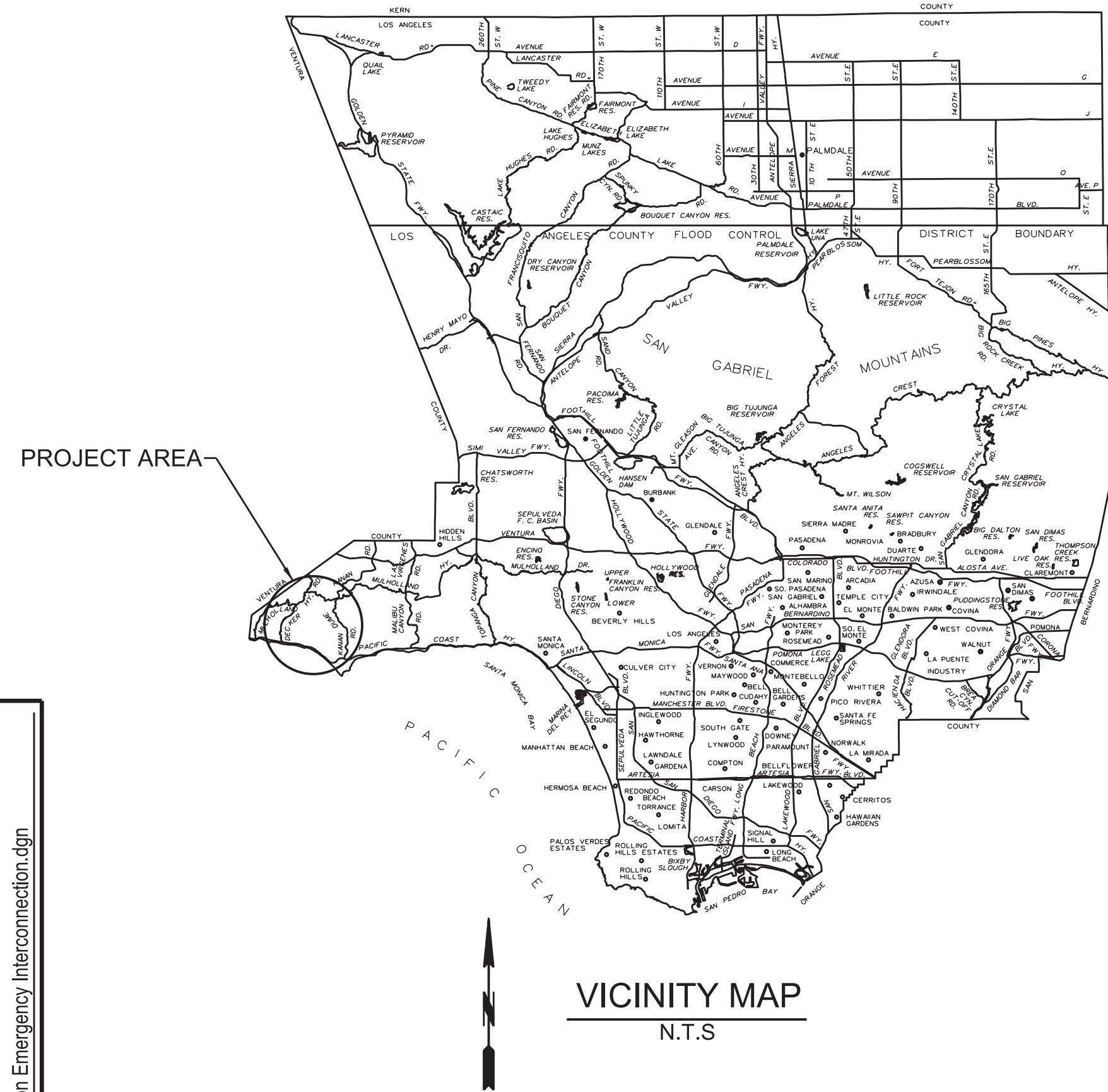


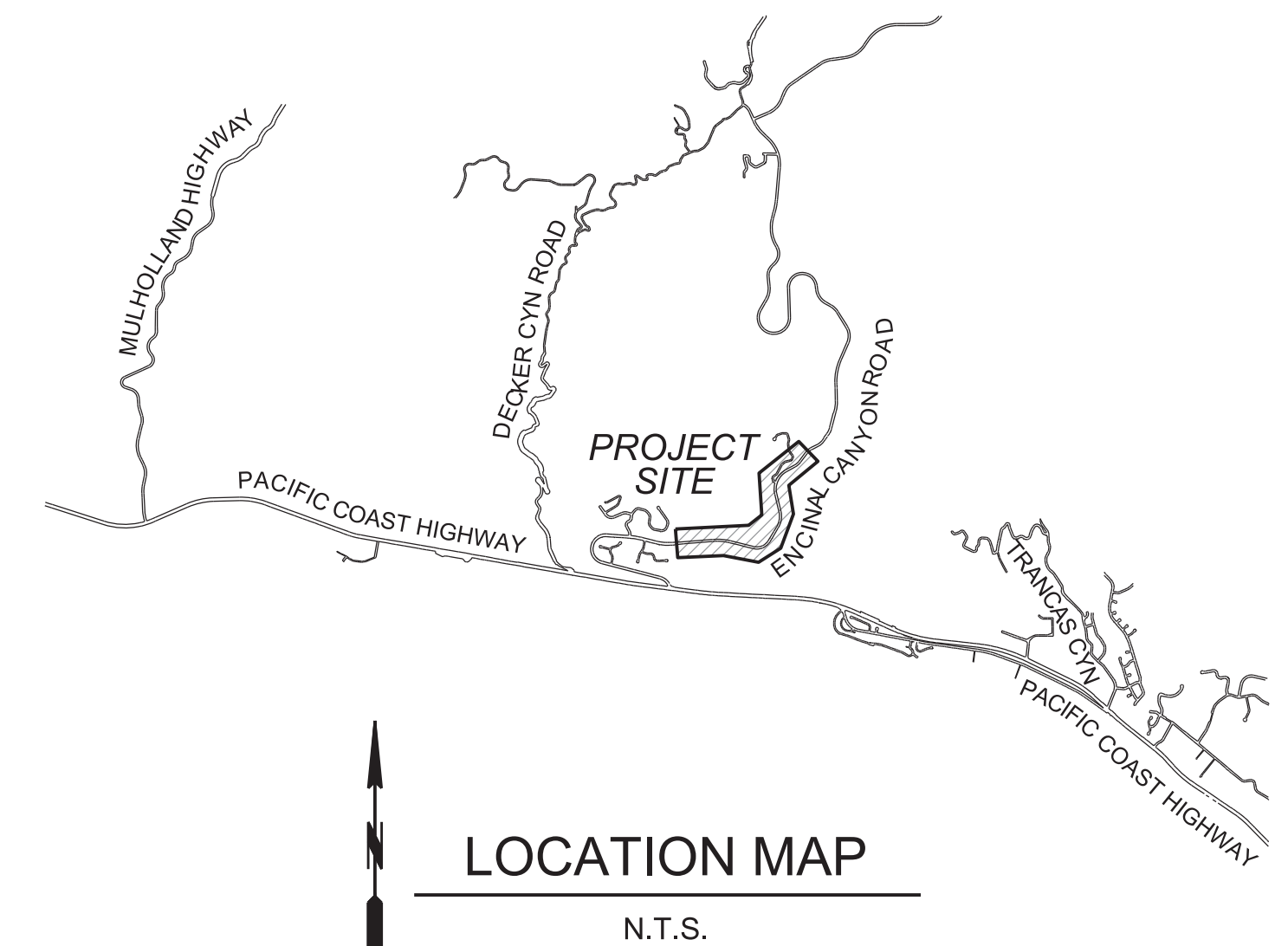
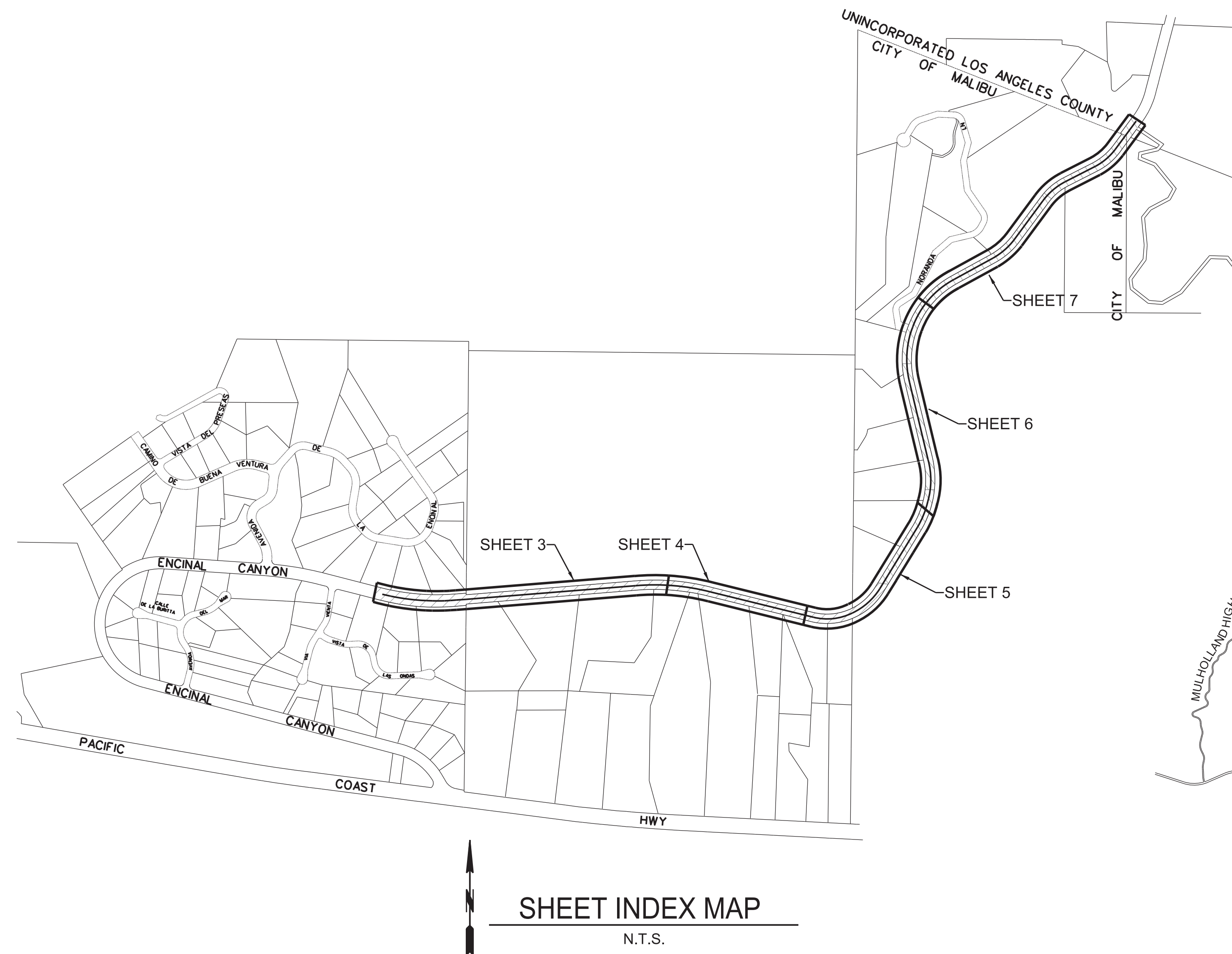
LOS ANGELES COUNTY
PUBLIC WORKS
ENCINAL CANYON ROAD
EMERGENCY INTERCONNECTION

WATERWORKS DISTRICT NO. 29, MALIBU



LEGEND

| | |
|---|--|
| PROPOSED WATER MAIN | |
| EXISTING WATER MAIN | |
| EXISTING SEWER AND MANHOLE | |
| EXISTING CABLE LINE | |
| EXISTING GAS LINE | |
| EXISTING TELEPHONE LINE | |
| EXISTING ELECTRICAL UNDERGROUND | |
| STREET CENTER LINE | |
| PROPERTY LINE | |
| RIGHT OF WAY LINE | |
| EXISTING A.C. PAVING | |
| EXISTING CHAIN LINK FENCE | |
| GATE VALVE | |
| TEE, BELLED | |
| ELBOW, FLANGED | |
| CONNECTIONS: FLANGE, BELL, MJ, FLEX. ADAPTOR | |
| SERVICE CONNECTION | |
| INTERCONNECTION | |
| FIRE HYDRANT 6" x 4 1/2 x 2 1/2" | |
| VAULT VENT | |
| CPS STATION | |
| PUMP WELL | |
| FLUSH OUT ASSEMBLY | |
| COMBINATION AIR RELEASE AND VACUUM VALVE ASSEMBLY | |
| LIGHT POLE | |
| POWER POLE | |
| BORING | |



| STATISTICS | |
|----------------------------|-----------------------|
| LENGTH OF 12" WATERMAIN | 7,096 FT |
| MAX STATIC PRESSURE | 340 PSI |
| PRESSURE ZONE | 825 |
| DISTRIBUTION MAP SHEET NO. | HZ-37, HZ-38 IZ-38 |

| REFERENCES | |
|--|---|
| WATER MAIN SPECIFICATIONS 29-632 (PC) | SURVEY REFERENCES PWFB 1202 PAGE 160 PWFB 1202 PAGE 161 PWFB 1202 PAGE 162 PWFB 1302 PAGE 457 PWFB 1302 PAGE 460 PWFB 1302 PAGE 461 |

| SHEET INDEX | |
|-------------|---|
| SHT NO. | DESCRIPTION |
| 1 | TITLE SHEET, LEGEND, VICINITY, LOCATION, AND INDEX MAPS |
| 2 | GENERAL NOTES, MATERIAL LISTS, AND UTILITY CROSSING DETAILS |
| 3 | PLAN STA. 10+00 TO STA. 24+50 |
| 4 | PLAN STA. 24+50 TO STA. 36+00 |
| 5 | PLAN STA. 36+00 TO STA. 48+00 |
| 6 | PLAN STA. 48+00 TO STA. 62+00 |
| 7 | PLAN STA. 62+00 TO STA. 80+90 |
| 8 | CROSS SECTION AND DETAILS |

| FILE NAME |
|---|
| WWD2900082 Encinal Canyon Emergency Interconnection.dgn |

DATE LAST SAVED:
01/06/2021

CHECKER
R. HARTOONIAN

DESIGNER
R. NADERI

DRAFTER
S. MAOULAWI



Know what's **below**.
Call before you dig.



APPROVED

BY _____
ASSISTANT DEPUTY DIRECTOR

DAT

RECOMMENDED

BY _____

DAT

[illegible]

PROJECT ENGINEER

DA

LOS ANGELES COUNTY PUBLIC WORKS
WATERWORKS DISTRICT NO. 29, MALIBU

ENCINAL CANYON RD
EMERGENCY INTERCONNECTION
TITLE SHEET, VICINITY MAP, LOCATION
AND SHEET INDEX MAP,

PROJID WWD2900082

| | |
|-----|----------|
| PCA | Y5292334 |
|-----|----------|

SPEC. WWD 29-803

SHEET 1 OF 8

90% PLANS

NOT FOR CONSTRUCTION

FILE NAME
WWD2900082 Encinal Canyon Emergency Interconnection.dgn

DATE LAST SAVED:
01/06/2021

CHECKER
R. HARTOONIAN

DESIGNER
R. NADERI

DRAFTER
S. MAOULAWI

GENERAL CONSTRUCTION NOTES

- ELEVATIONS SHOWN ARE IN FEET ABOVE THE N.A.V.D 1988 DATUM. MALIBU 2008 ADJ.
- ALL FIELD BOOK REFERENCES ARE TO LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS FIELD BOOKS, UNLESS OTHERWISE NOTED.
- STATIONING IS IN FEET ALONG CENTERLINE OF 12" DIAMETER WATER MAIN.
- ALL NEW WORK SHALL BE TESTED AT 200 PSI FOR FOUR HOURS ALONG 12" WATER MAINS IN 825 FT PRESSURE ZONE. CONTRACTOR SHALL DESIGN, FURNISH, AND INSTALL ANY NECESSARY THRUST BLOCKS IN ACCORDANCE WITH LACWD STANDARD PLAN W-21, UNLESS OTHERWISE NOTED.
- PIPE LENGTHS SHOWN ON THE PLANS WERE CALCULATED ON A HORIZONTAL OFFSET. PIPE LENGTH ADJUSTMENTS FOR JOGS, SLOPES, VALVES, AND FITTINGS HAVE NOT BEEN MADE.
- BEFORE BACKFILLING THE TRENCH, ALL UNDERGROUND STEEL SURFACES SHALL BE FIELD COATED WITH A MINIMUM 2" THICKNESS OR AS INDICATED IN SECTION W OF THE SPECIAL PROVISIONS OF 1,000 LB. CEMENT MORTAR (THREE (3) PARTS SAND TO ONE (1) PART PORTLAND CEMENT), UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL VERIFY THE SIZE, TYPE, CLASS, PROTECTIVE LINING AND COATING, AND DEPTH OF THE EXISTING WATER MAIN AND SHALL BE RESPONSIBLE FOR MAKING THE PROPER CONNECTIONS.
- THE PIPE SHALL BE CONSTRUCTED SO AS TO PROVIDE THE FOLLOWING MINIMUM CLEARANCES TO EXISTING OR OTHER PROPOSED UNDERGROUND CONDUITS OR STRUCTURES PURSUANT TO CALIFORNIA ADMINISTRATIVE CODE SECTION 64572:
 - HORIZONTAL: 24-INCHES OUTSIDE-TO-OUTSIDE (48-INCHES OUTSIDE-TO-OUTSIDE FOR STORM DRAINS)
 - VERTICAL: 12-INCHES OUTSIDE-TO-OUTSIDE
- THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH AS-BUILT PLANS OF THE WATER SYSTEM FOR THIS PROJECT AT THE COMPLETION OF THE WORK.
- EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE BASED ON RECORDS FURNISHED BY UTILITY COMPANIES. UTILITY SERVICE CONNECTIONS ARE APPROXIMATE. CONTRACTOR SHALL ASSUME THAT SERVICE FACILITIES (INCLUDING, BUT NOT LIMITED TO, WATER, TELEPHONE, ELECTRICAL, CABLE TV, AND GAS) EXTEND FROM EACH UTILITY FACILITY TO EACH PARCEL OR LOT WHETHER OR NOT SERVICE FACILITIES ARE SHOWN. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL PIPE AND FITTINGS REQUIRED TO AVOID ALL UTILITIES INCLUDING ALL SERVICE FACILITIES. ALL AT NO ADDITIONAL COST TO AGENCY.
- CONTRACTOR SHALL ADJUST WATER MAIN ALIGNMENTS AS REQUIRED TO MAINTAIN MINIMUM CLEARANCE BETWEEN PROPOSED WATER MAIN AND EXISTING UTILITIES, VAULTS, MANHOLES, STRUCTURES, AND ANY OTHER SUBSURFACE FACILITIES. PIPELINE CONSTRUCTION IN THE VICINITY OF SANITARY SEWERS SHALL, AT A MINIMUM, CONFORM TO LACWD STANDARD PLAN W-50.
- DISINFECTION: CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO ASSURE SANITARY INSTALLATION. THE CONTRACTOR SHALL ENDEAVOR TO KEEP ALL DIRT, RODENTS, INSECTS, ETC. AWAY FROM WATERWAY SURFACES. ISOLATION VALVES SHALL BE KEPT CLOSED (EXCEPT DURING FILLING AND FLUSHING, WHEN VALVES SHALL BE OPERATED SO AS TO ASSURE FLOW TOWARD NEW DISCHARGE) AND LEFT CLOSED AT ALL OTHER TIMES UNTIL AFTER PRESSURE TEST, DISINFECTION, FLUSHING AND BACTERIAL TEST HAS BEEN PASSED. CONTRACTOR SHALL NOTIFY AGENCY AT LEAST 24 HOURS IN ADVANCE OF ANY OPERATION OF ISOLATION VALVES WHICH SHALL BE OPERATED ONLY BY AGENCY PERSONNEL. AGENCY WILL ARRANGE FOR BACTERIOLOGICAL TEST SAMPLING OF NEW WATER MAINS UPON A MINIMUM 48 HOUR NOTIFICATION BY CONTRACTOR. AGENCY WILL ALSO ARRANGE FOR CONCURRENT BACTERIOLOGICAL TEST SAMPLING OF SUPPLY. PROCESS FOR BACTERIOLOGICAL TESTING TO BEGIN ON A MONDAY.
- IF THE CONTRACTOR DESIRES TEMPORARY WATER SERVICE FOR CONSTRUCTION, THE CONTRACTOR SHALL APPLY FOR INSTALLATION, BY THE AGENCY, OF TEMPORARY CONSTRUCTION METER(S) OFF FIRE HYDRANTS OR FLUSHOUTS. THE ISSUANCE OF TEMPORARY CONSTRUCTION METER(S) DURING THE SUMMER MONTHS MAY BE RESTRICTED BASED ON AVAILABLE WATER SUPPLY.
- THE CONTRACTOR SHALL NOTIFY LACWD MALIBU OFFICE SUPERINTENDENT AT (626) 456-6770, AT LEAST 48 HOURS BEFORE STARTING ANY WORK ON THIS PROJECT.
- JOINT DEFLECTIONS SHALL NOT EXCEED MANUFACTURERS RECOMMENDATIONS.
- INTERCONNECTIONS:
 - CONTRACTOR SHALL COMPLETELY INSTALL AND TEST NEW WATER MAIN IN ACCORDANCE WITH THE SECTION W OF THE SPECIAL PROVISIONS PRIOR TO MAKING THE INTERCONNECTION.
 - CONTRACTOR SHALL REMOVE INTERFERING PORTIONS OF EXISTING WATER MAINS, VALVES, FITTINGS, PLUGS, BLIND FLANGES, THRUST BLOCKS, AND APPURTENANCES IN THE PRESENCE OF THE ENGINEER.
 - CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING, TWO WORKING DAYS IN ADVANCE, THAT THEY ARE PREPARED WITH ALL LABOR, MATERIAL, EQUIPMENT, AND NECESSARY PRELIMINARY WORK TO MAKE THE CONNECTION. AGENCY PERSONNEL WILL CLOSE EXISTING VALVES AS NEEDED.
 - CONTRACTOR SHALL NOTIFY ALL AFFECTED AGENCY CUSTOMERS AND THE FIRE DEPARTMENT NO LESS THAN 24 HOURS PRIOR TO THE LOSS OF SERVICE. MAXIMUM SHUTDOWN SHALL NOT EXCEED 3 HOURS.
- CONTRACTOR SHALL POSSESS A VALID "A" OR "C-34" CONTRACTORS LICENSE.
- THE CONTRACTOR SHALL NOT RESTRICT THE USE OF PUBLIC RIGHT-OF-WAY OR ACCESS TO ADJACENT PREMISES.
- WATER TRANSMISSION MAIN TRENCH SHALL BE IN ACCORDANCE DETAIL 1, SHEET 8, UNLESS OTHERWISE NOTED.
- ALL 4" AND 6" DIAMETER PIPE SHALL HAVE A MINIMUM COVER OF 36"; 8" AND 10" DIAMETER PIPE SHALL HAVE A MINIMUM COVER OF 42"; 12"-24" DIAMETER PIPE SHALL HAVE A MINIMUM COVER OF 48"; WATER MAINS SHALL BE CONSTRUCTED WITH THE MINIMUM REQUIRED COVER MEASURED FROM THE PROPOSED ADJACENT FLOW LINES.
- ALL RUBBER MATERIALS IN CONTACT WITH POTABLE WATER SHALL BE "PEROXIDE CURED EPDM" FOR RESILIENT SEAT GATE VALVES, BUTTERFLY VALVES, FLEXIBLE EXPANSION JOINTS, FLANGE COUPLING ADAPTER JOINTS, SLEEVE COUPLING, PUSH-ON PIPE JOINTS, FITTING JOINTS, AND FLANGE GASKET JOINTS.
- THE CONTRACTOR SHALL TRANSPORT AND LEGALLY DISPOSE OF ALL REMOVED MATERIALS.
- EXISTING UTILITIES SHALL BE MAINTAINED IN PLACE BY THE CONTRACTOR, UNLESS OTHERWISE NOTED, AND ALL UTILITIES CROSSING THE TRENCH SHALL BE TEMPORARILY SUPPORTED TO THE SATISFACTION OF THE AGENCY.
- THE WATER MAIN TO BE ABANDONED SHALL BE COMPLETELY DRAINED. APPROXIMATELY EVERY 250 FEET MORE OR LESS, A SHORT SECTION OF WATER MAIN IS TO BE REMOVED AND EACH END OF THE WATER MAIN TO BE PLUGGED AS INDICATED ON THE PLANS AND THRUST BLOCKS SHALL BE PROVIDED.
- ASBESTOS CEMENT PIPE SHALL NOT BE CUT, A WHOLE SECTION LENGTH OF ACP SHALL BE REMOVED BY BREAKING THE JOINTS WHEN REQUIRED. THE REMOVED PIPE SHALL BE JOINED TO THE EXISTING ACP WITH COUPLINGS.
- WATER MAINS, VALVES, AND FITTINGS TO BE ABANDONED:
 - THE CONTRACTOR SHALL FURNISH ALL MATERIAL NEEDED FOR COMPLETE ABANDONMENT OF EXISTING WATER MAINS.
 - WHERE VALVES OR FITTINGS ARE REQUIRED TO BE REMOVED. THE EXISTING WATER MAIN OR FITTING TO REMAIN IN SERVICE SHALL BE BLIND FLANGED OR PLUGGED AS INDICATED ON THE PLANS AND THRUST BLOCKS SHALL BE PROVIDED.
 - ALL VALVES AND VALVE BOX CAPS SHALL BE REMOVED AND SALVAGED. THE VALVE BOX TOP SLEEVE AND BOTTOM SLEEVE SHALL BE FILLED WITH TYPE "A" BASE (OR AS REQUIRED BY THE PERMIT). IF THE VOID IS WITHIN THE PAVED STREET AREA THE VOID SHALL BE COMPACTED AND RESURFACED WITH AC PAVEMENT. IN SIDEWALK AREAS, THE CONCRETE SIDEWALK SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER.

SECTION AND DETAIL IDENTIFICATION SYSTEM

- A

1

2
- SECTION LETTER OR DETAIL NUMBER

SHEET ON WHICH SECTION OR DETAIL APPEARS

SHEET ON WHICH SECTION OR DETAIL IS CALLED OUT

MATERIALS LIST/WORK ACTIVITIES

| NO. | DESCRIPTION |
|-----|---|
| 1 | 12" STEEL PIPE, 0.25" THICK, CML & CMC, WELDED |
| 2 | 12" STEEL SLIP-ON WELD FLANGE, CL 300, CMC |
| 3 | 12" X 12" FLG'D STEEL TEE, CL 300 FLG, STD WT, CML & CMC |
| 4 | 12" FLG'D GATE VALVE, 350 PSI WWP, CL 300 FLG, NRS, W/ ADJUSTABLE VALVE BOX PER LACWD STD PLAN W-15 |
| 5 | 12" FLG'D 90° STEEL ELBOW, CL 300 FLG, STD WT, CML & CMC |
| 6 | 12" STEEL BLIND FLANGE, CL 300, CMC |
| 7 | 12" X 10" FLG'D STEEL REDUCER, STD WT, CL 300 FLG, CML & CMC |
| 8 | 12" FLG'D 90° STEEL ELBOW, CL 300 FLG, STD WT, CML & EPOXY COATED |
| 9 | 12" X 8" FLG'D STEEL REDUCER, CL 300 FLG, STD WT, CML & EPOXY COATED |
| 10 | 12" X 4" FLG'D STEEL TEE, CL 300 FLG, STD WT, CML & CMC |
| 11 | 8" PRESSURE REDUCING VALVE, CLA-VAL MODEL 90G-01BCSYPKCDBX D/S, CL 300 |
| 12 | 8" FLG'D GATE VALVE W/ HANDWHEEL, 350 PSI WWP, CL 300 FLG, NRS |
| 13 | 8" X 4" FLG'D STEEL TEE, CL 300 FLG, STD WT, CML & EPOXY COATED |
| 14 | 8" FLOW METER PER LVMWD STD. |
| 15 | 8" STEEL PIPE, SCH 20, CML & EPOXY COATED |
| 16 | 8" STEEL SLIP-ON WELD FLANGE, CL 300, CMC |
| 17 | 8" GROOVED COUPLING |
| 18 | PIPE SUPPORT PER STD. W-17, OMIT ANCHORS |
| 19 | THRUST BLOCK PER LACWD STD PLAN W-21 |
| 20 | CUT & PLUG EXISTING WATERMAIN PER LACWD STD. PLAN W-22 |
| 21 | RECONNECT EXISTING WATER SERVICE PER DETAIL 2, SHEET 8 (METER AND BOX TO REMAIN) |
| 22 | INSTALL SAMPLING STATION PER DETAIL 3, SHEET 8 |
| 23 | CATHODIC PROTECTION - SHALLOW Mg ANODE AND TEST STATION PER LACWD STD PLAN W-39 |
| 24 | REMOVE EXISTING AND INSTALL NEW FLUSH OUT LATERAL ONLY PER LACWD STD. PLAN W-33 |
| 25 | REMOVE EXISTING AND INSTALL NEW AIR-RELEASE LATERAL ONLY PER LACWD STD. PLAN W-16 |
| 26 | PRESSURE GAUGE PER DETAIL 4 ON SHEET 8 |
| 27 | 4" FLG'D GATE VALVE W/ HANDWHEEL, 350 PSI WWP, CL 300 FLG, NRS |
| 28 | 4" FLG'D GATE VALVE, 350 PSI WWP, CL 300 FLG, W/ ADJUSTABLE VALVE BOX PER LVWMD STD. |
| 29 | 4" X 4" FLG'D STEEL TEE, CL 300 FLG, STD WT, CML & EPOXY COATED |
| 30 | 2" PRESSURE REDUCING VALVE, CLA-VAL MODEL 90G-01BCSYPKCDBX D/S, CL 300 |
| 31 | 4" FLG'D 90° STEEL ELBOW, CL 300 FLG, STD WT, CML & EPOXY COATED |
| 32 | 4" STEEL PIPE, SCH 20, CML & EPOXY COATED |
| 33 | 2" PRESSURE RELIEF & SUSTAINING VALVE, CLA-VAL MODEL 50G-01BPKCDBX DS, CL 300 |
| 34 | 4" STEEL SLIP-ON WELD FLANGE, CL 300 |
| 35 | 4" GROOVED COUPLING |
| 36 | 2" 180° WELD ELBOW, STEEL, SCH 40, FLG'D CLASS 300, CML & EPOXY COATED |
| 37 | CHAIN LINK FENCING PER LACWD STD W-23 WITHOUT BARRIER WIRE |
| 38 | 6" MIN. THICK CONCRETE SLAB, SLOPE TO DRAIN TO STREET |
| 39 | 6" PUMP WELL, STYLE A, PER LACWD STD PLAN W-53 |
| 40 | MASONRY RETAINING WALL PER SSPWC 618-3, TYPE AND HEIGHT PER PLAN |
| 41 | 2" AIR RELEASE AND VACUUM VALVE ASSEMBLY PER LACWD STD PLAN W-16 |
| 42 | 4" X 2" FLG'D STEEL REDUCER, CL 300 FLG, STD WT, CML & EPOXY COATED |
| 43 | 2" STEEL SLIP-ON WELD FLANGE, CL 300 |
| 44 | 2" PRESSURE REDUCING VALVE, CLA-VAL MODEL 49G-03MODGABCSYPKCDXB D/S, CL 300 |
| 45 | 8" PRESSURE REDUCING VALVE, CLA-VAL MODEL 49G-03MODGABCSYPKCDXB D/S, CL 300 |
| 46 | 2" FLG'D 90° STEEL ELBOW, CL 300 FLG, STD WT, CML & EPOXY COATED |

BENCHMARK

B.M.

DY-7628

ELEV.

431.330

CSBM MON 4" UP 25' N/O C/L ENCINAL CYN RD & 138' W/O C/L VIA VIENTA
13' E/O PPH#1308445E MKD (BM 59-3 1963) IP MKR POST 2' S/O MON

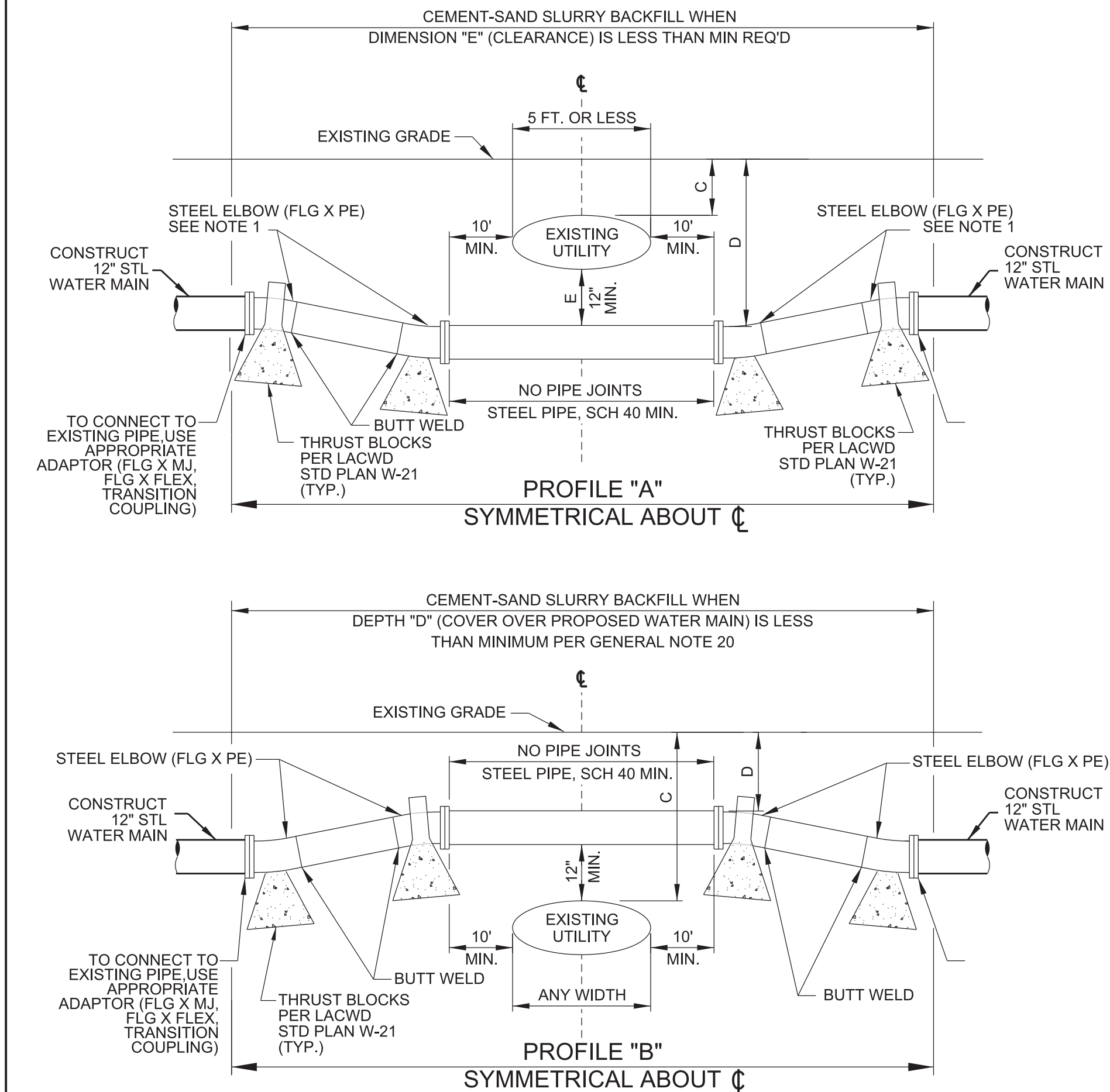
MALIBU

QUAD.

2008

ADJ. NAVD' 88

UTILITY CROSSING DETAILS



UTILITY CROSSING DETAILS

- 45° ELBOWS SHALL BE USED WHERE THE BOTTOM OF THE EXISTING UTILITY BEING UNDERCROSSED IS 4 FEET DEEP OR MORE. 22.5° ELBOWS MAY BE USED WHERE THE BOTTOM OF THE EXISTING UTILITY TO BE UNDERCROSSED IS LESS THAN 4 FEET DEEP.
- IN LIEU OF USING STEEL PIPE WITH STEEL ELBOWS AS SHOWN IN PROFILES "A" OR "B," CONTRACTOR MAY DEFLECT JOINTS PER MANUFACTURER'S RECOMMENDATIONS WHEN ALL THE FOLLOWING CONDITIONS ARE MET:
 - THERE IS NOT ADEQUATE CLEARANCE FOR THRUST BLOCKS.
 - THE CROSSING IS NOT BENEATH A CREEK BED, DRAINAGE COURSE, OR OTHERWISE UNSTABLE AREA.
 - THE WATER MAIN HAS LESS THAN 6' OF COVER AT ITS DEEPEST POINT.
- JOINT DEFLECTIONS SHALL NOT EXCEED MANUFACTURERS RECOMMENDATIONS.
- WHEN DEPTH "C" (COVER OVER EXISTING UTILITY) IS GREATER THAN 7 FEET, USE PROFILE "B."
- WALL THICKNESS OF STEEL PIPE AND ELBOWS SHALL BE SCH 40 MINIMUM.

90% PLANS

NOT FOR CONSTRUCTION

LOS ANGELES COUNTY PUBLIC WORKS

WATERWORKS DISTRICT NO. 29, MALIBU

ENCINAL CANYON RD
EMERGENCY INTERCONNECTION
GENERAL NOTES, MATERIAL LIST, AND
UTILITY CROSSING DETAILS



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PROJECT ENGINEER

DATE

PROJ ID WWD2900082

PCA

Y5292334

SPEC WWD 29-803

SHEET 2 OF 8

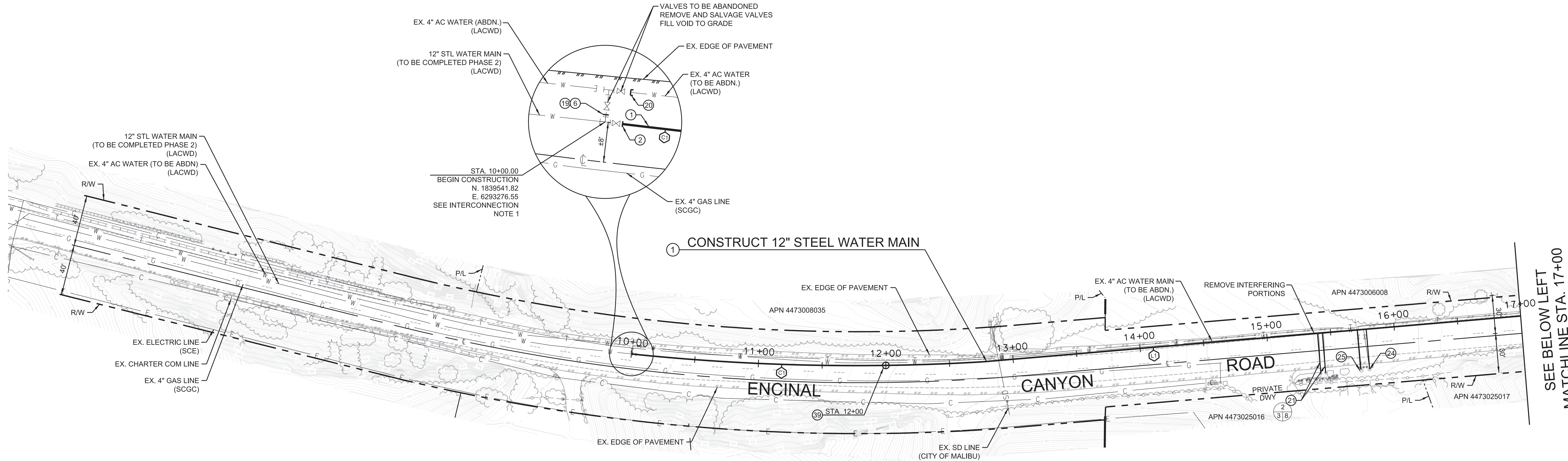
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WWD2900082 Encinal Canyon Emergency Interconnection.dgn

DATE LAST SAVED:
01/06/2021

CHECKER
R. HARTOONIAN

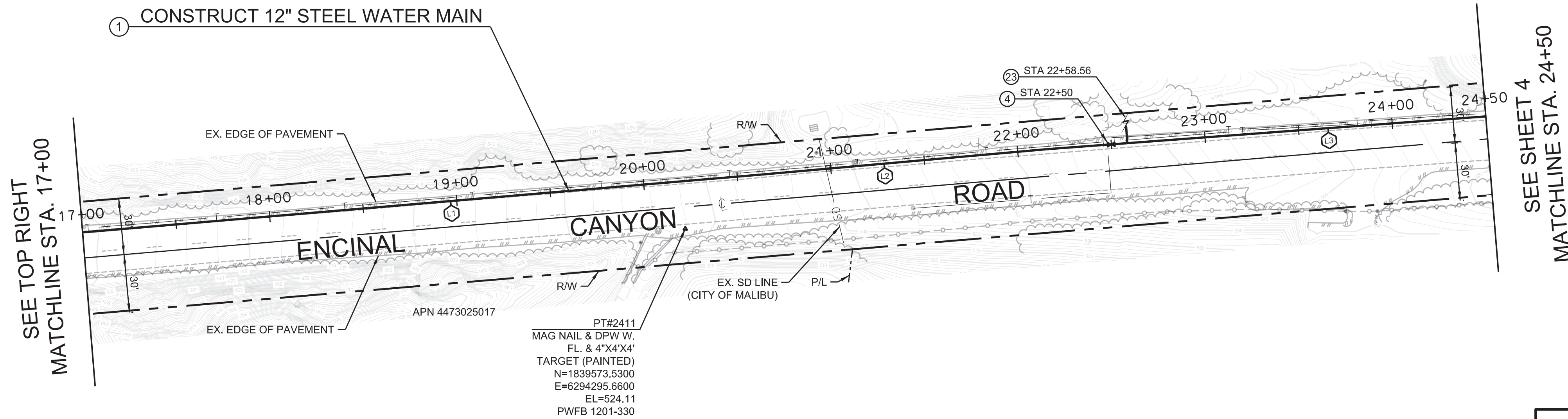
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R. NADERI

DRAFTER
S. MAOULAWI



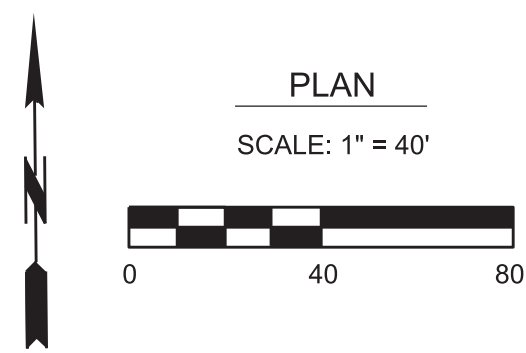
| CURVE DATA FOR 12" STEEL WATERMAIN | | | | | | |
|------------------------------------|----------|---------|--------|--------|------------------------------|------------------------------|
| NO | Δ | R (FT) | L (FT) | T (FT) | START | END |
| C1 | 9°25'22" | 1680.89 | 276.44 | 138.53 | N 1839541.82 E 6293276.55 | N 1839535.67 E 6293952.80 |

| LINE DATA FOR 12" STEEL WATERMAIN | | | | |
|-----------------------------------|-------------|------------------------------------|------------------------------------|-------------|
| NO | LENGTH (FT) | START | END | BEARING |
| L1 | 796.59' | N 1839535.67 FT E 6293952.80 FT | N 1839602.46 FT E 6294336.36 FT | N89°07'44"E |
| L2 | 152.24' | N 1839602.46 FT E 6294336.36 FT | N 1839615.95 FT E 6294488.00 FT | N84°54'54"E |
| L3 | 251.13' | N 1839615.95 FT E 6294488.00 FT | N 1839624.66 FT E 6294739.43 FT | N89°43'29"E |



INTERCONNECTION NOTE 1:

AFTER COMPLETION OF THE WATER MAIN INSTALLATION, SATISFACTORILY COMPLETING BACTERIOLOGICAL AND PRESSURE TESTS IN ACCORDANCE WITH SECTION W OF THE SPECIAL PROVISIONS, AND AFTER APPROPRIATE VALVES HAVE BEEN CLOSED BY AGENCY PERSONNEL, THE CONTRACTOR, UNDER AGENCY SUPERVISION, SHALL REMOVE EXISTING THRUST BLOCK AND 12" BLIND FLANGE AND COMPLETE THE INTERCONNECTION AS SHOWN ON THE PLANS, SEE GENERAL NOTE 16 ON SHEET 2. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED AGENCY CUSTOMERS AND THE FIRE DEPARTMENT NO LESS THAN 48 HOURS PRIOR TO LOSS OF SERVICE. SHUTDOWN TIME SHALL NOT EXCEED 3 HOURS.

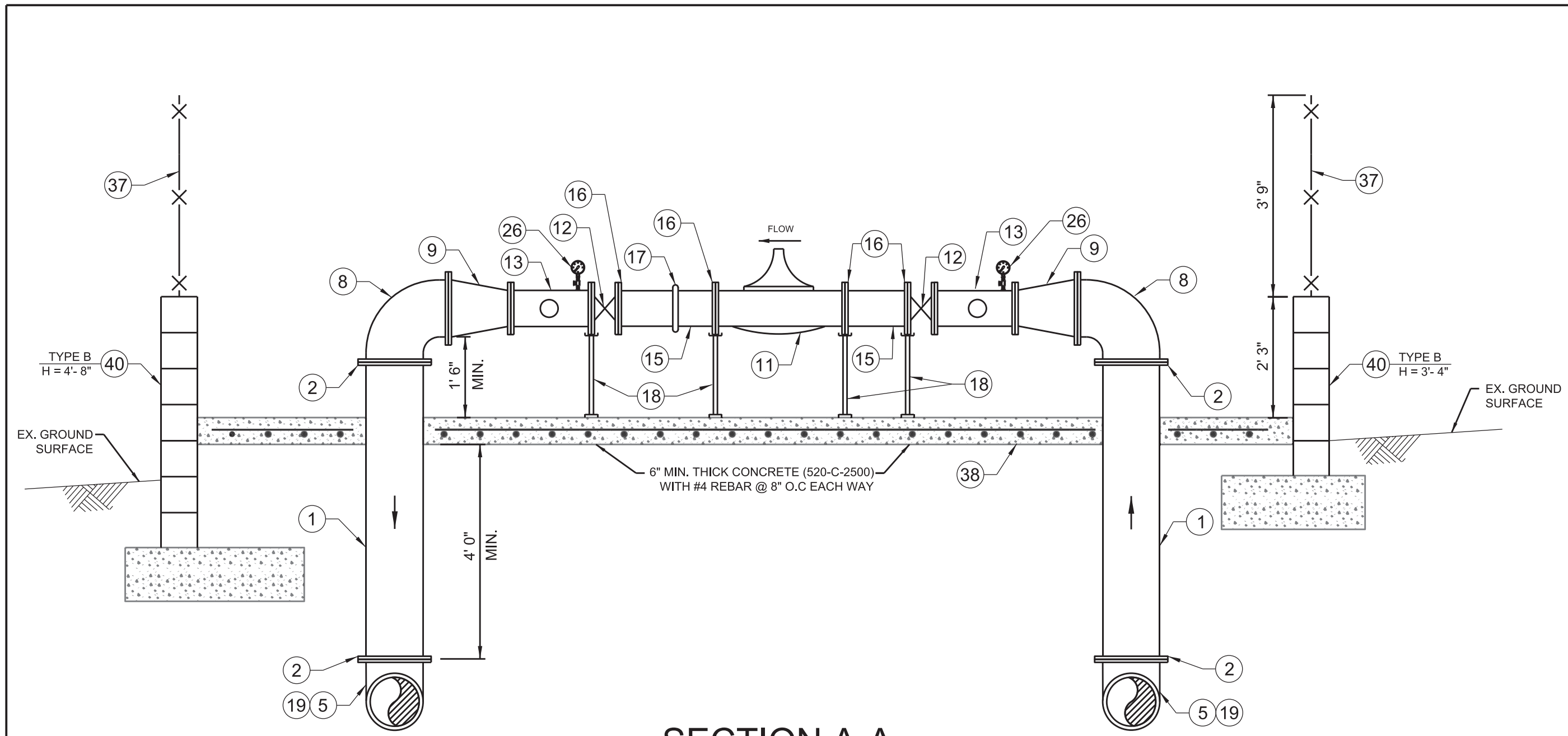


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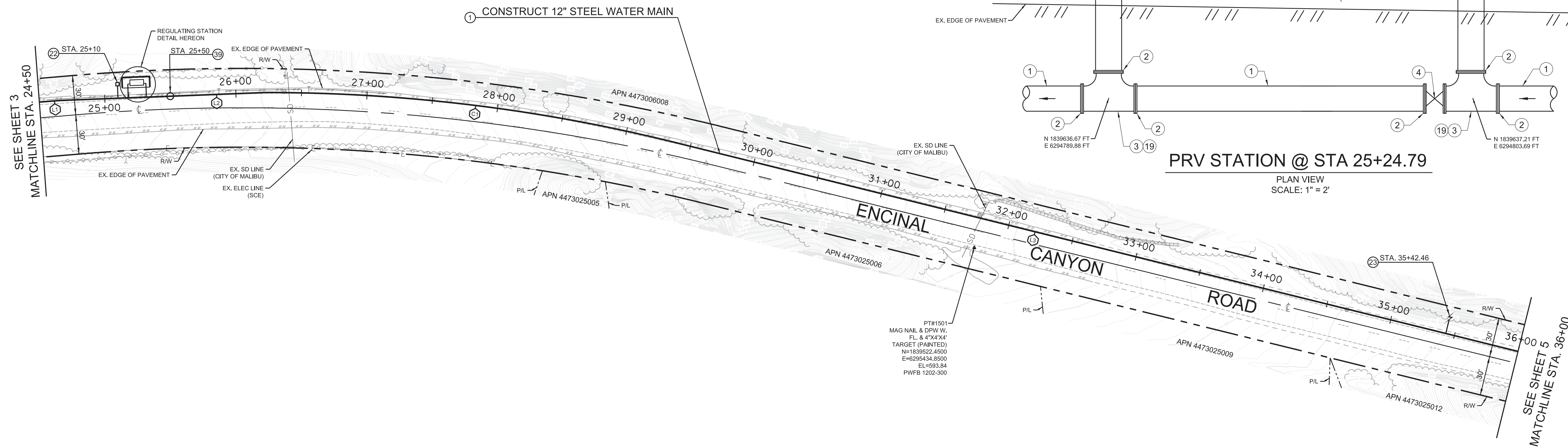


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| LOS ANGELES COUNTY PUBLIC WORKS WATERWORKS DISTRICT NO. 29, MALIBU | | | |
| ENCINAL CANYON RD EMERGENCY INTERCONNECTION | | | |
| PLAN STA. 10+00 TO STA. 24+50 | | | |
| PROJ ID | WWD2900082 | PCA | Y5292334 |
| SPEC | WWD 29-803 | SHEET | 3 OF 8 |

FILE NAME: WWD2900082 Encinal Canyon Emergency Interconnection.dgn
DATE LAST SAVED: 01/06/2021
CHECKER: R. HARTOONIAN
DESIGNER: R. NADERI
DRAFTER: S. MAOULAWI



SECTION A-A
SCALE: 1" = 2'

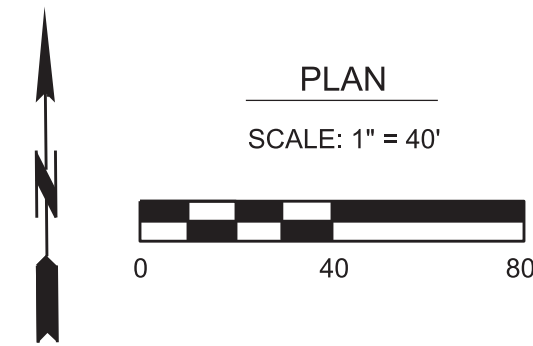


PRV STATION @ STA 25+24.79
PLAN VIEW
SCALE: 1" = 2'

CONSTRUCTION NOTE:
1. TW= TOP OF WALL, FS = FINISHED SURFACE,
EG = EXISTING GRADE, TF = TOP OF FOUNDATION

| LINE DATA FOR 12" STEEL WATERMAIN | | | | |
|-----------------------------------|-------------|------------------------------------|------------------------------------|-------------|
| NO. | LENGTH (FT) | START | END | BEARING |
| L1 | 251.13' | N 1839615.96 FT E 6294688.00 FT | N 1839634.68 FT E 6294736.43 FT | N85°43'29"E |
| L2 | 156.24' | N 1839634.68 FT E 6294736.43 FT | N 1839640.73 FT E 6294844.25 FT | N87°46'45"E |
| L3 | 33.09' | N 1839640.73 FT E 6294844.25 FT | N 1839623.87 FT E 6295954.50 FT | S76°05'33"E |

| CURVE DATA FOR 12" STEEL WATERMAIN | | | | | | |
|------------------------------------|-----------|---------|--------|--------|------------------------------------|------------------------------------|
| NO. | Δ | R (FT) | L (FT) | T (FT) | START | END |
| C1 | 14°22'48" | 1293.76 | 324.69 | 163.20 | N 1839640.73 FT E 6294844.25 FT | N 1839600.39 FT E 6295215.87 FT |



| DATE | INITIALS | DESCRIPTION |
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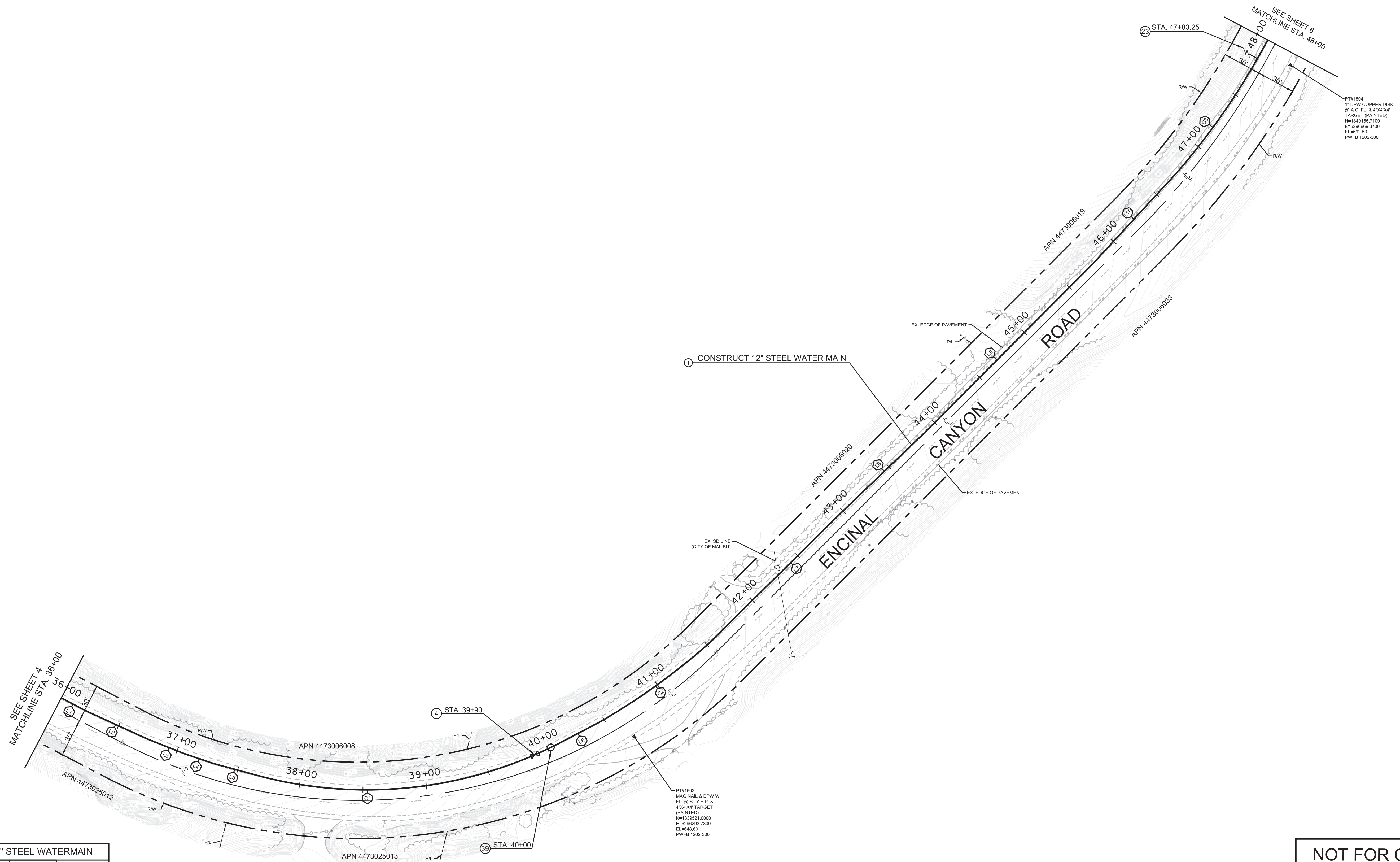
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| LOS ANGELES COUNTY PUBLIC WORKS WATERWORKS DISTRICT NO. 29, MALIBU | | | |
| ENCINAL CANYON RD EMERGENCY INTERCONNECTION | | | |
| PLAN STA. 24+50 TO 36+00 | | | |
| PROJ ID | WWD2900082 | PCA | Y5292334 |
| SPEC | WWD 29-803 | SHEET | 4 OF 8 |

90% PLANS

NOT FOR CONSTRUCTION

| LINE DATA FOR 12" STEEL WATERMAIN | | | | | |
|-----------------------------------|-------------|----------------|----------------|------------|--|
| NO | LENGTH (FT) | START | END | BEARING | |
| L1 | 67.29 | N 183600.30 E | N 183434.32 FT | S76°05'13" | |
| | | E 60952.10 FT | E 60952.10 FT | | |
| L2 | 52.32 | N 183434.32 FT | N 183424.42 FT | S76°05'13" | |
| | | E 60952.10 FT | E 60952.10 FT | | |
| L3 | 33.05 | N 183424.42 FT | N 183424.37 FT | S85°05'13" | |
| | | E 60952.10 FT | E 60952.10 FT | | |
| L4 | 23.15 | N 183424.37 FT | N 183421.89 FT | S85°05'13" | |
| | | E 60952.10 FT | E 60952.10 FT | | |
| L5 | 34.77 | N 183421.89 FT | N 183421.55 FT | S88°32'29" | |
| | | E 60952.10 FT | E 60952.10 FT | | |
| L6 | 39.59 | N 183421.55 FT | N 183420.31 FT | N45°11'47" | |
| | | E 60952.35 FT | E 60952.35 FT | | |
| L7 | 151.59 | N 183420.31 FT | N 183420.31 FT | N51°40'28" | |
| | | E 60952.35 FT | E 60952.35 FT | | |
| L8 | 87.17 | N 183420.31 FT | N 183420.31 FT | N32°25'27" | |
| | | E 60952.12 FT | E 60952.12 FT | | |
| L9 | 187.25 | N 183420.31 FT | N 183420.31 FT | N31°10'06" | |
| | | E 60955.69 FT | E 60955.69 FT | | |
| L10 | 98.94 | N 183690.71 FT | N 184005.73 FT | N28°54'27" | |
| | | E 60955.69 FT | E 60955.69 FT | | |

| CURVE DATA FOR 12" STEEL WATERMAIN | | | | | | |
|------------------------------------|-----------|--------|--------|--------|------------------------------------|------------------------------------|
| NO | Δ | R (FT) | L (FT) | T (FT) | START | END |
| C1 | 41°42'22" | 330.9 | 242.02 | 126.71 | N 1839421.01 FT E 6298612.48 FT | N 1835496.76 FT E 6298562.48 FT |
| C2 | 11°08'25" | 532.59 | 103.55 | 51.94 | N 1839255.88 FT E 6296265.20 FT | N 1835604.38 FT E 6296332.47 FT |
| C3 | 39°59'00" | 555.69 | 387.78 | 202.16 | N 1840052.73 FT E 6296603.67 FT | N 1840430.86 FT E 6296645.99 FT |



90% PLANS

NOT FOR CONSTRUCTION

ENCINAL CANYON RD
EMERGENCY INTERCONNECTION

PLAN STA. 36+00 TO 48+00

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| DATE | NO. | INITIALS | DESCRIPTION |
| REVISIONS | | | |



PROJECT ENGINEER

DATE _____

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| PROJ ID | WWD2900082 |
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| PCA | Y5292334 |
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SPEC WWD 29-803

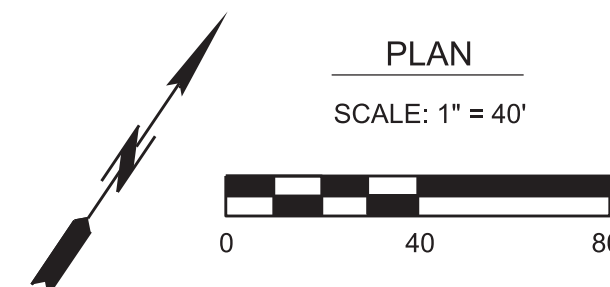
SHEET 5 OF 8



1. TW= TOP OF WALL, FS = FINISHED SURFACE,
EG = EXISTING GRADE, TF = TOP OF FOUNDATION



| CURVE DATA FOR 12" STEEL WATERMAIN | | | | | | |
|------------------------------------|-----------|--------|--------|--------|------------------------------------|------------------------------------|
| NO | Δ | R (FT) | L (FT) | T (FT) | START | END |
| C1 | 39°59'00" | 556.69 | 367.78 | 202.16 | N 1840033.73 FT E 6269652.97 FT | N 1840430.89 FT E 6269652.97 FT |
| C2 | 39°59'40" | 602.77 | 378.67 | 195.82 | N 1840097.88 FT E 6269652.11 FT | N 1840138.38 FT E 6266554.19 FT |
| C3 | 35°14'23" | 659.13 | 405.40 | 209.34 | N 1841338.95 FT E 6269652.19 FT | N 1841635.39 FT E 6269652.19 FT |



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| REVISIONS | | | |



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| PROJECT ENGINEER | DATE |
|------------------|------|

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|---------|------------|-----|----------|------|------------|-------|---|----|---|
| PROJ ID | WWD2900082 | PCA | Y5292334 | SPEC | WWD 29-803 | SHEET | 6 | OF | 8 |
|---------|------------|-----|----------|------|------------|-------|---|----|---|

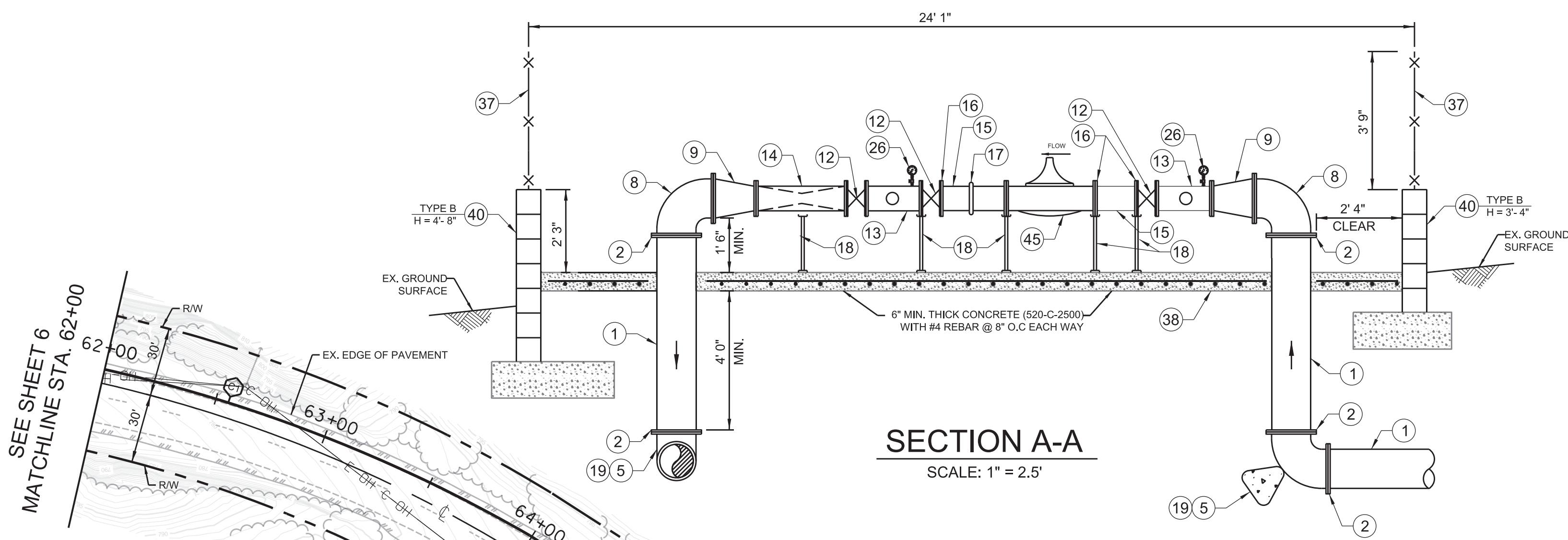
NOT FOR CONSTRUCTION

ENCINAL CANYON RD EMERGENCY INTERCONNECTION

PLAN STA. 48+00 TO 62+00

90% PLANS

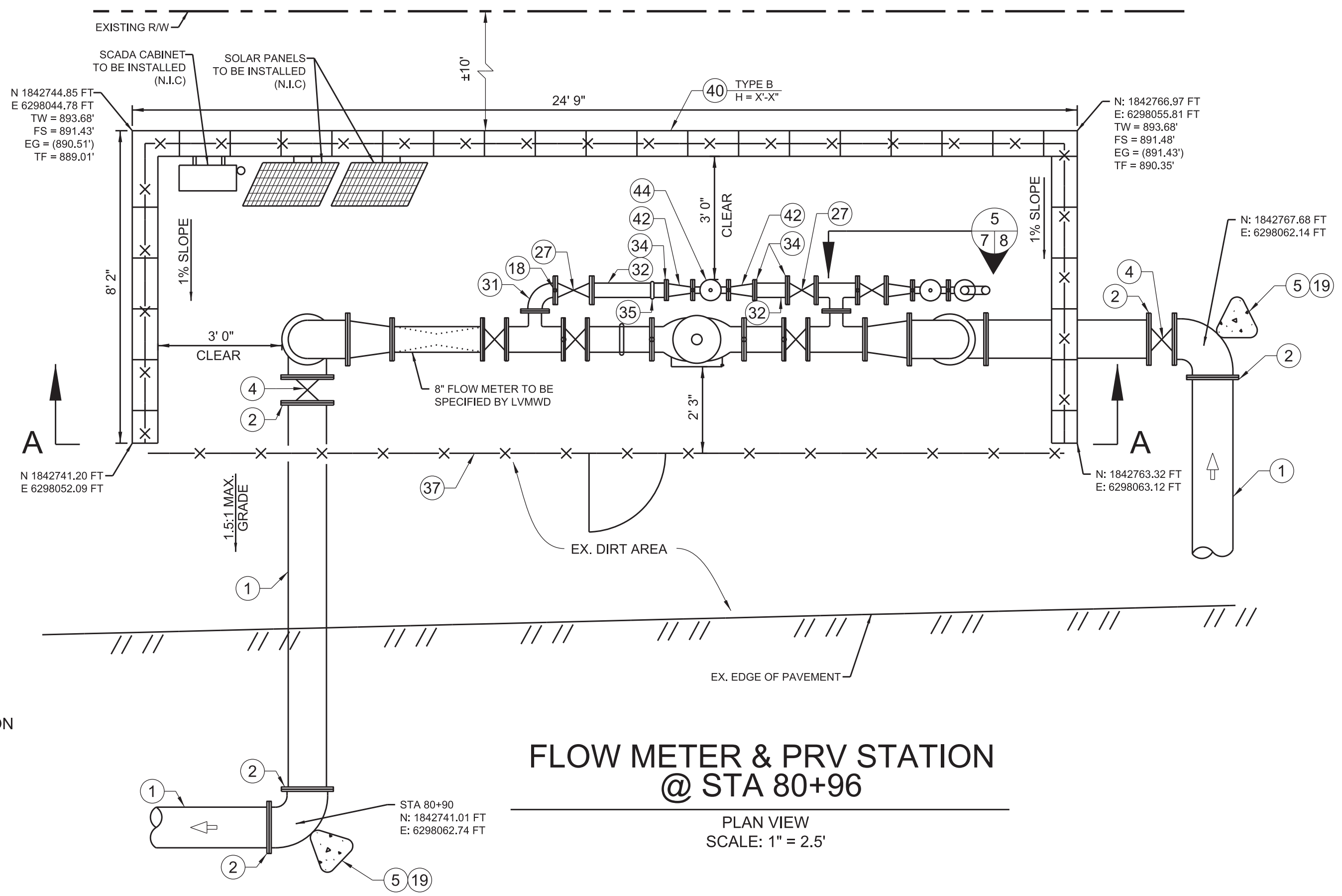
FILE NAME: WWD2900082 Encinal Canyon Emergency Interconnection.dgn
DATE LAST SAVED: 01/06/2021
CHECKER: R. HARTOONIAN
DESIGNER: R. NADERI
DRAFTER: S. MAULAWI



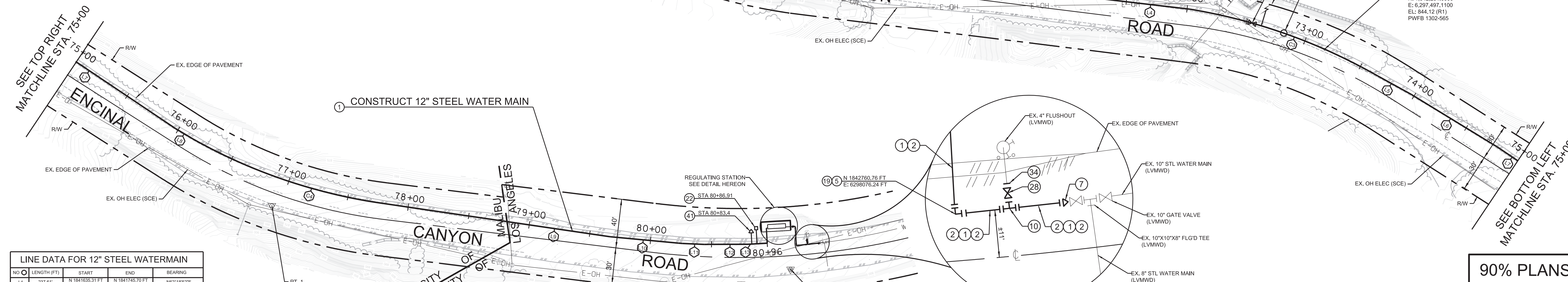
SECTION A-A
SCALE: 1" = 2.5'

CONSTRUCTION NOTE:
1. TW= TOP OF WALL, FS = FINISHED SURFACE,
EG = EXISTING GRADE, TF = TOP OF FOUNDATION

INTERCONNECTION NOTE 2:
AFTER COMPLETION OF THE WATER MAIN INSTALLATION, SATISFACTORILY COMPLETING BACTERIOLOGICAL AND PRESSURE TESTS IN ACCORDANCE WITH SECTION W OF THE SPECIAL PROVISIONS, AND AFTER APPROPRIATE VALVES HAVE BEEN CLOSED BY AGENCY AND LVMWD PERSONNEL, THE CONTRACTOR, UNDER AGENCY AND LVMWD SUPERVISION, SHALL INSTALL 12" X 10" REDUCER TO EXISTING 10" GATE VALVE AND COMPLETE THE INTERCONNECTION AS SHOWN ON THE PLANS, SEE GENERAL NOTE 16 ON SHEET 2. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED AGENCY CUSTOMERS AND THE FIRE DEPARTMENT NO LESS THAN 48 HOURS PRIOR TO LOSS OF SERVICE. SHUTDOWN TIME SHALL NOT EXCEED 3 HOURS.



FLOW METER & PRV STATION
@ STA 80+96
PLAN VIEW
SCALE: 1" = 2.5'



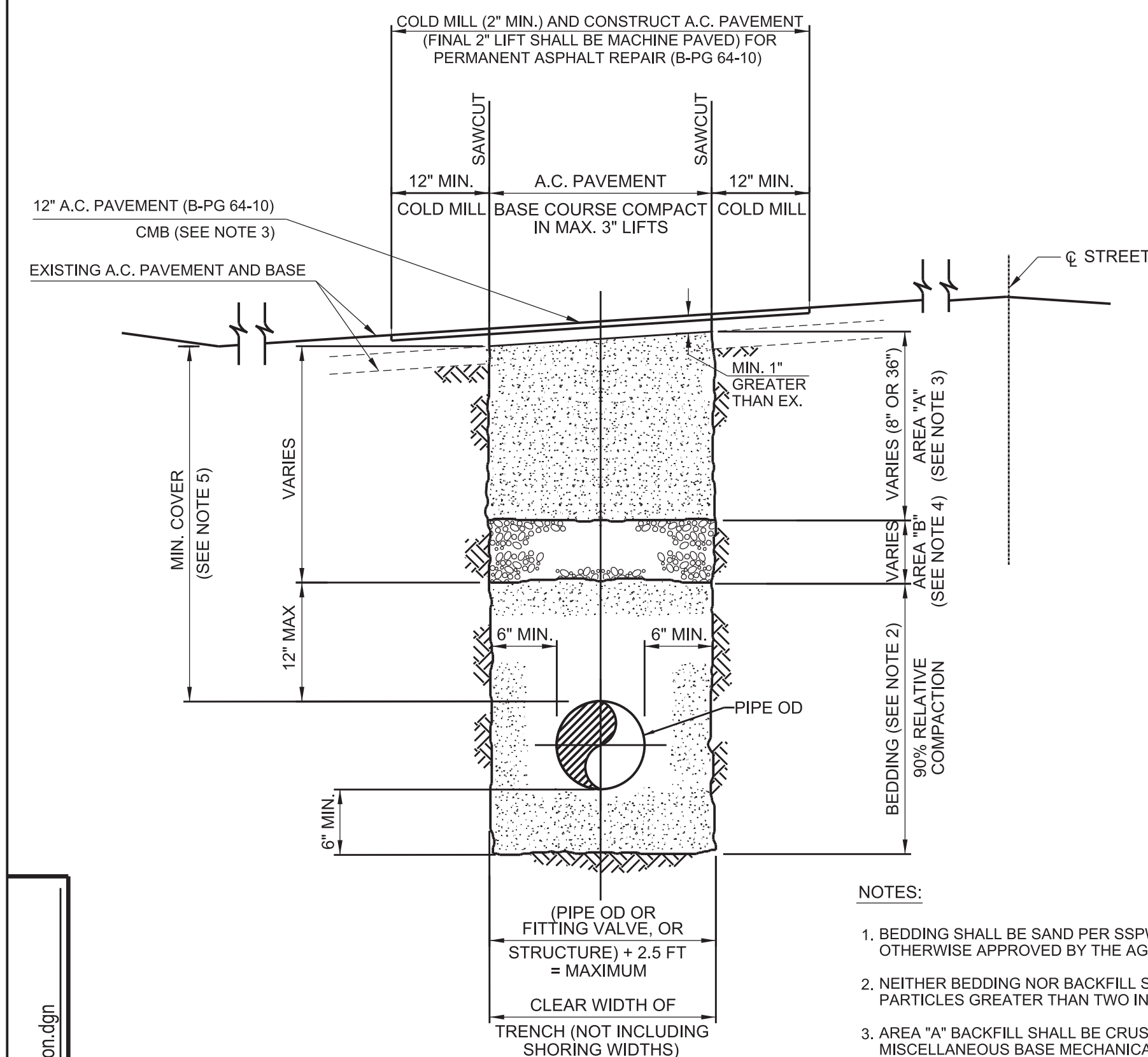
| LINE DATA FOR 12" STEEL WATERMAIN | | | | |
|-----------------------------------|-------------|------------------------------------|------------------------------------|-------------|
| NO | LENGTH (FT) | START | END | BEARING |
| L1 | 237.61' | N 1841635.31 FT E 629821.40 FT | N 1841745.70 FT E 6297031.80 FT | N62°18'52"E |
| L2 | 84.47' | N 1841745.70 FT E 6297031.80 FT | N 1841796.38 FT E 6297108.84 FT | N61°12'37"E |
| L3 | 262.09' | N 1841796.38 FT E 6297108.84 FT | N 1842094.96 FT E 6297372.14 FT | N36°35'26"E |
| L4 | 70.86' | N 1842094.96 FT E 6297372.14 FT | N 1842152.03 FT E 6297335.95 FT | N36°20'10"E |
| L5 | 35.24' | N 1842152.03 FT E 6297335.95 FT | N 1842274.35 FT E 6297741.77 FT | N58°29'43"E |
| L6 | 81.85' | N 1842274.35 FT E 6297741.77 FT | N 1842314.40 FT E 6297766.43 FT | N61°09'59"E |
| L7 | 118.22' | N 1842314.40 FT E 6297766.43 FT | N 1842354.41 FT E 6297788.33 FT | N63°31'00"E |
| L8 | 16.84' | N 1842354.41 FT E 6297788.33 FT | N 1842354.41 FT E 6297788.33 FT | N63°31'00"E |
| L9 | 187.11' | N 1842354.41 FT E 6297788.33 FT | N 1842650.87 FT E 6298055.62 FT | N38°01'14"E |
| L10 | 59.36' | N 1842650.87 FT E 6298055.62 FT | N 1842650.87 FT E 6298055.62 FT | N35°01'14"E |
| L11 | 17.97' | N 1842650.87 FT E 6298055.62 FT | N 1842650.87 FT E 6298055.62 FT | N32°01'14"E |
| L12 | 35.42' | N 1842650.87 FT E 6298055.62 FT | N 1842725.74 FT E 6298055.62 FT | N29°29'58"E |
| L13 | 14.80' | N 1842725.74 FT E 6298055.62 FT | N 1842725.74 FT E 6298055.62 FT | N28°29'58"E |

| CURVE DATA FOR 12" STEEL WATERMAIN | | | | | |
|------------------------------------|-----------|--------|--------|--------|------------------------------------|
| NO | Δ | R (FT) | L (FT) | T (FT) | START |
| C1 | 35°14'23" | 659.13 | 405.40 | 209.34 | N 1841338.95 FT E 6298554.19 FT |
| C2 | 20°28'40" | 414.79 | 148.25 | 74.92 | N 1841796.38 FT E 6297108.84 FT |
| C3 | 19°56'49" | 459.49 | 159.97 | 80.80 | N 1842152.03 FT E 6297335.95 FT |
| C4 | 21°19'33" | 444.36 | 165.39 | 83.66 | N 1842354.41 FT E 6297788.33 FT |

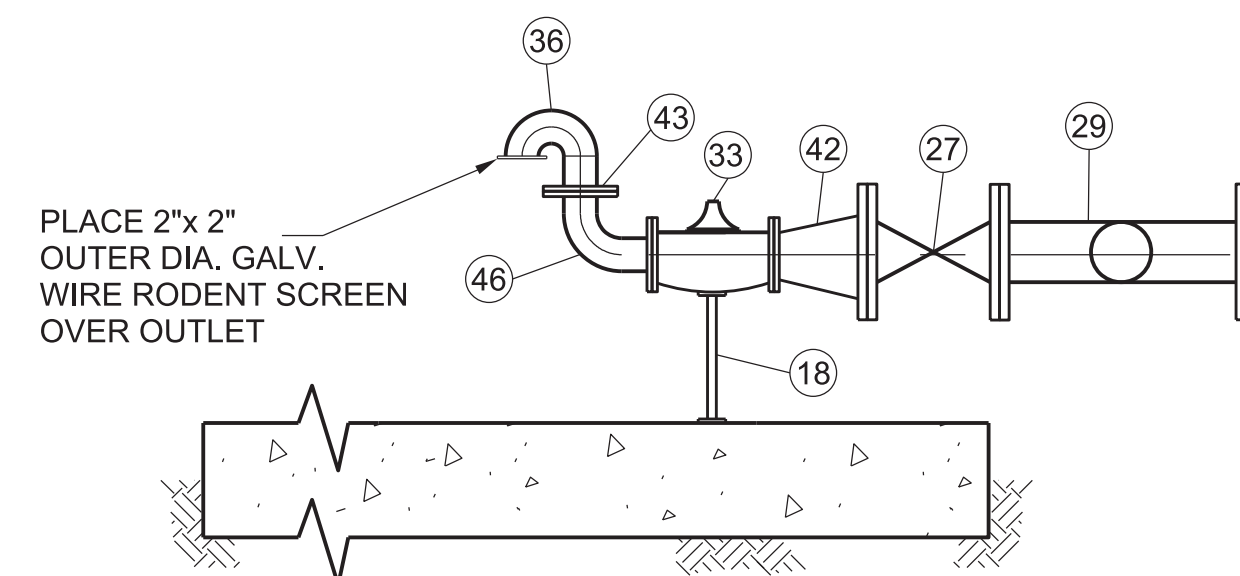
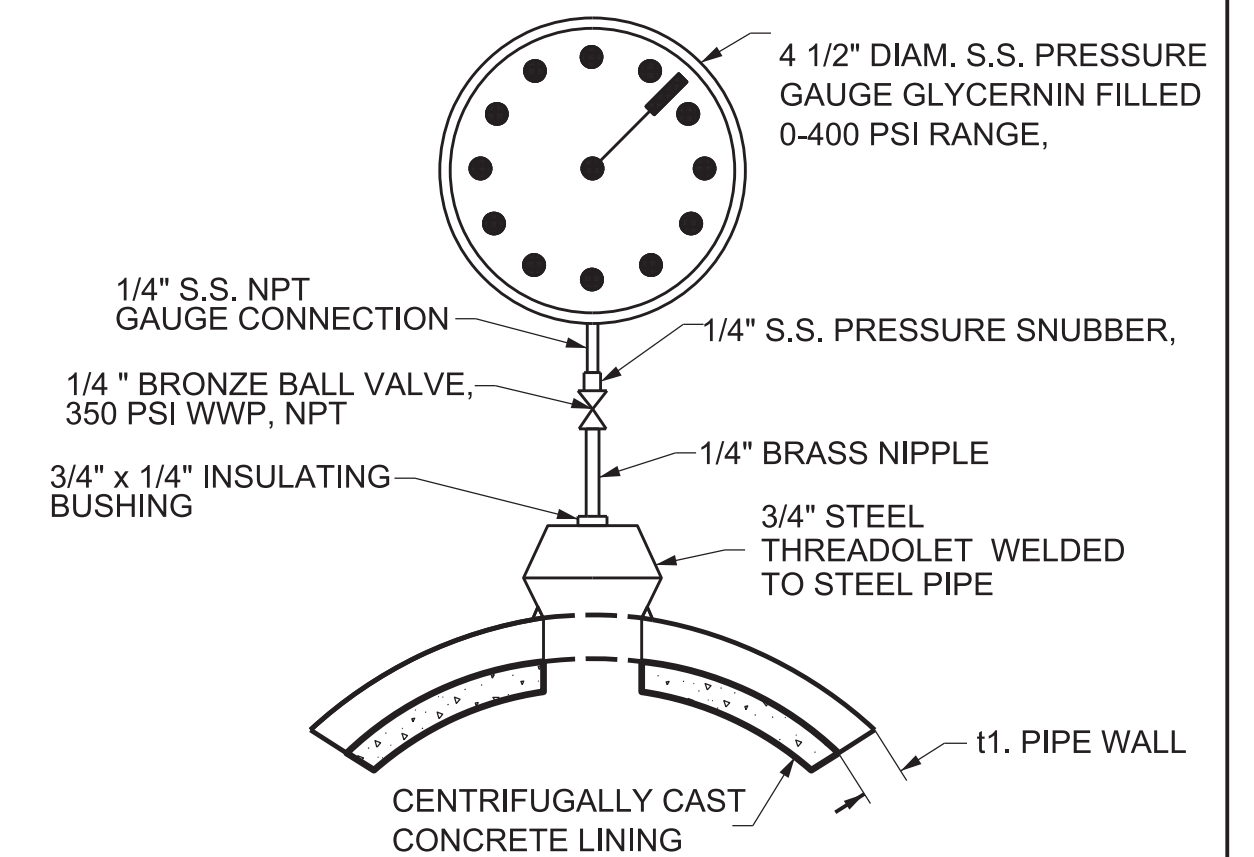
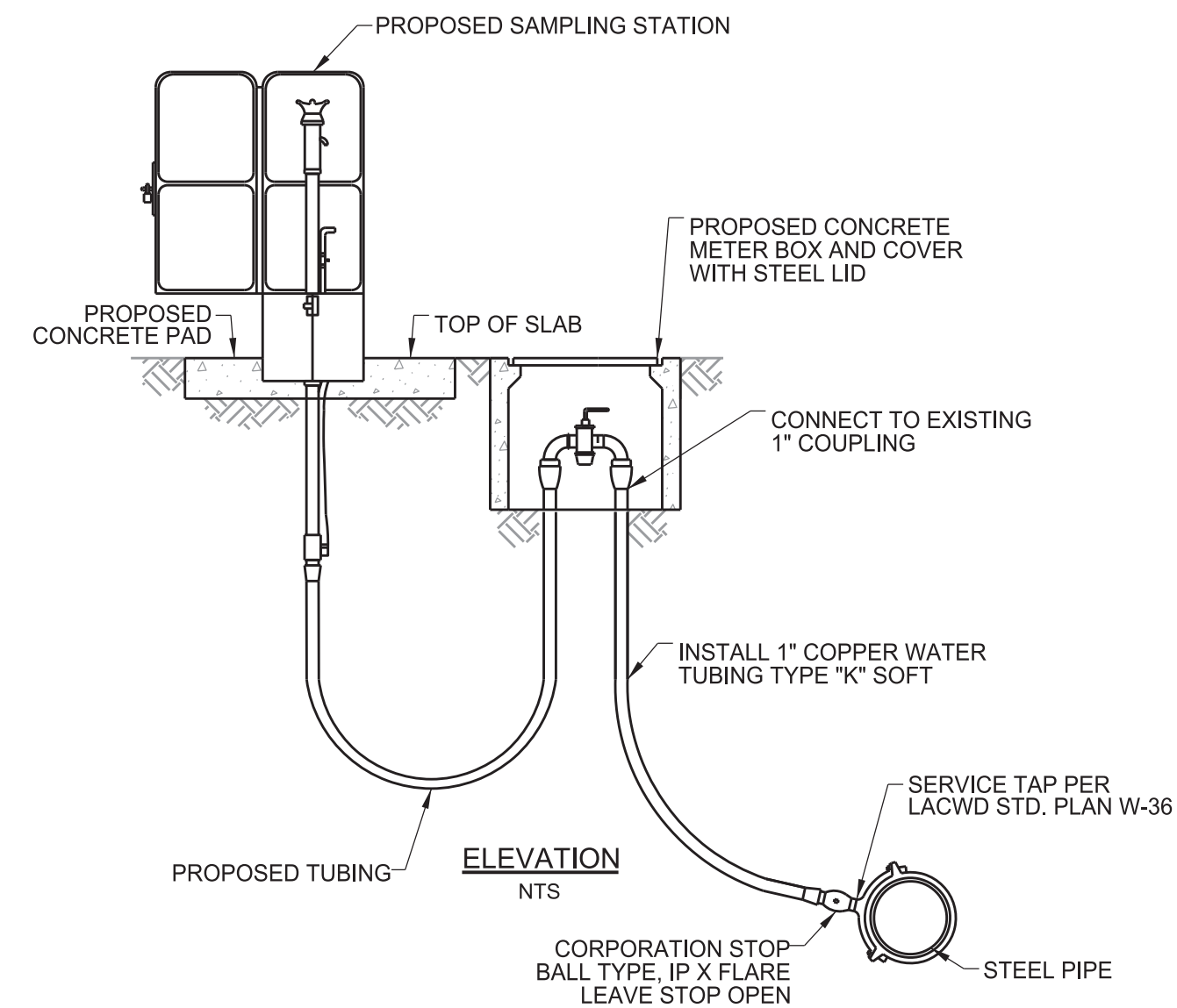
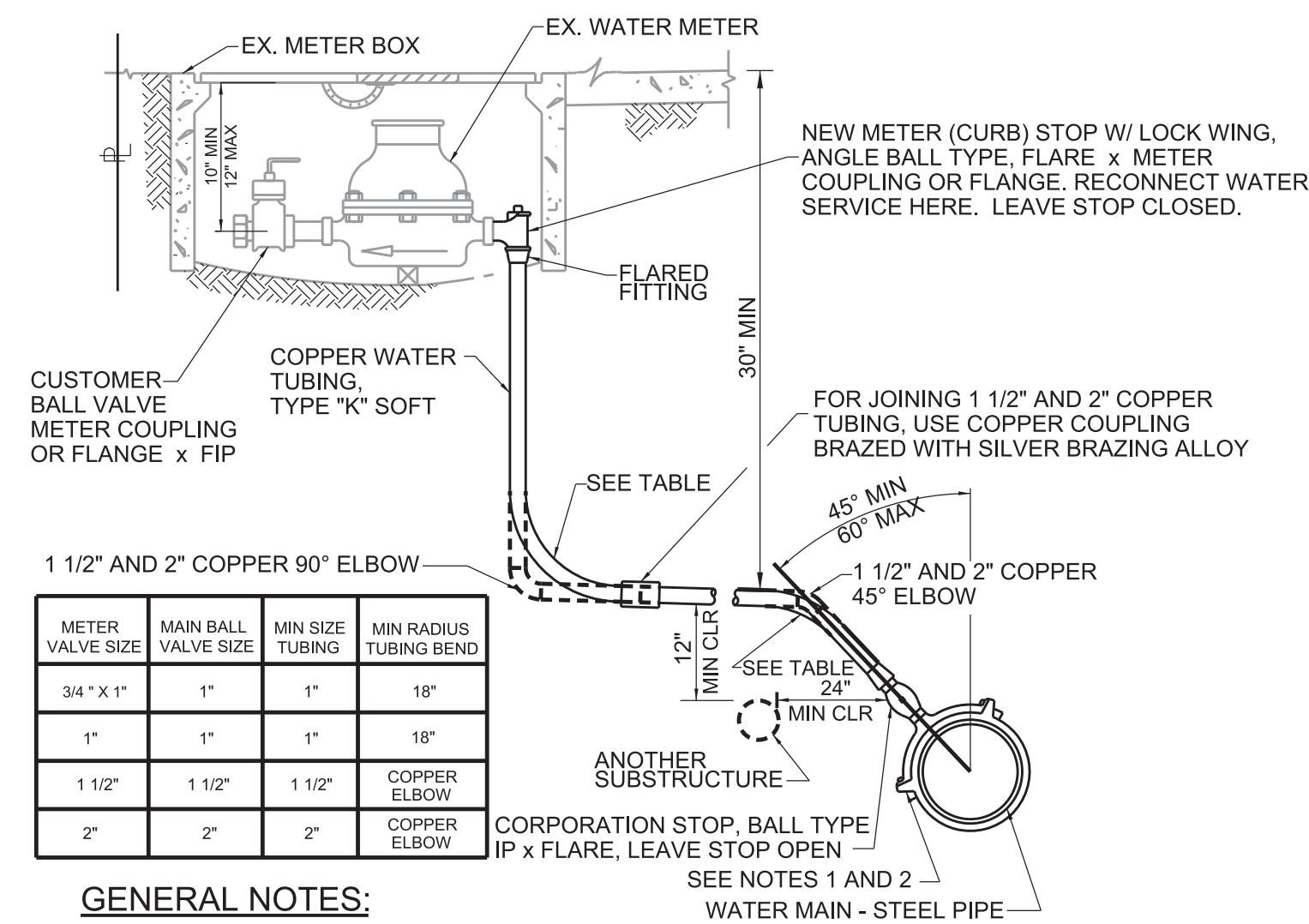
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| LOS ANGELES COUNTY PUBLIC WORKS WATERWORKS DISTRICT NO. 29, MALIBU | | | | |
|---|------------|-----|----------|-----------------|
| ENCINAL CANYON RD EMERGENCY INTERCONNECTION | | | | |
| PLAN STA. 62+00 TO 80+96 | | | | |
| PROJ ID | WWD2900082 | PCA | Y5292334 | SPEC WWD 29-803 |
| SHEET | 7 | OF | 8 | |



- NOTES:



| WATER SERVICE CONNECTION TABLE | | | |
|--------------------------------|------------|--------------------------|-------------------------------|
| NO. | APN | EX. SERVICE LATERAL SIZE | PROPOSED SERVICE LATERAL SIZE |
| 1 | 4473025016 | 1" | 1" |
| 2 | 4473025016 | 1" | 1" |

IN ADDITION TO PERMANENT RECONNECTION, TEMPORARY SERVICE TO BE PROVIDED FROM ABOVE-GROUND BYPASS DURING CONSTRUCTION

90% PLANS

NOT FOR CONSTRUCTION

LOS ANGELES COUNTY PUBLIC WORKS

ENCINAL CANYON RD
EMERGENCY INTERCONNECTION

DETAILS AND SECTIONS

| | | | | | |
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| | | | | <div><div>LOS ANGELES COUNTY PUBLIC WORKS WATERWORKS DISTRICT NO. 29, MALIBU</div><div>ENCINAL CANYON RD EMERGENCY INTERCONNECTION</div><div>DETAILS AND SECTIONS</div></div> | |
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