LA COUNTY PLANNING

AMY J. BODEK, AICP
Director,
Regional Planning

DENNIS SLAVIN
Chief Deputy Director,
Regional Planning

REPORT TO THE HEARING OFFICER

DATE ISSUED:	May 15, 2025
HEARING DATE:	May 27, 2025 AGENDA ITEM: 10
PROJECT NUMBER:	PRJ2024-003039-(3)
PERMIT NUMBER(S):	Administrative Coastal Development Permit ("ACDP") RPPL2024004507
SUPERVISORIAL DISTRICT:	3
PROJECT LOCATION:	23407 Red Rock Road, Topanga (Assessor's Parcel Number 4438-001-029)
OWNER:	John Wood
APPLICANT:	Idan Shimony
CASE PLANNER:	Jon Schneider, Planner jschneider@planning.lacounty.gov

RECOMMENDATION

The following recommendation is made prior to the public hearing and is subject to change based upon testimony and/or documentary evidence presented at the public hearing:

LA County Planning staff ("Staff") recommends **APPROVAL** of Project Number PRJ2024-003039-(3) - ACDP Number RPPL2024004507 based on the Findings (Exhibit C – Findings) contained within this report and subject to the Draft Conditions of Approval (Exhibit D – Conditions of Approval).

Staff recommends the following motions:

CEQA:

I, THE HEARING OFFICER, CLOSE THE PUBLIC HEARING AND FIND THAT THE PROJECT IS CATEGORICALLY EXEMPT PURSUANT TO STATE AND LOCAL CEQA GUIDELINES.

ENTITLEMENT:

I, THE HEARING OFFICER, APPROVE ADMINISTRATIVE COASTAL DEVELOPMENT PERMIT NUMBER RPPL2024004507 SUBJECT TO THE ATTACHED FINDINGS AND CONDITIONS.

PROJECT DESCRIPTION

A. Entitlement(s) Requested

The permittee, Idan Shimony ("Permittee"), requests the ACDP to authorize 30 roof-mounted solar modules and appurtenant equipment affixed to an existing single-family residence ("Project") on a property located 23407 Red Rock Road ("Project Site") in the R-C-20 (Rural Coastal—20 Acre Minimum Required Lot Area) Zone within the Santa Monica Mountains Coastal Zone pursuant to Los Angeles County Code ("County Code") Section 22.44.940.

B. Project

The applicant, Idan Shimony ("Applicant"), requests the ACDP to authorize the placement and maintenance of 30 roof-mounted solar modules and appurtenant equipment, including junction boxes and wiring, affixed to an existing single-family residence in the R-C-20 Zone, pursuant to County Code Sections 22.44.810, 22.44.1560, and 22.44.1750. Coastal Development Permit ("CDP") No. 5-81-439, issued by the California Coastal Commission on December 15, 1988, approved the construction of a 2,534 square-foot single-family residence with a 500 square-foot detached guest house, 200 square-foot driveway, water well, and septic system. CDP 5-81-439 was conditioned with future development restrictions requiring a new CDP for any future development. Further, the residence is situated within a mapped Coastal Commission appeal jurisdiction. Any ACDP within such an area requires a public hearing per County Code Section 22.44.940.E. Because the proposed solar array is associated with the principal permitted use in the R-C Zone (a single-family residence), does not propose grading, and does not require review by the Environmental Review Board ("ERB"), therefore, an ACDP is required for the Project.

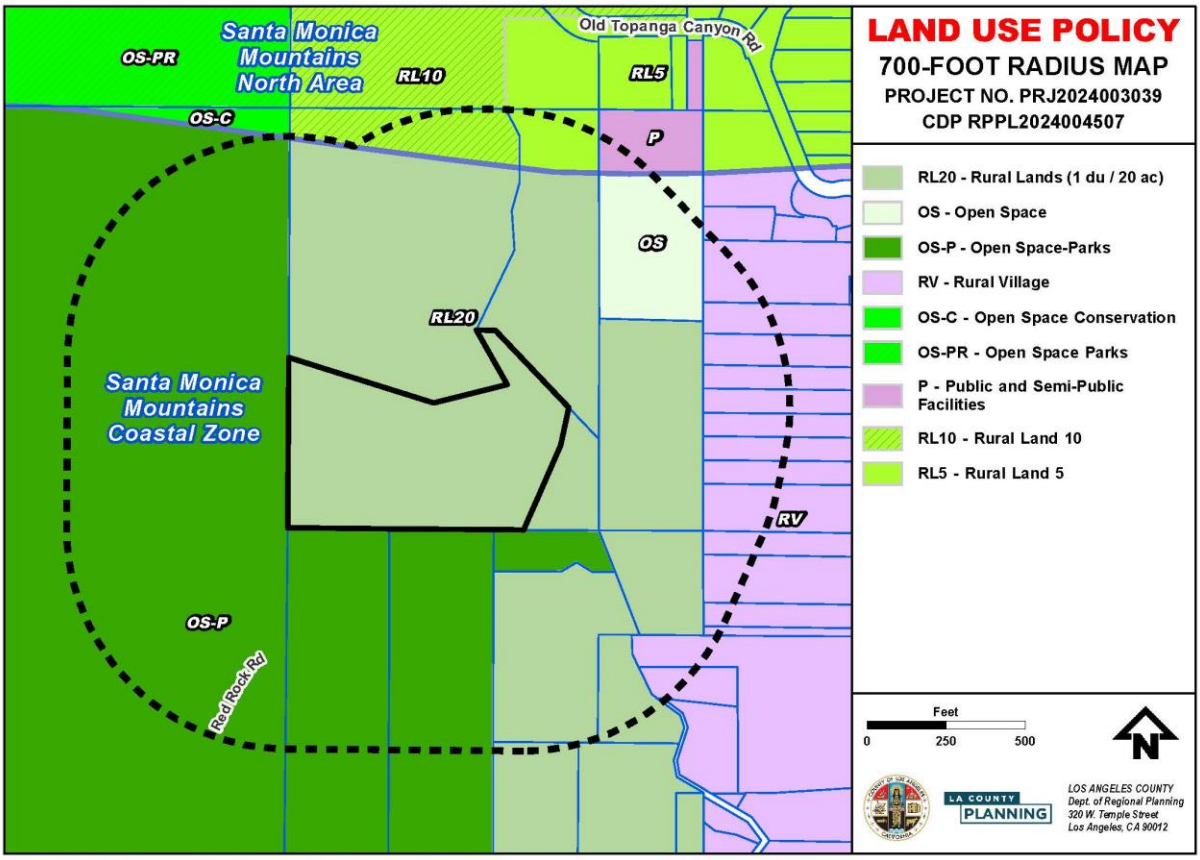
The Project Site is approximately nine acres in size and consists of one legal lot developed with a 2,534-square-foot single-family residence with detached accessory structures. The parcel is irregularly shaped and slopes downward from the west to the east. The residence and detached accessory structures are situated on a relatively flat area on the east side of the parcel. The remaining portion, which constitutes the majority of the parcel, is undeveloped.

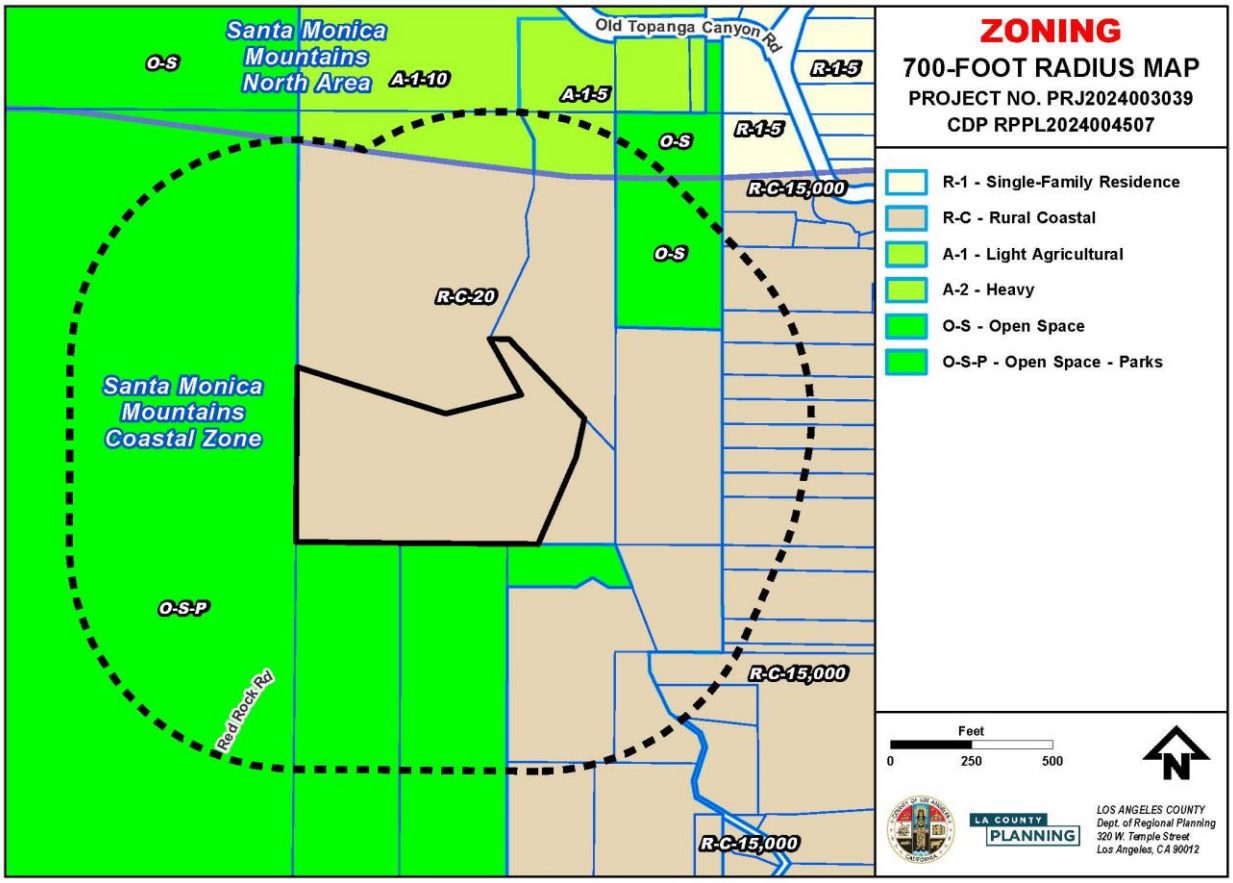
SUBJECT PROPERTY AND SURROUNDINGS

The following chart provides property data within a 500-foot radius:

LOCATION	LAND USE POLICY	ZONING	EXISTING USES
SUBJECT PROPERTY	RL20 (Rural Land, One Dwelling Unit per 20 Acres Maximum Density)	R-C-20	Single-family residence
NORTH	RL20, OS (Open Space)	R-C-20, O-S (Open Space)	Single-family residences, open space, vacant
EAST	RL20, RV (Rural Village), OS	R-C-20, R-C-15,000 (Rural Coastal, 15,000 Square-	Single-family residences, open space, vacant

		Foot Minimum Required Lot Area), O-S	
SOUTH	RL20, OS-P (Open Space-Parks)	R-C-20, O-S-P (Open Space, Parks)	Single-family residences, open space/parks
WEST	OS-P, RL20	O-S-P, R-C-20	Open space/parks, vacant





PROPERTY HISTORY

A. Zoning History

ORDINANCE NO.	ZONING	DATE OF ADOPTION
7076	M-3 (Unclassified)	December 26, 1956
7276	A-1-1 (Light Agricultural-One Acre Per Required Lot Area)	December 24, 1957
105754	A-1-2 (Light Agricultural-Two Acre Per Required Lot Area)	September 25, 1973
20140055	R-C-20	October 10, 2014

B. Violations

CASE NO.	VIOLATION	CLOSED/OPEN

ANALYSIS

A. Land Use Compatibility

The installment of roof mounted solar panels and appurtenant equipment affixed to an existing single-family residence are consistent with the RL20 land use designation of the Santa Monica Mountains Land Use Plan ("LUP"). The RL20 land use designation is intended for low density single-family detached housing in a setting consistent with the rural character of the area. The Project is consistent with this designation because it is associated with an existing single-family residence. The Project is consistent with the R-C-20 zoning classification in which the accessory uses are permitted. The properties surrounding the Project Site are single-family residences and open space, in which the Project is consistent with the development pattern of these surrounding properties.

As proposed, the Project would comply with all applicable development standards of the Zoning Code. For further details on this compliance, see the "Zoning Ordinance Consistency" section in the attached Exhibit C – Findings.

B. Neighborhood Impact (Need/Convenience Assessment)

The Project is designed to be consistent with the rural character of the surrounding community. The Project includes the authorization 30 roof-mounted solar modules and appurtenant equipment affixed to an existing single-family residence as part of the Project. The Project will utilize materials common in rural area designs such as stone, concrete, and reflective materials only associated to the solar panels. Further, the Project does not propose any disturbance or impact to the surrounding environment.

C. Design Compatibility

The Project is located within an existing rural neighborhood in the Topanga area. The Project Site is bordered by existing low-density, rural residential development in all directions. The solar modules will be affixed to the existing, single-family residence and will not disturb or impact the surrounding environment.

GENERAL PLAN/COMMUNITY PLAN CONSISTENCY

The Project is consistent with applicable goals and policies of the LUP. Consistency findings can be found in the attached Findings (Exhibit C – Findings).

ZONING ORDINANCE CONSISTENCY

The Project complies with all applicable zoning requirements. Consistency findings can be found in the attached Findings (Exhibit C – Findings).

BURDEN OF PROOF

The applicant is required to substantiate all facts identified by Section 22.44.1000 (Coastal Development Permit Findings and Decision) of the County Code. The Burden of Proof with applicant's responses is attached (Exhibit E – Applicant's Burden of Proof). Staff is of the opinion that the applicant has met the burden of proof.

ENVIRONMENTAL ANALYSIS

Los Angeles County ("County") completed an initial review for the above-mentioned Project. Based on an examination of the Project proposal and the supporting information included in the application, the County proposes that a Categorical Exemption is the appropriate environmental documentation under the California Environmental Quality Act ("CEQA"). The Project qualifies for a Categorical Exemption (Class 3—New Construction or Conversion of Small Structures) under CEQA and the County Environmental Document Reporting Procedures and Guidelines.

Pursuant to Section 15303 of the State CEQA Guidelines, the Class 3 Categorical Exemption includes the installation of small new equipment upon one single-family residence. The Project qualifies for a Class 3 Categorical Exemption because the Project includes the installment of roof-mounted solar modules and appurtenant equipment affixed to the roof of an existing single-family residence.

Section 15300.2 of the State CEQA Guidelines discusses how projects located within particularly sensitive environments may have a significant impact on the environment and are therefore not eligible for certain CEQA exemptions, including the Class 3 Categorical Exemptions cited herein. Exceptions to the exemptions include project impacts to an environmental resource of hazardous or critical concern where officially designated, precisely mapped, and adopted pursuant to law by federal, state, or local agencies. Exceptions to the exemptions also apply where a project may result in damage to scenic resources or where a project includes activities that will have a significant effect on the environment due to unusual circumstances. However, the proposed Project is not subject to an exception to the CEQA exemptions because the area has been mapped as mostly H3 (disturbed) habitat by the LUP, with H1-Quiet Zone (less than 200 feet from H1) and H1-100 Foot Buffer (less than 100 feet from H1) overlaying the H3, no impact from the development will extend into any environmental resources of hazardous or critical concern and or particularly sensitive environment. The Project is not expected to impact scenic or historic resources because the Project consists of roof-mounted solar modules that extend a maximum of six inches above the existing roof line and appurtenant equipment attached to an existing single-family residence. The Project Site is also not on any hazardous waste site list. Therefore, the proposed Project is not subject to an exception to the CEQA exemptions, and the Class 3 Categorical Exemption may be applied.

The Project, due to its minimal footprint and height, is not expected to impact scenic resources such as trails or designated scenic routes. Other exceptions involving cumulative impact, hazardous waste sites, and historic resources also would not apply. Therefore, the Project is categorically exempt from CEQA.

COMMENTS RECEIVED

A. County Department Comments and Recommendations
County department consultation was not required for this project, as the scope involves only the installation of roof-mounted solar modules and appurtenant equipment affixed to an existing single-family residence.

B. Public Comments
Staff has not received any public comments at the time of report preparation.

Report Reviewed By: Rob Glaser
Robert Glaser, Supervising Regional Planner

Report Approved By: M. Glaser
Mitch Glaser, Assistant Administrator

LIST OF ATTACHED EXHIBITS	
EXHIBIT A	Plans
EXHIBIT B	Project Summary Sheet
EXHIBIT C	Findings
EXHIBIT D	Conditions of Approval
EXHIBIT E	Applicant's Burden of Proof
EXHIBIT F	Environmental Determination
EXHIBIT G	Informational Maps
EXHIBIT H	Photos
EXHIBIT I	Agency Correspondence N/A

PHOTOVOLTAIC ROOF MOUNT & ENERGY SYSTEM

30 MODULES - SYSTEM SIZE STC (13.800 kW DC / 11.400 kW AC)

23407 RED ROCK ROAD, TOPANGA, CA 90290, USA (34.1080634, -118.6341551)

SYSTEM SUMMARY STC (13.800 kW DC / 11.400 kW AC)

STC DC: (30) 460W = 13.800 kW
STC AC: (30) 380W = 11.400 kW
STORAGE: (4) 3.84kW 5.0kWh = 15.36kW 20.0kWh

- (30) REC SOLAR PTE. LTD. REC460AA PURE-RX MODULES
- (30) ENPHASE ENERGY INC. IQ8X-80-M-US [240V] MICROINVERTERS
- (4) ENPHASE ENERGY INC. IQBATTERY-5P-1P-NA BATTERIES
- (1) ENPHASE IQ SYSTEM CONTROLLER 3
- 3x BRANCHES OF 10 CONNECTED IN PARALLEL

GOVERNING CODES

- 2023 COUNTY OF LOS ANGELES FIRE CODE
- 2023 COUNTY OF LOS ANGELES BUILDING CODE
- 2023 COUNTY OF LOS ANGELES RESIDENTIAL CODE
- 2023 COUNTY OF LOS ANGELES ELECTRICAL CODE
- 2023 CITY OF LOS ANGELES GREEN BUILDING STANDARDS CODE
- 2023 CITY OF LOS ANGELES MECHANICAL CODE
- 2023 COUNTY OF LOS ANGELES EXISTING BUILDING CODE
- 2023 COUNTY OF LOS ANGELES PLUMBING CODE

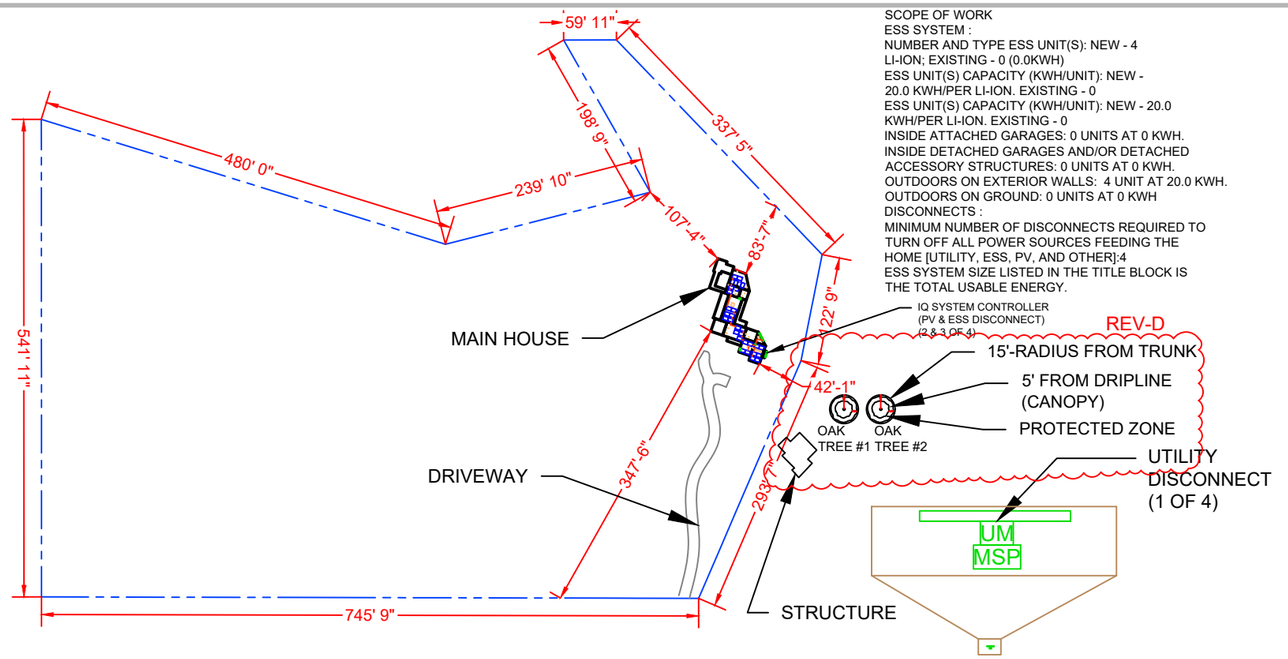
GENERAL NOTES

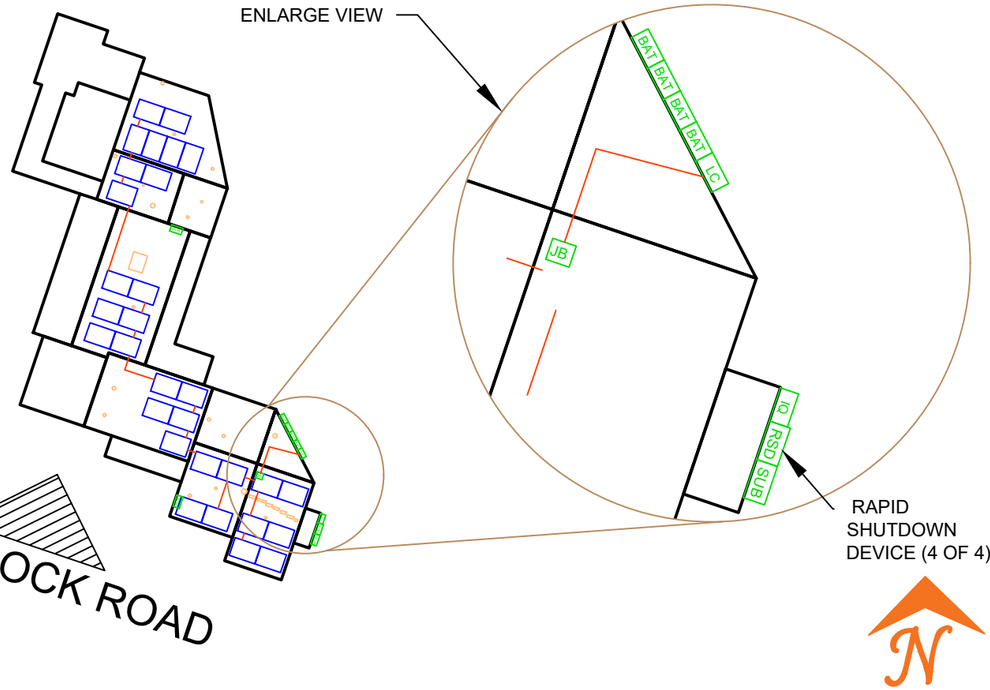
1) ALL PANELS, SWITCHES, ETC. SHALL HAVE SUFFICIENT GUTTER SPACE AND LUGS IN COMPLIANCE WITH UL REQUIREMENTS TO ACCOMMODATE CONDUCTORS SHOWN.
2) THIS SYSTEM WILL NOT BE INTERCONNECTED UNTIL APPROVAL FROM THE LOCAL JURISDICTION AND UTILITY IS OBTAINED.
3) ALL EXTERIOR ELECTRICAL DEVICES AND EQUIPMENT INCLUDING THOSE THAT ARE EXPOSED TO OUTSIDE ENVIRONMENT SHALL BE WEATHERPROOF AND SHALL BE LISTED BY 'UL' FOR THE TYPE OF APPLICATION AND 'UL' LABEL SHALL APPEAR ON ALL ELECTRICAL EQUIPMENT.
4) WIRING METHOD SHALL BE EMT ABOVE GROUND MOUNTED IN CONCEALED SPACES (UNLESS APPROVED OTHERWISE) AND SCHEDULE-40 PVC FOR BELOW GROUND INSTALLATIONS UNLESS NOTED OTHERWISE.
5) AN OSHA APPROVED LADDER PROVIDING ACCESS TO ALL PORTIONS OF THE ARRAY SHALL BE SECURED IN PRIOR TO REQUESTING INSPECTION.
6) IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL A SUPPLEMENTAL GROUNDING ELECTRODE CONDUCTOR IF NECESSARY.
7) COVER SHEET NOTES:
8) THE PROJECT SHALL COMPLY WITH THE CURRENT VERSION OF THE LOS ANGELES COUNTY FIRE DEPARTMENT ELECTRICAL POWER SOURCE DISCONNECT PLACARDING SYSTEM.
9) ALL ELECTRICAL WORK SHALL BE DESIGNED PER THE 2023 LOS ANGELES COUNTY ELECTRICAL CODE, 2022 CALIFORNIA ELECTRICAL CODE, AND 2020 NATIONAL ELECTRICAL CODE.
10) ALL CONDUITS IN THE ATTIC SPACE SHALL BE LOCATED A MINIMUM OF 18 INCHES FROM THE ROOF DECKING, FIRE CODE 605.11.2.1 EXCEPTION 2.
11) ALL ELECTRICAL EQUIPMENT SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTHY ADMINISTRATION.
12) DO NOT COVER MECHANICAL AND PLUMBING VENTS THROUGH THE ROOF WITH THE COLLECTOR.
13) CONDUIT RUN ON THE ROOF MUST BE SUPPORTED A MINIMUM OF 1" ABOVE THE ROOF SURFACE
14) SITE PLAN NOTE:
15) A 36-INCH WIDE PATHWAY SHALL BE PROVIDED TO THE EMERGENCY ESCAPE AND RESCUE OPENING.
.
16) ENPHASE DEVICES ARE WITHIN MANUFACTURER'S REQUIRED GUIDELINE, PV ARRAY DOES NOT EXCEED MAX DISTANCE OF 150'.
17) ALL ENSEMBLE EQUIPMENT MUST BE WITHIN 50' OF EACH OTHER.
18) IF THERE ARE COMMUNICATION ISSUES WITH GATEWAY, UB EXTENDER CAN BE USED TO RELOCATE COMMS KIT NEAR IQ SYSTEM CONTROLLER & BATTERY.
19) IQ BATTERY UNITS SHOULD NOT BE INSTALLED IN DIRECT SUNLIGHT.

TITLE PAGE NOTES

ALL WORK SHALL BE IN COMPLIANCE WITH THE MOST CURRENT LOS ANGELES COUNTY FIRE CODE.

WHEN ESS IS INSTALLED INSIDE GARAGE – ANY PLANNED OR EXISTING ATTACHED GARAGE SHALL COMPLY WITH ALL APPLICABLE CODES AND STANDARDS, AND WITH THE MANUFACTURER'S INSTALLATION MANUAL(S) TO WHICH THE EQUIPMENT HAS BEEN LISTED, INCLUDING REQUIREMENTS PERTAINING TO FIRE PROTECTIVE FEATURES (E.G., GYPSUM BOARD, DOORS, AND DUCTS), AND TO ALARM/DETECTOR DEVICES.





SITE PLAN

SCALE: 0'-0 3/32" = 1'-0"

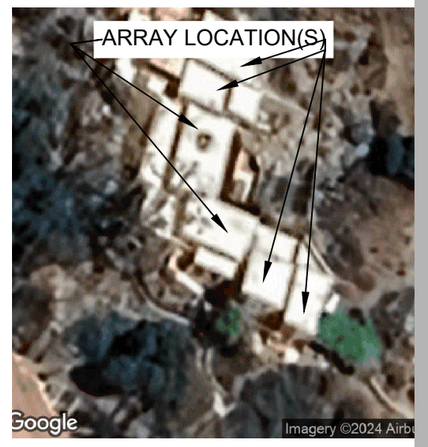
LEGEND

- NEW PV MODULE
- FIRE SETBACK
- MICRO-INVERTER
- ROOF ATTACHMENT
- ROOF ACCESS POINT
- STRING
- DIMENSIONS
- PROPERTY LINE
- RAFTER/TRUSS
- RAIL
- FENCE
- GATE
- DRIVEWAY
- CONDUIT
- UM — UTILITY METER
- JB — AC JUNCTION BOX (NEW)
- LC — AC COMBINER PANEL (NEW)
- SUB — SUB PANEL (EXISTING)
- SUB — SUB PANEL (NEW)
- FRONT OF HOUSE
- MSP — MAIN SERVICE PANEL (EXISTING, 125A)
- IQ — IQ SYSTEM CONTROLLER 3 (NEW)
- BAT — BATTERIES (NEW)
- RSD — RAPID SHUTDOWN (NEW)

SCOPE OF WORK
ESS SYSTEM :
NUMBER AND TYPE ESS UNIT(S): NEW - 4
LI-ION; EXISTING - 0 (0.0KWH)
ESS UNIT(S) CAPACITY (KWH/UNIT): NEW - 20.0 KWH/PER LI-ION. EXISTING - 0
ESS UNIT(S) CAPACITY (KWH/UNIT): NEW - 20.0 KWH/PER LI-ION. EXISTING - 0
INSIDE ATTACHED GARAGES: 0 UNITS AT 0 KWH.
INSIDE DETACHED GARAGES AND/OR DETACHED ACCESSORY STRUCTURES: 0 UNITS AT 0 KWH.
OUTDOORS ON EXTERIOR WALLS: 4 UNIT AT 20.0 KWH.
OUTDOORS ON GROUND: 0 UNITS AT 0 KWH
DISCONNECTS :
MINIMUM NUMBER OF DISCONNECTS REQUIRED TO TURN OFF ALL POWER SOURCES FEEDING THE HOME [UTILITY, ESS, PV, AND OTHER]:4
ESS SYSTEM SIZE LISTED IN THE TITLE BLOCK IS THE TOTAL USABLE ENERGY.

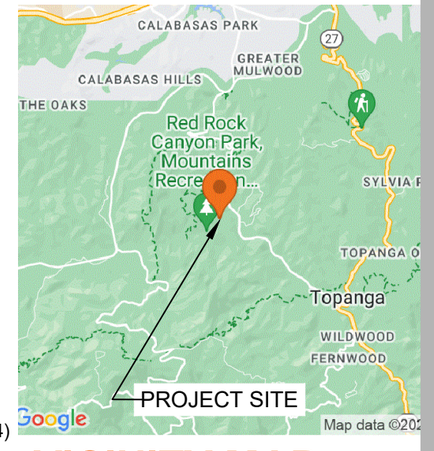
SHEET INDEX

AHJ: LOS ANGELES (COUNTY OF), CALIFORNIA
UTILITY: SOUTHERN CALIFORNIA EDISON CO



HOUSE PHOTO

SCALE: NTS



VICINITY MAP

SCALE: NTS

AMECO
YOUR LOCAL SOLAR EXPERT SINCE 1974
LIC. HOLDER SIGNATURE

CONTRACTOR: AMECO SOLAR & ROOFING
ADDRESS: 4705 LAUREL CANYON BOULEVARD, VALLEY VILLAGE, CA, USA
PHONE: 5626334400
EMAIL: info@amecosolar.com
LICENSE #: 1053172-B , C-10
ELECTRICAL LICENSE #: OREN TAMIR

REVISIONS

DESCRIPTION	DATE	REV
INITIAL DESIGN	06/03/2024	00
CHANGE REQUEST	06/24/2024	A
CHANGE REQUEST	07/18/2024	B
CHANGE REQUEST	07/19/2024	C
Change request	09/03/2024	D

SIGNATURE & SEAL

HOMEOWNER INFO

JOHN WOOD
23407 RED ROCK RD,
TOPANGA, CA 90290, USA
APN: 4438-001-029 PHONE: +16268402109
EMAIL: jwood@chla.usc.edu

SHEET NAME

COVER PAGE & SITE PLAN

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-1

MODULE AREA & WEIGHT CALCULATIONS

PV PANELS (COUNT, AREA, WEIGHT):
- (30x) REC SOLAR PTE. LTD. REC460AA PURE-RX (68.0" x 47.4", 51.6 LB)

MICRO-INVERTERS (COUNT, WEIGHT):
- (30x) ENPHASE ENERGY INC. IQ8X-80-M-US [240V] (2.43 LB)

ROOF PLANE #1:
- ATTACHMENT COUNT: 21
- MOUNTING SYSTEM WEIGHT / MODULE: 1.5 LB
- MOUNTING SYSTEM WEIGHT: (6) 1.5 LB = 9 LB

ROOF PLANE #2:
- ATTACHMENT COUNT: 18
- MOUNTING SYSTEM WEIGHT / MODULE: 1.5 LB
- MOUNTING SYSTEM WEIGHT: (5) 1.5 LB = 7.5 LB

ROOF PLANE #3:
- ATTACHMENT COUNT: 17
- MOUNTING SYSTEM WEIGHT / MODULE: 1.5 LB
- MOUNTING SYSTEM WEIGHT: (6) 1.5 LB = 9 LB

ROOF PLANE #4:
- ATTACHMENT COUNT: 21
- MOUNTING SYSTEM WEIGHT / MODULE: 1.5 LB
- MOUNTING SYSTEM WEIGHT: (6) 1.5 LB = 9 LB

ROOF PLANE #5:
- ATTACHMENT COUNT: 11
- MOUNTING SYSTEM WEIGHT / MODULE: 1.5 LB
- MOUNTING SYSTEM WEIGHT: (3) 1.5 LB = 4.5 LB

ROOF PLANE #6:
- ATTACHMENT COUNT: 14
- MOUNTING SYSTEM WEIGHT / MODULE: 1.5 LB
- MOUNTING SYSTEM WEIGHT: (4) 1.5 LB = 6 LB

NEW PANELS:
- PANEL AREA: (27) 68.0" x 47.4" = 605 SF
- PANEL WEIGHT: (27) 51.6 = 1393 LB
- MICRO-INVERTER WEIGHT: (27) 2.4 = 65 LB
- TOTAL SYSTEM WEIGHT: 1393 + 65 + 13.5 + 9 + 7.5 + 4.5 + 3 + 3 = 1499 LB
- WEIGHT PER CONNECTION: 1499 LB / 102 = 14.69 LB
- DISTRIBUTED LOAD: 1499 LB / 605 SF = 2.48 PSF
- ROOF AREA COVERAGE: 605 SF / 2859 SF = 21.2%

BILL OF MATERIALS		
EQUIPMENT	QTY	DESCRIPTION
SOLAR PV MODULES	30	REC SOLAR PTE. LTD. REC460AA PURE-RX
MICRO INVERTERS	30	ENPHASE ENERGY INC. IQ8X-80-M-US [240V]
BATTERIES	4	ENPHASE ENERGY INC. IQBATTERY-5P-1P-NA
SMART SWITCH	1	ENPHASE IQ SYSTEM CONTROLLER 3
JUNCTION BOX (AC)	1	JUNCTION BOX 600V, NEMA 3R UL LISTED
LOAD CENTER (AC)	1	ENPHASE IQ COMBINER 5/5C
ATTACHMENTS	102	IRONRIDGE RESOURCES - QBASE LOW SLOPE MOUNT QMLSH
RAIL	38	IRONRIDGE RESOURCES XR10
RAIL SPLICES	4	RAIL SPLICES (FOR ABOVE)
MID CLAMPS	30	MID CLAMPS
END CLAMPS	60	END CLAMPS
GROUNDING LUG	15	GROUNDING LUG

ROOF DESCRIPTION TABLE							
ROOF PLANE	ROOF PITCH	ROOF AZIMUTH	ROOF MATERIAL	RAFTER SIZE	RAFTER SPACING	ATTACHMENT SPACING	MODULES (PITCH)
#1	1°	200°	FLAT ROOF	2" x 4"	24" O.C.	72" O.C.	6 (15°)
#2	1°	200°	FLAT ROOF	2" x 4"	24" O.C.	72" O.C.	5 (15°)
#3	1°	20°	FLAT ROOF	2" x 4"	24" O.C.	72"/48" O.C.	6 (15°)
#4	1°	200°	FLAT ROOF	2" x 4"	24" O.C.	72" O.C.	6 (15°)
#5	1°	200°	FLAT ROOF	2" x 4"	24" O.C.	72" O.C.	3 (15°)
#6	1°	200°	FLAT ROOF	2" x 4"	24" O.C.	72" O.C.	4 (15°)

ROOF ACCESS POINT

- SHALL BE LOCATED IN AREAS THAT DO NOT REQUIRE THE PLACEMENT OF GROUND LADDERS OVER OPENINGS SUCH AS WINDOWS OR DOORS, AND LOCATED AT STRONG POINTS OF BUILDING CONSTRUCTION IN LOCATIONS WHERETHE ACCESS POINT DOES NOT CONFLICT WITH OVERHEAD OBSTRUCTIONS SUCH AS TREE LIMBS, WIRES OR SIGNS.

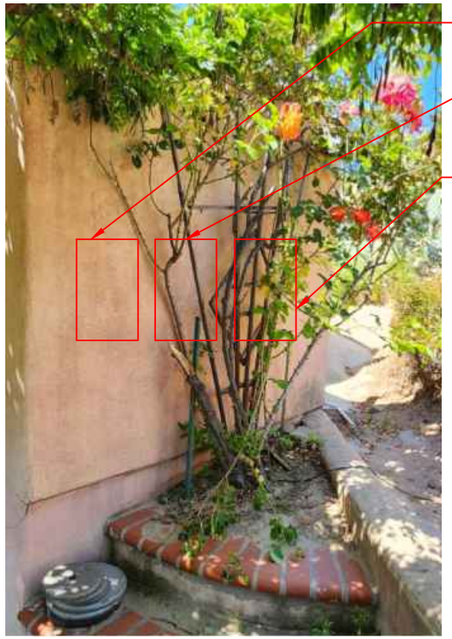
DESIGN CRITERIA

- EXPOSURE CATEGORY = B
- WIND SPEED = 94 MPH
- SNOW LOAD = 0 PSF

LEGEND

- NEW PV MODULE
- FIRE SETBACK
- MICRO-INVERTER
- ROOF ATTACHMENT
- ROOF ACCESS POINT
- STRING
- DIMENSIONS
- PROPERTY LINE
- RAFTER/TRUSS
- RAIL
- FENCE
- GATE
- DRIVEWAY
- CONDUIT
- UM — UTILITY METER
- JB — AC JUNCTION BOX (NEW)
- LC — AC COMBINER PANEL (NEW)
- SUB — SUB PANEL (EXISTING)
- SUB — SUB PANEL (NEW)
- FRONT OF HOUSE
- MSP — MAIN SERVICE PANEL (EXISTING, 125A)
- IQ — IQ SYSTEM CONTROLLER 3 (NEW)
- BAT — BATTERIES (NEW)
- RSD — RAPID SHUTDOWN (NEW)

GRAPHIC LOCATION #2

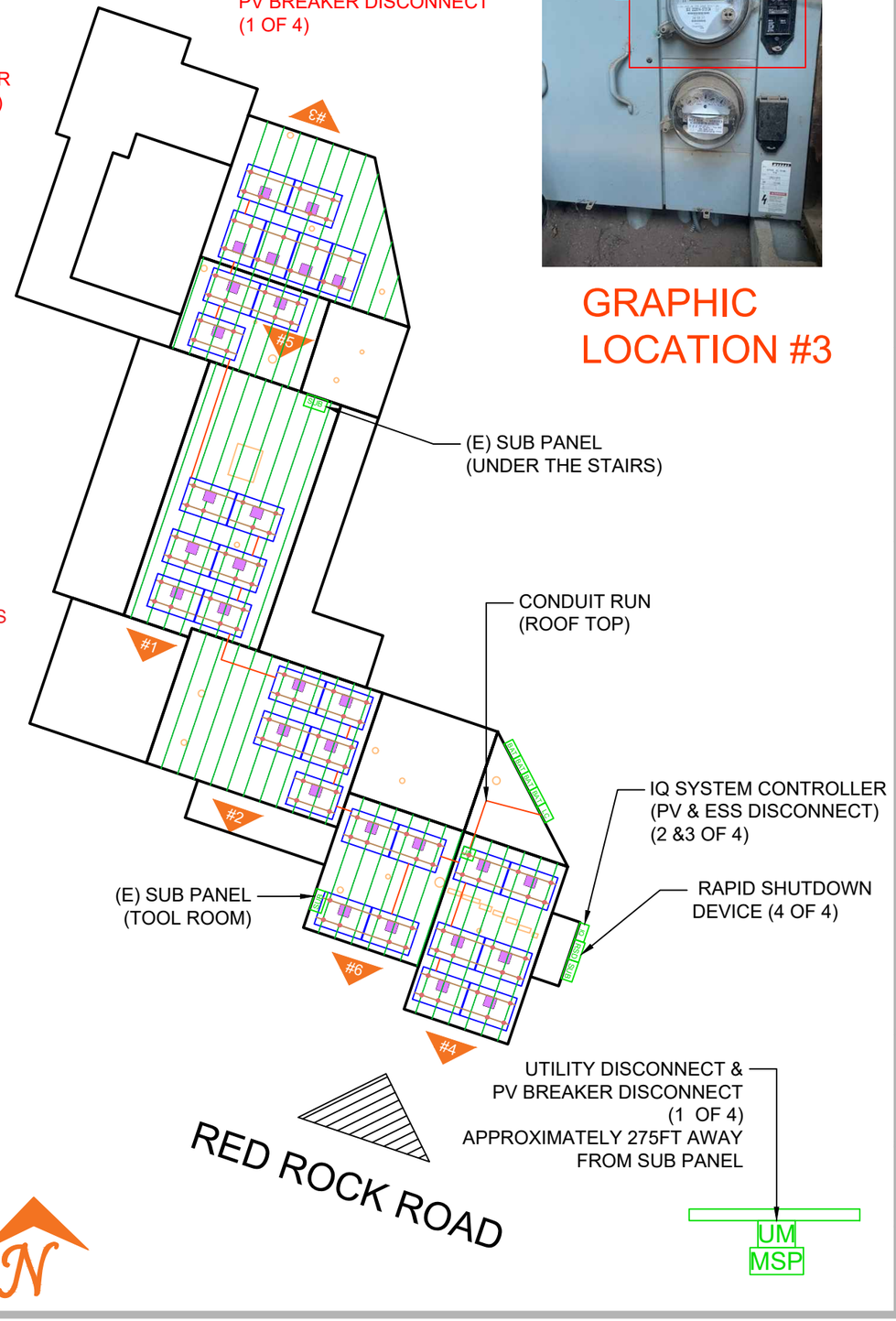


GRAPHIC LOCATION #1

ROOF PLAN WITH MODULES

SCALE: 1/16" = 1'-0"

ROOF VENTS, SKYLIGHTS, WILL NOT BE COVERED UPON PV INSTALLATION



GRAPHIC LOCATION #3

AMECO — YOUR LOCAL SOLAR EXPERT SINCE 1974

LIC. HOLDER SIGNATURE

CONTRACTOR: AMECO SOLAR & ROOFING
ADDRESS: 4705 LAUREL CANYON BOULEVARD, VALLEY VILLAGE, CA, USA
PHONE: 5626334400
EMAIL: info@amecosolar.com
LICENSE #: 1053172-B , C-10
ELECTRICAL LICENSE #: OREN TAMIR

REVISIONS

DESCRIPTION	DATE	REV
INITIAL DESIGN	06/03/2024	00
CHANGE REQUEST	06/24/2024	A
CHANGE REQUEST	07/18/2024	B
CHANGE REQUEST	07/19/2024	C
Change request	09/03/2024	D

SIGNATURE & SEAL

HOMEOWNER INFO

JOHN WOOD
23407 RED ROCK RD,
TOPANGA, CA 90290, USA
APN: 4438-001-029 PHONE: +16268402109
EMAIL: jwood@chla.usc.edu

SHEET NAME

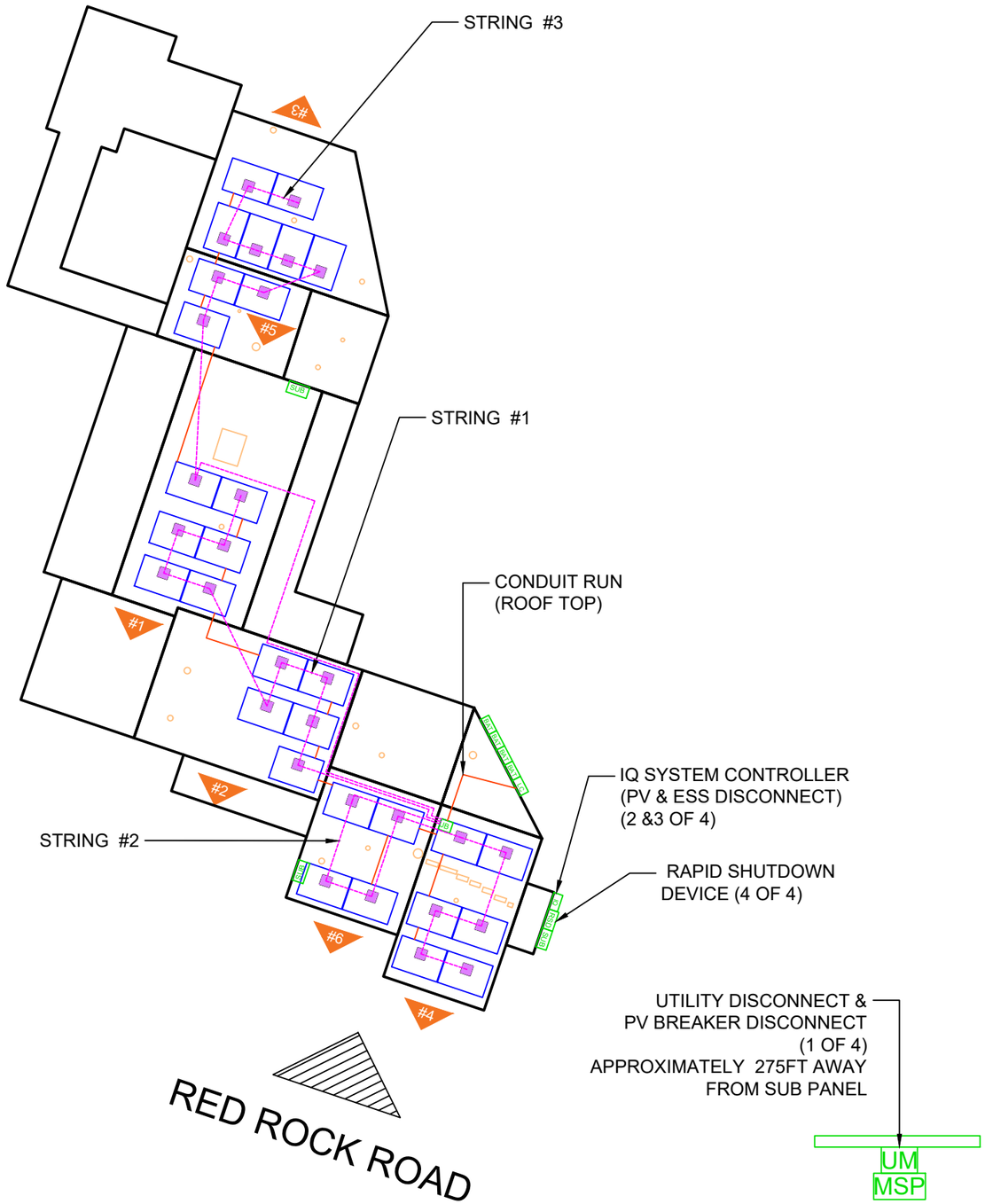
ROOF PLAN WITH MODULES

SHEET SIZE

ANSI B
11" X 17"

SHEET NUMBER

PV-2



LEGEND

- NEW PV MODULE
- FIRE SETBACK
- MICRO-INVERTER
- ROOF ATTACHMENT
- ROOF ACCESS POINT
- STRING
- DIMENSIONS
- PROPERTY LINE
- RAFTER/TRUSS
- RAIL
- FENCE
- GATE
- DRIVEWAY
- CONDUIT
- UM — UTILITY METER
- JB — AC JUNCTION BOX (NEW)
- LC — AC COMBINER PANEL (NEW)
- SUB — SUB PANEL (EXISTING)
- SUB — SUB PANEL (NEW)
- FRONT OF HOUSE
- MSP — MAIN SERVICE PANEL (EXISTING, 125A)
- IQ — IQ SYSTEM CONTROLLER 3 (NEW)
- BAT — BATTERIES (NEW)
- RSD — RAPID SHUTDOWN (NEW)

STRING PLAN WITH MODULES

SCALE: 1/16" = 1'-0"

AMECO
YOUR LOCAL SOLAR EXPERT SINCE 1974

LIC. HOLDER SIGNATURE

CONTRACTOR: AMECO SOLAR & ROOFING
ADDRESS: 4705 LAUREL CANYON BOULEVARD,
VALLEY VILLAGE, CA, USA
PHONE: 5626334400
EMAIL: info@amecosolar.com
LICENSE #: 1053172-B , C-10
ELECTRICAL LICENSE #: OREN TAMIR

REVISIONS

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CHANGE REQUEST	07/18/2024	B
CHANGE REQUEST	07/19/2024	C
Change request	09/03/2024	D

SIGNATURE & SEAL

HOMEOWNER INFO

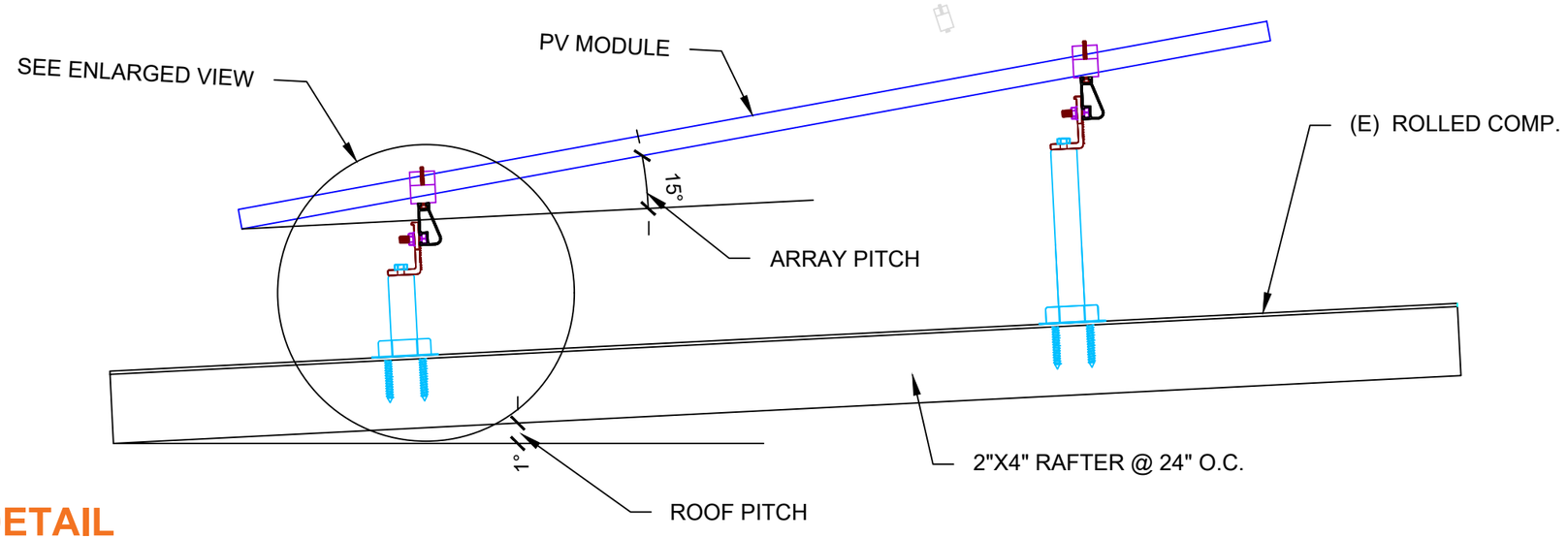
JOHN WOOD
23407 RED ROCK RD,
TOPANGA, CA 90290, USA
APN: 4438-001-029 PHONE: +16268402109
EMAIL: jwood@chla.usc.edu

SHEET NAME
STRING PLAN WITH MODULES

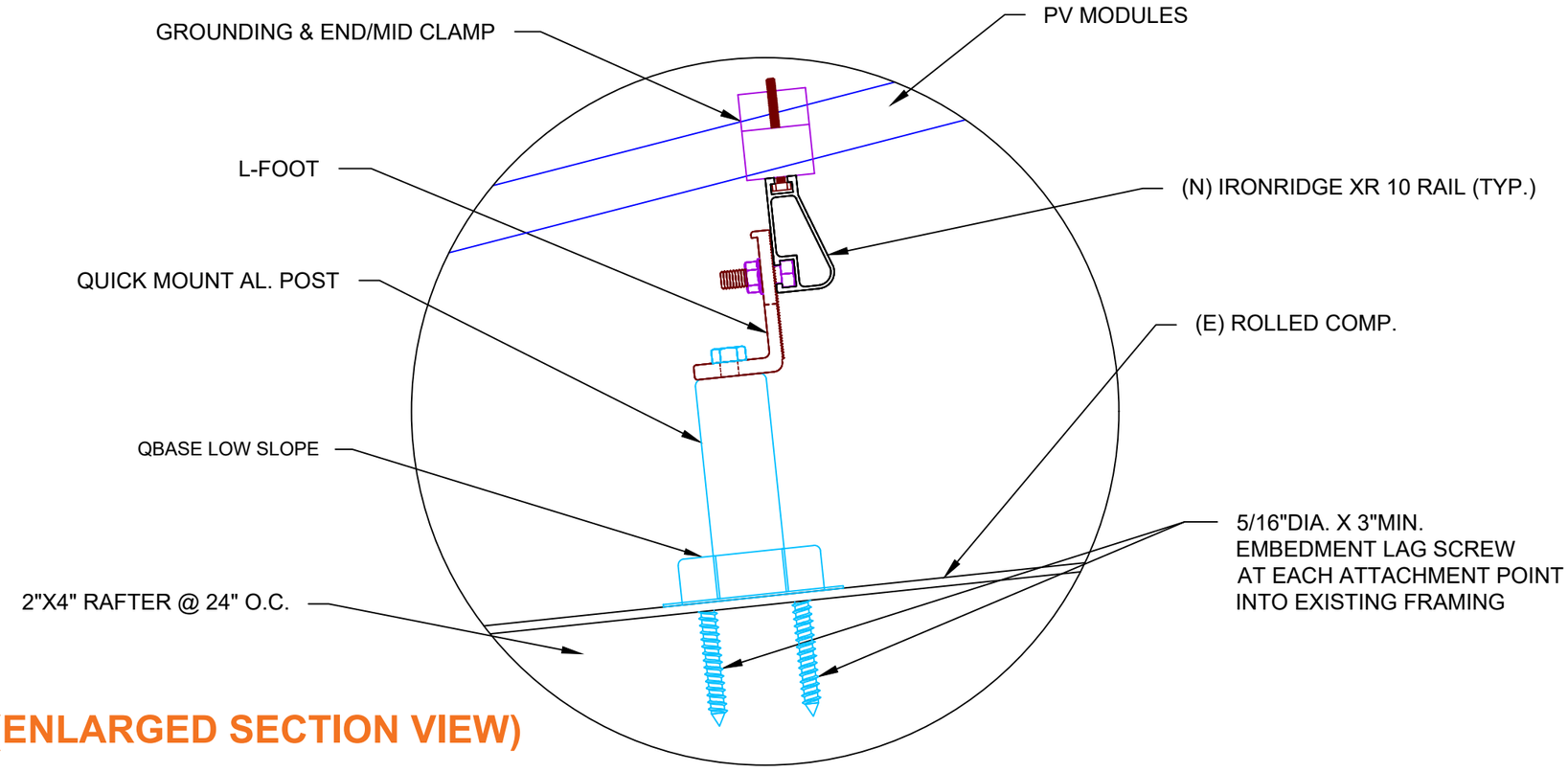
SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-2.1

REFER TO ROOF DESCRIPTION TABLE IN PV-2
FOR MOUNTING PLANE DETAILS



ATTACHMENT DETAIL
SCALE: NTS



ATTACHMENT DETAIL (ENLARGED SECTION VIEW)
SCALE: NTS

AMECO
YOUR LOCAL SOLAR EXPERT SINCE 1974
LIC. HOLDER SIGNATURE

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EMAIL: jwood@chla.usc.edu

SHEET NAME
ATTACHMENT DETAIL

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-3

SYSTEM SUMMARY STC (13.800 kW DC / 11.400 kW AC)

STC DC: (30) 460W = 13.800 kW
STC AC: (30) 380W = 11.400 kW
STORAGE: (4) 3.84kW 5.0kWh = 15.36kW 20.0kWh

- (30) REC SOLAR PTE. LTD. REC460AA PURE-RX MODULES
- (30) ENPHASE ENERGY INC. IQ8X-80-M-US [240V] MICROINVERTERS
- (4) ENPHASE ENERGY INC. IQBATTERY-5P-1P-NA BATTERIES
- (1) ENPHASE IQ SYSTEM CONTROLLER 3
- 3x BRANCHES OF 10 CONNECTED IN PARALLEL

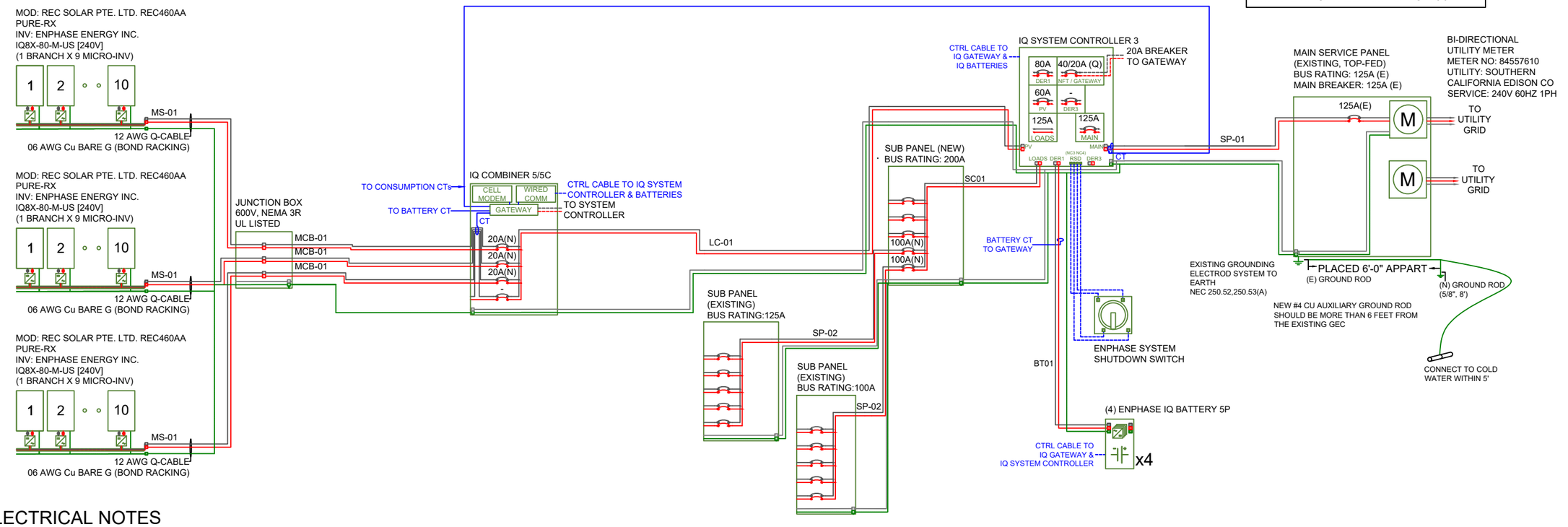
WHOLE HOME BACKUP

EXTREME CASE MODULE OUTPUT
(REC SOLAR PTE. LTD. REC460AA PURE-RX)

Isc(25°C) = 8.88A, Tisc = 0.040%/°C
Isc(T) = Isc(25°C) x [1 + Tisc x (T-25°C)]
Isc(1°C) = 8.79A, Isc(36°C) = 8.92A

Voc(25°C) = 65.30V, Tvoc = -0.240%/°C
Voc(T) = Voc(25°C) x [1 + Tvoc x (T-25°C)]
Voc(1°C) = 69.06V, Voc(36°C) = 63.58V

MAIN PANEL UPGRADE AVOIDANCE PER 705.13, PCS WILL BE USED TO LIMIT EXPORTED AMPS TO 100A



ELECTRICAL NOTES

1) ALL GROUNDING TO COMPLY WITH NEC 690.47.
2) ROOFTOP CONDUIT SHALL BE LOCATED MIN. 7/8" ABOVE ROOF SURFACE.
3) ALL TERMINALS SHALL BE MIN. 75°C RATED.
4) IQ GATEWAY BREAKER DETERMINED AT FACTORY BY MANUFACTURER (20A).
5) FOR IQ GATEWAY: USE SINGLE CT FOR PV PRODUCTION (L1 FROM ALL PV BRANCH CIRCUITS). USE SINGLE CT FOR BATTERIES (L2 FROM ALL BATTERY BRANCHES LANDING IN SYSTEM CONTROLLER). USE DOUBLE CTs FOR CONSUMPTION (L1 AND L2 FEEDING MSP MAIN BREAKER, SERVICE SIDE).
6) WHEN IQ SYSTEM CONTROLLER 3 NOT AT SERVICE ENTRANCE, REMOVE N-G JUMPER WIRE FROM CONTROLLER.
7) SINGLE LARGEST BREAKER, BASELINE LOAD, AND LRA OF LARGEST LOAD IN BACKUP LOAD PANEL CANNOT EXCEED STORAGE (ESS) OUTPUT CAPACITY, PER NEC 710.15.
8) IQ SYSTEM CONTROLLER 3 MAIN INPUT AND OUTPUT LUGS RATED FOR #6-300 KCMIL, FOR WIRES SMALLER THAN #6 REMOVE LUG AND USE AN APPROVED UL RING TERMINAL.
9) IQ SYSTEM CONTROLLER 3 COMES WITH FACTORY-INSTALLED HOLD DOWN KIT ARM, ADDITIONAL KIT NOT REQUIRED.
10) THE PROJECT SHALL COMPLY WITH THE CURRENT VERSION OF THE LOS ANGELES COUNTY FIRE DEPARTMENT ELECTRICAL POWER SOURCE DISCONNECT PLACARDING SYSTEM.
11) NEUTRAL CONDUCTOR CAN BE SIZED SMALLER THAN THE CURRENT CARRYING CONDUCTORS IF IT IS SIZED EQUAL TO OR LARGER THAN THE EQUIPMENT GROUNDING CONDUCTOR. ART. 705.95(B).

ELECTRICAL THREE LINE DIAGRAM

SCALE: NTS

AC wire details

Wire	Min Ampacity	Live	Neutral	Ground	Min EMT
MS-01	19.75A	12 AWG (Q-Cable)	-	06 AWG BARE (NOT IN CONDUIT)	-
MCB-01	19.75A	(2) 10 AWG THWN-2	-	10 AWG THWN-2	3/4 in
LC-01	59.25A	(2) 04 AWG THWN-2	04 AWG THWN-2	08 AWG THWN-2	1 in
SP-01	125A (loads)	(2) 1/0 AWG THWN-2	1/0 AWG THWN-2	06 AWG THWN-2	1-1/2 in
BT01	80A (OCPD)	(2) 03 AWG THWN-2	-	08 AWG THWN-2	1 in
SC01	125A	(2) 1/0 AWG THWN-2	1/0 AWG THWN-2	06 AWG THWN-2	1-1/2 in
SP02	100A	(2) 3 AWG THWN-2	3 AWG THWN-2	08 AWG THWN-2	1-1/4 in

AMECO
YOUR LOCAL SOLAR EXPERT SINCE 1974
LIC. HOLDER SIGNATURE

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HOMEOWNER INFO

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APN: 4438-001-029 PHONE: +16268402109
EMAIL: jwood@chla.usc.edu

SHEET NAME
THREE LINE DIAGRAM

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-4

SYSTEM SUMMARY STC (13.800 kW DC / 11.400 kW AC)

STC DC: (30) 460W = 13.800 kW
STC AC: (30) 380W = 11.400 kW
STORAGE: (4) 3.84kW 5.0kWh = 15.36kW 20.0kWh

- (30) REC SOLAR PTE. LTD. REC460AA PURE-RX MODULES
- (30) ENPHASE ENERGY INC. IQ8X-80-M-US [240V] MICROINVERTERS
- (4) ENPHASE ENERGY INC. IQBATTERY-5P-1P-NA BATTERIES
- (1) ENPHASE IQ SYSTEM CONTROLLER 3
- 3x BRANCHES OF 10 CONNECTED IN PARALLEL

NOTES AND SPECIFICATIONS:
· SIGNS AND LABELS SHALL MEET THE REQUIREMENTS OF THE 2022 CEC ARTICLE 110.21(B), UNLESS SPECIFIC INSTRUCTIONS ARE REQUIRED BY SECTION 690, OR IF REQUESTED BY THE LOCAL AHJ.
· SIGNS AND LABELS SHALL ADEQUATELY WARN OF HAZARDS USING EFFECTIVE WORDS, COLORS AND SYMBOLS.
· LABELS SHALL BE PERMANENTLY AFFIXED TO THE EQUIPMENT OR WIRING METHOD AND SHALL NOT BE HAND WRITTEN.
· LABEL SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.
· SIGNS AND LABELS SHALL COMPLY WITH ANSI Z535.4-2011, PRODUCT SAFETY SIGNS AND LABELS, UNLESS OTHERWISE SPECIFIED.
· DO NOT COVER EXISTING MANUFACTURER LABELS.
PROJECT SHALL COMPLY WITH THE MOST CURRENT LOS ANGELES COUNTY FIRE DEPARTMENT ELECTRICAL POWER SOURCE DISCONNECT PLACARDING SYSTEM

AC wire details

WireID	#Modules	Nominal Voltage	Backfeed *1.25 /cond. set	Min OCPD	Conductor sets	ccConductors /conduit	Expected max temp	Adjusted ampacity (ampacity x temp derate x conduit fill derate)	Conductor & neutral size	EGC size (Cu)	Conductor metal	Max length	V drop	Min EMT size
MS-01	10	240 V	19.75 A	20 A	1	2	36	25 x 0.88 x - = 22.00 A	12 AWG (Q-Cable)	06 AWG BARE (NOT IN CONDUIT)	Cu	50 ft	1.04 %	-
MCB-01	10	240 V	19.75 A	20 A	1	2	36	35 x 0.88 x 1.00 = 30.80 A	10 AWG THWN-2	10 AWG THWN-2	Cu	50 ft	0.62 %	3/4 in
LC-01	30	240 V	59.25 A	60 A	1	2	36	85 x 0.88 x 1.00 = 74.80 A	04 AWG THWN-2	08 AWG THWN-2	Cu	10 ft	0.10 %	1 in
SP-01	30	240 V	125.00 A	125 A	1	2	36	150 x 0.88 x 1.00 = 132 A	1/0 AWG THWN-2	06 AWG THWN-2	Cu	10 ft	0.08 %	1-1/2 in

EXTREME CASE MODULE OUTPUT
(REC SOLAR PTE. LTD. REC460AA PURE-RX)

Isc(25°C) = 8.88A, Tisc = 0.040%/°C
Isc(T) = Isc(25°C) x [1 + Tisc x (T-25°C)]
Isc(1°C) = 8.79A, Isc(36°C) = 8.92A

Voc(25°C) = 65.30V, Tvoc = -0.240%/°C
Voc(T) = Voc(25°C) x [1 + Tvoc x (T-25°C)]
Voc(1°C) = 69.06V, Voc(36°C) = 63.58V

ELECTRICAL NOTES

1) ALL EQUIPMENT TO BE LISTED BY UL OR OTHER NRTL, AND LABELED FOR ITS APPLICATION.
2) ALL CONDUCTORS SHALL BE COPPER, RATED FOR 600V AND 90°C WET ENVIRONMENT.
3) WIRING, CONDUIT, AND RACEWAYS MOUNTED ON ROOFTOPS SHALL BE ROUTED DIRECTLY TO, AND LOCATED AS CLOSE AS POSSIBLE TO THE NEAREST RIDGE, HIP, OR VALLEY.
4) WORKING CLEARANCES AROUND ALL NEW AND EXISTING ELECTRICAL EQUIPMENT SHALL COMPLY WITH NEC 110.26.
5) DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS. CONTRACTOR SHALL FURNISH ALL NECESSARY OUTLETS, SUPPORTS, FITTINGS AND ACCESSORIES TO FULFILL APPLICABLE CODES AND STANDARDS.
6) WHERE SIZES OF JUNCTION BOXES, RACEWAYS, AND CONDUITS ARE NOT SPECIFIED, THE CONTRACTOR SHALL SIZE THEM ACCORDINGLY.
7) ALL WIRE TERMINATIONS SHALL BE APPROPRIATELY LABELED AND READILY VISIBLE.
8) MODULE GROUNDING CLIPS TO BE INSTALLED BETWEEN MODULE FRAME AND MODULE SUPPORT RAIL, PER THE GROUNDING CLIP MANUFACTURER'S INSTRUCTION.
9) MODULE SUPPORT RAIL TO BE BONDED TO CONTINUOUS COPPER G.E.C.VIA WEEB LUG OR ILSCO GBL-4DBT LAY-IN LUG.
10) PV EQUIPMENT SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NEC 690.
11) EXACT LOCATION OF AUXILIARY GROUNDING TO BE DETERMINED AT TIME OF INSTALL.
12) EXISTING WIRES MUST BE REPLACED IF SMALLER THAN LISTED MINIMUM SIZES PER NEC 310.15(B)(16).
13) IQ GATEWAY BREAKER DETERMINED AT FACTORY BY MANUFACTURER (20A).
14) FOR IQ GATEWAY: USE SINGLE CT FOR PV PRODUCTION (L1 FROM ALL PV BRANCH CIRCUITS). USE SINGLE CT FOR BATTERIES (L2 FROM ALL BATTERY BRANCHES LANDING IN SYSTEM CONTROLLER). USE DOUBLE CTs FOR CONSUMPTION (L1 AND L2 FEEDING MSP MAIN BREAKER, SERVICE SIDE).
15) IQ COMBINER 5/5C REQUIRES ENPHASE HOLD DOWN KIT X-IQ-NA-HD-125A.
16) WHEN IQ SYSTEM CONTROLLER 3 NOT AT SERVICE ENTRANCE, REMOVE N-G JUMPER WIRE FROM CONTROLLER.
17) SINGLE LARGEST BREAKER, BASELINE LOAD, AND LRA OF LARGEST LOAD IN BACKUP LOAD PANEL CANNOT EXCEED STORAGE (ESS) OUTPUT CAPACITY, PER NEC 710.15.
18) IQ SYSTEM CONTROLLER 3 MAIN OUTPUT LUGS RATED FOR #6-300 KCMIL, FOR WIRES SMALLER THAN #6 REMOVE LUG AND USE AN APPROVED UL RING TERMINAL.
19) IQ SYSTEM CONTROLLER 3 COMES WITH FACTORY-INSTALLED HOLD DOWN KIT ARM, ADDITIONAL KIT NOT REQUIRED.
20) THE PROJECT SHALL COMPLY WITH THE CURRENT VERSION OF THE LOS ANGELES COUNTY FIRE DEPARTMENT ELECTRICAL POWER SOURCE DISCONNECT PLACARDING SYSTEM.
21) NEUTRAL CONDUCTOR CAN BE SIZED SMALLER THAN THE CURRENT CARRYING CONDUCTORS IF IT IS SIZED EQUAL TO OR LARGER THAN THE EQUIPMENT GROUNDING CONDUCTOR. ART. 705.95(B).

WIRING CALCULATIONS

SCALE: NTS

AMECO
YOUR LOCAL SOLAR EXPERT SINCE 1974
LIC. HOLDER SIGNATURE

CONTRACTOR: AMECO SOLAR & ROOFING
ADDRESS: 4705 LAUREL CANYON BOULEVARD, VALLEY VILLAGE, CA, USA
PHONE: 5626334400
EMAIL: info@amecosolar.com
LICENSE #: 1053172-B , C-10
ELECTRICAL LICENSE #: OREN TAMIR

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SIGNATURE & SEAL

HOMEOWNER INFO

JOHN WOOD
23407 RED ROCK RD,
TOPANGA, CA 90290, USA
APN: 4438-001-029 PHONE: +16268402109
EMAIL: jwood@chla.usc.edu

SHEET NAME
WIRING CALCULATIONS

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-5

NOTES :-

1-MINIMUM NUMBER OF DISCONNECTS REQUIRED TO TURN OFF ALL POWER SOURCES TO THE HOME(UTILITY, ESS AND PV).

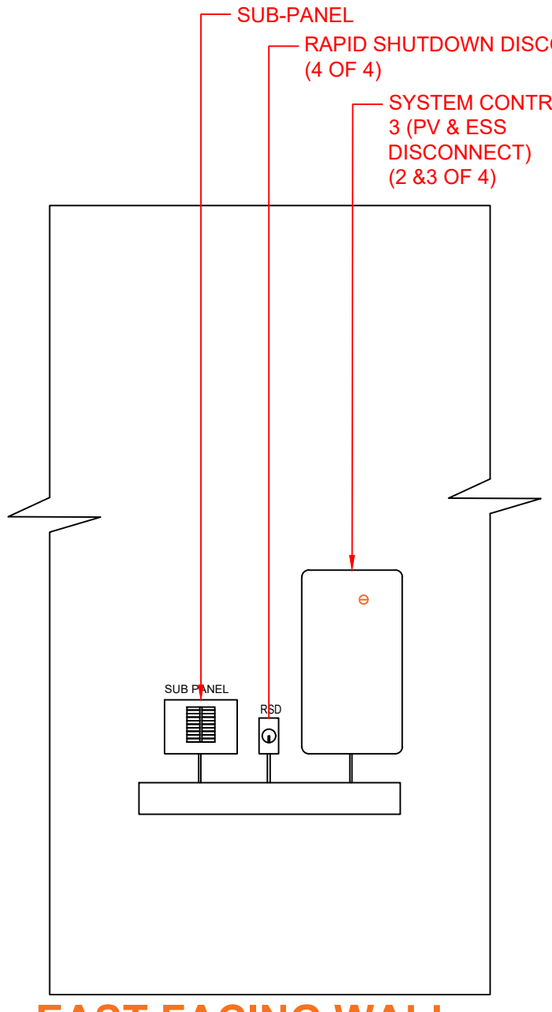
2-EXTERIOR ESS UNIT(S) WILL NOT BE INSTALLED WITHIN 5 FEET (IN ANY DIRECTION) OF ANY DOORS, WINDOWS, OPERABLE OPENINGS INTO BUILDINGS AND HVAC INLETS.

3-ALL SUCH AHJ-DEFINED OPENINGS SHALL BE DEPICTED ON A PLAN OR DETAIL, WITH DIMENSIONS FROM THE OPENING TO THE NEAREST ESS UNIT(S).

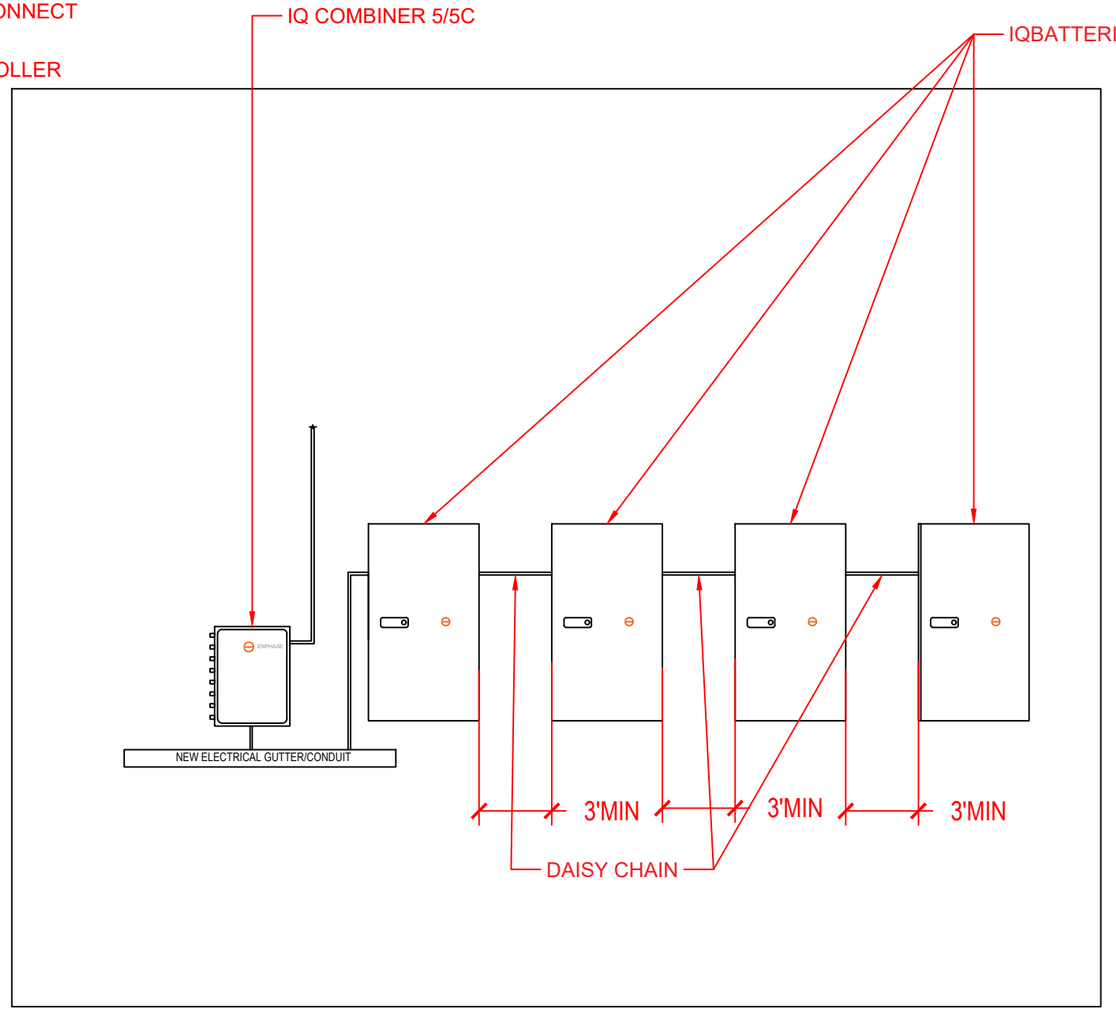
4-INDIVIDUAL ESS UNIT(S) SHALL BE SEPARATED FROM EACH OTHER BY AT LEAST 3 FEET, INCLUDING INSTALLATIONS ON ADJACENT WALLS.

POWER SOURCE DISCONNECT SCHEDULE

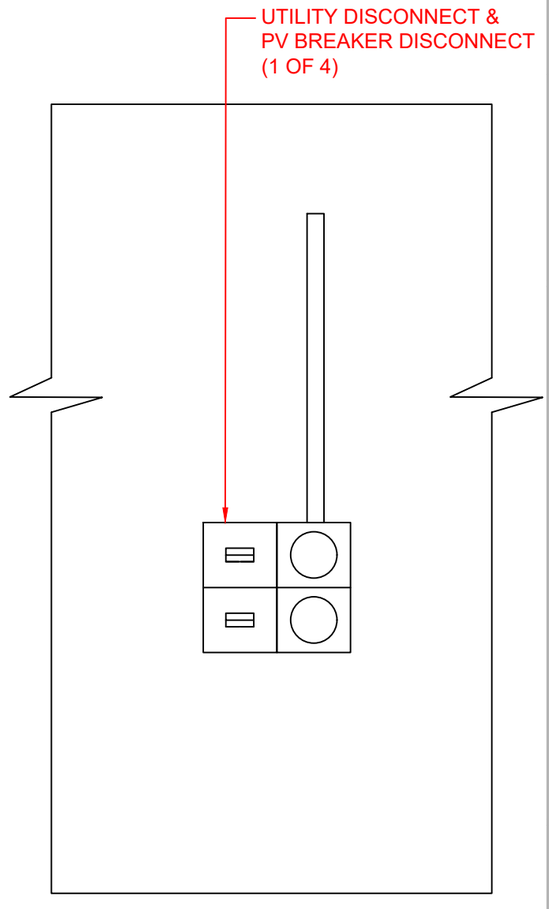
ENERGY SOURCE	DISCONNECTION NUMBER	DISCONNECTIONOPERATION /EQUIPMENT/DEVICE
UTILITY SERVICE	1 OF 4	125A MAIN BREAKER
PV BREAKER	2 OF 4	60 A PV BREAKER
ESS BREAKER	3 OF 4	80 PV ESS BREAKER
RSD	4 OF 4	RAPID SHUTDOWN SWITCH



EAST FACING WALL ELEVATION



NORTH SIDE WALL ELEVATION



METER ON PEDESTAL

EQUIPMENT ELEVATION

SCALE: NTS

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LIC. HOLDER SIGNATURE

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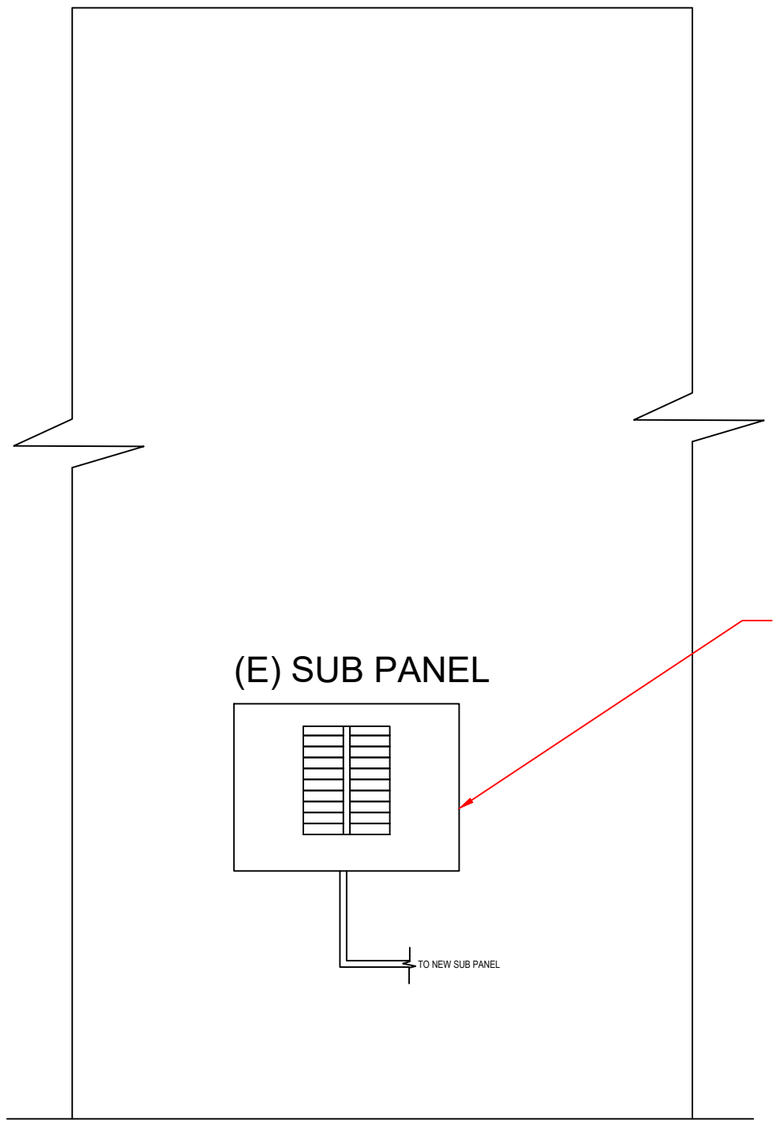
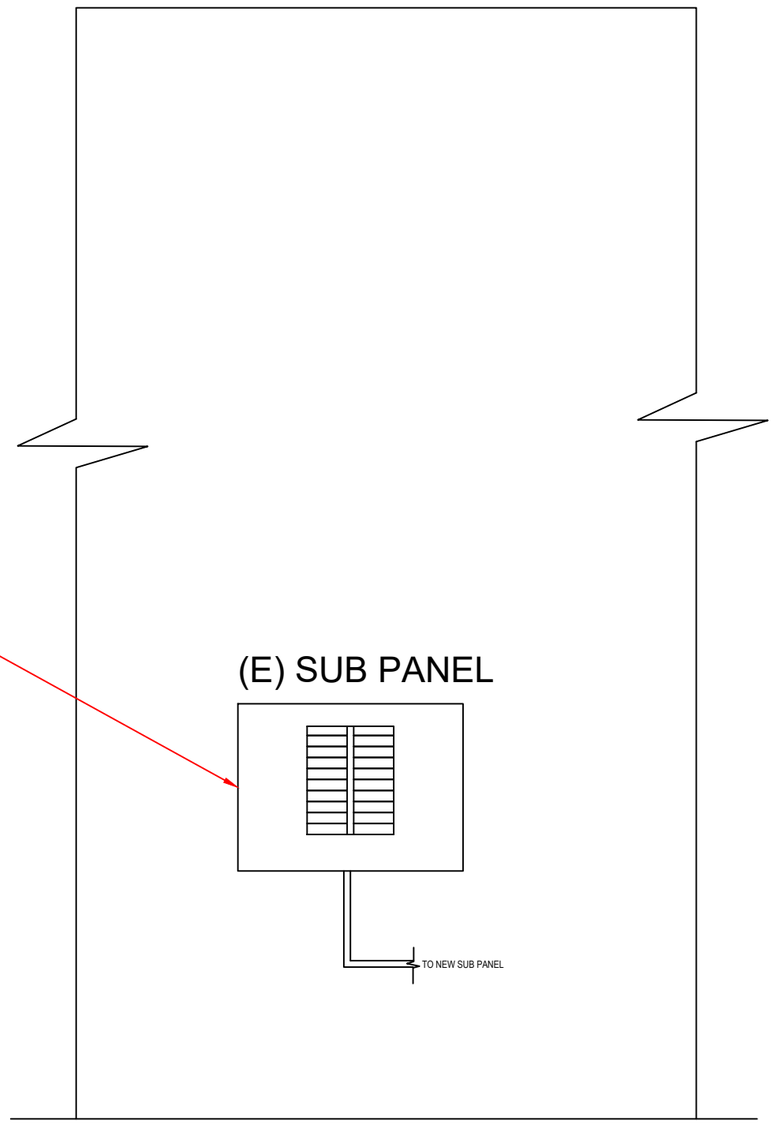
SHEET NAME
EQUIPMENT ELEVATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-5.1



INSIDE TOOL ROOM WALL ELEVATION



INSIDE UNDER THE STAIRS WALL ELEVATION

EQUIPMENT ELEVATION

SCALE: NTS

AMECO
YOUR LOCAL SOLAR EXPERT SINCE 1974

LIC. HOLDER SIGNATURE

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SHEET NAME
EQUIPMENT ELEVATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-5.2

F.D.- ELECTRICAL BLDG DISCONNECT
 # 1 OF4

LABEL LOCATION:
MAIN SERVICE PANEL

F.D.- ELECTRICAL BLDG DISCONNECT
 # 2 & 3 OF 4

LABEL LOCATION:
PV AND ESS DISCONNECT

F.D.- ELECTRICAL BLDG DISCONNECT
 # 4 OF 4

LABEL LOCATION:
RAPID SHUTDOWN DISCONNECT

#1

LABEL LOCATION:
MAIN BREAKER #1

#2

LABEL LOCATION:
SYSTEM CONTROLLER #1

#3

LABEL LOCATION:
SYSTEM CONTROLLER #1

#4

LABEL LOCATION:
RAPID SHUTDOWN DISCONNECT #1

NOTES AND SPECIFICATIONS:
· SIGNS AND LABELS SHALL MEET THE REQUIREMENTS OF THE 2022 CEC ARTICLE 110.21(B), UNLESS SPECIFIC
INSTRUCTIONS ARE REQUIRED BY SECTION 690, OR IF REQUESTED BY THE LOCAL AHJ.
· SIGNS AND LABELS SHALL ADEQUATELY WARN OF HAZARDS USING EFFECTIVE WORDS, COLORS AND SYMBOLS.
· LABELS SHALL BE PERMANENTLY AFFIXED TO THE EQUIPMENT OR WIRING METHOD AND SHALL NOT BE HAND
WRITTEN.
· LABEL SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.
· SIGNS AND LABELS SHALL COMPLY WITH ANSI Z535.4-2011, PRODUCT SAFETY SIGNS AND LABELS, UNLESS
OTHERWISE SPECIFIED.
· DO NOT COVER EXISTING MANUFACTURER LABELS.
PROJECT SHALL COMPLY WITH THE MOST CURRENT LOS ANGELES COUNTY FIRE DEPARTMENT ELECTRICAL POWER SOURCE DISCONNECT PLACARDING SYSTEM.

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SHEET NAME
PLACARDS

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-6

⚠ WARNING

ELECTRICAL SHOCK HAZARD

TERMINALS ON LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

LABEL LOCATION: INVERTERS, AC DISCONNECTS, AC COMBINER BOXES
CODE REF: CEC 2022 - 690.13(B)

RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM

LABEL LOCATION: UTILITY SERVICE ENTRANCE (MSP OR AC DISCONNECT IF LINE SIDE TAP), AND WHEREVER REQUIRED BY AHJ (INVERTERS, DC DISCONNECTS, OTHER)
CODE REF: CEC 2022 - 690.56(C)(2)

PV SYSTEM DISCONNECT

MAXIMUM AC OPERATING CURRENT: 100.0 AMPS
NOMINAL OPERATING AC VOLTAGE: 240.0 VAC

LABEL LOCATION: INTERCONNECTION Placard (MSP BACKFEED BREAKER OR TAP BOX IF LINE SIDE TAP), AC DISCONNECTS
CODE REF: CEC 2022 - 690.13(B)

⚠ WARNING

THREE POWER SUPPLY
SOURCES: UTILITY GRID, BATTERY AND PV SOLAR ELECTRIC SYSTEM

LABEL LOCATION:
UTILITY SERVICE METER AND MAIN SERVICE PANEL.
PER CODE(S): CEC 2022: 705.12(C), 706.11(A), & 706.11(B)

⚠ WARNING

TURN OFF PHOTOVOLTAIC AC DISCONNECT PRIOR TO WORKING INSIDE PANEL

LABEL LOCATION: MSP
CODE REF: CEC 2022 - 690.13(B)

⚠ WARNING

SOLAR SYSTEM CONNECTED AND ENERGISED

LABEL LOCATION: UTILITY METER
CODE REF: CEC 2022 - 690.13(B)

MAIN PHOTOVOLTAIC SYSTEM DISCONNECT

LABEL LOCATION: AC DISCONNECTS FOR UTILITY ACCESS
CODE REF: CEC 2022 - 690.13(B)

⚠ WARNING

POWER SOURCE OUTPUT CONNECTION
DO NOT RELOCATE THIS OVERCURRENT DEVICE

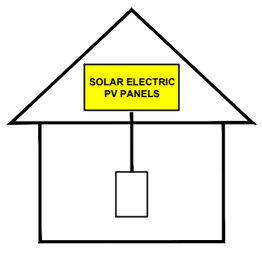
LABEL LOCATION: FIRST BACKFEED BREAKER (MSP/SUBPANEL) IF NO LINE SIDE TAP
CODE REF: CEC 2022 - 705.12(B)(3)(2)

CAUTION: MULTIPLE POWER SOURCES

LABEL LOCATION: MSP
CODE REF: CEC 2022 - 690.13(B)

SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUT DOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN THE ARRAY.



LABEL LOCATION: INTERCONNECTION POINT (MSP OR AC DISCONNECT IF LINE SIDE TAP)
CODE REF: CEC 2022 - 690.56(C)

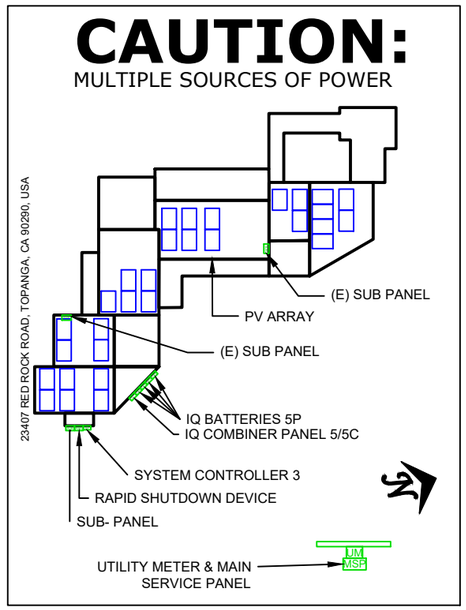
PCS CONTROLLED CURRENT SETTINGS: 100.0 AMPS
THE MAXIMUM CURRENT BACKFED BY THIS SYSTEM TO THE MAIN PANEL MAY BE CONTROLLED ELECTRONICALLY. REFER TO THE MANUFACTURER'S INSTRUCTIONS FOR MORE INFORMATION.

LABEL LOCATION: MAIN SERVICE PANEL

THIS SENSOR IS PART OF A POWER CONTROL SYSTEM. DO NOT REMOVE OR DISABLE. REPLACE WITH SAME TYPE AND RATING

LABEL LOCATION: ON CTS

CAUTION:
MULTIPLE SOURCES OF POWER



LABEL LOCATION: MSP
CODE REF: NEC 2020 - 705.10, NEC 2020 - 710.10

BATTERY
1 OF 4

LABEL LOCATION: BATTERY

BATTERY
2 OF 4

LABEL LOCATION: BATTERY

BATTERY
3 OF 4

LABEL LOCATION: BATTERY

BATTERY
4 OF 4

LABEL LOCATION: BATTERY

NOTES AND SPECIFICATIONS:
· SIGNS AND LABELS SHALL MEET THE REQUIREMENTS OF THE 2022 CEC ARTICLE 110.21(B), UNLESS SPECIFIC
INSTRUCTIONS ARE REQUIRED BY SECTION 690, OR IF REQUESTED BY THE LOCAL AHJ.
· SIGNS AND LABELS SHALL ADEQUATELY WARN OF HAZARDS USING EFFECTIVE WORDS, COLORS AND SYMBOLS.
· LABELS SHALL BE PERMANENTLY AFFIXED TO THE EQUIPMENT OR WIRING METHOD AND SHALL NOT BE HAND
WRITTEN.
· LABEL SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.
· SIGNS AND LABELS SHALL COMPLY WITH ANSI Z535.4-2011, PRODUCT SAFETY SIGNS AND LABELS, UNLESS
OTHERWISE SPECIFIED.
· DO NOT COVER EXISTING MANUFACTURER LABELS.
PROJECT SHALL COMPLY WITH THE MOST CURRENT LOS ANGELES COUNTY FIRE DEPARTMENT ELECTRICAL POWER SOURCE DISCONNECT PLACARDING SYSTEM.

AMECO
YOUR LOCAL SOLAR EXPERT SINCE 1974
LIC. HOLDER SIGNATURE

CONTRACTOR: AMECO SOLAR & ROOFING
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PHONE: 5626334400
EMAIL: info@amecosolar.com
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TOPANGA, CA 90290, USA
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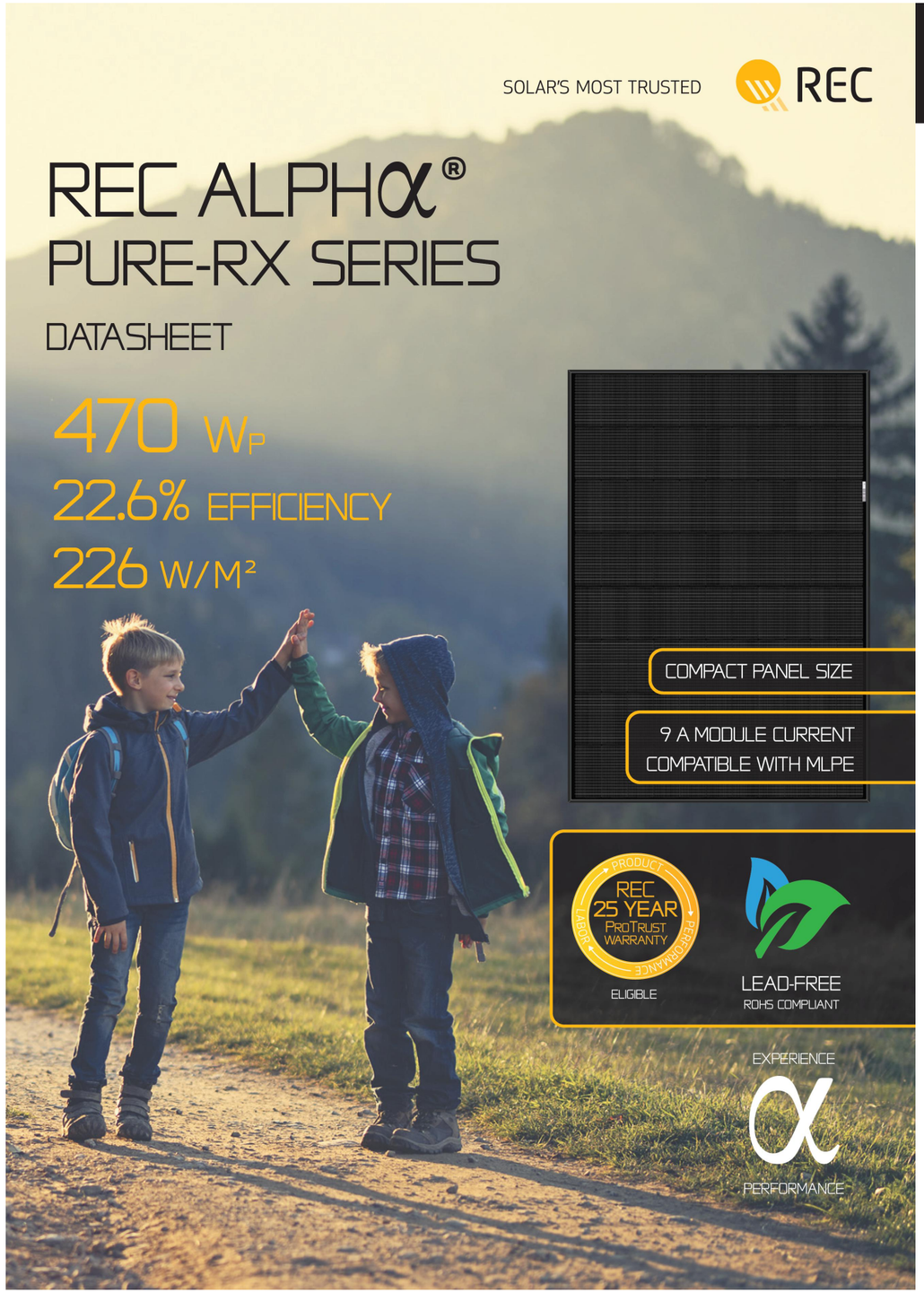
EMAIL: jwood@chla.usc.edu

SHEET NAME
PLACARDS

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-6.1



REC ALPHA® PURE-RX SERIES

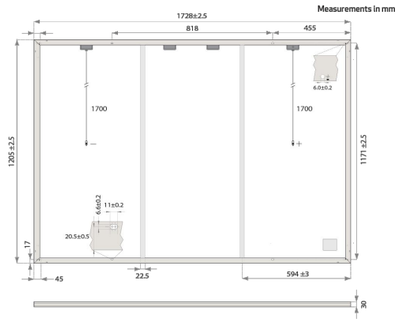
DATASHEET

SOLAR'S MOST TRUSTED

GENERAL DATA

Cell Type	88 half-cut bifacial REC heterojunction cells, with lead-free, gapless technology
Glass	3.2 mm solar glass with anti-reflective surface treatment in accordance with EN12150
Backsheet	Highly resistant polymer (Black)
Frame	Anodized aluminum (Black)
Junction Box	4-part, 4 bypass diodes, lead-free IP68 rated, in accordance with IEC 62790
Connectors	Stäubli MC4 PV-KBT4/KST4 (4 mm²) in accordance with IEC 62852, IP68 only when connected
Cable	4 mm² solar cable, 1.7 m + 1.7 m in accordance with EN50618
Dimensions	1728 x 1205 x 30 mm (2.08 m²)
Weight	23.4 kg
Origin	Made in Singapore

Measurements in mm



ELECTRICAL DATA

PRODUCT CODE*: RECxxxAA Pure-RX

STC					
Power Output - P_{MAX} (W_p)	450	455	460	465	470
Watt Class Sorting - (W)	0/+5W	0/+5W	0/+5W	0/+5W	0/+5W
Nominal Power Voltage - V_{MPP} (V)	54.3	54.6	54.9	55.2	55.4
Nominal Power Current - I_{MPP} (A)	8.29	8.34	8.38	8.43	8.49
Open Circuit Voltage - V_{OC} (V)	65.1	65.2	65.3	65.5	65.6
Short Circuit Current - I_{SC} (A)	8.81	8.84	8.88	8.91	8.95
Power Density (W/m²)	216	219	221	224	226
Panel Efficiency (%)	21.6	21.9	22.1	22.3	22.6
NMOT					
Power Output - Pmax (W_p)	343	346	350	354	358
Nominal Power Voltage - V_{MPP} (V)	51.2	51.4	51.7	52.0	52.2
Nominal Power Current - I_{MPP} (A)	6.70	6.73	6.77	6.81	6.86
Open Circuit Voltage - V_{OC} (V)	61.3	61.5	61.6	61.7	61.8
Short Circuit Current - I_{SC} (A)	7.11	7.14	7.17	7.2	7.23

Values at standard test conditions (STC: air mass AM 1.5, irradiance 1000 W/m², temperature 25°C), based on a production spread with a tolerance of P_{MAX}, V_{OC} & I_{SC} ±3% within one watt class. Nominal module operating temperature (NMOT: air mass AM 1.5, irradiance 800 W/m², temperature 20°C, windspeed 1 m/s). * Where xxx indicates the nominal power class (P_{MPP}) at STC above.

MAXIMUM RATINGS

Operational Temperature	-40 °C - 85 °C
System Voltage	1000 V
Maximum Test Load (front)	+7000 Pa (713 kg/m²)
Maximum Test Load (rear)	-4000 Pa (407 kg/m²)
Max Series Fuse Rating	25 A
Max Reverse Current	25 A

* See installation manual for mounting instructions. Design load = Test load / 1.5 (safety factor)

TEMPERATURE RATINGS*

Nominal Module Operating Temperature	44 °C ± 2°C
Temperature coefficient of P_{MAX}	-0.24% / °C
Temperature coefficient of V_{OC}	-0.24% / °C
Temperature coefficient of I_{SC}	0.04% / °C

*The temperature coefficients stated are linear values

DELIVERY INFORMATION

Panels per Pallet	33
Panels per 40 ft GP/high cube container	594 (18 Pallets)
Panels per 13.6 m truck	660 (20 Pallets)

CERTIFICATIONS

IEC 61215:2021; IEC61730:2016; UL61730	
ISO 11925-2	Ignitability (EN 13501-1 Class E)
IEC 62716	Ammonia Resistance
IEC 61701	Salt Mist (SM6)
IEC 61215:2016	Hailstone (35 mm)
UL 61730	Fire Type 2
IEC 62321	Lead-free acc. to RoHS EU 863/2015
ISO 14001; ISO9001; IEC45001; IEC62941	

Lead-Free

Take-e-way WEEE-compliant scheme

Living building challenge compliant

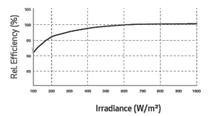
WARRANTY

	Standard	REC ProTrust	
Installed by an REC Certified Professional	No	Yes	Yes
System Size	All	<25 kW	25-500 kW
Product Warranty (yrs)	20	25	25
Power Warranty (yrs)	25	25	25
Labor Warranty (yrs)	0	25	10
Power in Year 1	98%	98%	98%
Annual Degradation	0.25%	0.25%	0.25%
Power in Year 25	92%	92%	92%

The REC ProTrust Warranty is only available on panels purchased through an REC Certified Solar Professional installer. Warranty conditions apply. See www.recgroup.com for more details

LOW LIGHT BEHAVIOUR

Typical low irradiance performance of module at STC:



Available from:

Founded in 1996, REC Group is an international pioneering solar energy company dedicated to empowering consumers with clean, affordable solar power. As Solar's Most Trusted, REC is committed to high quality, innovation, and a low carbon footprint in the solar materials and solar panels it manufactures. Headquartered in Norway with operational headquarters in Singapore, REC also has regional hubs in North America, Europe, and Asia-Pacific.

REC Solar PTE. LTD.
20 Tuas South Ave. 14
Singapore 637312
post@recgroup.com
www.recgroup.com

Specifications subject to change without notice.

Ref: PM-DS-12-06-Rev-4.2 3.2024

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LIC. HOLDER SIGNATURE

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APN: 4438-001-029 PHONE: +16268402109
EMAIL: jwood@chla.usc.edu

SHEET NAME
EQUIPMENT SPECIFICATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-7

ENPHASE

PRELIMINARY DATASHEET

IQ8X Microinverter

Our newest IQ8 Series Microinverters are the industry's first microgrid-forming*, software-defined microinverters with split-phase power conversion capability to convert DC power to AC power efficiently. The brain of the semiconductor-based microinverter is our proprietary application-specific integrated circuit (ASIC), which enables the microinverter to operate in grid-tied or off-grid mode. This chip is built using advanced 55-nm technology with high-speed digital logic and superfast response times to changing loads and grid events, alleviating constraints on battery sizing for home energy systems.

IQ8X Microinverter is the latest addition to this family, designed to support PV modules with high input DC voltage and cell counts, such as 80-half-cut cells, 88-half-cut cells and 96-cells.

Part of the Enphase Energy System, IQ8 Series Microinverters integrate with the IQ Battery, IQ Gateway, and the Enphase App monitoring and analysis software.

Enphase 25 year limited warranty

IQ8 Series Microinverters redefine reliability standards with more than one million cumulative hours of power-on testing, enabling an industry-leading limited warranty of up to 25 years.

Connect PV modules quickly and easily to the IQ8 Series Microinverters with integrated MC4 connectors.

UL CERTIFIED SAFETY

IQ8 Series Microinverters are UL Listed as PV rapid shutdown equipment and conform with regulations when installed according to the manufacturer's instructions.

*Meets UL 1741 only when installed with IQ System Controller 2 and 3.

Easy to install

- Lightweight and compact with plug-and-play connectors
- Power line communication (PLC) between components
- Faster installation with simple two-wire cabling

High productivity and reliability

- Produces power even when the grid is down*
- More than one million cumulative hours of testing
- Class II double-insulated enclosure
- Optimized for the latest high-powered PV modules

Microgrid-forming

- Complies with the latest advanced grid support
- Remote automatic updates for the latest grid requirements
- Configurable to support a wide range of grid profiles
- Meets CA Rule 21 (UL 1741-SA) and IEEE 1547:2018 (UL 1741-SB)

NOTE:

- IQ8 Series Microinverters cannot be mixed with previous generations of Enphase microinverters (IQ7 Series, IQ6 Series, and so on) in the same system.
- IQ Gateway is required to change the default grid profile at the time of installation to meet local Authority Having Jurisdiction (AHJ) requirements.

IQ8X Microinverter

INPUT DATA (DC)	UNIT	IQ8X-80-M-US
Commonly used module pairings [1]	W	320–540
Module compatibility		To meet compatibility, PV modules must be within the following maximum input DC voltage and maximum module I_{sc} Module compatibility can be checked at https://enphase.com/installers/microinverters/calculator
MPPT voltage range	V	43–60
Operating range	V	25–79.5
Minimum and maximum start voltage	V	30–79.5
Maximum input DC voltage	V	79.5
Maximum continuous operating DC current	A	10
Maximum input DC short-circuit current	A	16
Maximum module I_{sc}	A	13
Overvoltage class DC port		II
DC port backfeed current	mA	0
PV array configuration		Ungrounded array; no additional DC side protection required; AC side protection requires maximum 20 A per branch circuit

OUTPUT DATA (AC)	UNIT	IQ8X-80-M-US @240 VAC	IQ8X-80-M-US @208 VAC
Peak output power	VA	384	366
Maximum continuous output power	VA	380	360
Nominal grid voltage (L-L)	V	240, split-phase (L-L), 180°	208, single-phase (L-L), 120° [4]
Minimum and maximum grid voltage [2]	V	211–264	183–229
Max. continuous output current	A	1.58	1.73
Nominal frequency	Hz	60	
Extended frequency range	Hz	47–68	
AC short circuit fault current over three cycles	A_{rms}	2.70	
Maximum units per 20 A (L-L) branch circuit [3]		10	9
Total harmonic distortion	%	<5	
Overvoltage class AC port		III	
AC port backfeed current	mA	18	
Power factor setting		1.0	
Grid-tied power factor (adjustable)		0.85 leading ... 0.85 lagging	
Peak efficiency	%	97.4	97.2
CEC weighted efficiency	%	97	96.5
Nighttime power consumption	mW	26	17

MECHANICAL DATA	
Ambient temperature range	-40°C to 65°C (-40°F to 149°F)
Relative humidity range	4% to 100% (condensing)
DC connector type	Stäubli MC4
Dimensions (H × W × D); Weight	212 mm (8.3") × 175 mm (6.9") × 30.2 mm (1.2"); 1.1 kg (2.43 lbs)
Cooling	Natural convection – no fans
Approved for wet locations; Pollution degree	Yes; PD3
Enclosure	Class II double-insulated, corrosion-resistant polymeric enclosure
Environmental category; UV exposure rating	NEMA Type 6; outdoor

COMPLIANCE	
Certifications	CA Rule 21 (UL 1741-SA), UL 62109-1, IEEE 1547:2018 (UL 1741-SB), FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01 This product is UL Listed as PV rapid shutdown equipment and conforms with NEC 2014, NEC 2017, NEC 2020, and NEC 2023 section 690.12 and C22.1-2018 Rule 64-218 rapid shutdown of PV systems for AC and DC conductors when installed according to the manufacturer's instructions.

(1) No enforced DC/AC ratio.
(2) Nominal voltage range can be extended beyond nominal if required by the utility.
(3) Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.
(4) IQ8X is not certified for use with Enphase Three Phase Network Protection Relay (NPR-3P-208-NA) and therefore designed for single-phase operation only. Check with the local utility requirements if you wish to install single phase inverter across three phases.

IQ8X-MC4-DSH-00185-1.0-EN-US-2023-10-27

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SHEET NAME
EQUIPMENT SPECIFICATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-8

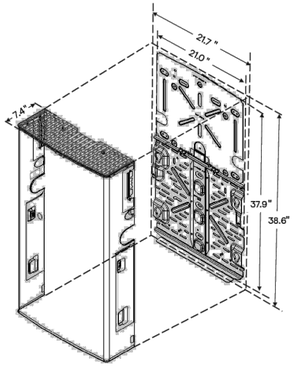
ENPHASE.

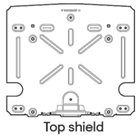
DATASHEET NA

IQ Battery 5P

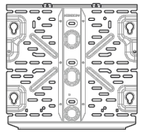
The IQ Battery 5P all-in-one AC-coupled system is powerful, reliable, simple, and safe. It has a total usable energy capacity of 5.0 kWh and includes six embedded grid-forming microinverters with a 3.84 kVA continuous power rating. It provides backup capability, and installers can quickly design the right system size to meet the customer needs.

Dimensions





Top shield



Bottom mounting bracket

Enphase 15 year limited warranty

15-year limited warranty

LISTED

UL 9540A Certified

Powerful

- Provides 3.84 kVA continuous and 7.68 kVA peak power
- Doubles the available power per kWh of prior generations of IQ Battery
- Includes six embedded IQ8D-BAT Microinverters

Reliable

- 15-year limited warranty
- Cools passively with no moving parts or fans
- Uses wired communication for fast and consistent connection
- Updates software and firmware remotely

Simple

- Fully integrated AC battery system
- Installs and commissions easily
- Supports Backup, Self-Consumption, and time-of-use (TOU) modes
- Offers homeowners remote monitoring and control from the Enphase App
- Field replaceable components

Safe

- Evaluated to UL 9540A for large scale fire testing and reduced separation distance as required in 2021 IRC R328.3.1, 2021 IFC 1207.1.5, and 2023 NFPA 855 15.3.1 and 9.1.5.[1]
- Uses lithium iron phosphate (LFP) chemistry for maximum safety and longevity

[1] Follow all installation instructions when installing Enphase ESS.

IQ Battery 5P

MODEL NUMBER	
IQBATTERY-5P-1P-NA	The IQ Battery 5P system with integrated IQ Microinverters and battery management system (BMS) with battery controller
WHAT'S IN THE BOX	
IQ Battery 5P unit	IQ Battery 5P unit (B05-T02-US00-1-3)
ID cover and conduit cover	IQ Battery 5P cover with two conduit covers for the left and right sides of the unit
Bottom mounting bracket and top shield	Bottom mounting bracket for mounting the battery on the wall. One top shield is required for UL9540A
M5 seismic screws	Two M5 seismic screws for securing the battery unit on the bottom mounting bracket
M4 grounding screws	Two M4 grounding screws for securing the top shield on the bottom mounting bracket
M5 ID cover grounding screws	Two M5 ID cover grounding screws for the EMI/EMC requirement
Cable ties	Six cable ties for securing field cables to the unit
Control (CTRL) connector	Spare CTRL connector without resistor for CTRL wiring
Control (CTRL) connector with resistor	Spare CTRL connector with resistor for CTRL wiring
Quick Install Guide (QIG)	QIG for IQ Battery unit installation instructions
OPTIONAL ACCESSORIES AND REPLACEMENT PARTS	
IQ8D-BAT-RMA	IQ8D-BAT Microinverter for field replacement
B05-T02-US00-1-3-RMA	IQ Battery 5P Battery unit for field replacement
B05-CX-0550-O	IQ Battery 5P cover for field replacement
B05-PI-0550-O	IQ Battery 5P pedestal mount
B05-CP-096-O	IQ Battery 5P conduit plates for field replacement. Includes one left-side and one right-side conduit plate
B05-WB-0543-O	IQ Battery 5P wall bracket for field replacement. Includes one bottom mounting bracket and one top shield
IQBATTERY-HNDL-5	IQ Battery 5P lifting handles. Includes one left-side and one right-side lifting handle
B05-ACFB-080-O	IQ Battery 5P AC filter board for field replacement
B05-BMSNA-0490-O	IQ Battery 5P BMS board for field replacement
B05-CANB-063-O	IQ Battery 5P control communication board for field replacement
B05-NICS-0524-O, B05-NUCS-0524-O	IQ Battery 5P control switch is preinstalled on the wiring cover for field replacement
OUTPUT (AC)	**@240 VAC[2]**
Rated (continuous) output power	3.84 kVA
Peak output power	7.68 kVA (3 seconds), 6.14 kVA (10 seconds)
Nominal voltage/range	240/211–264 VAC
Nominal frequency/range	60/57–63 Hz
Rated output current (@240 VAC)	16 A
Peak output current (@240 VAC)	32 A (3 seconds), 25.6 A (10 seconds)
Load start capability	Up to 48 A LRA[3]
Power factor (adjustable)	0.85 leading...0.85 lagging
Maximum units per 20 A branch circuit	One unit (single-phase)
Maximum conductor size supported	3 AWG
Overcurrent protection device (OCPD) for 3 AWG cable	80 A
Interconnection	Single-phase
AC round-trip efficiency[4]	90%

[2] Supported in both grid-connected and backup/off-grid operation
[3] Load start capability may vary
[4] AC to the battery to AC at 50% power rating

IQB-5P-DSH-00010-2.0-EN-US-2023-07-26

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ANSI B
11" X 17"

SHEET NUMBER
PV-9

IQ Battery 5P

BATTERY	
Total capacity	5.0 kWh
Usable capacity	5.0 kWh
DC round-trip efficiency	96%
Nominal DC voltage	76.8 V
Maximum DC voltage	86.4 V
Ambient operating temperature range (charging)	-20°C to 50°C (-4°F to 122°F) non-condensing
Ambient operating temperature range (discharging)	-20°C to 55°C (-4°F to 131°F) non-condensing
Optimum operating temperature range	0°C to 30°C (32°F to 86°F)
Chemistry	Lithium iron phosphate (LFP)
MECHANICAL DATA	
Dimensions (HxWxD)	980 mm x 550 mm x 188 mm (38.6 in x 21.7 in x 7.4 in)
Lifting weight	66.3 kg (146.1 lbs)
Total installed weight	78.9 kg (174 lbs)
Enclosure	Outdoor–NEMA 3R
IQ8D-BAT Microinverter enclosure	NEMA type 6
Cooling	Natural convection
Altitude	Up to 2,500 meters (8,202 feet)
Mounting	Wall-mount or pedestal-mount (sold separately)
FEATURES AND COMPLIANCE	
Compatibility	Compatible with IQ and M Series Microinverters, IQ System Controller 3/3G, IQ Combiner 5/5C, and IQ Gateway for grid-tied and backup operation
Communication	Wired control communication
Services	Backup, Self-Consumption, TOU, and NEM integrity
Monitoring	Enphase Installer Platform and Enphase App monitoring options; API integration
Compliance	CA Rule 21 (UL 1741-SA), IEEE 1547:2018 (UL 1741-SB, 3rd Ed.) CAN/CSA C22.2 No. 107.1-16 UL 9540, UL 9540A, UN 38.3, UL 1998, UL 991, NEMA Type 3R, AC156 EMI: 47 CFR, Part 15, Class B, ICES 003 Cell module: UL 1973, UN 38.3 Inverters: UL 62109-1, IEC 62109-2
LIMITED WARRANTY	
Limited warranty	>60% capacity, up to 15 years or 6,000 cycles[5]

[5] Whichever occurs first. Restrictions apply

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EMAIL: info@amecosolar.com
LICENSE #: 1053172-B , C-10
ELECTRICAL LICENSE #: OREN TAMIR

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HOMEOWNER INFO

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EMAIL: jwood@chla.usc.edu

SHEET NAME
EQUIPMENT SPECIFICATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-10

ENPHASE.

DATA SHEET

X-IQ-AM1-240-5
X-IQ-AM1-240-5C

IQ Combiner 5/5C

The IQ Combiner 5/5C consolidates interconnection equipment into a single enclosure and streamlines IQ Series Microinverters and IQ Gateway installation by providing a consistent, pre-wired solution for residential applications. IQ Combiner 5/5C uses wired control communication and is compatible with IQ System Controller 3/3G and IQ Battery 5P.

The IQ Combiner 5/5C, IQ Series Microinverters, IQ System Controller 3/3G, and IQ Battery 5P provide a complete grid-agnostic Enphase Energy System.

IQ Series Microinverters
The high-powered smart grid-ready IQ Series Microinverters (IQ6, IQ7, and IQ8 Series) simplify the installation process.

IQ System Controller 3/3G
Provides microgrid interconnection device (MID) functionality by automatically detecting grid failures and seamlessly transitioning the home energy system from grid power to backup power.

IQ Battery 5P
Fully integrated AC battery system. Includes six field-replaceable IQ8D-BAT Microinverters.

IQ Load Controller
Helps prioritize essential appliances during a grid outage to optimize energy consumption and prolong battery life.

Enphase 5 year limited warranty

5-year limited warranty

*For country-specific warranty information, see the https://enphase.com/installers/resources/warranty page.

Smart

- Includes IQ Gateway for communication and control
- Includes Enphase Mobile Connect (CELLMODEM-M1-06-SP-05), only with IQ Combiner 5C
- Supports flexible networking: Wi-Fi, Ethernet, or cellular
- Provides production metering (revenue grade) and consumption monitoring

Easy to install

- Mounts to one stud with centered brackets
- Supports bottom, back, and side conduit entries
- Supports up to four 2-pole branch circuits for 240 VAC plug-in breakers (not included)
- 80 A total PV branch circuits
- Bluetooth-based Wi-Fi provisioning for easy Wi-Fi setup

Reliable

- Durable NRTL-certified NEMA type 3R enclosure
- 5-year limited warranty
- 2-year labor reimbursement program coverage included for both the IQ Combiner SKUs*
- UL1741 Listed

IQ Combiner 5/5C

MODEL NUMBER	
IQ Combiner 5 (X-IQ-AM1-240-5)	IQ Combiner 5 with IQ Gateway printed circuit board for integrated revenue-grade PV production metering (ANSIC12.20 ±0.5%), consumption monitoring (± 2.5%), and IQ Battery monitoring (±2.5%). Includes a silver solar shield to deflect heat.
IQ Combiner 5C (X-IQ-AM1-240-5C)	IQ Combiner 5C with IQ Gateway printed circuit board for integrated revenue-grade PV production metering (ANSI C12.20 ±0.5%), consumption monitoring (±2.5%) and IQ Battery monitoring (±2.5%). Includes Enphase Mobile Connect cellular modem (CELLMODEM-M1-06-SP-05)[1]. Includes a silver solar shield to deflect heat.
WHAT'S IN THE BOX	
IQ Gateway printed circuit board	IQ Gateway is the platform for total energy management for comprehensive, remote maintenance, and management of the Enphase Energy System
Busbar	80 A busbar with support for 1 × IQ Gateway breaker and 4 × 20 A breaker for installing IQ Series Microinverters and IQ Battery 5P
IQ Gateway breaker	Circuit breaker, 2-pole, 10 A/15 A
Production CT	Pre-wired revenue-grade solid-core CT, accurate up to ±0.5%
Consumption CT	Two consumption metering clamp CTs, shipped with the box, accurate up to ±2.5%
IQ Battery CT	One battery metering clamp CT, shipped with the box, accurate up to ±2.5%
CTRL board	Control board for wired communication with IQ System Controller 3/3G and the IQ Battery 5P
Enphase Mobile Connect (only with IQ Combiner 5C)	4G-based LTE-M1 cellular modem (CELLMODEM-M1-06-SP-05) with a 5-year T-Mobile data plan
Accessories kit	Spare control headers for the COMMS-KIT-02 board
ACCESSORIES AND REPLACEMENT PARTS (NOT INCLUDED, ORDER SEPARATELY)	
CELLMODEM-M1-06-SP-05	4G-based LTE-M1 cellular modem with a 5-year T-Mobile data plan
CELLMODEM-M1-06-AT-05	4G-based LTE-M1 cellular modem with a 5-year AT&T data plan
Circuit breakers (off-the-shelf)	Supports Eaton BR2XX, Siemens Q2XX and GE/ABB THQL21XX Series circuit breakers (XX represents 10, 15, 20, 30, 40, 50, or 60). Also supports Eaton BR220B, BR230B, and BR240B circuit breakers compatible with the hold-down kit.
Circuit breakers (provided by Enphase)	BRK-10A-2-240V, BRK-15A-2-240V, BRK-20A-2P-240V, BRK-15A-2P-240V-B, and BRK-20A-2P-240V-B (more details in the "Accessories" section)
XA-SOLARSHIELD-ES	Replacement solar shield for IQ Combiner 5/5C
XA-ENV2-PCBA-5	IQ Gateway replacement printed circuit board (PCB) for IQ Combiner 5/5C
X-IQ-NA-HD-125A	Hold-down kit compatible with Eaton BR-B Series circuit breakers (with screws)
XA-COMMS2-PCBA-5	Replacement COMMS-KIT-02 printed circuit board (PCB) for IQ Combiner 5/5C
ELECTRICAL SPECIFICATIONS	
Rating	80 A
System voltage and frequency	120/240 VAC, 60 Hz
Busbar rating	125 A
Fault current rating	10 kAIC
Maximum continuous current rating (input from PV/storage)	64 A
Branch circuits (solar and/or storage)	Up to four 2-pole Eaton BR, Siemens Q, or GE/ABB THQL Series distributed generation (DG) breakers only (not included)
Maximum total branch circuit breaker rating (input)	80 A of distributed generation/95 A with IQ Gateway breaker included
IQ Gateway breaker	10 A or 15 A rating GE/Siemens/Eaton included
Production metering CT	200 A solid core pre-installed and wired to IQ Gateway
Consumption monitoring CT (CT-200-CLAMP)	A pair of 200 A clamp-style current transformers is included with the box
IQ Battery metering CT	200 A clamp-style current transformer for IQ Battery metering, included with the box

1. A plug-and-play industrial-grade cell modem for systems of up to 60 microinverters. Available in the United States, Canada, Mexico, Puerto Rico, and the US Virgin Islands, where there is adequate cellular service in the installation area.

IQC-5-5C-DSH-00007-3.0-EN-US-2024-03-01

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SHEET NAME
EQUIPMENT SPECIFICATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-11

MECHANICAL DATA		
Dimensions (W × H × D)		37.5 cm × 49.5 cm × 16.8 cm (14.75" × 19.5" × 6.63"). Height is 21.06" (53.5 cm) with mounting brackets
Weight		7.5 kg (16.5 lbs)
Ambient temperature range		-40°C to 46°C (-40°F to 115°F)
Cooling		Natural convection, plus heat shield
Enclosure environmental rating		Outdoor, NRTL-certified, NEMA type 3R, polycarbonate construction
Wire sizes		• 20 A to 50 A breaker inputs: 14 to 4 AWG copper conductors • 60 A breaker branch input: 4 to 1/0 AWG copper conductors • Main lug combined output: 10 to 2/0 AWG copper conductors • Neutral and ground: 14 to 1/0 copper conductors • Always follow local code requirements for conductor sizing
Communication (in-premise connectivity)		Built-in CTRL board for wired communication with IQ Battery 5P and IQ System Controller 3/3G. Integrated power line communication for IQ Series Microinverters
Altitude		Up to 2,600 meters (8,530 feet)
COMMUNICATION INTERFACES		
Integrated Wi-Fi		802.11b/g/n (dual band 2.4 GHz/5 GHz), for connecting the Enphase Cloud through the internet
Wi-Fi range (recommended)		10 m (32.8 feet)
Bluetooth		BLE4.2, 10 m range to configure Wi-Fi SSID
Ethernet		Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included), for connecting to the Enphase Cloud through the internet
Cellular/Mobile Connect		CELLMODEM-M1-06-SP-05 or CELLMODEM-M1-06-AT-05 (included with IQ Combiner 5C)
Digital I/O		Digital input/output for grid operator control
USB 2.0		Mobile Connect, COMMS-KIT-01 for IQ Battery 3/3T/10/10T, COMMS-KIT-02 for IQ Battery 5P
Access point (AP) mode		For connection between the IQ Gateway and a mobile device running the Enphase Installer App
Metering ports		Up to two Consumption CTs, one IQ Battery CT, and one Production CT
Power line communication		90–110 kHz
Web API		See https://developer-v4.enphase.com
Local API		See guide for local API
COMPLIANCE		
IQ Combiner with IQ Gateway		UL 1741, CAN/CSA C22.2 No. 107.1, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 60601-1/CANCSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production)
COMPATIBILITY		
PV	Microinverters	IQ6, IQ7, and IQ8 Series Microinverters
COMMS-KIT-01 [2]	IQ System Controller	EP200G101-M240US00
	IQ System Controller 2	EP200G101-M240US01
	IQ Battery	ENCHARGE-3-1P-NA, ENCHARGE-10-1P-NA, ENCHARGE-3T-1P-NA, ENCHARGE-10T-1P-NA
COMMS-KIT-02 [3]	IQ System Controller 3	SC200D111C240US01, SC200G111C240US01
	IQ Battery	IQBATTERY-5P-1P-NA

2. For information about IQ Combiner 5/5C compatibility with the 2nd-generation batteries, refer to the compatibility matrix.
3. IQ Combiner 5/5C comes pre-equipped with COMMS-KIT-02.

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SHEET NAME
EQUIPMENT SPECIFICATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-12

ENPHASE.

DATASHEET

IQ System Controller 3/3G

The Enphase IQ System Controller 3/3G connects the home to grid power, the IQ Battery system, and solar PV. It provides microgrid interconnect device (MID) functionality by automatically detecting and seamlessly transitioning the home energy system from grid power to backup power in the event of a grid failure. It consolidates interconnection equipment into a single enclosure and streamlines grid-independent capabilities of PV and storage installations by providing a consistent, pre-wired solution for residential applications.

IQ Series Microinverters
The high-powered smart grid-ready IQ Series Microinverters (M Series, IQ6, IQ7, and IQ8 Series) dramatically simplify the installation process

IQ Battery 5P
Fully integrated AC battery system. Includes six field-replaceable IQ8D-BAT microinverters

IQ Combiner 5/5C
Consolidates PV interconnection equipment into a single enclosure and streamlines IQ Series Microinverters and IQ Gateway installation by providing a consistent, pre-wired solution for residential applications

IQ Load Controller
Helps prioritize essential appliances during a grid outage to optimize energy consumption and prolong battery life

Enphase 10 year limited warranty

10-year limited warranty

UL LISTED

Easy to install

- Connects to service entrance[1] or main load center
- Includes neutral-forming transformer
- Mounts on single stud with centered brackets
- Provides conduit entry from the bottom, left, or right
- Includes color-coded wires for ease of wiring the System Shutdown Switch
- Integrates hold-down functionality to eliminate the need for hold-down kits and special breakers

Flexible

- Can be used for Sunlight Backup, Home Essentials Backup, or Full Energy Independence
- IQ System Controller 3 integrates with IQ Battery 5P
- IQ System Controller 3G integrates with select AC standby generators. See the Generator integration tech brief for a list of generators
- Provides a seamless transition to backup

Safe and reliable

- System Shutdown Switch can be used to disconnect PV, battery, and generator systems
- System Shutdown Switch acts as a rapid shutdown initiator of grid-forming IQ8 PV Microinverters for the safety of maintenance technicians/first responders
- 10-year limited warranty

(1) IQ System Controller 3 is not suitable for use as service equipment in Canada.

IQ System Controller 3/3G

DATASHEET

MODEL NUMBER	DESCRIPTION
SC200D111C240US01	IQ System Controller 3 streamlines the grid-independent capabilities of PV and storage installations. Integrates hold-down capability. Supports IQ Battery 5P units up to 40 kWH (without PCS*) and 80 kWh (with PCS*). **Does not support generator integration**
SC200G111C240US01	IQ System Controller 3G streamlines the grid-independent capabilities of PV and storage installations. Integrates hold-down capability. Supports IQ Battery 5P units up to 20 kWH (without PCS*) and 40 kWh (with PCS*). **Supports generator integration**
WHAT'S IN THE BOX	
IQ System Controller 3/3G	Includes neutral-forming transformer (NFT) and microgrid interconnect device (MID)
System Shutdown Switch	Includes pre-wired red, black, orange, and purple 12 AWG wire (EP200G-NA-02-RSD)
Wall-mounting bracket	Screws provided in the accessories kit for mounting
4-pole circuit breaker	Pre installed Quad breaker (BRK-20A40A-4P-240V), 20 A-40 A, 10 kAIC, Eaton BQC220240[2]
Accessories kit	IQ System Controller 3/3G literature kit, including labels, CTRL headers, screws, filler plates, and Quick Install Guide (QIG) (EP200G-LITKIT)
OPTIONAL ACCESSORIES AND REPLACEMENT PARTS	
CT-200-SPLIT	200 A split core current transformers for metering (accuracy: ±2.5%)[3]
CT-200-CLAMP	200 A clamp-type current transformers for metering (accuracy: ±2.5%)[3]
Main or load circuit breakers (order separately, as needed)[4]	• BRK-100A-2P-240V : 2-pole, 100A, 25kAIC, CSR2100N or CSR2100 • BRK-125A-2P-240V: 2-pole, 125A, 25kAIC, CSR2125N • BRK-150A-2P-240V: 2-pole, 150A, 25kAIC, CSR2150N • BRK-175A-2P-240V: 2-pole, 175A, 25kAIC, CSR2175N • BRK-200A-2P-240V: 2-pole, 200A, 25kAIC, CSR2200N
Distributed energy resource (DER) circuit breakers (order separately, as needed)[5]	• BRK-20A-2P-240V-B: 2-pole, 20 A, 10 kAIC, BR220B/BR220 • BRK-30A-2P-240V-B: 2-pole, 30 A, 10 kAIC, BR230 • BRK-40A-2P-240V-B: 2-pole, 40 A, 10 kAIC, BR240B/BR240 • BRK-60A-2P-240V: 2-pole, 60 A, 10 kAIC, BR260 • BRK-80A-2P-240V: 2-pole, 80 A, 10 kAIC, BR280
EP200G-HNDL-R1	IQ System Controller 3/3G installation handle kit (order separately)
CTRL-SC3-NA-01	Control cable, 500 ft. spool (order separately)
ALTERNATE DER CIRCUIT BREAKERS	
GE/ABB	THQL21xx (20/40/60/80 A)
Siemens	Q2xx (20/40/60/80 A)
Siemens (quad breaker)	Q24020CT2 (20/40 A)
ELECTRICAL SPECIFICATIONS	
Nominal voltage/Range (L-L)	240 V~[6]/±20%
Voltage measurement accuracy	±1% V nominal (±1.2V L-N and ±2.4V L-L)
Auxiliary (dry) contact for load control, excess PV control, and generator two-wire control	24 V, 1 A
Nominal frequency/Range	60 Hz/56–63 Hz
Frequency measurement accuracy	±0.1 Hz
Maximum continuous current rating	160 A
Maximum input overcurrent protection device	200 A
Maximum output overcurrent protection device	200 A
Maximum overcurrent protection device rating for generator circuit	80 A (IQ System Controller 3G only - SC200G111C240US01)
Maximum overcurrent protection device rating for storage circuit	2 x 80 A (IQ System Controller 3 - SC200D111C240US01), 1 x 80 A (IQ System Controller 3G - SC200G111C240US01)

(2) Factory installed quad breaker (Siemens or Eaton). NFT pre-wired to 40 A terminal of the quad breaker.
(3) Two units of CT-200-SPLIT or CT-200-CLAMP must be bought separately for generator integration.
(4) The IQ System Controller 3 is rated at 22 kAIC.
(5) Integrated hold-down kit support breakers (BR230/BR230/BR240) without predrilled hole.
Integrated hold-down kit also supports GE/ABB and Siemens as mentioned under section alternate DER circuit breakers.
(6) "~" indicates alternating current (AC) supply.
(*) Power Control System.

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SHEET NAME
EQUIPMENT SPECIFICATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-13

DATASHEET

ELECTRICAL SPECIFICATIONS		
Maximum overcurrent protection device rating for PV combiner unit	80 A	
Internal busbar rating	200 A	
Neutral-forming transformer (NFT)	• Breaker rating (pre-installed): 40 A between L1 and Neutral; 40 A between L2 and Neutral • Continuous rated power: 3,600 VA • Maximum continuous unbalance current: 30 A @ 120 V • Peak unbalanced current: 80 A @ 120 V for two seconds	
MECHANICAL DATA		
Dimensions (WxHxD)	50 cm x 91.6 cm x 24.6 cm (19.7 in x 36 in x 9.7 in)	
Weight	39.4 kg (87 lbs)	
Ambient temperature range	-40°C to 50°C (-40°F to 122°F)	
Cooling	Natural convection and a heat shield	
Enclosure environmental rating	Outdoor, NEMA type 3R, polycarbonate construction	
Maximum altitude	2500 meters (8200 feet)	
WIRE SIZES		
Connections (All lugs are rated to 90°C)	Main lugs and backup load lugs CSR breaker bottom wiring lugs AC combiner lugs, IQ Battery lugs, and generator lugs Neutral (large lugs)	Cu/Al: 6 AWG–300 kcmil Cu/Al: 2 AWG–300 kcmil 14 AWG–2 AWG Cu/Al: 6 AWG–300 kcmil
Neutral and ground bars	Large holes (5/16–24 UNF) Small holes (10–32 UNF)	14 AWG–1/0 AWG 14 AWG–6 AWG
COMPLIANCE		
Compliance (under progress)	UL 1741, UL 1741 SA, IEEE 1547:2018 (UL 1741-SB, 3rd Ed.), UL 1741 PCS CRD, UL1 998, UL 869A, UL 675, UL 508[7], UL 50E[7] CSA 22.2 No. 107.1, 47 CFR Part 15 Class B, ICES 003, ICC ES AC156. The IQ System Controller 3/3G is approved for use as service equipment in the United States	
WARRANTY		
Limited warranty (restrictions apply)	Up to 10 years (EP200G-NA-02-RSD has a 5-year warranty)	
COMPATIBILITY[8]		
Battery	IQ Battery 5P (IQBATTERY-5P-1P-NA)	
Microinverters	IQ8, IQ7, IQ6, and M Series Microinverters[9]	
IQ Combiner	IQ Combiner 5/5C (X-IQ-AM1-240-5C, X-IQ-AM1-240-5)	
Communications Kit 2	COMMS-KIT-02	

(7) Sections from these standards were used during the safety evaluation and included in the UL 1741 listing.
(8) For more details, refer to IQ System Controller 3/3G Quick Install Guide.
(9) M Series Microinverters can only be supported in states that have not yet adopted IEEE 1547:2018.
Enphase does not support mixing IQ8 Series Microinverters with other series on the same IQ Gateway.

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SHEET NAME
EQUIPMENT SPECIFICATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-14

Datasheet

IRONRIDGE

Flush Mount System

Built for solar's toughest roofs.

IronRidge builds the strongest mounting system for pitched roofs in solar. Every component has been tested to the limit and proven in extreme environments.

Our rigorous approach has led to unique structural features, such as curved rails and reinforced flashings, and is also why our products are fully certified, code compliant and backed by a 20-year warranty.

Strength Tested
All components evaluated for superior structural performance.

PE Certified
Pre-stamped engineering letters available in most states.

Class A Fire Rating
Certified to maintain the fire resistance rating of the existing roof.

Design Assistant
Online software makes it simple to create, share, and price projects.

UL 2703 Listed System
Entire system and components meet newest effective UL 2703 standard.

20-Year Warranty
Twice the protection offered by competitors.

Datasheet

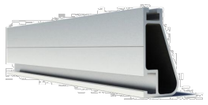
XR Rails

XR10 Rail

A low-profile mounting rail for regions with light snow.

- 6' spanning capability
- Moderate load capability
- Clear and black finish

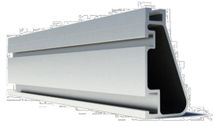
XR100 Rail



The ultimate residential solar mounting rail.

- 8' spanning capability
- Heavy load capability
- Clear and black finish

XR1000 Rail



A heavyweight mounting rail for commercial projects.

- 12' spanning capability
- Extreme load capability
- Clear anodized finish

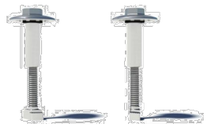
Bonded Splices

All rails use internal splices for seamless connections.

- Self-drilling screws
- Varying versions for rails
- Forms secure bonding

Clamps & Grounding

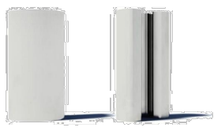
UFOs



Universal Fastening Objects bond modules to rails.

- Fully assembled & lubed
- Single, universal size
- Clear and black finish

Stopper Sleeves



Snap onto the UFO to turn into a bonded end clamp.

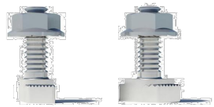
- Bonds modules to rails
- Sized to match modules
- Clear and black finish

Grounding Lugs

Connect arrays to equipment ground.

- Low profile
- Single tool installation
- Mounts in any direction

Microinverter Kits



Mount MIs or POs to XR Rails.

- Bonds devices to rails
- Kit comes assembled
- Listed to UL 2703

Attachments

FlashFoot2

Flash and mount XR Rails with superior waterproofing.

- Twist-on Cap eases install
- Wind-driven rain tested
- Mill and black finish

Slotted L-Feet

Drop-in design for rapid rail attachment.

- Secure rail connections
- Slot for vertical adjusting
- Clear and black finish

Bonding Hardware

Bond and attach XR Rails to roof attachments.

- T & Square Bolt options
- Nut uses 7/16" socket
- Assembled and lubricated

Flush Standoffs

Raise Flush Mount System to various heights.

- Works with vent flashing
- 4" and 7" lengths
- Ships assembled

Resources

Design Assistant
Go from rough layout to fully engineered system. For free.
Go to IronRidge.com/design

NABCEP Certified Training
Earn free continuing education credits, while learning more about our systems.
Go to IronRidge.com/training

AMECO
YOUR LOCAL SOLAR EXPERT SINCE 1974
LIC. HOLDER SIGNATURE

CONTRACTOR: AMECO SOLAR & ROOFING
ADDRESS: 4705 LAUREL CANYON BOULEVARD, VALLEY VILLAGE, CA, USA
PHONE: 5626334400
EMAIL: info@amecosolar.com
LICENSE #: 1053172-B , C-10
ELECTRICAL LICENSE #: OREN TAMIR

REVISIONS

DESCRIPTION	DATE	REV
INITIAL DESIGN	06/03/2024	00
CHANGE REQUEST	06/24/2024	A
CHANGE REQUEST	07/18/2024	B
CHANGE REQUEST	07/19/2024	C
Change request	09/03/2024	D

SIGNATURE & SEAL

HOMEOWNER INFO

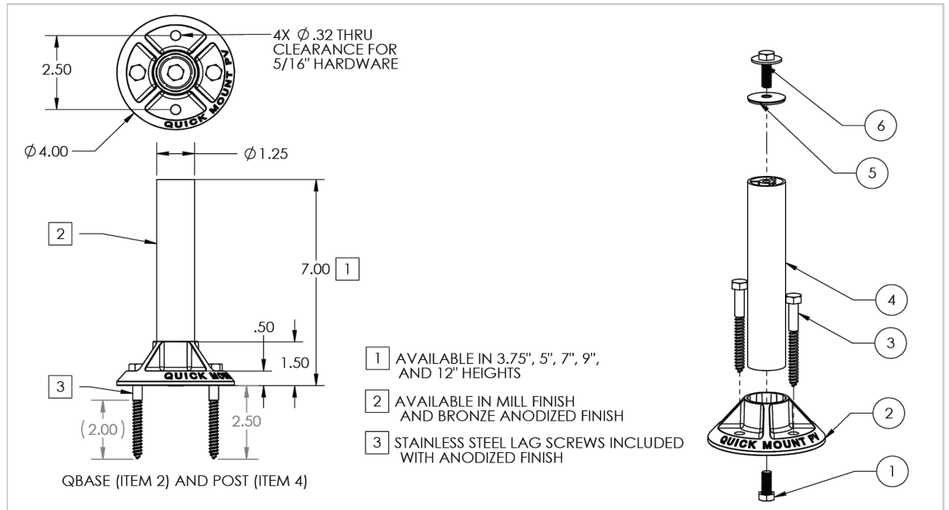
JOHN WOOD
23407 RED ROCK RD,
TOPANGA, CA 90290, USA
APN: 4438-001-029 PHONE: +16268402109
EMAIL: jwood@chla.usc.edu

SHEET NAME
EQUIPMENT SPECIFICATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-15

QBase Low Slope Mount | QMLSH



QBASE (ITEM 2) AND POST (ITEM 4)

ITEM NO.	DESCRIPTION	QTY.
1	CAP SCREW, HEX HEAD, 5/16"-18 X 3/4" UNC-2A. GRADE 8, MAGNI	1
2	QBASE, 1-1/4" ID, FOR 5/16" HARDWARE, A360 CAST AL	1
3	LAG SCREW, HEX HEAD, 5/16" X 3", ZINC	2
4	POST, 1.25" OD X 6.5", 6063-T5/6063-T6, MILL	1
5	WASHER, SEALING, 5/16" ID X 1-1/4" OD, EPDM BONDED SS	1
6	CAP SCREW, HEX HEAD, 5/16"-18 X 1" UNC-2A, NYLON PATCH, W/ CAPTIVE WASHER, 1"OD, 18-8 SS	1

DO NOT SCALE DRAWING

Quick Mount PV®

TITLE: QMLSH: QBASE LOW SLOPE MOUNT

UNLESS OTHERWISE SPECIFIED:	SIZE	DRAWN BY: RAD	REV
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± 1/8 TWO PLACE DECIMAL ±.19 THREE PLACE DECIMAL ±.094	A	DATE: 8/9/2019	10
	SCALE: 1:3	WEIGHT: 1.02	SHEET 1 OF 1

5 4 3 2 1

Lag pull-out (withdrawal) capacities (lbs) in typical lumber:			
	Lag Bolt Specifications		
	Specific Gravity	2/ea 5/16" shaft per 2.5" thread depth	5/16" shaft per 1" thread depth
Douglas Fir, Larch	.50	1330	266
Douglas Fir, South	.46	1175	235
Engelmann Spruce, Lodgepole Pine (MSR 1650 f & higher)	.46	1175	235
Hem, Fir	.43	1060	212
Hem, Fir (North)	.46	1175	235
Southern Pine	.55	1535	307
Spruce, Pine, Fir	.42	1025	205
Spruce, Pine, Fir (E of 2 million psi and higher grades of MSR and MEL)	.50	1330	266

Sources: American Wood Council, NDS 2005, Table 11.2 A, 11.3.2 A

Notes:

1) Thread must be embedded in a rafter or other structural roof member.
2) See IBC for required edge distances.

Quick Mount PV®
RESPECT THE ROOF

QBase Low Slope Mount Instructions

WARNING: Quick Mount PV products are NOT designed and should NOT be used to anchor fall protection equipment.

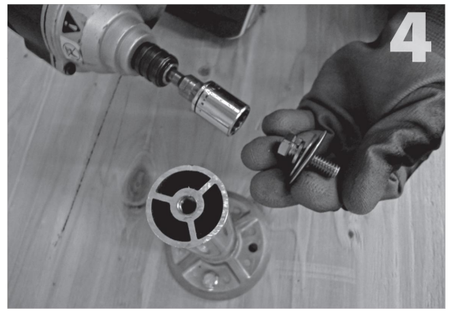
Installation Tools Required: Drill with 7/32" bit, impact gun with 1/2" socket, 1 tube of sealant compatible with roofing materials, pencil, chalk line

CAUTION: Prior to installation, check that proper screw embedment will be achieved for the necessary site load and roofing configurations.

Locate the desired mount placement over a rafter (or custom wood blocking). Using the base as a template, mark the two penetration points with either a pen or light drilling. Use two opposing holes on the base plate, parallel to the structural member.

Drill both pilot holes with a 7/32-inch bit. Make sure to hold the drill square to the rafter. The lag bolts must be anchored into a structural member, so it is very important to hit the center of the rafter with your pilot holes. Fill the pilot holes with a sealant compatible with roofing materials.

Prior to attaching the base to the roof, place the grade-8 hex bolt (item 1) in the bottom of the base (item 2) and screw the post (item 4) in. This is easier than adding the post after securing the base to the roof. Attach the base/post assembly to the roof with two lag bolts (item 3).



Attach the hardware (items 5-8) to the top of the post. (Be sure to seal off the post from weather exposure with the sealing washer (item 5), in the interim before racks are installed.) You are now ready to flash the mount, roof around it, and attach racking. Aluminum flashings for built-up roofs are available from Quick Mount PV in 4" and 8" cones (sold separately). For membrane roofs, be sure to use manufacturer-specified flashing and utilize the services of a certified roofer.

LA RESEARCH REPORTS (LARR): Approved for use in the City of Los Angeles per LARR #26194

Quick Mount PV®

925-478-8269 | www.quickmountpv.com | tech@quickmountpv.com
2700 Mitchell Dr. | Walnut Creek, CA 94598

AMECO
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EQUIPMENT SPECIFICATION

SHEET SIZE
ANSI B
11" X 17"

SHEET NUMBER
PV-16

LA COUNTY PLANNING

PROJECT NUMBER PRJ2024-003039-(3)

HEARING DATE May 27, 2025

REQUESTED ENTITLEMENT(S)

Administrative Coastal Development Permit ("ACDP") No. RPPL2024004507

PROJECT SUMMARY

OWNER / APPLICANT

John Wood/ Idan Shimony

MAP/EXHIBIT DATE

September 3, 2024

PROJECT OVERVIEW

ACDP to authorize 30 roof-mounted solar modules and appurtenant equipment, including junction boxes and associated wiring, affixed to an existing single-family residence that has development restrictions requiring a new CDP for any future development.

LOCATION

23407 Red Rock Road, Topanga

ACCESS

Red Rock Road

ASSESSORS PARCEL NUMBER(S)

4438-001-029

SITE AREA

9 acres

GENERAL PLAN / LOCAL PLAN

Santa Monica Mountains Local Coastal Program

PLANNING AREA

Santa Monica Mountains

LAND USE DESIGNATION

RL20 (Rural Land, One Dwelling Unit per 20 Acres Maximum Density)

ZONE

R-C-20 (Rural Coastal – 20-Acre Minimum Required Lot Area)

PROPOSED UNITS	MAX DENSITY/UNITS	COMMUNITY STANDARDS DISTRICT
N/A	N/A	N/A

ENVIRONMENTAL DETERMINATION (CEQA)

Class 3 Categorical Exemption – New Construction or Conversion of Small Structures

KEY ISSUES

- Consistency with the Santa Monica Mountains Local Coastal Program
- Satisfaction of the following portions of Title 22 of the Los Angeles County Code:
  - Section 22.44.850 (Santa Monica Mountains Coastal Development Permit Findings)
  - Section 22.44.1560 (Development Standards for Solar Energy Devices)

CASE PLANNER:	PHONE NUMBER:	E-MAIL ADDRESS:
Jon Schneider	(213) 974-0051	jschneider@planning.lacounty.gov

LOS ANGELES COUNTY
DEPARTMENT OF REGIONAL PLANNING

DRAFT FINDINGS OF THE HEARING OFFICER
AND ORDER
PROJECT NO. PRJ2024-003039
ACDP NO. RPPL2024004507

RECITALS

1. **HEARING DATE(S).** The Los Angeles County ("County") Hearing Officer conducted a duly noticed public hearing in the matter of Administrative Coastal Development Permit No. RPPL2024004507 ("ACDP") on May 27, 2025.

2. **HEARING PROCEEDINGS**. [RESERVED]

3. **ENTITLEMENT(S) REQUESTED.** The permittee, Idan Shimony ("Permittee"), requests the ACDP to authorize 30 roof-mounted solar modules and appurtenant equipment affixed to an existing single-family residence ("Project") on a property located 23407 Red Rock Road ("Project Site") in the R-C-20 (Rural Coastal—20 Acre Minimum Required Lot Area) Zone within the Santa Monica Mountains Coastal Zone pursuant to Los Angeles County Code ("County Code") Section 22.44.940.

4. **ENTITLEMENT(S) REQUIRED.** The ACDP is required to authorize the placement and maintenance of 30 roof-mounted solar modules and appurtenant equipment, including junction boxes and wiring, affixed to an existing single-family residence in the R-C-20 Zone, pursuant to County Code Sections 22.44.810, 22.44.1560, and 22.44.1750. Roof-mounted solar energy facilities associated with an existing single-family residence would normally be exempt from the requirement to obtain a CDP per the requirements of the Santa Monica Mountains Local Implementation Program ("LIP") (County Code Section 22.44.820.A). However, Coastal Development Permit No. 5-81-439, issued by the California Coastal Commission on December 15, 1988, which approved the construction of the 2,534-square-foot single-family residence with a 500-square-foot detached guest house, 200-square-foot driveway, water well, and septic system, was conditioned with development restrictions requiring a new CDP for any future development. Further, the residence is situated within a mapped Coastal Commission appeal jurisdiction zone of the Santa Monica Mountains Local Coastal Program ("LCP") Land Use Plan ("LUP"). Any project that can be appealed to the Coastal Commission requires a hearing, per the requirements of the LIP (County Code Section 22.44.940.E) and the Project does not require review by the Environmental Review Board ("ERB") or the Department biologist, as it consists of a minor improvement to a property with existing development approved pursuant to a valid, unexpired CDP, is proposed within the lawfully-established building site area, and does not require additional fuel modification in H1 or H2 habitats (County Code Section 22.44.1860.C.2.c). Therefore, an ACDP with a public hearing is required for the Project.

5. **LOCATION.** The Project is located at 23407 Red Rock Road, Topanga (Assessor's Parcel Number 4438-001-029) within the Santa Monica Mountains Planning Area.

6. **LAND USE DESIGNATION.** The Project Site is located within the RL20 (Rural Land 20, One Dwelling Unit per 20 Acres Maximum Density) land use designation of the LUP. The principal allowed use in the RL20 land use designation is single-family detached residences on relatively large lots.

7. **ZONING.** The Project Site is in the Malibu Zoned District and is zoned R-C-20. Pursuant to County Code Sections 22.44.1750.A.2 and 22.44.1560.B.2, a solar energy array is a use and structure accessory to the principal permitted use (a single-family residence) and requires an ACDP.

8. **SURROUNDING LAND USES AND ZONING**

LOCATION	LAND USE POLICY	ZONING	EXISTING USES
NORTH	RL20, OS (Open Space)	R-C-20, O-S (Open Space)	Single-family residences, open space, vacant
EAST	RL20, RV (Rural Village), OS	R-C-20, R-C-15,000 (Rural Coastal, 15,000 Square-Foot Minimum Required Lot Area), O-S	Single-family residences, open space, vacant, commercial
SOUTH	RL20, OS-P (Open Space- Parks)	R-C-20, O-S-P (Open Space, Parks), R-C-15,000	Single-family residences, open space/parks, vacant
WEST	OS-P, RL20	O-S-P, R-C-20	Open space/parks, vacant

9. **PROJECT AND SITE PLAN DESCRIPTION.**

A. Existing Site Conditions

The Project Site is approximately nine acres in size and consists of one legal lot developed with a 2,534-square-foot single-family residence with detached accessory structures. The parcel is irregularly shaped and slopes downward from the west to the east. The residence and detached accessory structures are situated on a relatively flat area on the east side of the parcel. The remaining portion and majority of the parcel is undeveloped.

B. Site Access

The Project Site is accessed from an unpaved portion of Red Rock Road, a 15-foot-wide private road, from the southeast section of the parcel. Red Rock Road becomes a 20-foot-wide public road approximately 1,200 feet to the southeast of the Project Site.

C. Site Plan
The site plan for the Project depicts an existing 2,534-square-foot single-family residence, a driveway, accessory structures, and trees. The proposed roof-mounted solar modules are shown to be situated on the roof of the residence. The 30 modules are shown to extend a maximum height of six inches above the existing roof with appurtenant equipment. The Project is within the existing building site area of the residence.

10. **CEQA DETERMINATION.**

Los Angeles County ("County") completed an initial review for the above-mentioned Project. Based on an examination of the Project proposal and the supporting information included in the application, the County proposes that a Categorical Exemption is the appropriate environmental documentation under the California Environmental Quality Act ("CEQA"). The Project qualifies for a Categorical Exemption (Class 3—New Construction or Conversion of Small Structures) under CEQA and the County Environmental Document Reporting Procedures and Guidelines.

Pursuant to Section 15303 of the State CEQA Guidelines, the Class 3 Categorical Exemption includes the installation of small new equipment upon one single-family residence. The Project qualifies for a Class 3 Categorical Exemption because the Project includes the installment of roof-mounted solar modules and appurtenant equipment affixed to the roof of an existing single-family residence ("Project").

Section 15300.2 of the State CEQA Guidelines discusses how projects located within particularly sensitive environments may have a significant impact on the environment and are therefore not eligible for certain CEQA exemptions, including the Class 3 Categorical Exemptions cited herein. Exceptions to the exemptions include project impacts to an environmental resource of hazardous or critical concern where officially designated, precisely mapped, and adopted pursuant to law by federal, state, or local agencies. Exceptions to the exemptions also apply where a project may result in damage to scenic resources or where a project includes activities that will have a significant effect on the environment due to unusual circumstances. However, the proposed Project is not subject to an exception to the CEQA exemptions because the area has been mapped as mostly H3 (disturbed) habitat by the LUP, with H1-Quiet Zone (less than 200 feet from H1) and H1-100 Foot Buffer (less than 100 feet from H1) overlaying the H3, no impact from the development will extend into any environmental resources of hazardous or critical concern and or particularly sensitive environment. The Project is not expected to impact scenic or historic resources because the Project consists of roof-mounted solar modules that extend a maximum of six inches above

the existing roof line and appurtenant equipment attached to an existing single-family residence. The Project Site is also not on any hazardous waste site list. Therefore, the proposed Project is not subject to an exception to the CEQA exemptions, and the Class 3 Categorical Exemption may be applied.

The Project, due to its minimal footprint and height, is not expected to impact scenic resources such as trails or designated scenic routes. Other exceptions involving cumulative impact, hazardous waste sites, and historic resources also would not apply. Therefore, the Project is categorically exempt from CEQA.

11. **COMMUNITY OUTREACH.** No community outreach was conducted by the Permittee because the Project consists of roof-mounted solar panels, which is an accessory structure and use for the previously approved single-family residence.

12. **PUBLIC COMMENTS.** Prior to the publication of the Report to the Hearing Officer, Staff did not receive any comments.

13. **AGENCY RECOMMENDATIONS.** County department consultations were not required, as the Project represents a discretionary approval with a public hearing for roof-mounted solar associated with the previously approved single-family residence.

14. **LEGAL NOTIFICATION.** Pursuant to County Code Section 22.222.120, the community was properly notified of the public hearing by mail, and newspaper (Malibu Times). Additionally, the Project was noticed and case materials were available on LA County Planning's website. On April 9, 2025, a total of 33 Notices of Public Hearing were mailed to all property owners as identified on the County Assessor's record within a 500-foot radius from the Project Site, as well as 17 notices to those on the courtesy mailing list for the Malibu Zoned District and to any additional interested parties.

GENERAL PLAN CONSISTENCY FINDINGS

15. **LAND USE POLICY.** The Hearing Officer finds that the Project is consistent with the goals and policies of the Santa Monica Local Coastal Program Land Use Plan ("LUP"), as construction of a roof-mounted solar devices is consistent with the RL20 land use designation. The Director finds that the Project is consistent with the underlying RL20 land use designation because the proposed roof-mounted solar panel array is a permitted accessory use and integrally related to the principal permitted use (single-family residence), is appropriately designed, is located on existing development, and is consistent with all development standards of the LIP.

16. **GOALS AND POLICES**. The Hearing Officer finds that the Project is consistent with LUP Policies Regarding New Development, including Policy CO-76, which directs new development to minimize grading, alteration of physical features, and vegetation clearance to prevent soil erosion. The Project is proposing a roof-mounted design that eliminates the need for any grading or brush clearance activities.

17. **GOALS AND POLICES**. The Hearing Officer finds that the Project is consistent with LCP Scenic Resources Goals Policy CO-128, which states that new development shall be subordinate to the character of its setting. The roof-mounted solar array is proposed on a developed parcel with a single-family residence. In the immediate vicinity of the Project Site there are other developed parcels containing single-family residences. The panels will extend a maximum of six inches above the roof surface, which is consistent with the LIP allowance of six feet above the maximum allowable height.

18. **GOALS AND POLICIES**. The Hearing Officer finds that the Project is consistent with LCP Scenic Resources Goals Policy CO-145, which directs that solar energy devices/panels shall be sited on the rooftops of permitted structures where feasible, to minimize site disturbance and the removal of native vegetation. The Project, a solar energy array, is proposed to be mounted on the roof of an existing single-family residence.

ZONING CODE CONSISTENCY

19. **PERMITTED USE IN ZONE.** The Hearing Officer finds that the Project is consistent with the R-C-20 zoning classification as roof-mounted solar energy arrays/devices are permitted as an accessory use to a principal permitted use (single-family residence) in such zone with an ACDP pursuant to County Code Section 22.44.1750 and 22.44.1560. The Project qualifies for the ACDP, as the development is an improvement to a property containing existing development approved pursuant to a valid Los Angeles County building permit and CDP Number 5-81-439, is mounted to the roof of the existing residence, and will not result in any development or impacts within H1 or H2 Habitats. All other applicable standards of the Los Angeles County Zoning Ordinance (Los Angeles County Code, Title 22) would be met.

20. **HEIGHT.** The Hearing Officer finds that the Project is consistent with the standard identified in County Code Section 22.44.1560.B.2, limiting the height of roof-mounted solar facilities to six feet above the maximum allowable height. The site plan depicts the roof-mounted solar array having a maximum height of six inches above the roof surface.

21. **ALTERNATIVE ENERGY.** The Hearing Officer finds that the Project is consistent with the standards identified for solar energy devices identified in County Code Section 22.44.1560. The Project meets the requirements and preferred location for solar energy devices to be roof mounted.

22. **BIOLOGICAL RESOURCES**. The Hearing Officer finds that the Project is consistent with the biological resource's requirements of County Code Section 22.44.1800. et. seq. The Project is located within H3 Habitat (significantly disturbed and/or developed areas) and H1 Quiet Zone and H1-100 Foot Buffer. That said, the development proposed is permitted in the H1 Quiet Zone and H1-100 Foot Buffer because the Project is on a lawfully created parcel; provides the landowner minimum, reasonable economic use of the property; the Project cannot avoid H1 Quiet Zone; the maximum feasible width for the Quiet Zone and 100 Foot is between the development and the H1 Habitat Buffer; the Project is mounted on the roof of the and appurtenant

equipment attached to the existing single-family residence and does not impact the environment; and all feasible mitigation measures have been provided to minimize adverse environmental effects. (22.44.1890.E.12.a-f) (22.44.1890.D.8.a-f). Further, because it is mounted to the roof of the existing single-family residence and does not require new fuel modification or increase the existing fuel modification zone of the residence, it does not require review by either Department of Regional Planning biologist or the ERB, as determined by the Director (County Code Section 22.44.1860.C.2.c).

COASTAL DEVELOPMENT PERMIT FINDINGS

23. **The Hearing Officer finds that the proposed development is in conformity with the certified local coastal program.** The Hearing Officer finds that the Project is proposed to be installed on an existing, legal single-family residence within H3 and H1-quiet Zone Habitats and does not require review from the ERB pursuant to 22.44.1860. The Project is integrated with the existing development and minimizes the amount of disturbance that will occur on the Project Site. The Project is consistent with the applicable policies of the Santa Monica Mountains Land Use Plan, the R-C Zone development standards, the community-wide development standards, and the area-specific development standards of the LIP.

24. **The Hearing Officer finds that any development, located between the nearest public road and the sea or shoreline of any body of water located within the coastal zone, is in conformity with the public access and public recreation policies of Chapter 3 of Division 20 of the Public Resources Code.** The Project is not located between the nearest road near the shoreline or the shorelines of any body of water in the coastal zone, nor is the site used for public access or public trails in the vicinity. Therefore, the Project does not need to meet the requirements of Chapter 3 of Division 20 of the Public Resources Code.

ENVIRONMENTAL FINDINGS

25. The Hearing Officer finds that the Project is exempt from the California Environmental Quality Act pursuant to State CEQA Guidelines section 15303 (Class 3--New Construction or Conversion of Small Structures) categorical exemption. The Project involves the construction and maintenance of roof-mounted solar modules and appurtenant equipment on an existing single-family residence. The Project does not qualify as an exception to exemption because it is not located in an environmentally sensitive area and does not contain any scenic or historic resources. Therefore, the Project is not expected to have any significant effects on the environment.

ADMINISTRATIVE FINDINGS

26. **LOCATION OF DOCUMENTS.** The location of the documents and other materials constituting the record of proceedings upon which the Hearing Officer's decision is based in this matter is at LA County Planning, 13th Floor, Hall of Records, 320 West Temple Street, Los Angeles, California 90012. The custodian of such documents and

materials shall be the Section Head of the Coastal Development Servies Section, LA County Planning.

BASED ON THE FOREGOING, THE HEARING OFFICER CONCLUDES THAT:

A. That the proposed development is in conformity with the LCP; and

B. That the proposed development is in conformity with the public access and public recreation policies of Chapter 3 of Division 20 of the Public Resources Code.

THEREFORE, THE HEARING OFFICER:

1. Finds that the Project is exempt from the California Environmental Quality Act pursuant to State CEQA Guidelines section 15303 of the State CEQA Guidelines (Class 3--New Construction or Conversion of Small Structures) Categorical Exemption; and

2. Approves **ACDP NO. RPPL2024004507**, subject to the attached conditions.

ACTION DATE: April 9, 2025

RG:TM:JS
03/25/25

c: Zoning Enforcement, Building and Safety

LOS ANGELES COUNTY
DEPARTMENT OF REGIONAL PLANNING

DRAFT CONDITIONS OF APPROVAL
PROJECT NO. PRJ2024-003039-(3)
ADMINISTRATIVE COASTAL DEVELOPMENT PERMIT NO. RPPL2024004507

PROJECT DESCRIPTION

The Project consists of the construction of 30 roof-mounted solar modules, appurtenant equipment, and associated wiring affixed to an existing single-family residence on a property located at 23407 Red Rock Road in the Santa Monica Mountains Coastal Zone subject to the following conditions of approval:

GENERAL CONDITIONS

1. Unless otherwise apparent from the context, the term “permittee” shall include the applicant, owner of the property, and any other person, corporation, or other entity making use of this grant.

2. This grant shall not be effective for any purpose until the permittee, and the owner of the subject property if other than the permittee, have filed at the office of the Los Angeles County ("County") Department of Regional Planning (“Regional Planning”) their affidavit stating that they are aware of and agree to accept all of the conditions of this grant. Notwithstanding the foregoing, this Condition No. 2 and Condition Nos. 4, 5, and 8 shall be effective immediately upon the date of final approval of this grant by the County.

3. Unless otherwise apparent from the context, the term “date of final approval” shall mean the date the County's action becomes effective pursuant to Section 22.60.260 of the County Code.

4. The permittee shall defend, indemnify, and hold harmless the County, its agents, officers, and employees from any claim, action, or proceeding against the County or its agents, officers, or employees to attack, set aside, void, or annul this permit approval, which action is brought within the applicable time period of Government Code Section 65009 or any other applicable limitations period. The County shall promptly notify the permittee of any claim, action, or proceeding and the County shall reasonably cooperate in the defense. If the County fails to promptly notify the permittee of any claim, action, or proceeding, or if the County fails to cooperate reasonably in the defense, the permittee shall not thereafter be responsible to defend, indemnify, or hold harmless the County.

5. In the event that any claim, action, or proceeding as described above is filed against the County, the permittee shall within ten days of the filing make an initial deposit with Regional Planning in the amount of up to $5,000.00, from which actual costs and expenses shall be billed and deducted for the purpose of defraying the costs or expenses involved in Regional Planning's cooperation in the defense, including but not limited to, depositions, testimony, and other assistance provided to permittee or permittee's counsel.

If during the litigation process, actual costs or expenses incurred reach 80 percent of the amount on deposit, the permittee shall deposit additional funds sufficient to bring the balance up to the amount of $5,000.00. There is no limit to the number of supplemental deposits that may be required prior to completion of the litigation.

At the sole discretion of the permittee, the amount of an initial or any supplemental deposit may exceed the minimum amounts defined herein. Additionally, the cost for collection and duplication of records and other related documents shall be paid by the permittee according to County Code Section 2.170.010.

6. If any material provision of this grant is held or declared to be invalid by a court of competent jurisdiction, the permit shall be void and the privileges granted hereunder shall lapse.

7. Upon any transfer or lease of the property during the term of this grant, the permittee, or the owner of the subject property if other than the permittee, shall promptly provide a copy of the grant and its conditions to the transferee or lessee of the subject property.

8. This grant shall expire unless used within two (2) years from the date of final approval of the grant. A single one-year time extension may be requested in writing and with the payment of the applicable fee prior to such expiration date.

9. The subject property shall be maintained and operated in full compliance with the conditions of this grant and any law, statute, ordinance, or other regulation applicable to any development or activity on the subject property. Failure of the permittee to cease any development or activity not in full compliance shall be a violation of these conditions. Inspections may be made to ensure compliance with the conditions of this grant as well as to ensure that any development undertaken on the subject property is in accordance with the approved site plan on file. Inspections may be unannounced and may be conducted utilizing any available technologies, including but not limited to, unmanned aircraft systems (UAS).

   If additional inspections are required to ensure compliance with the conditions of this grant, or if any inspection discloses that the subject property is being used in violation of any one of the conditions of this grant, the permittee shall be financially responsible and shall reimburse Regional Planning for all additional enforcement efforts necessary to bring the subject property into compliance. The amount charged for additional inspections shall be $456.00 per inspection, or the current recovery cost at the time any additional inspections are required, whichever is greater.

10. Notice is hereby given that any person violating a provision of this grant is guilty of a misdemeanor. Notice is further given that the Regional Planning Commission ("Commission") or a Hearing Officer may, after conducting a public hearing, revoke or modify this grant, if the Commission or Hearing Officer finds that these conditions have been violated or that this grant has been exercised so as to be detrimental to the public's health or safety or so as to be a nuisance, or as otherwise authorized pursuant to Chapter 22.238 of the County Code.

11. All development pursuant to this grant must be kept in full compliance with the County Fire Code to the satisfaction of the County Fire Department.

12. All development pursuant to this grant shall conform with the requirements of the County Department of Public Works to the satisfaction of said department.

13. All development pursuant to this grant shall comply with the requirements of Title 22 of the County Code and of the specific zoning of the subject property, unless specifically modified by this grant, as set forth in these conditions, including the approved Exhibit "A," or a revised Exhibit "A" approved by the Director of Regional Planning (“Director”).

PROJECT SITE SPECIFIC CONDITIONS

14. The 30 roof-mounted solar panel modules, associated equipment, and wiring shall be entirely affixed to the existing single-family residence.

RG:TM:JS
3/25/25

LA COUNTY PLANNING

SANTA MONICA MOUNTAINS COASTAL DEVELOPMENT PERMIT STATEMENT OF FINDINGS

Pursuant to County Code Section 22.44.850: Application - Burden of Proof, the applicant shall substantiate the following:

(Do not repeat the statement or provide Yes/No responses. If necessary, attach additional pages.)

A. That the proposed development is in conformity with the certified local coastal program.
Our project is in conformity with the local coastal program and has undergone all appropriate permitti
B. That any development, located between the nearest public road and the sea or shoreline of any body of water located within the coastal zone, is in conformity with the public access and public recreation policies of Chapter 3 of Division 20 of the Public Resources Code.
The project is on the rooftop of our residence and will not compromise public access to sea.

LA COUNTY PLANNING

SANTA MONICA MOUNTAINS COASTAL DEVELOPMENT PERMIT IN BIOLOGICAL RESOURCE AREAS STATEMENT OF FINDINGS

Pursuant to County Code Section 22.44.1850.I.3.a, the applicant shall substantiate the following:

(Do not repeat the statement or provide Yes/No responses. If necessary, attach additional pages.)

A. That the requested development is sited and designed to avoid H1 Habitat and areas within 100 feet of H1 Habitat except as permitted by Sections 22.44.1800 through 22.44.1950; and
This development has no impact on H1 Habitat.
B. That the requested development is sited and designed to avoid the 100-foot Quiet Zone except as set forth herein; and
This development more than 100 feet than H1 Habitat
C. That the requested development is sited and designed to avoid H2 "High Scrutiny" and H2 Habitat to the maximum extent feasible. Where avoidance is not feasible and it is necessary to allow the owner a reasonable economic use of the property, the requested development is sited and designed to minimize and mitigate significant adverse impacts in conformance with the policies and provisions of the LCP; and
This project will not impact H2 habitat in any manner.

D. That the requested development is sited and designed to avoid wildlife movement corridors (migratory paths) to the maximum extent feasible to ensure these areas are left in an undisturbed and natural state. Where avoidance is not feasible and it is necessary to allow the owner a reasonable economic use of the property, the requested development is sited and designed to minimize significant adverse impacts in conformance with the policies and provisions of the LCP; and
The proposed development is on the roof of an existing residential structure and will not impact wildlife corridors or habitat.
E. That roads and utilities serving the proposed development are located and designed so as to avoid H1 Habitat, H1 buffer, and to avoid or minimize significant adverse impacts to H2 "High Scrutiny," and H2 Habitat, and migratory paths.
The proposed development is on the roof of an existing residential structure and will not impact wildlife corridors or habitat.

LA COUNTY PLANNING

AMY J. BODEK, AICP
Director,
Regional Planning

DENNIS SLAVIN
Chief Deputy Director,
Regional Planning

ENVIRONMENTAL DETERMINATION

DETERMINATION DATE:	May 27, 2025
PROJECT NUMBER:	PRJ2024-003039-(3)
PERMIT NUMBER(S):	Administrative Coastal Development Permit RPPL2024004507
SUPERVISORIAL DISTRICT:	3
PROJECT LOCATION:	23407 Red Rock Road, Topanga (Assessor's Parcel Number 4438-001-029)
OWNER:	John Wood
APPLICANT:	Idan Shimony
CASE PLANNER:	Jon Schneider, Planner Jschneider@planning.lacounty.gov

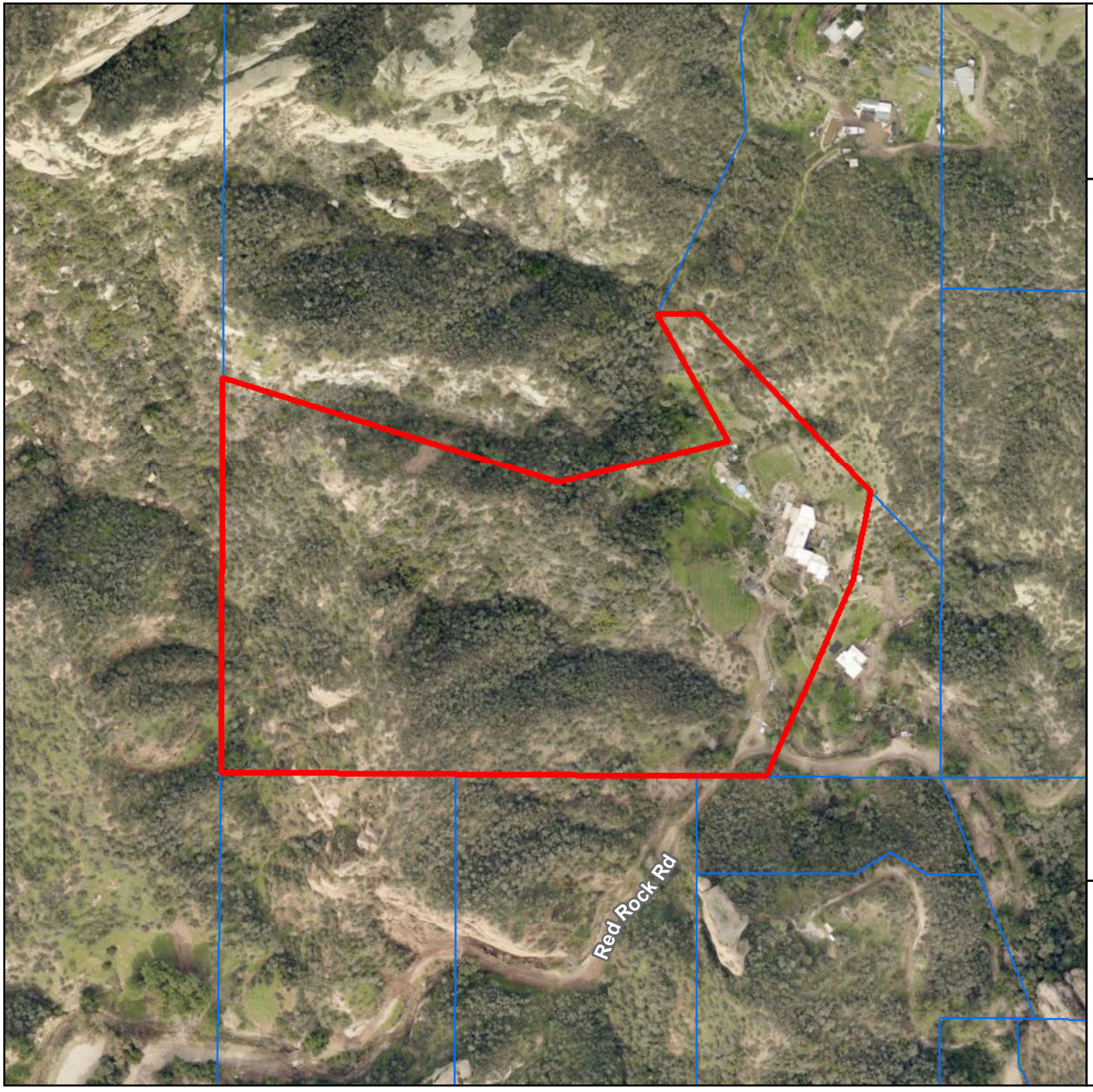
Los Angeles County ("County") completed an initial review for the above-mentioned Project. Based on an examination of the Project proposal and the supporting information included in the application, the County proposes that a Categorical Exemption is the appropriate environmental documentation under the California Environmental Quality Act ("CEQA"). The Project qualifies for a Categorical Exemption (Class 3—New Construction or Conversion of Small Structures) under CEQA and the County Environmental Document Reporting Procedures and Guidelines.

Pursuant to Section 15303 of the State CEQA Guidelines, the Class 3 Categorical Exemption includes the installation of small new equipment upon one single-family residence. The Project qualifies for a Class 3 Categorical Exemption because the Project includes the installment of roof-mounted solar modules and appurtenant equipment affixed to the roof of an existing single-family residence.

Section 15300.2 of the State CEQA Guidelines discusses how projects located within particularly sensitive environments may have a significant impact on the environment and are therefore not eligible for certain CEQA exemptions, including the Class 3 Categorical Exemptions cited herein. Exceptions to the exemptions include project impacts to an environmental resource of hazardous or critical concern where officially designated, precisely mapped, and adopted pursuant to law by federal, state, or local agencies. Exceptions to the exemptions also apply where a project may result in damage to scenic resources or where a project includes activities that will have a significant effect on the environment due to unusual circumstances. However, the proposed Project is not subject to an exception to the CEQA exemptions because the area has been mapped as mostly H3

(disturbed) habitat by the LUP, with H1-Quiet Zone (less than 200 feet from H1) and H1-100 Foot Buffer (less than 100 feet from H1) overlaying the H3, no impact from the development will extend into any environmental resources of hazardous or critical concern and or particularly sensitive environment. The Project is not expected to impact scenic or historic resources because the Project consists of roof-mounted solar modules that extend a maximum of six inches above the existing roof line and appurtenant equipment attached to an existing single-family residence. The Project Site is also not on any hazardous waste site list. Therefore, the proposed Project is not subject to an exception to the CEQA exemptions, and the Class 3 Categorical Exemption may be applied.

The Project, due to its minimal footprint and height, is not expected to impact scenic resources such as trails or designated scenic routes. Other exceptions involving cumulative impact, hazardous waste sites, and historic resources also would not apply. Therefore, the Project is categorically exempt from CEQA.



AERIAL IMAGERY

SITE-SPECIFIC MAP

PROJECT NO. PRJ2024003039
CDP RPPL2024004507

Digital Ortho Aerial Imagery:
Los Angeles Region Imagery Acquisition Consortium (LARIAC)
2023

Feet
0 150 300

N

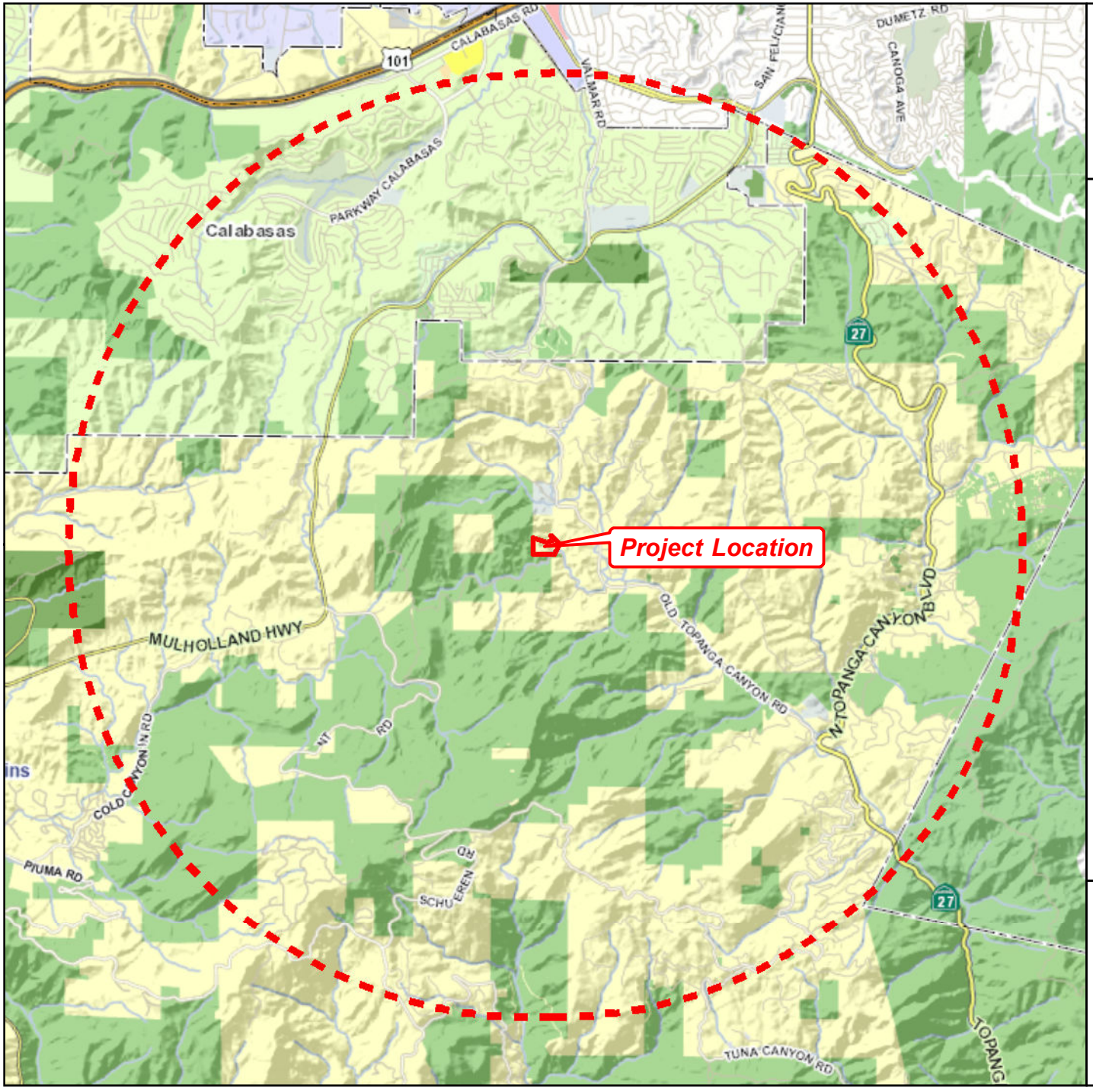
LOS ANGELES COUNTY
Dept. of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012

3-MILE RADIUS

LOCATOR MAP

PROJECT NO. PRJ2024003039

CDP RPPL2024004507



Feet

0 4,000 8,000

N

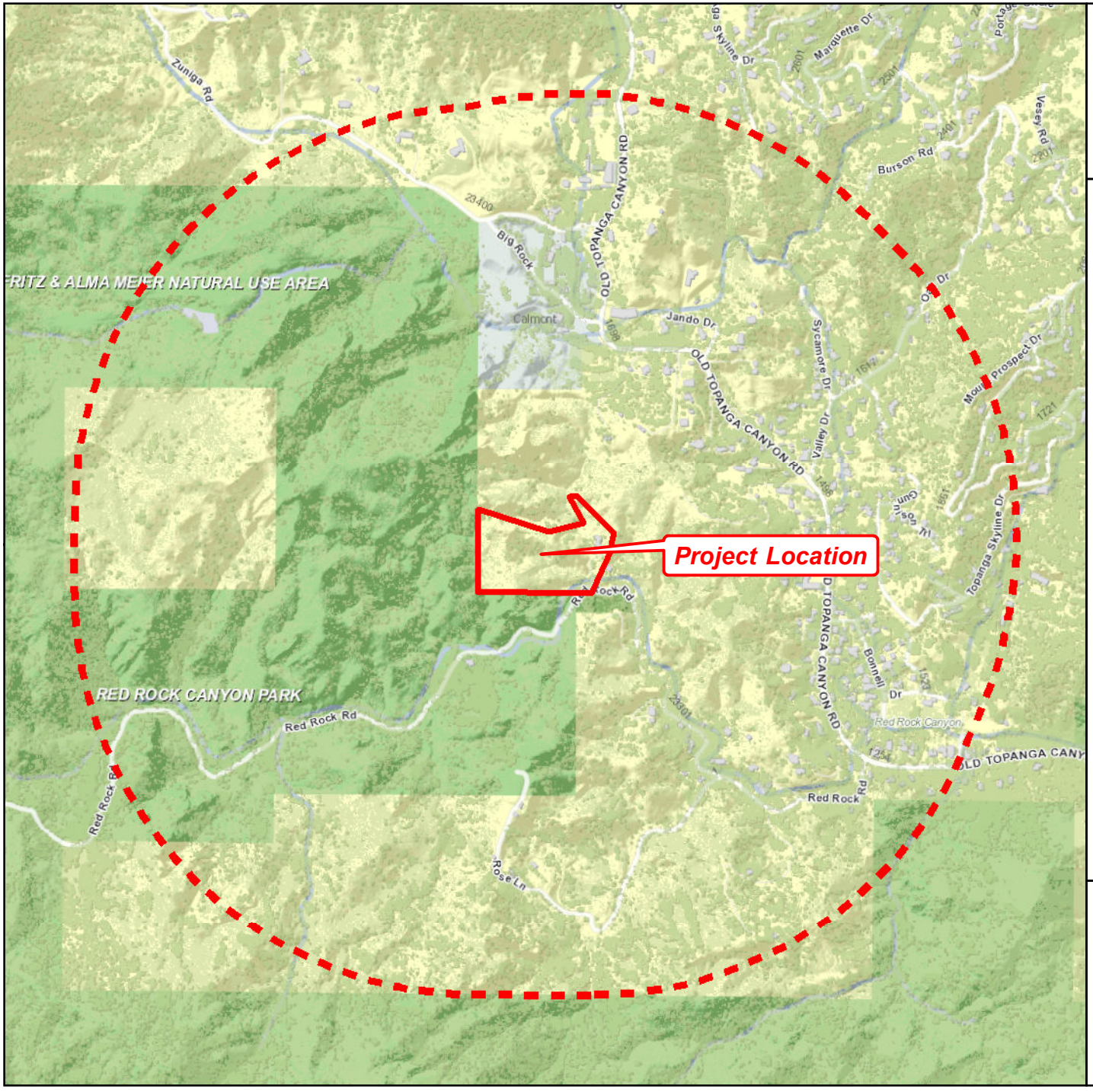
LOS ANGELES COUNTY
Dept. of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012

HALF-MILE RADIUS

LOCATOR MAP

PROJECT NO. PRJ2024003039

CDP RPPL2024004507



Feet

0 600 1,200

N

LA COUNTY PLANNING

LOS ANGELES COUNTY
Dept. of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012

20-MILE RADIUS

LOCATOR MAP

PROJECT NO. PRJ2024003039

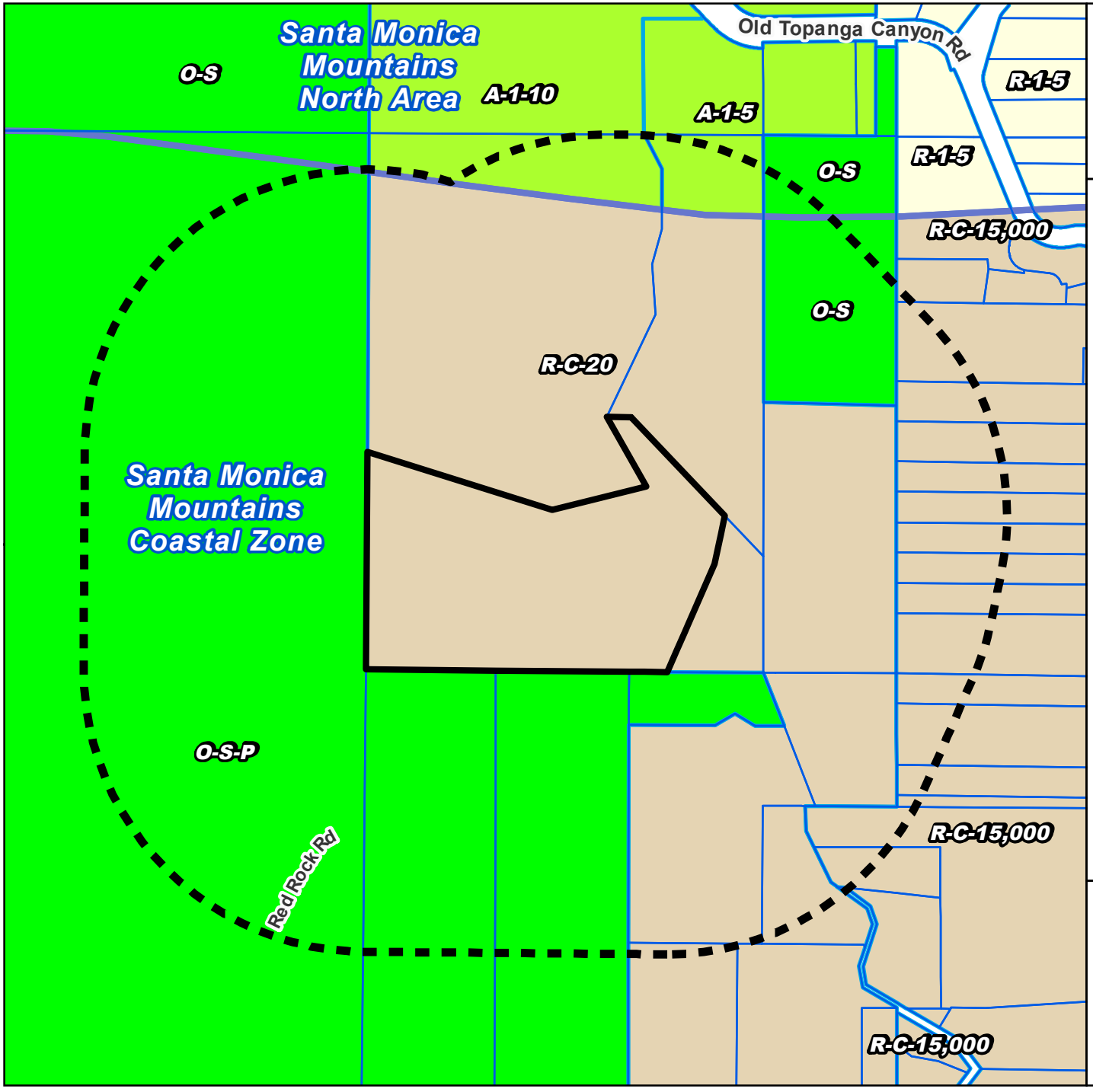
CDP RPPL2024004507

Miles

0 5 10

N

LOS ANGELES COUNTY
Dept. of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012



ZONING

700-FOOT RADIUS MAP

PROJECT NO. PRJ2024003039
CDP RPPL2024004507

- R-1 - Single-Family Residence
- R-C - Rural Coastal
- A-1 - Light Agricultural
- A-2 - Heavy
- O-S - Open Space
- O-S-P - Open Space - Parks

Feet
0 250 500

N

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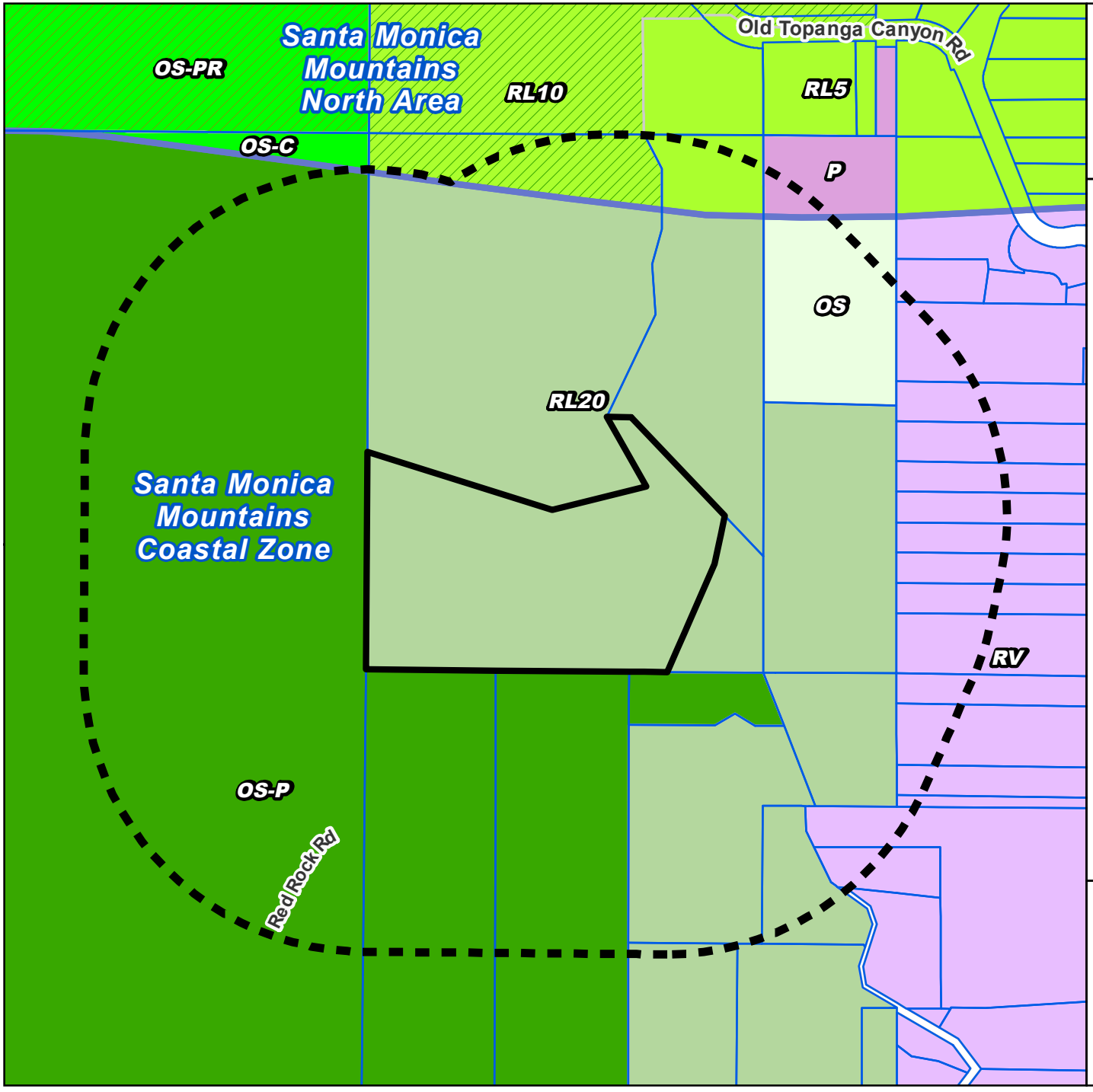

LAND USE POLICY

700-FOOT RADIUS MAP

PROJECT NO. PRJ2024003039
CDP RPPL2024004507

- RL20 - Rural Lands (1 du / 20 ac)
- OS - Open Space
- OS-P - Open Space-Parks
- RV - Rural Village
- OS-C - Open Space Conservation
- OS-PR - Open Space Parks
- P - Public and Semi-Public Facilities
- RL10 - Rural Land 10
- RL5 - Rural Land 5

Feet
0 250 500

N

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Dept. of Regional Planning
320 W. Temple Street
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