

SECTION 00901

ADDENDUM NO. 1

1. GENERAL

Scope

This addendum modifies the Contract Documents dated December, 2022, for the San Lorenzo Valley Water District Redwood Park Pipeline Project, and the work shall be accomplished in accordance with such modifications. This Addendum includes two (2) pages plus three (3) attachments (total of 13 pages).

The Addenda includes Contractor Information Items, responses to questions, changes to the Bid and Contract Documents, followed by attachments.

Acknowledgment

Bidders must acknowledge this addendum as part of the bid submission by completing bidder's acknowledgment of addenda (Section 00300). Failure to acknowledge the addendum may constitute grounds for rejection of the bid.

2. CONTRACTOR INFORMATION ITEMS

None

3. RESPONSES TO QUESTIONS

None

4. CHANGES TO VOLUME 1, CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS

The following sections are amended as noted:

- A. Section 01 20 00, Measurement and Payment, is reissued, new and revised Bid Items are as follows:
 - a. Bid Item 11, 6-inch Hydrant Service is added
 - b. Bid Item 12, Hot Tap to existing 6-inch Mains
 - c. Bid Item 13: Cut-in 4-in Wye Connection to Existing.
 - d. Bid Item 14: Cut-in 8-inch x 6-inch Tee with 4-inch Reducer Connection to Existing.
 - e. Bid Item 15: Field Fit Connections to Existing 1.5-inch Mains.
 - f. Bid Item 16: Abandon Existing 4-inch and 1.5-inch Mains.
 - g. Bid Item 17: 2-inch Air-Vac Valve.
 - h. Bid Item 18: Install 1-inch Service Lines to Existing Water Meters.
 - i. Bid Item 19: 2-inch Asphalt Overlay

j. Bid Item 20: Striping

5. CHANGES TO VOLUME 2, BID FORMS

- A. Section 00300, Bid Schedule, is reissued to conform to the Bid Items described in **4. A.**, above.

6. CHANGES TO CONTRACT DRAWINGS

The following sheets are amended as noted, and provided as attachments:

- A. Sheet C1.1, Pipeline Notes, Pipeline Note Number 23 is added, as follows:

“23. Minimum wall-to-wall separation between pipes is to be 12-inches, unless otherwise specified.”
- B. Sheet C3.0, Proposed Site Plan is revised. The changed sheet is attached.
- C. Sheet C3.1, Proposed Details is revised. The changed sheet is attached.
- D. Sheet C4.0 Utility Details is revised. The changed sheet is attached.

END OF SECTION 00901

SECTION 01 20 00

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Methods of Measurement
- B. Description of Bid Items

1.02 METHODS OF MEASUREMENT

- A. Materials and items of work which are to be paid for on the basis of measurement shall be measured in accordance with the method stipulated in the particular sections involved. In determining quantities, all measurements shall be made in a horizontal plane unless otherwise specified.
- B. Measurements shall be in accordance with U.S. Standard Measures. A pound is an avoirdupois pound. A ton is 2,000 pounds' avoirdupois. The unit of liquid measure is the U.S. gallon. The unit of length is feet. The unit of volume is cubic yards.
- C. Material not used from a transporting vehicle shall be determined by the ENGINEER and deducted from the certified tag.
- D. When material is to be measured and paid for on a volume basis and it would be impractical to determine the volume, or when requested by the CONTRACTOR in writing and approved by the ENGINEER in writing, the material will be weighed and converted to volume measurement for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the ENGINEER and shall be agreed to by the CONTRACTOR before such method of measurement of pay quantities will be adopted.
- E. Full compensation for all expense involved in conforming to the above requirements for measuring and weighing materials shall be considered as included in the unit prices paid for the materials being measured or weighed and no additional allowances will be made therefore.
- F. Quantities of material wasted or disposed of in a manner not called for under the Contract; or rejected loads of material, including material rejected after it has been placed by reason of failure of the CONTRACTOR to conform to the provisions of the Contract; or material not unloaded from the transporting vehicle; or material placed outside the lines indicated on the plans or given by the ENGINEER; or material remaining on hand after completion of the Contract, will not be paid for and such quantities will not be included in the final total quantities. No compensation will be allowed for hauling rejected material.

- G. Bid items include all work necessary to complete the specific item described and not otherwise included in other bid items. The CONTRACTOR shall include in each bid item all costs required to construct the work in accordance with the Contract Documents and as identified below.

1.03 DESCRIPTION OF BID ITEMS

A. Bid Item 1: Mobilization/Demobilization.

- 1. The lump sum bid price for this item shall constitute full compensation for mobilization and demobilization including but not limited to equipment shipping and delivery, equipment set up, materials shipping and delivery, utility coordination, permitting including any required Santa Cruz County Construction Permitting, removal of equipment, and project closeout. The Mobilization/Demobilization bid item shall not be in excess of five percent (5%) of the total bid schedule. Twenty-five percent (25%) of the total Mobilization/Demobilization bid price shall be considered the cost of Demobilization and will not be paid until completion of the work.

B. Bid Item 2: Sheeting, Shoring and Bracing.

- 1. The lump sum bid price for this item shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide sheeting, shoring and bracing of excavations, trenches and grading as required in the Contract Documents. Cost shall include any engineering or geotechnical investigations performed by the CONTRACTOR.

C. Bid Item 3: Traffic Control

- 1. The lump sum bid price for this item shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide traffic control for the Work as required in the Contract Documents, and shall conform to Santa Cruz County Requirements. Price shall include, but is not limited to, signage, flagmen, lights, barricades, and pilot cars as needed.

D. Bid Item 4: 8-inch Ductile Iron Water Main.

- 1. The unit price per linear foot shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide 8-inch ductile iron water main. Price shall include, but is not limited to, thrust restraints, temporary caps or plugs, installation, disinfection, pressure testing, final connection to system, excavation, backfill, compaction, asphalt restoration and all other work or appurtenances required for a complete installation.
- 2. Measurement shall be along the final installed alignment, as measured in the field.

E. Bid Item 5: 6-inch Ductile Iron Water Main.

- 1. The unit price per linear foot shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide 6-inch ductile iron water main. Price shall include, but is not limited to, thrust restraints, temporary caps or plugs, installation, disinfection, pressure testing, final connection to system, excavation, backfill, compaction, asphalt restoration and all other work or appurtenances required for a complete installation.
- 2. Measurement shall be along the final installed alignment, as measured in the field.

F. Bid Item 6: 4-inch Ductile Iron Water Main.

1. The unit price per linear foot shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide 4-inch ductile iron water main. Price shall include, but is not limited to, thrust restraints, temporary caps or plugs, installation, disinfection, pressure testing, final connection to system, excavation, backfill, compaction, asphalt restoration and all other work or appurtenances required for a complete installation.
2. Measurement shall be along the final installed alignment, as measured in the field.

G. Bid item 7: 8-inch Resilient Wedge Gate Valve

1. The unit price per valve shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide an 8-inch resilient wedge gate valve on the new water main. Price shall include, but is not limited to, excavation, installation, thrust restraint, backfill, compaction, repaving and all other work or appurtenances required for a complete installation.

H. Bid item 8: 6-inch Resilient Wedge Gate Valve

1. The unit price per valve shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide a 6-inch resilient wedge gate valve on the new water main. Price shall include, but is not limited to, excavation, installation, thrust restraint, backfill, compaction, repaving and all other work or appurtenances required for a complete installation.

I. Bid item 9: 4-inch Resilient Wedge Gate Valve

1. The unit price per valve shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide a 4-inch resilient wedge gate valve on the new water main. Price shall include, but is not limited to, excavation, installation, thrust restraint, backfill, compaction, repaving and all other work or appurtenances required for a complete installation.

J. Bid item 10: 2-inch Resilient Wedge Gate Valve

1. The unit price per valve shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide a 2-inch resilient wedge gate valve on the new water main. Price shall include, but is not limited to, excavation, installation, thrust restraint, backfill, compaction, repaving and all other work or appurtenances required for a complete installation.

K. Bid Item 11: 6-inch Hydrant Service.

1. The unit price per hydrant shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide new 6-inch ductile iron pipe from the new 8-inch x 6-inch Tee to the existing hydrant location. Price shall include, but is not limited to, ductile iron pipe, hydrant bury, gate valve, valve box, breakaway check valve, excavation, installation, thrust restraint, backfill, compaction, repaving and all other work or appurtenances required for a complete installation.

- L. Bid Item 12: Hot Tap to existing 6-inch Mains.
1. The unit price per hot tap shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide 6-inch on 6-inch hot taps on existing HDPE water main. Price shall include, but is not limited to, tapping saddle, gate valve, valve can, excavation, installation, thrust restraint, backfill, compaction, repaving and all other work or appurtenances required for a complete installation.
- M. Bid Item 13: Cut-in 4-in Wye Connection to Existing.
1. The unit price per Wye shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide 4-inch ductile iron wye fitting connection to existing HDPE water main. Price shall include, but is not limited to, fitting(s), gate valve, valve can, excavation, installation, thrust restraint, backfill, compaction, repaving and all other work or appurtenances required for a complete installation.
- N. Bid Item 14: Cut-in 8-inch x 6-inch Tee with 4-inch Reducer Connection to Existing.
1. The unit price per Tee shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide 8-inch x 6-inch Tee with 4-inch Reducer and connection to existing HDPE water main. Price shall include, but is not limited to, fitting(s), gate valve, valve can, excavation, installation, thrust restraint, backfill, compaction, repaving and all other work or appurtenances required for a complete installation.
- O. Bid Item 15: Field Fit Connections to Existing 1.5-inch Mains.
1. The unit price per connection shall constitute full compensation for all material, labor, equipment, tools, and services necessary to field fit new pipe to an existing 1.5-inch galvanized steel water main. Price shall include, but is not limited to, excavation, thrust restraint, backfill, compaction, repaving and all other work or appurtenances required for a complete installation.
- P. Bid Item 16: Abandon Existing 4-inch and 1.5-inch Mains.
1. The lump sum bid price shall constitute full compensation for all material, labor, equipment, tools, and services necessary to abandon existing water mains as shown on the Drawings. Price shall include, but not be limited to, plugs, caps, fittings, grout, excavation, backfill, compaction, repaving and all other work or appurtenances required for a complete installation. CONTRACTOR to expose and cut back abandoned pipe, then plug with 2-sack slurry, in accordance with Section 020100-3.
- Q. Bid Item 17: 2-inch Air-Vac Valve.
1. The unit price per valve shall constitute full compensation for all material, labor, equipment, tools, and services necessary to provide a combination air-relief and vacuum breaker valve as shown on the Drawings. Price shall include, but not be limited to, tapping saddle, corporation stop, piping, concrete pedestal, valves, enclosure, excavation, backfill, compaction and all other work or appurtenances required for a complete installation.
- R. Bid Item 18: Install 1-inch Service Lines to Existing Water Meters.
1. The unit bid price per service shall constitute full compensation for all material, labor, equipment, tools, and services necessary to replace existing water service laterals. Price shall include, but is not limited to, tapping saddle, corporation stop, PE water service lateral, meter setter or angle stop, meter box, excavation, backfill, compaction, repaving and all other work or appurtenances required for a complete installation.

2. Item includes customer notifications with signage and door hangers.
 3. Owner shall furnish replacement water meters, if needed.
- S. Bid Item 19: 2-inch Asphalt Overlay
1. The unit price shall constitute full compensation for all material, labor, equipment, tools, and services necessary to place 2-inches of asphalt paving in all areas where required. Price shall include, but is not limited to, clean existing asphalt surface, provide and place tack coat, provide and place new AC, compact AC, and dispose of waste.
 2. Driveways and pullouts adjacent to newly paved areas shall be feathered in.
 3. Measurement shall be actual square yards of AC placed, as measured in the field.
- T. Bid Item 20: Striping
1. This lump sum price shall constitute full compensation for all material, labor, equipment, tools, and services necessary to replace in kind all existing striping damaged or destroyed during construction activities. Price shall include, but is not limited to, provide striping materials, place striping, and dispose of waste.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 00300

REDWOOD PARK PIPELINE REPLACEMENT BID SCHEDULE

ITEM NO.	ITEM/DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
1	Mobilization/Demobilization	1	LS		
2	Sheeting, shoring and bracing	1	LS		
3	Traffic Control	1	LS		
4	8-inch Ductile Iron Water Main	1260	LF		
5	6-inch Ductile Iron Water Main	40	LF		
6	4-inch Ductile Iron Water Main	31	LF		
7	8-inch Resilient Wedge Gate Valve	2	EA		
8	6-inch Resilient Wedge Gate Valve	2	EA		
9	4-inch Resilient Wedge Gate Valve	4	EA		
10	2-inch Resilient Wedge Gate Valve	1	EA		
11	6-inch Hydrant Service	1	EA		
12	Hot Tap Connections to Existing 6-inch Mains	2	EA		
13	Cut-in 4-in Wye Connection to Existing	1	EA		
14	Cut-in 8-inch x 6-inch Tee with 4-inch Reducer Connection to Existing	1	EA		
15	Field Fit Connections to Existing 1.5-inch Mains	4	EA		
16	Abandon Existing 4-inch and 1.5-inch Mains	1	LS		
17	2-inch Air-Vac Valve	1	EA		
18	Install 1-inch Service Lines to Existing Water Meters.	4	EA		
19	2-inch Asphalt Overlay	1000	SY		
20	Striping	1	LS		

TOTAL BID PRICE:

\$

Units: ALW=Allowance, CF=Cubic Foot, CY=Cubic Yard, DY=Day, EA = Each, HR=Hour, LF=Linear Foot, LS=Lump Sum, SF=Square Foot, SY=Square Yard, VLF=Vertical Linear Foot.

TOTAL BID (in words): _____

END OF SECTION 00300

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ENGINEER'S NOTES:

GENERAL CONSTRUCTION:

- ALL WORK SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS; COUNTY SPECIFICATIONS AND STANDARD DRAWINGS; AND SAN LORENZO VALLEY WATER DISTRICT'S (DISTRICT) STANDARD SPECIFICATIONS AND DRAWINGS.
- ALL SPECIFICATIONS, DRAWINGS, AND DETAILS INCLUDED IN THE CONTRACT DOCUMENTS SHALL FULLY APPLY TO THE WORK WHETHER OR NOT SPECIFICALLY REFERENCED. IF CONFLICTS ARISE, THE MORE STRINGENT REQUIREMENTS APPLY.
- UNLESS NOTED OTHERWISE, ALL WORK SHOWN IN THESE DOCUMENTS IS NEW AND TO BE PERFORMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THE PUBLIC RIGHT-OF-WAY, PERMANENT AND TEMPORARY EASEMENTS AND DISTRICT OWNED PROPERTY.
- THE CONTRACTOR IS ALLOWED TO USE THE FUTURE TANK SITE FOR STAGING FOR THIS PROJECT. IF ADDITIONAL STAGING AREAS ARE DESIRED, THE CONTRACTOR WILL BE RESPONSIBLE FOR SECURING THEM AT THEIR OWN EXPENSE.
- SANTA CRUZ COUNTY SHALL BE NOTIFIED IN CONFORMANCE WITH ANY RELEVANT ENCROACHMENT PERMIT REQUIREMENTS PRIOR TO START OF CONSTRUCTION. CONSTRUCTION WILL NOT TAKE PLACE ON WEEKENDS OR HOLIDAYS UNLESS SPECIFICALLY APPROVED BY THE DISTRICT AND ALLOWED BY THE ENCROACHMENT PERMITS.
- THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUALLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL HOLD THE DISTRICT AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.
- DIMENSIONED DISTANCES SHALL GOVERN OVER SCALED DISTANCES.
- MAINTAIN ON-SITE THE LATEST SIGNED CONSTRUCTION DRAWINGS AT ALL TIMES. MAINTAIN A COMPLETE AND ACCURATE RECORD OF ALL CHANGES IN CONSTRUCTION FROM THAT SHOWN ON THE PLANS AND SPECIFICATIONS FOR THE PURPOSE OF PROVIDING A BASIS FOR RECORD DRAWINGS. NO CHANGES SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL FROM THE DISTRICT'S REPRESENTATIVE.
- WORK SHALL BE DONE IN ACCORDANCE WITH THE APPROPRIATE ENCROACHMENT PERMITS.
- CONTRACTOR SHALL PROVIDE VIDEO DOCUMENTATION OF THE PRE-PROJECT CONDITION OF THE JOBSITE AND ALL ADJACENT PROPERTIES TO THE DISTRICT PRIOR TO START OF CONSTRUCTION. VIDEO OF ADJACENT PROPERTIES SHALL BE LIMITED TO WHAT CAN BE RECORDED WITHOUT LEAVING THE JOBSITE OR ROW. CONTRACTOR SHALL PROTECT EXISTING JOBSITE CONDITIONS AND ADJACENT PROPERTIES DURING THE WORK AND REPAIR DAMAGE TO LANDSCAPING, PAVING, IRRIGATION, STRUCTURES, ETC., CAUSED BY THE WORK.
- CONTRACTOR SHALL MAINTAIN SAFE AND CONTINUOUS ACCESS TO ALL BUSINESSES, RESIDENCES, AND PUBLIC FACILITIES IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. ACCESS INTERRUPTIONS SHALL BE PUBLICIZED A MINIMUM OF 48 HOURS IN ADVANCE; ALL AFFECTED BUSINESSES, RESIDENTS, AND/OR PUBLIC FACILITIES SHALL BE NOTIFIED. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN CONFORMING TO THE MUTCD TO THE DISTRICT A MINIMUM OF 5 BUSINESS DAYS PRIOR TO MOBILIZATION.
- DUST SHALL BE CONTROLLED AT ALL TIMES BY APPROVED METHODS.
- IN ACCORDANCE WITH CALIFORNIA HEALTH AND SAFETY CODE SECTION 7050.5, THE CONTRACTOR SHALL NOTIFY THE COUNTY CORONER IF HUMAN REMAINS ARE DISCOVERED DURING THE COURSE OF THE WORK.
- CONTRACTOR SHALL CONTROL ALL RUNOFF FROM CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT AND MAINTENANCE OF ALL BMPS PRIOR TO ANY CONSTRUCTION ACTIVITIES OCCURRING AND THROUGHOUT THE DURATION OF THE PROJECT.
- ALL DEBRIS, BRUSH, AND RUBBISH WITHIN THE WORK AREA SHALL BE REMOVED AND DISPOSED OF DAILY, EXCEPT AS OTHERWISE REQUIRED. SAID MATERIALS SHALL BE LEGALLY DISPOSED OF IN AN APPROVED OFFSITE LOCATION. WHERE REMOVAL OF SUBSURFACE OBSTRUCTIONS IS NECESSARY, CAVITIES CREATED BY THE REMOVAL SHALL BE CLEARED OF ALL LOOSE DEBRIS AND SOIL AND SHAPED TO PROVIDE ACCESS FOR BACKFILLING AND COMPACTION EQUIPMENT.

UNDERGROUND FACILITIES:

- ENGINEER HAS SEARCHED AVAILABLE KNOWN RECORDS FOR INFORMATION ABOUT UNDERGROUND FACILITIES INCLUDING FACILITIES PRESENTLY BEING DESIGNED IN THE VICINITY OF THE PROJECT. TO THE BEST OF THE ENGINEER'S ABILITY THOSE UNDERGROUND FACILITIES WHICH MAY AFFECT THE WORK ARE SHOWN ON THESE DRAWINGS. NOTE THAT PG&E HAS DECLARED NO UNDERGROUND GAS LINES WITHIN THIS PROJECT AREA. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE PRESENCE AND LOCATION OF ALL EXISTING FACILITIES BY POTHOLING OR OTHER POSITIVE METHODOLOGY, AND SHALL MAINTAIN 5' CLEARANCE AROUND ANY UNDERGROUND GAS UTILITIES.
- AT LEAST 48 HOURS BEFORE COMMENCING ANY EXCAVATION, CONTRACTOR SHALL REQUEST UNDERGROUND SERVICE ALERT AND NON-MEMBER COMPANIES OR UTILITIES TO MARK OR OTHERWISE INDICATE THE LOCATION(S) OF THEIR SUBSURFACE FACILITIES.
- PRIOR TO PIPELINE EXCAVATION CONTRACTOR SHALL EXCAVATE AND EXPOSE EXISTING FACILITIES (POTHOLE) IN LOCATIONS WHERE NEW FACILITIES ARE PROPOSED TO ESTABLISH THE EXACT LOCATION SIZE, AND DEPTH, AND DETERMINE IF THERE WILL BE AN INTERFERENCE WITH PROPOSED FACILITIES. CHANGES OR DELAYS CAUSED BY CONTRACTOR'S FAILURE TO PERFORM "POTHOLING" AND INTERFERENCE LOCATION WORK SHALL NOT BE ELIGIBLE FOR EXTRA WORK COMPENSATION OR TIME EXTENSION. UPON LEARNING OF THE EXISTENCE OR LOCATION OF ANY UNDERGROUND FACILITY OMITTED OR SHOWN INCORRECTLY ON THESE DRAWINGS, OR IMPROPERLY MARKED OR OTHERWISE INDICATED, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DISTRICT, PROVIDING FULL DETAILS AS DEPTH, LOCATION, SIZE, AND FUNCTION.
- CONTRACTOR SHALL PRESERVE ALL SURVEY MARKERS AND MONUMENTATION IN PLACE. IF ANY EXISTING MONUMENTS REQUIRE REMOVAL TO PERFORM THE WORK, CONTRACTOR SHALL NOTIFY THE DISTRICT A LEAST 5 DAYS IN ADVANCE OF CONSTRUCTION.
- USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD POWER OR OTHER UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT. PROTECT FROM DAMAGE INCURRED DURING CONSTRUCTION ALL OVERHEAD UTILITY LINES WHETHER SHOWN OR NOT SHOWN ON THESE PLANS. NOTIFY UTILITY COMPANIES PRIOR TO ANY WORK IN OVERHEAD LOCATION. CONTRACTOR SHALL BE RESPONSIBLE FOR COST INCURRED.

PIPELINE NOTES:

- CONTRACTOR TO POTHOLE EXISTING WATER LINES TO VERIFY EXACT DEPTH, MATERIAL, SIZE, AND LOCATION.
- CONTRACTOR TO VERIFY ALL MATERIAL QUANTITIES.
- MINIMUM PIPE COVER SHALL BE 36" MEASURED FROM THE TOP OF THE BELL .
- PIPELINES SHALL SLOPE UNIFORMLY BETWEEN INVERT ELEVATIONS. CONTRACTOR SHALL PROVIDE ALL SHORTS, SPOOLS, AND FITTINGS NECESSARY TO MEET DEPTHS REQUIRED (SEE C-4.0).
- ALL VERTICAL CHANGES IN PIPE ALIGNMENT DELINEATED ON THE PLANS AS SHOWN WITHOUT BENDS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- CONNECTIONS MADE BETWEEN DIFFERENT CLASSES OF PIPE SHALL BE MADE WITH MATERIALS RATED FOR THE HIGHER PRESSURE CLASS.
- ALL NEW VALVES SHALL BE FLANGED DIRECTLY TO A TEE, CROSS OR OTHER FITTING. VALVES SHALL BE ACCESSIBLE FOR OPERATION WITH COMPLETE VALVE BOX PRIOR TO CONNECTION TO EXISTING WATER SYSTEM.
- THE WATER SYSTEM SHALL BE HYDROSTATICALLY TESTED PRIOR TO CONNECTION TO EXISTING SYSTEM.
- A DISTRICT REPRESENTATIVE MUST BE PRESENT ON SITE TO WITNESS TIE-INS.
- WATER PIPELINE CROSSINGS OVER UTILITIES MUST HAVE A 1-FOOT VERTICAL CLEARANCE BETWEEN WATER PIPE AND UTILITY, UNLESS APPROVED BY A DISTRICT REPRESENTATIVE. PIPELINES CROSSING OVER SEWER OR STORM LINES MUST MEET MINIMUM CLEARANCE REQUIREMENTS AND ANGLE OF APPROACH AS REQUIRED BY THE STATE WATER RESOURCE CONTROL BOARD DIVISION OF DRINKING WATER.
- CONTRACTOR SHALL ADJUST ALL VALVE BOXES, FIRE HYDRANTS, BLOW OFFS, AIR VACS, ETC. TO FINISHED GRADE UNLESS OTHERWISE SHOWN OR DIRECTED.
- FIRE HYDRANTS, METER BOXES, AIR VACS AND BLOW OFFS SHALL BE LOCATED NO CLOSER THAN 5 FEET FROM BEGINNING OF CURB RETURN, DRIVEWAY, OR ANY OTHER UTILITY. FINAL APPURTENANCE PLACEMENT TO BE DETERMINED IN THE FIELD BY A DISTRICT REPRESENTATIVE.
- THE CONTRACTOR IS ALERTED THAT THERE IS ASBESTOS CEMENT PIPE (ACP) IN THE SYSTEM. WHILE ACP SHOULD NOT BE ENCOUNTERED IN THIS PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ANCILLARY WORK REQUIRED, INCLUDING THE HANDLING AND DISPOSAL OF HAZARDOUS MATERIALS. ALL HANDLING, REMOVAL AND DISPOSAL SHALL BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL LAWS AND STANDARDS.
- CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM SAMPLING, DISINFECTION, AND DECHLORINATION TO THE SATISFACTION OF THE DISTRICT PRIOR TO MAKING CONNECTIONS BETWEEN NEW AND EXISTING FACILITIES.
- ALL PIPELINE TO BE CONSTRUCTED USING PRESSURE CLASS 350 DUCTILE IRON PIPE (DIP) WRAPPED WITH PLASTIC PER CALTRANS STANDARD.
- ALL FITTING TO PIPE CONNECTIONS TO BE FULLY RESTRAINED UTILIZING MECHANICAL JOINT FITTINGS, AND ALL FITTING TO FITTING CONNECTIONS TO BE FLANGED. ALL PUSH-ON JOINTS TO USE FIELD LOK GASKETS, OR EQUAL APPROVED BY ENGINEER.
- PROVIDE CONCRETE THRUST BLOCKS PER SD-8 FOR ANY CONNECTION NOT FULLY RESTRAINED.
- CONTRACTOR TO CUT OVER EXISTING SERVICES TO NEW MAIN. CONTRACTOR TO PROVIDE AND SET ALL REQUIRED METER BOXES IN CONFORMANCE WITH SLVWD STANDARD DETAILS (SD-4).
- MAINTAIN 3' CLEAR FROM OUTBOARD EDGE OF PIPE TO EDGE OF EXISTING PAVEMENT, UNLESS OTHERWISE SPECIFIED.
- ALL MAINS LABELED AS ABANDON IN PLACE TO BE CUT & CAPPED IN ACCORDANCE WITH ALL SLVWD SPECIFICATIONS.
- TRENCH BACKFILL TO BE 2-SACK SLURRY IN CONFORMANCE WITH SLVWD SPECIFICATION 7.2.1 TO 4-INCHES BELOW GRADE. PLACE HOT MIX ASPHALT IN TWO LIFTS OF 2-INCHES EACH TO FINISH GRADE. FINISH GRADE TO MATCH EXISTING GRADE.
- DISTRICT PERSONNEL SHALL OPERATE ALL VALVES WITHIN THE ACTIVE WATER SYSTEM. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH DISTRICT AS REQUIRED.
- MINIMUM WALL-TO-WALL SEPARATION BETWEEN PIPES IS TO BE 12-INCHES, UNLESS OTHERWISE SPECIFIED.

ABBREVIATIONS:

APPROX.	APPROXIMATELY
AC	ASPHALTIC CEMENT
ACP	ASBESTOS CEMENT PIPE
DIP	DUCTILE IRON PIPE
DWG	DRAWING
EX	EXISTING
FLG	FLANGED
FH	FIRE HYDRANT
G.V.	GATE VALVE
HDPE	HIGH-DENSITY POLYETHYLENE PIPE
MJ	MECHANICAL JOINT
PP	POWER POLE
ROW	RIGHT OF WAY
SD	STORM DRAIN
SLVWD	SAN LORENZO VALLEY WATER DISTRICT
TEMP	TEMPORARY
WM	WATER METER



DATE:	12/22/2022
SCALE:	N/A
DRAWN BY:	JWS
APPROVED BY:	JLW

NOTES SHEET

No.	REVISION/ISSUE	DATE	BY
1	REVISION FOR BIDDING	12/22/22	JWS

REDWOOD PARK PIPELINE

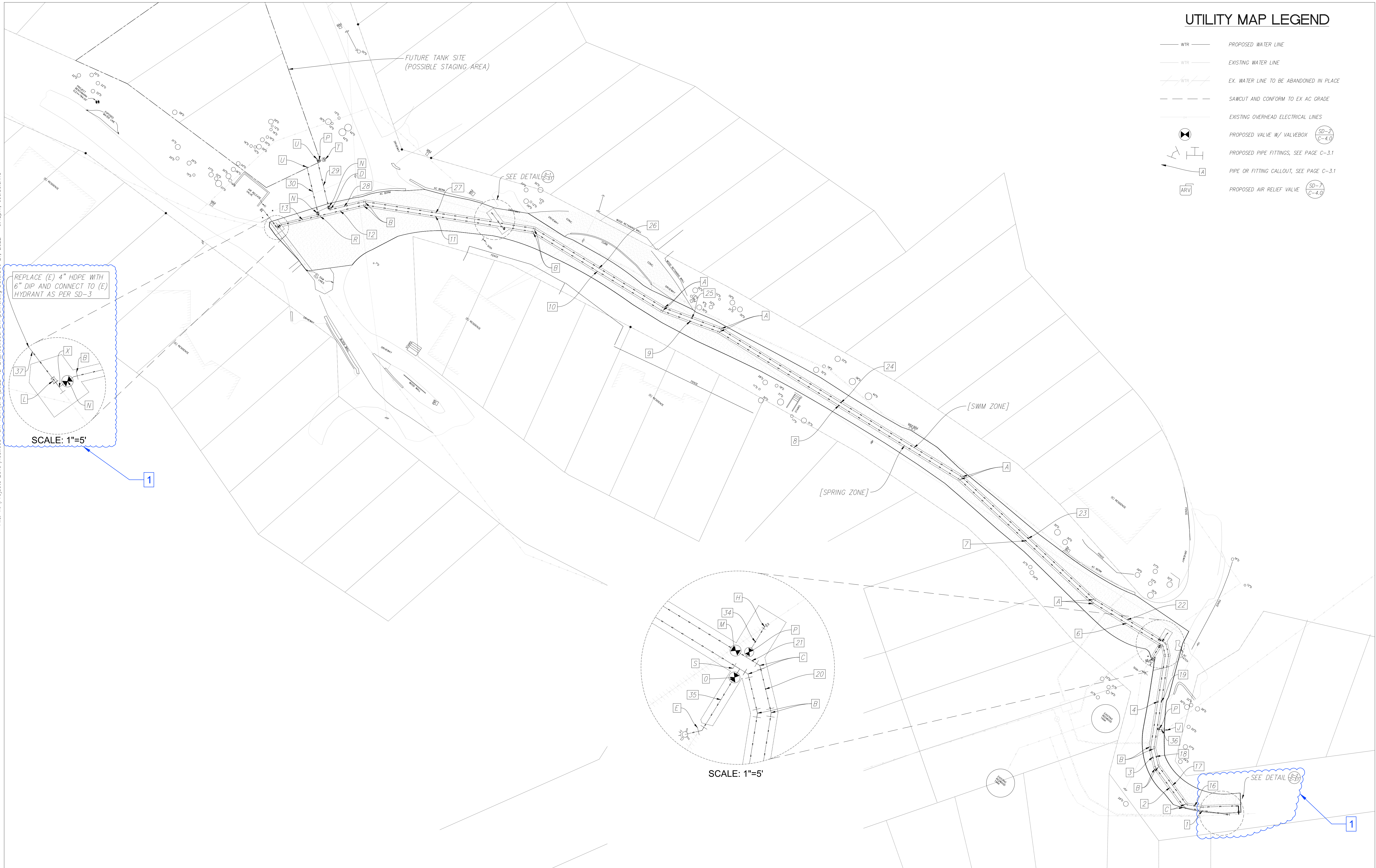


13060 Hwy 9
Boulder Creek, CA 95006
(831) 338-2153

SHEET

C-1.1

File: R:\Projects\2019\Redwood Park Tank (CAD)\2022-12-21_RedwoodParkPipeline.dwg Date: Dec. 21, 2022 - 6:12pm, JoeScianna



DATE: 12/22/2022
SCALE: 1"=20'
DRAWN BY: JWS
APPROVED BY: JLW

**PROPOSED
SITE PLAN**

No.	REVISION/ISSUE	DATE	BY
1	REVISION FOR BIDDING	12/22/22	JWS

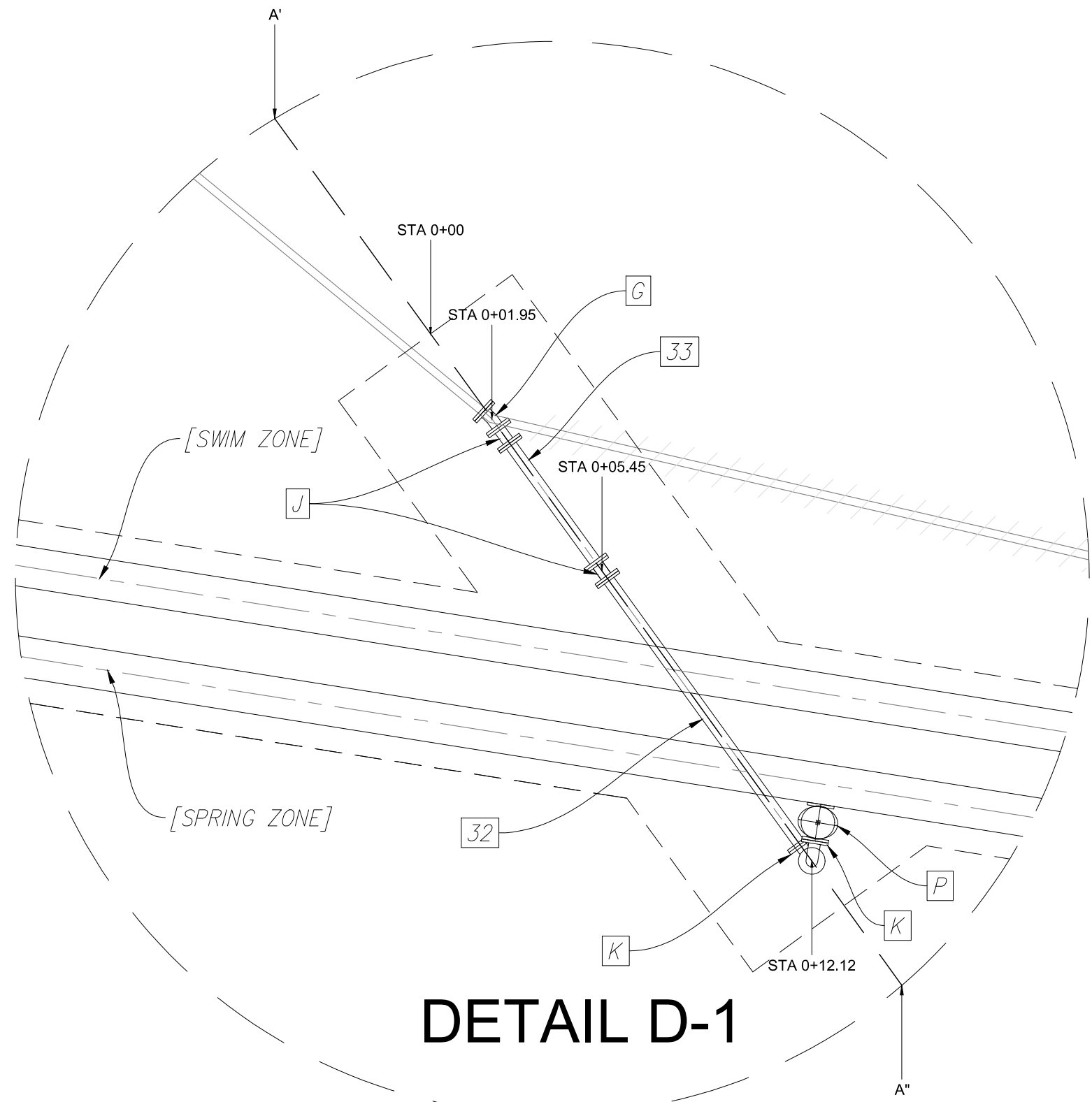
REDWOOD PARK PIPELINE



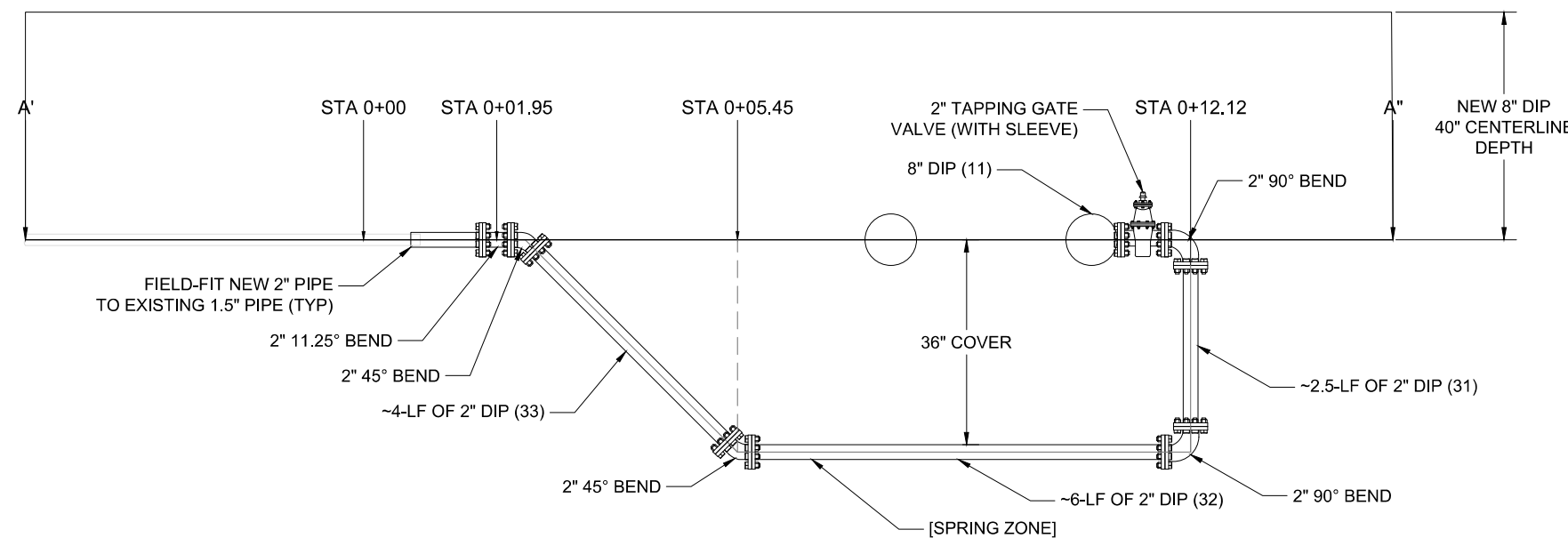
13060 Hwy 9
Boulder Creek, CA 95006
(831) 338-2153

SHEET
C-3.0

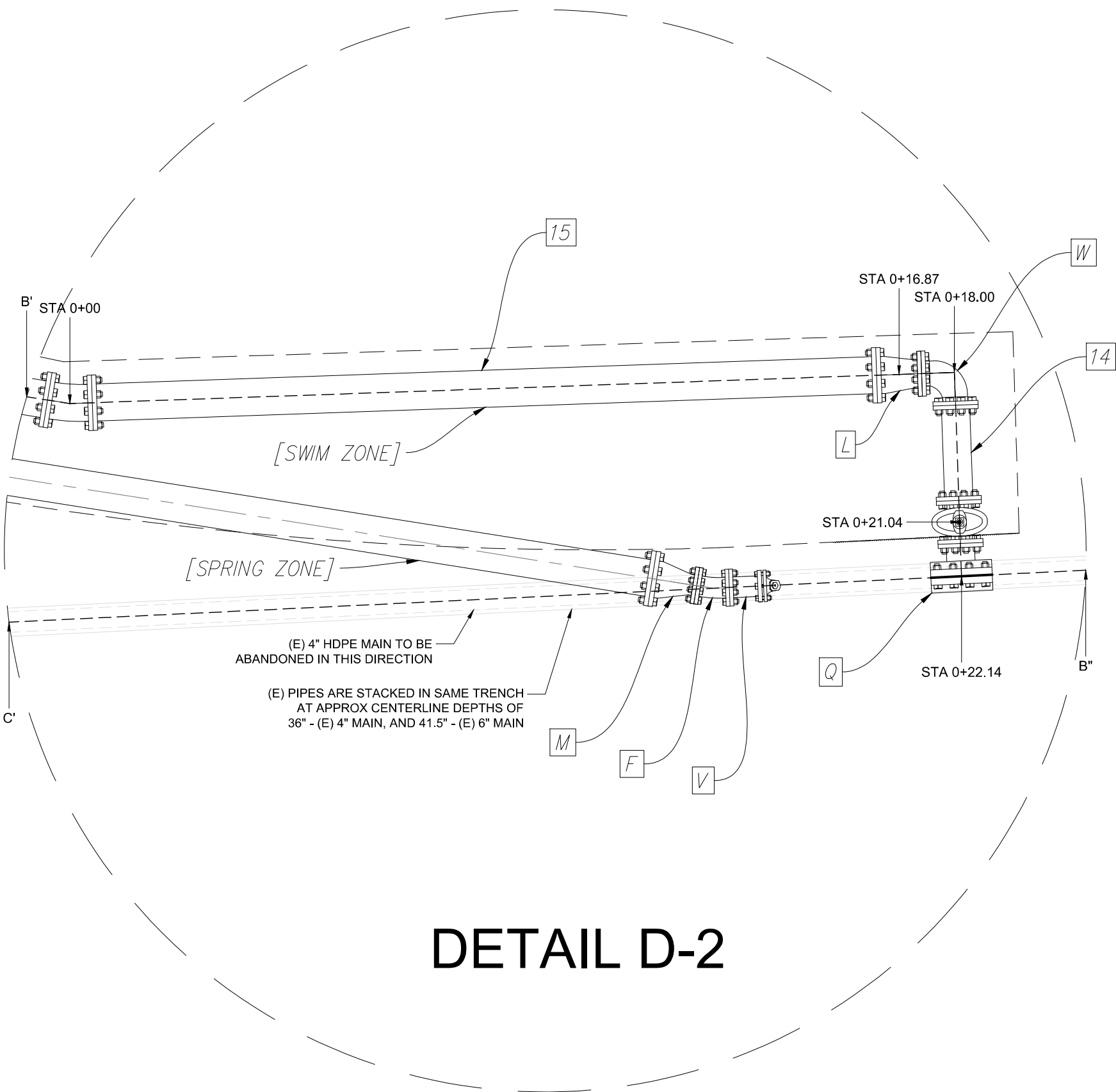
File: R:\Projects 2019\Redwood Park Tank (CAD)\2022-12-21_RedwoodParkPipeline.dwg Date: Dec 21, 2022 - 6:12pm, Joel Scianna



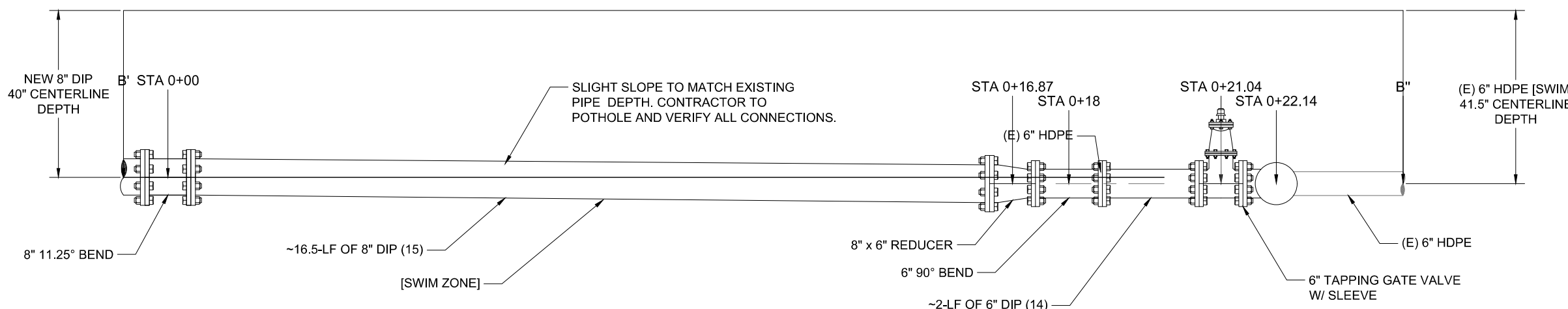
DETAIL D-1



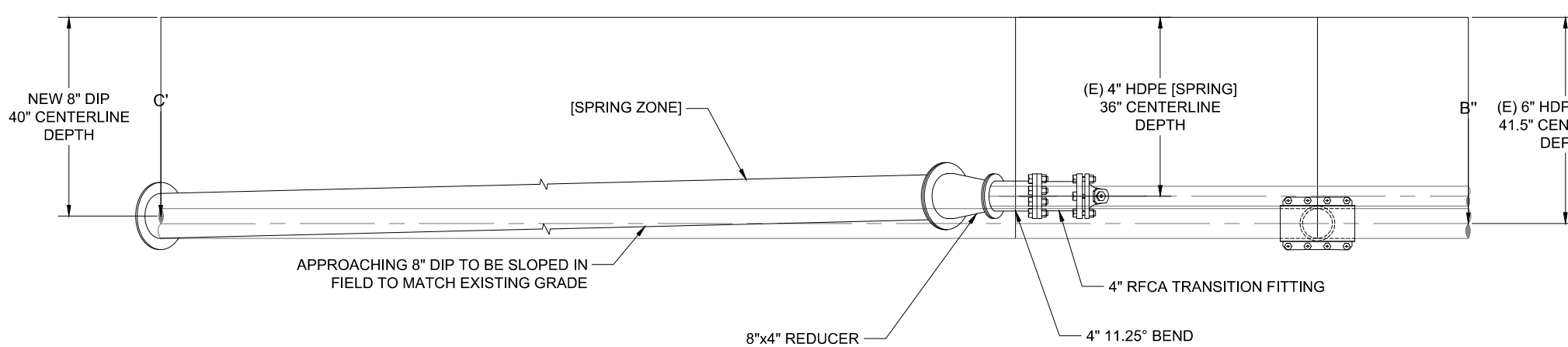
PROFILE A'-A''



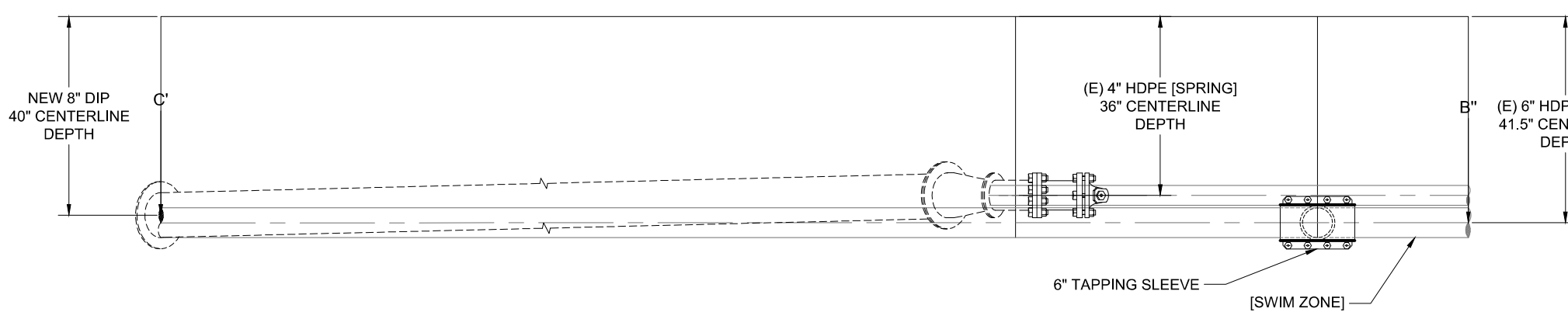
DETAIL D-2



PROFILE B'-B''



PROFILE C'-B'' [SPRING ZONE]



PROFILE C'-B'' [SWIM ZONE]

FITTING SCHEDULE

CALLOUT LETTER	FITTING TYPE	DIAMETER(S) (INCHES)
A	11.25° BEND	8"
B	22.5° BEND	8"
C	45° BEND	8"
D	90° BEND	8"
E	45° BEND	6"
F	11.25° BEND	4"
G	11.25° BEND	2"
H	22.5° BEND	2"
J	45° BEND	2"
K	90° BEND	2"
L	REDUCER	8" TO 6"
M	REDUCER	8" TO 4"
N	GATE VALVE	8"
O	GATE VALVE	6"
P	TAPPING SLEEVE WITH GATE VALVE	2"
Q	TAPPING SLEEVE WITH GATE VALVE	6"
R	TEE	8"x8"x8"
S	REDUCING TEE	8"x6"x8"
T	AIR RELIEF VALVE	2"
U	BLIND FLANGED CAP	8"
V	RFCA TRANSITION FITTING TO HDPE	4"
W	90° BEND	6"
X	REDUCING TEE	6"x8"x6"

NOTE: ALL FITTING TO PIPE CONNECTIONS WILL BE MECHANICAL JOINT, AND ALL FITTING TO FITTING CONNECTIONS WILL BE FLANGE x FLANGE.

PIPE SCHEDULE

PIPE NUMBER	LENGTH (FEET)	DIAMETER (INCHES)
1	~22	8
2	25	8
3	10	8
4	~46.5	8
5	5	8
6	39.5	8
7	90	8
8	140	8
9	30	8
10	75	8
11	~84.5	8
12	23.5	8
13	19.5	8
14	2	6
15	16	8
16	8	8
17	24	8
18	9.5	8
19	46.5	8
20	6	8
21	3.5	8
22	38	8
23	90	8
24	~140.5	8
25	30	8
26	~75	8
27	~85	8
28	18	8
29	25	8
30	25	8
31	2.5	2
32	6	2
33	4	2
34	~4.5	2
35	~9	2
36	4	2
37	12	6

NOTE: DIMENSIONS ARE PLAN VIEW DISTANCES BETWEEN NODES, AND DO NOT INCLUDE CHANGES DUE TO ELEVATION OR FIXTURES.



DATE: 12/22/2022
SCALE: 1"=2.5'
DRAWN BY: JWS
APPROVED BY: JLW

PROPOSED
DETAILS

No.	REVISION/ISSUE	DATE	BY
1	REVISION FOR BIDDING	12/22/22	JWS

REDWOOD PARK PIPELINE

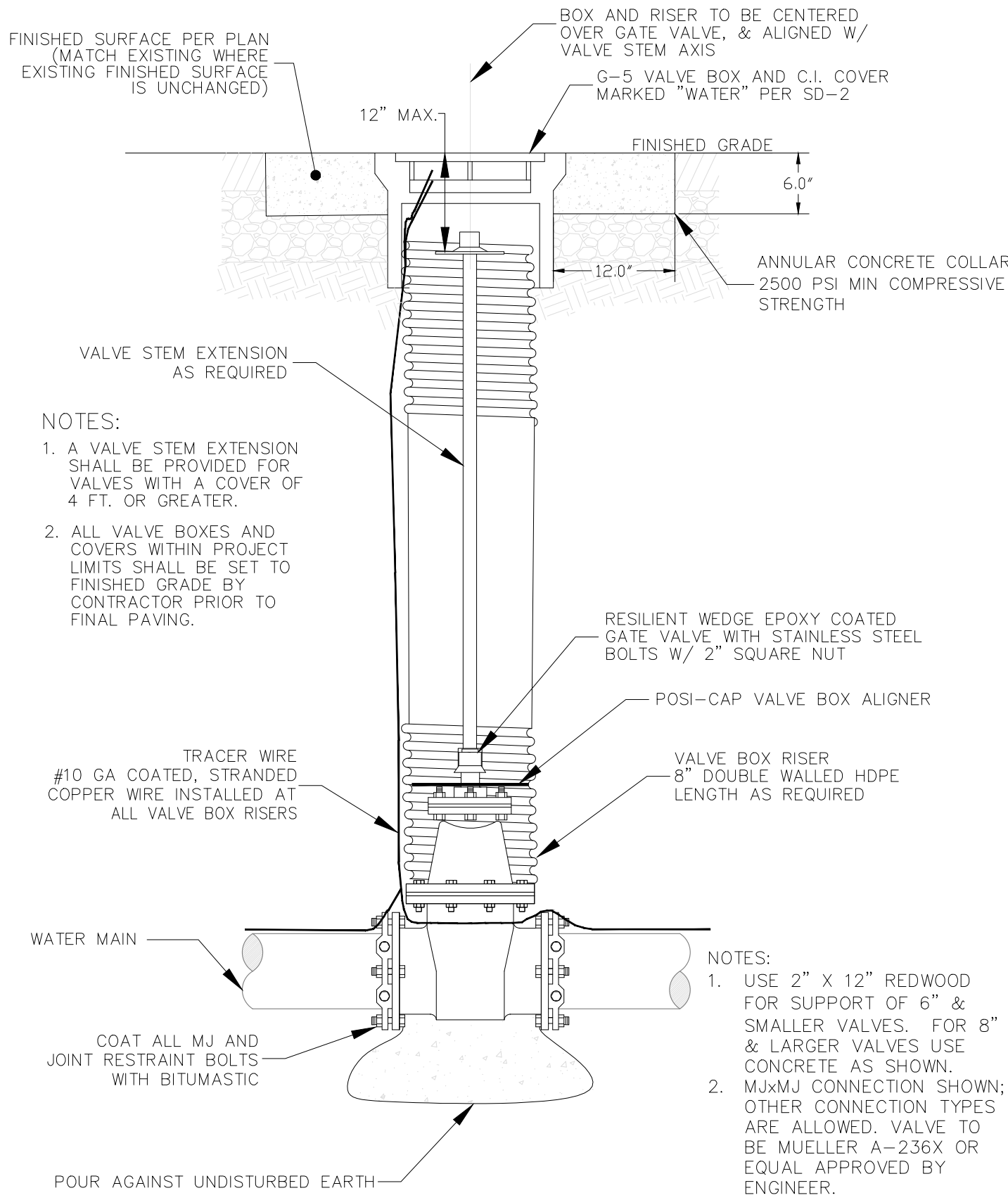


13060 Hwy 9
Boulder Creek, CA 95006
(831) 338-2153

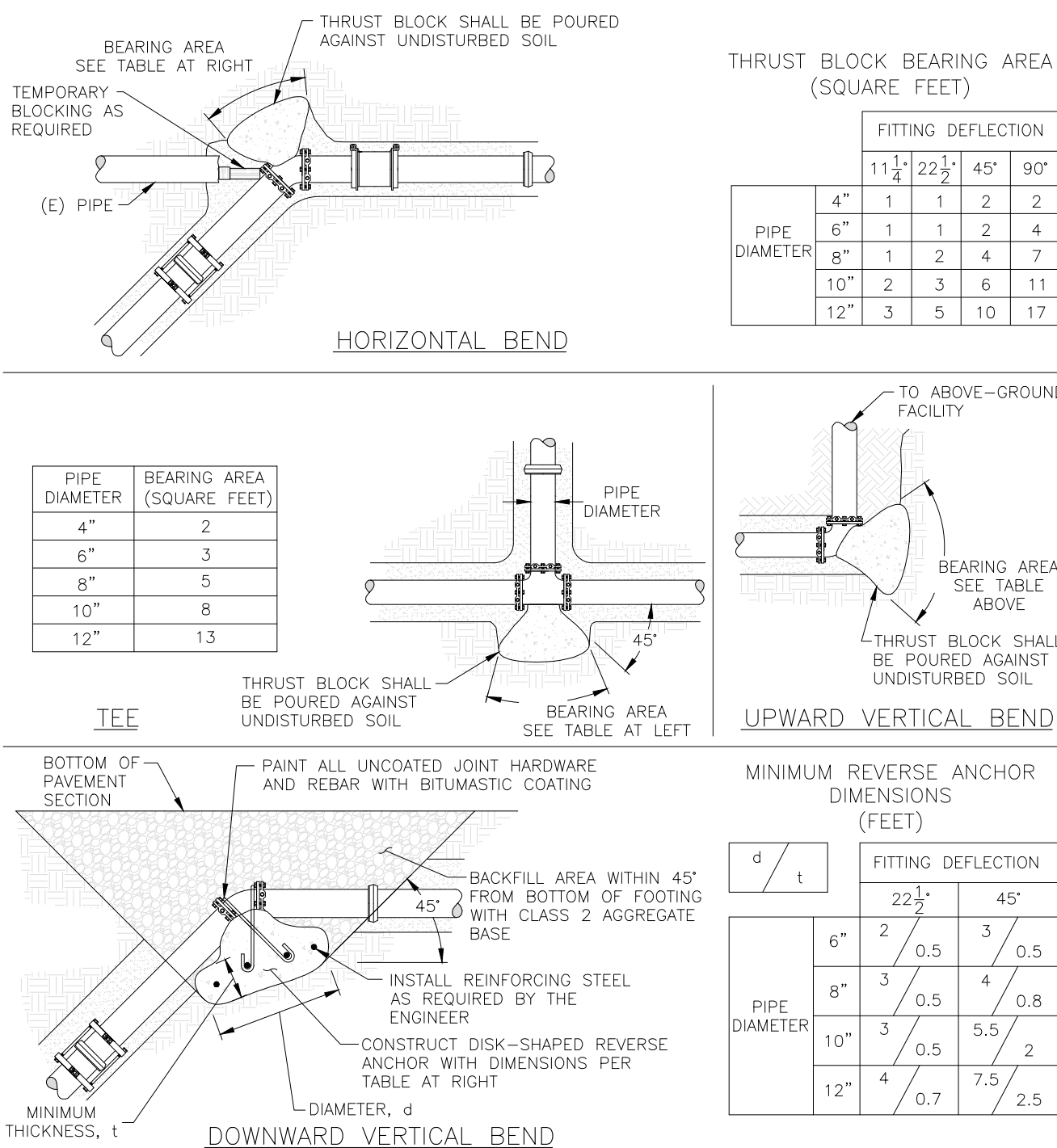
SHEET

C-3.1

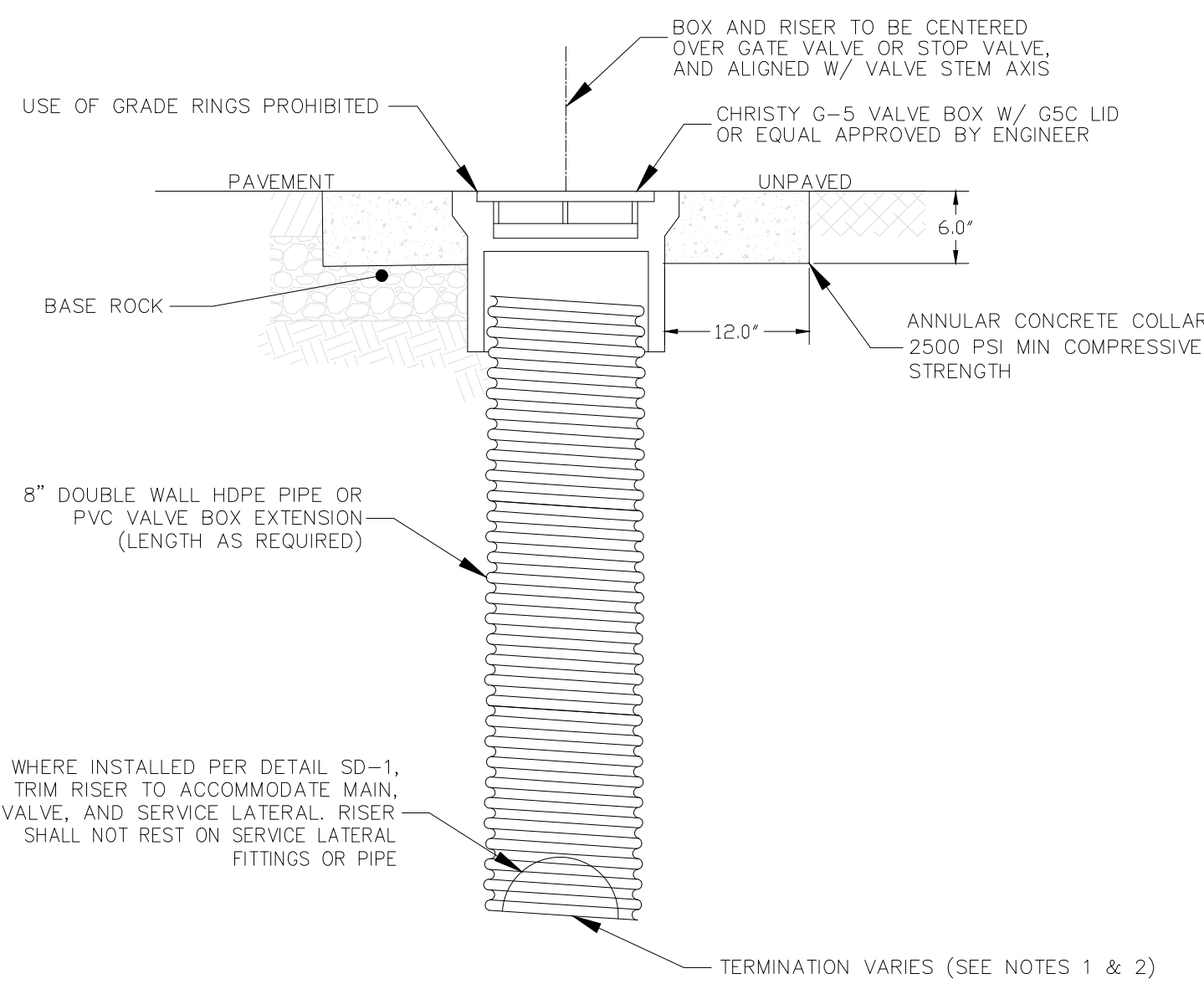
File: R:\Projects 2019\Redwood Park Tank CAD\2022-12-21_RedwoodParkPipeline.dwg Date: Dec 21, 2022 - 6:19pm, Joel Scianna



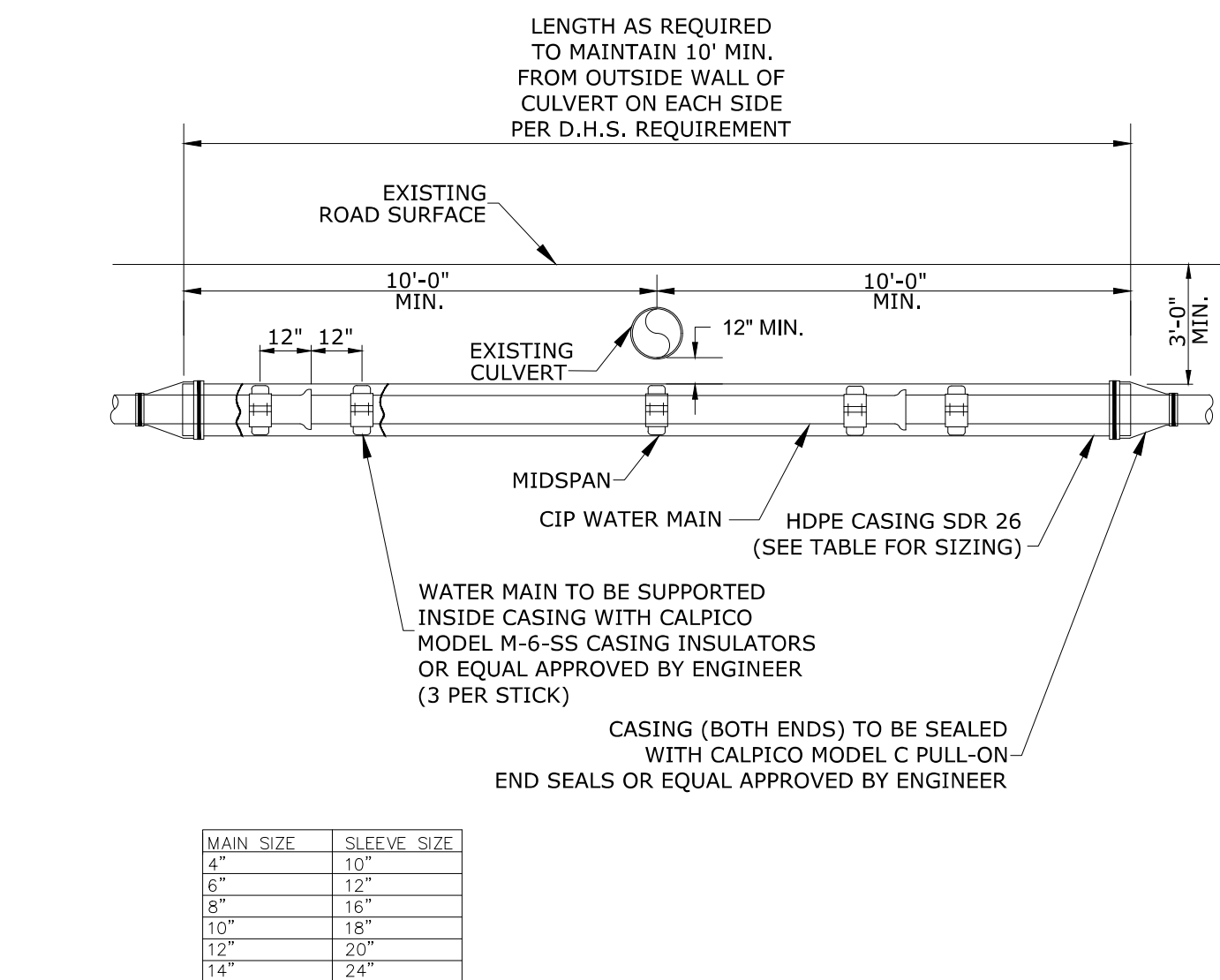
SD-1 GATE VALVE INSTALLATION



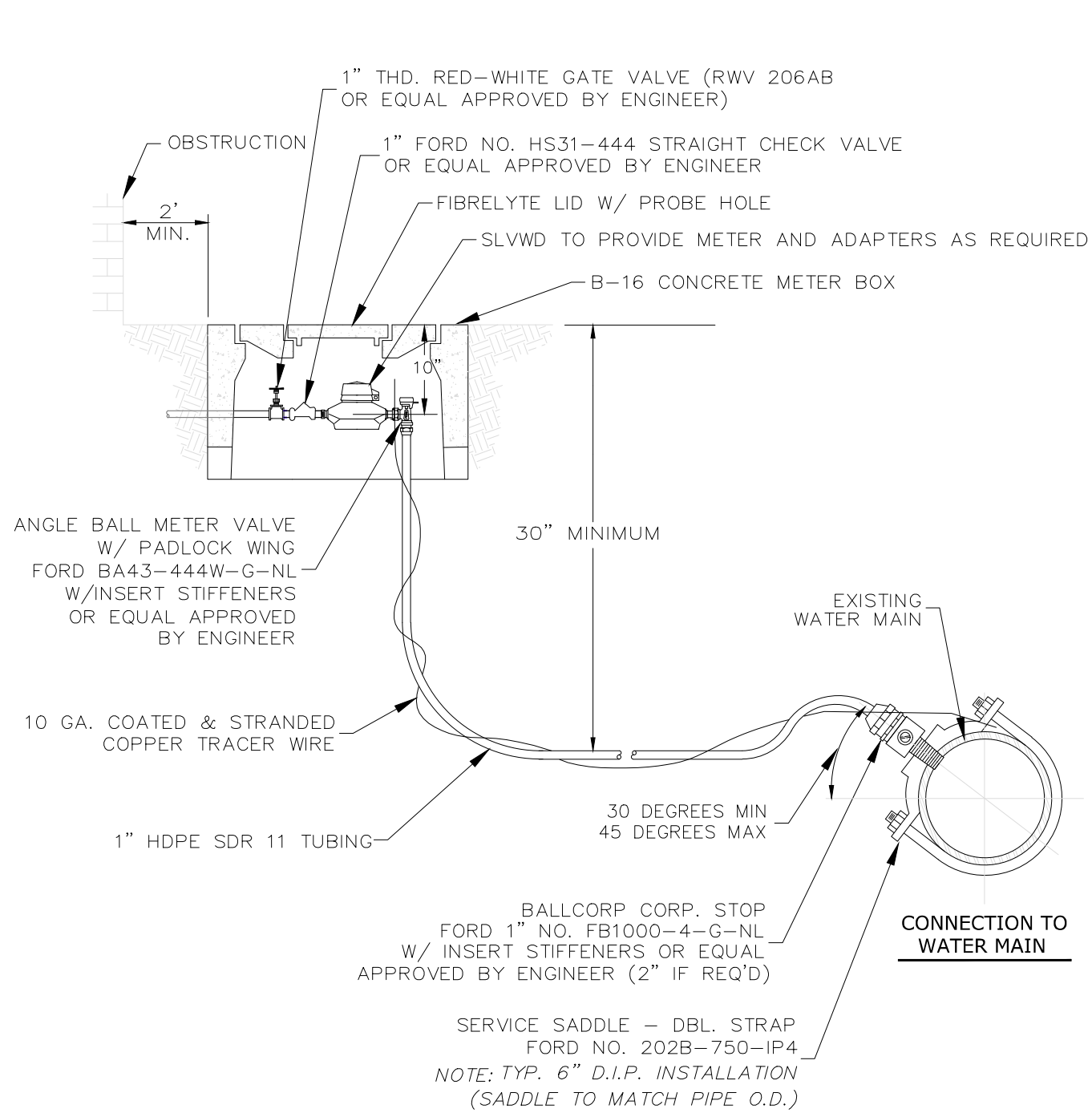
SD-8 THRUST BLOCK DETAIL



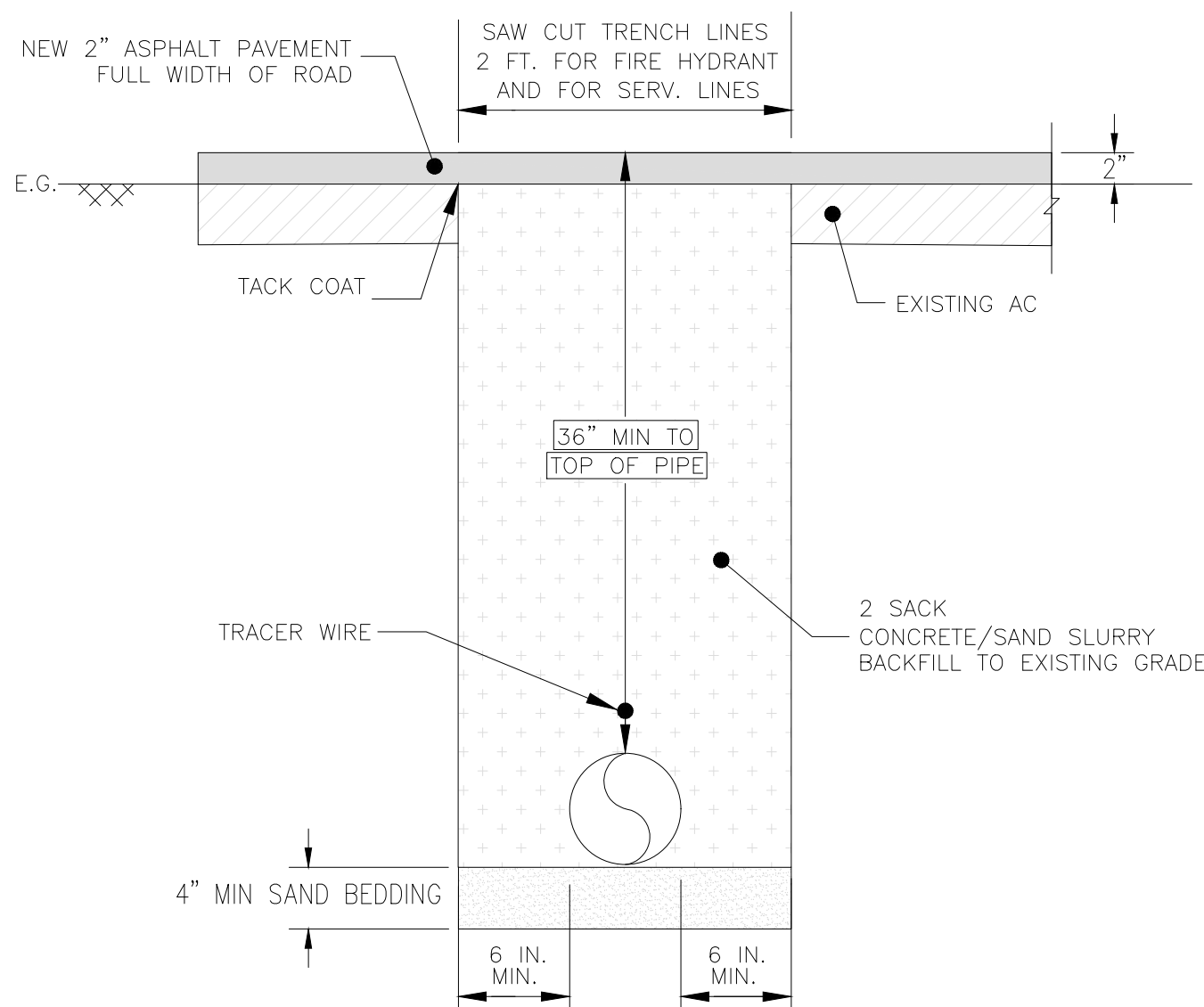
SD-2 VALVE BOX DETAIL



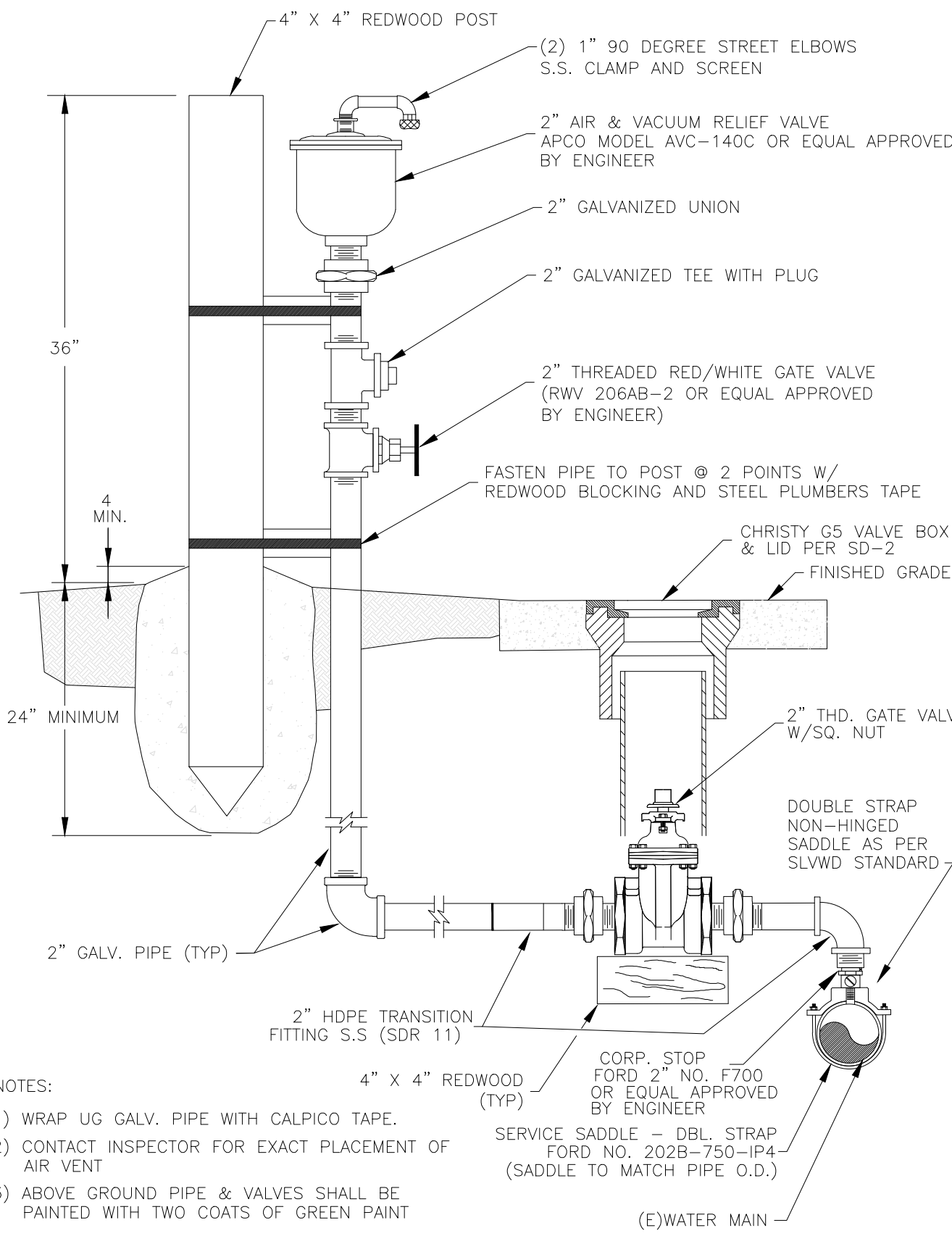
SD-9 WATER MAIN CASING DETAIL



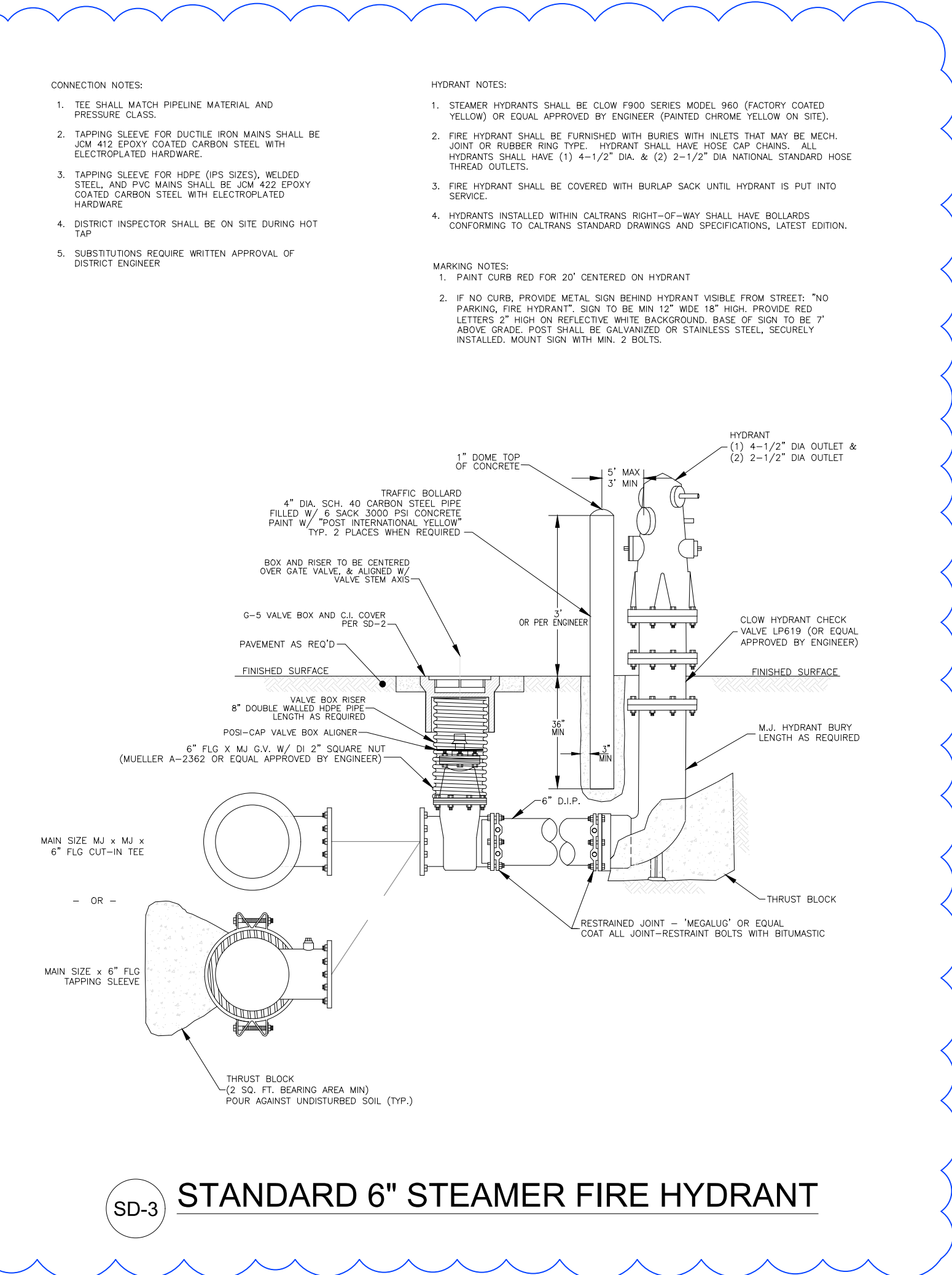
SD-4 SERVICE TAP DETAIL



SD-10 UTILITY TRENCH DETAIL (SANTA CRUZ CO. ROW)



SD-7 AIR RELIEF VALVE DETAIL



SD-3 STANDARD 6" STEAMER FIRE HYDRANT

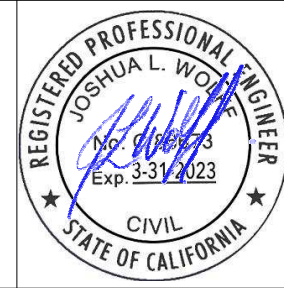


DATE: 12/22/2022
SCALE: N/A
DRAWN BY: JWS
APPROVED BY: JLW

UTILITY DETAILS

No.	REVISION/ISSUE	DATE	BY
1	REVISION FOR BIDDING	12/22/22	JWS

REDWOOD PARK PIPELINE



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Boulder Creek, CA 95006
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SHEET

C-4.0