habitat space with plants wildlife species forage on.

I66-4 Regarding fire safety, a detailed response related to fire protection and safety is provided in Topical Response-1. Please also see Response to Comment I66-1, above.

I66-5 The commenter's opposition to the Project is acknowledged for the record and will be provided to the decision makers for their review and consideration as part of this Final EIR.

Comment Letter I67

From: Bonnie Traylor
To: Erica G. Aguirre
Subject: THE TRAILS AT LYONS CANYON PROJECT PROJECT NO. 2021-001195-(5)
Date: Monday, March 10, 2025 6:24:47 PM

CAUTION: External Email. Proceed Responsibly.

Dear Ms. Aguirre,

I am writing in reference to THE TRAILS AT LYONS CANYON PROJECT PROJECT NO. 2021-001195-(5). It is my understanding that there is a project set to be built off of The Old Road and I am OPPOSED to this project for the following reasons: I67-1

1) Senior and or/multifamily housing in a high-fire hazard area with little or one-direction egress is dangerous. This is a one-way in, one-way out community with immediate exposure to MRCA open space. Placing a dense population of senior citizens or families in a small pocket with open hillsides surrounding is not wise. We have seen the recent scenes of seniors being evacuated in Altadena. I personally saw how difficult it was during the Fillmore fire which travelled all the way down to immediately behind my church, Newhall Nazarene which is just south of the proposed site on The Old Road. The Old Road had to be closed off both ways for safety, and several times, the 5 freeway was shut down. This is a very dangerous place for senior housing, and indeed, I would be opposed to any condos there. I67-2

2). Traffic in general. Santa Clarita already suffers from too much traffic. Every time building in the area is proposed, residents like me shake our heads and ask "Why?" We already have too much congestion, with no end in sight. Regular closures of the 5 FWY during snow events, fire evacuations, etc. mean that building in our area is a terrible idea. We spend hours in traffic trying to evacuate when there is a fire nearby. Why would LA County put more housing in a high fire hazard/congested traffic area? When the 5 is closed due to a SigAlert, The Old Road becomes the only way in or out of Santa Clarita from the San Fernando Valley. This area is already bottle-necked by natural land forms and the existing Newhall Pass. Building in a bottle-neck is a recipe for pain and disaster. I67-3

3) This area is a natural open space, providing a much-needed buffer around the city. Open spaces provide habitat for trees and native plants and animals that reduce pollution and noise and produce oxygen, while consuming carbon dioxide and other pollutants. They are the LUNGS of our city and they are NOT optional. We need such spaces for trails, leisure, and to keep our community livable and vibrant. Replacing existing, NATIVE plants with suburban sprinkler-watered, thirsty plants is a terrible idea. Natives are drought-tolerant and well-adapted to the climate we live in and do not consume our much-needed water resources. I am a member of the SCV Community Hiking Club, and this trail-adjacent land is important to protect from development. I personally have witnessed deer and foxes on Taylor trail, and our children deserve to have these experiences as well. Our hiking club introduces inner city kids to areas like this, and the results are miraculous. One child got to the end of the sidewalk and stopped. When we asked why, he said, "I've never walked on dirt before." Imagine a child who has only ever set foot on concrete and asphalt. This is not the future we want for them. Little kids need to experience beetles and butterflies, deer and DIRT. They need to feel small below a 300 year-old oak tree and see the marks left from pioneers that still mark these hills and valleys. Nature feeds our SOULS. I67-4 I67-5 I67-6 I67-7

4) Water. Santa Clarita/Stevenson Ranch is already in a tough situation with water resources. Putting in yet another development which claims to be "carbon neutral" or "net zero" is just I67-8

ridiculous. We already know that these mitigating promises made before construction are not enough to abate the building project, much less reduce the water consumption we already have. WE ARE EXPERIENCING DROUGHT. I would much rather see the city work on water reclamation projects and water storage efforts than put in more development in a natural water-collection sponge. This project will increase demand and reduce supply of our precious filtered drinking water. I67-8 Cont.

The bottom line is that developers will make millions by building, but the existing residents, like myself, will suffer. I love to hike Taylor Trail and Towsley Canyon, and this project will just be more urban sprawl and increase the demand for already precious resources of water. I67-9

I am only one person, but I believe I can speak for thousands of Santa Clarita residents who are tired of having our community's hills bulldozed no matter how loudly we say "STOP!" The world is already very loud and we are weary of defending our community. I67-10

Thank you so much for your time and the work you do. I would be happy to share more with your board if given the opportunity to do so. I67-11

Photo is one I took in a nearby creek of my friend's granddaughter.

Sincerely,
Bonnie Traylor
28302 Bonnie View Ave.
Santa Clarita, CA 91387

Response to Comment Letter I67

Bonnie Traylor
March 10, 2025

I67-1 This introductory comment does not express specific concerns related to the adequacy of the environmental analysis in the Draft EIR. The commenter's specific concerns are addressed below in responses to comments I67-2 through I67-10. This commenter's general opposition to the Project will be forwarded to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I67-2 Regarding the placement of housing (including senior housing) within a Very High Fire Hazard Severity Zone (VHFHSZ), the Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a VHFHSZ and within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant modern community that is suitable for its location within VHFHSZ. It is understood that as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level. For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Regarding evacuations of seniors in the event of an emergency, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff. As discussed in the Wildfire Evacuation Plan (Appendix M-1 of the Draft EIR) and detailed in MM-4.20-1, Wildfire Education Program, beginning on page 4.20-62 in Section 4.20, Wildfire of the Draft EIR, the Project's HOA would provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 has been revised to include a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents, including residents of the senior housing apartment complex. The senior housing complex will also have an on-site manager, who shall serve as the Fire Safety Coordinator for the senior affordable housing residents and would be able to assist with fire-related emergencies and evacuations. MM-4.20-1 has further been revised to ensure that the Fire Safety Coordinator shall be responsible for creating a senior housing carpool program that shall ensure that all seniors who are not

able to safely evacuate on their own, including mobility-challenged individuals, are accounted for and transported during an emergency evacuation. See Chapter 3, Revisions to the Draft EIR, of the Final EIR, for revisions to MM-4.20-1.

Regarding ingress/egress to the Project site, as discussed on page 4.20-45 in Section 4.20 of the Draft EIR, the Project's internal circulation consists of a loop roadway system that connects both the primary and secondary access points along The Old Road, which satisfies secondary access requirements detailed in County Code Title 21, Chapter 21.24, Design Standards, Part 1, Access. The Project also includes a 28-foot-wide private access road along the northern and western perimeter for emergency vehicle access.

I67-3 Automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, please refer to Section 4.17 of the Draft EIR and the Transportation Impact Analysis (provided as Appendix J of the Draft EIR), which includes an analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

Regarding traffic during an evacuation event, evacuation routes and evacuation plans are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

I67-4 The Project would employ a density-controlled development program that would largely cluster development in the lower-lying, northeastern area of the Project site closest to the I-5 corridor. The Draft EIR describes on pages 4.4-59 and 4.4-60 of Section 4.4, Biological Resources, that as a result of the Project's clustered design, the Project is able to permanently preserve via conservation easement approximately 62% of the Project site (approximately 144.43 acres) as contiguous natural open space

acreage within the On-Site Conservation Area in accordance with MM-4.4-1, On-Site Habitat Preservation. Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement.

I67-5 In addition to open space preservation as described above in Response to Comment I67-4, the Project would facilitate the dedication of existing non-dedicated trails. As illustrated in Figure 3-5, Conceptual Trails Map of the Draft EIR, the Project's proposed trail network consists of existing non-dedicated trails to be dedicated, existing dedicated trials (managed by the City of Santa Clarita or the County), and existing non-dedicated trails. Several existing non-dedicated trails are located within the southern portion of the site (within the designated natural open space portion of the Project site) and would remain with implementation of the Project. With implementation of the Project, an existing non-dedicated trail would be dedicated by the County, as shown in green/purple striping on Figure 3-5.

I67-6 Implementation of the Project would result in grading activities that would remove existing native plant species from the Project site. Section 4.4, Biological Resources, of the Draft EIR evaluates the potential significant impacts associated with development of the Project. As discussed therein, impacts related to candidate, sensitive, or special status plant/wildlife species, sensitive natural communities, and jurisdictional water resources would be less than significant with mitigation incorporated.

The Project would also incorporate new landscaping on site. As shown in Figure 3-7, Landscape Plan, of the Draft EIR and described within Chapter 3, Project Description, starting on page 3-13, the Project landscaping would use native, drought-tolerant, and climatically appropriate species. The overall planting palette, composed of shade and accent trees, screening shrubs and hedges, groundcovers, vines, and lawn, has been designed to reflect a distinctive sense of place for the Project. The plantings would provide seasonal interest and shade in the warmest times of the year and would be composed of safe, non-invasive, non-thorny, and non-toxic flowers, leaves, seeds, and sap. The overall planting palette would be primarily low maintenance and low water use, and plantings would be grouped and organized according to consistent seasonal maintenance practices, water use, and solar exposure. The use of native plants is recommended; however, the palette could also reflect the planting and geographic diversity of Southern California and use species that are climatically appropriate. Approximately one-quarter of the Project site would be planted with restored native habitat planting, including indigenous oak trees.

I67-7 Recreational facilities, including trails, are discussed in the Draft EIR starting on page 3-11 of Chapter 3, Project Description. As discussed therein, the Project would not construct new trails in the southern portion of the Project site. The Project would, however, construct a private-gated access road that would run along the outer northern and western edge of the development area, which would serve a multi-use trail system. A new publicly-accessible trailhead would be constructed near the gated connection of the access road to The Old Road at the northeastern corner of the Project site. Moreover, the Project would facilitate the dedication of existing non-dedicated trails. Figure 3-5, Conceptual Trails Map, of the Draft EIR, illustrates the Project's proposed trail network, existing non-dedicated trails to be dedicated, existing dedicated trials (managed by the City of Santa Clarita or the County), and existing non-dedicated trails. Several existing non-dedicated trails are located within the southern portion of the site (within the designated natural open space portion of the Project site) and would remain with implementation of the Project. With implementation of the Project, an existing non-dedicated trail would be dedicated the County, as shown in green/purple striping on Figure 3-5

of the Draft EIR. As a result of the Project, the County or the City of Santa Clarita would be responsible for the maintenance of these trails. Trailhead signage would be posted at this access point at The Old Road, as implemented through MM-4.20-1, of Section 4.20, Wildfire, of this Draft EIR (Draft EIR page 3-11).

As stated in Response to Comment I67-5, the Project would include both On-Site and Off-Site Conservation Areas, which would help support local wildlife species and native habitats such as oak woodland.

I67-8 The Draft EIR assesses the Project's impact on water supply, as stated on page 4.19-28 in Section 4.19, Utilities and Service Systems, of the Draft EIR. As discussed therein, the Project's Water Supply Assessment concludes that the total projected water supplies available to Santa Clarita Valley Water Agency Water Agency's (SCV Water's) service area over the 30-year projection during normal, single-dry, and multiple-dry year (five year drought) periods are sufficient to meet the projected demands associated with the Project, in addition to existing and other planned future uses. In addition, in preparing the Project's Water Supply Assessment, SCV Water considered the urban water shortage contingency planning analysis set forth in the 2020 Urban Water Management Plan and 2020 Water Shortage Contingency Plan in determining the sufficiency of water supplies for the Project, in addition to all existing and planned future uses in SCV Water's service area. These documents also explain how SCV Water's reliability planning provisions of these adopted documents assist SCV Water in responding to drought conditions, including the severe drought conditions that currently exist (see page 4-33 in Appendix L-2 of this Draft EIR).

The Project supports sustainable features, such as landscaping which would use native, drought-tolerant, and climatically appropriate species (see Response to Comment I67-6 for more discussion). In addition, the Draft EIR incorporates MM-4.8-5, Encourage Electric Vehicles (quantified), which would facilitate greater adoption and use of electric vehicles (EVs) by providing EV chargers in 92 single-family residential garages (which meets the CALGreen Tier 2 requirements). Similar to building electrification, electrification of the vehicle fleet reduces petroleum use and supports transition to a carbon neutral development by replacing fossil-fueled vehicles with a less GHG-intensive power source that can be generated using clean, renewable energy.

Regarding water storage efforts, as discussed above under header "Water Supply and Infrastructure" of Section 2.4.3.2, Fire Safety Requirements, of Topical Response-1, above, as part of the larger water system, the up to 2-million-gallon water tank, designed to County storage regulations and water agency requirements for fire flow, will provide additional water resources to the Project and surrounding vicinity by providing a new elevated storage tank on the west side of I-5.

I67-9 The comment raises concern for urban sprawl and increased demand for water supply. Regarding urban sprawl, the Project site is adjacent to existing developed uses to the north and the east. As stated on page 2-4 of Chapter 2, Environmental Setting of the Draft EIR, the General Plan land use designation of Residential 2 (H2) encompasses the entire Project site and is included in the Santa Clarita Valley Area Plan, also known as "One Valley One Vision" (OVOV). The land use designations of OVOV define the Residential 2 (H2) land use category as "urban residential," allowing a permitted residential density of up to two dwelling units per acre. According to the OVOV plan, the Residential 2 (H2) designation provides for residential neighborhoods at densities that require urban services, providing a transition between higher density, urban development and rural communities throughout the planning area. As such, the Project would not be considered urban sprawl. Moreover, within land designated Residential

2 (H2), density-controlled development (clustering) is encouraged on lands with significant environmental and or topographical features or resources, in order to preserve open space for protection of these natural features or resources. As such, the Applicant is requesting approval of a density-controlled development CUP to retain approximately 175 acres of the approximately 233-acre Project site as conserved and improved open space and the Project's residential uses would be clustered within the northeastern portion of the Project site.

For discussion on water supplies, see Response to Comment I67-8, above.

Overall, the commenter's opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR

I67-10 The commenter's general opposition to the Project is hereby provided to the Regional Planning Commission for their review and consideration as part of this Final EIR.

I67-11 This comment does not express environmental concerns related to the environmental analysis contained in the Draft EIR.

INTENTIONALLY LEFT BLANK

Comment Letter I68

From: Julie Benson
To: Erica G. Aguirre
Subject: Comments about The Trails at Lyons Canyon
Date: Wednesday, March 12, 2025 5:19:03 PM

CAUTION: External Email. Proceed Responsibly.

Dear Ms.

I am submitting comments about the proposed development called The Trails at Lyons Canyon. I have several concerns: I68-1

1. This development is in a high fire zone, particularly with a proposed senior and assisted living facility being part of the project. We all saw the danger of this with the Eaton Fire, and the difficulty evacuating the residents. I68-2

2. The number of native oak trees that will have to be removed is unacceptable. We need to protect as many of these trees as possible, particularly as they are beneficial to fire spread. I68-3

3. The traffic on The Old Road (currently a winding two-lane road), will increase dramatically unless there are major mitigating factors that are part of the project. I68-4

Thank you,

Julie Benson Krumrine

INTENTIONALLY LEFT BLANK

Response to Comment Letter I68

Julie Benson Krumrine
March 12, 2025

I68-1 This introductory comment does not express specific concerns related to the adequacy of the environmental analysis in the Draft EIR. The commenter's specific concerns are addressed below in responses to comments I68-2 through I68-4.

I68-2 Regarding the placement of development (including senior housing) within a Very High Fire Hazard Severity Zone (VHFHSZ), the Draft EIR analyzes the Project's impacts related to wildfire risk in Section 4.20, Wildfire. The EIR confirms the Project site is located within a VHFHSZ and within a State Responsibility Area. The fire hazard designation does not prohibit the development of the Project. Instead, the Project has been designed with the objective of constructing a fire-resistant, modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level. For a more detailed response related to fire protection and safety, please refer to Topical Response-1, which addresses issues related to compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities.

Regarding evacuations of seniors in the event of an emergency, please refer to the header of Evacuation of Senior Populations under Section 2.4.3.2, Fire Safety Requirements in Topical Response-1. It should be noted that the affordable senior apartment units provided on-site are not proposed to be assisted living retirement or convalescent facilities which would necessarily require care facilities and support staff.

Evacuation routes and evacuation plans are adequately addressed in Section 4.20, Wildfire, under Threshold 4.20a of the Draft EIR. This analysis is supported by the Project-specific Wildfire Evacuation Plan (see Appendix M-2 of the Draft EIR), which evaluates the Project's consistency with relevant emergency evacuation plans and emergency response plans, discloses the prevention and minimization regulations and measures applicable to the Project, and determines evacuation times for the existing and post-Project conditions. As stated on page 4.20-23 of the Draft EIR, the Project site is located proximate to several potential evacuation routes and connections would be established between the Project site and these potential routes. Specifically, regional access to the Project site is provided via I-5, which is located approximately 250 feet east of the Project site. The Project would provide two vehicle access points via two unsignalized driveways from The Old Road, which in turn provides connectivity to I-5. The Project also includes an emergency access road along the northern and western Project site perimeter.

To support successful evacuation from the Project site, the Draft EIR requires MM-4.20-1, Wildfire Education Program, which requires the preparation of Project-area-specific procedures for wildfire

evacuations that would be provided to homeowners. As stated on page 4.20-28 of Section 4.20 of the Draft EIR, with compliance with regulations and incorporation of MM-4.20-1, the long-term operations of the Project would not substantially impair evacuation or interfere with the established emergency operation plans, and impacts would be less than significant with mitigation. Please refer to Topical Response-1 for a more detailed response related to evacuation planning and modeling (specifically, see Sections 2.4.3.1, Attorney General's Guidance and 2.4.4, Project Wildfire Evacuation Modeling).

I68-3 Regarding impacts to native oak trees, a total of 334 SEA-Protected Trees would be impacted by the Project, including 232 oak trees (22 of which are Heritage Trees). Therefore, the Project would comply with Section 22.102.070, Protected Tree Permit, of the Los Angeles County Code. Additionally, the Project would incorporate mitigation measures to reduce impacts to oak trees. As detailed further in Section 4.4, Biological Resources, of the Draft EIR, implementation of MM-4.4-1 would require preservation of the remaining oak woodland within the On-Site Conservation Area and MM-4.4-9 would require the preservation of off-site oak woodland. Pursuant to MM-4.4-16, SEA Protected Tree Replacement/Compensation, the Project's required Conservation Management Plan must include a Protected Tree Replacement Plan that will dictate the establishment of required replacement trees. As shown on page 4.4-93 of the Draft EIR, of the 772 required replacement trees, 574 would be oak trees. Additional mitigation is incorporated to reduce impacts to oak trees, as detailed further in Section 4.4 of the Draft EIR. Given this, the Project's required mitigation would reduce potential oak woodlands impacts to below a level of significance under CEQA.

Regarding fire spread, the BehavePlus fire modeling system was used to model on-site fire behavior (see the Project's Fire Protection Plan, included as Appendix M-1 of the Draft EIR) to analyze the Project site's fire behavior pre- and post-development. The program simulates rate of fire spread, spotting distance, scorch height, tree mortality, fuel moisture, wind adjustment factor, and other variables. As stated on page 4.20-35 of Section 4.20, Wildfire, of the Draft EIR, based on the fire behavior modeling, the Project would reduce fire hazard conditions with the implementation of the required fuel modification zones on and off site and would not exacerbate the fire hazard conditions. Furthermore, the Project would be a clustered development in the northeast portion of the Project site, which includes a fuel managed perimeter interface with the adjacent open space, as further described in Section 3.2, Project Characteristics, of the Draft EIR. Topical Response-1 describes how higher density and clustered development built with ignition-resistant building materials and defensible space requirements (as incorporated into the Project) would be much more defensible than older neighborhoods built to previous standards. This is because the defensible space reduces the flame length and potential for spread of fire, and ignition-resistant construction limits opportunities for ember intrusion into structures. See Section 2.4.1.1, of Topical Response-1 for a discussion on how modern subdivisions and master planned communities are easier to defend than older subdivisions, even those in wildland-urban interfaces or in fire hazard severity zones.

I68-4 Off-site improvements are proposed under the Project, as described in Section 3.2.8, Off-Site Improvements, of Chapter 3, Project Description, of the Draft EIR. As discussed, starting on page 3-17 of the Draft EIR, The Old Road would be improved as required by the conditions of approval imposed by Los Angeles County Public Works. The existing portion of The Old Road adjacent to the Project's northeastern boundary within APN 2826-022- 901 is approximately 21 feet wide, with a curb and gutter on the east side of the road and an asphalt edge on the western side of the road. Off-site improvements of the Project would include widening The Old Road by 47 feet (including 45 feet of asphalt and 2 feet

of concrete curb and gutter) within APN 2826-022-901 to create a total 68- foot-wide curb to curb road within an 80-foot right of way. A new 8-foot-wide concrete sidewalk would be installed along the western frontage of the Project site. However, the proposed off-site improvements would not add any additional lanes to The Old Road.

Section 4.17, Transportation, of the Draft EIR analyzes the Project's impacts to related to transportation. Automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion, does not constitute a significant environmental impact under CEQA (California Public Resources Code, Section 21099[b][2]). However, Section 4.17 of the Draft EIR and the Transportation Impact Analysis (provided as Appendix J of the Draft EIR) includes analysis of the Los Angeles County Public Works Transportation Impact Analysis Guidelines, including the Project's traffic contribution to queuing at nearby signalized intersections. As detailed in the Transportation Impact Analysis, the Project is not anticipated to result in unacceptable or extended queuing at study intersections during operations (Draft EIR, pages 4.17-18 and 4.17-19).

INTENTIONALLY LEFT BLANK

Comment Letter I69

From: Jennifer Peterson
To: Erica G. Aguirre
Subject: Lyons development by towels
Date: Friday, March 14, 2025 4:03:42 PM

CAUTION: External Email. Proceed Responsibly.

Please do not build any more houses near Santa Clarita and especially not the lyons development by calgrove and towsley canyon!! It is a huge fire hazard and the poor animals have had enough taken from them! I69-1

Please don't build anymore in or around Santa Clarita and Stevenson ranch! I69-2

Thank you,
Jennifer peterson
Stevenson ranch homeowner
Sent from my iPhone

Response to Comment Letter I69

Jennifer Peterson
March 14, 2025

I69-1 This commenter's general opposition to the Project will be forwarded to the Regional Planning Commission for their review and consideration.

Section 4.20, Wildfire, of the Draft EIR includes a robust discussion of the Project's regional and local setting related to wildfire hazards, including the Project site's location within the location of the Project within a Very High Fire Hazard Severity Zone (VHFHSZ). For a more detailed response related to potential fire hazards, please refer to Topical Response-1, which addresses issues related to fire protection and safety, including compliance with applicable regulations, Project-specific fire safety features, results of the wildfire evacuation modeling, mitigation measures, and a summary of applicable research related to wildfire resilient communities. The Project has been designed with the objective of constructing a fire-resistant, modern community that is suitable for its location within VHFHSZ. It is understood that, as a result, the Project is required to comply with applicable state and building code requirements that include mandatory measures for new developments to minimize hazards associated with wildland fires. Further, as evaluated in Section 4.20 of the Draft EIR, the Project would be required to implement mitigation measures, which would implement additional protective measures beyond the regulatory requirements. As discussed further in Section 4.20 of the Draft EIR, after incorporation of these required mitigation measures, Project impacts related to wildfire would be reduced to a less than significant level.

Potential impacts to wildlife species are addressed in Section 4.4, Biological Resources, of the Draft EIR. As discussed therein, with implementation of required mitigation measures, Project impacts related to special status wildlife species, migratory species, wildlife corridors, and native wildlife nursery sites would be less than significant. The Project would provide approximately 150 acres of on-site natural open space. As proposed, and as required by Section 22.102.090 (SEA Development Standards) of the County Code, the Project would preserve 144.43 acres of the approximately 150-acre natural open space area within a conservation easement per MM-4.4-1, On-Site Habitat Preservation, which would ensure the preservation of this on-site 144.43-acre open space in perpetuity through recordation of a conservation easement (see page 4.4-69 of the Draft EIR). Additional habitat preservation would be provided through implementation of MM-4.4-9, Off-Site Habitat Preservation, which would result in approximately 467 acres of off-site lands preserved in perpetuity in a conservation easement.

I69-2 This comment does not express any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. This comment states general opposition to the Project and will be forwarded to the Regional Planning Commission for their review and consideration.

2.6 References

Alexandra D. Syphard and Jon E. Keeley, "Why Are So Many Structures Burning in California," Fremontia, 2020, p. 30 ["Data show that fires tend to be most frequent at low to intermediate housing and population densities."]

Alexandra D. Syphard, Teresa J. Brennan, and Jon E. Keeley, "The Importance of Building Construction Materials Relative to Other Factors Affecting Structure Survival During Wildfire," International Journal of Disaster Risk Reduction, Vo. 21 (2017), p 141 ["These [low to medium density] exurban housing developments are also located within complex terrain and may be more difficult to access by fire suppression crews; thus, low housing density has shown to be a major factor contributing to structure destruction in the [San Diego County] region."

Alexandra D. Syphard and Jon E. Keeley. 2015. Location, timing and extent of wildfire vary by cause of ignition. International Journal of Wildland Fire. 11 pp.

Alexandra D. Syphard, Avi Bar Massada, Van Butsic, and Jon E. Keeley, "Land Use Planning and Wildfire: Development Policies Influence Future Probability of Housing Loss," PLoS ONE Vol 8, Issue 8 (2013), doi:10.1371/journal.pone.0071708.

CAPCOA (California Air Pollution Control Officers Association). 2023. California Emissions Estimator Model (CalEEMod) User's Guide Version 2022. Prepared by Trinity Consultants and the California Air Districts. http://www.caleemod.com/.

CAPCOA. 2024. Final Draft—Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. October 2024. Accessed March 2025. https://www.caleemod.com/documents/handbook/full_handbook.pdf.

CARB (California Air Resources Board). 2017. California's 2017 Climate Change Scoping Plan. November 17. Accessed April 7, 2025. https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf.

CARB. 2022. 2022 Scoping Plan, Appendix D, Local Actions. November 2022. Accessed April 7, 2025. https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf.

CBIA (California Building Industry Association) 2022. Memorandum Subject: Supplemental Comments on the Board of Forestry Proposed Fire Safe Regulations. Dated January 19, 2022. https://blog.aklandlaw.com/wp-content/uploads/sites/282/2022/04/D-5.pdf

Cal OES (California Office of Emergency Services). 2023. Looking Back on the Cedar Fire, 20 Years Later. https://news.caloes.ca.gov/looking-back-on-the-cedar-fire-20-years-later/.

Caltrans (California Department of Transportation). 2013. I-5 HOT Lane Project Draft Supplemental EIR/Environmental Reevaluation. March 2013. Accessed April 2025. https://www.dropbox.com/scl/fo/kmhm12yu8sv1sh0a5jh74/AEyDhNZYuIxncEo87Iy1oJo/Reports%20%26%20Info/Environmental%20Impact%20Report%20(2013)?dl=0&rlkey=qtxnauyugrjoxkm92vk742jat&subfolder_nav_tracking=1.

Caltrans. 2025. US-101 – Wallis Annenberg Wildlife Crossing at Liberty Canyon. Accessed April 2025. https://dot.ca.gov/caltrans-near-me/district-7/district-7-projects/d7-101-annenberg-wildlife-crossing.

CDFW (California Department of Fish and Wildlife). 2022. Restoring California's Wildlife Connectivity 2022. California Department of Fish and Wildlife. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID =204648&inline

CDFW. 2023. Survey Considerations for California Endangered Species Act (CESA) Bumble Bee Species. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline.

CDFW. 2025. "Bank Service Areas - CDFW Approved Mitigation/Conservation Banks and Service Areas." Accessed April 2025. https://www.arcgis.com/apps/dashboards/cec8127c28bf401d9b8e59ad7e99570e.

Christopher, B. 2024. "The Supreme Court took powers away from federal regulators. Do California rules offer a backstop?" The Associate Press. Oline ed. July 10, 2024. https://apnews.com/us-news/california-courts-government-regulations-general-news-013592db5c5a4a913d94791e085ee11a.

City of Santa Clarita. 2024. "Transportation Development Plan." Accessed April 2025.

County of Los Angeles. 2006. Lyons Canyon Ranch Draft Environmental Impact Report. State Clearinghouse No. 2003031086 County Project No. TR 53653; Tentative Tract Map No. RMTR53653; Conditional Use Permit No. RCUP 200500088; Oak Tree Permit No. ROAK200500039. September 2006.

County of Los Angeles. 2020. SEA Ordinance Implementation Guide. Effective January 16, 2020. Accessed February 13, 2025. https://planning.lacounty.gov/long-range-planning/significant-ecological-areas-program/implementation-guide/.

County of Los Angeles. 2024. Construction and Demolition Debris Recycling and Reuse Ordinance - Policies, Procedures, Guidelines, and Facility Certification. August 19, 2024. Accessed April 2025. https://pw.lacounty.gov/epd/CD/cd_attachments/C%26D_Debris_Ordinance_Guidelines.pdf.

County of Los Angeles Fire Department. 2025. Emergency Operations. https://fire.lacounty.gov/emergency-operations/.

DOF (California Department of Finance). 2025. E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2021-2025, with 2020 Benchmark. January 1, 2025. Accessed June 12, 2025. https://dof.ca.gov/wp-content/uploads/sites/352/Forecasting/Demographics/Documents/E-5_2025_InternetVersion.xlsx

EPA (United States Environmental Protection Agency). 2021. Stormwater Best Management Practice. December 2021. Accessed April 2025. https://www.epa.gov/system/files/documents/2021-11/bmp-dry-detention-ponds.pdf.

FEMA (Federal Emergency Management Agency). 2021. New Developments' Construction Standards Require Wildfire Mitigation. https://www.fema.gov/case-study/new-developments-construction-standards-require-wildfire-mitigation.

Google. 2025. Google Earth, desktop application; centered on 34.371193°, -118.560271°. Accessed April 2025. https://earth.google.com/web/.

HCD (California Department of Housing and Community Development). 2025. "Annual Progress Reports - Data Dashboard and Downloads: Housing Element Implementation and APR Dashboard." Accessed March 2025. https://www.hcd.ca.gov/planning-and-community-development/housing-element-implementation-and-apr-dashboard.

Interagency Fuel Treatment Decision Support System (IFTDSS). 2025. Auto97th Landscape Fire Behavior Report Documentation. https://iftdss.firenet.gov/firenetHelp/help/pageHelp/content/10-cycle/summaries/auto97pctlreportdocumentation.htm?TocPath=Planning%20Cycle%20%26%20Workflows%7CLandscape%20Evaluation%7CLandscape%20Summary%7C_____3

Jack Flemming. 2025. Could this Irvine neighborhood be the blueprint for a more fire-resistant L.A.?. Los Angeles Times. https://www.latimes.com/california/story/2025-02-19/could-this-irvine-neighborhood-be-the-blueprint-for-a-more-fire-resistant-l-a.

LACDRP (Los Angeles County Department of Regional Planning). 2020. Significant Ecological Areas (SEA) Ordinance Implementation Guide. 133 pp. January 16, 2020.

McKenna, J. 2024. Subject: Lyons Canyon. Email correspondence between J. McKenna (City of Santa Clarita) and John Musella (Musella Group). August 20, 2024.

Murphey et al. 2019. Best Practices in Mitigation Paleontology. May 1, 2019. Accessed March 2015. https://docslib.org/doc/269296/murphey-et-al-2019-best-practices-in-mitigation-paleontology.

NWCG (National Wildfire Coordinating Group). 2025. Fire Danger Background. https://www.nwcg.gov/publications/pms437/fire-danger/fire-danger-background

Orange County Register. 2025. California rules will require more fire resistant homes in Palisades, Altadena. https://www.ocregister.com/2025/02/23/california-rules-will-require-more-fire-resistant-homes-in-palisades-altadena/

Patricia M Alexandre, Susan I. Stewart, Miranda H. Mockrin, Nicholas S. Keuler, Alexandra D. Syphard, Avi Bar-Massada, Murray K. Clayton, and Volker C. Radeloff, "The Relative Impact of Vegetation, Topography and Spatial Arrangement on Building Loss to Wildfires in Case Studies of California and Colorado," Landscape Ecol. 2016) Vo. 31, p. 416 ["The probability that a building is lost is highest in small, isolated building clusters with low to intermediate building density and few roads."]

Rancho Santa Fe Fire Protection District. 2008, "Shelter-In-Place… If You Can't Evacuate" https://www.rsf-fire.org/files/8cf3e8bcd/SIP_for_web.pdf.

Riley, S.P., J.A. Sikich, and J.F. Benson. 2021. "Big Cats in the Big City: Spatial Ecology of Mountain Lions in Greater Los Angeles." The Journal of Wildlife Management 85(8): 1,527–1,542.

Santa Clarita Transit. 2025. City of Santa Clarita Transit. Local Schedule. Effective March 8, 2025. https://santaclaritatransit.com/files/2025/03/LOCAL-Bus-Schedule-MAR25_RevMar4_WEB.pdf.

SCVEDC (Santa Clarita Valley Economic Development Corporation). 2024. SCVEDC Economic Snapshot Q2 2024. August 1, 2024. Accessed June 12, 2025. https://www.scvedc.org/blog/scvedc-economic-snapshot-q2-2024

SVP (Society of Vertebrate Paleontology). 2010. "Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources." https://vertpaleo.org/wpcontent/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf.

SWRCB (State Water Resources Control Board. 2019. State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Adopted April 2, 2019. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2021/procedures.pdf.

SWRCB. 2020. Implementation Guide for the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. April 2020. Accessed April 2025. https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/dredge_fill/revised_guidance.pdf.

United States (US) Census Bureau. 2023. 55 to 59 years in Santa Clarita City, California – AGE; Total Population percent. Accessed March 2025. https://data.census.gov/chart/ACSST1Y2023.S0101?q=Santa+Clarita+city,+California&type=column&measure=LINE13.

United States Geological Survey (USGS). 2018. A Million Gallons of Water - How much is it?. June 8. 2018. Water Science School. Accessed March 2025. https://www.usgs.gov/special-topics/water-science-school/science/a-million-gallons-water-how-much-it

3 Revisions to the Draft EIR

3.1 Introduction

This chapter contains minor revisions and clarifications to the Draft EIR as a result of responses to comments on the Draft EIR and others that are necessary to provide clarifications to the Project description or to correct non-substantive errors.

Pursuant to CEQA Guidelines Section 15088.5, a lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR but before certification. Significant new information can include a disclosure showing that a new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented, a substantial increase in the severity of an environmental impact, a feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project (but the project's proponents decline to adopt it), or the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. The revisions provided in this chapter do not constitute significant new information requiring recirculation of the EIR as defined in CEQA Guidelines Section 15088.5. No new significant environmental impacts or a substantial increase in the severity of environmental impacts would occur from these revisions. Instead, the information merely clarifies, amplifies, and makes insignificant modifications to an adequate EIR.

3.2 Revisions to the Draft EIR

The revisions shown below are categorized by chapter, section number, and page number. Text from the Draft EIR that has been removed is shown in strikethrough (i.e., ~~strikethrough~~), and text that has been added as part of the Final EIR is shown as double underlined (i.e., underline). Revisions may be shown with surrounding sentences for context.

Table of Contents

Appendices, Page TOC-xiii

I-6 ~~Los Angeles~~LA County Library Request for Information Letter

Acronyms and Abbreviations

Acronyms, Page ACR-iv

Acronym/Abbreviation	Definition
LACL	~~Los Angeles~~LA County Library

Executive Summary

ES.4, Environmental Impacts and Mitigation Measures, Pages ES-14 through ES-94

Table ES-1. Environmental Impacts and Mitigation Measures

<table>
<tr><th>Environmental Topic and Threshold</th><th>Level of Significance Prior to Mitigation</th><th>Mitigation Measure(s)</th><th>Level of Significance After Mitigation</th></tr>
<tr><td colspan="4">4.4. Biological Resources</td></tr>
<tr><td>4.4a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?</td><td>Potentially Significant Impact</td><td>MM-4.4-1: On-Site Habitat Preservation. Prior to final map recordation, the on-site conservation easement area shall be designated on the final map. Additionally, a letter of intent shall be obtained from the Conservation Easement holder. Prior to the issuance of a grading permit, the Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves 144.43 acres of open space within the Project boundaries for long-term conservation and management as a natural conservation area (“Conservation Area”). The following table documents the vegetation communities that would be preserved. The Conservation Area provides sufficient preservation for Project-related impacts to vegetation communities within Resource Categories 4 and 5 of the Significant Ecological Area Ordinance Implementation Guide.
<table>
<tr><th>Alliance</th><th>Unimpacted Acres (Open Space)</th><th>Preserved via Conservation Easement</th></tr>
<tr><td colspan="3">SEA Resource Category 1</td></tr>
<tr><td>Baccharis salicifolia Shrubland</td><td>0.52</td><td>0.52</td></tr>
<tr><td>Salix gooddingii–Salix laevigata Forest and Woodland</td><td>0</td><td>0.0</td></tr>
<tr><td>Sub-Total</td><td>0.52</td><td>0.52</td></tr>
<tr><td colspan="3">SEA Resource Category 3</td></tr>
</table></td><td>Less than Significant with Mitigation</td></tr>
</table>

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)			Level of Significance After Mitigation
		Ericameria palmeri Provisional Shrubland	0	0	
		Eriodictyon crassifolium Provisional Shrubland	0.41	0.41	
		Juglans californica Forest and Woodland	0.09	0.09	
		Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0	0	
		Quercus agrifolia Forest and Woodland	10.64	10.28	
		Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.01	0.01	
		Sub-Total	*11.15*	*10.79*	
		SEA Resource Category 4			
		Adenostoma fasciculatum Shrubland	69.77	64.68	
		Adenostoma fasciculatum Shrubland–Disturbed	9.73	9.73	
		Artemisia californica–Salvia leucophylla Shrubland	28.01	28.01	
		Artemisia californica–Salvia leucophylla Shrubland–Disturbed	10.66	10.66	
		Avena spp.–*Bromus* spp. Herbaceous Semi-natural	2.62	2.62	
		Distichlis spicata Herbaceous	0.07	0.07	
		Eriogonum davidsonii/Croton setiger Grassland	0	0	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)			Level of Significance After Mitigation
		Eriogonum fasciculatum Shrubland	0	0	
		Sub-Total	*120.87*	*115.77*	
		SEA Resource Category 5			
		Brassica nigra–Centaurea melitensis Herbaceous Semi-natural Stands	16.47	16.24[a]	
		Non-SEA Resource Category			
		Developed[1]	1.31	1.11	
		Total Acres	**150.31**	**144.43**	

Notes: SEA = Significant Ecological Area.
[a] 16.24 acres of this community are proposed to be restored per MM-4.4-2.
[1] Existing trails.

Conservation Management Plan. As part of recording the conservation easement, a Conservation Management Plan (CMP) applicable to the On-Site Conservation Area shall be prepared and submitted to the County of Los Angeles for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The CMP shall set forth the following requirements that shall be implemented by the entity that holds the conservation easement and/or manages and stewards the Conservation Area: (1) there shall be no grading or other construction activities within the On-Site Conservation Area, except for the proposed habitat enhancement/restoration, construction and maintenance of signage, and trail maintenance; (2) off-trail activities (e.g., hiking, biking, horseback riding) shall be prohibited; (3) signage shall be installed at the trailheads and at any access points to the On-Site Conservation Area, which shall include information on the organization that holds the conservation easement, brief descriptions of the restoration activities, protection of biological resources, and restrictions to human activities; (4) signage shall be placed in visible

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		locations that prohibits smoking and that requires that humans and domesticated pets remain within the limits of designated hiking trails, all domesticated pets be on leashes, and owners clean up after domesticated pets; (5) no fencing that represents a barrier to wildlife movement or other barriers to wildlife movement shall be installed; (6) dog waste bag dispensers and wildlife-proof receptacles for trash shall be provided at appropriate locations on the trail; (7) gasoline-powered maintenance equipment shall be prohibited; (8) commercial honeybee operations shall not be allowed to use the On-Site Conservation Area for storing their apiaries; (9) rodenticides shall be prohibited; (10) herbicides and pesticides shall be discouraged, and only those typically used for invasive plant management in California wildlands shall be allowed, per the California Invasive Plant Council and Pesticide Research Institute's 2015 Best Management Practices (BMPs) for Wildland Stewardship: Protecting Wildlife When Using Herbicides for Invasive Plant Management; (11) arborists certified by the International Society of Arboriculture (ISA) shall conduct surveys every five years that shall include an assessment of potential infestations of invasive shothole borer beetle and other pathogens or invasive insects that can threaten native habitat; (12) at least one annual walk-through survey shall be conducted by a biologist to qualitatively monitor the general condition of on-site habitats and to check for any new introduction or expansion of invasive plant species; (13) collect and remove trash, repair vandalized signs, and rectify trespass impacts; and (14) provide annual reporting that document the conditions of the Conservation Area. Approved work shall be outlined in the CMP and in the conservation easement, including monitoring and maintenance efforts or for other activities associated with preserve management, and prohibited activities shall be delineated. The conservation easement holder shall be an entity that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		existence for the foreseeable future. The California Department of Fish and Wildlife per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b). Funding for the conservation easement and implementation of the tasks in the CMP shall be maintained in perpetuity and shall be provided by a traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association (HOA) or other equivalent mechanism(s). ... **MM-4.4-3** *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation*. The required Conservation Management Plan (CMP) approved by the County of Los Angeles (County) shall include a Special-Status Plant Mitigation and Monitoring Plan (SSPMMP) that shall provide guidance and methods to preserve the special-status plants known to occur within the Conservation Area (slender mariposa lily [*Calochortus clavatus* var. *clavatus*], Plummer's mariposa lily [*Calochortus plummerae*], Peirson's morning glory [*Calystegia peirsonii*], and scarlet Keckiella [*Keckiella ternata*]), along with a program of special-status plants seed collection and dispersal within the Conservation Area. The SSPMMP shall also include methods and approach to translocating mariposa lily individuals proposed for impact into the Conservation Area. The SSPMMP shall be developed and implemented with a program that does not conflict with other conservation easement resource management objectives. The SSPMMP shall provide details on site preparation measures, as well as specific methods for the pre-construction collection of seeds from all four species and the harvest of mariposa lily bulbs from impacted populations. The SSPMMP shall also provide detailed methods for the dispersal of that seed and the translocation of the harvested bulbs into the conservation easement areas within locations with appropriate soils and growing conditions for each	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		species, as determined by a qualified biologist in coordination with the County and California Department of Fish and Wildlife. Finally, the SSPMMP shall provide a schedule and action plan for the maintenance and monitoring programs, including success criteria, and remedial contingency measures to be implemented if efforts are not successful. Pre-construction surveys shall be conducted in the Project footprint to map slender mariposa lily, Plummer's mariposa lily, Peirson's morning glory, and scarlet keckiella individual locations with a high-accuracy GPS unit and a permanent marker established in the field to locate the individual mariposa lilies for bulb collection. Seeds shall be collected from each species at the appropriate time of year. Mariposa lily bulbs shall remain in the ground until Project development. Prior to Project development, the bulbs shall be translocated within appropriate habitat in the Conservation Area. Performance Standard. Monitoring shall take place annually for 5 years from the time of establishment of the mariposa lily bulbs. The following success criteria is the minimum required by the end of the 5-year monitoring period: ▪ 25 slender mariposa lily ▪ 44 scarlet keckiella ▪ 600 Peirson's morning glory ▪ 128 Plummer's mariposa lily If it appears that the population of these special-status plant species (slender mariposa lily, scarlet keckiella, Peirson's morning glory, and Plummer's mariposa lily) or the vegetation community composition and status are on the decline or have been degraded, remedial activities shall be implemented according to the CMP and the SSPMMP, and monitoring shall continue until the success criteria are met. These activities may include weed control, additional seeding, native plant establishment, or other activities where appropriate.	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		Annual monitoring reports shall be submitted by August 31 of each year and shall include an evaluation of current monitoring data in relation to previous population observations (during previous monitoring years) and native enhancement efforts for slender mariposa lily, scarlet keckiella, ~~club-haired mariposa lily~~, Peirson's morning glory, and Plummer's mariposa lily. These reports shall also include any recommendations for remedial management measures and shall discuss other issues that need to be addressed, such as trespassing or vandalism. **~~MM-4.4-8:~~** *Crotch's Bumble Bee Habitat Preservation and Minimization Measures.* Incidental Take Permit The Applicant shall consult with the California Department of Fish and Wildlife on obtaining an Incidental Take Permit (ITP), per California Fish and Game Code 2081, for the take of Crotch's bumble bee. The Applicant shall provide the County with a copy of the ITP, or proof that an ITP is not required, prior to issuance of a grading permit. Mitigation for direct impacts to Crotch's bumble bee ~~will~~ shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished through the preservation of on-site suitable habitat (MM-4.4-1) and off-site suitable habitat (MM-4.4-9). The Applicant shall be obligated to implement all minimization and avoidance measures conditions that are included in the ITP. ~~Pre-Construction~~ Focused Survey ~~A pre-construction~~ Focused surveys for Crotch's bumble bee (*Bombus crotchii*) shall be conducted within the construction footprint prior to the start of ground-disturbing construction activities~~ occurring during the Crotch's bumble bee nesting period (February 1 through October 31).~~	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		~~The survey shall ensure that no nests for Crotch's bumble bee are located within the construction area~~. The ~~pre-construction~~ focused surveys shall include a habitat assessment and focused surveys, both of which shall be ~~based on recommendations~~ as described in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction. The habitat assessment shall, at a minimum, include historical and current species occurrences; document potential habitat on site including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and human-made structures that may support bumble bee colonies, such as rock walls, rubble, and furniture. The habitat assessment shall be repeated prior to February 1 in each year that ground-disturbing activities will occur to determine if foraging, nesting, or overwintering resources are present within the impact area. If nesting resources are present in the impact area, focused surveys shall be conducted. The focused survey shall be performed by a biologist with expertise in surveying for bumble bees and include at least three survey passes that are not on sequential days or in the same week, preferably spaced 2 to 4 weeks apart. The timing of these surveys shall coincide with the colony active period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling), and surveyors shall wait at least 1 hour following rain. Optimal surveys are conducted when there are sunny to partly sunny skies and ambient temperatures are greater than 60° Fahrenheit. Surveys may be conducted earlier than April 1 if other bees or butterflies are flying. Surveys shall not be conducted	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up to 5 minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after 5 minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point that would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). Identification shall include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in the U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation if able. The bee shall be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container shall be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		species, they become active shortly after removal from the cold environment, so photography must be performed quickly. If Crotch's bumble bee nests are not detected, no further mitigation would be required. The mere presence of foraging Crotch's bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources shall be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources. A written survey report shall be submitted to the County of Los Angeles (County) and CDFW within 30 days of the pre-construction survey. The report shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and detailed habitat assessment. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report. ~~If the above measures are followed, it is assumed that the project shall not need to obtain authorization from CDFW through the~~	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		~~California Endangered Species Act Incidental Take Permit process.~~ If the nest resources cannot be avoided, as outlined in this measure, the project applicant shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this California Environmental Quality Act document and shall be incorporated into the Habitat Mitigation and Monitoring Plan. **MM-4.4-9:** *Off-Site Habitat Preservation.* Prior to final map recordation, the Applicant shall obtain a letter of intent from the future Conservation Easement holder. Prior to issuance of a grading permit, the Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves off-site habitat for long-term conservation and management ("off-site conservation area"). As part of recording the conservation easement for any off-site parcel(s), a Conservation Management Plan (CMP) applicable to the off-site conservation area shall be prepared and submitted to the Los Angeles County (County) Department of Regional Planning (Planning) for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The conservation easement holder shall be an entity that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife (CDFW) per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b). <u>Funding for the conservation easement and implementation of the tasks in the CMP shall be maintained in perpetuity and shall be provided by a traditional endowment, establishing a community facilities district or landscape</u>	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		management district, or through contractual obligation with the Homeowners' Association or other equivalent mechanism(s). ... **MM-4.4-11**: *Nesting Bird Avoidance.* Project construction shall be conducted in compliance with the conditions set forth in the Migratory Bird Treaty Act and California Fish and Game Code with methods approved by the California Department of Fish and Wildlife to protect active bird/raptor nests. Vegetation removal shall occur during the non-breeding season for nesting birds (generally late September to early March) and nesting raptors (generally early July to late January) to avoid impacts to nesting birds and raptors. For the remaining Project activities initiated during the breeding season for nesting birds (March 1–September 30) and nesting raptors (February 1–June 30), a pre-construction survey shall be conducted by the Biological Monitor (MM-4.4-4) for nesting birds and/or raptors within 3 days prior to any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors). If the Biological Monitoring does not find any active nests on or immediately adjacent to the impact areas, the Project activity shall be allowed to proceed. If the Biological Monitor finds an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or breeding activities substantially disrupted, the Biological Monitor shall delineate an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts shall be mapped on the construction plans, which will be included in the report(s) documenting the survey(s) that will be submitted to the County within three days of the completion of the survey. The active nest shall be protected until nesting activity has ended. To protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by the	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		Biological Monitor: (1) work limits shall be established within a buffer around any occupied nest (the buffer shall be 100–300 feet for nesting non-raptors and 300–500 feet for nesting raptors), unless otherwise determined by the Biological Monitor and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by the Biological Monitor. Encroachment into the buffer area around a known nest shall only be allowed if the Biological Monitor determines that the proposed activity would not disturb the nest occupants. Construction can proceed when the Biological Monitor has determined that fledglings have left the nest, or the nest has failed. … MM-4.4-13: *Homeowners' Association Covenants, Conditions, and Restrictions*. The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions (CC&Rs), which are reviewed and approved prior to final map recordation, then recorded immediately after the final map records, shall include the following requirements to reduce potential human impacts on adjacent habitats and wildlife species: ▪ Invasive plant species (designated by the California Invasive Plant Council) shall be prohibited on all residential lots, as they could establish off site and have negative impacts to the adjacent habitats. ▪ All trash/garbage waste and recycling receptacles shall have locking devices that discourage wildlife foraging in common areas/parks and shall encourage the use of such locking devices on residential receptacles, as feasible. ▪ Intentional feeding of wildlife, including mule deer, is prohibited. ▪ The use of rodenticides is prohibited. ▪ Speed limits of 15 to 25 mph shall be posted, and the CCRs shall require residents to comply with the posted speed limits. ▪ Smoking shall be prohibited in open space areas.	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		▪ The HOA shall not use balloons for any community events, and the use of balloons by individual homeowners shall be discouraged. ▪ Homeowner reprisals against native wildlife species (i.e., killing or harming native wildlife species in any way) if homeowner pets are killed or harmed by wildlife shall be prohibited. Public information signage shall be installed at the trailhead and in the recreation facility, and printed information shall be provided to the HOA in order to (1) educate and inform the public about wildlife, especially mountain lions present in the area; (2) advise on proper avoidance measures to reduce human-wildlife conflicts; (3) advise on proper use of open space trails in a manner respectful to wildlife (e.g., dogs on leash, proper waste disposal); and (4) provide local contact information to report injured or dead wildlife. Signage should be written in the language(s) understandable to all those likely to recreate and use the trails. Signage should not be made of materials harmful to wildlife.	
4.4f. Would the project conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (County Code, Title 12, Ch. 12.36), the County Oak Tree Ordinance (County Code, Title 22, Ch. 22.174), the Significant Ecological Areas (SEAs) (County Code, Title 22, Ch. 102), Specific Plans (County Code, Title 22, Ch. 22.46), Community Standards Districts (County Code, Title 22, Ch. 22.300 et seq.), and/or Coastal Resource Areas (County General Plan, Figure 9.3)?	Potentially Significant Impact	**MM-4.4-1**: *On-Site Habitat Preservation*. **MM-4.4-2**: *Habitat Mitigation and Monitoring Plan*. **MM-4.4-4**: *Biological Monitoring*. **MM-4.4-5**: *Demarcation of Disturbance Limits*. **MM-4.4-6**: *Invasive Species Prevention*. **MM-4.4-7**: *Landscaping Plan*. **MM-4.4-8**: *Crotch's Bumble Bee Habitat Preservation and Minimization Measures*. **MM-4.4-9:** *Off-Site Habitat Preservation*. **MM-4.4-10**: *Special-Status Wildlife Relocation Plan*. **MM-4.4-12**: *Lighting Plan*.	Less than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

<table>
<tr><th>Environmental Topic and Threshold</th><th>Level of Significance Prior to Mitigation</th><th>Mitigation Measure(s)</th><th>Level of Significance After Mitigation</th></tr>
<tr><td></td><td></td><td>
MM-4.4-13: Homeowners' Association Covenants, Conditions, and Restrictions.

MM-4.4-16: SEA Protected Trees Replacement / Compensation. The required Conservation Management Plan (CMP) approved by the County of Los Angeles (County) shall include a Protected Tree Replacement Plan that shall dictate the establishment of replacement trees in the Conservation Area at the numbers specified in the following table. At a minimum, the removal of any SEA Protected Tree shall result in a minimum of two replacement plantings with 10:1 for Heritage Trees. Replacement trees shall be seedlings of the same species being removed and shall be planted within an area where suitable growing conditions are present and where the trees shall be able to remain in perpetuity, which may include the On-Site Conservation Area. ~~Undersized, naturally sprouted trees of the same species growing on site may be protected or transplanted as replacement trees.~~ The replacement trees shall be nurtured and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. The following table details the quantity of each species required for planting.

Summary of Individual Species Replacement Quantities
<table>
<tr><th>Scientific Name</th><th>Common Name</th><th>Total Impacted</th><th>Replacement Ratio</th><th>Total Replacement Required</th></tr>
<tr><td>Heteromeles arbutifolia</td><td>toyon</td><td>0</td><td>2:1</td><td>0</td></tr>
</table>
</td><td></td></tr>
</table>

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)					Level of Significance After Mitigation
		Juglans californica	Southern California black walnut	3	2:1	6	
		Populus fremontii	Fremont cottonwood	15	2:1	30	
		Quercus agrifolia	coast live oak	191	2:1	382	
		Quercus agrifolia (Heritage Tree)	coast live oak (Heritage Tree)	15	10:1	150	
		Quercus berberidifolia	scrub oak	1	2:1	2	
		Quercus lobata	valley oak	10	2:1	20	
		Quercus lobata (Heritage Tree)	valley oak (Heritage Tree)	2	10:1	20	
		Salix laevigata	red willow	24	2:1	48	
		Salix lasiolepis	arroyo willow	7	2:1	14	
		Sambucus nigra ssp. *caerulea*	blue elderberry	50	2:1	100	
			Total	**318**	**N/A**	**772**	
		It should be noted that mitigation can include the protection of undersized, naturally sprouted trees of the same species growing on site. In addition, per the County Code, the County may require					

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		additional mitigation and monitoring requirements following review of the Significant Ecological Area Conditional Use Permits. At a minimum, the County requires that the replacement trees need to be nurtured and maintained in a healthy condition and be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. The Project Applicant must pay into the County Protected Tree Fund should there not be enough locations within the Conservation Area (on-site or off-site) or Project landscaped areas for replacement trees. As a last resort, the Protected Tree Fund payments shall be used by the County in accordance with County Code Section 22.102.070(F)(5).	
…	…	…	…
4.20. Wildfire			
4.20a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?	Potentially Significant Impact	**MM-4.20-1**: *Wildfire Education Program*. The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions for the Project shall require that the HOA include a Fire Safety Coordinator position as part of the HOA Board, who shall be responsible for preparing and implementing ~~prepare~~ an educational program with wildfire-related information, including the Wildfire Evacuation Plan (WEP) and the Fire Protection Plan (FPP) requirements, to be provided to all residents and occupants, including residents and occupants of the senior affordable housing units. Similarly, the Property Manager(s) of the senior affordable housing shall serve as the Fire Safety Coordinator for the affordable housing residents and shall be responsible for preparing and implementing an educational program with wildfire-related information, including the WEP and the FPP requirements to be provided to all residents and occupants. ~~, including the Wildfire Evacuation Plan (WEP) and the Fire Protection Plan (FPP) requirements~~. The Covenants, Conditions, and Restrictions will be submitted to the County of Los Angeles (County) prior to issuance of	Less Than Significant with Mitigation

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		certificate of occupancy. The educational program shall be prepared in easy-to-understand, graphically based materials and shall be annually reviewed and updated, as appropriate, in order to maintain high wildfire awareness. Program features shall include, but may not be limited to, the following: 1. Biannual email and mailers: Residents and occupants of all dwelling units on the Project site, including the senior affordable housing rental units, shall be provided with biannual emails and mailers in April and in August that include information such as reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires. Links to various resources on where to get trusted information, such as the Los Angeles County Fire Department (LACoFD), 211 Los Angeles County, and Ready Los Angeles County, shall be provided and updated annually, as necessary. Additionally, at least once a year, information on the following shall be provided in the email and mailer: (1) how to notify the County Office of Emergency Management (OEM) and Health and Human Services of special needs and/or required accommodations (Accessible Alert LA County, CERT programs, or other), for transportation or other special services; and (2) how to prepare for evacuation of pets and how to register for assistance with pet evacuations. 2. Website: A dedicated community website shall be developed and maintained by the HOA with more detailed information and resources about wildfire awareness, prevention, and evacuation. The website address shall be sent to all residents of the Project, including occupants of the senior affordable housing units. The website shall serve as a centralized resource for the fire and evacuation education program and include information from the FPP and WEP. In addition to general emergency preparedness education, the website shall include information that is included in emails, mailers, and workshops/webinars. The website shall have	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		up-to-date fire watch and red flag warning alerts, as well as information on restrictions during fire weather conditions. Residents shall also be able to use the website to sign up for an annual residential defensible space inspection from the HOA fire safety committee. 3. New resident packet: All residents and new residents in the future shall be presented with a wildfire awareness and safety package upon purchase or rental of a residence. Within the package will be a USB drive with the WEP, FPP (which includes information on the regional fire hazard, how to build a go-bag, and tools to prepare a household evacuation plan), and a list of agencies and resources for receiving trusted information. 4. Emergency alert campaign: Residents shall be encouraged to sign up for Alert LA County. Alert LA County is the mass notification system for emergency alerts, weather alerts, health notifications, building alerts, and other updates from County, state, and federal agencies. Reminders shall be sent out in the biannual mailers and emails, on the community website, in the workshops, and in the new resident package. 5. Trail signage: Signs shall be placed at the new trailhead to provide all users with information about how to safely use the trail and shall include restrictions on smoking and firearm usage. Signs shall be evaluated annually by the HOA to ensure proper maintenance. 6. HOA fire safety committee: The HOA shall establish a fire safety committee, which shall include the owner and property manager(s) from the senior housing that is responsible for overseeing the maintenance of community-wide fire protection features. Residents will be able to report fire hazards or hazardous fuel conditions to the HOA committee for remediation. The committee shall be responsible for the coordination of the third party fuel modification zone (FMZ) inspections and the volunteer residential defensible space inspections. The committee	

Table ES-1. Environmental Impacts and Mitigation Measures

Environmental Topic and Threshold	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		shall also be responsible for the creation and distribution of the educational program for the Project. The committee shall serve as a communication link between LACoFD and the community. 7. Senior Housing Carpool Program: The Fire Safety Coordinator shall be responsible for creating a senior housing carpool program available for all residents on the Project site, including the senior affordable rental units. The program shall ensure that all seniors who are not able to safely evacuate on their own are accounted for and transported during an emergency evacuation.	

Chapter 1, Introduction

Section 1.3.1, Notice of Preparation, Page 1-7

Table 1-1. Notice of Preparation and Comment Letters Summary

Sender of Comments	Date Received	General Summary of Comments	Addressed in Section(s)
Regional/Local Agency			
~~Los Angeles~~LA County Library (LACL)	July 13, 2022	LACL states that the public library that will service the Project, Stevenson Ranch Library, does not currently meet minimum collection item requirements based on population of its service area. The comment states that the Project will have "a significant impact on library services since it will create a demand for additional materials and public access computers and will affect the library's capacity to serve the residents of the area". However, the commenter provides the cost estimate for the one-time Library Facilities Mitigation Fee to minimize the impact of residential projects on library services,	Section 4.15, Public Services
Los Angeles County Sanitation Districts (LACSD)	July 13, 2022	LACSD provides discussion on existing conditions related to wastewater conveyance and local water reclamation plants. In addition, the comment provides assumptions on average wastewater flow based on the proposed land uses and cites existing regulations for compliance.	Section 4.19, Utilities and Service Systems
Organizations			
…	…	…	…
Santa Clarita Organization for Planning and the Environment (SCOPE)	July 15, 2022	SCOPE urges the County to withdraw and recirculate the Notice of Preparation because it did not include a discussion of the Project's proposed tree removals. SCOPE calls for evaluation of the previously approved Lyons Canyon Ranch Project and a "no-Project" alternative; updated surveys for mountain lions, listed species, and oak resources; and an analysis of how large-scale oak loss, auto-oriented design, and the Project site's Very High Fire Hazard Severity Zone designation would affect carbon sequestration, wildlife corridors, and compliance with the County's Significant Ecological Areas Ordinance, General Plan, Climate Action Plan, and General Plan Safety Element. SCOPE also disputes the adequacy of the Water Supply Assessment in light of drought, contamination, and future cutbacks, and requests that the County require full electrification of all buildings, prepare robust fire and climate analyses, and provide the organization with all future Project notices.	Chapter 3, Project Description; Section 4.4, Biological Resources; Section 4.8, Greenhouse Gas Emissions; Section 4.11, Land Use and Planning; Section 4.17, Transportation; Section 4.19, Utilities and Service Systems; Section 4.20, Wildfire; Chapter 6, Alternatives

Chapter 2, Environmental Setting

Section 2.2, Project Site, Page 2-4

Miscellaneous structures on the Project site include fencing, a metal frame bridge, a billboard, an abandoned water tank, metal drainage pipe, irrigation lines, trails, electrical distribution lines, dirt roads, and an abandoned and plugged oil well. The plugged oil well (Ayers 1 – API ~~03706017~~ 0403706017), which did not produce oil, is located within the center of the Project site and was identified in 1961 (Stantec 2023). The location of this abandoned and plugged oil well is identified on Figure 2-5, Special Management Areas. Special Management Areas (SMAs) are defined by the County as areas that require additional development regulations due to the presence of natural resources, scenic resources, or identified hazards (County of Los Angeles 2015). As shown on Figure 2-5, the Project site is located within the following SMAs: a Hillside Management Area (HMA), a Significant Ecological Area (SEA), and Very High Fire Hazard Severity Zone (VHFHSZ).

Section 2.5.2, Public Services, Page 2-8

The ~~Los Angeles~~ LA County Library (LACL) provides library services to the County. The nearest LACL to the Project site is the Stevenson Ranch Library, located at 25950 The Old Road, in the community of Stevenson Ranch. The Stevenson Ranch Library is approximately 1.7 miles north of the Project site.

Chapter 3, Project Description

Section 3.1, Project Summary, Page 3-2

The Project site, which totals 233.49 gross (227.34 net[1]) acres, is located in unincorporated Los Angeles County (County), in the northern foothills of the Santa Susana Mountains at the westerly perimeter of the Santa Clarita Valley. The Project site consists of five Assessor's Parcel Numbers (APNs) 2826-041-039, 2826-023-014, 2826-022-026, 2826-022-027, and 2826-022-035.

Figure 2-1, Regional Location and Vicinity Map, included in Chapter 2, Environmental Setting, of this Draft EIR, provides the Project boundaries in the context of the surrounding community and jurisdictions. Stevenson Ranch, a master-planned community in the unincorporated County, is located north of the Project site, and the City of Santa Clarita is located just east of the Project site. The Santa Susana Mountains are located west of the site, with Ventura County located farther west of the Santa Susana Mountains. South of the Project site is unincorporated County land and City of Santa Clarita land (specifically, Rivendale Park and Open Space). Locally, the Project site is south of Sagecrest Circle, adjacent to The Old Road on its eastern side, and north of Calgrove Boulevard near Ed Davis Park in Towsley Canyon. The Project site is bordered by open space on its western, southern, and southeastern boundaries. Regional access to the Project site is provided by the northbound/southbound Interstate-5 (I-5) Freeway to the east, with freeway access ramps via Lyons Avenue or Calgrove Boulevard, each located one mile from the Project site. Direct access to the Project site is currently provided by The Old Road on the east.

Figure 3-1, Conceptual Site Plan, identifies the Project proposed development overlaid on an aerial photograph. Based on lot acreages, the Project includes the development of 510 dwelling units with a mix of attached and detached dwelling units, and affordable senior housing apartments within 41.47 acres; 1.13 acres for a

[1] The net acreage is the gross acreage minus existing utilities easements and the acreage of the proposed internal private driveways in Lots 1 through 11.

recreational center; 10.73 acres of debris basin lots maintained by the Los Angeles County Flood Control District (LACFCD); 21.72 acres of HOA-maintained open space; 152.84 acres of natural ~~and improved~~ open space, including landscaped areas and parklets; 1.43 acres of water tank and frontage; and 4.10 acres for Street A and Street B, which would be the public roadways.

Section 3.2.1, Land Use Entitlements, Page 3-6

Vesting Tentative Tract Map (VTTM) No. 83301

Vesting Tentative Tract Map (VTTM) No. 83301 is proposed to subdivide the 233.49-acre Project site into 37 legal lots and two public streets, as shown on Figure 3-2, Vesting Tentative Tract Map No. 83301. In addition, Figure 3-2B, Vesting Tentative Tract Map No. 83301, shows details of an on-site abandoned well in between Lots 16 and 17. Title 21, Subdivisions, of the Los Angeles County Code (County Code), sets forth the general provisions and requirements for compliance with the Subdivision Map Act. As set forth in Chapter 21.38, Vesting Tentative Map of the County Code, when a subdivider files a vesting tentative map for a subdivision whose proposed development is inconsistent with the Zoning Ordinance, the County may deny or may approve it conditioned on the subdivider obtaining the necessary change in the Zoning Ordinance in order to eliminate the inconsistency. The Project would include detached single-family condominiums within the A-2-1, A-2-2, C-3, and C-3-DP zones, as well, which are allowed in the zone as part of the subdivision.

Section 3.2.1, Land Use Entitlements, Page 3-7

Administrative Housing Permit

As stated in Chapter 22.166, Housing Permits of the County Code, a housing permit is required by the County to facilitate the increased production of affordable housing and senior citizen housing. This applies to the Project, which would provide affordable senior citizen housing, and therefore the Project may be eligible to receive various benefits, including but not limited to: density bonuses, incentives, waivers or reductions of development standards, and permit streamlining pursuant to the State Density Bonus Law, as set forth in Section 65915 of the California Government Code, as amended, or any other State laws or local ordinances or policies that aim to increase the production of affordable housing, including transitional and supportive housing, and senior citizen housing.

In accordance with State Density Bonus Law, the Project Applicant is requesting the following incentives:

- Request to allow surface parking for very-low-income senior housing to be located within an A-2-1 zone
- Request to allow the applicability of Density-Controlled Development (DCD) in the C-3-DP-zoned portion of the Project site

Additionally, the Project Applicant is requesting the following waivers:

- Maximum Height as provided by County Code Section 22.16.050(B)
  - The Project requests to exceed maximum height of 35 feet in the underlying A-2 zone and seeks a maximum height of 38 feet above grade within the A-2 zone.
- Building Separation as provided by County Code 22.110.050(A)(1)
  - The Project requests to allow 9 feet of building separation instead of 10 feet of building separation.
- Maximum retaining wall height per County Code 22.110.070(B)(4)

  - The Project requests a maximum retaining wall height of 17.5 feet.
- Multi-family housing in DCD development per County Code 22.140.170(C)(3)
  - The Project proposes senior affordable housing in the C-3-DP-zoned portion of the Project site.
- ~~Natural Open Space Preservation of 65% of Project site per County Code 22.102.100(A)(2)(a)~~
  - ~~The Project proposes the permanent preservation of approximately 65% of the Project site as natural open space.~~
- Retaining Walls Topped with Walls or Fences per LACC 22.110.070(B)(4)(b)
  - The Project includes retaining walls that are topped by non-view-obscuring fences in both cut and fill conditions. These fences would exist in required yards in some circumstances and would not exceed six feet in total height.
- Reduction in the required rear yard setback from 15 to 10 feet in the A-2-2 Zone for Lots 3 and 4
  - Given the irregular shape of the lots and dwelling unit orientation, the Project requests to reduce the rear side yard setback from the required 15 feet to 10 feet for Lots 3 and 4 (zoned A-2-2), waiving the requirements of County Code Table 22.16.050-A, Minimum Yard Depths For Agricultural Zones.

Section 3.6.1, Discretionary Actions, Page 3-21

The following is a summary of discretionary actions the County of Los Angeles will consider:

- Certification of Environmental Impact Report (RPPL2021003071)
- Vesting Tentative Tract Map (VTTM) 83301 to subdivide the Project site into 37 lots (RPPL2021003061)
- Conditional Use Permits (CUPs) (RPPL2021003113) for the following:
  - For development with an HMA;
  - For density-controlled development;
  - For development within the County's designated Santa Susana Mountains/Simi Hills SEA;
  - For grading exceeding 100,000 cubic yards in an A-2 zone;
  - For development of residential uses in the C-3 zone; and
  - For development of townhouses in an A-2-zone.
- Oak Tree Permit (RPPL2021003070)
- Administrative Housing Permit for the provision of 71 affordable dwelling units. This includes 24 for-sale inclusionary condominium units for moderate income levels, and 47 very low-income, rental senior citizen apartment units (with one manager's unit, for a total of 48 units within one building) and accompanying density bonus (with two incentives and unlimited waivers) to allow the provision of 510 units in all.
- Vacation of excess right-of-way in The Old Road and acquisition of property rights for adjacent County-owned parcel (APN 2826-022-90) as condition of approval prior to final map recordation, to facilitate offsite improvements, including a manufactured slope and a retaining wall of a maximum of four feet in height, in the vicinity of The Old Road.

Section 3.6.2, Other Permits and Approvals, Page 3-22

California Geologic Energy Management

- Well Abandonment Permit

California Department of Transportation

- Transportation permit for oversize/overweight vehicles on State highways

County of Los Angeles

- Fuel Modification Plan
- Grading/Building permits
- Well abandonment
- ~~Vacation of excess right-of-way in The Old Road and acquisition of property rights for adjacent County-owned parcel (APN 2826-022-90) as condition of approval prior to final map recordation, to facilitate offsite improvements, including a manufactured slope and a retaining wall of a maximum of four feet in height, in the vicinity of The Old Road~~

Figure 3-2, Vesting Tentative Tract Map No. 83301, Page 3-27

Draft EIR Figure 3-2 (showing Sheet 1 of 12 of the Vesting Tentative Tract Map No. 83301 dated September 23, 2024) presents an overview of the Project's proposed development. In addition to Sheet 1, Sheet 4 of 12 of the Vesting Tentative Tract Map No. 83301, showing details of the abandoned well in between Lots 16 and 17, has been added as Attachment C, Figure 3-2B, Vesting Tentative Tract Map No. 83301, of this Final EIR.

Section 4.4, Biological Resources

Section 4.4.5, Impact Analysis, Pages 4.4-54 and 4.4-55

Direct impacts to potential jurisdictional waters and associated riparian vegetation would occur due to vegetation removal and grading. Grading would cause fill to occur within the impacted areas. The proposed Project will impact potential jurisdictional waters, none of which support wetlands as shown in Figure 4.4-9. The impacts are summarized in Table 4.4-14. The Project site includes additional areas of potential USACE jurisdiction where impacts would not occur, including approximately 0.66 acres of non-wetland waters preserved within the On-Site Conservation Area. Impacts to potential jurisdictional waters would be a significant impact under CEQA and would not be compatible with SEA Resources. MM-4.4-14, Jurisdictional Waters Compensation, would require off-site compensation to offset the loss of on-site jurisdictional waters that are obtained by the implementation of MM-4.4-1 and MM-4.4-9. MM-4.4-1 would demonstrate recordation of a conservation easement for the Conservation Area, with the remaining on-site jurisdictional waters. MM-4.4-3 would provide a program to collect, propagate, and disseminate these species into the Conservation Area. MM-4.4-9 may provide additional preservation of jurisdictional waters in off-site parcels. MM-4.4-4 would provide monitoring to avoid any inadvertent impacts to potential jurisdictional waters and the implementation of mitigation measures. MM-4.4-5 would delineate the Project footprint to help avoid any inadvertent impacts to jurisdictional waters and to confine impacts to the approved limits of construction. MM-4.4-6 and MM-4.4-7 would avoid and minimize the introduction of non-native plant species to jurisdictional waters. As such, implementation of MM-4.4-1, MM-4.4-3, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-9, and MM-4.4-14 would reduce impacts to jurisdictional waters to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources.

Table 4.4-14. Proposed On-Site and Off-Site Impacts to Potential Waters of the United States (USACE and RWQCB Jurisdiction)

Drainage Name	Area (acres)		
	Non-wetland Waters	Wetlands	Total
Project Site			
Drainage A	0.24	0	0.24
Tributary A-1	0	0	0
Drainage B	0.29	0	0.29
Tributary B-1	0.06	0	0.06
Tributary B-3	0.01	0	0.01
Drainage C	0.02	0	0.02
Total[1]	**0.62**	**0**	**0.62**

Notes: USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board.
[1] Totals may not add up due to rounding.

The proposed Project will impact potential CDFW jurisdictional streams and SEA Water Resources, as shown in Figure 4.4-10, portions of which consist of the *Baccharis salicifolia* shrubland alliance and *Salix gooddingii–Salix laevigata* forest and woodland alliance that are already discussed under vegetation communities. The remaining riparian habitat consists of individual coast live oaks associated with the upper banks of the stream courses present within the Project site. Impacts to riparian habitat would be significant under CEQA prior to mitigation, as a sensitive vegetation community and are given SEA consideration as water SEA Water Resources. Table 4.4-15 summarizes impacts to CDFW jurisdiction and SEA Water Resources.

MM-4.4-1 would demonstrate recordation of a conservation easement for the Conservation Area to preserve the remaining on-site jurisdictional waters. MM-4.4-9 would provide additional preservation of CDFW jurisdictional streams and SEA Water Resources in off-site parcels. MM-4.4-4 would provide monitoring to avoid any inadvertent impacts to potential CDFW jurisdictional streams and SEA Water Resources and the implementation of mitigation measures. MM-4.4-5 would delineate the Project footprint to help avoid any inadvertent impacts to CDFW jurisdictional streams and SEA Water Resources and to confine impacts to the approved limits of construction. MM-4.4-6 and MM-4.4-7 would avoid and minimize the introduction of non-native plant species to CDFW jurisdictional streams and SEA Water Resources. As such, implementation of MM-4.4-1, MM-4.4-3, MM-4.4-4, MM-4.4-5, MM-4.4-6, MM-4.4-7, MM-4.4-9, and MM-4.4-14 would reduce impacts to CDFW jurisdictional streams and SEA Water Resources to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources.

Section 4.4.5, Impact Analysis, Page 4.4-57

Table 4.4-16 provides a summary of proposed impacts to non-heritage SEA protected trees located within the Project site. The 312 non-heritage tree impacts are comprised of 251 removals (trees that have a trunk on or within 2 feet of the grading limits) and 11 encroachments (trees that are not removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds are anticipated), and 50 trees that are located within a debris basin.[2] Trees in which the Project footprint encroaches into the tree protection zone (TPZ) are considered "directly impacted" by the proposed Project, as set forth by the Los Angeles County SEA Ordinance. Direct impacts include tree removal, root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds. Impacts to protected non-heritage trees would be considered as potentially significant prior to

mitigation due to substantially degrading the quality of the environment. MM-4.4-16, SEA Protected Tree Replacement/Compensation, addresses SEA guidelines recommended preservation, making the Project compatible with SEA Resources, and reduces proposed impacts to below a level of significance under CEQA.

Footnote 2: It should be noted that the 50 trees located within the debris basin ~~will not be removed~~ are not planned for removal as a result of the Project, but are considered ~~impacted~~ as removals for mitigation purposes because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding.

Section 4.4.7, Mitigation Measures, Page 4.4-69

MM-4.4-1 On-Site Habitat Preservation

Prior to final map recordation, the on-site conservation easement area shall be designated on the final map, Additionally, a letter of intent shall be obtained from the Conservation Easement holder. Prior to the issuance of a grading permit, the Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves 144.43 acres of open space within the Project boundaries for long-term conservation and management as a natural conservation area ("On-Site Conservation Area"). The following table documents the vegetation communities that would be preserved. The On-Site Conservation Area provides sufficient preservation for Project-related impacts to vegetation communities within Resource Categories 4 and 5 of the Significant Ecological Area Ordinance Implementation Guide.

Vegetation Communities Preserved on the Project Site

Alliance	Unimpacted Acres (Open Space)	Preserved via Conservation Easement
SEA Resource Category 1		
Baccharis salicifolia Shrubland	0.52	0.52
Salix gooddingii–Salix laevigata Forest and Woodland	0	0.0
Sub-Total	*0.52*	*0.52*
SEA Resource Category 3		
Ericameria palmeri Provisional Shrubland	0	0
Eriodictyon crassifolium Provisional Shrubland	0.41	0.41
Juglans californica Forest and Woodland	0.09	0.09
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0	0
Quercus agrifolia Forest and Woodland	10.64	10.28
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.01	0.01
Sub-Total	*11.15*	*10.79*
SEA Resource Category 4		
Adenostoma fasciculatum Shrubland	69.77	64.68
Adenostoma fasciculatum Shrubland–Disturbed	9.73	9.73
Artemisia californica–Salvia leucophylla Shrubland	28.01	28.01
Artemisia californica–Salvia leucophylla Shrubland–Disturbed	10.66	10.66

Vegetation Communities Preserved on the Project Site

Alliance	Unimpacted Acres (Open Space)	Preserved via Conservation Easement
Avena spp.–*Bromus* spp. Herbaceous Semi-natural	2.62	2.62
Distichlis spicata Herbaceous	0.07	0.07
Eriogonum davidsonii/Croton setiger Grassland	0	0
Eriogonum fasciculatum Shrubland	0	0
Sub-Total	*120.87*	*115.77*
SEA Resource Category 5		
Brassica nigra–Centaurea melitensis Herbaceous Semi-natural Stands	16.47	16.24[a]
Non-SEA Resource Category		
Developed[1]	1.31	1.11
Total Acres	**150.31**	**144.43**

Notes: SEA = Significant Ecological Area.
[a] 16.24 acres of this community are proposed to be restored per MM-4.4-2.
[1] Existing trails.

Conservation Management Plan. As part of recording the conservation easement, a Conservation Management Plan (CMP) applicable to the On-Site Conservation Area shall be prepared and submitted to the County of Los Angeles for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The CMP shall set forth the following requirements that shall be implemented by the entity that holds the conservation easement and/or manages and stewards the Conservation Area: (1) there shall be no grading or other construction activities within the On-Site Conservation Area, except for the proposed habitat enhancement/restoration, construction and maintenance of signage, and trail maintenance; (2) off-trail activities (e.g., hiking, biking, horseback riding) shall be prohibited; (3) signage shall be installed at the trailheads and at any access points to the On-Site Conservation Area, which shall include information on the organization that holds the conservation easement, brief descriptions of the restoration activities, protection of biological resources, and restrictions to human activities; (4) signage shall be placed in visible locations that prohibits smoking and that requires that humans and domesticated pets remain within the limits of designated hiking trails, all domesticated pets be on leashes, and owners clean up after domesticated pets; (5) no fencing that represents a barrier to wildlife movement or other barriers to wildlife movement shall be installed; (6) dog waste bag dispensers and wildlife-proof receptacles for trash shall be provided at appropriate locations on the trail; (7) gasoline-powered maintenance equipment shall be prohibited; (8) commercial honeybee operations shall not be allowed to use the On-Site Conservation Area for storing their apiaries; (9) rodenticides shall be prohibited; (10) herbicides and pesticides shall be discouraged, and only those typically used for invasive plant management in California wildlands shall be allowed, per the California Invasive Plant Council and Pesticide Research Institute's 2015 Best Management Practices (BMPs) for Wildland Stewardship: Protecting Wildlife When Using Herbicides for Invasive Plant Management; (11) arborists certified by the International Society of Arboriculture (ISA) shall conduct surveys every five years that shall include an assessment of potential infestations of invasive shothole borer beetle and other pathogens or invasive insects that can threaten native habitat; (12) at least one annual walk-through survey shall be conducted by a biologist to qualitatively monitor the general condition of on-site habitats and to check for any new introduction or expansion of invasive plant species; (13) collect and remove trash, repair vandalized signs, and rectify trespass impacts; and (14) provide annual reporting that document the conditions of the Conservation Area.

Approved work shall be outlined in the CMP and in the conservation easement, including monitoring and maintenance efforts or for other activities associated with preserve management, and prohibited activities shall be delineated. The conservation easement holder shall be an entity that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b). Funding for the conservation easement and implementation of the tasks in the CMP shall be maintained in perpetuity and shall be provided by a traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association or other equivalent mechanism(s).

Section 4.4.7, Mitigation Measures, Page 4.4-75

MM-4.4-3 Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation

The required Conservation Management Plan (CMP) approved by the County of Los Angeles (County) shall include a Special-Status Plant Mitigation and Monitoring Plan (SSPMMP) that shall provide guidance and methods to preserve the special-status plants known to occur within the Conservation Area (slender mariposa lily [*Calochortus clavatus* var. *clavatus*], Plummer's mariposa lily [*Calochortus plummerae*], Peirson's morning glory [*Calystegia peirsonii*], and scarlet Keckiella [*Keckiella ternata*]), along with a program of special-status plants seed collection and dispersal within the Conservation Area. The SSPMMP shall also include methods and approach to translocating mariposa lily individuals proposed for impact into the Conservation Area. The SSPMMP shall be developed and implemented with a program that does not conflict with other conservation easement resource management objectives.

The SSPMMP shall provide details on site preparation measures, as well as specific methods for the pre-construction collection of seeds from all four species and the harvest of mariposa lily bulbs from impacted populations. The SSPMMP shall also provide detailed methods for the dispersal of that seed and the translocation of the harvested bulbs into the conservation easement areas within locations with appropriate soils and growing conditions for each species, as determined by a qualified biologist in coordination with the County and California Department of Fish and Wildlife. Finally, the SSPMMP shall provide a schedule and action plan for the maintenance and monitoring programs, including success criteria, and remedial contingency measures to be implemented if efforts are not successful.

Pre-construction surveys shall be conducted in the Project footprint to map slender mariposa lily, Plummer's mariposa lily, Peirson's morning glory, and scarlet keckiella individual locations with a high-accuracy GPS unit and a permanent marker established in the field to locate the individual mariposa lilies for bulb collection. Seeds shall be collected from each species at the appropriate time of year. Mariposa lily bulbs shall remain in the ground until Project development. Prior to Project development, the bulbs shall be translocated within appropriate habitat in the Conservation Area.

Performance Standard. Monitoring shall take place annually for 5 years from the time of establishment of the mariposa lily bulbs. The following success criteria is the minimum required by the end of the 5-year monitoring period:

- 25 slender mariposa lily
- 44 scarlet keckiella
- 600 Peirson's morning glory

- 128 Plummer's mariposa lily

If it appears that the population of these special-status plant species (slender mariposa lily, scarlet keckiella, Peirson's morning glory, and Plummer's mariposa lily) or the vegetation community composition and status are on the decline or have been degraded, remedial activities shall be implemented according to the CMP and the SSPMMP, and monitoring shall continue until the success criteria are met. These activities may include weed control, additional seeding, native plant establishment, or other activities where appropriate.

Annual monitoring reports shall be submitted by August 31 of each year and shall include an evaluation of current monitoring data in relation to previous population observations (during previous monitoring years) and native enhancement efforts for slender mariposa lily, scarlet keckiella, ~~club haired mariposa lily~~, Peirson's morning glory, and Plummer's mariposa lily. These reports shall also include any recommendations for remedial management measures and shall discuss other issues that need to be addressed, such as trespassing or vandalism.

Section 4.4.7, Mitigation Measures, Page 4.4-79

MM-4.4-8 Crotch's Bumble Bee Habitat Preservation and Minimization Measures

Incidental Take Permit. The Applicant shall consult with the California Department of Fish and Wildlife on obtaining an Incidental Take Permit (ITP), per California Fish and Game Code 2081, for the take of Crotch's bumble bee. The Applicant shall provide the County with a copy of the ITP, or proof that an ITP is not required, prior to issuance of a grading permit. Mitigation for direct impacts to Crotch's bumble bee ~~will~~ shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished through the preservation of on-site suitable habitat (MM-4.4-1) and off-site suitable habitat (MM-4.4-9). The Applicant shall be obligated to implement all minimization and avoidance measures conditions that are included in the ITP.

Pre-Construction Focused Survey. ~~A pre-construction~~ Focused surveys for Crotch's bumble bee (*Bombus crotchii*) shall be conducted within the construction footprint prior to the start of ground-disturbing construction activities ~~occurring during the Crotch's bumble bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch's bumble bee are located within the construction area.~~ The ~~pre-construction~~ focused surveys shall include a habitat assessment and focused surveys, both of which shall be ~~based on recommendations~~ as described in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction.

The habitat assessment shall, at a minimum, include historical and current species occurrences; document potential habitat on site including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and human-made structures that may support bumble bee colonies, such as rock walls, rubble, and furniture. The habitat assessment shall be repeated prior to February 1 in each year that ground-disturbing activities will occur to determine if foraging, nesting, or overwintering resources are present within the impact area. If nesting resources are present in the impact area, focused surveys shall be conducted.

The focused survey shall be performed by a biologist with expertise in surveying for bumble bees and include at least three survey passes that are not on sequential days or in the same week, preferably spaced 2 to 4 weeks

apart. The timing of these surveys shall coincide with the colony active period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling), and surveyors shall wait at least 1 hour following rain. Optimal surveys are conducted when there are sunny to partly sunny skies and ambient temperatures are greater than 60° Fahrenheit. Surveys may be conducted earlier than April 1 if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up to 5 minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after 5 minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point that would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes).

Identification shall include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in the U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation if able. The bee shall be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container shall be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly.

If Crotch's bumble bee nests are not detected, no further mitigation would be required. The mere presence of foraging Crotch's bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources shall be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.

A written survey report shall be submitted to the County of Los Angeles (County) and CDFW within 30 days of the pre-construction survey. The report shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and detailed habitat assessment. If Crotch's bumble bee nests are

observed, the survey report shall also include recommendations for avoidance, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report.

~~If the above measures are followed, it is assumed that the project shall not need to obtain authorization from CDFW through the California Endangered Species Act Incidental Take Permit process.~~ If the nest resources cannot be avoided, as outlined in this measure, the project applicant shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this California Environmental Quality Act document and shall be incorporated into the Habitat Mitigation and Monitoring Plan.

Section 4.4.7, Mitigation Measures, Page 4.4-81

MM-4.4-9 Off-Site Habitat Preservation

Prior to final map recordation, the Applicant shall obtain a Letter of Intent from the future Conservation Easement holder. Prior to issuance of a grading permit, the Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves off-site habitat for long-term conservation and management ("off-site conservation area"). As part of recording the conservation easement for any off-site parcel(s), a Conservation Management Plan (CMP) applicable to the off-site conservation area shall be prepared and submitted to the Los Angeles County (County) Department of Regional Planning (Planning) for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The conservation easement holder shall be an entity that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b). Funding for the conservation easement and implementation of the tasks in the CMP shall be maintained in perpetuity and shall be provided by a traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association or other equivalent mechanism(s).

One or more of the following options shall be used to provide adequate preservation for Project-related impacts to vegetation communities and wildlife habitat within the Significant Ecological Area (SEA) Ordinance Implementation Guide Resource Categories 1 and 3. The proposed off-site conservation area lands must support resources similar to those disturbed by the Project (i.e., sensitive vegetation communities, special-status plant and wildlife habitats, jurisdictional waters, and protected trees) and be connected with other natural open space areas. To determine that these conditions are present, the Applicant shall fund a biological resources assessment by a County Planning-approved Biologist for any parcel proposed for preservation, and the results of the assessment shall be submitted to County Planning for their approval to be used as mitigation.

In-Kind and Off-Site in the Santa Susana Mountains and Simi Hills Significant Ecological Area

For parcels within the SEA that support in-kind vegetation communities as those found in the Project site, the preservation ratios for each of the SEA Resource Categories listed would be in accordance with the SEA Ordinance Implementation Guide. The following table indicates the minimum preserved acres required for off-site preservation of in-kind vegetation communities (communities classified as the same as those being impacted by the Project) within the SEA.

In-Kind Vegetation Communities Preserved Off-Site in the Santa Susana Mountains and Simi Hills Significant Ecological Area

Alliance	Required In-Kind Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	
Baccharis salicifolia Shrubland	11.65
Salix gooddingii–Salix laevigata Forest and Woodland	6.22
Sub-Total	*17.87*
SEA Resource Category 3 (Mitigated at 3:1)	
Ericameria palmeri Provisional Shrubland	2.00
Eriodictyon crassifolium Provisional Shrubland	0.84[a]
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0.20
Quercus agrifolia Forest and Woodland	30.50[b]
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.07[a]
Sub-Total	*33.61*
Total	**51.48**

Notes: SEA = Significant Ecological Area.
[a] None would be needed if MM-4.4-2, Habitat Mitigation and Monitoring Plan, is implemented.
[b] 15.30 acres shall be needed if MM-4.4-2 is implemented.

Out-of-Kind and Within the Santa Susana Mountains and Simi Hills Significant Ecological Area

Preservation of out-of-kind vegetation communities (communities classified as being different than those being impacted by the Project) that are in the same group (defined by combinations of relatively narrow sets of diagnostic plant species (including dominant and co-dominant species, broadly similar composition, and diagnostic growth forms that reflect biogeographic differences in mesoclimate, geology, substrates, hydrology, and disturbance regimes as defined by the Federal Geographic Data Committee in the 2006 Draft National Vegetation Classification Standard) as the impacted vegetation communities (as defined by the National Vegetation Classification Standards) can be satisfied with the acquisition of parcels within the Santa Susana Mountains and Simi Hills SEA. For preserved lands within the same Resource Category, a multiplier of 1.5 shall be applied to increase lands for preservation, as shown in the following table. For preserved lands within a higher sensitivity Resource Category, a multiplier of 1.25 shall be applied, as shown in the following table. Lower sensitivity Resource Categories may not satisfy mitigation requirements for higher sensitivity Resource Categories. For the two Resource Category 1 communities, preservation shall be a riparian-associated vegetation community.

Out-of-Kind Vegetation Communities Preserved Within the Santa Susana Mountains and Simi Hills Significant Ecological Area

Alliance	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	**1.5 Multiplier**	**1.25 Multiplier**
Baccharis salicifolia Shrubland	17.47	NA
Salix gooddingii–Salix laevigata Forest and Woodland	9.33	NA

Out-of-Kind Vegetation Communities Preserved Within the Santa Susana Mountains and Simi Hills Significant Ecological Area

Alliance	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
Subtotal	*26.81*	*NA*
SEA Resource Category 3 (Mitigated at 3:1)	**1.5 Multiplier**	**1.25 Multiplier**
Ericameria palmeri Provisional Shrubland	3.00	2.50
Eriodictyon crassifolium Provisional Shrubland	1.26[a]	1.0505[a]
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0.31	0.25
Quercus agrifolia Forest and Woodland	45.75[b]	38.13[c]
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.10[a]	0.08[a]
Subtotal	*50.42*	*42.01*
	77.23	*42.01*

Notes: NA = Not Applicable (due to there being no higher Resource Category)

[a] None would be needed if MM-4.4-2, Habitat Mitigation and Monitoring Plan, is implemented.

[b] 22.95 acres will need to be preserved if MM-4.4-2 is implemented.

[c] 19.13 acres will need to be preserved if MM-4.4-2 is implemented.

Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area

Off-site preservation within portions of the Santa Clara River SEA that are contiguous with the Santa Susana Mountains and Simi Hills SEA shall be considered if the area supports the same resource values as the Project site and is connected with other natural open space. Preservation of vegetation communities shall be acquired within the adjacent Santa Clara River SEA at a multiplier of 2 for in-kind preservation, multiplier of 2.5 for out-of-kind preservation but within the same Resource Category, and a multiplier of 2.25 for out-of-kind preservation but a higher level Resource Category, as shown in the following table. For the two Resource Category 1 communities, preservation shall be a riparian-associated vegetation community.

Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area

Alliance	In-Kind Preserved Acres	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	**2 Multiplier**	**2.5 Multiplier**	**2.25 Multiplier**
Baccharis salicifolia Shrubland	23.30	29.12	NA
Salix gooddingii–Salix laevigata Forest and Woodland	12.45	15.56	NA

Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area

Alliance	In-Kind Preserved Acres	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
Sub-Total	*35.74*	*44.68*	*NA*
SEA Resource Category 3 (Mitigated at 3:1)	**2 Multiplier**	**2.5 Multiplier**	**2.25 Multiplier**
Ericameria palmeri Provisional Shrubland	4.00	5.00	4.50
Eriodictyon crassifolium Provisional Shrubland	1.67[a]	2.09[a]	1.88[a]
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0.41	0.51	0.46
Quercus agrifolia Forest and Woodland	61.00[b]	76.25[c]	68.63[d]
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.13[a]	0.17[a]	0.15[a]
Sub-Total	*67.21*	*84.02*	*75.62*
Total	**102.95**	**128.70**	**75.62**

Notes: NA = Not Applicable (due to there being no higher Resource Category
[a] None would be needed to be preserved off-site if MM-4.4-2 is implemented.
[b] 30.60 acres would be needed if MM-4.4-2 is implemented.
[c] 38.25 acres would be needed to be preserved if MM-4.4-2 is implemented.
[d] 34.43 acres would be needed to be preserved if MM-4.4-2 is implemented.

Preservation of Assessor's Parcel Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

The six parcels are located within the Santa Susana Mountains/Simi Hills SEA, approximately 1 mile south-southwest of the Project site.

Nine vegetation communities were mapped in the six parcels, as listed in the table below. Two SEA Resource Category 3 communities, *Pseudotsuga macrocarpa–Quercus agrifolia* association (bigcone Douglas fir–coast live oak forest) and *Quercus agrifolia* association (coast live oak woodland and forest) occur, primarily on north-facing slopes and canyon bottoms. The seven SEA Resource Category 4 communities are shrub-dominated and consist of chaparral and coastal scrub species.

Assessor's Parcels Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

Vegetation Community	Acres
SEA Resource Category 1	
Quercus agrifolia Association Southern Coast Live Oak Riparian Forest (Water Resources)	27.47
SEA Resource Category 3	
Pseudotsuga macrocarpa–Quercus agrifolia Association	4.02
Quercus agrifolia Association	50.89
Subtotal	*54.91*

Assessor's Parcels Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

Vegetation Community	Acres
SEA Resource Category 4	
Adenostoma fasciculatum–Salvia leucophylla Association	11.35
Adenostoma fasciculatum–Salvia mellifera Mixed Shrub Association	1.16
Adenostoma fasciculatum Association	77.08
Artemisia californica–Eriogonum fasciculatum Association	2.08
Ceanothus crassifolius–Adenostoma fasciculatum–Rhus ovata Association	249.26
Ceanothus crassifolius–Adenostoma fasciculatum Association	14.37
Malacothamnus fasciculatus–Salvia leucophylla Association	2.54
Malosma laurina–Eriogonum fasciculatum Association	12.93
Wild oats and annual brome grasslands Semi-natural Alliance	12.24
Subtotal	*383.01*
Non-SEA Resource Category	
Urban/Developed	1.31
Total	**466.70**

Note: SEA = Significant Ecological Area.

The drainages in the six parcels are part of the Wiley Canyon and Towsley Canyon watersheds that contribute to the South Fork of the Santa Clara River. The desktop analysis resulted in 13.30 acres of potential streams in the six parcels. The method for determining potential adjacent riparian oak forest resulted in 27.47 acres of SEA Category 1 Water Resources. The remaining 54.91 acres of *Pseudotsuga macrocarpa–Quercus agrifolia* association and *Quercus agrifolia* association would be considered upland and SEA Resource Category 3.

As shown in the following table, the off-site conservation area provides sufficient acreage to fully offset impacts to SEA Resource Category 4 vegetation communities (for SEA Resource Category 4, preservation can be out-of-kind if the resource is of the same category.) and to partially offset impacts to SEA Resource Category 3 (for this discussion, the creation of vegetation communities within the *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands is not included; however, if oak trees are planted as replacement for SEA protected trees, then an argument shall be made that planted oaks also constitute the creation of oak woodland). The 27.47 acres of SEA Category 1 Water Resources and the 54.91 acres of SEA Resource Category 3 provides the necessary acres of preservation for these two categories. The parcels provide an additional 26.72 acres of SEA Resource Category 3 vegetation communities and 503.17 acres of SEA Resource Category 4 vegetation communities.

INTENTIONALLY LEFT BLANK

Impacts to SEA Resource Category Communities and Proposed Preservation for the Trails at Lyons Canyon Project Using APNs 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

SEA Resource Category	Total Impacts (acres)	Mitigation Requirement (acres)[a]	On-Site Preservation (acres)[b]	In-Kind Off-Site Preserved Acres Needed[c]	In-Kind Acres Provided by the Six Parcels[d]	Out-of-Kind Off-Site Preserved Acres Needed[e]	Out-of-Kind Acres Provided by the Six Parcels[f]	Total Preservation (acres)	Excess Acreage	Preservation to Impact Ratio: Required	Preservation to Impact Ratio: Provided
1	3.68	18.39	0.52	17.87	0	26.74	27.47	27.99	9.60	7.5:1	7.6:1
3	14.77	44.31	10.79	33.52	30.14[g]	5.07	24.77[h]	65.70	21.39	4.5:1	4.45:1
4[i]	32.40	64.80	115.78	0	383.01	NA	NA	498.79	433.99	3:1	15.4:1
5[j]	35.61	NA	16.24[k]	NA	NA	NA	NA	NA	NA	NA	NA

Notes: SEA = Significant Ecological Area; APN = Assessor's Parcel Number; NA = not applicable.

[a] This is determined by the impacts multiplied by the ratio of preservation required per the County of Los Angeles' SEA Implementation Guide (5:1 for Category 1, 3:1 for Category 3, and 2:1 for Category 4).

[b] Preserved in the Conservation Area established by the proposed MM-4.4-1.

[c] In-kind preservation within the Santa Susana Mountains/Simi Hills SEA, per proposed MM-4.4-2.

[d] APNs 2826-018-034, 2826-017-044, 2826-017-043, and 2826-017-041.

[e] Out-of-kind preservation within the Santa Susana Mountains/Simi Hills SEA is at 1.5:1 for same category (used for SEA Resources Category 1) and 1.25:1 for a higher category (used for SEA Resources Category 3), per proposed MM-4.4-2.

[f] Out-of-kind preservation of SEA Resource Category 1 (oak riparian forest).

[g] In the form of *Quercus agrifolia* Association.

[h] *Quercus agrifolia* Association preservation used for Project impacts to *Ericameria palmeri* Provisional Shrubland Alliance, *Eriodictyon crassifolium* Provisional Shrubland Alliance, *Nassella* [*Stipa*] spp. - *Melica* spp. Herbaceous Alliance, and *Rhus trilobata* - *Crataegus rivularis* - *Forestiera pubescens* Shrubland Alliance.

[i] For SEA Resource Category 4, preservation can be out-of-kind if the resource is of the same category.

[j] No preservation ratio is needed for SEA Resource Category 5, per se, only that the values that it supports (such as movement opportunities) are preserved.

[k] This would be transformed to a higher value SEA Resource Category if MM-4.4-2 is implemented.

INTENTIONALLY LEFT BLANK

Mitigation Bank Credits

Off-site purchase of mitigation credit from a County Planning-approved mitigation bank shall be completed prior to the issuance of grading permits. The mitigation bank would have to be located within the Santa Susana Mountains and Simi Hills SEA or be contiguous with the SEA. The credits purchased must meet the acres calculated by using a multiplier of 3 applied to the preservation ratios stated in the SEA Ordinance Implementation Guide for SEA Resource Categories 1 and 3, as shown in the following table.

Mitigation Credits Required to be Purchased from a County-Approved Mitigation Bank

SEA Resource Category	Mitigations Credits Required
1	53.61[a]
3	100.83[b,c]

Notes: County = County of Los Angeles; SEA = Significant Ecological Area.
[a] Riparian scrub.
[b] 91.50 woodland, 8.72 shrubland, and 0.61 grassland
[c] 45.90 woodland, 6.01 shrubland, and 0.61 grassland (totaling 52.52) would be needed if MM-4.4-2 is implemented.

Mitigation lands shall consist of similar or higher quality habitat than found on the Project site. Should credits not be available, then compensation may be in the form a County-approved turnkey project with a mitigation bank and/or other County Planning-approved option. Selected mitigation banks shall be accredited through CDFW and/or the County to have established conservation easements that shall ensure the preservation of the resources in perpetuity.

Section 4.4.7, Mitigation Measures, Page 4.4-90

MM-4.4-11 Nesting Bird Avoidance

Project construction shall be conducted in compliance with the conditions set forth in the Migratory Bird Treaty Act and California Fish and Game Code with methods approved by the California Department of Fish and Wildlife to protect active bird/raptor nests. Vegetation removal shall occur during the non-breeding season for nesting birds (generally late September to early March) and nesting raptors (generally early July to late January) to avoid impacts to nesting birds and raptors.

For the remaining Project activities initiated during the breeding season for nesting birds (March 1–September 30) and nesting raptors (February 1–June 30), a pre-construction survey shall be conducted by the Biological Monitor (MM-4.4-4) for nesting birds and/or raptors within 3 days prior to any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors). If the Biological Monitor~~ing~~ does not find any active nests <u>on</u> or immediately adjacent to the impact areas, the Project activity shall be allowed to proceed.

If the Biological Monitor finds an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or breeding activities substantially disrupted, the Biological Monitor shall delineate an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts shall be mapped on the construction plans, which will be included in the report(s) documenting the survey(s) that will be submitted to the County within three days of the completion of the survey. The active nest shall be protected until nesting activity has ended. To protect any nest

site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by the Biological Monitor: (1) work limits shall be established within a buffer around any occupied nest (the buffer shall be 100–300 feet for nesting non-raptors and 300–500 feet for nesting raptors), unless otherwise determined by the Biological Monitor and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by the Biological Monitor. Encroachment into the buffer area around a known nest shall only be allowed if the Biological Monitor determines that the proposed activity would not disturb the nest occupants. Construction can proceed when the Biological Monitor has determined that fledglings have left the nest, or the nest has failed.

Section 4.4.7, Mitigation Measures, Page 4.4-92

MM-4.4-13 Homeowners' Association Covenants, Conditions, and Restrictions

The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions (CC&Rs), which are reviewed and approved prior to final map recordation, then recorded immediately after the final map records, shall include the following requirements to reduce potential human impacts on adjacent habitats and wildlife species:

- Invasive plant species (designated by the California Invasive Plant Council) shall be prohibited on all residential lots, as they could establish off site and have negative impacts to the adjacent habitats.
- All trash/garbage waste and recycling receptacles shall have locking devices that discourage wildlife foraging in common areas/parks and shall encourage the use of such locking devices on residential receptacles, as feasible.
- Intentional feeding of wildlife, including mule deer, is prohibited.
- The use of rodenticides is prohibited.
- Speed limits of 15 to 25 mph shall be posted, and the CCRs shall require residents to comply with the posted speed limits.
- Smoking shall be prohibited in open space areas.
- The HOA shall not use balloons for any community events, and the use of balloons by individual homeowners shall be discouraged.
- Homeowner reprisals against native wildlife species (i.e., killing or harming native wildlife species in any way) if homeowner pets are killed or harmed by wildlife shall be prohibited.
- Public information signage shall be installed at the trailhead and in the recreation facility, and printed information shall be provided to the HOA in order to (1) educate and inform the public about wildlife, especially mountain lions present in the area; (2) advise on proper avoidance measures to reduce human-wildlife conflicts; (3) advise on proper use of open space trails in a manner respectful to wildlife (e.g., dogs on leash, proper waste disposal); and (4) provide local contact information to report injured or dead wildlife. Signage should be written in the language(s) understandable to all those likely to recreate and use the trails. Signage should not be made of materials harmful to wildlife.

Section 4.4.7, Mitigation Measures, Pages 4.4-93 and 4.4-94

MM-4.4-16 SEA Protected Trees Replacement/Compensation

The required Conservation Management Plan (CMP) approved by the County of Los Angeles (County) shall include a Protected Tree Replacement Plan that shall dictate the establishment of replacement trees in the Conservation Area at the numbers specified in the following table. At a minimum, the removal of any SEA Protected Tree shall

result in a minimum of two replacement plantings with 10:1 for Heritage Trees. Replacement trees shall be seedlings of the same species being removed and shall be planted within an area where suitable growing conditions are present and where the trees shall be able to remain in perpetuity, which may include the On-Site Conservation Area. ~~Undersized, naturally sprouted trees of the same species growing on site may be protected or transplanted as replacement trees.~~ The replacement trees shall be nurtured and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. The following table details the quantity of each species required for planting.

Summary of Individual Species Replacement Quantities

Scientific Name	Common Name	Total Impacted	Replacement Ratio	Total Replacement Required
Heteromeles arbutifolia	toyon	0	2:1	0
Juglans californica	Southern California black walnut	3	2:1	6
Populus fremontii	Fremont cottonwood	15	2:1	30
Quercus agrifolia	coast live oak	191	2:1	382
Quercus agrifolia (Heritage Tree)	coast live oak (Heritage Tree)	15	10:1	150
Quercus berberidifolia	scrub oak	1	2:1	2
Quercus lobata	valley oak	10	2:1	20
Quercus lobata (Heritage Tree)	valley oak (Heritage Tree)	2	10:1	20
Salix laevigata	red willow	24	2:1	48
Salix lasiolepis	arroyo willow	7	2:1	14
Sambucus nigra ssp. *caerulea*	blue elderberry	50	2:1	100
	Total	**318**	**Not Applicable**	**772**

It should be noted that mitigation can include the protection of undersized, naturally sprouted trees of the same species growing on site. In addition, per the County Code, the County may require additional mitigation and monitoring requirements following review of the Significant Ecological Area Conditional Use Permits. At a minimum, the County requires that the replacement trees need to be nurtured and maintained in a healthy condition and be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees.

The Project Applicant must pay into the County Protected Tree Fund should there not be enough locations within the Conservation Area (on-site and off-site) or Project landscaped areas for replacement trees. At last resort, the Protected Tree Fund payments shall be used by the County in accordance with County Code Section 22.102.070(F)(5).

Section 4.8, Greenhouse Gas Emissions

Section 4.8.4, Methodology, page 4.8-27

Carbon Sequestration (Loss)

This GHG analysis estimates the loss of sequestered carbon that would result from removal of trees on site during construction. The calculation methodology and default values provided in i-Tree Planting were used to estimate the one-time carbon-stock change from planting new trees based on the trees provided in the landscaping plan for the Project (i-Tree 2022). The i-Tree Planting tool quantifies increased carbon sequestration from urban tree planting using species-based biomass equations that account for user defined site-specific variables and tree growth rates (CAPCOA 2023). According to CalEEMod's User Guide, "While simplified quantification methods for increased carbon sequestration resulting from urban tree planting have been used in the past, CalEEMod does not recommend their application given the number and dynamic nature of variables that can influence the amount of CO_2 reduced. Tools like i-Tree Planting comprehensively account for these variables, enabling the user to easily calculate the approximate benefits from individual trees" (CAPCOA 2023). Trees sequester CO_2 while they are actively growing and the amount of CO_2 sequestered depends on the type of tree. Thereafter, the accumulation of carbon in biomass slows with age, and is assumed to be offset by losses from clipping, pruning, and occasional death. Active growing periods are subject to, among other things, species, climate regime, and planting density; however, for modeling purposes, it was assumed an active growing period of 30 years consistent with the Project lifetime.

The CalEEMod also estimates changes in carbon associated with soil and aboveground and belowground biomass resulting from a change in land use type. The soil type for the project area was obtained from UC Davis' SoilWeb online geospatial tool, which is recommended by the CalEEMod. The initial and final acres of each vegetation soil type were entered into the CalEEMod.

The Land Use Change module in CalEEMod (version 2022) estimates changes in CO_2 associated with soil and aboveground and belowground biomass resulting from a project-induced change in land use type. The user must define the initial acres of each vegetation land use type prior to construction of the project and the final acres after implementation of the project. CalEEMod calculates the stored carbon under both conditions. If the existing land use cover currently includes stored carbon, and that value exceeds that of the new land cover type, the land use change would result in GHG emissions. Conversely, if the stored carbon under the final with project conditions exceeds that of initial conditions, the land use change would result in a GHG benefit (i.e., reduction).

In order to estimate the emissions for soil carbon accumulation it is necessary to understand the existing soil onsite. The existing soil on the Project site was surveyed and presented in Figure 4.4-4 of Section 4.4, Biological Resources. Based on that data, the following areas would be disturbed by soil type: 0.24 acres of Castaic-Balcom silty clay loams (30 to 50 percent slopes), 19.62 acres of Castaic and Saugus soils (30 to 65 percent slopes), 1.06 acres of Hanford sandy loam (2 to 9 percent slopes), 25.48 acres of Saugus loam (30 to 50 percent slopes), 15.90 acres of Yolo loam (0 to 2 percent slopes), and 19.81 acres of Yolo loam (2 to 9 percent slopes). The initial acreage and final acres (undisturbed) were entered into CalEEMod by soil type.

In order to estimate the GHG emissions for above and belowground biomass carbon accumulation, it is necessary to understand the land use cover type being disturbed onsite. The existing land use cover type for the Project site is shown in Figure 4.4-3, Vegetation Communities and Land Covers, of the Draft EIR. Based on that data, the following areas would be disturbed by soil type: 34.01 acres of shrubland, 34.29 acres of grassland, and 13.27

acres of broadleaf forest. The initial acreage and final acres (undisturbed) were entered into CalEEMod by land use cover type.

Section 4.8.5, Impact Analysis, Pages 4.8-30 and 4.8-31

The loss of sequestered carbon from removal of ~~485~~ 443 trees is estimated based on the carbon content estimate for each tree over the growth period (MT CO_2 per tree). The loss of sequestered carbon is presented in Table 4.8-7, Released Carbon from Trees Removed.

Table 4.8-7. Released Carbon from Trees Removed

Tree Species	Growing Period (years)	Quantity of Trees Removed (trees)	Sequestered Carbon (MT CO_2)	Avoided Carbon (MT CO_2)
Willow	30	10	~~16.24~~ 2.57	0.15
Elderberry	30	~~125~~ 138	~~92.23~~ 20.14	1.19
Coastal live oak	30	~~204~~ 235	~~996.96~~ 113.95	6.72
Fremont cottonwood	30	~~9~~ 15	~~31.39~~ 7.31	0.43
Red willow	30	~~11~~ 25	~~33.56~~ 8.79	0.52
Scrub oak	30	~~3~~ 4	~~3.50~~ 1.63	0.10
Black walnut	30	~~2~~ 3	~~5.87~~ 1.33	0.08
California white oak	30	13	~~56.98~~ 5.31	0.31
Total		~~377~~ 443	~~1,236.73~~ 161.04	9.50
~~Total (when amortized over 30 years)~~			~~41.22~~	
Amortized Carbon Released (amortized sequestered and avoided carbon over 30 years)			5.68	

Source: i-Tree Planting Calculator version 2.2.0; trees removed as detailed in the Project's landscape plan.
Notes: MT CO_2 = metric tons carbon dioxide.
See Appendix B-1 for calculations and sources.

As presented in Table 4.8-7, the removal of ~~377~~ 443 trees would result in the release of approximately ~~1,236.73~~170.54 MT CO_2 which reflects the release of sequestered and avoided carbon[2] accumulated over a 30-year growing period, or ~~41.22~~5.68 MT CO_2 when amortized over 30 years. Based on the changes in land use type, the Project would result in the release of approximately 60.10 MT CO_2e of soil carbon and 132.70 MT CO_2e of above and below ground carbon, for a total of 192.80 MT CO_2e, or 6.43 MT CO_2e per year. Including the construction emissions in Table 4.8-6, the total estimated GHG emissions from the construction of the Project would be ~~15,881~~15,007.65 MT CO_2e. Estimated Project-generated construction emissions amortized over 30 years would be approximately ~~529.37~~500.26 MT CO_2e per year. As with Project-generated construction air quality pollutant emissions, GHG emissions generated during construction of the Project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Because there is no separate GHG threshold for construction, the evaluation of significance is determined by adding the amortized construction emissions to the operational emissions and comparing them to the operational threshold.

[2] Avoided carbon is based on the energy use saved during the lifetime of the trees.

Operational Emissions

Operation of the Project (prior to mitigation) would generate GHG emissions through motor vehicle trips; landscape maintenance equipment operation and hearths (area sources); energy use (natural gas and electricity); solid waste disposal; and water supply, treatment, and distribution and wastewater treatment. CalEEMod was used to calculate the annual GHG emissions based on the operational assumptions described in Section 4.8.4, Methodology.

The gain of sequestered carbon resulting from planting and growth of approximately ~~1,510~~ 1,628 trees on and off-site is estimated based on the carbon sequestration rate for the tree species, the number of new trees, and the growing period. It is assumed that all ~~1,510~~ 1,628 trees will grow for a minimum of 30 years.[3] Table 4.8-8, Planted Trees Sequestered Carbon, presents the estimated one-time carbon-stock change resulting from proposed planting of new trees.

Table 4.8-8. Planted Trees Sequestered Carbon

Tree Species	Growing Period (years)	Quantity of Trees Planted (trees)	Sequestered Carbon (MT CO_2)	Avoided Carbon (MT CO_2)
~~Common crape myrtle~~ Willow acacia	30	~~465~~ 512	~~544.35~~ 305.94	368.52
~~Ginkgo~~ Loquat	30	~~70~~ 244	~~86.33~~ 272.51	101.24
~~Walnut~~ Strawberry tree	30	~~4~~ 65	~~20.87~~ 41.71	36.10
~~Fremont cottonwood~~ Coastal live oak	30	~~18~~ 567	~~141.92~~ 329.75	274.94
~~Coastal live oak~~ Black walnut	30	~~410~~ 6	~~2,469.02~~ 10.97	2.66
~~Scrub oak~~ Valley oak	30	~~8~~ 40	~~9.58~~ 49.23	16.34
~~California white oak~~ Red willow	30	~~26~~ 48	~~56.90~~ 77.43	16.88
~~Red willow~~ Arroyo willow	30	~~22~~ 14	~~85.01~~ 12.15	3.59
~~Willow~~	~~30~~	~~20~~	~~48.76~~	–
~~European black~~ Blue elderberry	30	~~252~~ 100	~~144.61~~ 61.01	14.59
~~Loquat~~	~~30~~	~~215~~	~~327.43~~	–
Total		~~1,510~~ 1,628	~~3,934.78~~ 1,213.12	850.32
~~Total (when amortized over 30 years)~~			~~131.16~~	–
Amortized Carbon Stored (amortized sequestered and avoided carbon over 30 years)			68.78	

Source: i-Tree Planting Calculator version 2.2.0.
Notes: MT CO_2 = metric tons carbon dioxide.
See Appendix B-1 for calculations and sources.

[3] MM-4.4-15, SEA Protected Trees Replacement/Compensation, requires any planted mitigation trees shall be monitored for a period of seven years and replanted if the tree has died within seven years of initial planting.

As presented in Table 4.8-8, the gain in sequestered and avoided carbon resulting from planting ~~1,510~~ 1,628 trees would be ~~approximately~~ ~~3,935~~ 2,063.44 MT CO_2, or ~~131~~ 68.78 MT CO_2 per year when amortized over 30 years.

The estimated operational Project-generated unmitigated GHG emissions from area sources, energy usage, motor vehicles, solid waste generation, water usage and wastewater generation, and off-road equipment are shown in Table 4.8-9, Project Operational GHG Emissions.

Table 4.8-9. Project Operational GHG Emissions - Unmitigated

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	130.64	0.00	0.00	130.79
Energy	989.94	0.09	0.00	993.16
Mobile	4,565.91	0.23	0.19	4,635.30
Refrigerants	0.00	0.00	0.00	0.92
Solid waste	43.86	4.38	0.00	153.44
Water supply and wastewater	76.76	1.12	0.03	112.75
Total				**6,026.36**
Amortized construction emissions (Table 4.8-6)				*488.14*
Amortized Carbon Released (Table 4.8-7)				*~~41.22~~ 5.68*
Total operational + amortized construction emissions				*~~6,555.72~~ 6,520.18*
~~Amortized Sequestered Carbon~~ Amortized Carbon Stored (Table 4.8-8)				*~~131.16~~ 68.78*
Total operational + amortized construction emissions – ~~sequestered carbon~~ Amortized Carbon Stored				**~~6,424.56~~ 6,451.40**
Service Population				**1,795**
GHG Efficiency (MT CO_2e/SP/year)				**~~3.58~~ 3.59**
Efficiency Metric Threshold (MT CO_2e/SP/year)				**2.42**
Exceeds Threshold?				**Yes**

Notes: GHG = greenhouse gas; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent; MT = metric tons; SCAQMD: South Coast Air Quality Management District.
See Appendix B-1 for complete results.

As shown in Table 4.8-9, estimated Project-generated operational emissions, with amortized construction emissions and sequestered carbon from planting trees, would be approximately ~~6,425~~ 6,451 MT CO_2e per year. As discussed in Section 4.8.4, the service population is 1,795 persons. Therefore, the Project would result in an efficiency metric of ~~3.58~~ 3.59 MT/SP/yr. This would exceed the significance threshold of 2.42 MT/SP/yr. Therefore, GHG emissions generated by the Project would have a potentially significant impact on the environment and mitigation is required.

Section 4.8.5, Impact Analysis, page 4.8-34

Table 4.8-11. Project Operational GHG Emissions – Mitigated

Emission Source	CO_2	CH_4	N_2O	CO_2e	% Reduced
	Metric Tons per Year				
Area	8.86	0.00	0.00	8.90	2.02
Energy	462.55	0.04	0.01	465.24	8.76
Mobile	2,900.28	0.22	0.18	2,966.05	27.70

Table 4.8-11. Project Operational GHG Emissions – Mitigated

Emission Source	CO_2	CH_4	N_2O	CO_2e	% Reduced
	Metric Tons per Year				
Refrigerants	0.00	0.00	0.00	0.92	0.00
Solid waste	43.86	4.38	0.00	153.44	0.00
Water supply and wastewater	64.68	0.90	0.02	93.82	0.31
			Total	**3,688.37**	**38.79**
				Amortized construction emissions (Table 4.8-6)	488.14
				Amortized Carbon Released (Table 4.8-7)	~~41.22~~ 5.68
				Total operational + amortized construction emissions + Amortized Carbon Released	~~*4,217.73*~~ *4,182.19*
				Amortized ~~sequestered~~ Carbon Stored (Table 4.8-8)	~~*131.16*~~ *68.78*
				Total operational + amortized construction emissions – ~~sequestered~~ Amortized Carbon Stored	**~~4,086.57~~ 4,113.41**
				Service Population[1]	**1,795**
				GHG Efficiency (MT CO_2e/SP/year)	**~~2.28~~ 2.29**
				Efficiency Metric Threshold (MT CO_2e/SP/year) (Table 4.8-5)	**2.42**
				Exceeds Threshold?	**No**

Notes: GHG = greenhouse gas; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; MT = metric tons; SP = service population; CO_2e = carbon dioxide equivalent.

[1] The service population includes the Project's proposed 1,785 residents and 10 employees, as detailed in Section 4.14, Population and Housing, and detailed under Section 4.8.4, Methodology, above.

Source: See Appendix B-1 for complete results.

Mitigation measures quantified include MM-4.8-2 (residential and recreational building electrification), MM-4.8-3 (partly quantified) (energy conservation), MM-4.8-4 (100% zero-carbon electricity), MM-4.8-5 (EV Chargers), and MM-4.8-6 (water use efficiency and water conservation).

As shown in Table 4.8-11, the mitigated Project emissions, including implementation of MM-4.8-1 through MM-4.8-8 and MM-4.17-2, as quantifiable, would be approximately ~~4,087~~ 4,113 MT CO_2e per year. With a service population of 1,795 persons, this would result in an efficiency metric of ~~2.28~~ 2.29 MT/SP/yr which would be less than the 2.42 MT/SP/yr significance threshold established by the County. Again, this 2029 efficiency metric threshold reflects the trajectory planned for in the State's Scoping Plan, 2017 Scoping Plan Update, and 2022 Scoping Plan (i.e., AB 32, SB 32, and AB 1279). Since the Project's efficiency would be below the 2029 efficiency metric threshold, it would not interfere with attainment of the 2030, 2045, and 2050 statewide emission reduction targets, and therefore, would not interfere with the State's and the County's ability to achieve the mid-term and long-term GHG reduction targets. Therefore, direct and indirect GHG emissions generated by the Project would have a less than significant impact on the environment with mitigation.

Section 4.9, Hazards and Hazardous Materials

Section 4.9.1, Existing Conditions, Page 4.9-1

The Project site is currently undeveloped, and as noted above, there are no habitable structures onsite; however, some remaining structures include fencing, footings and other minor features associated with a former water tank, water wells, irrigation lines, and Southern California Edison (SCE) electrical distribution lines. Additionally, there is one plugged and abandoned subsurface oil well (Ayers 1 – API ~~03706017~~ 0403706017) previously constructed by the Sun Drilling Company, located in the center of the Project site. The approximate location of this plugged well

is shown on Figure 2-5, Special Management Areas, of Chapter 2, Environmental Setting, of this Draft EIR. A California Division of Oil, Gas, and Geothermal Resources (DOGGR) Well Summary Report prepared in 1961 obtained by California Geologic Energy Management (CalGEM) indicated that drilling of the well commenced on February 2, 1961 and was completed on March 10, 1961. The total well depth reached 9,785 feet below grounds surface (bgs) and was plugged and formally abandoned one day later, on March 11, 1961 (CALGEM 2022).

Section 4.9.5, Impact Analysis, Page 4.9-21

As discussed above in response to Threshold 4.9a, Existing Conditions, there is one identified plugged subsurface oil well (Ayers 1 – API ~~03706017~~ 0403706017), previously owned by the Sun Drilling Company, that could be a source of potential adverse effects. Presence of an oil well could have the potential to act as a conduit for transmission of methane gas emissions, if disturbed. The plugged oil well is located within the center of the Project site and has been identified on both the CalGEM Well Finder map, as well as the Public Works' SWMS database, which have been compiled pursuant to Government Code Section 65962.5. Refer to Figure 2-5, Special Management Areas in Chapter 2, Environmental Setting of this Draft EIR for the approximate location of this plugged well. Reportedly, the well did not produce and was subsequently plugged (Appendix F). Based on the location of the inactive oil well, the well is located within 300 feet of certain proposed residential units and, therefore, this would be a potentially significant impact as a potential source of methane gas emissions to future residents at the Project.

Section 4.10, Hydrology and Water Quality

Section 4.10.1, Existing Conditions, Page 4.10-2

As shown in Figure 4.10-1, the Project site is traversed by blue-line Lyons Creek, which trends east-southeast across the central portion of the site and then turns north before exiting the property in the northeast portion of the site. An east-trending tributary blue-line creek flows into Lyons Canyon Creek in the northern part of the site. Lyons Creek flows eastward into the South Fork of the Santa Clara River, which leads to the Santa Clara River, approximately 3.75 miles northeast of the Project site (Figure 4.10-2, Existing Drainages and Watershed, and Figure 4.10-3, Upper Santa Clara River Watershed and Floodplain Areas). The on-site portion of Lyons Creek drains into an existing double 8-foot by 8-foot reinforced concrete box (RCB) culvert, in the northeast corner of the site, which carries flow under The Old Road and Interstate-5 (I-5) freeway to Los Angeles County Flood Control District (LACFCD) stormwater facilities (Figure 4.10-4, Existing Condition Subwatersheds). Two large offsite tributary watersheds and several small offsite watersheds drain through the Project area to the existing box culvert storm drain (Appendix G-2). East of the I-5 freeway, stormwater from the Project site flows to north-trending Wiley Canyon Creek, located near Wiley Canyon Road, which eventually merges with Newhall Creek and the South Fork of the Santa Clara River.

Section 4.10.5, Impact Analysis, Page 4.10-22

The Project would require approximately 1,500,000 cubic yards of cut and 1,300,000 cubic yards of fill for a total of 2,800,000 cubic yards of grading with 1,345,000 cubic yards of over excavation. There is expected to be 15% shrinkage on the over excavation for a total of 200,000 cubic yards. The total earth movement would be approximately 2,845,000 cubic yards, including the on-site Project components and the off-site parcel adjacent to The Old Road that would be constructed with manufactured slopes. The grading would balance onsite, and as such, no import or export of soils would be required for the Project. Grading would be followed by vertical building construction, paving/concrete, and landscape installation. Construction of the Project would have the potential to result in local soil erosion during excavation, grading, trenching, and soil stockpiling. As discussed in Section 4.10-

1, Existing Conditions, the undeveloped Project site is traversed by blue-line Lyons Creek, which trends east-southeast across the central portion of the site and then turns north before exiting the property in the northeast portion of the site. An east-trending tributary blue-line creek flows into Lyons Canyon Creek in the northern part of the site. Each of these construction-related activities would result in potential siltation of Lyons Creek and its on-site tributaries, which in turn could adversely affect beneficial uses of Santa Clara River Reach 6, as listed in Table 4.10-1. Construction equipment and materials would include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. During the construction phase of the Project, petroleum hydrocarbons in site runoff could result from construction equipment/vehicle fueling or spills. The accidental spill of hazardous materials could adversely affect the water quality of stormwater and/or surface water bodies, which in turn could adversely affect beneficial uses of Santa Clara River Reach 6, as listed in Table 4.10-1.

Section 4.10.5, Impact Analysis, Pages 4.10-23

The Project includes replacement of existing open space with a new residential, recreational, and associated roadway and utility infrastructure. The primary sources of pollution in runoff from these land uses are expected to include oil, grease, petroleum products, and automobile-related pollutants, pathogens/bacteria from pets, pesticides/herbicides/insecticides and nitrogen and phosphorous from fertilizers for landscaping, and trash, lawn clippings, and debris that can accumulate impervious surfaces, such as parking lots, driveways, and sidewalks. Other potential pollutants that may be generated by the Project include household-type cleaning products, maintenance products (e.g., paints, solvents, cleaning products), and refrigerants associated with building mechanical heating, ventilation, and air conditioning (HVAC) systems.

As discussed in Section 4.10.1, the Project site is located in the vicinity of Reach 6 of the Santa Clara River. This Reach is listed on the 303(D) List of impaired water bodies in the Upper Santa Clara River watershed for chlorpyrifos, diazinon, toxicity, chloride, and coliform bacteria. Chlorpyrifos and diazinon are two organophosphorus pesticides widely used in both agricultural and urban applications. Chlorpyrifos is commonly used to control insects on agricultural crops and urban uses of chlorpyrifos include landscape maintenance, structural pest control, dormant sprays, and pet products. Diazinon is also widely used in both agricultural and urban applications. Urban uses of diazinon are similar to chlorpyrifos, with dormant sprays, foundation and landscape insect control, and building pest control being common applications. Both pesticides have been associated with toxicity in ambient waters, point source discharges, and agricultural discharges. Diazinon and chlorpyrifos have also been responsible for causing aquatic life toxicity in urban waters.

However, chlorpyrifos was banned by the USEPA for residential use in the United States in 2001 and diazinon was banned in 2004, due to concerns about its potential health risks (Banks et al. 2005; EPA 2016). As a result, Project operations are not anticipated to result in chlorpyrifos and diazinon water quality impacts. In addition, as discussed in Section 4.10.1, chlorpyrifos and diazinon are not prioritized for Reach 6 in the Upper Santa Clara River Watershed Enhanced Watershed Management Program (EWMP) (USCRWMG 2015) because constituents with no exceedances within the past 5 years and in areas where MS4s are not a source contributing to the exceedances are not considered to be priorities in the EWMP. In addition, toxicity was not prioritized in the EWMP because other prioritized constituents are expected to address these constituents and other specific constituents contributing to impairments (USCRWMG 2016).

Sources of chloride in the Upper Santa Clara River watershed include naturally occurring salts in water supply and saltwater swimming pool discharges. However, stormwater runoff in MS4s are not the primary source of chloride in the Upper Santa Clara River. The primary source of chloride is the wastewater treatment plants. Sources of chloride

in the treatment plants include self-regenerating water softeners, drinking water, and other additives (USCRWMG 2016). As a result, Project operations are not anticipated to result in chloride water quality impacts.

Major contributors of coliform (bacteria) to the Upper Santa Clara River are discharges from the stormwater conveyance system that drains urban areas. Excess fertilizers, nutrients, and pathogens/bacteria from pets can impact water quality by promoting excessive and/or rapid growth of aquatic vegetation, which reduces water clarity and results in oxygen depletion. Pesticides/herbicides/insecticides can also enter urban runoff after application on landscaped areas and can be toxic to aquatic organisms and can bioaccumulate in larger species, such as birds and fish. The potential impacts of these substances on biological resources are discussed in Section 4.4, Biological Resources, of this Draft EIR. Oil, grease and heavy metals can enter dry-weather and stormwater runoff from vehicle leaks, traffic, and vehicle maintenance activities, and metals can enter runoff as surfaces corrode, decay, or leach, which in turn could adversely affect beneficial uses of Santa Clara River Reach 6, as listed in Table 4.10-1.

These anticipated pollutants would be addressed through Project features, as described in Chapter 3.0, Project Description, as well as through compliance with regulatory requirements. During operations, the Project site would consist of vegetated open space, landscaped areas, buildings, and hardscapes. During storm events, all stormwater flows from outside of the Project's developed footprint would be directed into two larger, regional debris basins on Lot 14 (Basin A) and Lot 15 (Basin B), as well as five smaller desilting basins on Lots 19 (Basin C) and 33 through 36 (Basins J, F, G, and E, respectively). These basins would allow for settlement of debris and would then pass clear flows into the on-site storm drainage system to the outfall in the existing RBC culvert at The Old Road. All stormwater flows from on-site areas within the Project's developed footprint would be treated through proprietary biofiltration systems that would be placed throughout the development to treat stormwater flows, and then convey the flows into the on-site storm drainage system to the outfall in the existing RBC culvert at The Old Road, and finally to Wiley Canyon Creek and the South Fork of the Santa Clara River. Figure 4.10-7, Proposed Drainage and Water Quality Infrastructure, depicts the proposed basins that would capture flows from undeveloped areas and convey them into the Project's on-site storm drain system, as well as the proposed alignments and outfall location of the on-site storm drain system.

Section 4.10.5, Impact Analysis, Page 4.10-26

As discussed under Threshold 4.10a, the Project would require construction activities, including grading and removing vegetation, that would alter existing drainage patterns and flows within the Project site could generate erosion, siltation on- site and off-site, which in turn could adversely affect beneficial uses of Santa Clara River Reach 6, as listed in Table 4.10-1. However, the development footprint of the Project within the approximately 233-acre site would minimize impacts by clustering the approximately 83 acres of development toward the northeast portion of the Project site and preserving approximately 150 acres of natural open space in the southerly portion of the Project site. The proposed grading would also alter the portion of the Project site that includes a 100-year Flood Zone A (discussed further below in response to Threshold 4.10c.[iv]).

Section 4.10.5, Impact Analysis, Page 4.10-27

During storm events, all stormwater flows from outside of the Project's developed footprint would be directed into the Project's flood control facilities, which includes two regional debris basins and five smaller desilting basins, which would allow for settlement of debris and would then pass clear flows into the on-site storm drainage system to the outfall in the existing box drainage culvert at The Old Road. The Project would not alter the potential for soil erosion or siltation from areas outside of the graded/developed footprint, and as a result, would not adversely affect beneficial uses of Santa Clara River Reach 6, as listed in Table 4.10-1.

Section 4.10.5, Impact Analysis, Page 4.10-28

Each basin would intercept storm flows and provide peak flow detention to meet the County hydrology standard requirements for a 24-hour, 50-year storm event and a 24-hour, 100-year event, with a minimum of two feet of freeboard for all publicly-maintained basins. The proposed basins would capture sediment and reduce flows to the pre-project conditions before releasing flows to the downstream drainage network (Appendix G-3 and Appendix G-4). As a result, the incorporation of the regional debris basins, smaller desilting basins, stormwater drainage facilities, and compliance with regulations, the operation of the Project would not substantially alter the existing drainage pattern of the site, including through alteration of a flood zone (discussed further below in response to Threshold 4.10c.[iv]); alteration of a stream or river; or additional impervious surfaces, in a manner that would result in erosion or siltation, and associated adverse impacts to beneficial uses of Santa Clara River Reach 6, as listed in Table 4.10-1. Impacts ~~impacts~~ would be less than significant.

Section 4.10.5, Impact Analysis, Pages 4.10-29 and 4.10-30

Construction

The Project would not result in substantial additional sources of polluted runoff during short-term construction activities, as described under Threshold 4.10a, and as a result, would not adversely affect beneficial uses of Santa Clara River Reach 6, as listed in Table 4.10-1. Additionally, the Project would not create or contribute runoff that would exceed the capacity of existing stormwater drainage systems during short-term construction because the Project site would remain pervious during grading/earthwork. A site-specific SWPPP and ESCP would be implemented during construction to address transport of sediment and protect properties from erosion, flooding, or the deposition of mud, debris, or construction-related pollutants. As described under Threshold 4.10c(iii) above, all earthwork would be implemented in accordance with the grading permit and County Code- Appendix J, Grading, which sets forth detailed requirements for site grading activities and would ensure that stormwater flows were addressed through on-site BMPs to meet County Code requirements for hydromodification and water quality. The RCB culvert at the northwest corner of the Project site would continue to receive stormflows from the Project site during construction activities and could accommodate flows from the site, similar to the existing conditions.

Operation

As described under Threshold 4.10a, the Project's water quality BMPs and compliance with applicable laws and regulations would ensure that operation of the Project would not substantially degrade surface or groundwater quality, and as a result, would not adversely affect beneficial uses of Santa Clara River Reach 6, as listed in Table 4.10-1. Impacts ~~impacts~~ would be less than significant.

Section 4.10.5, Impact Analysis, Pages 4.10-33

The Project site is not located near any body of water that could create a seiche that could impact the Project. The nearest body of water to the Project site is Castaic Lake approximately 10.5 miles to the north, but this lake is lower in elevation in the watershed and would not affect the Project site. The Project is not located within the Castaic Lake Dam inundation zone (DWR 2018). Further, the nearest dam or levee to the Project site is the Castaic Lake, which is approximately 10.5 miles north and down gradient. If the Castaic Lake Dam failed, the flows would flood the Santa Clara River corridor and ultimately the Oxnard plains in route to the Pacific Ocean. The Project site is over 21 miles from the ocean, and would not be subject to the risks of a tsunami. As such, the Project would not risk release of pollutants as a result of inundation by a seiche or tsunami.

In terms of flood hazards, a portion of the Project site designated for development is within the 100-year flood zone (Zone A). To minimize risks of flood damage including release of pollutants due to inundation, the Project includes an engineered storm drainage system to collect and treat runoff from the developed site and provide flood control protection by constructing detention basins and a new flood control channel, which would reduce the flows from the Project site and convey them to the existing culvert under I-5. The drainage system would be designed to meet the County's 24-hour, 50-year Capital Flood control standards and FEMA's 24-hour, 100-year flood standards, to protect the development as well as the remaining floodplain that could be affected by the modification. As illustrated in Figure 4.10-9, Floodplain Comparison Map, following construction, all flooding within the Project site would be contained within the proposed debris basins and storm drains. As such, the proposed floodplain would be limited to the basin ponding areas. As a result, although a portion of the Project site is currently located within a 100-year flood zone, the Project would not risk release of pollutants due to Project inundation, and as a result, would not adversely affect beneficial uses of Santa Clara River Reach 6, as listed in Table 4.10-1. Impacts would be less than significant.

Section 4.10.5, Impact Analysis, Pages 4.10-33 and 4.10-34

The Project is subject to the requirements of the LARWQCB Basin Plan, overlying the East Groundwater Subbasin, which is managed by the SCVGSA through the GSP adopted in January 2022. The Basin Plan outlines water quality objectives for all surface water resources within the basin including the South Fork of the Santa Clara River. Compliance with the Basin Plan is ensured through Waste Discharge Requirements for all surface water discharges including stormwater. The County of Los Angeles as a Permittee under the Los Angeles County NPDES MS4 Permit is required to implement stormwater BMPs that comply with water quality objectives, including capturing and treating stormwater runoff. An LID Plan has been developed for the Project as required under the LARWQCB NPDES MS4 Permit and in accordance with the Public Works LID Manual (Appendix G-1). The LID Plan includes biofiltration for water quality treatment, as described under Threshold 4.10a. The biofiltration filter units would be designed to treat 150% of the volume generated onsite per the LID Manual (Appendix G-1). Compliance with the NPDES MS4 permit and LID requirements would ensure that the Project is consistent with the Basin Plan's water quality objectives, and as a result, would not adversely affect beneficial uses of Santa Clara River Reach 6, as listed in Table 4.10-1.

Section 4.10.6, Cumulative Impact Analysis, Pages 4.10-34 and 4.10-35

Construction

During construction activities, the Project site, the three cumulative projects, as well as other activities within the watershed would use hazardous material (e.g., fuel, oil, paint) and an accidental spill of hazardous materials could result in inadvertent releases to surface waters, which could adversely affect surface or groundwater quality. In addition, construction would have the potential to result in local soil erosion during excavation, grading, trenching, and soil stockpiling. Erosion could result in sediment and other pollutants entering surface water bodies and adversely affecting water quality. Such water quality impacts could adversely affect beneficial uses of Santa Clara River Reach 6, as listed in Table 4.10-1. However, the Project and the cumulative projects would be subject to the same regulatory requirements discussed above. Any cumulative project that has the potential to impact hydrology and water quality would also be required to comply with NPDES Construction General Permit and its required SWPPP, the NPDES MS4 BMP requirements, the ESCP to address transport of sediment and protect properties from erosion, and the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program and its required HMBP, all designed to prevent impacts to water quality and have procedures in place for responding to spills. While it is possible that the Project cumulative projects that contribute flows to the South Fork of the Santa Clara River could result in releases of sediment

and/or pollutants that could adversely affect water quality, the responsible parties associated with the Project and the other cumulative projects would be required to control runoff and respond to spills to the same or similar established regulatory standards from the City of Santa Clarita, as discussed both above in this section and in Section 4.9, Hazards and Hazardous Materials, of this Draft EIR. Therefore, compliance with water quality regulations would ensure that the cumulative impacts would not be considerable.

Operations

Once constructed, the designs of the Project in addition to the cumulative projects would result in the drainage systems for each site incorporating the requirements of the regulations discussed above during construction. As a result, the cumulative projects would incorporate on-site runoff management infrastructure, water quality BMPs, and adequate connections to the existing stormwater drainage system. Therefore, with compliance with these regulations and implementation of stormwater management measures, the Project would not cause or contribute to a cumulatively significant impact to hydrology and water quality and beneficial uses of Santa Clara River Reach 6.

Section 4.10.6, Cumulative Impact Analysis, Pages 4.10-36 and 4.10-37

Construction

The Project and other related projects would be subject to the same or similar regulatory requirements from the City of Santa Clarita for water quality and hydrology, including compliance with site-specific SWPPPs required by the General Construction Permit, the ESCP to control erosion, and other grading requirements in accordance with the County Code or relevant local requirements such as those required by the City of Santa Clarita. Existing regulations would require BMPs and erosion control measures to prevent erosion and off-site siltation from each of the construction sites, thus minimizing impacts to beneficial uses of Santa Clara River Reach 6. Therefore, the cumulative impact with respect to erosion and flooding would not be cumulatively considerable.

Operation

The Project and other proposed developments within the watershed would be subject to storm flow management designs imposed by the City and the County to ensure that cumulative development does not result in excessive runoff that could overwhelm regional flood control facilities. The Project would be designed to reduce flows to the pre-project conditions. The Project's Drainage Concept Report determined that the proposed basins would reduce the existing 50-year peak flow rate at the Caltrans culvert under I-5 from 1,656 cfs to 1,218 cfs, a reduction of 438 cfs (Appendix G-3). A CLOMR will be processed through and approved by FEMA prior to the approval of storm drain plans and construction of the proposed channel and basins (Appendix G-4). Additionally, the proposed basins would remove 48.8 acre-feet of sediment from the Project site, reducing the potential for sediment to impact the capacity of the downstream drainage network and minimizing impacts to beneficial uses of Santa Clara River Reach 6.

Section 4.10.6, Cumulative Impact Analysis, Page 4.10-38

The geographic area under consideration for the topic of flood hazards includes the watershed for the South Fork of the Santa Clara River (see Figures 4.10-2 and 4.10-3). Neither the Project nor the three cumulative projects would be located near a body of water that would be impacted by a seiche and would not be subject to the risks of a tsunami due to distance from the ocean and elevation. The nearest dam to the Project site is the Castaic Lake, which is approximately 10.5 miles north and down gradient. If the Castaic Lake dam failed, the flows would flood the Santa Clara River corridor in route to the Pacific Ocean and would not affect the Project nor the cumulative

projects. The Project is currently in a flood hazard zone, but the property would be developed to remove the developed area from the Zone A and eliminate hazards associated with a flood zone. During construction, all related projects would require the preparation of a SWPPP in accordance with the General Construction Permit. During operations, all related projects would be required to comply with the NPDES Municipal Permits and its MS4 BMP requirements and LID practices, along with County Code requirements, which would prevent significant amounts of pollutants in runoff, thus minimizing impacts to beneficial uses of Santa Clara River Reach 6. Therefore, the cumulative impact with respect to flood hazards, tsunami, and seiche would not be cumulatively considerable.

Section 4.10.9, References, Pages 4.10-40 and 4.10-41

Banks, K.E., D.H. Hunter, and D.J. Wachal. 2005. Chlorpyrifos in Surface Waters Before and After a Federally Mandated Ban. In Environment International, Volume 31, Issue 3, pages 351-356, April 2005. Accessed March 22, 2025. https://www.sciencedirect.com/science/article/abs/pii/S0160412004001436.

EPA (United States Environmental Protection Agency). 2016. "Diazinon IRED Facts." Accessed March 22, 2025. Diazinon IRED Facts | Pesticides | US EPA. https://archive.epa.gov/pesticides/reregistration/web/html/diazinon_ired_fs.html.

EPA ~~(United States Environmental Protection Agency)~~. 2021. "How Are Water Quality Standards Developed?" Updated September 22, 2021. Last accessed July 5, 2022. https://www.epa.gov/standards-water-body-health/how-are-water-quality-standards-developed.

USCRWMG (Upper Santa Clara River Watershed Management Group). Enhanced Watershed Management Program. Submitted by Larry Walker Associates, Tetra Tech, and Paradigm, June 2015. Accessed March 22, 2025. https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/watershed_management/santa_clara/UpperSantaClaraRiver_DraftEWMP1.pdf.

USCRWMG ~~(Upper Santa Clara River Watershed Management Group)~~. 2016. "Upper Santa Clara River Watershed Enhanced Watershed Management Program–Response to Regional Board Comments Received February 9, 2016." Last accessed July 5, 2022. https://www.waterboards.ca.gov/rwqcb4/water_issues/programs/stormwater/municipal/watershed_management/santa_clara/upper/USCRW_Comment%20Response_022016.pdf.

Section 4.11, Land Use and Planning

Section 4.11.5, Impact Analysis, Pages 4.11-15 through 4.11-42

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
Chapter 6, Land Use Element	
Goal LU 1. A General Plan that serves as the constitution for development, and a Land Use Policy Map that implements the General Plan's Goals, Policies and Guiding Principles.	
Policy LU 1.10. Prohibit plan amendments that increase density of residential land	**No Conflict.** The Project would not require a General Plan amendment and thus would not conflict with this policy. As discussed in Section 4.20, Wildfire, of this Draft EIR, the Project site is located within a VHFHSZ that falls within a State

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
uses within mapped fire and flood hazard areas unless generally surrounded by existing built development and the County determines the adjoining major highways and street networks can accommodate evacuation as well as safe access for emergency responders under a range of emergency scenarios, as determined by the County.	Responsibility Area (SRA). In addition, the lowland areas in the northeastern portion of the Project site are situated in a 100-year flood zone (Zone A), as detailed in Section 4.10, Hydrology and Water Quality, of this Draft EIR. However, the Project site is adjacent to existing built development (i.e., commercial, and residential uses) to the north and appurtenant to The Old Road and I-5 (a major highway) to the east. Furthermore, the Mountains Recreation and Conservation Authority (MRCA) Santa Clarita Woodlands Park, including Ed Davis Park in Towsley Canyon, is located southwest of the Project site. Southeast of the Project site's boundary is the City of Santa Clarita's Taylor Trail Wilderness and Open Space and Rivendale Park and Open Space. These land uses are publicly owned and established land uses that are not subject to potential development and would not change with implementation of the Project. As such, the Project is considered adjacent to existing development to the north and east, and settled uses are also located east and south of the Project site. As detailed in Section 4.17, Transportation of this Draft EIR, vehicular access to the Project site would be provided directly from The Old Road via two unsignalized driveways at the north and south, which have been analyzed to determine their ability to accommodate an increase in traffic. The analysis found that both driveways are projected to operate at an acceptable Level of Service and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project site in the event of an evacuation. The Project would provide on-site emergency vehicle access via proposed "A" Street and "B" Street, in addition to the 26-foot clear-to-sky private access road that would be used as a fire road, for emergency or maintenance vehicle access (see Section 4.9, Hazards and Hazardous Materials, and Section 4.17 of this Draft EIR for further details). An egress-ingress easement ~~roadway~~ to the property west of the Project site, proposed Tentative Tract Map (TTM) 74979, would also be provided. Consistent with County Code Title 21, Subdivisions and access requirements of the County Fire Code, the Project's roadways would meet all County access requirements for new residential development in a VHFHSZ. The private access road, which would also serve as an emergency access route, would also include a gate to prevent the public from obstructing the roadway and limit access to adjacent wildland areas. The gate would comply with all regulations of the County Fire Code, including being operatable by one person if power fails, a Knox Box, and be made of non-combustible materials, as detailed in Section 4.20 of this Draft EIR. The Project's Wildfire Evacuation Plan (Appendix M-2) determined that the Project, including any existing land uses would be able to evacuate within identified potential evacuation routes available to residents and provides emergency preparedness resources to support situational awareness and household preparedness.
…	…
Safety Element (2022)	
Goal S 4. An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to fire hazards.	
Policy S 4.1. Prohibit new subdivisions in VHFHSZs unless: (1) the new subdivision is generally surrounded by existing or	**No Conflict.** As discussed above in response to General Plan Policy LU 1.10, the Project site is adjacent to existing built development (i.e., commercial, and residential uses) to the north and appurtenant to The Old Road and I-5 (a major highway) to the east. Furthermore, the MRCA Santa Clarita Woodlands Park, including Ed Davis Park in Towsley Canyon, is located southwest of the Project

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
entitled development or is located in an existing approved specific plan or is within the boundaries of a communities facility district adopted by the County prior to January 1, 2022, including any improvement areas and future annexation areas identified in the County resolution approving such district; (2) the County determines there is sufficient secondary egress; and (3) the County determines the adjoining major highways and street networks are sufficient for evacuation as well as safe access for emergency responders under a range of emergency scenarios, as determined by the County. Discourage new subdivisions in all other FHSZs.	site. Southeast of the Project site's boundary is the City of Santa Clarita's Taylor Trail Wilderness and Open Space and Rivendale Park and Open Space. These land uses are publicly owned and established land uses that are not subject to potential development and would not change with implementation of the Project. As such, the Project is considered adjacent to existing development to the north and east, and settled uses are also located east and south of the Project site. As discussed in Section 4.20, Wildfire, of this Draft EIR, the Project site is located within a VHFHSZ that falls within the SRA. However, consistent with County Code Title 21, Subdivisions and access requirements of the County Fire Code, the Project's roadways, including proposed public streets "A" and "B" and the private access road, would meet all County access requirements for new residential development in a VHFHSZ. The private access road, which would also serve as an emergency access route for emergency and maintenance vehicles, would also include a gate that would comply with all regulations of the County Fire Code. including being operatable by one person if power fails, a Knox Box, and to be made of non-combustible materials, as detailed in Section 4.20 of this Draft EIR. The locked gate would prevent the public from obstructing the roadway and would also limit vehicular access to adjacent wildland areas. As further detailed in Section 4.20, the Project would implement MM-4.20-1, which would provide Project residents with potential egress route information and instructions for following the "Ready, Set, Go!" model of the County in the event of evacuation and include the requirements of the Project's Wildfire Evacuation Plan and the Fire Protection Plan (Appendix M-2). Furthermore, both means of ingress/egress from The Old Road have been analyzed to determine their ability to accommodate anticipated traffic levels. The analysis found that both roadways (Streets "A" and "B") are projected to operate at an acceptable Level of Service and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project site. The proposed multiple vehicular access points, emergency vehicle access, interior street and circulation elements, and proximity of The Old Road/I-5 would ensure safe access for emergency responders under a range of emergency scenarios. The Project's Wildfire Evacuation Plan (Appendix M-2) determined that the Project, including any existing land uses would be able to evacuate within identified potential evacuation routes available to residents and provides emergency preparedness resources to support situational awareness and household preparedness. As discussed in Section 4.9, Hazards and Hazardous Materials, of this Draft EIR, the Project would implement a fire protection plan, which includes measures such as using fire-retardant construction materials for structures adjoining the natural open space areas, establishment of fuel modification/management zones to provide defensible space and assist in wildland fire suppression, use of fire retardant and drought tolerant landscaping, and installation of fire hydrants spaced at 600 feet or less would be implemented. In addition, the Applicant would comply with the Developer Fee Program, with the LACoFD to further enhance fire protection to the proposed development. The preliminary fuel modification plan for the perimeter of the proposed development would incorporate required set back zones, fire road clearance, long-term maintenance requirements, and conceptual planting. Each fuel modification zone would be designed to specifically address fire suppression. The zones would include requirements for minimum structure setbacks, permanent irrigation systems, fire retardant plants from a County-approved plant

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
	list, and landscape and planting maintenance. With the implementation of these features and other measures, fire hazard in the VHFHSZ would be reduced to a less-than-significant level. In addition, the Project would cluster development in the northeastern portion of the Project site, thereby substantially minimizing the development footprint at the Project site. Therefore, for these reasons, the Project would not conflict with this policy.
Policy S 4.2. New subdivisions shall provide adequate evacuation and emergency vehicle access to and from the subdivision on streets or street systems that are evaluated for their traffic access or flow limitations, including but not limited to weight or vertical clearance limitations, dead-end, one-way, or single lane conditions.	**No Conflict.** As discussed above in response to General Plan Policy S 4.1, the Project adequately addresses concerns related to emergency access and evacuation. As detailed in Section 4.17, Transportation of this Draft EIR, vehicular access to the Project site would be provided directly from The Old Road via two unsignalized driveways at the north and south, which have been analyzed to determine their ability to accommodate an increase in traffic. The analysis found that both driveways are projected to operate at an acceptable Level of Service and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project site in the event of an evacuation. The Project would provide on-site emergency vehicle access via proposed "A" Street and "B" Street, in addition to the 26-foot clear-to-sky private access road that would be used as a fire road, for emergency or maintenance vehicle access (see Section 4.9, Hazards and Hazardous Materials, and Section 4.17 of this Draft EIR for further details). An egress-ingress easement ~~roadway~~ to the property west of the Project site, proposed Tentative Tract Map (TTM) 74979, would also be provided. Consistent with County Code Title 21, Subdivisions and access requirements of the County Fire Code, the Project's roadways would meet all County access requirements for new residential development in a VHFHSZ. The private access road, which would also serve as an emergency access route, would also include a gate to prevent the public from obstructing the roadway and limit access to adjacent wildland areas. The gate would comply with all regulations of the County Fire Code, including being operatable by one person if power fails, a Knox Box, and be made of non-combustible materials, as detailed in Section 4.20 of this Draft EIR. The Project's Wildfire Evacuation Plan (Appendix M-2) determined that the Project, including any existing land uses would be able to evacuate within identified potential evacuation routes available to residents and provides emergency preparedness resources to support situational awareness and household preparedness. The analysis provided in Section 4.17 of this Draft EIR found that both "A" Street and "B" Street are projected to operate at an acceptable Level of Service and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project site. The Project also provides emergency preparedness resources to support situational awareness and household preparedness. The Project's comprehensive approach to emergency access and evacuation planning contributes to the overall safety and resilience of the Project.
…	…
Goal S 47. Effective County emergency response management capabilities.	
~~**Policy S 4.1.** Prohibit new subdivisions in VHFHSZs unless: (1) the new subdivision is generally~~	~~**No Conflict.** As discussed above in response to General Plan Policy LU 1.10, the Project site is located within a VHVHSZ; however, the Project site is adjacent to existing development (i.e., commercial, and residential uses) to the north, while The Old Road and I-5 (a major highway) run parallel to the Project site to the east.~~

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
~~surrounded by existing or entitled development or is located in an existing approved specific plan or is within the boundaries of a communities facility district adopted by the County prior to January 1, 2022, including any improvement areas and future annexation areas identified in the County resolution approving such district; (2) the County determines there is sufficient secondary egress; and (3) the County determines the adjoining major highways and street networks are sufficient for evacuation as well as safe access for emergency responders under a range of emergency scenarios, as determined by the County. Discourage new subdivisions in all other FHSZs.~~	~~As detailed further in Section 4.17 of this Draft EIR, the Project would provide emergency vehicle access via proposed public streets "A" and "B", in addition to a private access road that would be used as a fire road, for access for emergency and maintenance vehicles. An egress/ingress roadway to the property west of the Project site, proposed Tentative Tract Map (TTM) 74979, would also be provided. Consistent with County Code Title 21, Subdivisions and access requirements of the County Fire Code, the Project's roadways would meet all County access requirements for new residential development in a VHFHSZ. The on-site emergency access route would include a locked gate to prevent the public from obstructing the roadway and would also limit public access to adjacent wildland areas. The gate would comply with all regulations of the County Fire Code, including being operatable by one person if power fails, a Knox Box, and be made of non-combustible materials, as detailed in Section 4.20 of this Draft EIR. As further detailed in Section 4.20, the Project would implement MM 4.20-1, which would provide Project residents with potential egress route information and instructions for following the "Ready, Set, Go!" model of the County in the event of evacuation and include the requirements of the Project's Wildfire Evacuation Plan and the Fire Protection Plan (Appendix M-2). Furthermore, both means of ingress/egress from The Old Road have been analyzed to determine their ability to accommodate anticipated traffic levels. The analysis found that both roadways (Streets "A" and "B") are projected to operate at an acceptable Level of Service and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project site. The proposed multiple vehicular access points, emergency vehicle access, interior street and circulation elements, and proximity of The Old Road/I-5 would ensure safe access for emergency responders under a range of emergency scenarios.~~
~~**Policy S 4.2.** New subdivisions shall provide adequate evacuation and emergency vehicle access to and from the subdivision on streets or street systems that are evaluated for their traffic access or flow limitations, including but not limited to weight or vertical clearance limitations, dead-end, one-way, or single lane conditions.~~	~~**No Conflict.** As discussed above in response to General Plan Policy S-4.1, the Project adequately addresses concerns related to emergency access and evacuation. The Project would provide on-site emergency vehicle access via proposed "A" Street and "B" Street, in addition to a private access road that would provide access for emergency evacuation as well as for maintenance vehicles. This private access road would include a locked gate to limit public access and prevent obstruction in the event of emergency evacuation. Furthermore, the Project's Wildfire Evacuation Plan (Appendix M-2) determined that the Project and existing land uses would be able to evacuate using the identified evacuation routes available to residents. As discussed under Policy S-4.1, the analysis found that both "A" Street and "B" Street are projected to operate at an acceptable Level of Service and would not substantially increase hazards related to queuing of vehicles entering or exiting the Project site. The Project also provides emergency preparedness resources to support situational awareness and household preparedness. The Project's comprehensive approach to emergency access and evacuation planning contributes to the overall safety and resilience of the Project.~~
Policy S 4~~7~~.3. Coordinate with other County and public agencies, such as transportation agencies, and health care providers on emergency planning and	**No Conflict.** As described in Section 4.15, Public Services, of this Draft EIR, coordination and correspondence with the LACoFD indicated that LACoFD Fire Station 124, located at 25870 Hemingway Avenue, Stevenson Ranch, is the primary fire protection service provider to the Project site. Additionally, it is a County requirement for the County to coordinate with itself and other public

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
response activities, and evacuation planning.	agencies for emergency planning and response activities an evacuation planning, and therefore, the Project would not conflict with this policy.
Policy S 47.5. Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.	**No Conflict.** The impact analysis on law enforcement and fire protection provided in Section 4.15, Public Services, of this Draft EIR indicate adequate police and fire resources are available to ensure the increase in demand from the Project can be met.
Safety Element (2015)	
Goal S 1. An effective regulatory system that prevents or minimizes personal injury, loss of life and property damage due to seismic and geotechnical hazards.	
Policy S 1.1. Discourage development in Seismic Hazard and Alquist-Priolo Earthquake Fault Zones.	**No Conflict.** As discussed in Section 4.7, Geology and Soils, of this Draft EIR, the Project site is not located in a Seismic Hazard or Alquist-Priolo Earthquake Fault Zone, and no known active or potentially active faults exist within the Project site.
Policy S 1.2. Prohibit the construction of most structures for human occupancy adjacent to active faults until a comprehensive fault study that addresses the potential for fault rupture has been completed.	**No Conflict.** As discussed above in Section 4.7, Geology and Soils, there are no Holocene-active faults that intersect or are within close proximity to the Project site, and the Project site is not located within an Alquist-Priolo Earthquake Fault Zone as defined by the CGS. Therefore, the Project would not conflict with this policy.
Policy S 1.3. Require developments to mitigate geotechnical hazards, such as soil instability and landsliding, in Hillside Management Areas through siting and development standards.	**No Conflict.** As described in Chapter 3, Project Description, of this Draft EIR, the Project site is in an HMA due to the presence of slopes over 25%. As discussed in Section 4.7, Geology and Soils, of this Draft EIR, the Geotechnical Report prepared for the Project recommends a number of measures to reduce slope instability, such as the removal of potential debris material, building setbacks from ascending slopes, reduction and control of drainage on debris material, construction of debris basins, and the construction of an impact wall. These recommendations would be incorporated within the final Project-design, as required by the CBC. In addition, a large portion (approximately 150 acres) of the Project site would be natural open space. As such, most of the Project site that is located in HMAs would be retained in its natural condition and not developed.
Goal S 2. An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to flood and inundation hazards.	
Policy S 2.1. Discourage development in the County's Flood Hazard Zones.	**No Conflict.** The Project site's lowland areas, located in the northeastern portion of the site, are situated in a 100-year flood zone (Zone A). To minimize risks of flood damage, the Project would result in the clustering of development to allow for engineered slopes and other safety measures that would minimize risk from floods in the developed portion of the Project site. Furthermore, the Project's drainage system would be designed to meet the County's flood control standards to protect the development as well as the remaining floodplain that could be affected by the modification. Since the flood plain would be modified by the Project, a Letter of Map Revision (LOMR) would be prepared and submitted to Federal Emergency Management Agency (FEMA) to remove the northern portion of the Project site west of the Caltrans culvert from the FEMA Flood Zone A

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
	designation. The LOMR would ensure that when the Project site is removed from the flood plain it is designed to ensure that downstream flood impacts are not increased. Additionally, the Project would include approximately 150 acres of natural open on-site. Further specifics on impacts related to potential floods can be found in Section 4.10, Hydrology and Water Quality, of this Draft EIR.
Policy S 2.2. Discourage development from locating downslope from aqueducts.	**No Conflict.** The Project site is not located downslope from an aqueduct and thus would not conflict with this policy.
Policy S 2.3. Consider climate change adaptation strategies in flood and inundation hazard planning.	**No Conflict.** Development of the Project would be clustered within the northeastern portion of the Project site. Additionally, the Project would include approximately 150 acres of natural open space, which would allow for preservation of natural grades and vegetation within this portion of the Project site.
Policy S 2.4: Ensure that developments located within the County's Flood Hazard Zones are sited and designed to avoid isolation from essential services and facilities in the event of flooding.	**No Conflict.** The lowland areas in northeastern portion of the Project site are located within a 100-year flood zone (Zone A), as detailed in Section 4.10, Hydrology and Water Quality, of this Draft EIR. To minimize risks of flood damage, the Project includes an engineered storm drainage system to collect and treat runoff from developed portion of the site and provide flood control protection by constructing four new detention basins and a new flood control channel, which would reduce stormwater flows from the Project site and convey them to the existing culvert under I-5. The drainage system would be designed to meet the County's flood control standards to protect the development as well as the remaining floodplain that could be affected by the modification. Since the flood plain would be modified by the Project, a Conditional Letter of Map Revision (CLOMR), which was requested in May 2024 (included as Appendix G-4 of the Draft EIR), would be processed through and approved by the Federal Emergency Management Agency (FEMA) prior to the approval of storm drain plans and construction of the proposed channel and basins. A LOMR would be processed through and approved by FEMA upon completion of the drainage improvements to officially revise the Flood Insurance Rate Maps (FIRM) to remove the Project site from being within a Special Flood Hazard Area. The LOMR would ensure that when the Project site is removed from the flood plain, it is designed to ensure that downstream flood impacts are not increased. As a result, the Project site would not be isolated from access to essential services and facilities in the event of a flood.
Policy S 2.5. Ensure that the mitigation of flood related property damage and loss limits impacts to biological and other resources.	**No Conflict.** The Project does not include mitigation for flood-related property damage or loss and as such would not conflict with this policy. However, as discussed in Section 4.4., Biological Resources, of this Draft EIR, the Project does include mitigation for direct impacts to aquatic resources. Impacts to jurisdictional aquatic resources, including streams and riparian habitat, as a result of Project development is primarily addressed through compensatory mitigation at a ratio of 1:1, or as required by the regulatory agencies, through the preservation, enhancement, and/or restoration of jurisdictional waters and associated riparian vegetation. Implementation of MM 4.4-1, MM-4.4-4 through MM-4.4-7, MM-4.4-9, and MM-4.4-14 would result in adequate compensatory mitigation and would reduce the Project's impacts to jurisdictional aquatic resources to less than significant.

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
Policy S 2.6. Work cooperatively with public agencies with responsibility for flood protection, and with stakeholders in planning for flood and inundation hazards.	No Conflict. The Project Applicant/Developer will work cooperatively with all applicable public agencies with responsibility for flood protection and with stakeholders for flood and inundation hazards, including the County and FEMA. As discussed above in response to Policy S 2.4, a LOMR would be processed through and approved by FEMA upon completion of the drainage improvements to officially revise the FIRM to remove the Project site from being within the Special Flood Hazard Area. The County's Floodway Map would also be revised in accordance with Public Works' Floodplain Management Plan requirements that includes measures to review and update flood risk hazards when new data becomes available.
Goal S 3. An effective regulatory system that prevents or minimizes personal injury, loss of life, and property damage due to fire hazards.	
Policy S 3.1. Discourage high density and intensity development in VHFHSZs.	No Conflict. As discussed in Section 4.20, Wildfire, of this Draft EIR, the Project site is located within a VHFHSZ that falls within the SRA. However, consistent with County Code Title 21, Subdivisions and access requirements of the County Fire Code, the Project's roadways would meet all County access requirements for new residential development in a VHFHSZ. The private access road, which would also serve as an emergency access route, would also include a gate that would comply with all regulations of the County Fire Code. The Project's Wildfire Evacuation Plan (Appendix M-2) determined that the Project, including any existing land uses would be able to evacuate within identified potential evacuation routes available to residents and provides emergency preparedness resources to support situational awareness and household preparedness. As discussed in Section 4.9, Hazards and Hazardous Materials, of this Draft EIR, the Project would implement a fire protection plan, which includes measures such as using fire-retardant construction materials for structures adjoining the natural open space areas, establishment of fuel modification/management zones to provide defensible space and assist in wildland fire suppression, and use of fire retardant and drought tolerant landscaping. Furthermore, per the Los Angeles County Fire Code (Appendix C, Section C105), installation of fire hydrants spaced at 600 feet or less would be implemented. In addition, the Applicant would comply with the Developer Fee Program, with the LACoFD to further enhance fire protection to the proposed development. The preliminary fuel modification plan for the perimeter of the proposed development would incorporate required set back zones, fire road clearance, long-term maintenance requirements, and conceptual planting. Each fuel modification zone would be designed to specifically address fire suppression. The zones would include requirements for minimum structure setbacks, permanent irrigation systems, fire retardant plants from a County-approved plant list, and landscape and planting maintenance. With the implementation of these features and other measures, fire hazard in the VHFHSZ would be reduced to a less-than-significant level. In addition, while the Project would cluster development in the northeastern portion of the Project site, thereby minimizing the size of the development footprint and interface with the undeveloped open space at the Project site, the Project would still maintain conformity with the permitted density of the H2 designation. Therefore, for these reasons, the Project would not conflict with this policy.

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
Policy S 3.3. Ensure that the mitigation of fire related property damage and loss in FHSZs limits impacts to biological and other resources.	The Project includes fuel modification zones (FMZs) in accordance with all applicable state and local defensible space requirements. An FMZ is a specific area where vegetation has been removed, planted, or modified to increase the likelihood that a structure will survive a wildfire; to improve defensible space around that structure needed for firefighting activities; and to prevent direct flame contact with structures. In order to provide a conservative analysis, the Draft EIR considers FMZs to be impacted areas for the purposes of biological resource impacts and its associated mitigation requirements. Importantly, FMZs are open spaces that are not developed with structures and do still function to support locally present plant and wildlife species as well as other important ecosystem services. All biological resource associated impacts are fully mitigated to a less than significant level as discussed in Section 4.4, Biological Resources of the Draft EIR. The Project would also cluster development in the northeastern portion of the Project site, thereby minimizing the development footprint and the required FMZs adjacent to wildland areas at the Project site.
Policy S 3.4. Reduce the risk of wildland fire hazards through the use of regulations and performance standards, such as fire resistant building materials, vegetation management, fuel modification and other fire hazard reduction programs.	The Project is required to comply with all building and fire codes that are applicable at the time of building permit approval and construction. Currently, relevant codes include the International Fire Code and the Los Angeles County Fire Code (Title 32 of the Los Angeles County Municipal Code, hereby referred to as "County Fire Code"), which adopts with amendments the California Fire Code, Chapter 7A of the California Building Code, the California Residential Code (Section 237), and would be subject to the provisions in California Public Resources Code Section 4291 as well as the Los Angeles County Fire Department (LACoFD) guidelines for fuel modification plans. These codes include provisions for fuel modification, use of ignition-resistant building materials, and defensible space for fire prevention and safety to aid in the protection of residents and structures. In addition to ignition-resistant construction measures, including ember-resistant vents to minimize the potential for structure fires from airborne embers, the Project has provided a customized fuel modification plan that includes 200-foot-wide fuel modification zones to meet the Los Angeles County Fire Code (Section 325.2.1). Additionally, as stated in Section 4.20, Wildfire, of the Draft EIR, in the event the full 200 feet is not achievable on site, LACoFD requires the neighboring property to provide brush thinning to achieve the remaining fuel modification (i.e., the on-site fuel modification is 150 feet, the neighboring property would be required to provide brush thinning for the remaining 50 feet). Further, where the full 200 feet of fuel modification is not maintained by the Project, as detailed in MM-4.20-2, Alternative Materials and Methods, of Section 4.20, Wildfire, of the Draft EIR, the Project would provide enhanced construction features (e.g., walls, windows, and vents). Moreover, because off-site FMZ (i.e., brush thinning) may not be controlled by the HOA due to access privileges or other constraints, such as for neighboring properties, off-site brush thinning would be enforced by LACoFD, and the Project HOA would assist with this annual maintenance to the extent the neighboring property owners allow.
Policy S 3.5. Encourage the use of low-volume and well-maintained vegetation that is compatible with the	**No Conflict.** As discussed in Section 3.2.5, On-Site Landscaping and Protected Tress in Chapter 3, project Description, of this Draft EIR, the Project landscaping would use native, drought-tolerant, and climatically appropriate species. The overall planting palette would be primarily low maintenance and low water use, and plantings would be grouped and organized according to consistent seasonal

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
area's natural vegetative habitats.	maintenance practices, water use, and solar exposure. The use of native plants is recommended; however, the palette could also reflect the planting and geographic diversity of Southern California and use species that are climatically appropriate. Approximately one-quarter of the Project site would be planted with restored native habitat planting, including indigenous oak trees. In accordance with MM 4.4-6, Invasive Species Prevention (discussed in Section 4.4., Biological Resources of the Draft EIR), the Project shall not include invasive plant species. Project landscape palettes shall be reviewed and approved by the County to ensure that invasive plant species are excluded.
Policy S 3.6. Ensure adequate infrastructure, including ingress, egress, and peak load water supply availability for all projects located in FHSZs.	**No Conflict.** The Project would incorporate infrastructure to ensure fire safety, including a new 2-million-gallon water tank to ensure reliable fire flow water pressure for the new residential structures, fire hydrants, and an emergency access road. The development of the proposed dwelling units and buildings on-site would be required to comply with Chapter 7 of the California Fire Code, which requires the use of ignition resistant building materials, smoke barriers, sprinkler systems, fire protection systems, and door and window designs to avoid ember intrusion. The Project would provide emergency vehicle access via proposed public streets "A" and "B", in addition to a private access road that would be used for access for emergency and maintenance vehicles. An egress/ingress easement to the property west of the Project site, proposed Tentative Tract Map (TTM) 74979, would also be provided. Consistent with County Code Title 21, Subdivisions and access requirements of the County Fire Code, the Project's roadways would meet all County access requirements for new residential development in a VHFHSZ.
Policy S 3.7: Site and design developments located within FHSZs, such as in areas located near ridgelines and on hilltops, in a sensitive manner to reduce the wildfire risk.	**No Conflict.** Through approval of the density-controlled development CUP, which is the County's mechanism for encouraging flexible siting and design techniques in hillside areas, and as required by Section 22.102.090, SEA Development Standards, of the County Code, the Project would designate approximately 150 acres of the approximately 233-acre Project site as preserved open space and improved open space. As such, the Project would preserve areas with steep slopes by clustering development in accordance with the provisions of the Zoning Ordinance. Development areas within the Project site would be stabilized during construction when there is a higher likelihood of erosion due to exposed soils through the use of drainage improvements and bank stabilization. As discussed in Section 4.7, Geology and Soils, of this Draft EIR, during operation, hardscape, managed landscape, and managed slopes would have low erosion potential. The Project would also adhere to design and siting requirements to avoid erosion, unstable slopes, and significant ridgelines. As discussed in Section 4.10, Hydrology and Water Quality, and in Section 4.7 of this Draft EIR, with implementation of the Geotechnical Report's recommendations and compliance with all applicable regulations, the Project would not result in new or increased impacts related to landslides, flooding, runoff, changes in drainage patterns, or slope stabilization. Further, as discussed in Section 4.20, Wildfire, of this Draft EIR, with the implementation of MM-4.20-1 through MM-4.20-3, the Project would reduce potential exposure of Project occupants to the uncontrolled spread of wildfire or significantly exacerbate wildfire risk to less than significant.

Table 4.11-1. Potential to Conflict with Applicable General Plan Goals and Policies

Goal or Policy	Analysis of Project Conflict
Goal S 4. Effective County emergency response management capabilities.	
Policy S 4.3. Coordinate with other County and public agencies, such as transportation agencies, and health care providers on emergency planning and response activities, and evacuation planning.	No Conflict. As described in Section 4.15, Public Services, of this Draft EIR, coordination and correspondence with the LACoFD indicated that LACoFD Fire Station 124, located at 25870 Hemingway Avenue, Stevenson Ranch, is the primary fire protection service provider to the Project site. Furthermore, as discussed in the Wildfire Evacuation Plan (Appendix M-1) and detailed in MM-4.20-1, Wildfire Education Program (discussed in in Section 4.20, Wildfire of the Draft EIR), the Project's HOA would provide information to occupants regarding notifying the County Office of Emergency Management and Health and Human Services of special needs occupants so that accommodations for their notification (Accessible Alert LA County, Community Emergency Response Team programs, or other), transportation or other special requirements can be provided during an emergency evacuation. Occupants would be advised of their options during an emergency by law enforcement or fire officials. Additionally, MM-4.20-1 requires establishment of a Fire Safety Coordinator position as part of the HOA Board who would be responsible for preparing and implementing an educational program with wildfire-related information to be provided to all on-site residents, including residents of the senior housing apartment complex. MM-4.20-1 also requires that the Fire Safety Coordinator/committee shall be responsible for creating a senior housing carpool program that shall ensure that all seniors who are not able to safely evacuate on their own, including mobility-challenged individuals, are accounted for and transported during an emergency evacuation.
Policy S 4.5. Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.	No Conflict. Impact analysis on law enforcement and fire protection are provided in Section 4.15, Public Services, of this Draft EIR. For law enforcement, the Project would pay the County's law enforcement facilities mitigation fee per Section 22.266, Law Enforcement Facilities Fee, of the Zoning Code, which explicitly applies to the unincorporated urban expansion areas of Santa Clarita. With respect to fire protection, the Project Applicant would pay the Fire Facility Fee, which constitutes full mitigation for development impacts associated with the need for additional fire protection services or facilities.
...	...
Public Services and Facilities Element	
Goal PS/F 8. A comprehensive public library system	
Policy PS/F 8.2. Support library mitigation fees that adequately address the impacts of new development.	No Conflict. As discussed in 4.15, Public Services, of this Draft EIR, the Stevenson Ranch Library would serve the Project site. Correspondence with the LACL indicated that based on LACL's service level guidelines, the Stevenson Ranch Library does not currently meet service standards for the population of the service area. To ensure that the Project pays its fair share of costs, the Applicant would comply with the Developer Fee Program for the LACL, as provided in Chapter ~~22.248.050~~22.264.050, Library Facilities Mitigation Fee, of the Zoning Code.

Section 4.12, Mineral Resources

Section 4.12.1, Existing Conditions, Page 4.12-3

The Project site is currently undeveloped, and there are no habitable buildings or structures onsite; however, some remaining structures include fencing, foundation footings, and other minor features associated with a former water tank, water wells, irrigation lines, and Southern California Edison (SCE) electrical distribution lines. According to the California Geologic Energy Management Division (CalGEM) Well Finder map, the northern portion of the Project site is within the Lyon Canyon (ABD) Oil/Gas Field, but there are no on-site oil wells located within the Lyon Canyon (ABD) Oil/Gas Field (CalGEM 2022). Additionally, there is one plugged and abandoned subsurface oil well (Ayers 1 – API ~~03706017~~ 0403706017) previously constructed by the Sun Drilling Company, located in the center of the Project site. The approximate location of this plugged well is shown on Figure 4.12-1. A California Division of Oil, Gas, and Geothermal Resources (DOGGR) Well Summary Report prepared in 1961 obtained by CalGEM indicated that drilling of the well was completed on March 10, 1961. The total well depth reached 9,785 feet below ground surface (bgs) and was plugged and formally abandoned one day later, on March 11, 1961 (CalGEM 2022). The well has been inactive since March 1961.

Section 4.12.5, Impact Analysis, Page 4.12-7

According to the CalGEM Well Finder map, the northern portion of the Project site is within the Lyon Canyon (ABD) Oil/Gas Field, but there are no on-site oil wells located within the Lyon Canyon (ABD) Oil/Gas Field (CalGEM 2022). There is one identified plugged subsurface oil well at the site (Ayers 1 – API ~~03706017~~ 0403706017), south of the Lyon Canyon (ABD) Oil/Gas Field, which was previously owned by the Sun Drilling Company, that could be considered a source of a mineral resource recovery site. The oil well was plugged and abandoned on March 11, 1961 and has been inactive since it was plugged. As shown on Figure 4.12-1, Mineral Resource Zones, the oil well is located within the center of the Project site (CalGEM 2022). Reportedly, the well did not produce and was subsequently plugged. Therefore, the Project would not result in a loss of availability in a resource recovery site (Appendix F). Because the Project site contains an inactive oil well even though it never produced oil, the Applicant must consult with CalGEM to confirm that the well has been adequately abandoned, as discussed in Section 4.9, Hazards and Hazardous Materials of this Draft EIR.

Section 4.12.5, Impact Analysis, Page 4.12-8

Additionally, as described in Section 4.12.1 and in response to Threshold 4.12a, above, there is one identified plugged subsurface oil well (Ayers 1 – API ~~03706017~~0403706017), previously owned by the Sun Drilling Company. Oil wells could be considered a source of a mineral resource recovery site. The plugged oil well is located within the center of the Project site and has been identified on the CalGEM Well Finder map, which has been compiled pursuant to Government Code Section 65962.5 (discussed in Section 4.9, Hazards and Hazardous Materials of this Draft EIR). Please refer to Figure 4.12-1 for the approximate location of this plugged well. Reportedly, the well did not produce and was subsequently plugged, therefore, the Project would not result in a loss of availability of a locally-important mineral resource recovery site (Appendix F). Because the Project site contains an inactive oil well, the Applicant must consult with CalGEM to confirm that the well has been adequately abandoned, as detailed in Section 4.9, Hazards and Hazardous Materials, of this Draft EIR. However, implementation of the Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan, as the onsite oil well was not productive, and do not currently and have not historically contributed to important mineral resource recovery.

Section 4.15, Public Services

Page 4.15-1

This section describes the existing conditions of the Trails at Lyons Canyon Project (Project) site and vicinity related to public services, identifies associated regulatory requirements, thresholds of significance, methodology, impact analysis, cumulative impacts analysis, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on publicly available data and reports from the Los Angeles County Fire Department, Los Angeles County Sheriff's Department, Los Angeles County Department of Parks and Recreation, ~~Los Angeles~~LA County Library, Los Angeles County Department of Regional Planning, the City of Santa Clarita Department of Parks, Recreation and Community Services, as well as the following:

Appendix A-2 Notice of Preparation Comment Letters, dated June/July 2022

Appendix I-1 Los Angeles County Fire Department Request for Information Letter, dated July 2021

Appendix I-2 Los Angeles County Sheriff's Department Request for Information Letter, dated June 2021

Appendix I-3 William S. Hart Union High School District Request for Information Letter, dated July 2021

Appendix I-4 Newhall School District Request for Information Letter, dated June 2021

Appendix I-5 Los Angeles County Department of Parks and Recreation Request for Information Letter, dated July 2021

Appendix I-6 ~~Los Angeles~~LA County Library Request for Information Letter, dated September 2021

Appendix M-1 Fire Protection Plan, prepared by Dudek, dated November 2023

Other sources consulted are listed in Section 4.15.9, References.

Section 4.15.1, Existing Conditions, Page 4.15-6

The ~~Los Angeles~~LA County Library (LACL) system was established in 1912 and provides library services to over 3.4 million residents living in the unincorporated County and to residents of 44 cities within the County (LACL 2022a). The LACL has a service area of over 3,000 square miles (LACL 2022a). The LACL system is a special fund County department (LACL Fund) operating under the direction of the Board of Supervisors (County of Los Angeles 2021). Funding comes primarily from the Library's statutory share of the Countywide tax levy and voter-approved taxes (County of Los Angeles 2021). The County applies a library facilities mitigation fee to new residential developments in the unincorporated areas. This fee is intended to mitigate the significant adverse impacts of increased residential development on the LACL system (County of Los Angeles 2014). The LACL operates community libraries serving unincorporated areas of the County, including the communities of Santa Clarita Valley, as well as 49 incorporated cities (Appendix A-2). The LACL uses the following library service level guidelines to determine adequacy of community library services (Appendix A-2):

Section 4.15.1, Existing Conditions, Pages 4.15-10 and 4.15-11

The nearest LACL to the Project site is the Stevenson Ranch Library located at 25950 The Old Road in Stevenson Ranch. The Stevenson Ranch Library is approximately 1.7 miles north of the Project site and includes 11,551 sf of space, a collection of ~~52,662~~47,278 books, magazines, and media, and ~~21~~20 public computers as of ~~July 2022~~June 2024 (Appendix A-2; LACL 2025). The Stevenson Ranch Library is open ~~five~~six days per week, Monday through ~~Friday~~Saturday, and is staffed by ~~3~~4 full time staff (~~2~~3 Librarians and 1 Library Assistant II) and ~~10~~7 part-time staff (~~6~~5 Library Associates and ~~4~~2 Library Pages) (Appendix I-6; LACL 2025). Amenities include ~~a~~ study rooms and a meeting room, free printing, laptop/hotspot kits available for checkout, and self-checkout kiosks (Appendix I-6; LACL 2025).

Castaic Library, located at 27971 Sloan Canyon Road in the City of Castaic, is 10.6 miles from the project site and is the next closest library. Castaic Library has a facility size of 12,232 sf, a collection of ~~42,515~~37,145 books and other library materials, and ~~26~~23 public access computers. Castaic Library serves the residents of unincorporated Castaic area of the County of Los Angeles (County), a population of ~~29,232~~28,485. Castaic Library staffing includes 3 full time staff (2 Librarians and 1 Library Assistant) and 4 part-time staff (~~3~~ Library Associates ~~and 1 Library Pages~~). Amenities include ~~a~~ study rooms and a meeting room, printing, laptop/hotspot kits and Kindle eReaders available for checkout, a self-service homework center, and self-checkout kiosk (Appendix I-6; LACL 2025).

Based on LACL's service level guidelines and according to LAPCL staff, the Stevenson Ranch Library does not currently meet service standards for the population of the service area and has a ~~5,275~~19,608 collection items, 4 public access computers, and 610 sf facility space deficit (Appendix A-2; LACL 2025). However, a new library is planned within FivePoint Valencia, formerly referred to as Newhall Ranch, located in the Santa Clarita Valley Planning Area approximately 3.4 miles from the Project site. This project would be implemented over the course of the next 20 to 30 years and would be accessible to residents of the County (Appendix I-6). Further, in efforts to minimize the impact of residential projects on library services in the County, the LACL collects a one-time Library Facilit~~at~~ies Mitigation Fee at the time building permits are requested for all new residential dwellings located within unincorporated areas of the County. The mitigation fee for Planning Area 1 (Santa Clarita Valley) for Fiscal Year ~~2022-23~~2024-25 is $~~1,096~~1,182 per dwelling unit (Appendix A-2; LACL 2025). The LACL also collects an annual special tax levied upon parcels within the unincorporated areas of the County. The LACL's special tax rate for Fiscal Year ~~2022-23~~2024-25 is $~~33.20~~34.54 per parcel (Appendix A-2; LACL 2025).

Section 4.15.1, Regulatory Requirements, Page 4.15-22

Pursuant to Section 22.264.030(B), no tract map, parcel map, Conditional Use Permit, other land use permit, or other entitlement, shall be approved unless payment of the Library Facilities Mitigation Fee is made a condition of approval for any such entitlement. The fee is a uniform fee within each library planning area, based on the estimated cost of providing the projected library facility needs in each library planning area, as identified in Table 22.264.050-A of Chapter 22.264. Within Planning Area 1 (Santa Clarita Valley), where the Project site is located, the Library Facilit~~at~~ies Mitigation Fee is $~~1,096~~1,182 per dwelling unit (Appendix A-2; LACL 2025).

Section 4.15.5, Impact Analysis, Page 4.15-41

The nearest LACL to the Project site is the Stevenson Ranch Library located at 25950 The Old Road in Stevenson Ranch. The Stevenson Ranch Library is approximately 1.7 miles north of the Project site and is a facility with 11,551 sf of space, a collection of ~~52,662~~47,278 books, magazines, and media, and ~~21~~20 public computers as of June ~~2020~~2024 (Appendix I-6; LACL 2025).

Section 4.15.5, Impact Analysis, Page 4.15-42

As discussed above, the Project would have an estimated population of 1,785 new residents and 10 employees at the recreation center, as detailed in Section 4.14, Population and Housing, of this Draft EIR. These residents and employees would be serviced by the Stevenson Ranch Library— the nearest library to the Project site. The LACL service guidelines state that its ultimate goal is to provide a library facility that has 0.5 square feet of library space per capita, and one to three items of library materials per thousand people served (Appendix I-6). Under existing conditions, the Stevenson Ranch Library does not meet the does not meet the minimum requirements for the population service area, as the library has a deficiency of ~~5,275~~19,608 collection items, 4 public access computers, and 610 sf facility space. The increase in residents on the Project site would increase demands for library services provided at the Stevenson Ranch Library. Based on the LACL's service level guidelines, the Project's projected population increase of 1,785 people would require an additional 4,909 collection items and two (2) additional public access computers~~; and according to the LACL, no additional library space is needed to serve the Project~~, and 893 sf of facility space. This would contribute to LACL's current deficiency at Stevenson Ranch Library as the library would need ~~10,286~~24,516 additional collection items, 6 public access computers, and 1,503 sf of facility space, to service the existing population plus the Project (Appendix A-2; LACL 2025).

Future residential and nonresidential development associated with the Project would be required to pay the LACL's special tax rate of $~~33.20~~34.54 per parcel for the ~~2022-2023~~2024-25 fiscal year, which may increase annually. In an effort to minimize the impact of residential projects on library services, LACL also collects a one-time library facilities mitigation fee (County Code Section ~~22.248.050~~22.264.050 [Library Facilities Mitigation Fee]) at the time building permits are requested for all new residential dwelling units located within the unincorporated areas of the County (Appendix A-2). The current developer fee rate for the Santa Clarita Valley's unincorporated area is $~~1,096~~1,182 per dwelling unit (Appendix A-2; LACL 2025). This is a one-time library facilities mitigation fee on new construction in the unincorporated County that would help offset demand for library services. This fee would amount to $~~558,960~~602,820 for development of 510 dwelling units on-site. In addition, correspondence with the LACL indicated that, while there are no plans to expand the Stevenson Ranch Library, plans have been set forth to build a new library within the new FivePoint Valencia development over the next 20 to 30 years (Appendix I-6). The required Library Facilities Mitigation Fee payment would ensure that the Project's impact on the library system would be less than significant. Therefore, impacts related to the Project's potential to create capacity of service level problems or result in substantial adverse physical impacts for library facilities would be less than significant.

Section 4.15.5, Cumulative Impact Analysis, Pages 4.15-50 and 4.15-51

The Project and Cumulative Projects would result in a temporary increase in population during construction due to the influx of construction workers. Some of these construction workers are expected to reside in the area and, therefore, would not place additional pressure on existing library facilities. Generally, an increase is anticipated to be negligible because construction workers are highly transient in their work location, the nearest library is several miles from the Project site, library hours are not conducive to daily construction schedules, and likely would use libraries near their place of residence. Therefore, and for the reasons stated above, construction of the Project is not expected to increase demand on existing park facilities to residents of the Project and Cumulative Projects would be serviced by the Stevenson Ranch Library, while Cumulative Projects in the City of Santa Clarita would also be serviced by the Santa Clarita Public Library. Future residential and nonresidential development associated with the Project and Cumulative Projects within unincorporated Los Angeles County would be required to pay the LACL's special tax rate of $~~33.20~~34.54 per parcel for the ~~2022-2023~~2024-25 fiscal year, which may increase annually (Appendix A-2). Future residential development in the unincorporated County (including the Project and Cumulative

Projects LA1 through LA13), would also be required to pay the County's library facilities mitigation fee (Zoning Code Section ~~22.248.050~~22.264.050). The fee for projects within the Santa Clarita Valley (Area 1) is $~~1,096~~1,182 per dwelling unit during preparation of this Draft EIR (Appendix A-2; LACL 2025). Cumulative Projects within City of Santa Clarita would be subject to the City's Library Facilities and Technology Mitigation Fee. These one-time library facilities mitigation fees on new construction would help offset demand for library services due to population growth, both for the LACL system and City of Santa Clarita Library. In addition, correspondence with the LACL indicated that, while there are no plans to expand the Stevenson Ranch Library, plans have been set forth to build a new library within the new FivePoint Valencia development over the next 20 to 30 years, which could serve the Project and all of the Cumulative Projects (Appendix I-6). Additionally, as detailed in Table 2-2 of Chapter 2, Environmental Setting, Cumulative Project LA7 (Mission Village) would include development of one library. According to the LACL, developer fees collected for the Project would mitigate for impacts on the library system (Appendix I-6). As developer fees would be collect for the Project and Cumulative Projects in the City and County, these fees can similarly be assumed to mitigate for cumulative impacts through the provision of additional facilities, materials, and/or services.

Section 4.15.9, References, Pages 4.15-55 and 4.15-56

LACL (~~Los Angeles~~LA County Library). 2022a. "About the Library." Accessed July 5, 2022. https://lacountylibrary.org/aboutus/.

LACL. 2025. Comments for the Draft Environmental Impact Report (DEIR) for the Trails at Lyons Canyon Project, Project No. 2021-001195-(5). From Skye Patrick, County Library. To Erica G. Aguirre, Department of Regional Planning. March 11, 2025.

Section 4.19, Utilities and Service Systems

Section 4.19.5, Impact Analysis, Page 4.19-22

Wastewater Treatment. Based on a SCVSD will-serve letter for the Project, included as Appendix L-6, the SCVSD has sufficient capacity to accommodate wastewater flows from the Project, assuming 510 residential units and a recreation center. Projected wastewater flows are based on LACSD's average wastewater generation factors. Based on the Sewer Area Study analysis, the expected average wastewater flow from the Project site would be 0.525 cubic feet per second (cfs), based on 504 residential units, a recreation center, and a fire station. Subsequent to completion of the Sewer Area Study, the number of detached and attached dwelling units was increased by six units, from 504 to 510 units, and the fire station was removed from the Project. As a result, peak projected wastewater flows decreased from 0.525 cfs to 0.511 cfs (Appendix L-5)~~, which is equivalent to 0.33 mgd~~. According to LACSD, the Project's average wastewater flow would be 102,174 gallons per day (or approximately 0.1 mgd) (LACSD 2025). Wastewater generated within the Santa Clarita Valley is treated by the SCVSD at the Saugus and Valencia WRPs, which are interconnected, forming the SCVJSS. The SCVJSS has a combined permitted treatment capacity of 28.1 mgd and currently processes an average flow of 19.0 mgd, resulting in an available treatment capacity of 9.1 mgd.

Section 4.19.5, Impact Analysis, Page 4.19-23

In addition, considering the available treatment capacity of the SCVJSS is 9.1 mgd, the expected Project wastewater flow of ~~0.33~~0.1 mgd would constitute ~~4.0~~1.0% of that available capacity. Based on this small percentage, the Project would not result in the relocation or construction of a wastewater treatment facility, the relocation or

construction of which would cause significant environmental impacts. Impacts would be less than significant, and no mitigation is required.

Section 4.19.5, Impact Analysis, Pages 4.19-28 and 4.19-29

As previously described in response to Threshold 4.19a, based on a SCVSD will-serve letter for the Project, included as Appendix L-6, the SCVSD has sufficient capacity to accommodate wastewater flows from the Project, assuming 510 residential units and a recreation center. Projected wastewater flows are based on LACSD's average wastewater generation factors. Based on the Sewer Area Study analysis, the expected average wastewater flow from the Project site would be 0.525 cfs, based on 504 residential units, a recreation center, and a fire station. Subsequent to completion of the Sewer Area Study, the number of detached and attached dwelling units was increased by six units, from 504 to 510 units, and the fire station was removed from the Project. As a result, projected wastewater flows decreased from 0.525 cfs to 0.511 cfs (Appendix L-5)~~, which is equivalent to 0.33 mgd~~. According to LACSD, the Project's average wastewater flow would be 102,174 gallons per day (or approximately 0.1 mgd) (LACSD 2025). Wastewater generated within the Santa Clarita Valley is treated by the SCVSD at the Saugus and Valencia WRPs, which are interconnected, forming the SCVJSS. The SCVJSS has a combined permitted treatment capacity of 28.1 mgd and currently processes an average flow of 19.0 mgd, resulting in an available treatment capacity of 9.1 mgd. Based on this treatment capacity, the expected Project wastewater flow of ~~0.33~~0.1 mgd would constitute ~~4.0~~1.0% of that available capacity.

Section 4.19.9, References, Page 4.19-38

LACSD. 2025. Second Response to Trails at Lyons Canyon Project. From Patricia Horsley, Facilities Planning Department. To Erica G. Aguirre, Department of Regional Planning. January 3, 2025.

Section 4.20, Wildfire

Section 4.20, Wildfire, Page 4.20-1

Appendix M-2 Wildfire Evacuation Plan (WEP), prepared by Dudek, dated ~~October 2023~~ June 2025

Section 4.20.5, Impact Analysis, Page 4.20-26

Appendix M-2 includes the detailed results of evacuation modeling for the Project and surrounding areas. As stated in Appendix M-2, using Vissim, a microscopic, multimodal traffic flow modeling software used to simulate different traffic conditions, it was determined that it would require ~~43~~ 46 minutes to evacuate the existing land uses along the southern side of Pico Canyon Road and west of The Old Road, and it would require 50 minutes to evacuate just the proposed Project's population. For evacuation of the Project site, modeling assumes vehicular traffic would use both available egress routes on site and all traffic would move north along The Old Road to simulate conditions similar to the 2016 Sage Fire, which included the closure of The Old Road to southbound traffic. Under the scenario where both existing land uses and the Project site would be evacuated simultaneously, it is estimated to take 1 hour and ~~26~~ 29 minutes to evacuate the Project site and 1 hour and 23 minutes to evacuate the existing surrounding land uses ~~all populations~~. The Project would increase evacuation times for existing populations by up to 37 minutes for the surrounding land uses, when compared to existing conditions. It is important to note, the evacuation time does not depict the time for each population modeled, but rather the time needed to evacuate all populations modeled. Therefore, the evacuation times for existing land uses and the Project remain within the 90-minute timeframe. Further, the analyzed timeframe is based on a very conservative scenario, in which all vehicles belonging

to households in the study area would be used in the evacuation, instead of the necessary number of vehicles needed to evacuate the impacted population; therefore, actual evacuation times would be expected to occur over a shorter time frame.

Section 4.20.6, Cumulative Impact Analysis, Page 4.20-54

As discussed under Threshold 4.20a above and in Appendix M-2, it was determined that it would require ~~43~~ 46 minutes to evacuate the existing land uses along the southern side of Pico Canyon Road and west of The Old Road, and it would require 50 minutes to evacuate just the proposed Project's population. Under the scenario where both existing land uses and the Project would be evacuated simultaneously, it would require 1 hour and ~~20~~ 23 minutes to evacuate the surrounding land uses and 1 hour and ~~26~~ 29 minutes to evacuate the proposed Project site. This would be an increase of 37 minutes for the surrounding land uses, when compared to existing conditions. Therefore, the evacuation times for existing land uses and the Project remain within the 90-minute timeframe. When considering the cumulative projects analyzed in the ~~Transportation Impact Analysis~~ WEP's evacuation analysis (i.e., Cumulative Projects LA1, Canyon View Estates, LA2, Tentative Tract Map 74979, and ~~SC1~~ LA3, Aidlin Hills), it was determined it would take ~~57~~ 1 hour and 3 minutes to evacuate surrounding land uses with existing conditions plus Cumulative Projects and 1 hour and ~~38~~ 40 minutes to evacuate surrounding land uses with existing conditions plus ~~c~~Cumulative Projects plus the Project, an increase of 37 minutes for the surrounding land uses when compared to the cumulative without Project conditions (~~Appendix J,~~ Appendix M-2). It would take 1 hour and 43 minutes to evacuate the Project site with existing conditions plus Cumulative Projects. Evacuation of existing conditions, the Project, and cumulative projects did not consider the paved extension that would allow for potential future access to off-site property, Tentative Tract Map 74979 (Cumulative Project LA2). Given Cumulative Project LA2's proximity to Stevenson Ranch, it is unlikely that Cumulative Project LA2 would be evacuated through the Project via the proposed paved extension, which would require evacuating vehicles to traverse open space that is proximate to unmaintained fuels. Additionally, evacuation would likely be phased in an early evacuation scenario, which would allow vehicles to evacuate via primary evacuation routes. However, in the event of a short-term evacuation notice, some evacuation traffic could use the paved extension, but the number of vehicles would be low and impacts would not be significant. With the addition of evacuation traffic from cumulative projects, the Project and cumulative projects west of I-5 would substantially conform to the 90-minute timeframe established by FEMA.

Section 4.20.7, Mitigation Measures, Pages 4.20-62 and 4.20-63

MM-4.20-1 Wildfire Education Program.

The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions for the Project shall require that the HOA include a Fire Safety Coordinator position as part of the HOA Board, who shall be responsible for preparing and implementing ~~prepare~~ an educational program with wildfire-related information, including the Wildfire Evacuation Plan (WEP) and the Fire Protection Plan (FPP) requirements, to be provided to all residents and occupants, including residents and occupants of the senior affordable housing units. Similarly, the Property Manager(s) of the senior affordable housing shall serve as the Fire Safety Coordinator for the affordable housing residents and shall be responsible for preparing and implementing an educational program with wildfire-related information, including the WEP and the FPP requirements to be provided to all residents and occupants. ~~, including the Wildfire Evacuation Plan (WEP) and the Fire Protection Plan (FPP) requirements~~. The Covenants, Conditions, and Restrictions will be submitted to the County of Los Angeles (County) prior to issuance of certificate of occupancy. The educational program shall be prepared in easy-to-understand, graphically based materials and shall be annually reviewed and

updated, as appropriate, in order to maintain high wildfire awareness. Program features shall include, but may not be limited to, the following:

1. Biannual email and mailers: Residents and occupants of all dwelling units on the Project site, including the senior affordable housing rental units, shall be provided with biannual emails and mailers in April and in August that include information such as reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires. Links to various resources on where to get trusted information, such as the Los Angeles County Fire Department (LACoFD), 211 Los Angeles County, and Ready Los Angeles County, shall be provided and updated annually, as necessary. Additionally, at least once a year, information on the following shall be provided in the email and mailer: (1) how to notify the County Office of Emergency Management (OEM) and Health and Human Services of special needs and/or required accommodations (Accessible Alert LA County, CERT programs, or other), for transportation or other special services; and (2) how to prepare for evacuation of pets and how to register for assistance with pet evacuations.
2. Website: A dedicated community website shall be developed and maintained by the HOA with more detailed information and resources about wildfire awareness, prevention, and evacuation. The website address shall be sent to all residents of the Project, including occupants of the senior affordable housing units. The website shall serve as a centralized resource for the fire and evacuation education program and include information from the FPP and WEP. In addition to general emergency preparedness education, the website shall include information that is included in emails, mailers, and workshops/webinars. The website shall have up-to-date fire watch and red flag warning alerts, as well as information on restrictions during fire weather conditions. Residents shall also be able to use the website to sign up for an annual residential defensible space inspection from the HOA fire safety committee.
3. New resident packet: All residents and new residents in the future shall be presented with a wildfire awareness and safety package upon purchase or rental of a residence. Within the package will be a USB drive with the WEP, FPP (which includes information on the regional fire hazard, how to build a go-bag, and tools to prepare a household evacuation plan), and a list of agencies and resources for receiving trusted information.
4. Emergency alert campaign: Residents shall be encouraged to sign up for Alert LA County. Alert LA County is the mass notification system for emergency alerts, weather alerts, health notifications, building alerts, and other updates from County, state, and federal agencies. Reminders shall be sent out in the biannual mailers and emails, on the community website, in the workshops, and in the new resident package.
5. Trail signage: Signs shall be placed at the new trailhead to provide all users with information about how to safely use the trail and shall include restrictions on smoking and firearm usage. Signs shall be evaluated annually by the HOA to ensure proper maintenance.
6. HOA fire safety committee: The HOA shall establish a fire safety committee, which shall include the owner and property manager(s) from the senior housing that is responsible for overseeing the maintenance of community-wide fire protection features. Residents will be able to report fire hazards or hazardous fuel conditions to the HOA committee for remediation. The committee shall be responsible for the coordination of the third party fuel modification zone (FMZ) inspections and the volunteer residential defensible space inspections. The committee shall also be responsible for the creation and distribution of the educational program for the Project. The committee shall serve as a communication link between LACoFD and the community.
7. Senior Housing Carpool Program: The Fire Safety Coordinator shall be responsible for creating a senior housing carpool program available for all residents on the Project site, including the senior affordable rental units. The program shall ensure that all seniors who are not able to safely evacuate on their own are accounted for and transported during an emergency evacuation.

Chapter 6, Alternatives

Section 6.4.3, Previously Approved Project–Lyons Canyon Ranch Project, Page 6-29

The Previously Approved Project included an approximately 2-acre site for a new fire station, which was intended to serve the proposed development and surrounding areas. The EIR was certified in August 2009 and the project proponent initiated the process to record the approved tract map. ~~However, the property was sold before completion of the tract map recordation, and as such, the Previously Approved Project cannot be constructed as the TTM has not been recorded.~~ At the time that the Project Applicant filed an application for this Project, the tract map for the previously approved project had not yet expired, and as such, it was possible to implement the previously approved project at that time in lieu of implementing the proposed Project. However, since then, the tract map for the previously approved project has expired, and as such, the previously approved project can no longer be constructed. The zone change of A-2-1/A-2-2 to C-3-DP was completed, and as such, the current Project site has 9.3 acres of C-3-DP zoning on-site.

Section 6.4.3, Previously Approved Project–Lyons Canyon Ranch Project, Page 6-32

At the time that the Project Applicant filed an application for this Project, the Tentative Tract Map (TTM) for the previously approved project had not yet expired, and as such, it was possible to implement the previously approved project at that time in lieu of implementing the proposed Project. However, since then, the TTM for the previously approved project has expired, and as such, it can no longer be constructed. ~~As detailed above, as the TTM for the Previously Approved Project had not been recorded prior to the property being sold, the Previously Approved Project cannot be constructed.~~ Additionally, because the Project's significant and unavoidable impact would not be reduced or eliminated with implementation of the Previously Approved Project, and because the Previously Approved Project would result in more significant and unavoidable impacts than the Project, the Previously Approved Project alternative is ultimately rejected from further analysis in the EIR. Additionally, the Previously Approved Project did not move forward with development of the site and furthermore, the design was more environmentally impactful when compared to the Project.

Section 6.5.3, Alternative C – Reduced Footprint Alternative, Page 6-64

The Project would result in direct impacts to ~~424~~ 312 protected non-heritage trees and ~~30~~ 22 heritage trees and would be required to implement mitigation to reduce impacts to less than significant. The development footprint for Alternative C would substantially reduce direct impacts to trees and would avoid impacts to the following tree species altogether: Fremont Cottonwood, Red Willow, and Arroyo Willow. However, as Alternative C would still result in direct tree impacts to non-heritage and heritage trees, mitigation would still be required to reduce impacts to less than significant. However, the specific replacement and compensation requirements would be reduced under Alternative C, and therefore, impacts under Alternative C would be less than the Project.

Appendix B-1, Air Quality and Greenhouse Gas Emission Calculations

CalEEMod Sheets that have been revised to reflect the iTree and soil carbon accumulation analysis are provided as Attachment A, Appendix B-1, Air Quality and GHG Emissions Calculations, to this Final EIR.

Appendix C, Biota Report

The Biota Report (included as Appendix C of the Draft EIR) has been revised to reflect changes made to the Draft EIR, shown above under header "Section 4.4, Biological Resources" of Section 3.2, Revisions to the Draft EIR, of this Chapter. Additional revisions to mitigation measures have been included that reflect editorial changes to make them consistent with the wording in the Final EIR and MMRP.

Section 5.5, Impacts to Jurisdictional Waters, pages 98-99

Direct impacts to potential jurisdictional waters and associated riparian vegetation would occur due to vegetation removal and grading. Grading would cause fill to occur within the impacted areas.

Direct Impacts

The proposed Project would impact potential jurisdictional waters, none of which support wetlands as shown in Figure 9. The impacts are summarized in Table 19 below. The Project site includes additional areas of potential USACE jurisdiction where impacts would not occur, including approximately 0.52-acre of non-wetland waters preserved within the on-site Conservation Area. Impacts to potential jurisdictional waters would be a significant impact under CEQA and would not be compatible with SEA Resources. MM-BIO-1 would require recordation of a conservation easement, and thus would conserve the area with the remaining on-site jurisdictional waters. MM-BIO-2 would provide additional preservation of jurisdictional waters in off-site parcels. MM-BIO-3 would provide enhancement of existing jurisdictional waters in the Conservation Area. MM-BIO-14, Jurisdictional Waters Compensation, would require off-site compensation to offset the loss of on-site jurisdictional waters if the implementation of MM-BIO-1, MM-BIO-2, and MM-BIO-3 do not provide sufficient preservation. MM-BIO-4 would provide monitoring to avoid any inadvertent impacts to potential jurisdictional waters and the implementation of mitigation measures. MM-BIO-5 would delineate the Project Footprint to help avoid any inadvertent impacts to jurisdictional waters and to confine. MM-BIO-6 and MM-BIO-7 would avoid and minimize the introduction of non-native plant species to jurisdictional waters. As such, with the implementation of MM-BIO-1, MM-BIO-2, MM-BIO-4, MM-BIO-5, MM-BIO-6, MM-BIO-7, MM-BIO-9, and MM-BIO-14, impacts to jurisdictional waters would be reduced to less than significant and provides the necessary preservation for the Project to be compatible with SEA Resources.

Table 19. Proposed Impacts to Potential Waters of the U.S. (USACE and RWQCB Jurisdiction) on the Project Site and Off-Site

Drainage Name	Area (acres)		
	Non-wetland Waters	Wetlands	Total
Project Site			
Drainage A	0.24	0	0.24
Tributary A-1	0	0	0
Drainage B	0.29	0	0.29
Tributary B-1	0.06	0	0.06
Tributary B-3	0.01	0	0.01
Drainage C	0.02	0	0.02
Totals[1]	**0.62**	**0**	**0.62**

Notes: USACE = U.S. Army Corps of Engineers; RWQCB = Regional Water Quality Control Board.
[1] Totals may not add up due to rounding.

The proposed Project would impact potential CDFW jurisdictional streams and SEA Water Resources, as shown in Figure 10, portions of which consist of the *Baccharis salicifolia* shrubland alliance and *Salix gooddingii-Salix laevigata* forest and woodland alliance that are already discussed under vegetation communities. The remaining riparian habitat consists of individual coast live oaks associated with the upper banks of the stream courses present within the Project site. Impacts to riparian habitat would be significant under CEQA prior to mitigation, as a sensitive vegetation community and are given SEA consideration as water SEA Water Resources. Table 20 summarizes impacts to CDFW jurisdiction and SEA Water Resources.

MM-BIO-1 would demonstrate recordation of a conservation easement for the Conservation Area to preserve the remaining on-site jurisdictional waters. MM-BIO-2 would provide additional preservation of CDFW jurisdictional streams and SEA Water Resources in off-site parcels. MM-BIO-4 would provide monitoring to avoid any inadvertent impacts to potential CDFW jurisdictional streams and SEA Water Resources and the implementation of mitigation measures. MM-BIO-5 would delineate the Project footprint to help avoid any inadvertent impacts to CDFW jurisdictional streams and SEA Water Resources and to confine impacts to the approved limits of construction. MM-BIO-6 and MM-BIO-7 would avoid and minimize the introduction of non-native plant species to CDFW jurisdictional streams and SEA Water Resources. As such, implementation of MM-BIO-1, MM-BIO-2, MM-BIO-4, MM-BIO-5, MM-BIO-6, MM-BIO-7, and MM-BIO-14 would reduce impacts to CDFW jurisdictional streams and SEA Water Resources to less than significant and provide the necessary preservation for the Project to be compatible with SEA Resources.

Section 5.7, Impacts to SEA Protected Trees, page 101

Non-Heritage Tree Impacts

Table 21 provides a summary of proposed impacts to non-heritage SEA protected trees located within the Project site. The 312 non-heritage tree impacts are comprised of 251 removals (trees that have a trunk on or within 2 feet of the grading limits) and 11 encroachments (trees that are not removed, but root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds are anticipated), and 50 trees that are located within a debris basin.[4] Trees in which the Project footprint encroaches into the tree protection zone (TPZ) are considered as "directly impacted" by the proposed Project, as set forth by the Los Angeles County SEA Ordinance. Direct impacts include tree removal, root damage, soil excavation and compaction, grade changes, loss of canopy, and trunk wounds. Impacts to protected non-heritage trees would be considered as potentially significant prior to mitigation under CEQA due to substantially degrading the quality of the environment. MM-BIO-16, SEA Protected Tree Replacement/Compensation, addresses SEA guidelines recommended preservation making the Project compatible with SEA Resources and reduces proposed impacts to below a level of significance under CEQA.

Footnote 4: It should be noted that the 50 trees located within the debris basin ~~will not be removed~~ are not planned for removal as a result of the Project, but are considered ~~impacted~~ as removals for mitigation purposes because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding.

Section 6.1, MM-BIO-1: On-Site Habitat Preservation, pages 109 through111

Prior to final map recordation, the on-site conservation easement area shall be designated on the final map, Additionally, a letter of intent shall be obtained from the Conservation Easement holder. Prior to the issuance of a

[4] It should be noted that the 50 trees located within the debris basin ~~will not be removed~~ are not planned for removal as a result of the Project, but are considered ~~impacted~~ as removals for mitigation purposes because they could be impacted and removed due to the potential of future damage as a result of the creation of the debris basins and associated flooding.

grading permit, the Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves 144.43 acres of open space within the Project boundaries for long-term conservation and management as a natural conservation area ("On-Site Conservation Area"). The following table documents the vegetation communities that would be preserved. The On-Site Conservation Area provides sufficient preservation for Project-related impacts to vegetation communities within ~~SEA~~Resource Categories 4 and 5 of the Significant Ecological Area Ordinance Implementation Guide ~~Resource Categories 4 and 5~~.

Table 24. Vegetation Communities Preserved on the Project Site

Alliance	Unimpacted Acres (Open Space)	Preserved via Conservation Easement
SEA Resource Category 1		
Baccharis salicifolia Shrubland	0.52	0.52
Salix gooddingii–Salix laevigata Forest and Woodland	0	0.0
Sub-Total	*0.52*	*0.52*
SEA Resource Category 3		
Ericameria palmeri Provisional Shrubland	0	0
Eriodictyon crassifolium Provisional Shrubland	0.41	0.41
Juglans californica Forest and Woodland	0.09	0.09
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0	0
Quercus agrifolia Forest and Woodland	10.64	10.28
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.01	0.01
Sub-Total	*11.15*	*10.79*
SEA Resource Category 4		
Adenostoma fasciculatum Shrubland	69.77	64.68
Adenostoma fasciculatum Shrubland–Disturbed	9.73	9.73
Artemisia californica–Salvia leucophylla Shrubland	28.01	28.01
Artemisia californica–Salvia leucophylla Shrubland–Disturbed	10.66	10.66
Avena spp.–*Bromus* spp. Herbaceous Semi-natural	2.62	2.62
Distichlis spicata Herbaceous	0.07	0.07
Eriogonum davidsonii/Croton setiger Grassland	0	0
Eriogonum fasciculatum Shrubland	0	0
Sub-Total	*120.87*	*115.~~78~~77*
SEA Resource Category 5		
Brassica nigra–Centaurea melitensis Herbaceous Semi-natural Stands	16.47	16.24[a]
Non-SEA Resource Category		
Developed[1]	1.31	1.~~31~~11
Total Acres	**150.31**	**144.43**

Notes: SEA = Significant Ecological Area.

[a] 16.24 acres of this community are proposed to be restored to native communities per MM-BIO-3.

[1] Existing trails.

Conservation Management Plan. As part of recording the conservation easement, a Conservation Management Plan (CMP) applicable to the On-Site Conservation Area shall be prepared and submitted to the County of Los Angeles for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The CMP shall set forth the following requirements that shall be implemented by the entity that holds the conservation easement and/or manages and stewards the Conservation Area: (1) there shall be no grading or other construction activities within the On-Site Conservation Area, except for the proposed habitat enhancement/restoration, construction and maintenance of signage, and trail maintenance; (2) off-trail activities (e.g., hiking, biking, horseback riding) shall be prohibited; (3) signage shall be installed at the trailheads and at any access points to the On-Site Conservation Area, which shall include information on the organization that holds the conservation easement, brief descriptions of the restoration activities, protection of biological resources, and restrictions to human activities; (4) signage shall be placed in visible locations ~~and shall require~~that prohibits smoking and that requires that humans and domesticated pets ~~shall~~ remain within the limits of designated hiking trails, all domesticated pets ~~shall~~ be on leashes, and owners ~~shall~~ clean up after domesticated pets~~, and that smoking is prohibited~~; (5) no fencing that represents a barrier to wildlife movement or other barriers to wildlife movement shall be installed; (6) dog waste bag dispensers and wildlife-proof receptacles for trash shall be provided at appropriate locations on the trail; (7) gasoline-powered maintenance equipment shall be prohibited; (8) commercial honeybee operations shall not be allowed to use the On-Site Conservation Area for storing their apiaries; (9) rodenticides shall be prohibited; (10) herbicides and pesticides shall be discouraged, and only those typically used for invasive plant management in California wildlands shall be allowed, per the California Invasive Plant Council ~~&~~and Pesticide Research Institute's 2015 Best Management Practices (BMPs) for Wildland Stewardship[5]: Protecting Wildlife When Using Herbicides for Invasive Plant Management; (11) arborists certified by the International Society of Arboriculture (ISA) shall conduct surveys every five years that shall include an assessment of potential infestations of invasive shothole borer beetle and other pathogens or invasive insects that can threaten native habitat; (12) at least one annual walk-through survey shall be conducted by a biologist to qualitatively monitor the general condition of on-site habitats and to check for any new introduction or expansion of invasive plant species; (13) collect and remove trash, repair vandalized signs, and rectify trespass impacts; and (14) provide annual reporting that document the conditions of the Conservation Area.

Approved work shall be outlined in the CMP and in the conservation easement, including monitoring and maintenance efforts or for other activities associated with preserve management, and prohibited activities shall be delineated. The conservation easement holder shall be an entity ~~which~~that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b). Funding for the conservation easement and implementation of the tasks in the CMP shall be maintained in perpetuity and shall be provided by a traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association or other equivalent mechanism(s).

Section 6.2, MM-BIO-2: Off-Site Habitat Preservation, pages 111 through 119

Prior to final map recordation, the Applicant shall obtain a Letter of Intent from the future Conservation Easement holder. Prior to issuance of a grading permit, the Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves off-site habitat for long-

~~[5] California Invasive Plant Council & Pesticide Research Institute. 2015. Best Management Practices (BMPs) for Wildland Stewardship. Accessed October 2023. https://cal-ipc.org/docs/bmps/dd9jwo1ml8vttq9527zjhek99qr/BMPHerbicide.pdf.~~

term conservation and management ("off-site conservation area"). As part of recording the conservation easement for any off-site parcel(s), a Conservation Management Plan (CMP) applicable to the off-site conservation area shall be prepared and submitted to the Los Angeles County (County) Department of Regional Planning (Planning) for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The conservation easement holder shall be an entity ~~which~~that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968~~, subdivision~~ (b). Funding for the conservation easement and implementation of the tasks in the CMP shall be maintained in perpetuity and shall be provided by a traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association or other equivalent mechanism(s).

One or more of the following options shall be used to provide adequate preservation for Projectrelated impacts to vegetation communities and wildlife habitat within the Significant Ecological Area (SEA) Ordinance Implementation Guide ~~SEA~~ Resource Categories 1 and 3. The proposed off-site conservation area lands must support resources similar to those disturbed by the Project (i.e., sensitive vegetation communities, special-status plant and wildlife habitats, jurisdictional waters, and protected trees) and be connected with other natural open space areas. To determine that these conditions are present, the Applicant ~~will~~shall fund a biological resources assessment by a County Planning-approved Biologist for any parcel proposed for preservation, and the results of the assessment ~~will~~shall be submitted to County Planning for their approval to be used as mitigation.

In-Kind and Off-Site in the Santa Susana Mountains and Simi Hills Significant Ecological Area

For parcels within the SEA that support in-kind vegetation communities as those found in the Project site, the preservation ratios for each of the SEA Resource Categories listed would be in accordance with the SEA Ordinance Implementation Guide. The following table indicates the minimum preserved acres required for off-site preservation of in-kind vegetation communities (communities classified as the same as those being impacted by the Project) within the SEA.

Table 25. In-Kind Vegetation Communities Preserved Off-Site in the Santa Susana Mountains and Simi Hills Significant Ecological Area

Alliance	Required In-Kind Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	
Baccharis salicifolia Shrubland	11.65
Salix gooddingii–Salix laevigata Forest and Woodland	6.22
Sub-Total	*17.87*
SEA Resource Category 3 (Mitigated at 3:1)	
Ericameria palmeri Provisional Shrubland	2.00
Eriodictyon crassifolium Provisional Shrubland	0.84[a]
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0.20
Quercus agrifolia Forest and Woodland	30.50[b]

Table 25. In-Kind Vegetation Communities Preserved Off-Site in the Santa Susana Mountains and Simi Hills Significant Ecological Area

Alliance	Required In-Kind Preserved Acres
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.07[a]
Sub-Total	*33.61*
Total	**51.48**

Notes: SEA = Significant Ecological Area.
1 None would be needed if MM-BIO-3, Habitat Mitigation and Monitoring Plan, is implemented.
2 15.30 acres ~~will~~shall be needed if MM-BIO-3 is implemented.

Out-of-Kind and Within the Santa Susana Mountains and Simi Hills Significant Ecological Area

Preservation of out-of-kind vegetation communities (communities classified as being different than those being impacted by the Project) that are in the same group (defined by combinations of relatively narrow sets of diagnostic plant species (including dominant~~s~~ and co-dominant~~s~~),dominant species, broadly similar composition, and diagnostic growth forms that reflect biogeographic differences in mesoclimate, geology, substrates, hydrology, and disturbance regimes[6] as defined by the Federal Geographic Data Committee in the 2006 Draft National Vegetation Classification Standard) as the impacted vegetation communities (as defined by the National Vegetation Classification Standards) can be satisfied with the acquisition of parcels within the Santa Susana Mountains and Simi Hills SEA. For preserved lands within the same Resource Category, a multiplier of 1.5 shall be applied to increase lands for preservation, as shown in the following table. For preserved lands within a higher sensitivity Resource Category, a multiplier of 1.25 shall be applied, as shown in the following table. Lower sensitivity Resource Categories may not satisfy mitigation requirements for higher sensitivity Resource Categories. For the two Resource Category 1 communities, preservation shall be a riparian-associated vegetation community.

Table 26. Out-of-Kind Vegetation Communities Preserved Within the Santa Susana Mountains and Simi Hills Significant Ecological Area

Alliance	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	**1.5 Multiplier**	**1.25 Multiplier**
Baccharis salicifolia Shrubland	17.47	NA
Salix gooddingii–Salix laevigata Forest and Woodland	9.33	NA
Subtotal	*26.81*	*NA*
SEA Resource Category 3 (Mitigated at 3:1)	**1.5 Multiplier**	**1.25 Multiplier**
Ericameria palmeri Provisional Shrubland	3.00	2.50
Eriodictyon crassifolium Provisional Shrubland	1.26[1]	1.~~05~~[1]0505[1]

[6] ~~Federal Geographic Data Committee. 2006. National Vegetation Classification Standard, Version 2 – Working Draft. https://www.fgdc.gov/standards/projects/vegetation/index_html.~~

Table 26. Out-of-Kind Vegetation Communities Preserved Within the Santa Susana Mountains and Simi Hills Significant Ecological Area

Alliance	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0.31	0.25
Quercus agrifolia Forest and Woodland	45.75[2]	38.13[3]
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.10[1]	0.08[1]
Subtotal	*50.42*	*42.01*
	77.23	*42.01*

Notes: NA = Not Applicable (due to there being no higher Resource Category)
1 None would be needed if MM-BIO-3, Habitat Mitigation and Monitoring Plan, is implemented.
2 22.95 acres will need to be preserved if MM-BIO-3 is implemented.
3 19.13 acres will need to be preserved if MM-BIO-3 is implemented.

Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area

Off-site preservation within portions of the Santa Clara River SEA that are contiguous with the Santa Susana Mountains and Simi Hills SEA shall be considered if the area supports the same resource values as the Project site and is connected with other natural open space. Preservation of vegetation communities shall be acquired within the adjacent Santa Clara River SEA at a multiplier of 2 for in-kind preservation, multiplier of 2.5 for out-of-kind preservation but within the same Resource Category, and a multiplier of 2.25 for out-of-kind preservation but a higher level Resource Category, as shown in the following table. For the two Resource Category 1 communities, preservation shall be a riparian-associated vegetation community.

Table 27. Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area

Alliance	In-Kind Preserved Acres	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	**2 Multiplier**	**2.5 Multiplier**	**2.25 Multiplier**
Baccharis salicifolia Shrubland	23.30	29.12	NA
Salix gooddingii–Salix laevigata Forest and Woodland	12.45	15.56	NA
Sub-Total	*35.74*	*44.68*	*NA*
SEA Resource Category 3 (Mitigated at 3:1)	**2 Multiplier**	**2.5 Multiplier**	**2.25 Multiplier**
Ericameria palmeri Provisional Shrubland	4.00	5.00	4.50
Eriodictyon crassifolium Provisional Shrubland	1.67[1]	2.09[1]	1.88[1]
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0.41	0.51	0.46
Quercus agrifolia Forest and Woodland	61.00[2]	76.25[3]	68.63[4]

Table 27. Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area

Alliance	In-Kind Preserved Acres	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.13[1]	0.17[1]	0.15[1]
Sub-Total	*67.21*	*84.02*	*75.62*
Total	102.95	128.70	75.62

Notes: NA = Not Applicable (due to there being no higher Resource Category

1 None would be needed to be preserved off-site if MM-BIO-3 is implemented.
2 30.60 acres would be needed if MM-BIO-3 is implemented.
3 38.25 acres would be needed to be preserved if MM-BIO-3 is implemented.
4 34.43 acres would be needed to be preserved if MM-BIO-3 is implemented.

Preservation of Assessor's Parcel Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

~~Assessor Parcels Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067~~ The six parcels are located within the Santa Susana Mountains/Simi Hills SEA, approximately one mile south-southwest of the Project site. ~~The analysis of the natural resources found on the six parcels can be found in Appendix I, Trails at Lyons Canyon Project — Offsite Mitigation Option — Natural Resources Analysis for Assessor Parcel Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-0412826-014-057, and 2826-014-067.~~

Nine vegetation communities were mapped in the six parcels, as listed in the table below. Two SEA Resource Category 3 communities, *Pseudotsuga macrocarpa–Quercus agrifolia* association (bigcone Douglas fir–coast live oak forest) and *Quercus agrifolia* association (coast live oak woodland and forest) occur, primarily on north-facing slopes and canyon bottoms. The seven SEA Resource Category 4 communities are shrub-dominated and consist of chaparral and coastal scrub species.

Table 28. Assessor's Parcels Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

Vegetation Community	Acres
SEA Resource Category 1	
Quercus agrifolia Association Southern Coast Live Oak Riparian Forest (Water Resources)	27.47
SEA Resource Category 3	
Pseudotsuga macrocarpa–Quercus agrifolia Association	4.02
Quercus agrifolia Association	50.89
Subtotal	*54.91*
SEA Resource Category 4	
Adenostoma fasciculatum–Salvia leucophylla Association	11.35
Adenostoma fasciculatum–Salvia mellifera Mixed Shrub Association	1.16
Adenostoma fasciculatum Association	77.08
Artemisia californica–Eriogonum fasciculatum Association	2.08

Table 28. Assessor's Parcels Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

Vegetation Community	Acres
Ceanothus crassifolius–Adenostoma fasciculatum–Rhus ovata Association	249.26
Ceanothus crassifolius–Adenostoma fasciculatum Association	14.37
Malacothamnus fasciculatus–Salvia leucophylla Association	2.54
Malosma laurina–Eriogonum fasciculatum Association	12.93
Wild oats and annual brome grasslands Semi-natural Alliance	12.24
Subtotal	*383.01*
Non-SEA Resource Category	
Urban/Developed	1.31
Total	**466.70**

Note: SEA = Significant Ecological Area.

The drainages in the six parcels are part of the Wiley Canyon and Towsley Canyon watersheds that contribute to the South Fork of the Santa Clara River. The desktop analysis resulted in 13.30 acres of potential streams in the six parcels. The method for determining potential adjacent riparian oak forest resulted in 27.47 acres of SEA Category 1 Water Resources. The remaining 54.91 acres of *Pseudotsuga macrocarpa–Quercus agrifolia* association and *Quercus agrifolia* association would be considered upland and SEA Resource Category 3.

As shown in the following table, the off-site conservation area provides sufficient acreage to fully offset impacts to SEA Resource Category 4 vegetation communities (for SEA Resource Category 4, preservation can be out-of-kind if the resource is of the same category.) and to partially offset impacts to SEA Resource Category 3 (for this discussion, the creation of vegetation communities within the *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands is not included; however, if oak trees are planted as replacement for SEA protected trees, then an argument shall be made that planted oaks also constitute the creation of oak woodland). The 27.47 acres of SEA Category 1 Water Resources and the 54.91 acres of SEA Resource Category 3 provides the necessary acres of preservation for these two categories. The parcels provide an additional 26.72 acres of SEA Resource Category 3 vegetation communities and 503.17 acres of SEA Resource Category 4 vegetation communities.

INTENTIONALLY LEFT BLANK

Table 29. Impacts to SEA Resource Category Communities and Proposed Preservation for the Trails at Lyons Canyon Project Using APNs 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

SEA Resource Category	Total Impacts (acres)	Mitigation Requirement (acres)[a]	On-Site Preservation (acres)[b]	In-Kind Off-Site Preserved Acres Needed[c]	In-Kind Acres Provided by the Six Parcels[d]	Out-of-Kind Off-Site Preserved Acres Needed[e]	Out-of-Kind Acres Provided by the Six Parcels[f]	Total Preservation (acres)	Excess Acreage	Preservation to Impact Ratio: Required	Preservation to Impact Ratio: Provided
1	3.68	18.39	0.52	17.87	0	26.74	27.47	27.99	9.60	7.5:1	7.6:1
3	14.77	44.31	10.79	33.52	30.14[g]	5.~~70~~07	24.77[h]	65.70	21.39	4.5:1	4.45:1
4[i]	32.40	64.80	115.78	0	383.01	NA	NA	498.79	433.99	3:1	15.4:1
5[j]	35.61	NA	16.24[k]	NA	NA	NA	NA	NA	NA	NA	NA

Notes: SEA = Significant Ecological Area; APN = Assessor's Parcel Number; NA = not applicable.

[a] This is determined by the impacts multiplied by the ratio of preservation required per the County of Los Angeles' SEA Implementation Guide (5:1 for Category 1, 3:1 for Category 3, and 2:1 for Category 4).

[b] Preserved in the Conservation Area established by the proposed MM-BIO-1.

[c] In-kind preservation within the Santa Susana Mountains/Simi Hills SEA, per proposed MM-BIO-3.

[d] APNs 2826-018-034, 2826-017-044, 2826-017-043, and 2826-017-041.

[e] Out-of-kind preservation within the Santa Susana Mountains/Simi Hills SEA is at 1.5:1 for same category (used for SEA Resources Category 1) and 1.25:1 for a higher category (used for SEA Resources Category 3), per proposed MM-BIO-3.

[f] Out-of-kind preservation of SEA Resource Category 1 (oak riparian forest).

[g] In the form of *Quercus agrifolia* Association.

[h] *Quercus agrifolia* Association preservation used for Project impacts to *Ericameria palmeri* Provisional Shrubland Alliance, *Eriodictyon crassifolium* Provisional Shrubland Alliance, *Nassella* [*Stipa*] spp. - *Melica* spp. Herbaceous Alliance, and *Rhus trilobata* - *Crataegus rivularis* - *Forestiera pubescens* Shrubland Alliance.

[i] For SEA Resource Category 4, preservation can be out-of-kind if the resource is of the same category.

[j] No preservation ratio is needed for SEA Resource Category 5, per se, only that the values that it supports (such as movement opportunities) are preserved.

[k] This would be transformed to a higher value SEA Resource Category if MM-BIO-3 is implemented.

INTENTIONALLY LEFT BLANK

Mitigation Bank Credits

Off-site purchase of mitigation credit from a County Planning-approved mitigation bank shall be completed prior to the issuance of grading permits. The mitigation bank would have to be located within the Santa Susana Mountains and Simi Hills SEA or be contiguous with the SEA. The credits purchased must meet the acres calculated by using a multiplier of 3 applied to the preservation ratios stated in the SEA Ordinance Implementation Guide for SEA Resource Categories 1 and 3, as shown in the following table.

Table 30. Mitigation Credits Required to be Purchased from a County-Approved Mitigation Bank

SEA Resource Category	Mitigations Credits Required
1	53.61[a]
3	100.83[b,c]

Notes: County = County of Los Angeles; SEA = Significant Ecological Area.

[a] Riparian scrub.

[b] 91.50 woodland, 8.72 shrubland, and 0.61 grassland

[c] ~~15.90~~ 45.90 woodland, 6.01 shrubland, and 0.61 grassland (totaling 52.52) would be needed if MM-BIO-3 is implemented.

Mitigation lands shall ~~be comprised~~consist of similar or higher quality habitat than found on the Project site. Should credits not be available, then compensation may be in the form a County-approved turnkey project with a mitigation bank and/or other County Planning-approved option. Selected mitigation banks shall be accredited through CDFW and/or the County to have established conservation easements that shall ensure the preservation of the resources in perpetuity.

Section 6.3, MM-BIO-3: Habitat Mitigation and Monitoring Plan, pages 119 through 123

After implementation of MM-BIO-2, if the Los Angeles County Department of Regional Planning (~~County~~ Planning) determines that sufficient habitat is not preserved off site, per MM-BIO-2, then on-site establishment and restoration ~~will~~shallbe conducted in the On-Site Conservation Area (MM-BIO-1). Prior to the issuance of a grading permit, a qualified biologist shall be retained to prepare a Habitat Mitigation and Monitoring Plan (HMMP) detailing the specific approach for each type of habitat restoration and establishment area, special-status species transplant location, and ~~SEA~~Significant Ecological Area protected tree transplant/planting and ~~will outline~~outlining detailed performance standards and monitoring requirements for each, following the monitoring and reporting methods and performance standards listed below. Planning approval of the HMMP ~~will~~shallbe required prior to the onset of Project-related ground-disturbing activities. When specified for each habitat type below, the acreages allotted for on-site establishment apply to a total of 16.24 acres of *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands.

- On-site establishment of 0.84 acre of *Eriodictyon crassifolium* provisional shrubland alliance
- On-site restoration/establishment of 0.07-acre of *Rhus trilobata* ~~Provisional~~ *Crataegus rivularis–Forestiera pubescens* shrubland alliance
- On-site establishment of 15.20 acres ~~oak~~*Quercus agrifolia* forest and woodland alliance

Habitat Restoration/Enhancement Implementation

The following best management practices ~~will~~shall be implemented during the implementation of the habitat restoration/enhancement activities.

Schedule: Establishment of restoration/revegetation sites ~~will~~shall be conducted during the appropriate time of year (between October 15 and January 30), with planting and/or seeding occurring immediately after the restoration sites are prepared.

Stressors: Any stressors causing habitat degradation should be addressed prior to starting restoration. This includes the removal of invasive plants and trash. Removal of invasive species ~~will~~shall include the following:

- Removal of non-native species in patches of native habitat shall be conducted in such a way as to minimize impacts to the existing native vegetation.
- Any proposals for use of herbicide treatments should be accompanied by a plan that demonstrates the following:
  - That other methods of invasive species control have been tested and that a single application of herbicide has been determined to be the best solution
  - That there is a post application plan for revegetation and/or mulching;
  - That the treatment is a one-time application
- Preemergent herbicide ~~will~~shall not be used.

Plant Material. The following ~~will~~shall be implemented:

- Details regarding the planned source of their plant material ~~will~~shall be provided.
- All stock from nurseries ~~will~~shall be derived from plants originally collected within cismontane ~~Los Angeles~~ County.
- Plant material used for habitat restoration purposes ~~will~~shall consist of native species that are local to the immediate area of the mitigation site.
- All plant material proposed for use in a habitat restoration program ~~will~~shall be inspected by a County-approved Restoration Biologist to ensure that all container plants are in good health and do not contain pests or pathogens that may be harmful to existing native plants or wildlife species.
- Container plants and other landscaping materials (including organic mulches) should be inspected by the County Planning-approved Restoration Biologist to ensure they do not contain Argentine ~~ants.~~ant (*Linepithema humile*).
- Native seed mixes ~~will~~shall be inspected by the County-approved Restoration Biologist prior to their application to ensure that they contain the proper species and that seed packages are in good condition and do not contain any pests or pathogens.
- Diseased or infested plant, seed, or landscape materials should be removed from the site and transported to an appropriate off-site green waste facility.
- One application of mulch ~~will~~shall be done, except for areas that ~~will~~shall provide nesting opportunities for native bees.

Maintenance Plan/Guidelines. A Maintenance Plan ~~will~~shall be included that outlines the following: (1) weed control, including cleaning of equipment to prevent further spread or introduction of new weeds; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; and (6) replacement planting.

Signage and Fencing. Signage specifications ~~will~~shall be developed to indicate the site is a restoration/preserve area and to either indicate that trespassing is not allowed or to instruct visitors to stay on trails. Specifications on fencing to protect biological resources and restrict human access ~~will~~shall be provided.

Monitoring Methods

Proposed plantings, enhancement/restoration, and receptor sites ~~will~~shall be monitored for ten years following the completion of seeding or planting. The monitoring program ~~will~~shall consist of the observation and evidence of vegetative growth and the observation of emergent and flowering special-status plant species where required, along with seed production for flowering plants, photo-documentation, and measurements of annual rainfall.

A County Planning-approved Restoration Biologist, restoration specialists, biologists, or horticulturists with appropriate credentials and experience in native habitat restoration shall perform monitoring. Continuity within the personnel and methodology of monitoring shall be maintained insofar as possible to ensure comparable assessments.

The Biologist ~~will~~shall conduct monitoring surveys quarterly during the non-growing season for each enhanced or restored habitat type or particular plant species where required. During the growing period, or as soon as vegetative growth is observed, the enhancement/restoration and receptor sites ~~will~~shall be monitored on a ~~bi-weekly~~every other week basis through seed production for ten years to document the growth of the enhanced or restored habitat type or replacement population.

Qualitative surveys, consisting of a general site walkover and habitat characterization, ~~will~~shall be completed during each monitoring visit. General observations, such as growth, flowering, and seed production, as well as pest problems, weed establishment, mortality, and site security, ~~will~~shall be noted in each site walkover. The Project Biologist ~~will~~shall also note observations on native plant recruitment for the purpose of later discussion in the annual reports. Records ~~will~~shall be kept of mortality and other problems, such as insect damage, weed infestation, and soil loss.

Surveying Flowering and Seed Production. In the case of replacement populations for specific species, flowering individuals observed within receptor sites ~~will~~shall be counted. As noted above, quantitative surveys may require multiple visits per month as the blooming period may be staggered along several months (i.e., vegetative growth or non-blooming individuals may not be detected until that individual has bloomed). Peak blooming periods may fluctuate year to year due to seasonal conditions; therefore, multiple visits ~~will~~shall aid in a more accurate count of flowering individuals. Each flowering individual in the restoration plots ~~will~~shall be tallied and recorded on data sheets. The total yearly population ~~will~~shall be calculated each year for the annual monitoring results.

Photo-Documentation. Permanent stations for photo-documentation ~~will~~shall be established prior to or during the first annual monitoring event. Photos shall be taken each monitoring period from the same vantage point and in the same direction each year and shall reflect material discussed in the annual monitoring report.

Monitoring Schedule

During the growing period, or as soon as vegetative growth is observed, each enhancement/restoration, and receptor site will be monitored monthly through seed production for ten years.

Annual Monitoring Reports. At the end of each monitoring period, an annual report ~~will~~shall be prepared for submittal to County Planning. The report ~~will~~shall summarize the information collected during the qualitative and quantitative monitoring. Each report ~~will~~shall document the monitoring methods and description of the enhancement/restoration and receptor sites and provide copies of field data, photo-documentation, monitoring results, an analysis of success, and recommendations for the project and/or remedial measures if necessary.

Since seeding of particular species may not occur when planned, monitoring shall be tied to the actual implementation date (e.g., the first annual report shall be delivered on January 1st of the year following the first growing season after enhancement/restoration and/or seeding). These reports ~~will~~shall describe the success of the relocation and ~~will~~shall discuss the efficacy of the various methods employed to propagate this species. These reports ~~will~~shall also include the following:

- A list of names, titles, and companies of all persons who prepared the content of the annual report and participated in monitoring activities for that year
- A vicinity map indicating location of the mitigation site
- A mitigation site plan, identifying plot locations, photo station locations, etc. as appropriate
- Copies of all monitoring photographs
- ~~and~~ An analysis of all qualitative and quantitative monitoring data

Performance Standards

The performance standards set forth below are to be achieved for the mitigation and monitoring program to be considered successful. Because of the variability of growing conditions and the number of flowering individuals from year-to-year, the performance standards ~~will~~shall be considered to have been achieved if during any of three years of the ten-year monitoring period, the target acreage or population number is achieved. Thus, the annual standards provide a guide showing that the program is on a positive trajectory.

- The growing conditions and number of flowering individuals in any given year can vary substantially, based on environmental conditions, such that it is necessary to observe translocated populations over a period of years to accurately determine survival. To this end, this plan ~~proposes~~includes a ten-year monitoring term to track flowering individuals, which provides the best and easiest indicators to track that the translocation is succeeding.
- Various threats to plants must be minimized to ensure survival and ultimate flowering of seeded individuals leading to future germination/successful reproduction.
- Habitat characteristics including non-native grasses and herbaceous weeds are important and require monitoring to determine that specific enhancement/restoration areas and translocation/receptor sites are exhibiting a positive trajectory.

Should the performance standards be achieved early in the program, monitoring ~~will~~shall continue for the full ten years to ensure that there is no degradation of the habitat values during the ten-year period.

Performance Standards for Ten Year Monitoring Period

- Flowering of the total number of flowering plants originating from seed shall equal or exceed the number of container individuals counted during the two-year monitoring period (at least three years of the ten-year monitoring period).
- Emergence of leaves for of a minimum of 80-percent of the translocated bulbs
- Flowering of a minimum of 60-percent of the translocated bulbs
- Survival of 80-percent of established individuals
- Habitat subject to translocation must exhibit same or less cover by non-native grasses; and forbs than during the initial planting (30-percent).

Adaptive Management

The HMMP shall include adaptive management strategies in the event the mitigation and monitoring program fails to achieve the performance standards discussed above during the ten-year monitoring period, the Project Applicant ~~will~~shall implement the following remedial measures to attempt to achieve the performance standards:

- If the enhancement/restoration areas or receptor sites are observed to be failing significantly to achieve the performance standard during the ten-year monitoring period, the Biological Monitor ~~will~~shall identify an alternate site(s) in the Conservation Area in which to broadcast seed from a contingency seed supply held at a seed facility (and maintained for at least ten years). Should the performance standards be achieved, contingency seed would be broadcast in the enhancement/restoration areas or receptor sites.
- If receptor sites appear on track to meet the performance standards, any remaining plant material may be planted after five years at the receptor sites (if space allows) or additional acceptable receptor sites ~~will~~shall be identified. This would allow for five years of monitoring of the container stock.
- Seeds and/or bulbs ~~will~~shall continue to be harvested from plants maintained in the nursery and installed in the receptor sites on an as-needed basis to ensure translocation/receptor sites are progressing toward final performance.
- The alternate site ~~will~~shall be prepared as outlined for the initial site and modifications incorporated as determined by the Project Biologist in coordination with the County Planning. Once an approach has been determined in coordination with the County, the seed would be broadcast at the contingency seed and seeded at the alternate site and a ten-year program, that includes monitoring and maintenance would be initiated as set forth above.

Section 6.4, MM-BIO-4: Biological Monitoring, page 124

Prior to the issuance of a grading permit, the Applicant shall submit the qualifications of potential Biological Monitor(s) to the County of Los Angeles (County) Department of Regional Planning (Planning) for review and approval. The Applicant shall then fund the County Planning-approved Biological Monitor(s) during Project construction to monitor construction activities and to ensure compliance with all mitigation measures. The Biological Monitor shall be present on site during all vegetation removal and each day prior to the commencement of grading activities. The Biological Monitor shall be responsible for conducting a pre-construction clearance survey, and any wildlife (common or special-status) shall be relocated to the Conservation Area. Pre-construction clearance surveys shall be conducted prior to construction of each new phase of the development. The Biological Monitor shall ~~monitor to~~ ensure that wildlife do not become entrapped in excavation or trenching areas. Safeguards shall be implemented during daytime periods of non-activity and overnight, such as a placing a platform over trenches, flush with the ground surface; installing escape ramps in trenches; or installing exclusionary fencing. Should relocation of any trapped wildlife be required, construction shall be halted until the Biological Monitor arrives on site and clears the work area (in compliance with all applicable permits and authorizations).

Burrowing owl has the potential to occur as a transient during dispersal and migration. Focused pre-construction surveys for burrowing owl shall be conducted weekly by the Biological Monitor beginning 30 days prior to the commencement of vegetation removal, with the last/fourth survey being conducted three days prior to the commencement of vegetation removal. If burrowing owl are located during any focused pre-construction surveys, or during the monitoring of construction activities, a 500-foot no-work buffer shall be established around the location of the burrow(s), and County Planning and California Department of Fish and Wildlife (CDFW) shall be notified. CDFW shall be consulted regarding the potential need for an Incidental Take Permit per California Fish and

Game Code 2081. The no-work buffer shall remain in place until the until the Project Applicant obtains confirmation from CDFW that it can be removed. The results of the surveys and any associated monitoring shall be documented in a Burrowing Owl Survey/Monitoring Report that shall be submitted to County Planning.

The Biological Monitor shall also monitor any colonial roosts located within 500 feet from the Project limits to determine if Project activities are having a detrimental effect on the roost. If bats are exhibiting distress due to noise generated by Project activities, the Biological Monitor shall work with the construction contractor on ways to reduce activities in the proximity of the roost (e.g., limiting the number of tractors in the area). The results of the protective actions will be documented in the daily monitoring report.

The Biological Monitor shall regularly inspect the Project site as needed after the completion of all grading activities. Monthly spot-check monitoring is anticipated to be required throughout the construction of the Project for those areas that are graded but not yet developed/landscaped. During monthly visits, the biological monitor shall ~~address~~do the following: (1) address the potential establishment of invasive species and require weed abatement (if necessary) in accordance with MM-BIO-6, Invasive Species Prevention; (2) address the potential establishment of native vegetation/habitat to reduce the potential for impacts between phases of construction; (3) identify deficiencies, if applicable, with any erosion control measures that have the potential to negatively impact biological resources.

Daily monitoring reports shall be prepared by the Biological Monitor that at a minimum document the results of any surveys conducted, wildlife relocations, construction activities performed, compliance issues observed, and corrective actions taken ~~during the reporting period~~. The monitoring reports shall include photos~~as appropriate and~~. The monitoring reports shall be made available to County Planning and CDFW at their request.

Section 6.6, MM-BIO-6: Invasive Species Prevention, page 125

The Project shall not include invasive plant species listed on Appendix C of the SEA Ordinance Implementation Guide ~~(Appendix J)~~ and in the California Invasive Plant Council (Cal-IPC) inventory ~~(Appendix K)~~ in Project landscaping palettes. Project landscape palettes shall be reviewed and approved by the County of Los Angeles (County) to ensure that invasive plant species are excluded. In addition, to prevent the spread of invasive plant species during construction and until the establishment of common landscaped areas associated with the Project, the following measures shall be implemented:

- A Workers Environmental Awareness Training (WEAT) program ~~will~~shall be prepared that ~~will~~shall include invasive species prevention measures implemented by the Project. The WEAT ~~will~~shall include descriptions of the common invasive plants known in the region. The WEAT ~~will~~shall also include descriptions of sensitive resources known to occur ~~in~~on the Project site and the procedures to follow should a sensitive resource be encountered.
- All mobile vehicles and construction equipment shall be washed prior to entering the Project site in an upland location where any seed material from invasive species ~~will~~shall be contained and not carried onto the Project site. Logs of the washing ~~will~~shall be submitted monthly to the County Department of Regional Planning.
- Following the completion of grading activities, for those areas of the Project site that are graded but not yet developed/landscaped, the County-approved Biological Monitor shall conduct monthly spot checks to prevent the introduction or establishment of invasive plant species onto the graded areas (see MM BIO-4). If invasive species are identified, the Biological Monitor shall remove the plants with hand tools or weeding equipment to prevent propagation.
- All vegetative material removed from the Project footprint shall be transported in a covered vehicle and ~~will~~shall be disposed of at a certified disposal site.

Section 6.7, MM-BIO-7: Landscaping Plan, pages 125 and 126

Prior to the issuance of the first grading permit, the Applicant shall prepare a Landscaping Plan for the Homeowners' Association (HOA) maintained areas and submit the Landscaping Plan to the County ~~Planning~~of Los Angeles for review and approval. The Landscaping Plan for the HOA-maintained areas shall include, but not be limited to, the following requirements:

- Plant species list shall include scientific name, common name, plant container size, and quantities.
- Invasive plant species (designated by California Invasive Plant Council) shall not be included in the Landscaping Plan as they could establish off site and have negative impacts to the adjacent habitats.
- Non-native milkweeds shall not be included in the landscaping plan as they could establish off site and have negative impacts to the adjacent habitats.
- Plant layout shall indicate the location of the plant species.
- Planting notes shall include irrigation and plant installation requirements such as mulch requirements.
- Ornamental varietals and selections of native species shall be avoided if they have the potential to hybridize with local native populations.
- Where native species are required, the species shall be indigenous native species of the region (locally indigenous native species).

Section 6.8, MM-BIO-8: Homeowners' Association Covenants, Conditions, and Restrictions, page 126

The Homeowner's Association (HOA) Covenants, Conditions, and Restrictions (CC&Rs), which are reviewed and approved prior to final map recordation, then recorded immediately after the final map records, shall include the following requirements to reduce potential human impacts on adjacent habitats and wildlife species:

- Invasive plant species (designated by California Invasive Plant Council) shall be prohibited on all residential lots, as they could establish off site and have negative impacts to the adjacent habitats.
- All trash/garbage waste and recycling receptacles shall have locking devices that discourage wildlife foraging in common areas/parks and shall encourage the use of such locking devices on residential receptacles, as feasible.
- Intentional feeding of wildlife, including mule deer, is prohibited.
- The use of rodenticides is prohibited.
- Speed limits of 15 to 25 miles per hour shall be posted, and the CCRs shall require residents to comply with the posted speed limits.
- Smoking shall be prohibited in open space areas.
- The HOA shall not use balloons for any community events, and the use of balloons by individual homeowners shall be discouraged.
- Homeowner reprisals against native wildlife species (i.e., killing or harming native wildlife species in any way) if homeowner pets are killed or harmed by wildlife shall be prohibited.
- Public information signage shall be installed at the trailhead and in the recreation facility and printed information shall be provided to the Homeowners' Association (HOA) in order to: 1) educate and inform the public about wildlife, especially mountain lions present in the area; 2) advise on proper avoidance measures to reduce human-wildlife conflicts; 3) advise on proper use of open space trails in a manner respectful to wildlife (e.g., dogs on leash, proper waste disposal); and 4) provide local contact information to report injured or dead

wildlife. Signage should be written in the language(s) understandable to all those likely to recreate and use the trails. Signage should not be made of materials harmful to wildlife.

Section 6.9, MM-BIO-9: Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation, pages 127 and 128

The required~~, County Planning~~ Conservation Management Plan (CMP) approved ~~CMP~~by the County of Los Angeles (County) shall include a Special-Status Plant Mitigation and Monitoring Plan (SSPMMP) that shall provide guidance and methods to preserve the special-status plants known to occur within the Conservation Area (slender mariposa lily [*Calochortus clavatus* var. *clavatus*], Plummer's mariposa lily [*Calochortus plummerae*], Peirson's morning glory [*Calystegia peirsonii*], and scarlet Keckiella [*Keckiella ternata*]), along with a program of special-status plants seed collection and dispersal within the Conservation Area. The SSPMMP ~~will~~shall also include methods and approach to translocating mariposa lily individuals proposed for impact into the Conservation Area. The SSPMMP ~~will~~shall be developed and implemented with a program that does not conflict with other conservation easement resource management objectives.

The SSPMMP ~~will~~shall provide details on site preparation measures, as well as specific methods for the pre-construction collection of seeds ~~or propagules~~ from all four species and the harvest of mariposa lily bulbs from impacted populations. The SSPMMP ~~will~~shall also provide detailed methods for the dispersal of that seed and the translocation of the harvested bulbs into the conservation easement areas within locations with appropriate soils and growing conditions for each species, as determined by a qualified biologist in coordination with the County and California Department of Fish and Wildlife. Finally, the SSPMMP ~~will~~shall provide a schedule and action plan for the maintenance and monitoring programs, including success criteria, and remedial contingency measures to be implemented if efforts are not successful.

Pre-construction surveys ~~will~~shall be conducted in the Project footprint to map slender mariposa lily, Plummer's mariposa lily, Peirson's morning glory, and scarlet keckiella individual locations with a high-accuracy GPS unit and a permanent marker established in the field to locate the individual mariposa lilies for bulb collection. Seeds ~~will~~shall be collected from each species at the appropriate time of year. Mariposa lily bulbs shall remain in the ground until Project development. Prior to Project development, the bulbs shall be translocated within appropriate habitat in the Conservation Area.

Performance Standard Monitoring shall take place annually for five years from the time of establishment of the mariposa lily bulbs. The following success criteria is the minimum required by the end of the five-year monitoring period:

- 25 slender mariposa lily
- 44 scarlet keckiella
- 600 Peirson's morning glory
- 128 Plummer's mariposa lily

If it appears that the population of these special-status plant species (slender mariposa lily, scarlet keckiella, ~~club-haired mariposa lily~~, Peirson's morning glory, and Plummer's mariposa lily) or the vegetation community composition and status are on the decline or have been degraded, remedial activities shall be implemented according to the CMP and the SSPMMP, and monitoring ~~will~~shall continue until the success criteria are met. These activities may include weed control, additional seeding, native plant establishment, or other activities where appropriate.

Annual monitoring reports shall be submitted by August 31 of each year and shall include an evaluation of current monitoring data in relation to previous population observations (during previous monitoring years) and native enhancement efforts for slender mariposa lily, scarlet keckiella, ~~club-haired mariposa lily,~~ Peirson's morning glory, and Plummer's mariposa lily. These reports shall also include any recommendations for remedial management measures and shall discuss other issues that need to be addressed, such as trespassing or vandalism.

Section 6.10, MM-BIO-10: Crotch Bumble Bee Habitat Preservation and Minimization Measures, pages 128 and 129

Incidental Take Permit. The Applicant shall consult with the California Department of Fish and Wildlife on obtaining an Incidental Take Permit (ITP), per California Fish and Game Code 2081, for the take of Crotch's bumble bee. The Applicant shall provide the County with a copy of the ITP, or proof that an ITP is not required, prior to issuance of a grading permit. Mitigation for direct impacts to Crotch's bumble bee ~~will~~ shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished through the preservation of on-site suitable habitat (MM-BIO-1) and off-site suitable habitat (MM-BIO-2). The Applicant shall be obligated to implement all minimization and avoidance measures conditions that are included in the ITP.

~~Pre-Construction~~ Focused Survey. ~~A pre-construction~~ Focused surveys for Crotch's bumble bee (*Bombus crotchii*) shall be conducted within the construction footprint prior to the start of ground-disturbing construction activities ~~occurring during the Crotch bumble bee nesting period (February 1 through October 31). The survey shall ensure that no nests for Crotch bumble bee are located within the construction area~~. The ~~pre-construction~~ focused surveys shall include ~~1)~~ a habitat assessment and ~~2)~~ focused surveys, both of which ~~will~~shall be ~~based on recommendations~~ as described in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction.

The habitat assessment shall, at a minimum, include historical and current species occurrences; document potential habitat on site including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and ~~man~~human-made structures that may support bumble bee colonies, such as rock walls, rubble, and furniture. The habitat assessment ~~will~~shall be repeated prior to February 1 in each year that ground-disturbing activities will occur to determine if foraging, nesting, or overwintering resources are present within the impact area. If nesting resources are present in the impact area, focused surveys ~~will~~shall be conducted.

The focused survey ~~will~~shall be performed by a biologist with expertise in surveying for bumble bees and include at least three survey passes that are not on sequential days or in the same week, preferably spaced two to four weeks apart. The timing of these surveys shall coincide with the colony active period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys ~~will~~shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling), and surveyors ~~will~~shall wait at least 1 hour following rain. Optimal surveys are conducted when there are sunny to partly sunny skies and ambient temperatures are greater than 60° Fahrenheit. Surveys may be conducted earlier than April 1 if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up to five minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency,

such that their presence would be apparent after five minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point ~~which~~that would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes).

Identification ~~will~~shall include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in the U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation if able. The bee ~~will~~shall be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container ~~will~~shall be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly.

If Crotch's bumble bee nests are not detected, no further mitigation would be required. The mere presence of foraging Crotch's bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources ~~will~~shall be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources.

A written survey report ~~will~~shall be submitted to the County of Los Angeles (County) and CDFW within 30 days of the pre-construction survey. The report ~~will~~shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report ~~will~~shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and detailed habitat assessment~~, and photo vouchers.~~ If Crotch's bumble bee nests are observed, the survey report ~~will~~shall also include recommendations for avoidance, and the location information ~~will~~shall be submitted to the California Natural Diversity Database ~~(CNDDB)~~ at the time of, or prior to, submittal of the survey report.

If the nest resources cannot be avoided, as outlined in this measure, the project applicant ~~will~~shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this ~~CEQA~~California Environmental Quality Act document and shall be incorporated into the Habitat Mitigation and Monitoring Plan.

Section 6.11, MM-BIO-11: Special-Status Wildlife Relocation Plan, page 130

Prior to commencement of any earthmoving activities or the pre-construction staging of equipment on the Project site, the Project Applicant shall contract with a ~~County Planning approved~~biologist approved by the County of Los Angeles (County) to develop a Preconstruction Wildlife Survey and Relocation Plan for terrestrial reptiles, including the California newt (*Taricha torosa*), two-striped gartersnake (*Thamnophis hammondii*), Southern California legless lizard (*Anniella stebbinsi*), and coastal whiptail (*Aspidoscelis tigris stejnegeri*). The Preconstruction Wildlife Survey and Relocation Plan shall be submitted to the County~~Planning~~ for review prior to any ground-disturbing activities within potentially occupied habitat.

The plan shall include at a minimum, the following:

- Protocols for pre-construction surveys to flush out and/or move identified special-status wildlife within the Study Area, as feasible
  - Relocation to the Conservation Area shall be the primary location, unless otherwise approved by the County~~Planning.~~
- The timing, frequency, and locations where surveys should be conducted
  - Surveys ~~will~~shall be conducted 24 hours prior to construction activities and repeated the morning of the proposed activity
  - Surveys shall be conducted in all areas anticipated to be subject to vegetation clearing
- The habitat and conditions in the proposed relocation site(s)
- The methods that would be used for trapping and relocating identified species
  - All equipment used in the effort ~~will~~shall be cleaned and decontaminated to minimize the spread of herpetofaunal pathogens.[7]
  - Any wildlife handling and relocation methodology from the ~~CDFW issued~~Streambed Alteration Agreement ~~will be~~ issued by the California Department of Fish and Wildlife (CDFW) shall be incorporated in the Preconstruction Survey and Relocation Plan.
- Protocols for documentation/recordation of the species and number of animals relocated
  - Relocations shall be logged and made available to the County~~Planning~~, if requested
- Protocols for notifying CDFW if identified species cannot be relocated
  - Attempts at relocation shall be logged, and notification shall occur within 24 hours
- The timing and frequency of reports documenting the results of the surveys

Section 6.12, MM-BIO-12: Nesting Bird Avoidance, pages 130 and 131

Project construction shall be conducted in compliance with the conditions set forth in the Migratory Bird Treaty Act and California Fish and Game Code with methods approved by the California Department of Fish and Wildlife to protect active bird/raptor nests. Vegetation removal shall occur during the non-breeding season for nesting birds (generally late September to early March) and nesting raptors (generally early July to late January) to avoid impacts to nesting birds and raptors.

[7] Julian et al. 2020. Minimizing the Spread of Herpetofaunal Pathogens in Aquatic Habitats by Decontaminating Construction Equipment. Herpetological Review, 2020, 51(3), 472–483. https://parcplace.org/wp-content/uploads/2020/11/Julian-2020-Decontamination-for-Herps-for-large-equipment.pdf.

For the remaining Project activities initiated during the breeding season for nesting birds (March 1–September 30) and nesting raptors (February 1–June 30), a pre-construction survey shall be conducted by the Biological Monitor (MM-BIO-4) for nesting birds and/or raptors within 3 days prior to any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors). If the Biological Monitor does not find any active nests on or immediately adjacent to the impact areas, the Project activity shall be allowed to proceed.

If the Biological Monitor finds an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or breeding activities substantially disrupted, the Biological Monitor shall delineate an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts shall be mapped on the construction plans, which will be included in the report(s) documenting the survey(s) that will be submitted to the County within three days of the completion of the survey. The active nest shall be protected until nesting activity has ended. To protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by the Biological Monitor: (1) work limits shall be established within a buffer around any occupied nest (the buffer shall be 100–300 feet for nesting non-raptors and 300–500 feet for nesting raptors), unless otherwise determined by the Biological Monitor and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by the Biological Monitor. Encroachment into the buffer area around a known nest shall only be allowed if the Biological Monitor determines that the proposed activity would not disturb the nest occupants. Construction can proceed when the Biological Monitor has determined that fledglings have left the nest, or the nest has failed.

Section 6.13, MM-BIO-13: Lighting Plan, pages 131 and 132

Prior to issuance of the building permit, the Applicant shall prepare lighting plans for submission and approval by the Los Angeles County (County) Department of Regional Planning (Planning) that identify the type, layout, and luminaire wattage of all exterior fixtures to be employed in association with the Project. The plan shall demonstrate compliance with Chapter 22.80 (Rural Outdoor Lighting District) of the County Code. The lighting plan shall at a minimum address and conform to the Rural Outdoor Lighting District as well as the following requirements, and County Planning must approve all aspects of the final submitted lighting plans.

- Wherever feasible and compatible with requirements for nighttime safety and security, outdoor lighting shall be not be operated adjacent to native habitats.
- Outdoor lighting shall be fully shielded so that bulbs and lenses are not visible and shall cause no light trespass into native habitats or skyward. No lighting shall be directed toward native habitats.
- Light fixtures shall be mounted as low as possible to minimize light trespass.
- The lowest amount of light shall be employed that is needed for the task. The lighting shall only illuminate the area needed and shall be no brighter than necessary. This includes lighting for stage events.
- Motion sensors ~~shall be employed,~~ or automatic controls shall be employed to ensure that lights are not left on longer than necessary.
- Only warm light sources shall be used for outdoor lighting. The amount of blue light emitted shall be minimized, as blue light has been shown to harm human health and to endanger wildlife. Warm (or subdued) light sources recommended for use outdoors include low-pressure sodium (LPS), high-pressure sodium (HPS), and low-color-temperature light emitting diodes (LEDs). Wherever feasible, lighting color temperature shall not exceed 2,200 kelvins.

- The following types of lighting are prohibited, and shall not be used: drop-down lenses, mercury vapor lights, ultraviolet lights, and searchlights, laser lights, or other outdoor lighting that flashes, blinks, ~~alternatives~~alternates, or moves.
- Project structures shall utilize non-reflective materials to avoid glare intruding into native habitats.
- Landscape screens shall be employed where feasible to reduce glare from vehicle headlights into native habitats.

Section 6.14, MM-BIO-14: Jurisdictional Waters Compensation, page 132

Mitigation for up to 4.94 acres of direct impacts to jurisdictional waters shall be implemented through on-site enhancement of remaining jurisdictional waters (per MM-BIO-2) and/or off-site acquisition, such as mitigation bank credits and/or turnkey projects with mitigation banks (as approved by the County of Los Angeles) following the issuance of permits from the ~~USACE~~U.S. Army Corps of Engineers, Los Angeles ~~RWQCB~~Regional Water Quality Control Board, and ~~CDFW~~California Department of Fish and Wildlife, and prior to the issuance of the grading permit.

Section 6.15, MM-BIO-15: Roosting Bat Survey, page 132

If Project construction initiates between June 1 and August 30, a Los Angeles County Department of Regional Planning (LACDRP)-approved Biological Monitor shall conduct a pre-construction roosting bat survey within one week prior to the start of ~~constructed~~construction-related activities for the Project. The biologist shall inspect cliff features that could have crevices used for roosting by a colony of canyon bat (*Parastrellus hesperus*) within 500 feet of proposed construction activities and then conduct a roost emergence survey at dusk for any potential roosting features found. Results of the surveys shall be documented in a report and submitted to ~~County Planning.~~LACDRP. As stated in MM-BIO-4, the Biological Monitor shall monitor any colonial roosts located within 500 feet from the Project limits.

Section 6.16, MM-BIO-16: SEA Protected Trees Replacement / Compensation, page 132 and 133

The required~~, County Planning~~ Conservation Management Plan (CMP) approved ~~CMP~~by the County of Los Angeles (County) shall include a Protected Tree Replacement Plan that ~~will~~shall dictate the establishment of replacement trees in the Conservation Area at the numbers specified in Table 31. At a minimum, the removal of any SEA Protected Tree shall result in a minimum of two replacement plantings with ~~a~~ 10:1 for Heritage Trees. Replacement trees shall be seedlings of the same species being removed and shall be planted within an area where suitable growing conditions are present and where the trees ~~will~~shall be able to remain in perpetuity, which may include the On-Site Conservation Area. ~~Undersized, naturally sprouted trees of the same species growing on site may be protected or transplanted as replacement trees~~. The replacement trees shall be nurtured and maintained in a condition of good health and ~~will~~shall be monitored for a period of seven years. If any of the replacement plantings fail during the monitoring period of seven years, the Applicant ~~will~~shall be responsible for replanting and nurturing those new trees. The following table details the quantity of each species required for planting.

Table 31. Summary of Individual Species Replacement Quantities

Scientific Name	Common Name	Total Impacted	Replacement Ratio	Total Replacement Required
Heteromeles arbutifolia	toyon	0	2:1	0

Table 31. Summary of Individual Species Replacement Quantities

Scientific Name	Common Name	Total Impacted	Replacement Ratio	Total Replacement Required
Juglans californica	Southern California black walnut	3	2:1	6
Populus fremontii	Fremont cottonwood	15	2:1	30
Quercus agrifolia	coast live oak	191	2:1	382
Quercus agrifolia (Heritage Tree)	coast live oak (Heritage Tree)	15	10:1	150
Quercus berberidifolia	scrub oak	1	2:1	2
Quercus lobata	valley oak	10	2:1	20
Quercus lobata (Heritage Tree)	valley oak (Heritage Tree)	2	10:1	20
Salix laevigata	red willow	24	2:1	48
Salix lasiolepis	arroyo willow	7	2:1	14
Sambucus nigra ssp. *caerulea*	blue elderberry	50	2:1	100
	Totals	**318**	**N/A**	**772**

It should be noted that mitigation can include the protection of undersized, naturally sprouted trees of the same species growing on site. In addition, per the County Code, the County may require additional mitigation and monitoring requirements following review of the ~~SEA CUPs.~~Significant Ecological Area Conditional Use Permits. At a minimum, the County ~~Planning~~ requires that the replacement trees need to be nurtured and maintained in a healthy condition and be monitored for a period of seven years. If any of the replacement plantings fail during the monitoring period of seven years, the Applicant ~~will~~shall be responsible for replanting and nurturing those new trees.

The Project Applicant must pay into the County Protected Tree Fund should there not be enough locations within the Conservation Area (on-site ~~or~~and off-site) or Project landscaped areas for replacement trees. ~~As a~~At last resort, the Protected Tree Fund payments shall be used by the County in accordance with County Code Section 22.102.070(F)(5~~) of the Los Angeles County Code~~.

Appendix M-2, Wildfire Evacuation Plan

The Evacuation Analysis Technical Memorandum (included as Appendix C of Appendix M-2, Wildfire Evacuation Plan in the Draft EIR) has been revised to incorporate additional existing land uses and a cumulative residential project. The revised Evacuation Analysis Technical Memorandum is provided as Attachment D to this Final EIR.

Section 4.1, Evacuation Assumptions and Scenarios, Page 20

Nighttime Evacuation; 100% Occupancy

Modeling assumed that the evacuation would occur at night when all residents and the surrounding communities are at home and thus all resident vehicles would need to evacuate. In an actual wildfire scenario, it is likely that

fewer vehicles would be present on the Project site and within the surrounding communities when an evacuation order is given.

Nighttime evacuation is the most conservative scenario, as this scenario assumed that all residents are at home and would evacuate with all available vehicles. Nighttime evacuation assumption also includes hotel guests from the Hampton Inn Los Angeles/Santa Clarita, La Quinta Inn & Suites ~~and~~, Extended Stay America, Residence Inn Santa Clarita Valencia, Fairfield Inn Santa Clarita Valencia, and Comfort Suites Near Six Flags Magic Mountain. The evacuation analysis assumed that commercial and retail land uses are closed when the evacuation order is issued, thus these land uses are not included in the evacuation analysis.

Section 4.1, Evacuation Assumptions and Scenarios, Page 22

Evacuation Scenarios

A total of ~~three~~ five evacuation scenarios were analyzed:

- **Scenario 1** – *Existing Land Uses*: This scenario estimates the evacuation time for the existing land uses within the study area and would direct evacuating vehicles toward Pico Canyons Road/Lyons Avenue (east of I-5, and I-5 interchanges). Figure 4 displays the area assumed to be evacuated under this scenario.
- **Scenario 2** – *Proposed Project Only*: This scenario assumed full evacuation of the proposed Project and would direct evacuating vehicles toward Pico Canyon Road/Lyons Avenue (east of I-5, and I-5 interchanges).
- **Scenario 3** – *Existing Land Uses with the proposed Project*: This scenario is similar to Scenario 1, with the addition of the proposed Project traffic. Figure 5 displays the area assumed to be evacuated under this scenario.
- **Scenario 4** – *Existing Land Uses with Cumulative Projects*[8]: This scenario is similar to Scenario 1, with the addition of the following cumulative projects:
  - **Canyon View Estates** – 37 dwelling units of single family residential at the intersection of Pico Canyon Road and Stevenson Ranch Parkway
  - **Tentative Tract Map 74979** – 7 dwelling units of single family residential located at south of Sagecrest Circle near Coriander Court
  - **Aidlin Hills** – 102 dwelling units of single-family residential located at the west end of Pico Canyon Road
- **Scenario 5** – *Existing Land Uses with Cumulative Projects with the proposed Project*: This scenario is similar to Scenario 4, with the addition of the proposed Project traffic.

Section 4.2, Potential for Project Evacuation Impact on Existing Conditions, Pages 26 and 27

Based upon review of previous fires and evacuation orders, evacuation modeling assumed that all vehicles would head north along The Old Road, since the segments of The Old Road between the southern Project's boundary and Calgrove Boulevard are exposed to potential wildfire fuel sources under some fire scenarios. In fact, the 2016 Sage Fire encroach upon this segment of The Old Road, and not upon the land uses located to the north of the Project's site. As shown in Table 1, in Scenario 1, which considers only the evacuation of existing land uses, it is estimated to take 46 ~~43~~ minutes to evacuate populations along the southern side of Pico Canyon Road and west of The Old Road. In Scenario 2, which considers only the evacuation of the Project's population, it is estimated to take 50

8 If an evacuation is required, the Wiley Canyon Project situated on Wiley Canyon Road, between Hawkbryn Avenue and Calgrove Boulevard, will evacuate towards Lyons Avenue using Wiley Canyon Road. This implies that the evacuation route of the Wiley Canyon Project differs from that of the proposed Project, and therefore, the traffic from the Wiley Canyon Project was not included in the cumulative analysis.

minutes to evacuate the Project site. In Scenario 3, which considers both existing and proposed populations, it is estimated to take 1 hour and 29 ~~26~~ minutes to evacuate the Project and 1 hour and 23 minutes to evacuate existing surrounding land uses ~~all populations~~ (Appendix C – Evacuation Technical Memorandum). The Project would increase evacuation times for existing populations by up to 37 minutes for the surrounding land uses, when compared to existing conditions. It is important to note, the evacuation time does not depict the time for each population modeled, but rather the time needed to evacuate all populations modeled. Populations located in closer proximity to the safe zone will evacuate sooner than the calculated evacuation time. Because the proposed Project only has two evacuation points and is located on the southernmost side of The Old Road, Project traffic that heads north during an evacuation would likely have to wait for existing traffic to evacuate (at the existing developments located closer to Pico Canyon Road). Therefore, evacuation traffic from the Project would have limited impact on existing conditions if evacuation were to the north.

Table 1. Evacuation Time Summary

Scenario	Total Evacuation Vehicles	Evacuation Time	
		Nearby Land Uses	Project
Scenario 1 – Existing Land Uses	~~1,960~~ 2,330	~~43~~ 46 minutes	N/A
Scenario 2 – Proposed Project Only	1,040	N/A	50 minutes
Scenario 3 – Existing Land Uses with Proposed Project	~~3,000~~ 3,370	1 hour ~~20~~ 23 minutes	1 hour ~~26~~ 29 minutes
Scenario 4 – Existing Land Uses with Cumulative Projects	~~2,060~~ 2,640	~~57 minutes~~ 1 hour 3 minutes	N/A
Scenario 5 – Existing Land Uses with Cumulative Projects and Project	~~3,100~~ 3,680	1 hour ~~34~~ 40 minutes	1 hour ~~38~~ 43 minutes

Source: CR Associates 202~~2~~5

Under the cumulative scenarios, it would take 1 hour and ~~34~~ 40 minutes to evacuate the surrounding land uses and 1 hour and ~~38~~ 43 minutes to evacuate the proposed Project (Scenario 5), an increase of 37 minutes for the surrounding land uses, when compared to the cumulative without Project conditions (Scenario 4).

4 Mitigation Monitoring and Reporting Program

Public Resources Code Section 21081.6(a)(1) requires a Lead Agency that approves or carries out a project, where an environmental impact report has identified significant environmental effects, to adopt a "reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment."

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared for the Trails at Lyons Canyon Project (Project), as set forth in the Final Environmental Impact Report (Final EIR). The County of Los Angeles (County) is the Lead Agency that must adopt the MMRP for future development under the Project. The MMRP will be kept on file with the Los Angeles County Department of Regional Planning, 320 West Temple Street, 13th Floor, Los Angeles, California, 90012.

The MMRP table presented below, which constitutes the monitoring and reporting program, lists all mitigation measures that are contained in the Final EIR. For each listed mitigation measure, the table identifies the following:

- EIR section title (Environmental Factor) where the mitigation measure is contained;
- Mitigation measure number and content;
- Actions required to comply with the mitigation measure;
- Timing of implementation/monitoring for the mitigation measure;
- Responsible agency or party responsible for implementing/reporting; and
- Monitoring agency or party responsible for verifying compliance

Figure 4.13-3, Area of Lot 22 in Which Construction Noise Mitigation is Required, and Figure 4.20-2, Fuel Modification Zones, as referenced in Mitigation Measure (MM)-4.13-1, Simultaneous Equipment Operation Limit for Portion of Lot 22, and MM-4.20-2, Alternative Materials and Methods, respectively, are included at the end of this MMRP.

INTENTIONALLY LEFT BLANK

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
1.1	Aesthetics	**MM-4.1-1**: *Visual Shielding Plan.* Prior to the issuance of a grading permit, the Applicant/Developer shall prepare a Visual Shielding Plan (Plan) to improve the overall aesthetic quality of construction areas. Plan requirements shall include the following: 1. Designated Staging Areas: The Plan shall require the establishment of one or more designated staging area(s) intended for the storage of construction equipment and vehicles, stockpiles, waste bins, and other construction-related materials during Project construction. The designated staging area(s) shall be located within the grading area on the northern portion of the Project site, strategically placed away from publicly-maintained trails and open-space areas to the south. Upon completion of construction activities for the day, all equipment shall be consolidated in the designated staging area(s) and any equipment or machinery not in use for a period of three of more months shall be removed from the Project site. 2. Visual Shielding: To address potential aesthetic impacts from construction equipment and activities, the Plan shall require establishment of visual shielding in the form of temporary, opaque fencing and/or cloth screening along the Project-site boundary fronting The Old Road as well as in the vicinity of the Taylor Trailhead and where the western leg of the Taylor Trail intersects with the Project site. Temporary, opaque fencing and/or cloth screening shall also be installed around the designated construction staging areas(s). The color palette of temporary fencing and/or cloth screening shall be restricted to neutral earth tones (e.g., shades of brown, green, gray, or beige). 3. Project Site Cleanliness/Management: All construction-related equipment and materials on the Project site shall be maintained in a clean and organized manner. 4. Monitoring**:** Monthly inspections shall be conducted to assess the effectiveness of the Plan. Any failed or poorly-performing visual shielding (e.g., damaged fencing and/or cloth screening) shall be replaced or repaired as soon as possible. The Plan shall be reviewed and approved by the County to ensure compliance with this mitigation measure. Visual shielding and establishment of designated staging areas shall commence prior to grading or soil disturbance activities and shall be maintained throughout the construction period and until the site is permanently stabilized and/or developed.	Preparation of a Visual Shielding Plan and submittal to County of Los Angeles for review and approval	Prior to issuance of grading permit	Project Applicant or Developer	County Department of Regional Planning
			Implementation of visual shielding and establishment of designated staging areas	Prior to grading or soil disturbance activities and maintained throughout construction period, and until the site is permanently stabilized and/or developed	Project Applicant or Developer	County Department of Regional Planning
2.1	Agriculture/Forest	NA	NA	NA	NA	NA
3.1	Air Quality	**MM-4.3-1:** *Construction Equipment.* Heavy-duty diesel-powered construction equipment greater than 50 horsepower shall be equipped with California Air Resources Board (CARB)-certified Tier 4 Final or better diesel engines. The County shall verify and approve all pieces within the construction fleet that would not meet Tier 4 Final standards. Equipment engines must be maintained in good condition and in proper tune as per manufacturer's specifications. During construction activities, the contractor shall, at a minimum, electrify or use alternative fuels (non-diesel) for the operation of all equipment less than 50 horsepower (welders). In addition, electricity use during the construction activities shall come from the existing electric grid instead of a diesel generator. If a generator is necessary for the completion of construction activities, a non-diesel generator shall be used.	Use Tier 4 Final or better diesel engines for construction equipment over 50 horsepower	During construction activities	Construction Contractor	County Department of Regional Planning
			The County shall verify and approve all pieces within the construction fleet that would not meet Tier 4 Final standards.	During construction activities	Construction Contractor and County Department of Regional Planning	County Department of Regional Planning

<table>
<tr><th>#</th><th>Environmental Factor</th><th>Mitigation Measure(s)</th><th>Action Required</th><th>When Monitoring to Occur</th><th>Responsible Agency or Party</th><th>Monitoring Agency or Party</th></tr>
<tr><td>4.1</td><td>Biological Resources</td><td>MM-4.4-1: On-Site Habitat Preservation. Prior to final map recordation, the on-site conservation easement area shall be designated on the final map. Additionally, a letter of intent shall be obtained from the Conservation Easement holder. Prior to the issuance of a grading permit, the Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves 144.43 acres of open space within the Project boundaries for long-term conservation and management as a natural conservation area (“Conservation Area”). The following table documents the vegetation communities that would be preserved. The Conservation Area provides sufficient preservation for Project-related impacts to vegetation communities within Resource Categories 4 and 5 of the Significant Ecological Area Ordinance Implementation Guide.

Vegetation Communities Preserved on the Project Site

<table>
<tr><th>Alliance</th><th>Unimpacted Acres (Open Space)</th><th>Preserved via Conservation Easement</th></tr>
<tr><td colspan="3">SEA Resource Category 1</td></tr>
<tr><td>Baccharis salicifolia Shrubland</td><td>0.52</td><td>0.52</td></tr>
<tr><td>Salix gooddingii–Salix laevigata Forest and Woodland</td><td>0</td><td>0.0</td></tr>
<tr><td>Sub-Total</td><td>0.52</td><td>0.52</td></tr>
<tr><td colspan="3">SEA Resource Category 3</td></tr>
<tr><td>Ericameria palmeri Provisional Shrubland</td><td>0</td><td>0</td></tr>
<tr><td>Eriodictyon crassifolium Provisional Shrubland</td><td>0.41</td><td>0.41</td></tr>
<tr><td>Juglans californica Forest and Woodland</td><td>0.09</td><td>0.09</td></tr>
<tr><td>Nassella (Stipa) spp.–Melica spp. Herbaceous</td><td>0</td><td>0</td></tr>
<tr><td>Quercus agrifolia Forest and Woodland</td><td>10.64</td><td>10.28</td></tr>
<tr><td>Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland</td><td>0.01</td><td>0.01</td></tr>
<tr><td>Sub-Total</td><td>11.15</td><td>10.79</td></tr>
<tr><td colspan="3">SEA Resource Category 4</td></tr>
<tr><td>Adenostoma fasciculatum Shrubland</td><td>69.77</td><td>64.68</td></tr>
<tr><td>Adenostoma fasciculatum Shrubland–Disturbed</td><td>9.73</td><td>9.73</td></tr>
<tr><td>Artemisia californica–Salvia leucophylla Shrubland</td><td>28.01</td><td>28.01</td></tr>
<tr><td>Artemisia californica–Salvia leucophylla Shrubland–Disturbed</td><td>10.66</td><td>10.66</td></tr>
<tr><td>Avena spp.–Bromus spp. Herbaceous Semi-natural</td><td>2.62</td><td>2.62</td></tr>
<tr><td>Distichlis spicata Herbaceous</td><td>0.07</td><td>0.07</td></tr>
</table>
</td><td>A letter of intent shall be obtained from the Conservation Easement holder.

The on-site conservation easement area shall be designated as such on the final map.

Recordation of a conservation easement

Preparation, submittal, and approval of a Conservation Management Plan

Conservation Easement holder review</td><td>Prior to final map recordation

Prior to final map recordation

Prior to the issuance of a grading permit

Prior to issuance of a grading permit

Prior to issuance of grading activities</td><td>Project Applicant or Developer

Project Applicant or Developer

Project Applicant or Developer

Project Applicant or Developer

Project Applicant or Developer</td><td>County Department of Regional Planning

County Department of Regional Planning

County Department of Regional Planning

County Department of Regional Planning

County Department of Regional Planning and Conservation Easement Holder</td></tr>
</table>

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party

Eriogonum davidsonii/Croton setiger Grassland	0	0
Eriogonum fasciculatum Shrubland	0	0
Sub-Total	*120.87*	*115.77*
SEA Resource Category 5		
Brassica nigra–Centaurea melitensis Herbaceous Semi-natural Stands	16.47	16.24[a]
Non-SEA Resource Category		
Developed[1]	1.31	1.11
Total Acres	**150.31**	**144.43**

Notes: SEA = Significant Ecological Area.
[a] 16.24 acres of this community are proposed to be restored per MM-4.4-2.
[1] Existing trails.
Notes: SEA = Significant Ecological Area.
[1] 16.47 acres of this community are proposed to be restored per MM-4.4-2.
[2] Existing trails.

Conservation Management Plan**.** As part of recording the conservation easement, a Conservation Management Plan (CMP) applicable to the On-Site Conservation Area shall be prepared and submitted to the County of Los Angeles for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The CMP shall set forth the following requirements that shall be implemented by the entity that holds the conservation easement and/or manages and stewards the Conservation Area: (1) there shall be no grading or other construction activities within the On-Site Conservation Area, except for the proposed habitat enhancement/restoration, construction and maintenance of signage, and trail maintenance; (2) off-trail activities (e.g., hiking, biking, horseback riding) shall be prohibited; (3) signage shall be installed at the trailheads and at any access points to the On-Site Conservation Area, which shall include information on the organization that holds the conservation easement, brief descriptions of the restoration activities, protection of biological resources, and restrictions to human activities; (4) signage shall be placed in visible locations that prohibits smoking and that requires that humans and domesticated pets remain within the limits of designated hiking trails, all domesticated pets be on leashes, and owners clean up after domesticated pets; (5) no fencing that represents a barrier to wildlife movement or other barriers to wildlife movement shall be installed; (6) dog waste bag dispensers and wildlife-proof receptacles for trash shall be provided at appropriate locations on the trail; (7) gasoline-powered maintenance equipment shall be prohibited; (8) commercial honeybee operations shall not be allowed to use the On-Site Conservation Area for storing their apiaries; (9) rodenticides shall be prohibited; (10) herbicides and pesticides shall be discouraged, and only those typically used for invasive plant management in California wildlands shall be allowed, per the California Invasive Plant Council and Pesticide Research Institute's 2015 Best Management Practices (BMPs) for Wildland Stewardship: Protecting Wildlife When Using Herbicides for Invasive Plant Management; (11) arborists certified by the International Society of Arboriculture (ISA) shall conduct surveys every five years that shall include an assessment of potential infestations of invasive shothole borer beetle and other pathogens or invasive

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		insects that can threaten native habitat; (12) at least one annual walk-through survey shall be conducted by a biologist to qualitatively monitor the general condition of on-site habitats and to check for any new introduction or expansion of invasive plant species; (13) collect and remove trash, repair vandalized signs, and rectify trespass impacts; and (14) provide annual reporting that document the conditions of the Conservation Area. Approved work shall be outlined in the CMP and in the conservation easement, including monitoring and maintenance efforts or for other activities associated with preserve management, and prohibited activities shall be delineated. The conservation easement holder shall be an entity that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b). Funding for the conservation easement and implementation of the tasks in the CMP shall be maintained in perpetuity and shall be provided by a traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association or other equivalent mechanism(s).				
4.2	Biological Resources	**MM-4.4-2**: *Habitat Mitigation and Monitoring Plan.* After implementation of MM-4.4-9, if the Los Angeles County Department of Regional Planning (Planning) determines that sufficient habitat is not preserved off site, per MM-4.4-9, then on-site establishment and restoration shall be conducted in the On-Site Conservation Area (MM-4.4-1). Prior to the issuance of a grading permit, a qualified biologist shall be retained to prepare a Habitat Mitigation and Monitoring Plan (HMMP) detailing the specific approach for each type of habitat restoration and establishment area, special-status species transplant location, and Significant Ecological Area protected tree transplant/planting and outlining detailed performance standards and monitoring requirements for each, following the monitoring and reporting methods and performance standards listed below. Planning approval of the HMMP shall be required prior to the onset of Project-related ground-disturbing activities. When specified for each habitat type below, the acreages allotted for on-site establishment apply to a total of 16.24 acres of *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands. ▪ On-site establishment of 0.84 acres of *Eriodictyon crassifolium* provisional shrubland alliance ▪ On-site restoration/establishment of 0.07 acre of *Rhus trilobata–Crataegus rivularis–Forestiera pubescens* shrubland alliance ▪ On-site establishment of 15.20 acres *Quercus agrifolia* forest and woodland alliance <u>Habitat Restoration/Enhancement Implementation</u> The following best management practices shall be implemented during the implementation of the habitat restoration/enhancement activities. <u>Schedule</u>**:** Establishment of restoration/revegetation sites shall be conducted during the appropriate time of year (between October 15 and January 30), with	Determination by the County Department of Regional Planning if sufficient habitat is not preserved off-site, per MM-4.4-9, then preparation and submittal of a Habitat Mitigation and Monitoring Plan	After implementation of MM-4.4-9, and prior to issuance of a grading permit	Project Applicant or Developer and qualified biologist	County Department of Regional Planning
			Approval of a Habitat Mitigation and Monitoring Plan	Prior to the onset of Project-related ground-disturbing activities	County Department of Regional Planning	County Department of Regional Planning
			Habitat Restoration/enhancement implementation	During habitat restoration/enhancement activities, between October 15 and January 30, with planting and/or seeding occurring immediately after the restoration sites are prepared	Project Applicant or Developer and qualified biologist	County Department of Regional Planning
			Monitoring of plantings, enhancement/restoration, and receptor sites	For 10 years following the completion of seeding or plantings; quarterly surveys conducted during the non-growing season for each enhanced or restored habitat type or particular plant species where required.	Project Applicant or Developer and qualified biologist	County Department of Regional Planning
			Monitoring surveys and qualitative surveys	Quarterly during non-growing season and every other week basis through seed production for 10 years during the growing season.	Project Applicant or Developer and qualified biologist	County Department of Regional Planning

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		planting and/or seeding occurring immediately after the restoration sites are prepared. Stressors: Any stressors causing habitat degradation should be addressed prior to starting restoration. This includes the removal of invasive plants and trash. Removal of invasive species shall include the following: ▪ Removal of non-native species in patches of native habitat shall be conducted in such a way as to minimize impacts to the existing native vegetation. ▪ Any proposals for use of herbicide treatments should be accompanied by a plan that demonstrates the following: - That other methods of invasive species control have been tested and that a single application of herbicide has been determined to be the best solution - That there is a post application plan for revegetation and/or mulching; - That the treatment is a one-time application. ▪ Pre-emergent herbicide shall not be used. Plant Material. The following shall be implemented: ▪ Details regarding the planned source of their plant material shall be provided. ▪ All stock from nurseries shall be derived from plants originally collected within cismontane County. ▪ Plant material used for habitat restoration purposes shall consist of native species that are local to the immediate area of the mitigation site. ▪ All plant material proposed for use in a habitat restoration program shall be inspected by a County-approved Restoration Biologist to ensure that all container plants are in good health and do not contain pests or pathogens that may be harmful to existing native plants or wildlife species. ▪ Container plants and other landscaping materials (including organic mulches) should be inspected by the County Planning-approved Restoration Biologist to ensure they do not contain Argentine ant (*Linepithema humile*). ▪ Native seed mixes shall be inspected by the County-approved Restoration Biologist prior to their application to ensure that they contain the proper species and that seed packages are in good condition and do not contain any pests or pathogens. ▪ Diseased or infested plant, seed, or landscape materials should be removed from the site and transported to an appropriate off-site green waste facility. ▪ One application of mulch shall be done, except for areas that shall provide nesting opportunities for native bees. Maintenance Plan/Guidelines. A Maintenance Plan shall be included that outlines the following: (1) weed control, including cleaning of equipment to prevent further spread or introduction of new weeds; (2) herbivory control; (3) trash removal; (4) irrigation system maintenance; (5) maintenance training; and (6) replacement planting. Signage and Fencing. Signage specifications shall be developed to indicate the site is a restoration/preserve area and to either indicate that trespassing is not	Surveying Flowering and Seed Production and Annual Monitoring Reports	During the growing period, or as soon as vegetative growth is observed, each enhancement/restoration and receptor site shall be monitored monthly through seed production for 10 years	Project Applicant or Developer and qualified biologist	County Department of Regional Planning

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		allowed or to instruct visitors to stay on trails. Specifications on fencing to protect biological resources and restrict human access shall be provided. Monitoring Methods Proposed plantings, enhancement/restoration, and receptor sites shall be monitored for 10 years following the completion of seeding or planting. The monitoring program shall consist of the observation and evidence of vegetative growth and the observation of emergent and flowering special-status plant species where required, along with seed production for flowering plants, photo-documentation, and measurements of annual rainfall. A County Planning-approved Restoration Biologist, restoration specialists, biologists, or horticulturists with appropriate credentials and experience in native habitat restoration shall perform monitoring. Continuity within the personnel and methodology of monitoring shall be maintained insofar as possible to ensure comparable assessments. The Biologist shall conduct monitoring surveys quarterly during the non-growing season for each enhanced or restored habitat type or particular plant species where required. During the growing period, or as soon as vegetative growth is observed, the enhancement/restoration and receptor sites shall be monitored on a every other week basis through seed production for 10 years to document the growth of the enhanced or restored habitat type or replacement population. Qualitative surveys, consisting of a general site walkover and habitat characterization, shall be completed during each monitoring visit. General observations, such as growth, flowering, and seed production, as well as pest problems, weed establishment, mortality, and site security, shall be noted in each site walkover. The Project Biologist shall also note observations on native plant recruitment for the purpose of later discussion in the annual reports. Records shall be kept of mortality and other problems, such as insect damage, weed infestation, and soil loss. Surveying Flowering and Seed Production. In the case of replacement populations for specific species, flowering individuals observed within receptor sites shall be counted. As noted above, quantitative surveys may require multiple visits per month as the blooming period may be staggered along several months (i.e., vegetative growth or non-blooming individuals may not be detected until that individual has bloomed). Peak blooming periods may fluctuate year to year due to seasonal conditions; therefore, multiple visits shall aid in a more accurate count of flowering individuals. Each flowering individual in the restoration plots shall be tallied and recorded on data sheets. The total yearly population shall be calculated each year for the annual monitoring results. Photo-Documentation. Permanent stations for photo-documentation shall be established prior to or during the first annual monitoring event. Photos shall be taken each monitoring period from the same vantage point and in the same direction each year and shall reflect material discussed in the annual monitoring report. Monitoring Schedule. During the growing period, or as soon as vegetative growth is observed, each enhancement/restoration and receptor site shall be monitored monthly through seed production for 10 years.				

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		Annual Monitoring Reports. At the end of each monitoring period, an annual report shall be prepared for submittal to County Planning. The report shall summarize the information collected during the qualitative and quantitative monitoring. Each report shall document the monitoring methods and description of the enhancement/restoration and receptor sites and provide copies of field data, photo-documentation, monitoring results, an analysis of success, and recommendations for the project and/or remedial measures if necessary. Since seeding of particular species may not occur when planned, monitoring shall be tied to the actual implementation date (e.g., the first annual report shall be delivered on January 1st of the year following the first growing season after enhancement/restoration and/or seeding). These reports shall describe the success of the relocation and shall discuss the efficacy of the various methods employed to propagate this species. These reports shall also include the following: ▪ A list of names, titles, and companies of all persons who prepared the content of the annual report and participated in monitoring activities for that year ▪ A vicinity map indicating location of the mitigation site ▪ A mitigation site plan, identifying plot locations, photo station locations, etc. as appropriate ▪ Copies of all monitoring photographs ▪ An analysis of all qualitative and quantitative monitoring data Performance Standards The performance standards set forth below are to be achieved for the mitigation and monitoring program to be considered successful. Because of the variability of growing conditions and the number of flowering individuals from year-to-year, the performance standards shall be considered to have been achieved if during any of 3 years of the 10-year monitoring period, the target acreage or population number is achieved. Thus, the annual standards provide a guide showing that the program is on a positive trajectory. ▪ The growing conditions and number of flowering individuals in any given year can vary substantially, based on environmental conditions, such that it is necessary to observe translocated populations over a period of years to accurately determine survival. To this end, this plan includes a 10-year monitoring term to track flowering individuals, which provides the best and easiest indicators to track that the translocation is succeeding. ▪ Various threats to plants must be minimized to ensure survival and ultimate flowering of seeded individuals leading to future germination/successful reproduction. ▪ Habitat characteristics including non-native grasses and herbaceous weeds are important and require monitoring to determine that specific enhancement/restoration areas and translocation/receptor sites are exhibiting a positive trajectory. Should the performance standards be achieved early in the program, monitoring shall continue for the full 10 years to ensure that there is no degradation of the habitat values during the 10-year period.				

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		<u>Performance Standards for 10-Year Monitoring Period</u> ▪ Flowering of the total number of flowering plants originating from seed shall equal or exceed the number of container individuals counted during the 2-year monitoring period (at least 3 years of the 10-year monitoring period). ▪ Emergence of leaves for of a minimum of 80% of the translocated bulbs ▪ Flowering of a minimum of 60% of the translocated bulbs ▪ Survival of 80% of established individuals ▪ Habitat subject to translocation must exhibit same or less cover by non-native grasses and forbs than during the initial planting (30%). <u>Adaptive Management</u> The HMMP shall include adaptive management strategies in the event the mitigation and monitoring program fails to achieve the performance standards discussed above during the 10-year monitoring period; the Project Applicant shall implement the following remedial measures to attempt to achieve the performance standards: ▪ If the enhancement/restoration areas or receptor sites are observed to be failing significantly to achieve the performance standard during the 10-year monitoring period, the Biological Monitor shall identify an alternate site(s) in the Conservation Area in which to broadcast seed from a contingency seed supply held at a seed facility (and maintained for at least 10 years). Should the performance standards be achieved, contingency seed would be broadcast in the enhancement/restoration areas or receptor sites. ▪ If receptor sites appear on track to meet the performance standards, any remaining plant material may be planted after 5 years at the receptor sites (if space allows) or additional acceptable receptor sites shall be identified. This would allow for 5 years of monitoring of the container stock. ▪ Seeds and/or bulbs shall continue to be harvested from plants maintained in the nursery and installed in the receptor sites on an as-needed basis to ensure translocation/receptor sites are progressing toward final performance. ▪ The alternate site shall be prepared as outlined for the initial site and modifications incorporated as determined by the Project Biologist in coordination with County Planning. Once an approach has been determined in coordination with the County, the seed would be broadcast at the contingency seed and seeded at the alternate site, and a 10-year program, that includes monitoring and maintenance, would be initiated as set forth above.				
4.3	Biological Resources	**MM-4.4-3:** *Special-Status Plants Seed and Bulb Survey, Salvage, and Translocation*. The required Conservation Management Plan (CMP) approved by the County of Los Angeles (County) shall include a Special-Status Plant Mitigation and Monitoring Plan (SSPMMP) that shall provide guidance and methods to preserve the special-status plants known to occur within the Conservation Area (slender mariposa lily [*Calochortus clavatus* var. *clavatus*], Plummer's mariposa lily [*Calochortus plummerae*], Peirson's morning glory [*Calystegia peirsonii*], and scarlet Keckiella [*Keckiella ternata*]), along with a program of special-status plants seed collection and dispersal within the Conservation Area. The SSPMMP shall also include methods and approach to translocating mariposa lily individuals proposed for impact into the Conservation Area. The SSPMMP shall be developed and implemented with a	Preparation and approval of a Special-Status Plant Mitigation and Monitoring Plan	Prior to Project construction activities	Project Applicant or Developer and qualified biologist	County Department of Regional Planning and California Department of Fish and Wildlife
			Pre-construction surveys to map slender mariposa lily, Plummer's mariposa lily, Peirson's morning glory, and scarlet keckiella	Prior to construction activities	Project Applicant or Developer and qualified biologist	County Department of Regional Planning
			Seed collection from slender mariposa lily, Plummer's mariposa	During the plant-specific appropriate time of year.	Project Applicant or Developer and qualified biologist	County Department of Regional Planning

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		program that does not conflict with other conservation easement resource management objectives. The SSPMMP shall provide details on site preparation measures, as well as specific methods for the pre-construction collection of seeds from all four species and the harvest of mariposa lily bulbs from impacted populations. The SSPMMP shall also provide detailed methods for the dispersal of that seed and the translocation of the harvested bulbs into the conservation easement areas within locations with appropriate soils and growing conditions for each species, as determined by a qualified biologist in coordination with the County and California Department of Fish and Wildlife. Finally, the SSPMMP shall provide a schedule and action plan for the maintenance and monitoring programs, including success criteria, and remedial contingency measures to be implemented if efforts are not successful. Pre-construction surveys shall be conducted in the Project footprint to map slender mariposa lily, Plummer's mariposa lily, Peirson's morning glory, and scarlet keckiella individual locations with a high-accuracy GPS unit and a permanent marker established in the field to locate the individual mariposa lilies for bulb collection. Seeds shall be collected from each species at the appropriate time of year. Mariposa lily bulbs shall remain in the ground until Project development. Prior to Project development, the bulbs shall be translocated within appropriate habitat in the Conservation Area. <u>Performance Standard.</u> Monitoring shall take place annually for 5 years from the time of establishment of the mariposa lily bulbs. The following success criteria is the minimum required by the end of the 5-year monitoring period: ▪ 25 slender mariposa lily ▪ 44 scarlet keckiella ▪ 600 Peirson's morning glory ▪ 128 Plummer's mariposa lily If it appears that the population of these special-status plant species (slender mariposa lily, scarlet keckiella, Peirson's morning glory, and Plummer's mariposa lily) or the vegetation community composition and status are on the decline or have been degraded, remedial activities shall be implemented according to the CMP and the SSPMMP, and monitoring shall continue until the success criteria are met. These activities may include weed control, additional seeding, native plant establishment, or other activities where appropriate. Annual monitoring reports shall be submitted by August 31 of each year and shall include an evaluation of current monitoring data in relation to previous population observations (during previous monitoring years) and native enhancement efforts for slender mariposa lily, scarlet keckiella, Peirson's morning glory, and Plummer's mariposa lily. These reports shall also include any recommendations for remedial management measures and shall discuss other issues that need to be addressed, such as trespassing or vandalism.	lily, Peirson's morning glory, and scarlet keckiella. Mariposa lily bulbs shall remain in the ground until Project development	Prior to Project development, mariposa lily bulbs shall be translocated within appropriate habitat in the Conservation Area.		
			Mariposa lily bulb monitoring and reports	Annual Monitoring for 5 years from the time of establishment of the mariposa bulbs. Reports submitted by August 31 of each year	Project Applicant or Developer and qualified biologist	County Department of Regional Planning
4.4	Biological Resources	**MM-4.4-4**: *Biological Monitoring*. Prior to the issuance of a grading permit, the Applicant shall submit the qualifications of potential Biological Monitor(s) to the County of Los Angeles (County) Department of Regional Planning (Planning) for review and approval. The Applicant shall then fund the County Planning-approved Biological Monitor(s) during Project construction to monitor	Submittal of qualifications of potential biological monitors for review/approval	Prior to the issuance of a grading permit	Project Applicant or Developer	County Department of Regional Planning
			Funding of County Planning-Approved biological monitor(s)	Prior to and during construction activities	Project Applicant or Developer	County Department of Regional Planning

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		construction activities and to ensure compliance with all mitigation measures. The Biological Monitor shall be present on site during all vegetation removal and each day prior to the commencement of grading activities. The Biological Monitor shall be responsible for conducting a pre-construction clearance survey, and any wildlife (common or special-status) shall be relocated to the Conservation Area. Pre-construction clearance surveys shall be conducted prior to construction of each new phase of the development. The Biological Monitor shall ensure that wildlife do not become entrapped in excavation or trenching areas. Safeguards shall be implemented during daytime periods of non-activity and overnight, such as a placing a platform over trenches, flush with the ground surface; installing escape ramps in trenches; or installing exclusionary fencing. Should relocation of any trapped wildlife be required, construction shall be halted until the Biological Monitor arrives on site and clears the work area (in compliance with all applicable permits and authorizations). Burrowing owl has the potential to occur as a transient during dispersal and migration. Focused pre-construction surveys for burrowing owl shall be conducted weekly by the Biological Monitor beginning 30 days prior to the commencement of vegetation removal, with the last/fourth survey being conducted three days prior to the commencement of vegetation removal. If burrowing owl are located during any focused pre-construction surveys, or during the monitoring of construction activities, a 500-foot no-work buffer shall be established around the location of the burrow(s), and County Planning and California Department of Fish and Wildlife (CDFW) shall be notified. CDFW shall be consulted regarding the potential need for an Incidental Take Permit per California Fish and Game Code 2081. The no-work buffer shall remain in place until the until the Project Applicant obtains confirmation from CDFW that it can be removed. The results of the surveys and any associated monitoring shall be documented in a Burrowing Owl Survey/Monitoring Report that shall be submitted to County Planning. The Biological Monitor shall also monitor any colonial roosts located within 500 feet from the Project limits to determine if Project activities are having a detrimental effect on the roost. If bats are exhibiting distress due to noise generated by Project activities, the Biological Monitor shall work with the construction contractor on ways to reduce activities in the proximity of the roost (e.g., limiting the number of tractors in the area). The results of the protective actions will be documented in the daily monitoring report. The Biological Monitor shall regularly inspect the Project site as needed after the completion of all grading activities. Monthly spot-check monitoring is anticipated to be required throughout the construction of the Project for those areas that are graded but not yet developed/landscaped. During monthly visits, the biological monitor shall do the following: (1) address the potential establishment of invasive species and require weed abatement (if necessary) in accordance with MM-4.4-6, Invasive Species Prevention; (2) address the potential establishment of native vegetation/habitat to reduce the potential for impacts between phases of construction; (3) identify deficiencies, if applicable, with any erosion control measures that have the potential to negatively impact biological resources. Daily monitoring reports shall be prepared by the Biological Monitor that at a minimum document the results of any surveys conducted, wildlife relocations, construction activities performed, compliance issues observed, and corrective	Pre-construction clearance surveys	Prior to construction activities	Project Applicant or Developer and qualified biologist	County Department of Regional Planning
			Focused pre-construction surveys for burrowing owl. If burrowing owl are located during any focused pre-construction surveys, or during the monitoring of construction activities, a 500-foot no-work buffer shall be established around the location of the burrow(s) and County Planning and CDFW shall be notified.	Focused pre-construction surveys to be conducted weekly by the Biological Monitor beginning 30 days prior to the commencement of vegetation removal, with the last/fourth survey being conducted three days prior to the commencement of vegetation removal. 500-foot no-work buffer shall be in place until the Project Applicant obtains confirmation from CDFW that it can be removed	Project Applicant or Developer and qualified biologist/Biological Monitor	County Department of Regional Planning and California Department of Fish and Wildlife
			If burrowing owl(s) found during pre-construction survey, CDFW shall be consulted regarding the potential need for an Incidental Take Permit	Immediately upon finding burrowing owl(s) during pre-construction survey	Project Applicant or Developer and qualified biologist/Biological Monitor	California Department of Fish and Wildlife
			Preparation and submittal of Burrowing Owl Survey/Monitoring Report to County Planning	After completion of pre-construction survey for burrowing owl	Project Applicant or Developer and qualified biologist/Biological Monitor	County Department of Regional Planning
			Biological Monitoring of any colonial roosts within 500 feet from Project site; daily monitoring report	During Project construction activities	Biological Monitor and Construction Contractor	County Department of Regional Planning
			Monthly spot-check monitoring	After completion of all grading activities for areas that are graded but not yet developed/landscaped	Biological Monitor	County Department of Regional Planning
			Daily Monitoring Reports	During construction activities	Project Applicant or Developer and Biological Monitor	County Department of Regional Planning and California Department of Fish and Wildlife, if requested

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		actions taken. The monitoring reports shall include photos. The monitoring reports shall be made available to County Planning and the California Department of Fish and Wildlife at their request.				
4.5	Biological Resources	**MM-4.4-5:** *Demarcation of Disturbance Limits*. Prior to commencement of earthwork for each phase of Project construction, the construction limits shall be clearly demarcated (e.g., installation of flagging or temporary high visibility construction fence), as recommended by the Biological Monitor approved by the County of Los Angeles. All construction activities, including equipment staging and maintenance, shall be conducted within the marked disturbance limits to prevent inadvertent disturbance to sensitive vegetation communities outside the limits of work. The flagging shall be maintained throughout construction.	Demarcation of Disturbance Limits	Prior to commencement of earthwork for each phase of Project construction	Project Applicant or Developer and Approved Biological Monitor	County Department of Regional Planning
4.6	Biological Resources	**MM-4.4-6**: *Invasive Species Prevention*. The Project shall not include invasive plant species listed on Appendix C of the SEA Ordinance Implementation Guide and in the California Invasive Plant Council inventory in Project landscaping palettes. Project landscape palettes shall be reviewed and approved by the County of Los Angeles (County) to ensure that invasive plant species are excluded. In addition, to prevent the spread of invasive plant species during construction and until the establishment of common landscaped areas associated with the Project, the following measures shall be implemented: ▪ A Workers Environmental Awareness Training (WEAT) program shall be prepared that shall include invasive species prevention measures implemented by the Project. The WEAT shall include descriptions of the common invasive plants known in the region. The WEAT shall also include descriptions of sensitive resources known to occur on the Project site and the procedures to follow should a sensitive resource be encountered. ▪ All mobile vehicles and construction equipment shall be washed prior to entering the Project site in an upland location where any seed material from invasive species shall be contained and not carried onto the Project site. Logs of the washing shall be submitted monthly to the County Department of Regional Planning. ▪ Following the completion of grading activities, for those areas of the Project site that are graded but not yet developed/landscaped, the County-approved Biological Monitor shall conduct monthly spot checks to prevent the introduction or establishment of invasive plant species onto the graded areas (see MM-4.4-4, Biological Monitoring). If invasive species are identified, the Biological Monitor shall remove the plants with hand tools or weeding equipment to prevent propagation. ▪ All vegetative material removed from the Project footprint shall be transported in a covered vehicle and shall be disposed of at a certified disposal site.	Project landscaping palettes reviewed and approved by the County	Prior to planting on-site	Project Applicant or Developer	County Department of Regional Planning
			Preparation and implementation of a WEAT program.	During construction and until the establishment of common landscaped areas associated with the Project	Project Applicant or Developer	County Department of Regional Planning
			All mobile vehicles and construction equipment shall be washed prior to entering the Project site in an upland location where any seed material from invasive species shall be contained and not carried onto the Project site. Logs of the washing shall be submitted to County Department of Regional Planning.	During construction activities; logs of the washing for new equipment submitted monthly to County Department of Regional Planning	Project Applicant or Developer and Construction Contractor	County Department of Regional Planning
			Spot Checks to prevent the introduction or establishment of invasive plant spaces onto graded areas, and removal of invasive species if found.	Following completion of grading activities or areas of the Project site that are graded but not yet developed/landscaped, conducting monthly spot checks	Project Applicant or Developer	County Department of Regional Planning
			Removal of vegetative material	During site preparation/grading activities	Project Applicant or Developer and Construction Contractor	County Department of Regional Planning
4.7	Biological Resources	**MM-4.4-7:** *Landscaping Plan*. Prior to the issuance of the first grading permit, the Applicant shall prepare a Landscaping Plan for the areas maintained by the Homeowners' Association (HOA) and submit the Landscaping Plan to the County of Los Angeles for review and approval. The Landscaping Plan for the HOA-maintained areas shall include, but not be limited to, the following requirements: ▪ The plant species list shall include scientific names, common names, plant container sizes, and quantities.	Preparation and approval of Landscaping Plan	Prior to the issuance of the first grading permit	Project Applicant or Developer	County Department of Regional Planning
			Implementation of Landscaping Plan	During landscaping activities	Project Applicant or Developer and HOA	County Department of Public Works

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		▪ Invasive plant species (designated by California Invasive Plant Council) shall not be included in the Landscaping Plan as they could establish off site and have negative impacts to the adjacent habitats. ▪ Non-native milkweeds shall not be included in the landscaping plan as they could establish off site and have negative impacts to the adjacent habitats. ▪ The plant layout shall indicate the location of the plant species. ▪ Planting notes shall include irrigation and plant installation requirements such as mulch requirements. ▪ Ornamental varietals and selections of native species shall be avoided if they have the potential to hybridize with local native populations. ▪ Where native species are required, the species shall be indigenous native species of the region (locally indigenous native species).				
4.8	Biological Resources	**MM-4.4-8:** *Crotch's Bumble Bee Habitat Preservation and Minimization Measures.* <u>Incidental Take Permit</u> The Applicant shall consult with the California Department of Fish and Wildlife on obtaining an Incidental Take Permit (ITP), per California Fish and Game Code 2081, for the take of Crotch's bumble bee. The Applicant shall provide the County with a copy of the ITP, or proof that an ITP is not required, prior to issuance of a grading permit. Mitigation for direct impacts to Crotch's bumble bee shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the Project, or as otherwise determined through the Incidental Take Permit process. Mitigation shall be accomplished through the preservation of on-site suitable habitat (MM-4.4-1) and off-site suitable habitat (MM-4.4-9). The Applicant shall be obligated to implement all minimization and avoidance measures conditions that are included in the ITP. <u>Focused Survey</u> Focused surveys for Crotch's bumble bee (*Bombus crotchii*) shall be conducted within the construction footprint prior to the start of ground-disturbing construction activities. The focused surveys shall include a habitat assessment and focused surveys, both of which shall be as described in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species, released by the California Department of Fish and Wildlife (CDFW) on June 6, 2023, or the most current at the time of construction. The habitat assessment shall, at a minimum, include historical and current species occurrences; document potential habitat on site including foraging, nesting, and/or overwintering resources; and identify which plant species are present. For the purposes of this mitigation measure, nest resources are defined as abandoned small mammal burrows, bunch grasses with a duff layer, thatch, hollow trees, brush piles, and human-made structures that may support bumble bee colonies, such as rock walls, rubble, and furniture. The habitat assessment shall be repeated prior to February 1 in each year that ground-disturbing activities will occur to determine if foraging, nesting, or overwintering resources are present within the impact area. If nesting resources are present in the impact area, focused surveys shall be conducted. The focused survey shall be performed by a biologist with expertise in surveying for bumble bees and include at least three survey passes that are not on	Applicant shall consult with California Department of Fish and Wildlife on obtaining an incidental Take Permit for the take of Crotch's bumble bee.	Prior to any construction activities	Project Applicant or Developer	County Department of Regional Planning and California Department of Fish and Wildlife
			Minimization and avoidance measures conditions of Crotch's bumble bee	During construction and operational activities	Project Applicant or Developer, and Construction Contractor	County Department of Regional Planning and California Department of Fish and Wildlife
			Pre-construction survey for Crotch's bumble bee within the construction footprint, including habitat assessment and focused surveys.	Prior to the start of ground-disturbing construction activities occurring during the Crotch's bumble bee nesting period (February 1 through October 31). The habitat assessment shall be repeated prior to February 1 in each year that ground-disturbing activities will occur to determine if nesting resources are present within the impact area. Surveys shall coincide with the colony active period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset.	Project Applicant or Developer and qualified biologist(s)	County Department of Regional Planning and California Department of Fish and Wildlife
			Submittal of written survey report	Submitted within 30 days of the pre-construction survey	Project Applicant or Developer and qualified biologist(s)	County Department of Regional Planning and California Department of Fish and Wildlife

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		sequential days or in the same week, preferably spaced 2 to 4 weeks apart. The timing of these surveys shall coincide with the colony active period (April 1 through August 31 for Crotch's bumble bee). Surveys may occur between 1 hour after sunrise and 2 hours before sunset. Surveys shall not be conducted during wet conditions (e.g., foggy, raining, or drizzling), and surveyors shall wait at least 1 hour following rain. Optimal surveys are conducted when there are sunny to partly sunny skies and ambient temperatures are greater than 60° Fahrenheit. Surveys may be conducted earlier than April 1 if other bees or butterflies are flying. Surveys shall not be conducted when it is windy (i.e., sustained winds greater than 8 mph). Within non-developed habitats, the biologist shall look for nest resources suitable for bumble bee use. Ensuring that all nest resources receive 100% visual coverage, the biologist shall watch the nest resources for up to 5 minutes, looking for exiting or entering worker bumble bees. Worker bees should arrive and exit an active nest site with frequency, such that their presence would be apparent after 5 minutes of observation. If a bumble bee worker is detected, then a representative shall be identified to species. Biologists should be able to view several burrows at one time to sufficiently determine if bees are entering/exiting them depending on their proximity to one another. It is up to the discretion of the biologist regarding the actual survey viewshed limits from the chosen vantage point that would provide 100% visual coverage; this could include a 30- to 50-foot-wide area. If a nest is suspected, the surveyor can block the entrance of the possible nest with a sterile vial or jar until nest activity is confirmed (no longer than 30 minutes). Identification shall include trained biologists netting/capturing the representative bumble bee in appropriate insect nets, per the protocol in the U.S. National Protocol Framework for the Inventory and Monitoring of Bees. The bee shall be placed in a clear container for observation and photographic documentation if able. The bee shall be photographed using a macro lens from various angles to ensure recordation of key identifying characteristics. If bumble bee identifying characteristics cannot be adequately captured in the container due to movement, the container shall be placed in a cooler with ice until the bumble bee becomes inactive (generally within 15 minutes). Once inert, the bumble bee shall be removed from the container and placed on a white sheet of paper or card for examination and photographic documentation. The bumble bee shall be released into the same area from which it was captured upon completion of identification. Based on implementation of this method on a variety of other bumble bee species, they become active shortly after removal from the cold environment, so photography must be performed quickly. If Crotch's bumble bee nests are not detected, no further mitigation would be required. The mere presence of foraging Crotch's bumble bees would not require implementation of additional minimization measures because they can forage up to 10 kilometers from their nests. If nest resources occupied by Crotch's bumble bee are detected within the construction area, no construction activities shall occur within 100 feet of the nest, or as determined by a qualified biologist through evaluation of topographic features or distribution of floral resources. The nest resources shall be avoided for the duration of the Crotch's bumble bee nesting period (February 1 through October 31). Outside of the nesting season, it is assumed that no live individuals would be present within the nest as the daughter queens (gynes) usually leave by September, and all other individuals (original queen, workers, males) die. The gyne is highly mobile				

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		and can independently disperse to outside of the construction footprint to surrounding open space areas that support suitable hibernacula resources. A written survey report shall be submitted to the County of Los Angeles (County) and CDFW within 30 days of the pre-construction survey. The report shall include survey methods, weather conditions, and survey results, including a list of insect species observed and a figure showing the locations of any Crotch's bumble bee nest sites or individuals observed. The survey report shall include the qualifications/resumes of the surveyor(s) and approved biologist(s) for identification of photo vouchers and detailed habitat assessment. If Crotch's bumble bee nests are observed, the survey report shall also include recommendations for avoidance, and the location information shall be submitted to the California Natural Diversity Database at the time of, or prior to, submittal of the survey report. If the nest resources cannot be avoided, as outlined in this measure, the project applicant shall consult with CDFW regarding the need to obtain an Incidental Take Permit. Any measures determined to be necessary through the Incidental Take Permit process to offset impacts to Crotch's bumble bee may supersede measures provided in this California Environmental Quality Act document and shall be incorporated into the Habitat Mitigation and Monitoring Plan.				
4.9	Biological Resources	**MM-4.4-9:** *Off-Site Habitat Preservation.* Prior to final map recordation, the Applicant shall obtain a letter of intent from the future Conservation Easement holder. Prior to issuance of a grading permit, the Applicant shall demonstrate recordation of a conservation easement, as defined by California Civil Code Section 815.1, that permanently preserves off-site habitat for long-term conservation and management ("off-site conservation area"). As part of recording the conservation easement for any off-site parcel(s), a Conservation Management Plan (CMP) applicable to the off-site conservation area shall be prepared and submitted to the Los Angeles County (County) Department of Regional Planning (Planning) for approval. The CMP shall identify the required resource management activities and the entities that shall be responsible for managing those activities in perpetuity. The conservation easement holder shall be an entity that has as part of its mission the protection of the environment, including lands, plant species, and/or wildlife species, and can be expected by its organization and history to remain in existence for the foreseeable future. The California Department of Fish and Wildlife (CDFW) per Government Code Section 65967(c) shall review the entity. The entity that holds the endowment shall first meet the criteria outlined in Government Code Section 65968(b). Funding for the conservation easement and implementation of the tasks in the CMP shall be maintained in perpetuity and shall be provided by a traditional endowment, establishing a community facilities district or landscape management district, or through contractual obligation with the Homeowners' Association or other equivalent mechanism(s). One or more of the following options shall be used to provide adequate preservation for Project-related impacts to vegetation communities and wildlife habitat within the Significant Ecological Area (SEA) Ordinance Implementation Guide Resource Categories 1 and 3. The proposed off-site conservation area lands must support resources similar to those disturbed by the Project (i.e., sensitive vegetation communities, special-status plant and wildlife habitats, jurisdictional waters, and protected trees) and be connected with other natural open space areas. To determine that these conditions are present, the Applicant shall fund a	A letter of intent shall be obtained from the Conservation Easement holder.	Prior to final map recordation	Project Applicant or Developer	County Department of Regional Planning
			Recordation of a Conservation Easement	Prior to the issuance of a grading permit	Project Applicant or Developer	County Department of Regional Planning
			Preparation, submittal, and approval of a Conservation Management Plan	Prior to the issuance of a grading permit, as part of recordation of conservation easement	Project Applicant or Developer	County Department of Regional Planning
			Conservation Easement holder approval	Prior to issuance of grading activities	Project Applicant or Developer	County Department of Regional Planning
			Funding by Applicant of biological resources assessment by a County Planning-approved Biologist for any parcel proposed for preservation, and the results of the assessment shall be submitted to County Department of Regional Planning for their approval to be used as mitigation	Prior to the issuance of a grading permit, as part of recordation of conservation easement	Project Applicant or Developer	County Department of Regional Planning
			Implementation of Conservation Management Plan/off-site habitat preservation	Prior to the issuance of a grading permit, as part of recordation of conservation easement	Project Applicant or Developer	County Department of Regional Planning

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party

biological resources assessment by a County Planning-approved Biologist for any parcel proposed for preservation, and the results of the assessment shall be submitted to County Planning for their approval to be used as mitigation.

In-Kind and Off-Site in the Santa Susana Mountains and Simi Hills Significant Ecological Area

For parcels within the SEA that support in-kind vegetation communities as those found in the Project site, the preservation ratios for each of the SEA Resource Categories listed would be in accordance with the SEA Ordinance Implementation Guide. The following table indicates the minimum preserved acres required for off-site preservation of in-kind vegetation communities (communities classified as the same as those being impacted by the Project) within the SEA.

In-Kind Vegetation Communities Preserved Off-Site in the Santa Susana Mountains and Simi Hills Significant Ecological Area

Alliance	Required In-Kind Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	
Baccharis salicifolia Shrubland	11.65
Salix gooddingii–Salix laevigata Forest and Woodland	6.22
Sub-Total	*17.87*
SEA Resource Category 3 (Mitigated at 3:1)	
Ericameria palmeri Provisional Shrubland	2.00
Eriodictyon crassifolium Provisional Shrubland	0.84[a]
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0.20
Quercus agrifolia Forest and Woodland	30.50[b]
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.07[a]
Sub-Total	*33.61*
Total	**51.48**

Notes: SEA = Significant Ecological Area.
[a] None would be needed if MM-4.4-2, Habitat Mitigation and Monitoring Plan, is implemented.
[b] 15.30 acres shall be needed if MM-4.4-2 is implemented.

Out-of-Kind and Within the Santa Susana Mountains and Simi Hills Significant Ecological Area

Preservation of out-of-kind vegetation communities (communities classified as being different than those being impacted by the Project) that are in the same group (defined by combinations of relatively narrow sets of diagnostic plant species (including dominant and co-dominant species, broadly similar composition, and diagnostic growth forms that reflect biogeographic differences in mesoclimate, geology, substrates, hydrology, and disturbance regimes as defined by the Federal Geographic Data Committee in the 2006 Draft National Vegetation Classification Standard) as the impacted vegetation communities (as

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party

defined by the National Vegetation Classification Standards) can be satisfied with the acquisition of parcels within the Santa Susana Mountains and Simi Hills SEA. For preserved lands within the same Resource Category, a multiplier of 1.5 shall be applied to increase lands for preservation, as shown in the following table. For preserved lands within a higher sensitivity Resource Category, a multiplier of 1.25 shall be applied, as shown in the following table. Lower sensitivity Resource Categories may not satisfy mitigation requirements for higher sensitivity Resource Categories. For the two Resource Category 1 communities, preservation shall be a riparian-associated vegetation community.

Out-of-Kind Vegetation Communities Preserved Within the Santa Susana Mountains and Simi Hills Significant Ecological Area

Alliance	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	**1.5 Multiplier**	**1.25 Multiplier**
Baccharis salicifolia Shrubland	17.47	NA
Salix gooddingii–Salix laevigata Forest and Woodland	9.33	NA
Subtotal	*26.81*	*NA*
SEA Resource Category 3 (Mitigated at 3:1)	**1.5 Multiplier**	**1.25 Multiplier**
Ericameria palmeri Provisional Shrubland	3.00	2.50
Eriodictyon crassifolium Provisional Shrubland	1.26[a]	1.0505[a]
Nassella (*Stipa*) spp.–*Melica* spp. Herbaceous	0.31	0.25
Quercus agrifolia Forest and Woodland	45.75[b]	38.13[c]
Rhus trilobata–Crataegus rivularis–Forestiera pubescens Shrubland	0.10[a]	0.08[a]
Subtotal	*50.42*	*42.01*
Total	*77.23*	*42.01*

Notes: NA = Not Applicable (due to there being no higher Resource Category)

[a] None would be needed if MM-4.4-2, Habitat Mitigation and Monitoring Plan, is implemented.

[b] 22.95 acres will need to be preserved if MM-4.4-2 is implemented.

[c] 19.13 acres will need to be preserved if MM-4.4-2 is implemented.

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party

Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area

Off-site preservation within portions of the Santa Clara River SEA that are contiguous with the Santa Susana Mountains and Simi Hills SEA shall be considered if the area supports the same resource values as the Project site and is connected with other natural open space. Preservation of vegetation communities shall be acquired within the adjacent Santa Clara River SEA at a multiplier of 2 for in-kind preservation, multiplier of 2.5 for out-of-kind preservation but within the same Resource Category, and a multiplier of 2.25 for out-of-kind preservation but a higher level Resource Category, as shown in the following table. For the two Resource Category 1 communities, preservation shall be a riparian-associated vegetation community.

Vegetation Communities Preserved Within the Santa Clara River Significant Ecological Area

Alliance	In-Kind Preserved Acres	Out-of-Kind-Same Resource Category Preserved Acres	Out-of-Kind-Higher Resource Category Preserved Acres
SEA Resource Category 1 (Mitigated at 5:1)	**2 Multiplier**	**2.5 Multiplier**	**2.25 Multiplier**
Baccharis salicifolia Shrubland	23.30	29.12	NA
Salix gooddingii–Salix laevigata Forest and Woodland	12.45	15.56	NA
Sub-Total	*35.74*	*44.68*	*NA*
SEA Resource Category 3 (Mitigated at 3:1)	**2 Multiplier**	**2.5 Multiplier**	**2.25 Multiplier**
Ericameria palmeri Provisional Shrubland	4.00	5.00	4.50
Eriodictyon crassifolium Provisional Shrubland	1.67[a]	2.09[a]	1.88[a]
Nassella (Stipa) spp.–*Melica* spp. *Herbaceous*	0.41	0.51	0.46
Quercus agrifolia Forest and Woodland	61.00[b]	76.25[c]	68.63[d]
Rhus trilobata–Crataegus rivularis–Forestiera *pubescens* Shrubland	0.13[a]	0.17[a]	0.15[a]
Sub-Total	*67.21*	*84.02*	*75.62*
Total	***102.95***	***128.70***	***75.62***

Notes: NA = Not Applicable (due to there being no higher Resource Category
[a] None would be needed to be preserved off-site if MM-4.4-2 is implemented.
[b] 30.60 acres would be needed if MM-4.4-2 is implemented.

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party

[c] 38.25 acres would be needed to be preserved if MM-4.4-2 is implemented.
[d] 34.43 acres would be needed to be preserved if MM-4.4-2 is implemented.

Preservation of Assessor's Parcel Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

The six parcels are located within the Santa Susana Mountains/Simi Hills SEA, approximately 1 mile south-southwest of the Project site.

Nine vegetation communities were mapped in the six parcels, as listed in the table below. Two SEA Resource Category 3 communities, *Pseudotsuga macrocarpa–Quercus agrifolia* association (bigcone Douglas fir–coast live oak forest) and *Quercus agrifolia* association (coast live oak woodland and forest) occur, primarily on north-facing slopes and canyon bottoms. The seven SEA Resource Category 4 communities are shrub-dominated and consist of chaparral and coastal scrub species.

Assessor's Parcels Numbers 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

Vegetation Community	Acres
SEA Resource Category 1	
Quercus agrifolia Association Southern Coast Live Oak Riparian Forest (Water Resources)	27.47
SEA Resource Category 3	
Pseudotsuga macrocarpa–Quercus agrifolia Association	4.02
Quercus agrifolia Association	50.89
Subtotal	*54.91*
SEA Resource Category 4	
Adenostoma fasciculatum–Salvia leucophylla Association	11.35
Adenostoma fasciculatum–Salvia mellifera Mixed Shrub Association	1.16
Adenostoma fasciculatum Association	77.08
Artemisia californica–Eriogonum fasciculatum Association	2.08
Ceanothus crassifolius–Adenostoma fasciculatum–Rhus ovata Association	249.26
Ceanothus crassifolius–Adenostoma fasciculatum Association	14.37
Malacothamnus fasciculatus–Salvia leucophylla Association	2.54
Malosma laurina–Eriogonum fasciculatum Association	12.93
Wild oats and annual brome grasslands Semi-natural Alliance	12.24
Subtotal	*383.01*

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party

SEA Resource Category	
Urban/Developed	*1.31*
Total	**466.70**

Note: SEA = Significant Ecological Area.

The drainages in the six parcels are part of the Wiley Canyon and Towsley Canyon watersheds that contribute to the South Fork of the Santa Clara River. The desktop analysis resulted in 13.30 acres of potential streams in the six parcels. The method for determining potential adjacent riparian oak forest resulted in 27.47 acres of SEA Category 1 Water Resources. The remaining 54.91 acres of *Pseudotsuga macrocarpa–Quercus agrifolia* association and *Quercus agrifolia* association would be considered upland and SEA Resource Category 3.

As shown in the following table, the off-site conservation area provides sufficient acreage to fully offset impacts to SEA Resource Category 4 vegetation communities (for SEA Resource Category 4, preservation can be out-of-kind if the resource is of the same category.) and to partially offset impacts to SEA Resource Category 3 (for this discussion, the creation of vegetation communities within the *Brassica nigra–Centaurea melitensis* herbaceous semi-natural stands is not included; however, if oak trees are planted as replacement for SEA protected trees, then an argument shall be made that planted oaks also constitute the creation of oak woodland). The 27.47 acres of SEA Category 1 Water Resources and the 54.91 acres of SEA Resource Category 3 provides the necessary acres of preservation for these two categories. The parcels provide an additional 26.72 acres of SEA Resource Category 3 vegetation communities and 503.17 acres of SEA Resource Category 4 vegetation communities.

[**Note**: *Due to the size of the table "Impacts to SEA Resource Category Communities and Proposed Preservation for the Trails at Lyons Canyon Project Using APNs 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067" and for formatting purposes, this table is included instead at the end of this section.*

Mitigation Bank Credits

Off-site purchase of mitigation credit from a County Planning-approved mitigation bank shall be completed prior to the issuance of grading permits. The mitigation bank would have to be located within the Santa Susana Mountains and Simi Hills SEA or be contiguous with the SEA. The credits purchased must meet the acres calculated by using a multiplier of 3 applied to the preservation ratios stated in the SEA Ordinance Implementation Guide for SEA Resource Categories 1 and 3, as shown in the following table.

Mitigation Credits Required to be Purchased from a County-Approved Mitigation Bank

SEA Resource Category	Mitigations Credits Required
1	53.61[a]
3	100.83[b,c]

Notes: County = County of Los Angeles; SEA = Significant Ecological Area.
[a] Riparian scrub.

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		[b] 91.50 woodland, 8.72 shrubland, and 0.61 grassland [c] 45.90 woodland, 6.01 shrubland, and 0.61 grassland (totaling 52.52) would be needed if MM-4.4-2 is implemented. Mitigation lands shall consist of similar or higher quality habitat than found on the Project site. Should credits not be available, then compensation may be in the form a County-approved turnkey project with a mitigation bank and/or other County Planning-approved option. Selected mitigation banks shall be accredited through CDFW and/or the County to have established conservation easements that shall ensure the preservation of the resources in perpetuity.				
4.10	Biological Resources	**MM-4.4-10***: Special-Status Wildlife Relocation Plan.* Prior to commencement of any earthmoving activities or the pre-construction staging of equipment on the Project site, the Project Applicant shall contract with a biologist approved by the County of Los Angeles (County) to develop a Pre-construction Wildlife Survey and Relocation Plan for terrestrial reptiles, including the California newt (*Taricha torosa*), two-striped gartersnake (*Thamnophis hammondii*), Southern California legless lizard (*Anniella stebbinsi*), and coastal whiptail (*Aspidoscelis tigris stejnegeri*). The Pre-construction Wildlife Survey and Relocation Plan shall be submitted to the County for review prior to any ground-disturbing activities within potentially occupied habitat. The plan shall include at a minimum, the following: ▪ Protocols for pre-construction surveys to flush out and/or move identified special-status wildlife within the Study Area, as feasible - Relocation to the Conservation Area shall be the primary location, unless otherwise approved by the County ▪ The timing, frequency, and locations where surveys should be conducted - Surveys shall be conducted 24 hours prior to construction activities and repeated the morning of the proposed activity - Surveys shall be conducted in all areas anticipated to be subject to vegetation clearing ▪ The habitat and conditions in the proposed relocation site(s) ▪ The methods that would be used for trapping and relocating identified species - All equipment used in the effort shall be cleaned and decontaminated to minimize the spread of herpetofaunal pathogens (per the 2020 article by Julian et al. in the Herpetological Review, Minimizing the Spread of Herpetofaunal Pathogens in Aquatic Habitats by Decontaminating Construction Equipment) - Any wildlife handling and relocation methodology from the Streambed Alteration Agreement issued by the California Department of Fish and Wildlife (CDFW) shall be incorporated in the Pre-construction Survey and Relocation Plan ▪ Protocols for documentation/recordation of the species and number of animals relocated - Relocations shall be logged and made available to the County, if requested ▪ Protocols for notifying CDFW if identified species cannot be relocated - Attempts at relocation shall be logged, and notification shall occur within 24 hours ▪ The timing and frequency of reports documenting the results of the surveys	Applicant shall contract with a biologist approved by the County of Los Angeles to develop a Pre-construction Wildlife Survey and Relocation Plan for terrestrial reptiles, including the California newt (*Taricha torosa*), two-striped gartersnake (*Thamnophis hammondii*), Southern California legless lizard (*Anniella stebbinsi*), and coastal whiptail (*Aspidoscelis tigris stejnegeri*).	Prior to commencement of any earthmoving activities or the pre-construction staging of equipment on the Project site	Project Applicant or Developer and biologist approved by the County of Los Angeles	County Department of Regional Planning
			Submittal of Pre-construction Wildlife Survey and Relocation Plan to County for review	Prior to any ground-disturbing activities within potentially occupied habitat	Project Applicant or Developer and biologist approved by the County of Los Angeles	County Department of Regional Planning
			Implementation of Pre-construction Wildlife Survey and Relocation Plan, including pre-construction surveys, and protocols for documentation/recordation of the species and number of animals relocated	Surveys shall be conducted 24 hours prior to construction activities and repeated the morning of the proposed activity. Attempts at relocation shall be logged, and notification shall occur within 24 hours	Project Applicant or Developer and biologist approved by the County of Los Angeles	County Department of Regional Planning

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
4.11	Biological Resources	**MM-4.4-11**: *Nesting Bird Avoidance*. Project construction shall be conducted in compliance with the conditions set forth in the Migratory Bird Treaty Act and California Fish and Game Code with methods approved by the California Department of Fish and Wildlife to protect active bird/raptor nests. Vegetation removal shall occur during the non-breeding season for nesting birds (generally late September to early March) and nesting raptors (generally early July to late January) to avoid impacts to nesting birds and raptors. For the remaining Project activities initiated during the breeding season for nesting birds (March 1–September 30) and nesting raptors (February 1–June 30), a pre-construction survey shall be conducted by the Biological Monitor (MM-4.4-4) for nesting birds and/or raptors within 3 days prior to any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors). If the Biological Monitoring does not find any active nests or immediately adjacent to the impact areas, the Project activity shall be allowed to proceed. If the Biological Monitor finds an active nest adjacent to the construction area and determines that the nest may be indirectly impacted or breeding activities substantially disrupted, the Biological Monitor shall delineate an appropriate buffer zone around the nest depending on the sensitivity of the species and the nature of the construction activity. Any nest found during survey efforts shall be mapped on the construction plans, which will be included in the report(s) documenting the survey(s) that will be submitted to the County within three days of the completion of the survey. The active nest shall be protected until nesting activity has ended. To protect any nest site, the following restrictions to construction activities shall be required until nests are no longer active, as determined by the Biological Monitor: (1) work limits shall be established within a buffer around any occupied nest (the buffer shall be 100–300 feet for nesting non-raptors and 300–500 feet for nesting raptors), unless otherwise determined by the Biological Monitor and (2) access and surveying shall be restricted within the buffer of any occupied nest, unless otherwise determined by the Biological Monitor. Encroachment into the buffer area around a known nest shall only be allowed if the Biological Monitor determines that the proposed activity would not disturb the nest occupants. Construction can proceed when the Biological Monitor has determined that fledglings have left the nest, or the nest has failed.	Nesting bird avoidance during construction and vegetation removal activities.	Vegetation removal shall occur during the non-breeding season for nesting birds (generally late September to early March) and nesting raptors (generally early July to late January)	Project Applicant or Developer and biologist approved by the County of Los Angeles	County Department of Regional Planning
			Pre-construction surveys for nesting birds and nesting raptors for Project activities initiated during breeding season for nesting birds and nesting raptors.	Conducted within 3 days prior to any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors)	Project Applicant or Developer and Biological Monitor	County Department of Regional Planning
			During pre-construction survey, if active nests found, Biological Monitor to delineate a buffer zone around the nest. Reports to be prepared to document the survey(s).	Survey conducted within three (3) days prior to any work within 300 feet for suitable nesting habitat for non-raptors and within 500 feet for suitable nesting habitat for raptors. Survey reports submitted within three (3) days of the completion of the survey	Project Applicant or Developer and Biological Monitor	County Department of Regional Planning
4.12	Biological Resources	**MM-4.4-12**: *Lighting Plan*. Prior to issuance of the building permit, the Applicant shall prepare lighting plans for submission and approval by the Los Angeles County (County) Department of Regional Planning (Planning) that identify the type, layout, and luminaire wattage of all exterior fixtures to be employed in association with the Project. The plan shall demonstrate compliance with Chapter 22.80 (Rural Outdoor Lighting District) of the County Code. The lighting plan shall at a minimum address and conform to the Rural Outdoor Lighting District as well as the following requirements, and Planning must approve all aspects of the final submitted lighting plans. ▪ Wherever feasible and compatible with requirements for nighttime safety and security, outdoor lighting shall be not be operated adjacent to native habitats. ▪ Outdoor lighting shall be fully shielded so that bulbs and lenses are not visible and shall cause no light trespass into native habitats or skyward. No lighting shall be directed toward native habitats.	Preparation of lighting plans for submission and approval	Prior to issuance of the building permit	Project Applicant or Developer	County Department of Regional Planning
			Implementation of Lighting Plan	Before and during Project operations	Project Applicant or Developer	County Department of Regional Planning

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		▪ Light fixtures shall be mounted as low as possible to minimize light trespass. ▪ The lowest amount of light shall be employed that is needed for the task. The lighting shall only illuminate the area needed and shall be no brighter than necessary. This includes lighting for stage events. ▪ Motion sensors or automatic controls shall be employed to ensure that lights are not left on longer than necessary. ▪ Only warm light sources shall be used for outdoor lighting. The amount of blue light emitted shall be minimized, as blue light has been shown to harm human health and endanger wildlife. Warm (or subdued) light sources recommended for use outdoors include low-pressure sodium, high-pressure sodium, and low-color-temperature LEDs. Wherever feasible, lighting color temperature shall not exceed 2,200 kelvins. ▪ The following types of lighting are prohibited and shall not be used: drop-down lenses, mercury vapor lights, ultraviolet lights, searchlights, laser lights, or other outdoor lighting that flashes, blinks, alternates, or moves. ▪ Project structures shall utilize non-reflective materials to avoid glare intruding into native habitats. ▪ Landscape screens shall be employed where feasible to reduce glare from vehicle headlights into native habitats.				
4.13	Biological Resources	**MM-4.4-13**: *Homeowners' Association Covenants, Conditions, and Restrictions*. The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions (CC&Rs), which are reviewed and approved prior to final map recordation, then recorded immediately after the final map records, shall include the following requirements to reduce potential human impacts on adjacent habitats and wildlife species: ▪ Invasive plant species (designated by the California Invasive Plant Council) shall be prohibited on all residential lots, as they could establish off site and have negative impacts to the adjacent habitats. ▪ All trash/garbage waste and recycling receptacles shall have locking devices that discourage wildlife foraging in common areas/parks and shall encourage the use of such locking devices on residential receptacles, as feasible. ▪ Intentional feeding of wildlife, including mule deer, is prohibited. ▪ The use of rodenticides is prohibited. ▪ Speed limits of 15 to 25 mph shall be posted, and the CCRs shall require residents to comply with the posted speed limits. ▪ Smoking shall be prohibited in open space areas. ▪ The HOA shall not use balloons for any community events, and the use of balloons by individual homeowners shall be discouraged. ▪ Homeowner reprisals against native wildlife species (i.e., killing or harming native wildlife species in any way) if homeowner pets are killed or harmed by wildlife shall be prohibited. Public information signage shall be installed at the trailhead and in the recreation facility, and printed information shall be provided to the HOA in order to (1) educate and inform the public about wildlife, especially mountain lions present in the area; (2) advise on proper avoidance measures to reduce human-wildlife conflicts; (3) advise on proper use of open space trails in a manner respectful to wildlife (e.g., dogs on leash, proper waste disposal); and (4)	Final Draft HOA CC&Rs shall include requirements to prevent biological impacts and submitted for review and approval.	Prior to final map recordation	Project Applicant or Developer and HOA	County Department of Regional Planning
			Public information signage to be installed and printed information to be provided to the HOA	Prior to Project occupancy	Project Applicant or Developer and HOA	County Department of Regional Planning

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		provide local contact information to report injured or dead wildlife. Signage should be written in the language(s) understandable to all those likely to recreate and use the trails. Signage should not be made of materials harmful to wildlife.				
4.14	Biological Resources	**MM-4.4-14:** *Jurisdictional Waters Compensation*. Mitigation for up to 4.94 acres of direct impacts to jurisdictional waters shall be implemented through on-site enhancement of remaining jurisdictional waters (per MM-4.4-3) and/or off-site acquisition, such as mitigation bank credits and/or turnkey projects with mitigation banks (as approved by the County of Los Angeles) following the issuance of permits from the U.S. Army Corps of Engineers, Los Angeles Regional Water Quality Control Board, and California Department of Fish and Wildlife, and prior to the issuance of the grading permit.	On-site enhancement and/or off-site acquisition of jurisdictional waters	Prior to the issuance of the grading permit and following the issuance of permits from U.S. Army Corps of Engineers, Los Angeles Regional Water Quality Control Board, and California Department of Fish and Wildlife	Project Applicant or Developer	County Department of Regional Planning
4.15	Biological Resources	**MM-4.4-15:** *Roosting Bat Survey.* If Project construction initiates between June 1 and August 30, a Los Angeles County Department of Regional Planning (LACDRP)-approved Biological Monitor shall conduct a pre-construction roosting bat survey within one week prior to the start of construction-related activities for the Project. The biologist shall inspect cliff features that could have crevices used for roosting by a colony of canyon bat (Parastrellus hesperus) within 500 feet of proposed construction activities and then conduct a roost emergence survey at dusk for any potential roosting features found. Results of the surveys shall be documented in a report and submitted to LACDRP. As stated in MM-4.4-4, the Biological Monitor shall monitor any colonial roosts located within 500 feet from the Project limits.	Pre-construction roosting bat survey	If Project construction initiates between June 1 and August 30, survey to occur within one week prior to the start of construction-related activities for the Project	Project Applicant or Developer and Biological Monitor	County Department of Regional Planning
			Conduct a roost emergence survey at dusk for any potential roosting features found	If Project construction initiates between June 1 and August 30, survey to occur within one week prior to the start of construction-related activities for the Project	Project Applicant or Developer and Biological Monitor	County Department of Regional Planning
			Pre-construction survey report submitted to County Department of Regional Planning	After completion of pre-construction survey	Project Applicant or Developer and Biological Monitor	County Department of Regional Planning
4.16	Biological Resources	**MM-4.4-16:** *SEA Protected Trees Replacement / Compensation*. The required Conservation Management Plan (CMP) approved by the County of Los Angeles (County) shall include a Protected Tree Replacement Plan that shall dictate the establishment of replacement trees in the Conservation Area at the numbers specified in the following table. At a minimum, the removal of any SEA Protected Tree shall result in a minimum of two replacement plantings with 10:1 for Heritage Trees. Replacement trees shall be seedlings of the same species being removed and shall be planted within an area where suitable growing conditions are present and where the trees shall be able to remain in perpetuity, which may include the On-Site Conservation Area. The replacement trees shall be nurtured and maintained in a condition of good health and shall be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees. The following table details the quantity of each species required for planting. **Summary of Individual Species Replacement Quantities** Scientific Name / Common Name / Total Impacted / Replacement Ratio / Total Replacement Required *Heteromeles arbutifolia* / toyon / 0 / 2:1 / 0	Preparation and submittal of Protected Tree Replacement Plan	Prior to final map recordation	Project Applicant or Developer	County Department of Regional Planning
			Project Applicant shall plant, cause to be planted, or bond for 772 replacement trees as described in the summary table.	Prior to final map recordation. If bonding for the trees, they shall be planted prior to building permit issuance.	Project Applicant or Developer	County Department of Regional Planning and County Forestry Division
			Implementation of Protected Tree Replacement Plan	For a period of 7 years after planting of replacement trees	Project Applicant or Developer	County Department of Regional Planning and County Forestry Division
			If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees.	During the monitoring period of 7 years after planting of replacement trees	Project Applicant or Developer	County Department of Regional Planning and County Forestry Division
			Payment into County Protected Tree Fund if there are not enough locations with the Conservation Area or Project landscaped area for replacement trees. The Protected Tree Fund payments shall be used by the County in	After implementation of Protected Tree Replacement Plan	Project Applicant or Developer	County Department of Regional Planning and County Forestry Division

<table>
<tr><th>#</th><th>Environmental Factor</th><th>Mitigation Measure(s)</th><th>Action Required</th><th>When Monitoring to Occur</th><th>Responsible Agency or Party</th><th>Monitoring Agency or Party</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>Juglans californica</td><td>Southern California black walnut</td><td>3</td><td>2:1</td><td>6</td></tr>
<tr><td>Populus fremontii</td><td>Fremont cottonwood</td><td>15</td><td>2:1</td><td>30</td></tr>
<tr><td>Quercus agrifolia</td><td>coast live oak</td><td>191</td><td>2:1</td><td>382</td></tr>
<tr><td>Quercus agrifolia (Heritage Tree)</td><td>coast live oak (Heritage Tree)</td><td>15</td><td>10:1</td><td>150</td></tr>
<tr><td>Quercus berberidifolia</td><td>scrub oak</td><td>1</td><td>2:1</td><td>2</td></tr>
<tr><td>Quercus lobata</td><td>valley oak</td><td>10</td><td>2:1</td><td>20</td></tr>
<tr><td>Quercus lobata (Heritage Tree)</td><td>valley oak (Heritage Tree)</td><td>2</td><td>10:1</td><td>20</td></tr>
<tr><td>Salix laevigata</td><td>red willow</td><td>24</td><td>2:1</td><td>48</td></tr>
<tr><td>Salix lasiolepis</td><td>arroyo willow</td><td>7</td><td>2:1</td><td>14</td></tr>
<tr><td>Sambucus nigra ssp. caerulea</td><td>blue elderberry</td><td>50</td><td>2:1</td><td>100</td></tr>
<tr><td colspan="2">Total</td><td>318</td><td>N/A</td><td>772</td></tr>
</table>

It should be noted that mitigation can include the protection of undersized, naturally sprouted trees of the same species growing on site. In addition, per the County Code, the County may require additional mitigation and monitoring requirements following review of the Significant Ecological Area Conditional Use Permits. At a minimum, the County requires that the replacement trees need to be nurtured and maintained in a healthy condition and be monitored for a period of 7 years. If any of the replacement plantings fail during the monitoring period of 7 years, the Applicant shall be responsible for replanting and nurturing those new trees.

The Project Applicant must pay into the County Protected Tree Fund should there not be enough locations within the Conservation Area (on-site or off-site) or Project landscaped areas for replacement trees. As a last resort, the Protected Tree Fund payments shall be used by the County in accordance with County Code Section 22.102.070(F)(5).</td><td>accordance with County Code Section 22.102.070(F)(5).</td><td></td><td></td><td></td></tr>
<tr><td>5.1</td><td>Cultural Resources</td><td>MM-4.5-1: Archaeological Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Archaeologist, meeting the Secretary of the Interior’s Standards, and with experience in California prehistoric and historic resources (experience within Los Angeles County preferred). The Principal Investigator/Archaeologist shall do the following: (1) compose a Cultural Resource Monitoring and Inadvertent Discovery Plan (Plan); (2) manage archaeological monitoring; and (3) address any inadvertent discoveries identified during Project implementation. These actions are described further below.

(1) Cultural Resource Monitoring and Inadvertent Discovery Plan. The Principal Investigator/Archaeologist shall compose the Plan to outline cultural monitoring protocols and a program of treatment and mitigation in the case of an inadvertent discovery of cultural resources during ground-disturbing activities. The Plan would be informed by the data and findings provided in the cultural report prepared for the Project (Appendix D), final</td><td>Retain a Principal Investigator/Archaeologist</td><td>Prior to ground disturbance activities</td><td>Project Applicant or Developer</td><td>County Department of Regional Planning</td></tr>
<tr><td></td><td></td><td></td><td>Preparation of Cultural Resource Monitoring and Inadvertent Discovery Plan</td><td>Prior to ground disturbance activities</td><td>Project Applicant or Developer and Principal Investigator/Archaeologist</td><td>County Department of Regional Planning</td></tr>
<tr><td></td><td></td><td></td><td>Archaeological Monitoring</td><td>During initial ground disturbance within native soils</td><td>Project Applicant or Developer and Principal Investigator/Archaeologist</td><td>County Department of Regional Planning</td></tr>
<tr><td></td><td></td><td></td><td>Preparation and submittal of archaeological monitoring report for approval</td><td>Within 60 days following completion of all ground disturbing activities and prior to release of the grading bond</td><td>Project Applicant or Developer and Principal Investigator/Archaeologist</td><td>County Department of Regional Planning</td></tr>
</table>

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		grading and site plans in order to provide guidance for the proper identification, evaluation, treatment, and protection of any cultural resources or human remains in accordance with California Environmental Quality Act (CEQA), as well as the depths at which cultural monitoring is required, throughout the duration of the Project. Existence and importance of adherence to this Plan shall be stated on all Project site plans intended for use by those conducting the ground disturbing activities. (2) *Archaeological Monitoring*. The Principal Investigator/Archaeologist shall manage archaeological monitoring activities conducted by technicians knowledgeable in archaeological resources during initial ground disturbances within native soils. Initial ground disturbance is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to cultural monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by Project-related construction. The retained Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitors shall be responsible for maintaining daily monitoring logs. The requirement for archaeological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground disturbing activities and prior to release of the grading bond, an archaeological monitoring report shall be prepared within 60 days following completion of ground disturbance and submitted to the County of Los Angeles for review. This report shall document compliance with approved cultural mitigation, all monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the County and the South Central Coastal Information Center (SCCIC).				
5.2	Cultural Resources	**MM-4.5-2:** *Workers Environmental Awareness Program (WEAP) Training.* Prior to the commencement of ground-disturbing activities for all phases of Project implementation, the Project Applicant shall retain a Principal Investigator/Archaeologist, as detailed in MM-4.5-1, above. The Principal Investigator/Archaeologist shall prepare a WEAP. The WEAP shall be submitted to the County of Los Angeles for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of ground-disturbing activities. This training shall inform all personnel working on the Project site about the archaeological sensitivity of the area. The purpose of the WEAP training is to provide specific details on the kinds of archaeological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant archaeological resources. The WEAP shall define "tribal cultural resources" and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource. Each worker should also be instructed on the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the Principal Investigator/Archaeologist, and, if appropriate, Tribal representative as determined by the Principal Investigator/Archaeologist. Necessity of training	Retain a Principal Investigator/Archaeologist	Prior to the commencement of ground-disturbing activities	Project Applicant or Developer	County Department of Regional Planning
			Preparation, submittal, and approval of a Workers Environmental Awareness Program	Prior to the commencement of ground-disturbing activities	Project Applicant or Developer and Principal Investigator/Archaeologist	County Department of Regional Planning
			Presentation of Workers Environmental Awareness Program training	Prior to the commencement of ground-disturbing activities	Project Applicant or Developer and Principal Investigator/Archaeologist	County Department of Regional Planning

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		attendance shall be stated on all Project site plans intended for use by those conducting the ground-disturbing activities.				
6.1	Energy	NA	NA	NA	NA	NA
7.1	Geology/Soils	**MM-4.7-1.** *Paleontological Monitoring*. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Principal Investigator/Qualified Paleontologist that meets the standards of the Society for Vertebrate Paleontology (2010). The Principal Investigator/Qualified Paleontologist shall do the following: (1) compose a Paleontological Resource Monitoring and Inadvertent Discovery Plan (Plan); (2) manage paleontological monitoring; and (3) address any inadvertent discoveries identified during Project implementation. These actions are described further below. *(1) Paleontological Resource Monitoring and Inadvertent Discovery Plan*. The Principal Investigator/Qualified Paleontologist would compose the Plan to outline paleontological monitoring protocols and a program of treatment and mitigation in the case of an inadvertent discovery of paleontological resources during ground-disturbing activities. The Plan would be informed by the data and findings provided in the paleontological report prepared for the Project (Confidential Paleontological Resources Assessment Report, prepared by Environmental Science Associates, dated November 2021, as included as Appendix E-2 of this Draft Environmental Impact Report), final grading and site plans in order to provide guidance for the proper identification, evaluation, treatment, and protection of any paleontological resources in accordance with California Environmental Quality Act (CEQA) throughout the duration of the Project. Existence and importance of adherence to this Plan shall be stated on all Project site plans intended for use by those conducting the ground disturbing activities. *(2) Paleontological Monitoring*. The Principal Investigator/ Qualified Paleontologist shall manage paleontological monitoring activities conducted by technicians knowledgeable in paleontological resources during initial ground disturbances within native soils. Initial ground disturbance is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to paleontological monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by Project-related construction. The retained Principal Investigator/ Qualified Paleontologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter paleontological resources. The paleontological monitors shall be responsible for maintaining daily monitoring logs. The requirement for paleontological monitoring shall be noted on all construction plans to ensure implementation. Upon completion of all ground disturbing activities, a paleontological monitoring report shall be prepared within 60 days following completion of ground disturbance and submitted to the County of Los Angeles for review. This report shall document compliance with approved paleontological mitigation, all monitoring efforts, and include an appendix with daily monitoring logs.	Retain a Principal Investigator/Qualified Paleontologist	Prior to ground disturbance activities	Project Applicant or Developer	County Department of Regional Planning
			Preparation of Paleontological Resource Monitoring and Inadvertent Discovery Plan	Prior to ground disturbing activities	Project Applicant or Developer and Principal Investigator/Qualified Paleontologist	County Department of Regional Planning
			Paleontological Monitoring	During initial ground disturbances within native soils	Project Applicant or Developer and Principal Investigator/Qualified Paleontologist	County Department of Regional Planning
			Preparation and submittal of Paleontological monitoring report for County approval	Upon completion of all ground disturbing activities and within 60 days following completion of ground disturbance	Project Applicant or Developer and Principal Investigator/Qualified Paleontologist	County Department of Regional Planning

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
7.2	Geology/Soils	**MM-4.7-2.** *Workers Environmental Awareness Program (WEAP) Training.* Prior to the commencement of ground-disturbing activities for all phases of Project implementation, the Project Applicant shall retain a Principal Investigator/Qualified Paleontologist. The Principal Investigator/Qualified Paleontologist shall prepare a WEAP. The WEAP shall be submitted to the County of Los Angeles for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of ground-disturbing activities. This training shall inform all personnel working on the Project site about the paleontological sensitivity of the area. The purpose of the WEAP training is to provide specific details on the kinds of paleontological materials that may be identified during construction of the Project and explain the importance of and legal basis for the protection of significant paleontological resources. Each worker should also be instructed on the proper procedures to follow in the event that paleontological resources are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the immediate contact of the Principal Investigator/Qualified Paleontologist, if appropriate. Necessity of training attendance shall be stated on all Project site plans intended for use by those conducting the ground-disturbing activities.	Retain a Principal Investigator/Qualified Paleontologist	Prior to the commencement of ground-disturbing activities	Project Applicant or Developer	County Department of Regional Planning
			Preparation, submittal, and approval of a Workers Environmental Awareness Program	Prior to the commencement of ground-disturbing activities	Project Applicant or Developer and Paleontologist	County Department of Regional Planning
			Presentation of Workers Environmental Awareness Program training	Prior to the commencement of ground-disturbing activities	Project Applicant or Developer and Principal Investigator/Paleontologist	County Department of Regional Planning
8.1	Greenhouse Gas Emissions	**MM-4.8-1.** *Construction Emission Reductions*. Prior to the issuance of grading permits, the Project Applicant or its designee shall implement the following strategies during construction activities and provide evidence to the County that the Construction Contractor's contract specifications include the following strategies: a) Use electric or hybrid powered equipment for generators and other small pieces of equipment (e.g., forklifts and saws), as commercially available. b) Use cleaner-fuel equipment such as replacing diesel fuel with compressed natural gas (CNG) or renewable diesel, as commercially available. c) Reduce idling time of heavy-duty trucks either by shutting them off when not in use or reducing the time of idling to no more than 3 minutes (5-minute limit is required by the state airborne toxics control measure 13 CCR § 2485). Commercially available equipment is herein defined as equipment sourced within 50 vehicle miles of the Project site and within 10 percent of the cost of the diesel-fueled-equivalent equipment. The Project Applicant must contact at least 3 contractors or vendors within Los Angeles County and submit to the County justification if the specified equipment is not commercially available. Compliance with this measure shall be documented and made available to the County upon request.	Provide evidence to the County that Construction Contractor's contract specifications include construction strategies	Prior to the issuance of grading permits	Project Applicant or Developer and Construction Contractor	County Department of Regional Planning
			The Project Applicant must contact at least 3 contractors or vendors within Los Angeles County and submit to the County justification if the specified equipment is not commercially available.	Prior to issuance of grading permits	Project Applicant or Developer and Construction Contractor	County Department of Regional Planning
			Provide documentation to the County that construction emissions reductions are implemented	Upon request	Project Applicant or Developer and Construction Contractor	County Department of Regional Planning
8.2	Greenhouse Gas Emissions	**MM-4.8-2.** *Electrify Buildings.* All the Project's buildings shall be powered fully by electricity, with no natural gas infrastructure or appliances, including no fireplaces. Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the building design plans include no natural gas infrastructure.	Provide evidence to the County that on-site buildings include no natural gas infrastructure	Prior to the issuance of building permits	Project Applicant or Developer and Construction Contractor	County Department of Regional Planning
8.3	Greenhouse Gas Emissions	**MM-4.8-3.** *Energy Conservation*. Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the residential and recreational building design plans include the following energy conservation measures: a) Install Energy Star-rated heating, cooling, lighting, and appliances.	Provide evidence to the County that the residential and recreational building design plans include energy conservation measures	Prior to the issuance of building permits	Project Applicant or Developer	County Department of Regional Planning

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		b) Install a 7-kilowatt (kW) solar photovoltaic electric generating system at the recreation center. c) Outdoor lighting shall be light emitting diodes (LED) or other high-efficiency lightbulbs. d) Install Cool Pavement. Prior to the issuance of building permits, the Project applicant or its designee shall submit building plans illustrating installation of cool pavements in place of dark pavements. Outdoor pavements, such as walkways and patios, shall use paving materials with three-year SRI of 0.28 or initial SRI of 0.33. e) Provide information on energy efficiency, energy efficient lighting and lighting control systems, energy management, and existing energy incentive programs to future residents of the Project.				
8.4	Greenhouse Gas Emissions	**MM-4.8-4.** *Utilize 100% Zero-Carbon Electricity.* The Project shall require, through the Covenants, Conditions and Restrictions (CC&Rs), enforced by the homeowners' association, the use of 100% zero-carbon electricity procured through Southern California Edison (SCE) (SCE Green Rate) or other electricity provider for residences and the recreational center. This requirement shall be enforced until which time the electricity provided is 100% carbon-free for all accounts by default.	CCRs to require use of 100% zero-carbon electricity procured through SCE Green Rate.	Shall be enforced until which time the electricity provided is 100% carbon-free	Project Applicant or Developer and HOA	County Department of Regional Planning
8.5	Greenhouse Gas Emissions	**MM-4.8-5.** *Encourage Electric Vehicles.* Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the single-family residential building design plans incorporate the following: a) The installation of a dedicated 208/240 branch circuit will be included in every single-family garage unit, and no-less-than 92 of the market-rate units will have one Level 2 (fast charger with 40-amp circuit) electric vehicle (EV) charging station in the garage.	Provide evidence to the County that the single-family residential building design plans include EV charging specifications	Prior to issuance of building permits	Project Applicant or Developer	County Department of Regional Planning
8.6	Greenhouse Gas Emissions	**MM-4.8-6**. *Water Use Efficiency and Water Conservation*. Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the residential and recreational building design plans include the following water use efficiency and conservation measures, including: a) High-efficiency appliances/fixtures to reduce water use, and/or include water-efficient landscape design b) Low-flow or high-efficiency water fixtures c) Water-efficient landscapes with lower water demands than required by the California Department of Water Resources (DWR) 2015 Model Water Efficient Landscape Ordinance (MWELO) d) Planting of native and drought-tolerant plant species only e) Provide educational materials to future tenants and building occupants about water saving behaviors and water-conserving landscaping.	Provide evidence to the County that design plans include water use efficiency and conservation measures	Prior to issuance of building permits	Project Applicant or Developer	County Department of Regional Planning
8.7	Greenhouse Gas Emissions	**MM-4.8-7.** *Solid Waste Reduction.* Prior to the issuance of building permits for the Project, the Project Applicant shall provide building plans that include the following solid waste reduction measure: Provide storage areas for recyclables and organic waste in new construction, and food waste storage, if a pick-up service is available.	Provide building plans that include solid waste reduction measure	Prior to issuance of building permits	Project Applicant or Developer	County Department of Regional Planning
8.8	Greenhouse Gas Emissions		Provide evidence to County that design plans include electrical	Prior to the issuance of building permits	Project Applicant or Developer	County Department of Public Works

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		MM-4.8-8. *Landscape Maintenance Equipment Emission Reductions*. The Project Applicant shall implement the following landscape maintenance equipment reduction measures: a) *Outdoor Electrical Outlets*. Prior to the issuance of building permits, the Project Applicant or its designee shall provide evidence to the County that the design plans include electrical outlets on the exterior of the structure to facilitate use of electrical lawn and garden equipment. b) *Encourage Utilization of Existing Yard Equipment Exchange and Rebate Programs*. The Project's future homeowners' association shall educate future residents about the South Coast Air Quality Management District (SCAQMD) Electric Lawn Mower Rebate Program and the Commercial Electric Lawn and Garden Equipment Exchange Program. When conventional gasoline-powered yard equipment (e.g., lawn mowers, leaf blowers and vacuums, shredders, trimmers, and chain saw) are exchanged for electric and rechargeable battery-powered yard equipment, direct GHG emissions from fossil-fuel combustion are displaced by indirect GHG emissions associated with the generation of electricity used to power the equipment.	outlets on the exterior of structures			
			Educate Future residents about the SCAQMD Electric Lawn Mower Rebate Program and the Commercial Electric Lawn and Garden Equipment Exchange Program	During Project occupancy	Project Applicant or Developer and HOA	County Department of Regional Planning
9.1	Hazards/Hazardous Materials	**MM-4.9-1**: *Soils Management Plan (SMP)*. Prior to issuance of a grading permit, the Applicant shall retain a Qualified Environmental Specialist to prepare a Soil Management Plan (SMP) for submittal to the Los Angeles County Fire Department Hazardous Materials Division for approval. The SMP shall provide the protocols for all earthwork activities and the potential to encounter previously unidentified hazardous materials or wastes on the Project site as well as within off-site disturbance areas. Potential conditions and/or hazards that may be encountered during construction activities include but may not limited to buried septic systems, buried debris (e.g., building debris with lead-based paint chips or asbestos), areas of soil staining, or other suspect conditions that can be identified visually and/or from odors within the Project's proposed disturbance area. If suspect materials or conditions are encountered, then the following actions are required and specific protocols, consistent with applicable Health and Safety Code and Health Hazardous Materials Division of the Los Angeles County Fire Department (LACoFD) requirements, shall be included in the SMP: 1. earthwork activities in that area shall cease until sampling and characterization is completed by the Qualified Environmental Specialist; 2. depending on sampling/analysis results, the appropriate oversight agency shall be notified (e.g. Regional Water Quality Control Board, Department of Toxic Substances Control (DTSC), or the local Certified Unified Program Agency (LACoFD); 3. documentation shall be prepared that itemizes required sampling, results, and actions in conformance with regulatory standards to be taken; 4. protocols for resuming earthwork activities following approval from the oversight agency and remediation of contamination, if any, as deemed necessary by the Qualified Environmental Specialist and oversight agency; 5. National Institute for Occupational Safety and Health (NIOSH)-approved half-face respirators equipped with minimum N-95 protection factor shall be available upon request for use during worker collocation with surface disturbance activities; and	Retain a Qualified Environmental Specialist to prepare and submit Soil Management Plan for approval	Prior to issuance of a grading permit	Qualified Environmental Specialist and Project Applicant	County Fire Department
			If suspect materials or conditions are encountered, earthwork activities in that area shall cease until sampling and characterization is completed	During earthwork activities	Project Applicant or Developer and Construction Contractor and Qualified Environmental Specialist	County Fire Department
			Agencies shall be notified depending on sampling/analysis results	After completion of sampling/Analysis results	Project Applicant or Developer and Construction Contractor	RWQCB and/or DTSC and/or County Fire Department
			Preparation of documentation that itemized required sampling, results, and actions in conformance with regulatory standards to be taken	After completion of sampling results	Project Applicant or Developer and Qualified Environmental Specialist	RWQCB and/or DTSC and/or County Fire Department
			NIOSH-approved half-face respirators equipped with minimum N-95 protection factor shall be available upon request for use and hand washing facilities and areas for changing of clothing shall be provided	During worker collocation with surface disturbance activities	Project Applicant or Developer and Construction Contractor	County Department of Public Works
			Soil sampling beneath the pavement of The Old Road within 30 feet of I-5 to determine ADL	Prior to ground-disturbing activities	Project Applicant or Developer and Qualified Environmental Specialist	County Fire Department

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		6. hand washing facilities and areas for changing of clothing shall be provided during worker collocation with surface disturbance activities. The SMP shall outline requirements for construction activities that occur within 30 feet of the edge of Interstate 5 (I-5) to address potential aerially deposited lead (ADL) from historic vehicle emissions that included leaded fuels. The SMP shall set forth protocols for soil sampling beneath the pavement of The Old Road within 30-feet of I-5 to determine ADL concentrations and require that if soils are affected by ADL, they shall be managed consistent with all applicable DTSC standards and requirements. The SMP shall outline requirements for ground-disturbing activities as part of the Project as it relates to the potential of releasing spores of Coccidioidomycosis (also known as Valley Fever) into the air. In addition to providing N-95 respiratory masks upon request for construction personnel during any ground-disturbance activities, the SMP shall require the provision of educational material to construction personnel. This educational material shall include information on how to minimize exposure to and recognize symptoms of Valley Fever and ways report symptoms of Valley Fever; proper cleaning procedures to minimize accidental exposure; and demonstrations on how to use personal protective equipment, such respiratory protection, skin, and eye protection. The SMP shall require that any heavy equipment with factory enclosed cabs be provided with high-efficiency particulate absorbing filter (HEPA)-rated air filtration and positive pressure air. The General Contractor utilizing applicable heavy equipment shall provide proof of worker training on proper use of applicable heavy equipment cabs. Communication methods, such as two-way radios, shall be available for use in enclosed cabs.	concentrations and management of soils consistent with all applicable DTSC standards and requirements			and/or County Department of Public Health
			Provision of educational material as it relates to Valley Fever	During ground-disturbing activities	Project Applicant or Developer and Construction Contractor	County Department of Public Works
			Any heavy equipment with factory enclosed cabs be provided with HEPA-rated air filtration and positive pressure air. Communication methods, such as two-way radios, shall be available for use in enclosed cabs.	During ground-disturbing activities	Project Applicant or Developer and Construction Contractor	County Department of Public Works
9.2	Hazards/Hazardous Materials	**MM-4.9-2.** *Well Assessment*. Prior to issuance of a grading permit, the Applicant shall retain a registered California design professional, such as a licensed civil engineer and/or licensed petroleum engineer to evaluate the exact location, condition, and abandonment status of the well on the Project site. A summary report detailing the findings of the well conditions and abandonment status shall be submitted to the Los Angeles Department of Public Works (Public Works) Building Official and California Geologic Energy Management (CalGEM) for review and approval prior to issuance of a grading permit. Pursuant to Section 110.4 of the Los Angeles County Building Code (LACBC), building permits shall not be issued for new buildings or enclosed structures, additions, or conversions of any building or structure to habitable or occupiable space on, adjacent to, or within 300 feet (91.44 meters) of the existing plugged well without documentation, stamped and signed by the licensed engineer, of proper abandonment of the existing well consistent with CalGEM guidelines and approval by the Public Works Building Official. A CalGEM monitor shall be present on site during all abandonment activities of the on-site oil well. Any further additional abandonment or removal of the plugged well as required by CalGEM shall be completed and approved by CalGEM prior to issuance of a grading permit.	Retain a California-registered design professional to evaluate the on-site well	Prior to issuance of a grading permit	Project Applicant or Developer and California-registered design professional	County Department of Public Works
			Summary report detailing the findings of the well shall be submitted for review and approval	Prior to issuance of a grading permit	Project Applicant or Developer and California-registered design professional	County Department of Public Works and CalGEM
			Documentation, stamped and signed and approval that proper abandonment of the existing on-site well	Prior to issuance of a building permit	Project Applicant or Developer and California-registered design professional	County Department of Public Works
			CalGEM monitor shall be present on site during all abandonment activities of the on-site oil well	During abandonment activities of the on-site well	Project Applicant or Developer and CalGEM monitor	County Department of Public Works and CalGEM
			Any further additional abandonment or removal of the plugged well as required by CalGEM	During abandonment activities and prior to issuance of grading permit	Project Applicant or Developer and CalGEM monitor	County Department of Public Works and CalGEM
9.3	Hazards/Hazardous Materials	**MM-4.9-3**: *Methane Gas Survey and Remediation*. Prior to issuance of a grading permit, the Applicant shall conduct methane gas testing for the presence of methane gas emissions within 300 feet of the plugged well, in accordance with	Retain a Qualified Geotechnical Specialist to perform methane gas soil survey	Prior to issuance of a grading permit	Project Applicant or Developer and Qualified Geotechnical Specialist	County Department of Public Works

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		CalGEM and Los Angeles County Department of Public Works (Public Works) methane gas assessment guidelines. The Project applicant shall retain a Qualified Geotechnical Specialist to perform the methane gas soil survey and provide a summary report of the findings with recommendations for remedial work, if necessary. The summary report shall be submitted to the Public Works Building Official for review and approval prior to issuance of a grading permit. In the event that the soil gas investigation indicates methane levels that exceed 5,000 parts per million by volume, the Project Applicant shall include installation of a gas protection system for residences within 300 feet of the plugged oil well. The gas protection system shall be developed in compliance with the Public Works Methane Hazard Mitigation Policy and become part of the project design plans. The Applicant shall submit documentation to Public Works that ensures compliance with the proper abandonment standards and necessary approvals from CalGEM regarding the appropriate well abandonment. It shall ensure that this has been completed prior to commencement of construction of the Project and that all remedial and grading activity recommendations have been implemented to the satisfaction of CalGEM and the Public Works Building Official prior to commencement of construction grading.	Preparation and submittal of soil survey summary report for review and approval	Prior to issuance of a grading permit	Project Applicant or Developer and Qualified Geotechnical Specialist	County Department of Public Works
			Develop gas protection system for inclusion within project design plans if methane levels exceed 5,000 parts per million	Prior to issuance of a grading permit	Project Applicant or Developer	County Department of Public Works
			Submit documentation that ensures compliance with the proper abandonment standards and necessary approvals	Prior to commencement of construction	Project Applicant or Developer	County Department of Public Works
10.1	Hydrology/Water Quality	NA	NA	NA	NA	NA
11.1	Land Use/Planning	NA	NA	NA	NA	NA
12.1	Mineral Resources	NA	NA	NA	NA	NA
13.1	Noise	**MM-4.13-1:** *Simultaneous Equipment Operation Limit for Portion of Lot 22.* Within the area of Lot 22 designated on Figure 4.13-3, Area of Lot 22 In Which Construction Noise Mitigation is Required of the Draft Environmental Impact Report (EIR), the total quantity of mobile construction equipment allowed to operate simultaneously shall not exceed one.	Simultaneous Equipment Operation Limit within Lot 22	During construction activities within area of Lot 22	Project Applicant or Developer and Construction Contractor	County Department of Public Works
13.2	Noise	**MM-4.13-2:** *Staging Areas & Stationary Equipment*. Prior to issuance of grading permits, the County/Project applicant shall incorporate the following measures as a note on the grading plan cover sheet to ensure that the greatest distance between noise sources and sensitive receptors during construction activities have been achieved. ▪ Neither stationary construction equipment (i.e., generator, air compressor, cement mixer) nor construction staging areas shall be located within Lot 22. ▪ Construction equipment, fixed or mobile, shall be equipped with properly operating and maintained noise mufflers consistent with manufacturers' standards. ▪ Construction staging areas shall be located away from off-site sensitive uses during Project construction. ▪ The Project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Project site, whenever feasible.	Incorporation of noise measures during construction activities into notes of the grading plan cover sheet	Prior to issuance of grading permits	Project Applicant or Developer and Construction Contractor	County Department of Public Works
13.3	Noise	**MM-4.13-3:** *Stationary Equipment Construction Noise Barrier*. Stationary construction equipment located within 600 feet of the northern Project site property boundary in Lots 2, 3, 8, 9, 10, and 11 and within The Old Road Improvements construction zone shall each be enclosed within a sound barrier of 10-foot minimum height.	Stationary Equipment Construction Noise Barriers	During construction activities	Project Applicant or Developer and Construction Contractor	County Department of Public Works

<table>
<tr><th>#</th><th>Environmental Factor</th><th>Mitigation Measure(s)</th><th>Action Required</th><th>When Monitoring to Occur</th><th>Responsible Agency or Party</th><th>Monitoring Agency or Party</th></tr>
<tr><td>13.4</td><td>Noise</td><td>MM-4.13-4: Temporary Noise Barrier for On-Site Phases. For mobile equipment (as defined by the Section 12.08.440 of the Los Angeles County Code) construction activities within a Project Lot that is adjacent to an occupied, on-site residence, a temporary noise barrier shall be erected and maintained along the boundary between the Project Lot under construction and the Project Lot with occupied residence(s). The noise barrier for mobile construction equipment operation shall either: (1) extend along the entire common boundary between the construction zone and adjacent occupied Project Lot; or (2) extend from either end of the construction zone a length that is twice the separation distance between the construction zone and closest residence. For stationary construction equipment (as defined by the Section 12.08.440 of the Los Angeles County Code), temporary sound barriers surrounding three sides of the equipment (with the remaining open side facing the opposite direction from the adjacent occupied residences) shall be erected and maintained.

The temporary sound barriers shall remain in place throughout the duration of the applicable construction activity. To determine the appropriate height and length of the temporary noise barrier, prior to construction activities for each phase of development, the construction contractor shall determine the nearest occupied residence to the phased construction activity and abide by the below requirements:

<table>
<tr><th>Distance from Construction to On-site, Occupied Residence</th><th>Type of Equipment</th><th>Noise Barrier Height</th><th>Location for Barrier</th></tr>
<tr><td>50 to 99 feet</td><td>Mobile</td><td>14 feet</td><td>Along boundary between construction zone and adjacent Lot.</td></tr>
<tr><td>50 to 99 feet</td><td>Stationary</td><td>11 feet</td><td>Within 5 feet of stationary equipment, 3 sides</td></tr>
<tr><td>100 to 250 feet</td><td>Mobile</td><td>12 feet</td><td>Along boundary between construction zone and adjacent Lot.</td></tr>
<tr><td>100 to 300 feet</td><td>Stationary</td><td>11 feet</td><td>Within 5 feet of stationary equipment, 3 sides</td></tr>
<tr><td>Beyond 250 feet</td><td>Mobile</td><td>None</td><td>None</td></tr>
<tr><td>Beyond 300 feet</td><td>Stationary</td><td>None</td><td>None</td></tr>
</table>
</td><td>Temporary noise barriers during construction activities</td><td>During construction activities</td><td>Project Applicant or Developer and
Construction Contractor</td><td>County Department of Public Works</td></tr>
<tr><td>14.1</td><td>Population/Housing</td><td colspan="3">NA</td><td>NA</td><td>NA</td><td>NA</td></tr>
<tr><td>15.1</td><td>Public Services</td><td colspan="3">NA</td><td>NA</td><td>NA</td><td>NA</td></tr>
<tr><td>16.1</td><td>Recreation</td><td colspan="3">NA</td><td>NA</td><td>NA</td><td>NA</td></tr>
</table>

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
17.1	Transportation	**MM-4.17-1:** *Construction Traffic Management Plan.* Prior to construction of the Project, the Applicant shall prepare a detailed Construction Traffic Management Plan, that shall be prepared in accordance with the County's Requirements For Temporary Traffic Controls For Lane Closures, Street Closures And Detours and supplemental to Part 6 of the Greenbook Standard Specifications for Public Works Construction, subject to County review and approval. The Plan shall include, but not be limited to, the following: ▪ Maintain existing access for land uses in proximity of the Project site throughout construction, unless otherwise approved by the County. ▪ Schedule deliveries and pick-ups of construction materials to non-peak travel periods, to the maximum extent feasible. ▪ Coordinate deliveries and pick-ups to reduce the potential of trucks waiting to load or unload for protracted periods of time. ▪ Minimize obstruction of through traffic lanes on The Old Road and ensure adequate evacuation capabilities of the Project site and nearby developed areas that may require use of The Old Road during evacuations. Use flag persons as needed to ensure safe traffic operations along The Old Road. ▪ If any lane closure is necessary, include detailed safety precautions for pedestrians and bicyclists to allow for safe passage such as alternate routing, protection barriers, and appropriate signage. ▪ Construction equipment traffic from the contractors shall be controlled by flagman. ▪ Identify designated transport routes for heavy trucks (in addition to haul trucks) to be used throughout Project construction. ▪ Schedule vehicle movements to ensure that there are no vehicles waiting off-site and impeding public traffic flow on the surrounding streets. ▪ Install temporary construction signs to warn vehicular traffic of reduced speed limits in construction zone. ▪ Establish requirements for loading/unloading and storage of materials on the Project site, where length of time traffic travel lanes could be encumbered and/or sidewalk closings or pedestrian diversions would be implemented, to ensure the safety of the pedestrians. ▪ Coordinate with adjacent property owners and emergency service providers to ensure adequate access to the Project site and surrounding uses. ▪ Limit potential roadway lane closure(s) to off-peak travel periods. ▪ Identify a contact person in the Construction Traffic Management Plan that would be available to oversee implementation of the Plan and address any community concerns.	Prepare a detailed Construction Traffic Management Plan for review and approval by County	Prior to construction	Project Applicant or Developer	County Department of Public Works
			Implement Construction Traffic Management Plan	During construction activities	Project Applicant or Developer and Construction Contractor	County Department of Public Works
17.2	Transportation	**MM-4.17-2.** *Transportation Demand Management (TDM) Program.* Prior to issuance of final map recordation, the Project Applicant shall prepare a TDM Program aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation, such as carpooling, taking transit, walking, and biking for residents. The TDM Program shall be subject to review and approval by the Los Angeles County Department of Regional Planning and Los Angeles County Public Works. The exact measures to be implemented shall be determined when the TDM Program is prepared, prior to issuance of a final map recordation for the Project. The following TDM measures are based on measures by the California Air Pollution Control Officers Association (CAPCOA) publication, *Handbook for Analyzing Greenhouse Gas*	Prepare a TDM Program aimed and submit to County for review/approval	Prior to issuance of final map recordation	Project Applicant or Developer	County Department of Public Works and/or Planning
			Implement Subsidized or Discounted Transit Program	Active for three (3) years following initial deposit by the Applicant	Project Applicant or Developer	County Department of Public Works and/or Planning

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (2021). The TDM Program must include, but would not be limited to, the following: a) Locating the Project near a Bike Lane; Improving Bike Boulevard; Expand Bikeway Network: The Project shall include a Class III bicycle route on the proposed "A" Street, "B" Street, and the gated private access road on-site, which would connect to Los Angeles County's future Class II bicycle lane along the Project frontage on The Old Road. b) E-Bikeshare System: The Project shall include an E-bike loaner program (separate from the publicly accessible options in the City of Santa Clarita) to provide residents with short-term access for trips. This program shall be active for five years following an initial deposit by the Project Applicant. c) Provide Community-Based Traveling Planning: The Project shall provide households with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles, thereby reducing household vehicle miles traveled (VMT). The Project shall create a ridesharing program for school children. Most school districts provide bussing services to public schools only. School Pool helps match parents to transport students to private schools or to schools where students cannot walk or bike and do not meet the requirements for bussing. d) Carpool/Vanpool Incentives: The Project shall include monetary assistance with fares or gas costs for carpool/vanpool users. This incentive shall be active for three years following an initial deposit by the Project Applicant. e) Implement Subsidized or Discounted Transit Program: The Project shall provide subsidized/discounted daily or monthly public transit passes. This incentive shall be active for three years following an initial deposit by the Project Applicant.				
8.1	Tribal Cultural Resources	**MM-4.18-1**: *Retention of Native American Monitoring*. Prior to the commencement of any ground disturbance activities, the applicant/owner/developer shall retain a Native American monitor/entity procured by the Fernandeño Tataviam Band of Mission Indians. The applicant/owner/developer shall make arrangements with the retained Native American monitor/entity to enter into a Native American Monitoring Agreement with the intent of securing a total of one Native American monitor to be present during initial ground disturbance (including testing, clearing, grubbing, and grading operations) occurring from one foot above native soils and up to five feet below the surface of native soil. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. This definition excludes movement of sediments after they have been initially disturbed or displaced by current Project-related construction. More than one monitor may be required if multiple areas within the Project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 100 feet apart) of the simultaneous activities.	Retain a Native American monitor/entity procured by the Fernandeño Tataviam Band of Mission Indians.	Prior to the commencement of any ground disturbance activities	Project Applicant or Developer	County Department of Regional Planning
			Enter into a Native American Monitoring Agreement with retained Native American monitor/entity to monitor	Prior to the commencement of any ground disturbance activities	Project Applicant or Developer	County Department of Regional Planning
			Monitoring during initial ground disturbance	During initial construction-related earthmoving of sediments from their place of deposition	Project Applicant or Developer and Native American monitor/entity and Construction Contractor	County Department of Public Works
18.2	Tribal Cultural Resources	**MM-4.18-2**: *Workers Environmental Awareness Program*. The retained Native American monitor/entity procured by the Fernandeño Tataviam Band of Mission Indians (as detailed in MM-4.18-1, above) shall be notified by the applicant/owner/developer of the time and location of the Worker Environmental Awareness Program (WEAP) training no later than 72 hours prior to its scheduled occurrence. The applicant/owner/developer shall provide the	Notification of WEAP training and access/opportunity to participate in training	72 hours prior to its scheduled occurrence and during WEAP training	Project Applicant or Developer and Construction contractor	County Department of Public Works

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		retained Native American monitor/entity the access and opportunity to participate in the WEAP training. For further details and requirements pertaining to the WEAP training, please see MM-4.5-2.				
18.3	Tribal Cultural Resources	**MM-4.18-3**: *Inadvertent Discovery Clause*. In the event that potential prehistoric or historic-era Native American/Tribal resources (sites, features, or artifacts) are exposed during construction activities for the Project, all construction work occurring within 60 feet of the find shall immediately stop and the retained Native American monitor/entity procured by the Fernandeño Tataviam Band of Mission Indians (as detailed in MM-4.18-1, above) must be notified promptly. The find shall be assessed by the retained Principal Investigator/Archaeologist (as detailed in MM-4.5-1) in consultation with the retained Native American monitor/entity. Consultation shall assess and document potential finds in real time to determine whether or not additional study is warranted. In the event that human remains and associated funerary objects are inadvertently encountered during construction activities, the remains and funerary objects shall be treated in accordance with state and local regulations that provide requirements with regard to the accidental discovery of human remains, including California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5(e). In accordance with these regulations, if human remains are found, the County Coroner must be immediately notified of the discovery. Additionally, the retained Native American monitor/entity must be notified of the discovery immediately. No further excavation or disturbance of the Project site or any nearby (no less than 100 feet) area reasonably suspected to overlie adjacent remains can occur until the County Coroner has determined, within 2 working days of notification of the discovery, if the remains are potentially human in origin. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she is required to notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant must then complete their inspection within 48 hours of being granted access to the site. The most likely descendant would then determine, in consultation with the property owner, the disposition and treatment of the human remains.	Construction work to stop if potential prehistoric or historic-era Native American /TCRs are exposed and notification to Native American monitor	During construction activities	Project Applicant or Developer and Construction contractor	County Department of Public Works
			If human remains and associated funerary objects are found, notification to appropriate parties and stop work	During construction activities	Project Applicant or Developer and Construction Contractor	County Department of Public Works
19.1	Utilities/Service Systems	NA	NA	NA	NA	NA
20.1	Wildfire	**MM-4.20-1**: *Wildfire Education Program*. The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions for the Project shall require that the HOA include a Fire Safety Coordinator position as part of the HOA Board, who shall be responsible for preparing and implementing an educational program with wildfire-related information, including the Wildfire Evacuation Plan (WEP) and the Fire Protection Plan (FPP) requirements, to be provided to all residents and occupants, including residents and occupants of the senior affordable housing units. Similarly, the Property Manager(s) of the senior affordable housing shall serve as the Fire Safety Coordinator for the affordable housing residents and shall be responsible for preparing and implementing an educational program with wildfire-related information, including the WEP and the FPP requirements to be provided to all residents and occupants. The Covenants, Conditions, and Restrictions will be submitted to the County of Los	HOA CCRs shall require that the HOA prepare an educational wildfire program. Educational program to be submitted to County for review and approval.	Prior to issuance of certificate of occupancy	Project Applicant or Developer and HOA	County Fire Department
			Emails and Mailers to be provided to residents and occupants	Biannual emails and mailers in April and August	HOA	County Fire Department
			Website developed and website address sent to residents and occupants	Throughout resident occupancy	HOA	County Fire Department
			New resident package	Through resident occupancy, specifically provided upon occupation of each new resident	Project Applicant or Developer and/or HOA	County Fire Department

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		Angeles (County) prior to issuance of certificate of occupancy. The educational program shall be prepared in easy-to-understand, graphically based materials and shall be annually reviewed and updated, as appropriate, in order to maintain high wildfire awareness. Program features shall include, but may not be limited to, the following: 1. Biannual email and mailers: Residents and occupants of all dwelling units on the Project site, including the senior affordable housing rental units, shall be provided with biannual emails and mailers in April and in August that include information such as reminders about annual defensible space inspections, how to prepare for wildfire season, evacuation information, prohibited high-risk activities, and how to prevent wildfires. Links to various resources on where to get trusted information, such as the Los Angeles County Fire Department (LACoFD), 211 Los Angeles County, and Ready Los Angeles County, shall be provided and updated annually, as necessary. Additionally, at least once a year, information on the following shall be provided in the email and mailer: (1) how to notify the County Office of Emergency Management (OEM) and Health and Human Services of special needs and/or required accommodations (Accessible Alert LA County, CERT programs, or other), for transportation or other special services; and (2) how to prepare for evacuation of pets and how to register for assistance with pet evacuations. 2. Website: A dedicated community website shall be developed and maintained by the HOA with more detailed information and resources about wildfire awareness, prevention, and evacuation. The website address shall be sent to all residents of the Project, including occupants of the senior affordable housing units. The website shall serve as a centralized resource for the fire and evacuation education program and include information from the FPP and WEP. In addition to general emergency preparedness education, the website shall include information that is included in emails, mailers, and workshops/webinars. The website shall have up-to-date fire watch and red flag warning alerts, as well as information on restrictions during fire weather conditions. Residents shall also be able to use the website to sign up for an annual residential defensible space inspection from the HOA fire safety committee. 3. New resident packet: All residents and new residents in the future shall be presented with a wildfire awareness and safety package upon purchase or rental of a residence. Within the package will be a USB drive with the WEP, FPP (which includes information on the regional fire hazard, how to build a go-bag, and tools to prepare a household evacuation plan), and a list of agencies and resources for receiving trusted information. 4. Emergency alert campaign: Residents shall be encouraged to sign up for Alert LA County. Alert LA County is the mass notification system for emergency alerts, weather alerts, health notifications, building alerts, and other updates from County, state, and federal agencies. Reminders shall be sent out in the biannual mailers and emails, on the community website, in the workshops, and in the new resident package. 5. Trail signage: Signs shall be placed at the new trailhead to provide all users with information about how to safely use the trail and shall include restrictions on smoking and firearm usage. Signs shall be evaluated annually by the HOA to ensure proper maintenance.	Emergency alert campaign	Throughout project occupancy	HOA	County Fire Department
			Provide and maintain trail signage at new trailhead	Upon completion of new trail and evaluated annually	Project Applicant or Developer and/or HOA	County Department of Parks and Recreation
			Establishment of a fire safety committee, including coordination of the FMZ inspections; distribution of the educational program to project occupants; communication with the County Fire Department	Throughout project occupancy	Project Applicant or Developer and/or HOA	County Fire Department

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		6. HOA fire safety committee: The HOA shall establish a fire safety committee, which shall include the owner and property manager(s) from the senior housing that is responsible for overseeing the maintenance of community-wide fire protection features. Residents will be able to report fire hazards or hazardous fuel conditions to the HOA committee for remediation. The committee shall be responsible for the coordination of the third party fuel modification zone (FMZ) inspections and the volunteer residential defensible space inspections. The committee shall also be responsible for the creation and distribution of the educational program for the Project. The committee shall serve as a communication link between LACoFD and the community. 7. Senior Housing Carpool Program: The Fire Safety Coordinator shall be responsible for creating a senior housing carpool program available for all residents on the Project site, including the senior affordable rental units. The program shall ensure that all seniors who are not able to safely evacuate on their own are accounted for and transported during an emergency evacuation.				
20.2	Wildfire	**MM-4.20-2**: *Alternative Materials and Methods*. Prior to the execution of any contract with a construction contractor, the Project Applicant/Developer shall ensure that the following requirements shall be placed on the construction contractor's contract specification: All residential structures shall be built using ignition-resistant materials pursuant to the most recent Los Angeles County (County) Fire and Building Codes (Chapter 7A, focusing on structure ignition resistance from flame impingement and flying embers in areas designated as high fire hazard areas). The following are additional ignition-resistant construction requirements, beyond existing code requirements: 1. The 16 residences included in the southeastern portion of the Project site (within Lot 5 of the Tentative Tract Map) adjacent to the off-site open space area shall include the following features for additional fire prevention, protection, and suppression (Figure 4.20-2, Fuel Modification Zones, of the Draft EIR): i. Windows on structures facing the open space areas shall include dual panes, with both panes tempered. ii. Exterior walls and doors shall be constructed to a standard of minimum 1-hour fire rated with one layer of 5/8-inch type X gypsum sheathing applied behind the exterior covering or cladding on the exterior side of the framing, from the foundation to the roof, for all exterior walls of each building. iii. Exterior vents shall be ember-resistant (recommend BrandGuard, O'Hagin, or similar vents approved by LACoFD). iv. A solid 6-foot-tall wall shall be constructed of concrete masonry units between on-site structures and off-site open space. Proof of compliance shall be provided to the County prior to issuance of a certificate of occupancy for homes that require these additional fire prevention, protection, and suppression features.	Ensure requirements (for alternative materials and methods) on Construction Contractor's contract specification	Prior to the execution of any contract with a construction contractor	Project Applicant or Developer	County Fire Department
			Additional requirements for 16 residences within Lot 5 of the TTM	During construction of Lot 5 residences	Project Applicant or Developer and Construction Contractor	County Fire Department
			Proof of compliance	Prior to issuance of a certificate of occupancy for 16 residences within Lot 5 of TTM	Project Applicant/Construction Contractor	County Fire Department
20.3	Wildfire	**MM-4.20-3**: *Annual Fuel Modification Zone Inspection*. The Homeowners' Association (HOA) Covenants, Conditions, and Restrictions shall require annual fuel modification inspections to be conducted to confirm and document compliance with fuel modification maintenance requirements, as defined in the Los Angeles County Fire Department (LACoFD) approved fuel modification plan.	Annual fuel modification zone inspections to confirm and document compliance with fuel	Annually, to be submitted in May/June of each year	Project Applicant or Developer and HOA	County Fire Department

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		The HOA shall obtain a fuel modification zone (FMZ) inspection and report in May/June of each year to document and certify that vegetation management activities throughout the Project site have been performed. If the FMZ areas are not compliant, the HOA shall have a specified period to correct any noted issues, and re-inspection shall be required to achieve the annual certification of compliance. Documentation of compliance shall be retained by the HOA and provided to LACoFD upon request.	modification maintenance requirements			
20.4	Wildfire	**MM-4.20-4**. *Construction Fire Prevention Plan*. Prior to the commencement of construction activities, the Project Applicant/Developer shall prepare a construction fire protection plan (FPP) that requires the training of construction personnel and provides details related to fire-suppression procedures and equipment to be used on-site during construction. The construction FPP shall be consistent with the requirements in California Building Code Chapter 33 and California Fire Code Chapter 33, shall be subject to review and approval of the Los Angeles County Fire Department (LACoFD), and shall include the following: ▪ Protocols for conducting mandatory Project-specific environmental awareness training for all on-site construction workers, including the requirement to conduct the training prior to any grubbing or ground disturbance, and requirements for ongoing training to occur prior to commencement of each phase of construction ▪ Requirements to conduct and document construction worker trainings, which shall include protocols for minimizing potential ignition activities, vegetation clearing, parking requirements/restrictions, equipment/vehicle idling restrictions, smoking restrictions, initial attack firefighting, proper use of gas-powered equipment and storage of flammable fuels, use of spark arrestors, fire reporting, and hot work restrictions ▪ LACoFD-approved construction work restrictions during red flag warnings and high to extreme fire danger days ▪ Specifications for access to adequate water supplies and/or water trucks to service construction activities ▪ Documentation of emergency contact information and protocols for on-site emergency response communication to on-site workers, coordination with local fire agencies, and reporting/documentation procedures for actions taken ▪ Designation of an on-site fire awareness coordinator with itemized description of their role and responsibility for ensuring compliance with the construction FPP, including demonstration of compliance with applicable plans and policies established by state and local agencies and documentation of completion of required construction worker trainings	Preparation and submittal of a construction fire prevention plan for County Fire Department review	Prior to the commencement of construction activities	Project Applicant or Developer	County Fire Department
			Implementation of construction fire prevention plan	During construction activities	Project Applicant or Developer and Construction Contractor	County Fire Department
20.5	Wildfire	**MM-4.20-5**. *Construction-Related Fire Prevention Measures.* Prior to the execution of any contract with a construction contractor and issuance of grading permits, the Project Applicant/Developer shall ensure that the following requirements shall be placed on the construction contractor's contract specification: ▪ All required fuel modification for each phase of construction activity shall be implemented prior to commencement of that phase and prior to combustible building materials being delivered to the site.	Inclusion of construction-related fire prevention measures within construction contractor's contract specifications	Prior to the execution of any contract with a construction contractor and issuance of grading permits	Project Applicant or Developer	County Fire Department
			Implementation of all required fuel modification	Prior to commencement of that phase and prior to combustible building materials being delivered to the site	Project Applicant or Developer	County Fire Department
			Improvements within the active development area shall be in place	Prior to bringing lumber to the Project site	Project Applicant or Developer	County Fire Department

#	Environmental Factor	Mitigation Measure(s)	Action Required	When Monitoring to Occur	Responsible Agency or Party	Monitoring Agency or Party
		▪ Prior to bringing lumber onto the Project site, improvements within the active development area shall be in place, including utilities, operable fire hydrants, an approved, temporary roadway surface, and fuel modification zones (FMZs) established pursuant to the construction fire protection plan (FPP) and Los Angeles County Fire Department (LACoFD) requirements. ▪ All temporary construction power lines shall only be allowed in areas that have been cleared of combustible vegetation. ▪ All-new permanent power lines shall be installed underground for fire safety purposes.	Siting of temporary construction power line locations	During construction activities	Project Applicant or Developer and Construction Contractor	County Fire Department
			Installation of all new permanent power lines shall be underground	During construction activities	Project Applicant or Developer and Construction Contractor	County Fire Department
21	Mitigation Compliance	As a means of ensuring compliance of above mitigation measures, the applicant and subsequent owner(s) are responsible for submitting compliance report to the Department of Regional Planning for review, and for replenishing the mitigation monitoring account if necessary until such as all mitigation measures have been implemented and completed.	Submittal and approval of compliance report and replenishing mitigation monitoring account	Yearly and as required until all measures are completed.	Applicant and subsequent owner(s)	Los Angeles County Department of Regional Planning

Table within MM-4.4-9: Impacts to SEA Resource Category Communities and Proposed Preservation for the Trails at Lyons Canyon Project Using APNs 2826-018-034, 2826-017-044, 2826-017-043, 2826-017-041, 2826-014-057, and 2826-014-067

SEA Resource Category	Total Impacts (acres)	Mitigation Requirement (acres)[a]	On-Site Preservation (acres)[b]	In-Kind Off-Site Preserved Acres Needed[c]	In-Kind Acres Provided by the Six Parcels[d]	Out-of-Kind Off-Site Preserved Acres Needed[e]	Out-of-Kind Acres Provided by the Six Parcels[f]	Total Preservation (acres)	Excess Acreage	Preservation to Impact Ratio: Required	Preservation to Impact Ratio: Provided
1	3.68	18.39	0.52	17.87	0	26.74	27.47	27.99	9.60	7.5:1	7.6:1
3	14.77	44.31	10.79	33.52	30.14[g]	5.07	24.77[h]	65.70	21.39	4.5:1	4.45:1
4[i]	32.40	64.80	115.78	0	383.01	NA	NA	498.79	433.99	3:1	15.4:1
5[j]	35.61	NA	16.24[k]	NA	NA	NA	NA	NA	NA	NA	NA

Notes: SEA = Significant Ecological Area; APN = Assessor's Parcel Number; NA = not applicable.

[a] This is determined by the impacts multiplied by the ratio of preservation required per the County of Los Angeles' SEA Implementation Guide (5:1 for Category 1, 3:1 for Category 3, and 2:1 for Category 4).

[b] Preserved in the Conservation Area established by the proposed MM-4.4-1.

[c] In-kind preservation within the Santa Susana Mountains/Simi Hills SEA, per proposed MM-4.4-2.

[d] APNs 2826-018-034, 2826-017-044, 2826-017-043, and 2826-017-041.

[e] Out-of-kind preservation within the Santa Susana Mountains/Simi Hills SEA is at 1.5:1 for same category (used for SEA Resources Category 1) and 1.25:1 for a higher category (used for SEA Resources Category 3), per proposed MM-4.4-2.

[f] Out-of-kind preservation of SEA Resource Category 1 (oak riparian forest).

[g] In the form of *Quercus agrifolia* Association.

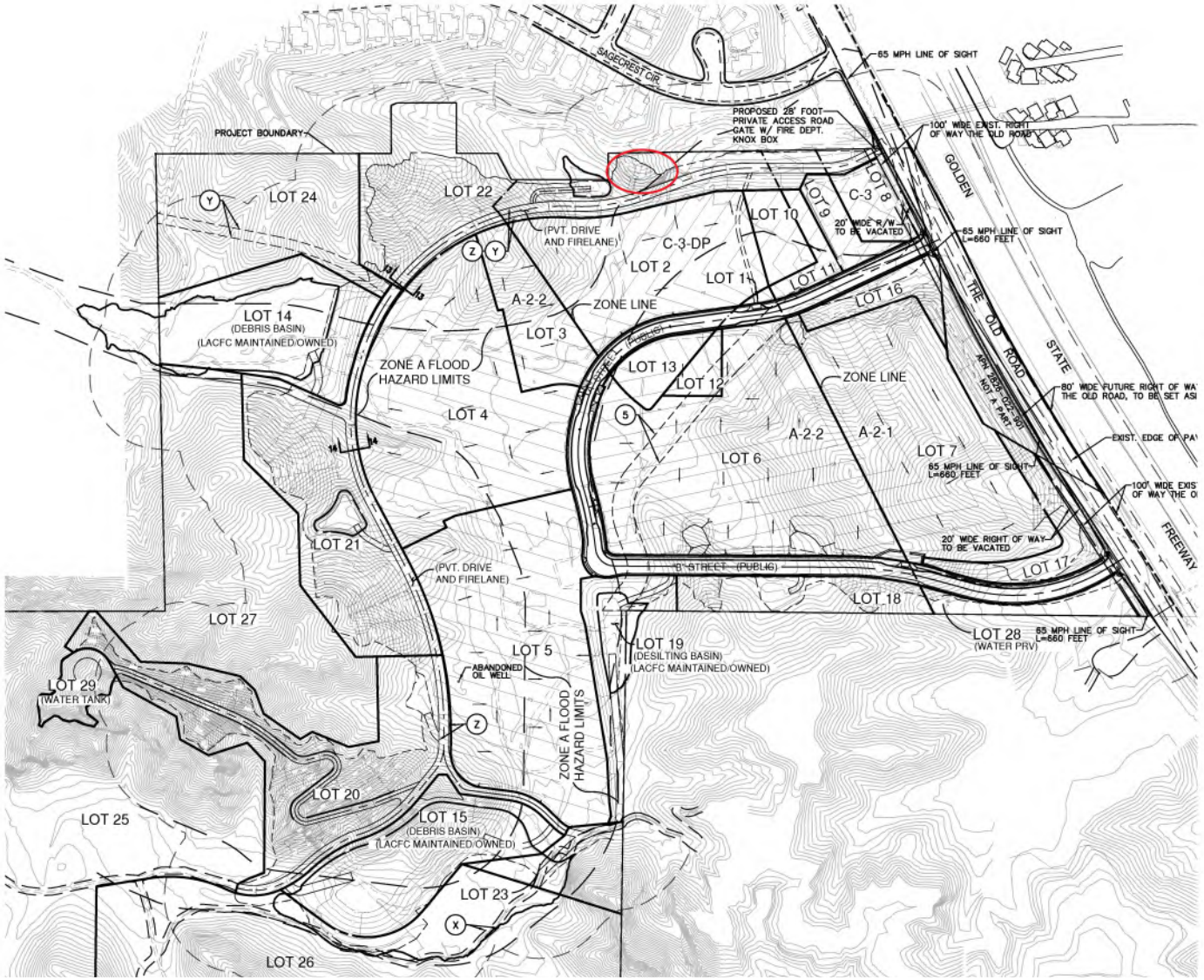
[h] *Quercus agrifolia* Association preservation used for Project impacts to *Ericameria palmeri* Provisional Shrubland Alliance, *Eriodictyon crassifolium* Provisional Shrubland Alliance, *Nassella* [*Stipa*] spp. - *Melica* spp. Herbaceous Alliance, and *Rhus trilobata* - *Crataegus rivularis* - *Forestiera pubescens* Shrubland Alliance.

[i] For SEA Resource Category 4, preservation can be out-of-kind if the resource is of the same category.

[j] No preservation ratio is needed for SEA Resource Category 5, per se, only that the values that it supports (such as movement opportunities) are preserved.

[k] This would be transformed to a higher value SEA Resource Category if MM-4.4-2 is implemented.

INTENTIONALLY LEFT BLANK



Area within which MM 4-13.1 Applies

EASEMENTS BASED ON FIRST AMERICAN TITLE INSURANCE COMPANY PRELIMINARY TITLE REPORT, ORDER NO. NHSC-6837868(RA), DATED MAY 6, 2022

EASEMENTS ITEM NO.	OWNER	PURPOSE	REFERENCE	FUTURE DISPOSITION	TENTATIVE MAP SHEET NO.
EXISTING					
(4)	SO. CAL. EDISON	ELECTRICAL LINES & INCIDENTAL PURPOSES	JULY 25, 1945 BOOK 30616, PAGE 283	TO BE REALIGNED WITH FINAL SCE DESIGN	N/A CANNOT BE PLOTTED
(5)	AYERS EASEMENT	INGRESS/EGRESS	JULY 12, 1977 INSTR. NO. 77-746808 JULY 13, 1977 INSTR. NO. 77-754792 APRIL 4, 1978 INSTR. NO. 78-352178 FEBRUARY 27, 1979 INSTR. NO. 79-227247	TO BE REALIGNED WITH "A" STREET AND "B" STREET	2
PROPOSED EASEMENTS					
(X)		TWENTY FOOT WIDE MULTI-USE(HIKING, MOUNTAIN BIKING, EQUESTRIAN) TRAIL EASEMENT TO BE DEDICATED TO THE COUNTY OF LOS ANGELES APPROPRIATELY ALONG THE EXISTING VARIABLE WIDTH TRAIL ALIGNMENTS		TO LA COUNTY PARKS AND REC. DEPARTMENT	2
(Y)		MINIMUM TWENTY EIGHT FOOT WIDE ACCESS EASEMENT FOR INGRESS AND EGRESS PURPOSES TO BE GRANTED TO ADJACENT PRIVATE PROPERTY OWNERS		PRIVATE ACCESS EASEMENT (TO BE MAINTAINED BY HOA)	2
(Z)		STORM DRAIN EASEMENT FOR ACCESS AND MAINTENANCE OF LOS ANGELES COUNTY OWNED BASIN, PIPS, AND STRUCTURES		TO LA COUNTY FLOOD CONTROL	2
		TEN FOOT WIDE SANITARY SEWER EASEMENT, CENTERLINE BEING PROPOSED SEWER MAIN WHERE SEWER MAIN IS OUTSIDE OF PUBLIC RIGHT OF WAY		TO LA COUNTY PUBLIC WORKS	

GRAPHIC SCALE
0 100 200 400
(IN FEET)

SOURCE: United Civil, Inc., 2023

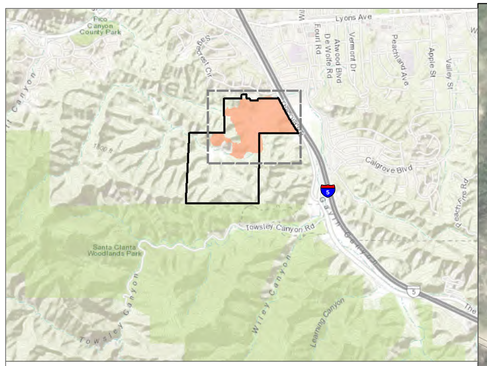
FIGURE 4.13-3

Area of Lot 22 In Which Mobile Construction Equipment Noise Mitigation is Required

Trails at Lyons Canyon Project

DUDEK

INTENTIONALLY LEFT BLANK



- Project Boundary
- Structure
- Enhanced Ignition Resistant Construction
- 6-Ft High Fire Wall
- Water Tank Access Retaining Wall
- 30-Ft Buffer
- 100-Ft Bufer
- 150-Ft Buffer
- 200-Ft Buffer
- FMZ Reduction
- FMZ Dimension

Fuel Modification Zone

- Onsite FMZ Equivalent
- Zone A - Setback Zone
- Zone B - Irrigated Zone
- Zone C - Manufactured Slope Thinning
- Zone C - Native Brush Thinning Zone
- Fire Access Roadway Zone
- Water Quality Basin (Annual Maintenance Required)
- Drainage Channel (Annual Maintenance Required)
- Offsite FMZ Equivalent

Land Use

- Fire Lane Access
- Driveway/Roadway Access
- Graded Area
- Trail/Access Road
- Park
- Manufactured Slope

NO REDUCTION OF 200-FT FUEL MOD WAS MADE IF REDUCTION CALCULATION IS UNDER 5 FEET. ONSITE ZONE C NOW EXTENDS TO 200 FEET UNLESS NOTED OTHERWISE.

SOURCE: AERIAL-BING MAPPING SERVICE; DEVELOPMENT-ALLIANCE ENGINEERING 2023

DUDEK

0 62.5 125 250 Feet

FIGURE **4.20-2**

Fuel Modification Plan

Trails at Lyons Canyon Project

INTENTIONALLY LEFT BLANK

Attachment A

Appendix B-1, Air Quality and GHG Emissions Calculations

Table of Contents

Trails at Lyons Canyon Detailed Report	2
Trails at Lyons Canyon Mitigated Detailed Report	146
i-Tree_Planting-carbon removed	419
i-Tree_Planting-carbon sequestered	420

Trails at Lyons Canyon Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

3. Construction Emissions Details

3.1. Clear & Grub (2025) - Unmitigated

3.3. Remedial & Mass Grading (2025) - Unmitigated

3.5. Finish Grading (2025) - Unmitigated

3.7. Pump Station 4 (2026) - Unmitigated

3.9. Building Construction Lots 7, 8, and 9 (2026) - Unmitigated

3.11. Building Construction Lots 7, 8, and 9 (2027) - Unmitigated

3.13. Building Construction Lots 7, 8, and 9 (2028) - Unmitigated

3.15. Building Construction Lot 6 (2026) - Unmitigated

3.17. Building Construction Lot 6 (2027) - Unmitigated

3.19. Building Construction Lot 6 (2028) - Unmitigated

3.21. Building Construction Lot 6 (2029) - Unmitigated

3.23. Building Construction Lot 5 (2026) - Unmitigated

3.25. Building Construction Lot 5 (2027) - Unmitigated

3.27. Building Construction Lot 5 (2028) - Unmitigated

3.29. Building Construction Lot 5 (2029) - Unmitigated

3.31. Building Construction Lot 4 (2026) - Unmitigated

3.33. Building Construction Lot 4 (2027) - Unmitigated

3.35. Building Construction Lot 4 (2028) - Unmitigated

3.37. Building Construction Lot 4 (2029) - Unmitigated

3.39. Building Construction Lots 2&3 (2026) - Unmitigated

3.41. Building Construction Lots 2&3 (2027) - Unmitigated

3.43. Building Construction Lots 2&3 (2028) - Unmitigated

3.45. Building Construction Lots 2&3 (2029) - Unmitigated

3.47. Building Construction Lots 10 and 11 (2026) - Unmitigated

3.49. Building Construction Lots 10 and 11 (2027) - Unmitigated

3.51. Balancing/Aggregate Base (2026) - Unmitigated

3.53. Curb & Gutter (2026) - Unmitigated

3.55. Asphalt Paving (2026) - Unmitigated

3.57. Concrete Flatwork (2026) - Unmitigated

3.59. Architectural Coating Lots 10 and 11 (2027) - Unmitigated

3.61. Architectural Coating Lots 7, 8, and 9 (2028) - Unmitigated

3.63. Architectural Coating Lots 7, 8, and 9 (2029) - Unmitigated

3.65. Architectural Coating Lot 6 (2028) - Unmitigated

3.67. Architectural Coating Lot 6 (2029) - Unmitigated

3.69. Architectural Coating Lot 5 (2028) - Unmitigated

3.71. Architectural Coating Lot 5 (2029) - Unmitigated

3.73. Architectural Coating Lot 4 (2028) - Unmitigated

3.75. Architectural Coating Lot 4 (2029) - Unmitigated

3.77. Architectural Coating Lot 2&3 (2028) - Unmitigated

3.79. Architectural Coating Lot 2&3 (2029) - Unmitigated

3.81. Wet Utilities (2025) - Unmitigated

3.83. Wet Utilities (2026) - Unmitigated

3.85. 18-inch Pipe Installation (2026) - Unmitigated

3.87. 12-inch Pipe Installation (2026) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Trails at Lyons Canyon
Construction Start Date	5/19/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	16.0
Location	34.36979474492071, -118.56446447799392
County	Los Angeles-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	3603
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Condo/Townhouse	209	Dwelling Unit	13.1	221,540	223,817	—	619	—

Single Family Housing	253	Dwelling Unit	82.1	493,350	438,902	—	749	—
Apartments Low Rise	48.0	Dwelling Unit	3.00	50,880	16,421	—	142	—
Other Asphalt Surfaces	8.41	Acre	8.41	0.00	0.00	—	—	—
Parking Lot	235	Space	2.11	0.00	1,583	—	—	—
City Park	1.96	Acre	1.96	0.00	72,607	72,607	—	—
Health Club	4.54	1000sqft	0.10	4,540	12,771	—	—	—
Recreational Swimming Pool	13.4	1000sqft	0.31	13,450	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26.7	22.5	202	199	0.42	8.49	28.9	37.4	7.81	11.6	19.5	—	47,369	47,369	1.93	1.20	41.5	47,566
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.8	22.5	108	164	0.27	4.18	18.0	22.2	3.84	8.36	12.2	—	37,663	37,663	1.58	1.20	1.16	38,049
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.5	12.9	71.7	113	0.19	2.47	8.86	11.3	2.27	3.70	5.97	—	26,332	26,332	0.91	0.82	12.5	26,613

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.65	2.36	13.1	20.7	0.03	0.45	1.62	2.07	0.42	0.68	1.09	—	4,360	4,360	0.15	0.14	2.07	4,406

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	26.7	22.5	202	199	0.42	8.49	28.9	37.4	7.81	11.6	19.5	—	47,369	47,369	1.93	0.54	7.55	47,566
2026	8.52	7.35	48.9	69.3	0.12	1.85	3.83	5.11	1.69	0.92	2.37	—	15,595	15,595	0.64	0.44	16.5	15,740
2027	18.4	15.8	103	169	0.27	3.46	10.5	14.0	3.18	2.53	5.71	—	38,148	38,148	1.57	1.18	41.5	38,581
2028	24.9	22.5	86.6	153	0.24	2.66	11.2	13.9	2.45	2.68	5.13	—	35,198	35,198	1.11	1.20	40.1	35,622
2029	19.7	17.9	66.3	119	0.19	1.96	8.79	10.7	1.80	2.11	3.91	—	27,727	27,727	0.88	0.94	28.6	28,058
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	13.0	10.9	95.9	106	0.17	4.18	18.0	22.2	3.84	8.36	12.2	—	20,285	20,285	0.84	0.25	0.16	20,379
2026	16.3	13.6	108	164	0.27	3.86	10.4	14.3	3.52	2.49	6.01	—	37,618	37,618	1.58	1.19	1.16	38,014
2027	18.3	15.7	104	162	0.27	3.46	10.5	14.0	3.18	2.53	5.71	—	37,663	37,663	1.30	1.18	1.08	38,049
2028	24.8	22.5	87.2	146	0.24	2.66	11.2	13.9	2.45	2.68	5.13	—	34,692	34,692	1.12	1.20	1.04	35,078
2029	21.6	20.0	67.7	116	0.20	1.97	9.11	11.1	1.81	2.18	4.00	—	27,855	27,855	0.91	0.97	0.77	28,169
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	7.77	6.53	58.9	59.3	0.12	2.47	8.86	11.3	2.27	3.70	5.97	—	13,677	13,677	0.56	0.15	1.19	13,738
2026	4.01	3.38	26.3	41.8	0.06	0.91	2.26	3.18	0.84	0.54	1.38	—	9,026	9,026	0.38	0.26	4.19	9,117
2027	11.6	9.80	71.7	113	0.19	2.39	7.30	9.69	2.20	1.75	3.95	—	26,332	26,332	0.91	0.82	12.5	26,613
2028	14.5	12.9	59.5	100	0.16	1.83	7.34	9.17	1.69	1.76	3.44	—	23,753	23,753	0.78	0.80	11.5	24,023
2029	9.94	9.10	35.5	61.5	0.10	1.04	4.66	5.70	0.96	1.12	2.08	—	14,792	14,792	0.49	0.51	6.63	14,962

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.42	1.19	10.7	10.8	0.02	0.45	1.62	2.07	0.42	0.68	1.09	—	2,264	2,264	0.09	0.03	0.20	2,274
2026	0.73	0.62	4.79	7.62	0.01	0.17	0.41	0.58	0.15	0.10	0.25	—	1,494	1,494	0.06	0.04	0.69	1,509
2027	2.12	1.79	13.1	20.7	0.03	0.44	1.33	1.77	0.40	0.32	0.72	—	4,360	4,360	0.15	0.14	2.07	4,406
2028	2.65	2.36	10.9	18.3	0.03	0.33	1.34	1.67	0.31	0.32	0.63	—	3,933	3,933	0.13	0.13	1.90	3,977
2029	1.81	1.66	6.49	11.2	0.02	0.19	0.85	1.04	0.18	0.20	0.38	—	2,449	2,449	0.08	0.08	1.10	2,477

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	36.8	34.5	22.3	149	0.31	1.11	26.0	27.1	1.15	6.60	7.76	330	46,482	46,813	35.3	1.31	92.6	48,178
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	33.9	31.7	22.9	110	0.30	1.09	26.0	27.1	1.14	6.60	7.75	330	45,222	45,552	35.3	1.37	7.83	46,851
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	34.7	32.9	15.3	130	0.26	0.46	25.7	26.2	0.51	6.54	7.05	330	35,591	35,921	35.1	1.35	43.2	37,246
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.34	6.01	2.80	23.7	0.05	0.08	4.70	4.78	0.09	1.19	1.29	54.7	5,893	5,947	5.82	0.22	7.15	6,166

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.7	13.3	9.73	114	0.28	0.17	26.1	26.3	0.16	6.63	6.79	—	28,442	28,442	1.33	1.11	87.1	28,892
Area	21.6	21.0	8.74	32.8	0.06	0.70	—	0.70	0.69	—	0.69	0.00	10,817	10,817	0.21	0.02	—	10,828
Energy	0.46	0.23	3.97	1.71	0.03	0.32	—	0.32	0.32	—	0.32	—	5,979	5,979	0.54	0.02	—	5,999
Water	—	—	—	—	—	—	—	—	—	—	—	65.4	398	464	6.74	0.16	—	681
Waste	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Vegetation	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	846	846	—	—	—	846
Total	36.8	34.5	22.3	149	0.31	1.11	26.0	27.1	1.15	6.60	7.76	330	46,482	46,813	35.3	1.31	92.6	48,178
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.5	13.1	10.6	105	0.27	0.17	26.1	26.3	0.16	6.63	6.79	—	27,260	27,260	1.39	1.16	2.26	27,643
Area	18.9	18.4	8.46	3.60	0.05	0.68	—	0.68	0.68	—	0.68	0.00	10,739	10,739	0.20	0.02	—	10,750
Energy	0.46	0.23	3.97	1.71	0.03	0.32	—	0.32	0.32	—	0.32	—	5,979	5,979	0.54	0.02	—	5,999
Water	—	—	—	—	—	—	—	—	—	—	—	65.4	398	464	6.74	0.16	—	681
Waste	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Vegetation	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	846	846	—	—	—	846
Total	33.9	31.7	22.9	110	0.30	1.09	26.0	27.1	1.14	6.60	7.75	330	45,222	45,552	35.3	1.37	7.83	46,851
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.4	13.0	10.7	108	0.27	0.17	25.8	26.0	0.16	6.56	6.72	—	27,578	27,578	1.38	1.16	37.6	27,997
Area	19.9	19.7	0.77	20.2	< 0.005	0.06	—	0.06	0.05	—	0.05	0.00	789	789	0.02	< 0.005	—	790
Energy	0.46	0.23	3.97	1.71	0.03	0.32	—	0.32	0.32	—	0.32	—	5,979	5,979	0.54	0.02	—	5,999
Water	—	—	—	—	—	—	—	—	—	—	—	65.4	398	464	6.74	0.16	—	681
Waste	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Vegetation	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	846	846	—	—	—	846
Total	34.7	32.9	15.3	130	0.26	0.46	25.7	26.2	0.51	6.54	7.05	330	35,591	35,921	35.1	1.35	43.2	37,246
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.63	2.38	1.96	19.7	0.05	0.03	4.71	4.74	0.03	1.20	1.23	—	4,566	4,566	0.23	0.19	6.22	4,635
Area	3.62	3.60	0.14	3.69	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	131	131	< 0.005	< 0.005	—	131
Energy	0.08	0.04	0.72	0.31	< 0.005	0.06	—	0.06	0.06	—	0.06	—	990	990	0.09	< 0.005	—	993
Water	—	—	—	—	—	—	—	—	—	—	—	10.8	65.9	76.8	1.12	0.03	—	113
Waste	—	—	—	—	—	—	—	—	—	—	—	43.9	0.00	43.9	4.38	0.00	—	153
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.92	0.92
Vegetation	—	-0.01	-0.03	—	-0.01	-0.02	-0.02	-0.03	> -0.005	> -0.005	-0.01	—	140	140	—	—	—	140
Total	6.34	6.01	2.80	23.7	0.05	0.08	4.70	4.78	0.09	1.19	1.29	54.7	5,893	5,947	5.82	0.22	7.15	6,166

3. Construction Emissions Details

3.1. Clear & Grub (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.54	6.33	59.6	54.7	0.09	2.62	—	2.62	2.41	—	2.41	—	9,771	9,771	0.40	0.08	—	9,805
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.17	1.63	1.50	< 0.005	0.07	—	0.07	0.07	—	0.07	—	268	268	0.01	< 0.005	—	269
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	44.3	44.3	< 0.005	< 0.005	—	44.5
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.97	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	194	194	0.01	0.01	0.71	196
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	127	127	0.01	0.02	0.35	133
Hauling	0.22	0.04	3.40	1.32	0.02	0.04	0.74	0.78	0.04	0.20	0.24	—	2,771	2,771	0.15	0.43	6.43	2,911

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	5.10	5.10	< 0.005	< 0.005	0.01	5.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.48	3.48	< 0.005	< 0.005	< 0.005	3.63
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.9	75.9	< 0.005	0.01	0.08	79.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.86
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.58	0.58	< 0.005	< 0.005	< 0.005	0.60
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.01	13.2

3.3. Remedial & Mass Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	24.1	20.3	185	163	0.38	7.92	—	7.92	7.29	—	7.29	—	40,965	40,965	1.66	0.33	—	41,105
Dust From Material Movement	—	—	—	—	—	—	27.1	27.1	—	11.2	11.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.75	4.83	44.0	38.9	0.09	1.89	—	1.89	1.74	—	1.74	—	9,764	9,764	0.40	0.08	—	9,798
Dust From Material Movement	—	—	—	—	—	—	6.45	6.45	—	2.67	2.67	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	8.03	7.09	0.02	0.34	—	0.34	0.32	—	0.32	—	1,617	1,617	0.07	0.01	—	1,622
Dust From Material Movement	—	—	—	—	—	—	1.18	1.18	—	0.49	0.49	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.23	3.62	0.00	0.00	0.68	0.68	0.00	0.16	0.16	—	719	719	0.03	0.02	2.63	730
Vendor	0.01	0.01	0.22	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.52	199
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.77	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	165	165	0.01	0.01	0.27	167

Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.4	45.4	< 0.005	0.01	0.05	47.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.3	27.3	< 0.005	< 0.005	0.04	27.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.51	7.51	< 0.005	< 0.005	0.01	7.84
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Finish Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	10.5	8.84	78.3	73.0	0.13	3.61	—	3.61	3.32	—	3.32	—	14,342	14,342	0.58	0.12	—	14,391
Dust From Material Movement	—	—	—	—	—	—	16.6	16.6	—	8.01	8.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	6.44	6.00	0.01	0.30	—	0.30	0.27	—	0.27	—	1,179	1,179	0.05	0.01	—	1,183

Dust From Material Movement	—	—	—	—	—	—	1.36	1.36	—	0.66	0.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.17	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	195	195	0.01	< 0.005	—	196
Dust From Material Movement	—	—	—	—	—	—	0.25	0.25	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.42	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	315	315	0.01	0.01	0.03	318
Vendor	0.01	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.01	199
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.2	26.2	< 0.005	< 0.005	0.04	26.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.6	15.6	< 0.005	< 0.005	0.02	16.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.34	4.34	< 0.005	< 0.005	0.01	4.40

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.59	2.59	< 0.005	< 0.005	< 0.005	2.70
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Pump Station 4 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.87	3.41	< 0.005	0.06	—	0.06	0.05	—	0.05	—	535	535	0.02	< 0.005	—	537
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.0	22.0	< 0.005	< 0.005	—	22.1
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.64	3.64	< 0.005	< 0.005	—	3.65
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.29	4.29	< 0.005	< 0.005	0.01	4.34
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.13	5.13	< 0.005	< 0.005	0.01	5.36
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction Lots 7, 8, and 9 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.18	1.82	16.5	20.5	0.04	0.63	—	0.63	0.58	—	0.58	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.18	1.82	16.5	20.5	0.04	0.63	—	0.63	0.58	—	0.58	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.90	8.55	0.02	0.26	—	0.26	0.24	—	0.24	—	1,660	1,660	0.07	0.01	—	1,665
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.26	1.56	< 0.005	0.05	—	0.05	0.04	—	0.04	—	275	275	0.01	< 0.005	—	276
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.52	0.54	9.04	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,897	1,897	0.08	0.07	6.42	1,925
Vendor	0.07	0.03	1.03	0.50	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	935	935	0.04	0.13	2.53	979
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.51	0.61	7.72	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,798	1,798	0.08	0.07	0.17	1,820
Vendor	0.07	0.03	1.08	0.51	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	936	936	0.04	0.13	0.07	977
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.28	3.37	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	761	761	0.03	0.03	1.16	771
Vendor	0.03	0.01	0.45	0.21	< 0.005	0.01	0.11	0.11	< 0.005	0.03	0.03	—	390	390	0.02	0.06	0.45	407
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.61	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	126	126	0.01	< 0.005	0.19	128
Vendor	0.01	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.6	64.6	< 0.005	0.01	0.08	67.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction Lots 7, 8, and 9 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	11.3	14.6	0.03	0.41	—	0.41	0.37	—	0.37	—	2,844	2,844	0.12	0.02	—	2,853
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.23	2.06	2.67	0.01	0.07	—	0.07	0.07	—	0.07	—	471	471	0.02	< 0.005	—	472
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.50	0.48	8.41	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,861	1,861	0.08	0.07	5.80	1,888
Vendor	0.06	0.03	0.99	0.47	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	917	917	0.04	0.13	2.39	958
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.49	0.60	7.13	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,764	1,764	0.02	0.07	0.15	1,784
Vendor	0.06	0.03	1.03	0.48	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	918	918	0.04	0.13	0.06	957
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.43	5.35	0.00	0.00	1.29	1.29	0.00	0.30	0.30	—	1,278	1,278	0.02	0.05	1.78	1,295
Vendor	0.04	0.02	0.74	0.34	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	655	655	0.03	0.09	0.74	684
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.98	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	212	212	< 0.005	0.01	0.30	214
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	108	108	< 0.005	0.01	0.12	113
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction Lots 7, 8, and 9 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.02	1.69	15.0	20.5	0.04	0.51	—	0.51	0.47	—	0.47	—	3,982	3,982	0.16	0.03	—	3,996
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.02	1.69	15.0	20.5	0.04	0.51	—	0.51	0.47	—	0.47	—	3,982	3,982	0.16	0.03	—	3,996
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.24	1.04	9.19	12.5	0.02	0.31	—	0.31	0.29	—	0.29	—	2,439	2,439	0.10	0.02	—	2,447
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.23	0.19	1.68	2.29	< 0.005	0.06	—	0.06	0.05	—	0.05	—	404	404	0.02	< 0.005	—	405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.48	0.48	7.90	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,827	1,827	0.02	0.07	5.21	1,853
Vendor	0.06	0.02	0.94	0.45	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	896	896	0.03	0.13	2.27	936
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.48	0.54	6.71	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,732	1,732	0.02	0.07	0.13	1,753
Vendor	0.06	0.02	0.98	0.46	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	896	896	0.03	0.13	0.06	935
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.33	0.29	0.33	4.30	0.00	0.00	1.11	1.11	0.00	0.26	0.26	—	1,077	1,077	0.01	0.04	1.38	1,091
Vendor	0.04	0.01	0.61	0.28	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.05	—	549	549	0.02	0.08	0.60	573
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.78	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	178	178	< 0.005	0.01	0.23	181
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	90.9	90.9	< 0.005	0.01	0.10	94.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction Lot 6 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.18	1.82	16.5	20.5	0.04	0.63	—	0.63	0.58	—	0.58	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.18	1.82	16.5	20.5	0.04	0.63	—	0.63	0.58	—	0.58	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.42	0.35	3.21	3.98	0.01	0.12	—	0.12	0.11	—	0.11	—	771	771	0.03	0.01	—	774
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.58	0.73	< 0.005	0.02	—	0.02	0.02	—	0.02	—	128	128	0.01	< 0.005	—	128
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.43	0.45	7.49	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,572	1,572	0.07	0.05	5.32	1,595
Vendor	0.06	0.02	0.89	0.43	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	811	811	0.03	0.12	2.19	848
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.42	0.51	6.39	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,490	1,490	0.07	0.05	0.14	1,508
Vendor	0.06	0.02	0.93	0.44	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	811	811	0.03	0.12	0.06	846
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.11	1.30	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	293	293	0.01	0.01	0.45	297
Vendor	0.01	< 0.005	0.18	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	157	157	0.01	0.02	0.18	164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.5	48.5	< 0.005	< 0.005	0.07	49.1
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.0	26.0	< 0.005	< 0.005	0.03	27.2

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction Lot 6 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	11.3	14.6	0.03	0.41	—	0.41	0.37	—	0.37	—	2,844	2,844	0.12	0.02	—	2,853
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.27	0.23	2.06	2.67	0.01	0.07	—	0.07	0.07	—	0.07	—	471	471	0.02	< 0.005	—	472
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.41	0.40	6.97	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,542	1,542	0.07	0.05	4.80	1,564
Vendor	0.05	0.02	0.86	0.41	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	795	795	0.03	0.11	2.07	831
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.40	0.50	5.90	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,461	1,461	0.02	0.05	0.12	1,479
Vendor	0.05	0.02	0.89	0.42	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	795	795	0.03	0.11	0.05	829
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.36	4.43	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,059	1,059	0.01	0.04	1.48	1,073
Vendor	0.04	0.02	0.64	0.29	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.05	—	568	568	0.02	0.08	0.64	593
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.81	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	175	175	< 0.005	0.01	0.24	178
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94.0	94.0	< 0.005	0.01	0.11	98.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction Lot 6 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.02	1.69	15.0	20.5	0.04	0.51	—	0.51	0.47	—	0.47	—	3,982	3,982	0.16	0.03	—	3,996
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.02	1.69	15.0	20.5	0.04	0.51	—	0.51	0.47	—	0.47	—	3,982	3,982	0.16	0.03	—	3,996
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	10.7	14.7	0.03	0.36	—	0.36	0.34	—	0.34	—	2,852	2,852	0.12	0.02	—	2,862
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.96	2.67	0.01	0.07	—	0.07	0.06	—	0.06	—	472	472	0.02	< 0.005	—	474
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.40	0.40	6.54	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,514	1,514	0.02	0.05	4.32	1,535
Vendor	0.05	0.02	0.82	0.39	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	776	776	0.03	0.11	1.96	812
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.39	0.45	5.56	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,435	1,435	0.02	0.05	0.11	1,452
Vendor	0.05	0.02	0.85	0.40	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	777	777	0.03	0.11	0.05	810
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.28	0.32	4.17	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,043	1,043	0.01	0.04	1.34	1,057
Vendor	0.04	0.01	0.61	0.28	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.05	—	556	556	0.02	0.08	0.60	581
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	173	173	< 0.005	0.01	0.22	175
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	92.1	92.1	< 0.005	0.01	0.10	96.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction Lot 6 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	1.97	1.65	14.4	20.4	0.04	0.47	—	0.47	0.43	—	0.43	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.65	14.4	20.4	0.04	0.47	—	0.47	0.43	—	0.43	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	7.01	9.93	0.02	0.23	—	0.23	0.21	—	0.21	—	1,940	1,940	0.08	0.02	—	1,947
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.15	1.28	1.81	< 0.005	0.04	—	0.04	0.04	—	0.04	—	321	321	0.01	< 0.005	—	322
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.38	0.35	6.12	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,488	1,488	0.02	0.05	3.86	1,509
Vendor	0.05	0.02	0.78	0.37	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	756	756	0.03	0.11	1.85	791
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.38	0.40	5.18	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,411	1,411	0.02	0.05	0.10	1,428
Vendor	0.05	0.02	0.81	0.38	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	756	756	0.03	0.11	0.05	790
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.19	2.65	0.00	0.00	0.73	0.73	0.00	0.17	0.17	—	698	698	0.01	0.03	0.81	707
Vendor	0.02	0.01	0.40	0.18	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	368	368	0.01	0.05	0.39	385
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.48	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	0.13	117
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	61.0	61.0	< 0.005	0.01	0.06	63.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction Lot 5 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.18	1.82	16.5	20.5	0.04	0.63	—	0.63	0.58	—	0.58	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.56	3.17	0.01	0.10	—	0.10	0.09	—	0.09	—	616	616	0.02	< 0.005	—	618
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.47	0.58	< 0.005	0.02	—	0.02	0.02	—	0.02	—	102	102	< 0.005	< 0.005	—	102
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.36	0.43	5.40	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,259	1,259	0.06	0.05	0.12	1,274
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	624	624	0.03	0.09	0.04	651
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.87	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	197	197	0.01	0.01	0.30	200
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.4	96.4	< 0.005	0.01	0.11	101
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.7	32.7	< 0.005	< 0.005	0.05	33.1
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	0.02	16.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Building Construction Lot 5 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	11.3	14.6	0.03	0.41	—	0.41	0.37	—	0.37	—	2,844	2,844	0.12	0.02	—	2,853
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.23	2.06	2.67	0.01	0.07	—	0.07	0.07	—	0.07	—	471	471	0.02	< 0.005	—	472

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.35	0.34	5.89	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,302	1,302	0.06	0.05	4.06	1,322
Vendor	0.04	0.02	0.66	0.31	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	611	611	0.03	0.08	1.59	639
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.34	0.42	4.99	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,235	1,235	0.02	0.05	0.11	1,249
Vendor	0.04	0.02	0.68	0.32	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	612	612	0.03	0.08	0.04	638
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.30	3.74	0.00	0.00	0.91	0.91	0.00	0.21	0.21	—	895	895	0.01	0.03	1.25	906
Vendor	0.03	0.01	0.49	0.23	< 0.005	< 0.005	0.12	0.12	< 0.005	0.03	0.04	—	437	437	0.02	0.06	0.49	456
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.06	0.68	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.21	150
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	72.3	72.3	< 0.005	0.01	0.08	75.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Building Construction Lot 5 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.02	1.69	15.0	20.5	0.04	0.51	—	0.51	0.47	—	0.47	—	3,982	3,982	0.16	0.03	—	3,996
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.02	1.69	15.0	20.5	0.04	0.51	—	0.51	0.47	—	0.47	—	3,982	3,982	0.16	0.03	—	3,996
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	10.7	14.7	0.03	0.36	—	0.36	0.34	—	0.34	—	2,852	2,852	0.12	0.02	—	2,862
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.96	2.67	0.01	0.07	—	0.07	0.06	—	0.06	—	472	472	0.02	< 0.005	—	474
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.38	0.33	0.33	5.53	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,279	1,279	0.01	0.05	3.65	1,297
Vendor	0.04	0.01	0.63	0.30	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	597	597	0.02	0.08	1.51	624
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.33	0.38	4.70	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,213	1,213	0.02	0.05	0.09	1,227
Vendor	0.04	0.01	0.66	0.31	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	598	598	0.02	0.08	0.04	623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.27	3.52	0.00	0.00	0.91	0.91	0.00	0.21	0.21	—	881	881	0.01	0.03	1.13	893
Vendor	0.03	0.01	0.47	0.22	< 0.005	< 0.005	0.12	0.12	< 0.005	0.03	0.04	—	428	428	0.02	0.06	0.47	447
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.64	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	0.01	0.19	148
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	70.8	70.8	< 0.005	0.01	0.08	74.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Building Construction Lot 5 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.65	14.4	20.4	0.04	0.47	—	0.47	0.43	—	0.43	—	3,981	3,981	0.16	0.03	—	3,995

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.65	14.4	20.4	0.04	0.47	—	0.47	0.43	—	0.43	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	7.13	10.1	0.02	0.23	—	0.23	0.21	—	0.21	—	1,971	1,971	0.08	0.02	—	1,978
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.30	1.84	< 0.005	0.04	—	0.04	0.04	—	0.04	—	326	326	0.01	< 0.005	—	327
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.32	0.29	5.17	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,257	1,257	0.01	0.05	3.26	1,275
Vendor	0.04	0.01	0.60	0.29	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	581	581	0.02	0.08	1.42	608
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.32	0.32	0.34	4.38	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,192	1,192	0.02	0.05	0.08	1,206
Vendor	0.04	0.01	0.62	0.29	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	582	582	0.02	0.08	0.04	608
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.17	2.27	0.00	0.00	0.63	0.63	0.00	0.15	0.15	—	599	599	0.01	0.02	0.70	607
Vendor	0.02	0.01	0.31	0.14	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	288	288	0.01	0.04	0.30	301
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.41	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	99.2	99.2	< 0.005	< 0.005	0.12	100
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	47.7	47.7	< 0.005	0.01	0.05	49.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Building Construction Lot 4 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.18	1.82	16.5	20.5	0.04	0.63	—	0.63	0.58	—	0.58	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.25	0.21	1.88	2.33	< 0.005	0.07	—	0.07	0.07	—	0.07	—	452	452	0.02	< 0.005	—	453
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.34	0.43	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.8	74.8	< 0.005	< 0.005	—	75.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.53	0.64	8.05	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,875	1,875	0.09	0.07	0.17	1,898
Vendor	0.08	0.03	1.22	0.58	0.01	0.02	0.29	0.31	0.01	0.08	0.09	—	1,061	1,061	0.04	0.15	0.07	1,107
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.96	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	216	216	0.01	0.01	0.33	219
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	120	120	0.01	0.02	0.14	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.8	35.8	< 0.005	< 0.005	0.05	36.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Building Construction Lot 4 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.50	1.26	11.3	14.6	0.03	0.41	—	0.41	0.37	—	0.37	—	2,844	2,844	0.12	0.02	—	2,853
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.23	2.06	2.67	0.01	0.07	—	0.07	0.07	—	0.07	—	471	471	0.02	< 0.005	—	472
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.52	0.50	8.77	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,940	1,940	0.08	0.07	6.05	1,969
Vendor	0.07	0.03	1.12	0.53	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,040	1,040	0.04	0.14	2.71	1,086
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.51	0.63	7.43	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,839	1,839	0.03	0.07	0.16	1,861
Vendor	0.07	0.03	1.16	0.55	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,040	1,040	0.04	0.14	0.07	1,084
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.36	0.45	5.58	0.00	0.00	1.35	1.35	0.00	0.32	0.32	—	1,333	1,333	0.02	0.05	1.86	1,350
Vendor	0.05	0.02	0.84	0.39	0.01	0.01	0.21	0.21	0.01	0.06	0.06	—	743	743	0.03	0.10	0.84	775
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.02	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	221	221	< 0.005	0.01	0.31	224
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	123	123	0.01	0.02	0.14	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Building Construction Lot 4 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	2.02	1.69	15.0	20.5	0.04	0.51	—	0.51	0.47	—	0.47	—	3,982	3,982	0.16	0.03	—	3,996
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.02	1.69	15.0	20.5	0.04	0.51	—	0.51	0.47	—	0.47	—	3,982	3,982	0.16	0.03	—	3,996
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.21	10.7	14.7	0.03	0.36	—	0.36	0.34	—	0.34	—	2,852	2,852	0.12	0.02	—	2,862
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.96	2.67	0.01	0.07	—	0.07	0.06	—	0.06	—	472	472	0.02	< 0.005	—	474
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.50	0.50	8.24	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,906	1,906	0.02	0.07	5.43	1,932
Vendor	0.07	0.02	1.07	0.51	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,015	1,015	0.04	0.14	2.57	1,061
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.50	0.57	7.00	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,807	1,807	0.02	0.07	0.14	1,828
Vendor	0.07	0.02	1.11	0.52	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,016	1,016	0.04	0.14	0.07	1,060
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.40	5.24	0.00	0.00	1.35	1.35	0.00	0.32	0.32	—	1,313	1,313	0.02	0.05	1.68	1,330
Vendor	0.05	0.02	0.80	0.37	0.01	0.01	0.21	0.21	0.01	0.06	0.06	—	727	727	0.03	0.10	0.79	759
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.96	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	217	217	< 0.005	0.01	0.28	220
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.13	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Building Construction Lot 4 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.65	14.4	20.4	0.04	0.47	—	0.47	0.43	—	0.43	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.97	1.65	14.4	20.4	0.04	0.47	—	0.47	0.43	—	0.43	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.27	1.07	9.32	13.2	0.03	0.30	—	0.30	0.28	—	0.28	—	2,579	2,579	0.10	0.02	—	2,588
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.23	0.19	1.70	2.41	< 0.005	0.06	—	0.06	0.05	—	0.05	—	427	427	0.02	< 0.005	—	428
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.48	0.43	7.70	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,873	1,873	0.02	0.07	4.86	1,899
Vendor	0.07	0.02	1.02	0.49	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	988	988	0.04	0.14	2.42	1,034
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.47	0.50	6.52	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,776	1,776	0.02	0.07	0.13	1,797
Vendor	0.07	0.02	1.06	0.50	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	989	989	0.04	0.14	0.06	1,033
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.31	0.30	0.32	4.43	0.00	0.00	1.22	1.22	0.00	0.29	0.29	—	1,167	1,167	0.01	0.04	1.36	1,182
Vendor	0.04	0.01	0.69	0.32	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.06	—	640	640	0.02	0.09	0.68	669
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.81	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	193	193	< 0.005	0.01	0.23	196
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.11	111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Building Construction Lots 2&3 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.18	1.82	16.5	20.5	0.04	0.63	—	0.63	0.58	—	0.58	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.20	1.49	< 0.005	0.05	—	0.05	0.04	—	0.04	—	288	288	0.01	< 0.005	—	289
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.03	0.02	0.22	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.7	47.7	< 0.005	< 0.005	—	47.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.54	0.64	8.16	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,901	1,901	0.09	0.07	0.18	1,924
Vendor	0.07	0.03	1.08	0.51	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	936	936	0.04	0.13	0.07	977
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.62	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	140	140	0.01	0.01	0.21	142
Vendor	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	67.7	67.7	< 0.005	0.01	0.08	70.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.1	23.1	< 0.005	< 0.005	0.04	23.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.01	11.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Building Construction Lots 2&3 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.50	1.26	11.3	14.6	0.03	0.41	—	0.41	0.37	—	0.37	—	2,844	2,844	0.12	0.02	—	2,853
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.27	0.23	2.06	2.67	0.01	0.07	—	0.07	0.07	—	0.07	—	471	471	0.02	< 0.005	—	472
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.53	0.51	8.89	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,967	1,967	0.08	0.07	6.13	1,996
Vendor	0.06	0.03	0.99	0.47	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	917	917	0.04	0.13	2.39	958
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.52	0.64	7.53	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,865	1,865	0.03	0.07	0.16	1,886
Vendor	0.06	0.03	1.03	0.48	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	918	918	0.04	0.13	0.06	957
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.37	0.46	5.65	0.00	0.00	1.37	1.37	0.00	0.32	0.32	—	1,352	1,352	0.02	0.05	1.89	1,369
Vendor	0.04	0.02	0.74	0.34	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	655	655	0.03	0.09	0.74	684
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.03	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	224	224	< 0.005	0.01	0.31	227
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	108	108	< 0.005	0.01	0.12	113
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Building Construction Lots 2&3 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.02	1.69	15.0	20.5	0.04	0.51	—	0.51	0.47	—	0.47	—	3,982	3,982	0.16	0.03	—	3,996
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	2.02	1.69	15.0	20.5	0.04	0.51	—	0.51	0.47	—	0.47	—	3,982	3,982	0.16	0.03	—	3,996
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.45	1.21	10.7	14.7	0.03	0.36	—	0.36	0.34	—	0.34	—	2,852	2,852	0.12	0.02	—	2,862
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.26	0.22	1.96	2.67	0.01	0.07	—	0.07	0.06	—	0.06	—	472	472	0.02	< 0.005	—	474
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.51	0.50	8.35	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,932	1,932	0.02	0.07	5.51	1,959
Vendor	0.06	0.02	0.94	0.45	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	896	896	0.03	0.13	2.27	936
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.50	0.57	7.10	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,831	1,831	0.02	0.07	0.14	1,853
Vendor	0.06	0.02	0.98	0.46	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	896	896	0.03	0.13	0.06	935
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.41	0.36	0.41	5.32	0.00	0.00	1.37	1.37	0.00	0.32	0.32	—	1,331	1,331	0.02	0.05	1.71	1,348
Vendor	0.04	0.01	0.71	0.32	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	642	642	0.02	0.09	0.70	670
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	0.97	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	220	220	< 0.005	0.01	0.28	223
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.12	111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.45. Building Construction Lots 2&3 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.65	14.4	20.4	0.04	0.47	—	0.47	0.43	—	0.43	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.65	14.4	20.4	0.04	0.47	—	0.47	0.43	—	0.43	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	1.00	0.84	7.32	10.4	0.02	0.24	—	0.24	0.22	—	0.22	—	2,026	2,026	0.08	0.02	—	2,033
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.34	1.89	< 0.005	0.04	—	0.04	0.04	—	0.04	—	335	335	0.01	< 0.005	—	337
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.49	0.44	7.81	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,899	1,899	0.02	0.07	4.93	1,925
Vendor	0.06	0.02	0.90	0.43	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	872	872	0.03	0.13	2.13	913
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.48	0.51	6.61	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,800	1,800	0.02	0.07	0.13	1,822
Vendor	0.06	0.02	0.94	0.44	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	873	873	0.03	0.13	0.06	911
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.24	0.26	3.53	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	930	930	0.01	0.04	1.08	942
Vendor	0.03	0.01	0.48	0.22	< 0.005	< 0.005	0.13	0.13	< 0.005	0.04	0.04	—	444	444	0.02	0.06	0.47	464
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.64	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.18	156
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.5	73.5	< 0.005	0.01	0.08	76.8

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.47. Building Construction Lots 10 and 11 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.18	1.82	16.5	20.5	0.04	0.63	—	0.63	0.58	—	0.58	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.78	0.96	< 0.005	0.03	—	0.03	0.03	—	0.03	—	187	187	0.01	< 0.005	—	188
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.18	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	31.0	31.0	< 0.005	< 0.005	—	31.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.22	2.76	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	642	642	0.03	0.02	0.06	650
Vendor	0.02	0.01	0.36	0.17	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	312	312	0.01	0.04	0.02	326
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.6	30.6	< 0.005	< 0.005	0.05	31.0
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.6	14.6	< 0.005	< 0.005	0.02	15.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.07	5.07	< 0.005	< 0.005	0.01	5.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.53
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.49. Building Construction Lots 10 and 11 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.10	1.76	15.8	20.5	0.04	0.57	—	0.57	0.52	—	0.52	—	3,981	3,981	0.16	0.03	—	3,995
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.25	12.0	0.02	0.33	—	0.33	0.31	—	0.31	—	2,330	2,330	0.09	0.02	—	2,338
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	1.69	2.19	< 0.005	0.06	—	0.06	0.06	—	0.06	—	386	386	0.02	< 0.005	—	387
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.17	3.00	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	664	664	0.03	0.02	2.07	674
Vendor	0.02	0.01	0.33	0.16	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	306	306	0.01	0.04	0.80	319
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.17	0.22	2.54	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	630	630	0.01	0.02	0.05	637

Vendor	0.02	0.01	0.34	0.16	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	306	306	0.01	0.04	0.02	319
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.13	1.56	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	374	374	0.01	0.01	0.52	379
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	179	179	0.01	0.02	0.20	187
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	61.9	61.9	< 0.005	< 0.005	0.09	62.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.6	29.6	< 0.005	< 0.005	0.03	30.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.51. Balancing/Aggregate Base (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.77	2.33	20.4	22.3	0.05	0.87	—	0.87	0.80	—	0.80	—	5,555	5,555	0.23	0.05	—	5,574
Paving	1.38	1.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.15	0.13	1.12	1.22	< 0.005	0.05	—	0.05	0.04	—	0.04	—	304	304	0.01	< 0.005	—	305
Paving	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	50.4	50.4	< 0.005	< 0.005	—	50.6
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.03	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	217	217	0.01	0.01	0.73	220
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.92
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.53. Curb & Gutter (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.21	2.33	3.85	0.01	0.09	—	0.09	0.08	—	0.08	—	596	596	0.02	< 0.005	—	598
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.13	0.22	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	34.3	34.3	< 0.005	< 0.005	—	34.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.68	5.68	< 0.005	< 0.005	—	5.70
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.05	0.05	0.90	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	190	190	0.01	0.01	0.64	192
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.02	10.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.18	7.18	< 0.005	< 0.005	0.01	7.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.74	1.74	< 0.005	< 0.005	< 0.005	1.76
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.19	1.19	< 0.005	< 0.005	< 0.005	1.24
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.55. Asphalt Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	1.02	8.62	12.1	0.02	0.43	—	0.43	0.39	—	0.39	—	1,874	1,874	0.08	0.02	—	1,881
Architectural Coatings	0.99	0.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.61	0.86	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.1	22.1	< 0.005	< 0.005	—	22.2
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.03	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	217	217	0.01	0.01	0.73	220
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.9	14.9	< 0.005	< 0.005	0.02	15.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.89	8.89	< 0.005	< 0.005	0.01	9.28
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.46	2.46	< 0.005	< 0.005	< 0.005	2.49
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.47	1.47	< 0.005	< 0.005	< 0.005	1.54
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.57. Concrete Flatwork (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.67	3.01	< 0.005	0.05	—	0.05	0.04	—	0.04	—	490	490	0.02	< 0.005	—	492
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	< 0.005	< 0.005	0.06	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.1	16.1	< 0.005	< 0.005	—	16.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.67	2.67	< 0.005	< 0.005	—	2.68
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.42	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	298	298	0.01	0.01	1.01	302
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.43	9.43	< 0.005	< 0.005	0.01	9.55
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.10	4.10	< 0.005	< 0.005	< 0.005	4.28
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.56	1.56	< 0.005	< 0.005	< 0.005	1.58
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.71
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.59. Architectural Coating Lots 10 and 11 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.48	2.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.48	2.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.22	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.7	34.7	< 0.005	< 0.005	—	34.9

Architect Coatings	0.65	0.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.75	5.75	< 0.005	< 0.005	—	5.77
Architectural Coatings	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	106	106	< 0.005	< 0.005	0.33	108
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	0.01	0.02	0.32	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.41	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.01	102
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	0.01	0.02	0.01	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.6	26.6	< 0.005	< 0.005	0.04	27.0
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.8	31.8	< 0.005	< 0.005	0.04	33.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.41	4.41	< 0.005	< 0.005	0.01	4.46
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.27	5.27	< 0.005	< 0.005	0.01	5.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.61. Architectural Coating Lots 7, 8, and 9 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.95	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.95	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.58	0.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	95.6	95.6	< 0.005	< 0.005	—	96.0
Architectural Coatings	1.39	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Architectural Coatings	0.25	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.24	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	287	287	< 0.005	0.01	0.82	291
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.09	1.06	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	272	272	< 0.005	0.01	0.02	275
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.79	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	< 0.005	0.01	0.25	200
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	85.6	85.6	< 0.005	0.01	0.09	89.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.8	32.8	< 0.005	< 0.005	0.04	33.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.2	14.2	< 0.005	< 0.005	0.02	14.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.63. Architectural Coating Lots 7, 8, and 9 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.95	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.14	3.14	< 0.005	< 0.005	—	3.15
Architectural Coatings	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.52	0.52	< 0.005	< 0.005	—	0.52
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.08	0.98	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	268	268	< 0.005	0.01	0.02	271
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.38	6.38	< 0.005	< 0.005	0.01	6.46
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.73	2.73	< 0.005	< 0.005	< 0.005	2.85
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.47
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.65. Architectural Coating Lot 6 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.38	0.53	< 0.005	0.01	—	0.01	0.01	—	0.01	—	63.5	63.5	< 0.005	< 0.005	—	63.7
Architectural Coatings	1.10	1.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.02	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	235	235	< 0.005	0.01	0.67	238
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.86	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	223	223	< 0.005	0.01	0.02	225
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.43	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	107	107	< 0.005	< 0.005	0.14	109
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	56.8	56.8	< 0.005	0.01	0.06	59.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	0.02	18.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.41	9.41	< 0.005	< 0.005	0.01	9.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.67. Architectural Coating Lot 6 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.33	0.46	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	55.4	55.4	< 0.005	< 0.005	—	55.6
Architectural Coatings	0.96	0.96	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.17	9.17	< 0.005	< 0.005	—	9.20
Architectural Coatings	0.18	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.95	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	231	231	< 0.005	0.01	0.60	234

Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.28	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.80	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	219	219	< 0.005	0.01	0.02	222
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.35	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	92.2	92.2	< 0.005	< 0.005	0.11	93.4
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.3	48.3	< 0.005	0.01	0.05	50.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.3	15.3	< 0.005	< 0.005	0.02	15.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.99	7.99	< 0.005	< 0.005	0.01	8.35
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.69. Architectural Coating Lot 5 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134

Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.38	0.53	< 0.005	0.01	—	0.01	0.01	—	0.01	—	63.5	63.5	< 0.005	< 0.005	—	63.7
Architectural Coatings	1.10	1.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5

Architectural Coating	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.90	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	209	209	< 0.005	0.01	0.60	212
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.77	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	198	198	< 0.005	0.01	0.02	200
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.38	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	95.5	95.5	< 0.005	< 0.005	0.12	96.8
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	56.8	56.8	< 0.005	0.01	0.06	59.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.8	15.8	< 0.005	< 0.005	0.02	16.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.41	9.41	< 0.005	< 0.005	0.01	9.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.71. Architectural Coating Lot 5 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.45	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	53.6	53.6	< 0.005	< 0.005	—	53.7
Architectural Coatings	0.93	0.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.87	8.87	< 0.005	< 0.005	—	8.90
Architectural Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.84	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	205	205	< 0.005	0.01	0.53	208
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.28	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.71	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	195	195	< 0.005	0.01	0.01	197
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.2	79.2	< 0.005	< 0.005	0.09	80.3
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.7	46.7	< 0.005	0.01	0.05	48.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.1	13.1	< 0.005	< 0.005	0.02	13.3

Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.73	7.73	< 0.005	< 0.005	0.01	8.07
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.73. Architectural Coating Lot 4 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.49	2.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.49	2.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.05	0.04	0.29	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	48.1	48.1	< 0.005	< 0.005	—	48.2
Architectural Coatings	0.90	0.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.96	7.96	< 0.005	< 0.005	—	7.99
Architectural Coatings	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.35	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	313	313	< 0.005	0.01	0.89	318
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.15	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	297	297	< 0.005	0.01	0.02	300
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.43	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.14	110

Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.0	43.0	< 0.005	0.01	0.05	44.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.0	18.0	< 0.005	< 0.005	0.02	18.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.12	7.12	< 0.005	< 0.005	0.01	7.44
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.75. Architectural Coating Lot 4 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.49	2.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134

Architectural Coatings	2.49	2.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.45	0.64	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.3	76.3	< 0.005	< 0.005	—	76.6
Architectural Coatings	1.42	1.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.6	12.6	< 0.005	< 0.005	—	12.7
Architectural Coatings	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.27	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	308	308	< 0.005	0.01	0.80	312
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.28	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	1.07	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	292	292	< 0.005	0.01	0.02	295
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.64	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	169	169	< 0.005	0.01	0.20	171
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.5	66.5	< 0.005	0.01	0.07	69.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.03	28.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.77. Architectural Coating Lot 2&3 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.25	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.5	41.5	< 0.005	< 0.005	—	41.7
Architectural Coatings	0.55	0.55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.88	6.88	< 0.005	< 0.005	—	6.90
Architectural Coatings	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.35	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	313	313	< 0.005	0.01	0.89	318
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.15	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	297	297	< 0.005	0.01	0.02	300
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	93.8	93.8	< 0.005	< 0.005	0.12	95.0
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	37.2	37.2	< 0.005	0.01	0.04	38.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.5	15.5	< 0.005	< 0.005	0.02	15.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.15	6.15	< 0.005	< 0.005	0.01	6.43
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.79. Architectural Coating Lot 2&3 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.43	0.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	71.8	71.8	< 0.005	< 0.005	—	72.1
Architectural Coatings	0.95	0.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.9	11.9	< 0.005	< 0.005	—	11.9

Architect Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.27	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	308	308	< 0.005	0.01	0.80	312
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.28	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	1.07	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	292	292	< 0.005	0.01	0.02	295
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.61	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	159	159	< 0.005	0.01	0.19	161
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	62.6	62.6	< 0.005	0.01	0.07	65.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.4	26.4	< 0.005	< 0.005	0.03	26.7
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.4	10.4	< 0.005	< 0.005	0.01	10.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.81. Wet Utilities (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.61	16.8	26.6	0.04	0.57	—	0.57	0.52	—	0.52	—	4,062	4,062	0.16	0.03	—	4,075
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.92	1.61	16.8	26.6	0.04	0.57	—	0.57	0.52	—	0.52	—	4,062	4,062	0.16	0.03	—	4,075
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.61	6.34	10.0	0.01	0.21	—	0.21	0.20	—	0.20	—	1,534	1,534	0.06	0.01	—	1,539
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.16	1.83	< 0.005	0.04	—	0.04	0.04	—	0.04	—	254	254	0.01	< 0.005	—	255
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.38	0.34	0.35	5.57	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,106	1,106	0.05	0.04	4.05	1,123
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	127	127	0.01	0.02	0.35	133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.38	4.72	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,048	1,048	0.05	0.04	0.10	1,062
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	127	127	0.01	0.02	0.01	132
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.16	1.87	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	402	402	0.02	0.01	0.66	407
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	47.9	47.9	< 0.005	0.01	0.06	50.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.34	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.5	66.5	< 0.005	< 0.005	0.11	67.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.94	7.94	< 0.005	< 0.005	0.01	8.29
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.83. Wet Utilities (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.84	1.55	16.2	26.6	0.04	0.49	—	0.49	0.45	—	0.45	—	4,062	4,062	0.16	0.03	—	4,075

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.84	1.55	16.2	26.6	0.04	0.49	—	0.49	0.45	—	0.45	—	4,062	4,062	0.16	0.03	—	4,075
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.43	4.49	7.39	0.01	0.14	—	0.14	0.13	—	0.13	—	1,129	1,129	0.05	0.01	—	1,133
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.82	1.35	< 0.005	0.03	—	0.03	0.02	—	0.02	—	187	187	0.01	< 0.005	—	188
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.31	5.17	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,084	1,084	0.04	0.04	3.67	1,100
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.33	0.29	0.35	4.41	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,028	1,028	0.05	0.04	0.10	1,040
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.01	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.11	1.28	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	290	290	0.01	0.01	0.44	294
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.7	34.7	< 0.005	< 0.005	0.04	36.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.0	48.0	< 0.005	< 0.005	0.07	48.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.74	5.74	< 0.005	< 0.005	0.01	6.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.85. 18-inch Pipe Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.44	3.65	4.94	0.01	0.12	—	0.12	0.11	—	0.11	—	710	710	0.03	0.01	—	713
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.09	0.07	0.60	0.81	< 0.005	0.02	—	0.02	0.02	—	0.02	—	117	117	< 0.005	< 0.005	—	117
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.3	19.3	< 0.005	< 0.005	—	19.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	0.03	17.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.5	20.5	< 0.005	< 0.005	0.02	21.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.88
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.39	3.39	< 0.005	< 0.005	< 0.005	3.55
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.87. 12-inch Pipe Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.44	3.65	4.94	0.01	0.12	—	0.12	0.11	—	0.11	—	710	710	0.03	0.01	—	713
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.80	1.08	< 0.005	0.03	—	0.03	0.02	—	0.02	—	156	156	0.01	< 0.005	—	156
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.8	25.8	< 0.005	< 0.005	—	25.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.03	23.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.3	27.3	< 0.005	< 0.005	0.03	28.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.78	3.78	< 0.005	< 0.005	0.01	3.83
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.53	4.53	< 0.005	< 0.005	0.01	4.73
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	276	276	0.03	< 0.005	—	278
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	502	502	0.05	0.01	—	504
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	52.9	52.9	0.01	< 0.005	—	53.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	76.5	76.5	0.01	< 0.005	—	77.0
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	41.3	41.3	< 0.005	< 0.005	—	41.5
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	948	948	0.09	0.01	—	954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	276	276	0.03	< 0.005	—	278
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	502	502	0.05	0.01	—	504
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	52.9	52.9	0.01	< 0.005	—	53.2

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	76.5	76.5	0.01	< 0.005	—	77.0
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	41.3	41.3	< 0.005	< 0.005	—	41.5
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	948	948	0.09	0.01	—	954
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	45.7	45.7	< 0.005	< 0.005	—	46.0
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	83.0	83.0	0.01	< 0.005	—	83.5
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	8.76	8.76	< 0.005	< 0.005	—	8.81
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	12.7	12.7	< 0.005	< 0.005	—	12.7
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	6.84	6.84	< 0.005	< 0.005	—	6.88

Recreational Swimming	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	157	157	0.01	< 0.005	—	158

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.15	0.07	1.27	0.54	0.01	0.10	—	0.10	0.10	—	0.10	—	1,610	1,610	0.14	< 0.005	—	1,614
Single Family Housing	0.29	0.14	2.45	1.04	0.02	0.20	—	0.20	0.20	—	0.20	—	3,108	3,108	0.28	0.01	—	3,117
Apartments Low Rise	0.02	0.01	0.20	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	251	251	0.02	< 0.005	—	252
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	62.3	62.3	0.01	< 0.005	—	62.4
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.46	0.23	3.97	1.71	0.03	0.32	—	0.32	0.32	—	0.32	—	5,031	5,031	0.45	0.01	—	5,045
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.15	0.07	1.27	0.54	0.01	0.10	—	0.10	0.10	—	0.10	—	1,610	1,610	0.14	< 0.005	—	1,614
Single Family Housing	0.29	0.14	2.45	1.04	0.02	0.20	—	0.20	0.20	—	0.20	—	3,108	3,108	0.28	0.01	—	3,117
Apartments Low Rise	0.02	0.01	0.20	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	251	251	0.02	< 0.005	—	252
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.01	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	62.3	62.3	0.01	< 0.005	—	62.4
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.46	0.23	3.97	1.71	0.03	0.32	—	0.32	0.32	—	0.32	—	5,031	5,031	0.45	0.01	—	5,045
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	267
Single Family Housing	0.05	0.03	0.45	0.19	< 0.005	0.04	—	0.04	0.04	—	0.04	—	515	515	0.05	< 0.005	—	516

Apartments Low Rise	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.5	41.5	< 0.005	< 0.005	—	41.6
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.3	10.3	< 0.005	< 0.005	—	10.3
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.08	0.04	0.72	0.31	< 0.005	0.06	—	0.06	0.06	—	0.06	—	833	833	0.07	< 0.005	—	835

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.99	0.50	8.46	3.60	0.05	0.68	—	0.68	0.68	—	0.68	0.00	10,739	10,739	0.20	0.02	—	10,750
Consumer Products	16.6	16.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	1.36	1.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.72	2.57	0.28	29.2	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.2	78.2	< 0.005	< 0.005	—	78.4
Total	21.6	21.0	8.74	32.8	0.06	0.70	—	0.70	0.69	—	0.69	0.00	10,817	10,817	0.21	0.02	—	10,828
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.99	0.50	8.46	3.60	0.05	0.68	—	0.68	0.68	—	0.68	0.00	10,739	10,739	0.20	0.02	—	10,750
Consumer Products	16.6	16.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.36	1.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	18.9	18.4	8.46	3.60	0.05	0.68	—	0.68	0.68	—	0.68	0.00	10,739	10,739	0.20	0.02	—	10,750
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.01	0.01	0.11	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	122	122	< 0.005	< 0.005	—	122
Consumer Products	3.02	3.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.25	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.34	0.32	0.03	3.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.86	8.86	< 0.005	< 0.005	—	8.90
Total	3.62	3.60	0.14	3.69	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	131	131	< 0.005	< 0.005	—	131

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	57.9	360	417	5.98	0.15	—	610
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.13	12.0	15.1	0.32	0.01	—	25.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.11	0.11	< 0.005	< 0.005	—	0.11
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	11.4	11.4	< 0.005	< 0.005	—	11.5
Health Club	—	—	—	—	—	—	—	—	—	—	—	4.28	15.3	19.6	0.44	0.01	—	33.8
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	65.4	398	464	6.74	0.16	—	681
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/T	—	—	—	—	—	—	—	—	—	—	—	57.9	360	417	5.98	0.15	—	610
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.13	12.0	15.1	0.32	0.01	—	25.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.11	0.11	< 0.005	< 0.005	—	0.11
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	11.4	11.4	< 0.005	< 0.005	—	11.5
Health Club	—	—	—	—	—	—	—	—	—	—	—	4.28	15.3	19.6	0.44	0.01	—	33.8
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	65.4	398	464	6.74	0.16	—	681
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	9.59	59.5	69.1	0.99	0.02	—	101
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.52	1.98	2.50	0.05	< 0.005	—	4.22
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.02	0.02	< 0.005	< 0.005	—	0.02

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	1.89	1.89	< 0.005	< 0.005	—	1.90
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.71	2.54	3.25	0.07	< 0.005	—	5.60
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	10.8	65.9	76.8	1.12	0.03	—	113

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	83.3	0.00	83.3	8.33	0.00	—	292
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	107	0.00	107	10.7	0.00	—	375
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	19.1	0.00	19.1	1.91	0.00	—	66.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.09	0.00	0.09	0.01	0.00	—	0.32
Health Club	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.8
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	41.3	0.00	41.3	4.13	0.00	—	145
Total	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	83.3	0.00	83.3	8.33	0.00	—	292
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	107	0.00	107	10.7	0.00	—	375
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	19.1	0.00	19.1	1.91	0.00	—	66.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.09	0.00	0.09	0.01	0.00	—	0.32
Health Club	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.8
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	41.3	0.00	41.3	4.13	0.00	—	145
Total	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	13.8	0.00	13.8	1.38	0.00	—	48.3
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	17.7	0.00	17.7	1.77	0.00	—	62.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.17	0.00	3.17	0.32	0.00	—	11.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.02	0.00	0.02	< 0.005	0.00	—	0.05
Health Club	—	—	—	—	—	—	—	—	—	—	—	2.31	0.00	2.31	0.23	0.00	—	8.08
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	6.84	0.00	6.84	0.68	0.00	—	23.9
Total	—	—	—	—	—	—	—	—	—	—	—	43.9	0.00	43.9	4.38	0.00	—	153

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/T	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.59	1.59
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.53	3.53
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.36	0.36
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.59	1.59
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.53	3.53
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.36	0.36
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.26	0.26
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.58	0.58
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.92	0.92

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	363	363	—	—	—	363
Total	—	—	—	—	—	—	—	—	—	—	—	—	363	363	—	—	—	363
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	363	363	—	—	—	363
Total	—	—	—	—	—	—	—	—	—	—	—	—	363	363	—	—	—	363
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	60.1	60.1	—	—	—	60.1

Total	—	—	—	—	—	—	—	—	—	—	—	—	60.1	60.1	—	—	—	60.1

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	180	180	—	—	—	180
Shrubland	—	—	—	—	—	—	—	—	—	—	—	—	522	522	—	—	—	522
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	99.4	99.4	—	—	—	99.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	801	801	—	—	—	801
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	180	180	—	—	—	180
Shrubland	—	—	—	—	—	—	—	—	—	—	—	—	522	522	—	—	—	522
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	99.4	99.4	—	—	—	99.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	801	801	—	—	—	801
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	29.9	29.9	—	—	—	29.9
Shrubland	—	—	—	—	—	—	—	—	—	—	—	—	86.4	86.4	—	—	—	86.4

Grassla	—	—	—	—	—	—	—	—	—	—	—	—	16.5	16.5	—	—	—	16.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	133	133	—	—	—	133

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.27	-0.27	—	—	—	-0.27
Fremont cottonwood(Populus fremontii)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.47	1.47	—	—	—	1.47
Coastal live oak(Quercus agrifolia)	—	0.01	< 0.005	—	0.01	0.01	0.01	0.02	< 0.005	< 0.005	0.01	—	22.9	22.9	—	—	—	22.9
Scrub Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.16	0.16	—	—	—	0.16
Valley Oak	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-2.22	-2.22	—	—	—	-2.22
Red Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.63	-1.63	—	—	—	-1.63
Arroyo Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.21	-0.21	—	—	—	-0.21
Blue Elderberry	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.12	1.12	—	—	—	1.12
Willow Acacia	—	-0.03	-0.01	—	-0.02	-0.04	-0.04	-0.08	-0.01	-0.01	-0.02	—	-74.2	-74.2	—	—	—	-74.2
Loquat	—	-0.01	> -0.005	—	-0.01	-0.01	-0.01	-0.02	> -0.005	> -0.005	-0.01	—	-20.4	-20.4	—	—	—	-20.4

Strawberry Tree	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	-7.27	-7.27	—	—	—	-7.27
Coastal Live Oak	—	-0.03	> -0.005	—	-0.01	-0.03	-0.03	-0.06	-0.01	-0.01	-0.02	—	-55.4	-55.4	—	—	—	-55.4
Fremont Cottonwood	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-2.94	-2.94	—	—	—	-2.94
Subtotal	—	-0.06	-0.01	—	-0.04	-0.07	-0.07	-0.15	-0.02	-0.02	-0.04	—	-139	-139	—	—	—	-139
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	—	—	—	—	—	—	—	—	—	—	-1.10	-1.10	—	—	—	-1.10
Fremont cottonwood(Populus fremontii)	—	—	—	—	—	—	—	—	—	—	—	—	5.06	5.06	—	—	—	5.06
Coastal live oak(Quercus agrifolia)	—	—	—	—	—	—	—	—	—	—	—	—	27.5	27.5	—	—	—	27.5
Scrub Oak	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43	—	—	—	0.43
Valley Oak	—	—	—	—	—	—	—	—	—	—	—	—	-6.69	-6.69	—	—	—	-6.69
Red Willow	—	—	—	—	—	—	—	—	—	—	—	—	-7.47	-7.47	—	—	—	-7.47
Arroyo Willow	—	—	—	—	—	—	—	—	—	—	—	—	-0.70	-0.70	—	—	—	-0.70
Blue Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	4.67	4.67	—	—	—	4.67
Willow Acacia	—	—	—	—	—	—	—	—	—	—	—	—	-61.6	-61.6	—	—	—	-61.6
Loquat	—	—	—	—	—	—	—	—	—	—	—	—	-54.9	-54.9	—	—	—	-54.9
Strawberry Tree	—	—	—	—	—	—	—	—	—	—	—	—	-8.40	-8.40	—	—	—	-8.40

Coastal Live Oak	—	—	—	—	—	—	—	—	—	—	—	—	-66.4	-66.4	—	—	—	-66.4
Fremont Cottonwood	—	—	—	—	—	—	—	—	—	—	—	—	-10.1	-10.1	—	—	—	-10.1
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	-180	-180	—	—	—	-180
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Fremont cottonwood(Populus fremontii)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Coastal live oak(Quercus agrifolia)	—	—	0.02	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Scrub Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Valley Oak	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Red Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Arroyo Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Blue Elderberry	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Willow Acacia	—	—	-0.07	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Loquat	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Strawberry Tree	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal Live Oak	—	—	-0.06	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—

Fremont Cottonwood	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Subtotal	—	—	-0.13	—	-0.01	-0.01	-0.01	-0.02	> -0.005	> -0.005	-0.01	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	-318	-318	—	—	—	-318
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.27	-0.27	—	—	—	-0.27
Fremont cottonwood(Populus fremontii)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.47	1.47	—	—	—	1.47
Coastal live oak(Quercus agrifolia)	—	0.01	< 0.005	—	0.01	0.01	0.01	0.02	< 0.005	< 0.005	0.01	—	22.9	22.9	—	—	—	22.9
Scrub Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.16	0.16	—	—	—	0.16
Valley Oak	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-2.22	-2.22	—	—	—	-2.22
Red Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.63	-1.63	—	—	—	-1.63
Arroyo Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.21	-0.21	—	—	—	-0.21
Blue Elderberry	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.12	1.12	—	—	—	1.12
Willow Acacia	—	-0.03	-0.01	—	-0.02	-0.04	-0.04	-0.08	-0.01	-0.01	-0.02	—	-74.2	-74.2	—	—	—	-74.2
Loquat	—	-0.01	> -0.005	—	-0.01	-0.01	-0.01	-0.02	> -0.005	> -0.005	-0.01	—	-20.4	-20.4	—	—	—	-20.4
Strawberry Tree	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	-7.27	-7.27	—	—	—	-7.27

Coastal Live Oak	—	-0.03	> -0.005	—	-0.01	-0.03	-0.03	-0.06	-0.01	-0.01	-0.02	—	-55.4	-55.4	—	—	—	-55.4
Fremont Cottonwood	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-2.94	-2.94	—	—	—	-2.94
Subtotal	—	-0.06	-0.01	—	-0.04	-0.07	-0.07	-0.15	-0.02	-0.02	-0.04	—	-139	-139	—	—	—	-139
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	—	—	—	—	—	—	—	—	—	—	-1.10	-1.10	—	—	—	-1.10
Fremont cottonwood(Populus fremontii)	—	—	—	—	—	—	—	—	—	—	—	—	5.06	5.06	—	—	—	5.06
Coastal live oak(Quercus agrifolia)	—	—	—	—	—	—	—	—	—	—	—	—	27.5	27.5	—	—	—	27.5
Scrub Oak	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43	—	—	—	0.43
Valley Oak	—	—	—	—	—	—	—	—	—	—	—	—	-6.69	-6.69	—	—	—	-6.69
Red Willow	—	—	—	—	—	—	—	—	—	—	—	—	-7.47	-7.47	—	—	—	-7.47
Arroyo Willow	—	—	—	—	—	—	—	—	—	—	—	—	-0.70	-0.70	—	—	—	-0.70
Blue Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	4.67	4.67	—	—	—	4.67
Willow Acacia	—	—	—	—	—	—	—	—	—	—	—	—	-61.6	-61.6	—	—	—	-61.6
Loquat	—	—	—	—	—	—	—	—	—	—	—	—	-54.9	-54.9	—	—	—	-54.9
Strawberry Tree	—	—	—	—	—	—	—	—	—	—	—	—	-8.40	-8.40	—	—	—	-8.40
Coastal Live Oak	—	—	—	—	—	—	—	—	—	—	—	—	-66.4	-66.4	—	—	—	-66.4

Fremont Cottonwood	—	—	—	—	—	—	—	—	—	—	—	—	-10.1	-10.1	—	—	—	-10.1
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	-180	-180	—	—	—	-180
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Fremont cottonwood(Populus fremontii)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Coastal live oak(Quercus agrifolia)	—	—	0.02	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Scrub Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Valley Oak	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Red Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Arroyo Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Blue Elderberry	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Willow Acacia	—	—	-0.07	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Loquat	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Strawberry Tree	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal Live Oak	—	—	-0.06	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Fremont Cottonwood	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—

Subtotal	—	—	-0.13	—	-0.01	-0.01	-0.01	-0.02	> -0.005	> -0.005	-0.01	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	-318	-318	—	—	—	-318
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.04	-0.04	—	—	—	-0.04
Fremont cottonwood(Populus fremontii)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.24	0.24	—	—	—	0.24
Coastal live oak(Quercus agrifolia)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.80	3.80	—	—	—	3.80
Scrub Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	—	—	—	0.03
Valley Oak	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.37	-0.37	—	—	—	-0.37
Red Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.27	-0.27	—	—	—	-0.27
Arroyo Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.03	-0.03	—	—	—	-0.03
Blue Elderberry	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.18	0.18	—	—	—	0.18
Willow Acacia	—	-0.01	> -0.005	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005	—	-12.3	-12.3	—	—	—	-12.3
Loquat	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-3.37	-3.37	—	—	—	-3.37
Strawberry Tree	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.20	-1.20	—	—	—	-1.20
Coastal Live Oak	—	> -0.005	> -0.005	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005	—	-9.16	-9.16	—	—	—	-9.16
Fremont Cottonwood	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.49	-0.49	—	—	—	-0.49

Subtotal	—	-0.01	> -0.005	—	-0.01	-0.01	-0.01	-0.03	> -0.005	> -0.005	-0.01	—	-23.0	-23.0	—	—	—	-23.0
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	—	—	—	—	—	—	—	—	—	—	-0.18	-0.18	—	—	—	-0.18
Fremont cottonwood(Populus fremontii)	—	—	—	—	—	—	—	—	—	—	—	—	0.84	0.84	—	—	—	0.84
Coastal live oak(Quercus agrifolia)	—	—	—	—	—	—	—	—	—	—	—	—	4.56	4.56	—	—	—	4.56
Scrub Oak	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07	—	—	—	0.07
Valley Oak	—	—	—	—	—	—	—	—	—	—	—	—	-1.11	-1.11	—	—	—	-1.11
Red Willow	—	—	—	—	—	—	—	—	—	—	—	—	-1.24	-1.24	—	—	—	-1.24
Arroyo Willow	—	—	—	—	—	—	—	—	—	—	—	—	-0.12	-0.12	—	—	—	-0.12
Blue Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	0.77	0.77	—	—	—	0.77
Willow Acacia	—	—	—	—	—	—	—	—	—	—	—	—	-10.2	-10.2	—	—	—	-10.2
Loquat	—	—	—	—	—	—	—	—	—	—	—	—	-9.08	-9.08	—	—	—	-9.08
Strawberry Tree	—	—	—	—	—	—	—	—	—	—	—	—	-1.39	-1.39	—	—	—	-1.39
Coastal Live Oak	—	—	—	—	—	—	—	—	—	—	—	—	-11.0	-11.0	—	—	—	-11.0
Fremont Cottonwood	—	—	—	—	—	—	—	—	—	—	—	—	-1.68	-1.68	—	—	—	-1.68
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	-29.7	-29.7	—	—	—	-29.7

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Fremont cottonwood(Populus fremontii)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Coastal live oak(Quercus agrifolia)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Scrub Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Valley Oak	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Red Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Arroyo Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Blue Elderberry	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Willow Acacia	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Loquat	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Strawberry Tree	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal Live Oak	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Fremont Cottonwood	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Subtotal	—	—	-0.02	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	-0.01	-0.03	—	-0.01	-0.02	-0.02	-0.03	> -0.005	> -0.005	-0.01	—	-52.7	-52.7	—	—	—	-52.7

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Clear & Grub	Site Preparation	5/19/2025	5/30/2025	5.00	10.0	—
Remedial & Mass Grading	Grading	6/2/2025	9/30/2025	5.00	87.0	—
Finish Grading	Grading	10/3/2025	11/13/2025	5.00	30.0	—
Pump Station 4	Grading	4/1/2026	4/21/2026	5.00	15.0	—
Building Construction Lots 7, 8, and 9	Building Construction	6/2/2026	11/8/2028	5.00	637	—
Building Construction Lot 6	Building Construction	9/24/2026	9/6/2029	5.00	771	—
Building Construction Lot 5	Building Construction	10/14/2026	9/10/2029	5.00	759	—
Building Construction Lot 4	Building Construction	11/4/2026	11/27/2029	5.00	800	—
Building Construction Lots 2&3	Building Construction	11/25/2026	9/17/2029	5.00	734	—
Building Construction Lots 10 and 11	Building Construction	12/8/2026	10/26/2027	5.00	231	—
Balancing/Aggregate Base	Paving	6/30/2026	7/27/2026	5.00	20.0	—
Curb & Gutter	Paving	7/26/2026	8/24/2026	5.00	21.0	—
Asphalt Paving	Paving	8/17/2026	9/21/2026	5.00	26.0	—
Concrete Flatwork	Paving	6/23/2026	7/8/2026	5.00	12.0	—
Architectural Coating Lots 10 and 11	Architectural Coating	1/1/2027	5/13/2027	5.00	95.0	—
Architectural Coating Lots 7, 8, and 9	Architectural Coating	1/1/2028	1/12/2029	5.00	270	—
Architectural Coating Lot 6	Architectural Coating	5/3/2028	7/31/2029	5.00	325	—

Architectural Coating Lot 5	Architectural Coating	5/3/2028	7/24/2029	5.00	320	—
Architectural Coating Lot 4	Architectural Coating	7/1/2028	10/19/2029	5.00	340	—
Architectural Coating Lot 2&3	Architectural Coating	7/26/2028	10/2/2029	5.00	310	—
Wet Utilities	Trenching	6/22/2025	5/22/2026	5.00	240	—
18-inch Pipe Installation	Trenching	5/5/2026	7/27/2026	5.00	60.0	—
12-inch Pipe Installation	Trenching	5/5/2026	8/24/2026	5.00	80.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Clear & Grub	Rubber Tired Dozers	Diesel	Average	6.00	8.00	367	0.40
Clear & Grub	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Clear & Grub	Other Material Handling Equipment	Diesel	Average	1.00	8.00	170	0.40
Remedial & Mass Grading	Graders	Diesel	Average	8.00	8.00	148	0.41
Remedial & Mass Grading	Scrapers	Diesel	Average	12.0	8.00	423	0.48
Remedial & Mass Grading	Rubber Tired Dozers	Diesel	Average	8.00	8.00	367	0.40
Remedial & Mass Grading	Off-Highway Trucks	Diesel	Average	2.00	8.00	376	0.38
Finish Grading	Graders	Diesel	Average	6.00	8.00	148	0.41
Finish Grading	Rubber Tired Dozers	Diesel	Average	6.00	8.00	367	0.40
Finish Grading	Off-Highway Trucks	Diesel	Average	2.00	8.00	376	0.38
Pump Station 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

Pump Station 4	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Building Construction Lots 7, 8, and 9	Forklifts	Diesel	Average	4.00	8.00	82.0	0.20
Building Construction Lots 7, 8, and 9	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction Lots 7, 8, and 9	Cranes	Diesel	Average	2.00	7.00	367	0.29
Building Construction Lots 7, 8, and 9	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Building Construction Lots 7, 8, and 9	Tractors/Loaders/Backhoes	Diesel	Average	4.00	7.00	84.0	0.37
Building Construction Lot 6	Forklifts	Diesel	Average	4.00	8.00	82.0	0.20
Building Construction Lot 6	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction Lot 6	Cranes	Diesel	Average	2.00	7.00	367	0.29
Building Construction Lot 6	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Building Construction Lot 6	Tractors/Loaders/Backhoes	Diesel	Average	4.00	7.00	84.0	0.37
Building Construction Lot 5	Forklifts	Diesel	Average	4.00	8.00	82.0	0.20
Building Construction Lot 5	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction Lot 5	Cranes	Diesel	Average	2.00	7.00	367	0.29
Building Construction Lot 5	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Building Construction Lot 5	Tractors/Loaders/Backhoes	Diesel	Average	4.00	7.00	84.0	0.37
Building Construction Lot 4	Forklifts	Diesel	Average	4.00	8.00	82.0	0.20
Building Construction Lot 4	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74

Building Construction Lot 4	Cranes	Diesel	Average	2.00	7.00	367	0.29
Building Construction Lot 4	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Building Construction Lot 4	Tractors/Loaders/Backhoes	Diesel	Average	4.00	7.00	84.0	0.37
Building Construction Lots 2&3	Forklifts	Diesel	Average	4.00	8.00	82.0	0.20
Building Construction Lots 2&3	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction Lots 2&3	Cranes	Diesel	Average	2.00	7.00	367	0.29
Building Construction Lots 2&3	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Building Construction Lots 2&3	Tractors/Loaders/Backhoes	Diesel	Average	4.00	7.00	84.0	0.37
Building Construction Lots 10 and 11	Forklifts	Diesel	Average	4.00	8.00	82.0	0.20
Building Construction Lots 10 and 11	Generator Sets	Diesel	Average	2.00	8.00	14.0	0.74
Building Construction Lots 10 and 11	Cranes	Diesel	Average	2.00	7.00	367	0.29
Building Construction Lots 10 and 11	Welders	Diesel	Average	2.00	8.00	46.0	0.45
Building Construction Lots 10 and 11	Tractors/Loaders/Backhoes	Diesel	Average	4.00	7.00	84.0	0.37
Balancing/Aggregate Base	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Balancing/Aggregate Base	Graders	Diesel	Average	2.00	8.00	148	0.41
Balancing/Aggregate Base	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Balancing/Aggregate Base	Skid Steer Loaders	Diesel	Average	2.00	8.00	71.0	0.37
Curb & Gutter	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36

Asphalt Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Asphalt Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Asphalt Paving	Graders	Diesel	Average	2.00	8.00	148	0.41
Concrete Flatwork	Skid Steer Loaders	Diesel	Average	2.00	8.00	71.0	0.37
Architectural Coating Lots 10 and 11	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating Lots 7, 8, and 9	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating Lot 6	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating Lot 5	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating Lot 4	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating Lot 2&3	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Wet Utilities	Excavators	Diesel	Average	6.00	8.00	36.0	0.38
Wet Utilities	Skid Steer Loaders	Diesel	Average	6.00	8.00	71.0	0.37
Wet Utilities	Tractors/Loaders/Backhoes	Diesel	Average	6.00	8.00	84.0	0.37
18-inch Pipe Installation	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
18-inch Pipe Installation	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
18-inch Pipe Installation	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
18-inch Pipe Installation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
12-inch Pipe Installation	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
12-inch Pipe Installation	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
12-inch Pipe Installation	Rollers	Diesel	Average	1.00	8.00	36.0	0.38

12-inch Pipe Installation	Tractors/Loaders/Back	Diesel	Average	1.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Clear & Grub	—	—	—	—
Clear & Grub	Worker	14.0	18.5	LDA,LDT1,LDT2
Clear & Grub	Vendor	4.00	10.2	HHDT,MHDT
Clear & Grub	Hauling	40.0	20.0	HHDT
Clear & Grub	Onsite truck	—	—	HHDT
Remedial & Mass Grading	—	—	—	—
Remedial & Mass Grading	Worker	52.0	18.5	LDA,LDT1,LDT2
Remedial & Mass Grading	Vendor	6.00	10.2	HHDT,MHDT
Remedial & Mass Grading	Hauling	0.00	20.0	HHDT
Remedial & Mass Grading	Onsite truck	—	—	HHDT
Finish Grading	—	—	—	—
Finish Grading	Worker	24.0	18.5	LDA,LDT1,LDT2
Finish Grading	Vendor	6.00	10.2	HHDT,MHDT
Finish Grading	Hauling	0.00	20.0	HHDT
Finish Grading	Onsite truck	—	—	HHDT
Pump Station 4	—	—	—	—
Pump Station 4	Worker	8.00	18.5	LDA,LDT1,LDT2
Pump Station 4	Vendor	4.00	10.2	HHDT,MHDT
Pump Station 4	Hauling	0.00	20.0	HHDT
Pump Station 4	Onsite truck	—	—	HHDT
Building Construction Lots 7, 8, and 9	—	—	—	—

Building Construction Lots 7, 8, and 9	Worker	140	18.5	LDA,LDT1,LDT2
Building Construction Lots 7, 8, and 9	Vendor	30.0	10.2	HHDT,MHDT
Building Construction Lots 7, 8, and 9	Hauling	0.00	20.0	HHDT
Building Construction Lots 7, 8, and 9	Onsite truck	—	—	HHDT
Building Construction Lot 6	—	—	—	—
Building Construction Lot 6	Worker	116	18.5	LDA,LDT1,LDT2
Building Construction Lot 6	Vendor	26.0	10.2	HHDT,MHDT
Building Construction Lot 6	Hauling	0.00	20.0	HHDT
Building Construction Lot 6	Onsite truck	—	—	HHDT
Building Construction Lot 5	—	—	—	—
Building Construction Lot 5	Worker	98.0	18.5	LDA,LDT1,LDT2
Building Construction Lot 5	Vendor	20.0	10.2	HHDT,MHDT
Building Construction Lot 5	Hauling	0.00	20.0	HHDT
Building Construction Lot 5	Onsite truck	—	—	HHDT
Building Construction Lot 4	—	—	—	—
Building Construction Lot 4	Worker	146	18.5	LDA,LDT1,LDT2
Building Construction Lot 4	Vendor	34.0	10.2	HHDT,MHDT
Building Construction Lot 4	Hauling	0.00	20.0	HHDT
Building Construction Lot 4	Onsite truck	—	—	HHDT
Building Construction Lots 2&3	—	—	—	—
Building Construction Lots 2&3	Worker	148	18.5	LDA,LDT1,LDT2
Building Construction Lots 2&3	Vendor	30.0	10.2	HHDT,MHDT
Building Construction Lots 2&3	Hauling	0.00	20.0	HHDT
Building Construction Lots 2&3	Onsite truck	—	—	HHDT
Building Construction Lots 10 and 11	—	—	—	—
Building Construction Lots 10 and 11	Worker	50.0	18.5	LDA,LDT1,LDT2

Building Construction Lots 10 and 11	Vendor	10.0	10.2	HHDT,MHDT
Building Construction Lots 10 and 11	Hauling	0.00	20.0	HHDT
Building Construction Lots 10 and 11	Onsite truck	—	—	HHDT
Balancing/Aggregate Base	—	—	—	—
Balancing/Aggregate Base	Worker	16.0	18.5	LDA,LDT1,LDT2
Balancing/Aggregate Base	Vendor	4.00	10.2	HHDT,MHDT
Balancing/Aggregate Base	Hauling	0.00	20.0	HHDT
Balancing/Aggregate Base	Onsite truck	—	—	HHDT
Curb & Gutter	—	—	—	—
Curb & Gutter	Worker	14.0	18.5	LDA,LDT1,LDT2
Curb & Gutter	Vendor	4.00	10.2	HHDT,MHDT
Curb & Gutter	Hauling	0.00	20.0	HHDT
Curb & Gutter	Onsite truck	—	—	HHDT
Asphalt Paving	—	—	—	—
Asphalt Paving	Worker	16.0	18.5	LDA,LDT1,LDT2
Asphalt Paving	Vendor	4.00	10.2	HHDT,MHDT
Asphalt Paving	Hauling	0.00	20.0	HHDT
Asphalt Paving	Onsite truck	—	—	HHDT
Concrete Flatwork	—	—	—	—
Concrete Flatwork	Worker	22.0	18.5	LDA,LDT1,LDT2
Concrete Flatwork	Vendor	4.00	10.2	HHDT,MHDT
Concrete Flatwork	Hauling	0.00	20.0	HHDT
Concrete Flatwork	Onsite truck	—	—	HHDT
Architectural Coating Lots 10 and 11	—	—	—	—
Architectural Coating Lots 10 and 11	Worker	8.00	18.5	LDA,LDT1,LDT2
Architectural Coating Lots 10 and 11	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lots 10 and 11	Hauling	0.00	20.0	HHDT
Architectural Coating Lots 10 and 11	Onsite truck	—	—	HHDT

Architectural Coating Lots 7, 8, and 9	—	—	—	—
Architectural Coating Lots 7, 8, and 9	Worker	22.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lots 7, 8, and 9	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lots 7, 8, and 9	Hauling	0.00	20.0	HHDT
Architectural Coating Lots 7, 8, and 9	Onsite truck	—	—	HHDT
Architectural Coating Lot 6	—	—	—	—
Architectural Coating Lot 6	Worker	18.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lot 6	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lot 6	Hauling	0.00	20.0	HHDT
Architectural Coating Lot 6	Onsite truck	—	—	HHDT
Architectural Coating Lot 5	—	—	—	—
Architectural Coating Lot 5	Worker	16.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lot 5	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lot 5	Hauling	0.00	20.0	HHDT
Architectural Coating Lot 5	Onsite truck	—	—	HHDT
Architectural Coating Lot 4	—	—	—	—
Architectural Coating Lot 4	Worker	24.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lot 4	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lot 4	Hauling	0.00	20.0	HHDT
Architectural Coating Lot 4	Onsite truck	—	—	HHDT
Architectural Coating Lot 2&3	—	—	—	—
Architectural Coating Lot 2&3	Worker	24.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lot 2&3	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lot 2&3	Hauling	0.00	20.0	HHDT
Architectural Coating Lot 2&3	Onsite truck	—	—	HHDT
Wet Utilities	—	—	—	—
Wet Utilities	Worker	80.0	18.5	LDA,LDT1,LDT2
Wet Utilities	Vendor	4.00	10.2	HHDT,MHDT

Wet Utilities	Hauling	0.00	20.0	HHDT
Wet Utilities	Onsite truck	—	—	HHDT
18-inch Pipe Installation	—	—	—	—
18-inch Pipe Installation	Worker	8.00	18.5	LDA,LDT1,LDT2
18-inch Pipe Installation	Vendor	4.00	10.2	HHDT,MHDT
18-inch Pipe Installation	Hauling	0.00	20.0	HHDT
18-inch Pipe Installation	Onsite truck	—	—	HHDT
12-inch Pipe Installation	—	—	—	—
12-inch Pipe Installation	Worker	8.00	18.5	LDA,LDT1,LDT2
12-inch Pipe Installation	Vendor	4.00	10.2	HHDT,MHDT
12-inch Pipe Installation	Hauling	0.00	20.0	HHDT
12-inch Pipe Installation	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating Lots 10 and 11	76,320	25,440	0.00	0.00	0.00
Architectural Coating Lots 7, 8, and 9	154,696	72,014	0.00	0.00	0.00
Architectural Coating Lot 6	244,171	81,390	0.00	0.00	0.00
Architectural Coating Lot 5	240,414	80,138	0.00	0.00	0.00
Architectural Coating Lot 4	255,440	85,147	9,194	3,065	0.00
Architectural Coating Lot 2&3	177,614	59,205	0.00	0.00	0.00
Asphalt Paving	0.00	0.00	0.00	0.00	5,528

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Clear & Grub	—	—	30.0	0.00	—
Remedial & Mass Grading	—	—	1,740	0.00	—
Finish Grading	—	—	180	0.00	—
Pump Station 4	—	—	0.00	0.00	—
Balancing/Aggregate Base	0.00	0.00	0.00	0.00	13.3
Curb & Gutter	0.00	0.00	0.00	0.00	13.3
Asphalt Paving	0.00	0.00	0.00	0.00	13.3
Concrete Flatwork	0.00	0.00	0.00	0.00	13.3

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse	—	0%
Single Family Housing	2.79	0%
Apartments Low Rise	—	0%
Other Asphalt Surfaces	8.41	100%
Parking Lot	2.11	100%
City Park	0.00	0%
Health Club	0.00	0%
Recreational Swimming Pool	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	99,963	532	0.03	< 0.005
2026	171,364	346	0.03	< 0.005
2027	171,364	346	0.03	< 0.005
2028	171,364	346	0.03	< 0.005
2029	157,084	346	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	4,221	4,221	4,221	1,540,787	36,798	36,798	36,798	13,431,088

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	209
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Single Family Housing	—

Wood Fireplaces	0
Gas Fireplaces	253
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	48
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1550684.25	516,895	6,810	2,270	27,508

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse	290,921	346	0.0330	0.0040	5,022,345

Single Family Housing	528,781	346	0.0330	0.0040	9,698,843
Apartments Low Rise	55,799	346	0.0330	0.0040	782,672
Other Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00
Parking Lot	80,705	346	0.0330	0.0040	0.00
City Park	0.00	346	0.0330	0.0040	0.00
Health Club	43,551	346	0.0330	0.0040	194,321
Recreational Swimming Pool	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse	30,235,755	32,640,538
Single Family Housing	0.00	0.00
Apartments Low Rise	1,635,774	281,475
Other Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	22,201
City Park	0.00	2,262,851
Health Club	2,235,341	179,108
Recreational Swimming Pool	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	155	—
Single Family Housing	199	—
Apartments Low Rise	35.5	—

Other Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
City Park	0.17	—
Health Club	25.9	—
Recreational Swimming Pool	76.7	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

Health Club	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Recreational Swimming Pool	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Grazing	Inceptisols	125	111
Grazing	Entisols	94.5	33.0
Grazing	Alfisols	0.13	0.02
Grazing	Mollisols	2.43	0.65

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	24.0	10.7
Shrubland	153	119
Grassland	53.5	19.2

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
Willow Acacia	512	704,420	335
Loquat	244	205,628	852
Strawberry Tree	65.0	69,935	322
Coastal Live Oak	567	546,527	2,376
Black Walnut	6.00	5,990	19.3
Fremont Cottonwood	30.0	32,869	106
Scrub Oak	2.00	1,839	5.90

Valley Oak	40.0	36,788	118
Red Willow	48.0	38,032	122
Arroyo Willow	14.0	8,112	25.9
Blue Elderberry	100	32,039	110
Black Walnut	-3.00	2,995	9.60
Fremont cottonwood(Populus fremontii)	-15.0	16,434	53.1
Coastal live oak(Quercus agrifolia)	-235	226,515	985
Scrub Oak	-4.00	3,679	11.8
Valley Oak	-13.0	11,956	38.5
Red Willow	-25.0	19,808	63.6
Arroyo Willow	-10.0	5,795	18.5
Blue Elderberry	-138	44,213	152

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	17.4	annual days of extreme heat
Extreme Precipitation	9.55	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	20.6	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	88.9
AQ-PM	46.3
AQ-DPM	10.3
Drinking Water	71.3
Lead Risk Housing	1.45
Pesticides	47.6
Toxic Releases	18.4
Traffic	98.1
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	40.8
Haz Waste Facilities/Generators	46.4
Impaired Water Bodies	33.2
Solid Waste	91.0
Sensitive Population	—
Asthma	10.3

Cardio-vascular	43.0
Low Birth Weights	23.1
Socioeconomic Factor Indicators	—
Education	8.42
Housing	55.1
Linguistic	62.2
Poverty	30.8
Unemployment	72.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	87.77107661
Employed	67.86860003
Median HI	78.49351983
Education	—
Bachelor's or higher	70.67881432
High school enrollment	100
Preschool enrollment	76.74836392
Transportation	—
Auto Access	78.96830489
Active commuting	59.43795714
Social	—
2-parent households	55.24188374
Voting	48.80020531
Neighborhood	—
Alcohol availability	81.22674195

Park access	2.194276915
Retail density	83.75465161
Supermarket access	52.55998973
Tree canopy	72.65494675
Housing	—
Homeownership	43.19260875
Housing habitability	66.17477223
Low-inc homeowner severe housing cost burden	46.11831131
Low-inc renter severe housing cost burden	68.20223277
Uncrowded housing	62.10701912
Health Outcomes	—
Insured adults	82.81791351
Arthritis	0.0
Asthma ER Admissions	93.6
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	60.8
Cognitively Disabled	62.4
Physically Disabled	97.3
Heart Attack ER Admissions	32.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6

Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	61.7
SLR Inundation Area	0.0
Children	25.4
Elderly	67.6
English Speaking	44.8
Foreign-born	30.9
Outdoor Workers	89.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	81.9
Traffic Density	92.2
Traffic Access	23.0
Other Indices	—
Hardship	17.7
Other Decision Support	—
2016 Voting	36.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	39.0
Healthy Places Index Score for Project Location (b)	77.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Based on site and landscape plans.
Construction: Construction Phases	Based on applicant provided information.
Construction: Off-Road Equipment	Based on applicant provided information.
Construction: Trips and VMT	Based on applicant provided information.
Construction: Architectural Coatings	Architectural coating phases.
Construction: Electricity	Based on electricity use during construction.
Operations: Vehicle Data	Based on TIA.
Operations: Hearths	No wood stoves or fireplaces.
Operations: Water and Waste Water	Based on WSA.
Operations: Energy Use	Accounts for solar per Title 24.

Trails at Lyons Canyon Mitigated Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

2.6. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Clear & Grub (2025) - Unmitigated

3.2. Clear & Grub (2025) - Mitigated

3.3. Remedial & Mass Grading (2025) - Unmitigated

3.4. Remedial & Mass Grading (2025) - Mitigated

3.5. Finish Grading (2025) - Unmitigated

3.6. Finish Grading (2025) - Mitigated

3.7. Pump Station 4 (2026) - Unmitigated

3.8. Pump Station 4 (2026) - Mitigated

3.9. Building Construction Lots 7, 8, and 9 (2026) - Unmitigated

3.10. Building Construction Lots 7, 8, and 9 (2026) - Mitigated

3.11. Building Construction Lots 7, 8, and 9 (2027) - Unmitigated

3.12. Building Construction Lots 7, 8, and 9 (2027) - Mitigated

3.13. Building Construction Lots 7, 8, and 9 (2028) - Unmitigated

3.14. Building Construction Lots 7, 8, and 9 (2028) - Mitigated

3.15. Building Construction Lot 6 (2026) - Unmitigated

3.16. Building Construction Lot 6 (2026) - Mitigated

3.17. Building Construction Lot 6 (2027) - Unmitigated

3.18. Building Construction Lot 6 (2027) - Mitigated

3.19. Building Construction Lot 6 (2028) - Unmitigated

3.20. Building Construction Lot 6 (2028) - Mitigated

3.21. Building Construction Lot 6 (2029) - Unmitigated

3.22. Building Construction Lot 6 (2029) - Mitigated

3.23. Building Construction Lot 5 (2026) - Unmitigated

3.24. Building Construction Lot 5 (2026) - Mitigated

3.25. Building Construction Lot 5 (2027) - Unmitigated

3.26. Building Construction Lot 5 (2027) - Mitigated

3.27. Building Construction Lot 5 (2028) - Unmitigated

3.28. Building Construction Lot 5 (2028) - Mitigated

3.29. Building Construction Lot 5 (2029) - Unmitigated

3.30. Building Construction Lot 5 (2029) - Mitigated

3.31. Building Construction Lot 4 (2026) - Unmitigated

3.32. Building Construction Lot 4 (2026) - Mitigated

3.33. Building Construction Lot 4 (2027) - Unmitigated

3.34. Building Construction Lot 4 (2027) - Mitigated

3.35. Building Construction Lot 4 (2028) - Unmitigated

3.36. Building Construction Lot 4 (2028) - Mitigated

3.37. Building Construction Lot 4 (2029) - Unmitigated

3.38. Building Construction Lot 4 (2029) - Mitigated

3.39. Building Construction Lots 2&3 (2026) - Unmitigated

3.40. Building Construction Lots 2&3 (2026) - Mitigated

3.41. Building Construction Lots 2&3 (2027) - Unmitigated

3.42. Building Construction Lots 2&3 (2027) - Mitigated

3.43. Building Construction Lots 2&3 (2028) - Unmitigated

3.44. Building Construction Lots 2&3 (2028) - Mitigated

3.45. Building Construction Lots 2&3 (2029) - Unmitigated

3.46. Building Construction Lots 2&3 (2029) - Mitigated

3.47. Building Construction Lots 10 and 11 (2026) - Unmitigated

3.48. Building Construction Lots 10 and 11 (2026) - Mitigated

3.49. Building Construction Lots 10 and 11 (2027) - Unmitigated

3.50. Building Construction Lots 10 and 11 (2027) - Mitigated

3.51. Balancing/Aggregate Base (2026) - Unmitigated

3.52. Balancing/Aggregate Base (2026) - Mitigated

3.53. Curb & Gutter (2026) - Unmitigated

3.54. Curb & Gutter (2026) - Mitigated

3.55. Asphalt Paving (2026) - Unmitigated

3.56. Asphalt Paving (2026) - Mitigated

3.57. Concrete Flatwork (2026) - Unmitigated

3.58. Concrete Flatwork (2026) - Mitigated

3.59. Architectural Coating Lots 10 and 11 (2027) - Unmitigated

3.60. Architectural Coating Lots 10 and 11 (2027) - Mitigated

3.61. Architectural Coating Lots 7, 8, and 9 (2028) - Unmitigated

3.62. Architectural Coating Lots 7, 8, and 9 (2028) - Mitigated

3.63. Architectural Coating Lots 7, 8, and 9 (2029) - Unmitigated

3.64. Architectural Coating Lots 7, 8, and 9 (2029) - Mitigated

3.65. Architectural Coating Lot 6 (2028) - Unmitigated

3.66. Architectural Coating Lot 6 (2028) - Mitigated

3.67. Architectural Coating Lot 6 (2029) - Unmitigated

3.68. Architectural Coating Lot 6 (2029) - Mitigated

3.69. Architectural Coating Lot 5 (2028) - Unmitigated

3.70. Architectural Coating Lot 5 (2028) - Mitigated

3.71. Architectural Coating Lot 5 (2029) - Unmitigated

3.72. Architectural Coating Lot 5 (2029) - Mitigated

3.73. Architectural Coating Lot 4 (2028) - Unmitigated

3.74. Architectural Coating Lot 4 (2028) - Mitigated

3.75. Architectural Coating Lot 4 (2029) - Unmitigated

3.76. Architectural Coating Lot 4 (2029) - Mitigated

3.77. Architectural Coating Lot 2&3 (2028) - Unmitigated

3.78. Architectural Coating Lot 2&3 (2028) - Mitigated

3.79. Architectural Coating Lot 2&3 (2029) - Unmitigated

3.80. Architectural Coating Lot 2&3 (2029) - Mitigated

3.81. Wet Utilities (2025) - Unmitigated

3.82. Wet Utilities (2025) - Mitigated

3.83. Wet Utilities (2026) - Unmitigated

3.84. Wet Utilities (2026) - Mitigated

3.85. 18-inch Pipe Installation (2026) - Unmitigated

3.86. 18-inch Pipe Installation (2026) - Mitigated

3.87. 12-inch Pipe Installation (2026) - Unmitigated

3.88. 12-inch Pipe Installation (2026) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Trails at Lyons Canyon Mitigated
Construction Start Date	5/19/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	16.0
Location	34.36979474492071, -118.56446447799392
County	Los Angeles-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	3603
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Condo/Townhouse	209	Dwelling Unit	13.1	221,540	223,817	—	619	—

Single Family Housing	253	Dwelling Unit	82.1	493,350	438,902	—	749	—
Apartments Low Rise	48.0	Dwelling Unit	3.00	50,880	16,421	—	142	—
Other Asphalt Surfaces	8.41	Acre	8.41	0.00	0.00	—	—	—
Parking Lot	235	Space	2.11	0.00	1,583	—	—	—
City Park	1.96	Acre	1.96	0.00	72,607	72,607	—	—
Health Club	4.54	1000sqft	0.10	4,540	12,771	—	—	—
Recreational Swimming Pool	13.4	1000sqft	0.31	13,450	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-4	Integrate A ordable and Below Market Rate Housing
Energy	E-2	Require Energy Efficient Appliances
Energy	E-7*	Require Higher Efficacy Public Street and Area Lighting
Energy	E-11	Procure Electricity from Lower Carbon Intensity Power Supply
Energy	E-12-A	Install Alternative Type of Water Heater in Place of Gas Storage Tank Heater in Residences
Energy	E-12-B	Install Electric Space Heater in Place of Natural Gas Heaters in Residences
Energy	E-13	Install Electric Ranges in Place of Gas Ranges
Energy	E-15	Require All-Electric Development
Energy	E-21*	Install Cool Pavements
Water	W-4	Require Low-Flow Water Fixtures
Water	W-5	Design Water-Efficient Landscapes

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.7	15.1	29.5	242	0.41	0.84	28.9	29.7	0.84	11.6	12.5	—	46,519	46,519	1.89	1.17	41.5	46,713
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.7	15.1	18.4	161	0.22	0.45	18.0	18.4	0.42	8.36	8.69	—	33,882	33,882	1.43	1.17	1.16	34,265
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.28	7.91	12.7	111	0.15	0.29	8.86	9.10	0.29	3.70	3.94	—	23,710	23,710	0.81	0.80	12.5	23,981
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.51	1.44	2.32	20.2	0.03	0.05	1.62	1.66	0.05	0.68	0.72	—	3,925	3,925	0.13	0.13	2.07	3,970

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.93	4.85	29.5	242	0.41	0.84	28.9	29.7	0.84	11.6	12.5	—	46,519	46,519	1.89	0.54	7.55	46,713
2026	3.29	3.14	11.8	70.9	0.10	0.21	3.83	3.98	0.20	0.92	1.06	—	13,990	13,990	0.58	0.43	16.5	14,130
2027	7.54	7.04	17.4	164	0.22	0.42	10.5	11.0	0.42	2.53	2.94	—	34,279	34,279	1.42	1.15	41.5	34,698
2028	15.7	15.1	15.9	144	0.19	0.35	11.2	11.6	0.35	2.68	3.04	—	31,417	31,417	0.95	1.17	40.1	31,829
2029	12.6	12.2	12.1	113	0.15	0.28	8.79	9.07	0.28	2.11	2.39	—	24,702	24,702	0.76	0.92	28.6	25,023

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.28	2.21	16.4	106	0.16	0.34	18.0	18.4	0.33	8.36	8.69	—	19,435	19,435	0.80	0.24	0.16	19,527
2026	5.14	4.60	18.4	161	0.22	0.45	10.4	10.9	0.42	2.49	2.91	—	33,882	33,882	1.43	1.16	1.16	34,265
2027	7.50	6.99	18.2	158	0.22	0.42	10.5	11.0	0.42	2.53	2.94	—	33,794	33,794	1.15	1.15	1.08	34,166
2028	15.7	15.1	16.4	138	0.19	0.35	11.2	11.6	0.35	2.68	3.04	—	30,911	30,911	0.97	1.17	1.04	31,285
2029	14.4	14.2	12.8	109	0.15	0.28	9.11	9.40	0.28	2.18	2.47	—	24,697	24,697	0.78	0.95	0.77	25,000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.44	1.41	9.16	69.3	0.12	0.24	8.86	9.10	0.24	3.70	3.94	—	13,356	13,356	0.55	0.15	1.19	13,416
2026	1.35	1.23	6.40	39.4	0.05	0.11	2.26	2.37	0.10	0.54	0.64	—	7,989	7,989	0.34	0.25	4.19	8,077
2027	4.15	3.79	12.7	111	0.15	0.29	7.30	7.59	0.29	1.75	2.04	—	23,710	23,710	0.81	0.80	12.5	23,981
2028	8.28	7.91	11.2	95.8	0.13	0.25	7.34	7.59	0.25	1.76	2.00	—	21,275	21,275	0.68	0.78	11.5	21,537
2029	6.17	6.06	6.75	58.4	0.08	0.15	4.66	4.81	0.15	1.12	1.27	—	13,200	13,200	0.43	0.49	6.63	13,364
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.26	0.26	1.67	12.6	0.02	0.04	1.62	1.66	0.04	0.68	0.72	—	2,211	2,211	0.09	0.02	0.20	2,221
2026	0.25	0.22	1.17	7.18	0.01	0.02	0.41	0.43	0.02	0.10	0.12	—	1,323	1,323	0.06	0.04	0.69	1,337
2027	0.76	0.69	2.32	20.2	0.03	0.05	1.33	1.38	0.05	0.32	0.37	—	3,925	3,925	0.13	0.13	2.07	3,970
2028	1.51	1.44	2.04	17.5	0.02	0.04	1.34	1.38	0.04	0.32	0.37	—	3,522	3,522	0.11	0.13	1.90	3,566
2029	1.13	1.11	1.23	10.7	0.01	0.03	0.85	0.88	0.03	0.20	0.23	—	2,185	2,185	0.07	0.08	1.10	2,213

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.93	4.85	29.5	242	0.41	0.84	28.9	29.7	0.84	11.6	12.5	—	46,519	46,519	1.89	0.54	7.55	46,713
2026	3.29	3.14	11.8	70.9	0.10	0.21	3.83	3.98	0.20	0.92	1.06	—	13,990	13,990	0.58	0.43	16.5	14,130

2027	7.54	7.04	17.4	164	0.22	0.42	10.5	11.0	0.42	2.53	2.94	—	34,279	34,279	1.42	1.15	41.5	34,698
2028	15.7	15.1	15.9	144	0.19	0.35	11.2	11.6	0.35	2.68	3.04	—	31,417	31,417	0.95	1.17	40.1	31,829
2029	12.6	12.2	12.1	113	0.15	0.28	8.79	9.07	0.28	2.11	2.39	—	24,702	24,702	0.76	0.92	28.6	25,023
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.28	2.21	16.4	106	0.16	0.34	18.0	18.4	0.33	8.36	8.69	—	19,435	19,435	0.80	0.24	0.16	19,527
2026	5.14	4.60	18.4	161	0.22	0.45	10.4	10.9	0.42	2.49	2.91	—	33,882	33,882	1.43	1.16	1.16	34,265
2027	7.50	6.99	18.2	158	0.22	0.42	10.5	11.0	0.42	2.53	2.94	—	33,794	33,794	1.15	1.15	1.08	34,166
2028	15.7	15.1	16.4	138	0.19	0.35	11.2	11.6	0.35	2.68	3.04	—	30,911	30,911	0.97	1.17	1.04	31,285
2029	14.4	14.2	12.8	109	0.15	0.28	9.11	9.40	0.28	2.18	2.47	—	24,697	24,697	0.78	0.95	0.77	25,000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.44	1.41	9.16	69.3	0.12	0.24	8.86	9.10	0.24	3.70	3.94	—	13,356	13,356	0.55	0.15	1.19	13,416
2026	1.35	1.23	6.40	39.4	0.05	0.11	2.26	2.37	0.10	0.54	0.64	—	7,989	7,989	0.34	0.25	4.19	8,077
2027	4.15	3.79	12.7	111	0.15	0.29	7.30	7.59	0.29	1.75	2.04	—	23,710	23,710	0.81	0.80	12.5	23,981
2028	8.28	7.91	11.2	95.8	0.13	0.25	7.34	7.59	0.25	1.76	2.00	—	21,275	21,275	0.68	0.78	11.5	21,537
2029	6.17	6.06	6.75	58.4	0.08	0.15	4.66	4.81	0.15	1.12	1.27	—	13,200	13,200	0.43	0.49	6.63	13,364
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.26	0.26	1.67	12.6	0.02	0.04	1.62	1.66	0.04	0.68	0.72	—	2,211	2,211	0.09	0.02	0.20	2,221
2026	0.25	0.22	1.17	7.18	0.01	0.02	0.41	0.43	0.02	0.10	0.12	—	1,323	1,323	0.06	0.04	0.69	1,337
2027	0.76	0.69	2.32	20.2	0.03	0.05	1.33	1.38	0.05	0.32	0.37	—	3,925	3,925	0.13	0.13	2.07	3,970
2028	1.51	1.44	2.04	17.5	0.02	0.04	1.34	1.38	0.04	0.32	0.37	—	3,522	3,522	0.11	0.13	1.90	3,566
2029	1.13	1.11	1.23	10.7	0.01	0.03	0.85	0.88	0.03	0.20	0.23	—	2,185	2,185	0.07	0.08	1.10	2,213

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	35.5	33.8	13.3	139	0.24	0.41	24.2	24.6	0.45	6.15	6.61	330	35,657	35,988	35.2	1.26	86.7	37,328
Mit.	35.0	33.5	9.39	137	0.22	0.09	24.2	24.3	0.14	6.15	6.29	318	29,039	29,357	33.5	1.21	86.7	30,642
% Reduced	1%	1%	29%	1%	10%	78%	—	1%	70%	—	5%	4%	19%	18%	5%	3%	—	18%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	32.6	31.0	13.9	101	0.23	0.39	24.2	24.6	0.44	6.15	6.60	330	34,478	34,808	35.3	1.31	7.67	36,087
Mit.	32.2	30.8	9.98	99.8	0.20	0.08	24.2	24.3	0.13	6.15	6.28	318	27,860	28,177	33.5	1.27	7.67	29,401
% Reduced	1%	1%	28%	2%	11%	81%	—	1%	71%	—	5%	4%	19%	19%	5%	3%	—	19%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	34.4	32.7	14.2	124	0.23	0.40	24.0	24.4	0.45	6.09	6.54	330	34,828	35,159	35.2	1.31	40.6	36,471
Mit.	33.9	32.5	10.3	122	0.21	0.09	24.0	24.1	0.13	6.09	6.22	318	28,210	28,528	33.5	1.27	40.6	29,785
% Reduced	1%	1%	28%	1%	11%	79%	—	1%	70%	—	5%	4%	19%	19%	5%	3%	—	18%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.28	5.97	2.59	22.6	0.04	0.07	4.38	4.45	0.08	1.11	1.19	54.7	5,766	5,821	5.84	0.22	6.72	6,038
Mit.	6.19	5.93	1.87	22.3	0.04	0.02	4.38	4.39	0.02	1.11	1.14	52.6	4,670	4,723	5.55	0.21	6.72	4,931
% Reduced	1%	1%	28%	1%	11%	79%	—	1%	70%	—	5%	4%	19%	19%	5%	3%	—	18%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.4	13.1	9.25	108	0.26	0.16	24.3	24.5	0.15	6.18	6.33	—	26,549	26,549	1.28	1.05	81.1	26,974
Area	20.6	20.5	0.28	29.2	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	78.2	78.2	< 0.005	< 0.005	—	78.4
Energy	0.46	0.23	3.91	1.67	0.02	0.32	—	0.32	0.32	—	0.32	—	7,786	7,786	0.71	0.04	—	7,816
Water	—	—	—	—	—	—	—	—	—	—	—	65.4	398	464	6.74	0.16	—	681
Waste	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Vegetation	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	846	846	—	—	—	846
Total	35.5	33.8	13.3	139	0.24	0.41	24.2	24.6	0.45	6.15	6.61	330	35,657	35,988	35.2	1.26	86.7	37,328
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.3	13.0	10.1	99.8	0.25	0.16	24.3	24.5	0.15	6.18	6.33	—	25,448	25,448	1.33	1.10	2.10	25,811
Area	17.9	17.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.46	0.23	3.91	1.67	0.02	0.32	—	0.32	0.32	—	0.32	—	7,786	7,786	0.71	0.04	—	7,816
Water	—	—	—	—	—	—	—	—	—	—	—	65.4	398	464	6.74	0.16	—	681
Waste	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Vegetation	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	846	846	—	—	—	846
Total	32.6	31.0	13.9	101	0.23	0.39	24.2	24.6	0.44	6.15	6.60	330	34,478	34,808	35.3	1.31	7.67	36,087
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.1	12.9	10.2	102	0.25	0.16	24.1	24.2	0.15	6.11	6.26	—	25,744	25,744	1.32	1.10	35.0	26,142
Area	19.8	19.7	0.19	20.0	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	53.5	53.5	< 0.005	< 0.005	—	53.7
Energy	0.46	0.23	3.91	1.67	0.02	0.32	—	0.32	0.32	—	0.32	—	7,786	7,786	0.71	0.04	—	7,816
Water	—	—	—	—	—	—	—	—	—	—	—	65.4	398	464	6.74	0.16	—	681
Waste	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Vegetation	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	846	846	—	—	—	846
Total	34.4	32.7	14.2	124	0.23	0.40	24.0	24.4	0.45	6.09	6.54	330	34,828	35,159	35.2	1.31	40.6	36,471
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.58	2.35	1.86	18.7	0.05	0.03	4.39	4.42	0.03	1.12	1.14	—	4,262	4,262	0.22	0.18	5.80	4,328
Area	3.61	3.59	0.03	3.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.86	8.86	< 0.005	< 0.005	—	8.90
Energy	0.08	0.04	0.71	0.30	< 0.005	0.06	—	0.06	0.06	—	0.06	—	1,289	1,289	0.12	0.01	—	1,294
Water	—	—	—	—	—	—	—	—	—	—	—	10.8	65.9	76.8	1.12	0.03	—	113
Waste	—	—	—	—	—	—	—	—	—	—	—	43.9	0.00	43.9	4.38	0.00	—	153
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.92	0.92
Vegetation	—	-0.01	-0.03	—	-0.01	-0.02	-0.02	-0.03	> -0.005	> -0.005	-0.01	—	140	140	—	—	—	140
Total	6.28	5.97	2.59	22.6	0.04	0.07	4.38	4.45	0.08	1.11	1.19	54.7	5,766	5,821	5.84	0.22	6.72	6,038

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.4	13.1	9.25	108	0.26	0.16	24.3	24.5	0.15	6.18	6.33	—	26,549	26,549	1.28	1.05	81.1	26,974
Area	20.6	20.5	0.28	29.2	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	78.2	78.2	< 0.005	< 0.005	—	78.4
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,397	1,397	0.27	0.03	—	1,413
Water	—	—	—	—	—	—	—	—	—	—	—	52.9	169	222	5.46	0.13	—	398
Waste	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Vegetation	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	846	846	—	—	—	846
Total	35.0	33.5	9.39	137	0.22	0.09	24.2	24.3	0.14	6.15	6.29	318	29,039	29,357	33.5	1.21	86.7	30,642

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.3	13.0	10.1	99.8	0.25	0.16	24.3	24.5	0.15	6.18	6.33	—	25,448	25,448	1.33	1.10	2.10	25,811
Area	17.9	17.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,397	1,397	0.27	0.03	—	1,413
Water	—	—	—	—	—	—	—	—	—	—	—	52.9	169	222	5.46	0.13	—	398
Waste	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Vegetation	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	846	846	—	—	—	846
Total	32.2	30.8	9.98	99.8	0.20	0.08	24.2	24.3	0.13	6.15	6.28	318	27,860	28,177	33.5	1.27	7.67	29,401
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.1	12.9	10.2	102	0.25	0.16	24.1	24.2	0.15	6.11	6.26	—	25,744	25,744	1.32	1.10	35.0	26,142
Area	19.8	19.7	0.19	20.0	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	53.5	53.5	< 0.005	< 0.005	—	53.7
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,397	1,397	0.27	0.03	—	1,413
Water	—	—	—	—	—	—	—	—	—	—	—	52.9	169	222	5.46	0.13	—	398
Waste	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Vegetation	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	846	846	—	—	—	846
Total	33.9	32.5	10.3	122	0.21	0.09	24.0	24.1	0.13	6.09	6.22	318	28,210	28,528	33.5	1.27	40.6	29,785
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.58	2.35	1.86	18.7	0.05	0.03	4.39	4.42	0.03	1.12	1.14	—	4,262	4,262	0.22	0.18	5.80	4,328
Area	3.61	3.59	0.03	3.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.86	8.86	< 0.005	< 0.005	—	8.90
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	231	231	0.04	0.01	—	234
Water	—	—	—	—	—	—	—	—	—	—	—	8.76	28.0	36.7	0.90	0.02	—	65.9
Waste	—	—	—	—	—	—	—	—	—	—	—	43.9	0.00	43.9	4.38	0.00	—	153
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.92	0.92

Vegetati	—	-0.01	-0.03	—	-0.01	-0.02	-0.02	-0.03	> -0.005	> -0.005	-0.01	—	140	140	—	—	—	140
Total	6.19	5.93	1.87	22.3	0.04	0.02	4.38	4.39	0.02	1.11	1.14	52.6	4,670	4,723	5.55	0.21	6.72	4,931

3. Construction Emissions Details

3.1. Clear & Grub (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	4.78	50.9	0.09	0.18	—	0.18	0.18	—	0.18	—	9,771	9,771	0.40	0.08	—	9,805
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.13	1.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	268	268	0.01	< 0.005	—	269
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.22	0.22	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.3	44.3	< 0.005	< 0.005	—	44.5
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.97	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	194	194	0.01	0.01	0.71	196
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	127	127	0.01	0.02	0.35	133
Hauling	0.22	0.04	3.40	1.32	0.02	0.04	0.74	0.78	0.04	0.20	0.24	—	2,771	2,771	0.15	0.43	6.43	2,911
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	5.10	5.10	< 0.005	< 0.005	0.01	5.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.48	3.48	< 0.005	< 0.005	< 0.005	3.63
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.9	75.9	< 0.005	0.01	0.08	79.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.86
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.58	0.58	< 0.005	< 0.005	< 0.005	0.60
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.01	13.2

3.2. Clear & Grub (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	4.78	50.9	0.09	0.18	—	0.18	0.18	—	0.18	—	9,771	9,771	0.40	0.08	—	9,805
Dust From Material Movement	—	—	—	—	—	—	15.3	15.3	—	7.88	7.88	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.13	1.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	268	268	0.01	< 0.005	—	269
Dust From Material Movement	—	—	—	—	—	—	0.42	0.42	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.02	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.3	44.3	< 0.005	< 0.005	—	44.5
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.97	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	194	194	0.01	0.01	0.71	196
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	127	127	0.01	0.02	0.35	133
Hauling	0.22	0.04	3.40	1.32	0.02	0.04	0.74	0.78	0.04	0.20	0.24	—	2,771	2,771	0.15	0.43	6.43	2,911
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	5.10	5.10	< 0.005	< 0.005	0.01	5.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.48	3.48	< 0.005	< 0.005	< 0.005	3.63
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.9	75.9	< 0.005	0.01	0.08	79.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.86
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.58	0.58	< 0.005	< 0.005	< 0.005	0.60
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	0.01	13.2

3.3. Remedial & Mass Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.86	3.86	20.1	210	0.38	0.77	—	0.77	0.77	—	0.77	—	40,965	40,965	1.66	0.33	—	41,105
Dust From Material Movement	—	—	—	—	—	—	27.1	27.1	—	11.2	11.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	4.79	50.1	0.09	0.18	—	0.18	0.18	—	0.18	—	9,764	9,764	0.40	0.08	—	9,798
Dust From Material Movement	—	—	—	—	—	—	6.45	6.45	—	2.67	2.67	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.17	0.87	9.15	0.02	0.03	—	0.03	0.03	—	0.03	—	1,617	1,617	0.07	0.01	—	1,622

Dust From Material Movement	—	—	—	—	—	—	1.18	1.18	—	0.49	0.49	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.23	3.62	0.00	0.00	0.68	0.68	0.00	0.16	0.16	—	719	719	0.03	0.02	2.63	730
Vendor	0.01	0.01	0.22	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.52	199
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.77	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	165	165	0.01	0.01	0.27	167
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.4	45.4	< 0.005	0.01	0.05	47.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.3	27.3	< 0.005	< 0.005	0.04	27.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.51	7.51	< 0.005	< 0.005	0.01	7.84
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Remedial & Mass Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.86	3.86	20.1	210	0.38	0.77	—	0.77	0.77	—	0.77	—	40,965	40,965	1.66	0.33	—	41,105
Dust From Material Movement	—	—	—	—	—	—	27.1	27.1	—	11.2	11.2	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.92	4.79	50.1	0.09	0.18	—	0.18	0.18	—	0.18	—	9,764	9,764	0.40	0.08	—	9,798
Dust From Material Movement	—	—	—	—	—	—	6.45	6.45	—	2.67	2.67	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.17	0.87	9.15	0.02	0.03	—	0.03	0.03	—	0.03	—	1,617	1,617	0.07	0.01	—	1,622
Dust From Material Movement	—	—	—	—	—	—	1.18	1.18	—	0.49	0.49	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.23	3.62	0.00	0.00	0.68	0.68	0.00	0.16	0.16	—	719	719	0.03	0.02	2.63	730
Vendor	0.01	0.01	0.22	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.52	199
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.77	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	165	165	0.01	0.01	0.27	167
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.4	45.4	< 0.005	0.01	0.05	47.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.3	27.3	< 0.005	< 0.005	0.04	27.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.51	7.51	< 0.005	< 0.005	0.01	7.84
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Finish Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.35	1.35	7.02	77.3	0.13	0.27	—	0.27	0.27	—	0.27	—	14,342	14,342	0.58	0.12	—	14,391
Dust From Material Movement	—	—	—	—	—	—	16.6	16.6	—	8.01	8.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	0.58	6.35	0.01	0.02	—	0.02	0.02	—	0.02	—	1,179	1,179	0.05	0.01	—	1,183
Dust From Material Movement	—	—	—	—	—	—	1.36	1.36	—	0.66	0.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	1.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	195	195	0.01	< 0.005	—	196
Dust From Material Movement	—	—	—	—	—	—	0.25	0.25	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.42	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	315	315	0.01	0.01	0.03	318
Vendor	0.01	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.01	199
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.2	26.2	< 0.005	< 0.005	0.04	26.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.6	15.6	< 0.005	< 0.005	0.02	16.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.34	4.34	< 0.005	< 0.005	0.01	4.40
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.59	2.59	< 0.005	< 0.005	< 0.005	2.70
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Finish Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.35	7.02	77.3	0.13	0.27	—	0.27	0.27	—	0.27	—	14,342	14,342	0.58	0.12	—	14,391

Dust From Material Movement	—	—	—	—	—	—	16.6	16.6	—	8.01	8.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	0.58	6.35	0.01	0.02	—	0.02	0.02	—	0.02	—	1,179	1,179	0.05	0.01	—	1,183
Dust From Material Movement	—	—	—	—	—	—	1.36	1.36	—	0.66	0.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	1.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	195	195	0.01	< 0.005	—	196
Dust From Material Movement	—	—	—	—	—	—	0.25	0.25	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.12	1.42	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	315	315	0.01	0.01	0.03	318

Vendor	0.01	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.01	199
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.2	26.2	< 0.005	< 0.005	0.04	26.6
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.6	15.6	< 0.005	< 0.005	0.02	16.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.34	4.34	< 0.005	< 0.005	0.01	4.40
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.59	2.59	< 0.005	< 0.005	< 0.005	2.70
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Pump Station 4 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	1.41	3.74	< 0.005	0.01	—	0.01	0.01	—	0.01	—	535	535	0.02	< 0.005	—	537
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.06	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.0	22.0	< 0.005	< 0.005	—	22.1
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.64	3.64	< 0.005	< 0.005	—	3.65
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.29	4.29	< 0.005	< 0.005	0.01	4.34

Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.13	5.13	< 0.005	< 0.005	0.01	5.36
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Pump Station 4 (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	1.41	3.74	< 0.005	0.01	—	0.01	0.01	—	0.01	—	535	535	0.02	< 0.005	—	537
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.06	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.0	22.0	< 0.005	< 0.005	—	22.1

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.64	3.64	< 0.005	< 0.005	—	3.65
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.29	4.29	< 0.005	< 0.005	0.01	4.34
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.13	5.13	< 0.005	< 0.005	0.01	5.36
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.85	0.85	< 0.005	< 0.005	< 0.005	0.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction Lots 7, 8, and 9 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	0.69	8.30	0.01	0.03	—	0.03	0.03	—	0.03	—	1,400	1,400	0.06	0.01	—	1,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.02	0.02	0.13	1.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	232	232	0.01	< 0.005	—	233
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.52	0.54	9.04	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,897	1,897	0.08	0.07	6.42	1,925
Vendor	0.07	0.03	1.03	0.50	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	935	935	0.04	0.13	2.53	979
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.51	0.61	7.72	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,798	1,798	0.08	0.07	0.17	1,820
Vendor	0.07	0.03	1.08	0.51	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	936	936	0.04	0.13	0.07	977
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.28	3.37	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	761	761	0.03	0.03	1.16	771
Vendor	0.03	0.01	0.45	0.21	< 0.005	0.01	0.11	0.11	< 0.005	0.03	0.03	—	390	390	0.02	0.06	0.45	407
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.61	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	126	126	0.01	< 0.005	0.19	128
Vendor	0.01	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.6	64.6	< 0.005	0.01	0.08	67.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction Lots 7, 8, and 9 (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	0.69	8.30	0.01	0.03	—	0.03	0.03	—	0.03	—	1,400	1,400	0.06	0.01	—	1,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	1.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	232	232	0.01	< 0.005	—	233
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.58	0.52	0.54	9.04	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,897	1,897	0.08	0.07	6.42	1,925
Vendor	0.07	0.03	1.03	0.50	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	935	935	0.04	0.13	2.53	979
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.51	0.61	7.72	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,798	1,798	0.08	0.07	0.17	1,820
Vendor	0.07	0.03	1.08	0.51	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	936	936	0.04	0.13	0.07	977
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.28	3.37	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	761	761	0.03	0.03	1.16	771
Vendor	0.03	0.01	0.45	0.21	< 0.005	0.01	0.11	0.11	< 0.005	0.03	0.03	—	390	390	0.02	0.06	0.45	407
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.61	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	126	126	0.01	< 0.005	0.19	128
Vendor	0.01	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.6	64.6	< 0.005	0.01	0.08	67.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction Lots 7, 8, and 9 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,399	2,399	0.10	0.02	—	2,407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	397	397	0.02	< 0.005	—	399
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.50	0.48	8.41	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,861	1,861	0.08	0.07	5.80	1,888
Vendor	0.06	0.03	0.99	0.47	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	917	917	0.04	0.13	2.39	958
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.56	0.49	0.60	7.13	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,764	1,764	0.02	0.07	0.15	1,784
Vendor	0.06	0.03	1.03	0.48	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	918	918	0.04	0.13	0.06	957
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.43	5.35	0.00	0.00	1.29	1.29	0.00	0.30	0.30	—	1,278	1,278	0.02	0.05	1.78	1,295
Vendor	0.04	0.02	0.74	0.34	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	655	655	0.03	0.09	0.74	684
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.98	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	212	212	< 0.005	0.01	0.30	214
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	108	108	< 0.005	0.01	0.12	113
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction Lots 7, 8, and 9 (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,399	2,399	0.10	0.02	—	2,407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	397	397	0.02	< 0.005	—	399
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.50	0.48	8.41	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,861	1,861	0.08	0.07	5.80	1,888
Vendor	0.06	0.03	0.99	0.47	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	917	917	0.04	0.13	2.39	958
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.49	0.60	7.13	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,764	1,764	0.02	0.07	0.15	1,784
Vendor	0.06	0.03	1.03	0.48	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	918	918	0.04	0.13	0.06	957
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.43	5.35	0.00	0.00	1.29	1.29	0.00	0.30	0.30	—	1,278	1,278	0.02	0.05	1.78	1,295
Vendor	0.04	0.02	0.74	0.34	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	655	655	0.03	0.09	0.74	684
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.98	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	212	212	< 0.005	0.01	0.30	214
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	108	108	< 0.005	0.01	0.12	113
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction Lots 7, 8, and 9 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	12.2	0.02	0.04	—	0.04	0.04	—	0.04	—	2,058	2,058	0.08	0.02	—	2,065
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.18	2.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.48	0.48	7.90	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,827	1,827	0.02	0.07	5.21	1,853
Vendor	0.06	0.02	0.94	0.45	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	896	896	0.03	0.13	2.27	936
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.48	0.54	6.71	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,732	1,732	0.02	0.07	0.13	1,753
Vendor	0.06	0.02	0.98	0.46	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	896	896	0.03	0.13	0.06	935
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.33	4.30	0.00	0.00	1.11	1.11	0.00	0.26	0.26	—	1,077	1,077	0.01	0.04	1.38	1,091
Vendor	0.04	0.01	0.61	0.28	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.05	—	549	549	0.02	0.08	0.60	573
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.05	0.06	0.78	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	178	178	< 0.005	0.01	0.23	181
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	90.9	90.9	< 0.005	0.01	0.10	94.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction Lots 7, 8, and 9 (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	12.2	0.02	0.04	—	0.04	0.04	—	0.04	—	2,058	2,058	0.08	0.02	—	2,065
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.18	2.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.48	0.48	7.90	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,827	1,827	0.02	0.07	5.21	1,853
Vendor	0.06	0.02	0.94	0.45	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	896	896	0.03	0.13	2.27	936
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.48	0.54	6.71	0.00	0.00	1.83	1.83	0.00	0.43	0.43	—	1,732	1,732	0.02	0.07	0.13	1,753
Vendor	0.06	0.02	0.98	0.46	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	896	896	0.03	0.13	0.06	935
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.33	4.30	0.00	0.00	1.11	1.11	0.00	0.26	0.26	—	1,077	1,077	0.01	0.04	1.38	1,091
Vendor	0.04	0.01	0.61	0.28	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.05	—	549	549	0.02	0.08	0.60	573
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.78	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	178	178	< 0.005	0.01	0.23	181
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	90.9	90.9	< 0.005	0.01	0.10	94.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction Lot 6 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.32	3.86	0.01	0.01	—	0.01	0.01	—	0.01	—	651	651	0.03	0.01	—	653
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.43	0.45	7.49	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,572	1,572	0.07	0.05	5.32	1,595
Vendor	0.06	0.02	0.89	0.43	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	811	811	0.03	0.12	2.19	848
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.42	0.51	6.39	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,490	1,490	0.07	0.05	0.14	1,508
Vendor	0.06	0.02	0.93	0.44	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	811	811	0.03	0.12	0.06	846
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.11	1.30	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	293	293	0.01	0.01	0.45	297
Vendor	0.01	< 0.005	0.18	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	157	157	0.01	0.02	0.18	164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.5	48.5	< 0.005	< 0.005	0.07	49.1
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.0	26.0	< 0.005	< 0.005	0.03	27.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction Lot 6 (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.32	3.86	0.01	0.01	—	0.01	0.01	—	0.01	—	651	651	0.03	0.01	—	653
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.70	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.43	0.45	7.49	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,572	1,572	0.07	0.05	5.32	1,595
Vendor	0.06	0.02	0.89	0.43	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	811	811	0.03	0.12	2.19	848
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.42	0.51	6.39	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,490	1,490	0.07	0.05	0.14	1,508
Vendor	0.06	0.02	0.93	0.44	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	811	811	0.03	0.12	0.06	846
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.11	1.30	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	293	293	0.01	0.01	0.45	297
Vendor	0.01	< 0.005	0.18	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	157	157	0.01	0.02	0.18	164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.5	48.5	< 0.005	< 0.005	0.07	49.1
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.0	26.0	< 0.005	< 0.005	0.03	27.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction Lot 6 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.23	0.23	1.18	14.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,399	2,399	0.10	0.02	—	2,407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	397	397	0.02	< 0.005	—	399
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.41	0.40	6.97	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,542	1,542	0.07	0.05	4.80	1,564
Vendor	0.05	0.02	0.86	0.41	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	795	795	0.03	0.11	2.07	831
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.40	0.50	5.90	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,461	1,461	0.02	0.05	0.12	1,479
Vendor	0.05	0.02	0.89	0.42	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	795	795	0.03	0.11	0.05	829
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.33	0.29	0.36	4.43	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,059	1,059	0.01	0.04	1.48	1,073
Vendor	0.04	0.02	0.64	0.29	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.05	—	568	568	0.02	0.08	0.64	593
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.81	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	175	175	< 0.005	0.01	0.24	178
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94.0	94.0	< 0.005	0.01	0.11	98.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction Lot 6 (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.23	0.23	1.18	14.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,399	2,399	0.10	0.02	—	2,407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	397	397	0.02	< 0.005	—	399
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.47	0.41	0.40	6.97	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,542	1,542	0.07	0.05	4.80	1,564
Vendor	0.05	0.02	0.86	0.41	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	795	795	0.03	0.11	2.07	831
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.40	0.50	5.90	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,461	1,461	0.02	0.05	0.12	1,479
Vendor	0.05	0.02	0.89	0.42	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	795	795	0.03	0.11	0.05	829
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.36	4.43	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,059	1,059	0.01	0.04	1.48	1,073
Vendor	0.04	0.02	0.64	0.29	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.05	—	568	568	0.02	0.08	0.64	593
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.81	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	175	175	< 0.005	0.01	0.24	178
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94.0	94.0	< 0.005	0.01	0.11	98.1

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction Lot 6 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.3	0.02	0.05	—	0.05	0.05	—	0.05	—	2,406	2,406	0.10	0.02	—	2,414
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	398	398	0.02	< 0.005	—	400
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.40	0.40	6.54	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,514	1,514	0.02	0.05	4.32	1,535
Vendor	0.05	0.02	0.82	0.39	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	776	776	0.03	0.11	1.96	812
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.39	0.45	5.56	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,435	1,435	0.02	0.05	0.11	1,452
Vendor	0.05	0.02	0.85	0.40	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	777	777	0.03	0.11	0.05	810
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.28	0.32	4.17	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,043	1,043	0.01	0.04	1.34	1,057
Vendor	0.04	0.01	0.61	0.28	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.05	—	556	556	0.02	0.08	0.60	581
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	173	173	< 0.005	0.01	0.22	175
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	92.1	92.1	< 0.005	0.01	0.10	96.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction Lot 6 (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.3	0.02	0.05	—	0.05	0.05	—	0.05	—	2,406	2,406	0.10	0.02	—	2,414
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	398	398	0.02	< 0.005	—	400
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.40	0.40	6.54	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,514	1,514	0.02	0.05	4.32	1,535
Vendor	0.05	0.02	0.82	0.39	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	776	776	0.03	0.11	1.96	812
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.39	0.45	5.56	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,435	1,435	0.02	0.05	0.11	1,452
Vendor	0.05	0.02	0.85	0.40	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	777	777	0.03	0.11	0.05	810
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.28	0.32	4.17	0.00	0.00	1.07	1.07	0.00	0.25	0.25	—	1,043	1,043	0.01	0.04	1.34	1,057
Vendor	0.04	0.01	0.61	0.28	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.05	—	556	556	0.02	0.08	0.60	581
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.76	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	173	173	< 0.005	0.01	0.22	175
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	92.1	92.1	< 0.005	0.01	0.10	96.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction Lot 6 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	0.81	9.71	0.02	0.03	—	0.03	0.03	—	0.03	—	1,636	1,636	0.07	0.01	—	1,642
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.15	1.77	< 0.005	0.01	—	0.01	0.01	—	0.01	—	271	271	0.01	< 0.005	—	272
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.38	0.35	6.12	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,488	1,488	0.02	0.05	3.86	1,509
Vendor	0.05	0.02	0.78	0.37	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	756	756	0.03	0.11	1.85	791
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.38	0.40	5.18	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,411	1,411	0.02	0.05	0.10	1,428
Vendor	0.05	0.02	0.81	0.38	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	756	756	0.03	0.11	0.05	790
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.19	2.65	0.00	0.00	0.73	0.73	0.00	0.17	0.17	—	698	698	0.01	0.03	0.81	707
Vendor	0.02	0.01	0.40	0.18	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	368	368	0.01	0.05	0.39	385
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.48	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	0.13	117
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	61.0	61.0	< 0.005	0.01	0.06	63.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction Lot 6 (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.15	0.81	9.71	0.02	0.03	—	0.03	0.03	—	0.03	—	1,636	1,636	0.07	0.01	—	1,642
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.03	0.03	0.15	1.77	< 0.005	0.01	—	0.01	0.01	—	0.01	—	271	271	0.01	< 0.005	—	272
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.38	0.35	6.12	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,488	1,488	0.02	0.05	3.86	1,509
Vendor	0.05	0.02	0.78	0.37	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	756	756	0.03	0.11	1.85	791
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.38	0.40	5.18	0.00	0.00	1.52	1.52	0.00	0.36	0.36	—	1,411	1,411	0.02	0.05	0.10	1,428
Vendor	0.05	0.02	0.81	0.38	0.01	0.01	0.22	0.23	0.01	0.06	0.07	—	756	756	0.03	0.11	0.05	790
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.19	0.18	0.19	2.65	0.00	0.00	0.73	0.73	0.00	0.17	0.17	—	698	698	0.01	0.03	0.81	707
Vendor	0.02	0.01	0.40	0.18	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	368	368	0.01	0.05	0.39	385
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.48	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	0.13	117
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	61.0	61.0	< 0.005	0.01	0.06	63.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction Lot 5 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.26	3.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	519	519	0.02	< 0.005	—	521
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.01	0.01	0.05	0.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	86.0	86.0	< 0.005	< 0.005	—	86.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.36	0.43	5.40	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,259	1,259	0.06	0.05	0.12	1,274
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	624	624	0.03	0.09	0.04	651
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.87	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	197	197	0.01	0.01	0.30	200
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.4	96.4	< 0.005	0.01	0.11	101
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.7	32.7	< 0.005	< 0.005	0.05	33.1
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	0.02	16.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction Lot 5 (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.26	3.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	519	519	0.02	< 0.005	—	521
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.56	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	86.0	86.0	< 0.005	< 0.005	—	86.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.36	0.43	5.40	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,259	1,259	0.06	0.05	0.12	1,274
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	624	624	0.03	0.09	0.04	651
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.07	0.87	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	197	197	0.01	0.01	0.30	200
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.4	96.4	< 0.005	0.01	0.11	101
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.7	32.7	< 0.005	< 0.005	0.05	33.1
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	0.02	16.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Building Construction Lot 5 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.23	0.23	1.18	14.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,399	2,399	0.10	0.02	—	2,407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	397	397	0.02	< 0.005	—	399
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.35	0.34	5.89	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,302	1,302	0.06	0.05	4.06	1,322
Vendor	0.04	0.02	0.66	0.31	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	611	611	0.03	0.08	1.59	639
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.34	0.42	4.99	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,235	1,235	0.02	0.05	0.11	1,249
Vendor	0.04	0.02	0.68	0.32	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	612	612	0.03	0.08	0.04	638
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.30	3.74	0.00	0.00	0.91	0.91	0.00	0.21	0.21	—	895	895	0.01	0.03	1.25	906
Vendor	0.03	0.01	0.49	0.23	< 0.005	< 0.005	0.12	0.12	< 0.005	0.03	0.04	—	437	437	0.02	0.06	0.49	456
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.06	0.68	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.21	150
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	72.3	72.3	< 0.005	0.01	0.08	75.5

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Building Construction Lot 5 (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,399	2,399	0.10	0.02	—	2,407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	397	397	0.02	< 0.005	—	399
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.35	0.34	5.89	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,302	1,302	0.06	0.05	4.06	1,322
Vendor	0.04	0.02	0.66	0.31	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	611	611	0.03	0.08	1.59	639
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.34	0.42	4.99	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,235	1,235	0.02	0.05	0.11	1,249
Vendor	0.04	0.02	0.68	0.32	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	612	612	0.03	0.08	0.04	638
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.24	0.30	3.74	0.00	0.00	0.91	0.91	0.00	0.21	0.21	—	895	895	0.01	0.03	1.25	906
Vendor	0.03	0.01	0.49	0.23	< 0.005	< 0.005	0.12	0.12	< 0.005	0.03	0.04	—	437	437	0.02	0.06	0.49	456
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.06	0.68	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.21	150
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	72.3	72.3	< 0.005	0.01	0.08	75.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Building Construction Lot 5 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.3	0.02	0.05	—	0.05	0.05	—	0.05	—	2,406	2,406	0.10	0.02	—	2,414
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	398	398	0.02	< 0.005	—	400
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.33	0.33	5.53	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,279	1,279	0.01	0.05	3.65	1,297
Vendor	0.04	0.01	0.63	0.30	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	597	597	0.02	0.08	1.51	624
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.33	0.38	4.70	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,213	1,213	0.02	0.05	0.09	1,227
Vendor	0.04	0.01	0.66	0.31	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	598	598	0.02	0.08	0.04	623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.27	3.52	0.00	0.00	0.91	0.91	0.00	0.21	0.21	—	881	881	0.01	0.03	1.13	893
Vendor	0.03	0.01	0.47	0.22	< 0.005	< 0.005	0.12	0.12	< 0.005	0.03	0.04	—	428	428	0.02	0.06	0.47	447
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.64	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	0.01	0.19	148
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	70.8	70.8	< 0.005	0.01	0.08	74.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Building Construction Lot 5 (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.3	0.02	0.05	—	0.05	0.05	—	0.05	—	2,406	2,406	0.10	0.02	—	2,414
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	398	398	0.02	< 0.005	—	400
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.33	0.33	5.53	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,279	1,279	0.01	0.05	3.65	1,297
Vendor	0.04	0.01	0.63	0.30	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	597	597	0.02	0.08	1.51	624
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.33	0.38	4.70	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,213	1,213	0.02	0.05	0.09	1,227
Vendor	0.04	0.01	0.66	0.31	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	598	598	0.02	0.08	0.04	623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.27	0.24	0.27	3.52	0.00	0.00	0.91	0.91	0.00	0.21	0.21	—	881	881	0.01	0.03	1.13	893
Vendor	0.03	0.01	0.47	0.22	< 0.005	< 0.005	0.12	0.12	< 0.005	0.03	0.04	—	428	428	0.02	0.06	0.47	447
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.64	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	0.01	0.19	148
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	70.8	70.8	< 0.005	0.01	0.08	74.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Building Construction Lot 5 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.16	0.16	0.82	9.86	0.02	0.03	—	0.03	0.03	—	0.03	—	1,663	1,663	0.07	0.01	—	1,668
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.03	0.03	0.15	1.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	275	275	0.01	< 0.005	—	276
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.32	0.29	5.17	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,257	1,257	0.01	0.05	3.26	1,275
Vendor	0.04	0.01	0.60	0.29	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	581	581	0.02	0.08	1.42	608
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.32	0.34	4.38	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,192	1,192	0.02	0.05	0.08	1,206
Vendor	0.04	0.01	0.62	0.29	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	582	582	0.02	0.08	0.04	608
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.16	0.16	0.17	2.27	0.00	0.00	0.63	0.63	0.00	0.15	0.15	—	599	599	0.01	0.02	0.70	607
Vendor	0.02	0.01	0.31	0.14	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	288	288	0.01	0.04	0.30	301
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.41	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	99.2	99.2	< 0.005	< 0.005	0.12	100
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	47.7	47.7	< 0.005	0.01	0.05	49.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Building Construction Lot 5 (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.16	0.16	0.82	9.86	0.02	0.03	—	0.03	0.03	—	0.03	—	1,663	1,663	0.07	0.01	—	1,668
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.15	1.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	275	275	0.01	< 0.005	—	276
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.32	0.29	5.17	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,257	1,257	0.01	0.05	3.26	1,275
Vendor	0.04	0.01	0.60	0.29	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	581	581	0.02	0.08	1.42	608
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32	0.32	0.34	4.38	0.00	0.00	1.28	1.28	0.00	0.30	0.30	—	1,192	1,192	0.02	0.05	0.08	1,206
Vendor	0.04	0.01	0.62	0.29	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	582	582	0.02	0.08	0.04	608
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.17	2.27	0.00	0.00	0.63	0.63	0.00	0.15	0.15	—	599	599	0.01	0.02	0.70	607
Vendor	0.02	0.01	0.31	0.14	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	288	288	0.01	0.04	0.30	301
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.41	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	99.2	99.2	< 0.005	< 0.005	0.12	100
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	47.7	47.7	< 0.005	0.01	0.05	49.8

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Building Construction Lot 4 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.19	2.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	381	381	0.02	< 0.005	—	383
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.1	63.1	< 0.005	< 0.005	—	63.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.53	0.64	8.05	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,875	1,875	0.09	0.07	0.17	1,898
Vendor	0.08	0.03	1.22	0.58	0.01	0.02	0.29	0.31	0.01	0.08	0.09	—	1,061	1,061	0.04	0.15	0.07	1,107
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.96	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	216	216	0.01	0.01	0.33	219
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	120	120	0.01	0.02	0.14	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.8	35.8	< 0.005	< 0.005	0.05	36.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.32. Building Construction Lot 4 (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.19	2.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	381	381	0.02	< 0.005	—	383
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.1	63.1	< 0.005	< 0.005	—	63.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.53	0.64	8.05	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,875	1,875	0.09	0.07	0.17	1,898
Vendor	0.08	0.03	1.22	0.58	0.01	0.02	0.29	0.31	0.01	0.08	0.09	—	1,061	1,061	0.04	0.15	0.07	1,107
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.96	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	216	216	0.01	0.01	0.33	219
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	120	120	0.01	0.02	0.14	126

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.8	35.8	< 0.005	< 0.005	0.05	36.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.02	20.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Building Construction Lot 4 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,399	2,399	0.10	0.02	—	2,407

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	397	397	0.02	< 0.005	—	399
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.52	0.50	8.77	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,940	1,940	0.08	0.07	6.05	1,969
Vendor	0.07	0.03	1.12	0.53	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,040	1,040	0.04	0.14	2.71	1,086
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.51	0.63	7.43	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,839	1,839	0.03	0.07	0.16	1,861
Vendor	0.07	0.03	1.16	0.55	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,040	1,040	0.04	0.14	0.07	1,084
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.36	0.45	5.58	0.00	0.00	1.35	1.35	0.00	0.32	0.32	—	1,333	1,333	0.02	0.05	1.86	1,350
Vendor	0.05	0.02	0.84	0.39	0.01	0.01	0.21	0.21	0.01	0.06	0.06	—	743	743	0.03	0.10	0.84	775
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.02	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	221	221	< 0.005	0.01	0.31	224
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	123	123	0.01	0.02	0.14	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.34. Building Construction Lot 4 (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,399	2,399	0.10	0.02	—	2,407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	397	397	0.02	< 0.005	—	399

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.52	0.50	8.77	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,940	1,940	0.08	0.07	6.05	1,969
Vendor	0.07	0.03	1.12	0.53	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,040	1,040	0.04	0.14	2.71	1,086
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.51	0.63	7.43	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,839	1,839	0.03	0.07	0.16	1,861
Vendor	0.07	0.03	1.16	0.55	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,040	1,040	0.04	0.14	0.07	1,084
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.36	0.45	5.58	0.00	0.00	1.35	1.35	0.00	0.32	0.32	—	1,333	1,333	0.02	0.05	1.86	1,350
Vendor	0.05	0.02	0.84	0.39	0.01	0.01	0.21	0.21	0.01	0.06	0.06	—	743	743	0.03	0.10	0.84	775
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.02	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	221	221	< 0.005	0.01	0.31	224
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	123	123	0.01	0.02	0.14	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Building Construction Lot 4 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.3	0.02	0.05	—	0.05	0.05	—	0.05	—	2,406	2,406	0.10	0.02	—	2,414
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	398	398	0.02	< 0.005	—	400
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.57	0.50	0.50	8.24	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,906	1,906	0.02	0.07	5.43	1,932
Vendor	0.07	0.02	1.07	0.51	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,015	1,015	0.04	0.14	2.57	1,061
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.50	0.57	7.00	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,807	1,807	0.02	0.07	0.14	1,828
Vendor	0.07	0.02	1.11	0.52	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,016	1,016	0.04	0.14	0.07	1,060
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.40	5.24	0.00	0.00	1.35	1.35	0.00	0.32	0.32	—	1,313	1,313	0.02	0.05	1.68	1,330
Vendor	0.05	0.02	0.80	0.37	0.01	0.01	0.21	0.21	0.01	0.06	0.06	—	727	727	0.03	0.10	0.79	759
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.96	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	217	217	< 0.005	0.01	0.28	220
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.13	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.36. Building Construction Lot 4 (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.3	0.02	0.05	—	0.05	0.05	—	0.05	—	2,406	2,406	0.10	0.02	—	2,414
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	398	398	0.02	< 0.005	—	400
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.50	0.50	8.24	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,906	1,906	0.02	0.07	5.43	1,932
Vendor	0.07	0.02	1.07	0.51	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,015	1,015	0.04	0.14	2.57	1,061
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.56	0.50	0.57	7.00	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,807	1,807	0.02	0.07	0.14	1,828
Vendor	0.07	0.02	1.11	0.52	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,016	1,016	0.04	0.14	0.07	1,060
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.35	0.40	5.24	0.00	0.00	1.35	1.35	0.00	0.32	0.32	—	1,313	1,313	0.02	0.05	1.68	1,330
Vendor	0.05	0.02	0.80	0.37	0.01	0.01	0.21	0.21	0.01	0.06	0.06	—	727	727	0.03	0.10	0.79	759
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.96	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	217	217	< 0.005	0.01	0.28	220
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.13	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Building Construction Lot 4 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	1.07	12.9	0.02	0.04	—	0.04	0.04	—	0.04	—	2,175	2,175	0.09	0.02	—	2,183
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.20	2.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	360	360	0.01	< 0.005	—	361
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.48	0.43	7.70	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,873	1,873	0.02	0.07	4.86	1,899
Vendor	0.07	0.02	1.02	0.49	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	988	988	0.04	0.14	2.42	1,034
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.47	0.50	6.52	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,776	1,776	0.02	0.07	0.13	1,797
Vendor	0.07	0.02	1.06	0.50	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	989	989	0.04	0.14	0.06	1,033
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.30	0.32	4.43	0.00	0.00	1.22	1.22	0.00	0.29	0.29	—	1,167	1,167	0.01	0.04	1.36	1,182
Vendor	0.04	0.01	0.69	0.32	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.06	—	640	640	0.02	0.09	0.68	669
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.81	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	193	193	< 0.005	0.01	0.23	196
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.11	111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.38. Building Construction Lot 4 (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	1.07	12.9	0.02	0.04	—	0.04	0.04	—	0.04	—	2,175	2,175	0.09	0.02	—	2,183
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.20	2.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	360	360	0.01	< 0.005	—	361
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.48	0.43	7.70	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,873	1,873	0.02	0.07	4.86	1,899
Vendor	0.07	0.02	1.02	0.49	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	988	988	0.04	0.14	2.42	1,034
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.47	0.50	6.52	0.00	0.00	1.91	1.91	0.00	0.45	0.45	—	1,776	1,776	0.02	0.07	0.13	1,797
Vendor	0.07	0.02	1.06	0.50	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	989	989	0.04	0.14	0.06	1,033
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.30	0.32	4.43	0.00	0.00	1.22	1.22	0.00	0.29	0.29	—	1,167	1,167	0.01	0.04	1.36	1,182
Vendor	0.04	0.01	0.69	0.32	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.06	—	640	640	0.02	0.09	0.68	669
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.06	0.81	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	193	193	< 0.005	0.01	0.23	196
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.11	111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Building Construction Lots 2&3 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	1.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	243	243	0.01	< 0.005	—	244
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.3	40.3	< 0.005	< 0.005	—	40.4

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.54	0.64	8.16	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,901	1,901	0.09	0.07	0.18	1,924
Vendor	0.07	0.03	1.08	0.51	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	936	936	0.04	0.13	0.07	977
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.62	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	140	140	0.01	0.01	0.21	142
Vendor	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	67.7	67.7	< 0.005	0.01	0.08	70.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.1	23.1	< 0.005	< 0.005	0.04	23.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.01	11.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.40. Building Construction Lots 2&3 (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.02	0.02	0.12	1.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	243	243	0.01	< 0.005	—	244
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.3	40.3	< 0.005	< 0.005	—	40.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.54	0.64	8.16	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,901	1,901	0.09	0.07	0.18	1,924
Vendor	0.07	0.03	1.08	0.51	0.01	0.01	0.26	0.27	0.01	0.07	0.08	—	936	936	0.04	0.13	0.07	977
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.62	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	140	140	0.01	0.01	0.21	142
Vendor	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	67.7	67.7	< 0.005	0.01	0.08	70.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	23.1	23.1	< 0.005	< 0.005	0.04	23.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.01	11.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Building Construction Lots 2&3 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,399	2,399	0.10	0.02	—	2,407

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	397	397	0.02	< 0.005	—	399
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.53	0.51	8.89	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,967	1,967	0.08	0.07	6.13	1,996
Vendor	0.06	0.03	0.99	0.47	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	917	917	0.04	0.13	2.39	958
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.52	0.64	7.53	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,865	1,865	0.03	0.07	0.16	1,886
Vendor	0.06	0.03	1.03	0.48	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	918	918	0.04	0.13	0.06	957
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.37	0.46	5.65	0.00	0.00	1.37	1.37	0.00	0.32	0.32	—	1,352	1,352	0.02	0.05	1.89	1,369
Vendor	0.04	0.02	0.74	0.34	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	655	655	0.03	0.09	0.74	684
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.03	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	224	224	< 0.005	0.01	0.31	227
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	108	108	< 0.005	0.01	0.12	113
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.42. Building Construction Lots 2&3 (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,399	2,399	0.10	0.02	—	2,407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	397	397	0.02	< 0.005	—	399

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.53	0.51	8.89	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,967	1,967	0.08	0.07	6.13	1,996
Vendor	0.06	0.03	0.99	0.47	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	917	917	0.04	0.13	2.39	958
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.52	0.64	7.53	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,865	1,865	0.03	0.07	0.16	1,886
Vendor	0.06	0.03	1.03	0.48	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	918	918	0.04	0.13	0.06	957
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.37	0.46	5.65	0.00	0.00	1.37	1.37	0.00	0.32	0.32	—	1,352	1,352	0.02	0.05	1.89	1,369
Vendor	0.04	0.02	0.74	0.34	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	655	655	0.03	0.09	0.74	684
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.03	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	224	224	< 0.005	0.01	0.31	227
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	108	108	< 0.005	0.01	0.12	113
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Building Construction Lots 2&3 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.3	0.02	0.05	—	0.05	0.05	—	0.05	—	2,406	2,406	0.10	0.02	—	2,414
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	398	398	0.02	< 0.005	—	400
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.58	0.51	0.50	8.35	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,932	1,932	0.02	0.07	5.51	1,959
Vendor	0.06	0.02	0.94	0.45	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	896	896	0.03	0.13	2.27	936
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.50	0.57	7.10	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,831	1,831	0.02	0.07	0.14	1,853
Vendor	0.06	0.02	0.98	0.46	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	896	896	0.03	0.13	0.06	935
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.36	0.41	5.32	0.00	0.00	1.37	1.37	0.00	0.32	0.32	—	1,331	1,331	0.02	0.05	1.71	1,348
Vendor	0.04	0.01	0.71	0.32	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	642	642	0.02	0.09	0.70	670
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	0.97	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	220	220	< 0.005	0.01	0.28	223
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.12	111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.44. Building Construction Lots 2&3 (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,371
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.18	14.3	0.02	0.05	—	0.05	0.05	—	0.05	—	2,406	2,406	0.10	0.02	—	2,414
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.22	2.60	< 0.005	0.01	—	0.01	0.01	—	0.01	—	398	398	0.02	< 0.005	—	400
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.51	0.50	8.35	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,932	1,932	0.02	0.07	5.51	1,959
Vendor	0.06	0.02	0.94	0.45	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	896	896	0.03	0.13	2.27	936
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.57	0.50	0.57	7.10	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,831	1,831	0.02	0.07	0.14	1,853
Vendor	0.06	0.02	0.98	0.46	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	896	896	0.03	0.13	0.06	935
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.36	0.41	5.32	0.00	0.00	1.37	1.37	0.00	0.32	0.32	—	1,331	1,331	0.02	0.05	1.71	1,348
Vendor	0.04	0.01	0.71	0.32	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	642	642	0.02	0.09	0.70	670
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	0.97	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	220	220	< 0.005	0.01	0.28	223
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.12	111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.45. Building Construction Lots 2&3 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	0.84	10.1	0.02	0.03	—	0.03	0.03	—	0.03	—	1,709	1,709	0.07	0.01	—	1,715
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.15	1.85	< 0.005	0.01	—	0.01	0.01	—	0.01	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.49	0.44	7.81	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,899	1,899	0.02	0.07	4.93	1,925
Vendor	0.06	0.02	0.90	0.43	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	872	872	0.03	0.13	2.13	913
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.48	0.51	6.61	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,800	1,800	0.02	0.07	0.13	1,822
Vendor	0.06	0.02	0.94	0.44	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	873	873	0.03	0.13	0.06	911
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.24	0.26	3.53	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	930	930	0.01	0.04	1.08	942
Vendor	0.03	0.01	0.48	0.22	< 0.005	< 0.005	0.13	0.13	< 0.005	0.04	0.04	—	444	444	0.02	0.06	0.47	464
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.64	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.18	156
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.5	73.5	< 0.005	0.01	0.08	76.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.46. Building Construction Lots 2&3 (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,358	3,358	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	0.84	10.1	0.02	0.03	—	0.03	0.03	—	0.03	—	1,709	1,709	0.07	0.01	—	1,715
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.15	1.85	< 0.005	0.01	—	0.01	0.01	—	0.01	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.49	0.44	7.81	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,899	1,899	0.02	0.07	4.93	1,925
Vendor	0.06	0.02	0.90	0.43	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	872	872	0.03	0.13	2.13	913
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.48	0.51	6.61	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,800	1,800	0.02	0.07	0.13	1,822
Vendor	0.06	0.02	0.94	0.44	0.01	0.01	0.26	0.26	0.01	0.07	0.08	—	873	873	0.03	0.13	0.06	911
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.24	0.26	3.53	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	930	930	0.01	0.04	1.08	942
Vendor	0.03	0.01	0.48	0.22	< 0.005	< 0.005	0.13	0.13	< 0.005	0.04	0.04	—	444	444	0.02	0.06	0.47	464
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05	0.04	0.05	0.64	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.18	156
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.5	73.5	< 0.005	0.01	0.08	76.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.47. Building Construction Lots 10 and 11 (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	158	158	0.01	< 0.005	—	158
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.1	26.1	< 0.005	< 0.005	—	26.2

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.22	2.76	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	642	642	0.03	0.02	0.06	650
Vendor	0.02	0.01	0.36	0.17	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	312	312	0.01	0.04	0.02	326
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.6	30.6	< 0.005	< 0.005	0.05	31.0
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.6	14.6	< 0.005	< 0.005	0.02	15.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.07	5.07	< 0.005	< 0.005	0.01	5.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.53
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.48. Building Construction Lots 10 and 11 (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.01	0.01	0.08	0.94	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	158	158	0.01	< 0.005	—	158
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.1	26.1	< 0.005	< 0.005	—	26.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.22	2.76	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	642	642	0.03	0.02	0.06	650
Vendor	0.02	0.01	0.36	0.17	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	312	312	0.01	0.04	0.02	326
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.6	30.6	< 0.005	< 0.005	0.05	31.0
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.6	14.6	< 0.005	< 0.005	0.02	15.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.07	5.07	< 0.005	< 0.005	0.01	5.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.53
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.49. Building Construction Lots 10 and 11 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	0.97	11.7	0.02	0.04	—	0.04	0.04	—	0.04	—	1,965	1,965	0.08	0.02	—	1,972

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.18	2.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	325	325	0.01	< 0.005	—	326
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.17	3.00	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	664	664	0.03	0.02	2.07	674
Vendor	0.02	0.01	0.33	0.16	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	306	306	0.01	0.04	0.80	319
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.17	0.22	2.54	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	630	630	0.01	0.02	0.05	637
Vendor	0.02	0.01	0.34	0.16	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	306	306	0.01	0.04	0.02	319
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.13	1.56	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	374	374	0.01	0.01	0.52	379
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	179	179	0.01	0.02	0.20	187
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	61.9	61.9	< 0.005	< 0.005	0.09	62.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.6	29.6	< 0.005	< 0.005	0.03	30.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.50. Building Construction Lots 10 and 11 (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.9	0.03	0.06	—	0.06	0.06	—	0.06	—	3,359	3,359	0.14	0.03	—	3,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	0.97	11.7	0.02	0.04	—	0.04	0.04	—	0.04	—	1,965	1,965	0.08	0.02	—	1,972
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.18	2.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	325	325	0.01	< 0.005	—	326

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.18	0.17	3.00	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	664	664	0.03	0.02	2.07	674
Vendor	0.02	0.01	0.33	0.16	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	306	306	0.01	0.04	0.80	319
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.17	0.22	2.54	0.00	0.00	0.65	0.65	0.00	0.15	0.15	—	630	630	0.01	0.02	0.05	637
Vendor	0.02	0.01	0.34	0.16	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	306	306	0.01	0.04	0.02	319
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.13	1.56	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	374	374	0.01	0.01	0.52	379
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	179	179	0.01	0.02	0.20	187
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	61.9	61.9	< 0.005	< 0.005	0.09	62.7
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.6	29.6	< 0.005	< 0.005	0.03	30.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.51. Balancing/Aggregate Base (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.55	4.96	30.0	0.05	0.10	—	0.10	0.10	—	0.10	—	5,414	5,414	0.22	0.04	—	5,432
Paving	1.38	1.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.27	1.64	< 0.005	0.01	—	0.01	0.01	—	0.01	—	297	297	0.01	< 0.005	—	298
Paving	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.30	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	49.1	49.1	< 0.005	< 0.005	—	49.3
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.03	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	217	217	0.01	0.01	0.73	220

Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.92
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.52. Balancing/Aggregate Base (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.55	4.96	30.0	0.05	0.10	—	0.10	0.10	—	0.10	—	5,414	5,414	0.22	0.04	—	5,432
Paving	1.38	1.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.27	1.64	< 0.005	0.01	—	0.01	0.01	—	0.01	—	297	297	0.01	< 0.005	—	298
Paving	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.30	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	49.1	49.1	< 0.005	< 0.005	—	49.3
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.03	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	217	217	0.01	0.01	0.73	220
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.92

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.53. Curb & Gutter (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.29	4.18	0.01	0.01	—	0.01	0.01	—	0.01	—	596	596	0.02	< 0.005	—	598
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.3	34.3	< 0.005	< 0.005	—	34.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.68	5.68	< 0.005	< 0.005	—	5.70
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.90	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	190	190	0.01	0.01	0.64	192
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.02	10.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.18	7.18	< 0.005	< 0.005	0.01	7.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.74	1.74	< 0.005	< 0.005	< 0.005	1.76
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.19	1.19	< 0.005	< 0.005	< 0.005	1.24
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.54. Curb & Gutter (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.29	4.18	0.01	0.01	—	0.01	0.01	—	0.01	—	596	596	0.02	< 0.005	—	598

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.3	34.3	< 0.005	< 0.005	—	34.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.68	5.68	< 0.005	< 0.005	—	5.70
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.90	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	190	190	0.01	0.01	0.64	192
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.02	10.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.18	7.18	< 0.005	< 0.005	0.01	7.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.74	1.74	< 0.005	< 0.005	< 0.005	1.76
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.19	1.19	< 0.005	< 0.005	< 0.005	1.24
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.55. Asphalt Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	0.85	12.1	0.02	0.03	—	0.03	0.03	—	0.03	—	1,733	1,733	0.07	0.01	—	1,739
Architectural Coatings	0.99	0.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.86	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	123	123	0.01	< 0.005	—	124
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.4	20.4	< 0.005	< 0.005	—	20.5
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.03	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	217	217	0.01	0.01	0.73	220
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.9	14.9	< 0.005	< 0.005	0.02	15.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.89	8.89	< 0.005	< 0.005	0.01	9.28
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.46	2.46	< 0.005	< 0.005	< 0.005	2.49
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.47	1.47	< 0.005	< 0.005	< 0.005	1.54
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.56. Asphalt Paving (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	0.85	12.1	0.02	0.03	—	0.03	0.03	—	0.03	—	1,733	1,733	0.07	0.01	—	1,739
Architectural Coatings	0.99	0.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.86	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	123	123	0.01	< 0.005	—	124
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.4	20.4	< 0.005	< 0.005	—	20.5
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.03	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	217	217	0.01	0.01	0.73	220
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.9	14.9	< 0.005	< 0.005	0.02	15.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.89	8.89	< 0.005	< 0.005	0.01	9.28
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.46	2.46	< 0.005	< 0.005	< 0.005	2.49
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.47	1.47	< 0.005	< 0.005	< 0.005	1.54
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.57. Concrete Flatwork (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	2.54	3.43	< 0.005	0.01	—	0.01	0.01	—	0.01	—	490	490	0.02	< 0.005	—	492
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.1	16.1	< 0.005	< 0.005	—	16.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.67	2.67	< 0.005	< 0.005	—	2.68
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.42	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	298	298	0.01	0.01	1.01	302
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.43	9.43	< 0.005	< 0.005	0.01	9.55
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.10	4.10	< 0.005	< 0.005	< 0.005	4.28
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.56	1.56	< 0.005	< 0.005	< 0.005	1.58
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.71
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.58. Concrete Flatwork (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	2.54	3.43	< 0.005	0.01	—	0.01	0.01	—	0.01	—	490	490	0.02	< 0.005	—	492
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.1	16.1	< 0.005	< 0.005	—	16.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.67	2.67	< 0.005	< 0.005	—	2.68
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.42	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	298	298	0.01	0.01	1.01	302
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.43	9.43	< 0.005	< 0.005	0.01	9.55
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.10	4.10	< 0.005	< 0.005	< 0.005	4.28
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.56	1.56	< 0.005	< 0.005	< 0.005	1.58
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.71
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.59. Architectural Coating Lots 10 and 11 (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.48	2.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.48	2.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Architectural Coating	0.65	0.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	106	106	< 0.005	< 0.005	0.33	108
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	0.01	0.02	0.32	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.41	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.01	102
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	0.01	0.02	0.01	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.6	26.6	< 0.005	< 0.005	0.04	27.0
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.8	31.8	< 0.005	< 0.005	0.04	33.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.41	4.41	< 0.005	< 0.005	0.01	4.46
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.27	5.27	< 0.005	< 0.005	0.01	5.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.60. Architectural Coating Lots 10 and 11 (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.48	2.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.48	2.48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.65	0.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	106	106	< 0.005	< 0.005	0.33	108
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	0.01	0.02	0.32	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.41	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	101	101	< 0.005	< 0.005	0.01	102
Vendor	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	0.01	0.02	0.01	128

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.6	26.6	< 0.005	< 0.005	0.04	27.0
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.8	31.8	< 0.005	< 0.005	0.04	33.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.41	4.41	< 0.005	< 0.005	0.01	4.46
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.27	5.27	< 0.005	< 0.005	0.01	5.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.61. Architectural Coating Lots 7, 8, and 9 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.95	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.95	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.39	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.25	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.24	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	287	287	< 0.005	0.01	0.82	291

Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.09	1.06	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	272	272	< 0.005	0.01	0.02	275
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.79	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	< 0.005	0.01	0.25	200
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	85.6	85.6	< 0.005	0.01	0.09	89.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.8	32.8	< 0.005	< 0.005	0.04	33.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.2	14.2	< 0.005	< 0.005	0.02	14.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.62. Architectural Coating Lots 7, 8, and 9 (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Architectural Coatings	1.95	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.95	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.39	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Architectural Coating	0.25	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.24	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	287	287	< 0.005	0.01	0.82	291
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.09	1.06	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	272	272	< 0.005	0.01	0.02	275
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.79	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	198	198	< 0.005	0.01	0.25	200
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	85.6	85.6	< 0.005	0.01	0.09	89.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.8	32.8	< 0.005	< 0.005	0.04	33.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.2	14.2	< 0.005	< 0.005	0.02	14.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.63. Architectural Coating Lots 7, 8, and 9 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.95	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.08	0.98	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	268	268	< 0.005	0.01	0.02	271
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.38	6.38	< 0.005	< 0.005	0.01	6.46
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.73	2.73	< 0.005	< 0.005	< 0.005	2.85
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.47
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.64. Architectural Coating Lots 7, 8, and 9 (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.95	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.08	0.98	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	268	268	< 0.005	0.01	0.02	271
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.38	6.38	< 0.005	< 0.005	0.01	6.46
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.73	2.73	< 0.005	< 0.005	< 0.005	2.85
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.45	0.45	< 0.005	< 0.005	< 0.005	0.47
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.65. Architectural Coating Lot 6 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.10	1.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.02	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	235	235	< 0.005	0.01	0.67	238
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.86	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	223	223	< 0.005	0.01	0.02	225
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.43	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	107	107	< 0.005	< 0.005	0.14	109
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	56.8	56.8	< 0.005	0.01	0.06	59.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	0.02	18.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.41	9.41	< 0.005	< 0.005	0.01	9.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.66. Architectural Coating Lot 6 (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.10	1.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Architect Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	1.02	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	235	235	< 0.005	0.01	0.67	238
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.86	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	223	223	< 0.005	0.01	0.02	225
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.43	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	107	107	< 0.005	< 0.005	0.14	109
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	56.8	56.8	< 0.005	0.01	0.06	59.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.8	17.8	< 0.005	< 0.005	0.02	18.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.41	9.41	< 0.005	< 0.005	0.01	9.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.67. Architectural Coating Lot 6 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.96	0.96	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.18	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.95	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	231	231	< 0.005	0.01	0.60	234
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.28	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.80	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	219	219	< 0.005	0.01	0.02	222
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.35	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	92.2	92.2	< 0.005	< 0.005	0.11	93.4
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.3	48.3	< 0.005	0.01	0.05	50.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.3	15.3	< 0.005	< 0.005	0.02	15.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.99	7.99	< 0.005	< 0.005	0.01	8.35
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.68. Architectural Coating Lot 6 (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Architect Coatings	0.96	0.96	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.18	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.95	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	231	231	< 0.005	0.01	0.60	234
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.28	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.80	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	219	219	< 0.005	0.01	0.02	222
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.35	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	92.2	92.2	< 0.005	< 0.005	0.11	93.4
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.3	48.3	< 0.005	0.01	0.05	50.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.3	15.3	< 0.005	< 0.005	0.02	15.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.99	7.99	< 0.005	< 0.005	0.01	8.35
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.69. Architectural Coating Lot 5 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.10	1.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.90	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	209	209	< 0.005	0.01	0.60	212
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.77	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	198	198	< 0.005	0.01	0.02	200
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.38	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	95.5	95.5	< 0.005	< 0.005	0.12	96.8
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	56.8	56.8	< 0.005	0.01	0.06	59.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.8	15.8	< 0.005	< 0.005	0.02	16.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.41	9.41	< 0.005	< 0.005	0.01	9.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.70. Architectural Coating Lot 5 (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.10	1.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.20	0.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.90	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	209	209	< 0.005	0.01	0.60	212

Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.77	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	198	198	< 0.005	0.01	0.02	200
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.38	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	95.5	95.5	< 0.005	< 0.005	0.12	96.8
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	56.8	56.8	< 0.005	0.01	0.06	59.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.8	15.8	< 0.005	< 0.005	0.02	16.0
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.41	9.41	< 0.005	< 0.005	0.01	9.82
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.71. Architectural Coating Lot 5 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.93	0.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Architectural Coating	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.84	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	205	205	< 0.005	0.01	0.53	208
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.28	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.71	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	195	195	< 0.005	0.01	0.01	197
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.2	79.2	< 0.005	< 0.005	0.09	80.3
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.7	46.7	< 0.005	0.01	0.05	48.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.1	13.1	< 0.005	< 0.005	0.02	13.3
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.73	7.73	< 0.005	< 0.005	0.01	8.07
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.72. Architectural Coating Lot 5 (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.32	2.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.93	0.93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.84	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	205	205	< 0.005	0.01	0.53	208
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.28	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.71	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	195	195	< 0.005	0.01	0.01	197
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.2	79.2	< 0.005	< 0.005	0.09	80.3
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.7	46.7	< 0.005	0.01	0.05	48.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.1	13.1	< 0.005	< 0.005	0.02	13.3

Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.73	7.73	< 0.005	< 0.005	0.01	8.07
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.73. Architectural Coating Lot 4 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.49	2.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.49	2.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.90	0.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.35	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	313	313	< 0.005	0.01	0.89	318
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.15	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	297	297	< 0.005	0.01	0.02	300
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.43	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.14	110

Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.0	43.0	< 0.005	0.01	0.05	44.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.0	18.0	< 0.005	< 0.005	0.02	18.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.12	7.12	< 0.005	< 0.005	0.01	7.44
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.74. Architectural Coating Lot 4 (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.49	2.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Architectural Coatings	2.49	2.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.90	0.90	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.35	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	313	313	< 0.005	0.01	0.89	318
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.15	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	297	297	< 0.005	0.01	0.02	300
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.43	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.14	110
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	43.0	43.0	< 0.005	0.01	0.05	44.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.0	18.0	< 0.005	< 0.005	0.02	18.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.12	7.12	< 0.005	< 0.005	0.01	7.44
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.75. Architectural Coating Lot 4 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.49	2.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.49	2.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.42	1.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.27	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	308	308	< 0.005	0.01	0.80	312
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.28	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	1.07	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	292	292	< 0.005	0.01	0.02	295
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.64	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	169	169	< 0.005	0.01	0.20	171
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.5	66.5	< 0.005	0.01	0.07	69.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.03	28.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.76. Architectural Coating Lot 4 (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.49	2.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	2.49	2.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.42	1.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Architect Coatings	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.27	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	308	308	< 0.005	0.01	0.80	312
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.28	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	1.07	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	292	292	< 0.005	0.01	0.02	295
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.64	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	169	169	< 0.005	0.01	0.20	171
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.5	66.5	< 0.005	0.01	0.07	69.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.03	28.4
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.77. Architectural Coating Lot 2&3 (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.55	0.55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.35	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	313	313	< 0.005	0.01	0.89	318
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.15	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	297	297	< 0.005	0.01	0.02	300
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	93.8	93.8	< 0.005	< 0.005	0.12	95.0
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	37.2	37.2	< 0.005	0.01	0.04	38.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.5	15.5	< 0.005	< 0.005	0.02	15.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.15	6.15	< 0.005	< 0.005	0.01	6.43
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.78. Architectural Coating Lot 2&3 (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Architect Coatings	0.55	0.55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.08	1.35	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	313	313	< 0.005	0.01	0.89	318
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.30	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	1.15	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	297	297	< 0.005	0.01	0.02	300
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	93.8	93.8	< 0.005	< 0.005	0.12	95.0
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	37.2	37.2	< 0.005	0.01	0.04	38.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.5	15.5	< 0.005	< 0.005	0.02	15.7
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.15	6.15	< 0.005	< 0.005	0.01	6.43
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.79. Architectural Coating Lot 2&3 (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.95	0.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.27	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	308	308	< 0.005	0.01	0.80	312
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.28	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	1.07	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	292	292	< 0.005	0.01	0.02	295
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.61	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	159	159	< 0.005	0.01	0.19	161
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	62.6	62.6	< 0.005	0.01	0.07	65.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.4	26.4	< 0.005	< 0.005	0.03	26.7
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.4	10.4	< 0.005	< 0.005	0.01	10.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.80. Architectural Coating Lot 2&3 (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.95	0.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.27	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	308	308	< 0.005	0.01	0.80	312

Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.28	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	1.07	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	292	292	< 0.005	0.01	0.02	295
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	116	116	< 0.005	0.02	0.01	122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.61	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	159	159	< 0.005	0.01	0.19	161
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	62.6	62.6	< 0.005	0.01	0.07	65.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.4	26.4	< 0.005	< 0.005	0.03	26.7
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.4	10.4	< 0.005	< 0.005	0.01	10.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.81. Wet Utilities (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.41	8.47	22.5	0.03	0.06	—	0.06	0.06	—	0.06	—	3,212	3,212	0.13	0.03	—	3,223
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.41	8.47	22.5	0.03	0.06	—	0.06	0.06	—	0.06	—	3,212	3,212	0.13	0.03	—	3,223
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	3.20	8.48	0.01	0.02	—	0.02	0.02	—	0.02	—	1,213	1,213	0.05	0.01	—	1,217
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.58	1.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	201	201	0.01	< 0.005	—	202
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.35	5.57	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,106	1,106	0.05	0.04	4.05	1,123
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	127	127	0.01	0.02	0.35	133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.38	4.72	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,048	1,048	0.05	0.04	0.10	1,062

Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	127	127	0.01	0.02	0.01	132
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.16	1.87	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	402	402	0.02	0.01	0.66	407
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	47.9	47.9	< 0.005	0.01	0.06	50.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.34	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.5	66.5	< 0.005	< 0.005	0.11	67.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.94	7.94	< 0.005	< 0.005	0.01	8.29
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.82. Wet Utilities (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.41	8.47	22.5	0.03	0.06	—	0.06	0.06	—	0.06	—	3,212	3,212	0.13	0.03	—	3,223
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.41	8.47	22.5	0.03	0.06	—	0.06	0.06	—	0.06	—	3,212	3,212	0.13	0.03	—	3,223

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	3.20	8.48	0.01	0.02	—	0.02	0.02	—	0.02	—	1,213	1,213	0.05	0.01	—	1,217
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.58	1.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	201	201	0.01	< 0.005	—	202
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.35	5.57	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,106	1,106	0.05	0.04	4.05	1,123
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	127	127	0.01	0.02	0.35	133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.38	0.34	0.38	4.72	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,048	1,048	0.05	0.04	0.10	1,062
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	127	127	0.01	0.02	0.01	132
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.16	1.87	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	402	402	0.02	0.01	0.66	407
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	47.9	47.9	< 0.005	0.01	0.06	50.0

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.34	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.5	66.5	< 0.005	< 0.005	0.11	67.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.94	7.94	< 0.005	< 0.005	0.01	8.29
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.83. Wet Utilities (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.41	8.47	22.5	0.03	0.06	—	0.06	0.06	—	0.06	—	3,212	3,212	0.13	0.03	—	3,223
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.41	8.47	22.5	0.03	0.06	—	0.06	0.06	—	0.06	—	3,212	3,212	0.13	0.03	—	3,223
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	2.35	6.24	0.01	0.02	—	0.02	0.02	—	0.02	—	892	892	0.04	0.01	—	896

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.43	1.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	148	148	0.01	< 0.005	—	148
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.31	5.17	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,084	1,084	0.04	0.04	3.67	1,100
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.35	4.41	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,028	1,028	0.05	0.04	0.10	1,040
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.01	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.11	1.28	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	290	290	0.01	0.01	0.44	294
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.7	34.7	< 0.005	< 0.005	0.04	36.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.0	48.0	< 0.005	< 0.005	0.07	48.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.74	5.74	< 0.005	< 0.005	0.01	6.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.84. Wet Utilities (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.41	8.47	22.5	0.03	0.06	—	0.06	0.06	—	0.06	—	3,212	3,212	0.13	0.03	—	3,223
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.41	8.47	22.5	0.03	0.06	—	0.06	0.06	—	0.06	—	3,212	3,212	0.13	0.03	—	3,223
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	2.35	6.24	0.01	0.02	—	0.02	0.02	—	0.02	—	892	892	0.04	0.01	—	896
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.43	1.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	148	148	0.01	< 0.005	—	148

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.31	5.17	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,084	1,084	0.04	0.04	3.67	1,100
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.35	4.41	0.00	0.00	1.05	1.05	0.00	0.25	0.25	—	1,028	1,028	0.05	0.04	0.10	1,040
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.01	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.11	1.28	0.00	0.00	0.29	0.29	0.00	0.07	0.07	—	290	290	0.01	0.01	0.44	294
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.7	34.7	< 0.005	< 0.005	0.04	36.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.0	48.0	< 0.005	< 0.005	0.07	48.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.74	5.74	< 0.005	< 0.005	0.01	6.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.85. 18-inch Pipe Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.14	2.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	290	290	0.01	< 0.005	—	291
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.7	47.7	< 0.005	< 0.005	—	47.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.90	7.90	< 0.005	< 0.005	—	7.93
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	0.03	17.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.5	20.5	< 0.005	< 0.005	0.02	21.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.88
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.39	3.39	< 0.005	< 0.005	< 0.005	3.55
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.86. 18-inch Pipe Installation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.14	2.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	290	290	0.01	< 0.005	—	291
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	< 0.005	< 0.005	0.02	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.7	47.7	< 0.005	< 0.005	—	47.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.90	7.90	< 0.005	< 0.005	—	7.93
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	0.03	17.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.5	20.5	< 0.005	< 0.005	0.02	21.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.88
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.39	3.39	< 0.005	< 0.005	< 0.005	3.55
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.87. 12-inch Pipe Installation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.14	2.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	290	290	0.01	< 0.005	—	291
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.6	63.6	< 0.005	< 0.005	—	63.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.03	23.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.3	27.3	< 0.005	< 0.005	0.03	28.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.78	3.78	< 0.005	< 0.005	0.01	3.83
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.53	4.53	< 0.005	< 0.005	0.01	4.73
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.88. 12-inch Pipe Installation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.14	2.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	290	290	0.01	< 0.005	—	291
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.6	63.6	< 0.005	< 0.005	—	63.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.01	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	125	125	0.01	0.02	0.34	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.03	23.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.3	27.3	< 0.005	< 0.005	0.03	28.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.78	3.78	< 0.005	< 0.005	0.01	3.83
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.53	4.53	< 0.005	< 0.005	0.01	4.73
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	276	276	0.03	< 0.005	—	278
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	502	502	0.05	0.01	—	504
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	52.9	52.9	0.01	< 0.005	—	53.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	1,815	1,815	0.17	0.02	—	1,826
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	76.5	76.5	0.01	< 0.005	—	77.0
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Health Club	—	—	—	—	—	—	—	—	—	—	—	—	95.3	95.3	0.01	< 0.005	—	95.9
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,817	2,817	0.27	0.03	—	2,834
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	276	276	0.03	< 0.005	—	278
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	502	502	0.05	0.01	—	504
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	52.9	52.9	0.01	< 0.005	—	53.2
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	1,815	1,815	0.17	0.02	—	1,826
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	76.5	76.5	0.01	< 0.005	—	77.0
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	95.3	95.3	0.01	< 0.005	—	95.9
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,817	2,817	0.27	0.03	—	2,834
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhou	—	—	—	—	—	—	—	—	—	—	—	—	45.7	45.7	< 0.005	< 0.005	—	46.0
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	83.0	83.0	0.01	< 0.005	—	83.5
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	8.76	8.76	< 0.005	< 0.005	—	8.81
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	300	300	0.03	< 0.005	—	302
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	12.7	12.7	< 0.005	< 0.005	—	12.7
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	15.8	15.8	< 0.005	< 0.005	—	15.9
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	466	466	0.04	0.01	—	469

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	132	132	0.03	< 0.005	—	134

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	245	245	0.05	0.01	—	248
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	26.5	26.5	0.01	< 0.005	—	26.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	908	908	0.17	0.02	—	918
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	38.3	38.3	0.01	< 0.005	—	38.7
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	47.5	47.5	0.01	< 0.005	—	48.1
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,397	1,397	0.27	0.03	—	1,413
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	132	132	0.03	< 0.005	—	134
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	245	245	0.05	0.01	—	248
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	26.5	26.5	0.01	< 0.005	—	26.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	908	908	0.17	0.02	—	918

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	38.3	38.3	0.01	< 0.005	—	38.7
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	47.5	47.5	0.01	< 0.005	—	48.1
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,397	1,397	0.27	0.03	—	1,413
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9	< 0.005	< 0.005	—	22.2
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	40.5	40.5	0.01	< 0.005	—	41.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	4.38	4.38	< 0.005	< 0.005	—	4.43
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	150	150	0.03	< 0.005	—	152
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	6.34	6.34	< 0.005	< 0.005	—	6.41
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	7.87	7.87	< 0.005	< 0.005	—	7.96
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	231	231	0.04	0.01	—	234

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.15	0.07	1.27	0.54	0.01	0.10	—	0.10	0.10	—	0.10	—	1,610	1,610	0.14	< 0.005	—	1,614
Single Family Housing	0.29	0.14	2.45	1.04	0.02	0.20	—	0.20	0.20	—	0.20	—	3,108	3,108	0.28	0.01	—	3,117
Apartments Low Rise	0.02	0.01	0.20	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	251	251	0.02	< 0.005	—	252
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.46	0.23	3.91	1.67	0.02	0.32	—	0.32	0.32	—	0.32	—	4,969	4,969	0.44	0.01	—	4,983
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhouse	0.15	0.07	1.27	0.54	0.01	0.10	—	0.10	0.10	—	0.10	—	1,610	1,610	0.14	< 0.005	—	1,614
Single Family Housing	0.29	0.14	2.45	1.04	0.02	0.20	—	0.20	0.20	—	0.20	—	3,108	3,108	0.28	0.01	—	3,117
Apartments Low Rise	0.02	0.01	0.20	0.08	< 0.005	0.02	—	0.02	0.02	—	0.02	—	251	251	0.02	< 0.005	—	252
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.46	0.23	3.91	1.67	0.02	0.32	—	0.32	0.32	—	0.32	—	4,969	4,969	0.44	0.01	—	4,983
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	267
Single Family Housing	0.05	0.03	0.45	0.19	< 0.005	0.04	—	0.04	0.04	—	0.04	—	515	515	0.05	< 0.005	—	516
Apartments Low Rise	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.5	41.5	< 0.005	< 0.005	—	41.6
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.08	0.04	0.71	0.30	< 0.005	0.06	—	0.06	0.06	—	0.06	—	823	823	0.07	< 0.005	—	825

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Health Club	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhou	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Single Family Housing	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Health Club	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consumer Product	16.6	16.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.36	1.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.72	2.57	0.28	29.2	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.2	78.2	< 0.005	< 0.005	—	78.4
Total	20.6	20.5	0.28	29.2	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	78.2	78.2	< 0.005	< 0.005	—	78.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	16.6	16.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.36	1.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	17.9	17.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	3.02	3.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.25	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipm	0.34	0.32	0.03	3.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.86	8.86	< 0.005	< 0.005	—	8.90
Total	3.61	3.59	0.03	3.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.86	8.86	< 0.005	< 0.005	—	8.90

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	16.6	16.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.36	1.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.72	2.57	0.28	29.2	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.2	78.2	< 0.005	< 0.005	—	78.4
Total	20.6	20.5	0.28	29.2	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	78.2	78.2	< 0.005	< 0.005	—	78.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	16.6	16.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	1.36	1.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	17.9	17.9	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	3.02	3.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.25	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.34	0.32	0.03	3.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.86	8.86	< 0.005	< 0.005	—	8.90
Total	3.61	3.59	0.03	3.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.86	8.86	< 0.005	< 0.005	—	8.90

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	57.9	360	417	5.98	0.15	—	610

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.13	12.0	15.1	0.32	0.01	—	25.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.11	0.11	< 0.005	< 0.005	—	0.11
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	11.4	11.4	< 0.005	< 0.005	—	11.5
Health Club	—	—	—	—	—	—	—	—	—	—	—	4.28	15.3	19.6	0.44	0.01	—	33.8
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	65.4	398	464	6.74	0.16	—	681
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	57.9	360	417	5.98	0.15	—	610
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.13	12.0	15.1	0.32	0.01	—	25.5
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.11	0.11	< 0.005	< 0.005	—	0.11
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	11.4	11.4	< 0.005	< 0.005	—	11.5
Health Club	—	—	—	—	—	—	—	—	—	—	—	4.28	15.3	19.6	0.44	0.01	—	33.8
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	65.4	398	464	6.74	0.16	—	681
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	9.59	59.5	69.1	0.99	0.02	—	101
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.52	1.98	2.50	0.05	< 0.005	—	4.22
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.02	0.02	< 0.005	< 0.005	—	0.02
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	1.89	1.89	< 0.005	< 0.005	—	1.90
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.71	2.54	3.25	0.07	< 0.005	—	5.60
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	10.8	65.9	76.8	1.12	0.03	—	113

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	46.6	160	206	4.80	0.12	—	361
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.00	-2.10	-2.10	> -0.005	> -0.005	—	-2.12
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	2.52	4.87	7.39	0.26	0.01	—	15.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.05	0.05	< 0.005	< 0.005	—	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	-0.28	-0.28	> -0.005	> -0.005	—	-0.28
Health Club	—	—	—	—	—	—	—	—	—	—	—	3.83	6.83	10.7	0.39	0.01	—	23.3
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	52.9	169	222	5.46	0.13	—	398
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	46.6	160	206	4.80	0.12	—	361
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.00	-2.10	-2.10	> -0.005	> -0.005	—	-2.12
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	2.52	4.87	7.39	0.26	0.01	—	15.7
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.05	0.05	< 0.005	< 0.005	—	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	-0.28	-0.28	> -0.005	> -0.005	—	-0.28
Health Club	—	—	—	—	—	—	—	—	—	—	—	3.83	6.83	10.7	0.39	0.01	—	23.3
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	52.9	169	222	5.46	0.13	—	398
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	7.71	26.4	34.1	0.80	0.02	—	59.8
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.00	-0.35	-0.35	> -0.005	> -0.005	—	-0.35
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.42	0.81	1.22	0.04	< 0.005	—	2.61
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	-0.05	-0.05	> -0.005	> -0.005	—	-0.05
Health Club	—	—	—	—	—	—	—	—	—	—	—	0.63	1.13	1.76	0.07	< 0.005	—	3.86
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.76	28.0	36.7	0.90	0.02	—	65.9

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	83.3	0.00	83.3	8.33	0.00	—	292
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	107	0.00	107	10.7	0.00	—	375
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	19.1	0.00	19.1	1.91	0.00	—	66.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.09	0.00	0.09	0.01	0.00	—	0.32
Health Club	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.8
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	41.3	0.00	41.3	4.13	0.00	—	145
Total	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	83.3	0.00	83.3	8.33	0.00	—	292
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	107	0.00	107	10.7	0.00	—	375
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	19.1	0.00	19.1	1.91	0.00	—	66.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.09	0.00	0.09	0.01	0.00	—	0.32
Health Club	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.8

Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	41.3	0.00	41.3	4.13	0.00	—	145
Total	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	13.8	0.00	13.8	1.38	0.00	—	48.3
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	17.7	0.00	17.7	1.77	0.00	—	62.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.17	0.00	3.17	0.32	0.00	—	11.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.02	0.00	0.02	< 0.005	0.00	—	0.05
Health Club	—	—	—	—	—	—	—	—	—	—	—	2.31	0.00	2.31	0.23	0.00	—	8.08
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	6.84	0.00	6.84	0.68	0.00	—	23.9
Total	—	—	—	—	—	—	—	—	—	—	—	43.9	0.00	43.9	4.38	0.00	—	153

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	83.3	0.00	83.3	8.33	0.00	—	292
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	107	0.00	107	10.7	0.00	—	375
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	19.1	0.00	19.1	1.91	0.00	—	66.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.09	0.00	0.09	0.01	0.00	—	0.32
Health Club	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.8
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	41.3	0.00	41.3	4.13	0.00	—	145
Total	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	83.3	0.00	83.3	8.33	0.00	—	292
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	107	0.00	107	10.7	0.00	—	375

Apartments	—	—	—	—	—	—	—	—	—	—	—	19.1	0.00	19.1	1.91	0.00	—	66.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.09	0.00	0.09	0.01	0.00	—	0.32
Health Club	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.8
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	41.3	0.00	41.3	4.13	0.00	—	145
Total	—	—	—	—	—	—	—	—	—	—	—	265	0.00	265	26.5	0.00	—	927
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	13.8	0.00	13.8	1.38	0.00	—	48.3
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	17.7	0.00	17.7	1.77	0.00	—	62.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.17	0.00	3.17	0.32	0.00	—	11.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.02	0.00	0.02	< 0.005	0.00	—	0.05
Health Club	—	—	—	—	—	—	—	—	—	—	—	2.31	0.00	2.31	0.23	0.00	—	8.08

Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	6.84	0.00	6.84	0.68	0.00	—	23.9
Total	—	—	—	—	—	—	—	—	—	—	—	43.9	0.00	43.9	4.38	0.00	—	153

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.59	1.59
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.53	3.53
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.36	0.36
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.59	1.59
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.53	3.53
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.36	0.36
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.26	0.26
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.58	0.58
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

Recreational	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.92	0.92

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.59	1.59
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.53	3.53
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.36	0.36
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.59	1.59

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.53	3.53
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.36	0.36
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.57	5.57
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.26	0.26
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.58	0.58
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Health Club	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Recreational Swimming Pool	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.92	0.92

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	363	363	—	—	—	363
Total	—	—	—	—	—	—	—	—	—	—	—	—	363	363	—	—	—	363
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	363	363	—	—	—	363
Total	—	—	—	—	—	—	—	—	—	—	—	—	363	363	—	—	—	363
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	60.1	60.1	—	—	—	60.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	60.1	60.1	—	—	—	60.1

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	180	180	—	—	—	180
Shrubland	—	—	—	—	—	—	—	—	—	—	—	—	522	522	—	—	—	522
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	99.4	99.4	—	—	—	99.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	801	801	—	—	—	801
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	180	180	—	—	—	180
Shrubland	—	—	—	—	—	—	—	—	—	—	—	—	522	522	—	—	—	522
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	99.4	99.4	—	—	—	99.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	801	801	—	—	—	801
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	29.9	29.9	—	—	—	29.9
Shrubland	—	—	—	—	—	—	—	—	—	—	—	—	86.4	86.4	—	—	—	86.4
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	16.5	16.5	—	—	—	16.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	133	133	—	—	—	133

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.27	-0.27	—	—	—	-0.27
Fremont Cottonwood	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.47	-1.47	—	—	—	-1.47
Coastal live oak(Quercus agrifolia)	—	0.01	< 0.005	—	0.01	0.01	0.01	0.02	< 0.005	< 0.005	0.01	—	22.9	22.9	—	—	—	22.9
Scrub Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.16	0.16	—	—	—	0.16
White Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.07	1.07	—	—	—	1.07
Red Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.63	-1.63	—	—	—	-1.63
Willow	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.52	0.52	—	—	—	0.52
Elderberry	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.05	4.05	—	—	—	4.05
Willow Acacia	—	-0.03	-0.01	—	-0.02	-0.04	-0.04	-0.08	-0.01	-0.01	-0.02	—	-74.2	-74.2	—	—	—	-74.2
Loquat	—	-0.01	> -0.005	—	-0.01	-0.01	-0.01	-0.02	> -0.005	> -0.005	-0.01	—	-20.4	-20.4	—	—	—	-20.4
Strawberry Tree	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	-7.27	-7.27	—	—	—	-7.27
Coastal Live Oak	—	-0.03	> -0.005	—	-0.01	-0.03	-0.03	-0.06	-0.01	-0.01	-0.02	—	-55.4	-55.4	—	—	—	-55.4
Valley Oak	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-3.29	-3.29	—	—	—	-3.29
Arroyo Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.72	-0.72	—	—	—	-0.72
Blue Elderberry	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-2.94	-2.94	—	—	—	-2.94
Subtotal	—	-0.06	-0.01	—	-0.04	-0.07	-0.07	-0.15	-0.02	-0.02	-0.04	—	-139	-139	—	—	—	-139

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	—	—	—	—	—	—	—	—	—	—	-1.10	-1.10	—	—	—	-1.10
Fremont Cottonwood	—	—	—	—	—	—	—	—	—	—	—	—	-5.06	-5.06	—	—	—	-5.06
Coastal live oak(Quercus agrifolia)	—	—	—	—	—	—	—	—	—	—	—	—	27.5	27.5	—	—	—	27.5
Scrub Oak	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43	—	—	—	0.43
White Oak	—	—	—	—	—	—	—	—	—	—	—	—	3.22	3.22	—	—	—	3.22
Red Willow	—	—	—	—	—	—	—	—	—	—	—	—	-7.47	-7.47	—	—	—	-7.47
Willow	—	—	—	—	—	—	—	—	—	—	—	—	1.75	1.75	—	—	—	1.75
Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	17.0	17.0	—	—	—	17.0
Willow Acacia	—	—	—	—	—	—	—	—	—	—	—	—	-61.6	-61.6	—	—	—	-61.6
Loquat	—	—	—	—	—	—	—	—	—	—	—	—	-54.9	-54.9	—	—	—	-54.9
Strawberry Tree	—	—	—	—	—	—	—	—	—	—	—	—	-8.40	-8.40	—	—	—	-8.40
Coastal Live Oak	—	—	—	—	—	—	—	—	—	—	—	—	-66.4	-66.4	—	—	—	-66.4
Valley Oak	—	—	—	—	—	—	—	—	—	—	—	—	-9.91	-9.91	—	—	—	-9.91
Arroyo Willow	—	—	—	—	—	—	—	—	—	—	—	—	-2.45	-2.45	—	—	—	-2.45
Blue Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	-12.3	-12.3	—	—	—	-12.3
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	-180	-180	—	—	—	-180

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—
Fremont Cottonwood	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—
Coastal live oak(Quercus agrifolia)	—	—	0.02	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—
Scrub Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—
White Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—
Red Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—
Willow	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—
Elderberry	—	—	0.01	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—
Willow Acacia	—	—	-0.07	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—
Loquat	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—
Strawberry Tree	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—
Coastal Live Oak	—	—	-0.06	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—
Valley Oak	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—
Arroyo Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—
Blue Elderberry	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—
Subtotal	—	—	-0.13	—	-0.01	-0.01	-0.01	-0.02	> -0.005	> -0.005	-0.01	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	-318	-318	—	—	—	-318
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.27	-0.27	—	—	—	-0.27
Fremont Cottonwood	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.47	-1.47	—	—	—	-1.47
Coastal live oak(Quercus agrifolia)	—	0.01	< 0.005	—	0.01	0.01	0.01	0.02	< 0.005	< 0.005	0.01	—	22.9	22.9	—	—	—	22.9
Scrub Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.16	0.16	—	—	—	0.16
White Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.07	1.07	—	—	—	1.07
Red Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.63	-1.63	—	—	—	-1.63
Willow	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.52	0.52	—	—	—	0.52
Elderberry	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.05	4.05	—	—	—	4.05
Willow Acacia	—	-0.03	-0.01	—	-0.02	-0.04	-0.04	-0.08	-0.01	-0.01	-0.02	—	-74.2	-74.2	—	—	—	-74.2
Loquat	—	-0.01	> -0.005	—	-0.01	-0.01	-0.01	-0.02	> -0.005	> -0.005	-0.01	—	-20.4	-20.4	—	—	—	-20.4
Strawberry Tree	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	-7.27	-7.27	—	—	—	-7.27
Coastal Live Oak	—	-0.03	> -0.005	—	-0.01	-0.03	-0.03	-0.06	-0.01	-0.01	-0.02	—	-55.4	-55.4	—	—	—	-55.4
Valley Oak	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-3.29	-3.29	—	—	—	-3.29
Arroyo Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.72	-0.72	—	—	—	-0.72

Blue Elderberry	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-2.94	-2.94	—	—	—	-2.94
Subtotal	—	-0.06	-0.01	—	-0.04	-0.07	-0.07	-0.15	-0.02	-0.02	-0.04	—	-139	-139	—	—	—	-139
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	—	—	—	—	—	—	—	—	—	—	-1.10	-1.10	—	—	—	-1.10
Fremont Cottonwood	—	—	—	—	—	—	—	—	—	—	—	—	-5.06	-5.06	—	—	—	-5.06
Coastal live oak(Quercus agrifolia)	—	—	—	—	—	—	—	—	—	—	—	—	27.5	27.5	—	—	—	27.5
Scrub Oak	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43	—	—	—	0.43
White Oak	—	—	—	—	—	—	—	—	—	—	—	—	3.22	3.22	—	—	—	3.22
Red Willow	—	—	—	—	—	—	—	—	—	—	—	—	-7.47	-7.47	—	—	—	-7.47
Willow	—	—	—	—	—	—	—	—	—	—	—	—	1.75	1.75	—	—	—	1.75
Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	17.0	17.0	—	—	—	17.0
Willow Acacia	—	—	—	—	—	—	—	—	—	—	—	—	-61.6	-61.6	—	—	—	-61.6
Loquat	—	—	—	—	—	—	—	—	—	—	—	—	-54.9	-54.9	—	—	—	-54.9
Strawberry Tree	—	—	—	—	—	—	—	—	—	—	—	—	-8.40	-8.40	—	—	—	-8.40
Coastal Live Oak	—	—	—	—	—	—	—	—	—	—	—	—	-66.4	-66.4	—	—	—	-66.4
Valley Oak	—	—	—	—	—	—	—	—	—	—	—	—	-9.91	-9.91	—	—	—	-9.91
Arroyo Willow	—	—	—	—	—	—	—	—	—	—	—	—	-2.45	-2.45	—	—	—	-2.45

Blue Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	-12.3	-12.3	—	—	—	-12.3
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	-180	-180	—	—	—	-180
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Fremont Cottonwood	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal live oak(Quercus agrifolia)	—	—	0.02	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Scrub Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
White Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Red Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Willow	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Elderberry	—	—	0.01	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Willow Acacia	—	—	-0.07	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Loquat	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Strawberry Tree	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal Live Oak	—	—	-0.06	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Valley Oak	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Arroyo Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—

Blue Elderberry	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Subtotal	—	—	-0.13	—	-0.01	-0.01	-0.01	-0.02	> -0.005	> -0.005	-0.01	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	-318	-318	—	—	—	-318
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.04	-0.04	—	—	—	-0.04
Fremont Cottonwood	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.24	-0.24	—	—	—	-0.24
Coastal live oak(Quercus agrifolia)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.80	3.80	—	—	—	3.80
Scrub Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	—	—	—	0.03
White Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.18	0.18	—	—	—	0.18
Red Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.27	-0.27	—	—	—	-0.27
Willow	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	—	—	—	0.09
Elderberry	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.67	0.67	—	—	—	0.67
Willow Acacia	—	-0.01	> -0.005	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005	—	-12.3	-12.3	—	—	—	-12.3
Loquat	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-3.37	-3.37	—	—	—	-3.37
Strawberry Tree	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.20	-1.20	—	—	—	-1.20
Coastal Live Oak	—	> -0.005	> -0.005	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005	—	-9.16	-9.16	—	—	—	-9.16

Valley Oak	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.54	-0.54	—	—	—	-0.54
Arroyo Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.12	-0.12	—	—	—	-0.12
Blue Elderberry	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.49	-0.49	—	—	—	-0.49
Subtotal	—	-0.01	> -0.005	—	-0.01	-0.01	-0.01	-0.03	> -0.005	> -0.005	-0.01	—	-23.0	-23.0	—	—	—	-23.0
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	—	—	—	—	—	—	—	—	—	—	-0.18	-0.18	—	—	—	-0.18
Fremont Cottonwood	—	—	—	—	—	—	—	—	—	—	—	—	-0.84	-0.84	—	—	—	-0.84
Coastal live oak(Quercus agrifolia)	—	—	—	—	—	—	—	—	—	—	—	—	4.56	4.56	—	—	—	4.56
Scrub Oak	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07	—	—	—	0.07
White Oak	—	—	—	—	—	—	—	—	—	—	—	—	0.53	0.53	—	—	—	0.53
Red Willow	—	—	—	—	—	—	—	—	—	—	—	—	-1.24	-1.24	—	—	—	-1.24
Willow	—	—	—	—	—	—	—	—	—	—	—	—	0.29	0.29	—	—	—	0.29
Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	2.81	2.81	—	—	—	2.81
Willow Acacia	—	—	—	—	—	—	—	—	—	—	—	—	-10.2	-10.2	—	—	—	-10.2
Loquat	—	—	—	—	—	—	—	—	—	—	—	—	-9.08	-9.08	—	—	—	-9.08
Strawberry Tree	—	—	—	—	—	—	—	—	—	—	—	—	-1.39	-1.39	—	—	—	-1.39
Coastal Live Oak	—	—	—	—	—	—	—	—	—	—	—	—	-11.0	-11.0	—	—	—	-11.0

Valley Oak	—	—	—	—	—	—	—	—	—	—	—	—	-1.64	-1.64	—	—	—	-1.64
Arroyo Willow	—	—	—	—	—	—	—	—	—	—	—	—	-0.40	-0.40	—	—	—	-0.40
Blue Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	-2.03	-2.03	—	—	—	-2.03
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	-29.7	-29.7	—	—	—	-29.7
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Fremont Cottonwood	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal live oak(Quercus agrifolia)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Scrub Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
White Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Red Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Willow	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Elderberry	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Willow Acacia	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Loquat	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Strawberry Tree	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal Live Oak	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—

Valley Oak	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Arroyo Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Blue Elderberry	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Subtotal	—	—	-0.02	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	-0.01	-0.03	—	-0.01	-0.02	-0.02	-0.03	> -0.005	> -0.005	-0.01	—	-52.7	-52.7	—	—	—	-52.7

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	363	363	—	—	—	363
Total	—	—	—	—	—	—	—	—	—	—	—	—	363	363	—	—	—	363
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	363	363	—	—	—	363
Total	—	—	—	—	—	—	—	—	—	—	—	—	363	363	—	—	—	363
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grazing	—	—	—	—	—	—	—	—	—	—	—	—	60.1	60.1	—	—	—	60.1
Total	—	—	—	—	—	—	—	—	—	—	—	—	60.1	60.1	—	—	—	60.1

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	180	180	—	—	—	180
Shrubland	—	—	—	—	—	—	—	—	—	—	—	—	522	522	—	—	—	522
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	99.4	99.4	—	—	—	99.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	801	801	—	—	—	801
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	180	180	—	—	—	180
Shrubland	—	—	—	—	—	—	—	—	—	—	—	—	522	522	—	—	—	522
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	99.4	99.4	—	—	—	99.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	801	801	—	—	—	801
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	29.9	29.9	—	—	—	29.9
Shrubland	—	—	—	—	—	—	—	—	—	—	—	—	86.4	86.4	—	—	—	86.4
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	16.5	16.5	—	—	—	16.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	133	133	—	—	—	133

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.27	-0.27	—	—	—	-0.27
Fremont Cottonwood	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.47	-1.47	—	—	—	-1.47
Coastal live oak(Quercus agrifolia)	—	0.01	< 0.005	—	0.01	0.01	0.01	0.02	< 0.005	< 0.005	0.01	—	22.9	22.9	—	—	—	22.9
Scrub Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.16	0.16	—	—	—	0.16
White Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.07	1.07	—	—	—	1.07
Red Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.63	-1.63	—	—	—	-1.63
Willow	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.52	0.52	—	—	—	0.52
Elderberry	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.05	4.05	—	—	—	4.05
Willow Acacia	—	-0.03	-0.01	—	-0.02	-0.04	-0.04	-0.08	-0.01	-0.01	-0.02	—	-74.2	-74.2	—	—	—	-74.2
Loquat	—	-0.01	> -0.005	—	-0.01	-0.01	-0.01	-0.02	> -0.005	> -0.005	-0.01	—	-20.4	-20.4	—	—	—	-20.4
Strawberry Tree	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	-7.27	-7.27	—	—	—	-7.27
Coastal Live Oak	—	-0.03	> -0.005	—	-0.01	-0.03	-0.03	-0.06	-0.01	-0.01	-0.02	—	-55.4	-55.4	—	—	—	-55.4

Valley Oak	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-3.29	-3.29	—	—	—	-3.29
Arroyo Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.72	-0.72	—	—	—	-0.72
Blue Elderberry	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-2.94	-2.94	—	—	—	-2.94
Subtotal	—	-0.06	-0.01	—	-0.04	-0.07	-0.07	-0.15	-0.02	-0.02	-0.04	—	-139	-139	—	—	—	-139
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	—	—	—	—	—	—	—	—	—	—	-1.10	-1.10	—	—	—	-1.10
Fremont Cottonwood	—	—	—	—	—	—	—	—	—	—	—	—	-5.06	-5.06	—	—	—	-5.06
Coastal live oak(Quercus agrifolia)	—	—	—	—	—	—	—	—	—	—	—	—	27.5	27.5	—	—	—	27.5
Scrub Oak	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43	—	—	—	0.43
White Oak	—	—	—	—	—	—	—	—	—	—	—	—	3.22	3.22	—	—	—	3.22
Red Willow	—	—	—	—	—	—	—	—	—	—	—	—	-7.47	-7.47	—	—	—	-7.47
Willow	—	—	—	—	—	—	—	—	—	—	—	—	1.75	1.75	—	—	—	1.75
Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	17.0	17.0	—	—	—	17.0
Willow Acacia	—	—	—	—	—	—	—	—	—	—	—	—	-61.6	-61.6	—	—	—	-61.6
Loquat	—	—	—	—	—	—	—	—	—	—	—	—	-54.9	-54.9	—	—	—	-54.9
Strawberry Tree	—	—	—	—	—	—	—	—	—	—	—	—	-8.40	-8.40	—	—	—	-8.40
Coastal Live Oak	—	—	—	—	—	—	—	—	—	—	—	—	-66.4	-66.4	—	—	—	-66.4

Valley Oak	—	—	—	—	—	—	—	—	—	—	—	—	-9.91	-9.91	—	—	—	-9.91
Arroyo Willow	—	—	—	—	—	—	—	—	—	—	—	—	-2.45	-2.45	—	—	—	-2.45
Blue Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	-12.3	-12.3	—	—	—	-12.3
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	-180	-180	—	—	—	-180
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Fremont Cottonwood	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal live oak(Quercus agrifolia)	—	—	0.02	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Scrub Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
White Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Red Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Willow	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Elderberry	—	—	0.01	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Willow Acacia	—	—	-0.07	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Loquat	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Strawberry Tree	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal Live Oak	—	—	-0.06	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—

Valley Oak	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Arroyo Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Blue Elderberry	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Subtotal	—	—	-0.13	—	-0.01	-0.01	-0.01	-0.02	> -0.005	> -0.005	-0.01	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	-318	-318	—	—	—	-318
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.27	-0.27	—	—	—	-0.27
Fremont Cottonwood	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.47	-1.47	—	—	—	-1.47
Coastal live oak(Quercus agrifolia)	—	0.01	< 0.005	—	0.01	0.01	0.01	0.02	< 0.005	< 0.005	0.01	—	22.9	22.9	—	—	—	22.9
Scrub Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.16	0.16	—	—	—	0.16
White Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.07	1.07	—	—	—	1.07
Red Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.63	-1.63	—	—	—	-1.63
Willow	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.52	0.52	—	—	—	0.52
Elderberry	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.05	4.05	—	—	—	4.05
Willow Acacia	—	-0.03	-0.01	—	-0.02	-0.04	-0.04	-0.08	-0.01	-0.01	-0.02	—	-74.2	-74.2	—	—	—	-74.2
Loquat	—	-0.01	> -0.005	—	-0.01	-0.01	-0.01	-0.02	> -0.005	> -0.005	-0.01	—	-20.4	-20.4	—	—	—	-20.4

Strawberry	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	-7.27	-7.27	—	—	—	-7.27
Coastal Live Oak	—	-0.03	> -0.005	—	-0.01	-0.03	-0.03	-0.06	-0.01	-0.01	-0.02	—	-55.4	-55.4	—	—	—	-55.4
Valley Oak	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-3.29	-3.29	—	—	—	-3.29
Arroyo Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.72	-0.72	—	—	—	-0.72
Blue Elderberry	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-2.94	-2.94	—	—	—	-2.94
Subtotal	—	-0.06	-0.01	—	-0.04	-0.07	-0.07	-0.15	-0.02	-0.02	-0.04	—	-139	-139	—	—	—	-139
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	—	—	—	—	—	—	—	—	—	—	-1.10	-1.10	—	—	—	-1.10
Fremont Cottonwood	—	—	—	—	—	—	—	—	—	—	—	—	-5.06	-5.06	—	—	—	-5.06
Coastal live oak(Quercus agrifolia)	—	—	—	—	—	—	—	—	—	—	—	—	27.5	27.5	—	—	—	27.5
Scrub Oak	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43	—	—	—	0.43
White Oak	—	—	—	—	—	—	—	—	—	—	—	—	3.22	3.22	—	—	—	3.22
Red Willow	—	—	—	—	—	—	—	—	—	—	—	—	-7.47	-7.47	—	—	—	-7.47
Willow	—	—	—	—	—	—	—	—	—	—	—	—	1.75	1.75	—	—	—	1.75
Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	17.0	17.0	—	—	—	17.0
Willow Acacia	—	—	—	—	—	—	—	—	—	—	—	—	-61.6	-61.6	—	—	—	-61.6
Loquat	—	—	—	—	—	—	—	—	—	—	—	—	-54.9	-54.9	—	—	—	-54.9

Strawberry	—	—	—	—	—	—	—	—	—	—	—	—	-8.40	-8.40	—	—	—	-8.40
Coastal Live Oak	—	—	—	—	—	—	—	—	—	—	—	—	-66.4	-66.4	—	—	—	-66.4
Valley Oak	—	—	—	—	—	—	—	—	—	—	—	—	-9.91	-9.91	—	—	—	-9.91
Arroyo Willow	—	—	—	—	—	—	—	—	—	—	—	—	-2.45	-2.45	—	—	—	-2.45
Blue Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	-12.3	-12.3	—	—	—	-12.3
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	-180	-180	—	—	—	-180
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Fremont Cottonwood	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal live oak(Quercus agrifolia)	—	—	0.02	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Scrub Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
White Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Red Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Willow	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Elderberry	—	—	0.01	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Willow Acacia	—	—	-0.07	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Loquat	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—

Strawberry	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal Live Oak	—	—	-0.06	—	> -0.005	> -0.005	> -0.005	-0.01	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Valley Oak	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Arroyo Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Blue Elderberry	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Subtotal	—	—	-0.13	—	-0.01	-0.01	-0.01	-0.02	> -0.005	> -0.005	-0.01	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	-0.06	-0.14	—	-0.04	-0.09	-0.09	-0.17	-0.02	-0.02	-0.05	—	-318	-318	—	—	—	-318
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.04	-0.04	—	—	—	-0.04
Fremont Cottonwood	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.24	-0.24	—	—	—	-0.24
Coastal live oak(Quercus agrifolia)	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.80	3.80	—	—	—	3.80
Scrub Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	—	—	—	0.03
White Oak	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.18	0.18	—	—	—	0.18
Red Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.27	-0.27	—	—	—	-0.27
Willow	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	—	—	—	0.09
Elderberry	—	< 0.005	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.67	0.67	—	—	—	0.67

Willow Acacia	—	-0.01	> -0.005	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005	—	-12.3	-12.3	—	—	—	-12.3
Loquat	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-3.37	-3.37	—	—	—	-3.37
Strawberry Tree	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-1.20	-1.20	—	—	—	-1.20
Coastal Live Oak	—	> -0.005	> -0.005	—	> -0.005	-0.01	-0.01	-0.01	> -0.005	> -0.005	> -0.005	—	-9.16	-9.16	—	—	—	-9.16
Valley Oak	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.54	-0.54	—	—	—	-0.54
Arroyo Willow	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.12	-0.12	—	—	—	-0.12
Blue Elderberry	—	> -0.005	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	-0.49	-0.49	—	—	—	-0.49
Subtotal	—	-0.01	> -0.005	—	-0.01	-0.01	-0.01	-0.03	> -0.005	> -0.005	-0.01	—	-23.0	-23.0	—	—	—	-23.0
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	—	—	—	—	—	—	—	—	—	—	-0.18	-0.18	—	—	—	-0.18
Fremont Cottonwood	—	—	—	—	—	—	—	—	—	—	—	—	-0.84	-0.84	—	—	—	-0.84
Coastal live oak(Quercus agrifolia)	—	—	—	—	—	—	—	—	—	—	—	—	4.56	4.56	—	—	—	4.56
Scrub Oak	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07	—	—	—	0.07
White Oak	—	—	—	—	—	—	—	—	—	—	—	—	0.53	0.53	—	—	—	0.53
Red Willow	—	—	—	—	—	—	—	—	—	—	—	—	-1.24	-1.24	—	—	—	-1.24
Willow	—	—	—	—	—	—	—	—	—	—	—	—	0.29	0.29	—	—	—	0.29
Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	2.81	2.81	—	—	—	2.81

Willow Acacia	—	—	—	—	—	—	—	—	—	—	—	—	-10.2	-10.2	—	—	—	-10.2
Loquat	—	—	—	—	—	—	—	—	—	—	—	—	-9.08	-9.08	—	—	—	-9.08
Strawberry Tree	—	—	—	—	—	—	—	—	—	—	—	—	-1.39	-1.39	—	—	—	-1.39
Coastal Live Oak	—	—	—	—	—	—	—	—	—	—	—	—	-11.0	-11.0	—	—	—	-11.0
Valley Oak	—	—	—	—	—	—	—	—	—	—	—	—	-1.64	-1.64	—	—	—	-1.64
Arroyo Willow	—	—	—	—	—	—	—	—	—	—	—	—	-0.40	-0.40	—	—	—	-0.40
Blue Elderberry	—	—	—	—	—	—	—	—	—	—	—	—	-2.03	-2.03	—	—	—	-2.03
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	-29.7	-29.7	—	—	—	-29.7
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black Walnut	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Fremont Cottonwood	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal live oak(Quercus agrifolia)	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Scrub Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
White Oak	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Red Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Willow	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—
Elderberry	—	—	< 0.005	—	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	—	—	—	—	—	—

Willow Acacia	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Loquat	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Strawberry Tree	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Coastal Live Oak	—	—	-0.01	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Valley Oak	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Arroyo Willow	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Blue Elderberry	—	—	> -0.005	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
Subtotal	—	—	-0.02	—	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	> -0.005	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	-0.01	-0.03	—	-0.01	-0.02	-0.02	-0.03	> -0.005	> -0.005	-0.01	—	-52.7	-52.7	—	—	—	-52.7

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Clear & Grub	Site Preparation	5/19/2025	5/30/2025	5.00	10.0	—
Remedial & Mass Grading	Grading	6/2/2025	9/30/2025	5.00	87.0	—
Finish Grading	Grading	10/3/2025	11/13/2025	5.00	30.0	—
Pump Station 4	Grading	4/1/2026	4/21/2026	5.00	15.0	—
Building Construction Lots 7, 8, and 9	Building Construction	6/2/2026	11/8/2028	5.00	637	—
Building Construction Lot 6	Building Construction	9/24/2026	9/6/2029	5.00	771	—

Building Construction Lot 5	Building Construction	10/14/2026	9/10/2029	5.00	759	—
Building Construction Lot 4	Building Construction	11/4/2026	11/27/2029	5.00	800	—
Building Construction Lots 2&3	Building Construction	11/25/2026	9/17/2029	5.00	734	—
Building Construction Lots 10 and 11	Building Construction	12/8/2026	10/26/2027	5.00	231	—
Balancing/Aggregate Base	Paving	6/30/2026	7/27/2026	5.00	20.0	—
Curb & Gutter	Paving	7/26/2026	8/24/2026	5.00	21.0	—
Asphalt Paving	Paving	8/17/2026	9/21/2026	5.00	26.0	—
Concrete Flatwork	Paving	6/23/2026	7/8/2026	5.00	12.0	—
Architectural Coating Lots 10 and 11	Architectural Coating	1/1/2027	5/13/2027	5.00	95.0	—
Architectural Coating Lots 7, 8, and 9	Architectural Coating	1/1/2028	1/12/2029	5.00	270	—
Architectural Coating Lot 6	Architectural Coating	5/3/2028	7/31/2029	5.00	325	—
Architectural Coating Lot 5	Architectural Coating	5/3/2028	7/24/2029	5.00	320	—
Architectural Coating Lot 4	Architectural Coating	7/1/2028	10/19/2029	5.00	340	—
Architectural Coating Lot 2&3	Architectural Coating	7/26/2028	10/2/2029	5.00	310	—
Wet Utilities	Trenching	6/22/2025	5/22/2026	5.00	240	—
18-inch Pipe Installation	Trenching	5/5/2026	7/27/2026	5.00	60.0	—
12-inch Pipe Installation	Trenching	5/5/2026	8/24/2026	5.00	80.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Clear & Grub	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	8.00	367	0.40
Clear & Grub	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Clear & Grub	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	8.00	170	0.40
Remedial & Mass Grading	Graders	Diesel	Tier 4 Final	8.00	8.00	148	0.41
Remedial & Mass Grading	Scrapers	Diesel	Tier 4 Final	12.0	8.00	423	0.48
Remedial & Mass Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	8.00	8.00	367	0.40
Remedial & Mass Grading	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	376	0.38
Finish Grading	Graders	Diesel	Tier 4 Final	6.00	8.00	148	0.41
Finish Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	8.00	367	0.40
Finish Grading	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	376	0.38
Pump Station 4	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Pump Station 4	Skid Steer Loaders	Diesel	Tier 4 Final	1.00	8.00	71.0	0.37
Building Construction Lots 7, 8, and 9	Forklifts	Diesel	Tier 4 Final	4.00	8.00	82.0	0.20
Building Construction Lots 7, 8, and 9	Generator Sets	Electric	Average	2.00	8.00	14.0	0.74
Building Construction Lots 7, 8, and 9	Cranes	Diesel	Tier 4 Final	2.00	7.00	367	0.29
Building Construction Lots 7, 8, and 9	Welders	Electric	Average	2.00	8.00	46.0	0.45
Building Construction Lots 7, 8, and 9	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	7.00	84.0	0.37
Building Construction Lot 6	Forklifts	Diesel	Tier 4 Final	4.00	8.00	82.0	0.20
Building Construction Lot 6	Generator Sets	Electric	Average	2.00	8.00	14.0	0.74

Building Construction Lot 6	Cranes	Diesel	Tier 4 Final	2.00	7.00	367	0.29
Building Construction Lot 6	Welders	Electric	Average	2.00	8.00	46.0	0.45
Building Construction Lot 6	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	7.00	84.0	0.37
Building Construction Lot 5	Forklifts	Diesel	Tier 4 Final	4.00	8.00	82.0	0.20
Building Construction Lot 5	Generator Sets	Electric	Average	2.00	8.00	14.0	0.74
Building Construction Lot 5	Cranes	Diesel	Tier 4 Final	2.00	7.00	367	0.29
Building Construction Lot 5	Welders	Electric	Average	2.00	8.00	46.0	0.45
Building Construction Lot 5	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	7.00	84.0	0.37
Building Construction Lot 4	Forklifts	Diesel	Tier 4 Final	4.00	8.00	82.0	0.20
Building Construction Lot 4	Generator Sets	Electric	Average	2.00	8.00	14.0	0.74
Building Construction Lot 4	Cranes	Diesel	Tier 4 Final	2.00	7.00	367	0.29
Building Construction Lot 4	Welders	Electric	Average	2.00	8.00	46.0	0.45
Building Construction Lot 4	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	7.00	84.0	0.37
Building Construction Lots 2&3	Forklifts	Diesel	Tier 4 Final	4.00	8.00	82.0	0.20
Building Construction Lots 2&3	Generator Sets	Electric	Average	2.00	8.00	14.0	0.74
Building Construction Lots 2&3	Cranes	Diesel	Tier 4 Final	2.00	7.00	367	0.29
Building Construction Lots 2&3	Welders	Electric	Average	2.00	8.00	46.0	0.45

Building Construction Lots 2&3	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	7.00	84.0	0.37
Building Construction Lots 10 and 11	Forklifts	Diesel	Tier 4 Final	4.00	8.00	82.0	0.20
Building Construction Lots 10 and 11	Generator Sets	Electric	Average	2.00	8.00	14.0	0.74
Building Construction Lots 10 and 11	Cranes	Diesel	Tier 4 Final	2.00	7.00	367	0.29
Building Construction Lots 10 and 11	Welders	Electric	Average	2.00	8.00	46.0	0.45
Building Construction Lots 10 and 11	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	7.00	84.0	0.37
Balancing/Aggregate Base	Rollers	Electric	Average	1.00	8.00	36.0	0.38
Balancing/Aggregate Base	Graders	Diesel	Tier 4 Final	2.00	8.00	148	0.41
Balancing/Aggregate Base	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Balancing/Aggregate Base	Skid Steer Loaders	Diesel	Tier 4 Final	2.00	8.00	71.0	0.37
Curb & Gutter	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Asphalt Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Asphalt Paving	Rollers	Electric	Average	1.00	8.00	36.0	0.38
Asphalt Paving	Graders	Diesel	Tier 4 Final	2.00	8.00	148	0.41
Concrete Flatwork	Skid Steer Loaders	Diesel	Tier 4 Final	2.00	8.00	71.0	0.37
Architectural Coating Lots 10 and 11	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48
Architectural Coating Lots 7, 8, and 9	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48
Architectural Coating Lot 6	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48
Architectural Coating Lot 5	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48

Architectural Coating Lot 4	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48
Architectural Coating Lot 2&3	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48
Wet Utilities	Excavators	Electric	Average	6.00	8.00	36.0	0.38
Wet Utilities	Skid Steer Loaders	Diesel	Tier 4 Final	6.00	8.00	71.0	0.37
Wet Utilities	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	6.00	8.00	84.0	0.37
18-inch Pipe Installation	Concrete/Industrial Saws	Electric	Average	1.00	8.00	33.0	0.73
18-inch Pipe Installation	Plate Compactors	Electric	Average	1.00	8.00	8.00	0.43
18-inch Pipe Installation	Rollers	Electric	Average	1.00	8.00	36.0	0.38
18-inch Pipe Installation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
12-inch Pipe Installation	Concrete/Industrial Saws	Electric	Average	1.00	8.00	33.0	0.73
12-inch Pipe Installation	Plate Compactors	Electric	Average	1.00	8.00	8.00	0.43
12-inch Pipe Installation	Rollers	Electric	Average	1.00	8.00	36.0	0.38
12-inch Pipe Installation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Clear & Grub	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	8.00	367	0.40
Clear & Grub	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Clear & Grub	Other Material Handling Equipment	Diesel	Tier 4 Final	1.00	8.00	170	0.40

Remedial & Mass Grading	Graders	Diesel	Tier 4 Final	8.00	8.00	148	0.41
Remedial & Mass Grading	Scrapers	Diesel	Tier 4 Final	12.0	8.00	423	0.48
Remedial & Mass Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	8.00	8.00	367	0.40
Remedial & Mass Grading	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	376	0.38
Finish Grading	Graders	Diesel	Tier 4 Final	6.00	8.00	148	0.41
Finish Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	6.00	8.00	367	0.40
Finish Grading	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	376	0.38
Pump Station 4	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Pump Station 4	Skid Steer Loaders	Diesel	Tier 4 Final	1.00	8.00	71.0	0.37
Building Construction Lots 7, 8, and 9	Forklifts	Diesel	Tier 4 Final	4.00	8.00	82.0	0.20
Building Construction Lots 7, 8, and 9	Generator Sets	Electric	Average	2.00	8.00	14.0	0.74
Building Construction Lots 7, 8, and 9	Cranes	Diesel	Tier 4 Final	2.00	7.00	367	0.29
Building Construction Lots 7, 8, and 9	Welders	Electric	Average	2.00	8.00	46.0	0.45
Building Construction Lots 7, 8, and 9	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	7.00	84.0	0.37
Building Construction Lot 6	Forklifts	Diesel	Tier 4 Final	4.00	8.00	82.0	0.20
Building Construction Lot 6	Generator Sets	Electric	Average	2.00	8.00	14.0	0.74
Building Construction Lot 6	Cranes	Diesel	Tier 4 Final	2.00	7.00	367	0.29
Building Construction Lot 6	Welders	Electric	Average	2.00	8.00	46.0	0.45
Building Construction Lot 6	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	7.00	84.0	0.37

Building Construction Lot 5	Forklifts	Diesel	Tier 4 Final	4.00	8.00	82.0	0.20
Building Construction Lot 5	Generator Sets	Electric	Average	2.00	8.00	14.0	0.74
Building Construction Lot 5	Cranes	Diesel	Tier 4 Final	2.00	7.00	367	0.29
Building Construction Lot 5	Welders	Electric	Average	2.00	8.00	46.0	0.45
Building Construction Lot 5	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	7.00	84.0	0.37
Building Construction Lot 4	Forklifts	Diesel	Tier 4 Final	4.00	8.00	82.0	0.20
Building Construction Lot 4	Generator Sets	Electric	Average	2.00	8.00	14.0	0.74
Building Construction Lot 4	Cranes	Diesel	Tier 4 Final	2.00	7.00	367	0.29
Building Construction Lot 4	Welders	Electric	Average	2.00	8.00	46.0	0.45
Building Construction Lot 4	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	7.00	84.0	0.37
Building Construction Lots 2&3	Forklifts	Diesel	Tier 4 Final	4.00	8.00	82.0	0.20
Building Construction Lots 2&3	Generator Sets	Electric	Average	2.00	8.00	14.0	0.74
Building Construction Lots 2&3	Cranes	Diesel	Tier 4 Final	2.00	7.00	367	0.29
Building Construction Lots 2&3	Welders	Electric	Average	2.00	8.00	46.0	0.45
Building Construction Lots 2&3	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	7.00	84.0	0.37
Building Construction Lots 10 and 11	Forklifts	Diesel	Tier 4 Final	4.00	8.00	82.0	0.20
Building Construction Lots 10 and 11	Generator Sets	Electric	Average	2.00	8.00	14.0	0.74

Building Construction Lots 10 and 11	Cranes	Diesel	Tier 4 Final	2.00	7.00	367	0.29
Building Construction Lots 10 and 11	Welders	Electric	Average	2.00	8.00	46.0	0.45
Building Construction Lots 10 and 11	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	7.00	84.0	0.37
Balancing/Aggregate Base	Rollers	Electric	Average	1.00	8.00	36.0	0.38
Balancing/Aggregate Base	Graders	Diesel	Tier 4 Final	2.00	8.00	148	0.41
Balancing/Aggregate Base	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Balancing/Aggregate Base	Skid Steer Loaders	Diesel	Tier 4 Final	2.00	8.00	71.0	0.37
Curb & Gutter	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Asphalt Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Asphalt Paving	Rollers	Electric	Average	1.00	8.00	36.0	0.38
Asphalt Paving	Graders	Diesel	Tier 4 Final	2.00	8.00	148	0.41
Concrete Flatwork	Skid Steer Loaders	Diesel	Tier 4 Final	2.00	8.00	71.0	0.37
Architectural Coating Lots 10 and 11	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48
Architectural Coating Lots 7, 8, and 9	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48
Architectural Coating Lot 6	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48
Architectural Coating Lot 5	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48
Architectural Coating Lot 4	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48
Architectural Coating Lot 2&3	Air Compressors	Electric	Average	1.00	6.00	37.0	0.48
Wet Utilities	Excavators	Electric	Average	6.00	8.00	36.0	0.38
Wet Utilities	Skid Steer Loaders	Diesel	Tier 4 Final	6.00	8.00	71.0	0.37

Wet Utilities	Tractors/Loaders/Back	Diesel	Tier 4 Final	6.00	8.00	84.0	0.37
18-inch Pipe Installation	Concrete/Industrial Saws	Electric	Average	1.00	8.00	33.0	0.73
18-inch Pipe Installation	Plate Compactors	Electric	Average	1.00	8.00	8.00	0.43
18-inch Pipe Installation	Rollers	Electric	Average	1.00	8.00	36.0	0.38
18-inch Pipe Installation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
12-inch Pipe Installation	Concrete/Industrial Saws	Electric	Average	1.00	8.00	33.0	0.73
12-inch Pipe Installation	Plate Compactors	Electric	Average	1.00	8.00	8.00	0.43
12-inch Pipe Installation	Rollers	Electric	Average	1.00	8.00	36.0	0.38
12-inch Pipe Installation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Clear & Grub	—	—	—	—
Clear & Grub	Worker	14.0	18.5	LDA,LDT1,LDT2
Clear & Grub	Vendor	4.00	10.2	HHDT,MHDT
Clear & Grub	Hauling	40.0	20.0	HHDT
Clear & Grub	Onsite truck	—	—	HHDT
Remedial & Mass Grading	—	—	—	—
Remedial & Mass Grading	Worker	52.0	18.5	LDA,LDT1,LDT2
Remedial & Mass Grading	Vendor	6.00	10.2	HHDT,MHDT
Remedial & Mass Grading	Hauling	0.00	20.0	HHDT

Remedial & Mass Grading	Onsite truck	—	—	HHDT
Finish Grading	—	—	—	—
Finish Grading	Worker	24.0	18.5	LDA,LDT1,LDT2
Finish Grading	Vendor	6.00	10.2	HHDT,MHDT
Finish Grading	Hauling	0.00	20.0	HHDT
Finish Grading	Onsite truck	—	—	HHDT
Pump Station 4	—	—	—	—
Pump Station 4	Worker	8.00	18.5	LDA,LDT1,LDT2
Pump Station 4	Vendor	4.00	10.2	HHDT,MHDT
Pump Station 4	Hauling	0.00	20.0	HHDT
Pump Station 4	Onsite truck	—	—	HHDT
Building Construction Lots 7, 8, and 9	—	—	—	—
Building Construction Lots 7, 8, and 9	Worker	140	18.5	LDA,LDT1,LDT2
Building Construction Lots 7, 8, and 9	Vendor	30.0	10.2	HHDT,MHDT
Building Construction Lots 7, 8, and 9	Hauling	0.00	20.0	HHDT
Building Construction Lots 7, 8, and 9	Onsite truck	—	—	HHDT
Building Construction Lot 6	—	—	—	—
Building Construction Lot 6	Worker	116	18.5	LDA,LDT1,LDT2
Building Construction Lot 6	Vendor	26.0	10.2	HHDT,MHDT
Building Construction Lot 6	Hauling	0.00	20.0	HHDT
Building Construction Lot 6	Onsite truck	—	—	HHDT
Building Construction Lot 5	—	—	—	—
Building Construction Lot 5	Worker	98.0	18.5	LDA,LDT1,LDT2
Building Construction Lot 5	Vendor	20.0	10.2	HHDT,MHDT
Building Construction Lot 5	Hauling	0.00	20.0	HHDT

Building Construction Lot 5	Onsite truck	—	—	HHDT
Building Construction Lot 4	—	—	—	—
Building Construction Lot 4	Worker	146	18.5	LDA,LDT1,LDT2
Building Construction Lot 4	Vendor	34.0	10.2	HHDT,MHDT
Building Construction Lot 4	Hauling	0.00	20.0	HHDT
Building Construction Lot 4	Onsite truck	—	—	HHDT
Building Construction Lots 2&3	—	—	—	—
Building Construction Lots 2&3	Worker	148	18.5	LDA,LDT1,LDT2
Building Construction Lots 2&3	Vendor	30.0	10.2	HHDT,MHDT
Building Construction Lots 2&3	Hauling	0.00	20.0	HHDT
Building Construction Lots 2&3	Onsite truck	—	—	HHDT
Building Construction Lots 10 and 11	—	—	—	—
Building Construction Lots 10 and 11	Worker	50.0	18.5	LDA,LDT1,LDT2
Building Construction Lots 10 and 11	Vendor	10.0	10.2	HHDT,MHDT
Building Construction Lots 10 and 11	Hauling	0.00	20.0	HHDT
Building Construction Lots 10 and 11	Onsite truck	—	—	HHDT
Balancing/Aggregate Base	—	—	—	—
Balancing/Aggregate Base	Worker	16.0	18.5	LDA,LDT1,LDT2
Balancing/Aggregate Base	Vendor	4.00	10.2	HHDT,MHDT
Balancing/Aggregate Base	Hauling	0.00	20.0	HHDT
Balancing/Aggregate Base	Onsite truck	—	—	HHDT
Curb & Gutter	—	—	—	—
Curb & Gutter	Worker	14.0	18.5	LDA,LDT1,LDT2
Curb & Gutter	Vendor	4.00	10.2	HHDT,MHDT
Curb & Gutter	Hauling	0.00	20.0	HHDT
Curb & Gutter	Onsite truck	—	—	HHDT
Asphalt Paving	—	—	—	—
Asphalt Paving	Worker	16.0	18.5	LDA,LDT1,LDT2

Asphalt Paving	Vendor	4.00	10.2	HHDT,MHDT
Asphalt Paving	Hauling	0.00	20.0	HHDT
Asphalt Paving	Onsite truck	—	—	HHDT
Concrete Flatwork	—	—	—	—
Concrete Flatwork	Worker	22.0	18.5	LDA,LDT1,LDT2
Concrete Flatwork	Vendor	4.00	10.2	HHDT,MHDT
Concrete Flatwork	Hauling	0.00	20.0	HHDT
Concrete Flatwork	Onsite truck	—	—	HHDT
Architectural Coating Lots 10 and 11	—	—	—	—
Architectural Coating Lots 10 and 11	Worker	8.00	18.5	LDA,LDT1,LDT2
Architectural Coating Lots 10 and 11	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lots 10 and 11	Hauling	0.00	20.0	HHDT
Architectural Coating Lots 10 and 11	Onsite truck	—	—	HHDT
Architectural Coating Lots 7, 8, and 9	—	—	—	—
Architectural Coating Lots 7, 8, and 9	Worker	22.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lots 7, 8, and 9	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lots 7, 8, and 9	Hauling	0.00	20.0	HHDT
Architectural Coating Lots 7, 8, and 9	Onsite truck	—	—	HHDT
Architectural Coating Lot 6	—	—	—	—
Architectural Coating Lot 6	Worker	18.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lot 6	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lot 6	Hauling	0.00	20.0	HHDT
Architectural Coating Lot 6	Onsite truck	—	—	HHDT
Architectural Coating Lot 5	—	—	—	—
Architectural Coating Lot 5	Worker	16.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lot 5	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lot 5	Hauling	0.00	20.0	HHDT
Architectural Coating Lot 5	Onsite truck	—	—	HHDT

Architectural Coating Lot 4	—	—	—	—
Architectural Coating Lot 4	Worker	24.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lot 4	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lot 4	Hauling	0.00	20.0	HHDT
Architectural Coating Lot 4	Onsite truck	—	—	HHDT
Architectural Coating Lot 2&3	—	—	—	—
Architectural Coating Lot 2&3	Worker	24.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lot 2&3	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lot 2&3	Hauling	0.00	20.0	HHDT
Architectural Coating Lot 2&3	Onsite truck	—	—	HHDT
Wet Utilities	—	—	—	—
Wet Utilities	Worker	80.0	18.5	LDA,LDT1,LDT2
Wet Utilities	Vendor	4.00	10.2	HHDT,MHDT
Wet Utilities	Hauling	0.00	20.0	HHDT
Wet Utilities	Onsite truck	—	—	HHDT
18-inch Pipe Installation	—	—	—	—
18-inch Pipe Installation	Worker	8.00	18.5	LDA,LDT1,LDT2
18-inch Pipe Installation	Vendor	4.00	10.2	HHDT,MHDT
18-inch Pipe Installation	Hauling	0.00	20.0	HHDT
18-inch Pipe Installation	Onsite truck	—	—	HHDT
12-inch Pipe Installation	—	—	—	—
12-inch Pipe Installation	Worker	8.00	18.5	LDA,LDT1,LDT2
12-inch Pipe Installation	Vendor	4.00	10.2	HHDT,MHDT
12-inch Pipe Installation	Hauling	0.00	20.0	HHDT
12-inch Pipe Installation	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Clear & Grub	—	—	—	—
Clear & Grub	Worker	14.0	18.5	LDA,LDT1,LDT2
Clear & Grub	Vendor	4.00	10.2	HHDT,MHDT
Clear & Grub	Hauling	40.0	20.0	HHDT
Clear & Grub	Onsite truck	—	—	HHDT
Remedial & Mass Grading	—	—	—	—
Remedial & Mass Grading	Worker	52.0	18.5	LDA,LDT1,LDT2
Remedial & Mass Grading	Vendor	6.00	10.2	HHDT,MHDT
Remedial & Mass Grading	Hauling	0.00	20.0	HHDT
Remedial & Mass Grading	Onsite truck	—	—	HHDT
Finish Grading	—	—	—	—
Finish Grading	Worker	24.0	18.5	LDA,LDT1,LDT2
Finish Grading	Vendor	6.00	10.2	HHDT,MHDT
Finish Grading	Hauling	0.00	20.0	HHDT
Finish Grading	Onsite truck	—	—	HHDT
Pump Station 4	—	—	—	—
Pump Station 4	Worker	8.00	18.5	LDA,LDT1,LDT2
Pump Station 4	Vendor	4.00	10.2	HHDT,MHDT
Pump Station 4	Hauling	0.00	20.0	HHDT
Pump Station 4	Onsite truck	—	—	HHDT
Building Construction Lots 7, 8, and 9	—	—	—	—
Building Construction Lots 7, 8, and 9	Worker	140	18.5	LDA,LDT1,LDT2
Building Construction Lots 7, 8, and 9	Vendor	30.0	10.2	HHDT,MHDT
Building Construction Lots 7, 8, and 9	Hauling	0.00	20.0	HHDT
Building Construction Lots 7, 8, and 9	Onsite truck	—	—	HHDT

Building Construction Lot 6	—	—	—	—
Building Construction Lot 6	Worker	116	18.5	LDA,LDT1,LDT2
Building Construction Lot 6	Vendor	26.0	10.2	HHDT,MHDT
Building Construction Lot 6	Hauling	0.00	20.0	HHDT
Building Construction Lot 6	Onsite truck	—	—	HHDT
Building Construction Lot 5	—	—	—	—
Building Construction Lot 5	Worker	98.0	18.5	LDA,LDT1,LDT2
Building Construction Lot 5	Vendor	20.0	10.2	HHDT,MHDT
Building Construction Lot 5	Hauling	0.00	20.0	HHDT
Building Construction Lot 5	Onsite truck	—	—	HHDT
Building Construction Lot 4	—	—	—	—
Building Construction Lot 4	Worker	146	18.5	LDA,LDT1,LDT2
Building Construction Lot 4	Vendor	34.0	10.2	HHDT,MHDT
Building Construction Lot 4	Hauling	0.00	20.0	HHDT
Building Construction Lot 4	Onsite truck	—	—	HHDT
Building Construction Lots 2&3	—	—	—	—
Building Construction Lots 2&3	Worker	148	18.5	LDA,LDT1,LDT2
Building Construction Lots 2&3	Vendor	30.0	10.2	HHDT,MHDT
Building Construction Lots 2&3	Hauling	0.00	20.0	HHDT
Building Construction Lots 2&3	Onsite truck	—	—	HHDT
Building Construction Lots 10 and 11	—	—	—	—
Building Construction Lots 10 and 11	Worker	50.0	18.5	LDA,LDT1,LDT2
Building Construction Lots 10 and 11	Vendor	10.0	10.2	HHDT,MHDT
Building Construction Lots 10 and 11	Hauling	0.00	20.0	HHDT
Building Construction Lots 10 and 11	Onsite truck	—	—	HHDT
Balancing/Aggregate Base	—	—	—	—
Balancing/Aggregate Base	Worker	16.0	18.5	LDA,LDT1,LDT2
Balancing/Aggregate Base	Vendor	4.00	10.2	HHDT,MHDT

Balancing/Aggregate Base	Hauling	0.00	20.0	HHDT
Balancing/Aggregate Base	Onsite truck	—	—	HHDT
Curb & Gutter	—	—	—	—
Curb & Gutter	Worker	14.0	18.5	LDA,LDT1,LDT2
Curb & Gutter	Vendor	4.00	10.2	HHDT,MHDT
Curb & Gutter	Hauling	0.00	20.0	HHDT
Curb & Gutter	Onsite truck	—	—	HHDT
Asphalt Paving	—	—	—	—
Asphalt Paving	Worker	16.0	18.5	LDA,LDT1,LDT2
Asphalt Paving	Vendor	4.00	10.2	HHDT,MHDT
Asphalt Paving	Hauling	0.00	20.0	HHDT
Asphalt Paving	Onsite truck	—	—	HHDT
Concrete Flatwork	—	—	—	—
Concrete Flatwork	Worker	22.0	18.5	LDA,LDT1,LDT2
Concrete Flatwork	Vendor	4.00	10.2	HHDT,MHDT
Concrete Flatwork	Hauling	0.00	20.0	HHDT
Concrete Flatwork	Onsite truck	—	—	HHDT
Architectural Coating Lots 10 and 11	—	—	—	—
Architectural Coating Lots 10 and 11	Worker	8.00	18.5	LDA,LDT1,LDT2
Architectural Coating Lots 10 and 11	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lots 10 and 11	Hauling	0.00	20.0	HHDT
Architectural Coating Lots 10 and 11	Onsite truck	—	—	HHDT
Architectural Coating Lots 7, 8, and 9	—	—	—	—
Architectural Coating Lots 7, 8, and 9	Worker	22.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lots 7, 8, and 9	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lots 7, 8, and 9	Hauling	0.00	20.0	HHDT
Architectural Coating Lots 7, 8, and 9	Onsite truck	—	—	HHDT
Architectural Coating Lot 6	—	—	—	—

Architectural Coating Lot 6	Worker	18.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lot 6	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lot 6	Hauling	0.00	20.0	HHDT
Architectural Coating Lot 6	Onsite truck	—	—	HHDT
Architectural Coating Lot 5	—	—	—	—
Architectural Coating Lot 5	Worker	16.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lot 5	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lot 5	Hauling	0.00	20.0	HHDT
Architectural Coating Lot 5	Onsite truck	—	—	HHDT
Architectural Coating Lot 4	—	—	—	—
Architectural Coating Lot 4	Worker	24.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lot 4	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lot 4	Hauling	0.00	20.0	HHDT
Architectural Coating Lot 4	Onsite truck	—	—	HHDT
Architectural Coating Lot 2&3	—	—	—	—
Architectural Coating Lot 2&3	Worker	24.0	18.5	LDA,LDT1,LDT2
Architectural Coating Lot 2&3	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating Lot 2&3	Hauling	0.00	20.0	HHDT
Architectural Coating Lot 2&3	Onsite truck	—	—	HHDT
Wet Utilities	—	—	—	—
Wet Utilities	Worker	80.0	18.5	LDA,LDT1,LDT2
Wet Utilities	Vendor	4.00	10.2	HHDT,MHDT
Wet Utilities	Hauling	0.00	20.0	HHDT
Wet Utilities	Onsite truck	—	—	HHDT
18-inch Pipe Installation	—	—	—	—
18-inch Pipe Installation	Worker	8.00	18.5	LDA,LDT1,LDT2
18-inch Pipe Installation	Vendor	4.00	10.2	HHDT,MHDT
18-inch Pipe Installation	Hauling	0.00	20.0	HHDT

18-inch Pipe Installation	Onsite truck	—	—	HHDT
12-inch Pipe Installation	—	—	—	—
12-inch Pipe Installation	Worker	8.00	18.5	LDA,LDT1,LDT2
12-inch Pipe Installation	Vendor	4.00	10.2	HHDT,MHDT
12-inch Pipe Installation	Hauling	0.00	20.0	HHDT
12-inch Pipe Installation	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating Lots 10 and 11	76,320	25,440	0.00	0.00	0.00
Architectural Coating Lots 7, 8, and 9	154,696	72,014	0.00	0.00	0.00
Architectural Coating Lot 6	244,171	81,390	0.00	0.00	0.00
Architectural Coating Lot 5	240,414	80,138	0.00	0.00	0.00
Architectural Coating Lot 4	255,440	85,147	9,194	3,065	0.00
Architectural Coating Lot 2&3	177,614	59,205	0.00	0.00	0.00
Asphalt Paving	0.00	0.00	0.00	0.00	5,528

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Clear & Grub	—	—	30.0	0.00	—

Remedial & Mass Grading	—	—	1,740	0.00	—
Finish Grading	—	—	180	0.00	—
Pump Station 4	—	—	0.00	0.00	—
Balancing/Aggregate Base	0.00	0.00	0.00	0.00	13.3
Curb & Gutter	0.00	0.00	0.00	0.00	13.3
Asphalt Paving	0.00	0.00	0.00	0.00	13.3
Concrete Flatwork	0.00	0.00	0.00	0.00	13.3

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse	—	0%
Single Family Housing	2.79	0%
Apartments Low Rise	—	0%
Other Asphalt Surfaces	8.41	100%
Parking Lot	2.11	100%
City Park	0.00	0%
Health Club	0.00	0%
Recreational Swimming Pool	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	99,963	532	0.03	< 0.005

2026	171,364	346	0.03	< 0.005
2027	171,364	346	0.03	< 0.005
2028	171,364	346	0.03	< 0.005
2029	157,084	346	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	4,221	4,221	4,221	1,540,787	34,285	34,285	34,285	12,513,843

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	4,108	4,108	4,108	1,499,313	33,362	33,362	33,362	12,177,000

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Single Family Housing	—

Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Apartments Low Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Apartments Low Rise	—
Wood Fireplaces	0

Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
1550684.25	516,895	6,810	2,270	27,508

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse	290,921	346	0.0330	0.0040	5,022,345
Single Family Housing	528,781	346	0.0330	0.0040	9,698,843
Apartments Low Rise	55,799	346	0.0330	0.0040	782,672

Other Asphalt Surfaces	1,913,600	346	0.0330	0.0040	0.00
Parking Lot	80,705	346	0.0330	0.0040	0.00
City Park	0.00	346	0.0330	0.0040	0.00
Health Club	100,501	346	0.0330	0.0040	0.00
Recreational Swimming Pool	0.00	346	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse	279,107	173	0.0330	0.0040	0.00
Single Family Housing	516,138	173	0.0330	0.0040	0.00
Apartments Low Rise	55,815	173	0.0330	0.0040	0.00
Other Asphalt Surfaces	1,913,600	173	0.0330	0.0040	0.00
Parking Lot	80,705	173	0.0330	0.0040	0.00
City Park	0.00	173	0.0330	0.0040	0.00
Health Club	100,184	173	0.0330	0.0040	0.00
Recreational Swimming Pool	0.00	173	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse	30,235,755	32,640,538
Single Family Housing	0.00	0.00
Apartments Low Rise	1,635,774	281,475
Other Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	22,201
City Park	0.00	2,262,851

Health Club	2,235,341	179,108
Recreational Swimming Pool	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse	24,297,453	32,215,276
Single Family Housing	0.00	-833,933
Apartments Low Rise	1,314,508	250,274
Other Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	19,193
City Park	0.00	-110,001
Health Club	1,996,160	154,842
Recreational Swimming Pool	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	155	—
Single Family Housing	199	—
Apartments Low Rise	35.5	—
Other Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
City Park	0.17	—
Health Club	25.9	—
Recreational Swimming Pool	76.7	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	155	—
Single Family Housing	199	—
Apartments Low Rise	35.5	—
Other Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
City Park	0.17	—
Health Club	25.9	—
Recreational Swimming Pool	76.7	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0

Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Health Club	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Recreational Swimming Pool	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0

Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Health Club	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Health Club	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Recreational Swimming Pool	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Recreational Swimming Pool	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Grazing	Inceptisols	125	111
Grazing	Entisols	94.5	33.0
Grazing	Alfisols	0.13	0.02
Grazing	Mollisols	2.43	0.65

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Grazing	Inceptisols	125	111
Grazing	Entisols	94.5	33.0
Grazing	Alfisols	0.13	0.02
Grazing	Mollisols	2.43	0.65

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	24.0	10.7
Shrubland	153	119
Grassland	53.5	19.2

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	24.0	10.7
Shrubland	153	119
Grassland	53.5	19.2

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
Willow Acacia	512	704,420	3,335
Loquat	244	205,628	852
Strawberry Tree	65.0	69,935	322
Coastal Live Oak	567	546,527	2,376
Black Walnut	6.00	5,990	19.3
Fremont Cottonwood	30.0	32,869	106
Scrub Oak	2.00	1,839	5.90
Valley Oak	40.0	36,788	118
Red Willow	48.0	38,032	122
Arroyo Willow	14.0	8,112	25.9
Blue Elderberry	100	32,039	110
Black Walnut	-3.00	2,995	9.60
Fremont Cottonwood	-15.0	16,434	53.1

Coastal live oak(Quercus agrifolia)	-235	226,515	985
Scrub Oak	-4.00	3,679	11.8
White Oak	-13.0	11,956	38.5
Red Willow	-25.0	19,808	63.6
Willow	-10.0	5,794	18.5
Elderberry	-138	44,213	152

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
Willow Acacia	512	704,420	3,335
Loquat	244	205,628	852
Strawberry Tree	65.0	69,935	322
Coastal Live Oak	567	546,527	2,376
Black Walnut	6.00	5,990	19.3
Fremont Cottonwood	30.0	32,869	106
Scrub Oak	2.00	1,839	5.90
Valley Oak	40.0	36,788	118
Red Willow	48.0	38,032	122
Arroyo Willow	14.0	8,112	25.9
Blue Elderberry	100	32,039	110
Black Walnut	-3.00	2,995	9.60
Fremont Cottonwood	-15.0	16,434	53.1
Coastal live oak(Quercus agrifolia)	-235	226,515	985
Scrub Oak	-4.00	3,679	11.8
White Oak	-13.0	11,956	38.5
Red Willow	-25.0	19,808	63.6
Willow	-10.0	5,794	18.5
Elderberry	-138	44,213	152

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	17.4	annual days of extreme heat
Extreme Precipitation	9.55	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	20.6	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	88.9

AQ-PM	46.3
AQ-DPM	10.3
Drinking Water	71.3
Lead Risk Housing	1.45
Pesticides	47.6
Toxic Releases	18.4
Traffic	98.1
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	40.8
Haz Waste Facilities/Generators	46.4
Impaired Water Bodies	33.2
Solid Waste	91.0
Sensitive Population	—
Asthma	10.3
Cardio-vascular	43.0
Low Birth Weights	23.1
Socioeconomic Factor Indicators	—
Education	8.42
Housing	55.1
Linguistic	62.2
Poverty	30.8
Unemployment	72.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—

Above Poverty	87.77107661
Employed	67.86860003
Median HI	78.49351983
Education	—
Bachelor's or higher	70.67881432
High school enrollment	100
Preschool enrollment	76.74836392
Transportation	—
Auto Access	78.96830489
Active commuting	59.43795714
Social	—
2-parent households	55.24188374
Voting	48.80020531
Neighborhood	—
Alcohol availability	81.22674195
Park access	2.194276915
Retail density	83.75465161
Supermarket access	52.55998973
Tree canopy	72.65494675
Housing	—
Homeownership	43.19260875
Housing habitability	66.17477223
Low-inc homeowner severe housing cost burden	46.11831131
Low-inc renter severe housing cost burden	68.20223277
Uncrowded housing	62.10701912
Health Outcomes	—
Insured adults	82.81791351
Arthritis	0.0

Asthma ER Admissions	93.6
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	60.8
Cognitively Disabled	62.4
Physically Disabled	97.3
Heart Attack ER Admissions	32.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	61.7
SLR Inundation Area	0.0
Children	25.4
Elderly	67.6
English Speaking	44.8
Foreign-born	30.9

Outdoor Workers	89.1
Climate Change Adaptive Capacity	—
Impervious Surface Cover	81.9
Traffic Density	92.2
Traffic Access	23.0
Other Indices	—
Hardship	17.7
Other Decision Support	—
2016 Voting	36.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	39.0
Healthy Places Index Score for Project Location (b)	77.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Based on site and landscape plans.
Construction: Construction Phases	Based on applicant provided information.
Construction: Off-Road Equipment	Based on applicant provided information. In accordance with MM-AQ-1.
Construction: Trips and VMT	Based on applicant provided information.
Construction: Architectural Coatings	Architectural coating phases.
Construction: Electricity	Based on electricity use during construction.
Operations: Vehicle Data	Based on TIA.
Operations: Hearths	All electric.
Operations: Water and Waste Water	Based on WSA.
Operations: Energy Use	Use accounts for 7kW solar PV array at the health club and Title 24 for residential. Health club all-electric because mitigation module does not compensate for that land use. Other asphalt surfaces represents EV charger electricity use.

i-Tree Planting
Report produced for Santa Clarita, CA from i-Tree Planting v2.7.2.
This is an i-Tree's benefits and tree growth forecast.
Total number of trees planted in this project: 443
Electricity Emissions Factor: 353.4
Fuel Emissions Factor: 52
Project years: 30
Annual Tree Mortality: 3
Run Date: 4-3-2025

Group Identifier	Tree Group Characteristics	Initial Number of Trees	Species	Initial DBH (inches)	Distance to Building (feet)	Direction	Building Vintage	Tree Condition	Crown Light Exposure	DBH (inches)	Height (feet)	Sunlit Veg Trees	Basal Area (square feet)	Canopy Cover (square feet)	Biomass (short ton)	CO2 Avoided (pounds)	CO2 Avoided ($)	CO2 Sequestered (pounds)	CO2 Sequestered ($)	Electricity Saved (kWh)	Electricity Saved ($)	Fuel Saved (MMBtu)	Fuel Saved ($)	Rainfall Interception (gallons)	Evaporation (gallons)	Transpiration (gallons)	Avoided Runoff (gallons)	Avoided Runoff ($)	O3 Removed (pounds)	NO2 Avoided (pounds)	NO2 Removed (pounds)	SO2 Avoided (pounds)	SO2 Removed (pounds)	VOC Avoided (pounds)	PM2.5 Avoided (pounds)	PM2.5 Removed (pounds)	Avoided Value ($)	Removal Value ($)
	1 3 Black walnut(Juglans nigra) 1	3	Black walnut(Juglans nigra)		1 0-19	north (ÂºÂ)	post-1980	excellent	full sun	21.8	79.6	1.2	3.2	1,327.80	2.4	2,934.50	$173.16	12,090.70	$713.45	2,994.80	$613.03	9.6	$134.82	20,616.10	20,614.00	100,846.70	5,579.10	$49.85	26.27	0.21	6.16	0.74	0.42	1.55	0.86	0.28	$5.75	$192.55
	2 15 Fremont cottonwood(Popul	15	Fremont cottonwood(Populus fremontii)		1 0-19	north (ÂºÂ)	post-1980	excellent	full sun	21.8	74.9	6.2	16	7,751.30	10.9	16,119.50	$951.19	55,447.90	$3,271.89	16,434.40	$3,364.13	53.1	$686.79	101,461.00	101,450.70	506,095.10	27,998.50	$250.19	137.53	1.16	32.55	4.08	2.18	8.52	5.38	1.55	$31.58	$866.19
	3 295 Coastal live oak(Quercus a	235	Coastal live oak(Quercus agrifolia)		1 0-19	north (ÂºÂ)	post-1980	excellent	full sun	12.1	55.4	97	77.8	46,767.40	58.7	251,218.20	$14,823.96	301,302.30	$17,779.34	226,514.60	$46,367.54	964.9	$12,744.26	861,016.40	860,930.40	4,211,791.60	233,006.90	$2,082.15	1,146.92	18.07	356.14	63.58	18.46	118.78	74.52	10.94	$445.15	$6,673.99
	4 4 Scrub oak(Quercus berberidi	4	Scrub oak(Quercus berberidifolia)		1 0-19	north (ÂºÂ)	post-1980	excellent	full sun	15.6	64.3	1.7	2.2	973.4	1.8	3,603.20	$212.62	9,341.90	$551.25	3,678.80	$753.05	11.8	$153.15	19,130.30	19,128.40	93,578.80	5,177.00	$46.26	23.99	0.26	5.61	0.91	0.38	1.91	1.21	0.25	$7.67	$147.91
	5 13 Oak sp(Quercus) trees of	13	Oak sp(Quercus)		1 0-19	north (ÂºÂ)	post-1980	excellent	full sun	17	67.3	5.4	6.4	4,533.20	6.7	11,718.30	$691.00	35,275.40	$2,081.54	11,956.10	$2,447.42	38.5	$497.75	80,779.80	80,771.40	396,145.70	21,880.50	$195.15	97.9	0.84	22.67	2.96	1.56	6.2	3.92	0.95	$22.97	$592.35
	6 25 Red willow(Salix laevigata)	25	Red willow(Salix laevigata)		1 0-19	north (ÂºÂ)	post-1980	excellent	full sun	21.8	57.8	10	26.7	8,443.00	17.4	19,385.10	$1,143.88	88,967.00	$5,246.25	19,868.10	$4,054.72	63.6	$822.87	148,199.30	149,184.40	729,830.90	40,376.10	$360.80	176.18	1.39	40.53	4.91	2.82	10.26	6.49	1.63	$38.04	$1,053.48
	7 10 Willow spp(Salix) trees of 1	10	Willow spp(Salix)		1 0-19	north (ÂºÂ)	post-1980	excellent	full sun	17	50.9	4.1	6.5	2,337.80	3.7	5,657.20	$333.82	19,136.00	$1,128.59	5,794.50	$1,186.13	18.5	$239.19	44,768.60	44,764.10	218,902.20	12,115.20	$108.26	50.89	0.41	11.38	1.43	0.81	3	1.9	0.42	$11.13	$293.26
	8 138 Elderberry spp(Sambucus)	138	Elderberry spp(Sambucus)		1 0-19	north (ÂºÂ)	post-1980	excellent	full sun	15.6	17.3	57	75.8	20,032.40	35.3	44,383.60	$2,619.59	185,614.70	$10,952.81	44,213.40	$9,050.49	151.8	$1,963.62	431,708.30	431,665.10	2,111,766.10	116,828.20	$1,043.98	407.6	3.19	88.42	11.24	6.68	22.97	14.5	2.41	$85.30	$2,222.82

Cumulative graph data

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Sequestered & Avoided Carbon	702.0413137	1488.004994	2362.430976	3327.980288	4386.800166	5536.771621	6778.634016	8133.354568	9610.366952	11220.87496	12934.3976	14824.30099	16846.44059	18956.23542	21148.549061	23427.67943	25780.77353	28233.84646	30702.71357	33334.18661	35974.1064	38651.5894	41335.63077	44011.36743	47207.92625	50369.20995	53493.47798	56581.25386	59645.50358	62674.34279
Energy	2080.451297	4114.624249	6154.250317	8048.547742	9951.46558	11810.60439	13607.21651	15485.6427	17422.84359	19485.88213	21558.44627	24295.96515	27182.23645	30044.71444	32981.44719	35715.5465	38515.57241	41406.48821	44265.81068	47085.98789	49869.93095	52775.45172	55637.45244	58455.41203	63212.7345	67832.8668	72314.28747	76661.19474	80929.06479	85068.93819
Avoided Runoff	52.31824321	112.2613703	179.4162346	253.1266466	334.4164955	421.9205077	515.9276368	616.3100398	722.9476573	835.7188881	954.4989686	1079.158803	1200.164626	1345.577886	1487.055358	1633.849409	1785.808336	1942.776769	2104.596995	2271.1049	2442.139408	2617.533919	2796.914462	2979.926511	3166.235237	3355.925345	3547.569586	3741.883308	3938.41237	4136.844896
Air Pollution	98.35148232	215.127657	350.2817771	504.2865353	677.4837126	876.8467673	1085.05481	1321.376571	1580.896569	1864.612369	2172.253383	2510.767441	2870.248954	3264.692863	3679.344746	4139.139478	4584.098512	5074.321434	5589.219233	6127.468326	6688.72476	7273.471712	7878.885937	8503.567442	9160.621865	9833.535416	10521.13368	11222.0726	11935.38837	12659.53793
Combined Benefits	2933.112107	5930.21767	8996.388304	12155.26141	15349.37199	18640.1433	22007.78378	25556.07788	29337.05719	33407.09837	37619.59513	42710.22255	48113.46862	53611.20562	59197.28791	64894.10781	70666.16229	76659.63287	82711.58057	88818.66773	94974.89952	101322.0267	107648.8673	113950.2734	122747.5178	131391.1375	139876.3996	148206.3743	156448.3691	164539.8336

i-Tree Planting
Report produced for Santa Clarita, CA from i-Tree Planting v2.7.2.
This is an i-TreeP benefits and tree growth forecast.
Total number of trees planted in this project: 1628
Electricity Emissions Factor: 252.4
Fuel Emissions Factor: 52
Project years: 30
Annual Tree Mortality: 3
Run Date: 4-30-2025

Group Identifier	Tree Group Characteristics	Initial Numberof Trees	Species	Initial DBH (inches)	Distance to Building (feet)	Direction	Building Vintage	TreeCondition	CrownLightExposure	DBH (inches)	Height (feet)	Surviving Trees	Basal Area (square feet)	Canopy Cover (square feet)	Biomass (short ton)	CO2 Avoided (pounds)	CO2 Avoided ($)	CO2 Sequestered (pounds)	CO2 Sequestered ($)	Electricity Saved (kWh)	Electricity Saved ($)	Fuel Saved (MMBtu)	Fuel Saved ($)	Rainfall Interception (gallons)	Evaporation (gallons)	Transpiration (gallons)	Avoided Runoff (gallons)	Avoided Runoff ($)	CO Removed (pounds)	NO2 Avoided (pounds)	NO2 Removed (pounds)	SO2 Avoided (pounds)	SO2 Removed (pounds)	VOC Avoided (pounds)	PM2.5 Avoided (pounds)	PM2.5 Removed (pounds)	Avoided Value ($)	Removal Value ($)
1	512 Willow acacia(Acacia salicina)	512	Willow acacia(Acacia salicina)	1	0-19	north (ðN°)	post-1980	excellent	full sun	21.8	70	212	547.8	116,809.80	130.6	812,457.30	$47,941.74	674,477.60	$38,799.78	704,419.70	$144,194.71	3,335.10	$43,155.36	2,059,180.30	2,058,974.60	10,072,790.80	557,252.20	$4,979.61	2,907.14	58.43	745.83	205.63	50.56	370.84	232.08	39.97	$1,395.00	$20,256.59
2	244 Loquat tree(Eriobotrya ja	244	Loquat tree(Eriobotrya japonica)	1	0-19	north (ðN°)	post-1980	excellent	full sun	15.6	50.4	101	134	24,070.30	116	221,202.70	$13,170.81	600,765.80	$35,451.36	265,627.70	$42,091.99	851.8	$11,021.56	554,477.10	554,421.70	2,712,308.30	150,051.70	$1,340.86	636.54	16.05	148.73	56.49	10.98	107.6	67.6	5.47	$402.45	$3,760.30
3	65 Strawberry tree(Arbutus ur	65	Strawberry tree(Arbutus unedo)	1	0-19	north (ðN°)	post-1980	excellent	full sun	12.1	63.3	27	21.5	10,509.80	17.9	79,596.20	$4,696.84	91,959.50	$5,426.37	69,935.20	$14,315.73	321.8	$4,164.28	238,973.30	238,949.50	1,168,974.10	64,670.60	$577.90	242.54	5.72	57.04	20.15	4.36	36.77	23.03	1.77	$138.13	$1,411.00
4	567 Coastal live oak(Quercus	567	Coastal live oak(Quercus agrifolia)	1	0-19	north (ðN°)	post-1980	excellent	full sun	12.1	55.4	234	187.7	98,362.30	141.7	696,130.60	$35,766.75	726,972.00	$42,897.39	546,526.70	$111,874.02	2,376.30	$30,748.78	2,077,431.10	2,077,223.60	10,162,967.40	562,191.20	$5,023.74	2,523.57	43.59	623.84	153.41	44.54	286.58	179.8	26.39	$1,074.94	$16,102.78
5	6 Black walnut(Juglans nigra)	6	Black walnut(Juglans nigra)	1	0-19	north (ðN°)	post-1980	excellent	full sun	21.8	73.6	2.5	6.4	2,655.60	4.7	5,869.00	$346.32	24,181.30	$1,426.90	5,989.60	$1,226.06	19.3	$249.65	41,232.20	41,228.10	201,693.40	11,158.20	$99.71	52.54	0.42	12.32	1.49	0.84	3.1	1.96	0.55	$11.51	$325.10
6	39 Fremont cottonwood(Popu	39	Fremont cottonwood(Populus fremontii)	1	0-19	north (ðN°)	post-1980	excellent	full sun	21.8	74.8	12	32.1	15,502.70	21.7	32,238.00	$1,902.37	110,895.80	$6,543.76	32,868.80	$6,728.25	106.2	$1,373.58	296,922.00	296,901.30	1,812,190.10	55,996.90	$500.39	275.05	2.32	66.1	8.16	4.35	17.04	10.77	3.1	$63.15	$1,732.39
7	2 Scrub oak(Quercus berberi	2	Scrub oak(Quercus berberidifolia)	1	0-19	north (ðN°)	post-1980	excellent	full sun	15.6	64.3	0.83	1.1	486.7	0.9	1,801.60	$106.31	4,671.00	$275.63	1,839.40	$376.53	5.9	$76.58	9,565.20	9,564.20	46,789.40	2,588.50	$23.13	12	0.13	2.8	0.46	0.19	0.95	0.6	0.12	$3.53	$73.95
8	40 Oak spp(Quercus): trees of	40	Oak spp(Quercus):	1	0-19	north (ðN°)	post-1980	excellent	full sun	17	67.3	17	25.9	13,948.30	20.7	36,011.60	$2,126.16	108,539.50	$6,404.74	36,786.10	$7,530.53	118.4	$1,531.53	248,552.70	248,527.80	1,215,832.90	67,262.90	$601.06	301.24	2.59	69.76	9.12	4.81	19.07	12.05	2.92	$70.67	$1,822.62
9	48 Red willow(Salix laevigata)	48	Red willow(Salix laevigata)	1	0-19	north (ðN°)	post-1980	excellent	full sun	21.8	57.8	20	51.4	16,210.50	33.5	37,219.40	$2,196.25	170,701.40	$10,072.80	38,031.60	$7,765.06	122.1	$1,579.91	286,462.70	286,434.10	1,401,275.40	77,322.10	$692.74	338.26	2.68	77.82	9.42	5.42	19.71	12.46	3.12	$73.05	$2,102.68
10	14 Willow spp(Salix) trees of	14	Willow spp(Salix)	1	0-19	north (ðN°)	post-1980	excellent	full sun	17	50.9	5.8	9.1	3,273.00	5.2	7,920.10	$467.35	26,776.40	$1,580.03	8,112.30	$1,660.59	25.9	$334.86	62,676.00	62,669.70	306,589.00	16,961.30	$151.57	70.13	0.57	15.93	2	1.13	4.2	2.66	0.59	$15.57	$410.56
11	100 Elderberry spp(Sambucu	100	Elderberry spp(Sambucus)	1	0-19	north (ðN°)	post-1980	excellent	full sun	15.6	17.3	41	54.9	14,516.20	25.6	32,169.20	$1,898.25	134,503.40	$7,936.82	32,018.70	$6,558.33	110	$1,422.91	312,832.10	312,800.80	1,538,265.30	84,658.10	$756.51	295.36	2.31	64.07	8.14	4.85	16.64	10.5	1.75	$61.81	$1,610.74

Cumulative graph data

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Sequestered & Avc	2700.814464	5743.779457	9141.729425	12902.75052	17031.28383	21558.111	26538.02274	32188.05605	38348.59749	45030.31257	52177.2147	59976.3113	68345.68311	77110.39957	86248.71652	95749.1398	107021.0666	118579.6794	130228.406	142254.7611	154342.4861	166600.9823	178764.1366	190815.1681	204014.9116	217014.9145	229807.3445	242890.4376	255766.7576	268434.7507
Energy	8155.817726	16242.37826	24238.83545	32132.7773	39915.85742	47668.269	55549.95801	65317.14481	75423.28076	85922.7477	96610.4259	109225.2796	122886.9045	136573.6166	150262.173	163977.5735	183110.0114	202172.176	220814.9176	239164.7906	257105.6432	275584.247	293652.5302	311312.8894	333355.3825	354774.8157	375572.9658	397645.7637	419144.5581	440000.7923
Avoided Runoff	182.8949439	391.1999617	623.8344968	880.5986413	1161.078839	1464.9991	1792.10953	2142.113612	2514.747876	2909.686209	3326.58237	3765.060435	4224.753445	4705.114731	5205.799696	5726.28783	6298.074855	6824.636815	7401.432763	7995.905904	8607.486673	9235.594236	9879.272498	10537.5976	11299.86977	11894.63204	12591.85161	13299.92644	14018.69257	14747.20303
Air Pollution	361.8621431	792.9364563	1294.301928	1868.83695	2526.208274	3252.9953	4072.429544	4999.689802	6023.483203	7148.18288	8375.925154	9727.141934	11195.63636	12774.5461	14465.51233	16269.87407	18227.09434	20296.62422	22474.91408	24760.65386	27149.85435	29648.11206	32242.74027	34928.3317	37733.87896	40616.73672	43571.11745	46604.12591	49695.36456	52837.61889
Combined Benefit	11401.39356	23170.20408	35298.7013	47784.96461	60628.42837	73944.374	87952.51183	104647.0043	122310.1093	141010.9284	160490.148	182693.7933	206652.9594	231163.676	256182.2016	281722.8752	314626.2473	347873.1166	381059.6705	414175.5115	447205.4703	481068.9356	514538.6795	547594.3749	586313.8428	624301.099	661543.0784	700440.2556	738625.3727	776020.3649

Attachment B

Additional Transportation Analysis

FEHR PEERS

Memorandum

Date: May 16, 2025

To: Corey Harpole, NUWI Lyons Canyon

From: Dongyang Lin & Jeremy Klop, Fehr & Peers

Subject: Additional Transportation Analysis for The Trails at Lyons Canyon Project

LA25-3234.01

This memorandum documents the additional transportation analysis conducted by Fehr & Peers to respond to comments from the City of Santa Clarita (the "City") on the Draft Environmental Impact Report ("EIR") for The Trails at Lyons Canyon Project (the "Project").

Methodology

Study Intersections

On March 10, 2025, the City commented on the Draft EIR of the Project to expand the list of study intersections to include the following locations (**Figure 1**):

1. Pico Canyon Road & I-5 Southbound Ramps
2. Lyons Avenue & I-5 Northbound Ramps
3. Lyons Avenue & Wiley Canyon Road
4. Calgrove Boulevard & I-5 Southbound Ramps
5. Calgrove Boulevard & I-5 Northbound Ramps
6. Calgrove Boulevard & Wiley Canyon Road

Fehr & Peers reviewed the City's Local Transportation Assessment Guidelines[1], analyzed trip generation and distribution at six intersections, and determined that five of the six requested locations meet the City's threshold for operational analysis.

[1] City of Santa Clarita, Transportation Analysis Updates in Santa Clarita, May 19, 2020. Accessed in April 2025 via: https://santaclarita.gov/wp-content/uploads/sites/42/migration/Transportation%20Analysis%20Updates%20in%20Santa%20Clarita_05192020.pdf

City's Guidelines states that: "*intersections where the proposed project would add 50 or more net new trips during the AM and PM peak hours should be included in the study*". Fehr & Peers confirmed with the City's traffic engineer that the threshold applies if the Project generates 50 or more net new trips during **either** the AM or PM peak hour. The Project's trip generation and trip distribution established and approved for the transportation study (**Table 1**, **Figure 2**) indicate that the Project would not generate 50 or more net new trips during either the AM or PM peak hour at Intersection #6 (Calgrove Boulevard & Wiley Canyon Road). Therefore, Intersection #6 is excluded from the Project's operational analysis in the following sections.

Table 1: Project Peak Hour Trip Generation at Study Intersections

Intersections	Project Trip Distribution and Direction	AM Peak		PM Peak		AM Peak Total	PM Peak Total	Exceeds Threshold?
		In	Out	In	Out			
1. Pico Canyon Road & I-5 Southbound Ramps	25% Inbound Trips; 3% Outbound Trips	19	7	64	4	26	68	Yes
2. Lyons Avenue & I-5 Northbound Ramps	25% Inbound Trips; 50% Outbound Trips	19	119	64	75	138	139	Yes
3. Lyons Avenue & Wiley Canyon Road	25% Inbound and Outbound Trips	19	60	64	37	79	101	Yes
4. Calgrove Boulevard & I-5 Southbound Ramps	23% Inbound and Outbound Trips	18	55	59	34	73	93	Yes
5. Calgrove Boulevard & I-5 Northbound Ramps	23% Inbound Trips; No Outbound Trips	18	0	59	0	18	59	Yes
6. Calgrove Boulevard & Wiley Canyon Road	**Less than 1% Inbound and Outbound Trips**	**<1**	**<2**	**<3**	**<1**	**<3**	**<4**	**No**

Note: Detailed Project Trips Generation Estimates available on **Appendix A**.
Source: Fehr & Peers, 2025

Level of Service and Queueing Methodology

Consistent with the requirements of the City and the Project's Draft EIR, the *Highway Capacity Manual* (HCM) (Transportation Research Board, 2016) methodology was used to analyze the delay. Under HCM methodology, delay is calculated in seconds for both the signalized and unsignalized intersections and given a LOS grade (**Table 2**). The signalized study intersections were analyzed using the HCM 6th Edition Signalized methodology and the unsignalized

intersections were analyzed using the HCM 6th Edition Two-way Stop Control methodology. The Synchro software package was used to produce the HCM results.

The adequacy of the storage lengths was evaluated by comparing the 95th percentile queue length to the available storage length. The 95th percentile queue is defined to be the queue length (in vehicles) that has only a 5-percent probability of being exceeded during the analysis time period. The Synchro software package was used to produce queueing results and lane storage lengths were measured through aerial photo review and field investigation.

Table 2: HCM Level of Service Definitions for Signalized Intersections

LOS	HCM Average Control Delay (seconds/vehicle) for Signalized Intersections	HCM Average Control Delay (seconds/vehicle) for Unsignalized Intersections
A	< 10.0	< 10.0
B	> 10.0 and < 20.0	> 10.0 and < 15.0
C	> 20.0 and < 35.0	> 15.0 and < 25.0
D	> 35.0 and < 55.0	> 25.0 and < 35.0
E	> 55.0 and < 80.0	> 35.0 and < 50.0
F	> 80.0	> 50.0

Analysis Scenarios

Consistent with the Project's Draft EIR, Fehr & Peers analyzed the following three scenarios:

- Existing Year Conditions[2]
- Future (2029) Base
- Future (2029) Plus Project

Intersection Operational Analysis

Existing Year Conditions

Weekday AM and PM peak hour turning movement counts for the study intersections were collected in November 2024 (Intersection #2 and #3) and April 2025 (Intersection #1, #4, #5), when all local schools were in session (Appendix C). Existing Year traffic volumes were analyzed using the methodologies described above to determine the operating conditions at the study

[2] Since these intersections were not part of the original 2022 Transportation Impact Analysis, the existing year is based on the count collection periods of 2024 and 2025.

intersections. **All study intersections analyzed operate at LOS D or better during the AM and the PM peak periods (Table 3).**

Table 3: Existing Intersection Levels of Service

No.	Intersection	Control	Existing Year	Peak Hour	Existing Delay and LOS	
					Delay (sec)	LOS
1	I-5 Southbound Ramps &	Signal	2025	AM	14.1	B
	Pico Canyon Road			PM	15.2	B
2	I-5 Northbound Ramps &	Signal	2024	AM	12.5	B
	Lyons Avenue			PM	14.0	B
3	Wiley Canyon Road &	Signal	2024	AM	43.4	D
	Lyons Avenue			PM	37.6	D
4	I-5 Southbound Ramps &	SSSC	2025	AM	6.5	A
	Calgrove Boulevard			PM	3.3	A
5	I-5 Northbound Ramps &	SSSC	2025	AM	2.2	A
	Calgrove Boulevard			PM	7.7	A

Note: SSSC = Side Street Stop Controlled.
Source: Fehr & Peers, 2025

Future Year 2029 Conditions

Future Base Traffic Conditions

The future year traffic forecast incorporates regional growth and development beyond the study area. Ambient growth rate and trip generation estimates for related projects (**Figure 3**) align with the Project's Draft EIR. Fehr & Peers applied a 0.35% annual growth rate to existing traffic volumes to account for regional development through 2029. Traffic volumes from following related projects at study intersections are added into future forecast calculations (Appendix B).

- Canyon View Estates.
- Tentative Tract Map No. 74979.
- Wiley Canyon Project

Future Plus Project Traffic Conditions

Project's trip generation estimations are consistent with the Project's Draft EIR and presented in Appendix A. Fehr & Peers used the Project trip distribution (**Figure 2**) consistent with the Draft EIR and assigned trips to study intersections during AM and PM peak hours. The Project traffic

volumes were added to the Future Base traffic projections, resulting in Future plus Project AM and PM peak hour traffic volumes (Appendix B).

Level of Service and Delay Analysis

The Future Base and Future Plus Project peak hour traffic volumes were analyzed to determine the projected delay and LOS for analyzed intersections. All study intersections are projected to operate at LOS D or better during the AM and the PM peak periods (**Table 4**). Based on the City's Local Transportation Assessment Guidelines, an intersection is considered to be affected if the Project would:

- *Worsen an intersection maintained by the City of Santa Clarita from LOS D or better to LOS E or F*
- *Cause the following increase in delay at an intersection maintained by the City of Santa Clarita that operated (with the project) at LOS D or worse*
    - *LOS D with the project: more than 4-second increase in delay is significant*
    - *LOS E or F with the project: more than 2-second increase in delay is significant*

The Project is not expected to cause significant operational changes at intersections analyzed.

Freeway Off-Ramp Queuing Analysis

The freeway off-ramp queuing analysis evaluates a proposed project's potential to cause or lengthen a forecasted off-ramp queue on the freeway mainline that could lead to a potential safety impact due to speed differentials between vehicles exiting the freeway off-ramps and vehicles traveling on the freeway mainline. Based on Caltrans Local Development Review (LDR) Safety Review Practitioner's Guidance[3], if the Project adds two or more car lengths to the ramp queue that will extend into the freeway mainline, then the location must be reviewed for traffic safety impacts.

Table 5 summarizes the weekday peak hour 95th percentile queues for analyzed off-ramps in Future Year (2029) conditions. Appendix D provides detailed queuing reports. The northbound left movement 95th percentile queue at the I-5 northbound off-ramp/Lyons Avenue is anticipated to exceed the left turn pocket storage length by four car lengths in the Future Base scenario and by five car lengths in the Future Plus Project scenario. Despite this, the total off-ramp queue is not expected to extend into the freeway mainline. In addition, The Project would add six car lengths to the shared left-through movement of I-5 northbound off-ramp queue at Calgrove Boulevard, but the queue is not expected to extend into the freeway mainline. The Project is not expected to add two or more car lengths to other off-ramp queues, nor will these queues extend into the

[3] Caltrans, Local Development Review (LDR) Safety Review Practitioner's Guidance, February 2024

freeway mainline. **Therefore, the Project is projected to have a less-than-significant impact on freeway safety at off-ramps.**

Table 4: Future Conditions Intersection Levels of Service

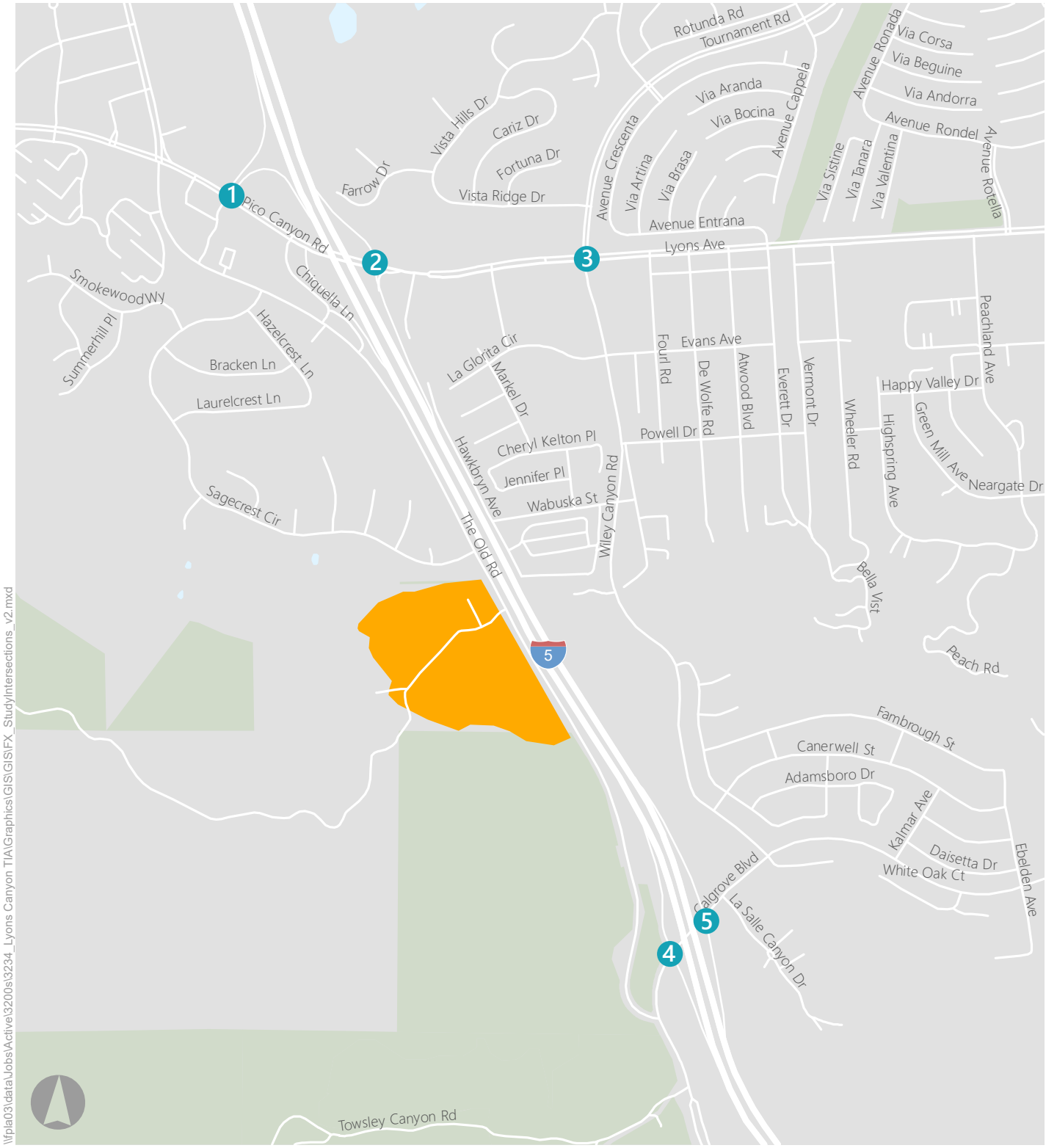
No.	Intersection	Control	Peak Hour	Future Base (2029)		Future (2029) + Project		Delay Change	Significant Operational Changes?
				Delay (sec)	LOS	Delay (sec)	LOS		
1	I-5 Southbound Ramps &	Signal	AM	14.1	B	14.3	B	0.2	No
	Pico Canyon Road		PM	15.4	B	15.9	B	0.5	No
2	I-5 Northbound Ramps &	Signal	AM	12.5	B	13.8	B	1.3	No
	Lyons Avenue		PM	14.5	B	15.9	B	1.4	No
3	Wiley Canyon Road &	Signal	AM	46.6	D	46.7	D	0.1	No
	Lyons Avenue		PM	40.5	D	40.8	D	0.3	No
4	I-5 Southbound Ramps &	SSSC	AM	7.1	A	7.0	A	-0.1	No
	Calgrove Boulevard		PM	4.4	A	4.5	A	0.1	No
5	I-5 Northbound Ramps &	SSSC	AM	2.3	A	2.7	A	0.4	No
	Calgrove Boulevard		PM	8.7	A	24.6	C	15.9	No

Note: SSSC = Side Street Stop Controlled.
Source: Fehr & Peers, 2025

Table 5: Peak-Hour Off-Ramp 95th Percentile Queue Lengths in Future Conditions[1]

No.	Off-Ramp	Control	Turn Movement[2]	Storage Length[3]	Future Base (2029)				Future (2029) + Project				Max Queue Length Increase (feet)	Max Equivalent Car Lengths[6]	Significant Impact?
					95th Percentile Queue (ft)		Queue Exceeds Storage? (Vehicles)		95th Percentile Queue (ft)		Queue Exceeds Storage? (Vehicles)				
					AM	PM	AM	PM	AM	PM	AM	PM			
1	I-5 Southbound at Pico Canyon Road	Signal	SBL	1,200	150	200	No	No	150	225	No	No	25	1	No
			SBT	1,200	150	200	No	No	150	225	No	No	25	1	
			SBR	200	50	50	No	No	50	50	No	No	0	0	
2	I-5 Northbound at Lyons Avenue	Signal	NBL	200	175	300	No	4	175	325	No	5	25	1	No[7]
			NBT	1,100	175	300	No	No	175	325	No	No	25	1	
			NBR	1,100	25	25	No	No	25	25	No	No	0	0	
4	I-5 Southbound at Calgrove Boulevard	SSSC	Shared SBL/T/R	1,200	75	50	No	No	75	75	No	No	25	1	No
5	I-5 Northbound at Calgrove Boulevard	SSSC	Shared NBL/T	1,100	25	75	No	No	25	225	No	No	150	6	No
			NBR	150	25	50	No	No	25	50	No	No	0	0	

Note:
1. Queue lengths are outputs derived from the Future Year Conditions' Synchro models developed for this Project. The 95th percentile queue length is a conservative assumption commonly employed for intersection design considerations and does not represent the typical queue length an average driver would experience.
2. Movement acronyms represent the cardinal direction (first two letters) and the turn movement (last letter). For example, NBL=Northbound-left movement, NBR = Northbound-right movement, and NBT = Northbound-through movement. Shared indicates that multiple movements are allowed from a single lane.
3. The storage length shown (measured in feet based on online aerial photographs) is the maximum storage length available for a single lane for each movement. Ramp storage lengths were determined assuming that 100% of the storage length on each lane of the ramp from the stop line to the gore point could be used.
4. Storage lengths and queues are shown in feet and rounded up to the nearest 25.
5. SSSC = Side Street Stop Controlled.
6. Assumes an average storage length per car of 25 feet.
7. Although the NBL 95th percentile queue would exceed the storage pocket, the total ramp queue would not extend into the freeway mainline.
Source: Fehr & Peers, 2025



Study Intersections

Project Site

Figure 1

Study Intersections

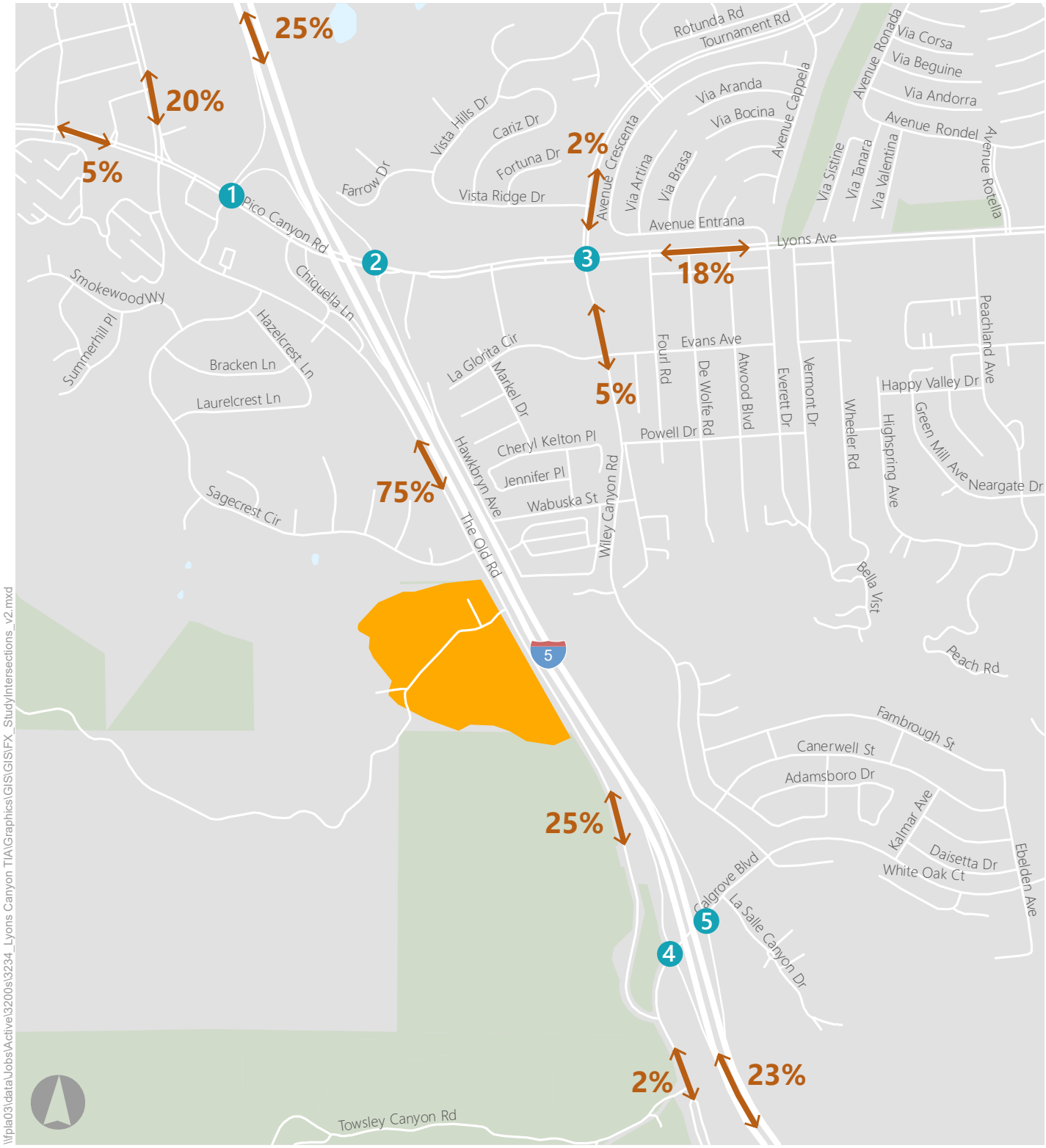


Figure 2

Project Trip Distribution

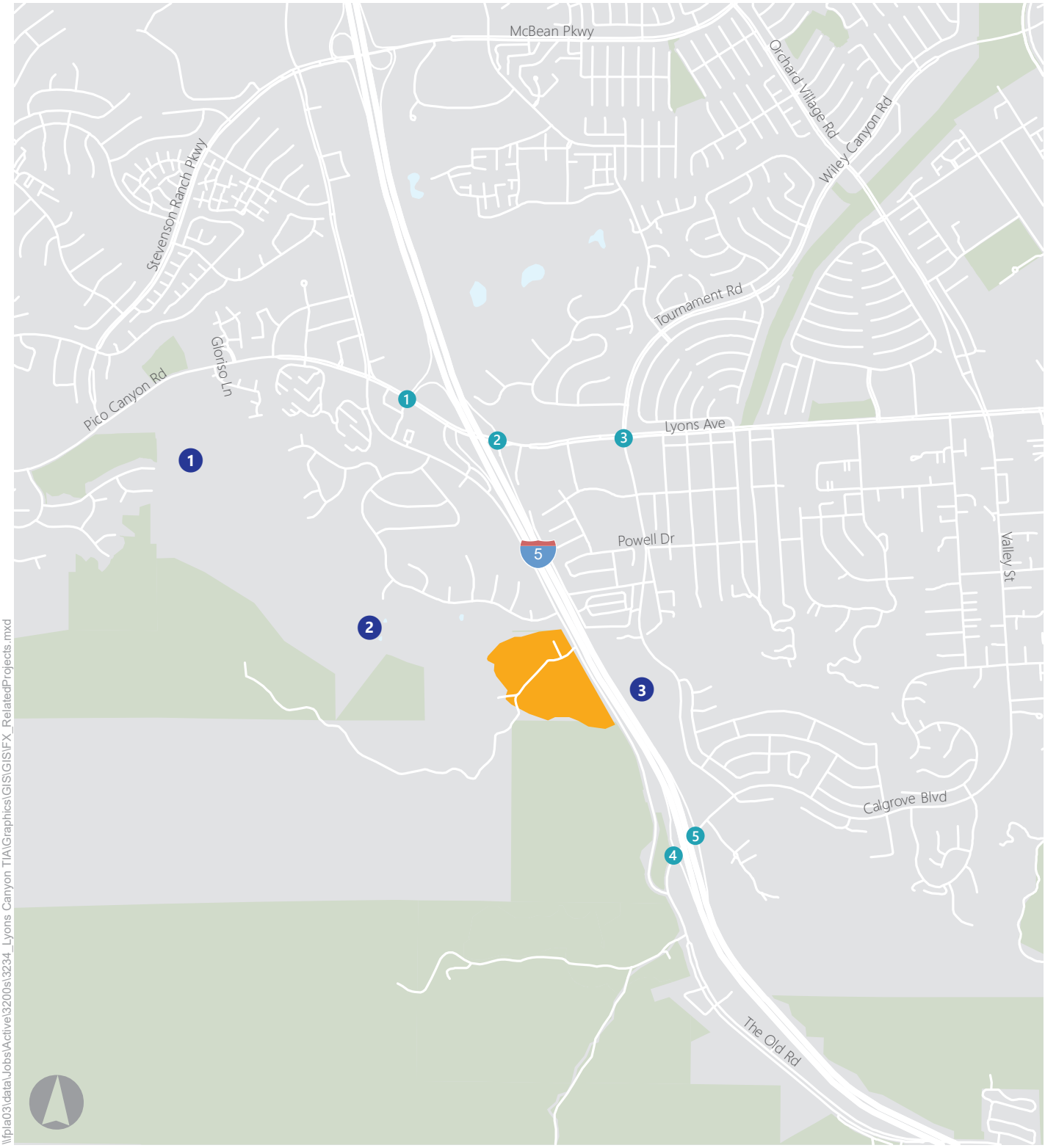


Figure 3

Related Projects

Appendix A

Project Trip Generation Estimates

Next Page

APPENDIX A
THE TRAILS AT LYONS CANYON PROJECT
PROJECT PEAK HOUR TRIP GENERATION ESTIMATES

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]						Trip Generation Estimates					
			AM Peak Hour			PM Peak Hour			AM Peak Hour Trips			PM Peak Hour Trips		
			Rate	In%	Out%	Rate	In%	Out%	In	Out	Total	In	Out	Total
PROPOSED PROJECT														
Single Family Residential	210	167 Units	0.74	25%	75%	0.99	63%	37%	31	93	124	105	61	166
Detached Townhomes [b]	210	101 Units	0.74	25%	75%	0.99	63%	37%	19	56	75	63	37	100
Attached Townhomes (low-rise)	220	214 Units	0.46	23%	77%	0.56	63%	37%	23	76	99	76	44	120
Multi-Family Residential (low-rise)	220	35 Units	0.46	23%	77%	0.56	63%	37%	4	13	17	13	7	20
TOTAL PROJECT VEHICLE TRIPS									**77**	**238**	**315**	**257**	**149**	**406**

Notes:

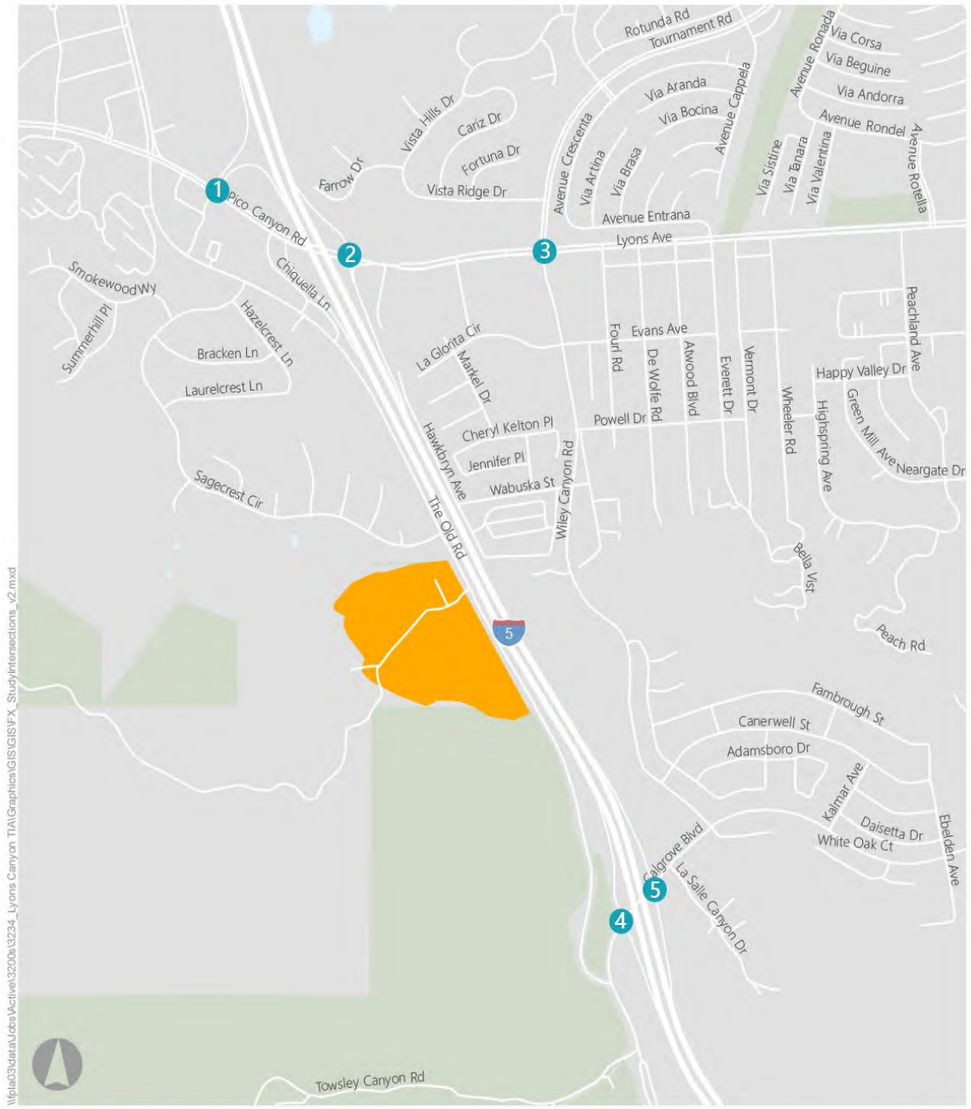
[a] Source: Institute of Transportation Engineers (ITE), *Trip Generation, 10th Edition,* 2017. The ITE Trip Generation 11th Edition was published after the Project's scoping memo. If the 11th Edition was used, it would result in fewer daily and peak hour trips, so therefore using 10th Edition is conservative. Comparisons are presented in Appendix I.

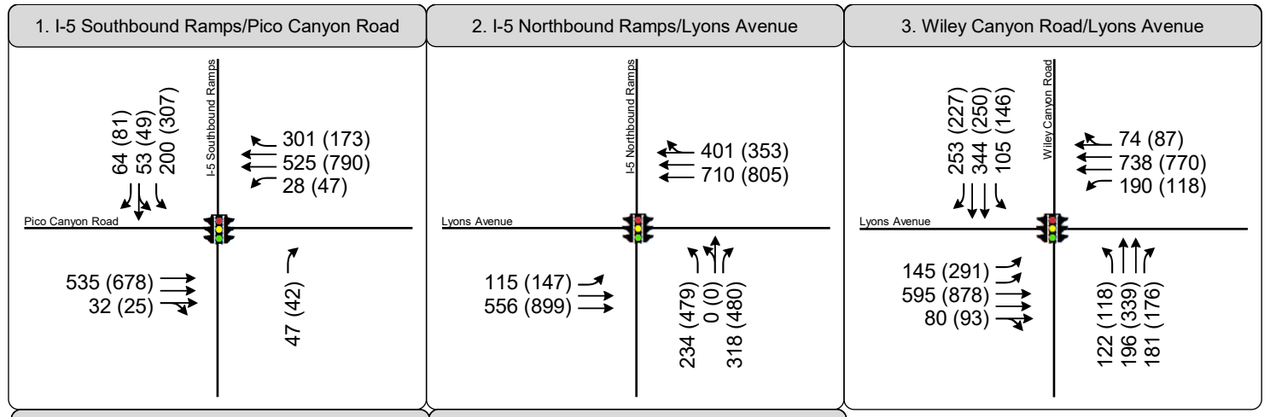
[b] As described in Trip Generation Manual, 10th Edition, surveyed single-family units include all single-family detached homes on individual lots. While this project is comprised of a single lot, the townhomes are in detached groups and provide a two-car garage for each unit. Therefore, these detached townhomes are most similar to the Land Use 210 category (Single Family Residential).

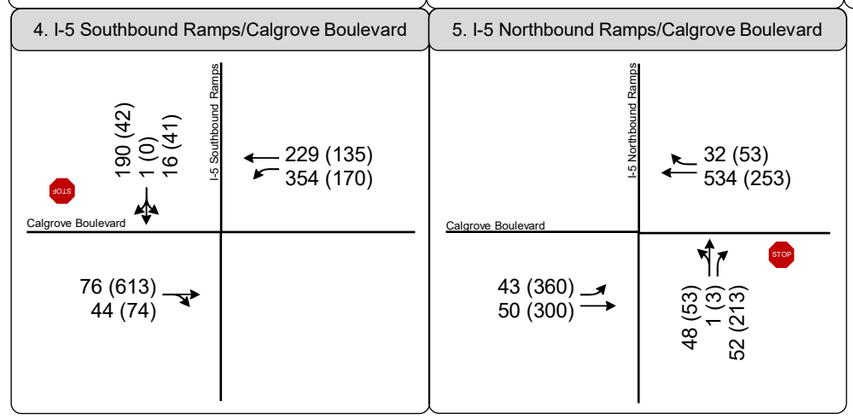
Appendix B

LANE CONFIGURATIONS AND TRAFFIC VOLUMES

Next Page





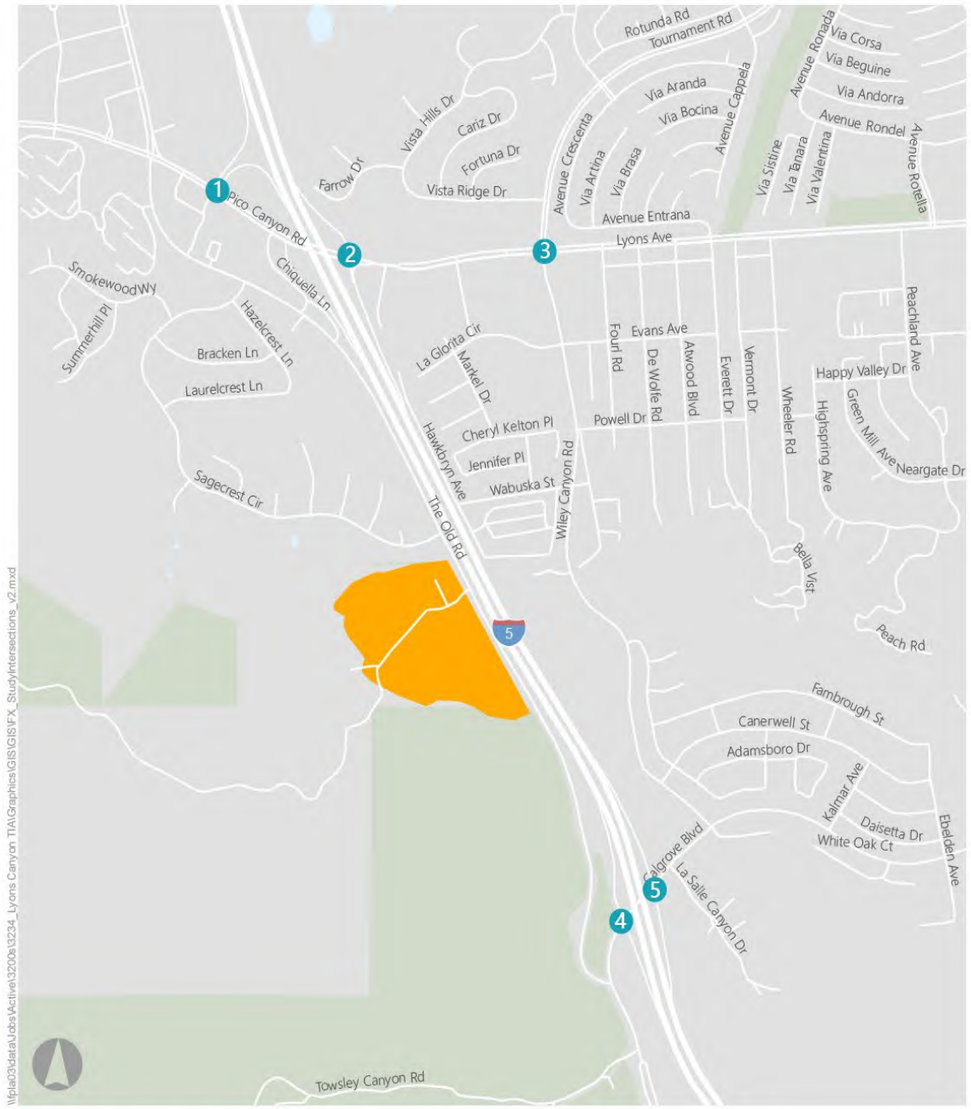


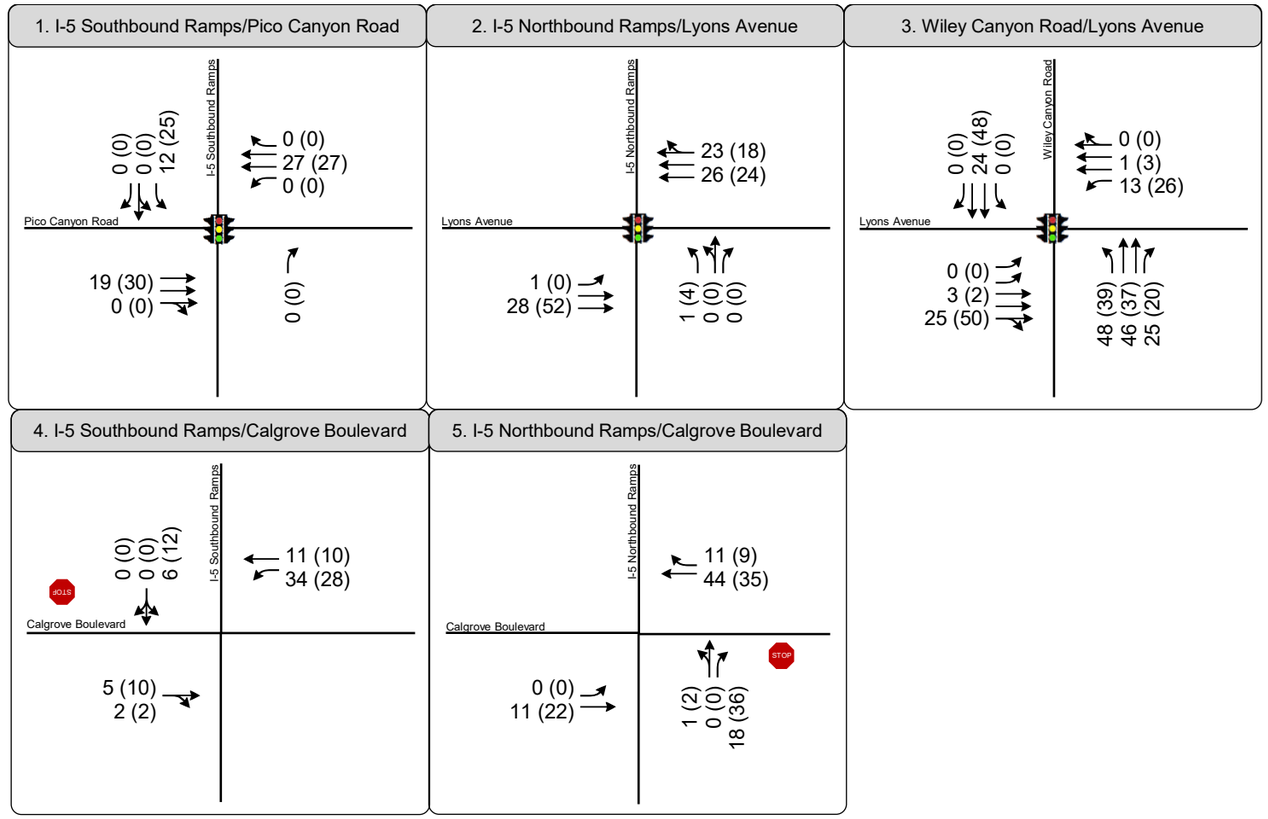
LEGEND

AM (PM)	Peak Hour Traffic Volume		Stop Sign
	Lane Configuration		Signalized

Appendix B

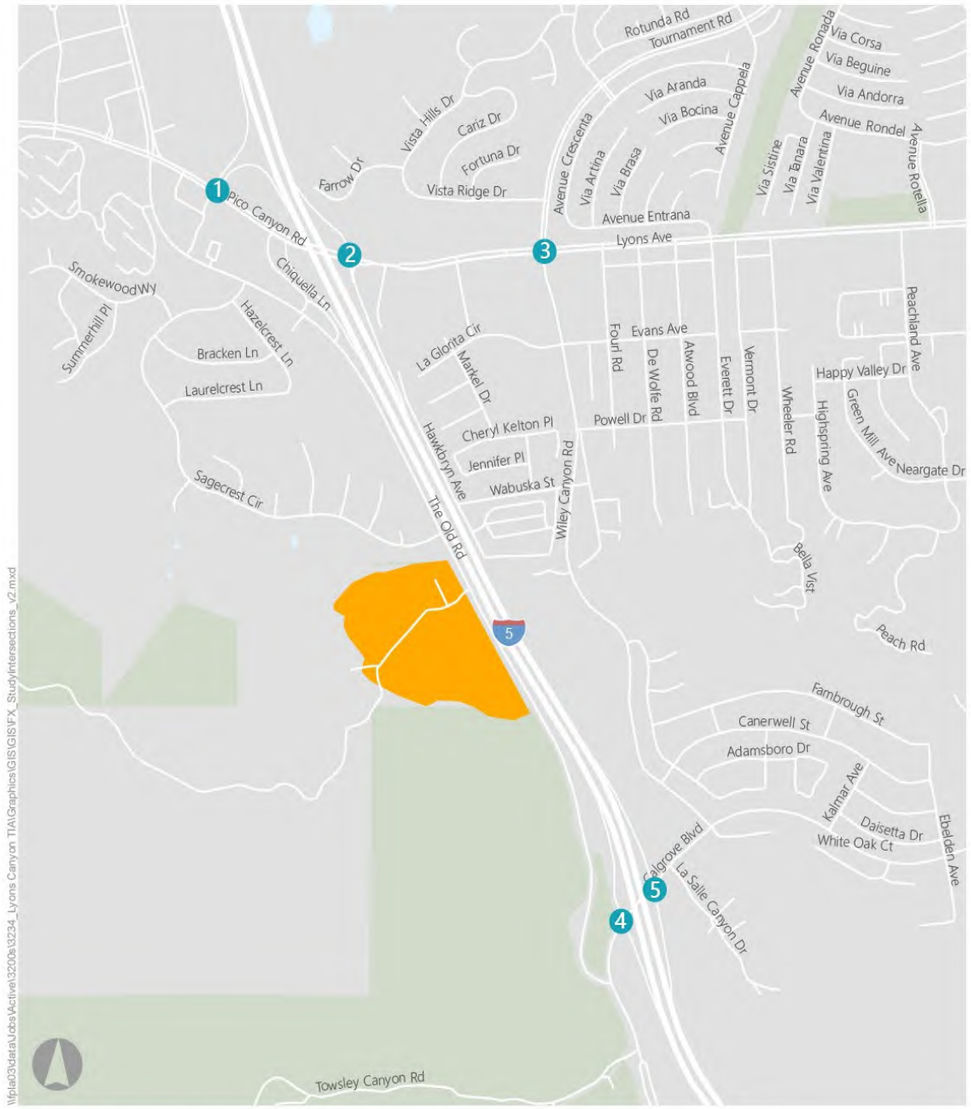
Peak Hour Traffic Volumes and Lane Configurations
Existing Conditions

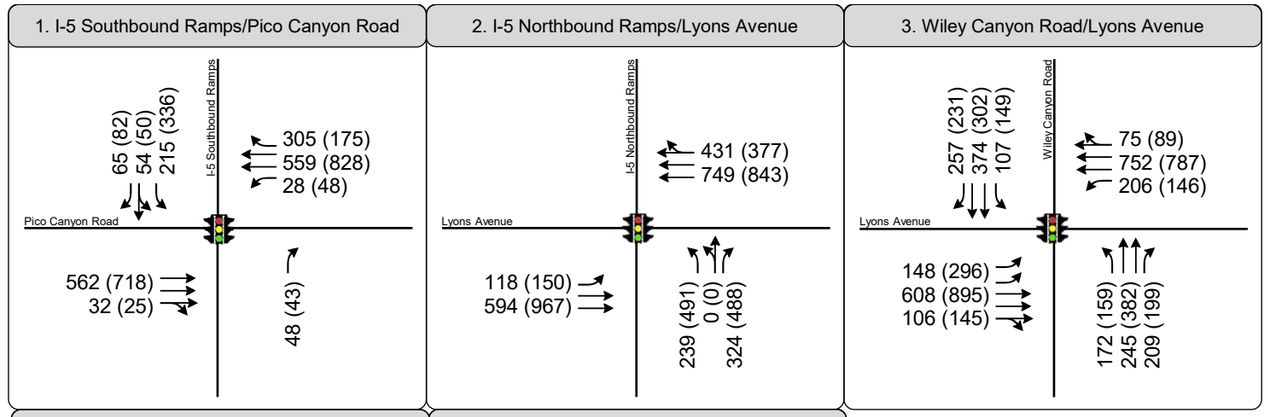




LEGEND

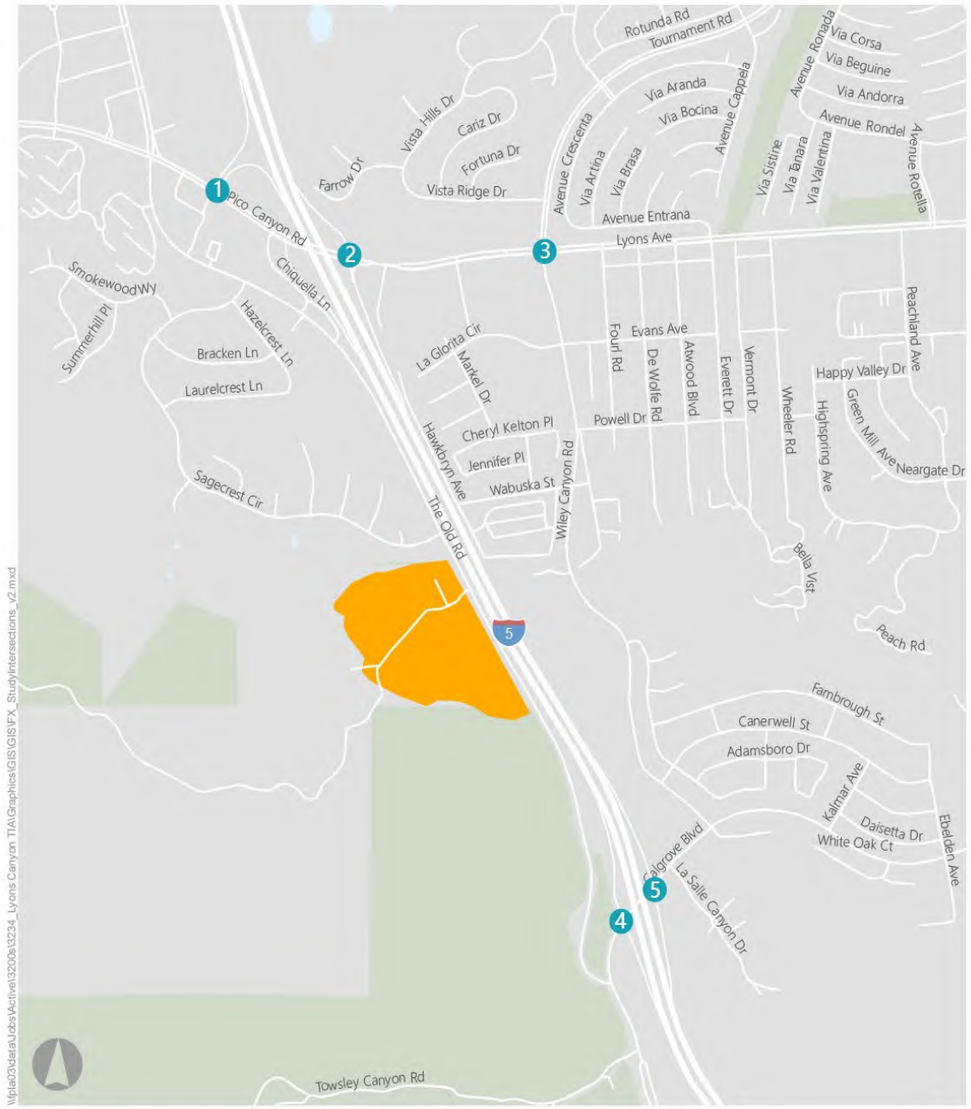
AM (PM)	Peak Hour Traffic Volume		Stop Sign
	Lane Configuration		Signalized

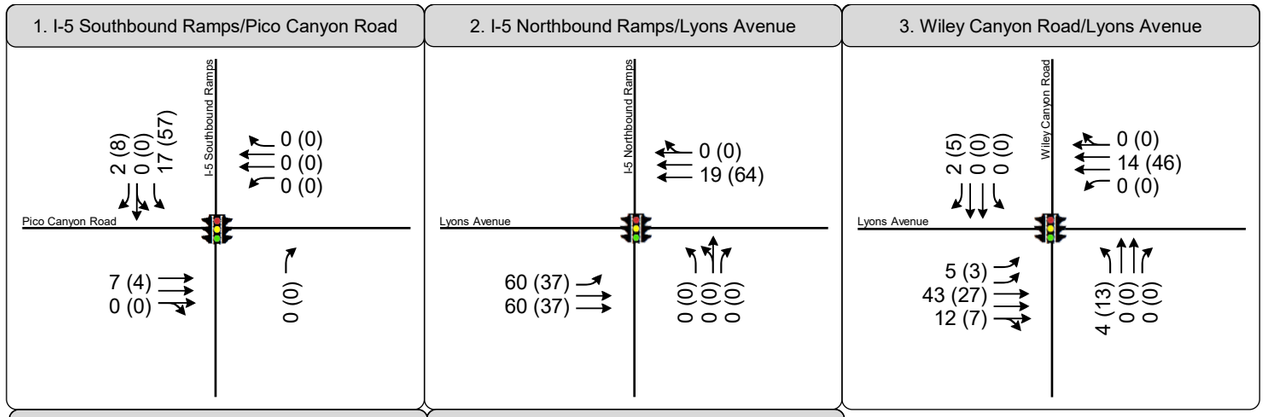




LEGEND

AM (PM)	Peak Hour Traffic Volume		Stop Sign
	Lane Configuration		Signalized



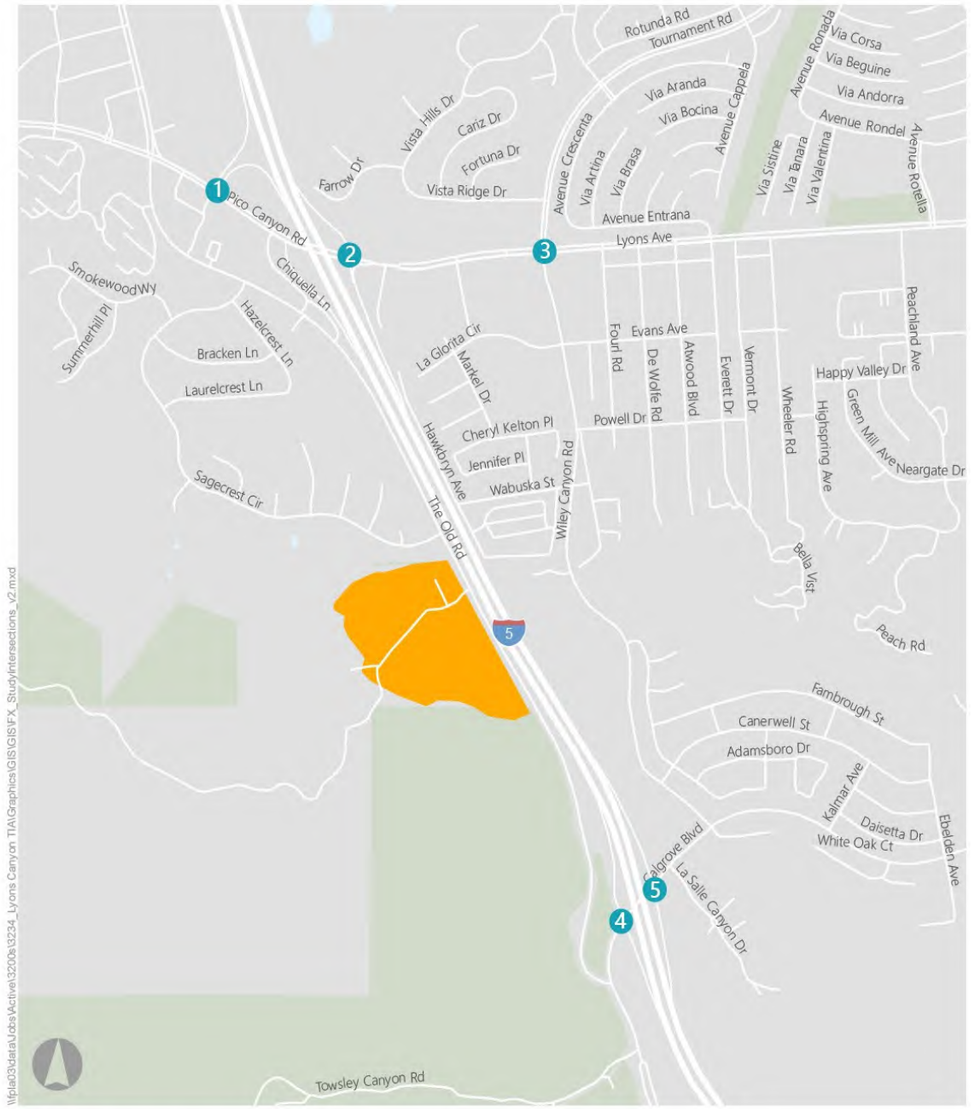


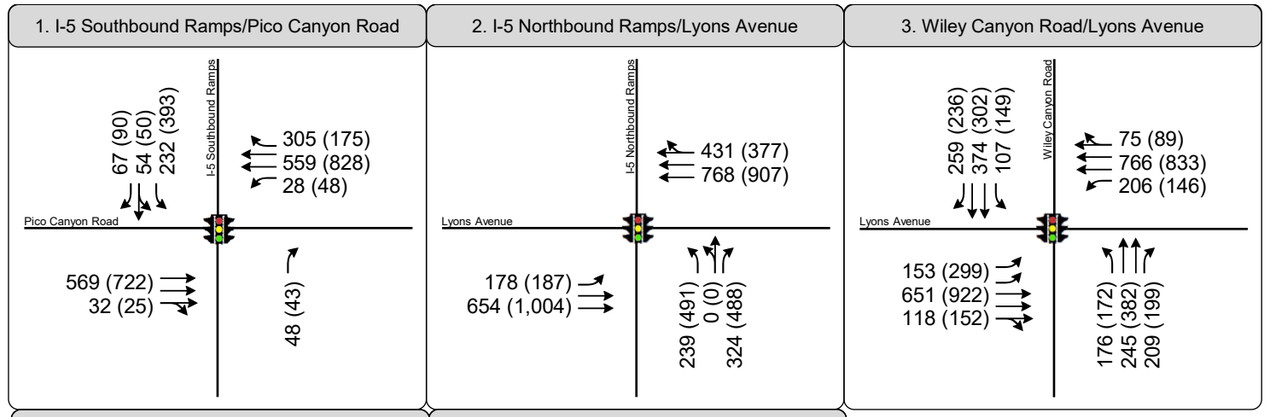
LEGEND

AM (PM)	Peak Hour Traffic Volume		Stop Sign
	Lane Configuration		Signalized

Appendix B

Peak Hour Traffic Volumes and Lane Configurations Project Only





LEGEND

AM (PM)	Peak Hour Traffic Volume		Stop Sign
	Lane Configuration		Signalized

Appendix B

Peak Hour Traffic Volumes and Lane Configurations
Future (2029) + Project Conditions

Appendix C

COUNT SHEETS

Next Page

Prepared by National Data & Surveying Services

I-5 SB Ramps/Marriott Way & Pico Canyon Rd

Peak Hour Turning Movement Count

ID: 25-020113-001
City: Santa Clarita

Day: Tuesday
Date: 4/8/2025

PEAK HOURS

AM	09:45 AM - 10:45 AM
NOON	NONE
PM	04:15 PM - 05:15 PM

COUNT PERIODS

AM	7:00 AM - 11:00 AM
NOON	NONE
PM	3:00 PM - 07:00 PM

I-5 SB Ramps/Marriott Way — SOUTHBOUND

AM	64	53	200	0	303	AM
NOON	0	0	0	0	0	NOON
PM	81	49	307	0	175	PM
	1	0.5	1.5	0		

EASTBOUND — Pico Canyon Rd

AM	NOON	PM	
589	0	872	
0	0	0	0
1	0	0	0
535	0	678	3
32	0	25	0
AM	NOON	PM	

WESTBOUND — Pico Canyon Rd

PM	NOON	AM	
173	0	301	1
790	0	525	2
44	0	28	1
3	0	0	0
1027	0	780	
PM	NOON	AM	

CONTROL

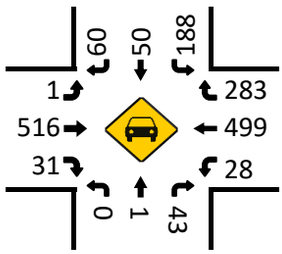
Signalized

TEV	1785 AM	0 NOON	2192 PM
PHF	~~0.93~~		~~0.95~~

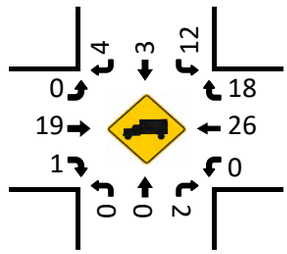
	0	0	0	1		
PM	118	0	1	2	39	PM
NOON	0	0	0	0	0	NOON
AM	113	0	0	1	45	AM

NORTHBOUND — I-5 SB Ramps/Marriott Way

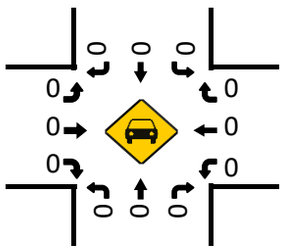
Cars (AM)



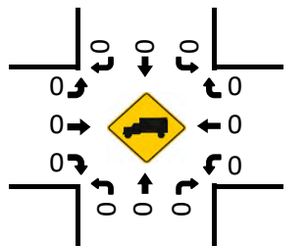
HT (AM)



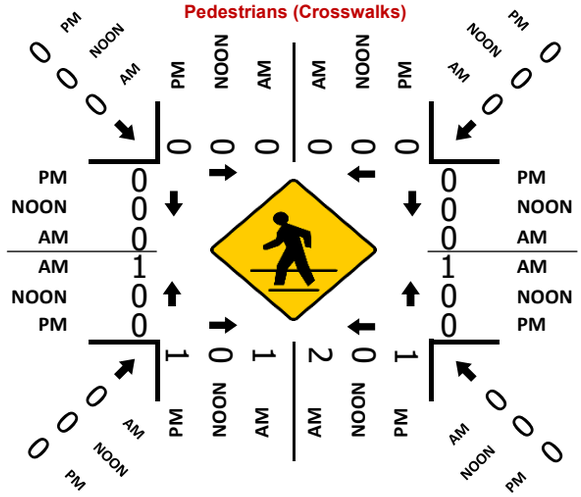
Cars (NOON)



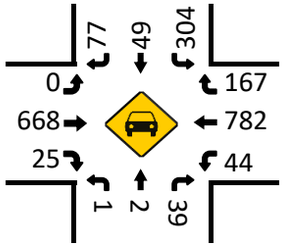
HT (NOON)



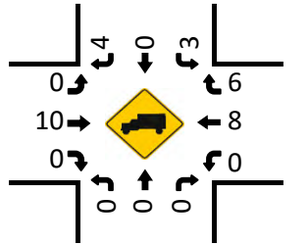
Pedestrians (Crosswalks)



Cars (PM)

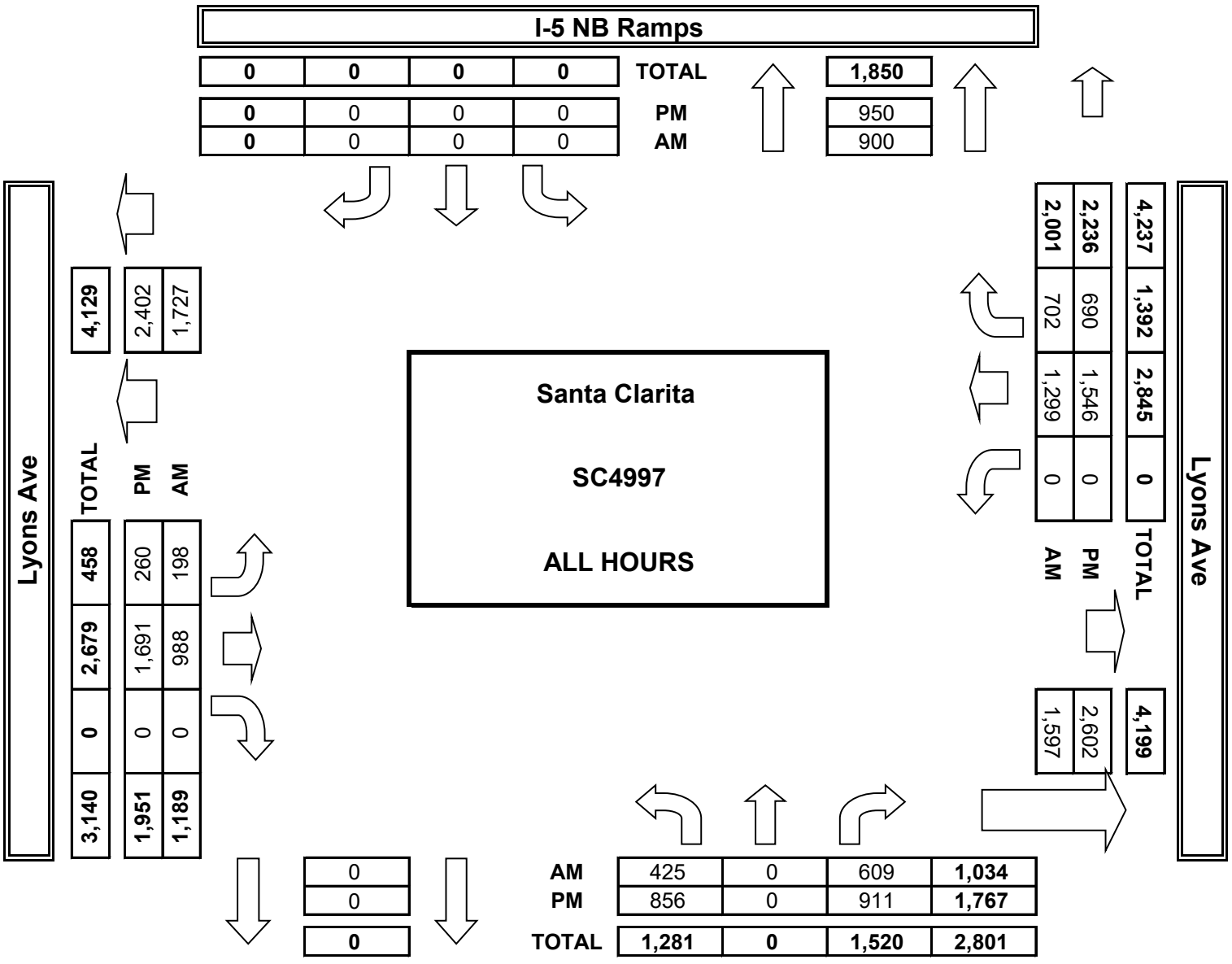


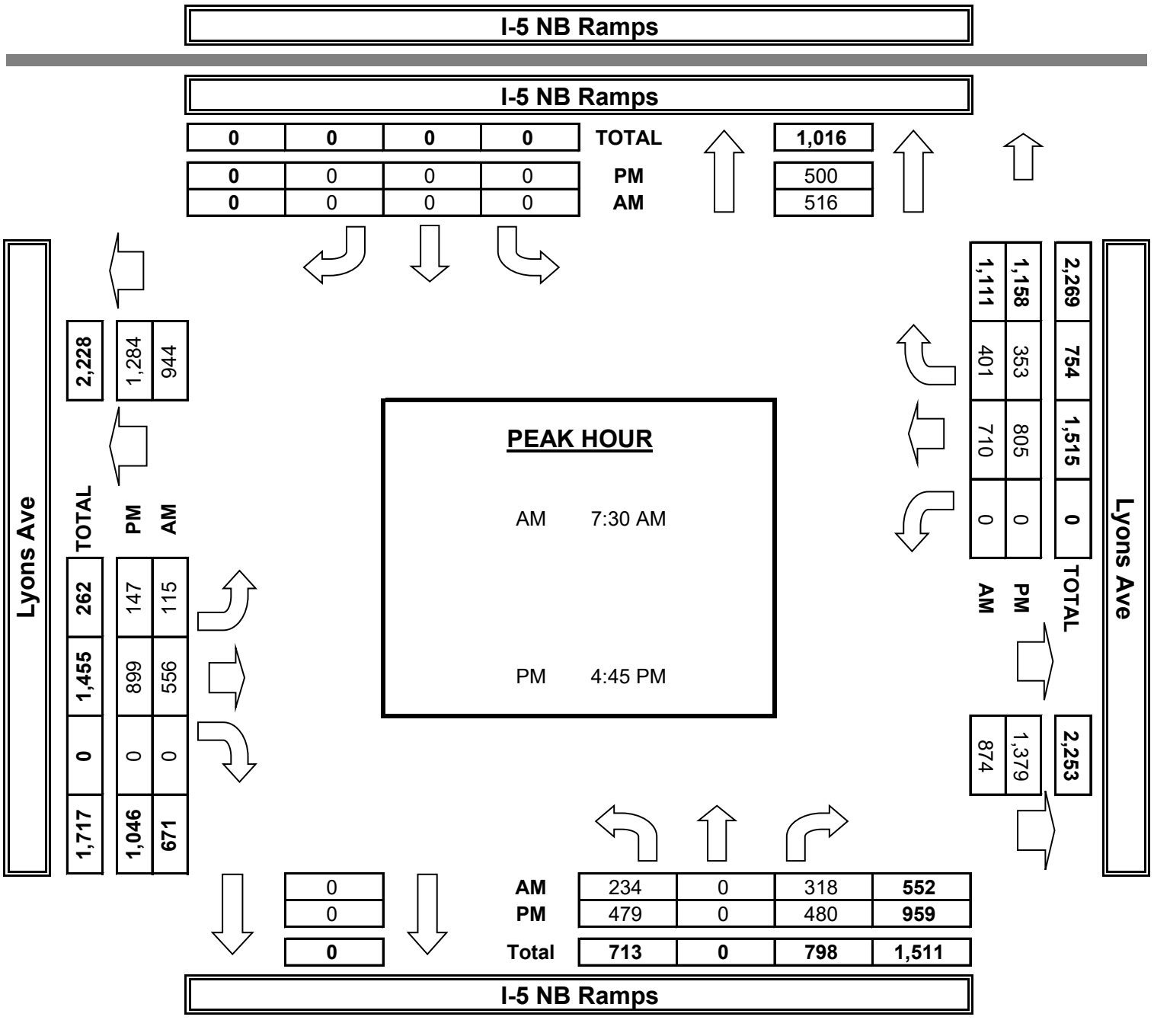
HT (PM)



AimTD LLC

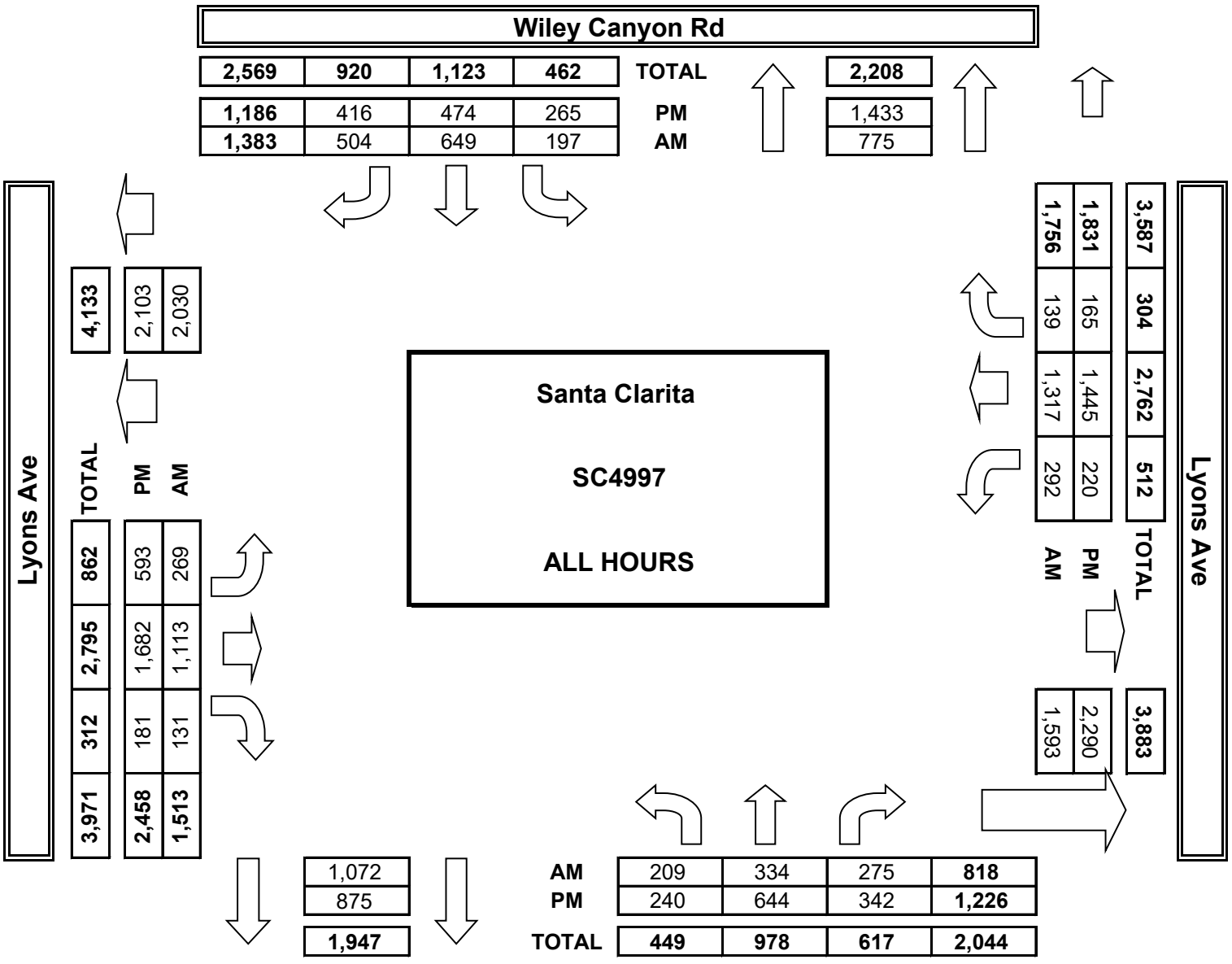
TURNING MOVEMENT COUNTS

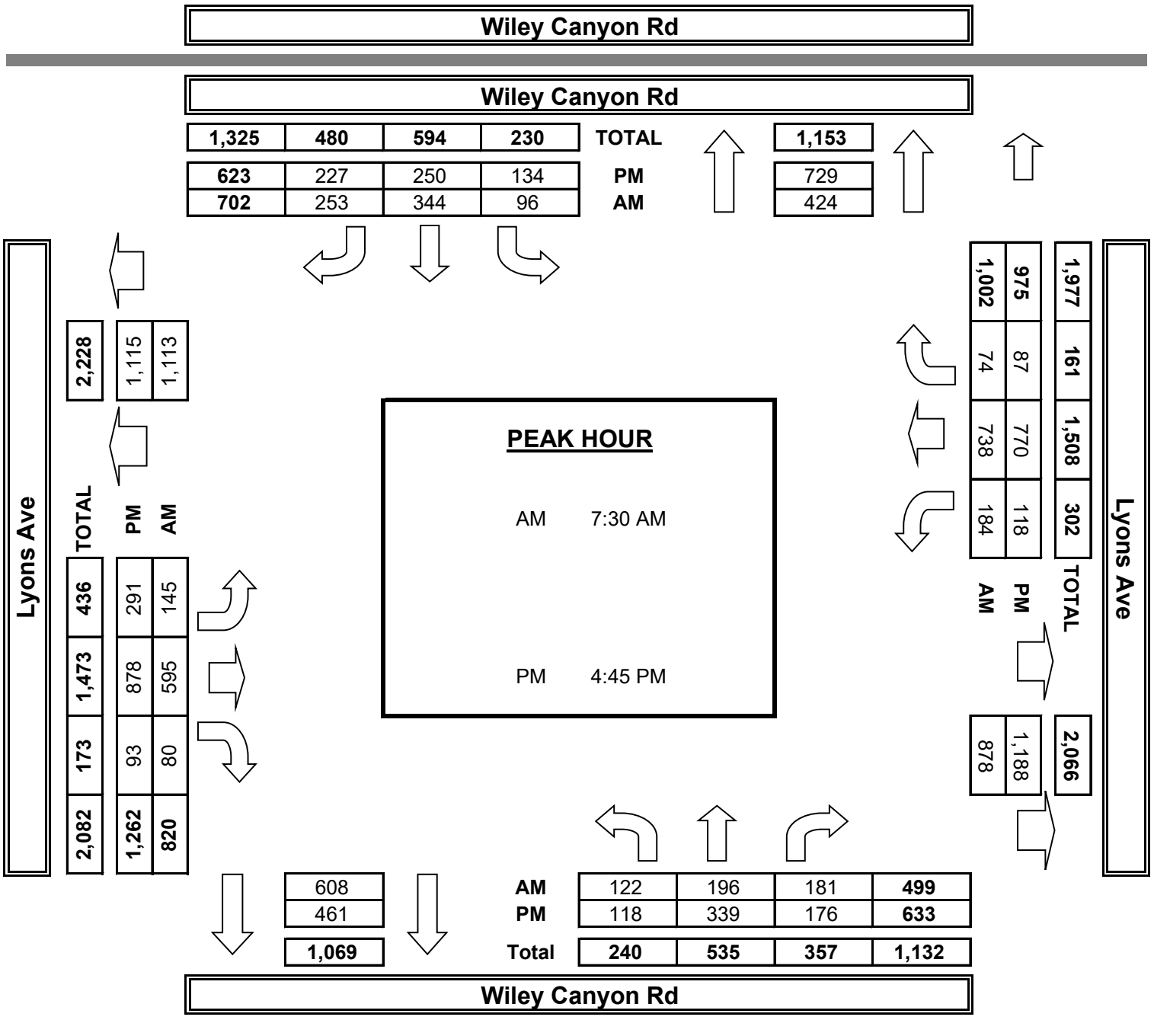




AimTD LLC

TURNING MOVEMENT COUNTS





Prepared by National Data & Surveying Services

I-5 SB Ramps & Calgrove Blvd

Peak Hour Turning Movement Count

ID: 25-020113-002
City: Santa Clarita

Day: Tuesday
Date: 4/8/2025

PEAK HOURS

AM	07:00 AM - 08:00 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	7:00 AM - 11:00 AM
NOON	NONE
PM	3:00 PM - 07:00 PM

SOUTHBOUND (I-5 SB Ramps)

AM	190	1	16	0	0	AM
NOON	0	0	0	0	0	NOON
PM	42	0	41	0	0	PM
	0.3	0.3	0.3	0		

EASTBOUND (Calgrove Blvd)

AM	NOON	PM	
420	0	180	
0	0	0	0
0	0	0	0
76	0	613	1
44	0	74	0
AM	NOON	PM	

WESTBOUND (Calgrove Blvd)

PM	NOON	AM	
0	0	0	0
135	0	229	1
170	0	354	1
0	0	0	0
656	0	93	
PM	NOON	AM	

NORTHBOUND (I-5 SB Ramps)

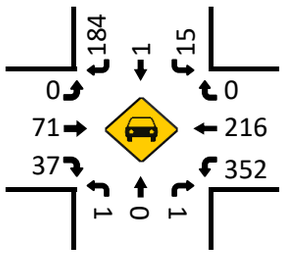
PM	245	1	3	0	2	PM
NOON	0	0	0	0	0	NOON
AM	399	0	1	0	1	AM
		0	0	0	0	

CONTROL

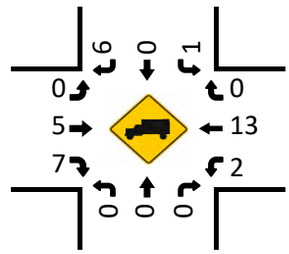
1-Way Stop(SB)

	AM	NOON	PM
TEV	912	0	1081
PHF	~~0.94~~		~~0.98~~

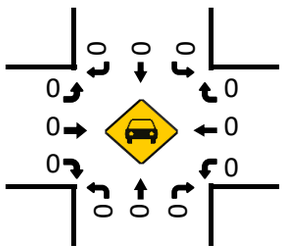
Cars (AM)



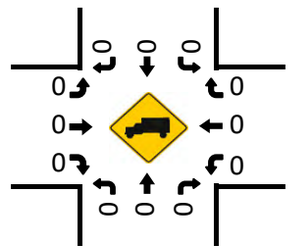
HT (AM)



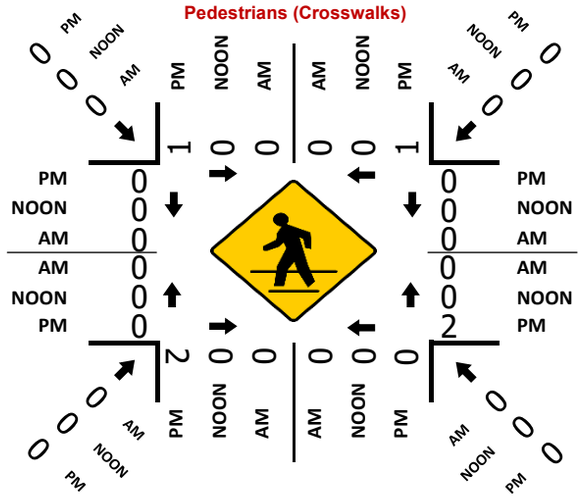
Cars (NOON)



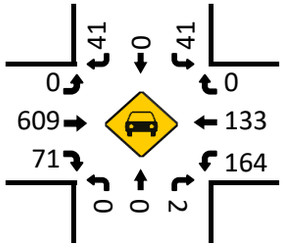
HT (NOON)



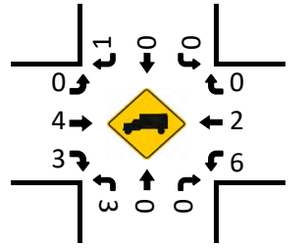
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

I-5 NB Ramps & Calgrove Blvd

Peak Hour Turning Movement Count

ID: 25-020113-003
City: Santa Clarita

Day: Tuesday
Date: 4/8/2025

PEAK HOURS

AM	07:00 AM - 08:00 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	7:00 AM - 11:00 AM
NOON	NONE
PM	3:00 PM - 07:00 PM

SOUTHBOUND (I-5 NB Ramps)

AM	0	0	0	0	76	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	416	PM

EASTBOUND (Calgrove Blvd)

AM	NOON	PM		
582	0	306	⇦	
0	0	0	↶	0
43	0	360	↱	1
50	0	300	→	1
0	0	0	↷	0
AM	NOON	PM		

WESTBOUND (Calgrove Blvd)

	PM	NOON	AM
1	53	0	32
1	253	0	534
0	0	0	0
0	0	0	0
⇨	513	0	102
	PM	NOON	AM

NORTHBOUND (I-5 NB Ramps)

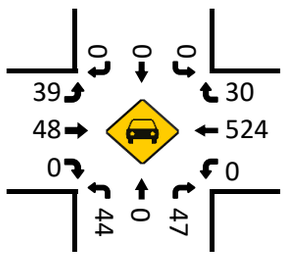
PM	0	0	53	3	213	PM
NOON	0	0	0	0	0	NOON
AM	0	0	48	1	52	AM

CONTROL

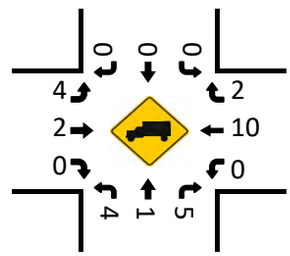
1-Way Stop(NB)

TEV	760 AM	0 NOON	1235 PM
PHF	~~0.94~~		~~0.96~~

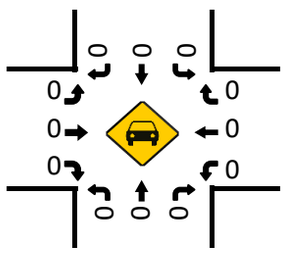
Cars (AM)



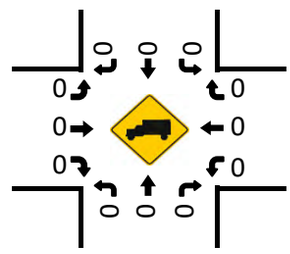
HT (AM)



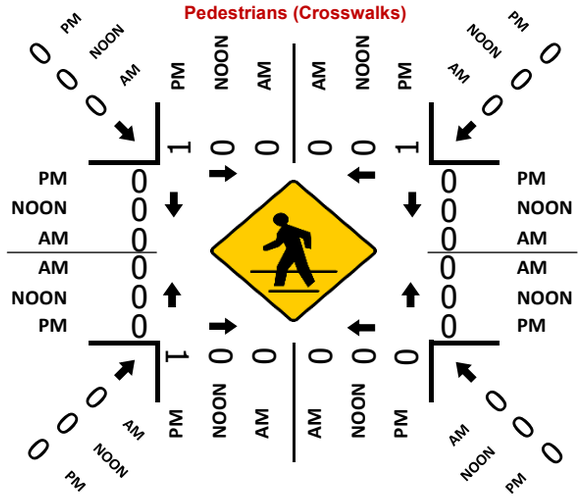
Cars (NOON)



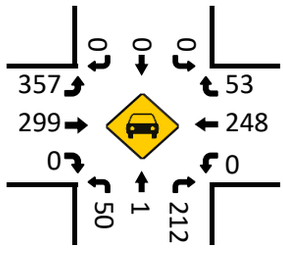
HT (NOON)



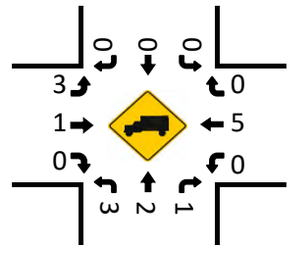
Pedestrians (Crosswalks)



Cars (PM)



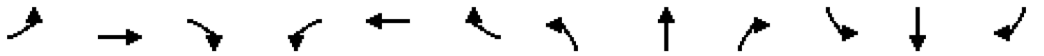
HT (PM)



Appendix D

SYNCHRO REPORT: LOS AND QUEUING

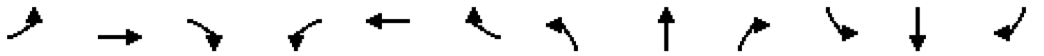
Next Page



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	535	32	28	525	301	0	0	47	200	53	64
Future Volume (vph)	0	535	32	28	525	301	0	0	47	200	53	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2		6.2	6.2	6.2			6.2	5.4	5.4	5.4
Lane Util. Factor		0.91		1.00	0.95	1.00			1.00	0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00	1.00			1.00	1.00	1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00	1.00			1.00	1.00	1.00	1.00
Frt		0.99		1.00	1.00	0.85			0.87	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00			1.00	0.95	0.97	1.00
Satd. Flow (prot)		4892		1715	3438	1538			1565	1633	1670	1518
Flt Permitted		1.00		0.41	1.00	1.00			1.00	0.95	0.97	1.00
Satd. Flow (perm)		4892		739	3438	1538			1565	1633	1670	1518
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	575	34	30	565	324	0	0	51	215	57	69
RTOR Reduction (vph)	0	5	0	0	0	128	0	0	0	0	0	49
Lane Group Flow (vph)	0	604	0	30	565	196	0	0	51	135	137	20
Confl. Peds. (#/hr)			3	3								1
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type		NA		Perm	NA	Perm			Perm	Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases				6		6			2 4 6	4		4
Actuated Green, G (s)		70.0		70.0	70.0	70.0			115.6	34.0	34.0	34.0
Effective Green, g (s)		70.0		70.0	70.0	70.0			110.2	34.0	34.0	34.0
Actuated g/C Ratio		0.61		0.61	0.61	0.61			0.95	0.29	0.29	0.29
Clearance Time (s)		6.2		6.2	6.2	6.2				5.4	5.4	5.4
Vehicle Extension (s)		4.0		4.0	4.0	4.0				3.0	3.0	3.0
Lane Grp Cap (vph)		2962		447	2081	931			1491	480	491	446
v/s Ratio Prot		0.12			c0.16							
v/s Ratio Perm				0.04		0.13			0.03	c0.08	0.08	0.01
v/c Ratio		0.20		0.07	0.27	0.21			0.03	0.28	0.28	0.05
Uniform Delay, d1		10.3		9.4	10.8	10.3			0.1	31.4	31.4	29.2
Progression Factor		1.00		1.00	1.00	1.00			1.00	1.00	1.00	1.00
Incremental Delay, d2		0.0		0.3	0.3	0.5			0.0	0.3	0.3	0.0
Delay (s)		10.3		9.7	11.1	10.8			0.1	31.7	31.7	29.2
Level of Service		B		A	B	B			A	C	C	C
Approach Delay (s/veh)		10.3			10.9			0.1			31.2	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	115.6	Sum of lost time (s)	11.6
Intersection Capacity Utilization	93.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



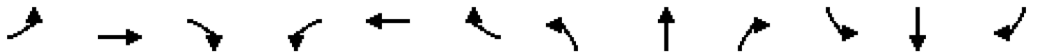
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	556	0	0	710	401	234	0	318	0	0	0
Future Volume (veh/h)	115	556	0	0	710	401	234	0	318	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	131	632	0	0	807	387	266	0	0			
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	208	2289	0	0	1538	707	578	0				
Arrive On Green	0.12	0.65	0.00	0.00	0.46	0.46	0.16	0.00	0.00			
Sat Flow, veh/h	1767	3618	0	0	3544	1553	3534	0	1572			
Grp Volume(v), veh/h	131	632	0	0	807	387	266	0	0			
Grp Sat Flow(s),veh/h/ln	1767	1763	0	0	1689	1553	1767	0	1572			
Q Serve(g_s), s	4.3	4.6	0.0	0.0	10.3	10.9	4.1	0.0	0.0			
Cycle Q Clear(g_c), s	4.3	4.6	0.0	0.0	10.3	10.9	4.1	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	208	2289	0	0	1538	707	578	0				
V/C Ratio(X)	0.63	0.28	0.00	0.00	0.52	0.55	0.46	0.00				
Avail Cap(c_a), veh/h	1258	3035	0	0	2907	1337	2633	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	25.4	4.5	0.0	0.0	11.8	11.9	22.8	0.0	0.0			
Incr Delay (d2), s/veh	3.1	0.1	0.0	0.0	0.4	0.9	0.6	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.8	1.0	0.0	0.0	3.1	3.2	1.5	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.5	4.6	0.0	0.0	12.2	12.9	23.4	0.0	0.0			
LnGrp LOS	C	A			B	B	C					
Approach Vol, veh/h		763			1194			266				
Approach Delay, s/veh		8.7			12.4			23.4				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		45.1			11.7	33.4		15.3				
Change Period (Y+Rc), s		5.9			4.6	5.9		5.4				
Max Green Setting (Gmax), s		52.0			43.0	52.0		45.0				
Max Q Clear Time (g_c+I1), s		6.6			6.3	12.9		6.1				
Green Ext Time (p_c), s		6.8			0.4	14.6		0.9				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	12.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	595	80	190	738	74	122	196	181	105	344	253
Future Volume (veh/h)	145	595	80	190	738	74	122	196	181	105	344	253
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	163	669	75	213	829	75	137	220	18	118	387	22
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	311	960	107	673	2358	212	162	546	237	159	539	237
Arrive On Green	0.09	0.21	0.21	0.38	0.50	0.50	0.09	0.15	0.15	0.09	0.15	0.15
Sat Flow, veh/h	3428	4617	513	1767	4697	423	1767	3526	1531	1767	3526	1548
Grp Volume(v), veh/h	163	488	256	213	595	309	137	220	18	118	387	22
Grp Sat Flow(s),veh/h/ln	1714	1689	1753	1767	1689	1743	1767	1763	1531	1767	1763	1548
Q Serve(g_s), s	6.0	17.6	17.9	11.2	14.1	14.2	10.1	7.4	1.3	8.6	13.8	0.7
Cycle Q Clear(g_c), s	6.0	17.6	17.9	11.2	14.1	14.2	10.1	7.4	1.3	8.6	13.8	0.7
Prop In Lane	1.00		0.29	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	311	702	364	673	1695	875	162	546	237	159	539	237
V/C Ratio(X)	0.52	0.69	0.70	0.32	0.35	0.35	0.85	0.40	0.08	0.74	0.72	0.09
Avail Cap(c_a), veh/h	390	908	471	673	1695	875	268	855	371	268	855	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.3	48.4	48.5	28.8	19.9	19.9	59.0	50.3	47.7	58.6	53.2	9.6
Incr Delay (d2), s/veh	0.5	5.4	10.5	1.2	0.6	1.1	5.7	1.3	0.4	2.6	4.9	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.8	8.8	4.9	5.5	5.9	4.7	3.4	0.5	3.9	6.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.8	53.8	59.1	30.0	20.4	21.0	64.8	51.6	48.1	61.2	58.1	10.1
LnGrp LOS	E	D	E	C	C	C	E	D	D	E	E	B
Approach Vol, veh/h		907			1117			375			527	
Approach Delay, s/veh		56.0			22.4			56.3			56.8	
Approach LOS		E			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	71.8	17.1	26.2	55.8	32.9	16.8	26.4
Change Period (Y+Rc), s	5.0	5.5	5.0	6.0	5.5	* 5.5	5.0	6.0
Max Green Setting (Gmax), s	15.0	43.5	20.0	32.0	23.0	* 36	20.0	32.0
Max Q Clear Time (g_c+I1), s	8.0	16.2	12.1	15.8	13.2	19.9	10.6	9.4
Green Ext Time (p_c), s	0.1	12.8	0.1	4.2	0.2	7.5	0.1	2.8

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	43.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	76	44	354	229	0	0	0	0	16	1	190
Future Vol, veh/h	0	76	44	354	229	0	0	0	0	16	1	190
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	70	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	0	81	47	377	244	0	0	0	0	17	1	202

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	128	0	0	1103	1126	244
Stage 1	-	-	-	-	-	-	998	998	-
Stage 2	-	-	-	-	-	-	105	128	-
Critical Hdwy	-	-	-	4.14	-	-	6.44	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	5.44	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.44	5.54	-
Follow-up Hdwy	-	-	-	2.236	-	-	3.536	4.036	3.336
Pot Cap-1 Maneuver	0	-	-	1446	-	0	232	203	790
Stage 1	0	-	-	-	-	0	354	319	-
Stage 2	0	-	-	-	-	0	914	786	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1446	-	-	171	0	790
Mov Cap-2 Maneuver	-	-	-	-	-	-	171	0	-
Stage 1	-	-	-	-	-	-	354	0	-
Stage 2	-	-	-	-	-	-	675	0	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	5.1	14
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1446	-	617
HCM Lane V/C Ratio	-	-	0.26	-	0.357
HCM Ctrl Dly (s/v)	-	-	8.4	-	14
HCM Lane LOS	-	-	A	-	B
HCM 95th %tile Q (veh)	-	-	1	-	1.6

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	43	50	0	0	534	32	48	1	52	0	0	0
Future Vol, veh/h	43	50	0	0	534	32	48	1	52	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	0	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	46	53	0	0	568	34	51	1	55	0	0	0

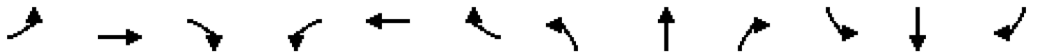
Major/Minor	Major1		Major2			Minor1			
Conflicting Flow All	602	0	-	-	-	0	730	747	53
Stage 1	-	-	-	-	-	-	145	145	-
Stage 2	-	-	-	-	-	-	585	602	-
Critical Hdwy	4.14	-	-	-	-	-	6.44	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	5.44	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.44	5.54	-
Follow-up Hdwy	2.236	-	-	-	-	-	3.536	4.036	3.336
Pot Cap-1 Maneuver	966	-	0	0	-	-	386	339	1009
Stage 1	-	-	0	0	-	-	877	773	-
Stage 2	-	-	0	0	-	-	553	486	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	966	-	-	-	-	-	367	0	1009
Mov Cap-2 Maneuver	-	-	-	-	-	-	367	0	-
Stage 1	-	-	-	-	-	-	835	0	-
Stage 2	-	-	-	-	-	-	553	0	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	4.1	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	367	1009	966	-	-	-
HCM Lane V/C Ratio	0.142	0.055	0.047	-	-	-
HCM Ctrl Dly (s/v)	16.4	8.8	8.9	-	-	-
HCM Lane LOS	C	A	A	-	-	-
HCM 95th %tile Q (veh)	0.5	0.2	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	678	25	47	790	173	0	0	42	307	49	81
Future Volume (vph)	0	678	25	47	790	173	0	0	42	307	49	81
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2		6.2	6.2	6.2			6.2	5.4	5.4	5.4
Lane Util. Factor		0.91		1.00	0.95	1.00			1.00	0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.99			1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00	1.00			1.00	1.00	1.00	1.00
Frt		0.99		1.00	1.00	0.85			0.87	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00			1.00	0.95	0.97	1.00
Satd. Flow (prot)		5104		1785	3574	1577			1627	1698	1725	1599
Flt Permitted		1.00		0.35	1.00	1.00			1.00	0.95	0.97	1.00
Satd. Flow (perm)		5104		656	3574	1577			1627	1698	1725	1599
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	714	26	49	832	182	0	0	44	323	52	85
RTOR Reduction (vph)	0	3	0	0	0	72	0	0	0	0	0	60
Lane Group Flow (vph)	0	737	0	49	832	110	0	0	44	187	188	25
Confl. Peds. (#/hr)			2	2								
Confl. Bikes (#/hr)			1			4						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA		Perm	NA	Perm			Perm	Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases				6		6			2 4 6	4		4
Actuated Green, G (s)		70.0		70.0	70.0	70.0			115.6	34.0	34.0	34.0
Effective Green, g (s)		70.0		70.0	70.0	70.0			110.2	34.0	34.0	34.0
Actuated g/C Ratio		0.61		0.61	0.61	0.61			0.95	0.29	0.29	0.29
Clearance Time (s)		6.2		6.2	6.2	6.2				5.4	5.4	5.4
Vehicle Extension (s)		4.0		4.0	4.0	4.0				3.0	3.0	3.0
Lane Grp Cap (vph)		3090		397	2164	954			1550	499	507	470
v/s Ratio Prot		0.14			c0.23							
v/s Ratio Perm				0.07		0.07			0.03	c0.11	0.11	0.02
v/c Ratio		0.24		0.12	0.38	0.12			0.03	0.37	0.37	0.05
Uniform Delay, d1		10.5		9.7	11.7	9.7			0.1	32.4	32.3	29.3
Progression Factor		1.00		1.00	1.00	1.00			1.00	1.00	1.00	1.00
Incremental Delay, d2		0.1		0.6	0.5	0.2			0.0	0.5	0.5	0.0
Delay (s)		10.6		10.4	12.2	9.9			0.1	32.8	32.8	29.3
Level of Service		B		B	B	A			A	C	C	C
Approach Delay (s/veh)		10.6			11.8			0.1			32.2	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	115.6	Sum of lost time (s)	11.6
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



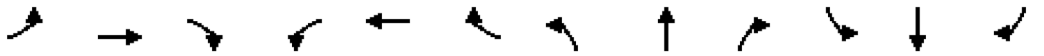
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	899	0	0	805	353	479	0	480	0	0	0
Future Volume (veh/h)	147	899	0	0	805	353	479	0	480	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	152	927	0	0	830	313	494	0	0			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	213	2198	0	0	1546	579	681	0				
Arrive On Green	0.12	0.62	0.00	0.00	0.43	0.43	0.19	0.00	0.00			
Sat Flow, veh/h	1767	3618	0	0	3781	1354	3534	0	1572			
Grp Volume(v), veh/h	152	927	0	0	775	368	494	0	0			
Grp Sat Flow(s),veh/h/ln	1767	1763	0	0	1689	1591	1767	0	1572			
Q Serve(g_s), s	5.1	8.2	0.0	0.0	10.5	10.6	8.1	0.0	0.0			
Cycle Q Clear(g_c), s	5.1	8.2	0.0	0.0	10.5	10.6	8.1	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.85	1.00		1.00			
Lane Grp Cap(c), veh/h	213	2198	0	0	1445	681	681	0				
V/C Ratio(X)	0.71	0.42	0.00	0.00	0.54	0.54	0.73	0.00				
Avail Cap(c_a), veh/h	1238	2986	0	0	2861	1347	2591	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	26.0	5.9	0.0	0.0	13.0	13.1	23.3	0.0	0.0			
Incr Delay (d2), s/veh	4.4	0.2	0.0	0.0	0.4	1.0	1.5	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.2	2.0	0.0	0.0	3.3	3.3	3.1	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	30.4	6.1	0.0	0.0	13.5	14.0	24.8	0.0	0.0			
LnGrp LOS	C	A			B	B	C					
Approach Vol, veh/h		1079			1143			494				
Approach Delay, s/veh		9.5			13.7			24.8				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		44.2			12.0	32.2		17.2				
Change Period (Y+Rc), s		5.9			4.6	5.9		5.4				
Max Green Setting (Gmax), s		52.0			43.0	52.0		45.0				
Max Q Clear Time (g_c+I1), s		10.2			7.1	12.6		10.1				
Green Ext Time (p_c), s		11.0			0.4	13.7		1.8				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	14.0
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	291	878	93	118	770	87	118	339	176	146	250	227
Future Volume (veh/h)	291	878	93	118	770	87	118	339	176	146	250	227
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	300	905	88	122	794	81	122	349	26	151	258	36
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	355	2315	224	159	2228	226	159	542	238	176	576	256
Arrive On Green	0.10	0.49	0.49	0.09	0.48	0.48	0.09	0.15	0.15	0.10	0.16	0.16
Sat Flow, veh/h	3428	4688	454	1767	4639	470	1767	3526	1548	1767	3526	1564
Grp Volume(v), veh/h	300	651	342	122	577	298	122	349	26	151	258	36
Grp Sat Flow(s),veh/h/ln	1714	1689	1765	1767	1689	1733	1767	1763	1548	1767	1763	1564
Q Serve(g_s), s	11.3	16.0	16.1	8.9	14.1	14.3	8.9	12.3	1.9	11.1	8.7	2.6
Cycle Q Clear(g_c), s	11.3	16.0	16.1	8.9	14.1	14.3	8.9	12.3	1.9	11.1	8.7	2.6
Prop In Lane	1.00		0.26	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	355	1668	872	159	1622	832	159	542	238	176	576	256
V/C Ratio(X)	0.84	0.39	0.39	0.77	0.36	0.36	0.77	0.64	0.11	0.86	0.45	0.14
Avail Cap(c_a), veh/h	519	1668	872	268	1622	832	268	855	375	268	855	379
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	20.9	21.0	58.7	21.5	21.5	58.7	52.5	48.1	58.5	49.8	47.3
Incr Delay (d2), s/veh	5.2	0.6	1.2	2.9	0.6	1.2	2.9	3.5	0.6	10.5	1.5	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	6.3	6.7	4.1	5.6	5.9	4.1	5.7	0.8	5.4	3.9	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.3	21.6	22.2	61.7	22.1	22.7	61.7	56.0	48.6	69.0	51.3	48.0
LnGrp LOS	E	C	C	E	C	C	E	E	D	E	D	D
Approach Vol, veh/h		1293			997			497			445	
Approach Delay, s/veh		31.4			27.1			57.0			57.1	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	68.9	16.9	27.6	16.9	70.7	18.1	26.3
Change Period (Y+Rc), s	5.0	5.5	5.0	6.0	5.0	5.5	5.0	6.0
Max Green Setting (Gmax), s	20.0	38.5	20.0	32.0	20.0	38.5	20.0	32.0
Max Q Clear Time (g_c+I1), s	13.3	16.3	10.9	10.7	10.9	18.1	13.1	14.3
Green Ext Time (p_c), s	0.3	11.0	0.1	3.2	0.1	11.8	0.1	4.1

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	37.6
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	613	74	170	135	0	0	0	0	41	0	42
Future Vol, veh/h	0	613	74	170	135	0	0	0	0	41	0	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	70	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	626	76	173	138	0	0	0	0	42	0	43

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	702	0	0	1148	1186	138
Stage 1	-	-	-	-	-	-	484	484	-
Stage 2	-	-	-	-	-	-	664	702	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	895	-	0	220	189	910
Stage 1	0	-	-	-	-	0	620	552	-
Stage 2	0	-	-	-	-	0	512	440	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	895	-	-	178	0	910
Mov Cap-2 Maneuver	-	-	-	-	-	-	178	0	-
Stage 1	-	-	-	-	-	-	620	0	-
Stage 2	-	-	-	-	-	-	413	0	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	5.6	21.7
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	895	-	300
HCM Lane V/C Ratio	-	-	0.194	-	0.282
HCM Ctrl Dly (s/v)	-	-	10	-	21.7
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q (veh)	-	-	0.7	-	1.1

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	360	300	0	0	253	53	53	3	213	0	0	0
Future Vol, veh/h	360	300	0	0	253	53	53	3	213	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	0	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	375	313	0	0	264	55	55	3	222	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	319	0	-	-	-	0	1355	1382	313
Stage 1	-	-	-	-	-	-	1063	1063	-
Stage 2	-	-	-	-	-	-	292	319	-
Critical Hdwy	4.11	-	-	-	-	-	6.41	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	5.41	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.41	5.51	-
Follow-up Hdwy	2.209	-	-	-	-	-	3.509	4.009	3.309
Pot Cap-1 Maneuver	1247	-	0	0	-	-	166	145	730
Stage 1	-	-	0	0	-	-	333	301	-
Stage 2	-	-	0	0	-	-	760	655	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1247	-	-	-	-	-	116	0	730
Mov Cap-2 Maneuver	-	-	-	-	-	-	116	0	-
Stage 1	-	-	-	-	-	-	233	0	-
Stage 2	-	-	-	-	-	-	760	0	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	5	0	22.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	116	730	1247	-	-	-
HCM Lane V/C Ratio	0.503	0.304	0.301	-	-	-
HCM Ctrl Dly (s/v)	63.9	12.1	9.1	-	-	-
HCM Lane LOS	F	B	A	-	-	-
HCM 95th %tile Q (veh)	2.3	1.3	1.3	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	562	32	28	559	305	0	0	48	215	54	65
Future Volume (vph)	0	562	32	28	559	305	0	0	48	215	54	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2		6.2	6.2	6.2			6.2	5.4	5.4	5.4
Lane Util. Factor		0.91		1.00	0.95	1.00			1.00	0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00	1.00			1.00	1.00	1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00	1.00			1.00	1.00	1.00	1.00
Frt		0.99		1.00	1.00	0.85			0.87	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00			1.00	0.95	0.97	1.00
Satd. Flow (prot)		4894		1716	3438	1538			1565	1633	1669	1518
Flt Permitted		1.00		0.39	1.00	1.00			1.00	0.95	0.97	1.00
Satd. Flow (perm)		4894		713	3438	1538			1565	1633	1669	1518
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	604	34	30	601	328	0	0	52	231	58	70
RTOR Reduction (vph)	0	4	0	0	0	138	0	0	0	0	0	48
Lane Group Flow (vph)	0	634	0	30	601	190	0	0	52	143	146	22
Confl. Peds. (#/hr)			3	3								1
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type		NA		Perm	NA	Perm			Perm	Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases				6		6			2 4 6	4		4
Actuated Green, G (s)		62.4		62.4	62.4	62.4			108.0	34.0	34.0	34.0
Effective Green, g (s)		62.4		62.4	62.4	62.4			102.6	34.0	34.0	34.0
Actuated g/C Ratio		0.58		0.58	0.58	0.58			0.95	0.31	0.31	0.31
Clearance Time (s)		6.2		6.2	6.2	6.2				5.4	5.4	5.4
Vehicle Extension (s)		4.0		4.0	4.0	4.0				3.0	3.0	3.0
Lane Grp Cap (vph)		2827		411	1986	888			1486	514	525	477
v/s Ratio Prot		0.13			c0.17							
v/s Ratio Perm				0.04		0.12			0.03	c0.09	0.09	0.01
v/c Ratio		0.22		0.07	0.30	0.21			0.03	0.28	0.28	0.05
Uniform Delay, d1		11.1		10.1	11.7	11.0			0.1	27.8	27.8	25.7
Progression Factor		1.00		1.00	1.00	1.00			1.00	1.00	1.00	1.00
Incremental Delay, d2		0.1		0.3	0.4	0.5			0.0	0.3	0.3	0.0
Delay (s)		11.1		10.4	12.1	11.5			0.2	28.1	28.1	25.8
Level of Service		B		B	B	B			A	C	C	C
Approach Delay (s/veh)		11.1			11.8			0.2			27.6	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	93.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

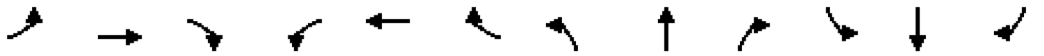
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	594	0	0	749	431	239	0	324	0	0	0
Future Volume (veh/h)	118	594	0	0	749	431	239	0	324	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	134	675	0	0	851	422	272	0	0			
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	197	2382	0	0	1668	767	536	0				
Arrive On Green	0.11	0.68	0.00	0.00	0.49	0.49	0.15	0.00	0.00			
Sat Flow, veh/h	1767	3618	0	0	3544	1553	3534	0	1572			
Grp Volume(v), veh/h	134	675	0	0	851	422	272	0	0			
Grp Sat Flow(s),veh/h/ln	1767	1763	0	0	1689	1553	1767	0	1572			
Q Serve(g_s), s	4.8	5.0	0.0	0.0	11.2	12.4	4.6	0.0	0.0			
Cycle Q Clear(g_c), s	4.8	5.0	0.0	0.0	11.2	12.4	4.6	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	197	2382	0	0	1668	767	536	0				
V/C Ratio(X)	0.68	0.28	0.00	0.00	0.51	0.55	0.51	0.00				
Avail Cap(c_a), veh/h	767	5654	0	0	3714	1708	2138	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	28.0	4.3	0.0	0.0	11.2	11.5	25.5	0.0	0.0			
Incr Delay (d2), s/veh	4.1	0.1	0.0	0.0	0.3	0.9	0.7	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.1	1.1	0.0	0.0	3.4	3.6	1.8	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	32.0	4.3	0.0	0.0	11.6	12.4	26.3	0.0	0.0			
LnGrp LOS	C	A			B	B	C					
Approach Vol, veh/h		809			1273			272				
Approach Delay, s/veh		8.9			11.8			26.3				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.1			11.9	38.2		15.3				
Change Period (Y+Rc), s		5.9			4.6	5.9		5.4				
Max Green Setting (Gmax), s		105.0			28.4	72.0		39.6				
Max Q Clear Time (g_c+I1), s		7.0			6.8	14.4		6.6				
Green Ext Time (p_c), s		7.6			0.3	18.0		0.9				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	12.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	608	106	206	752	75	172	245	209	107	374	257
Future Volume (veh/h)	148	608	106	206	752	75	172	245	209	107	374	257
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	166	683	100	231	845	75	193	275	29	120	420	35
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	311	886	128	614	2162	191	218	695	303	159	576	253
Arrive On Green	0.09	0.20	0.20	0.35	0.46	0.46	0.12	0.20	0.20	0.09	0.16	0.16
Sat Flow, veh/h	3428	4458	645	1767	4705	416	1767	3526	1535	1767	3526	1549
Grp Volume(v), veh/h	166	515	268	231	605	315	193	275	29	120	420	35
Grp Sat Flow(s),veh/h/ln	1714	1689	1726	1767	1689	1744	1767	1763	1535	1767	1763	1549
Q Serve(g_s), s	6.1	19.1	19.4	12.9	15.6	15.7	14.2	9.0	2.0	8.8	14.9	1.2
Cycle Q Clear(g_c), s	6.1	19.1	19.4	12.9	15.6	15.7	14.2	9.0	2.0	8.8	14.9	1.2
Prop In Lane	1.00		0.37	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	311	671	343	614	1551	801	218	695	303	159	576	253
V/C Ratio(X)	0.53	0.77	0.78	0.38	0.39	0.39	0.88	0.40	0.10	0.76	0.73	0.14
Avail Cap(c_a), veh/h	312	755	386	614	1551	801	308	1042	454	214	855	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.3	50.0	50.1	32.3	23.5	23.5	56.9	46.1	43.4	58.7	52.4	10.9
Incr Delay (d2), s/veh	0.9	7.9	15.4	1.8	0.7	1.4	15.2	1.0	0.4	6.4	4.8	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.7	9.7	5.8	6.2	6.6	7.2	4.0	0.8	4.1	6.8	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.2	57.9	65.6	34.1	24.2	25.0	72.1	47.1	43.7	65.0	57.3	11.6
LnGrp LOS	E	E	E	C	C	C	E	D	D	E	E	B
Approach Vol, veh/h		949			1151			497			575	
Approach Delay, s/veh		60.2			26.4			56.6			56.1	
Approach LOS		E			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	66.1	21.3	27.6	51.4	31.7	16.9	32.0
Change Period (Y+Rc), s	5.0	5.5	5.0	6.0	5.5	* 5.5	5.0	6.0
Max Green Setting (Gmax), s	12.0	43.5	23.0	32.0	26.0	* 30	16.0	39.0
Max Q Clear Time (g_c+I1), s	8.1	17.7	16.2	16.9	14.9	21.4	10.8	11.0
Green Ext Time (p_c), s	0.1	12.6	0.1	4.4	0.2	4.8	0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	46.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	82	47	393	243	0	0	0	0	22	1	193
Future Vol, veh/h	0	82	47	393	243	0	0	0	0	22	1	193
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	70	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	0	87	50	418	259	0	0	0	0	23	1	205

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	137	0	0	1207	1232	259
Stage 1	-	-	-	-	-	-	1095	1095	-
Stage 2	-	-	-	-	-	-	112	137	-
Critical Hdwy	-	-	-	4.14	-	-	6.44	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	5.44	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.44	5.54	-
Follow-up Hdwy	-	-	-	2.236	-	-	3.536	4.036	3.336
Pot Cap-1 Maneuver	0	-	-	1435	-	0	201	176	775
Stage 1	0	-	-	-	-	0	318	287	-
Stage 2	0	-	-	-	-	0	908	779	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1435	-	-	143	0	775
Mov Cap-2 Maneuver	-	-	-	-	-	-	143	0	-
Stage 1	-	-	-	-	-	-	318	0	-
Stage 2	-	-	-	-	-	-	644	0	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	5.3	16.7
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1435	-	534
HCM Lane V/C Ratio	-	-	0.291	-	0.43
HCM Ctrl Dly (s/v)	-	-	8.5	-	16.7
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q (veh)	-	-	1.2	-	2.1

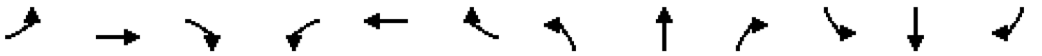
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	62	0	0	586	43	50	1	71	0	0	0
Future Vol, veh/h	44	62	0	0	586	43	50	1	71	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	0	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	47	66	0	0	623	46	53	1	76	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	669	0	-	-	-	0	806	829	66
Stage 1	-	-	-	-	-	-	160	160	-
Stage 2	-	-	-	-	-	-	646	669	-
Critical Hdwy	4.14	-	-	-	-	-	6.44	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	5.44	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.44	5.54	-
Follow-up Hdwy	2.236	-	-	-	-	-	3.536	4.036	3.336
Pot Cap-1 Maneuver	912	-	0	0	-	-	349	304	992
Stage 1	-	-	0	0	-	-	864	762	-
Stage 2	-	-	0	0	-	-	518	453	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	912	-	-	-	-	-	331	0	992
Mov Cap-2 Maneuver	-	-	-	-	-	-	331	0	-
Stage 1	-	-	-	-	-	-	819	0	-
Stage 2	-	-	-	-	-	-	518	0	-

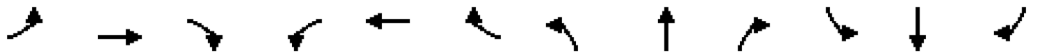
Approach	EB	WB	NB
HCM Ctrl Dly, s/v	3.8	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	331	992	912	-	-	-
HCM Lane V/C Ratio	0.164	0.076	0.051	-	-	-
HCM Ctrl Dly (s/v)	18	8.9	9.2	-	-	-
HCM Lane LOS	C	A	A	-	-	-
HCM 95th %tile Q (veh)	0.6	0.2	0.2	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	718	25	48	828	175	0	0	43	336	50	82
Future Volume (vph)	0	718	25	48	828	175	0	0	43	336	50	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2		6.2	6.2	6.2			6.2	5.4	5.4	5.4
Lane Util. Factor		0.91		1.00	0.95	1.00			1.00	0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.99			1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00	1.00			1.00	1.00	1.00	1.00
Frt		1.00		1.00	1.00	0.85			0.87	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00			1.00	0.95	0.96	1.00
Satd. Flow (prot)		5106		1785	3574	1577			1627	1698	1723	1599
Flt Permitted		1.00		0.33	1.00	1.00			1.00	0.95	0.96	1.00
Satd. Flow (perm)		5106		622	3574	1577			1627	1698	1723	1599
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	756	26	51	872	184	0	0	45	354	53	86
RTOR Reduction (vph)	0	2	0	0	0	76	0	0	0	0	0	59
Lane Group Flow (vph)	0	780	0	51	872	108	0	0	45	202	205	27
Confl. Peds. (#/hr)			2	2								
Confl. Bikes (#/hr)			1			4						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA		Perm	NA	Perm			Perm	Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases				6		6			2 4 6	4		4
Actuated Green, G (s)		64.4		64.4	64.4	64.4			110.0	34.0	34.0	34.0
Effective Green, g (s)		64.4		64.4	64.4	64.4			104.6	34.0	34.0	34.0
Actuated g/C Ratio		0.59		0.59	0.59	0.59			0.95	0.31	0.31	0.31
Clearance Time (s)		6.2		6.2	6.2	6.2				5.4	5.4	5.4
Vehicle Extension (s)		4.0		4.0	4.0	4.0				3.0	3.0	3.0
Lane Grp Cap (vph)		2989		364	2092	923			1547	524	532	494
v/s Ratio Prot		0.15			c0.24							
v/s Ratio Perm				0.08		0.07			0.03	0.12	0.12	0.02
v/c Ratio		0.26		0.14	0.42	0.12			0.03	0.39	0.39	0.05
Uniform Delay, d1		11.2		10.3	12.5	10.1			0.1	29.8	29.8	26.7
Progression Factor		1.00		1.00	1.00	1.00			1.00	1.00	1.00	1.00
Incremental Delay, d2		0.1		0.8	0.6	0.3			0.0	0.5	0.5	0.0
Delay (s)		11.2		11.1	13.1	10.4			0.1	30.3	30.3	26.7
Level of Service		B		B	B	B			A	C	C	C
Approach Delay (s/veh)		11.2			12.6			0.1			29.7	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	75.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	967	0	0	843	377	491	0	488	0	0	0
Future Volume (veh/h)	150	967	0	0	843	377	491	0	488	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	155	997	0	0	869	332	506	0	0			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	203	2237	0	0	1616	615	682	0				
Arrive On Green	0.11	0.63	0.00	0.00	0.45	0.45	0.19	0.00	0.00			
Sat Flow, veh/h	1767	3618	0	0	3764	1368	3534	0	1572			
Grp Volume(v), veh/h	155	997	0	0	816	385	506	0	0			
Grp Sat Flow(s),veh/h/ln	1767	1763	0	0	1689	1588	1767	0	1572			
Q Serve(g_s), s	5.6	9.4	0.0	0.0	11.5	11.6	8.8	0.0	0.0			
Cycle Q Clear(g_c), s	5.6	9.4	0.0	0.0	11.5	11.6	8.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.86	1.00		1.00			
Lane Grp Cap(c), veh/h	203	2237	0	0	1517	713	682	0				
V/C Ratio(X)	0.76	0.45	0.00	0.00	0.54	0.54	0.74	0.00				
Avail Cap(c_a), veh/h	793	5329	0	0	3351	1576	2461	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	28.1	6.1	0.0	0.0	13.1	13.1	24.9	0.0	0.0			
Incr Delay (d2), s/veh	5.9	0.2	0.0	0.0	0.4	0.9	1.6	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.5	2.4	0.0	0.0	3.7	3.6	3.4	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.0	6.3	0.0	0.0	13.5	14.0	26.5	0.0	0.0			
LnGrp LOS	C	A			B	B	C					
Approach Vol, veh/h		1152			1201			506				
Approach Delay, s/veh		10.0			13.7			26.5				
Approach LOS		B			B			C				

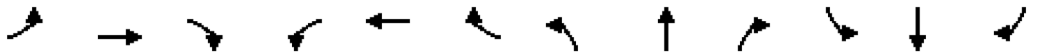
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		47.5			12.1	35.3		18.0				
Change Period (Y+Rc), s		5.9			4.6	5.9		5.4				
Max Green Setting (Gmax), s		99.0			29.4	65.0		45.6				
Max Q Clear Time (g_c+I1), s		11.4			7.6	13.6		10.8				
Green Ext Time (p_c), s		13.5			0.4	15.9		1.8				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			14.5									
HCM 6th LOS			B									

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	296	895	145	146	787	89	159	382	199	149	302	231
Future Volume (veh/h)	296	895	145	146	787	89	159	382	199	149	302	231
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	305	923	136	151	811	83	164	394	33	154	311	36
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	358	2086	306	176	2152	219	189	590	259	179	569	253
Arrive On Green	0.10	0.47	0.47	0.10	0.46	0.46	0.11	0.17	0.17	0.10	0.16	0.16
Sat Flow, veh/h	3428	4449	653	1767	4638	472	1767	3526	1550	1767	3526	1564
Grp Volume(v), veh/h	305	700	359	151	589	305	164	394	33	154	311	36
Grp Sat Flow(s),veh/h/ln	1714	1689	1725	1767	1689	1732	1767	1763	1550	1767	1763	1564
Q Serve(g_s), s	11.5	18.3	18.4	11.1	15.0	15.1	12.1	13.8	2.4	11.3	10.7	2.6
Cycle Q Clear(g_c), s	11.5	18.3	18.4	11.1	15.0	15.1	12.1	13.8	2.4	11.3	10.7	2.6
Prop In Lane	1.00		0.38	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	358	1583	809	176	1567	804	189	590	259	179	569	253
V/C Ratio(X)	0.85	0.44	0.44	0.86	0.38	0.38	0.87	0.67	0.13	0.86	0.55	0.14
Avail Cap(c_a), veh/h	467	1583	809	268	1567	804	281	881	387	268	855	379
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	23.5	23.5	58.5	23.0	23.0	58.0	51.5	46.8	58.4	50.9	47.5
Incr Delay (d2), s/veh	8.3	0.8	1.6	10.5	0.7	1.4	12.0	3.6	0.6	11.4	2.2	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	7.3	7.7	5.4	6.0	6.3	6.0	6.4	1.0	5.5	4.8	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.4	24.3	25.1	69.0	23.7	24.4	70.0	55.1	47.4	69.8	53.1	48.2
LnGrp LOS	E	C	C	E	C	C	E	E	D	E	D	D
Approach Vol, veh/h		1364			1045			591			501	
Approach Delay, s/veh		33.9			30.4			58.8			57.9	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	66.7	19.1	27.3	18.2	67.4	18.4	28.1
Change Period (Y+Rc), s	5.0	5.5	5.0	6.0	5.0	5.5	5.0	6.0
Max Green Setting (Gmax), s	18.0	39.5	21.0	32.0	20.0	37.5	20.0	33.0
Max Q Clear Time (g_c+I1), s	13.5	17.1	14.1	12.7	13.1	20.4	13.3	15.8
Green Ext Time (p_c), s	0.3	11.3	0.1	3.7	0.1	11.0	0.1	4.7

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	40.5
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	632	77	200	147	0	0	0	0	54	0	43
Future Vol, veh/h	0	632	77	200	147	0	0	0	0	54	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	70	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	645	79	204	150	0	0	0	0	55	0	44

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	724	0	0	1243	1282	150
Stage 1	-	-	-	-	-	-	558	558	-
Stage 2	-	-	-	-	-	-	685	724	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	879	-	0	193	165	896
Stage 1	0	-	-	-	-	0	573	512	-
Stage 2	0	-	-	-	-	0	500	430	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	879	-	-	148	0	896
Mov Cap-2 Maneuver	-	-	-	-	-	-	148	0	-
Stage 1	-	-	-	-	-	-	573	0	-
Stage 2	-	-	-	-	-	-	384	0	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	6	31
HCM LOS			D

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	879	-	235
HCM Lane V/C Ratio	-	-	0.232	-	0.421
HCM Ctrl Dly (s/v)	-	-	10.3	-	31
HCM Lane LOS	-	-	B	-	D
HCM 95th %tile Q (veh)	-	-	0.9	-	2

Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	365	326	0	0	292	63	56	3	252	0	0	0
Future Vol, veh/h	365	326	0	0	292	63	56	3	252	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	0	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	380	340	0	0	304	66	58	3	263	0	0	0

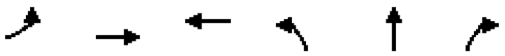
Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	370	0	-	-	-	0	1437	1470	340
Stage 1	-	-	-	-	-	-	1100	1100	-
Stage 2	-	-	-	-	-	-	337	370	-
Critical Hdwy	4.11	-	-	-	-	-	6.41	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	5.41	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.41	5.51	-
Follow-up Hdwy	2.209	-	-	-	-	-	3.509	4.009	3.309
Pot Cap-1 Maneuver	1194	-	0	0	-	-	148	128	705
Stage 1	-	-	0	0	-	-	320	289	-
Stage 2	-	-	0	0	-	-	725	622	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1194	-	-	-	-	-	101	0	705
Mov Cap-2 Maneuver	-	-	-	-	-	-	101	0	-
Stage 1	-	-	-	-	-	-	218	0	-
Stage 2	-	-	-	-	-	-	725	0	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	5	0	26.7
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	101	705	1194	-	-	-
HCM Lane V/C Ratio	0.608	0.372	0.318	-	-	-
HCM Ctrl Dly (s/v)	84.9	13.1	9.4	-	-	-
HCM Lane LOS	F	B	A	-	-	-
HCM 95th %tile Q (veh)	2.9	1.7	1.4	-	-	-

Lane Group	EBT	WBL	WBT	WBR	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	638	30	601	328	52	143	146	70
v/c Ratio	0.23	0.07	0.30	0.32	0.03	0.28	0.28	0.13
Control Delay (s/veh)	11.1	10.7	12.2	2.0	0.0	29.6	29.6	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.1	10.7	12.2	2.0	0.0	29.6	29.6	7.1
Queue Length 50th (ft)	72	9	105	0	0	77	80	0
Queue Length 95th (ft)	93	23	138	37	0	133	135	32
Internal Link Dist (ft)	551		559				1314	
Turn Bay Length (ft)		150						200
Base Capacity (vph)	2831	411	1986	1027	1565	719	735	708
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.07	0.30	0.32	0.03	0.20	0.20	0.10

Intersection Summary

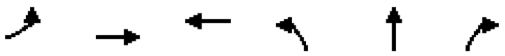


Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Group Flow (vph)	134	675	1341	136	136	368
v/c Ratio	0.58	0.34	0.68	0.26	0.26	0.23
Control Delay (s/veh)	55.5	11.9	25.4	32.1	32.1	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.5	11.9	25.4	32.1	32.1	0.4
Queue Length 50th (ft)	85	116	242	70	70	0
Queue Length 95th (ft)	164	144	310	153	153	0
Internal Link Dist (ft)		660	1800		1079	
Turn Bay Length (ft)	275			190		
Base Capacity (vph)	478	3339	3317	634	634	1568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.20	0.40	0.21	0.21	0.23

Intersection Summary

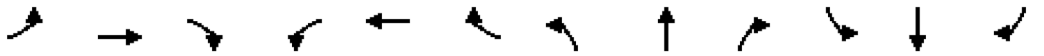
Lane Group	EBT	WBL	WBT	WBR	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	782	51	872	184	45	202	205	86
v/c Ratio	0.26	0.14	0.42	0.18	0.03	0.39	0.39	0.16
Control Delay (s/veh)	11.3	11.6	13.3	1.9	0.0	32.5	32.4	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.3	11.6	13.3	1.9	0.0	32.5	32.4	6.7
Queue Length 50th (ft)	91	15	167	0	0	116	118	0
Queue Length 95th (ft)	115	35	211	29	0	188	190	36
Internal Link Dist (ft)	551		559				1314	
Turn Bay Length (ft)		150						200
Base Capacity (vph)	2991	364	2092	999	1627	703	714	713
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.14	0.42	0.18	0.03	0.29	0.29	0.12

Intersection Summary



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Group Flow (vph)	155	997	1258	253	253	503
v/c Ratio	0.61	0.50	0.68	0.47	0.47	0.32
Control Delay (s/veh)	54.0	14.1	27.1	34.9	34.9	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.0	14.1	27.1	34.9	34.9	0.5
Queue Length 50th (ft)	96	195	231	137	137	0
Queue Length 95th (ft)	188	245	316	284	284	0
Internal Link Dist (ft)		660	1800		1079	
Turn Bay Length (ft)	275			190		
Base Capacity (vph)	501	3255	3059	738	738	1568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.31	0.41	0.34	0.34	0.32

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	569	32	28	559	305	0	0	48	232	54	67
Future Volume (vph)	0	569	32	28	559	305	0	0	48	232	54	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2		6.2	6.2	6.2			6.2	5.4	5.4	5.4
Lane Util. Factor		0.91		1.00	0.95	1.00			1.00	0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00	1.00			1.00	1.00	1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00	1.00			1.00	1.00	1.00	1.00
Frt		0.99		1.00	1.00	0.85			0.87	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00			1.00	0.95	0.97	1.00
Satd. Flow (prot)		4895		1716	3438	1538			1565	1633	1667	1518
Flt Permitted		1.00		0.39	1.00	1.00			1.00	0.95	0.97	1.00
Satd. Flow (perm)		4895		706	3438	1538			1565	1633	1667	1518
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	612	34	30	601	328	0	0	52	249	58	72
RTOR Reduction (vph)	0	4	0	0	0	138	0	0	0	0	0	49
Lane Group Flow (vph)	0	642	0	30	601	190	0	0	52	152	155	23
Confl. Peds. (#/hr)			3	3								1
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type		NA		Perm	NA	Perm			Perm	Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases				6		6			2 4 6	4		4
Actuated Green, G (s)		62.4		62.4	62.4	62.4			108.0	34.0	34.0	34.0
Effective Green, g (s)		62.4		62.4	62.4	62.4			102.6	34.0	34.0	34.0
Actuated g/C Ratio		0.58		0.58	0.58	0.58			0.95	0.31	0.31	0.31
Clearance Time (s)		6.2		6.2	6.2	6.2				5.4	5.4	5.4
Vehicle Extension (s)		4.0		4.0	4.0	4.0				3.0	3.0	3.0
Lane Grp Cap (vph)		2828		407	1986	888			1486	514	524	477
v/s Ratio Prot		0.13			c0.17							
v/s Ratio Perm				0.04		0.12			0.03	c0.09	0.09	0.01
v/c Ratio		0.23		0.07	0.30	0.21			0.03	0.30	0.30	0.05
Uniform Delay, d1		11.1		10.1	11.7	11.0			0.1	28.0	28.0	25.7
Progression Factor		1.00		1.00	1.00	1.00			1.00	1.00	1.00	1.00
Incremental Delay, d2		0.1		0.4	0.4	0.5			0.0	0.3	0.3	0.0
Delay (s)		11.1		10.4	12.1	11.5			0.2	28.3	28.3	25.8
Level of Service		B		B	B	B			A	C	C	C
Approach Delay (s/veh)		11.1			11.8			0.2			27.8	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	108.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	93.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	654	0	0	768	431	239	0	324	0	0	0
Future Volume (veh/h)	178	654	0	0	768	431	239	0	324	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	202	743	0	0	873	407	272	0	0			
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	255	2425	0	0	1606	739	517	0				
Arrive On Green	0.14	0.69	0.00	0.00	0.48	0.48	0.15	0.00	0.00			
Sat Flow, veh/h	1767	3618	0	0	3544	1553	3534	0	1572			
Grp Volume(v), veh/h	202	743	0	0	873	407	272	0	0			
Grp Sat Flow(s),veh/h/ln	1767	1763	0	0	1689	1553	1767	0	1572			
Q Serve(g_s), s	7.5	5.7	0.0	0.0	12.4	12.7	4.8	0.0	0.0			
Cycle Q Clear(g_c), s	7.5	5.7	0.0	0.0	12.4	12.7	4.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	255	2425	0	0	1606	739	517	0				
V/C Ratio(X)	0.79	0.31	0.00	0.00	0.54	0.55	0.53	0.00				
Avail Cap(c_a), veh/h	920	5546	0	0	3326	1530	1954	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	28.1	4.2	0.0	0.0	12.6	12.7	26.9	0.0	0.0			
Incr Delay (d2), s/veh	5.4	0.1	0.0	0.0	0.4	0.9	0.8	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.3	1.2	0.0	0.0	3.9	3.8	1.9	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	33.5	4.3	0.0	0.0	13.0	13.6	27.7	0.0	0.0			
LnGrp LOS	C	A			B	B	C					
Approach Vol, veh/h		945			1280			272				
Approach Delay, s/veh		10.6			13.2			27.7				
Approach LOS		B			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		52.7			14.4	38.2		15.3				
Change Period (Y+Rc), s		5.9			4.6	5.9		5.4				
Max Green Setting (Gmax), s		107.0			35.4	67.0		37.6				
Max Q Clear Time (g_c+I1), s		7.7			9.5	14.7		6.8				
Green Ext Time (p_c), s		8.7			0.5	17.7		0.9				

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	13.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	651	118	206	766	75	176	245	209	107	374	259
Future Volume (veh/h)	153	651	118	206	766	75	176	245	209	107	374	259
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	172	731	113	231	861	75	198	275	29	120	420	45
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	311	946	145	582	2150	187	223	707	308	159	578	254
Arrive On Green	0.09	0.21	0.21	0.33	0.46	0.46	0.13	0.20	0.20	0.09	0.16	0.16
Sat Flow, veh/h	3428	4421	677	1767	4713	409	1767	3526	1536	1767	3526	1549
Grp Volume(v), veh/h	172	557	287	231	616	320	198	275	29	120	420	45
Grp Sat Flow(s),veh/h/ln	1714	1689	1720	1767	1689	1745	1767	1763	1536	1767	1763	1549
Q Serve(g_s), s	6.3	20.5	20.8	13.3	16.0	16.1	14.6	8.9	2.0	8.8	14.9	1.7
Cycle Q Clear(g_c), s	6.3	20.5	20.8	13.3	16.0	16.1	14.6	8.9	2.0	8.8	14.9	1.7
Prop In Lane	1.00		0.39	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	311	722	368	582	1541	796	223	707	308	159	578	254
V/C Ratio(X)	0.55	0.77	0.78	0.40	0.40	0.40	0.89	0.39	0.09	0.76	0.73	0.18
Avail Cap(c_a), veh/h	312	806	411	582	1541	796	295	1015	442	214	855	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	48.8	49.0	34.2	23.9	23.9	56.7	45.8	43.0	58.7	52.4	12.0
Incr Delay (d2), s/veh	1.2	7.5	14.6	2.0	0.8	1.5	18.5	1.0	0.4	6.4	4.8	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	9.2	10.3	6.0	6.4	6.8	7.6	4.0	0.8	4.1	6.8	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.6	56.3	63.5	36.2	24.6	25.4	75.2	46.7	43.4	65.0	57.1	12.9
LnGrp LOS	E	E	E	D	C	C	E	D	D	E	E	B
Approach Vol, veh/h		1016			1167			502			585	
Approach Delay, s/veh		58.8			27.1			57.8			55.3	
Approach LOS		E			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	65.7	21.7	27.6	49.0	33.7	16.9	32.5
Change Period (Y+Rc), s	5.0	5.5	5.0	6.0	5.5	* 5.5	5.0	6.0
Max Green Setting (Gmax), s	12.0	44.5	22.0	32.0	25.0	* 32	16.0	38.0
Max Q Clear Time (g_c+I1), s	8.3	18.1	16.6	16.9	15.3	22.8	10.8	10.9
Green Ext Time (p_c), s	0.1	13.0	0.1	4.5	0.2	5.4	0.1	3.9

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	46.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	82	102	393	261	0	0	0	0	22	1	193
Future Vol, veh/h	0	82	102	393	261	0	0	0	0	22	1	193
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	70	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	0	87	109	418	278	0	0	0	0	23	1	205

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	196	0	0	1256	1310	278
Stage 1	-	-	-	-	-	-	1114	1114	-
Stage 2	-	-	-	-	-	-	142	196	-
Critical Hdwy	-	-	-	4.14	-	-	6.44	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	5.44	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.44	5.54	-
Follow-up Hdwy	-	-	-	2.236	-	-	3.536	4.036	3.336
Pot Cap-1 Maneuver	0	-	-	1365	-	0	187	158	756
Stage 1	0	-	-	-	-	0	311	281	-
Stage 2	0	-	-	-	-	0	880	735	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	1365	-	-	130	0	756
Mov Cap-2 Maneuver	-	-	-	-	-	-	130	0	-
Stage 1	-	-	-	-	-	-	311	0	-
Stage 2	-	-	-	-	-	-	611	0	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	5.3	17.9
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1365	-	506
HCM Lane V/C Ratio	-	-	0.306	-	0.454
HCM Ctrl Dly (s/v)	-	-	8.8	-	17.9
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q (veh)	-	-	1.3	-	2.3

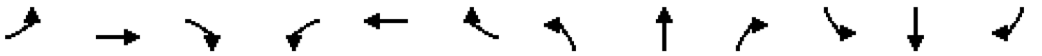
Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	62	0	0	586	43	68	1	71	0	0	0
Future Vol, veh/h	44	62	0	0	586	43	68	1	71	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	0	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	47	66	0	0	623	46	72	1	76	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	669	0	-	-	-	0	806	829	66
Stage 1	-	-	-	-	-	-	160	160	-
Stage 2	-	-	-	-	-	-	646	669	-
Critical Hdwy	4.14	-	-	-	-	-	6.44	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	5.44	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.44	5.54	-
Follow-up Hdwy	2.236	-	-	-	-	-	3.536	4.036	3.336
Pot Cap-1 Maneuver	912	-	0	0	-	-	349	304	992
Stage 1	-	-	0	0	-	-	864	762	-
Stage 2	-	-	0	0	-	-	518	453	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	912	-	-	-	-	-	331	0	992
Mov Cap-2 Maneuver	-	-	-	-	-	-	331	0	-
Stage 1	-	-	-	-	-	-	819	0	-
Stage 2	-	-	-	-	-	-	518	0	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	3.8	0	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	331	992	912	-	-	-
HCM Lane V/C Ratio	0.222	0.076	0.051	-	-	-
HCM Ctrl Dly (s/v)	18.9	8.9	9.2	-	-	-
HCM Lane LOS	C	A	A	-	-	-
HCM 95th %tile Q (veh)	0.8	0.2	0.2	-	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	722	25	48	828	175	0	0	43	393	50	90
Future Volume (vph)	0	722	25	48	828	175	0	0	43	393	50	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.2		6.2	6.2	6.2			6.2	5.4	5.4	5.4
Lane Util. Factor		0.91		1.00	0.95	1.00			1.00	0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.99			1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00	1.00			1.00	1.00	1.00	1.00
Frt		1.00		1.00	1.00	0.85			0.87	1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00			1.00	0.95	0.96	1.00
Satd. Flow (prot)		5106		1785	3574	1577			1627	1698	1721	1599
Flt Permitted		1.00		0.33	1.00	1.00			1.00	0.95	0.96	1.00
Satd. Flow (perm)		5106		618	3574	1577			1627	1698	1721	1599
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	760	26	51	872	184	0	0	45	414	53	95
RTOR Reduction (vph)	0	3	0	0	0	77	0	0	0	0	0	65
Lane Group Flow (vph)	0	783	0	51	872	107	0	0	45	232	235	30
Confl. Peds. (#/hr)			2	2								
Confl. Bikes (#/hr)			1			4						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA		Perm	NA	Perm			Perm	Perm	NA	Perm
Protected Phases		2			6						4	
Permitted Phases				6		6			2 4 6	4		4
Actuated Green, G (s)		63.4		63.4	63.4	63.4			109.0	34.0	34.0	34.0
Effective Green, g (s)		63.4		63.4	63.4	63.4			103.6	34.0	34.0	34.0
Actuated g/C Ratio		0.58		0.58	0.58	0.58			0.95	0.31	0.31	0.31
Clearance Time (s)		6.2		6.2	6.2	6.2				5.4	5.4	5.4
Vehicle Extension (s)		4.0		4.0	4.0	4.0				3.0	3.0	3.0
Lane Grp Cap (vph)		2969		359	2078	917			1546	529	536	498
v/s Ratio Prot		0.15			c0.24							
v/s Ratio Perm				0.08		0.07			0.03	c0.14	0.14	0.02
v/c Ratio		0.26		0.14	0.42	0.12			0.03	0.44	0.44	0.06
Uniform Delay, d1		11.3		10.4	12.6	10.2			0.1	29.9	29.9	26.3
Progression Factor		1.00		1.00	1.00	1.00			1.00	1.00	1.00	1.00
Incremental Delay, d2		0.1		0.8	0.6	0.3			0.0	0.6	0.6	0.1
Delay (s)		11.3		11.2	13.2	10.5			0.1	30.5	30.5	26.3
Level of Service		B		B	B	B			A	C	C	C
Approach Delay (s/veh)		11.3			12.7			0.1			29.8	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	109.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	77.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	1004	0	0	907	377	491	0	488	0	0	0
Future Volume (veh/h)	187	1004	0	0	907	377	491	0	488	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1856	1856	0	0	1856	1856	1856	1856	1856			
Adj Flow Rate, veh/h	193	1035	0	0	935	344	506	0	0			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	3	3	0	0	3	3	3	3	3			
Cap, veh/h	243	2310	0	0	1652	607	666	0				
Arrive On Green	0.14	0.66	0.00	0.00	0.45	0.45	0.19	0.00	0.00			
Sat Flow, veh/h	1767	3618	0	0	3803	1335	3534	0	1572			
Grp Volume(v), veh/h	193	1035	0	0	868	411	506	0	0			
Grp Sat Flow(s),veh/h/ln	1767	1763	0	0	1689	1594	1767	0	1572			
Q Serve(g_s), s	7.6	10.4	0.0	0.0	13.6	13.7	9.8	0.0	0.0			
Cycle Q Clear(g_c), s	7.6	10.4	0.0	0.0	13.6	13.7	9.8	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		0.84	1.00		1.00			
Lane Grp Cap(c), veh/h	243	2310	0	0	1534	724	666	0				
V/C Ratio(X)	0.79	0.45	0.00	0.00	0.57	0.57	0.76	0.00				
Avail Cap(c_a), veh/h	792	4927	0	0	2991	1412	2132	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	30.2	6.1	0.0	0.0	14.5	14.5	27.8	0.0	0.0			
Incr Delay (d2), s/veh	5.8	0.2	0.0	0.0	0.5	1.0	1.8	0.0	0.0			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.4	2.7	0.0	0.0	4.6	4.4	3.9	0.0	0.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.0	6.3	0.0	0.0	15.0	15.5	29.6	0.0	0.0			
LnGrp LOS	D	A			B	B	C					
Approach Vol, veh/h		1228			1279			506				
Approach Delay, s/veh		10.9			15.1			29.6				
Approach LOS		B			B			C				

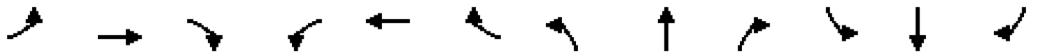
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		53.3			14.5	38.7		19.0				
Change Period (Y+Rc), s		5.9			4.6	5.9		5.4				
Max Green Setting (Gmax), s		101.0			32.4	64.0		43.6				
Max Q Clear Time (g_c+I1), s		12.4			9.6	15.7		11.8				
Green Ext Time (p_c), s		14.4			0.5	17.1		1.8				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			15.9									
HCM 6th LOS			B									

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	299	922	152	146	833	89	172	382	199	149	302	236
Future Volume (veh/h)	299	922	152	146	833	89	172	382	199	149	302	236
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	308	951	143	151	859	84	177	394	33	154	311	36
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	361	2080	312	176	2158	210	202	590	259	179	544	241
Arrive On Green	0.11	0.47	0.47	0.10	0.46	0.46	0.11	0.17	0.17	0.10	0.15	0.15
Sat Flow, veh/h	3428	4435	665	1767	4660	454	1767	3526	1550	1767	3526	1563
Grp Volume(v), veh/h	308	723	371	151	622	321	177	394	33	154	311	36
Grp Sat Flow(s),veh/h/ln	1714	1689	1723	1767	1689	1736	1767	1763	1550	1767	1763	1563
Q Serve(g_s), s	11.7	19.1	19.2	11.1	16.0	16.1	13.0	13.8	2.4	11.3	10.8	2.6
Cycle Q Clear(g_c), s	11.7	19.1	19.2	11.1	16.0	16.1	13.0	13.8	2.4	11.3	10.8	2.6
Prop In Lane	1.00		0.39	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	361	1584	808	176	1564	804	202	590	259	179	544	241
V/C Ratio(X)	0.85	0.46	0.46	0.86	0.40	0.40	0.88	0.67	0.13	0.86	0.57	0.15
Avail Cap(c_a), veh/h	467	1584	808	254	1564	804	281	881	387	268	855	379
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	23.7	23.7	58.5	23.3	23.3	57.5	51.5	46.8	58.4	51.8	48.3
Incr Delay (d2), s/veh	8.6	0.9	1.7	13.0	0.8	1.5	15.6	3.6	0.6	11.4	2.6	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	7.6	8.0	5.5	6.4	6.8	6.6	6.4	1.0	5.5	4.9	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.6	24.5	25.4	71.5	24.1	24.8	73.1	55.1	47.4	69.8	54.4	49.1
LnGrp LOS	E	C	C	E	C	C	E	E	D	E	D	D
Approach Vol, veh/h		1402			1094			604			501	
Approach Delay, s/veh		34.0			30.8			59.9			58.8	
Approach LOS		C			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	66.6	20.1	26.4	18.1	67.4	18.4	28.1
Change Period (Y+Rc), s	5.0	5.5	5.0	6.0	5.0	5.5	5.0	6.0
Max Green Setting (Gmax), s	18.0	39.5	21.0	32.0	19.0	38.5	20.0	33.0
Max Q Clear Time (g_c+I1), s	13.7	18.1	15.0	12.8	13.1	21.2	13.3	15.8
Green Ext Time (p_c), s	0.3	11.6	0.1	3.7	0.1	11.4	0.1	4.7

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	40.8
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	632	111	200	206	0	0	0	0	54	0	43
Future Vol, veh/h	0	632	111	200	206	0	0	0	0	54	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	70	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	645	113	204	210	0	0	0	0	55	0	44

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	758	0	0	1320	1376	210
Stage 1	-	-	-	-	-	-	618	618	-
Stage 2	-	-	-	-	-	-	702	758	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	853	-	0	173	145	830
Stage 1	0	-	-	-	-	0	538	481	-
Stage 2	0	-	-	-	-	0	491	415	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	853	-	-	132	0	830
Mov Cap-2 Maneuver	-	-	-	-	-	-	132	0	-
Stage 1	-	-	-	-	-	-	538	0	-
Stage 2	-	-	-	-	-	-	374	0	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	5.2	36.6
HCM LOS			E

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	853	-	210
HCM Lane V/C Ratio	-	-	0.239	-	0.471
HCM Ctrl Dly (s/v)	-	-	10.5	-	36.6
HCM Lane LOS	-	-	B	-	E
HCM 95th %tile Q (veh)	-	-	0.9	-	2.3

Intersection	
Int Delay, s/veh	24.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	365	326	0	0	292	63	115	3	252	0	0	0
Future Vol, veh/h	365	326	0	0	292	63	115	3	252	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	100	-	-	-	-	0	-	-	150	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	380	340	0	0	304	66	120	3	263	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	370	0	-	-	-	0	1437	1470	340
Stage 1	-	-	-	-	-	-	1100	1100	-
Stage 2	-	-	-	-	-	-	337	370	-
Critical Hdwy	4.11	-	-	-	-	-	6.41	6.51	6.21
Critical Hdwy Stg 1	-	-	-	-	-	-	5.41	5.51	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.41	5.51	-
Follow-up Hdwy	2.209	-	-	-	-	-	3.509	4.009	3.309
Pot Cap-1 Maneuver	1194	-	0	0	-	-	148	128	705
Stage 1	-	-	0	0	-	-	320	289	-
Stage 2	-	-	0	0	-	-	725	622	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	1194	-	-	-	-	-	~ 101	0	705
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 101	0	-
Stage 1	-	-	-	-	-	-	218	0	-
Stage 2	-	-	-	-	-	-	725	0	-

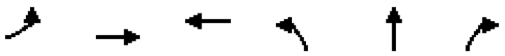
Approach	EB	WB	NB
HCM Ctrl Dly, s/v	5	0	84.7
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT	WBR
Capacity (veh/h)	101	705	1194	-	-	-
HCM Lane V/C Ratio	1.217	0.372	0.318	-	-	-
HCM Ctrl Dly (s/v)	237.5	13.1	9.4	-	-	-
HCM Lane LOS	F	B	A	-	-	-
HCM 95th %tile Q (veh)	8.3	1.7	1.4	-	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBT	WBL	WBT	WBR	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	646	30	601	328	52	152	155	72
v/c Ratio	0.23	0.07	0.30	0.32	0.03	0.30	0.30	0.14
Control Delay (s/veh)	11.1	10.7	12.2	2.0	0.0	29.9	29.9	7.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.1	10.7	12.2	2.0	0.0	29.9	29.9	7.0
Queue Length 50th (ft)	73	9	105	0	0	83	85	0
Queue Length 95th (ft)	94	23	138	37	0	141	143	33
Internal Link Dist (ft)	551		559				1314	
Turn Bay Length (ft)		150						200
Base Capacity (vph)	2831	407	1986	1027	1565	719	734	709
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.07	0.30	0.32	0.03	0.21	0.21	0.10

Intersection Summary

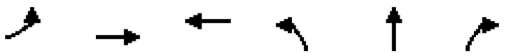


Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Group Flow (vph)	202	743	1363	136	136	368
v/c Ratio	0.69	0.35	0.70	0.28	0.28	0.23
Control Delay (s/veh)	59.0	11.3	28.2	37.2	37.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.0	11.3	28.2	37.2	37.2	0.4
Queue Length 50th (ft)	138	132	272	78	78	0
Queue Length 95th (ft)	244	157	356	172	172	0
Internal Link Dist (ft)		660	1800		1079	
Turn Bay Length (ft)	275			190		
Base Capacity (vph)	553	3219	2881	558	558	1568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.23	0.47	0.24	0.24	0.23

Intersection Summary

Lane Group	EBT	WBL	WBT	WBR	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	786	51	872	184	45	232	235	95
v/c Ratio	0.26	0.14	0.42	0.19	0.03	0.44	0.44	0.17
Control Delay (s/veh)	11.5	11.7	13.4	2.0	0.0	33.1	33.1	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.5	11.7	13.4	2.0	0.0	33.1	33.1	6.4
Queue Length 50th (ft)	92	15	167	0	0	135	137	0
Queue Length 95th (ft)	116	36	211	29	0	212	215	37
Internal Link Dist (ft)	551		559				1314	
Turn Bay Length (ft)		150						200
Base Capacity (vph)	2972	359	2078	994	1627	725	735	737
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.14	0.42	0.19	0.03	0.32	0.32	0.13

Intersection Summary

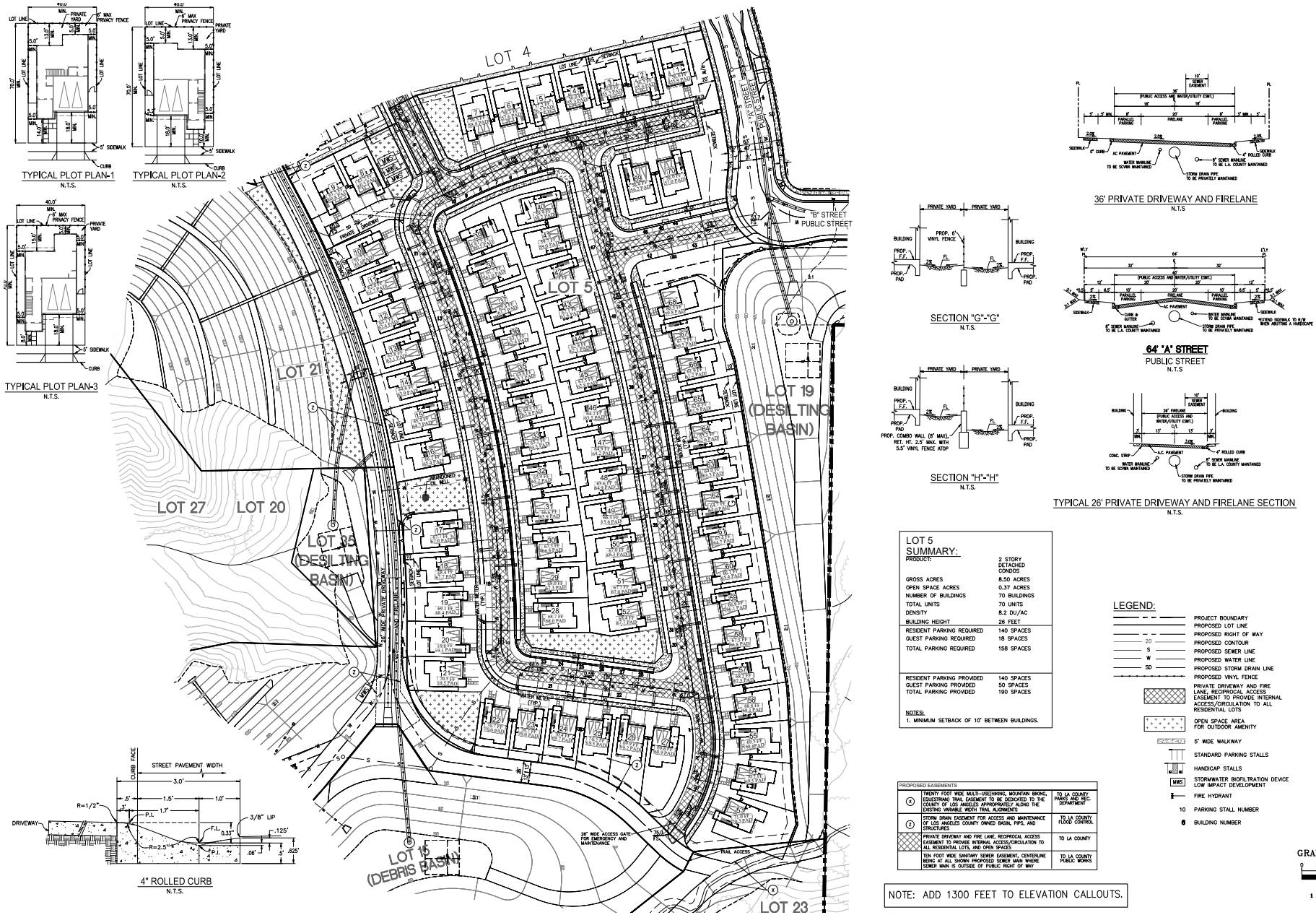


Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Group Flow (vph)	193	1035	1324	253	253	503
v/c Ratio	0.68	0.50	0.69	0.50	0.50	0.32
Control Delay (s/veh)	58.4	13.6	28.9	40.0	40.0	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.4	13.6	28.9	40.0	40.0	0.5
Queue Length 50th (ft)	130	205	265	155	155	0
Queue Length 95th (ft)	245	267	373	316	316	0
Internal Link Dist (ft)		660	1800		1079	
Turn Bay Length (ft)	275			190		
Base Capacity (vph)	513	3129	2809	656	656	1568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.33	0.47	0.39	0.39	0.32

Intersection Summary

Attachment C

Figure 3-2B, Vesting Tentative Tract Map No. 83301



SOURCE: United Civil Inc., 2024

FIGURE 3-2B

Vesting Tentative Tract Map No. 8330

Trails at Lyons Canyon Project

DUDEK

Attachment D

Evacuation Analysis Technical Memorandum

TO:	Corey Harpole, New Urban West, Inc.
FROM:	Phuong Nguyen, PE; CR Associates (CRA)
DATE:	June 12, 2025
RE:	Lyons Canyon Fire Evacuation Analysis – Technical Memorandum

The purpose of this technical memorandum is to assess the time required for emergency evacuation under several scenarios, assuming a wind-driven fire that results in an evacuation affecting the Lyons Canyon Project ("Project") and surrounding communities.[1] The following discussion of evacuation traffic simulations is not intended to be an Evacuation Plan, nor include elements typically found in an Evacuation Plan. The sole purpose of the traffic simulations is to focus on the vehicle travel times in simulated evacuation events.

Background and Purpose

This memorandum provides a summary of the traffic simulations conducted for evacuation of the Project and surrounding community due to a wildfire. The simulations have been conducted for a variety of evacuation scenarios described below. Modeling potential evacuation traffic impacts requires that numerous assumptions be made to address many variables that will impact a real-life evacuation scenario, including the number of existing vehicles in the community, the number of project vehicles that will need to evacuate, the roadway capacities and whether enhancements are provided (e.g., extra lanes, lane widening, signaling intersections), the total number of intersections and how they will be operating, the final destination, the targeted evacuation area, the total mobilization time, vegetation communities, weather and wind, fire spread rates, humidity, topography, risk to homes, locations of ignitions and new fire starts, and lead time needed, etc. There are many hundreds or thousands of potential model scenarios, and every fire scenario poses variations that regularly change and are reassessed "real-time" during a wildfire. Agencies involved in implementing an evacuation order would not rely on a project-specific evacuation plan, but on situational awareness and wildfire pre-plans, which act as operational tools to provide high-level fire assessments and assets at risk, preferred evacuation approaches, and safety information to inform evacuation decision-making.

The following analysis is intended to present representative evacuation scenarios using the best available information, conservative assumptions, and the best available modeling technology. In an actual emergency, unified command will take into account numerous factors including fire location and spread rates, wind speeds and direction, humidity, topography, fuel loading, emergency access routes, evacuation routes, shelter-in-place options, time needed to evacuate, and other variables, and will issue specific evacuation or shelter-in-place directives consistent with the process and protocols outlined in the City's and County's Emergency Operations Plans. During a wildfire, residents should comply with those directives from authorities and first responders conducting the evacuation or emergency response. The evacuation traffic model used herein is appropriate for planning and comparison purposes but will likely not be relied on by first responders and should not be relied on by residents in time of an emergency; however, it provides useful information that will be provided to agencies and emergency managers.

The roadway network and vehicle input assumptions also have been selected to simulate a "worst-case" evacuation scenario that would occur in the nighttime when all Project residents and the surrounding community are at home when ordered to evacuate. This "worst-case" evaluation is not required by law. Nonetheless, this preparer imposed a "worst-case" evaluation out of an abundance

[1] This memorandum was prepared with technical fire behavior input from Dudek's fire protection planning team.

of caution. The assumptions that a mass evacuation would occur at night when all Project residents and the surrounding community are at home when the evacuation order is provided represents an extreme, worst-case condition. In an actual wildfire event, phased evacuation orders would be given to provide for a more orderly evacuation, and it is likely that fewer residents would be present onsite.

The wildfire evacuation scenarios selected for this analysis were based on a comprehensive approach that included review of fire history, review of Harris Fire evacuations in 2007, fire behavior science, area topography, fuel types and the evolved approach to evacuations which is surgical instead of area wide. Accordingly, given the highest probability wildfire scenarios that would result in evacuation, the perimeter populations in certain locations may be targeted for evacuation. The entire proposed Project is provided wildfire hardening and will provide significant protection against exposure to wildfire. However, some perimeter units, based solely on their closer proximity to native fuels, may be selected for occupant relocation as a precautionary measure. This may be combined with targeted evacuations of perimeter populations within existing communities along The Old Road and along the southern side of Pico Canyon Road, as indicated in the modeling analysis. This type of evacuation is consistent with management of recent wildfires throughout southern California and Los Angeles County, including the Palisades Fire in 2021, where the phased/surgical evacuation practice has been implemented with great success.

Project Description

The proposed Project is located at the southwest corner of the intersection of The Old Road and Lyons Ranch Road in Los Angeles County. The project study area is bordered by Pico Canyon Road to the north, Towsley Canyon Road & Calgrove Boulevard to the south, I-5 to the east, and open space to the west. **Figure 1** displays the proposed Project location and study area, and **Figure 2** displays the proposed Project site plan.

The proposed Project will construct 510[2] multi-family dwelling units, a recreation center, and open spaces on 233.17 acres site.

Assumptions

This evacuation analysis was performed for the Project to determine how long it would take for residents of the proposed Project and the surrounding communities to evacuate to nearby urban areas/freeway access in case of a fire emergency. Current evacuation practice typically targets the scope of the evacuation only to the area in immediate danger and placing a larger area on standby for evacuation. This practice allows for better evacuation operations, reduces gridlock, and reserves sufficient travel way for emergency vehicles. It is assumed that first responders or law enforcement will direct traffic at all major intersections during the evacuation process.

During the evacuation process, which can proceed aided by the roadside fuel modification zones and unexposed corridors, wildfire spread and encroachment may be slowed by fire-fighting efforts that would likely include fixed wing and helicopter fire-fighting assets. Hand crews would also be deployed toward containment. None of the evacuation scenarios assumed counter-flow lanes, as these lanes are reserved for first responders, law enforcement, and fire fighters in case of unforeseen circumstances. Because the proposed Project consists of primarily residential land uses, this analysis assumed a nighttime evacuation order, where all the residents are home and that each household would take all of their vehicles during an evacuation.

[2] Note that while the Project currently proposes 510 multi-family dwelling units, the evacuation analysis conservatively assumed 516 units to account for potential development variations.

Lyons Canyon Evacuation
Technical Memorandum

C+R

Figure 1
Project Regional Location

Lyons Canyon Evacuation
Technical Memorandum

C+R

Figure 2
Project Site Plan

Nighttime Evacuation; 100% Occupancy

CRA assumed that the evacuation would occur at night when all residents and the surrounding communities are at home and thus all resident vehicles would need to evacuate. In an actual wildfire scenario, it is likely that fewer vehicles would be present on the Project site and within the surrounding communities when an evacuation order is given.

Nighttime Evacuation is the most conservative scenario, as this scenario assumed that all residents are at home and would evacuate with all available vehicles. Nighttime evacuation assumption also includes hotel guests from the Hampton Inn Los Angeles/Santa Clarita (128 Rooms), La Quinta Inn & Suites (122 rooms), Extended Stay America (90 rooms), Residence Inn Santa Clarita Valencia (90 rooms), Fairfield Inn Santa Clarita Valencia (66 rooms), Comfort Suites Near Six Flags Magic Mountain (100 rooms). The evacuation analysis assumed that commercial and retail land uses are closed when the evacuation order is issued, thus these land uses are not included in the evacuation analysis.

Research[3][4] consistently shows that residential evacuation during wildfires is often delayed because individuals attempt to gather personal belongings before leaving, significantly extending response times. Studies from events like the Marshall Fire and controlled simulations have demonstrated that pre-evacuation activities—including packing, locating pets, and preparing children—can account for a large portion of overall evacuation time. These delays are especially pronounced when all household members are present, such as during nighttime hours. In contrast, land uses such as retail centers or restaurants are typically occupied by temporary visitors who can leave immediately and are more likely to self-evacuate before an official order is issued. Therefore, assuming a midnight evacuation scenario—when all residents are home and likely to engage in time-consuming behavior represents the most conservative and risk-averse approach for evacuation modeling and analysis.

Primary Evacuation Routes

CRA assumed that traffic evacuating from both the Project and nearby communities would use The Old Road to travel north to more urbanized, fire-safe areas or access I-5 to leave the area. This presents a worst-case scenario by assuming more traffic would utilize these roadways despite the other available options that may be employed in an actual evacuation scenario, such as shelter in place or targeted evacuation.

Based upon review of previous fires, evacuation orders, and the Los Angeles County Fire Hazard Severity Zone Map (11/2020)[5], it is assumed that all vehicles would head north along The Old Road, since the segments of The Old Road between the southern Project's boundary and Calgrove Boulevard is located within a Very High Fire Severity Zone, and are exposed to potential wildfire fuel sources under some fire scenarios. In fact, the 2016 Sage Fire encroach upon this segment of The Old Road, and not upon the land uses located to the north of the Project's site.[6]

[3] https://link.springer.com/article/10.1007/s10694-018-0744-9

[4] https://www.researchgate.net/publication/348698214_Evacuation_behaviors_and_emergency_communications_An_analysis_of_real-world_incident_videos

[5] https://lacounty.maps.arcgis.com/apps/webappviewer/index.html?id=d2ea45d15c784adfa601e84b38060c4e
CalFire completed an updated Fire Hazard Severity Zone Map (FHSZM) for State Responsibility Areas in 2023, which became effective in April 2024. A comparison of the 2022 and 2024 FHSZMs shows a slight expansion of fire hazard zones around the Project site. However, because there has been no significant nearby development, this change does not lead to an increase in the designated evacuation area. 2024 Map: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones

[6] https://projects.capradio.org/california-fire-history/#14.44/34.37267/-118.57463

This assumption selects a reasonable evacuation route for the assumed extreme weather scenario and a fire traveling in a southwesterly direction. Detailed evacuation analysis information is provided in **Attachment B**.

No contraflow lanes were assumed to provide access.[7] Two-way travel was assumed, with evacuating vehicles traveling outbound to the Safe Zone. It is assumed that first responders or law enforcement will direct traffic at all major intersections during the evacuation process. Should evacuation managers determine that contraflow is preferred or necessary, evacuation capacity would increase while evacuation times would decrease.

Safe Zone

Based on Dudek's review of the County's fire history[8], fires have halted along areas adjacent to wildland fuels and have not historically progressed into the more densely urbanized, irrigated, and hardscaped areas. Thus, it is assumed that evacuees are considered to reach a safe area once they travel past I-5.

Specifically, none of the historical fires encroaches upon the urbanized area of Los Angeles County and the City of Santa Clara.

A total of five evacuation scenarios were analyzed:

- **Scenario 1** – *Existing Land Uses*: This scenario estimates the evacuation time for the existing land uses within the study area, which includes all nearby residences, hotels, and businesses that would be operating when the nighttime evacuation order is issued and would direct evacuating vehicles toward Pico Canyons Road/Lyons Avenue (east of I-5, and I-5 interchanges). **Figure 3** displays the area assumed to be evacuated under this scenario.
- **Scenario 2** – *Proposed Project Only*: This scenario assumed full evacuation of the proposed Project and would direct evacuating vehicles toward Pico Canyon Road/Lyons Avenue (east of I-5, and I-5 interchanges).
- **Scenario 3** – *Existing Land Uses with the proposed Project*: This scenario is similar to Scenario 1, with the addition of the proposed Project traffic. **Figure 4** displays the area assumed to be evacuated under this scenario.
- **Scenario 4** – *Existing Land Uses with Cumulative Projects*[9]: This scenario is similar to Scenario 1, with the addition of the following cumulative projects:
    - **Canyon View Estates** – 37 dwelling units of single family residential at the intersection of Pico Canyon Road and Stevenson Ranch Parkway
    - **Tentative Tract Map 74979** – 7 dwelling units of single family residential located at south of Sagecrest Circle near Coriander Court
    - **Aidlin Hills** – 102 dwelling units of single-family residential located at the west end of Pico Canyon Road

[7] Contraflow or lane reversal involves directing traffic to use lanes coming from the source of a hazard to move people away from the hazard. Such a strategy can be used to eliminate bottlenecks in communities with road geometries that prevent efficient evacuations or to facilitate traffic flow out of a major urban area. Among the considerations in planning emergency contraflow are whether sufficient traffic control officers are available, potential negative impact on responding fire apparatus, access management, merging, exiting, safety concerns, and labor requirements. Contraflow configurations must be carefully planned based on on-site factors and should not be implemented in an *ad-hoc* fashion. Dudek July 2014. "Wildland Fire Evacuation Procedures Analysis" for City of Santa Barbara, California, page 65.
[8] Simi Valley and Piru Wildfires 2003 After Action Analysis and Reports.
[9] If an evacuation is required, the Wiley Canyon Project situated on Wiley Canyon Road, between Hawkbryn Avenue and Calgrove Boulevard, will evacuate towards Lyons Avenue using Wiley Canyon Road. This implies that the evacuation route of the Wiley Canyon Project differs from that of the proposed Project, and therefore, the traffic from the Wiley Canyon Project was not included in the cumulative analysis.

- **Scenario 5** – *Existing Land Uses with Cumulative Projects with the proposed Project*: This scenario is similar to Scenario 4, with the addition of the proposed Project traffic.

Figure 5 displays the evacuation routes for the study area.

Evacuating Vehicles

The number of evacuating vehicles was calculated by taking the total number of residential units and multiplying it by the average vehicle ownership (2.01 vehicles per household) for residential land uses and 1 vehicle per hotel room[10]. Average vehicle ownership, residential units, and hotel rooms calculations are provided in **Attachment A**. **Table 1** displays the number of vehicles evacuating under each scenario.

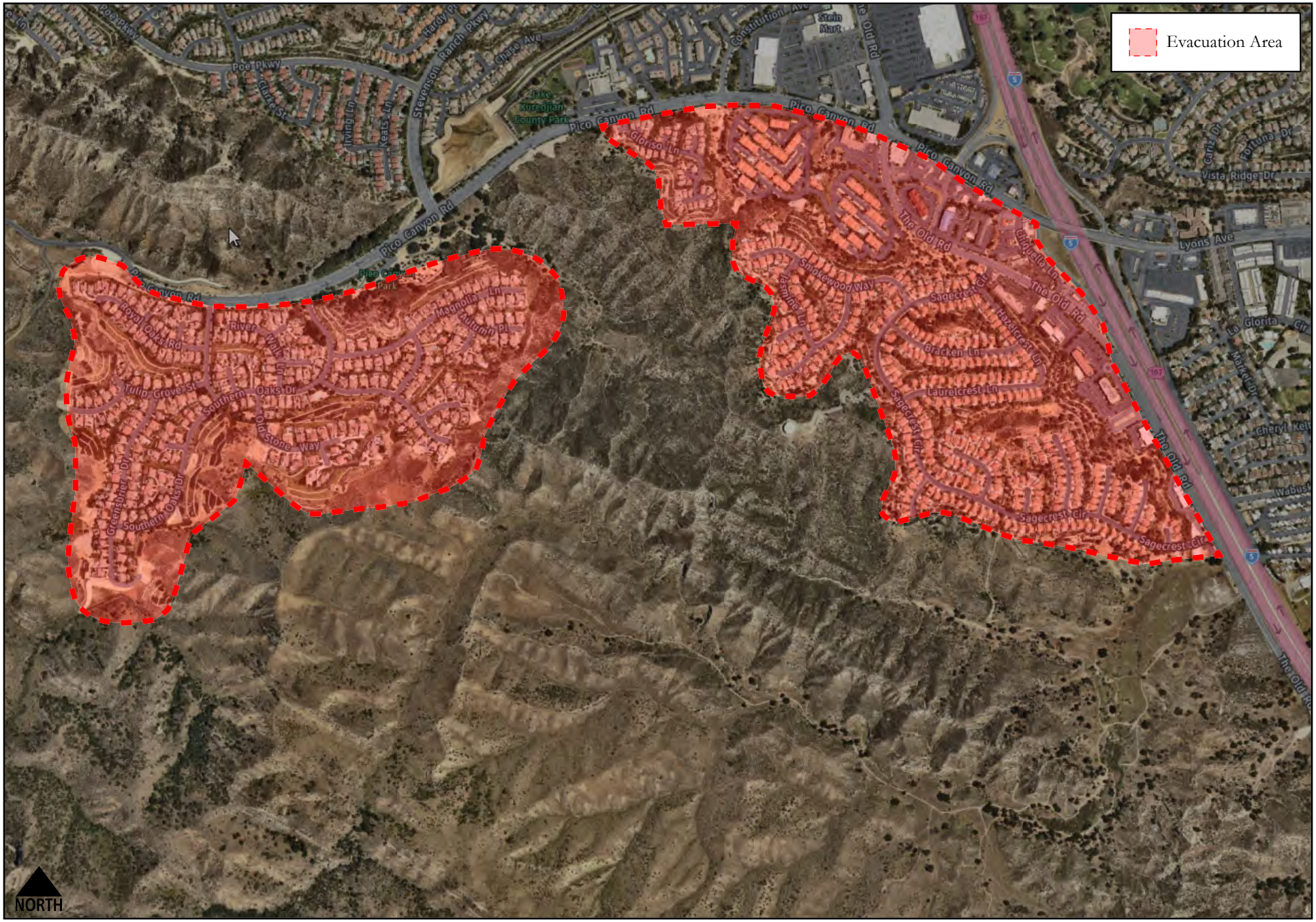
Table 1 – Evacuating Vehicles

Scenario	Evacuating Land Uses	Number of Evacuating Vehicles
Scenario 1 – Existing Land Uses	882 households, 610 occupied hotel rooms	2,330
Scenario 2 – Proposed Project Only	516 households	1,040
Scenario 3 – Existing Land Uses with Proposed Project	1,396 households, 610 occupied hotel rooms	3,370
Scenario 4 – Existing Land Uses with Cumulative Projects	978 households, 610 occupied hotel rooms	2,640
Scenario 5 – Existing Land Uses with Cumulative Projects with the proposed Project	1,494 households, 610 occupied hotel rooms	3,680

Source: CR Associates (2025), US Census Bureau (2025), Google Maps (2025).

For the analysis, these scenarios assumed that two percent (2%) of the evacuating vehicles are heavy vehicles (trucks with trailers). Two percent is the nationally accepted ratio of heavy vehicles to all vehicles[11].

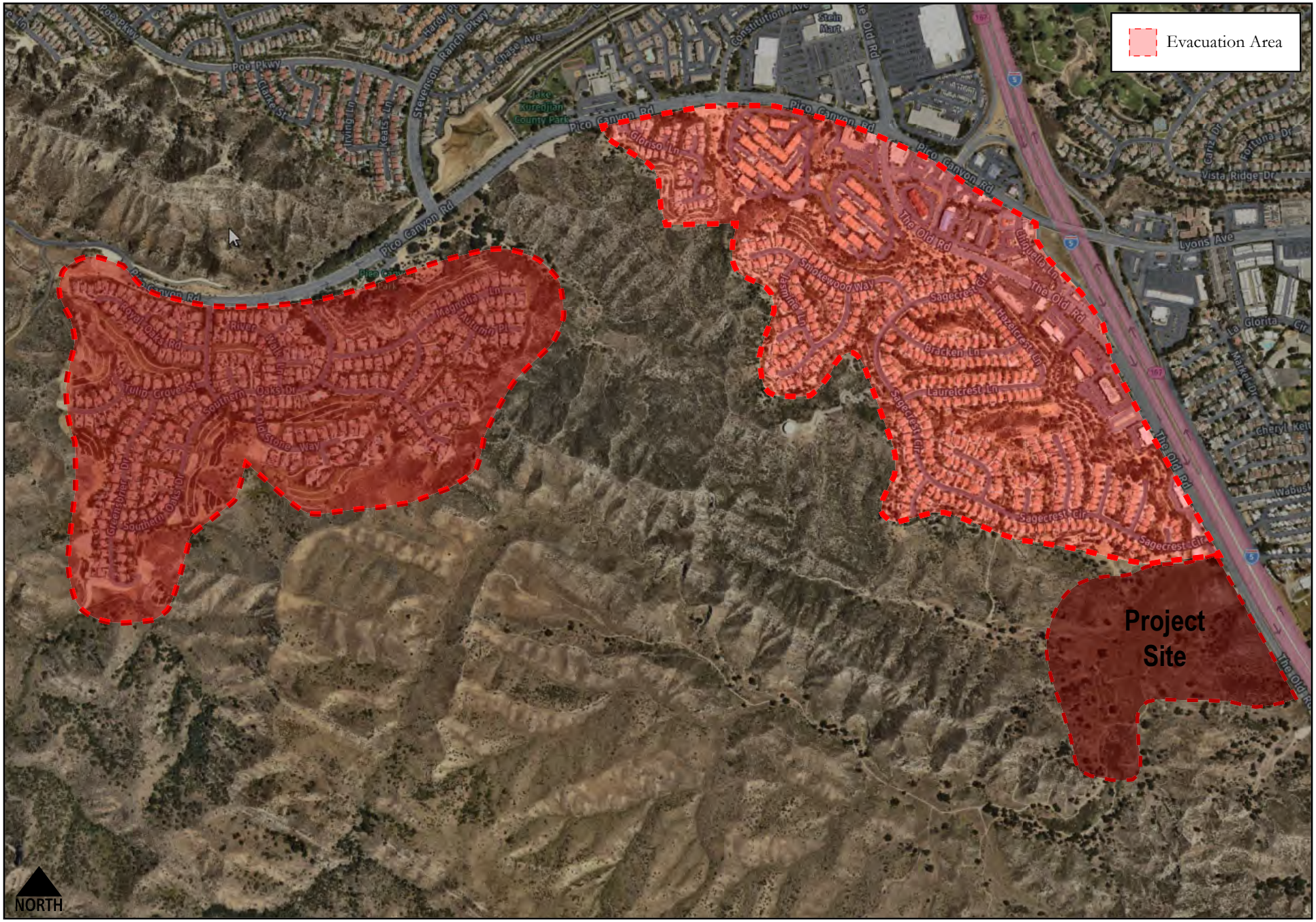
[10] Even though the Institute of Transportation Engineers Parking Generation Manual 6th Edition parking generation rate for hotel is 0.73 vehicles per room, for a conservative analysis, 1 vehicles per room is assumed.
[11] https://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_599.pdf (p.5). Given that there are no industrial land uses within the evacuation area, this assumption is very conservative in nature.



Lyons Canyon Evacuation
Technical Memorandum

C+R

Figure 3
Existing Land Uses Evacuation Area

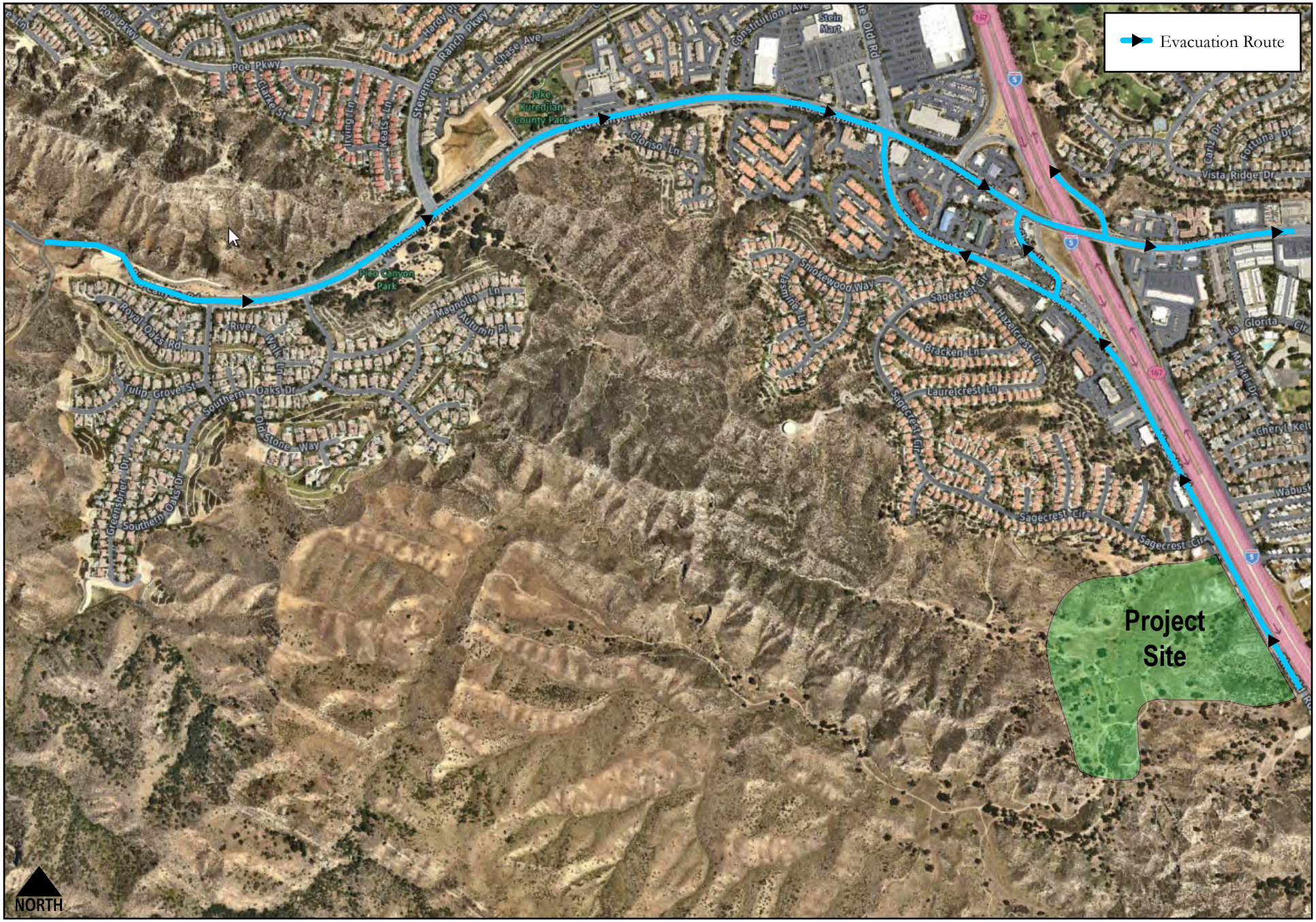


Lyons Canyon Evacuation Technical Memorandum

C+R

Figure 4

Existing Land Uses with Proposed Project Evacuation Area



Lyons Canyon Evacuation Technical Memorandum

C+R

Figure 5
Evacuation Routes

Mass Evacuation

A mass evacuation scenario was modeled in which all area residents would evacuate at the same time. This assumption presents a worst-case scenario as all traffic would be directed to the evacuation roadways at once. Mass evacuation events can overwhelm a roadway's capacity, which, when reaching a threshold traffic density, begins to decrease traffic flow.

In an actual "real-life" wildfire event, a phased evacuation would be implemented where orders are given to evacuate based on vulnerability, location, and/or other factors, which reduces or prevents traffic surges on major roadways and improves traffic flow. The phased evacuation strategy also prioritizes the evacuation of residents in proximity to the immediate danger, giving emergency managers the ability to monitor the fire situation and decide in real time based on changing conditions whether to order additional evacuations as needed, or not.

Extreme Wildfire Event

The evacuation analysis set forth below assumes a Santa Ana-wind driven fire from the north and/or east of the study area and travels in a westerly and southerly direction. This fire condition is the one most likely to require a large-scale evacuation, and the one that creates the most risk to property and humans. Traffic evacuating from both the Project and nearby developments are anticipated to use The Old Road, Pico Canyon Road, and local streets to access these two roadways.

In California, wildfire-related large-scale evacuations are almost exclusively associated with wildfires that occur on extreme fire weather days, also known as "Red Flag Warning" days. These days occur when relative humidity drops to low levels and strong winds from the north/northeast are sustained. With climate change, periods in which such wildfires occur may increase. During Red Flag Warning days, vegetation is more likely to ignite and fire spread is more difficult to control. In the greater Santa Clarita region, these extreme weather days typically occur during limited periods in the late summer, fall and, occasionally, in the spring, but may occur at other times on a less frequent basis. Currently, it is not common to experience more than 15 to 20 Red Flag Warning days in a typical year. Wildfires that occur during these periods of extreme weather are driven by winds –referred to as "Santa Ana" winds – that come from the north or east and blow toward the south or west. Fires driven by these winds move very quickly, making them difficult to control. In response to such fires, emergency managers typically activate pre-planned evacuation triggers that require down-wind communities to sequentially be notified to evacuate and move to nearby urbanized areas prior to the fire's encroachment.

Wildfires that occur on non-extreme weather days behave in a much less aggressive manner and pose fewer dangers to life and property because they include less aggressive fire behavior and are easier to control. Terrain and fuel are typically the wildfire drivers. During these non-extreme weather days, vegetation is much more difficult to ignite and does not spread fire as rapidly. In these situations, firefighters have a very high success rate of controlling fires and keeping them under 10 acres. CALFIRE estimates that 90% of all vegetation fires occur during normal, onshore weather conditions and that such fires account for only 10% of the land area burned. Conversely, the 10% of wildfires that occur during extreme fire weather account for 90% of the land area burned. This data highlights that the most dangerous fire conditions are those related to a fire that moves rapidly due to high winds and low humidity, whereas under normal conditions fires are likely to be controlled with no evacuation or possibly limited extent, focused evacuations.

While it is possible that a fire driven by onshore wind (i.e., from the west) could require evacuation of the Project, such an event would be highly unusual. Moreover, due to the reduced fire behavior during normal weather periods, the evacuation would not be expected to be a large-scale evacuation of large

areas. Instead, most of the Project area population would be anticipated to remain at their locations and within their communities, with a more targeted evacuation being ordered, if any.

Analysis Methodology

The analysis methodology utilized the following equation for determining evacuation time:

Evacuation Time = (Evacuation Population / Average Vehicle Occupancy) / Roadway Capacity

To analyze the evacuation events, CRA conducted simulations using *Vissim*, a microscopic, multimodal traffic flow modeling software used to simulate different traffic conditions. In *Vissim* simulations, roadway capacity is accounted for and each vehicle in the traffic system is individually tracked through the model and comprehensive measures of effectiveness, such as average vehicle speed and queueing, are collected on every vehicle during each 0.1-second of the simulation. This software enables drivers' behaviors during an evacuation to be replicated. A total of 20 simulations were conducted to yield a reasonable sample size to determine the performance of the study area roadways and impacts during evacuation scenarios. To be conservative, CRA assumed a worst-case scenario in which all vehicles belonging to households in the study area would be used in the evacuation, instead of the necessary number of vehicles needed to evacuate the impacted population. Detailed evacuation analysis information is provided in **Attachment B**.

Simulation Area

The simulation area used for this modeling is expansive and includes existing land uses bounded by the following limits:

- Pico Canyon Service Road to the west
- I-5 to the east
- Pico Canyon Road to the north
- Southern edge of the Project's boundary

Evacuation Routes

The evacuation areas described above are anticipated to utilize the following facilities as evacuation routes:

Pico Canyon Road – Pico Canyon Road is a four-lane roadway with a raised median and a posted speed limit of 50 mph, within the County of Los Angeles. It is classified as a four-lane Major Road.

The Old Road – Within the project study area, The Old Road is a 2-lane roadway between Pico Canyon Road and Calgrove Boulevard.

Evacuation Analysis & Results

Based on the analysis methodology described above, **Table 2** reflects evacuation times for each scenario.

Table 2 – Evacuation Time Summary – All Scenarios

Scenario	Total Evacuation Vehicles	Evacuation Time	
		Nearby Land Uses	Project
Scenario 1 – Existing Land Uses	2,330	46 minutes	N/A
Scenario 2 – Proposed Project Only	1,040	N/A	50 minutes
Scenario 3 – Existing Land Uses with Proposed Project	3,370	1 hour 23 minutes	1 hour 29 minutes
Scenario 4 – Existing Land Uses with Cumulative Projects	2,640	1 hour 3 minutes	N/A
Scenario 5 – Existing Land Uses with Cumulative Projects with the proposed Project	3,680	1 hour 40 minutes	1 hour 43 minutes

Source: CR Associates (2025)

The evacuation time does not depict the time for *each* population modeled, but rather the time needed to evacuate *all* populations modeled. Populations located in closer proximity to the safe zone will safely evacuate sooner than the calculated evacuation time.

As presented in Table 2, the estimated evacuation time for existing land uses located along the southern side of Pico Canyon Road and west of The Old Road is approximately 45 minutes under existing conditions (Scenario 1).

For the proposed Project in isolation (Scenario 2), the evacuation time is estimated at 50 minutes.

Under Scenario 3, which reflects existing land uses in combination with the proposed Project, the evacuation time increases to approximately 1 hour and 23 minutes for the surrounding land uses and 1 hour and 29 minutes for the proposed Project. This represents a 37-minute increase in evacuation time for the surrounding land uses when compared to existing conditions under Scenario 1.

Under cumulative conditions without the proposed Project (Scenario 4), the estimated evacuation time for the surrounding land uses is approximately 1 hour and 3 minutes. With the inclusion of the proposed Project (Scenario 5), the evacuation time increases to 1 hour and 40 minutes for the surrounding land uses and 1 hour and 43 minutes for the proposed Project. This reflects a 37-minute increase in evacuation time for the surrounding land uses relative to the cumulative no-project condition (Scenario 4).

Although there are no established thresholds for determining whether evacuation times are safe, the Federal Emergency Management Agency (FEMA) [12] has provided a general guideline for reasonable community evacuations of 90 minutes[13]. Therefore, with the Project, the evacuation times are well within the 90-minute timeframe and the analyzed timeframe is based on a very conservative scenario, with actual evacuation times expected to occur over a shorter time frame. Additional information regarding evacuation science and evacuation time are included in **Attachment C**.

The proposed Project provides several features that would enhance orderly and safe evacuation, but which are not reflected in the average evacuation time results above. These features include evacuation preparedness, fuel modification along Project roadways, structural hardening of Lyons

[12] 1 hour and 39 minutes - 1 hour and 2 minute = 37 minutes
[13] From Fire Services Operational Assessment, Otay Ranch Village 14, Rohde & Associates Emergency Management. 26 pp.

Canyon homes, and temporary areas for safe refuge and "shelter-in-place" options. These evacuation enhancements would reduce the potential for evacuation friction or interruption; however, such enhancements cannot be well depicted by the traffic evacuation model. Other model limitations are discussed below.

Analysis and Conclusion

Neither CEQA, nor the County has adopted numerical time standards for determining whether an evacuation timeframe is appropriate. Public safety, not time, is generally the guiding consideration for evaluating impacts related to emergency evacuation. The County considers a Project's impact on evacuation significant if the Project will significantly impair or physically interfere with implementation of an adopted emergency response or evacuation plan; or if the Project will expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

The County of Los Angeles has historically had an extremely high success rate for safely evacuating large numbers of people and doing so in a managed and strategic way using available technological innovations. Safely undertaking large-scale evacuations may take several hours or more and require moving people long distances to designated areas. Further, evacuations are fluid and timeframes may vary widely depending on numerous factors, including, among other things, the number of vehicles evacuating, the road capacity to accommodate those vehicles, residents' awareness and preparedness, evacuation messaging and direction, and on-site law enforcement control.

Notwithstanding evacuation challenges and variables, the success rate in the County of Los Angeles in safely managing both mass and targeted evacuations is nearly 100% safe evacuations based on research showing there were no fire-caused deaths during an evacuation. Technological advancements and improved evacuation strategies learned from prior wildfire evacuation events have resulted in a system that is many times more capable of managing evacuations. With the technology in use today in the County, evacuations are more strategic and surgical than in the past, evacuating smaller areas at highest risk and phasing evacuation traffic so that it flows more evenly and minimizes the surges that may slow an evacuation. Mass evacuation scenarios where large populations are all directed to leave simultaneously, resulting in traffic delays, are thereby avoided, and those populations most at risk populations are able to safely evacuate.

Based on the evacuation simulations above, evacuation traffic generated by the Project would not significantly increase the average evacuation travel time or result in unsafe evacuation timeframes. Although there is a potential increase in evacuation times of up to 37 minutes for existing communities, it is anticipated that the longest evacuation times would be associated with the Project vehicles. In a likely evacuation scenario, existing residents west of the Project site would be located downstream of Project traffic because they are closer to the evacuation routes and destinations and would be able to evacuate prior to Project traffic reaching the same location.

The Project would also provide the responding emergency managers (LA County Sheriff's Department, LA County Fire Department, California Highway Patrol, and other cooperating agencies and Departments) the alternative option of recommending residents to temporarily seek refuge on-site in fire-resistant buildings or within the wide, converted landscapes and hardscapes that would not readily facilitate wildfire spread. This on-site sheltering option is a contingency plan in the unlikely scenario when evacuation is considered infeasible or the less safe option. This would provide emergency managers with a safer alternative to risking a late evacuation.

This information will be provided to law enforcement and fire agencies for use in pre-planning scenarios to better inform the field decisions made pursuant to adopted Emergency Response Plans. Emergency personnel who issue evacuation orders may take into account these time estimates in

determining when and where to issue evacuation orders. In a real evacuation scenario, emergency managers may use alternative actions/options to further expedite evacuation. Such actions may include providing additional lead time in issuing evacuation orders, prioritizing area at higher risks, providing alternative signal control at downstream intersections, utilizing additional off-site routes or directing traffic to roadways with additional capacity, implementing contra-flow lanes, issuing "shelter-in-place" orders when determined to be safer than evacuation, or considering the possibility of a delayed evacuation where parts of the population could be directed to remain on-site until the fire burns out in the sparse fuels around the evacuation route. These options require "in the field" determinations of when evacuations are needed and how they are phased to maximize efficiency. Overall, safe evacuation of the Project and surrounding community is possible in all modeled scenarios.

Limitations

In coordination with fire professionals at Dudek and CRA has presented a conservative analysis simulating evacuation during an extreme wildfire event. However, as discussed above, wildfires are variable events. The underlying planning principle for fire preparedness, given the dynamic nature of a fire, is to demonstrate the availability of multiple route alternatives and response strategies to permit emergency professionals to manage their response according to the specific circumstances. The Project area provides ample route and response alternatives that were not considered in this model. Emergency responders will coordinate the safest possible evacuation based on the dynamic circumstances of the actual event, including the appropriate phasing of the evacuation, and utilization of the most appropriate ingress and egress routes for area residents and emergency responders.

The breadth of route alternatives and response strategies available to emergency professionals to manage a potential fire in the County cannot and should not be evaluated using this evacuation analysis alone. A comprehensive view of Project fire safety is gained by understanding this memorandum, the Project's Fire Protection Plan (Dudek 2022) and Evacuation Plan (Dudek 2022), along with the standard protocols and "in-the-field" decision making of emergency responders as detailed in the County and nearby City Emergency Response Plans and focused Annex documents[14].

This travel time analysis presents a reasonable vehicle travel time estimate based on professional judgment made by CRA, Dudek, and fire operations experts with experience participating in evacuations in Southern California. Changing any number of these assumptions can lengthen or shorten the average vehicle travel time.

For instance, a situation could arise in which professionals *may* choose to utilize additional roadways for evacuation not utilized in the analyses and *may also* choose to guide vehicle trips to more or different route permutations relative to what has been modeled in this analysis. A phased evacuation is also likely to be implemented, which improves the orderly flow of traffic in an evacuation scenario.

The net result of changing the variables selected could yield an average evacuation travel time shorter or longer than the results detailed in the analysis. Many factors can shorten or lengthen the vehicle time from the results shown herein. For example:

1. Changing the evacuation area affected by the evacuation order would affect the results. For Instance, emergency managers could order an early evacuation of land uses located in higher risks area, such as the Southern Oaks community. Thus, by the time an evacuation order is established for the proposed Project, there would be less vehicles on the road.

[14] https://ceo.lacounty.gov/emergencydisaster-plans-and-annexes/

2. Increasing or decreasing the number of path permutations and percentage of the population utilizing each route that leads out of the immediate area could shorten or lengthen vehicle travel time relative to the results shown herein.

3. Emergency professionals electing to reserve certain travel lanes for emergency vehicle ingress for periods of time could affect the travel time relative to the results shown herein.

4. Assuming evacuees utilize fewer or more vehicles to evacuate from their homes relative to the vehicle utilization rate selected in the analysis would shorten or lengthen vehicle travel time relative to the results shown herein.

5. Changing the mix of vehicle trips allocated to each evacuation route could shorten or lengthen vehicle travel time relative to the results shown herein.

6. Assuming different road condition adjustment factors could shorten or lengthen the vehicle travel time relative to the results shown herein.

7. Assuming fewer people are at home when the evacuation notice is given would reduce the number of vehicle trips and shorten vehicle travel time relative to the results shown herein. For instance, an evacuation during daytime hours could result in fewer outbound trips than assumed in this analysis

8. Assuming some portion of vehicle trips are made in advance of the evacuation notice would reduce the number of vehicle trips relative to the results shown herein.

9. Assuming emergency professionals elect to implement contraflow on certain roadways to open up additional lanes for emergency evacuation egress could reduce the travel time results shown herein.

This evacuation time analysis is necessarily limited in scope given the numerous variables inherent in a wildfire and evacuation event. However, as discussed above, it is not anticipated that the Project will significantly impact evacuation of the proposed or existing surrounding communities based on evacuation times and other qualitative considerations.

Prepared by

Phuong Nguyen, PE
Senior Transportation Engineer
CR Associates

Michael Huff
Discipline Director – Urban Forestry + Fire Protection
Dudek

Vehicle Ownership Calculation

GEOID	Total Households	Total Owners	Own Zero Vehicles	Own One Vehicles	Own Two Vehicles	Own Three Vehicles	Own Four Vehicles	Own Five Plus Vehicles	Total Renters	Rent Zero Vehicles	Rent One Vehicles	Rent Two Vehicles	Rent Three Vehicles	Rent Four Vehicles	Rent Five Plus Vehicles
060379203261	1470	628	17	155	303	143	10	0	842	48	360	248	186	0	0
060379203391	2383	1792	20	240	835	387	189	121	591	0	126	364	39	47	15
060379203262	976	591	0	59	237	158	98	39	385	36	148	185	16	0	0
060379203381	1741	1555	12	163	869	265	176	70	186	16	56	58	19	0	37
060379203341	406	175	0	43	91	41	0	0	231	172	30	12	0	17	0
060379203343	825	430	0	115	225	90	0	0	395	71	194	83	47	0	0
060379203131	492	388	9	60	150	65	78	26	104	0	47	12	10	35	0
060379203132	226	112	0	54	36	22	0	0	114	37	10	67	0	0	0
060379203302	298	280	14	68	111	67	20	0	18	0	0	18	0	0	0
060379203303	398	131	0	33	42	56	0	0	267	148	109	10	0	0	0
060379203304	654	271	12	83	53	93	30	0	383	213	70	100	0	0	0
060379203344	548	434	9	99	229	97	0	0	114	0	12	72	30	0	0
Total	10417	6787	93	1172	3181	1484	601	256	3630	741	1162	1229	347	99	52
Total Veh	20987														
Num. Veh	0														
Average Veh/HH	2.014														
Lyons Valley HH	516														

Housing Inventory

Aidlin Hills Project

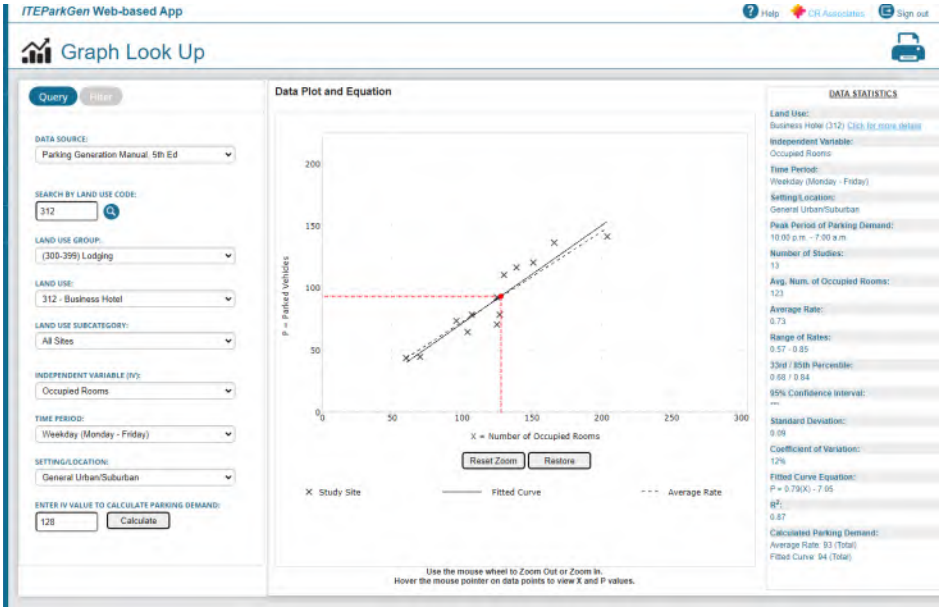
Location map with Mentryville on the left

Lennar Homes' Aidlin Hills project in Wickham Canyon was conditionally approved on August 17, 2016 by the Los Angeles County Regional Planning Commission. It was first proposed to the Los Angeles County Department of Regional Planning in July of 2013. The tract consists of 102 single-family homes and will be located on Pico Canyon Road just west of the Southern Oaks tract of Stevenson Ranch. Less than a mile away is Mentryville. It was named for landowner Joseph Aidlin. They are going to grade over 100,000 cubic yards of earth for only 102 homes. To me, that seems excessive, but the LACRP was fine with it.

Evacuating Vehicles Demand Calculation

Land Use	Units	Average Veh Rate	Total Evacuating Veh
Project - 2 locations	516	2.01468753	1040
IMT Stevenson Ranch - 2 locations	170	2.01468753	350
Sunset Pointe (north of Project) - 2 locations	320	2.01468753	650
Gloriso - 1 location	51	2.01468753	110
Southern Oaks - 1 location	291	2.01468753	590
La Quinta Inn & Suites*	122	1	130
Hampton Inn*	128	1	130
Extended Stay Los Angeles (104 rooms) *	104	1	110
Residence Inn Santa Clarita Valencia (90 rooms) *	90	1	90
Fairfield Inn Santa Clarita Valencia (66 rooms) *	66	1	70
Comfort Suites Near Six Flags Magic Mountain (100 rooms) *	100	1	100
Aidlin Hills	102	2.01468753	210
Canyon View Estates	37	2.01468753	80
TM 74979	7	2.01468753	20

*Note that the ITE parking rate for hotels is 0.73 vehicles per room, which includes vehicles generated by supporting staff. For a conservative analysis, the model applied a rate of 1 vehicle per room, rounded up to the nearest 10.



Attachment B
Evacuation Analysis Worksheets

EXISTING

Node	1		6		3		4						
Run	Min	Max	Min	Max	Min	Max	Min	Max			Min	Max	Total
1							950.7	3683.7			950.7	3683.7	2733
2							948.9	3803.1			948.9	3803.1	2854.2
3							947.7	3839.8			947.7	3839.8	2892.1
4							947.7	3706.5			947.7	3706.5	2758.8
5							948	3862.4			948	3862.4	2914.4
6							946.6	3669.1			946.6	3669.1	2722.5
7							946.6	3595.7			946.6	3595.7	2649.1
8							949.1	3698.7			949.1	3698.7	2749.6
9							946.6	3864.9			946.6	3864.9	2918.3
10							945.3	3695.7			945.3	3695.7	2750.4
11							947.8	3664.3			947.8	3664.3	2716.5
12							947.6	3631.9			947.6	3631.9	2684.3
13							945.9	3782.7			945.9	3782.7	2836.8
14							949.3	3782.3			949.3	3782.3	2833
15							947	3750.1			947	3750.1	2803.1
16							945.8	3776.1			945.8	3776.1	2830.3
17							944.5	3655.5			944.5	3655.5	2711
18							947.3	3750.6			947.3	3750.6	2803.3
19							945.2	3787.1			945.2	3787.1	2841.9
20							944.1	3648.4			944.1	3648.4	2704.3
												Average	2785.345
												Time	0:46

PROJECT ONLY

Node	1		2		3		4	
Run	Min	Max	Min	Max	Min	Max	Min	Max
1	0	0	0	0	233.5	3007.9	1087.9	3207.2
2	0	0	0	0	231.3	2945.8	1072.1	3149.5
3	0	0	0	0	217	3063.6	1095.7	3316.6
4	0	0	0	0	258.2	3079.6	1089	3288.1
5	0	0	0	0	245.8	3095.7	1084.7	3303.9
6	0	0	0	0	235.3	2983.3	1083.8	3189.1
7	0	0	0	0	235.2	3063.3	1086.6	3315.7
8	0	0	0	0	238.9	3063.6	1079.4	3301.8
9	0	0	0	0	228.5	2974.3	1078.8	3219.6
10	0	0	0	0	222	2995.8	1088.7	3276.5
11	0	0	0	0	240.6	3167	1096.1	3413.7
12	0	0	0	0	239.2	3063.1	1075.6	3317.9
13	0	0	0	0	225.1	2959.3	1083.7	3201.4
14	0	0	0	0	230.7	2844.4	1082.2	3096.9
15	0	0	0	0	243.3	3129.9	1081.7	3334.7
16	0	0	0	0	229.8	3220	1082.3	3462.4
17	0	0	0	0	247.1	3008.6	1085.6	3256.1
18	0	0	0	0	234.4	3050.4	1079.7	3249.3
19	0	0	0	0	225.8	2928.3	1070.6	3169.1
20	0	0	0	0	220.5	2996.3	1082.4	3203.1

Project Only
Select
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes
Yes

Min	Max	Total
233.5	3207.2	2973.7
231.3	3149.5	2918.2
217	3316.6	3099.6
258.2	3288.1	3029.9
245.8	3303.9	3058.1
235.3	3189.1	2953.8
235.2	3315.7	3080.5
238.9	3301.8	3062.9
228.5	3219.6	2991.1
222	3276.5	3054.5
240.6	3413.7	3173.1
239.2	3317.9	3078.7
225.1	3201.4	2976.3
230.7	3096.9	2866.2
243.3	3334.7	3091.4
229.8	3462.4	3232.6
247.1	3256.1	3009
234.4	3249.3	3014.9
225.8	3169.1	2943.3
220.5	3203.1	2982.6
	Average	3029.52
	Time	0:50

EXISTING + PROJECT

Node	1		6		3		4			Other			Project		
Run	Min	Max	Min	Max	Min	Max	Min	Max		Min	Max	Total	Min	Max	Total
1	0	0	215.7	5541	0	0	950.7	5993.5		950.7	5993.5	5042.8	215.7	5541	5325.3
2	0	0	222.9	5657.4	0	0	948.9	5972		948.9	5972	5023.1	222.9	5657.4	5434.5
3	0	0	231.4	5745.6	0	0	947.7	6057.6		947.7	6057.6	5109.9	231.4	5745.6	5514.2
4	0	0	232.7	5524.3	0	0	947.7	5841.2		947.7	5841.2	4893.5	232.7	5524.3	5291.6
5	0	0	234.4	5699	0	0	948	6019.5		948	6019.5	5071.5	234.4	5699	5464.6
6	0	0	226.4	5657.8	0	0	946.6	5976.2		946.6	5976.2	5029.6	226.4	5657.8	5431.4
7	0	0	216.7	5436.8	0	0	946.6	5753.4		946.6	5753.4	4806.8	216.7	5436.8	5220.1
8	0	0	220.5	5633.4	0	0	949.1	5944.4		949.1	5944.4	4995.3	220.5	5633.4	5412.9
9	0	0	240.6	5834.8	0	0	946.6	6147.2		946.6	6147.2	5200.6	240.6	5834.8	5594.2
10	0	0	222.5	5681.9	0	0	945.3	6009		945.3	6009	5063.7	222.5	5681.9	5459.4
11	0	0	225.8	5504	0	0	947.8	5836.1		947.8	5836.1	4888.3	225.8	5504	5278.2
12	0	0	231.2	5487.7	0	0	947.6	5799.4		947.6	5799.4	4851.8	231.2	5487.7	5256.5
13	0	0	224.8	5658.4	0	0	945.9	5973		945.9	5973	5027.1	224.8	5658.4	5433.6
14	0	0	230.1	5597.1	0	0	949.3	5910.5		949.3	5910.5	4961.2	230.1	5597.1	5367
15	0	0	226.4	5589.1	0	0	947	5909.6		947	5909.6	4962.6	226.4	5589.1	5362.7
16	0	0	220.9	5607.3	0	0	945.8	5903.5		945.8	5903.5	4957.7	220.9	5607.3	5386.4
17	0	0	217.8	5568.9	0	0	944.5	5888.5		944.5	5888.5	4944	217.8	5568.9	5351.1
18	0	0	227.1	5615.4	0	0	947.3	5927.2		947.3	5927.2	4979.9	227.1	5615.4	5388.3
19	0	0	231.1	5629.7	0	0	945.2	5952.2		945.2	5952.2	5007	231.1	5629.7	5398.6
20	0	0	215.4	5614.8	0	0	944.1	5929.5		944.1	5929.5	4985.4	215.4	5614.8	5399.4
											Average	4990.09		Average	5388.5
											Time	1:23		Time	1:29

CUMULATIVE

Node	1		6		3		4	
Run	Min	Max	Min	Max	Min	Max	Min	Max
1					233.5	3914.9	950.7	4036.9
2					231.3	3978.7	948.9	4039.7
3					217	3840.8	947.7	4038
4					258.2	3953.8	947.7	4037.7
5					245.8	3979.3	948	4038.6
6					235.3	3914.9	946.6	4035.5
7					235.2	3833.7	946.6	4039.5
8					238.9	3946	949.1	4037.2
9					228.5	3974.6	946.6	4039.8
10					222	3979.3	945.3	4038.6
11					240.6	3975.2	947.8	4039.2
12					239.2	3978.8	947.6	4039.9
13					225.1	3978.2	945.9	4038.8
14					230.7	3928.7	949.3	4037.7
15					243.3	3955.6	947	4039.1
16					229.8	3978.6	945.8	4037.7
17					247.1	3978.7	944.5	4037.5
18					234.4	3977.3	947.3	4039.3
19					225.8	3979.3	945.2	4039.5
20					220.5	3692.9	944.1	3798.9

Existing Condition — Everyone Else

Select	Min	Max	Total
Yes	233.5	4036.9	3803.4
Yes	231.3	4039.7	3808.4
Yes	217	4038	3821
Yes	258.2	4037.7	3779.5
Yes	245.8	4038.6	3792.8
Yes	235.3	4035.5	3800.2
Yes	235.2	4039.5	3804.3
Yes	238.9	4037.2	3798.3
Yes	228.5	4039.8	3811.3
Yes	222	4038.6	3816.6
Yes	240.6	4039.2	3798.6
Yes	239.2	4039.9	3800.7
Yes	225.1	4038.8	3813.7
Yes	230.7	4037.7	3807
Yes	243.3	4039.1	3795.8
Yes	229.8	4037.7	3807.9
Yes	247.1	4037.5	3790.4
Yes	234.4	4039.3	3804.9
Yes	225.8	4039.5	3813.7
Yes	220.5	4038.9	3818.4
		Average	3804.35
		Time	1:03

CUMULATIVE + PROJECT

Node	1		6		3		4			Everyone Else			Project	
Run	Min	Max	Min	Max	Min	Max	Min	Max		Max	Total	Min	Max	Total
1			247.1	6000.9	248.5	6259.7	948.2	6058.7		6259.7	6011.2	247.1	6259.7	6012.6
2			222.3	5725.3	223.7	6259.1	945.7	6058.6		6259.1	6035.4	222.3	6259.1	6036.8
3			225.5	5543.5	238.8	6259.6	947.6	6055.2		6259.6	6020.8	225.5	6259.6	6034.1
4			239.9	6376.8	233.7	6258.9	947.9	6058.7		6258.9	6025.2	233.7	6376.8	6143.1
5			227.6	6938.6	221.5	6258.5	948.2	6058.4		6258.5	6037	221.5	6938.6	6717.1
6			229.2	6195.8	241.2	6259.2	947	6055.3		6259.2	6018	229.2	6259.2	6030
7			223.4	6358.6	241.9	6258.6	947.1	6056.9		6258.6	6016.7	223.4	6358.6	6135.2
8			214.7	5892.9	234.1	6259.7	945	6059.6		6259.7	6025.6	214.7	6259.7	6045
9			245.6	6070.5	241	6258.8	950.7	6057.6		6258.8	6017.8	241	6258.8	6017.8
10			227.5	6255.3	235.7	6259.7	951.3	6059.2		6259.7	6024	227.5	6259.7	6032.2
11			222	6590	225.7	6259	948.4	6056.8		6259	6033.3	222	6590	6368
12			246.9	6818.6	249.1	6235.6	949.3	6057.2		6235.6	5986.5	246.9	6818.6	6571.7
13			237.9	6863.4	251.5	6259.4	949.5	6056.3		6259.4	6007.9	237.9	6863.4	6625.5
14			215.2	6340	218.7	6258.3	945.4	6059.9		6258.3	6039.6	215.2	6340	6124.8
15			235.7	5843.3	241.2	6258.8	947.9	6059.1		6258.8	6017.6	235.7	6258.8	6023.1
16			217.9	6363.1	241.8	6259.7	948	6058.3		6259.7	6017.9	217.9	6363.1	6145.2
17			216.5	6040.9	249.5	6245.9	944.3	6059.4		6245.9	5996.4	216.5	6245.9	6029.4
18			225.8	5865.5	225.5	6259.7	946.6	6056.2		6259.7	6034.2	225.5	6259.7	6034.2
19			228.7	6762.3	242.2	6257.5	946.5	6058.1		6257.5	6015.3	228.7	6762.3	6533.6
20			243.1	5964.7	222.3	6258	949.3	6059.9		6258	6035.7	222.3	6258	6035.7
										Average	6020.805		Average	6184.755
										Time	1:40		Time	1:43

Fire Evacuation Threshold

Neither CEQA, nor the County has adopted numerical time standards for determining whether an evacuation timeframe is appropriate. Public safety, not time, is generally the guiding consideration for evaluating impacts related to emergency evacuation. The County considers a project's impact on evacuation significant if the project will significantly impair or physically interfere with implementation of an adopted emergency response or evacuation plan; or if the project will expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

In any populated area, safely undertaking large-scale evacuations may take several hours or more and require moving people long distances to designated areas. Further, evacuations are fluid and timeframes may vary widely depending on numerous factors, including, among other things, the number of vehicles evacuating, the road capacity to accommodate those vehicles, residents' awareness and preparedness, evacuation messaging and direction, and on-site law enforcement control. The "Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act"[15] guidance from the California Office of the Attorney General suggests that jurisdictions set benchmarks of significance based on past successful evacuations or on those from communities in similar situations.

A recent study titled "Review of California Wildfire Evacuation from 2017 to 2019[16]" provides more insights on the topic. This research involved interviews with 553 individuals (297 evacuees affected by various fires) including the Creek Fire, Rye Fire, Skirball Fire, and Thomas Fire. The study aimed to understand the decision-making processes of these individuals during the fires, such as whether to evacuate or stay, when to leave, the paths taken, chosen shelters, destinations, and modes of transportation. According to this research, the time it took for evacuations ranged from under 30 minutes to over 10 hours. From this dataset[17], the average evacuation time for the Creek Fire was found to be 3 hours and 40 minutes, involving 115,000 people[18]. For the Thomas Fire, the average time was 4 hours and 25 minutes, impacting 104,607 individuals.

As previously mentioned, there is no specific impact threshold for an acceptable increase in evacuation time, as evacuation times can vary significantly due to multiple factors, resulting in numerous potential scenarios that are not feasible to model comprehensively. While the Project team was not able to find a County of Los Angeles, however, the San Diego County Operational Area Evacuation and Repopulation Policy #8-B (provided here for reference), along with many other agencies across California, utilizes the following definitions for evacuation orders and warnings:

- *Evacuation Order: This involves moving community members out of a designated area due to an immediate threat to life and property from an emergency incident. An evacuation order should be issued when there is a potential or actual threat to civilian life within 1 to 2 hours, or when the Incident Commander (IC) deems it necessary to protect civilians.*
- *Evacuation Warning: This alerts community members in a designated area of a potential threat to life and property from an emergency incident. An evacuation warning may be issued when the potential or actual threat to civilian life is more than 2 hours away.*

While these definitions do not establish specific evacuation thresholds, they provide essential guidelines for how the Incident Commander may issue an evacuation order or warning.
California fire and law enforcement agencies have integrated training, experience, and technology to assist in successful evacuations, which focus on moving persons at risk to safer areas before a wildfire

[15] https://oag.ca.gov/system/files/attachments/press-docs/2022.10.10%20-%20Wildfire%20Guidance.pdf
[16] https://escholarship.org/uc/item/5w85z07g
[17] https://zenodo.org/records/4408243
[18] https://abc7.com/sylmar-brush-fire-creek-kagel-canyon/2740550/

encroaches on a populated area. Timeframes for moving people vary by site specifics, population, road capacities and other factors and there is no one threshold that would be appropriate to all locations. There are no established thresholds for evacuation times for this Project or at the time of this plan's preparation, for any California community, to the knowledge of the authors. This is primarily because every location and fire scenario are unique. While it may take one community 20 minutes to evacuate safely, it is not a valid assumption to consider a 3-hour evacuation for another community as unsafe. The 3-hour evacuation can be very safe while the 20-minute evacuation may be unsafe due to the conditions and exposures along the evacuation routes.

Reference & Analysis Tool Selection

The methodology for fire evacuation analysis is rapidly advancing as new data and best practices become available. Before conducting the evacuation analysis, a thorough historical review of fire evacuation behavior and practices was undertaken to ensure the analysis accurately reflects local conditions. Consequently, the list of references in the technical memorandum only includes documents that pertain directly to local operating conditions and behaviors. The intention behind this selective referencing is to guide decision-makers towards specific, location-relevant guidelines rather than providing a comprehensive list of all reviewed best practices.

CRA has compiled an extensive list of research and findings on best practices for both wildfire and standard evacuation analyses. These foundational best practices informed our evacuation analysis, and a selection of the most relevant and recent research is included at the end this section. According to the research, wildfire evacuation analysis is not a one-size-fits-all approach; certain tools and practices are better suited for jurisdiction-wide analysis, including transportation modeling, roadway capacity-based analysis, GIS analysis, and custom tools. Notably, "A Review of Traffic Models for Wildland-Urban Interface Wildfire Evacuation" (Bergstedt, 2017) identified 12 tools for evacuation analysis, a number that continues to grow as more data and computing power become available.

Vissim, although not the sole tool available for fire evacuation analysis, was chosen for its capability to simulate driver behaviors, particularly undesirable behaviors such as competing for the right-of-way during evacuations. This capability is endorsed by the Bergstedt research paper and is utilized by various agencies, including the Utah Department of Transportation and the Florida Department of Transportation for hurricane evacuation analysis. Vissim's popularity and widespread use in evacuation analysis are evidenced by its citation in over 700 research papers, reflecting its effectiveness in mirroring human behavior. Despite the availability of other tools, Vissim was deemed the most suitable for this Project's evacuation analysis.

The WUI-NITY, while an impressive tool designed for evaluating jurisdiction-wide evacuation, does not fully meet the specific needs of this Project. A critical aspect of our analysis is to manage varying traffic flows and dynamic roadway capacities that change due to downstream congestion. The WUI-NITY, which focuses on larger planning areas, relies on a simplified ad hoc traffic movement model that uses common assumptions in evacuation modeling and determines road capacity based on the number of lanes and road type. While this approach is generally acceptable, our study requires a more nuanced method that accounts for local conditions, such as winding roads where actual driving speeds may be lower than posted limits. Therefore, we opted to use Vissim for its finer detail in simulation.

Similarly, the Wildfire Safe Egress – Platform (WISE), developed by the UCLA Engineering Department, employs an approach akin to that of WUI-NITY. However, WISE, being a GIS-based analysis tool, considers varying evacuation patterns and uses GIS analysis to estimate actual

evacuation times. Like WUI-NITY, the WISE platform is better suited for broader planning level analysis and does not offer the detailed benefits provided by the Vissim microsimulation platform.

Additionally, the "Traffic Modeling for Wildland–Urban Interface Fire Evacuation" research paper, which evaluated a broad range of potential fire evacuation modeling platforms including microsimulation, supports the methodology used in this Project. The paper underscores that microsimulation should be sensitive to local conditions and reflect actual demand. This aligns with our approach: vehicle ownership was derived from census data to mirror local demand accurately, and speed and traffic counts were meticulously gathered from all study area roadways to calibrate the model. The research findings affirm the conclusions of the CRA team regarding the adoption of best practices in evacuation modeling.

CRA Library of References – Fire and Evacuation Studies

Arthur Rohaert, Erica D. Kuligowski, Adam Ardinge, Jonathan Wahlqvist, Steven M.V. Gwynne, Amanda Kimball, Noureddine Bénichou, Enrico Ronchi, Traffic dynamics during the 2019 Kincade wildfire evacuation, Transportation Research Part D: Transport and Environment, Volume 116, 2023, 103610, ISSN 1361-9209, https://doi.org/10.1016/j.trd.2023.103610.

Morris, George. Edited by Carrie Dennis, California Department of Forestry and Fire Protection, 2020, pp. 1–122, *2020 Fire Siege*.

"Wildland Urban Interface Operating Principles." *International Association of Fire Fighters*, International Association of Fire Fighters, May 2019, www.iaff.org/wp-content/uploads/2019/05/CAL-FIRE-Wildland-Urban-Interface-Book.pdf.

"California Fire Siege 2007." *SCV History in Pictures*, 2007, scvhistory.com/scvhistory/files/lw3443/lw3443.pdf.

O'Brien, David W. "Running Head: EVALUATING DATA FOR THE PURPOSE OF WILDLAND." *Evaluating Data for the Purpose of Wildland Fire Evacuations*, FEMA.gov, apps.usfa.fema.gov/pdf/efop/efo45872.pdf. Accessed 24 Apr. 2024.

Manzello, S. , Foote, E. and Liu, J. (2011), CHARACTERIZING FIREBRAND EXPOSURE DURING WILDLAND-URBAN INTERFACE FIRES., Fire and Materials 2011, San Francisco, CA, [online], https://tsapps.nist.gov/publication/get_pdf.cfm?pub_id=907530 (Accessed April 24, 2024)

Amanda M. Stasiewicz, Travis B. Paveglio, Preparing for wildfire evacuation and alternatives: Exploring influences on residents' intended evacuation behaviors and mitigations, International Journal of Disaster Risk Reduction, Volume 58, 2021, 102177, ISSN 2212-4209, https://doi.org/10.1016/j.ijdrr.2021.102177. (https://www.sciencedirect.com/science/article/pii/S2212420921001436)

Harry Mitchell, Steve Gwynne, Enrico Ronchi, Nikolaos Kalogeropoulos, Guillermo Rein, Integrating wildfire spread and evacuation times to design safe triggers: Application to two rural communities using PERIL model, Safety Science, Volume 157, 2023, 105914, ISSN 0925-7535, https://doi.org/10.1016/j.ssci.2022.105914. (https://www.sciencedirect.com/science/article/pii/S0925753522002533)

Maranghides, A. , Link, E. , Brown, C. , Mell, W. , Hawks, S. , Wilson, M. , Brewer, W. , Vihnanek, R. and Walton, W. (2021), A Case Study of the Camp Fire - Fire Progression Timeline, Technical Note (NIST TN), National Institute of Standards and Technology, Gaithersburg, MD, [online], https://doi.org/10.6028/NIST.TN.2135 (Accessed April 24, 2024)

Maranghides, A. , Link, E. , Brown, C. , Walton, W. , Mell, W. and Hawks, S. (2023), A Case Study of the Camp Fire - Notification, Evacuation, Traffic, and Temporary Refuge Areas (NETTRA), Technical Note (NIST TN), National Institute of Standards and Technology, Gaithersburg, MD, [online], https://doi.org/10.6028/NIST.TN.2252, https://tsapps.nist.gov/publication/get_pdf.cfm?pub_id=936322 (Accessed April 24, 2024)

Chen, Jiayan et al. “Pre-evacuation Time Estimation Based Emergency Evacuation Simulation in Urban Residential Communities.” International journal of environmental research and public health vol. 16,23 4599. 20 Nov. 2019, doi:10.3390/ijerph16234599

Cruz, M.G., Alexander, M.E. The 10% wind speed rule of thumb for estimating a wildfire’s forward rate of spread in forests and shrublands. Annals of Forest Science 76, 44 (2019). https://doi.org/10.1007/s13595-019-0829-8

Masri, Shahir et al. “Disproportionate Impacts of Wildfires among Elderly and Low-Income Communities in California from 2000-2020.” International journal of environmental research and public health vol. 18,8 3921. 8 Apr. 2021, doi:10.3390/ijerph18083921

Arms, Michael M, and John D Van Zante. “Wildfire evacuation: outrunning the witch's curse--one animal center's experience.” ILAR journal vol. 51,2 (2010): 158-63. doi:10.1093/ilar.51.2.158

Jonathan Wahlqvist, Enrico Ronchi, Steven M.V. Gwynne, Max Kinateder, Guillermo Rein, Harry Mitchell, Noureddine Bénichou, Chunyun Ma, Amanda Kimball, Erica Kuligowski, The simulation of wildland-urban interface fire evacuation: The WUI-NITY platform, Safety Science, Volume 136, 2021, 105145, ISSN 0925-7535, https://doi.org/10.1016/j.ssci.2020.105145. (https://www.sciencedirect.com/science/article/pii/S0925753520305415)

“Traffic Modeling of Potential Emergency Wildfire Evacuation ...” Traffic Modeling of Potential Emergency Wildfire Evacuation Routes, Caltrans, 28 May 2021, dot.ca.gov/-/media/dot-media/programs/research-innovation-system-information/documents/preliminary-investigations/pi-0278-a11y.pdf.

Sarah Cowan, Eric B. Kennedy, Determinants of residential wildfire mitigation uptake: A scoping review, 2013–2022, Fire Safety Journal, Volume 140, 2023, 103851,ISSN 0379-7112, https://doi.org/10.1016/j.firesaf.2023.103851. (https://www.sciencedirect.com/science/article/pii/S0379711223001194)

Xilei Zhao, Yiming Xu, Ruggiero Lovreglio, Erica Kuligowski, Daniel Nilsson, Thomas J. Cova, Alex Wu, Xiang Yan, Estimating wildfire evacuation decision and departure timing using large-scale GPS data, Transportation Research Part D: Transport and Environment, Volume 107, 2022, 103277, ISSN 1361-9209, https://doi.org/10.1016/j.trd.2022.103277. (https://www.sciencedirect.com/science/article/pii/S136192092200102X)

“Planning Considerations: Evacuation and Shelter-in-Place.” Planning Considerations: Evacuation and Shelter-in-Place Guidance for State, Local, Tribal, and Territorial Partners, FEMA, July 2019, www.fema.gov/sites/default/files/2020-07/planning-considerations-evacuation-and-shelter-in-place.pdf.

“Using Highways for No-Notice Evacuations.” USING HIGHWAYS FOR NO-NOTICE EVACUATIONS, Department of Transportation , Dec. 2007, ops.fhwa.dot.gov/publications/evac_primer_nn/primer.pdf.

Alex Wu, Xiang Yan, Erica Kuligowski, Ruggiero Lovreglio, Daniel Nilsson, Thomas J. Cova, Yiming Xu, Xilei Zhao, Wildfire evacuation decision modeling using GPS data, International Journal of Disaster

Risk Reduction, Volume 83, 2022, 103373, ISSN 2212-4209, https://doi.org/10.1016/j.ijdrr.2022.103373.
(https://www.sciencedirect.com/science/article/pii/S2212420922005921)

Dapeng Li, A data-driven approach to improving evacuation time estimates during wildfires for communities with part-time residents in the wildland-urban interface, International Journal of Disaster Risk Reduction, Volume 82, 2022, 103363, ISSN 2212-4209, https://doi.org/10.1016/j.ijdrr.2022.103363.
(https://www.sciencedirect.com/science/article/pii/S2212420922005829)

Maranghides, A. , Link, E. , Nazare, S. , Hawks, S. , McDougald, J. , Quarles, S. and Gorham, D. (2022), WUI Structure/Parcel/Community Fire Hazard Mitigation Methodology, Technical Note (NIST TN), National Institute of Standards and Technology, Gaithersburg, MD, [online], https://doi.org/10.6028/NIST.TN.2205, https://tsapps.nist.gov/publication/get_pdf.cfm?pub_id=934142 (Accessed April 25, 2024)

Maranghides, A. and Link, E. (2023), WUI Fire Evacuation and Sheltering Considerations: Assessment, Planning, and Execution (ESCAPE), Technical Note (NIST TN), National Institute of Standards and Technology, Gaithersburg, MD, [online], https://doi.org/10.6028/NIST.TN.2262, https://tsapps.nist.gov/publication/get_pdf.cfm?pub_id=956333 (Accessed April 25, 2024)

Nikolaos Kalogeropoulos, Harry Mitchell, Enrico Ronchi, Steve Gwynne, Guillermo Rein, Design of stochastic trigger boundaries for rural communities evacuating from a wildfire, Fire Safety Journal, Volume 140, 2023, 103854, ISSN 0379-7112, https://doi.org/10.1016/j.firesaf.2023.103854.
(https://www.sciencedirect.com/science/article/pii/S0379711223001224)

Bonta, Rob. *Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act*, State of California Office of the Attorney General, 10 Oct. 2022, oag.ca.gov/system/files/attachments/press-docs/2022.10.10 - Wildfire Guidance.pdf.

Dotson, Jones J. "Development of Evacuation Time Estimate Studies For ..." *Development of Evacuation Time Estimate Studies for Nuclear Power Plants*, Nuclear Regulatory Commission, Jan. 2005, www.nrc.gov/docs/ML0502/ML050250240.pdf.

Ahmad, S.; Ali, A.; Ahmed, H.U.; Huang, Y.; Lu, P. Evaluating Traffic Operation Conditions during Wildfire Evacuation Using Connected Vehicles Data. *Fire* **2023**, *6*, 184. https://doi.org/10.3390/fire6050184

Bergstedt, Albin. *A Review of Traffic Models for Wildland-Urban Interface Wildfire Evacuation*, Lund University Publications, 2017, lup.lub.lu.se/luur/download?func=downloadFile&recordOId=8934008&fileOId=8934017.

Ronchi, Enrico, et al. "WUI-NITY: A Platform for the Simulation of Wildland-Urban Interface Fire Evacuation." *WUINITY a Platform for the Simulation of Wildland Urban Interface Fire Evacuation*, National Fire Protection Association, Apr. 2020, www.nfpa.org/education-and-research/research/fire-protection-research-foundation/projects-and-reports/wuinity-a-platform-for-the-simulation-of-wildlandurban-interface-fire-evacuation.

Ronchi, Enrico, et al. “WUI-NITY 2: The Integration, Verification, and Validation of the Wildfire Evacuation Platform WUI-NITY.” *WUINITY a Platform for the Simulation of Wildland Urban Interface Fire Evacuation*, National Fire Protection Association, Dec. 2021, www.nfpa.org/education-and-research/research/fire-protection-research-foundation/projects-and-reports/wuinity-a-platform-for-the-simulation-of-wildlandurban-interface-fire-evacuation.

Ronchi, Enrico, Jonathan Wahlqvist, Arthur Rohaert, et al. “WUI-NITY 3: Multi-Method Traffic Movement Data Collection for WUI Fire Evacuation Modelling.” *WUINITY a Platform for the Simulation of Wildland Urban Interface Fire Evacuation*, National Fire Protection Association, Apr. 2023, www.nfpa.org/education-and-research/research/fire-protection-research-foundation/projects-and-reports/wuinity-a-platform-for-the-simulation-of-wildlandurban-interface-fire-evacuation.

Vedat Bayram, Hande Yaman, A joint demand and supply management approach to large scale urban evacuation planning: Evacuate or shelter-in-place, staging and dynamic resource allocation, European Journal of Operational Research, Volume 313, Issue 1, 2024, Pages 171-191, ISSN 0377-2217, https://doi.org/10.1016/j.ejor.2023.07.033. (https://www.sciencedirect.com/science/article/pii/S0377221723005921)

The Estimated Evacuation Time for the Emergency Planning Zone of the Kori Nuclear Site, with a Focus on the Precautionary Action Zone Lee et al.

https://jrpr.org/journal/view.php?doi=10.14407%2Fjrpr.2016.41.3.196

“Florida Statewide Regional Evacuation Study Program Regional Behavioral Analysis.” *Florida Statewide Regional Evacuation Study Program*, Cambridge Systematics, 30 June 2021, portal.floridadisaster.org/preparedness/RES/Studies/Shared%20Documents/Supporting%20Documents/Region-Specific%20Folders/2021_SRESP_BehavioralStudy_Statewide.pdf?Mobile=1&Source=%2Fpreparedness%2FRES%2FStudies%2F%5Flayouts%2F15%2Fmobile%2Fviewa%2Easpx%3FList%3Db80ccbff%2Dfde9%2D4485%2Db19e%2D1591535df67b%26View%3Ddff608f3%2D58f1%2D4764%2D85cd%2D092e7b03e182%26RootFolder%3D%252Fpreparedness%252FRES%252FStudies%252FShared%2BDocuments%252FSupporting%2BDocuments%252FRegion%2DSpecific%2BFolders%26wdFCCState%3D1.

Smith, T. “Criteria for Development of Evacuation Time Estimate Studies.” *Criteria for Development of Evacuation Time Estimate Studies (NUREG/CR-7002, Revision 1)*, Nuclear Regulatory Commission, Feb. 2021, www.nrc.gov/reading-rm/doc-collections/nuregs/contract/cr7002/r1/index.html.

Communicating During and After a Nuclear Power Plant Incident , June 2013, www.fema.gov/sites/default/files/documents/fema_nuclear-power-plant-incident_communicating-during-after_june-2013.pdf.

Criteria for - Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, Federal Emergency Management Agency, Dec. 2019, www.fema.gov/sites/default/files/2020-06/NUREG-0654_FEMA-REP-1_Rev_2_Dec_2019_Secure.pdf.