

**RECLAMATION DISTRICT NO. 17
MOSSDALE TRACT
BOARD OF TRUSTEES MEETING
TUESDAY, NOVEMBER 11, 2025
2:00 P.M.
ENGINEER'S REPORT**

I. EARLY IMPLEMENTATION PROGRAM – LEVEE SEEPAGE REPAIR PROJECT

- A. EIP Project Funding Agreement expires 12/31/2025
 - a. Amendment to extend agreement expiration in progress 24 months
- B. \$784,235 DWR retention release for Phase 1-2 received 10/15/25
- C. Right of Way transfers in progress – District Counsel taking lead on agreements:
 - a. Oakwood Lake Waer District (OLWD), negotiations ongoing
 - b. Joint Use Agreement (JUA) for San Joaquin County (Howard Road Parcel)
 - c. JUA for San Joaquin County (Mosssdale Crossing Regional Park)
 - d. JUA for Caltrans (Highway 120)
 - e. JUA with UPRR (north of Mosssdale Crossing Regional Park)
- D. Habitat Mitigation Area
 - a. Replanting plan completed.
 - b. Nursery quotes received.
 - 1. Total cost of plants to complete planting plan is \$40, 000.
 - i. We have chosen to purchase plants that are a bit older and more established, bringing initial cost up a bit.
 - ii. Plant purchase requires expeditious payments at contract signing and when plants are ready and pulled.
 - 2. Order will be divided up into 2 or 3 deliveries.
 - i. Plants in stock – set for installation as early as next week.
 - ii. Plants currently growing – set for installation early spring 2026
 - iii. Plants to be grown – set for installation fall 2026.
 - 3. Contracting Strategy
 - i. RD17 to purchase plants directly from nursery.
 - ii. Seek authority from the Board of Trustees for total cost of plants of \$40,000 so that payments can be made

within purchase terms of the nursery as the plants become available. First installment is ready and pulled.

- iii. Authorize Contract with EW-Black for under \$25,000 contract for installation of the plants as they come available.

EXHIBIT A: Nursery Invoice for available plants.

EXHIBIT B: Habitat Mitigation Area Photos.

II. DISTRICT PLAN REVIEW

- A. Manteca Zone 36/Zone 39 Storm Drain Project
 - a. City of Manteca provided 90% Phase 1 Project Plans and Specs for Outfall portion of project – RD17 provided review comments

EXHIBIT C: Zone 36/39 Storm Drain Project Phase 1 Outfall - 90% Design Plans with RD17 comments.

- B. City of Lathrop Golden Valley Parkway Bridge
 - a. City of Lathrop engineering consultant coordinating geotechnical investigations with RD17 engineer
 - b. In-water borings completed in SJ River in late October, RD17 explorations to proceed the week of 11/11

EXHIBIT D: Field Photos of Geo Ex Drillers

e

III. DISTRICT MAINTENANCE

- A. Security Hardening – EcoBlock installation complete across HWY-5 tunnel entrance and southern UPRR crossing.
- B. Rodent Abatement
 - a. Lemhi Land and Cattle continued rodent hole grouting program.
 - b. Ag Wildlife Management (AWM) continued rodent abatement program.
- C. Element 1: PG&E Tower Coating
 - a. PGE started application of corrosion coating to lattice transmission towers.

EXHIBIT E: PG&E Transmission Tower Coating Photos

- D. Fence & Gate Modification & Repairs
 - a. Extension of barrier fence at Woodward Rd. – completed

EXHIBIT F: Barrier Fence installation Photos

- E. Annual Maintenance Bid Project for Vegetation Management, Erosion Repairs, Debris Removal, and All-Weather Road Repairs
 - a. Robert Burns Construction commenced work on 10/6/25
 - b. Initial Contract Project field work completed by 10/17/25
 - c. Work Change Directives Issued:
 - 1. Fallen Branch Removal Sta 52+25
 - 2. LS Trimming on Fencing Sta 30+00 to Sta 155+00
 - 3. LS Grading (Rills) Sta 919+90 to Sta 925+90 (Dryland Levee)
 - 4. Dryland Levee AB Reconditioning Sta 855+00 to 945+00
 - d. Change Orders:
 - 1. Change Order 1 will incorporate Work Change Directives 1-4.

EXHIBIT G: Annual Maintenance Bid Project Photos

I. CALIFORNIA DATE EXCHANGE CENTER (CDEC)

- A. Review the California Date Exchange Center (CDEC) River Stage Forecast and reservoir levels in the nearby San Joaquin Basin.

EXHIBIT H: Delta Hydrology Conditions San Joaquin River Flow in cfs at Vernalis for October 2025.

EXHIBIT I: CDEC San Joaquin River near Mossdale Stage Guidance plot dated November 3, 2025.

EXHIBIT J CDEC Daily Reservoir Storage Summary compared to historical averages, and Top of Conservation limits. November 3, 2025.

EXHIBIT K: CDEC Camanche Reservoirs Conditions dated November 3, 2025.

EXHIBIT L: CDEC New Melones Reservoir Conditions dated November 3, 2025.

EXHIBIT M: CDEC New Don Pedro Reservoirs Conditions dated November 3, 2025.

EXHIBIT N: CDEC New Hogan Reservoirs Conditions dated November 3, 2025.

EXHIBIT O: CDEC Folsom Reservoir Conditions dated November 3, 2025.

EXHIBIT P: CDEC Lake Shasta Conditions dated November 3, 2025.

EXHIBIT Q: CDEC Lake Oroville Conditions dated November 3, 2025.

EXHIBIT A

63989

ORDER

EWBCON1

SOLD TO:

EW Black Consulting, Inc.
2611 Louisiana Street
Sacramento CA 95821

SHIP TO:

COMMENT:					
CUST. PO NO.	ORDER DATE	ORDERED BY	PLANNED DELIVERY	TERMS	PAGE
	10/30/2025	Emmett Black		Cash / Credit Card	1/2
ITEM	QTY	DESCRIPTION	UNIT PRICE	EXTENDED	
QUELOB-T6	20	Quercus lobata valley oak	19.95	399.00	
SALGOO-T4		Salix gooddingii Goodding's black willow (out of stock)	12.30	0.00	
SALLAL-T4	190	Salix lasiolepis arroyo willow	12.30	2,337.00	
ACENEG-T4	15	Acer negundo	12.30	184.50	
CEPOCB-T4	200	Cephalanthus occidentalis buttonbush (not sure on #s until approved as an order and pulled)	12.30	2,460.00	
QUELOB-T4	190	Quercus lobata valley oak (several large orders in progress unsure on our #s until those are pulled unlikely to have this many)	12.30	2,337.00	
CEPOCB-01	25	Cephalanthus occidentalis buttonbush	6.95	173.75	
QUELOB-L3	450	Quercus lobata valley oak	5.65	2,542.50	
ACENEG-TB	350	Acer negundo California box elder	3.70	1,295.00	
QUELOB-TB	1,200	Quercus lobata valley oak (unlikely to have this full amount but maybe around 900-1000 potentially)	3.70	4,440.00	
RUBURS-LN	200	Rubus ursinus	1.70	340.00	

Cornflower Farms, Inc
P.O. Box 896
Elk Grove CA 95759

Website:
Phone: 916-689-1015
Fax: 916-689-1968
E-mail: natives@cornflowerfarms.com

SALE AMOUNT	
8.75% TAX	
TOTAL	

63989

ORDER

EWBCON1

SOLD TO:

EW Black Consulting, Inc.
2611 Louisiana Street
Sacramento CA 95821

SHIP TO:

COMMENT:					
CUST. PO NO.	ORDER DATE	ORDERED BY	PLANNED DELIVERY	TERMS	PAGE
	10/30/2025	Emmett Black		Cash / Credit Card	2/2
ITEM	QTY	DESCRIPTION	UNIT PRICE	EXTENDED	
		California blackberry (maybe need to pull for contracts first might have less than this) Emmett Black del_ops@hotmail.com (619) 243-4473			

Cornflower Farms, Inc
P.O. Box 896
Elk Grove CA 95759

Website:
Phone: 916-689-1015
Fax: 916-689-1968
E-mail: natives@cornflowerfarms.com

SALE AMOUNT	16,508.75
8.75 % TAX	1,444.52
TOTAL	17,953.27

EXHIBIT B



Figure 21. 0856-0450-04-030 No signs of tampering with the automated irrigation valves at RD-17's habitat mitigation site.

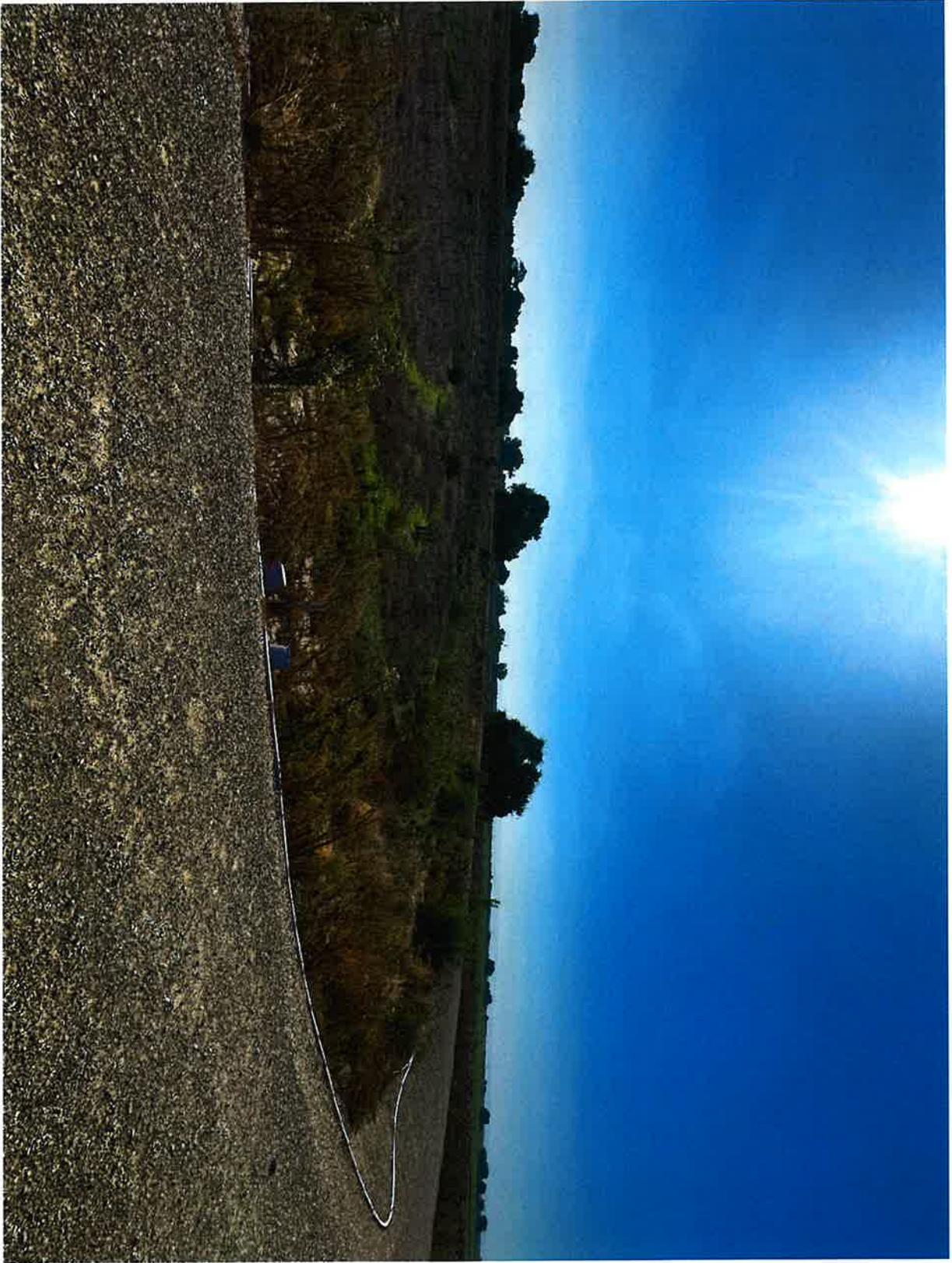


Figure 22. 0856-0450-04-030 Vegetation regrowth along established planting lines.

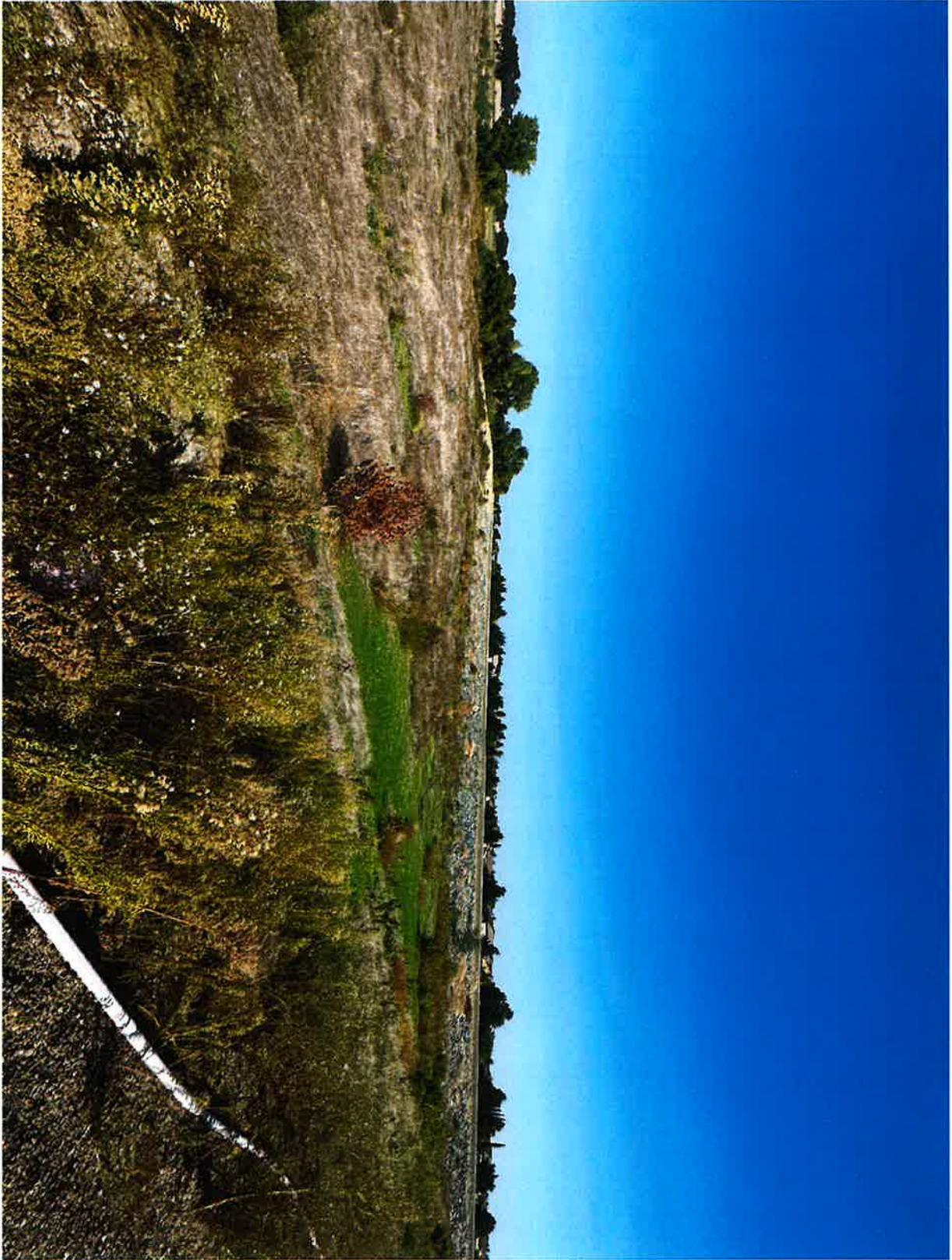


Figure 23. 0856-0450-04-030 Vegetation regrowth along established planting lines.



Figure 24. 0856-0450-04-030 Vegetation regrowth along established planting lines.

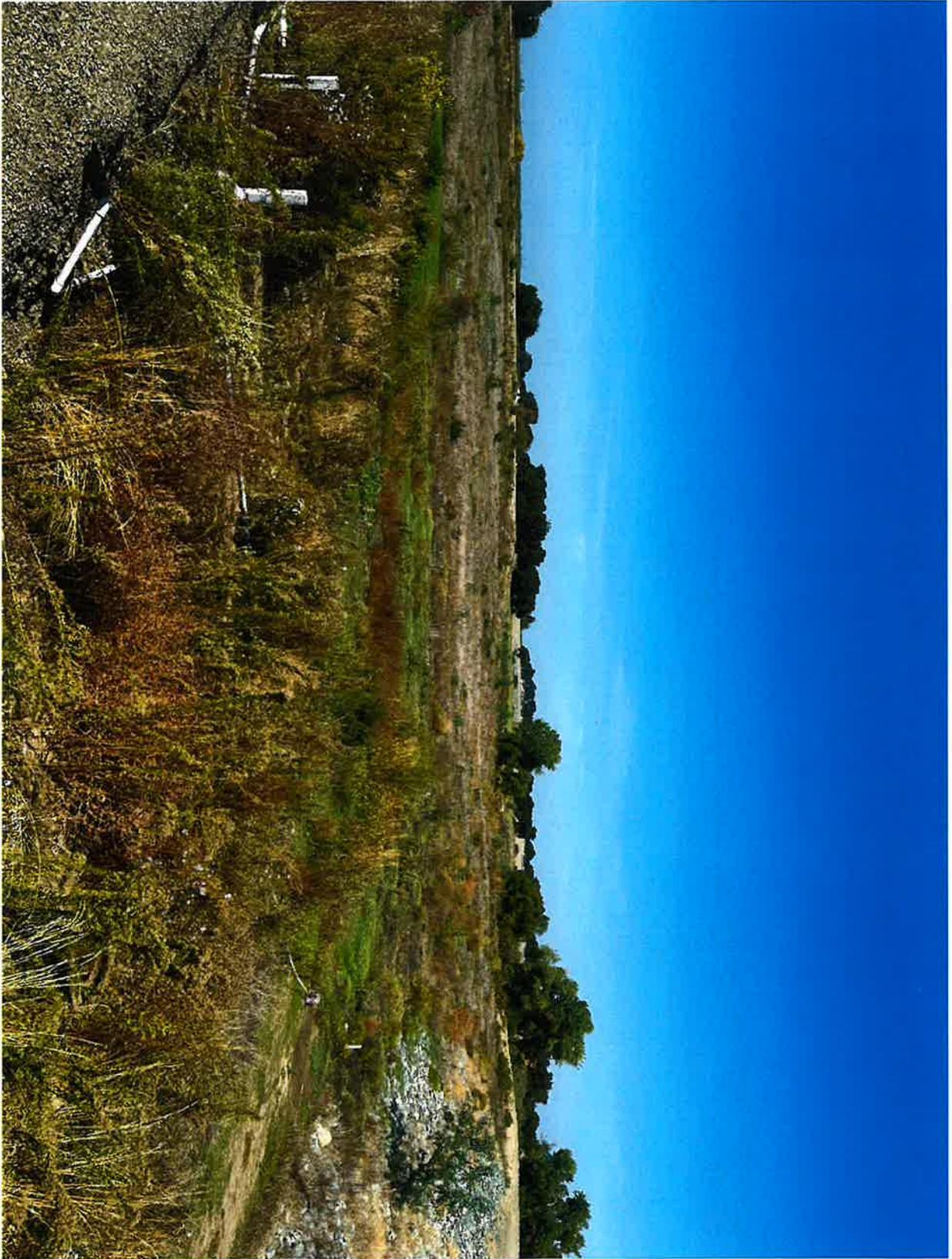


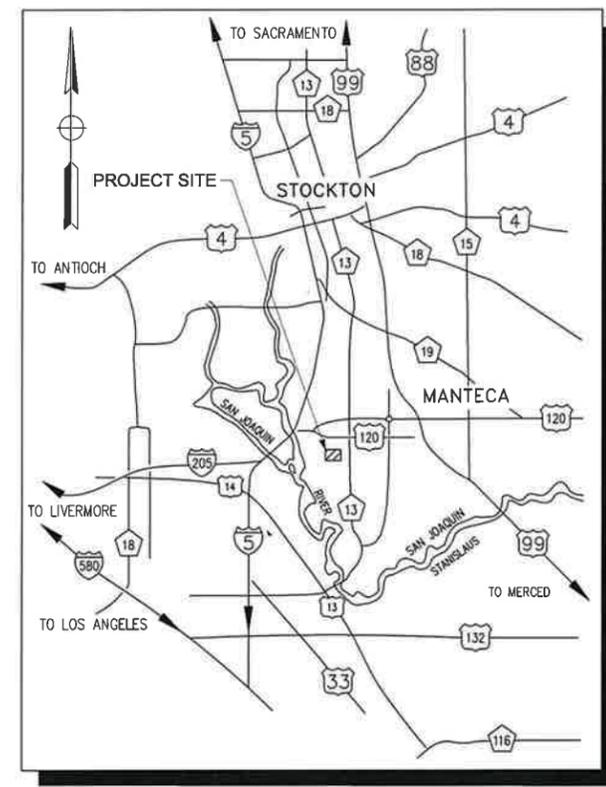
Figure 25. 0856-0450-04-030 Vegetation regrowth along established planting lines.

EXHIBIT C

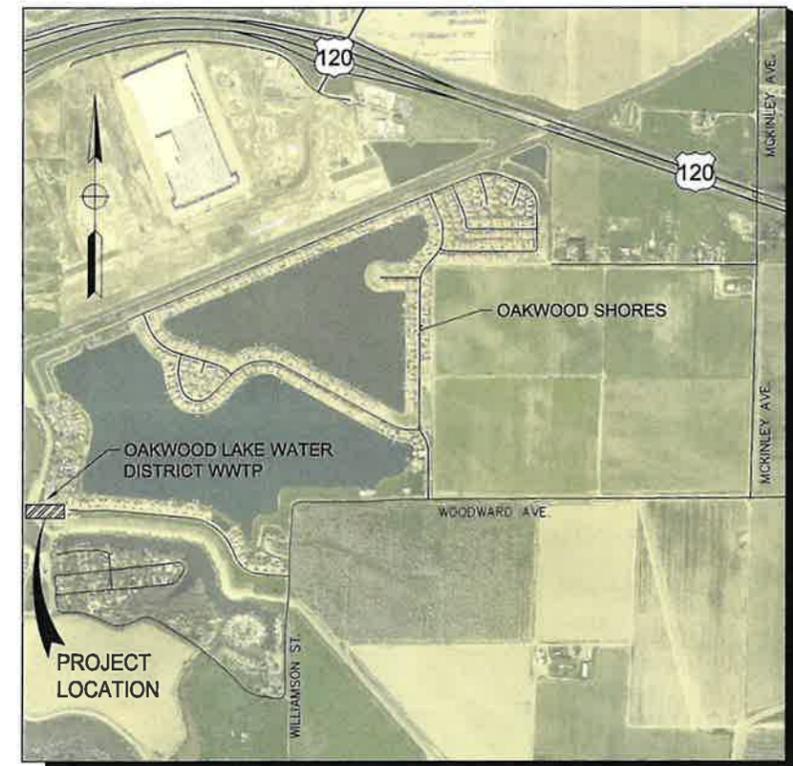
\\DEWBERRY\PROT\LOCAL\OFFICES\MANTECA\PROJECTS\10126948 - ZONE 36-39 STORM DRAIN - CI MANTECA\ADD PROJECT DESIGN FILES\435 WATER PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-23839IP-GENERAL--G0.20 DRAWING INDEX, LOCATION MAP, AND VICINITY MAP

SHEET INDEX

SHEET NO.	DRAWING	TITLE
GENERAL		
1	G0.10	COVER SHEET
2	G0.20	DRAWING INDEX, LOCATION MAP, AND VICINITY MAP
3	G0.22	CONTRACTOR SITE INGRESS & EGRESS AND HAUL ROUTE
4	G0.30	GENERAL NOTES, UTILITY NOTES, AND UTILITY CONTACT INFORMATION
5	G0.31	EROSION CONTROL NOTES
6	G0.40	ABBREVIATIONS AND SYMBOLS
7	G0.50	PROJECT OVERVIEW
8	G0.51	SURVEY CONTROL MAP
9	G0.52	STORM DRAIN FORCE MAIN - HORIZONTAL CONTROL PLAN 1
10	G0.53	STORM DRAIN FORCE MAIN - HORIZONTAL CONTROL PLAN 2
11	G0.61	LIMITS OF CONSTRUCTION WITHIN OLWD WWTP
12	G0.70	STORM DRAIN OUTFALL - STAGING AREA PLAN
13	G0.80	STORM DRAIN OUTFALL - CONSTRUCTION SEQUENCING PLAN
DEMOLITION		
14	D3.01	OAKWOOD LAKE WATER DISTRICT WWTP - EXISTING SITE AND PIPING LAYOUT
15	D3.02	OAKWOOD LAKE WATER DISTRICT WWTP - TRAILER RELOCATION PLAN
16	D3.03	OAKWOOD LAKE WATER DISTRICT WWTP - FENCING DEMOLITION PLAN
17	D3.04	OAKWOOD LAKE WATER DISTRICT WWTP - TEMPORARY CONSTRUCTION FENCING PLAN
18	D3.05	OAKWOOD LAKE WATER DISTRICT WWTP - TEMPORARY SECURITY FENCE DETAILS
19	D3.06	OAKWOOD LAKE WATER DISTRICT WWTP - STRUCTURES/BASIN DEMOLITION PLAN
20	D3.07	OAKWOOD LAKE WATER DISTRICT WWTP - PIPING DEMOLITION PLAN
21	D3.08	OAKWOOD LAKE WATER DISTRICT WWTP - SITE AND PIPING LAYOUT - POST PIPING DEMOLITION
22	D3.09	OAKWOOD LAKE WATER DISTRICT WWTP - POND DEMOLITION - SITE GRADING PLAN
23	D3.10	OAKWOOD LAKE WATER DISTRICT WWTP - SECTIONS 1
24	D3.11	OAKWOOD LAKE WATER DISTRICT WWTP - SECTIONS 2
25	D3.12	OAKWOOD LAKE WATER DISTRICT WWTP - SECTIONS 3
26	D3.13	OAKWOOD LAKE WATER DISTRICT WWTP - SECTIONS 4
27	D3.14	OAKWOOD LAKE WATER DISTRICT WWTP - RESTORATION PLAN AND DETAILS
28	D3.15	OAKWOOD LAKE WATER DISTRICT WWTP - PERMANENT SECURITY FENCING PLAN
CIVIL DETAILS		
29	CD0.10	CIVIL DETAILS
30	CD0.20	EROSION CONTROL DETAILS
CIVIL		
31	C3.00	STORM DRAIN FORCE MAIN - PLAN AND PROFILE STA 0+00 - STA 6+02
32	C4.00	STORM DRAIN OUTFALL - OVERALL SITE PLAN
33	C4.01	STORM DRAIN OUTFALL - OUTFALL DISCHARGE PIPING - PLAN AND PROFILE
34	C4.02	STORM DRAIN OUTFALL - ACCESS ROAD AND LEVEE CONSTRUCTION DETAILS
35	C4.03	STORM DRAIN OUTFALL - OUTFALL GENERAL ARRANGEMENT
36	C4.04	STORM DRAIN OUTFALL - OUTFALL SECTION
37	C4.05	STORM DRAIN OUTFALL - TYPICAL DETAILS 1
38	C4.06	STORM DRAIN OUTFALL - TYPICAL DETAILS 2



VICINITY MAP



LOCATION MAP

KEY TO DRAWING NUMBERS

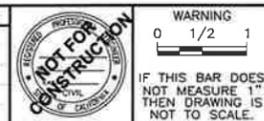
DISCIPLINES	WORK AREAS
G - GENERAL	0 - GENERAL
C - CIVIL	1 - GRAVITY STORM DRAIN
CD - CIVIL DETAIL	2 - STORM DRAIN PUMP STATION
D - DEMOLITION	3 - STORM DRAIN FORCE MAIN
S - STRUCTURAL	4 - STORM DRAIN OUTFALL
M - MECHANICAL	
E - ELECTRICAL	

EXAMPLE NUMBER: C 2.01

- C - DISCIPLINE
- 2 - SEQUENTIAL NUMBER IN WORK AREA FOR A GIVEN DISCIPLINE
- 01 - WORK AREA

90% SUBMITTAL
10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DATE: 10/22/25
DRAWN: DSR/KT
DESIGN: KT
CHECKED: DR
APPROVED: DR
SCALE: AS SHOWN

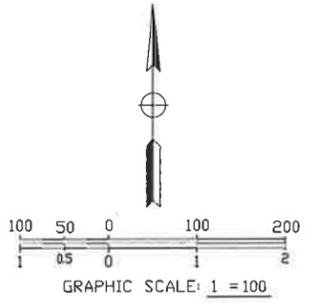
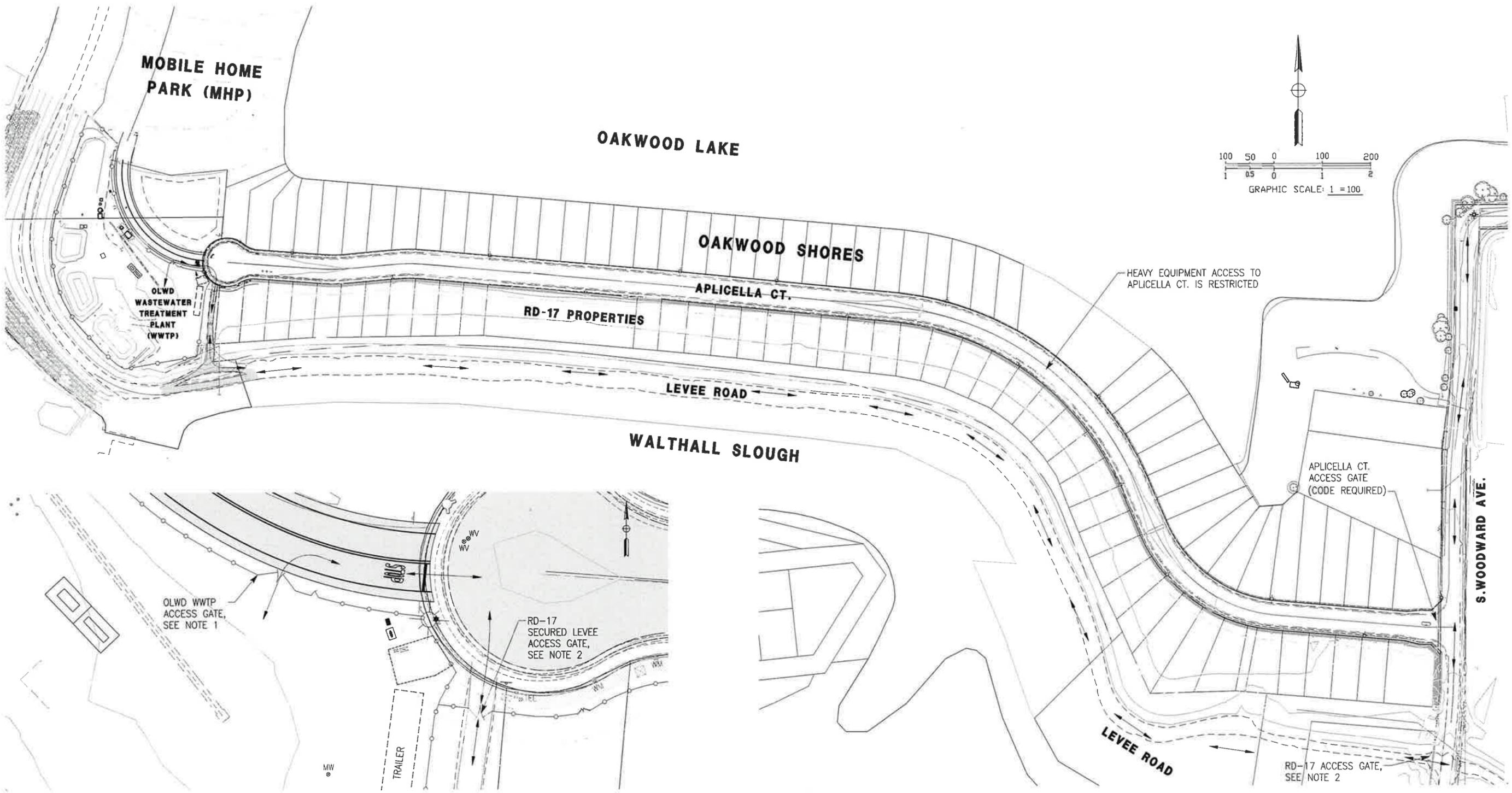
Dewberry | drake baglan
903 West Center Street, Suite 1
Manteca, CA 95337

CITY OF MANTECA, CALIFORNIA
CITY OF MANTECA
1101 WEST CENTER ST.
MANTECA, CA95337
HTTPS://WWW.CI.MANTECA.CA.US

STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
DRAWING INDEX, LOCATION MAP, AND VICINITY MAP

SHEET 2
OF 38
DRAWING NO. G0.20

L:\5012848 - ZONE 36-39 STORM DRAIN - CI MANTECA\400 PROJECT DESIGN FILES\435 WATER PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-25639IP-GENERAL--G0.22 INGRESS AND EGRESS



LEGEND:

↔ INGRESS / EGRESS AND HAULING ROUTE THROUGH RD-17 AND OLWD PROPERTIES

NOTE

1. CONTRACTOR SHALL REMOVE EXISTING OLWD WWTP ACCESS GATE AND MODIFY ENTRANCE TO FACILITATE CONSTRUCTION EQUIPMENT INGRESS AND EGRESS ROUTE. CONTRACTOR SHALL COMPLY WITH ACCESS RESTRICTIONS ESTABLISHED BY OLWD. CONTRACTOR SHALL INSTALL TEMPORARY GATE FOR ACCESS DURING CONSTRUCTION. FOLLOWING COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL REPAIR FENCE AND REPLACE GATE AS DIRECTED BY THE DISTRICT ENGINEER.
2. CONTRACTOR SHALL COMPLY WITH ACCESS RESTRICTIONS ESTABLISHED BY RD-17.
3. CONTRACTOR SHALL RESTORE ACCESS ROUTES TO PRE-PROJECT CONDITIONS TO THE SATISFACTION OF RD-17 AND OLWD FOLLOWING CONSTRUCTION COMPLETION.

**90% SUBMITTAL
10/23/2025**

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DATE: 10/22/25
DRAWN: DSR/KT
DESIGN: KT
CHECKED: DR
APPROVED: DR
SCALE: AS SHOWN

Dewberry | drake haglan

903 West Center Street, Suite 1
Manteca, CA 95337



CITY OF MANTECA
1101 WEST CENTER ST.
MANTECA, CA 95337
[HTTPS://WWW.CI.MANTECA.CA.US](https://www.ci.manteca.ca.us)

STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION

CONTRACTOR SITE INGRESS & EGRESS AND HAUL ROUTE

SHEET 3
OF 38
DRAWING NO. G0.22

L:\50128948 - ZONE 36-39 STORM DRAIN - CI MANTECA\400 PROJECT DESIGN FILES\435 WATER\PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-23539IP-GENERAL--CO.30 GENERAL NOTES, UTILITY NOTES, AND UTILITY CONTACT INFORMATION

CONTACTS:

CITY OF MANTECA
KEVIN JORGENSEN II
CITY ENGINEER
1001 W. CENTER STREET
MANTECA, CA 95337
(209) 456-8500

OAKWOOD LAKE WATER DISTRICT
BERT MICHALCZYK
DISTRICT ENGINEER
P.O. BOX 77980
STOCKTON, CA 95267
(925) 570-8830

RECLAMATION DISTRICT 17
CHRISTOPHER H. NEUDECK
DISTRICT ENGINEER
P.O. BOX 1461
STOCKTON, CA 95201
(925) 946-0268

TELEPHONE
VERIZON
STEPHAN MACDONALD
510 PARK AVENUE
SAN FERNANDO, CA 91340
(818) 837-0358

CABLE
COMCAST
KRIS COOK
6505 TAM O' SHANTER DRIVE
STOCKTON, CA 95210
(925) 271-2919

GAS & ELECTRIC
PG&E
ROBERT DAY
P.O. BOX 930
STOCKTON, CA 95201
(209) 942-1784

GENERAL NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE CITY'S INTERPRETATION OR CORRECTION THEREOF SHALL BE CONCLUSIVE. IN ADDITION FOR ANY WORK WITHIN THE FORMER OLWD WASTEWATER TREATMENT FACILITY, ANY DISCREPANCIES AND AMBIGUITIES SHALL BE REPORTED TO THE OLWD DISTRICT ENGINEER. ANY CHANGES IN THE APPROVED PLANS WITHIN THE FORMER OLWD WWTF, ARE SUBJECT TO THE REVIEW / APPROVAL OF THE OLWD DISTRICT ENGINEER.
2. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND LICENSES AND PAYING ALL ASSOCIATED FEES REQUIRED FOR THE CONSTRUCTION AND COMPLETION OF THE PROJECT. PERMITS AND LICENSES MAY INCLUDE BUT NOT BE LIMITED TO:
 - a. CITY OF MANTECA ENCRoACHMENT PERMIT
 - b. OLWD ENCRoACHMENT PERMIT
 - c. RD-17 ENCRoACHMENT PERMIT
 - d. CENTRAL VALLEY FLOOD PROTECTION BOARD ENCRoACHMENT PERMIT
 - e. USACE 404 PERMIT
 - f. REGIONAL WATER QUALITY CONTROL BOARD 401 WATER QUALITY CERTIFICATION
 - g. CALIFORNIA DIVISION OF FISH AND WILDLIFE 1602 STREAMBED ALTERATION AGREEMENT
 - h. STATE LAND COMMISSION LEASE
4. THE CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCHMARKS AND SURVEY REFERENCE POINTS, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT.
5. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAGMEN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY. TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. CONTRACTOR SHALL MAINTAIN CONTINUOUS ACCESS TO ALL OLWD OPERATING FACILITIES.
6. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS DURING THE PERFORMANCE OF THIS CONTRACT WORK.
7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE REMOVAL OR RELOCATION OF ALL EXISTING UTILITIES WITH RESPECTIVE UTILITY COMPANIES WITHOUT ADDITIONAL COST TO THE CITY. ALL REPAIR OR RELOCATION OF WATER, SEWER, OR STORM DRAIN FACILITIES SHALL BE ACCOMPLISHED PER CITY STANDARDS AND SPECIFICATIONS.
8. THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND UNDERGROUND SERVICE ALERT (U.S.A.). VERIFY LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES WITH RESPECTIVE UTILITY COMPANIES PRIOR TO

COMMENCEMENT OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF ALL SUCH FACILITIES IN THE AREA OF CONSTRUCTION AND SHALL NOTIFY UTILITIES FORTY-EIGHT HOURS IN ADVANCE OF ANY CONSTRUCTION.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. THE COST OF REPLACING EXISTING IMPROVEMENTS SHALL BE AT THE CONTRACTOR'S EXPENSE

10. PRIOR TO BEGINNING WORK, CONTACT CAL-OSHA AT (559) 445-5302 FOR PERMIT REQUIREMENTS.

11. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE CITY, OLWD, AND THE DESIGN ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE CITY OR THEIR AGENTS.

12. EXCAVATIONS OF 5 FEET OR MORE IN DEPTH WILL REQUIRE AN EXCAVATION PERMIT FROM THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL SAFETY. FOR TRENCHES 5 FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL COMPLY WITH SECTION 5-1.02A OF THE CALTRANS STANDARDS, CHAPTER 9 OF THE STATE OF CALIFORNIA LABOR CODE, AND APPLICABLE LOCAL CODES OR ORDINANCES.

13. WHENEVER PAVEMENT IS BROKEN OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE SPECIFICATIONS, THE CONTRACTOR SHALL REPLACE THE PAVEMENT, AFTER PROPER BACKFILLING, WITH PAVEMENT MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL PAVING. THE FINISHED PAVEMENT SHALL BE SUBJECT TO THE APPROVAL OF THE CITY. PAVEMENT REPLACEMENT SHALL CONSIST OF AC THICKNESS 1-INCH GREATER THAN EXISTING AC THICKNESS WITH BASE COURSE AB THICKNESS EQUAL TO EXISTING BASE COURSE THICKNESS. PAVEMENT THICKNESS SHOWN ARE BASED ON RECORD DRAWINGS AND SHALL BE CONFIRMED IN THE FIELD BY CONTRACTOR.

14. THE CONTRACTOR'S ATTENTION IS DIRECTED TO: SECTION 1540 (A) (1) OF THE CONSTRUCTION SAFETY ORDERS (TITLE B CALIFORNIA ADMINISTRATION CODE SECTION 1540), ISSUED BY THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD PURSUANT TO THE CALIFORNIA OCCUPATIONS SAFETY AND HEALTH ACT OF 1973, AS AMENDED, WHICH STATES: (A) "PRIOR TO OPENING AN EXCAVATION, THE CONTRACTOR SHALL DETERMINE WHETHER UNDERGROUND INSTALLATIONS; I.E., SEWER, WATER, FUEL, ELECTRIC LINES, ETC., WILL BE ENCOUNTERED AND IF SO, WHERE SUCH UNDERGROUND INSTALLATIONS ARE LOCATED. WHEN THE EXCAVATION APPROACHES THE LOCATION OF SUCH UNDERGROUND INSTALLATION, THE EXACT LOCATION SHALL BE DETERMINED BY CAREFUL PROBING OR HAND DIGGING; AND, WHEN IT IS UNCOVERED, ADEQUATE PROTECTION SHALL BE PROVIDED FOR THE EXISTING INSTALLATION BY THE CONTRACTOR.

15. DUST SHALL BE CONTROLLED PER SECTION 10 OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS AND PROJECT TECHNICAL SPECIFICATIONS. RECYCLED WATER FOR DUST CONTROL IS AVAILABLE AT NO COST AT THE MANTECA WQCF.

16. ALL DRAINAGE PATTERNS SHALL BE MAINTAINED AT ALL TIMES DURING AND AFTER CONSTRUCTION.

17. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE CITY.

18. THE CITY SHALL BE NOTIFIED AT LEAST 24 HOURS IN ADVANCE OF ANY WORK BEING PERFORMED. THE OLWD SHALL BE NOTIFIED PRIOR TO ANY WORK COMMENCING ON OLWD PROPERTY.

19. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF MANTECA, DEPARTMENT OF PUBLIC WORKS STANDARD PLANS AND SPECIFICATIONS EXCEPT WHERE NOTED OTHERWISE.

20. A FOURTEEN (14) DAY NOTICE SHALL BE GIVEN FOR ANY PLANNED DISRUPTION AND THE CITY OR ASSOCIATED UTILITY COMPANY TO BE AFFECTED SHALL BE NOTIFIED IMMEDIATELY UPON ANY UTILITY SERVICE DISRUPTION OTHER THAN SPECIFIED PREVIOUSLY.

21. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING ALL ITEMS DISTURBED DURING CONSTRUCTION TO THE SATISFACTION OF THE CITY INCLUDING UTILITIES, DRAINAGE, PRIVATE DRIVEWAYS, AND FENCING.

22. EXISTING OVERHEAD ELECTRIC AND TELEPHONE TRANSMISSION LINES MAY BE LOCATED AT OR NEAR THE SITE. THESE OVERHEAD UTILITIES ARE NOT SHOWN ON THE DRAWINGS. EXTREME CAUTION SHALL BE USED WHEN WORKING IN THE VICINITY OF OVERHEAD UTILITIES SO AS TO PREVENT INJURY TO WORKMEN OR DAMAGE TO THE UTILITIES.

23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING RECORD DRAWINGS FOR ALL UNDERGROUND WORK THROUGHOUT THE COURSE OF CONSTRUCTION. SUCH DRAWINGS SHALL RECORD THE LOCATION AND GRADE (CITY DATUM) OF ALL UNDERGROUND IMPROVEMENTS AND SHALL BE DELIVERED TO THE CITY AND OLWD PRIOR TO CONSIDERATION OF THE ACCEPTANCE OF WORK.

24. CONTRACTOR SHALL COORDINATE AND NOTIFY THE CITY WHEN WORK IS READY FOR INSPECTIONS. PRESENCE OR ABSENCE OF THE CITY WILL NOT RELIEVE CONTRACTOR OF FULL RESPONSIBILITY FOR PROPER PERFORMANCE OR WORK. OLWD SHALL BE NOTIFIED WHEN WORK RELATED TO OLWD FACILITIES IS READY FOR INSPECTION.

25. CONTRACTOR SHALL REMOVE AND LEGALLY DISPOSE OF ALL MATERIALS THAT ARE TO BE REMOVED FROM THE SITE INCLUDING SURPLUS EXCAVATION MATERIALS AND DEBRIS. CONTRACTOR SHALL MAINTAIN THE SITE IN A SAFE, NEAT, AND ORDERLY CONDITION.

26. ALL TRAFFIC CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH CALTRANS AND CITY STANDARDS AND SPECIFICATIONS. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED BY THE CONTRACTOR FOR

REVIEW/APPROVED BY THE CITY AND OLWD. ANY FULL ROAD CLOSURES SHALL REQUIRE CMIS BOARDS PLUS TWO WEEK, ONE WEEK, AND 48-HOUR NOTIFICATION TO ALL AFFECTED RESIDENTS AND BUSINESSES.

27. CONTRACTOR SHALL COMPLY WITH ALL STATE AND CITY LAWS AND ORDINANCES RELATING TO SAFETY AND CHARACTER OF WORK, EQUIPMENT AND LABOR PERSONNEL. THIS SHALL INCLUDE, BUT NOT LIMITED TO SHORING OF TRENCHES, VENTILATION OF CONFINED SPACES, CONFORMANCE TO TRAFFIC CONTROL REQUIREMENTS, INCLUDING PROVISIONS AND MAINTENANCE OF BARRICADES, TRENCH COVERS, AND PREPARATION AND IMPLEMENTATION OF TRAFFIC CONTROL PLANS AS REQUIRED.

SEDIMENT & EROSION CONTROL NOTES:

1. CONTRACTOR SHALL SUBMIT FOR CITY REVIEW AND APPROVAL A STORMWATER POLLUTION PREVENTION PLAN (SWPPP).

2. CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PROTECT THE STORM DRAINAGE SYSTEM AGAINST A POTENTIAL DISCHARGE FROM THE CONSTRUCTION SITE OR ACTIVITIES, WHICH MAY INCLUDE PROTECTING STORM DRAIN INLETS, STREET SWEEPING, VACUUMING, AND OTHER ACTIVITIES, AS SPECIFIED IN THE APPROVED SWPPP.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DISCHARGE INCURRED DUE TO THEIR ACTIVITIES OR FAILURE TO ACT APPROPRIATELY, INCLUDING ALL COSTS ASSOCIATED WITH EMERGENCY MITIGATION AND ABATEMENT.

UTILITIES NOTES:

1. CONTRACTOR SHALL POTHOLE TO EXPOSE ALL EXISTING PIPING/UTILITY CROSSINGS, AND CONNECTIONS TO EXISTING SYSTEMS. CONTRACTOR SHALL DEVELOP INFORMATION TO FACILITATE PIPE FABRICATION AND CONNECTIONS. EXPOSURE AND MEASUREMENT SHALL BE ACCOMPLISHED PRIOR TO SUBMITTAL OF PIPING SHOP DRAWINGS.

2. EXISTING UTILITIES ARE SHOWN BASED ON REVIEW OF HISTORICAL RECORD DRAWINGS. CONTRACTOR SHALL POTHOLE TO VERIFY IN FIELD HORIZONTAL AND VERTICAL LOCATION OF UTILITIES WITHIN PROPOSED UTILITY CORRIDORS.

3. CONTRACTOR SHALL TAKE ANY NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AT ANY UTILITY CROSSINGS.

4. PROVIDE MINIMUM CLEARANCE OF 12" AT PIPELINE CROSSINGS UNLESS INDICATED OTHERWISE.

5. PROVIDE MINIMUM LONGITUDINAL CLEARANCE OF 12" BETWEEN PIPELINES UNLESS INDICATED OTHERWISE.

6. FOR PIPELINE TRENCHING DETAIL, SEE DETAIL 1, DRWG CD0.10.

7. MINIMUM COVER FOR PIPING SHALL BE 36" UNLESS INDICATED OTHERWISE.

8. STORM DRAIN FORCE MAIN SHALL BE WELDED STEEL PIPE. ALL PIPE JOINTS TO BE CUT TO THE DEFLECTION

SHOWN ON THE PLANS. PIPES TO HAVE FULL PENETRATION WELDS. JOINTS SHALL BE RESTRAINED.

9. UTILITY COMPANIES AND OLWD SHALL BE CONTACTED TO COORDINATE THE SCHEDULE FOR POTHOLING ACTIVITIES. CONTRACTOR MUST COORDINATE POTHOLING SCHEDULE TO ALLOW A REPRESENTATIVE OF A UTILITY COMPANY OR OLWD TO BE ONSITE DURING POTHOLING OF THEIR UTILITY.

TRENCHING NOTES:

1. TRENCHES SHALL BE PLATED TO ALLOW TRAFFIC THROUGHOUT DURING NON-WORKING HOURS AT ALL DRIVEWAY CROSSINGS AND OTHER ACCESS LOCATIONS.

2. PLATES SHALL BE RECESSED OR ABOVE EXISTING ASPHALT, SECURED AND RAMPED WITH TEMPORARY PAVING TO REDUCE TRAFFIC NOISE WHEN VEHICLES CROSS THE TRENCH.

OLWD WWTP SITE ACCESS REQUIREMENTS:

1. CONTRACTOR SHALL MAINTAIN CONTINUOUS ACCESS TO OLWD-WASTEWATER TREATMENT PLANT, LIFT STATION NO. 3, LIFT STATION NO. 4, AND APPURTENANT MECHANICAL/ ELECTRICAL FACILITIES.

2. CONTRACTOR SHALL NOT RESTRICT ACCESS TO MOBILE HOME PARK AND SHALL PROVIDE 48-HR NOTICE OF ALL WORK IN ACCESS ROAD TO MHP RESIDENTS. SIGNAGE OR DOOR HANGERS MAY BE ACCEPTABLE.

3. CONTRACTOR SHALL COORDINATE WITH DISTRICT STAFF FOR ACCESS AND MOVEMENT THROUGH WASTEWATER TREATMENT PLANT SITE.

4. CONTRACTOR SHALL SECURE TEMPORARY ACCESS GATE AT THE END OF CONSTRUCTION EACH DAY.

OAKWOOD SHORES OWNERS ASSOCIATION REQUIREMENTS:

THE CONTRACTOR SHALL CONDUCT ALL ACTIVITIES WITHIN THE OAKWOOD SHORES COMMUNITY IN FULL CONFORMANCE WITH THE REQUIREMENTS OF THE OAKWOOD SHORES OWNER'S ASSOCIATION (HOA) AS FOLLOWS:

1. CONSTRUCTION ACTIVITIES ARE LIMITED TO MONDAY THROUGH FRIDAY 7:30 AM TO 5:00 PM.

2. A NOTICE OF THE START OF CONSTRUCTION ACTIVITIES SHALL BE PROVIDED TO THE DISTRICT AND THE CITY AND POSTED ON THE FRONT DOOR OF ALL OAKWOOD SHORES RESIDENTS ALONG APPLICABLE COURT AND MHP RESIDENTS NO LESS THAN SEVEN (7) AND NO MORE THAN FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

3. A 48-HOUR NOTICE SHALL BE PROVIDED TO THE DISTRICT AND AFFECTED RESIDENTS IF ANY DRIVEWAY WILL BE BLOCKED DURING THE CONSTRUCTION HOURS; NO DRIVEWAY SHALL REMAIN BLOCKED OR OTHERWISE INACCESSIBLE OUTSIDE OF CONSTRUCTION HOURS.

4. A TRAFFIC CONTROL PLAN SHALL BE DEVELOPED AND SUBMITTED TO THE DISTRICT FOR APPROVAL AT LEAST SEVEN (7) DAYS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY. THE TRAFFIC CONTROL PLAN SHALL BE IN CONFORMANCE WITH CITY OF MANTECA STANDARDS. ALL TRAFFIC CONTROL ACTIVITIES AND

ASSOCIATED MATERIALS (CONES, SIGNS, FLAGMEN ETC.) SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN.

5. ALL OPEN TRENCHES SHALL BE APPROPRIATELY PLATED OVER WHEN THE CONTRACTOR IS NOT ACTIVELY WORKING IN THAT TRENCH.

6. NO MATERIALS OR EQUIPMENT SHALL BE STORED ON THE STREET; THE CONTRACTOR MAY USE DESIGNATED AREAS FOR MATERIAL STORAGE AND EQUIPMENT PARKING.

7. ALL WORK SHALL BE DONE IN CONFORMANCE WITH THE MORE STRINGENT OF CITY OF MANTECA STANDARDS OR AS SHOWN OR SPECIFIED ON THE CONSTRUCTION PLANS.

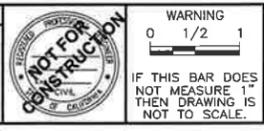
8. ALL DAMAGE SHALL BE REPAIRED OR REPLACED TO PRE-CONSTRUCTION CONDITIONS.

9. THE HOA SHALL BE NAMED AS AN ADDITIONAL INSURED AND BE PROVIDED WITH COVERAGE IDENTICAL TO THAT PROVIDED TO THE DISTRICT; A CERTIFICATE OF INSURANCE FOR THE HOA SHALL BE PROVIDED.

10. THE CONTRACTOR SHALL COOPERATE FULLY WITH OTHER CONTRACTORS RETAINED BY THE DISTRICT OR HOA.

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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION

GENERAL NOTES, UTILITY NOTES, AND UTILITY CONTACT INFORMATION

SHEET 4
OF 38
DRAWING NO. GO.30

\\DEWBERRY\DEWBERRYROOT\LOCAL\OFFICES\MANTECA\PROJECTS\00126948 - ZONE 36-39 STORM DRAIN - CI MANTECA\400 PROJECT DESIGN FILES\435 WATER\PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-23639IP-GENERAL-GO.31 EROSION CONTROL NOTES

EROSION CONTROL NOTES:

1. THESE PLANS DEPICT APPROPRIATE MEASURES TO CONTROL EROSION ON THE SITE TO BE GRADED AS SHOWN ON THE PLANS. THE NATIVE VEGETATION WILL BE REMOVED ONLY FROM THOSE AREAS TO BE GRADED. AREAS OUTSIDE OF AND DOWNSLOPE OF THE LIMITS OF GRADING SHALL BE PROTECTED FROM SILT LADEN RUNOFF BY PERIMETER SILT FENCES AS DEPICTED ON THIS PLAN. SLOPED AREAS WHICH HAVE BEEN STRIPPED OF VEGETATION AND NEW SLOPES OVER FOUR FEET HIGH CREATED DURING THE GRADING OPERATION SHALL BE TRACKWALKED & HYDROSEEDED.
2. ALL EROSION SEDIMENT STRUCTURES SHALL BE INSPECTED AFTER EACH RAINSTORM AND SHALL BE CLEANED OUT AS NECESSARY.
3. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. THE LOCATION IS SHOWN ON THESE PLANS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE ENTRANCE.
4. THE CONTRACTOR IS RESPONSIBLE FOR ALL ASPECTS OF EROSION CONTROL FOR THE LIFE OF THE PROJECT AND SHALL INSTALL AND MAINTAIN ANY DEVICES AND MEASURES NECESSARY TO THE SATISFACTION OF THE CITY, DURING CONSTRUCTION ACTIVITIES.
5. TO MINIMIZE EROSION OF GRADED BANKS, ALL GRADED BANKS AND STOCKPILE AREAS SHALL BE HYDROSEEDED, LANDSCAPED OR SEALED.
6. STRAW BALES, PIECES OF WOOD, FABRIC OR OTHER SUITABLE MATERIALS SHALL BE USED TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING ANY COMPLETED STORM DRAIN INLETS. THESE PROTECTION MEASURES SHALL BE MAINTAINED UNTIL THE PROJECT IS COMPLETED.
7. WHEN TEMPORARY STRUCTURES HAVE SERVED THEIR INTENDED PURPOSE AND THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, THE EMBANKMENT AND RESULTING SEDIMENT DEPOSITS SHALL BE LEVELED OR OTHERWISE DISPOSED OF BY THE CONTRACTOR AS RECOMMENDED BY GEOTECHNICAL ENGINEER.
8. GRADED AREAS MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE SHALL BE DIRECTED TOWARDS DRAINAGE INLETS.
9. TEMPORARY EROSION CONTROL DEVICES SHOWN ON THIS PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED WHEN THE CITY INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.
10. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREW AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE CITY INSPECTOR.
11. WHEN DIRECTED BY THE INSPECTOR, A 12-INCH BERM SHALL BE MAINTAINED ALONG THE TOP OF THE SLOPE OF THOSE FILLS ON WHICH GRADING IS NOT IN PROGRESS.

12. STAND-BY CREWS SHALL BE ALERTED BY THE PERMITEE OR CONTRACTOR FOR EMERGENCY WORK DURING RAINSTORMS.
13. STORM DRAIN TRENCHES THAT DRAIN THROUGH BASIN DIKES SHALL BE PLUGGED WITH SANDBAGS FROM TOP OF PIPE TO TOP OF DIKE.
14. ALL UTILITY TRENCHES SHALL BE BLOCKED WHEN DIRECTED BY THE CITY AT THE PRESCRIBED INTERVALS FROM THE BOTTOM TO THE TOP WITH DOUBLE ROW OF SANDBAGS PRIOR TO BACKFILL. SANDBAGS SHALL BE PLACED WITH ALTERNATE HEADER AND STRETCHER COURSES. THE INTERVALS PRESCRIBED BETWEEN SANDBAG BLOCKING SHALL DEPEND ON THE SLOPE OF THE GROUND SURFACE, BUT NOT TO EXCEED THE FOLLOWING:

GRADE OF GROUND SURFACE OR STREET	INTERVAL AS REQUIRED
LESS THAN 2%	100 FEET
2% TO 4%	50 FEET
4% TO 10%	25 FEET
OVER 10%	25 FEET

15. PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED STREET AREAS AT THE INTERVALS INDICATED ABOVE. VELOCITY CHECK DAMS MAY BE CONSTRUCTED OF SANDBAGS, TIMBER, OR OTHER EROSION RESISTANT MATERIALS APPROVED BY THE INSPECTOR, AND SHALL EXTEND COMPLETELY ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. EARTH DIKES MAY NOT BE USED AS VELOCITY CHECK DAMS.
16. AFTER STORM DRAIN AND UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS-FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OF A CROWNED STREET. REMOVE ALL CHECK DAMS PRIOR TO BACKFILL.
17. EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, ALL DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY OR WHEN DIRECTED BY THE INSPECTOR.
18. ALL BASINS AND CHECK DAMS SHALL HAVE BEEN PUMPED DRY, AND ALL DEBRIS AND SILT REMOVED WITHIN 24 HOURS AFTER EACH STORM EXCEPT WHERE APPROVED BY THE CITY.
19. SANDBAGS SHALL BE STOCKPILED ON-SITE, READY TO BE PLACED IN POSITION WHEN RAIN FORECAST IS 40 PERCENT PROBABILITY OR GREATER.
20. EXPOSED SLOPES SHALL BE PROTECTED BY VEGETATION COVER OR FABRIC COVER AS APPROVED BY THE CITY.
21. ALL EROSION CONTROL MEASURES SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF THE CASQA STORMWATER MANAGEMENT HANDBOOK.

22. THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO COMPLY WITH THE REQUIREMENTS OF THE STATE WATER RESOURCES CONTROL BOARD. FIELD CONDITIONS MAY NECESSITATE MODIFICATIONS TO THIS PLAN.
23. STRAW WADDLES INSTALLED ON A SLOPE SHALL CONFORM TO THE GUIDELINES SPECIFIED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM BEST MANAGEMENT PRACTICES.
24. EROSION RESISTANT VEGETATION SHALL BE MAINTAINED ON THE FACE OF ALL SLOPES.
25. CONTRACTOR SHALL REFER TO THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR ALL PRE AND POST CONSTRUCTION EROSION CONTROL MEASURES AND BEST MANAGEMENT PRACTICES (BMPs)
26. CONTRACTOR SHALL INSTALL DRAIN INLET PROTECTION FOR ALL CATCH BARNs LOCATED IN THE VICINITY OF WORK. THIS INCLUDES ANY CATCH BASINS LOCATED IN THE PUBLIC RIGHT-OF-WAY, AS WELL AS ANY ONSITE CATCH BASINS.
27. CONTRACTOR SHALL ENSURE THAT CONSTRUCTION ACTIVITIES DO NOT DEPOSIT SEDIMENT ONTO THE PUBLIC ROADWAY, SIDEWALKS AND GUTTERS.
28. CONTRACTOR SHALL USE STREET SWEEPING OR OTHER DRY SWEEPING METHODS, AS NECESSARY TO REMOVE CONSTRUCTION RELATED SEDIMENT FROM PAVEMENT IN THE PROJECT AREA AND PROJECT ROADWAY.
29. HYDROMULCHNG OF SLOPES OVER 5' IN HEIGHT SHALL BE COMPLETED BETWEEN SEPTEMBER 1 AND OCTOBER 1 OF THE YEAR IN WHICH THEY ARE CONSTRUCTED OR IMMEDIATELY AFTER THEIR CONSTRUCTION. IF THEY ARE COMPLETED AFTER OCTOBER 1ST APPLICATION RATES SHALL BE AS FOLLOWS AS REQUIRED BY CITY:

HYDROSEED MIX: BOTANICAL NAME	COMMON NAME	MIN % PURITY	MIN % GERMINATION	LB/ACRE
ARISTIDA TERNIPES VAR. HAMULOSA	(THREE-AWN)	90%	85%	2
BROMUS CARINATUS	(CALIFORNIA BROME)	90%	85%	2
ELYMUS GLAUCUS	(BLUE WLD RYE)	90%	85%	4
ELYMUS TRACHYCAULUS SSP. TRACHYCAULUS	(SLENDER WHEATGRASS)	90%	85%	3
MELICA CALIFORNIA	(CALIFORNIA ONION GRASS)	90%	85%	2
MUHLBERGIA RIGENS	(DEER GRASS)	90%	85%	4
NASSELLA LEPIDA	(FOOTHILL NEEDLE GRASS)	90%	85%	6
TRIFOLIUM HIRTUM	('HYKON' ROSE CLOVER)	90%	85%	10
CELLULOSE FIBER MULCH				2000
ORGANIC BINDER WITH HYDROSEED SLURRY				50
16-20-0-5 FERTILIZER				300

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10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



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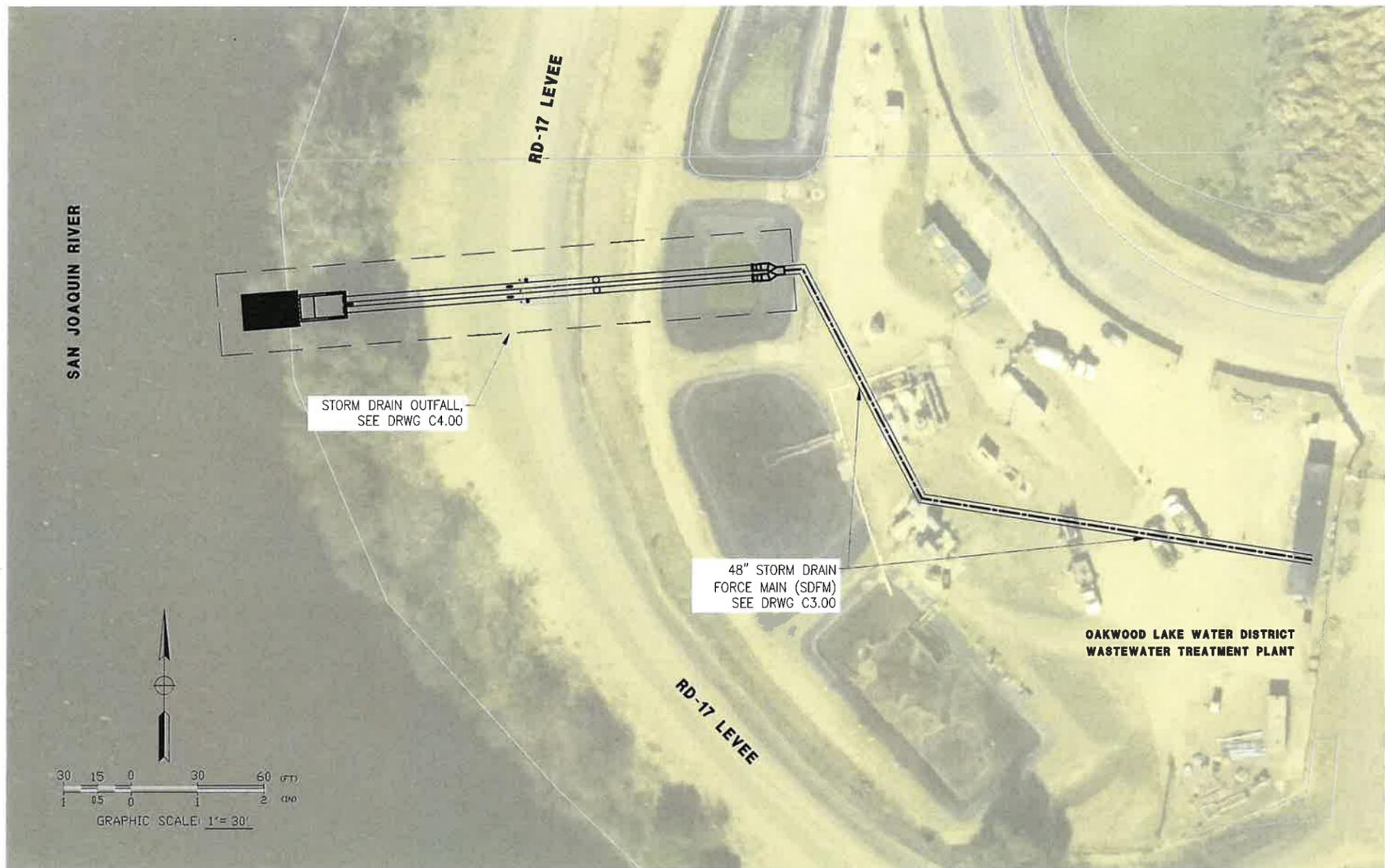


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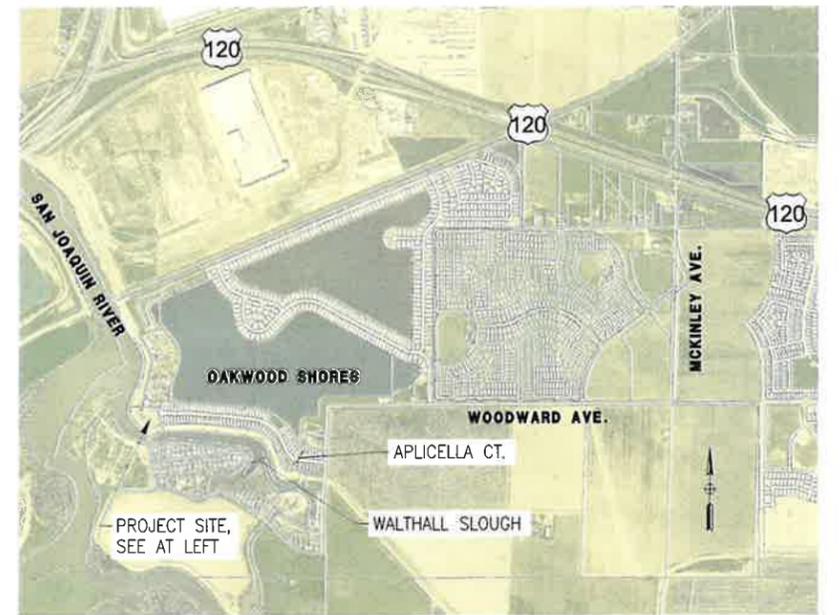
STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
EROSION CONTROL NOTES

SHEET 5
 OF 38
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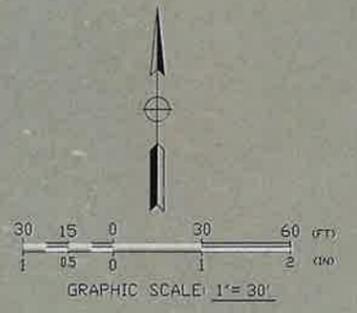
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PLAN



KEY MAP



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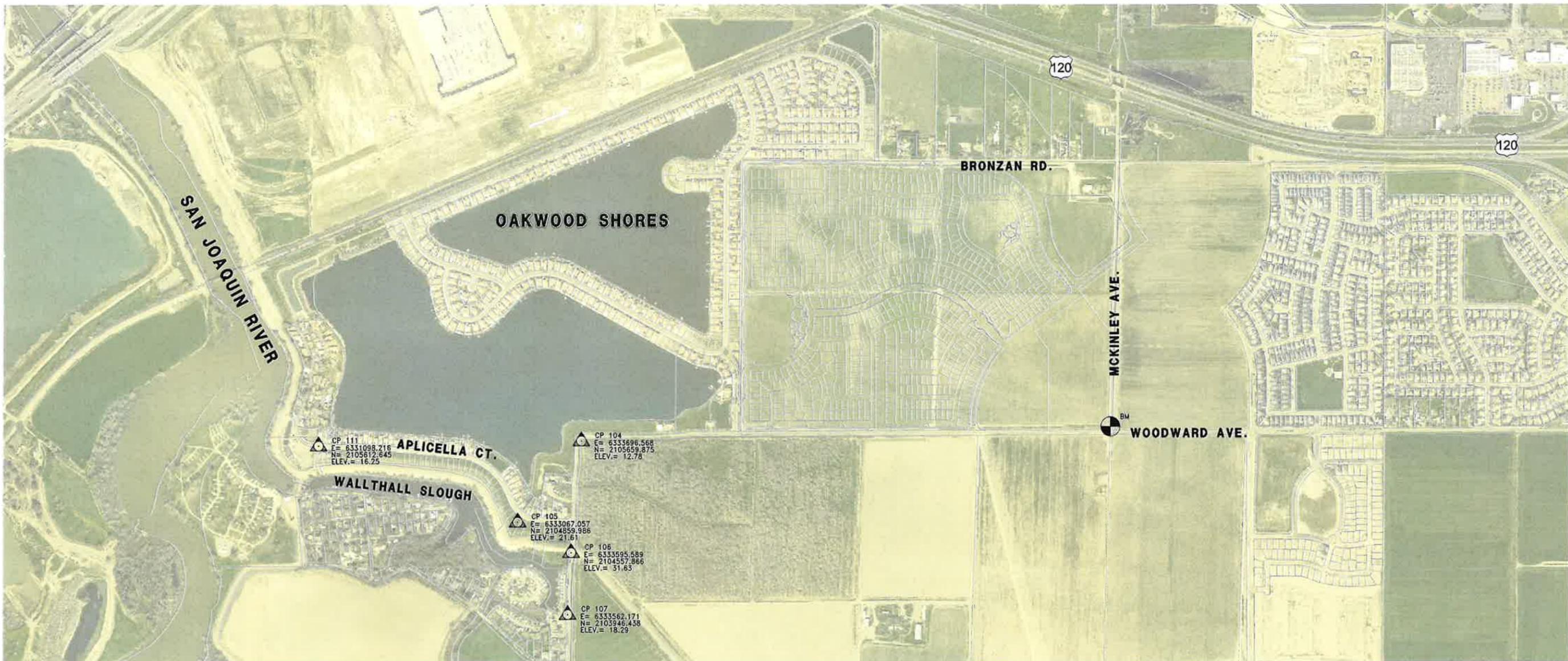


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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
PROJECT OVERVIEW

SHEET 7
OF 38
DRAWING NO. GO.50

\\DEWBERRY\PROJ\LOCAL\OFFICES\MANTECA\PROJECTS\10126848 - ZONE 36-39 STORM DRAIN - C1 MANTECA\400 PROJECT DESIGN FILES\435 WATER PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-238381P-GENERAL--00.51 SURVEY CONTROL POINTS



PLAN

BASIS OF BEARINGS: A COURSE OF NORTH 89°51'05" EAST BETWEEN CITY OF MANTECA MONUMENTS NO. 208 AND NO. 219, AS CALCULATED FROM COORDINATES SHOWN IN BOOK 33 OF SURVEYS, AT PAGE 133, S.J.C.R., WAS USED AS A BASIS FOR ALL BEARINGS SHOWN ON THIS MAP. ALL DISTANCES SHOWN ARE GROUND. TO OBTAIN GRID DISTANCE, MULTIPLY GROUND DISTANCE WITH 0.999929269.

BENCHMARK: 2" BRASS DISK STAMPED CITY OF MANTECA BENCHMARK NO. 90 SET IN CENTERLINE OF MCKINLEY AVENUE APPROXIMATELY 30' NORTH OF THE INTERSECTION OF WOODWARD ROAD AND MCKINLEY AVENUE.

BENCHMARK ELEVATION: 16.744 NGVD29 DATUM

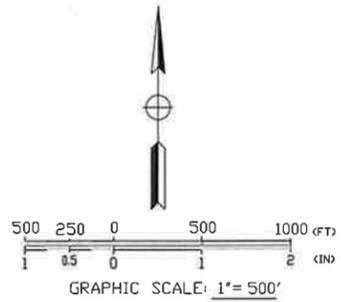
CONVERSION FACTOR FROM NGVD29 TO NAVD88:
 NGVD29 + 2.41' = NAVD88

SURVEY CONTROL POINTS

CP NO.	ELEVATION	EASTING	NORTHING	DESCRIPTION
104	12.78	6333696.568	2105659.875	1/2" IRON PIPE W/CONTROL PLUG
105	21.61	6333607.057	2104859.986	MAG NAIL
106	31.63	6333595.589	2104557.866	1/2" IRON PIPE W/CONTROL PLUG
107	18.29	6333562.171	2103946.438	MAG NAIL
111	16.25	6331098.216	2105612.645	3/4" IRON PIPE W/CONTROL PLUG

COORDINATE SYSTEM CODE: CA83IIF

COORDINATE SYSTEM DESCRIPTION: NAD83, CALIFORNIA STATE PLANE, ZONE III, US FOOT



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10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



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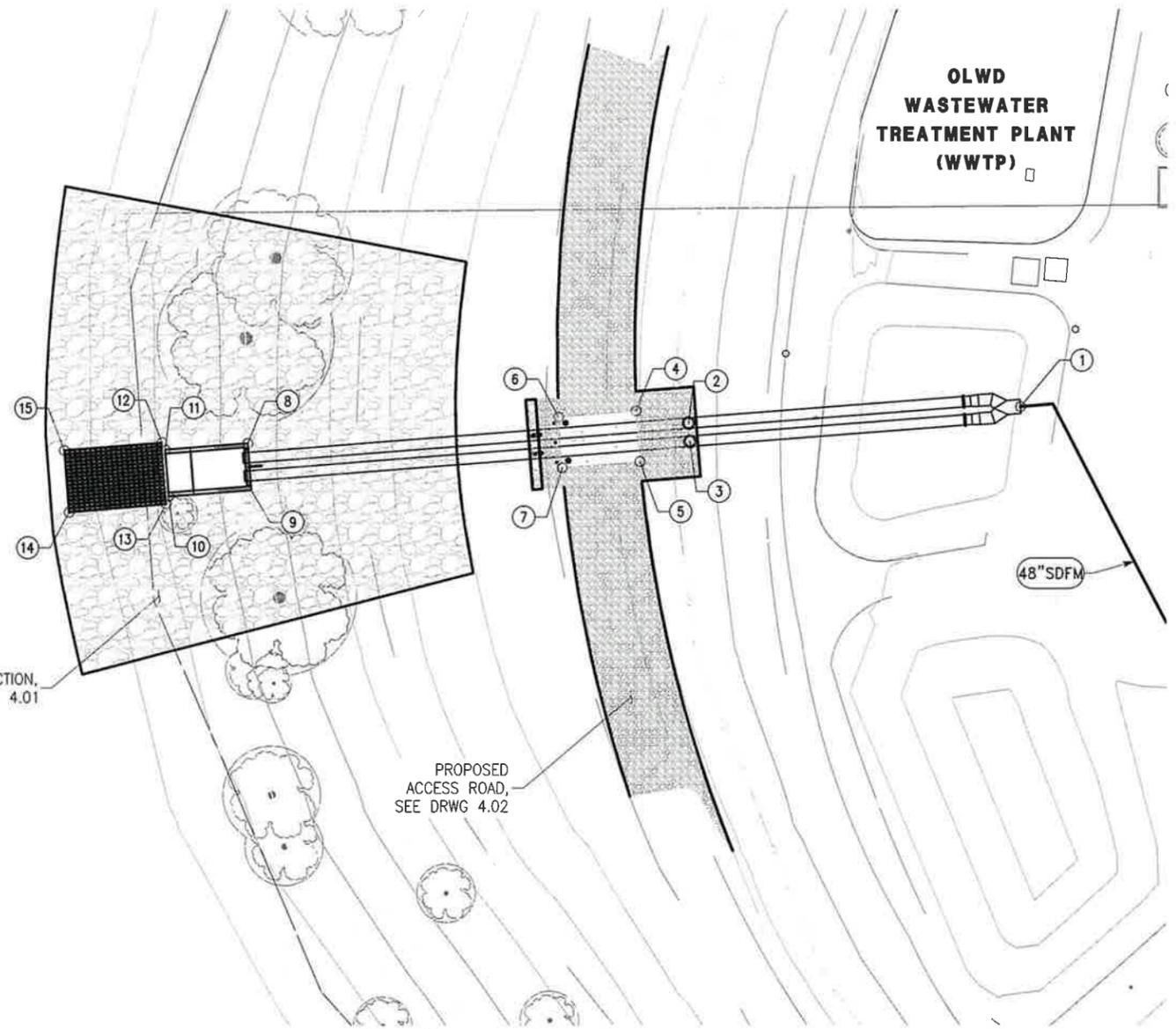
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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
SURVEY CONTROL MAP

SHEET 8
 OF 38
 DRAWING NO. G0.51

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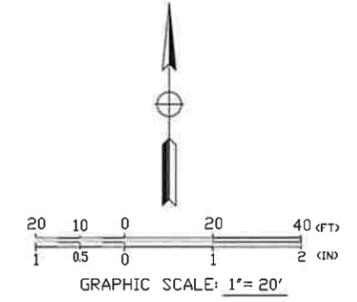


PLAN

ROCK SLOPE PROTECTION, SEE DRWG 4.01

PROPOSED ACCESS ROAD, SEE DRWG 4.02

OLWD WASTEWATER TREATMENT PLANT (WWTP)



HORIZONTAL CONTROL TABLE

LOCATION	DESCRIPTION	EASTING	NORTHING
①	CONNECTION TO 48" SDFM	6330796.25	2105652.24
②	CENTER OF ACCESS MANWAY	6330711.27	2105648.06
③	CENTER OF ACCESS MANWAY	6330711.63	2105643.41
④	CONCRETE PAD	6330697.79	2105651.23
⑤	CONCRETE PAD	6330698.79	2105638.25
⑥	CONCRETE PAD	6330677.85	2105649.69
⑦	CONCRETE PAD	6330678.85	2105636.70
⑧	OUTFALL STRUCTURE	6330598.36	2105643.02
⑨	OUTFALL STRUCTURE	6330599.29	2105631.05
⑩	OUTFALL STRUCTURE	6330578.35	2105629.43
⑪	OUTFALL STRUCTURE	6330577.43	2105641.40
⑫	CONCRETE BLOCK MAT	6330576.60	2105643.21
⑬	CONCRETE BLOCK MAT	6330577.81	2105627.51
⑭	CONCRETE BLOCK MAT	6330552.71	2105625.47
⑮	CONCRETE BLOCK MAT	6330551.47	2105641.38

COORDINATE SYSTEM CODE: CA83IIF

COORDINATE SYSTEM DESCRIPTION: NAD83, CALIFORNIA STATE PLANE, ZONE III, US FOOT

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 DESIGN: KL
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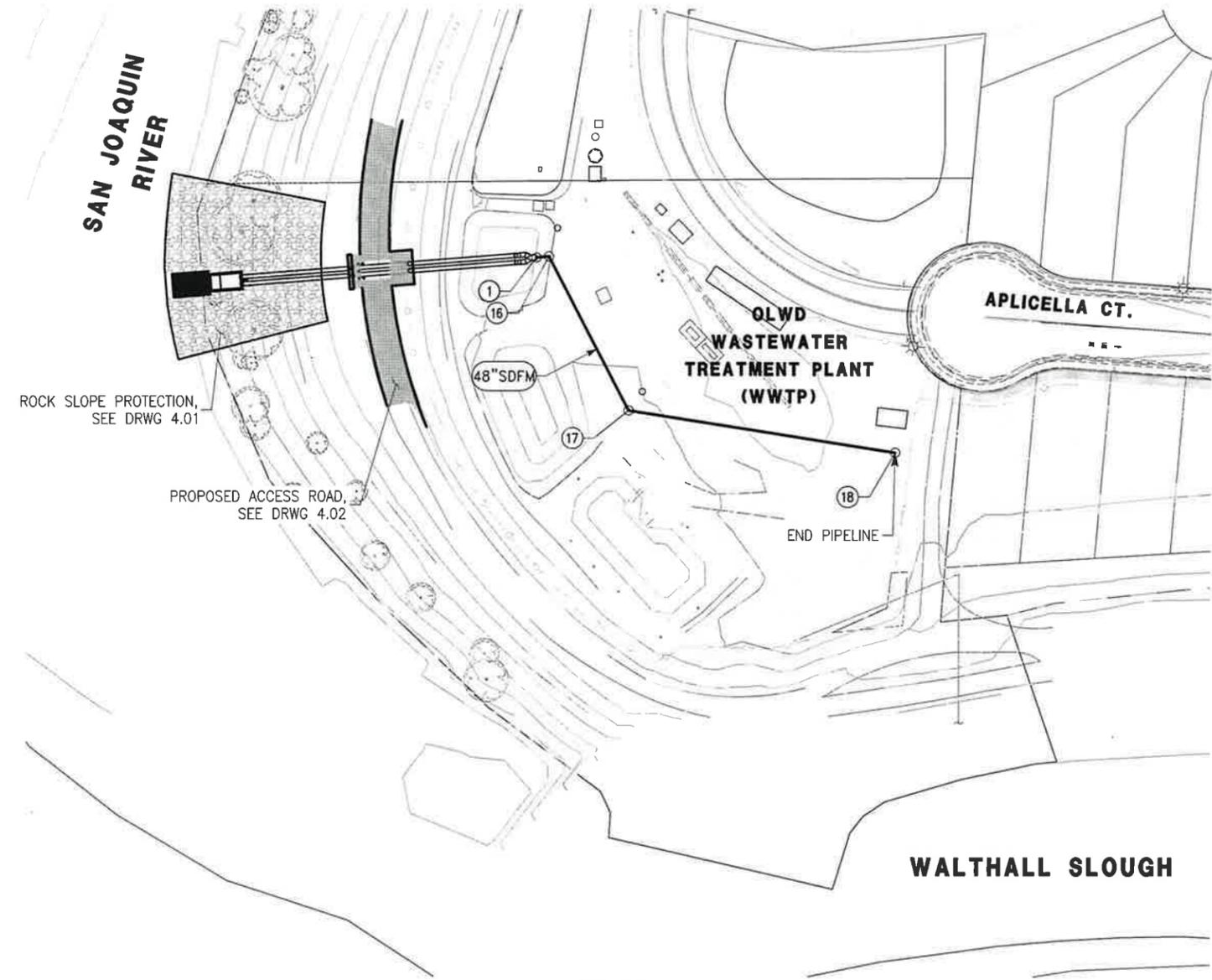


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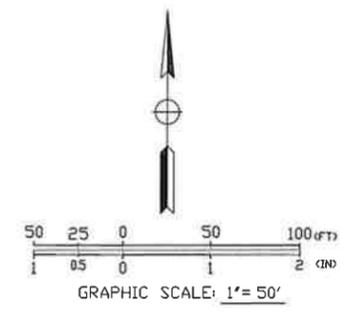
STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
STORM DRAIN FORCE MAIN HORIZONTAL CONTROL PLAN 1

SHEET 9 OF 38
 DRAWING NO. GO.52

\\DENBERRY\BERRY\ROOT\LOCAL\OFFICES\MANTECA\PROJECTS\10126948 - ZONE 36-39 STORM DRAIN - C1 MANTECA\400 PROJECT DESIGN FILES\435 WATER\PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-23539IP-GENERAL--G0.53--00.53 HORIZONTAL CONTROL POINTS SDFM



PLAN



HORIZONTAL CONTROL TABLE

LOCATION	DESCRIPTION	EASTING	NORTHING
①	CONNECTION TO OUTFALL PIPING	6330796.25	2105652.24
①⑥	48" SDFM - ±72.5° ANGLE POINT	6330804.55	2105652.93
①⑦	48" SDFM - ±45.0° ANGLE POINT	6330858.49	2105549.62
①⑧	48" SDFM - END PIPELINE	6331037.84	2105521.39

COORDINATE SYSTEM CODE: CA83IIF

COORDINATE SYSTEM DESCRIPTION: NAD83, CALIFORNIA STATE PLANE, ZONE III, US FOOT

BASIS OF BEARINGS: A COURSE OF NORTH 89°51'05" EAST BETWEEN CITY OF MANTECA MONUMENTS NO. 208 AND NO. 219, AS CALCULATED FROM COORDINATES SHOWN IN BOOK 33 OF SURVEYS, AT PAGE 133, S.J.C.R., WAS USED AS A BASIS FOR ALL BEARINGS SHOWN ON THIS MAP. ALL DISTANCES SHOWN ARE GROUND. TO OBTAIN GRID DISTANCE, MULTIPLY GROUND DISTANCE WITH 0.999929269.

BENCHMARK: 2" BRASS DISK STAMPED CITY OF MANTECA BENCHMARK NO. 90 SET IN CENTERLINE OF MCKINLEY AVENUE APPROXIMATELY 30' NORTH OF THE INTERSECTION OF WOODWARD ROAD AND MCKINLEY AVENUE.

BENCHMARK ELEVATION: 16.744 NGVD29 DATUM

CONVERSION FACTOR FROM NGVD29 TO NAVD88:
 NGVD29 + 2.41' = NAVD88

90% SUBMITTAL
10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



WARNING
 0 1/2 1
 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

DATE: 10/22/25
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 DESIGN: KT
 CHECKED: DR
 APPROVED: DR
 SCALE: AS SHOWN

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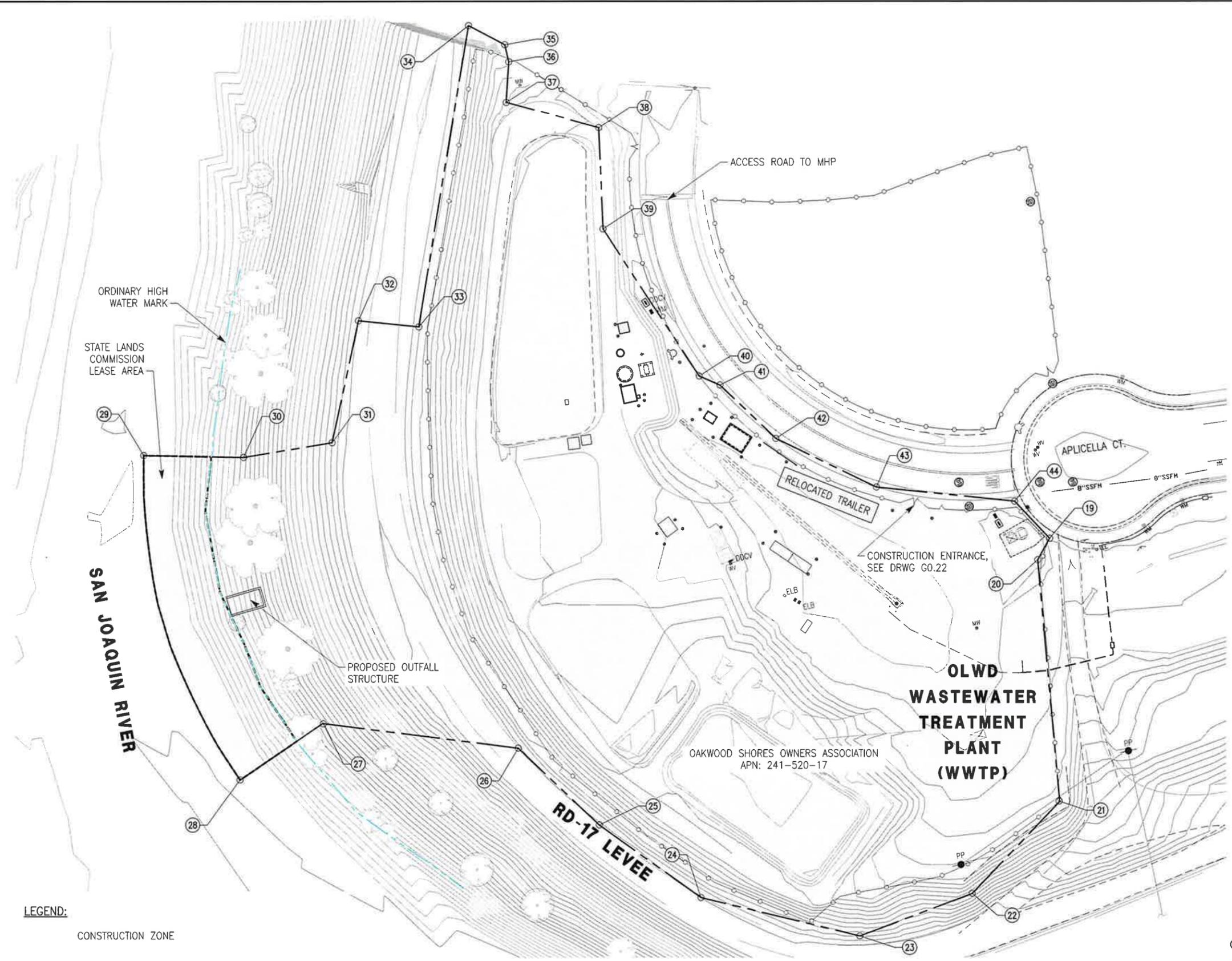


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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
STORM DRAIN FORCE MAIN HORIZONTAL CONTROL PLAN 2

SHEET 10
 OF 38
 DRAWING NO. G0.53

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HORIZONTAL CONTROL TABLE -- CONSTRUCTION LIMITS

LOCATION	EASTING	NORTHING
19	6331061.78	2105572.21
20	6331052.22	2105561.33
21	6331035.12	2105418.74
22	6330972.87	2105376.55
23	6330902.60	2105365.89
24	6330815.02	2105408.06
25	6330764.95	2105462.75
26	6330727.45	2105517.33
27	6330617.43	2105556.13
28	6330562.77	2105533.80
29	6330547.17	2105733.48
30	6330604.65	2105719.91
31	6330657.62	2105717.39
32	6330687.98	2105784.58
33	6330722.29	2105773.41
34	6330788.08	2105941.52
35	6330806.69	2105925.91
36	6330806.85	2105915.48
37	6330800.37	2105892.23
38	6330850.85	2105866.06
39	6330840.86	2105806.98
40	6330878.46	2105709.95
41	6330889.35	2105702.14
42	6330915.20	2105664.29
43	6330967.56	2105623.49
44	6331045.92	2105598.08

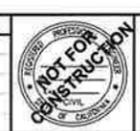
LEGEND:
CONSTRUCTION ZONE

PLAN

COORDINATE SYSTEM CODE: CA83IIF
 COORDINATE SYSTEM DESCRIPTION: NAD83,
 CALIFORNIA STATE PLANE, ZONE III, US FOOT

90% SUBMITTAL
10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



WARNING
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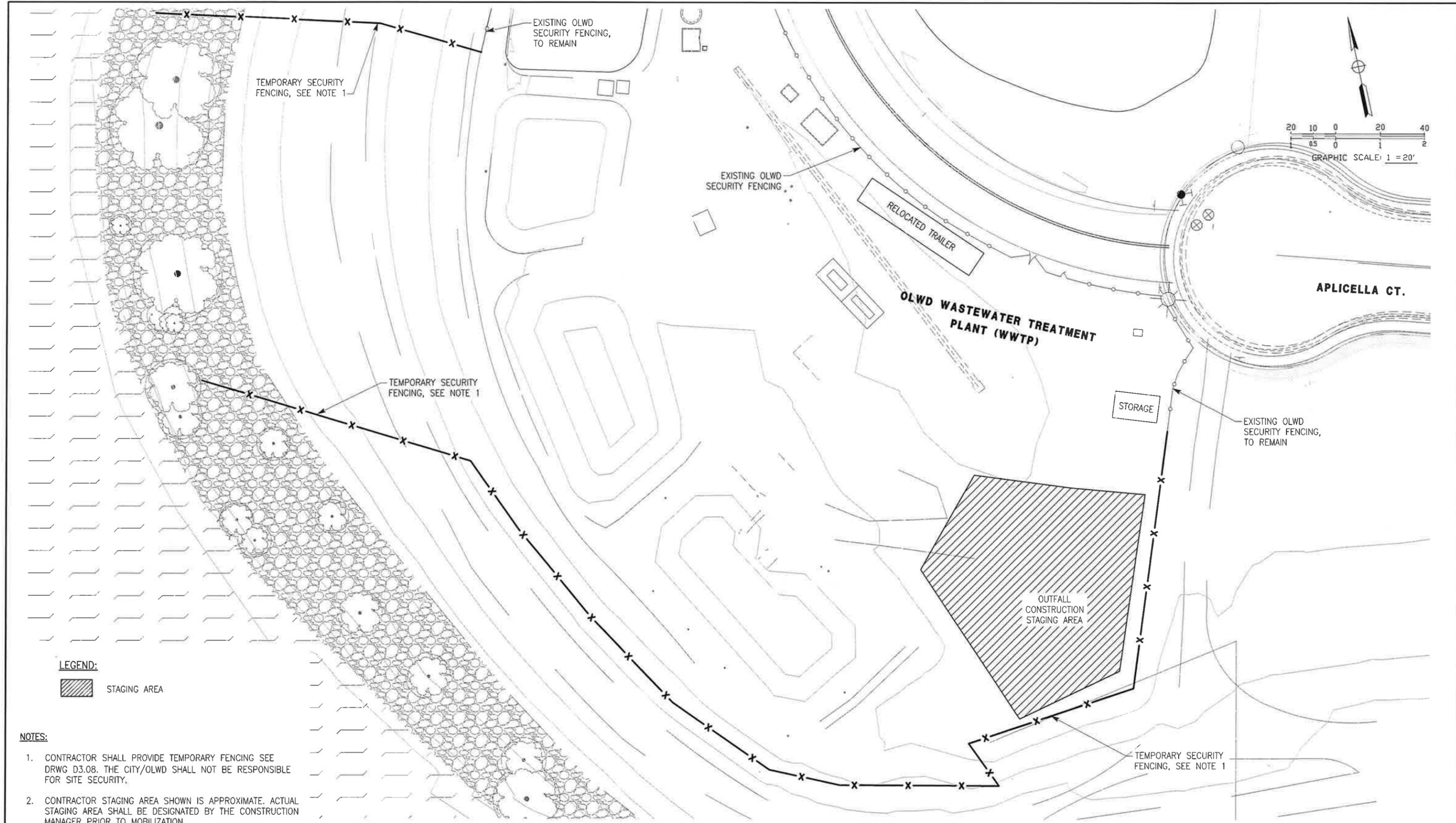
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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
LIMITS OF CONSTRUCTION WITHIN OLWD WWTP

SHEET 11
 OF 38
 DRAWING NO. GO.61

L:\50126948 - ZONE 36-39 STORM DRAIN - CI MANTECA\400 PROJECT DESIGN FILES\435 WATER PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-23639P-GENERAL--G0.70 STAGING AREA OUTFALL



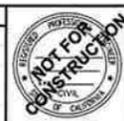
LEGEND:
 STAGING AREA

- NOTES:**
1. CONTRACTOR SHALL PROVIDE TEMPORARY FENCING SEE DRWG D3.08. THE CITY/OLWD SHALL NOT BE RESPONSIBLE FOR SITE SECURITY.
 2. CONTRACTOR STAGING AREA SHOWN IS APPROXIMATE. ACTUAL STAGING AREA SHALL BE DESIGNATED BY THE CONSTRUCTION MANAGER PRIOR TO MOBILIZATION.

PLAN

90% SUBMITTAL
10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



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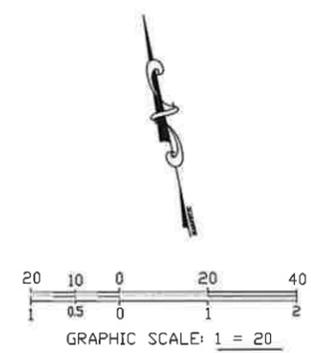
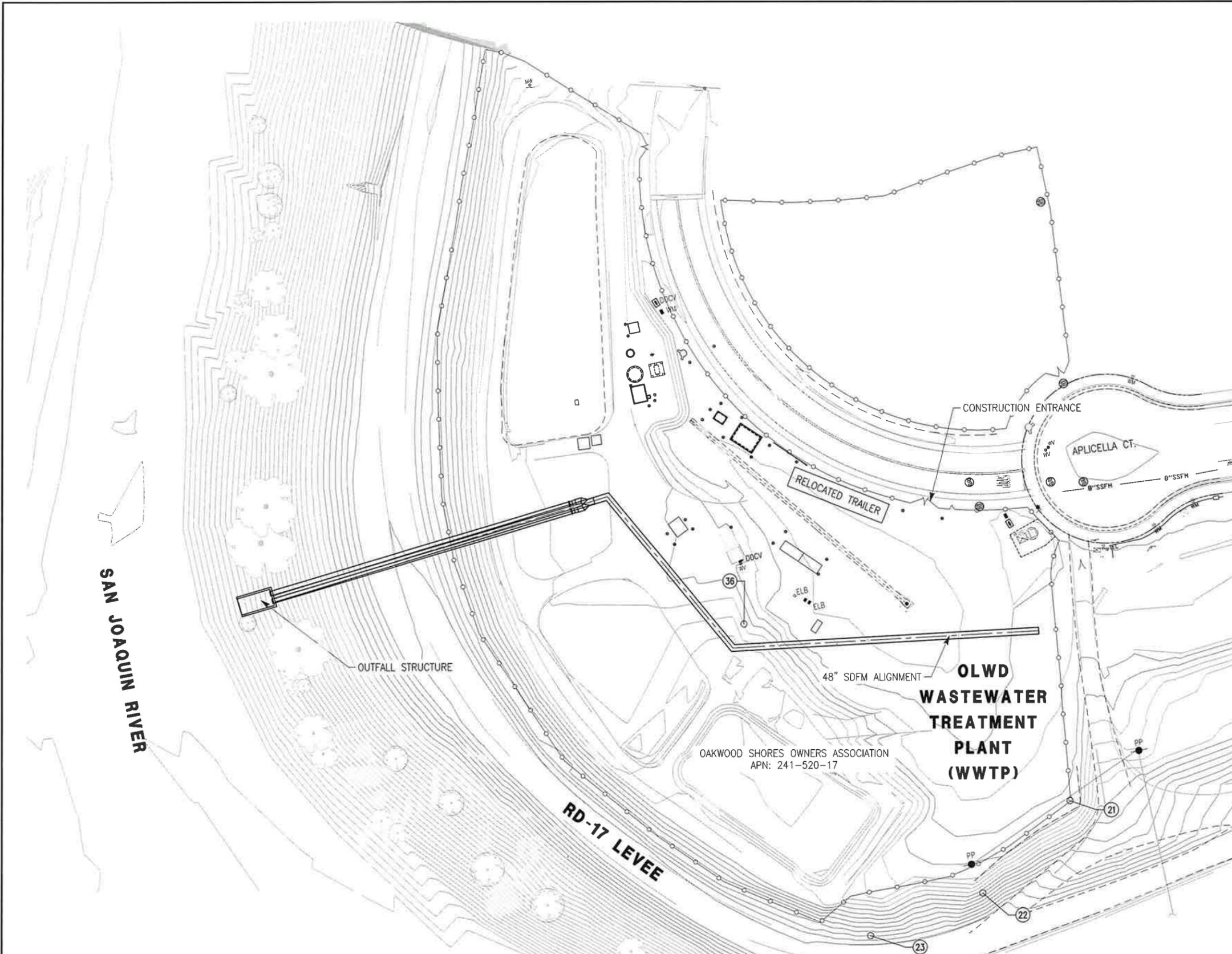


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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
STORM DRAIN OUTFALL STAGING AREA PLAN

SHEET 12
 OF 38
 DRAWING NO. G0.70

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- CONSTRUCTION SEQUENCING STAGES:**
- STAGE 1 – DECOMMISSION OLWD WWTP:
1. DISCONNECT WATER, SEWER, ELECTRICAL, AND SCADA SERVICE FROM OFFICE TRAILER.
 2. RELOCATE OLWD WWTP OFFICE TRAILER PER DRWG D3.02.
 3. CONNECT WATER, SEWER, ELECTRICAL, AND SCADA SERVICES TO RELOCATED TRAILER
 4. REMOVED EXISTING OLWD SECURITY FENCE AND INSTALL TEMPORARY CONSTRUCTION FENCING AS SHOWN IN DRWG D3.04 AND D3.05
 5. DECOMMISSION OLWD WWTP AS SHOWN IN DRWG D3.06 AND D3.07
 6. BACKFILL TREATMENT AND STORAGE PONDS AS SHOWN IN DRWGS D3.09 – D3.13.
- STAGE 2 – OUTFALL CONSTRUCTION, SEE SECTION 01020 WORK SEQUENCE – OUTFALL CONSTRUCTION AND BELOW:
1. CONSTRUCT TEMPORARY TURBIDITY BARRIER AND SHEETPILE COFFERDAM FOR OUTFALL CONSTRUCTION
 2. CONSTRUCT OUTFALL STRUCTURE AND 30-INCH DISCHARGE PIPES AND APPURTENANCES
 3. CONSTRUCT ROCK SLOPE PROTECTION
 4. CONSTRUCT 20-FOOT LEVEE ACCESS ROAD
 5. REMOVE TEMPORARY TURBIDITY BARRIER AND SHEETPILE COFFERDAM
- STAGE 3 – 48-INCH SDFM
1. CONSTRUCT 48-INCH SDFM TO CONNECTION TO 30-INCH DISCHARGE PIPES AT LEVEE
 2. COMPLETE TREATMENT PLANT SITE RESTORATION AS SHOWN IN DRWG D3.14.
 3. CONSTRUCT PERMANENT OLWD WWTP SECURITY FENCE AS SHOWN IN DRWG D3.15

PLAN

90% SUBMITTAL
10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



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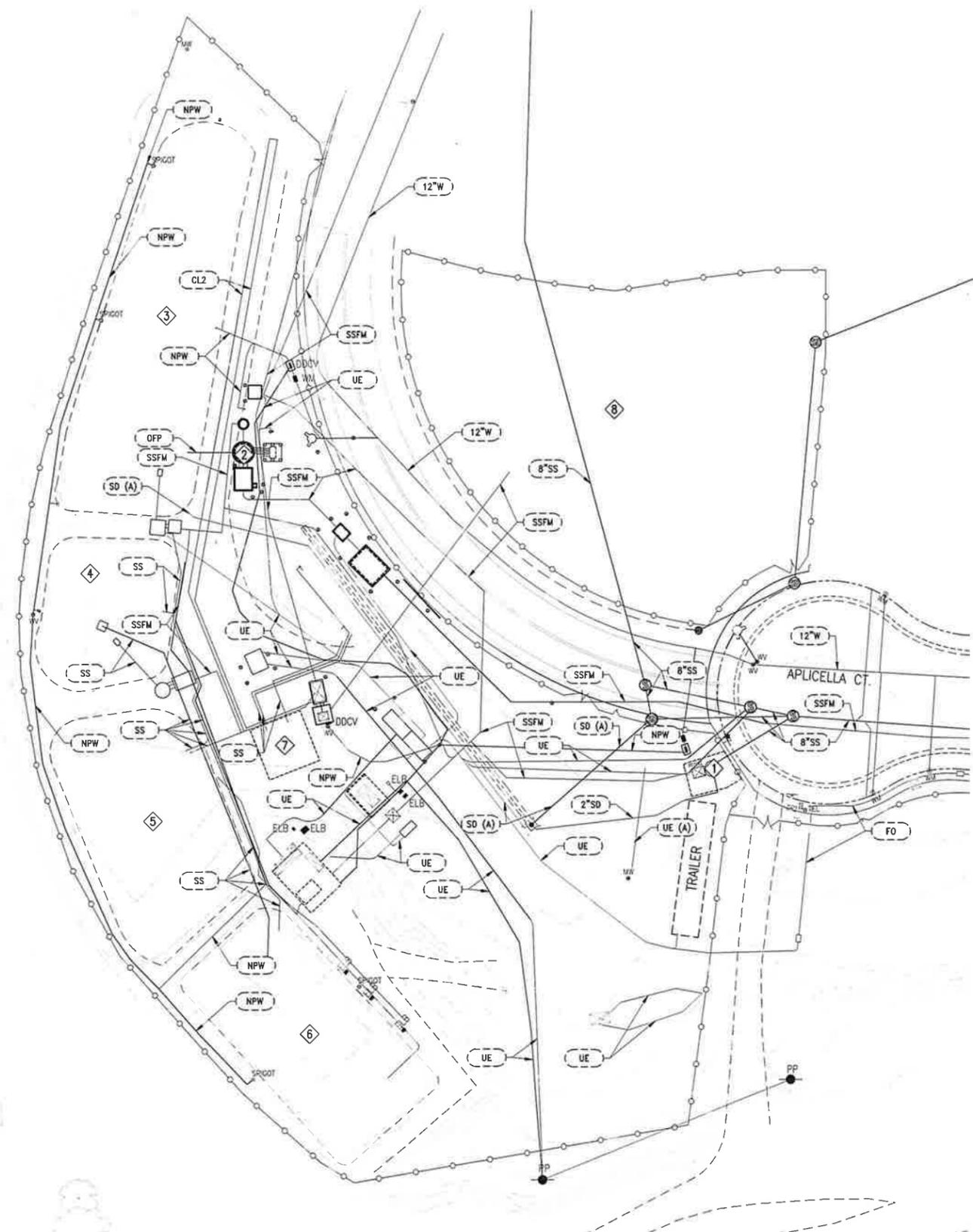
STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
STORM DRAIN OUTFALL CONSTRUCTION SEQUENCING PLAN

SHEET 13
 OF 38
 DRAWING NO. GO.80

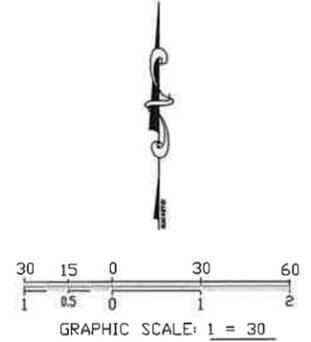
\\DEWBERRY\DEWBERRYROOT\LOCAL\OFFICES\MANTECA\PROJECTS\50126548 - ZONE 36-39 STORM DRAIN - CI MANTECA\100 PROJECT DESIGN FILES\335 WATER PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-24659P-DEM0-03.01 OLWD EXISTING SITE AND PIPING LAYOUT

SAN JOAQUIN RIVER

RD-17 LEVEE



PLAN



EXISTING UTILITIES LEGEND:

- 12\"/> 12-INCH WATER MAIN
- NPW NON-POTABLE WATER
- SD (A) ABANDONED STORM DRAIN
- 2\"/> 2-INCH STORM DRAIN
- SS SANITARY SEWER
- SSFM SANITARY SEWER FORCE MAIN
- OFP PUMP STATION OVERFLOW PIPE
- 8\"/> 8-INCH GRAVITY SANITARY SEWER
- UE UNDERGROUND ELECTRIC
- FO FIBER OPTIC

SYMBOL:

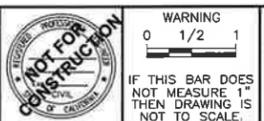
- DDCV DOUBLE DETECTOR CHECK VALVE
- POWER POLE
- MONITORING WELL
- WATER VALVE
- WATER METER
- FIRE HYDRANT
- SPIGOT
- DRY WELL
- STORM DRAIN MANHOLE
- SANITARY SEWER MANHOLE
- ELECTRICAL BOX
- STREET LIGHT
- TELEPHONE BOX
- STREET SIGN

LEGEND:

- 1 OLWD LIFT STATION NO. 3
- 2 OLWD LIFT STATION NO. 4
- 3 WWTP EMERGENCY STORAGE POND
- 4 WWTP FILTER FLOW EQUALIZATION BASIN
- 5 WWTP SLUDGE POND
- 6 WWTP SBR POND
- 7 WWTP FILTER SYSTEM
- 8 WWTP STORAGE POND NO. 3

90% SUBMITTAL
10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



WARNING
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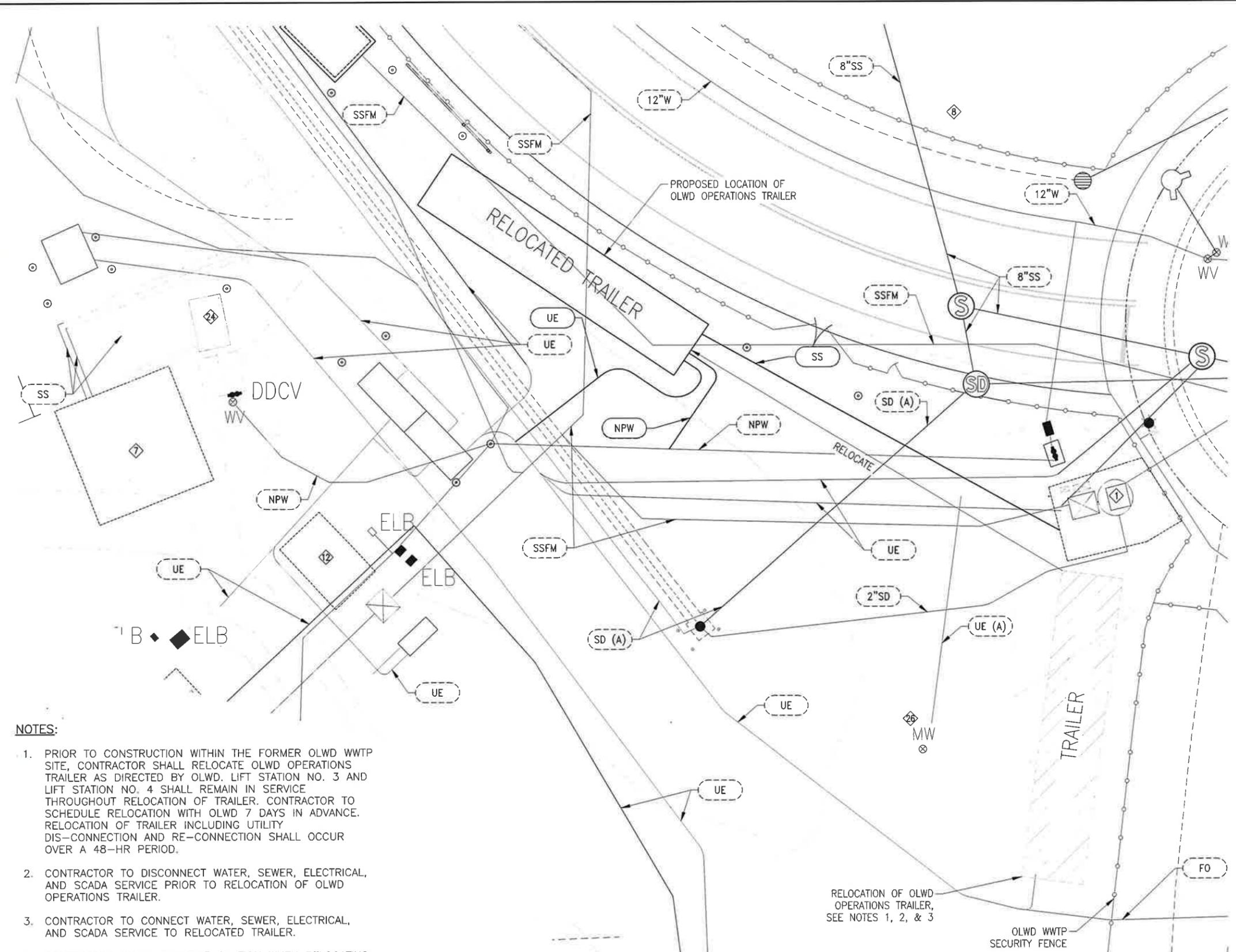
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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
OAKWOOD LAKE WATER DISTRICT WWTP
EXISTING SITE AND PIPING LAYOUT

SHEET 14
 OF 38
 DRAWING NO. D3.01

L:\50126948 - ZONE 36-39 STORM DRAIN - CI MANTECA\400 PROJECT DESIGN FILES\35 WATER\PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-25639P-DEMO--03.02 OLWD TRAILER RELOCATION PLAN



- EXISTING UTILITIES LEGEND:**
- 12"W 12-INCH WATER MAIN
 - NPW NON-POTABLE WATER
 - SD (A) ABANDONED STORM DRAIN
 - 2"SD 2-INCH STORM DRAIN
 - SS SANITARY SEWER
 - SSFM SANITARY SEWER FORCE MAIN
 - OPP PUMP STATION OVERFLOW PIPE
 - 8"SS 8-INCH GRAVITY SANITARY SEWER
 - UE UNDERGROUND ELECTRIC
 - FO FIBER OPTIC
 - UE RELOCATED UNDERGROUND ELECTRICAL
 - SS RELOCATED SEWER SERVICE LINE FOR TRAILER
 - NPW RELOCATED NON-POTABLE WATER SERVICE LINE FOR TRAILER

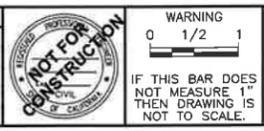
- SYMBOL:**
- DDCV DOUBLE DETECTOR CHECK VALVE
 - PP POWER POLE
 - MW MONITORING WELL
 - WV WATER VALVE
 - WM WATER METER
 - FIRE HYDRANT
 - SPIGOT
 - DRY WELL
 - SDM STORM DRAIN MANHOLE
 - SSM SANITARY SEWER MANHOLE
 - ELB ELECTRICAL BOX
 - SL STREET LIGHT
 - TEL TELEPHONE BOX
 - SS SIGN

- LEGEND:**
- 1 OLWD LIFT STATION NO. 3
 - 7 WWTP FILTER SYSTEM
 - 8 WWTP STORAGE POND NO. 3
 - 12 WWTP EMERGENCY GENERATOR
 - 24 WWTP EFFLUENT PUMP STATION - TO BE ABANDONED
 - 26 MONITORING WELL - TO BE DESTROYED

- NOTES:**
- PRIOR TO CONSTRUCTION WITHIN THE FORMER OLWD WWTP SITE, CONTRACTOR SHALL RELOCATE OLWD OPERATIONS TRAILER AS DIRECTED BY OLWD. LIFT STATION NO. 3 AND LIFT STATION NO. 4 SHALL REMAIN IN SERVICE THROUGHOUT RELOCATION OF TRAILER. CONTRACTOR TO SCHEDULE RELOCATION WITH OLWD 7 DAYS IN ADVANCE. RELOCATION OF TRAILER INCLUDING UTILITY DIS-CONNECTION AND RE-CONNECTION SHALL OCCUR OVER A 48-HR PERIOD.
 - CONTRACTOR TO DISCONNECT WATER, SEWER, ELECTRICAL, AND SCADA SERVICE PRIOR TO RELOCATION OF OLWD OPERATIONS TRAILER.
 - CONTRACTOR TO CONNECT WATER, SEWER, ELECTRICAL, AND SCADA SERVICE TO RELOCATED TRAILER.
 - CONTRACTOR SHALL EXERCISE CAUTION WHEN RELOCATING TRAILER TO AVOID DAMAGE. ANY DAMAGE TO THE TRAILER DUE TO CONTRACTOR ACTIONS SHALL BE REPAIRED TO THE DISTRICT'S SATISFACTION AT CONTRACTOR EXPENSE.

90% SUBMITTAL
10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
OAKWOOD LAKE WATER DISTRICT WWTP TRAILER RELOCATION PLAN

SHEET 15
OF 38
DRAWING NO. D3.02

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SAN JOAQUIN RIVER

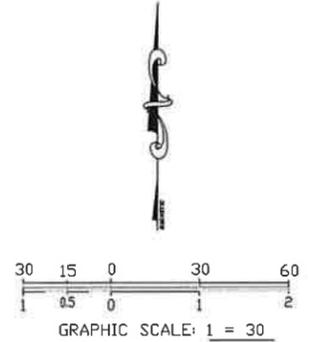
RD-17 LEVEE

OLWD WWTP SECURITY FENCE TO BE RELOCATED UPON OUTFALL CONSTRUCTION COMPLETION, SEE DRAWING D3.15

EXISTING FENCE TO BE REMOVED

EXISTING FENCE TO BE REMOVED

PLAN



SYMBOL:

- DDCV DOUBLE DETECTOR CHECK VALVE
- PP POWER POLE
- MW MONITORING WELL
- WV WATER VALVE
- WM WATER METER
- FH FIRE HYDRANT
- SPIGOT SPIGOT
- DW DRY WELL
- SDM STORM DRAIN MANHOLE
- SSM SANITARY SEWER MANHOLE
- ELB ELECTRICAL BOX
- SL STREET LIGHT
- TEL TELEPHONE BOX
- SS STREET SIGN

LEGEND:

- EXISTING FENCING TO BE REMOVED
- ① OLWD LIFT STATION NO. 3
- ② OLWD LIFT STATION NO. 4
- ③ WWTP EMERGENCY STORAGE POND **TO BE BACKFILLED**
- ④ WWTP FILTER FLOW EQUALIZATION BASIN **TO BE BACKFILLED**
- ⑤ WWTP SLUDGE POND **TO BE BACKFILLED**
- ⑥ WWTP SBR POND **TO BE BACKFILLED**
- ⑦ WWTP FILTER SYSTEM
- ⑧ WWTP STORAGE POND NO. 3
- ⑨ WWTP EMERGENCY GENERATOR
- ⑩ WWTP MOTOR CONTROL CENTER/PG&E METER
- ⑪ WWTP EMERGENCY RETURN PUMP STATION
- ⑫ WWTP FILTER PUMP STATION
- ⑬ WWTP EFFLUENT PUMP STATION - TO BE ABANDONED
- ⑭ PG&E VAULT - TO BE REMOVED PRIOR TO CONSTRUCTION
- ⑮ MONITORING WELL - TO BE DESTROYED

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



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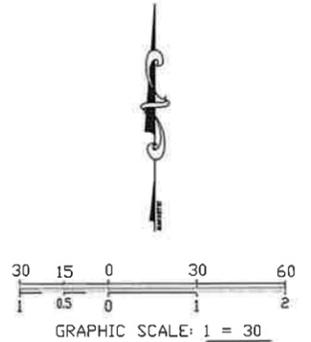
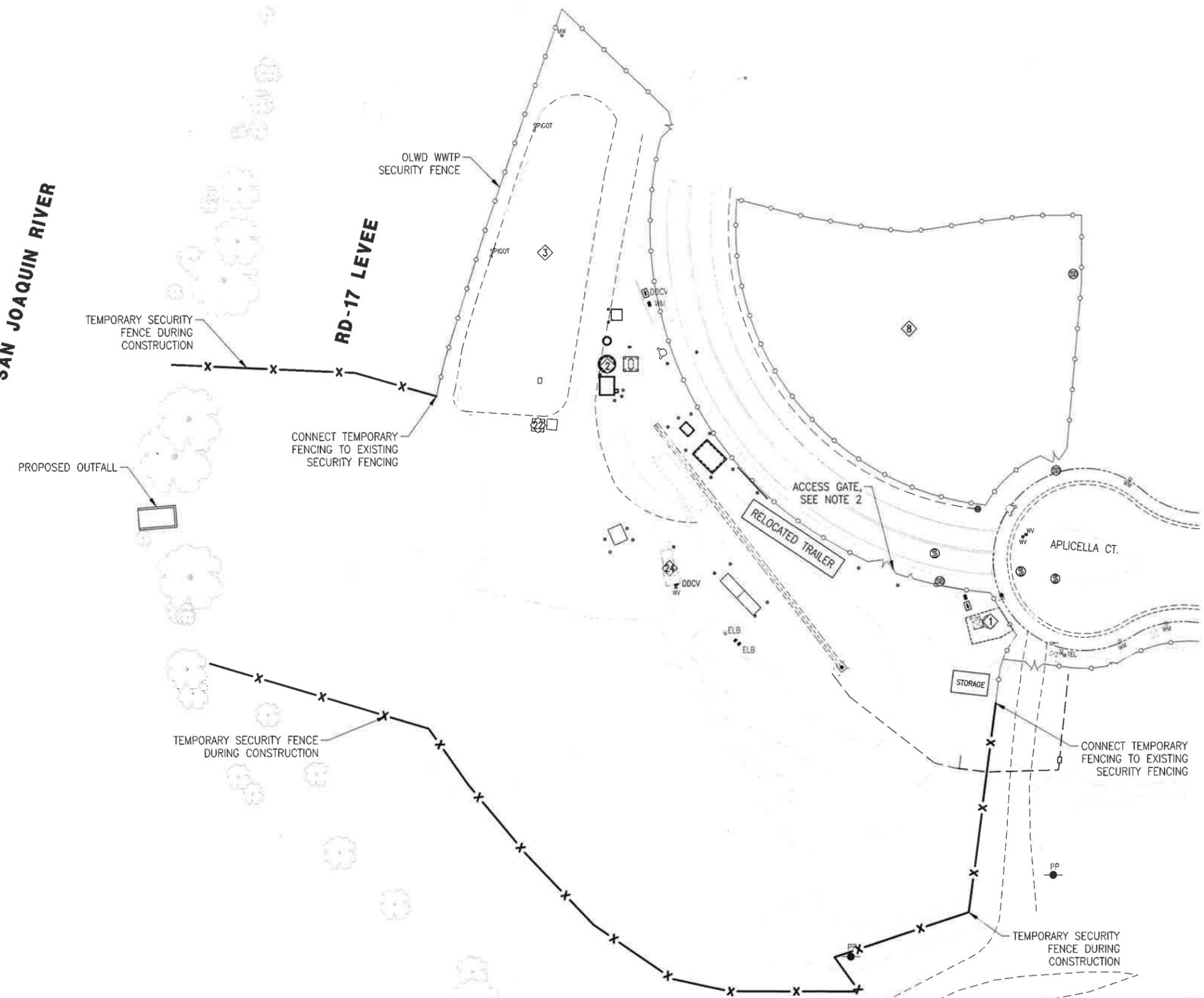
STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
OAKWOOD LAKE WATER DISTRICT WWTP FENCING DEMOLITION PLAN

90% SUBMITTAL
10/23/2025

SHEET 16
 OF 38
 DRAWING NO. D3.03

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SAN JOAQUIN RIVER



- SYMBOL:**
- DDCV DOUBLE DETECTOR CHECK VALVE
 - PP POWER POLE
 - MW MONITORING WELL
 - WV WATER VALVE
 - WM WATER METER
 - FH FIRE HYDRANT
 - SPIGOT SPIGOT
 - DW DRY WELL
 - SDM STORM DRAIN MANHOLE
 - SSM SANITARY SEWER MANHOLE
 - ELB ELECTRICAL BOX
 - SL STREET LIGHT
 - TEL TELEPHONE BOX
 - SS STREET SIGN

- LEGEND:**
- ① OLWD LIFT STATION NO. 3
 - ② OLWD LIFT STATION NO. 4
 - ③ WWTP EMERGENCY STORAGE POND **TO BE BACKFILLED**
 - ④ WWTP STORAGE POND NO. 3
 - ⑤ WWTP EMERGENCY RETURN PUMP STATION
 - ⑥ WWTP EFFLUENT PUMP STATION - TO BE ABANDONED
 - ⑦ PG&E VAULT - TO BE REMOVED PRIOR TO CONSTRUCTION

- NOTES:**
1. FOR TEMPORARY CONSTRUCTION FENCE DETAIL, SEE DETAILS 8-10, DRWG CD3.05.
 2. CONTRACTOR TO REMOVE EXISTING ACCESS GATE, MODIFY OPENING TO ALLOW FOR ACCESS OF PROPOSED CONSTRUCTION EQUIPMENT, AND INSTALL TEMPORARY SECURITY GATE.
 3. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY DURING CONSTRUCTION.

PLAN

**90% SUBMITTAL
10/23/2025**

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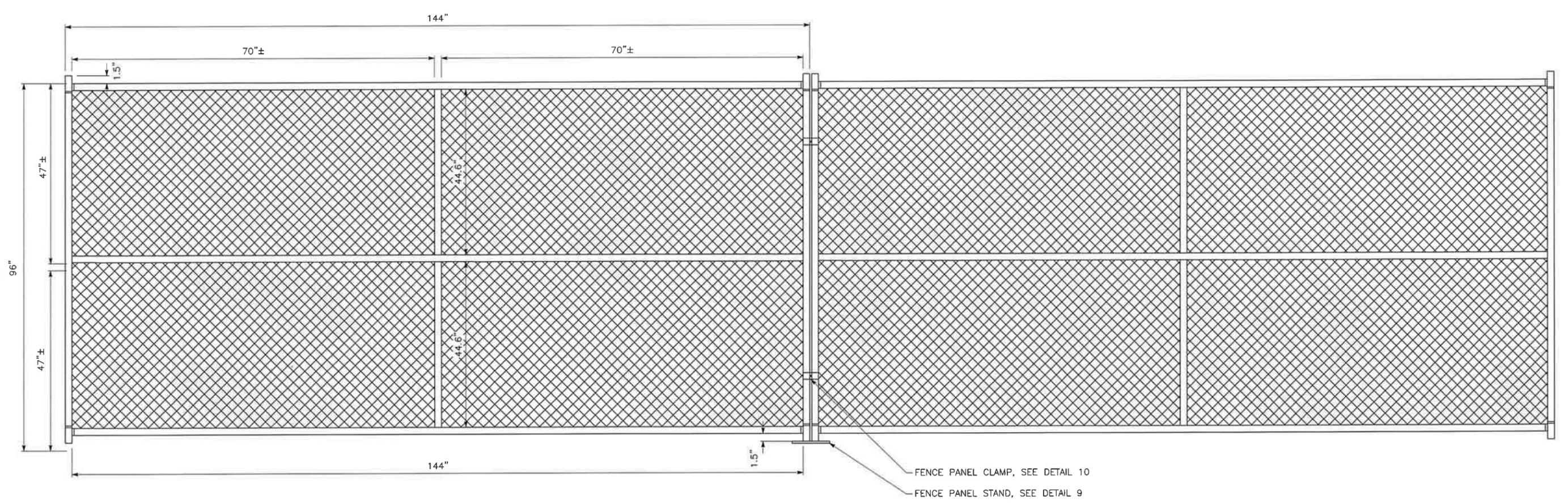


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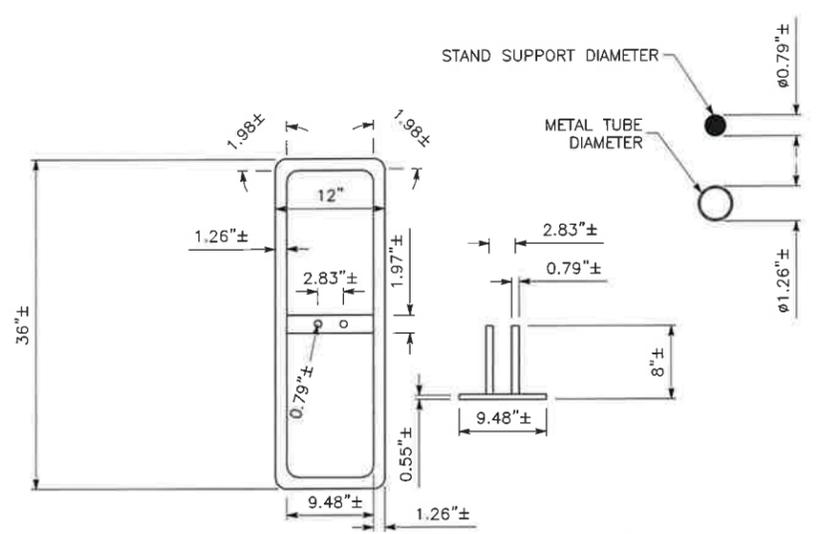
STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
**OAKWOOD LAKE WATER DISTRICT WWTP
TEMPORARY CONSTRUCTION FENCING PLAN**

SHEET 17
OF 38
DRAWING NO.
D3.04

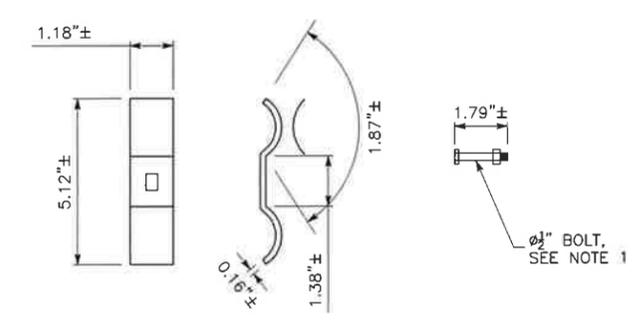
\\DEWBERRY\DEWBERRYROOT\LOCAL\OFFICES\MANTECA\PROJECTS\MANTECA\PROJECTS\50126648 - ZONE 36-39 STORM DRAIN - CI MANTECA\100 PROJECT DESIGN FILES\35 WATER PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-23639IP-DEMO--D3.05 FENCE DETAILS



TEMPORARY SECURITY FENCE DETAIL 8
 SCALE: NTS



TEMPORARY FENCE PANEL STAND DETAIL 9
 SCALE: NTS



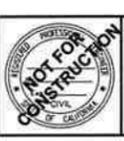
TEMPORARY FENCE PANEL CLAMP DETAIL 10
 SCALE: NTS

NOTES:

- TEMPORARY FENCE PANEL CLAMPS SHALL BE FASTENED WITH BOLTS SECURED BY NUTS FACING THE CONSTRUCTION WORK AREA AWAY FROM PUBLIC ACCESS.
- DIMENSIONS FOR TEMPORARY SECURITY FENCING DETAILS MAY VARY DEPENDING ON SUPPLIER.

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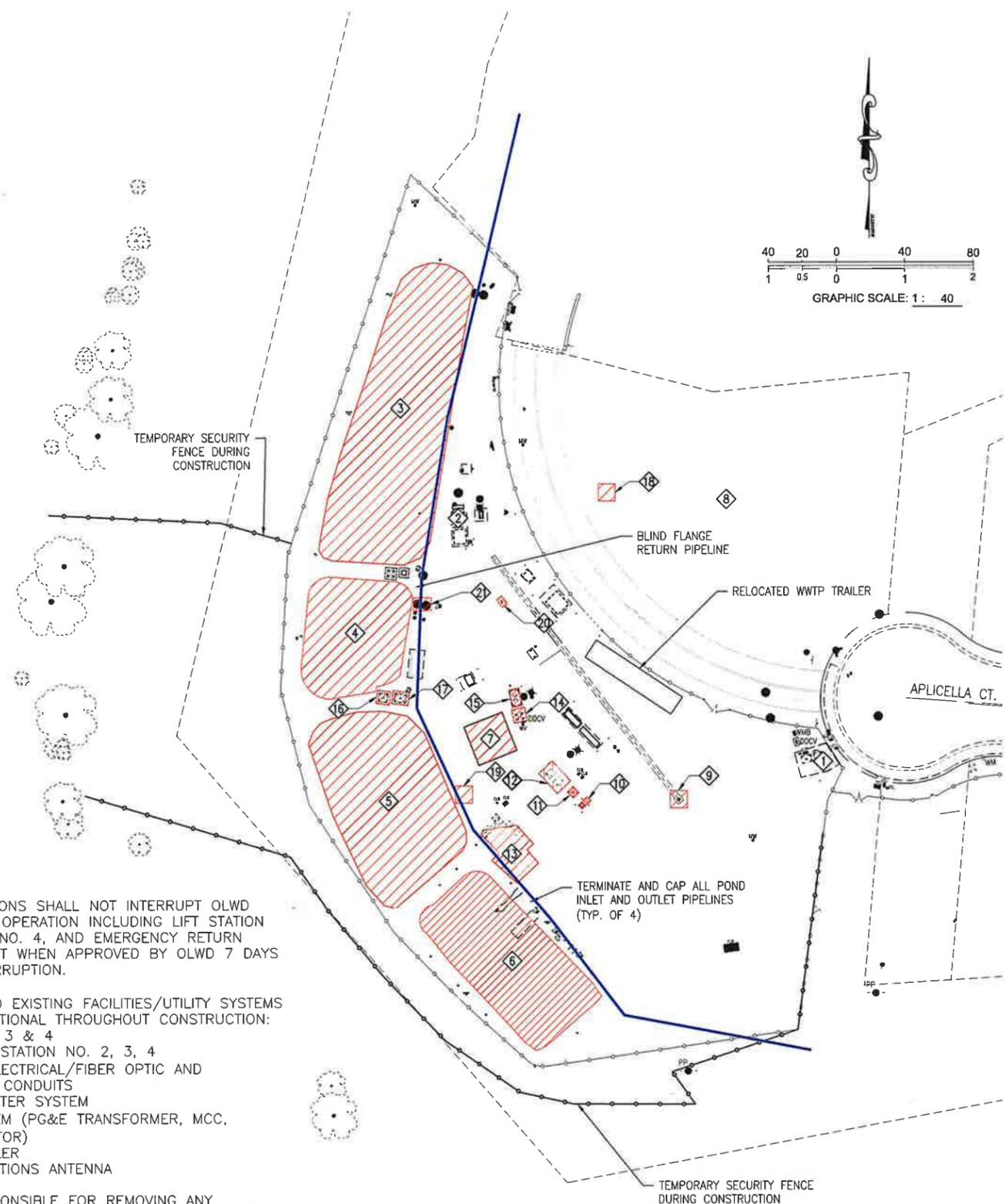


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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
OAKWOOD LAKE WATER DISTRICT WWTP
TEMPORARY SECURITY FENCE DETAILS

SHEET 18
 OF 38
 DRAWING NO. D3.05

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- NOTES:**
- CONTRACTOR OPERATIONS SHALL NOT INTERRUPT OLWD WASTEWATER SYSTEM OPERATION INCLUDING LIFT STATION NO. 3, LIFT STATION NO. 4, AND EMERGENCY RETURN PUMP STATION EXCEPT WHEN APPROVED BY OLWD 7 DAYS IN ADVANCE OF INTERRUPTION.
 - THE FOLLOWING OLWD EXISTING FACILITIES/UTILITY SYSTEMS SHALL REMAIN OPERATIONAL THROUGHOUT CONSTRUCTION:
 - LIFT STATION NO. 3 & 4
 - SSFM FROM LIFT STATION NO. 2, 3, 4
 - UNDERGROUND ELECTRICAL/FIBER OPTIC AND INSTRUMENTATION CONDUITS
 - NON-POTABLE WATER SYSTEM
 - ELECTRICAL SYSTEM (PG&E TRANSFORMER, MCC, STANDBY GENERATOR)
 - OLWD WWTP TRAILER
 - OLWD COMMUNICATIONS ANTENNA
 - CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY RESIDUALS FROM THE FLOW EQUALIZATION BASIN, SLUDGE POND, AND SBR POND. CONTRACTOR IS RESPONSIBLE FOR TRANSPORT OFFSITE OF RESIDUALS AND DISPOSAL AT AN APPROVED SITE.

PLAN

LEGEND:

- STRUCTURES/BASINS TO BE DECOMMISSIONED/DEMOLISHED/BACKFILLED
- ① OLWD LIFT STATION NO. 3
- ② OLWD LIFT STATION NO. 4
- ③ WWTP EMERGENCY STORAGE POND
- ④ WWTP FILTER FLOW EQUALIZATION BASIN
- ⑤ WWTP SLUDGE POND
- ⑥ WWTP SBR POND
- ⑦ WWTP FILTER SYSTEM
- ⑧ WWTP STORAGE POND NO. 3
- ⑨ YARD DRAIN PUMP STATION
- ⑩ TEMPORARY TRANSFORMER
- ⑪ VALVE AND CONTROL VAULT
- ⑫ WWTP EMERGENCY GENERATOR
- ⑬ HEADWORKS AREA
- ⑭ VALVE AND CONTROL VAULT
- ⑮ RECYCLED WATER PUMP STATION
- ⑯ VALVE AND CONTROL VAULT
- ⑰ VALVE AND CONTROL VAULT
- ⑱ POND OUTLET SCREEN
- ⑲ VALVE AND CONTROL VAULT
- ⑳ BACKWASH RETURN PUMP STATION
- ㉑ VALVE AND CONTROL VAULT

DECOMMISSIONING NOTES			
PHASE	NO	FACILITY	DEMOLITION NOTES
I	③	EMERGENCY STORAGE POND	CONTRACTOR SHALL REMOVE AND SALVAGE OLD BACKFLOW DEVICE AND CAP AS NEEDED.
II	④	FILTER EFFLUENT EQUALIZATION POND	CONTRACTOR SHALL REMOVE LINER AND IN-POND CONCRETE PADS AND BACKFILL PER GRADING PLAN.
I/II	⑤	SLUDGE POND	(I) CONTRACTOR SHALL REMOVE CABLE STAYS, CONCRETE STEPS AND (II) REMOVE LINER AND BACKFILL PER GRADING PLAN.
I/II	⑥	SEQUENCING BATCH REACTOR	(I) CONTRACTOR SHALL REMOVE CABLE STAYS, CONCRETE STEPS, JIB CRANE FOUNDATION AND (II) REMOVE LINER AND BACKFILL PER GRADING PLAN.
I	⑦	FILTRATION PAD	CONTRACTOR SHALL REMOVE CONCRETE PAD CHEMICAL ROOM BUILDING, PRESSURE FILTERS, CHEMICAL TANKS AND OTHER MISCELLANEOUS MECHANICAL EQUIPMENT AND SALVAGE AS DIRECTED.
I/II	⑧	POND NO. 3	(I) CONTRACTOR SHALL REMOVE LINER AND (II) BACKFILL PER GRADING PLAN.
I	⑨	YARD DRAIN PUMP STATION	CONTRACTOR SHALL REMOVE BOLLARDS AND ALL MECHANICAL AND ELECTRICAL EQUIPMENT IN VAULT AND SALVAGE AS DIRECTED.
I	⑩	TEMPORARY TRANSFORMER	CONTRACTOR SHALL REMOVE TRANSFORMER'S FOUNDATION PAD AND BOLLARDS AND SALVAGE AS DIRECTED.
I	⑪	VALVE AND CONTROL VAULT	CONTRACTOR SHALL REMOVE ALL MECHANICAL AND ELECTRICAL EQUIPMENT IN VAULT AND SALVAGE AS DIRECTED AND REMOVE VAULT.
I	⑫	WWTP EMERGENCY GENERATOR	CONTRACTOR SHALL REMOVE CONCRETE FOUNDATION AND GENERATOR AND SALVAGE AS DIRECTED.
I	⑬	HEADWORKS AREA	CONTRACTOR SHALL REMOVE MCC, BAR SCREEN, CATWALK, CONCRETE PAD, ELECTRICAL PANELS, PUMPS, AND ABOVE GROUND PIPING AND SALVAGE AS DIRECTED. PLC'S SHALL BE SALVAGED AS DIRECTED.
I	⑭	VALVE AND CONTROL VAULT	CONTRACTOR SHALL REMOVE ALL MECHANICAL AND ELECTRICAL EQUIPMENT IN VAULT AND SALVAGE AS DIRECTED AND REMOVE VAULT.
I	⑮	RECYCLED WATER PUMP STATION	CONTRACTOR SHALL REMOVE ALL MECHANICAL AND ELECTRICAL EQUIPMENT IN VAULT AND SALVAGE AS DIRECTED AND REMOVE VAULT.
I	⑯	VALVE AND CONTROL VAULT	CONTRACTOR SHALL REMOVE ALL MECHANICAL AND ELECTRICAL EQUIPMENT IN VAULT AND SALVAGE AS DIRECTED AND REMOVE VAULT.
I	⑰	VALVE AND CONTROL VAULT	CONTRACTOR SHALL REMOVE ALL MECHANICAL AND ELECTRICAL EQUIPMENT IN VAULT AND SALVAGE AS DIRECTED AND REMOVE VAULT.
I	⑱	POND OUTLET SCREEN	CONTRACTOR SHALL REMOVE POND OUTLET SCREEN.
I	⑲	VALVE AND CONTROL VAULT	CONTRACTOR SHALL REMOVE ALL MECHANICAL AND ELECTRICAL EQUIPMENT IN VAULT AND SALVAGE AS DIRECTED AND REMOVE VAULT.
I	⑳	BACKWASH RETURN PUMP STATION AND STANDPIPE	CONTRACTOR SHALL REMOVE CONCRETE PAD AND ALL MECHANICAL AND ELECTRICAL EQUIPMENT AND SALVAGE AS DIRECTED. CONTRACTOR SHALL REMOVE AND CAP STANDPIPE TO BELOW GRADE.
I	㉑	VALVE AND CONTROL VAULT	CONTRACTOR SHALL REMOVE ALL MECHANICAL AND ELECTRICAL EQUIPMENT IN VAULT AND SALVAGE AS DIRECTED AND REMOVE VAULT.
II	VARIOUS LOCATIONS	INLET/OUTLET PIPES	CAP ALL INLET/OUTLET PIPES TO SBR, SLUDGE STORAGE POND, AND FILTER FLOW EQUALIZATION BASIN AT APPROPRIATE LOCATION IN COORDINATION WITH BACKFILLING AND RE-GRADING.

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10/23/2025**

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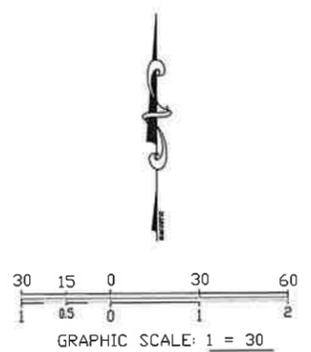
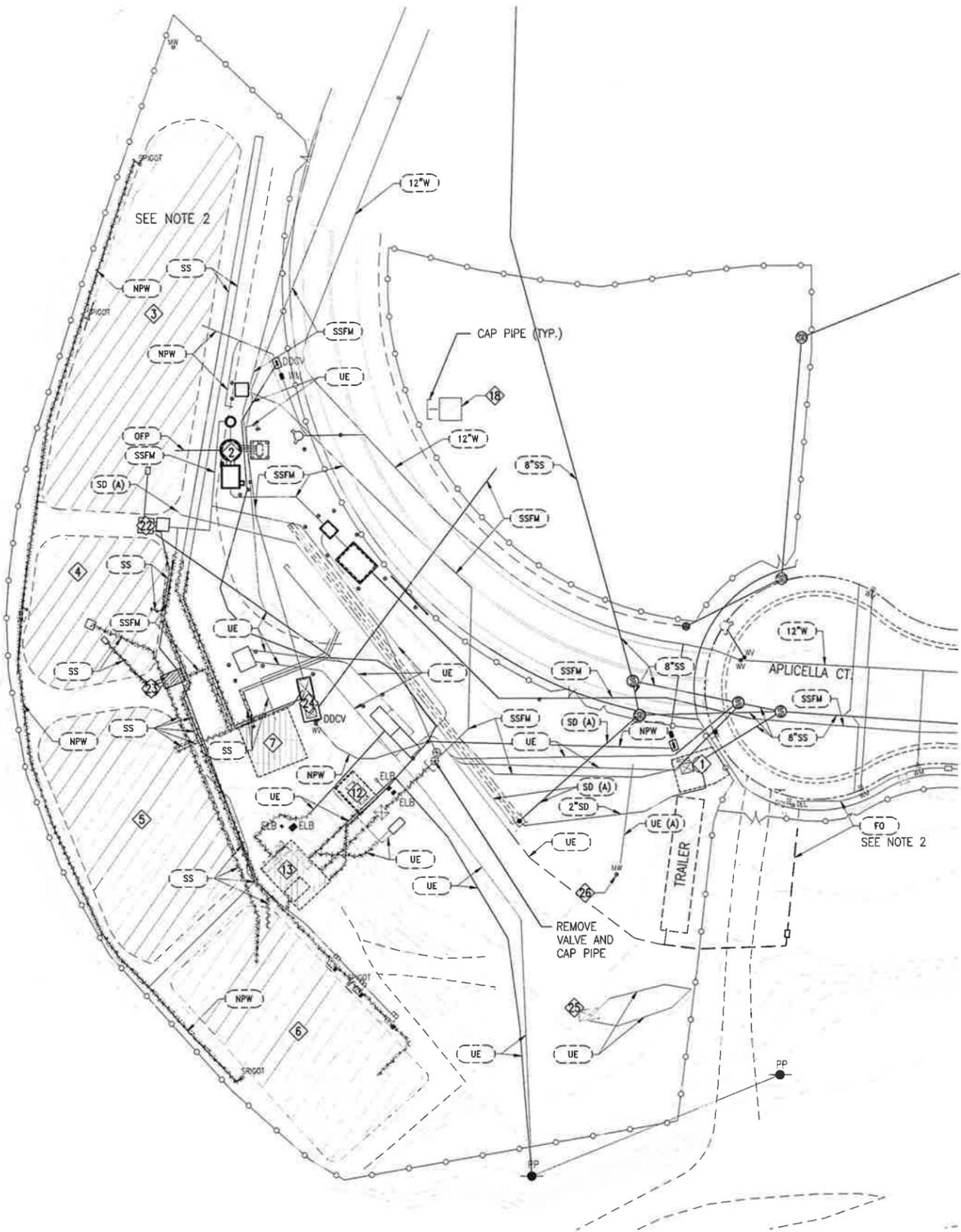
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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
OAKWOOD LAKE WATER DISTRICT WWTP STRUCTURES/BASIN DEMOLITION PLAN

SAN JOAQUIN RIVER

RD-17 LEVEE



UTILITIES LEGEND:

- 12-INCH WATER MAIN
- NON-POTABLE WATER
- ABANDONED STORM DRAIN
- 2-INCH STORM DRAIN
- SANITARY SEWER
- SANITARY SEWER FORCE MAIN
- PUMP STATION OVERFLOW PIPE
- 8-INCH GRAVITY SANITARY SEWER
- UNDERGROUND ELECTRIC
- FIBER OPTIC

LEGEND:

- UNDERGROUND UTILITIES TO BE REMOVED
- STRUCTURES/BASINS TO BE DECOMMISSIONED/DEMOLISHED AND REMOVED PRIOR TO THE CONSTRUCTION OF OUTFALL AND SDFM, SEE DRWG D3.06 FOR ADDITIONAL DETAIL

- OLWD LIFT STATION NO. 3
- OLWD LIFT STATION NO. 4
- WWTP EMERGENCY STORAGE POND **TO BE BACKFILLED**
- WWTP FILTER FLOW EQUALIZATION BASIN **TO BE BACKFILLED**
- WWTP SLUDGE POND **TO BE BACKFILLED**
- WWTP SBR POND **TO BE BACKFILLED**
- WWTP FILTER SYSTEM
- WWTP EMERGENCY GENERATOR
- WWTP MOTOR CONTROL CENTER/PG&E METER
- POND OUTLET SCREEN
- WWTP EMERGENCY RETURN PUMP STATION
- WWTP FILTER PUMP STATION
- WWTP EFFLUENT & BACKWASH PUMP STATION
- PG&E VAULT - TO BE REMOVED
- MONITORING WELL - TO BE DESTROYED

NOTES:

1. CONTRACTOR SHALL PROTECT OLWD WWTP EXISTING UNDERGROUND UTILITIES DURING CONSTRUCTION.
2. FO CONDUIT TO BE RELOCATED, SEE DRWG D3.08.

PLAN

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10/23/2025

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REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
OAKWOOD LAKE WATER DISTRICT WWTP
PIPING DEMOLITION PLAN

SHEET 20
OF 38
DRAWING NO. D3.07

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SAN JOAQUIN RIVER

OLWD WWTP SECURITY FENCE
RD-17 LEVEE

PROPOSED OUTFALL

OLWD WWTP TEMPORARY SECURITY FENCE DURING CONSTRUCTION, SEE DRWG D3.07

RELOCATED TRAILER

APLICELLA CT.

SEE NOTE 1

CONNECT TO EXISTING FO CONDUIT

RELOCATED PULL BOX

EXISTING FO CONDUIT TO BE ABANDONED

CONNECT TO EXISTING FO CONDUIT

STORAGE

EXISTING FO CONDUIT TO BE ABANDONED

CONNECT TO EXISTING FO CONDUIT

EXISTING FO CONDUIT TO BE ABANDONED

CONNECT TO EXISTING FO CONDUIT

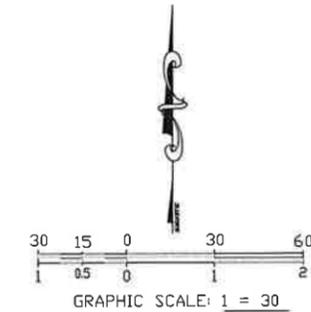
EXISTING FO CONDUIT TO BE ABANDONED

LEGEND:

- ① OLWD LIFT STATION NO. 3
- ② OLWD LIFT STATION NO. 4
- ③ WWTP EMERGENCY STORAGE POND **TO BE BACKFILLED**
- ④ WWTP STORAGE POND NO. 3
- ④ WWTP EFFLUENT PUMP STATION - TO BE ABANDONED
- ⑤ PG&E VAULT - TO BE REMOVED PRIOR TO CONSTRUCTION
- ⑥ MONITORING WELL - TO BE DESTROYED
- ⑦ EXISTING UNDERGROUND FIBER OPTIC CONDUITS TO BE RELOCATED DURING CONSTRUCTION
- ⑧ RELOCATED UNDERGROUND ELECTRICAL CONDUITS / FIBER OPTIC

NOTES:

1. FOR ENLARGED PLAN VIEW, SEE DRWG D3.02.



UTILITIES LEGEND:

- 12"W 12-INCH WATER MAIN
- NPW NON-POTABLE WATER
- SD (A) ABANDONED STORM DRAIN
- 2"SD 2-INCH STORM DRAIN
- SS (A) ABANDONED SANITARY SEWER
- SSFM SANITARY SEWER FORCE MAIN
- OFF PUMP STATION OVERFLOW PIPE
- 8"SS 8-INCH GRAVITY SANITARY SEWER
- UE UNDERGROUND ELECTRIC
- FO FIBER OPTIC
- 48"SDFM PROPOSED 48-INCH STORM DRAIN FORCE MAIN
- UE RELOCATED UNDERGROUND ELECTRICAL
- FO RELOCATED FIBER OPTIC
- SS RELOCATED SEWER SERVICE LINE FOR TRAILER
- NPW RELOCATED NON-POTABLE WATER SERVICE LINE FOR TRAILER

SYMBOL:

- DDCV DOUBLE DETECTOR CHECK VALVE
- PP POWER POLE
- MW MONITORING WELL
- WV WATER VALVE
- WM WATER METER
- FH FIRE HYDRANT
- SPIGOT
- DW DRY WELL
- SDM STORM DRAIN MANHOLE
- SSM SANITARY SEWER MANHOLE
- ELB ELECTRICAL BOX
- SL STREET LIGHT
- TEL TELEPHONE BOX
- SS SIGN

PLAN

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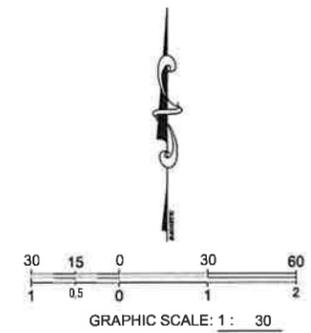
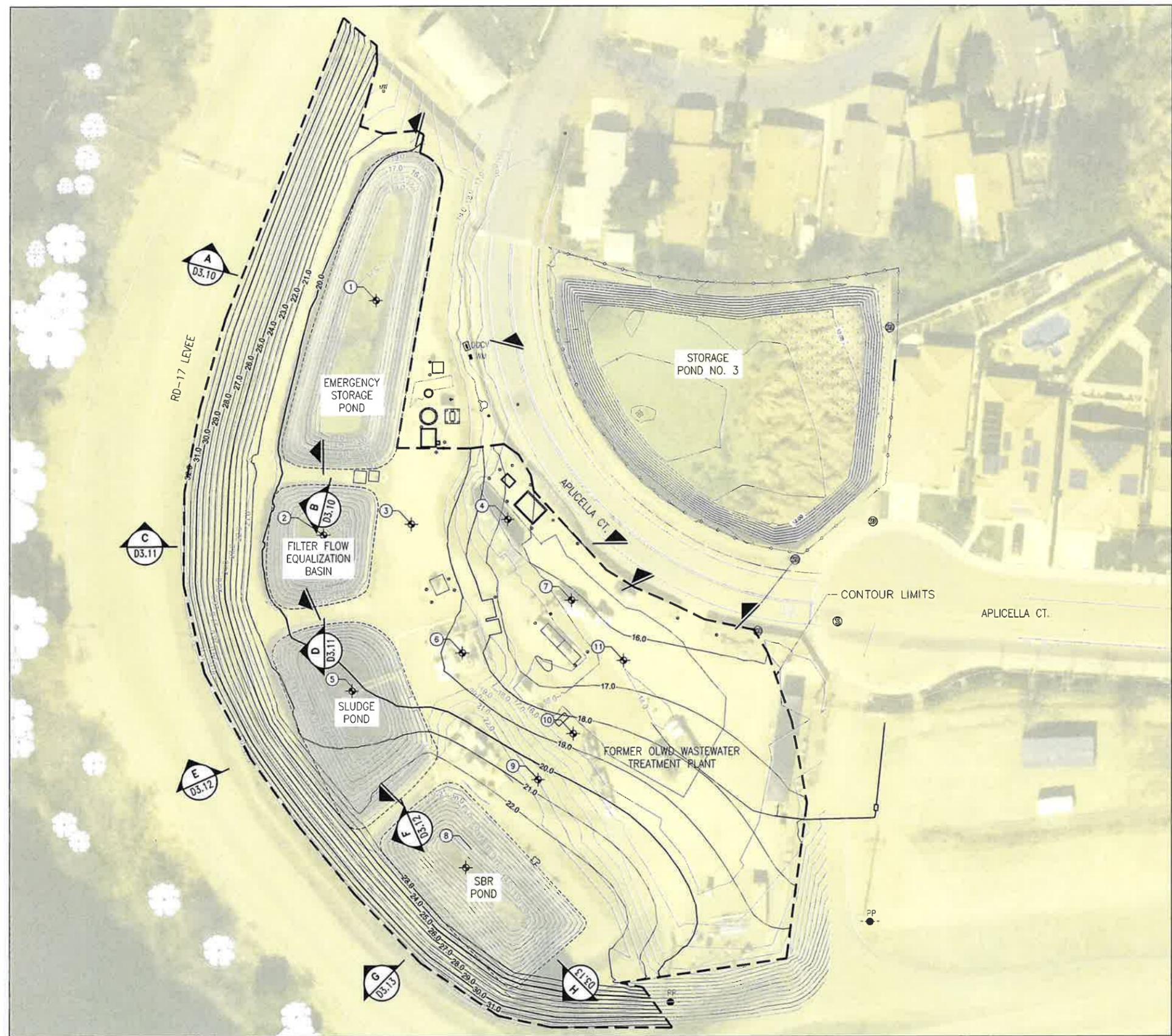


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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
**OAKWOOD LAKE WATER DISTRICT WWTP
SITE AND PIPING LAYOUT - POST PIPING DEMOLITION**

SHEET 21
OF 38
DRAWING NO. D3.08

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GENERAL NOTE:

CUT VOLUME: 250 CU YD (SWELL FACTOR: 1.2)
 FILL VOLUME: 7,880 CU YD
 TOTAL IMPORT VOLUME: 7,730 CU YD

LEGEND:

LOCATION	FINISH GRADE	ORIGINAL GRADE
①	19.73	11.88
②	19.71	11.30
③	19.92	19.61
④	16.71	14.76
⑤	20.14	9.80
⑥	19.59	18.53
⑦	16.08	14.34
⑧	22.63	10.75
⑨	20.95	19.94
⑩	18.53	15.18
⑪	16.39	14.09

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10/23/2025

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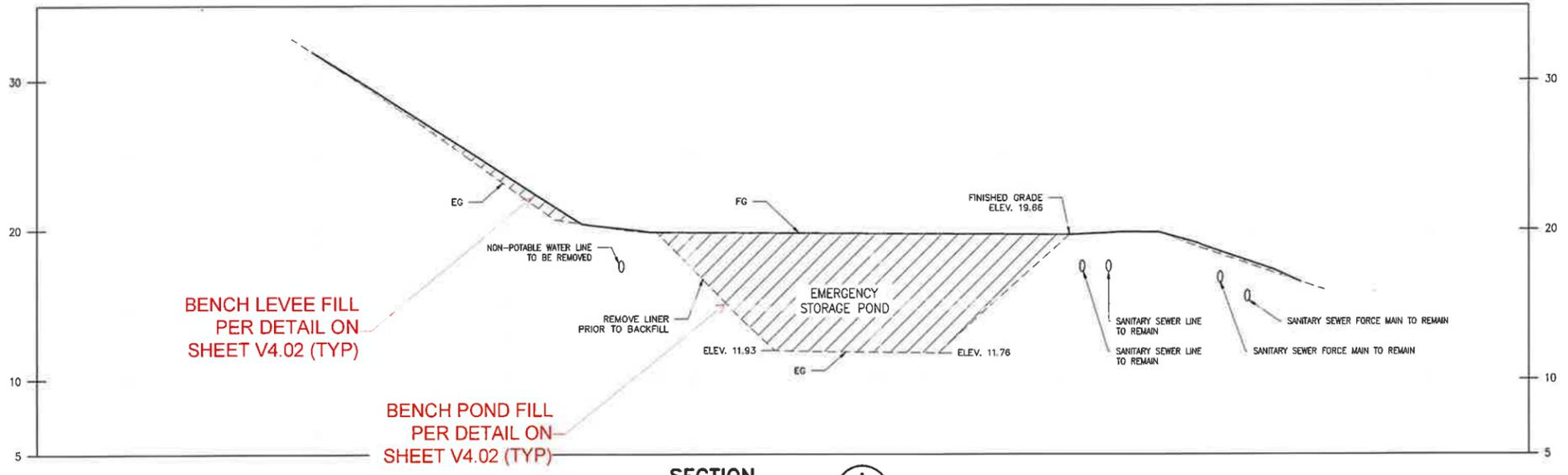
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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
OAKWOOD LAKE WATER DISTRICT WWTP POND DEMOLITION - SITE GRADING PLAN

SHEET 22
 OF 38
 DRAWING NO. D3.09

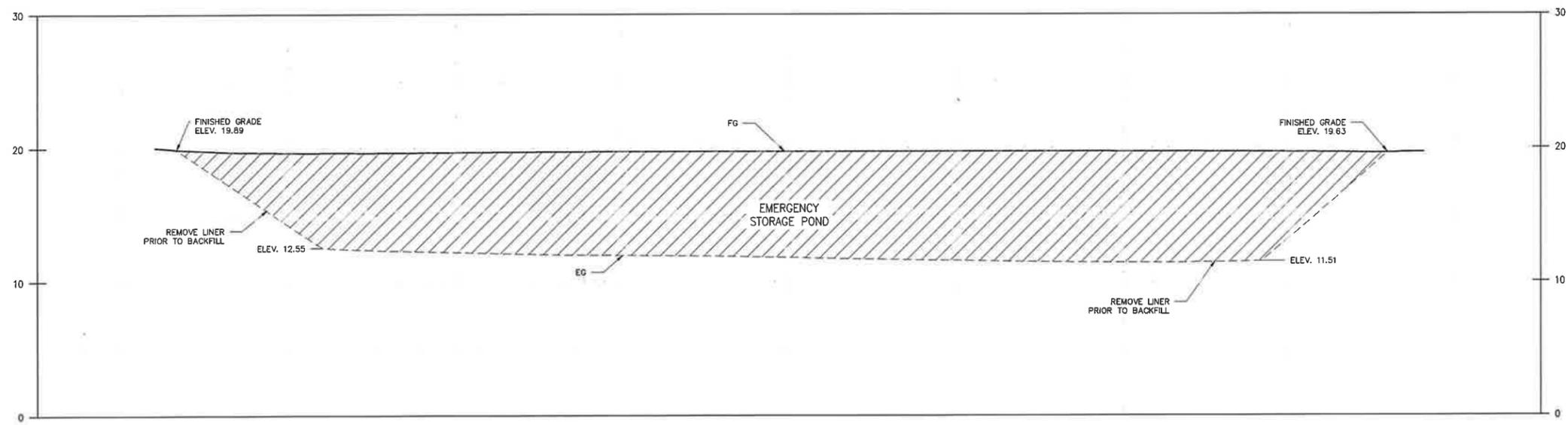
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SECTION A
 HORIZONTAL SCALE: 1" = 20'
 VERTICAL SCALE: 1" = 10'

NOTES:

1. MATCH FINAL GRADE WITH EXISTING ELEVATION AT PROPERTY LINE.
2. WASTEWATER PIPELINES TO REMAIN SHALL BE PROTECTED IN PLACE.



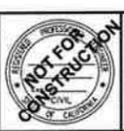
SECTION B
 HORIZONTAL SCALE: 1" = 20'
 VERTICAL SCALE: 1" = 10'

NOTES:

1. MATCH FINAL GRADE WITH EXISTING ELEVATION AT PROPERTY LINE.

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REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



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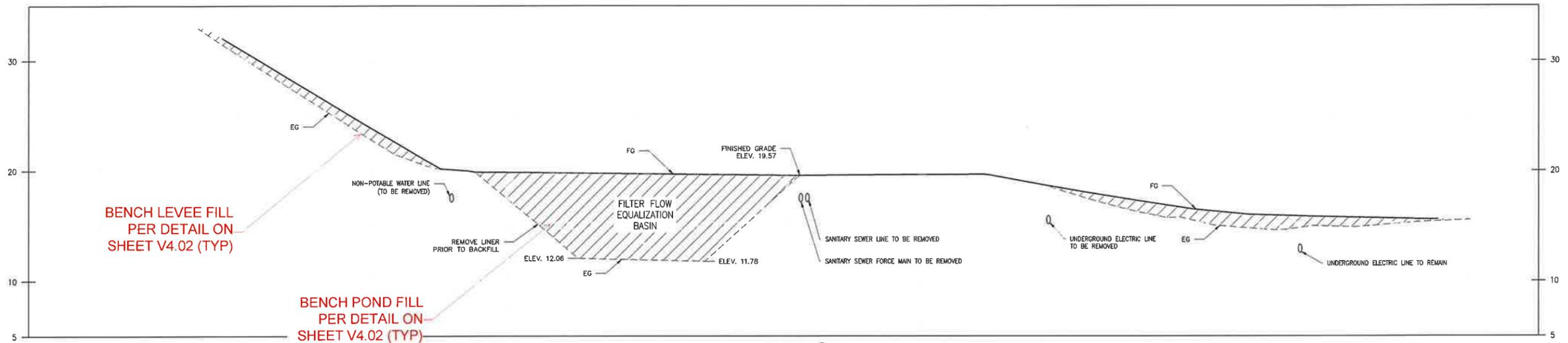


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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
OAKWOOD LAKE WATER DISTRICT WWTP SECTIONS 1

SHEET 23
 OF 38
 DRAWING NO. D3.10

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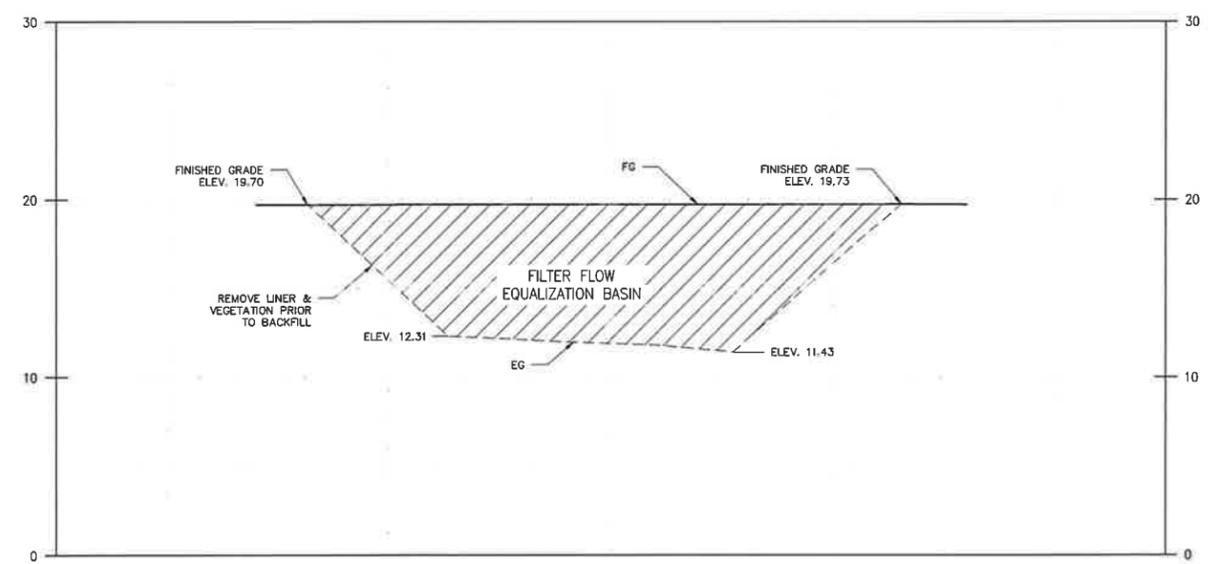


SECTION C
 D3.09

HORIZONTAL SCALE: 1" = 20'
 VERTICAL SCALE: 1" = 10'

NOTES:

1. MATCH FINAL GRADE WITH EXISTING ELEVATION AT PROPERTY LINE.
2. WASTEWATER PIPELINES TO REMAIN SHALL BE PROTECTED IN PLACE.



SECTION D
 D3.09

HORIZONTAL SCALE: 1" = 20'
 VERTICAL SCALE: 1" = 10'

NOTES:

1. MATCH FINAL GRADE WITH EXISTING ELEVATION AT PROPERTY LINE.

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10/23/2025

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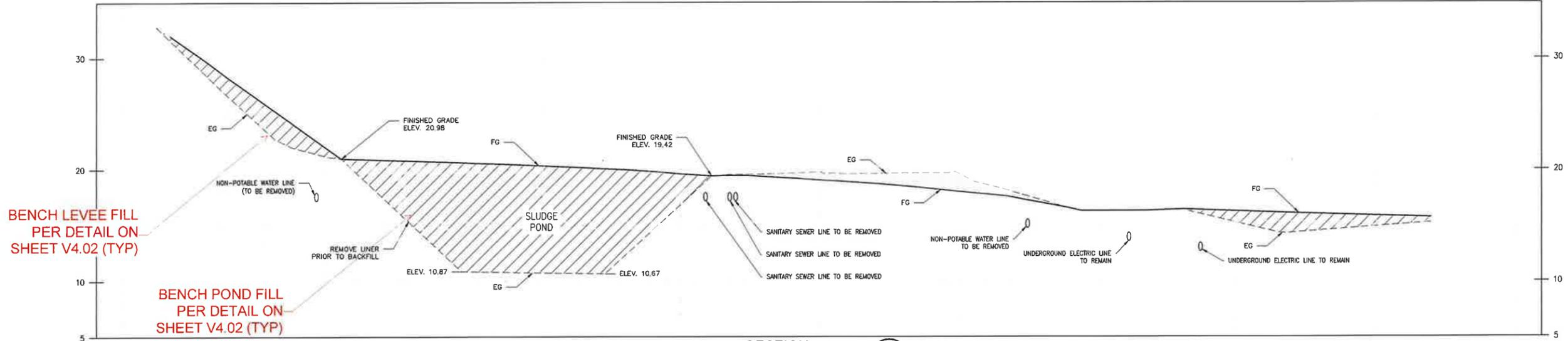


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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
OAKWOOD LAKE WATER DISTRICT WWTP
SECTIONS 2

SHEET 24
 OF 38
 DRAWING NO. D3.11

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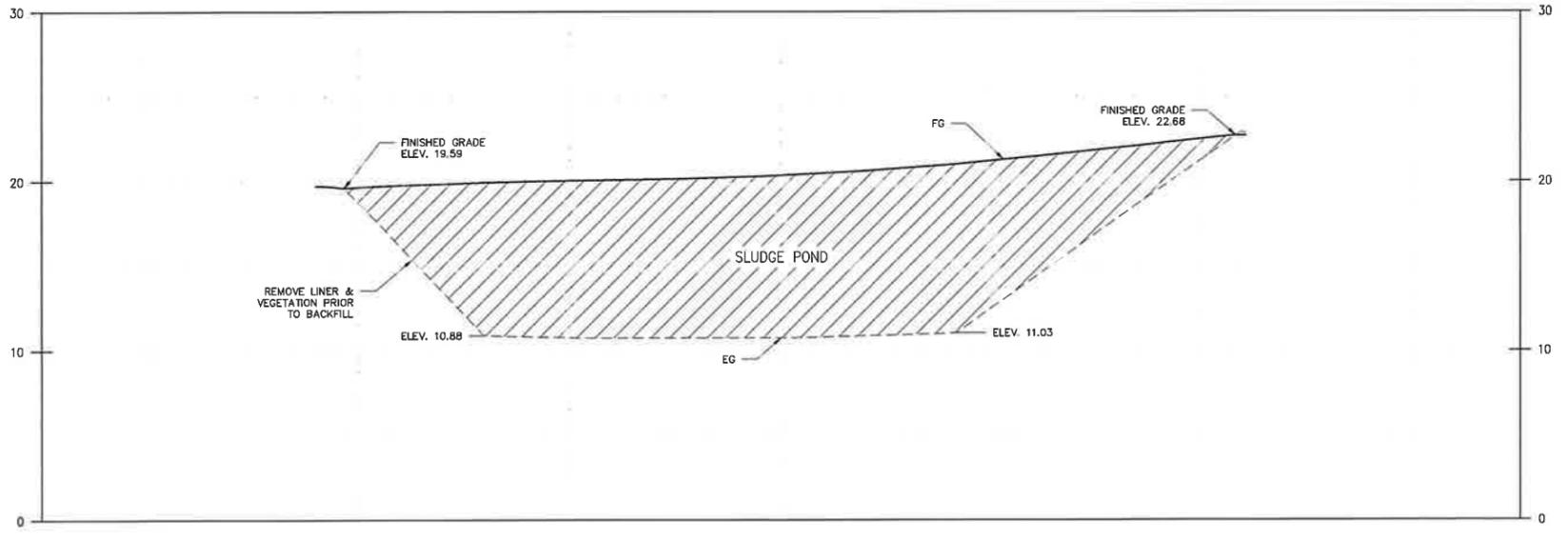


SECTION **E**
D3.09

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

NOTES:

1. MATCH FINAL GRADE WITH EXISTING ELEVATION AT PROPERTY LINE.
2. WASTEWATER PIPELINES TO REMAIN SHALL BE PROTECTED IN PLACE.



SECTION **F**
D3.09

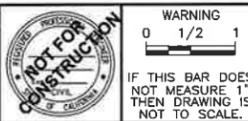
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 10'

NOTES:

1. MATCH FINAL GRADE WITH EXISTING ELEVATION AT PROPERTY LINE.

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10/23/2025

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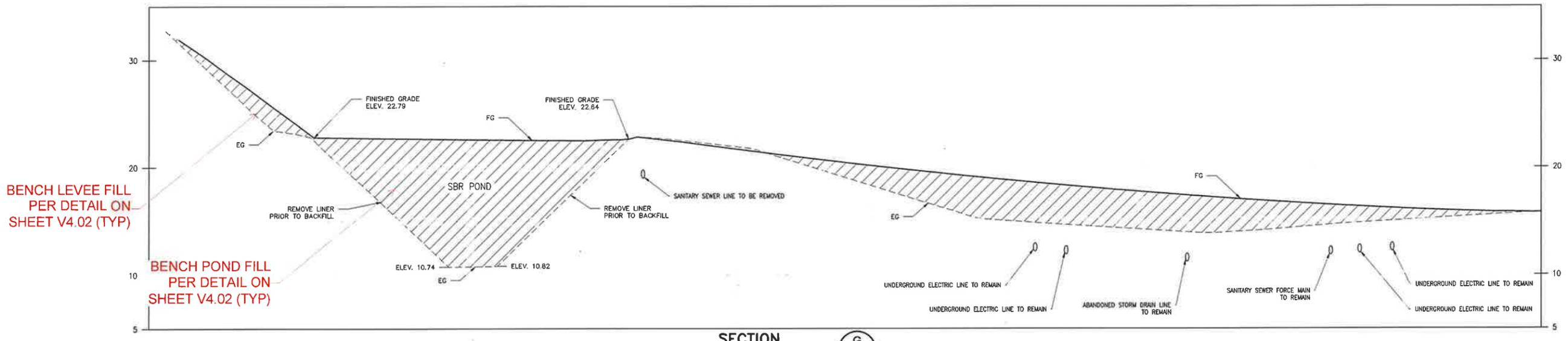


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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
OAKWOOD LAKE WATER DISTRICT WWTP
SECTIONS 3

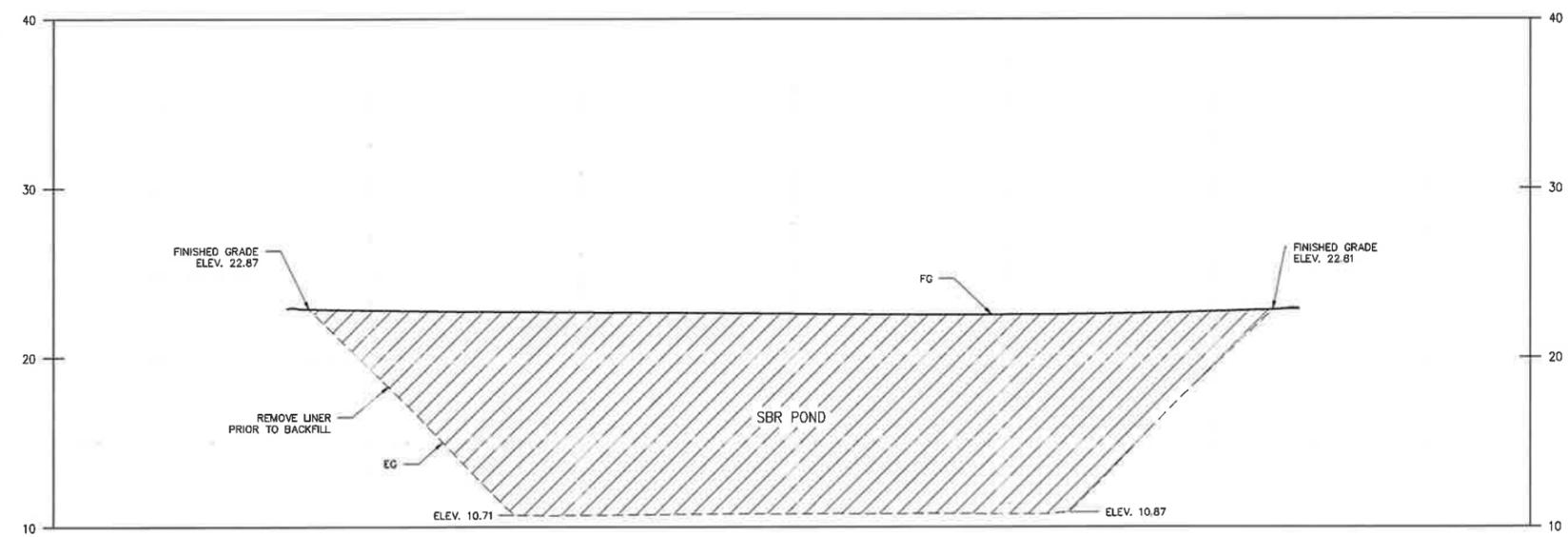
SHEET 25
OF 38
DRAWING NO. D3.12

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SECTION **G**
 D3.09
 HORIZONTAL SCALE: 1" = 20'
 VERTICAL SCALE: 1" = 10'

- NOTES:**
1. MATCH FINAL GRADE WITH EXISTING ELEVATION AT PROPERTY LINE.
 2. WASTEWATER PIPELINES TO REMAIN SHALL BE PROTECTED IN PLACE.



SECTION **H**
 D3.09
 HORIZONTAL SCALE: 1" = 20'
 VERTICAL SCALE: 1" = 10'

- NOTES:**
1. MATCH FINAL GRADE WITH EXISTING ELEVATION AT PROPERTY LINE.

90% SUBMITTAL
10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



WARNING
 0 1/2 1
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 APPROVED: DR
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OAKWOOD LAKE WATER DISTRICT WWTP
SECTIONS 4

SHEET 26
 OF 38
 DRAWING NO. D3.13

L:\50126948 - ZONE 36-39 STORM DRAIN - CI MANTECA\400 PROJECT DESIGN FILES\435 WATER\PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-Z3639IP-DEMO--D3.14 OLWD RESTORATION PLAN AND DETAILS

SAN JOAQUIN RIVER

RD-17 LEVEE

OLWD WWTP SECURITY FENCE

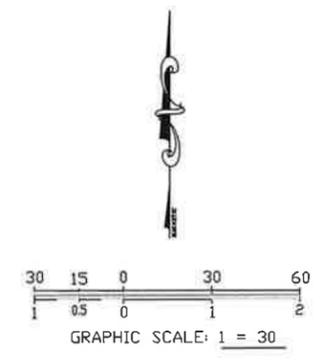
PROPOSED OUTFALL

RELOCATED TRAILER

APLICELLA CT.

STORAGE

PLAN



SURFACE IMPROVEMENT LEGEND:

- AGGREGATE BASE, 3" DEPTH
- EMBANKMENT

SYMBOL:

- DD CV DOUBLE DETECTOR CHECK VALVE
- PP POWER POLE
- MW MONITORING WELL
- WV WATER VALVE
- WM WATER METER
- FIRE HYDRANT
- SPIGOT
- DRY WELL
- STORM DRAIN MANHOLE
- SANITARY SEWER MANHOLE
- EAB ELECTRICAL BOX
- STREET LIGHT
- TELEPHONE BOX
- STREET SIGN

LEGEND:

- OLWD LIFT STATION NO. 3
- OLWD LIFT STATION NO. 4
- WWTP EMERGENCY STORAGE POND
- WWTP STORAGE POND NO. 3
- WWTP INFLUENT PUMP STATION - TO BE ABANDONED

NOTES:

1. CONTRACTOR TO RESTORE DISTURBED AREA WITHIN OLWD SECURITY FENCE TO ORIGINAL CONDITION THROUGH PLACEMENT AND COMPACTION OF AGGREGATE MATERIALS WHERE SHOWN.

**90% SUBMITTAL
10/23/2025**

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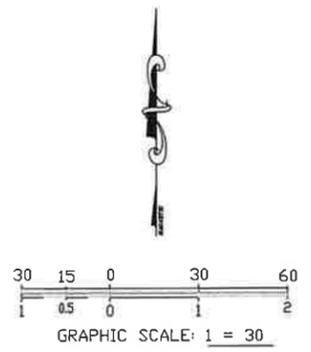
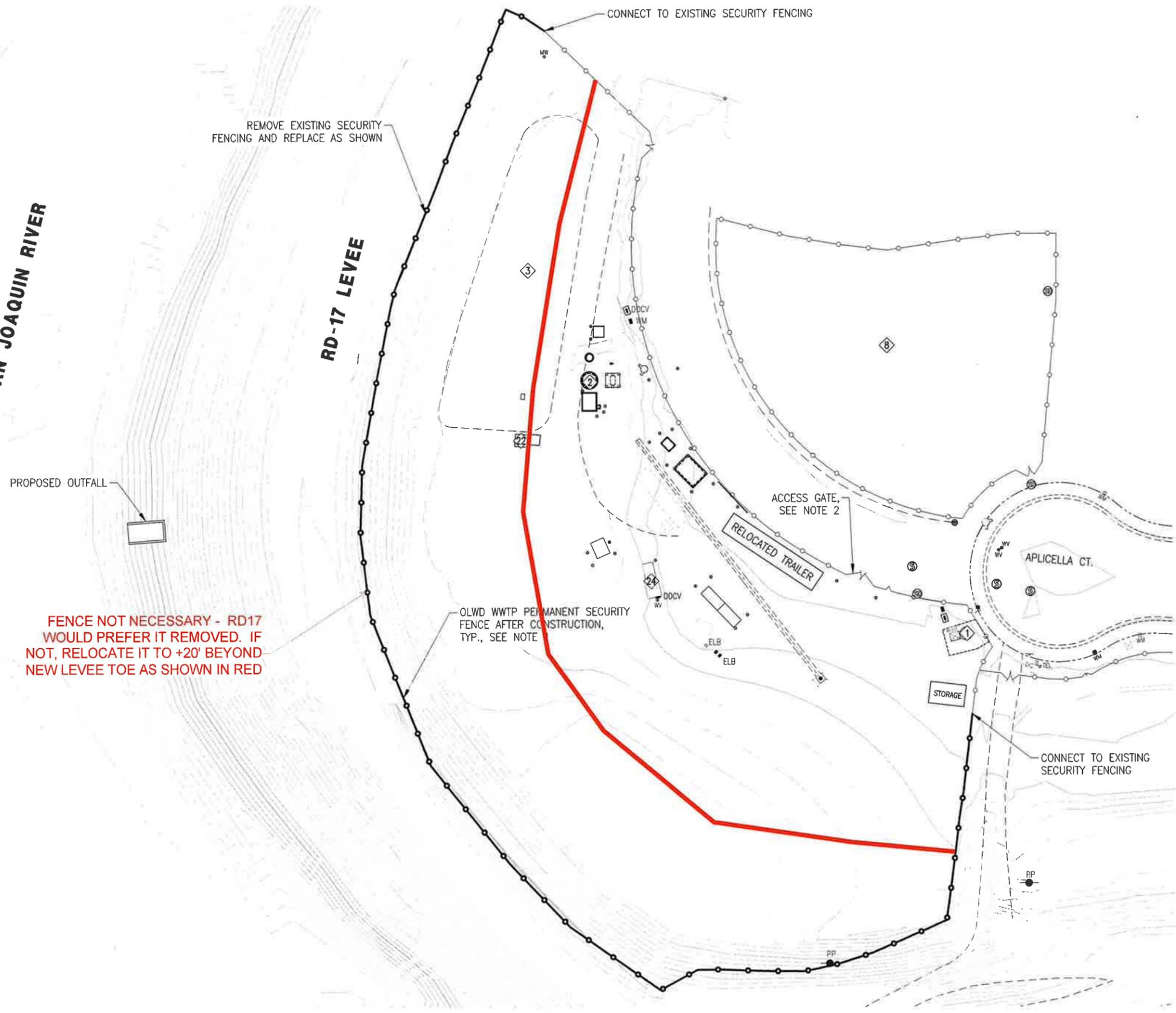
STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
OAKWOOD LAKE WATER DISTRICT WWTP RESTORATION PLAN AND DETAILS

SHEET 27
OF 38
DRAWING NO. D3.14

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SAN JOAQUIN RIVER

RD-17 LEVEE



SYMBOL:

- DDCV DOUBLE DETECTOR CHECK VALVE
- PP POWER POLE
- MW MONITORING WELL
- W WATER VALVE
- WM WATER METER
- FIRE HYDRANT
- SPIGOT
- DRY WELL
- STORM DRAIN MANHOLE
- SANITARY SEWER MANHOLE
- ELB ELECTRICAL BOX
- STREET LIGHT
- TELEPHONE BOX
- STREET SIGN

LEGEND:

- ① OLWD LIFT STATION NO. 3
- ② OLWD LIFT STATION NO. 4
- ③ WWTP EMERGENCY STORAGE POND
- ④ WWTP STORAGE POND NO. 3
- ⑤ WWTP EMERGENCY RETURN PUMP STATION
- ⑥ WWTP EFFLUENT PUMP STATION -- TO BE ABANDONED

NOTES:

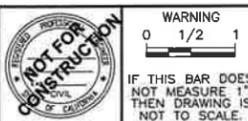
1. CONTRACTOR TO REMOVE TEMPORARY SECURITY FENCING AND REPLACE WITH SECURITY FENCING PER DETAIL 2, DRWG CO.10.
2. CONTRACTOR TO REMOVE TEMPORARY ACCESS GATE AND REPLACE WITH GATE TO MATCH PRE-PROJECT GATE.

**FENCE NOT NECESSARY - RD17
 WOULD PREFER IT REMOVED. IF
 NOT, RELOCATE IT TO +20' BEYOND
 NEW LEVEE TOE AS SHOWN IN RED**

PLAN

**90% SUBMITTAL
 10/23/2025**

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



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 0 1/2 1
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DATE: 10/22/25
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 DESIGN: KT
 CHECKED: DR
 APPROVED: DR
 SCALE: AS SHOWN

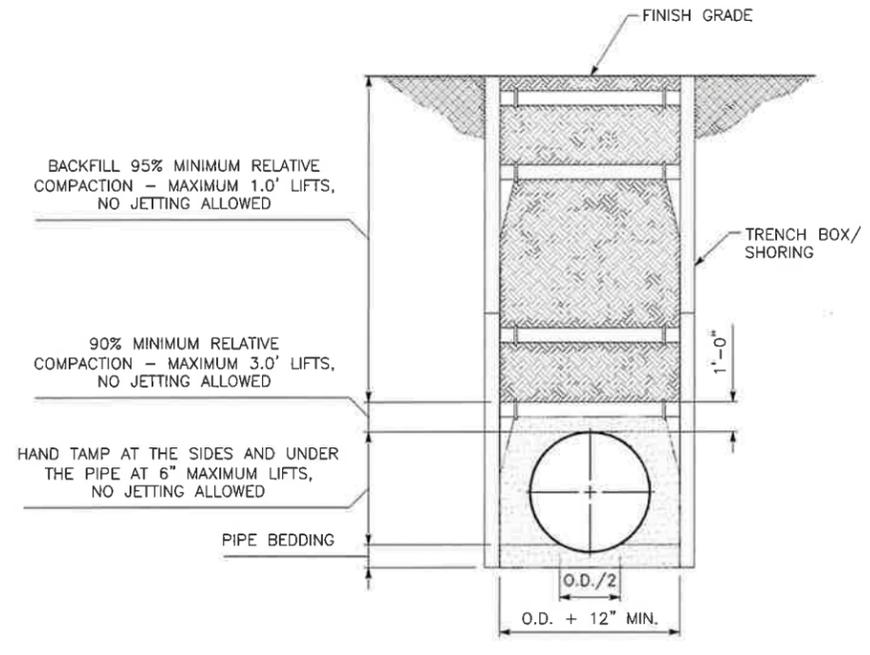
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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
OAKWOOD LAKE WATER DISTRICT WWTP PERMANENT SECURITY FENCING PLAN

SHEET 28
 OF 38
 DRAWING NO. D3.15

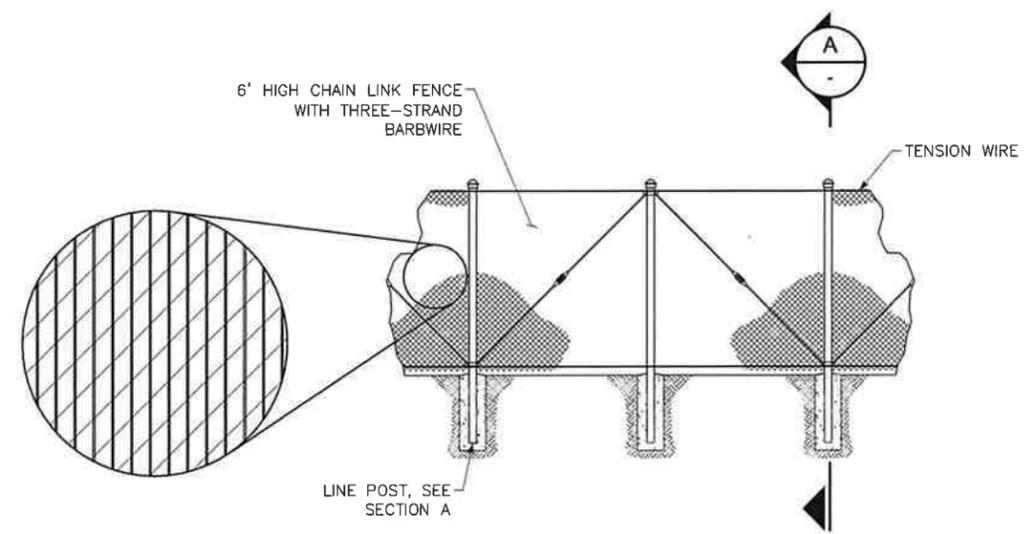
\\DEWBERRY\ROOT\LOCAL\OFFICES\MANTECA\PROJECTS\012694B - ZONE 36-39 STORM DRAIN - CI MANTECA\400 PROJECT DESIGN FILES\435 WATER\PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-2539P-CIVL DETAILS-CDD.10 CONSTRUCTION DETAILS



TYPICAL TRENCH DETAIL 1
SCALE: NTS

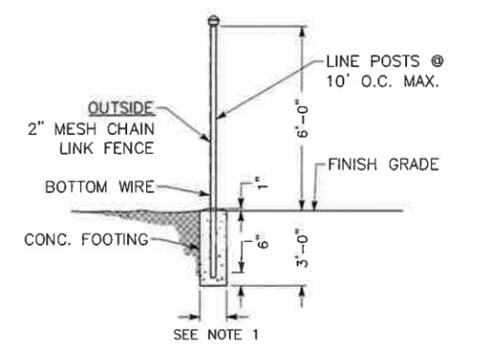
TRENCH EXCAVATION AND BACKFILL NOTES:

- EXISTING ASPHALT CONCRETE (AC) MUST BE SAWCUT.
- PAVEMENT REPLACEMENT SHALL BE EQUIVALENT TO EXISTING PAVEMENT AND BASE, BUT IN NO CASE SHALL BE LESS THAN 3" A.C. AND 6" A.B. PLACED IN TWO LIFTS.
- TRENCHES 5 FEET OR MORE IN DEPTH MUST BE GUARDED BY A SHORING SYSTEM. SHORING SYSTEM REQUIRED FOR TRENCH EXCAVATION FOR 48" SDFM AND 30" SDFM. CUTTING BACK OF GROUND PROHIBITED UNLESS APPROVED BY CONSTRUCTION MANAGER.
- WHEN DIRECTED BY THE CITY, PLACE DRAIN ROCK (1 1/2" X 3/4" OR 2 1/2" X 1 1/2") AT 95% COMPACTION BELOW BEDDING MATERIAL FOR A FIRM AND STABLE BASE.
- LOCATOR TAPE TO BE MARKED: "CAUTION - SERVICE LINE BURIED BELOW".
- SELECTED NATIVE MATERIAL MAY BE USED IN ALL TRENCH BACKFILL ZONES AND SHALL BE FREE OF ORGANIC MATERIAL, STONES, OR LUMPS EXCEEDING 3" IN GREATEST DIMENSION, EXCEPT AS FOLLOWS. FOR THE 48" SDFM AND 30" SDFM BETWEEN STA 0+21 - 5+22, CLSM SHALL BE PLACED 6-INCH BELOW THE PIPE AND UP TO A MINIMUM ELEVATION OF 10 FT.
- COMPACTION TESTING SHALL BE REQUIRED AS DIRECTED BY THE CITY.
- ANY AREA AT THE BOTTOM OF THE TRENCH DETERMINED TO BE UNSUITABLE BY THE CITY SHALL BE REMOVED AND REPLACED WITH 6" OF CLASS I, II, OR III MATERIALS AT 95% MINIMUM RELATIVE COMPACTION. IN A CASE WHERE THE TRENCH BOTTOM IS UNSTABLE, THE BOTTOM AREA SHALL BE REMOVED AND REPLACED WITH CLASS I OR CLASS II MATERIALS TO DEPTH DETERMINED BY CITY.



- NOTES:**
- DETAIL MAY VARY DEPENDING UPON MANUFACTURER.
 - 12" DIA. MIN. FOR GATE POSTS
12" DIA. MIN. FOR CORNER POSTS
9" DIA. MIN. FOR LINE POSTS

SECURITY FENCING DETAIL 2
SCALE: NTS



CHAIN LINK FENCE POST DETAIL A
SCALE: NTS

90% SUBMITTAL
10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.



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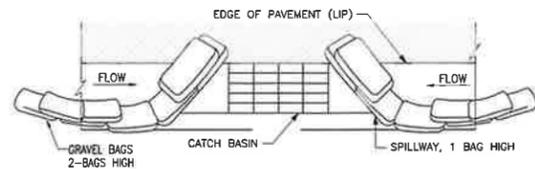
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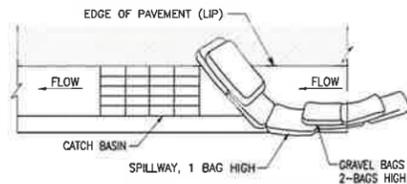
STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
CIVIL DETAILS

SHEET 29
OF 38
DRAWING NO.
CDD.10



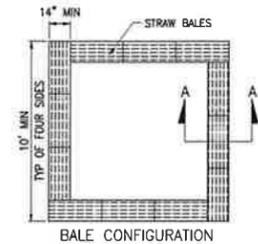
TYPICAL PROTECTION FOR INLET ON SUMP

SCALE: NTS

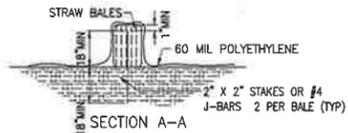


TYPICAL PROTECTION FOR INLET ON GRADE

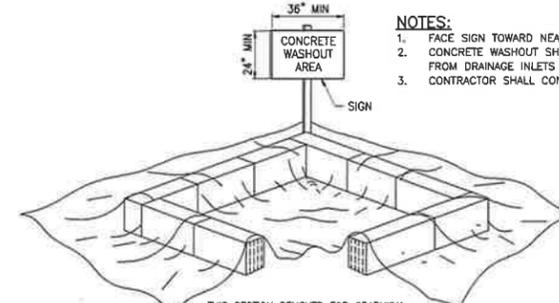
SCALE: NTS



BALE CONFIGURATION



SECTION A-A



CONCRETE WASHOUT AREA

- NOTES:**
1. FACE SIGN TOWARD NEAREST STREET OR ACCESS POINT
 2. CONCRETE WASHOUT SHALL BE LOCATED BEHIND THE CURB AND 50 FEET MINIMUM FROM DRAINAGE INLETS OR WATERCOURSES.
 3. CONTRACTOR SHALL CONDUCT ALL CONCRETE WASHOUT ONSITE AS DIRECTED BY CITY.

NOTES:

1. INTENDED FOR SHORT-TERM USE.
2. USE TO INHIBIT NON-STORM WATER FLOW.
3. ALLOW FOR PROPER MAINTENANCE AND CLEAN UP.
4. BAGS MUST BE REMOVED AFTER ADJACENT OPERATION IS COMPLETED
5. NOT APPLICABLE IN AREAS WITH HIGH SILTS AND CLAYS WITHOUT FILTER FABRIC.

DI PROTECTION TYPE 3 - GRAVEL BAG

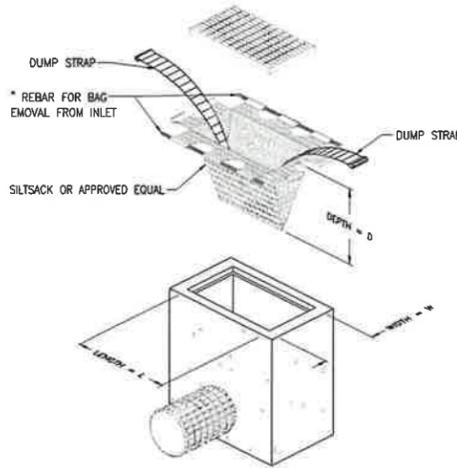
THE GRAVEL BAG BARRIER (TYPE 3) IS SHOWN IN THE FIGURES. FLOW FROM A SEVERE STORM SHOULD NOT OVERTOP THE CURB. IN AREAS OF HIGH CLAY AND SILTS, USE FILTER FABRIC AND GRAVEL AS ADDITIONAL FILTER MEDIA. GRAVEL BAGS SHOULD BE USED DUE TO THEIR HIGH PERMEABILITY.

1. USE SAND BAG MADE OF GEOTEXTILE FABRIC (NOT BURLAP) AND FILL WITH 0.75 IN. ROCK OR 0.25 IN. PEA GRAVEL.
2. CONSTRUCT ON GENTLY SLOPING STREET.
3. LEAVE ROOM UPSTREAM OF BARRIER FOR WATER TO POND AND SEDIMENT TO SETTLE.
4. PLACE SEVERAL LAYERS OF SAND BAGS - OVERLAPPING THE BAGS AND PACKING THEM TIGHTLY TOGETHER.
5. LEAVE GAP OF ONE BAG ON THE TOP ROW TO SERVE AS A SPILLWAY (E.G., 10 YEAR STORM) SHOULD NOT OVERTOP THE CURB.
6. THIS DETAIL IS TO BE USED ON EXISTING STREETS WHERE SILTED FLOW IS TO BE INTERCEPTED (CAUGHT) PRIOR TO ENTERING THE STORM DRAIN SYSTEM. SANDBAGS CAN ALSO BE USED WHEN THE ROUGH GRADED STREETS HAVE POURED INPLACE CONCRETE SURROUNDING THE INLET TO CREATE A "FLOW LINE" WHERE A DAM CAN BE ACHIEVED TO PROTECT THE STORM SYSTEM FROM THE INFLOW OF SEDIMENT.

DI PROTECTION - TYPE 3



SCALE: NTS

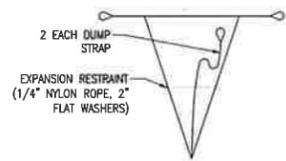


TYPICAL SILTSACK CONSTRUCTION

SCALE: NTS



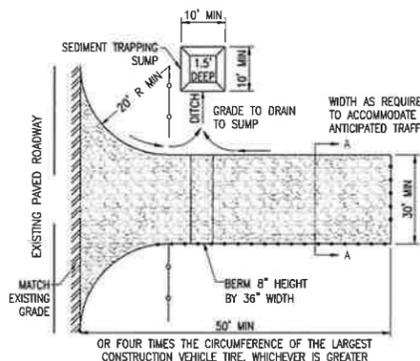
INSTALLATION DETAIL



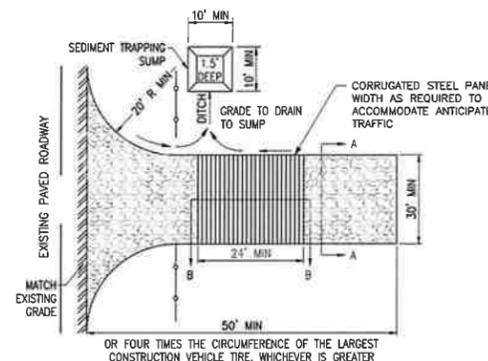
BAG DETAIL

CONCRETE WASHOUT DETAIL 6

SCALE: NTS



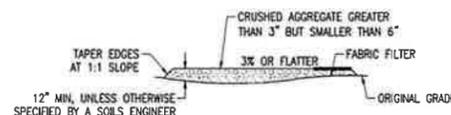
- NOTES:**
1. OR FOUR TIMES THE CIRCUMFERENCE OF THE LARGEST CONSTRUCTION VEHICLE TIRE, WHICHEVER IS GREATER
 2. CONSTRUCT SEDIMENT BARRIER AND CHANNELIZE RUNOFF TO SEDIMENT TRAPPING DEVICE



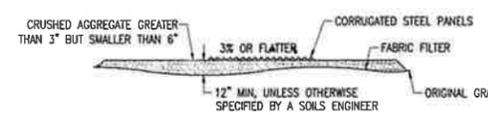
- NOTES:**
1. OR FOUR TIMES THE CIRCUMFERENCE OF THE LARGEST CONSTRUCTION VEHICLE TIRE, WHICHEVER IS GREATER
 2. CONSTRUCT SEDIMENT BARRIER AND CHANNELIZE RUNOFF TO SEDIMENT TRAPPING DEVICE

PLAN OPTION 1

PLAN OPTION 2



SECTION A-A



SECTION B-B

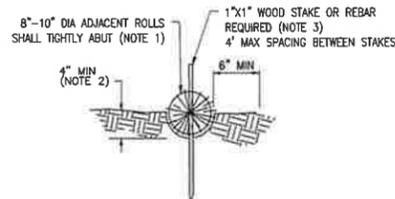
TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

DESIGN AND CONSTRUCTION SPECIFICATIONS:

1. THE TEMPORARY STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE PLANS AND SPECIFICATIONS OF THE LATEST EDITION OF THE CALIFORNIA STORMWATER HANDBOOK, DETAIL TC-1. WHERE THERE IS A DISCREPANCY BETWEEN THIS DETAIL AND THE CALIFORNIA STORMWATER HANDBOOK, THE HANDBOOK SHALL GOVERN.
2. CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT EACH ENTRANCE TO THE PROJECT SITE AND SHALL BE CONSTRUCTED ON LEVEL GROUND.
3. THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 3 TO 6 INCH DIA. STONE.
4. THE THICKNESS FOR THE PAD SHALL NOT BE LESS THAN 12 INCHES OR AS RECOMMENDED BY SOILS ENGINEER.
5. THE WIDTH OF THE PAD SHALL NOT BE LESS THAN 30' OR THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS, WHICHEVER IS GREATER.
6. THE LENGTH OF THE PAD SHALL BE AS REQUIRED, BUT NOT LESS THAN 50 FEET.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY SHALL BE REMOVED IMMEDIATELY.
8. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP, SEDIMENT BASIN, OR SEDIMENT SWALE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF GRAVEL BAGS, GRAVEL, BOARDS, OR OTHER APPROVED METHODS.
9. CONTRACTOR TO REMOVE AND DISPOSE OF STABILIZED CONSTRUCTION ENTRANCE UPON COMPLETION OF CONSTRUCTION.
10. CONSTRUCTION AND MAINTENANCE SHALL BE IN ACCORDANCE WITH THE 2003 CALIFORNIA STORMWATER BMP HANDBOOK.

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE

SCALE: NTS



STRAW WATTLE DETAIL

SCALE: NTS



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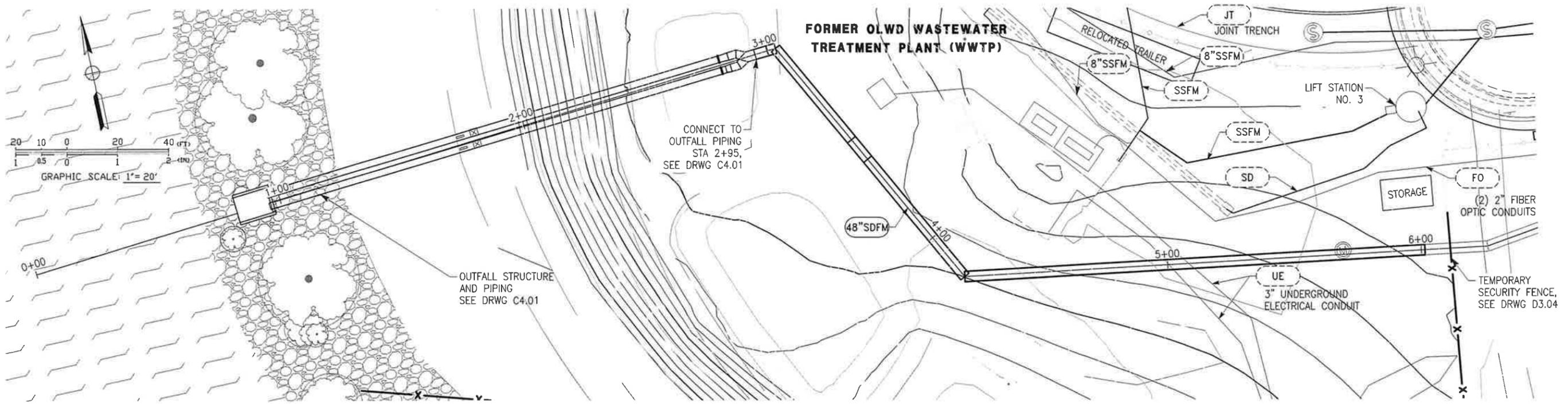
STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION

EROSION CONTROL DETAILS

90% SUBMITTAL
10/23/2025

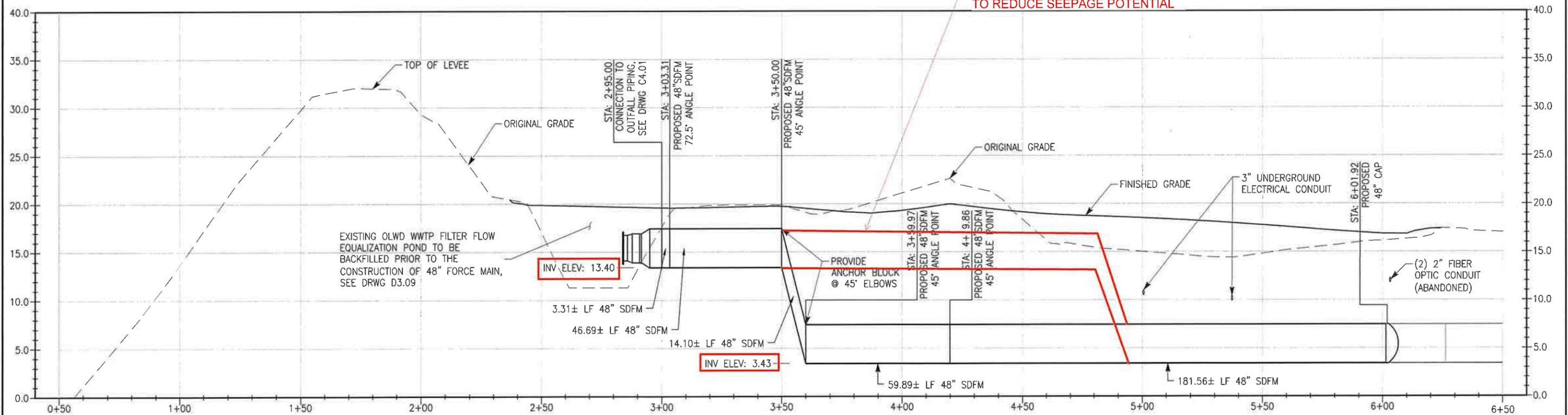
SHEET 30
 OF 38
 DRAWING NO.
 CDO.20

\\DEWBERRY\DEWBERRY\PROJECTS\435 WATER\PLANS\PHASE 1 OUTFALL CONSTRUCTION\COM-25539IP-CNL DETAILS-CDO.20 EROSION CONTROL DETAILS
 X
 X
 X
 X
 X



PLAN

KEEP PIPE AS SHALLOW AS POSSIBLE, FOR AS LONG AS POSSIBLE, AS IT NEARS THE LEVEE TO REDUCE SEEPAGE POTENTIAL

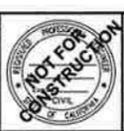


PROFILE

HORZ SCALE: 1" = 20'
VERT SCALE: 1" = 5'

90% SUBMITTAL
10/23/2025

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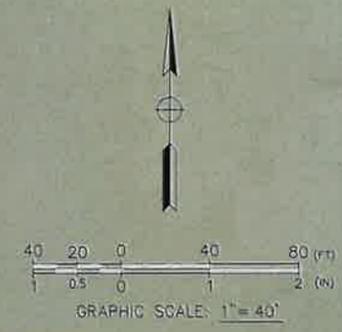
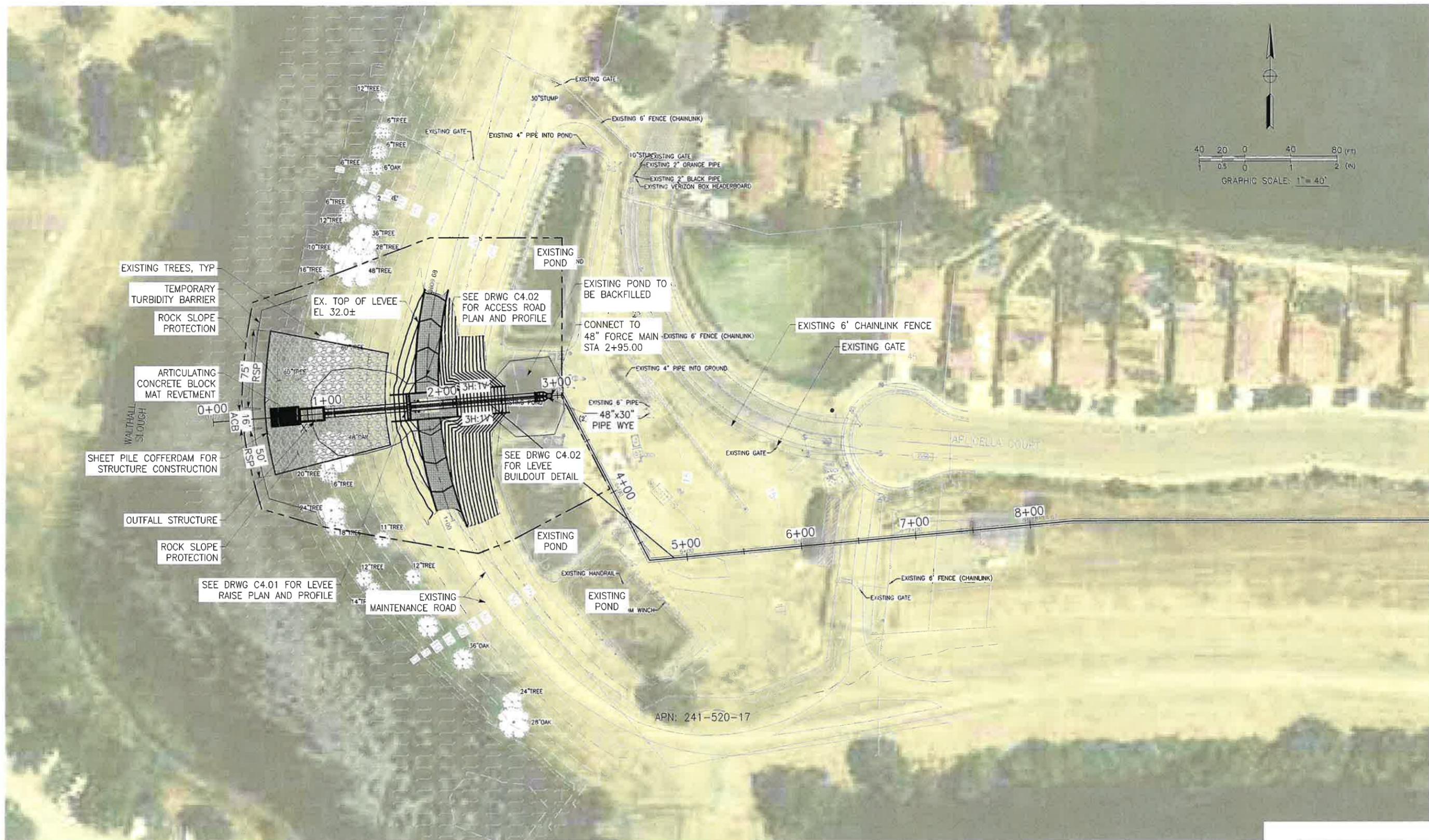


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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
STORM DRAIN FORCE MAIN
PLAN AND PROFILE STA 0+00 - STA 6+02

SHEET 31
OF 38
DRAWING NO. C3.00

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90% SUBMITTAL
10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.
C	07/01	65% SUBMITTAL	JOH	JHK	VCG	SRS
B	03/24	REVISED 30%	JOH	JHK	VCG	SRS
A	10/31	30% SUBMITTAL	JOH	JHK	VCG	SRS



Mead & Hunt
180 PROMENADE CIR. SUITE 240
SACRAMENTO, CA 95834
TEL: 916.971.3691

DATE: 09/08/25
DRAWN: MWR
DESIGN: AHB
CHECKED: JOH
APPROVED: SRS
SCALE: AS SHOWN

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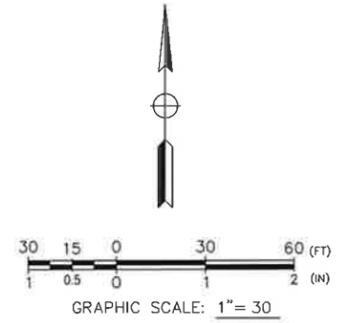
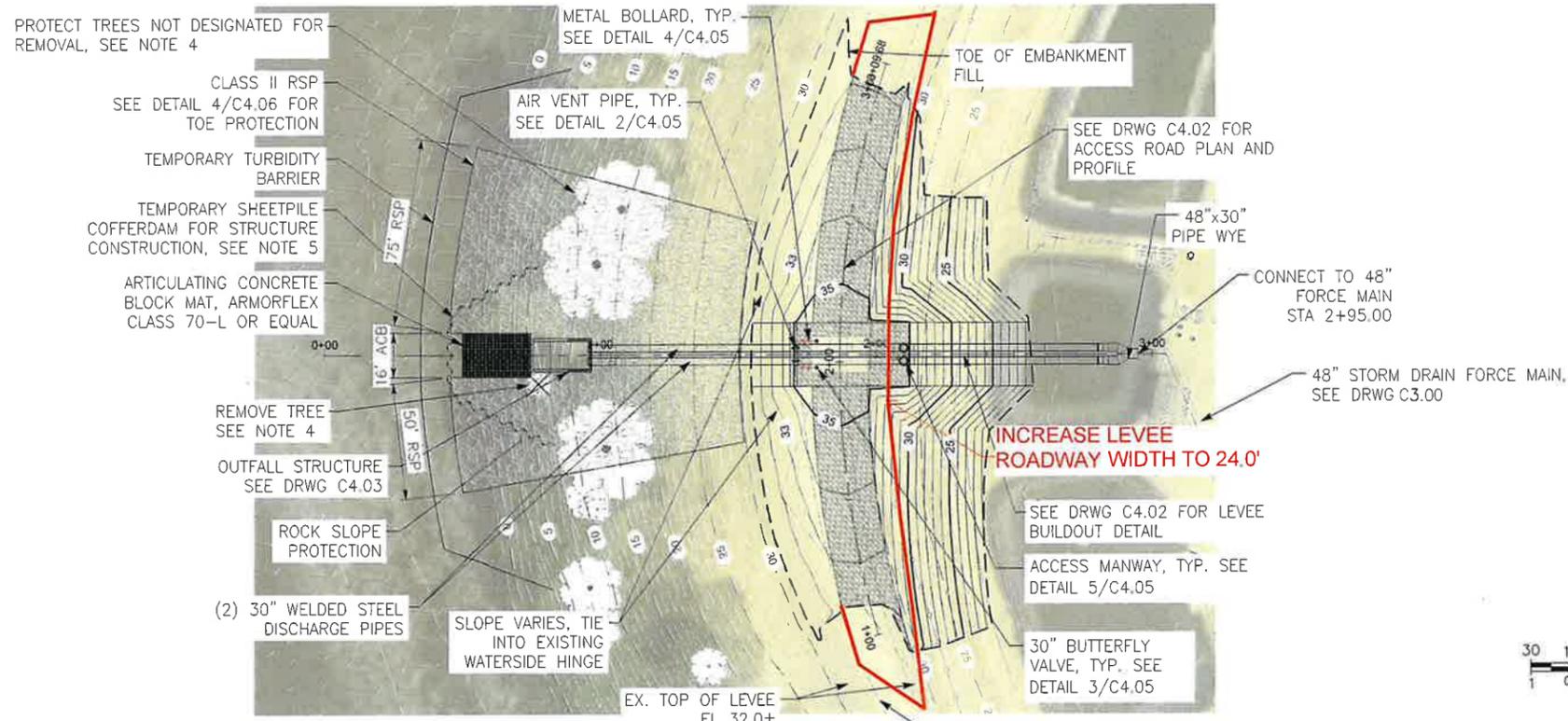
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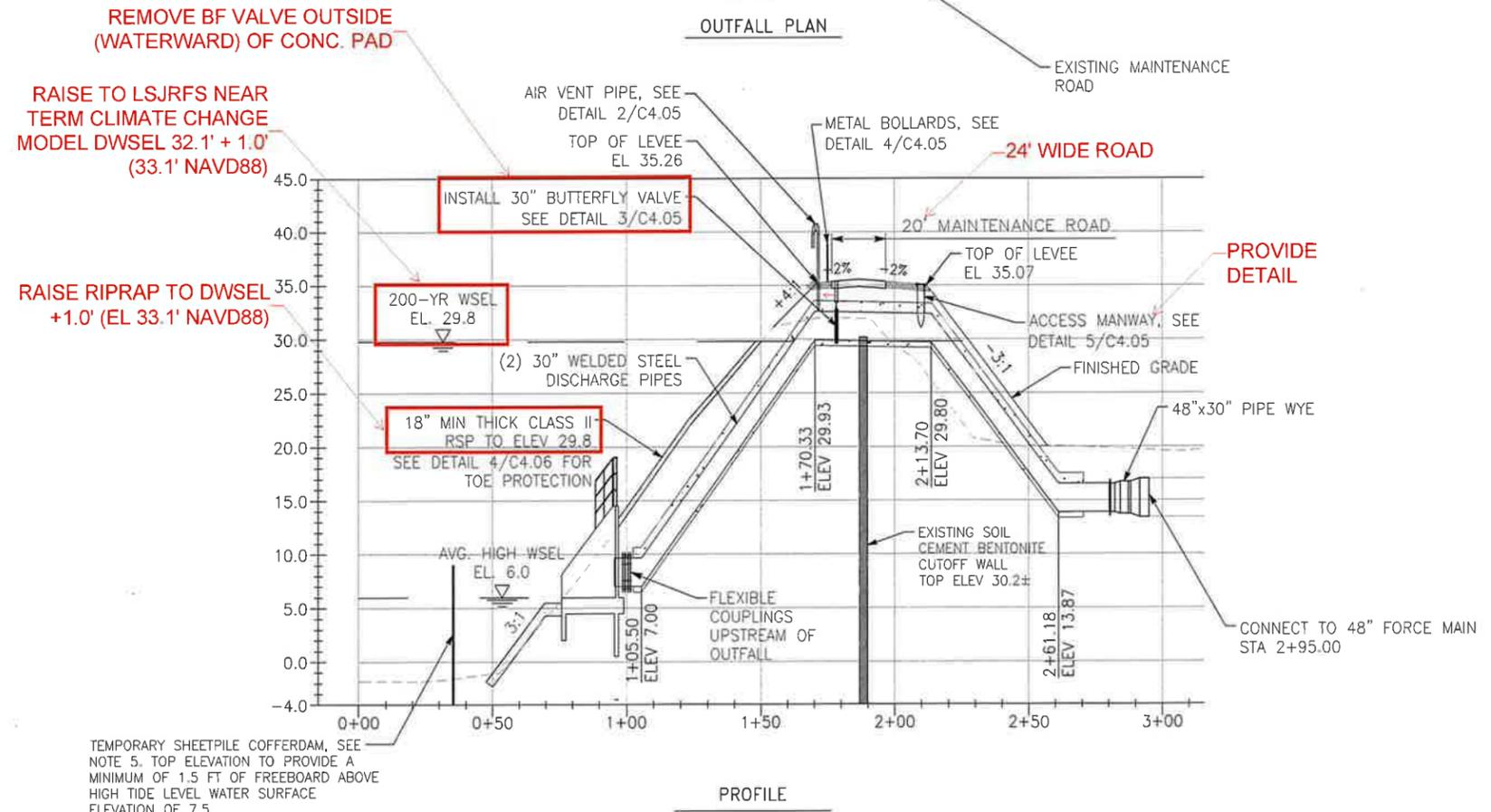
STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION

STORM DRAIN OUTFALL OVERALL PLAN

SHEET 32
OF 38
DRAWING NO.
C4.00



- OUTFALL CONSTRUCTION NOTES
1. THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF THE PERMITS ISSUED BY THE REGULATORY AGENCIES, THE CONTRACTOR SHALL PROVIDE NOTICE TO AND COORDINATE WITH ALL AGENCIES THAT WILL BE PROVIDING PRE-ACTIVITY CLEARANCES AND PERFORMING INSPECTIONS DURING CONSTRUCTION.
 2. A TEMPORARY TURBIDITY CURTAIN SHALL BE DEPLOYED TO ISOLATE AND CONTAIN THE ENTIRE IN-WATER WORK AREA. ADDITIONAL MEASURES SHALL BE IMPLEMENTED AS NECESSARY TO CONTAIN DEBRIS AND SILT FROM WORK ACTIVITIES ON THE WATERSIDE SLOPE ABOVE THE SLOUGH. DURING CONSTRUCTION OF THE OUTFALL, TURBIDITY LEVELS IN THE RIVER WILL BE MONITORED BY THE CITY'S BIOLOGICAL MONITOR. IF CONSTRUCTION ACTIVITIES RESULT IN A PERSISTENT TURBIDITY PLUME DOWNSTREAM OF THE WORK SITE, WORK SHALL CEASE UNTIL TURBIDITY SUBSIDES AND CORRECTIVE MEASURES ARE IMPLEMENTED. WATER QUALITY IN THE RIVER SHALL NOT EXCEED THE MAXIMUM ACCEPTABLE LIMITS.
 3. CONSTRUCTION MATERIAL STOCKPILES SHALL NOT BE PERMITTED WITHIN THE WATERSIDE WORK AREAS.
 4. EXCEPT AS NOTED ON THE PLANS, TREES ON THE WATERSIDE LEVEE SLOPE SHALL BE PROTECTED IN PLACE. HAND OR MACHINE PLACE ROCK WITHIN TREE DRIP LINE ON UNDISTURBED EXISTING GROUND WITHOUT GEOTEXTILE FABRIC WITH 2 FEET CLEAR AROUND TRUNK PERIMETER. CLEAR AND GRUB TREES DESIGNATED FOR REMOVAL AND SHRUBS WITHIN THE WORK LIMITS, EXCAVATE TO REMOVE ROOT BALLS AND ALL ROOTS WITH DIAMETERS OF 1/2" OR GREATER.
 5. THE SHEETPILE COFFERDAM FOR CONCRETE STRUCTURE CONSTRUCTION DEWATERING IS A DELEGATED DESIGN. THE CONTRACTOR SHALL SUBMIT CONSTRUCTION DRAWINGS AND DESIGN CALCULATIONS FOR SHEETPILE COFFERDAM SYSTEM, INCLUDING DEWATERING AND WATER CONTROL FACILITIES. CALCULATIONS SHALL BE PREPARED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER. DESIGN FOR WATER LOADING TO TOP OF COFFERDAM. TEMPORARY SHEET PILE SHALL BE COMPLETELY REMOVED AT COMPLETION OF CONSTRUCTION.
 6. WELDED STEEL PIPES SHALL BE 3/8-INCH MINIMUM WALL THICKNESS THAT COMPLY WITH AWWA C200 WITH MATERIAL CONFORMING TO ASTM A53, TYPE E OR S, GRADE B. PIPE INTERIOR LINING SHALL BE LIQUID EPOXY COATED IN ACCORDANCE WITH AWWA C210, NOT LESS THAN 16 MILS DRY FILM THICKNESS. PIPE EXTERIOR SHALL BE FUSION-BONDED EPOXY COATED IN ACCORDANCE WITH AWWA C213, NOT LESS THAN 12 MILS DFT. PIPE JOINTS SHALL BE COMPLETE JOINT PENETRATION BUTT WELDED IN ACCORDANCE WITH AWWA C206, WITH INTERIOR WELD SURFACES GROUND SMOOTH. FIELD JOINTS MAY BE BUTT STRAP JOINTS PROVIDED A DOUBLE-WELDED (INSIDE AND OUTSIDE) BUTT STRAP JOINT THAT COMPLIES WITH AWWA C206 IS PROVIDED.



90% SUBMITTAL
10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.
C	07/01	65% SUBMITTAL	JOH	JHK	VCG	SRS
B	03/24	REVISED 30%	JOH	JHK	VCG	SRS
A	10/31	30% SUBMITTAL	JOH	JHK	VCG	SRS

NOT FOR CONSTRUCTION

Mead & Hunt
180 PROMENADE CIR. SUITE 240
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TEL: 916.971.3691

DATE: 09/08/25
DRAWN: MWR
DESIGN: AHB
CHECKED: JOH
APPROVED: SRS
SCALE: AS SHOWN

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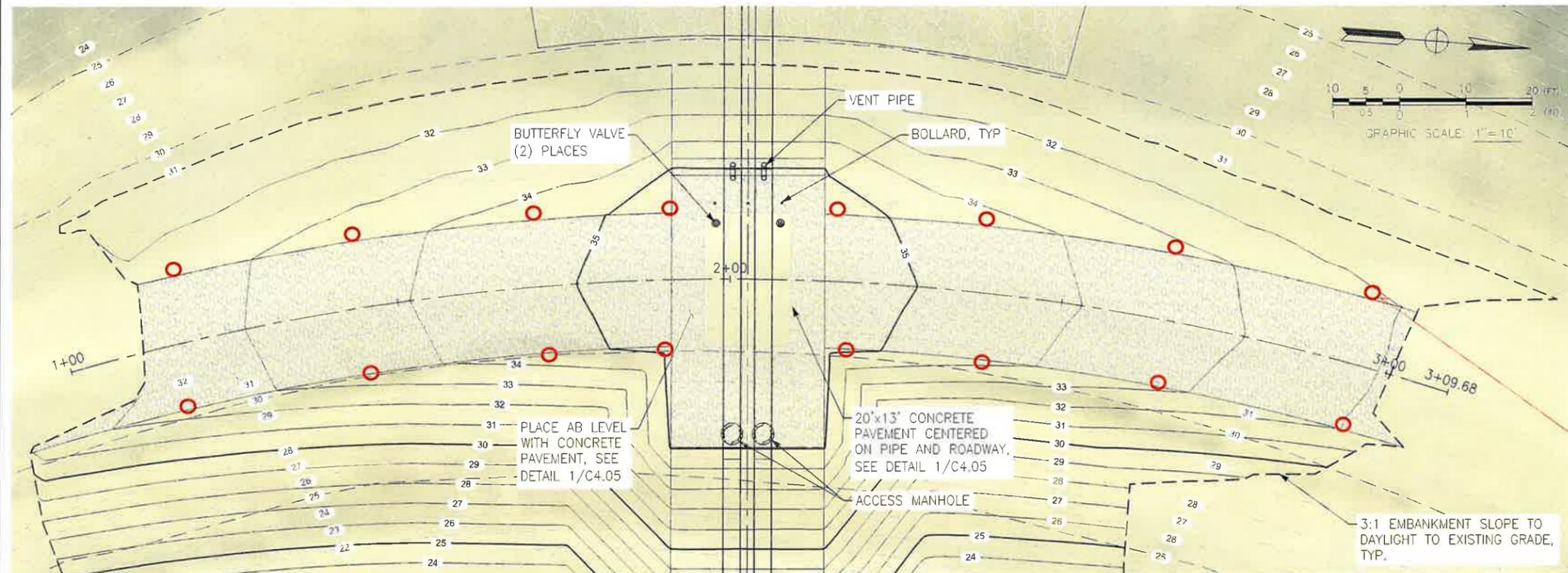
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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION

STORM DRAIN OUTFALL
OUTFALL DISCHARGE PIPING - PLAN AND PROFILE

SHEET 33
OF 38
DRAWING NO.
C4.01

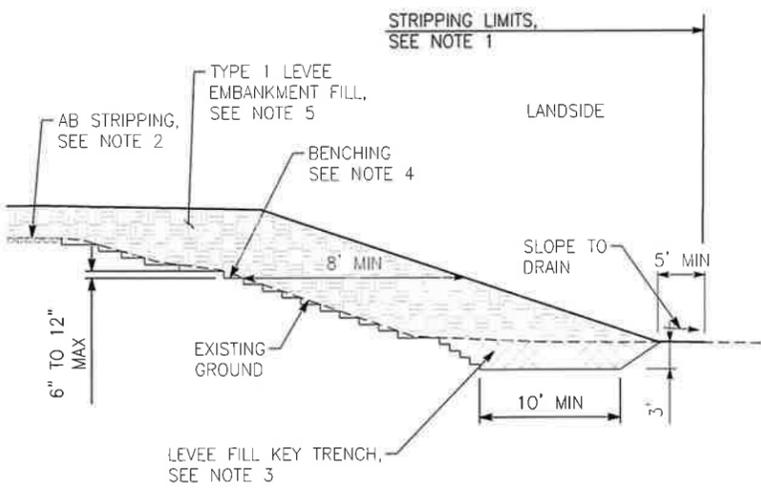
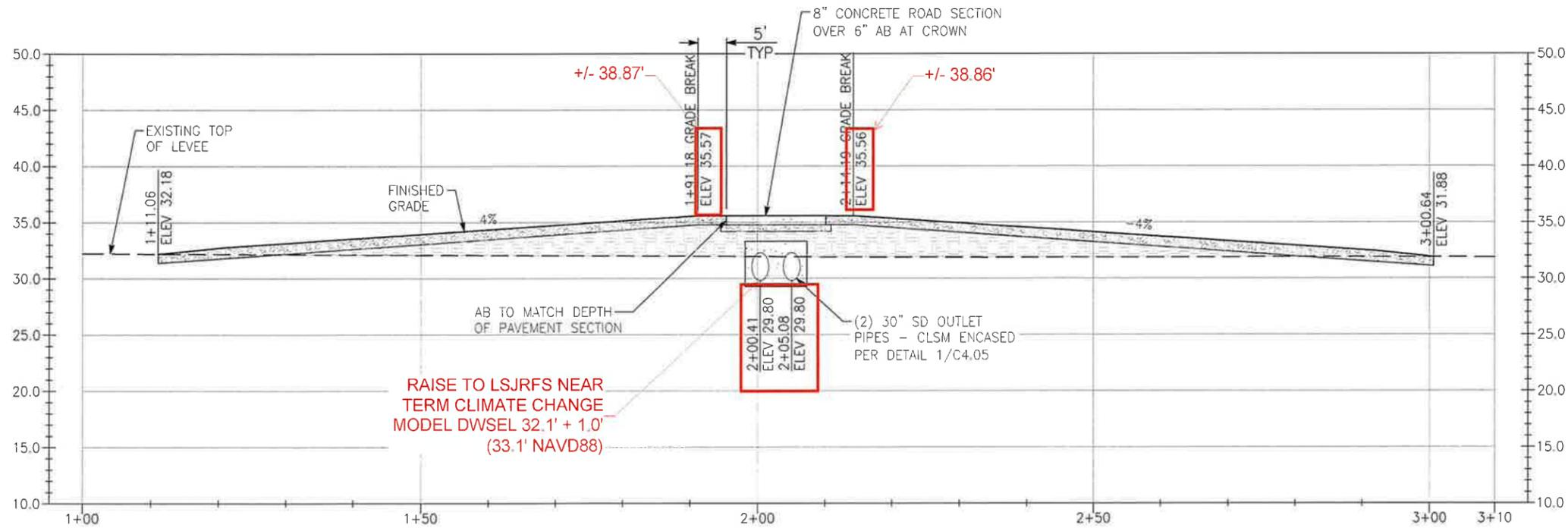
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- TYPICAL KEY AND BENCHING NOTES:**
1. STRIP EXISTING GROUND SURFACES WITHIN EMBANKMENT FOUNDATION AREAS AND 5' BEYOND TO A MINIMUM DEPTH OF 0.35'.
 2. REMOVE EXISTING TOP OF LEVEE PATROL ROAD AB SURFACING WITHIN LIMITS OF FILL.
 3. EXCAVATE LEVEE EMBANKMENT KEY TRENCH TO A MINIMUM OF 3 FEET. THE LEVEE KEY TRENCH MUST BE INSPECTED BY THE CITY'S GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF FILL.
 4. ALL FILL PLACED ON SLOPES GREATER THAN 5:1 (HORIZONTAL TO VERTICAL) SHALL BE BENCHING INTO FIRM NATIVE SOIL WITH PLACEMENT OF EACH LIFT.
 5. PLACE LEVEE EMBANKMENT FILL IN ACCORDANCE WITH SPECIFICATIONS.

INSTALL WHITE RELECTIVE GROUND MOUNT DELINEATORS EVERY 50' (TYP)

ACCESS ROAD CL PLAN



TYPICAL LEVEE FILL, KEY AND BENCHING DETAIL
SCALE: 1"=10'

ACCESS ROAD CL PROFILE

**90% SUBMITTAL
10/23/2025**

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.
C	07/01	65% SUBMITTAL	JOH	JHK	VCG	SRS
B	03/24	REVISED 30%	JOH	JHK	VCG	SRS
A	10/31	30% SUBMITTAL	JOH	JHK	VCG	SRS

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TEL: 916.971.3691

DATE: 09/08/25
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DESIGN: AHB
CHECKED: JOH
APPROVED: SRS
SCALE: AS SHOWN

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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
STORM DRAIN OUTFALL
ACCESS ROAD AND LEVEE CONSTRUCTION DETAILS

SHEET 34
OF 38
DRAWING NO.
C4.02

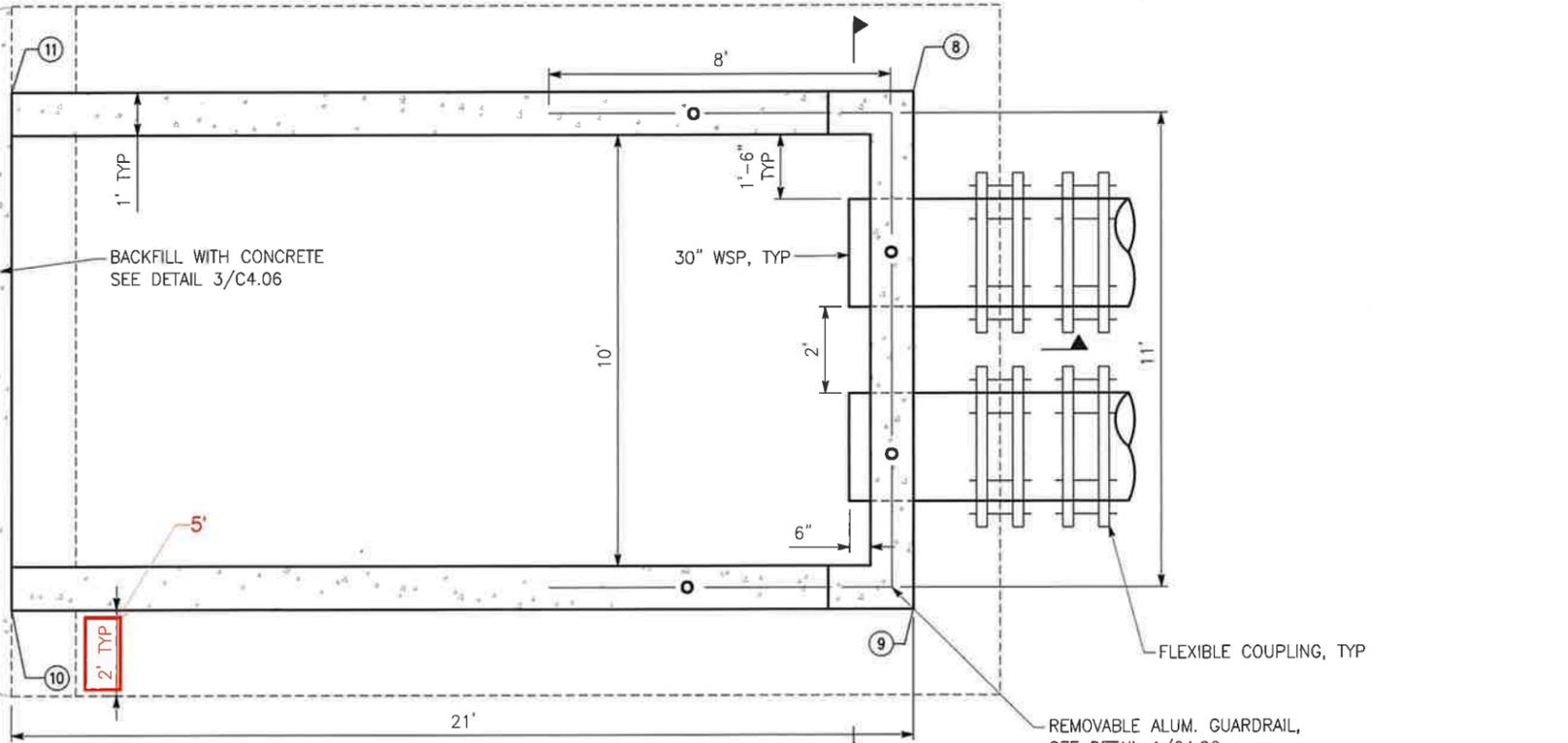
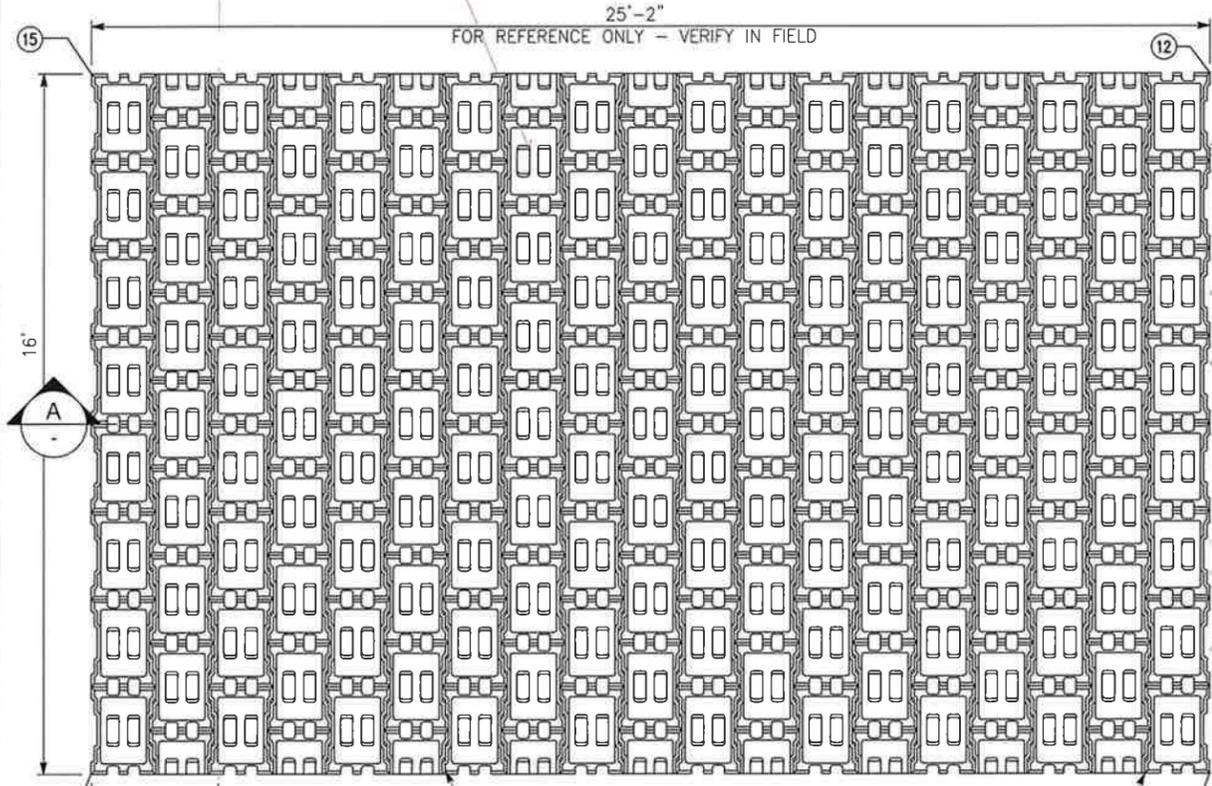
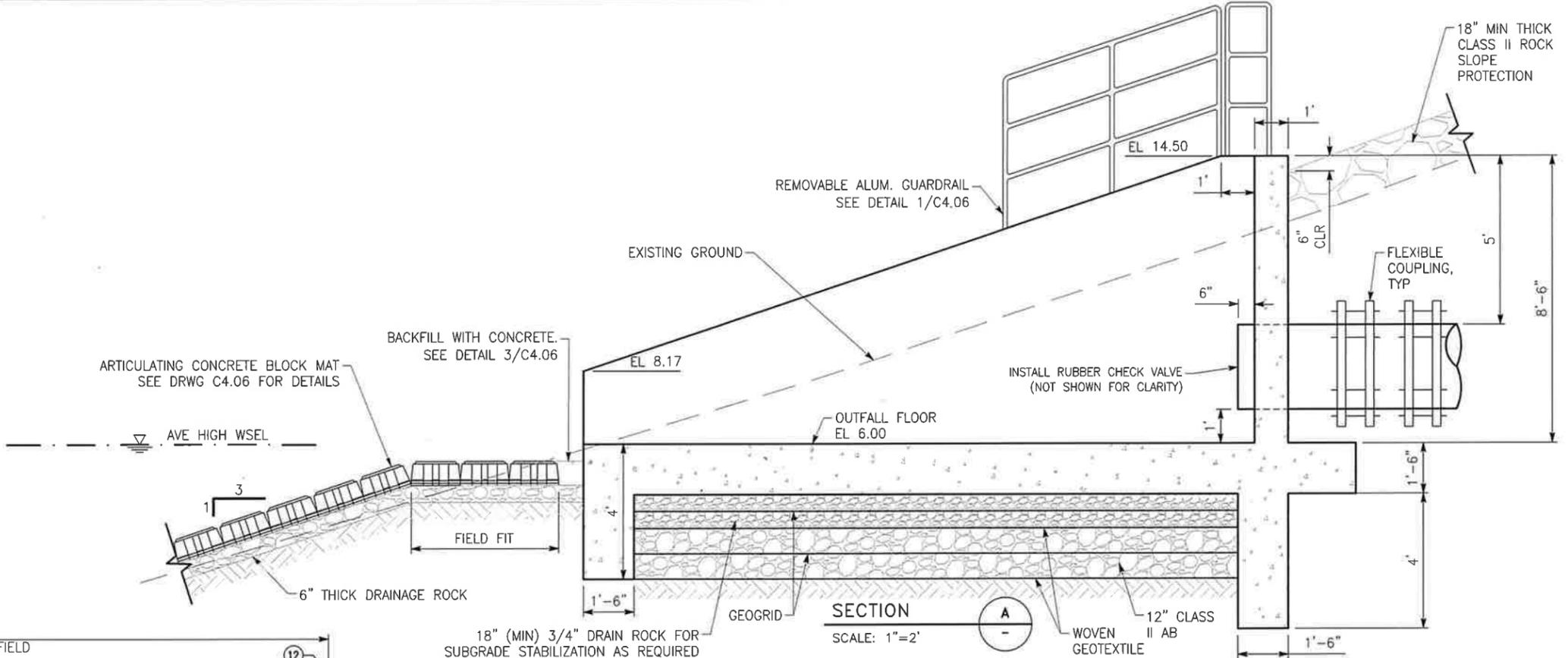
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HORIZONTAL CONTROL TABLE

LOCATION	DESCRIPTION	EASTING	NORTHING
⑧	OUTFALL STRUCTURE	6330598.36	2105643.02
⑨	OUTFALL STRUCTURE	6330599.29	2105631.05
⑩	OUTFALL STRUCTURE	6330578.35	2105629.43
⑪	OUTFALL STRUCTURE	6330577.43	2105641.40
⑫	CONCRETE BLOCK MAT	6330576.60	2105643.21
⑬	CONCRETE BLOCK MAT	6330577.81	2105627.51
⑭	CONCRETE BLOCK MAT	6330552.71	2105625.47
⑮	CONCRETE BLOCK MAT	6330551.47	2105641.38

COORDINATE SYSTEM CODE: CA83IIF
 COORDINATE SYSTEM DESCRIPTION: NAD83, CALIFORNIA STATE PLANE, ZONE III, US FOOT

USE CLOSED FACE ACB UNITS



OUTFALL STRUCTURE PLAN
 SCALE: 1"=2'

90% SUBMITTAL
 10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RVD	RVD	APP.
C	07/01	65% SUBMITTAL	JOH	JHK	VCG	SRS
B	03/24	REVISED 30%	JOH	JHK	VCG	SRS
A	10/31	30% SUBMITTAL	JOH	JHK	VCG	SRS



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 SACRAMENTO, CA 95834
 TEL: 916.971.3691

DATE: 09/08/25
 DRAWN: MWR
 DESIGN: AHB
 CHECKED: JOH
 APPROVED: SRS
 SCALE: AS SHOWN



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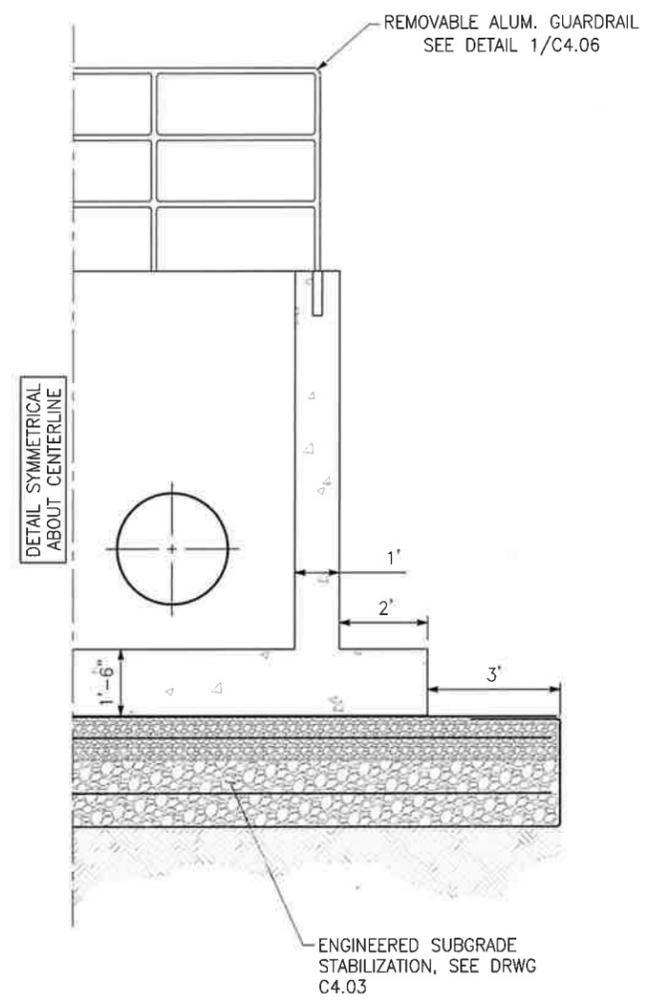
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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION

STORM DRAIN OUTFALL
 OUTFALL GENERAL ARRANGEMENT

SHEET 35
 OF 38
 DRAWING NO.
 C4.03

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SECTION B
SCALE: 1"=2' C4.03

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10/23/2025

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C	07/01	65% SUBMITTAL	JOH	JHK	VCG	SRS
B	03/24	REVISED 30%	JOH	JHK	VCG	SRS
A	10/31	30% SUBMITTAL	JOH	JHK	VCG	SRS



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CHECKED: JOH
APPROVED: SRS
SCALE: AS SHOWN

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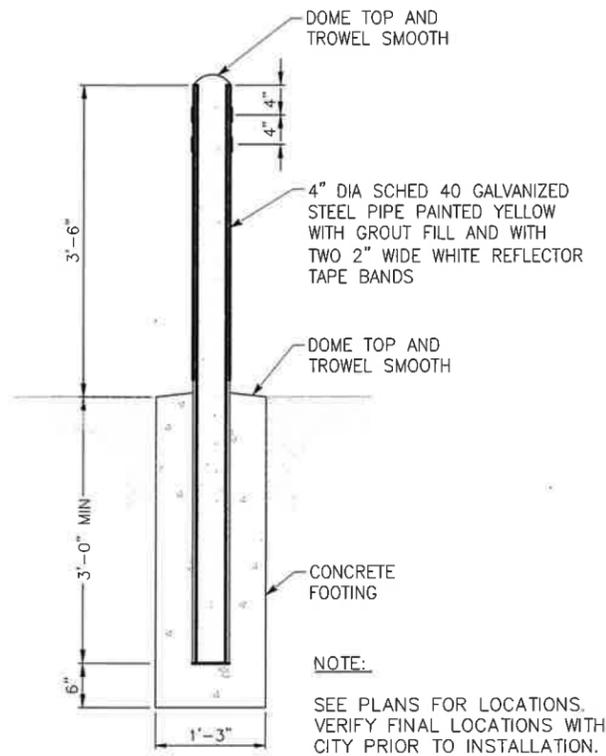
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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION

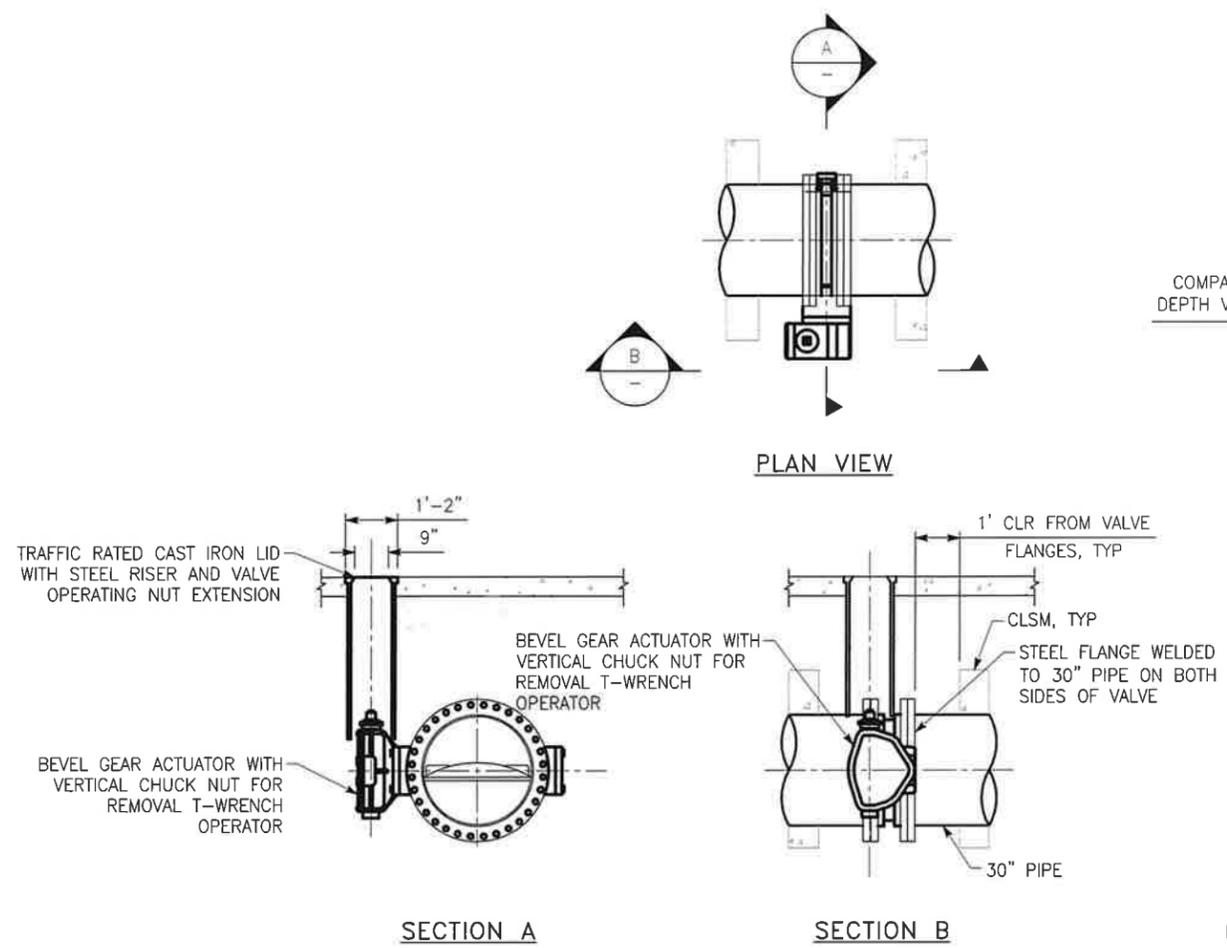
**STORM DRAIN OUTFALL
OUTFALL SECTION**

SHEET 36
OF 38
DRAWING NO.
C4.04

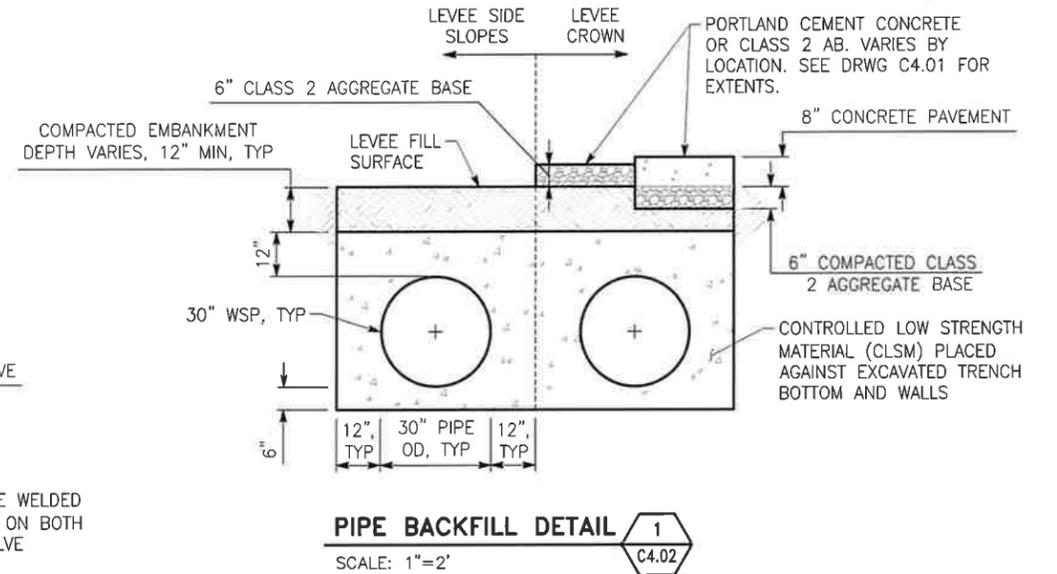
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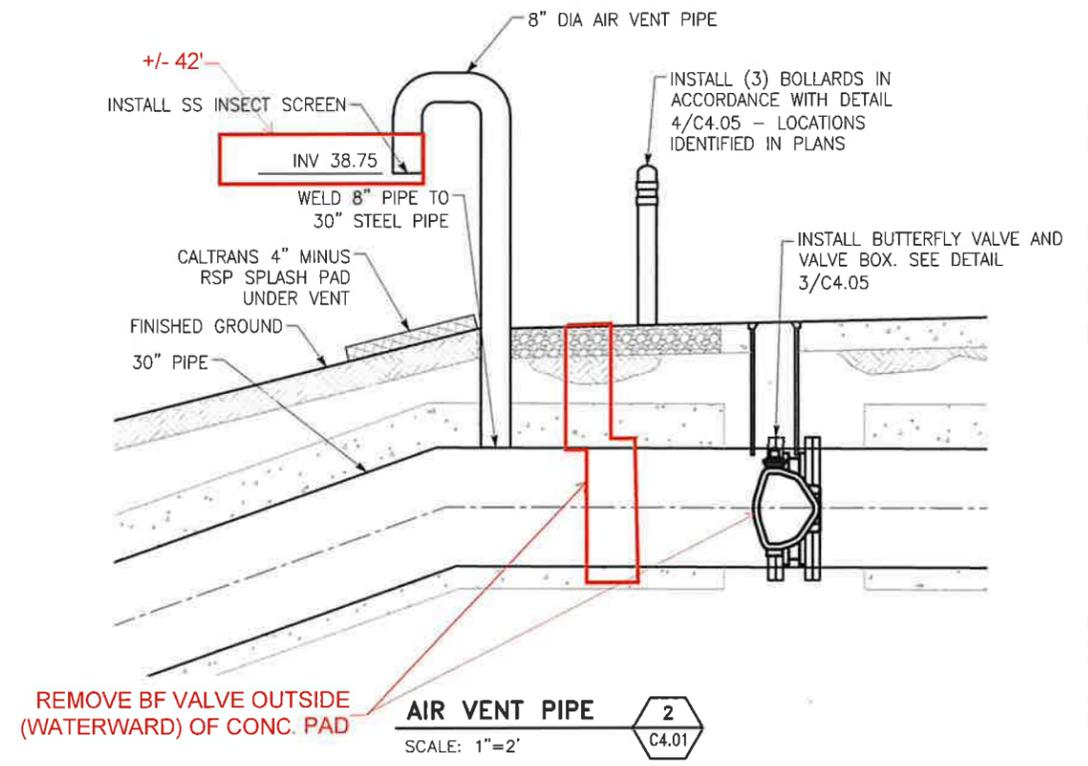
METAL BOLLARD 4
SCALE: 1"=1' C4.01



BUTTERFLY VALVE 3
SCALE: 1"=2' C4.01



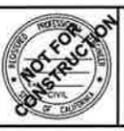
PIPE BACKFILL DETAIL 1
SCALE: 1"=2' C4.02



AIR VENT PIPE 2
SCALE: 1"=2' C4.01

90% SUBMITTAL
10/23/2025

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CHECKED: AHB
APPROVED: MWR
SCALE: AS SHOWN

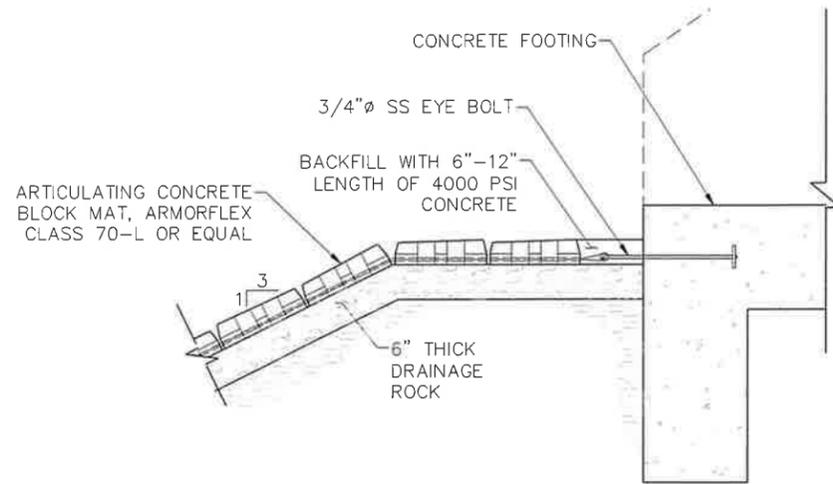
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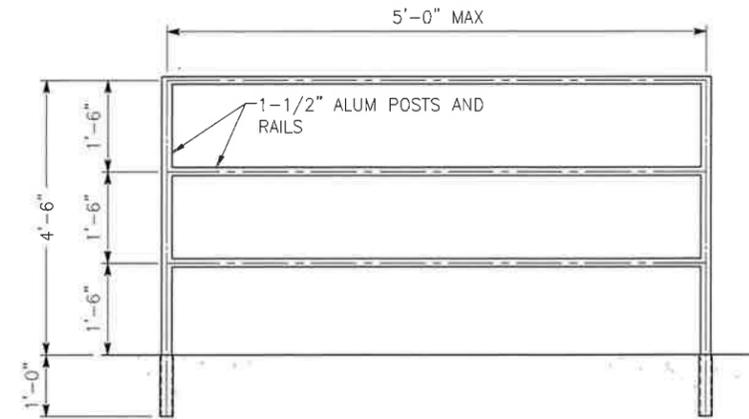
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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION
STORM DRAIN OUTFALL
TYPICAL DETAILS 1

SHEET 37
OF 38
DRAWING NO.
C4.05

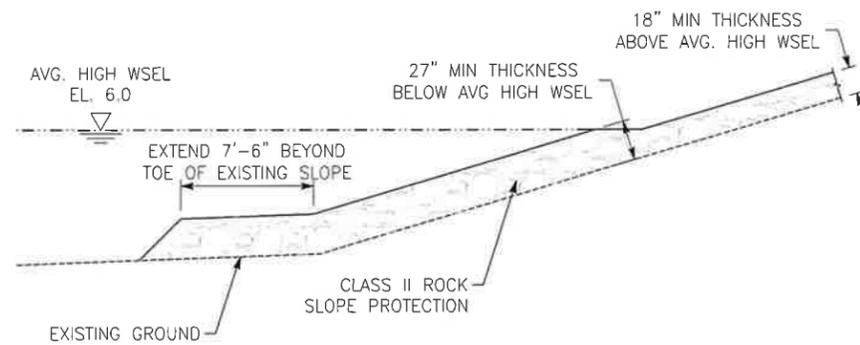


TOP OF SLOPE ANCHOR AT HEADWALL 3
NOT TO SCALE C4.06

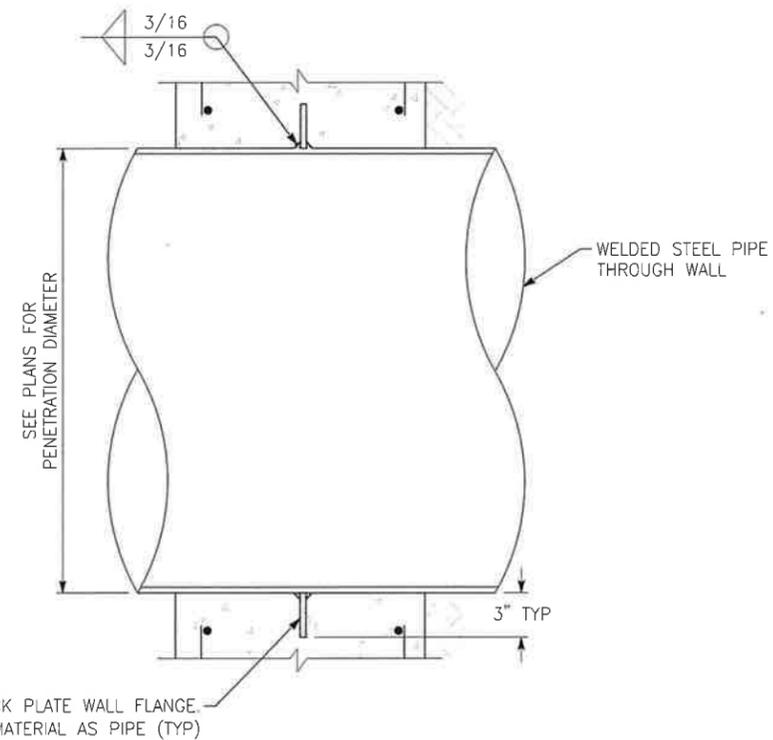


TYPICAL RAILING SECTION

REMOVABLE ALUMINUM GUARDRAIL 1
NOT TO SCALE C4.06



RSP TOE PROTECTION 4
SCALE: 1" = 5' C4.06

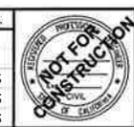


3/8" THICK PLATE WALL FLANGE
SAME MATERIAL AS PIPE (TYP)

TYPICAL STEEL PIPE PENETRATION 2
NOT TO SCALE C4.06

90% SUBMITTAL
10/23/2025

REV.	DATE	DESCRIPTION	CKD.	RV'D	RV'D	APP.
C	07/01	65% SUBMITTAL	JOH	JHK	VCG	SRS
B	03/24	REVISED 30%	JOH	JHK	VCG	SRS
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STORM DRAIN ZONE 36 & 39 IMPROVEMENTS PROJECT - PHASE 1 OUTFALL CONSTRUCTION

STORM DRAIN OUTFALL
TYPICAL DETAILS 2

SHEET 38
OF 38
DRAWING NO.
C4.06

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EXHIBIT D



Figure 13. 0856-0810 Geo Ex Drillers assembling barge to commence geotechnical exploration of river channel near Sta 755+00.



Figure 14. 0856-0810 Golden Valley Parkway Bridge geotechnical exploration.

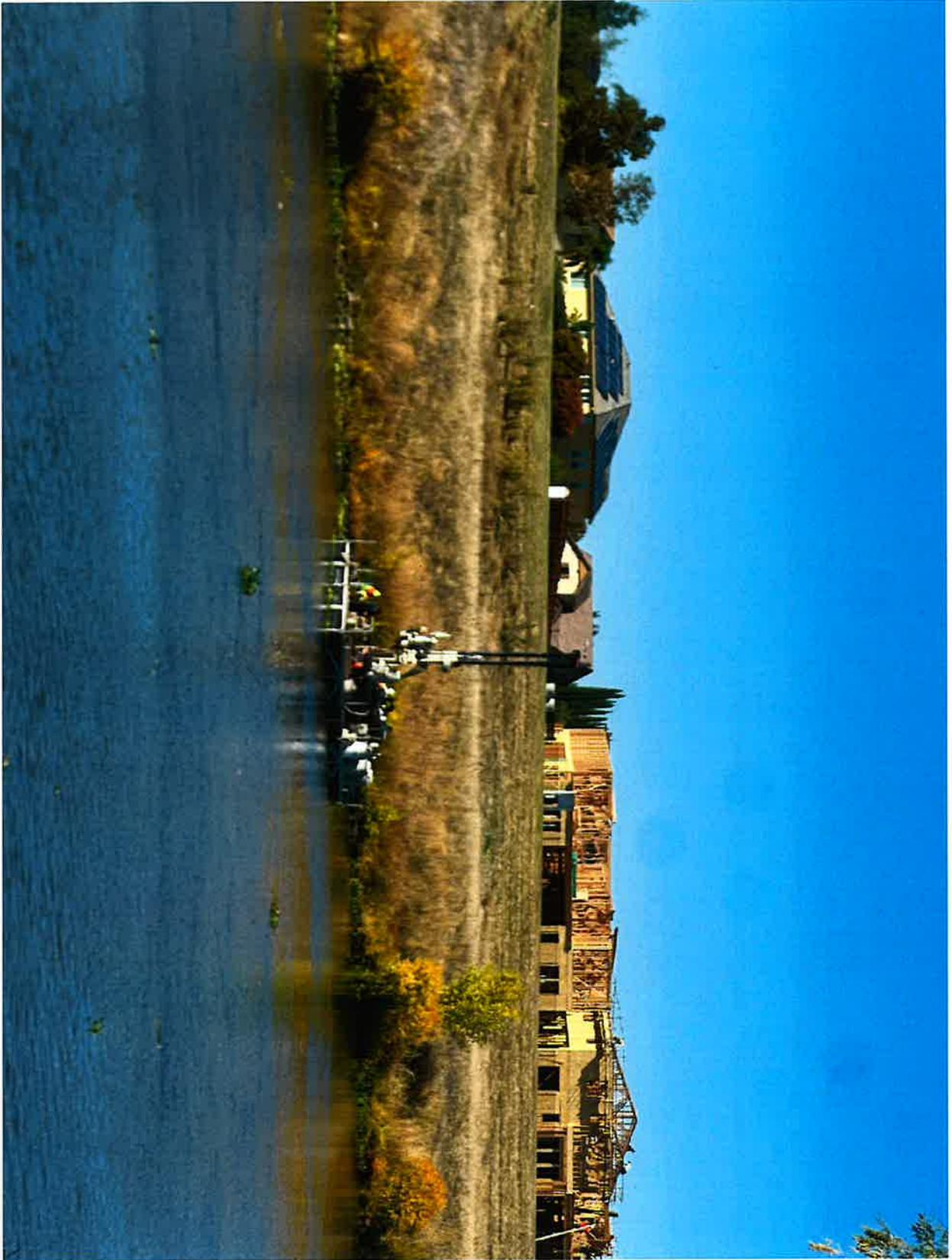


Figure 15. 0856-0810 GeoEx coring geotechnical samples of river bed near Sta 755+00.

EXHIBIT E



Figure 16. 0856-9026 PGE subcontractor PAR West coating PGE towers near Sta 250+00.



Figure 17. 0856-9026 PGE subcontractor PAR West coating PGE towers near Sta 250+00.

EXHIBIT F



Figure 10. 0856-9026-07-004 Dino and Sons fabricating pipe fence.

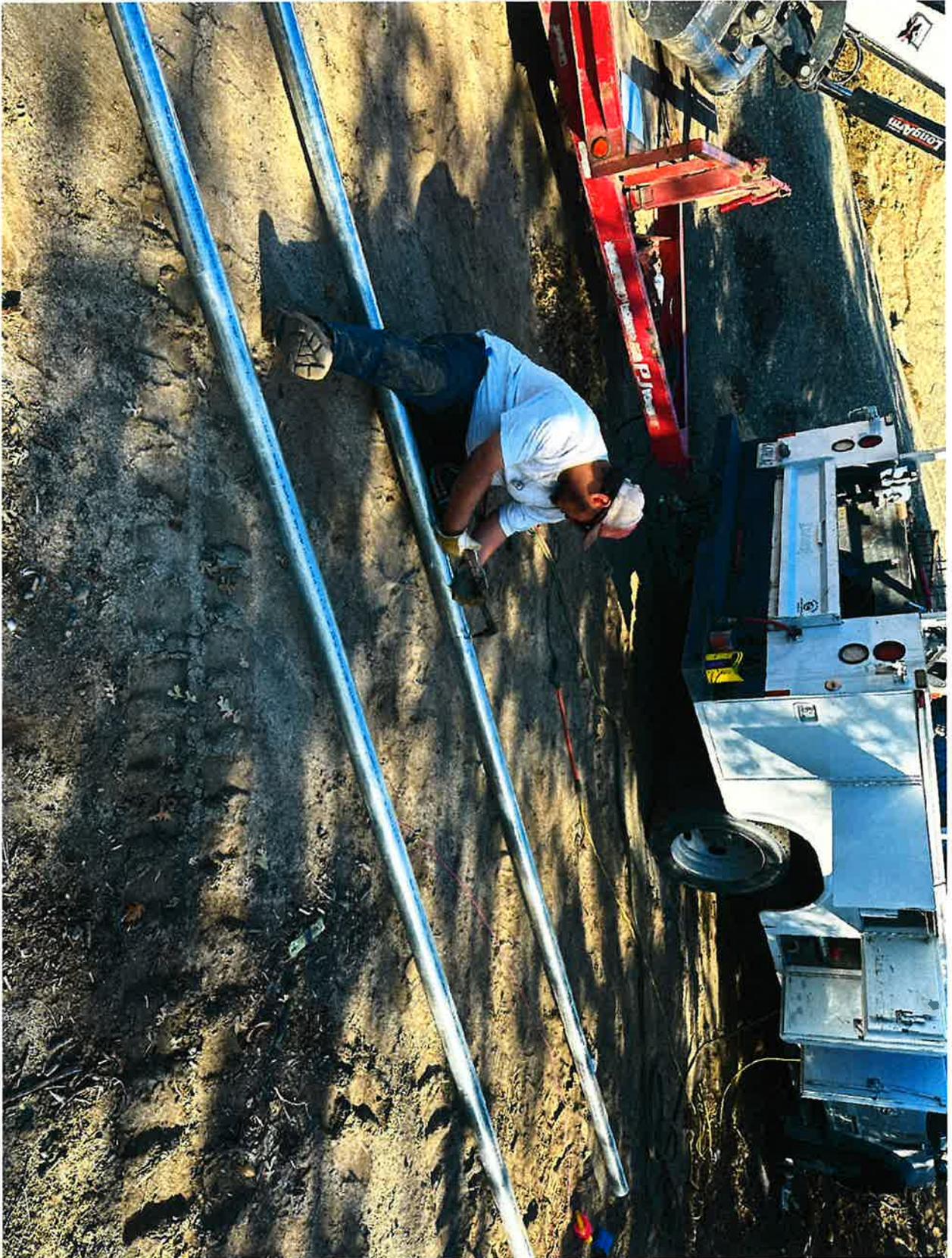


Figure 11. 0856-9026-07-004 Dino and Sons fabricating pipe fence.



Figure 12. 0856-9026-07-004 Dino and Sons extended existing fence at Sta 855+00 to prevent intrusion.



Figure 18. 0856-9026-07-902 EW Black placed 30 ecoblocks to prevent levee access near Sta 795+00.



Figure 19. 0856-9026-07-902 EW Black placing ecoblocks to prevent levee access near Sta 795+00.

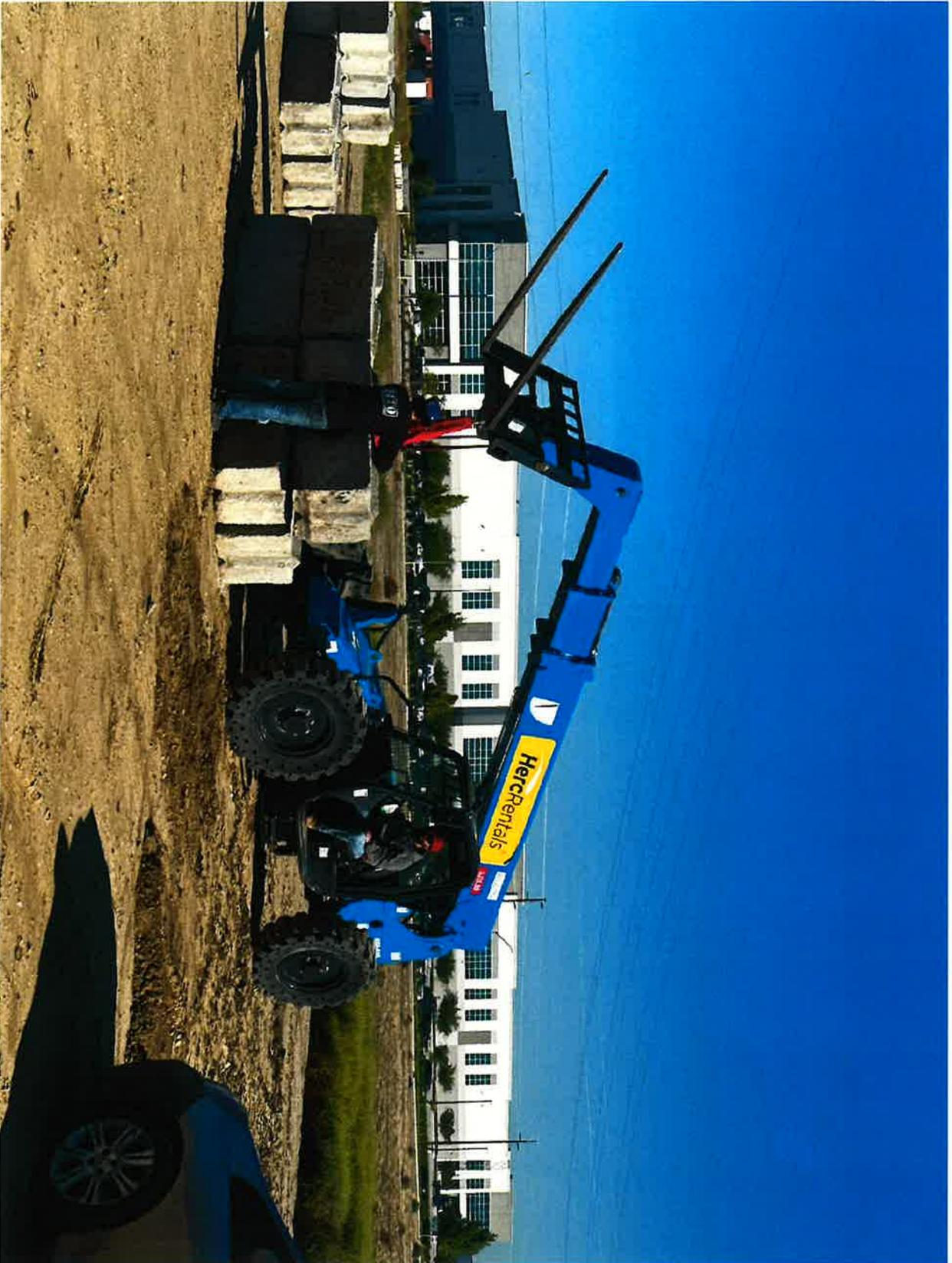
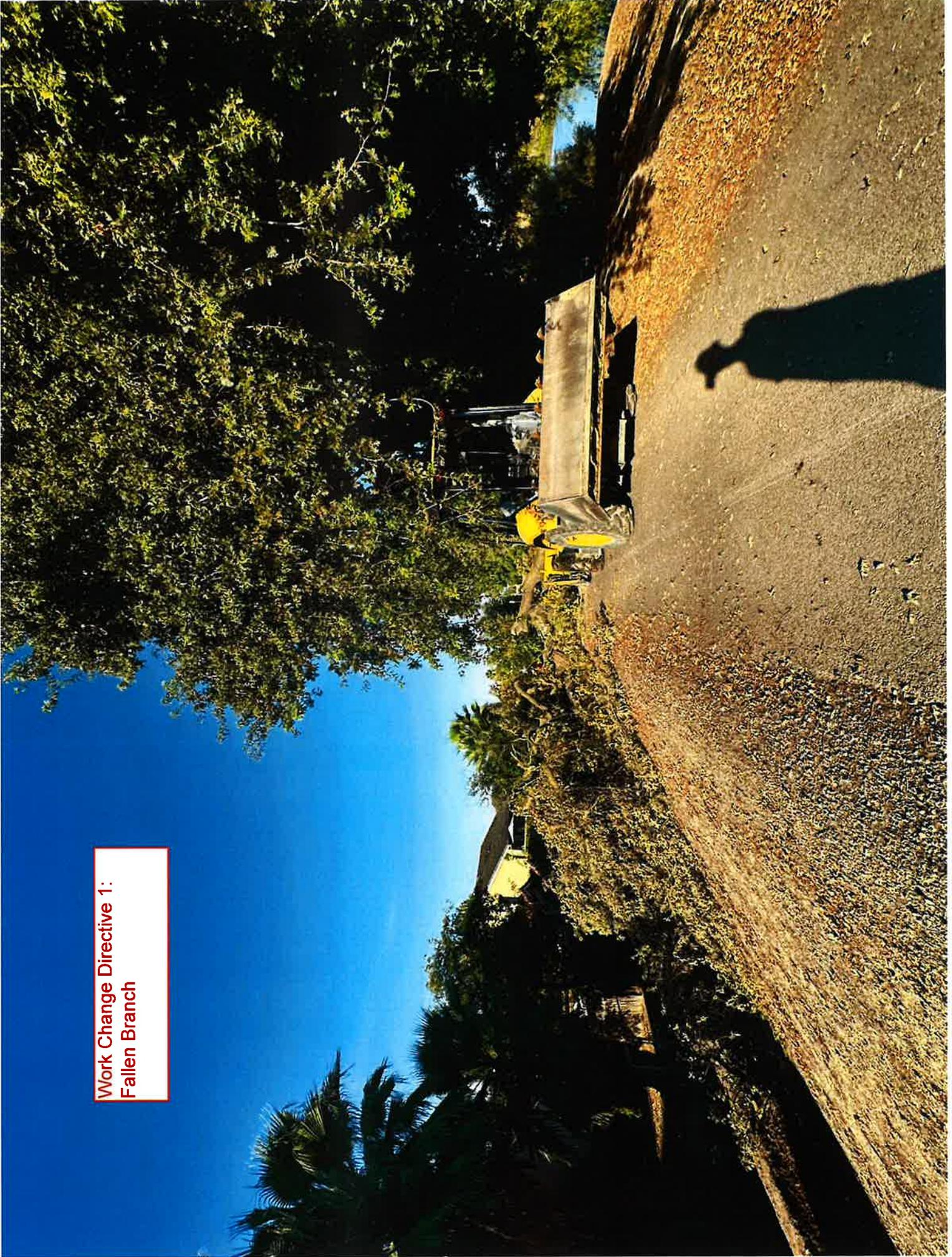


Figure 20. 0856-9026-07-902 EW Black placing ecoblocks to prevent levee access near Sta 795+00.

EXHIBIT G

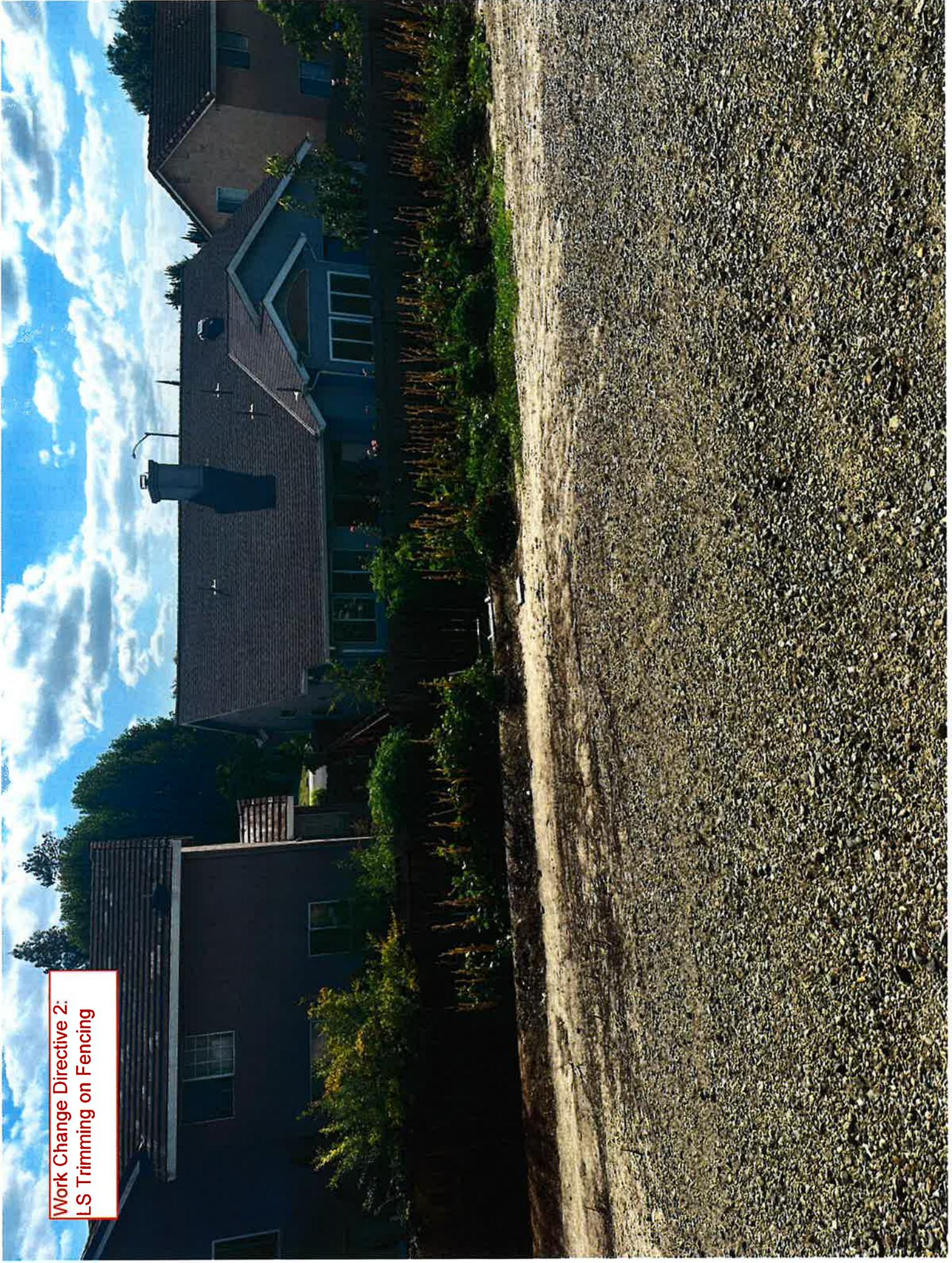
**Work Change Directive 1:
Fallen Branch**



Work Change Directive 2:
LS Trimming on Fencing



Work Change Directive 2:
LS Trimming on Fencing



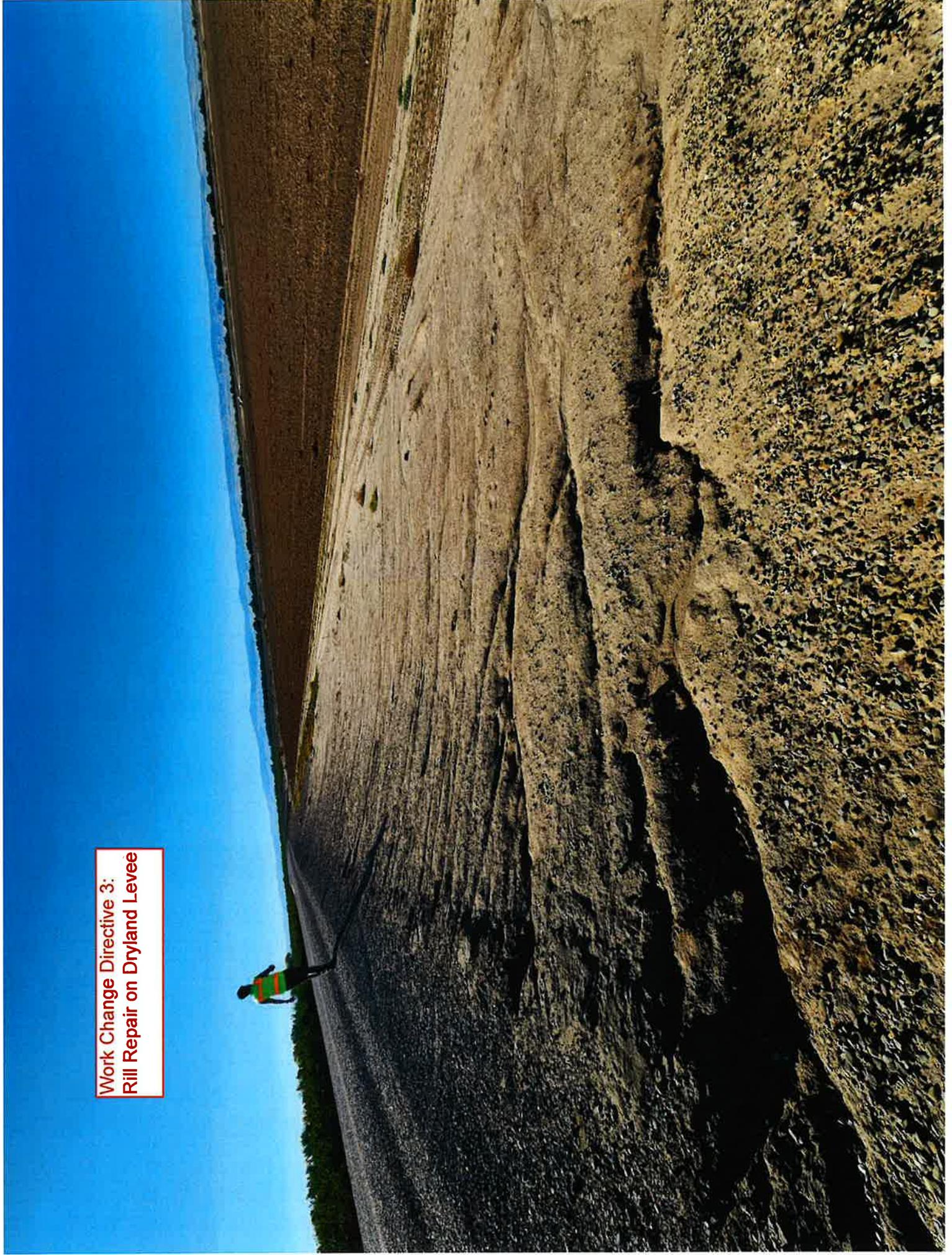
Work Change Directive 2:
LS Trimming on Fencing



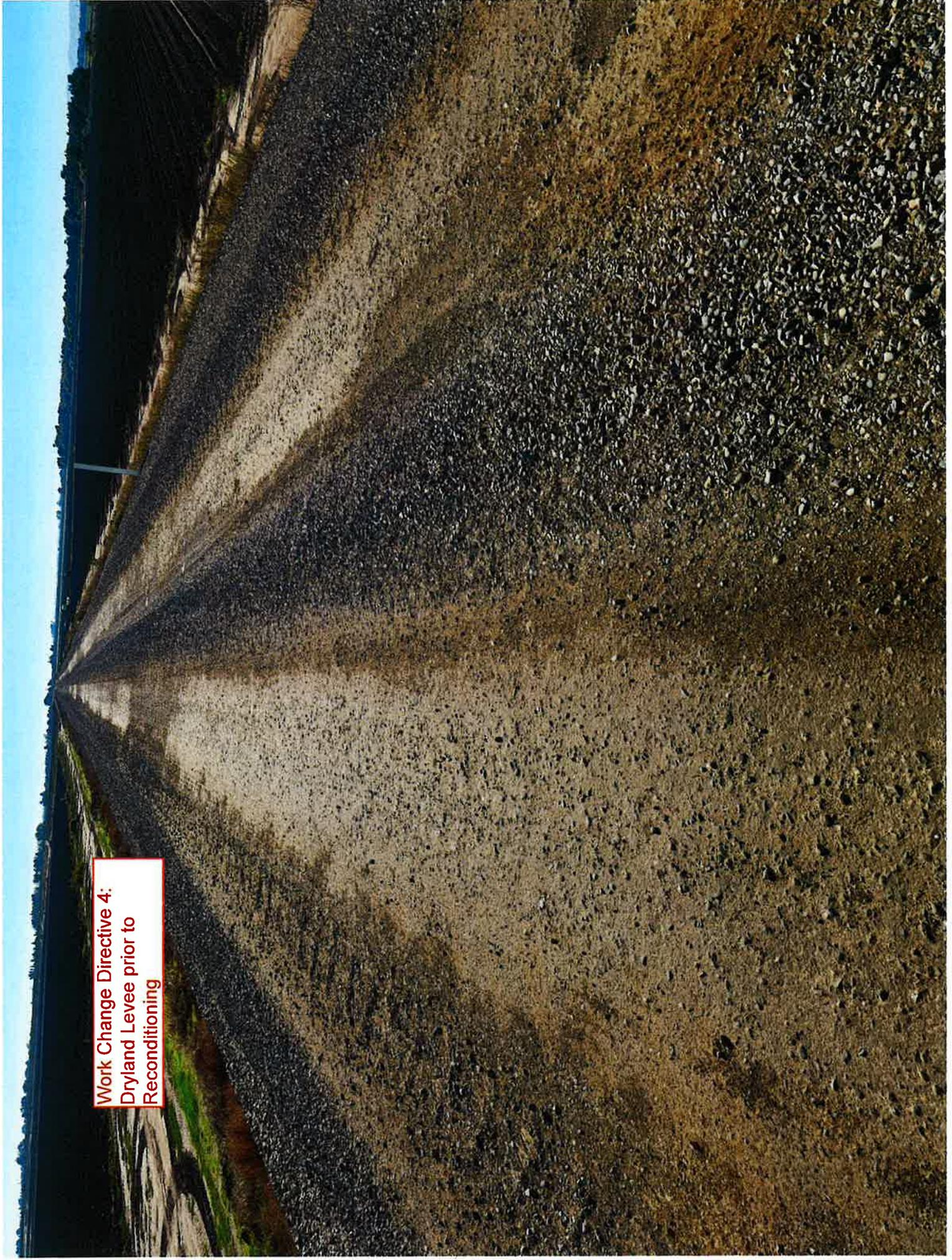
Work Change Directive 2:
LS Trimming on Fencing



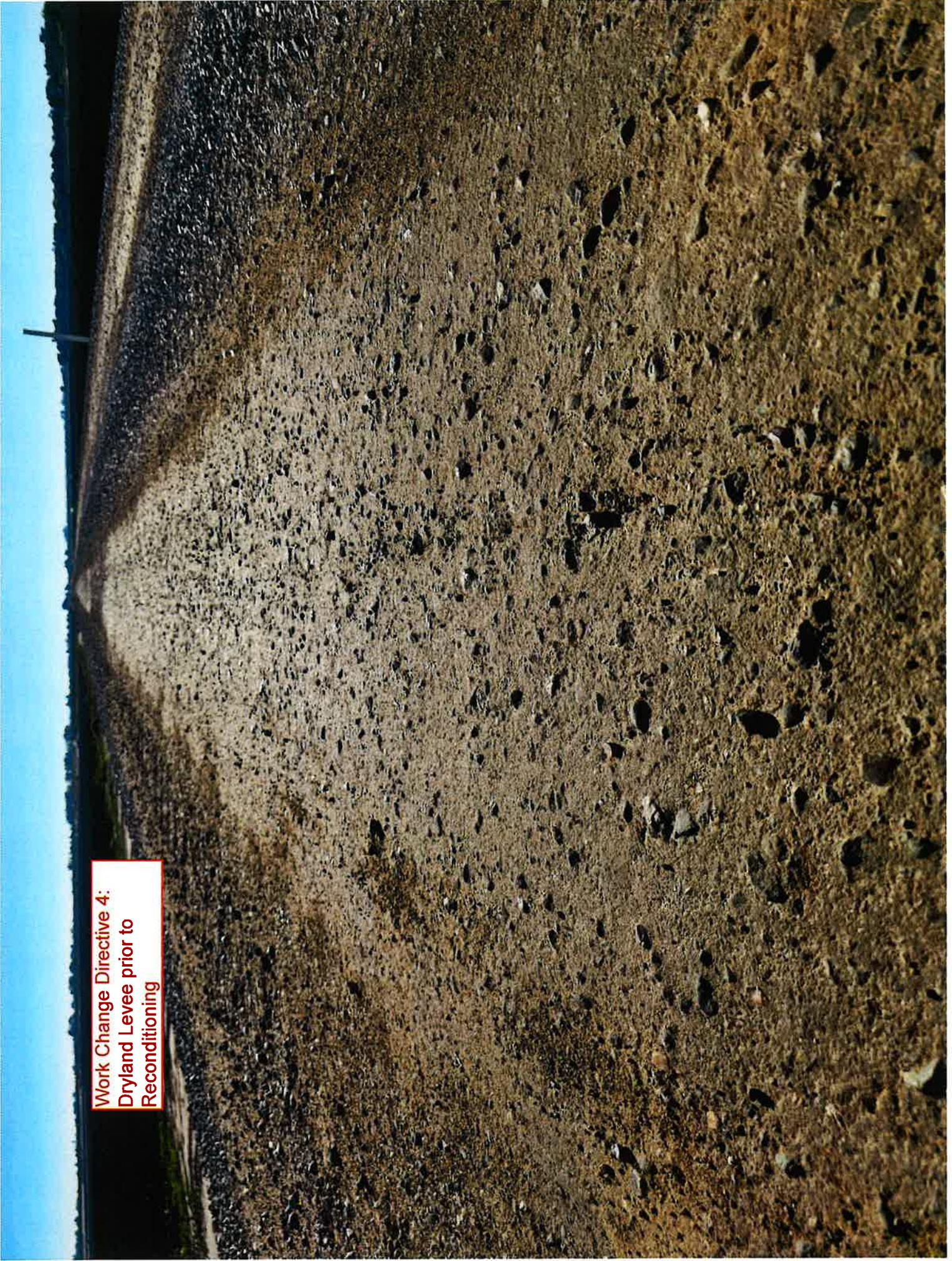
Work Change Directive 3:
Rill Repair on Dryland Levee



Work Change Directive 4:
Dryland Levee prior to
Reconditioning



Work Change Directive 4:
Dryland Levee prior to
Reconditioning



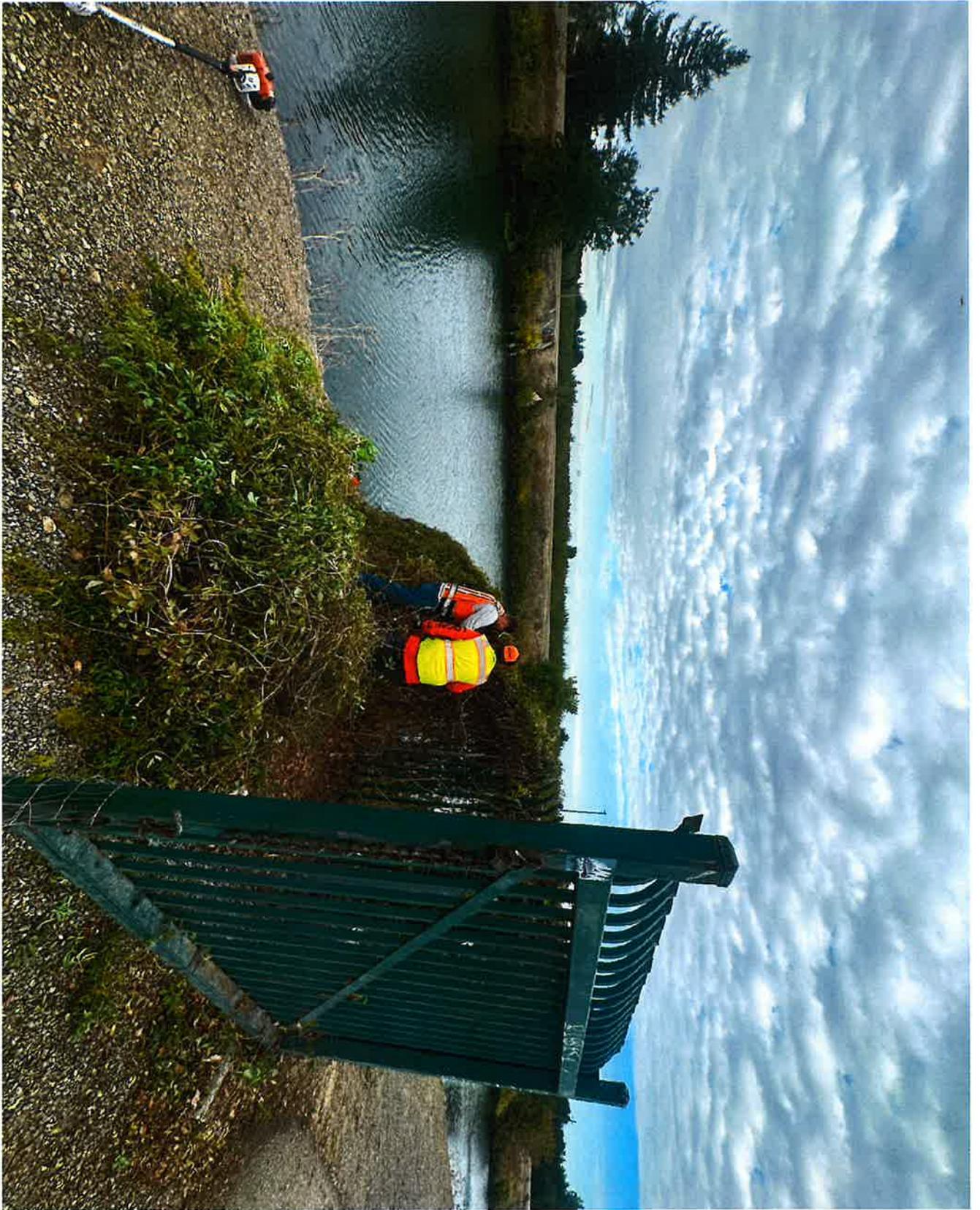


Figure 1. 0856-0840 Vegetation removal from district fence.



Figure 2. 0856-0840 Pavers and misc. debris to be removed from levee toe.



Figure 3. 0856-0840 Fallen Oak removal near Sta 51+00.



Figure 4. 0856-0840 Vegetation removal above crown road.

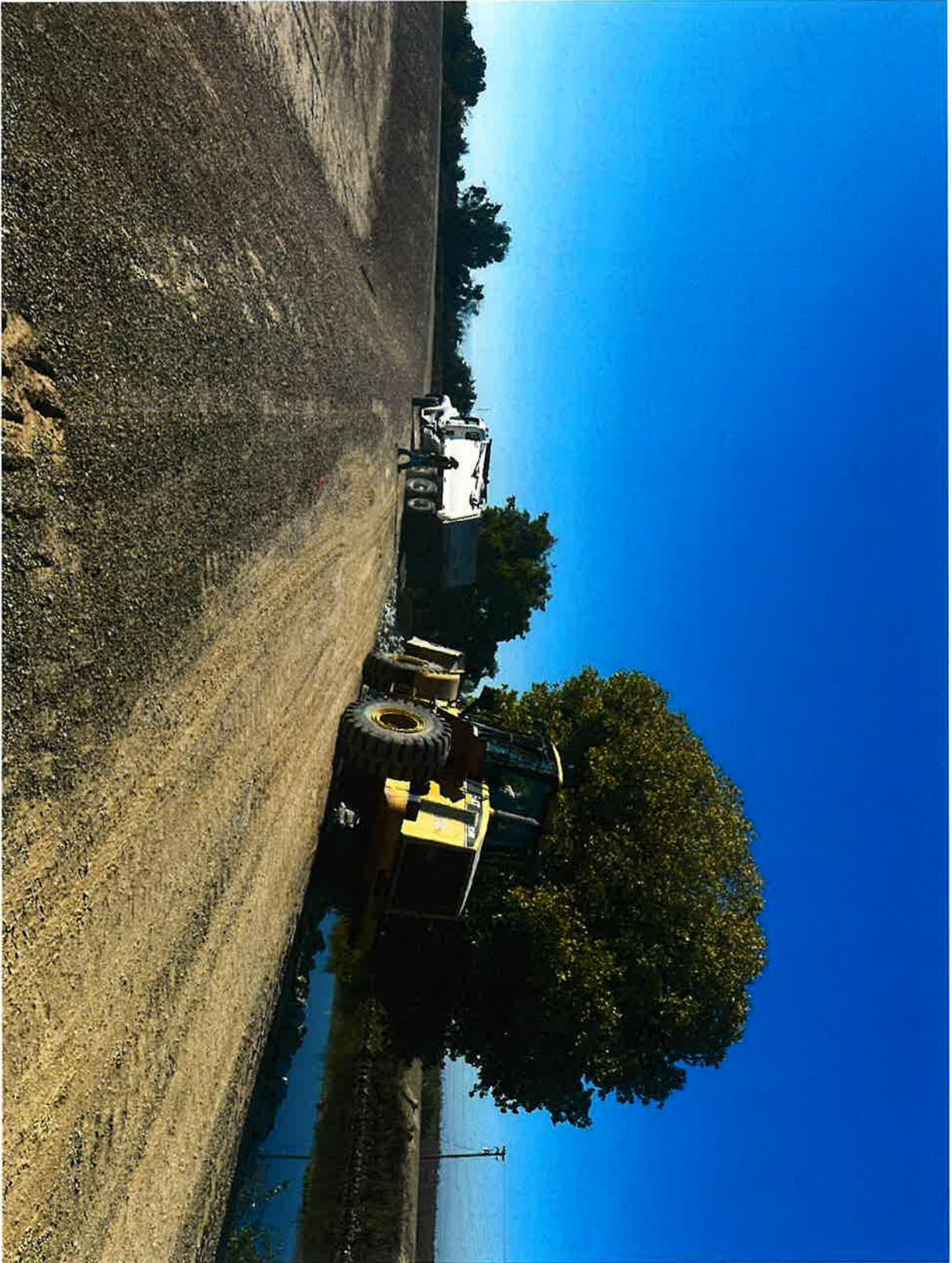


Figure 5. 0856-0840 Debris removal near Sta 816+00.

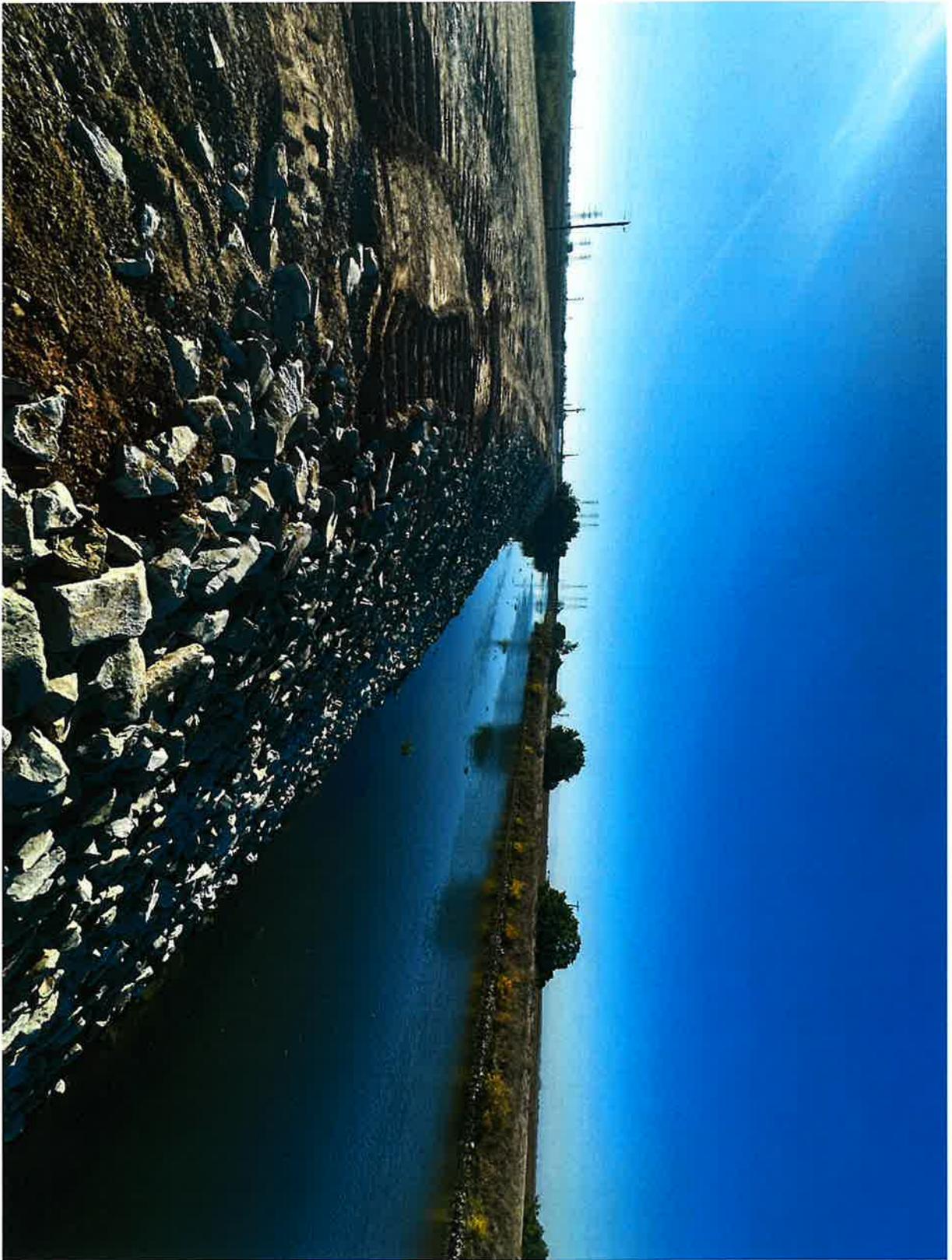


Figure 6. 0856-0840 rock slope protection near Sta 230.

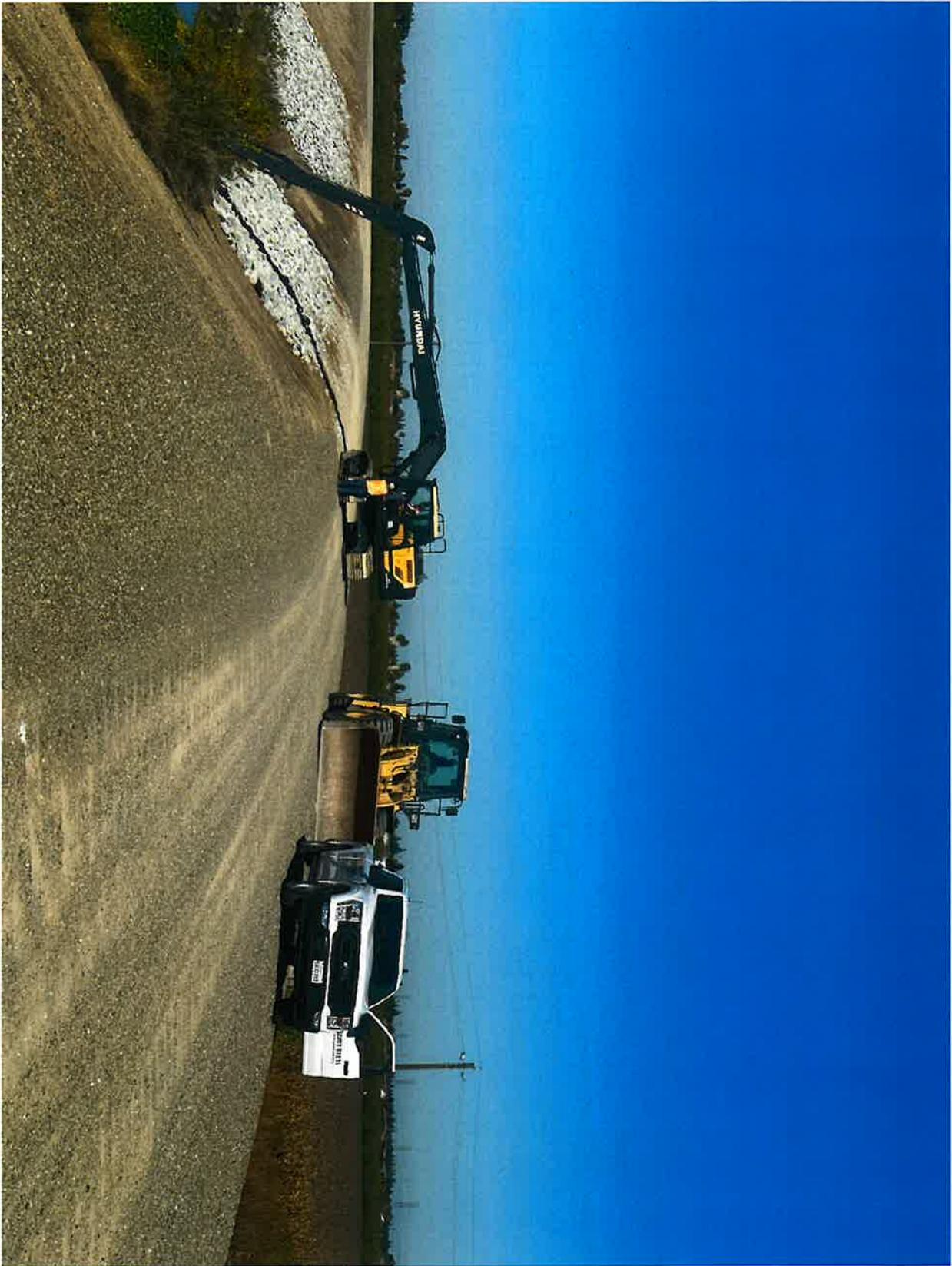


Figure 7. 0856-0840 Rock placement on levee waterside slope near Sta 198+00.

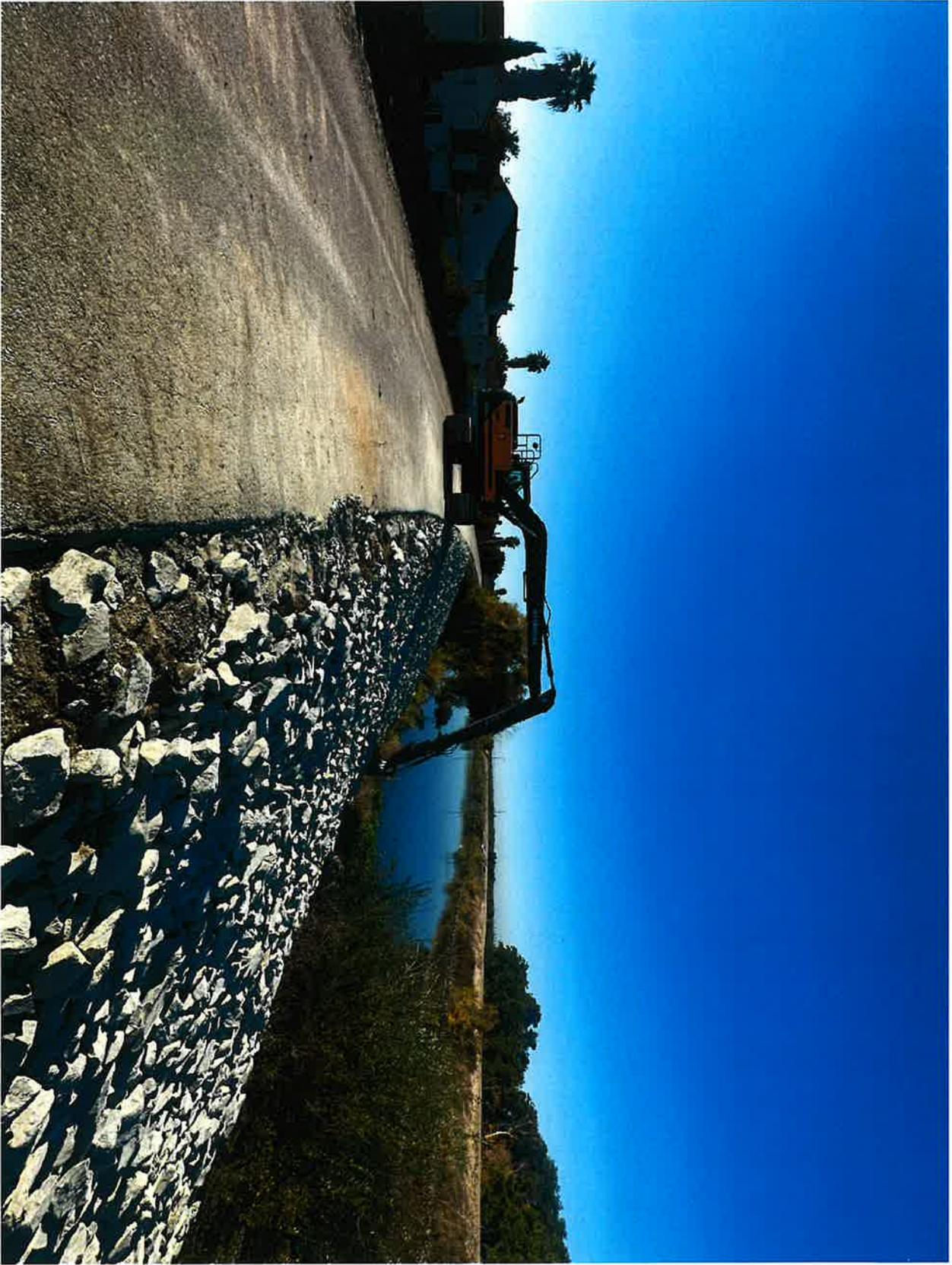


Figure 8. 0856-0840 Rock placement near Sta 142+00.



Figure 9. 0856-0840 Levee toe mowing near Sta 600+00.

EXHIBIT H

Delta Hydrology Conditions

Date (30 days)	Sacramento at Freeport +SRWTP cfs	Yolo Bypass Rumsey +FRE cfs	East Side Streams cfs	San Joaquin at Vernalis cfs	Rainfall @ Stockton inches	Clifton Court Forebay cfs	Tracy Pumping Plant cfs	Contra Costa CCWD cfs	Barker Slough BKS cfs	Byron Bethany cfs
10/05/2025	19,324	236	475	1,196	0.00	6,672	4,155	143	40	10
10/06/2025	19,068	235	475	1,312	0.00	2,993	2,681	145e	47	15
10/07/2025	18,464	254	765	1,314	0.00	2,998	2,581	139	46	22
10/08/2025	17,585	279	455	1,232	0.00	2,995	2,664	134	47	28
10/09/2025	17,989	281	365	1,143	0.00	2,997	2,775	153	44	20
10/10/2025	17,251	287e	325	1,135	0.00	2,996	2,724	132	57	21
10/11/2025	16,011	171e	316	1,186	0.00	2,994	2,288	122	49	23
10/12/2025	14,572	64e	322	1,273	0.00	2,996	1,835	115	50	23
10/13/2025	13,041	53e	410	1,349	1.36	2,995	1,826	110	38	22
10/14/2025	13,838	87e	730	1,526	0.16	2,993	1,823	110	36	15
10/15/2025	13,054	88e	416	1,686	0.04	1,991	1,662	113	39	11
10/16/2025	12,569	55e	370	1,653	0.04	1,992	870	105	40	14
10/17/2025	12,407	39e	373	1,849	0.00	2,996	1,078	99	36	15
10/18/2025	12,390	30e	364	2,288	0.00	3,992	1,396	93	37	10
10/19/2025	12,239	25e	357	2,466	0.00	3,990	968	93	39	10
10/20/2025	12,409	21e	358	2,467	0.00	3,997	1,607	109	38	11
10/21/2025	12,214	19	350	2,280	0.00	3,991	2,227	109	40	15
10/22/2025	11,638	17	387	2,006	0.00	3,991	1,750	54	36	16
10/23/2025	12,075	18	692	1,973	0.00	3,992	1,750	49	37	18
10/24/2025	11,818	18	432	2,231	0.00	3,998	945	53	39	16
10/25/2025	11,372	19	372	2,458	0.00	3,990	967	61	38	8
10/26/2025	11,387	16	369	2,255	0.00	490	2,263	58	28	28
10/27/2025	12,173	17	358	1,988	0.00	0	3,542	61	40	17
10/28/2025	12,112	19	348	1,705	0.00	0	3,513	60	37	20
10/29/2025	12,367	18	358	1,450	0.00	0	3,165	65	37	29
10/30/2025	11,470e	18	358	1,310	0.00	990	2,949	87	36	36
10/31/2025	11,062	19	384	1,566	0.00	1,997	3,648	108	56	25
11/01/2025	10,761	18	390	2,001	0.00	999	4,196	124	54	17
11/02/2025	10,939e	20	384	2,017	0.00	953	4,181	122	66	11
11/03/2025	11,029	20	385	1,838	0.00	997	4,181	120	64	9

SRWTP: Sacramento Regional Water Treatment Plant effluent.

Yolo Bypass: combined measurements of Cache Creek at Rumsey and Freemont Weir.

East Side Streams: combined stream flows of Cosumnes River at Michigan Bar, Mokelumne River at Woodbridge, miscellaneous streams estimated from Dry Creek at Galt (discontinued since Dec. 1997), and Calaveras River based on releases from New Hogan Dam.

Rainfall: incremental daily precipitation measured at Stockton Fire Station #4.

CCWD Pumping Plants: combined pumping at the Old River, Rock Slough and Middle River Plants.

Delta Hydrology Conditions

Date	Banks PP cfs	Delta GCD cfs	Rio Vista Flow cfs	QWEST cfs	NDOI cfs	E/I Ratio 3 day	E/I Ratio 14 day	Delta Status
10/05/2025	6,705	2,000	12,404	-214	12,310	52.8%	55.1%	b
10/06/2025	3,369	2,000	12,462	5,138	17,717	43.5%	45.7%	b
10/07/2025	2,607	1,950	12,280	5,287	17,685	34.8%	36.5%	b
10/08/2025	2,946	1,950	10,672	2,546	13,034	26.7%	27.6%	b
10/09/2025	2,955	1,950	10,076	1,757	11,652	27.6%	27.7%	b
10/10/2025	2,964	1,900	10,363	1,769	11,939	28.4%	27.9%	b
10/11/2025	2,960	1,900	9,861	1,988	11,667	28.6%	27.3%	b
10/12/2025	3,158	1,900	8,869	2,125	10,811	27.9%	26.0%	b
10/13/2025	2,767	1,900	7,744	1,810	9,384	28.1%	24.9%	b
10/14/2025	2,946	1,850	8,824	6,567	15,765	29.5%	24.6%	b
10/15/2025	2,132	1,850	9,691	9,081	19,210	28.0%	23.0%	b
10/16/2025	2,021	1,850	9,201	9,647	19,302	24.4%	20.0%	b
10/17/2025	2,678	1,850	8,889	8,368	17,731	22.9%	19.1%	b
10/18/2025	4,080	1,800	8,759	7,209	16,440	27.6%	22.8%	b
10/19/2025	4,089	1,800	6,579	3,051	9,560	32.4%	27.3%	b
10/20/2025	4,084	1,800	6,212	1,924	8,004	35.5%	31.0%	b
10/21/2025	3,976	1,800	6,264	1,217	7,331	36.9%	33.4%	b
10/22/2025	3,877	1,800	6,060	1,350	7,249	38.8%	35.8%	b
10/23/2025	3,703	1,750	5,651	949	6,437	40.0%	37.0%	b
10/24/2025	3,863	1,750	5,975	2,174	7,988	37.5%	35.1%	b
10/25/2025	3,797	1,750	5,793	2,068	7,700	36.0%	34.2%	b
10/26/2025	1,351	1,750	5,479	4,332	9,661	29.0%	28.1%	b
10/27/2025	0	1,750	5,487	3,327	8,652	26.2%	25.2%	b
10/28/2025	0	1,750	6,043	3,312	9,196	22.8%	22.0%	b
10/29/2025	0	1,700	6,002	3,354	9,197	23.8%	23.1%	b
10/30/2025	0	1,700	6,195	2,426	8,467	24.5%	24.1%	b
10/31/2025	396	1,700	7,419	-1,572	5,672	30.5%	29.2%	b
11/01/2025	2,710	1,700	8,305	-2,156	5,975	36.4%	34.1%	b
11/02/2025	1,119	1,700	8,043	-1,699	6,142	40.5%	37.3%	b
11/03/2025	1,216	1,700	8,199	-1,709	6,293	39.1%	36.6%	b

Delta Gross Channel Depletions from Dayflow Table 3.
 Rio Vista Flow calculated from Dayflow equation.
 QWEST calculated from Dayflow equation.
 Net Delta Outflow Index calculated from equation as specified in D-1641, revised March 2000.
 E/I Ratio : Export to Import Ratio

Coordinated Operation Agreement Delta Status:

- c = Excess Delta cond.
- b = Balanced Delta cond.
- i = Excess Delta cond. w/ restrictions for Delta Inflow
- j = Excess Delta cond. w/ restrictions for San Joaquin River Flow
- m = Excess Delta cond. w/ restrictions for Sacramento River Flow
- o = Excess Delta cond. w/ restrictions for Old and Middle River Flow
- r = Excess Delta cond. w/ restrictions

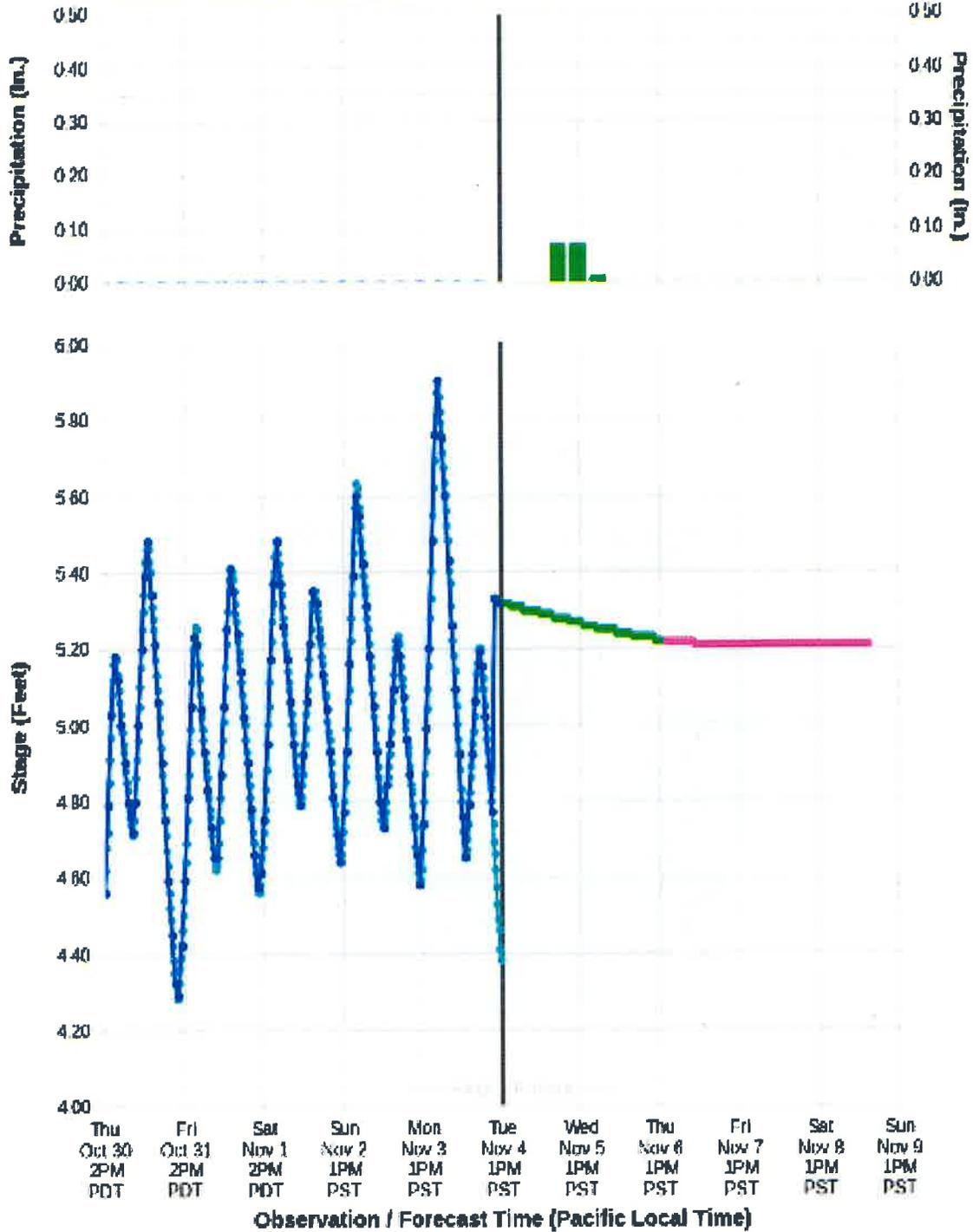
EXHIBIT I

Be sure to reload this page for up-to-date information. [[<< Previous](#)] Forecast Point [[Next >>](#)]

San Joaquin River System river forecast bulletin.

San Joaquin River - Mossdale (MOSC1) River Forecast Plot

Forecast Posted: 11/04/2025 at 12:59 PM PST • Graphic Created: 11/04/2025 at 1:06 PM PST



◆ Observed (Simulated) ◆ Forecast ◆ Calibration
◆ Observed (Raw Gauge)

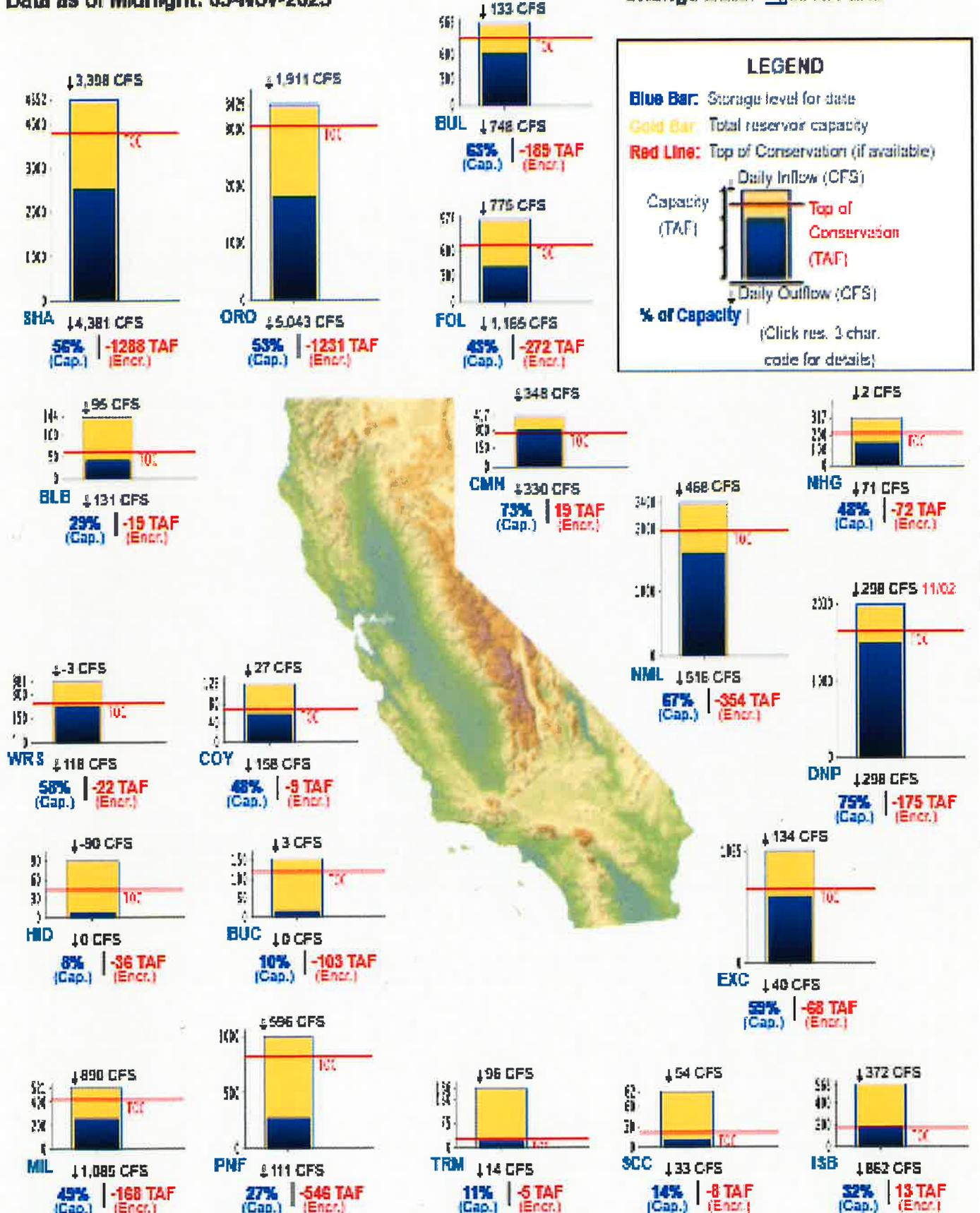
California Department of Water Resources
NOAA / NWS / California Nevada River Forecast Center

EXHIBIT J

TOP OF CONSERVATION CONDITIONS: CENTRAL VALLEY AND RUSSIAN RIVER FLOOD CONTROL RESERVOIRS: 03-NOV-2025

Data as of Midnight: 03-Nov-2025

Change Date: 03-Nov-2025



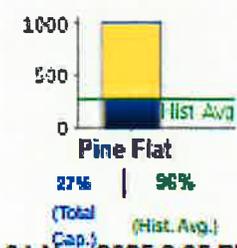
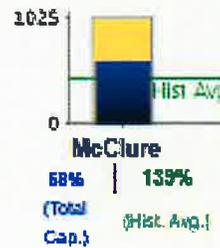
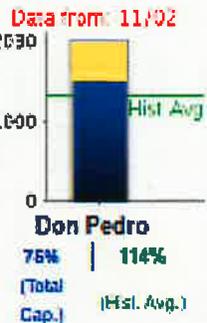
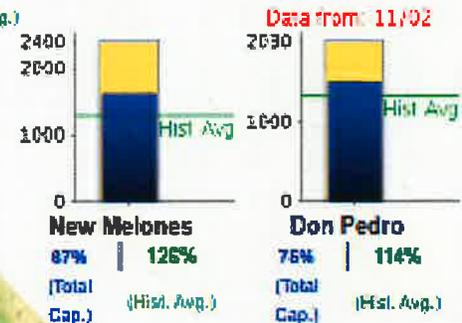
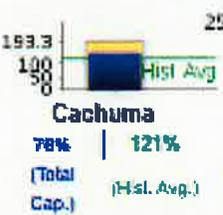
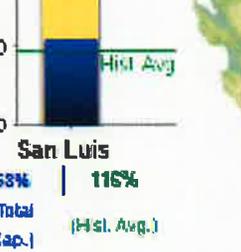
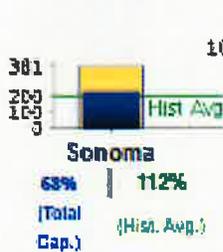
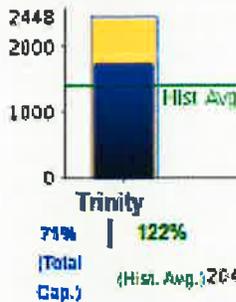
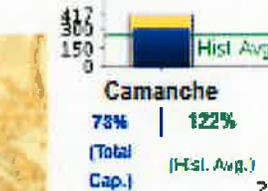
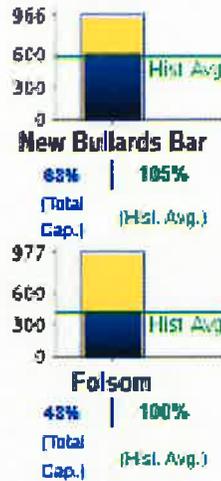
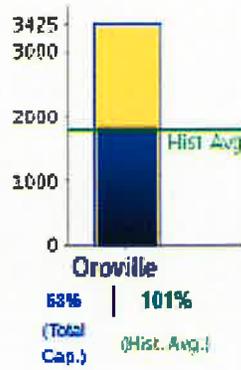
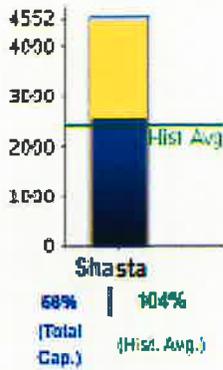
[Click to download printable version of current data.](#)

Report Generated: 04-Nov-2025 2:24 PM

CURRENT CONDITIONS: MAJOR WATER SUPPLY RESERVOIRS:03-NOV-2025

Data as of Midnight: 03-Nov-2025

Change Date: 03-Nov-2025

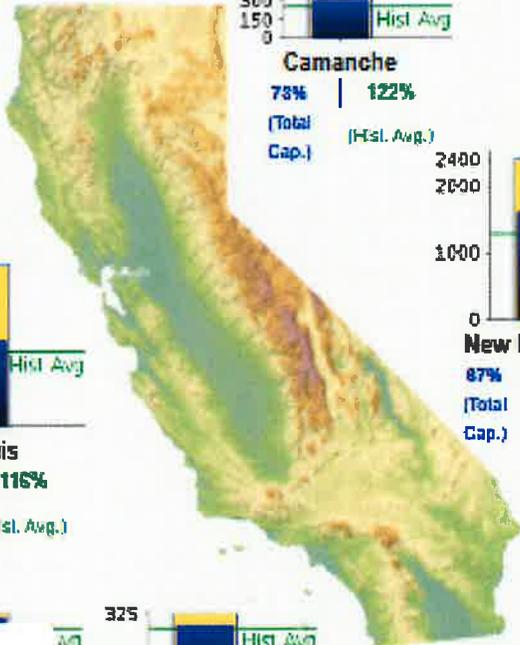


LEGEND

- Blue Bar: Storage level for date
- Gold Bar: Total reservoir capacity
- Green Line: Historic level for date.

Capacity (TAF) | Historical Avg Mark

% of Capacity | % Hist. Avg.
(Click res. 3 char. code for details)



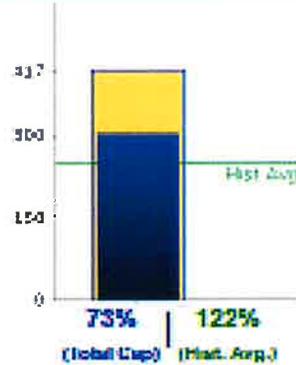
[Click to download printable version of current data.](#)

Report Generated: 04-Nov-2025 2:25 PM

The CSI link has been disabled to zoom in, for the lack of historical data.

EXHIBIT K

Camanche - Storage Conditions, November 03, 2025



- Data as of Midnight: November 03, 2025
- Storage: 302,670 AF
 - Reservoir Elevation: 219.06 FT
 - **73% of Total Capacity**
 - **122% of Historical Avg. for this Date**
 - Total Capacity: 417,120 AF
 - Avg. Stor. for November 03: 248,984 AF

Change Date: 03-Nov-2025

Major Reservoir Current Conditions Graphs

Clickable Version of Current Data

Camanche Storage Level Graph: Choose water years to plot:

- 2020-2021
- 2021-2022
- 2022-2023
- 2023-2024
- 2024-2025
- 2025-2026 (current)

(click back for multiple selections)

Camanche Reservoir Storage Levels

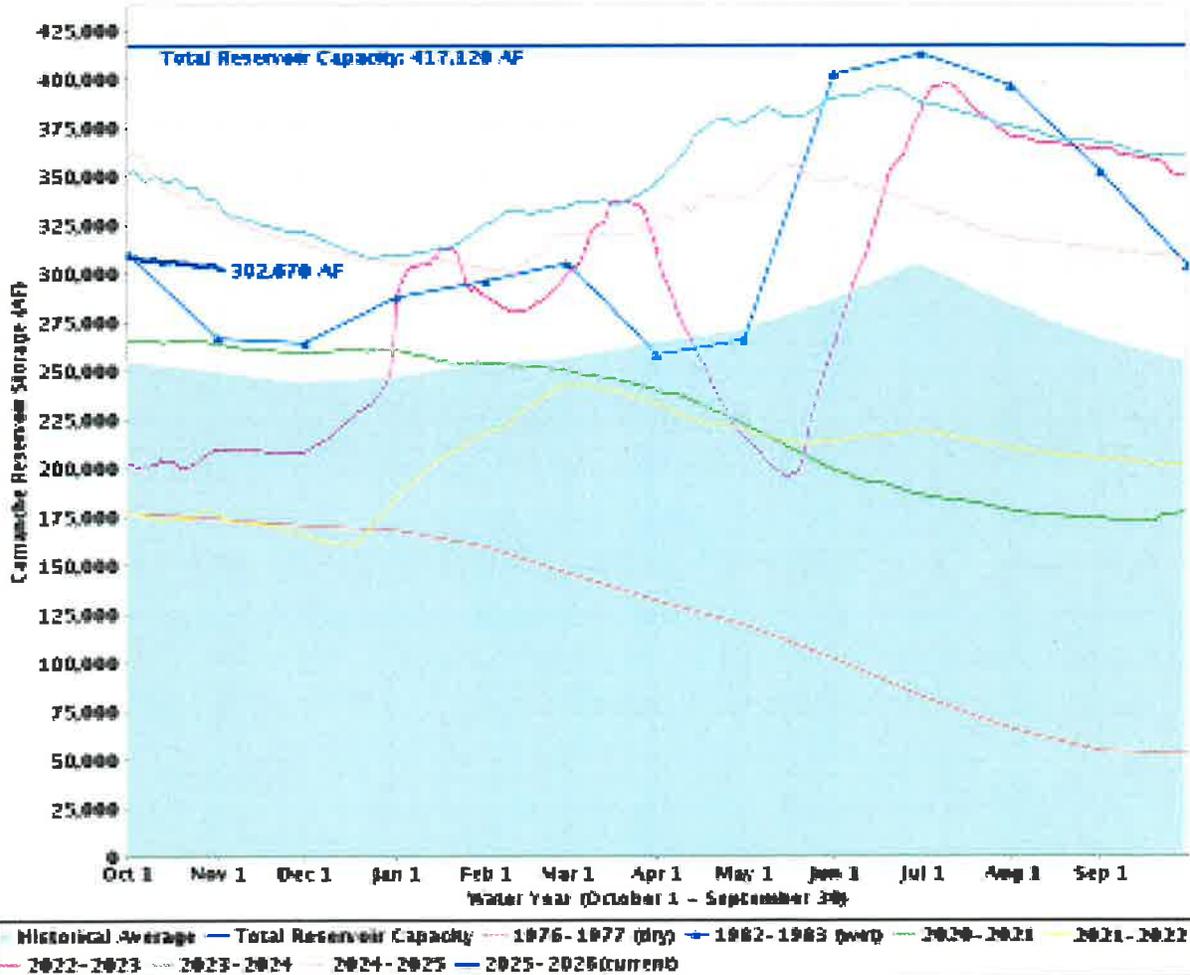
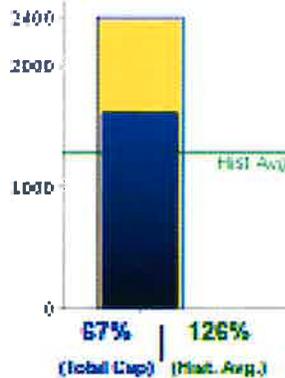


EXHIBIT L

New Melones - Storage Conditions, November 03, 2025



New Melones Lake



Data as of Midnight: November 03, 2025

- Storage: 1,615,620 AF
- Reservoir Elevation: 1,015.28 FT
- **67% of Total Capacity**
- **126% of Historical Avg. For this Date**
- Total Capacity: 2,400,000 AF
- Avg. Stor. for November 03: 1,286,417 AF

Change Date: 03-Nov-2025

Major Reservoirs Current Conditions Graphs

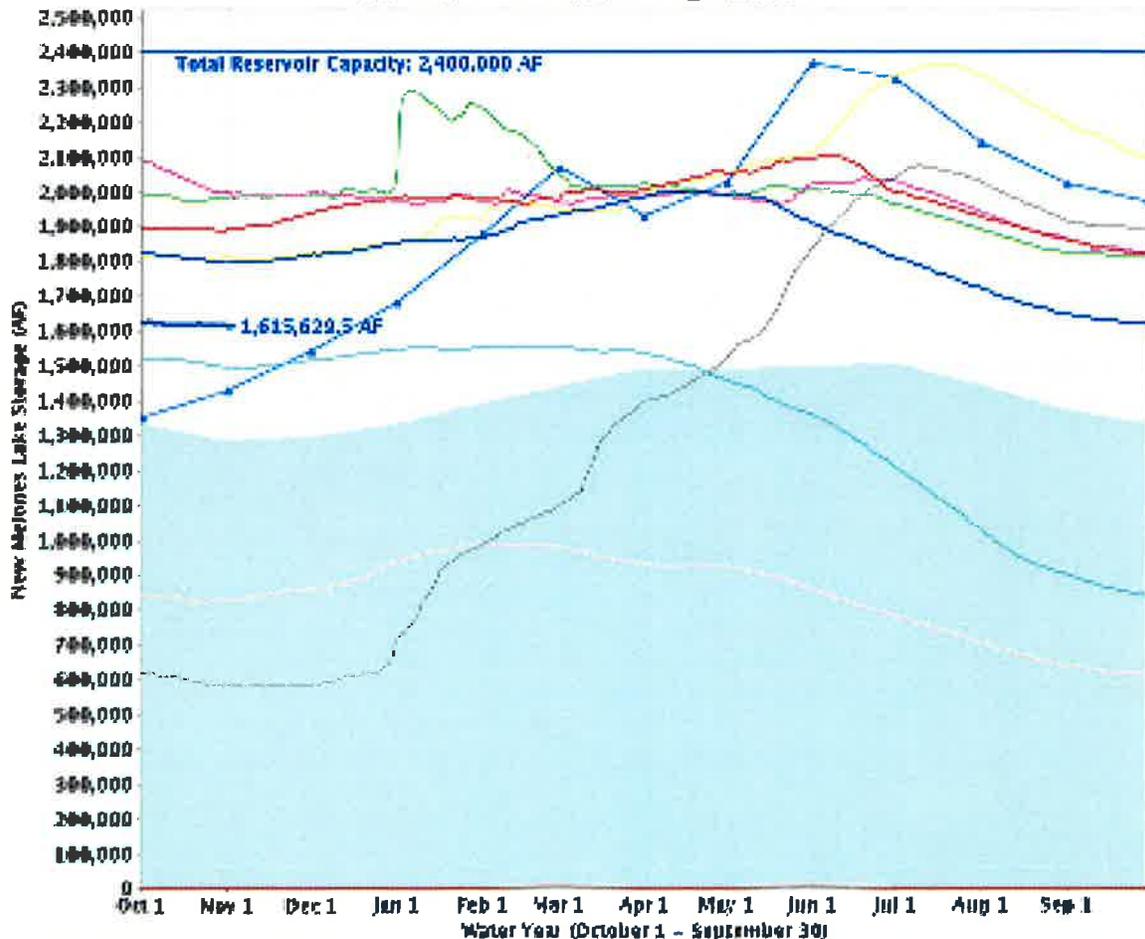
Pinable Version of Current Data

New Melones Storage Level Graph: Choose water years to plot:

- 2020-2021
- 2021-2022
- 2022-2023
- 2023-2024
- 2024-2025
- 2025-2026 (current)

(add boxes for multiple selections)

New Melones Lake Storage Levels



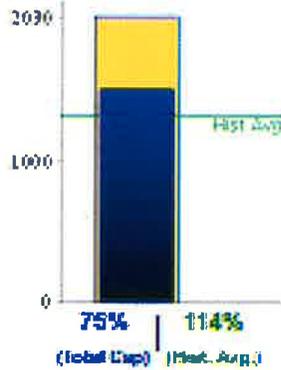
— Historical Average
 — Total Reservoir Capacity
 — 1976-1977 (dry)
 — 1982-1983 (avg)
 — 1996-1997
 — 1997-1998
 — 1998-1999
 — 2020-2021
 — 2021-2022
 — 2022-2023
 — 2023-2024
 — 2024-2025
 — 2025-2026 (current)

EXHIBIT M

Don Pedro - Storage Conditions, November 03, 2025



Don Pedro Reservoir



Data as of Midnight: November 03, 2025

- Storage: 1,514,220 AF
- Reservoir Elevation: 789.56 FT
- **75% of Total Capacity**
- **114% of Historical Avg. for This Date**
- Total Capacity: 2,030,000 AF
- Avg. Stor. for November 03: 1,333,259 AF

Change Date: 03-Nov-2025

Water Resources Control Conditions Graphs

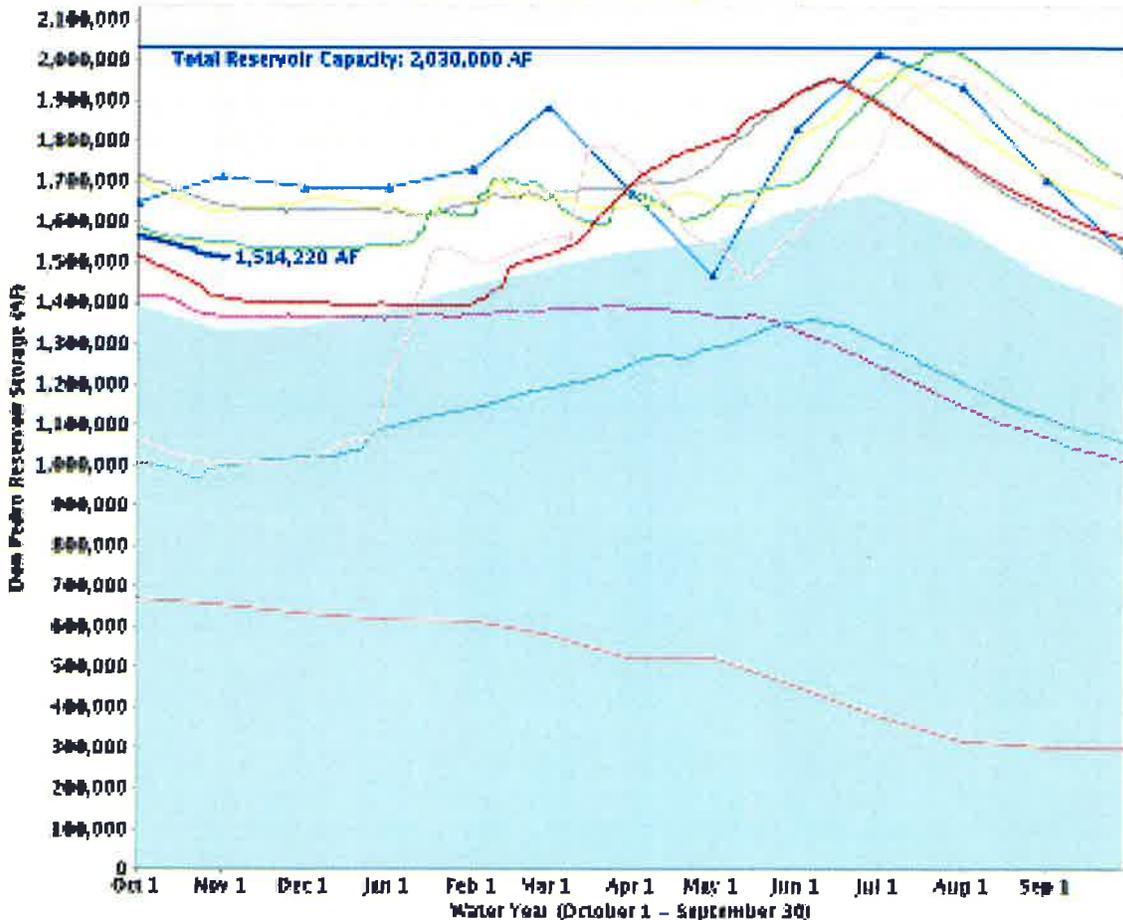
Pin & Print Section of Current Data

Don Pedro Storage Level Graph: Choose water years to plot:

- 2020-2021
- 2021-2022
- 2022-2023
- 2023-2024
- 2024-2025
- 2025-2026(current)

(click back for multiple selected data)

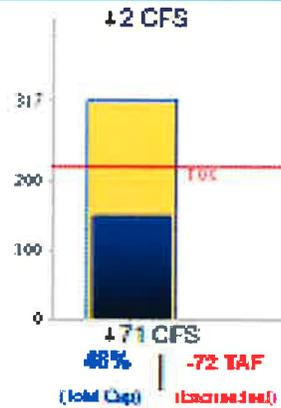
Don Pedro Reservoir Storage Levels



— Total Reservoir Capacity
 --- 1976-1977 (dry)
 — 1982-1983 (wet)
 --- 1997-1998
 --- 1999-1999
--- 2020-2021
 --- 2021-2022
 --- 2022-2023
 --- 2023-2024
 --- 2024-2025
 --- 2025-2026(current)

EXHIBIT N

New Hogan - Top of Conservation Conditions, November 03, 2025



Data as of Midnight: November 03, 2025

- Storage: 150,784 AF
- Reservoir Elevation: 665.69 FT
- 48% of Total Capacity
- -72 TAF Encroached For This Date
- Total Capacity: 317,000 AF
- Avg. Stor. November 03: 113,455 AF
- TOC Stor. 323,600 AF
- Daily Inflow: 2 CFS
- Daily Outflow: 71 CFS

Major Reservoir TOC Current Conditions Graphs

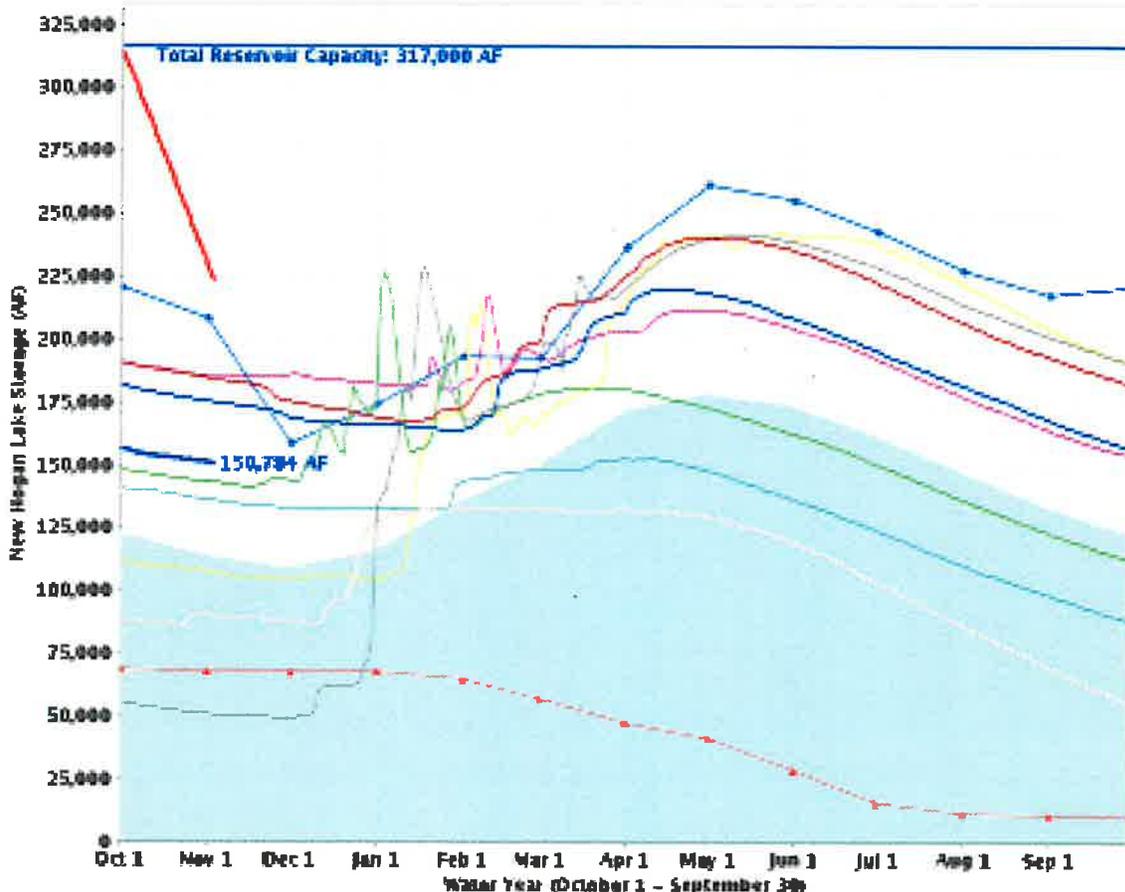
Change Date: 03-Nov-2025

New Hogan Storage Level Graph: Choose water years to plot:

- 2020-2021
- 2021-2022
- 2022-2023
- 2023-2024
- 2024-2025
- 2025-2026 (current)

(hit checkboxes for multiple selections)

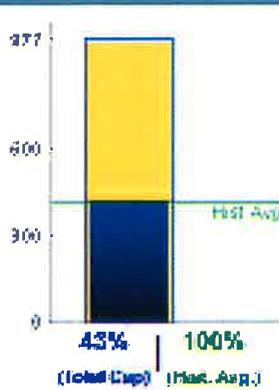
New Hogan Lake Storage Levels



- Historical Average
- Total Reservoir Capacity
- TOC
- 1976-1977 (dry)
- 1982-1983 (wet)
- 1996-1997
- 1997-1998
- 1998-1999
- 2020-2021
- 2021-2022
- 2022-2023
- 2023-2024
- 2024-2025
- 2025-2026 (current)

EXHIBIT O

Folsom - Storage Conditions, November 03, 2025



- Data as of Midnight: November 03, 2025
- Storage: 418,986 AF
 - Reservoir Elevation: 405.36 FT
 - 43% of Total Capacity
 - 100% of historical Avg. for this date
 - Total Capacity: 977,000 AF
 - Avg. Stor. for November 03: 417,136 AF

Change Date: 03-Nov-2025

Major Reservoirs Current Conditions Graphic

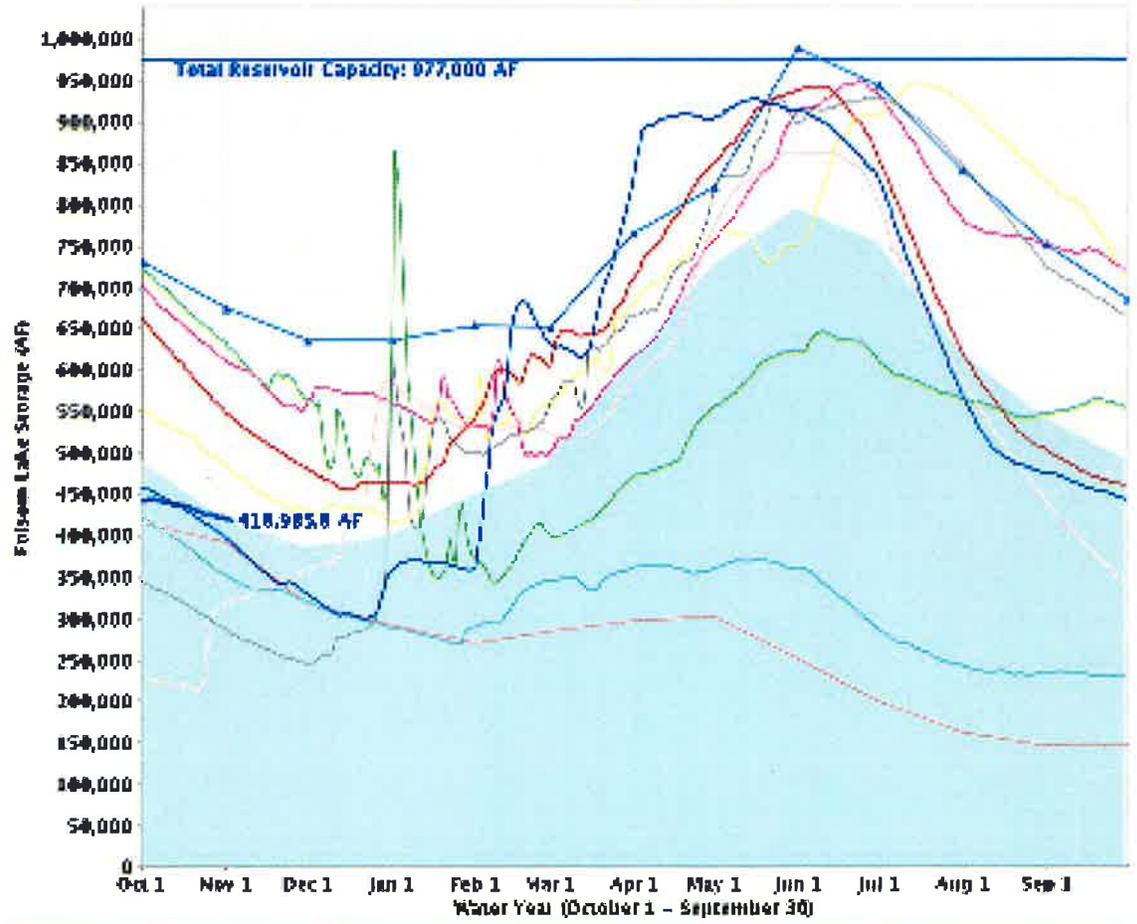
Trans-Sacramento Division of Current Data

Folsom Storage Level Graph: Choose water years to plot:

- 2020-2021
- 2021-2022
- 2022-2023
- 2023-2024
- 2024-2025
- 2025-2026(current)

click back for multiple select option

Folsom Lake Storage Levels



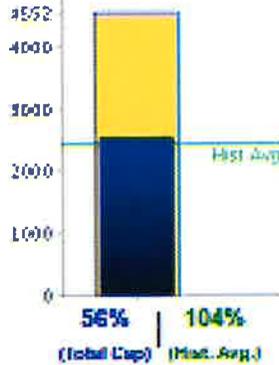
Historical Average	Total Reservoir Capacity	1976-1977 (dry)	1982-1983 (wet)	1996-1997	1997-1998	
1998-1999	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026(current)

EXHIBIT P

Shasta - Storage Conditions, November 03, 2025



Lake Shasta



Data as of Midnight: November 03, 2025

- Storage: 2,538,781 AF
- Reservoir Elevation: 586.18 FT
- **56% of Total Capacity**
- **104% of Historical Avg. for this Date**
- Total Capacity: 4,552,000 AF
- Avg. Stor. for November 03: 2,437,043 AF

Change Date: 03-Nov-2025

Map: Reservoirs Council Conditions Graphs

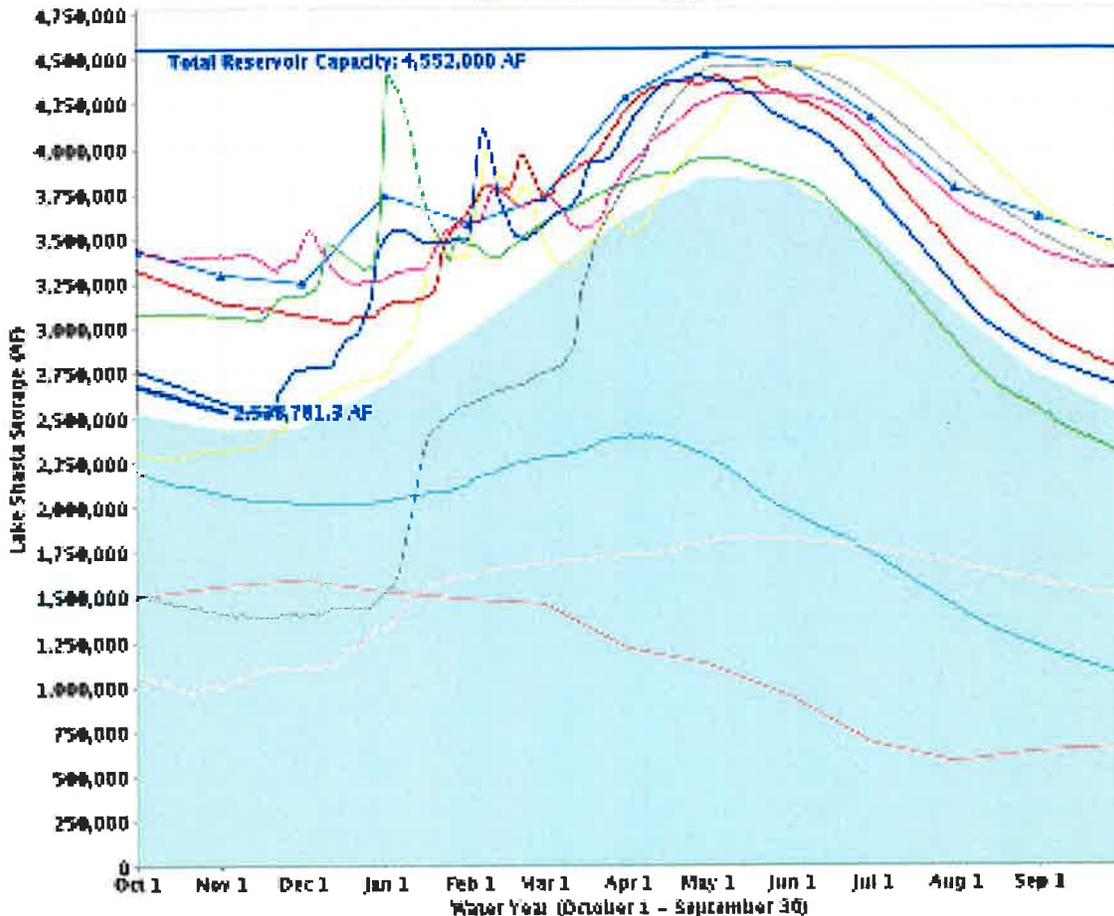
Reservoirs Council of Central Data

Shasta Storage Level Graph: Choose water years to plot:

- 2020-2021
- 2021-2022
- 2022-2023
- 2023-2024
- 2024-2025
- 2025-2026(current)

(click on for multiple selected)

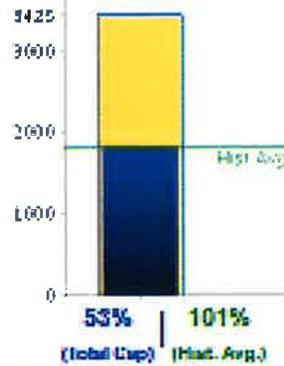
Lake Shasta Storage Levels



— Historical Average
 — Total Reservoir Capacity
 — 1976-1977 (dry)
 — 1982-1983 (wet)
 — 1996-1997
 — 1997-1998
— 1998-1999
— 2020-2021
— 2021-2022
— 2022-2023
— 2023-2024
— 2024-2025
— 2025-2026(current)

EXHIBIT Q

Oroville - Storage Conditions, November 03, 2025



Data as of Midnight: November 03, 2025

- Storage: 1,818,250 AF
- Reservoir Elevation: 773.04 FT
- 63% of Total Capacity
- 101% of Historical Avg. for this Date
- Total Capacity: 3,424,753 AF
- Avg. Stor. for November 03: 1,801,439 AF

Change Date: 03-Nov-2025

Map by Geacorn.com/Courtesy of Geacorn.com

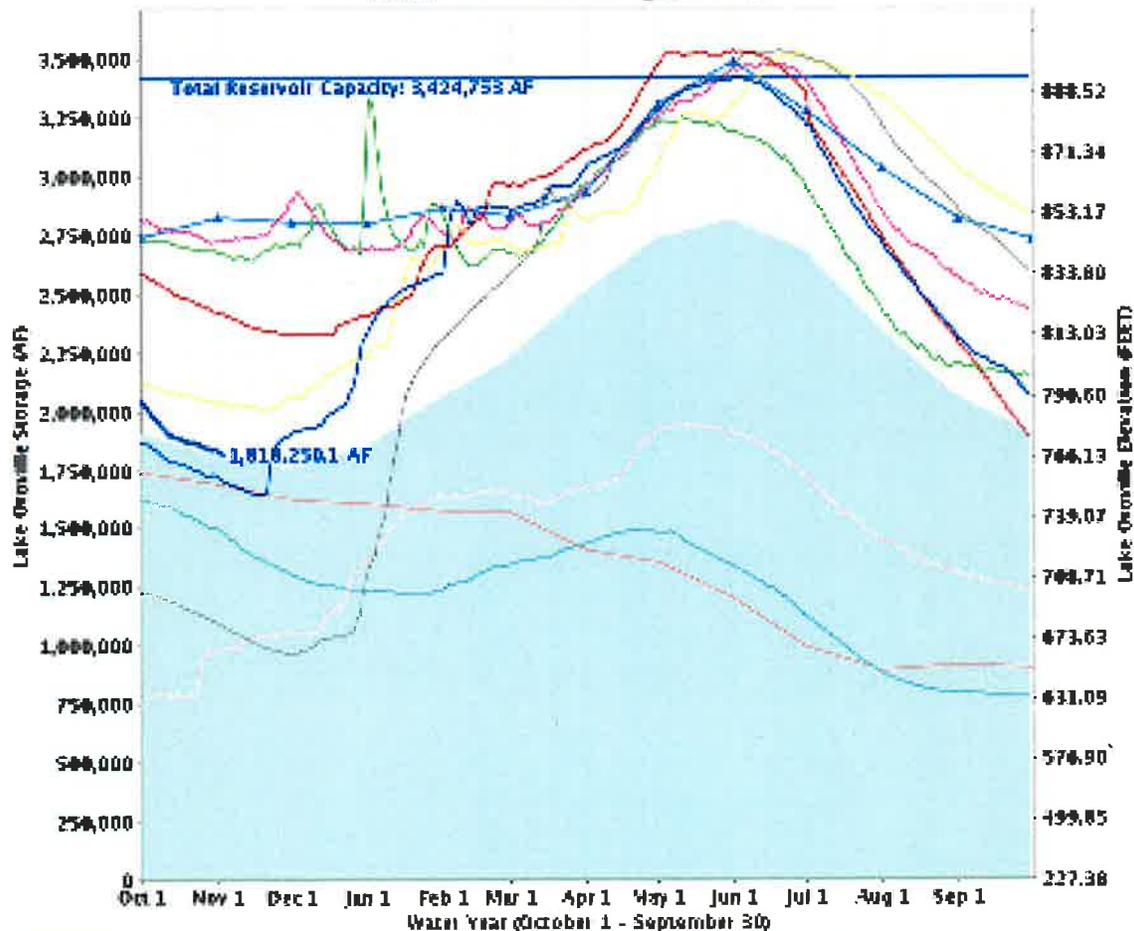
Pinable Version of Current Data

Oroville Storage Level Graph: Choose water years to plot:

- 2020-2021
- 2021-2022
- 2022-2023
- 2023-2024
- 2024-2025
- 2025-2026(current)

(ctrl click for multiple selections)

Lake Oroville Storage Levels



- Historical Average
- Total Reservoir Capacity
- 1976-1977 (dry)
- 1982-1983 (wet)
- 1996-1997
- 1997-1998
- 1998-1999
- 2020-2021
- 2021-2022
- 2022-2023
- 2023-2024
- 2024-2025
- 2025-2026(current)