

## **APPENDIX A**

**PROJECT PLANS FOR  
SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT:  
OLD RIVER ROAD AND VICINITY  
COASTLAND CIVIL ENGINEERING, INC.  
OCTOBER 2020**



PROJECT PLANS FOR :

# SWEETWATER SPRINGS WATER DISTRICT

## 2021 CAPITAL IMPROVEMENT PROJECT

### BONITA AVE, OLD RIVER RD, PALO ALTO DR, AND WOODLAND DR

JANUARY 2021

GUERNEVILLE

SONOMA COUNTY, CALIFORNIA

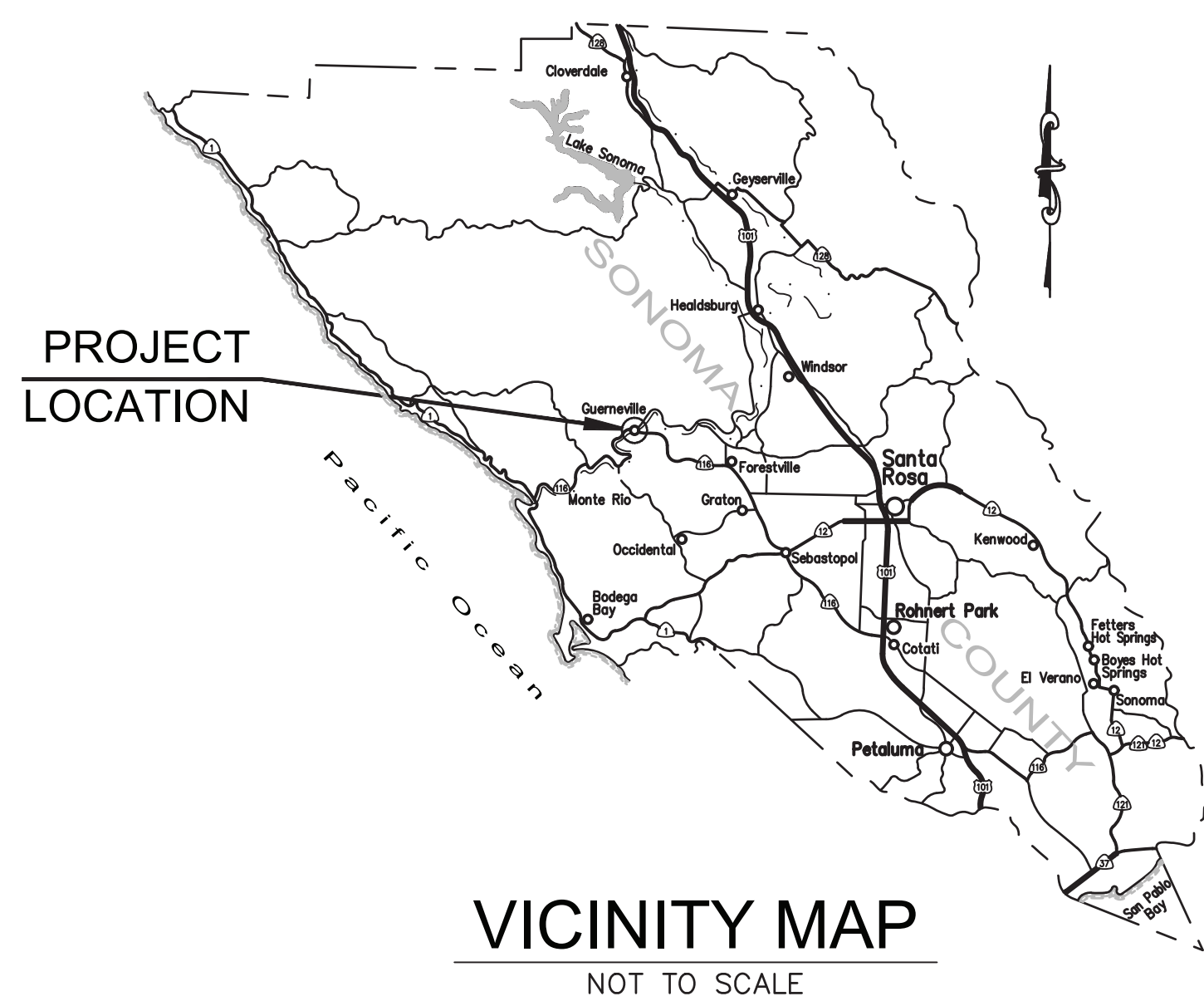
FOR USE IN CONJUNCTION WITH :

CALTRANS STANDARD SPECIFICATIONS 2018

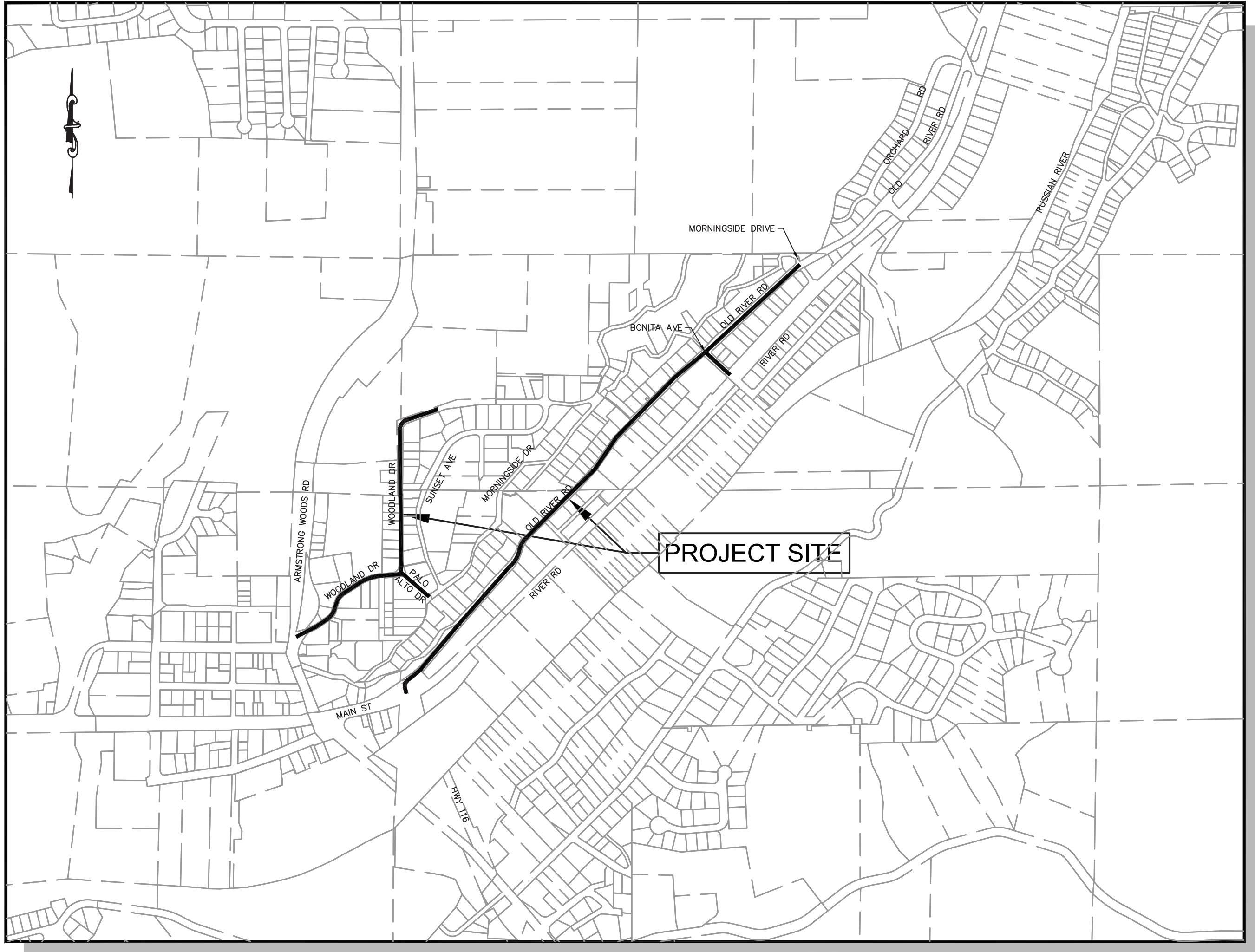
CALTRANS STANDARD PLANS 2018

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VICINITY MAP  
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LOCATION MAP  
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#### INDEX OF SHEETS

Sheet No.	Sheet Title
1	COVER SHEET
2	ABBREVIATIONS, & GENERAL NOTES
3	SURVEY CONTROL PLAN
4	OLD RIVER ROAD - PLAN AND PROFILE-STA 10+00 TO STA 13+75
5	OLD RIVER ROAD - PLAN AND PROFILE-STA 13+75 TO STA 17+75
6	OLD RIVER ROAD - PLAN AND PROFILE-STA 17+75 TO STA 21+75
7	OLD RIVER ROAD - PLAN AND PROFILE-STA 21+75 TO STA 25+75
8	OLD RIVER ROAD - PLAN AND PROFILE-STA 25+75 TO STA 29+75
9	OLD RIVER ROAD - PLAN AND PROFILE-STA 29+75 TO STA 33+75
10	OLD RIVER ROAD - PLAN AND PROFILE-STA 33+75 TO STA 37+75
11	OLD RIVER ROAD - PLAN AND PROFILE-STA 37+75 TO STA 41+75
12	OLD RIVER ROAD - PLAN AND PROFILE-STA 41+75 TO STA 44+00
13	BONITA AVE - PLAN AND PROFILE-STA 20+00 TO STA 20+50
14	WOODLAND DR - PLAN AND PROFILE-STA 20+00 TO STA 23+75
15	WOODLAND DR - PLAN AND PROFILE-STA 23+75 TO STA 27+50
16	WOODLAND DR - PLAN AND PROFILE-STA 27+50 TO STA 31+25
17	WOODLAND DR - PLAN AND PROFILE-STA 31+25 TO STA 35+00
18	WOODLAND DR - PLAN AND PROFILE-STA 35+00 TO STA 38+75
19	PALO ALTO DR - PLAN AND PROFILE-STA 30+00 TO STA 32+75
20	WOODLAND DR - TEMPORARY WATER LINE PLAN
21	MISCELLANEOUS DETAILS - 1
22	MISCELLANEOUS DETAILS - 2
23	MISCELLANEOUS DETAILS - 3
24	MISCELLANEOUS DETAILS - 4

**PRELIMINARY**  
**90% SUBMITTAL**

DATE: JANUARY 2021

SWEETWATER SPRINGS WATER DISTRICT	PROJECT NUMBER 88-4430
	DRAWING DATE JANUARY 2021
	DRAWING NUMBER 1 OF 24
APPROVED  JOHN L. WANGER DISTRICT ENGINEER	DATE

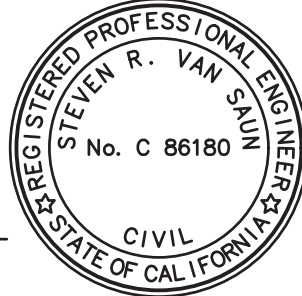


**Coastland Civil Engineering, Inc.**

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STEVEN R. VAN SAUN, RCE 86180

1/8/2021  
DATE





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## GENERAL NOTES

1. ALL WORKMANSHIP, MATERIALS, AND CONSTRUCTION SHALL CONFORM TO THESE PLANS, THE CONTRACT SPECIFICATIONS FOR THIS PROJECT, AND THE 2018 CALTRANS STANDARD SPECIFICATIONS AND PLANS.
2. THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (U.S.A.) AT (800) 642-2444 OR 811 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION, FOR MARK OUTS OF EXISTING UNDERGROUND FACILITIES.
3. THE CONTRACTOR SHALL POSSESS THE CLASS(ES) OF LICENSE(S) AS SPECIFIED IN THE SPECIAL PROVISIONS FOR THIS PROJECT.
4. THE LOCATIONS OF UTILITIES SHOWN ON THE PLANS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE DISTRICT ONLY ASSUMES RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION OF ITS OWN UNDERGROUND UTILITIES.
5. THE CONTRACTOR SHALL POT HOLE ALL KNOWN UTILITY CROSSINGS 5 DAYS PRIOR TO SCHEDULED CONSTRUCTION OF NEW FACILITIES IN AN AREA.
6. THE CONTRACTOR SHALL INVESTIGATE THE SITE AND BE AWARE OF LIMITED OVERHEAD CLEARANCES.
7. EXISTING VEGETATION SHALL BE REMOVED ONLY AS DIRECTED BY THE ENGINEER.
8. ALL LANDSCAPING AND IRRIGATION SYSTEMS DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED IN KIND.
9. THE CONTRACTOR SHALL REMOVE AND REPLACE CONCRETE SIDEWALK, DRIVEWAYS AND PLANTER STRIPS TO THE NEAREST SCORE MARK AS REQUIRED BY THE ENGINEER.
10. CAUTION SHALL BE EXERCISED WHEN DIGGING WITHIN THE DRIPLINE OF ANY TREE. THE ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY UNDERGROUND WORK WITHIN THE DRIPLINE OF TREES. ROOTS OVER 2" IN DIAMETER SHALL NOT BE CUT WITHOUT PERMISSION FROM THE CONTRACTOR'S ARBORIST AND THE ENGINEER. IN THE EVENT THAT A TREE ROOT IS APPROVED FOR REMOVAL, IT SHALL BE NEATLY CUT, SQUARE, AT THE EDGE OF THE TRENCH, NOT SHREDDED OR SHATTERED, TO THE SATISFACTION OF THE CONTRACTOR'S ARBORIST.
11. EXCAVATIONS OVER FIVE FEET (5') DEEP REQUIRE AN EXCAVATION PERMIT FROM THE STATE DEPARTMENT OF INDUSTRIAL SAFETY.
12. CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD THE DISTRICT AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE ENGINEER.
13. UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.
14. NOTICE TO CONTRACTORS: THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY LINES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO DISTRICT OR OTHER UTILITIES CAUSED BY HIS OPERATIONS.
16. THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS AND THE ENGINEER, IN WRITING, 48 HOURS IN ADVANCE OF ANY DRIVEWAY ACCESS INTERRUPTIONS AS DESCRIBED IN THE PROJECT SPECIFICATIONS. MAIL SERVICE SHALL BE MAINTAINED THROUGHOUT THE COURSE OF THIS PROJECT. THE U.S. POSTAL SERVICE SHALL HAVE UNINTERRUPTED ACCESS TO MAILBOXES AT ALL TIMES.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAWFUL OFF-SITE DISPOSAL OF ALL BITUMINOUS PAVEMENT, CONCRETE AND REINFORCEMENT, AND SPOILS NOT NEEDED FOR BACKFILL AS REQUIRED BY THE ENGINEER AND PER THE SPECIFICATIONS.
18. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

## WATER NOTES

1. WATER SERVICE TAPS UP TO 1 INCH REQUIRE 24 INCHES OF SPACING BETWEEN TAPS. FOR LARGER SERVICE TAPS THE CONTRACTOR SHALL REFER TO THE PROJECT SPECIFICATIONS FOR MINIMUM SPACING REQUIREMENTS.
2. ONLY DISTRICT UTILITY DEPARTMENT PERSONNEL SHALL OPERATE VALVES ON THE EXISTING WATER SYSTEM. REQUIRED NOTIFICATION FOR SHUT-DOWNS IS 5 WORKING DAYS.
3. CUT-IN TEES AND FINAL WATER MAIN TIE-INS SHALL BE MADE UNDER THE INSPECTION OF DISTRICT PERSONNEL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE DISTRICT FOR INSPECTIONS. SEE PROJECT SPECIFICATIONS FOR PRE EXCAVATION REQUIREMENTS.
4. WATER SERVICES OTHER THAN THOSE SHOWN ON THE PLANS SHALL NOT BE INSTALLED WITHOUT THE APPROVAL OF THE ENGINEER.
5. IF DAMAGE OCCURS TO ANY WATER SERVICE DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE THE SERVICE FROM THE CORPORATION STOP AT THE MAIN TO THE WATER METER WITHOUT SPLICING.
6. WATER SERVICE MARKOUTS ARE APPROXIMATE. THE CONTRACTOR SHALL CAUTIOUSLY EXCAVATE UNTIL SERVICE IS EXPOSED OR AS DIRECTED BY THE ENGINEER.
7. WHERE CONFLICTS OCCUR WITH EXISTING UNDERGROUND FACILITIES, THE CONTRACTOR SHALL DEPRESS THE NEW WATER MAIN PER DETAILS ON THE PLANS.
8. NEW WATER SERVICES AND SEWER LATERALS SHALL BE SEPARATED HORIZONTALLY BY A MINIMUM OF 5 FEET.
9. THERE SHALL BE NO UNMETERED CONNECTIONS TO THE WATER SYSTEM, INCLUDING CONNECTIONS BYPASSING THE METER FOR OBTAINING CONSTRUCTION WATER. UNMETERED CONNECTIONS WILL BE SEVERED BY THE DISTRICT. UNMETERED CONNECTIONS WILL RESULT IN PENALTIES INCLUDING FINES AND PAYMENT OF ESTIMATED WATER USAGE FEES. REASONABLE QUANTITIES OF CONSTRUCTION WATER SHALL BE AVAILABLE TO THE CONTRACTOR, AT NO COST, AT AN EXISTING HYDRANT TO BE DETERMINED BY THE DISTRICT. CONTRACTOR SHALL BE RESPONSIBLE FOR TRANSPORT OF SUCH WATER. CONSTRUCTION WATER SHALL BE METERED. THE CONTRACTOR SHALL SUPPLY A BACKFLOW PREVENTION DEVICE TO BE INSTALLED ON THE HYDRANT TO BE USED.
10. ALL WATER SERVICE TIE-INS TO EXISTING HOUSE SERVICE LINES SHALL BE MADE WITH HDPE TUBING AND SHALL MATCH THE SIZE OF THE EXISTING SERVICE LINE. WHEN CONNECTING TO A LINE FOR A BACKFLOW PREVENTER, THE TIE-IN PIPE SHALL MATCH THE EXISTING SIZE AND SHALL BE MADE WITH HDPE PIPE. NO GALVANIZED FITTINGS OR PIPE WILL BE USED. ALL TIE-INS WILL BE AT BACK OF EXISTING METER.
11. METER BOXES SHALL BE INSTALLED OUT OF TRAFFIC LOADING AREAS WHEREVER POSSIBLE.
12. THE CONTRACTOR SHALL POTHOLE ALL CROSSING UTILITIES PRIOR INSTALLATION OF NEW WATER MAIN.
13. LEADED JOINTS THAT ARE ENCOUNTERED IN EXISTING WATER MAINS THAT ARE TO REMAIN IN SERVICE WITHIN THE LIMITS OF EXCAVATIONS ON THIS PROJECT SHALL BE REMOVED BY THE CONTRACTOR UNDER DISTRICT INSPECTION.
14. ALL TEMPORARY BLOW-OFFS USED FOR REMOVING FOAM SWABS DURING WATER MAIN CLEANING SHALL BE CONSTRUCTED WITH A (SAME SIZE AS MAIN) ELBOW AND VERTICAL STAND TO PREVENT TRENCH WATER FROM FLOWING BACK INTO THE MAIN DURING SWAB REMOVAL. AFTER SWAB REMOVAL INSTALL MJ CAP ON STAND PIPE. RESTRAIN CAP AND STAND PIPE WITH MEGA-LUGS TO ALLOW TESTING.
15. ALL WATER SERVICE LATERAL MARKOUTS ARE APPROXIMATE, THE DISTRICT ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY OR OMISSION.
16. UNLESS HYDRANT STATIONING IS SPECIFICALLY CALLED OUT, LOCATIONS OF FIRE HYDRANTS ARE APPROXIMATE ONLY. CONFIRM ACTUAL LOCATIONS WITH THE DISTRICT PRIOR TO INSTALLATION.
17. MECHANICAL RESTRAINTS SHALL BE USED ON ALL JOINTS OF A WATER MAIN TIE-IN.
18. RESTRAINED MECHANICAL JOINTS SHALL BE USED ON ALL TEES, FITTINGS AND ASSOCIATED GATE VALVES UNLESS OTHERWISE APPROVED OR DIRECTED BY THE ENGINEER.

## EROSION PREVENTION AND SEDIMENT CONTROL NOTES

### GENERAL

1. PERFORM EROSION PREVENTION AND SEDIMENT CONTROL IN ACCORDANCE WITH CHAPTER 11 AND 11A OF THE SONOMA COUNTY CODE (SCC).
2. THE APPROVED PLANS SHALL CONFORM WITH THE PERMIT AND RESOURCE MANAGEMENT DEPARTMENT'S (PRMD) EROSION PREVENTION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) GUIDE AS POSTED ON THE PRMD WEBSITE.
3. THE OWNER IS RESPONSIBLE FOR PREVENTING STORM WATER POLLUTION GENERATED FROM THE CONSTRUCTION SITE YEAR ROUND. WORK SITES WITH INADEQUATE EROSION AND SEDIMENT CONTROL MAY BE SUBJECT TO A STOP WORK ORDER.
4. IF DISCREPANCIES OCCUR BETWEEN THESE NOTES, MATERIAL REFERENCED HEREIN OR MANUFACTURER'S RECOMMENDATIONS, THEN THE MOST PROTECTIVE SHALL APPLY.
5. AT ALL TIMES THE OWNER IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH THE STATE OF CALIFORNIA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY. CONSTRUCTION ACTIVITIES INCLUDE BUT ARE NOT LIMITED TO CLEARING, GRADING, EXCAVATION, STOCKPIILING, AND RECONSTRUCTION OF EXISTING FACILITIES INVOLVING REMOVAL AND REPLACEMENT.

### RAINY SEASON OPERATIONS

1. THE OWNER MUST IMPLEMENT AN EFFECTIVE COMBINATION OF EROSION PREVENTION AND SEDIMENT CONTROL ON ALL DISTURBED AREAS DURING THE RAINY SEASON (OCTOBER 15 – APRIL 15). CONSTRUCTION GRADING AND DRAINAGE IMPROVEMENT SHALL BE PERMITTED DURING THE RAINY SEASON ONLY WHEN ON-SITE SOIL CONDITIONS PERMIT THE WORK TO BE PERFORMED IN COMPLIANCE WITH SCC CHAPTER 11 AND 11A. STORM WATER BMP'S REFERENCED OR DETAILED IN THE PERMIT AUTHORITY'S BEST MANAGEMENT PRACTICES GUIDE SHALL BE IMPLEMENTED AND FUNCTIONAL ON THE SITE AT ALL TIMES
2. THE AREA OF ERODIBLE LAND EXPOSED AT ANY ONE TIME DURING THE WORK SHALL NOT EXCEED 1 ACRE OR 20% OF THE PERMITTED WORK AREA, WHICHEVER IS GREATER, AND THE TIME OF EXPOSURE SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICABLE.
3. AGRICULTURAL GRADING AND DRAINAGE IMPROVEMENTS, AND INITIAL LAND PREPARATION WORK FOR VINEYARD AND ORCHARD PLANTING, SHALL BE PERMITTED DURING THE RAINY SEASON ONLY FROM APRIL 1 TO APRIL 15, AND ONLY WHEN ON-SITE SOIL CONDITIONS PERMIT THE WORK TO BE PERFORMED IN COMPLIANCE WITH SCC CH. 11A AND 11.

### YEAR ROUND REQUIREMENTS

1. DURING THE NON-RAINY SEASON, ON ANY DAY WHEN THE NATIONAL WEATHER SERVICE FORECAST IS A CHANCE OF RAIN OF 30% OR GREATER WITHIN THE NEXT 24 HOURS, STORM WATER BMP'S REFERENCED OR DETAILED IN PRMD'S BEST MANAGEMENT PRACTICES GUIDE SHALL BE IMPLEMENTED, INSTALLED, AND FUNCTIONAL ON THE SITE TO PREVENT SOIL AND OTHER POLLUTANT DISCHARGES. AT ALL OTHER TIMES, BMP'S SHOULD BE STORED ON SITE IN PREPARATION FOR INSTALLATION PRIOR TO RAIN EVENTS.
2. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED BY THE OWNER BEFORE FORECASTED STORM EVENTS AND AFTER STORM EVENTS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT HAVE FAILED OR ARE NO LONGER EFFECTIVE SHALL BE PROMPTLY REPLACED. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED.
3. THE LIMITS OF GRADING SHALL BE DEFINED AND MARKED ON SITE TO PREVENT DAMAGE TO SURROUNDING VEGETATION. PRESERVATION OF EXISTING VEGETATION SHALL OCCUR TO THE MAXIMUM EXTENT PRACTICABLE. ANY EXISTING VEGETATION WITHIN THE LIMITS OF GRADING THAT IS TO REMAIN UNDISTURBED BY THE WORK SHALL BE IDENTIFIED AND PROTECTED FROM DAMAGE BY MARKING, FENCING, OR OTHER MEASURES.
4. CHANGES TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN MAY BE MADE TO RESPOND TO FIELD CONDITIONS AND SHALL BE NOTED ON THE PLAN.
5. DISCHARGES OF POTENTIAL POLLUTANTS FROM CONSTRUCTION SITES SHALL BE PREVENTED USING SOURCE CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE. POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SEDIMENT, TRASH, NUTRIENTS, PETROLEUM HYDROCARBONS, METALS, CONCRETE, CEMENT, ASPHALT, LIME, PAINT, STAINS, GLUES, WOOD PRODUCTS, PESTICIDES, HERBICIDES, CHEMICALS, HAZARDOUS WASTE, SANITARY WASTE, VEHICLE OR EQUIPMENT WASH WATER, AND CHLORINATED WATER.
6. ENTRANCE(S) TO THE CONSTRUCTION SITE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF POTENTIAL POLLUTANTS OFFSITE. POTENTIAL POLLUTANTS DEPOSITED ON SUCH AREAS WITHIN THE COUNTY RIGHT-OF-WAY, SUCH AS ROADWAYS AND SIDEWALKS, SHALL BE PROPERLY DISPOSED OF AT THE END OF EACH WORKING DAY OR MORE FREQUENTLY AS NECESSARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING CONSTRUCTION VEHICLES LEAVING THE SITE ON A DAILY BASIS TO PREVENT DUST, SILT, AND DIRT FROM BEING RELEASED OR TRACKED OFFSITE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AT THE END OF EACH WORKING DAY OR MORE OFTEN AS NECESSARY.
7. ALL DISTURBED AREAS SHALL BE PROTECTED BY USING EROSION PREVENTION MEASURES TO THE MAXIMUM EXTENT PRACTICABLE, SUCH AS ESTABLISHING VEGETATION COVERAGE, HYDROSEEDING, STRAW MULCH, GEOTEXTILES, PLASTIC COVERS, BLANKETS OR MATS. TEMPORARY OR PERMANENT VEGETATION SHALL BE INSTALLED AS SOON AS PRACTICAL AFTER VEGETATION REMOVAL BUT IN ALL CASES PRIOR TO OCTOBER 15. PRIOR TO FINAL INSPECTION, ALL DISTURBED AREAS SHALL BE REVEGETATED OR LANDSCAPING SHALL BE INSTALLED.
8. WHENEVER IT IS NOT POSSIBLE TO USE EROSION PREVENTION MEASURES ON EXPOSED SLOPES, SEDIMENT CONTROL DEVICES SUCH AS FIBER ROLLS AND SILT FENCES SHALL BE INSTALLED TO PREVENT SEDIMENT MIGRATION. FIBER ROLLS AND SILT FENCES SHALL BE TRENCHED AND KEYED INTO THE SOIL AND INSTALLED ON CONTOUR. SILT FENCES SHALL BE INSTALLED APPROXIMATELY 2 TO 5 FEET FROM TOE OF SLOPE.
9. HYDROSEEDING SHALL BE CONDUCTED IN A THREE STEP PROCESS. FIRST, EVENLY APPLY SEED MIX AND FERTILIZER TO THE EXPOSED SLOPE. SECOND, EVENLY APPLY MULCH OVER THE SEED AND FERTILIZER. THIRD, STABILIZE THE MULCH IN PLACE. AN EQUIVALENT SINGLE STEP PROCESS, WITH SEED, FERTILIZER, WATER, AND BONDED FIBERS IS ACCEPTABLE.

APPLICATIONS SHALL BE BROADCASTED MECHANICALLY OR MANUALLY AT THE RATES SPECIFIED BELOW. SEED MIX AND FERTILIZER SHALL BE WORKED INTO THE SOIL BY ROLLING OR TAMPING. IF STRAW IS USED AS MULCH, STRAW SHALL BE DERIVED FROM WHEAT, RICE, OR BARLEY AND BE APPROXIMATELY 6 TO 8 INCHES IN LENGTH. STABILIZATION OF MULCH SHALL BE DONE HYDRAULICALLY BY APPLYING AN EMULSION OR MECHANICALLY BY CRIMPING OR PUNCHING THE MULCH INTO THE SOIL. EQUIVALENT METHODS AND MATERIALS MAY BE USED ONLY IF THEY ADEQUATELY PROMOTE VEGETATION GROWTH AND PROTECT EXPOSED SLOPES.

MATERIALS	APPLICATION RATE (POUNDS PER ACRE)
SEED MIX	
BROMUS MOLLIS (BLANDO BROME)	40
TRIFOLIUM HIRTUM (HYKON ROSE CLOVER)	20
FERTILIZER	
16-20-0 & 15% SULPHUR	500
MULCH	
STRAW	4000
HYDRAULIC STABILIZING*	
M-BINDER OR SENTINEL	75-100
EQUIVALENT MATERIAL	PER MANUFACTURER
*NON-ASPHALTIC, DERIVED FROM PLANTS	

10. DUST CONTROL SHALL BE PROVIDED BY CONTRACTOR DURING ALL PHASES OF CONSTRUCTION.
11. STORM DRAIN INLETS SHALL BE PROTECTED FROM POTENTIAL POLLUTANTS UNTIL DRAINAGE CONVEYANCE SYSTEMS ARE FUNCTIONAL AND CONSTRUCTION HAS BEEN COMPLETED.
12. ENERGY DISSIPATORS SHALL BE INSTALLED AT STORM DRAIN OUTLETS WHICH MAY CONVEY EROSION STORM WATER FLOW.
13. SOIL, MATERIAL STOCKPILES, AND FERTILIZING MATERIAL SHALL BE PROPERLY PROTECTED TO MINIMIZE SEDIMENT AND POLLUTANT TRANSPORT FROM THE CONSTRUCTION SITE.
14. SOLID WASTE, SUCH AS TRASH, DISCARDED BUILDING MATERIALS AND DEBRIS, SHALL BE PLACED IN DESIGNATED COLLECTION AREAS OR CONTAINERS. THE CONSTRUCTION SITE SHALL BE CLEARED OF SOLID WASTE DAILY OR AS NECESSARY. REGULAR REMOVAL AND PROPER DISPOSAL SHALL BE COORDINATED BY THE CONTRACTOR.
15. A CONCRETE WASHOUT AREA, SUCH AS A TEMPORARY PIT, SHALL BE DESIGNATED TO CLEAN CONCRETE TRUCKS AND TOOLS. AT NO TIME SHALL CONCRETE PRODUCTS AND WASTE BE ALLOWED TO ENTER COUNTY WATERWAYS SUCH AS CREEKS OR STORM DRAINS. NO WASHOUT OF CONCRETE, MORTAR MIXERS, OR TRUCKS SHALL BE ALLOWED ON SOIL.
16. PROPER APPLICATION, CLEANING, AND STORAGE OF POTENTIALLY HAZARDOUS MATERIALS, SUCH AS PAINTS AND CHEMICALS, SHALL BE CONDUCTED TO PREVENT THE DISCHARGE OF POLLUTANTS.
17. TEMPORARY RESTROOMS AND SANITARY FACILITIES SHALL BE LOCATED AND MAINTAINED DURING CONSTRUCTION ACTIVITIES TO PREVENT THE DISCHARGE OF POLLUTANTS.
18. APPROPRIATE VEHICLE STORAGE, FUELING, MAINTENANCE, AND CLEANING AREAS SHALL BE DESIGNATED AND MAINTAINED TO PREVENT DISCHARGE OF POLLUTANTS.

## INSPECTIONS

APPROVAL OF ALL WORK SHALL BE NECESSARY AT THE COMPLETION OF EACH OF THE FOLLOWING STAGES OF WORK AND SUCH APPROVAL MUST BE OBTAINED BEFORE SUBSEQUENT STAGES OF WORK MAY BE COMMENCED. ADDITIONALLY, THE INSPECTOR SHALL BE NOTIFIED AT LEAST ONE WORKING DAY IN ADVANCE BEFORE ANY OF THE FOLLOWING STAGES OF WORK ARE COMMENCED. ONLY THAT WORK THAT IS DONE IN THE PRESENCE OF THE INSPECTOR, OR LACKING SUCH PRESENCE, AT THE INSPECTOR'S OPTION, DONE WITH HIS/HER KNOWLEDGE, WILL BE APPROVED. CALL THE AUTOMATED INSPECTION REQUEST SYSTEM PHONE NUMBER 707-565-3551 AND USE THE CODES PROVIDED ON THE HANDOUT YOU RECEIVED WITH YOUR PERMIT(S) TO SELECT AN INSPECTION. LARGER PROJECTS REQUIRE A PRE-CONSTRUCTION MEETING ON SITE, AND SMALLER PROJECTS BY PHONE. THE AUTOMATED INSPECTION REQUEST FOR A PRE-CONSTRUCTION MEETING IS CHOICE "200". THIS REQUEST MUST BE MADE FIVE (5) DAYS IN ADVANCE OF WORK AND AN INSPECTOR WILL CALL BACK TO MAKE ARRANGEMENTS.

1. EARTHWORK:  
CONSTRUCTION OF EMBANKMENTS, EXCAVATIONS.  
EXCAVATION FOR STORM DRAINS AND CULVERTS.  
PREPARATION OF SUBGRADE  
BACK-FILLING OF STRUCTURES AND PIPES AND PUBLIC UTILITIES.
2. CONCRETE WORK:  
CONSTRUCTION OF FORMS, FOR ALL CONCRETE STRUCTURES, INCLUDING CURBS, GUTTERS, AND SIDEWALKS.  
PLACING OF CONCRETE IN STRUCTURES, INCLUDING CURBS, GUTTERS, AND SIDEWALKS.
3. DRAINAGE FACILITIES:  
PLACING OF STORM DRAINS AND CULVERT PIPES.  
CONSTRUCTION OF ROADSIDE DITCHES AND OTHER DRAINAGE WAYS
4. ROADWAY CONSTRUCTION:  
PLACING AND COMPACTING OF BASE MATERIAL. IF MORE THAN ONE COURSE OR TYPE OF BASE OR SUB-BASE IS TO BE USED, APPROVAL SHALL BE NECESSARY FOR EACH COURSE AND/OR TYPE.  
PLACING OF PAVEMENT OR SURFACING.
5. FINAL CLEAN-UP.  
FINAL INSPECTION MAY NOT BE REQUESTED UNTIL THE CONSTRUCTION INSPECTOR RECEIVES, REVIEWS AND APPROVES BOTH THE ENGINEER'S FINAL LETTER AND THE FINAL GEOTECHNICAL REPORT. THIS APPROVAL MUST BE OBTAINED PRIOR TO SCHEDULING A FINAL INSPECTION.

## LEGEND

DESCRIPTION OF LINETYPE	PROPOSED	EXISTING
PROPERTY LINE	N/A	---
FLOWLINE	N/A	---
CENTERLINE/CONTROL LINE	N/A	---
FENCE	N/A	○ ○
WATER MAIN PIPE	6" W	6" W
SANITARY SEWER PIPE	N/A	SS--SS
STORM DRAIN PIPE	N/A	---
GAS LINE	N/A	G--G
TELEPHONE LINE/CONDUIT	N/A	7--7
ELECTRICAL LINE/CONDUIT	N/A	E--E
OVERHEAD UTILITY	N/A	OH--OH
ABANDONED FACILITY	6" W	6" W
ASPHALT CONCRETE	---	---
CONCRETE	---	---
AGGREGATE BASE	---	---
SUBGRADE	N/A	---
WATER MAIN GATE VALVE	○	○
WATER MAIN BLOW OFF	○	○
WATER METER	○	○
FIRE HYDRANT	○	○
SANITARY SEWER CLEANOUT	N/A	○
SANITARY SEWER / STORM DRAIN MANHOLE	N/A	○
STORM DRAIN CURB INLET/CATCH BASIN	N/A	○
STORM DRAIN DROP INLET (TOP OPENING)	N/A	○
MAILBOX	N/A	○
ROADSIDE SIGN	N/A	○
TREE AND DRIP LINE	N/A	○
SURVEY CONTROL POINT	N/A	○
JOINT UTILITY POLE	N/A	○

## ABBREVIATIONS

AC	ASPHALT CONCRETE	MB	MAILBOX
ACP	ASPHALT CONCRETE PIPE	MH	MANHOLE
AB	AGGREGATE BASE	MIN.	MINIMUM
ARV	AIR RELEASE VALVE	OG	ORIGINAL GROUND
BSW	BACK OF SIDEWALK	OHU	OVERHEAD UTILITY
DIP	DUCTILE IRON PIPE	PH	UTILITY POTHOLE
CL	CENTERLINE, CONTROL LINE	PVC	POLYVINYL CHLORIDE
CB	CATCH BASIN	R	RADIUS
CLR.	CLEAR	RC	RELATIVE COMPACTION
CONC	CONCRETE	RCP	REINFORCED CONCRETE PIPE
CP	CONTROL POINT	RSP	ROCK SLOPE PROTECTION
CSP	CORRUGATED STEEL PIPE	RT	RIGHT
DI	DROP INLET	R/W	RIGHT-OF-WAY
DWY	DRIVEWAY	S	SLOPE
E	ELECTRICAL, ELECTRIC CONDUIT	SD	STORM DRAIN
EG	EXISTING GRADE	SDE	STORM DRAIN EASEMENT
EL	ELEVATION	SS	SANITARY SEWER
EP	EDGE OF PAVEMENT	SSFM	SANITARY SEWER FORCE MAIN
EXIST, EX	EXISTING	STA	STATION
FL	FLOWLINE	STD	STANDARD
FG	FINISHED GRADE	SVC	SERVICE
PH	FIRE HYDRANT	TB	TOP OF BANK
FX	FENCE	TC	TOP OF CURB
G	GAS, GAS MAIN	TEL	TELEPHONE
GIP	GALVANIZED IRON PIPE	TG	TOP OF GRATE
HDPE	HIGH DENSITY POLYETHYLENE	TOE	TOE OF SLOPE
IE	INVERT ELEVATION	TP	TELEPHONE POLE
INV	INVERT	TYP	TYPICAL
IP	IRON PIPE	U	UNDERGROUND UTILITY
JP	JOINT POLE	UTIL	UTILITY
JT	JOINT UTILITY TRENCH	VIF	VERIFY IN FIELD
LAT	SANITARY SEWER LATERAL	W	WATER, WATER MAIN
LF	LINEAL FEET	WM	WATER METER
LT	LEFT	WV	WATER VALVE

## CONSTRUCTION NOTE DESIGNATIONS

(RT) = ROADWAY AND RELATED ITEMS CONSTRUCTION NOTES.

(TI) = STRIPING AND RELATED ITEMS CONSTRUCTION NOTES.

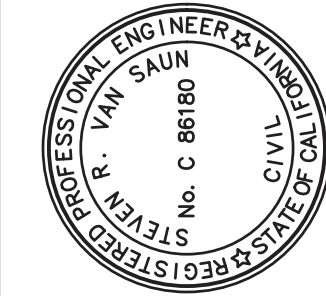
(WI) = WATER AND RELATED ITEMS CONSTRUCTION NOTES.



**Coastland Civil Engineering, Inc.**

1400 Neotomas Avenue, Santa Rosa, CA 95405

707.571.8037 Fax



PREPARED UNDER THE DIRECTION OF

STEVEN R. VAN SAUN, RCE 86180 DATE: 1/8/2021

REVIEWED BY

SRV

DRAWN BY

WUK

DESIGNED BY

WUK

CALIFORNIA

SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT

GUERNEVILLE

**LEGEND, ABBREVIATIONS  
AND GENERAL NOTES**

PROJECT NUMBER  
88-4430

DRAWING DATE  
JANUARY 2021

SHEET NUMBER

2 OF 24

**PRELIMINARY**

90% SUBMITTAL

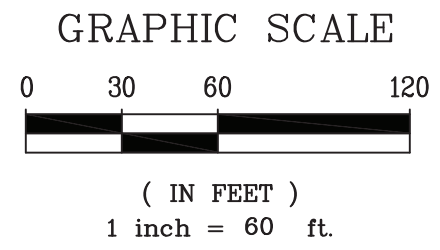
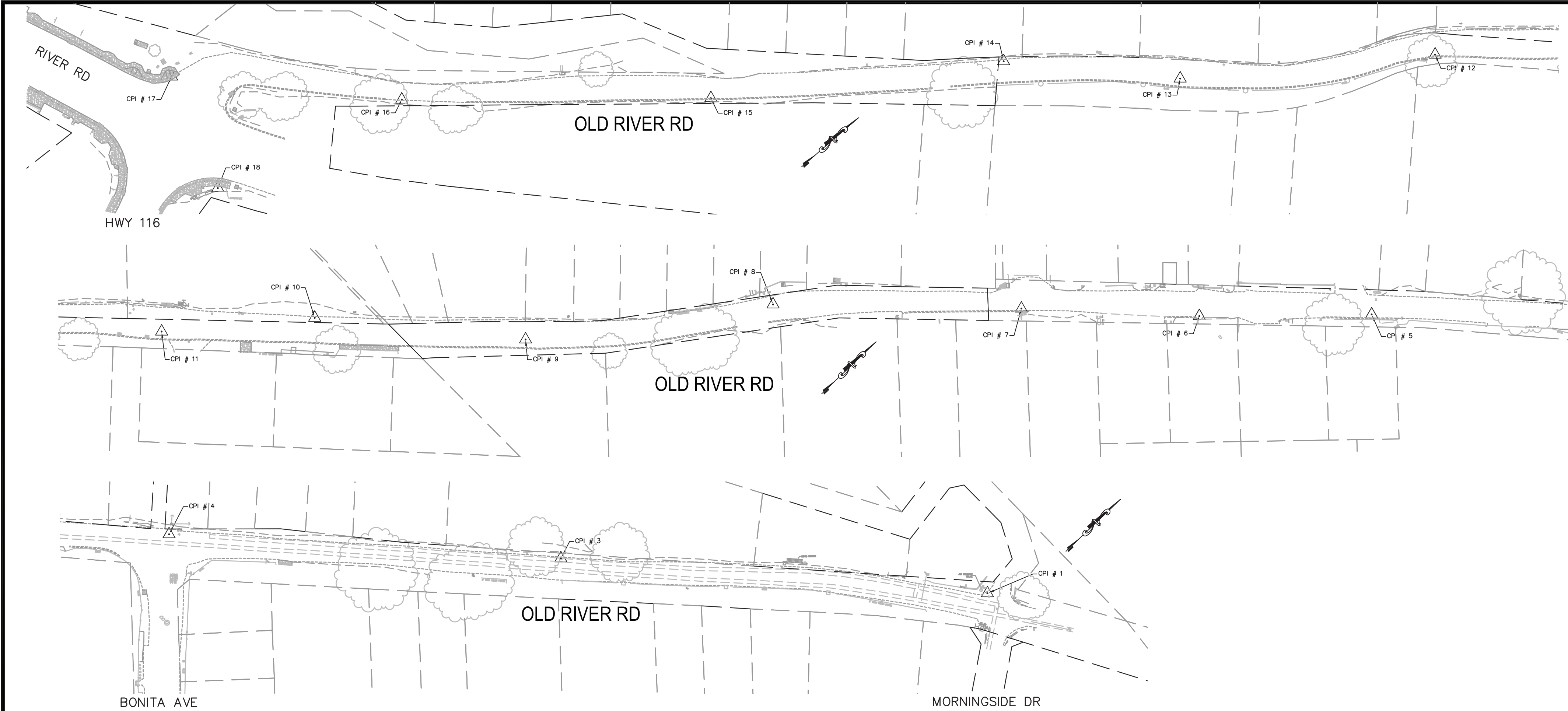
DATE: JANUARY 2021



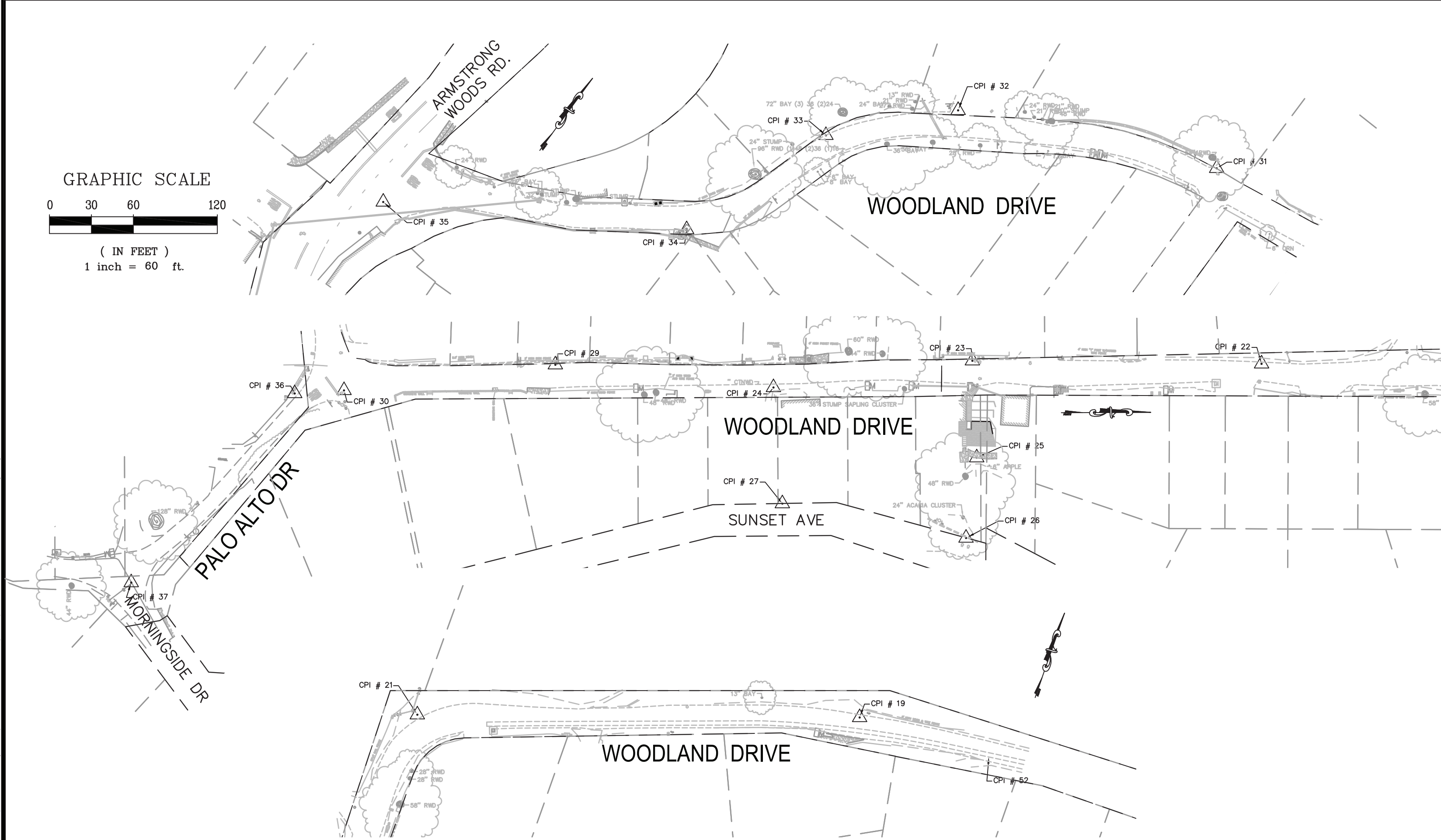
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FOR REDUCED PLANS, THE ORIGINAL SCALE IS IN INCHES

ORIGINAL PLOT DATE:



SURVEY CONTROL DATA OLD RIVER RD				
CONTROL POINT NO.	NORTHING	EASTING	ELEV.	DESCRIPTION
1	1948780.15	6279002.64	70.28	SET CPI CTRL MAG NAIL
2	1948678.30	6279104.47	55.46	SET CPI CTRL MAG NAIL
3	1948538.90	6278731.42	59.68	SET CPI CTRL MAG NAIL
4	1948312.64	6278487.18	56.08	SET CPI CTRL MAG NAIL
5	1948128.01	6278308.20	55.72	SET CPI CTRL MAG NAIL
6	1948021.33	6278208.27	55.92	SET CPI CTRL MAG NAIL
7	1947916.56	6278099.46	55.29	SET CPI CTRL MAG NAIL
8	1947766.58	6277951.49	55.75	SET CPI CTRL MAG NAIL
9	1947594.22	6277828.02	51.94	SET CPI CTRL MAG NAIL
10	1947477.55	6277691.22	51.05	SET CPI CTRL MAG NAIL
11	1947375.57	6277610.01	50.75	SET CPI CTRL MAG NAIL
12	1947233.55	6277479.21	55.78	SET CPI CTRL MAG NAIL
13	1947056.43	6277353.47	60.68	SET CPI CTRL MAG NAIL
14	1946952.54	6277244.66	65.38	SET CPI CTRL MAG NAIL
15	1946743.94	6277106.33	64.24	SET CPI CTRL MAG NAIL
16	1946544.50	6276936.09	59.93	SET CPI CTRL MAG NAIL
17	1946409.34	6276793.88	55.48	FND CTRL PK NAIL
18	1946377.27	6276891.16	56.19	FND CTRL 1" IRON PIPE



SURVEY CONTROL DATA WOODLAND DR & PALO ALTO DR				
CONTROL POINT NO.	NORTHING	EASTING	ELEV.	DESCRIPTION
19	1948001.57	6277083.36	202.91	SET CPI CTRL MAG NAIL
20	1948015.04	6277573.82	237.79	FND CTRL RR SPIKE LS
21	1947899.46	6276784.19	171.90	SET CPI CTRL REBAR LS
22	1947718.23	6276771.31	168.41	SET CPI CTRL MAG NAIL
23	1947511.55	6276768.26	177.43	SET CPI CTRL MAG NAIL
24	1947369.31	6276786.76	174.58	SET CPI CTRL REBAR LSCPI
25	1947514.38	6276837.53	194.50	SET CPI CTRL SPIKE 60d
26	1947506.51	6276894.95	219.01	SET CPI CTRL MAG NAIL
27	1947375.32	6276869.82	205.52	SET CPI CTRL MAG NAIL
29	1947213.48	6276769.85	166.67	SET CPI CTRL MAG NAIL
30	1947062.36	6276787.57	153.58	SET CPI CTRL MAG NAIL
31	1947048.93	6276656.67	141.69	SET CPI CTRL MAG NAIL
32	1946973.16	6276483.10	116.62	SET CPI CTRL MAG NAIL
33	1946902.94	6276417.41	105.82	SET CPI CTRL SPIKE 60d
34	1946789.81	6276376.89	90.48	SET CPI CTRL MAG NAIL
35	1946677.55	6276190.30	63.20	SET CPI CTRL MAG NAIL
36	1947027.10	6276789.59	152.52	SET CPI CTRL SPIKE d
37	1946909.70	6276924.31	159.14	SET CPI CTRL MAG NAIL
52	1948005.34	6277179.83	210.82	FND CTRL RR SPIKE LS

## SURVEYOR'S STATEMENT

THIS MAP REPRESENTS A FIELD SURVEY MADE BY CINQUINI & PASSARINO, INC. IN JULY OF 2020, AND NOVEMBER 11, 2020 AND REPRESENTS THE VISUAL SURFACE CONDITIONS AS OF AFORESAID DATE.

## BENCHMARK

CINQUINI & PASSARINO CONTROL POINT NO. 2, BEING A SET MAG NAIL WITH WASHER STAMPED "CINQUINI & PASSARINO CONTROL" ALONG MORNINGSIDE DRIVE APPROXIMATELY 125 FEET SOUTHERLY OF THE INTERSECTION WITH OLD RIVER ROAD AS SHOWN HEREON.  
ELEVATION = 55.46' (NAVD 88)

THE ORTHOMETRIC ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 1988) AND WERE DETERMINED BY STATIC GPS TIES TO CGPS STATIONS P182, P183 & P197 WITH PUBLISHED ELLIPSOIDAL HEIGHTS OF P182 = 1303.365', P183 = 35.695' AND P197 = 1.662', IN ADDITION TO APPLYING THE NGS GEOD HEIGHT MODEL "GEOID2018".

## BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM, ZONE 11, NAD 83, EPOCH 2017.50 AS DETERMINED LOCALLY BY A LINE BETWEEN CONTINUOUS GLOBAL POSITIONING SYSTEMS (CGPS) STATION P183 AND STATION 182; BEING NORTH 25°16'52" WEST AS DERIVED FROM GEODETIC VALUES PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC).

**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021

CALIFORNIA  
GUERNEVILLE  
SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT

PROJECT NUMBER  
88-4430  
DRAWING DATE  
JANUARY 2021  
SHEET NUMBER  
3 OF 24



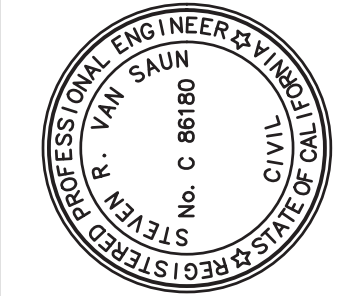
**Coastland Civil Engineering, Inc.**

1400 Neotomas Avenue, Santa Rosa, CA 95405  
707.571.8003 Fax

PREPARED UNDER THE DIRECTION OF

STEVEN R. VAN SAUN, RCE 86180 DATE

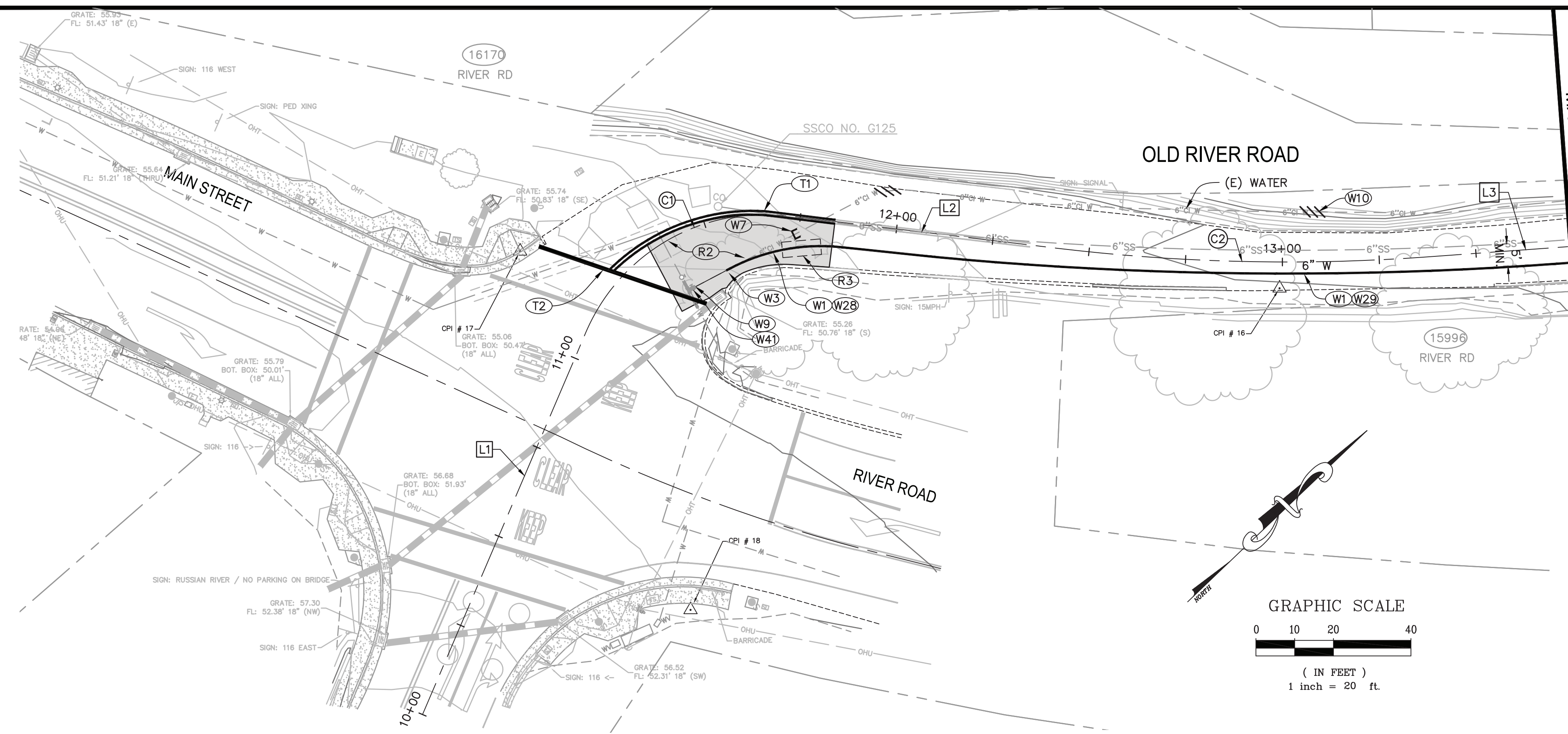
DESIGNED BY WJK  
DRAWN BY WJK  
REVIEWED BY SRV



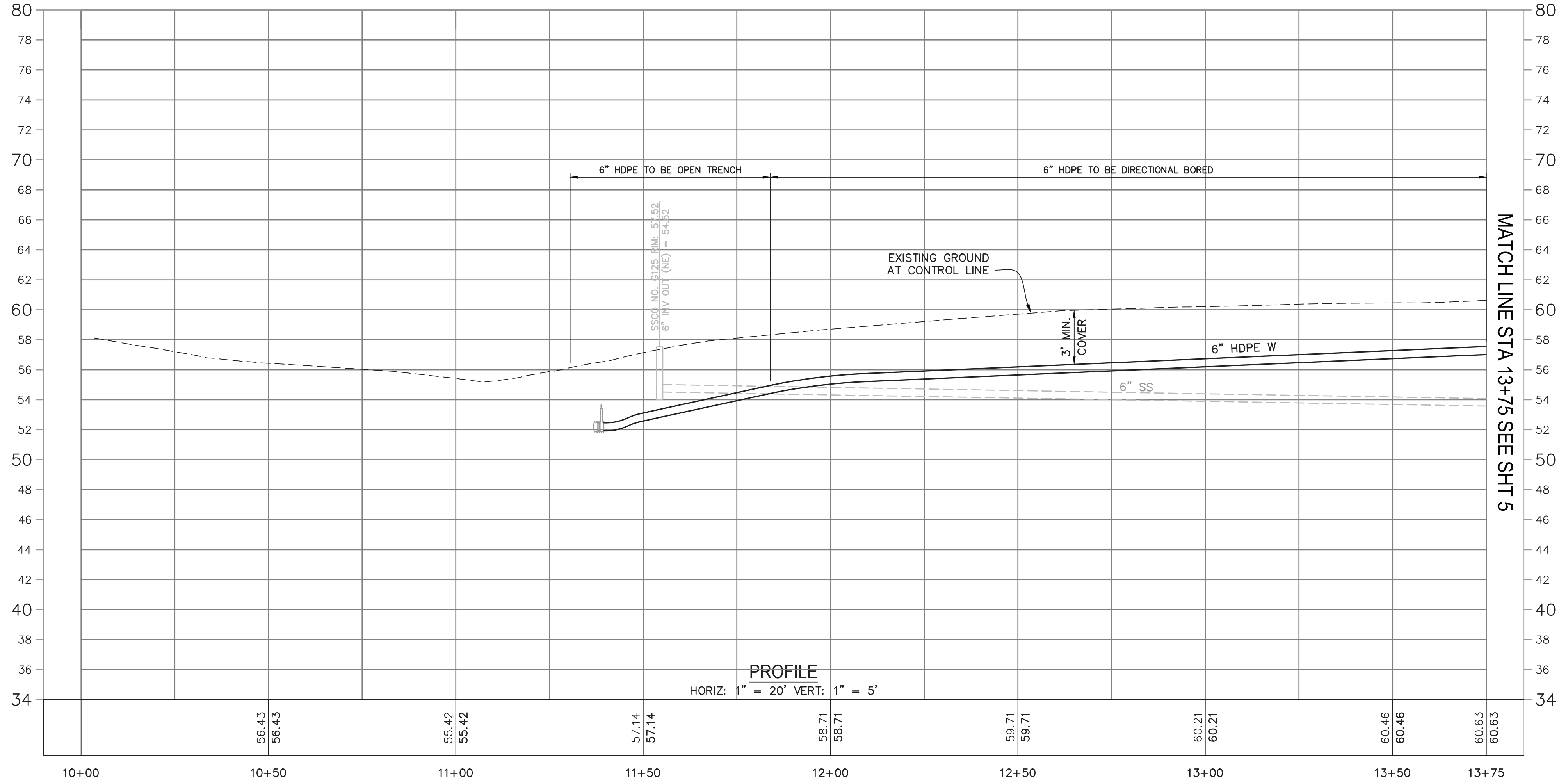


FOR REDUCED PLANS, THE 0  
ORIGINAL SCALE IS IN INCHES

3  
2  
1



CL OLD RIVER ROAD PROFILE



SHEET INDEX MAP  
NOT TO SCALE

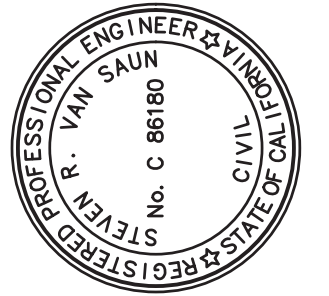
Line Table: Old River Rd					
Line #	Length	Direction	Start Station	Start Point	End Point
L1	107.29	N23° 11' 10.72"W	10+00.00	N:1946308.62 E:6276862.95	11+07.29 N:1946407.24 E:6276820.71
L2	69.86	N50° 31' 03.62"E	11+71.60	N:1946465.52 E:6276834.88	12+41.46 N:1946509.94 E:6276888.80
L3	257.25	N39° 29' 25.98"E	13+37.69	N:1946577.87 E:6276956.74	15+94.94 N:1946776.40 E:6277120.34

Curve Table: Old River Rd			
CURVE NO.	RADIUS	LENGTH	DELTA
C1	50.00	64.32	73°42'14"
C2	500.00	96.23	11°01'38"

CONSTRUCTION NOTES

- (R1) PLACE BLUE PAVEMENT MARKER PER DETAIL
- (R2) GRIND 0.25' AND PLACE 0.25' OF TRENCH PAVING PER COUNTY STD. 219B, TYPE A1 AND DETAIL
- (R3) APPROXIMATE BORE PIT LOCATION.
- (T1) INSTALL YELLOW THERMOPLASTIC DETAIL 23 PER CALTRANS STD PLAN A20A.
- (T2) INSTALL WHITE 12-INCH THERMOPLASTIC CROSSWALK/LIMIT LINE PER CALTRANS STD PLAN A24E.
- (W1) CONSTRUCT 6" HDPE WATER MAIN.
- (W3) INSTALL TEMPORARY BLOW OFF PER DETAIL
- (W5) INSTALL FIRE HYDRANT PER DETAIL
- (W7) PLUG EXISTING WATER MAIN AND ABANDON PER DETAIL
- (W9) CONNECT TO EXISTING WATER MAIN WITH FITTINGS AS REQUIRED UNDER THE INSPECTION OF THE DISTRICT.
- (W10) ABANDON WATER MAIN PER SPECIFICATIONS.
- (W28) WATER MAIN TO BE OPEN CUT TRENCH.
- (W29) WATER MAIN TO BE DIRECTIONAL BORED PER PROJECT SPECIFICATIONS.
- (W41) EXISTING 6-INCH GATE VALVE TO REMAIN.

**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021



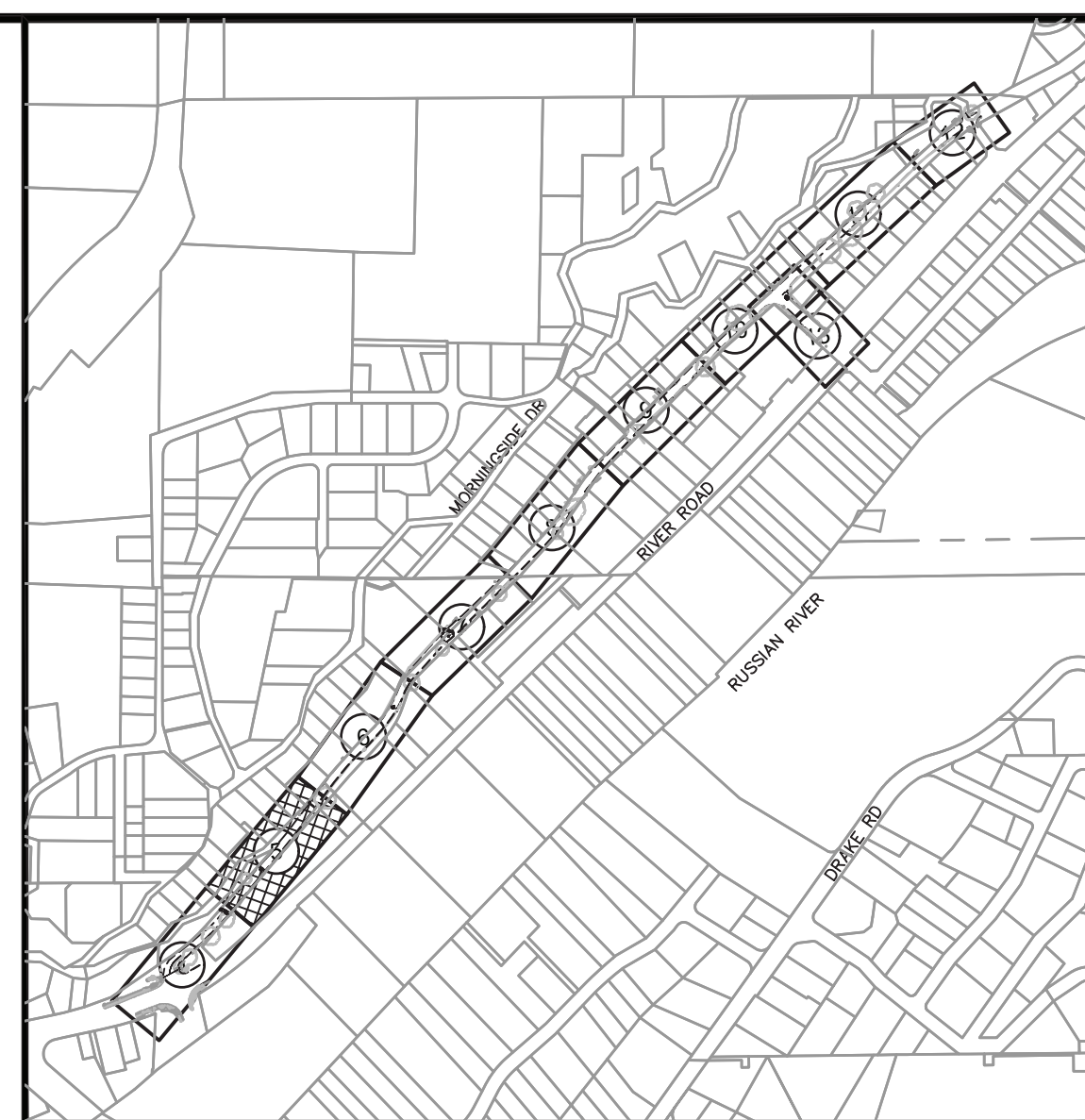
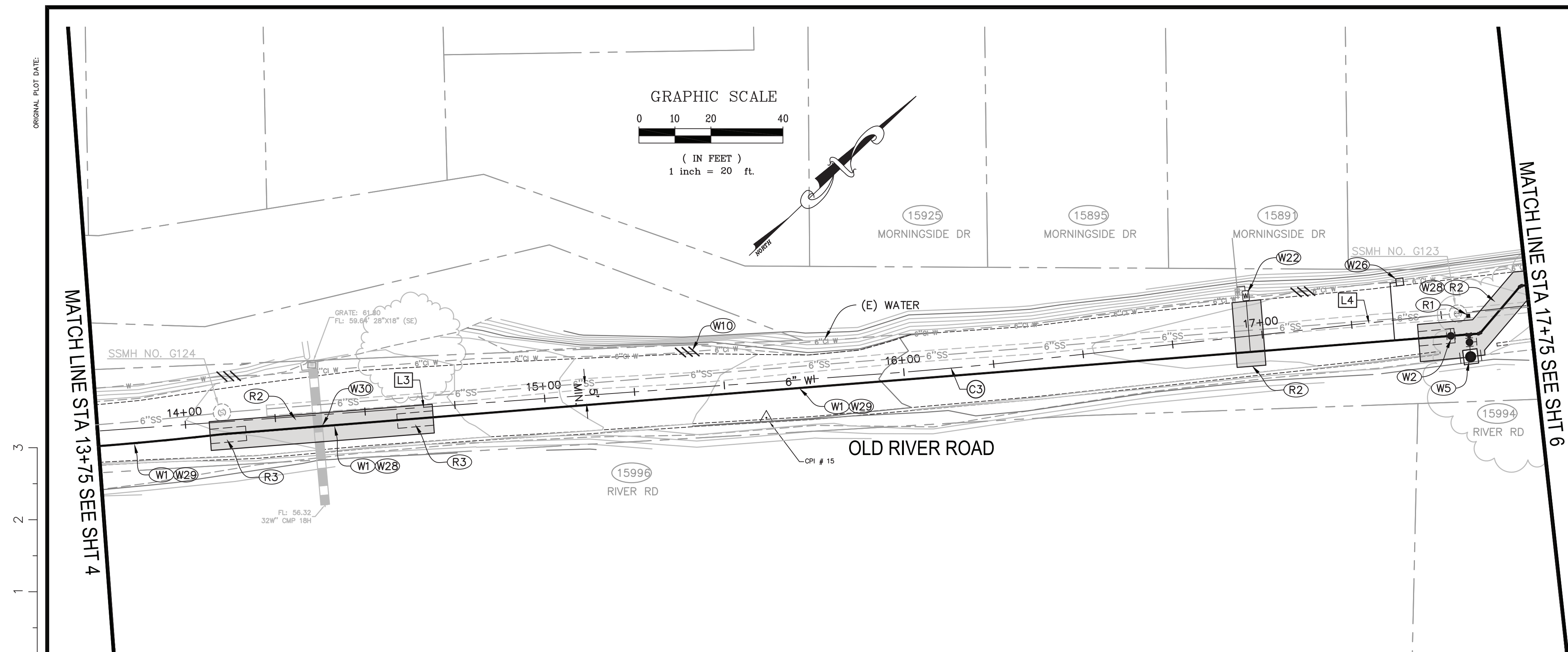
PREPARED UNDER THE DIRECTION OF  
STEVEN R. VAN SAUN, RCE 86180 DATE 1/8/2021  
DESIGNED BY WJK DRAWN BY WJK REVIEWED BY WJK  
WJK WJK WJK

**Coastland Civil Engineering, Inc.**  
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707.571.8003 Fax 707.571.8007

CALIFORNIA  
SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT  
GUERNEVILLE  
**OLD RIVER ROAD - PLAN AND PROFILE**  
**STA. 10+00 TO STA. 13+75**

PROJECT NUMBER 88-4430  
DRAWING DATE JANUARY 2021  
SHEET NUMBER 4 OF 24



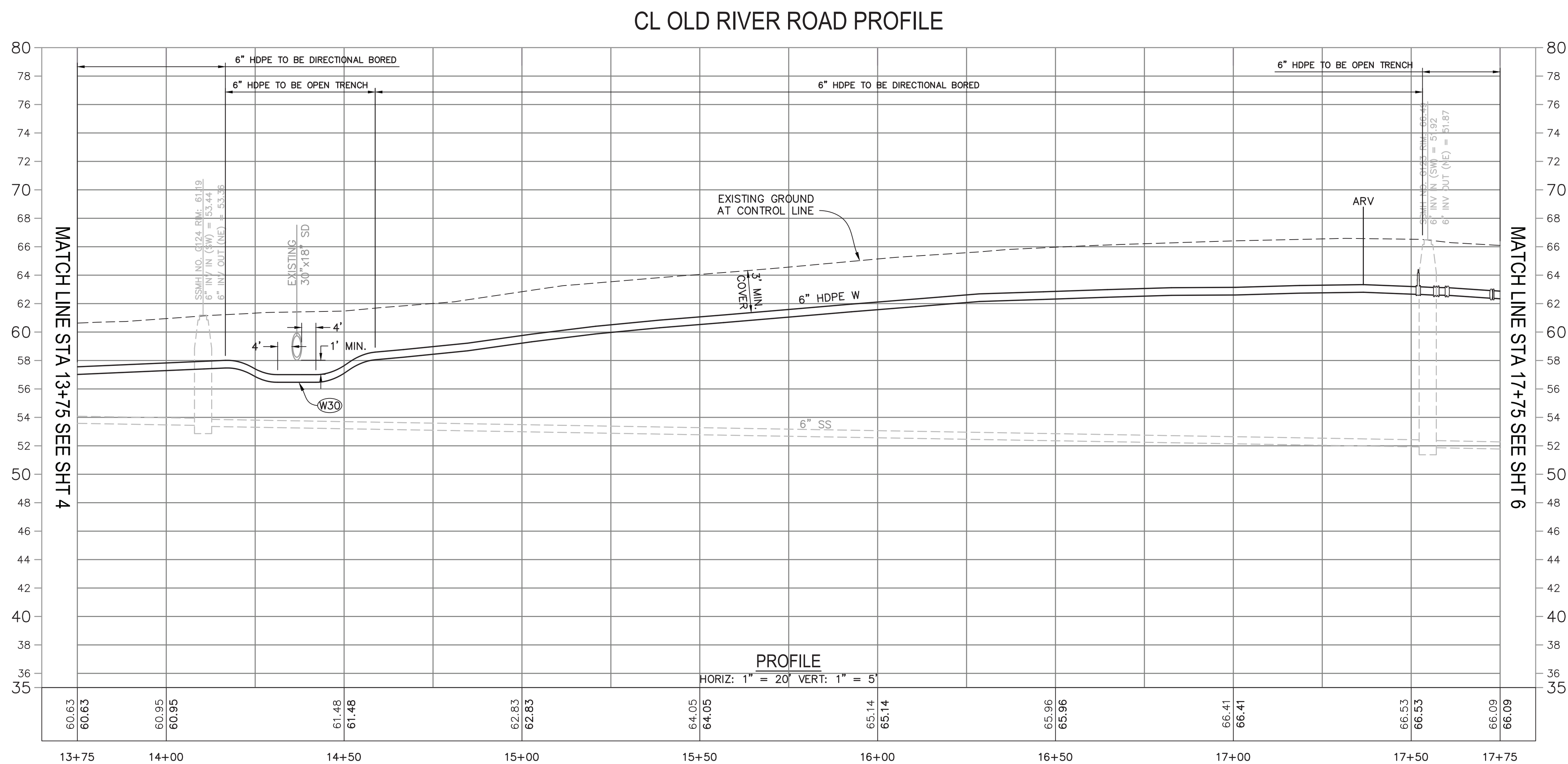


Line Table: Old River Rd					
Line #	Length	Direction	Start Station	End Station	End Point
L3	257.25	N39° 29' 25.98"E	13+37.69	N:1946577.87 E:6276956.74	N:1946776.40 E:6277120.34
L4	197.01	N37° 24' 22.67"E	16+31.32	N:1946804.88 E:6277142.95	N:1946961.37 E:6277262.63

Curve Table: Old River Rd			
CURVE NO.	RADIUS	LENGTH	DELTA
(C3)	1000.00	36.38	2°05'03"



- (R1) PLACE BLUE PAVEMENT MARKER PER DETAIL — (3/21)
- (R2) GRIND 0.25' AND PLACE 0.25' OF TRENCH PAVING PER COUNTY STD. 219B, TYPE A1 AND DETAIL — (16/24)
- (R3) APPROXIMATE BORE PIT LOCATION.
- (W1) CONSTRUCT 6" HDPE WATER MAIN.
- (W2) INSTALL 6" GATE VALVE PER DETAIL — (7/22)
- (W5) INSTALL FIRE HYDRANT PER DETAIL — (3/21)
- (W10) ABANDON WATER MAIN PER SPECIFICATIONS.
- (W22) INSTALL 1" WATER SERVICE WITH 1" METER PER DETAIL TIE INTO SERVICE AT BACK OF EXISTING METER BOX. — (6/22)
- (W26) INSTALL AIR RELEASE VALVE PER DETAIL PER — (1/21)
- (W28) WATER MAIN TO BE OPEN CUT TRENCH.
- (W29) WATER MAIN TO BE DIRECTIONAL BORED PER PROJECT SPECIFICATIONS.
- (W30) "ROPE" PIPE UNDER STORM DRAIN PER DETAIL — (11/23)

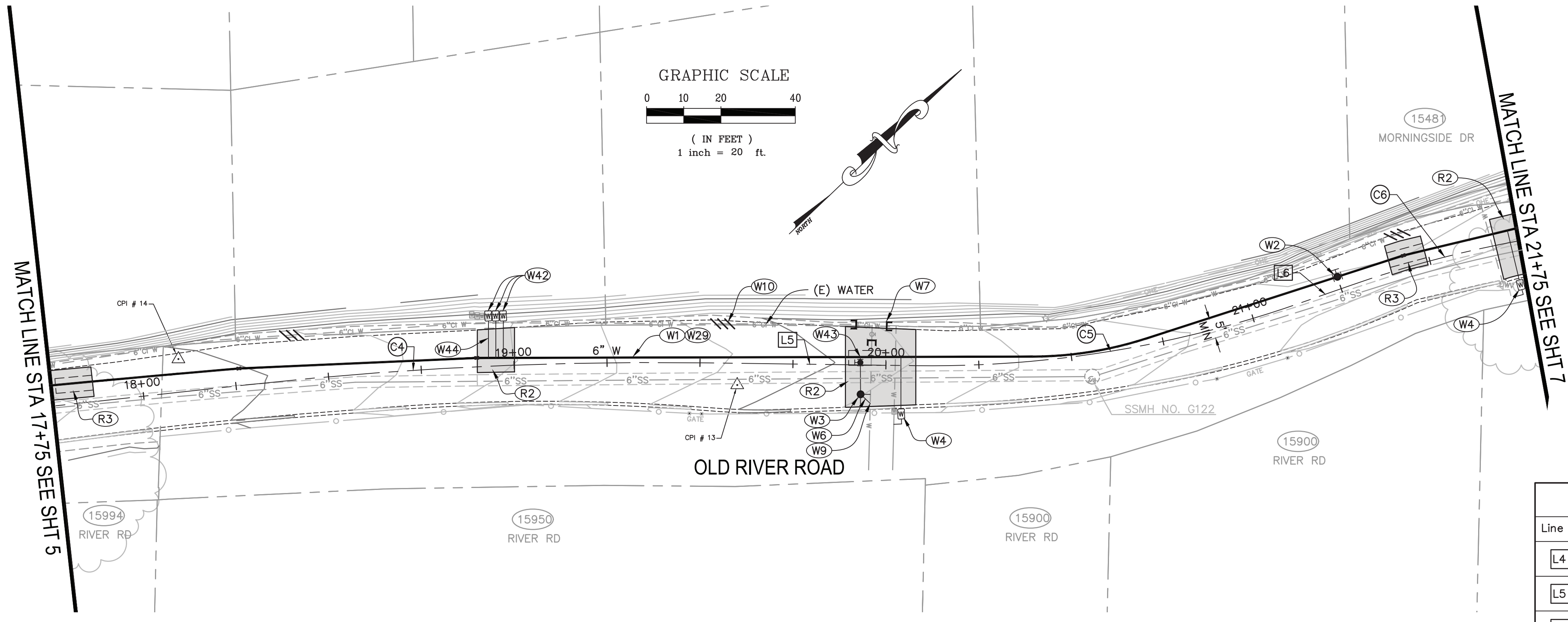


**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021



FOR REDUCED PLANS, THE ORIGINAL SCALE IS IN INCHES

3  
2  
1  
0



SHEET INDEX MAP  
NOT TO SCALE

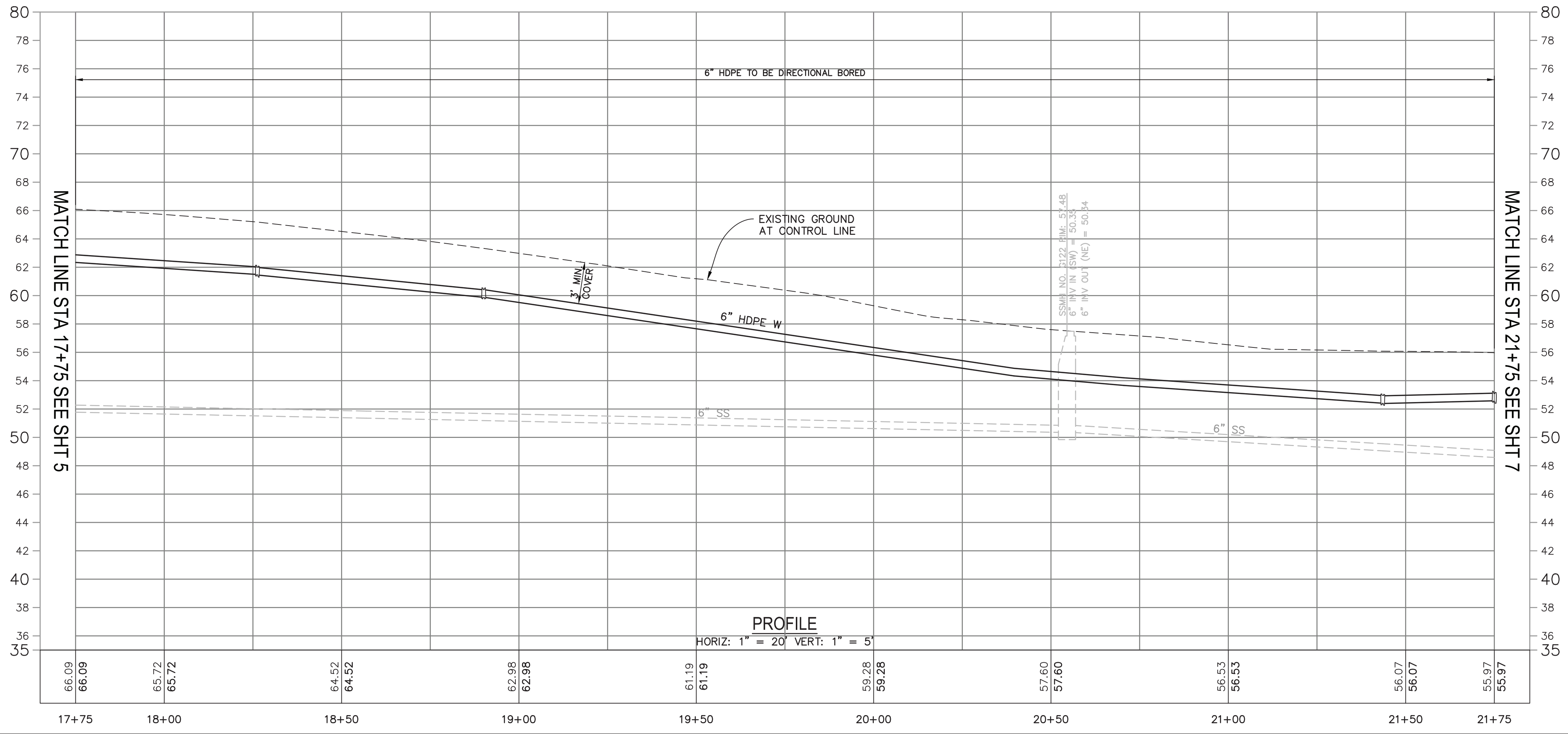
Line Table: Old River Rd						
Line #	Length	Direction	Start Station	Start Point	End Station	End Point
L4	197.01	N37° 24' 22.67"E	16+31.32	N:1946804.88 E:6277142.95	18+28.32	N:1946961.37 E:6277262.63
L5	57.33	N44° 25' 44.99"E	19+50.90	N:1947053.94 E:6277342.86	20+08.22	N:1947094.87 E:6277382.99
L6	14.77	N24° 24' 02.08"E	21+13.09	N:1947180.95 E:6277441.96	21+27.86	N:1947194.40 E:6277448.06

Curve Table: Old River Rd			
CURVE NO.	RADIUS	LENGTH	DELTA
C4	1000.00	122.57	7°01'22"
C5	300.00	104.87	20°01'43"
C6	300.00	108.28	20°40'45"

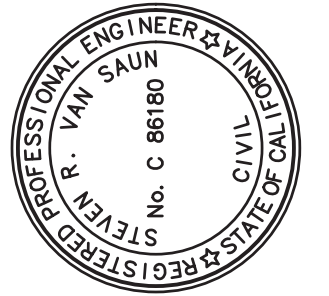
CONSTRUCTION NOTES

- (R1) PLACE BLUE PAVEMENT MARKER PER DETAIL (3/21)
- (R2) GRIND 0.25' AND PLACE 0.25' OF TRENCH PAVING PER COUNTY STD. 219B, TYPE A1 AND DETAIL (16/24)
- (R3) APPROXIMATE BORE PIT LOCATION.
- (W1) CONSTRUCT 6" HDPE WATER MAIN.
- (W2) INSTALL 6" GATE VALVE PER DETAIL (7/22)
- (W3) INSTALL TEMPORARY BLOW OFF PER DETAIL (5/22)
- (W4) INSTALL 1" WATER SERVICE WITH 5/8" METER PER DETAIL TIE INTO SERVICE AT BACK OF EXISTING METER BOX. (6/22)
- (W5) INSTALL FIRE HYDRANT PER DETAIL (3/21)
- (W6) INSTALL 4" PVC WATER SERVICE & CONNECT TO EXISTING FIRE LINE.
- (W9) CONNECT TO EXISTING WATER MAIN WITH FITTINGS AS REQUIRED UNDER THE INSPECTION OF THE DISTRICT.
- (W10) ABANDON WATER MAIN PER SPECIFICATIONS.
- (W29) WATER MAIN TO BE DIRECTIONAL BORED PER PROJECT SPECIFICATIONS.
- (W42) INSTALL 1" WATER SERVICE WITH 1" METER PER DETAIL (6/22)
- (W43) INSTALL 6" X 6" X 4" TEE, AND 4" GATE VALVE.
- (W44) PROVIDE MINIMUM OF 24-INCHES OF SEPARATION BETWEEN WATER SERVICES.

CL OLD RIVER ROAD PROFILE



**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021



PREPARED UNDER THE DIRECTION OF  
STEVEN R. VAN SAUN, RCE 86180 DATE 1/8/2021  
DESIGNED BY WJK DRAWN BY WJK REVIEWED BY SRV



**Coastland Civil Engineering, Inc.**  
1400 Neotomas Avenue, Santa Rosa, CA 95405  
707.571.8003 Fax 707.571.8005

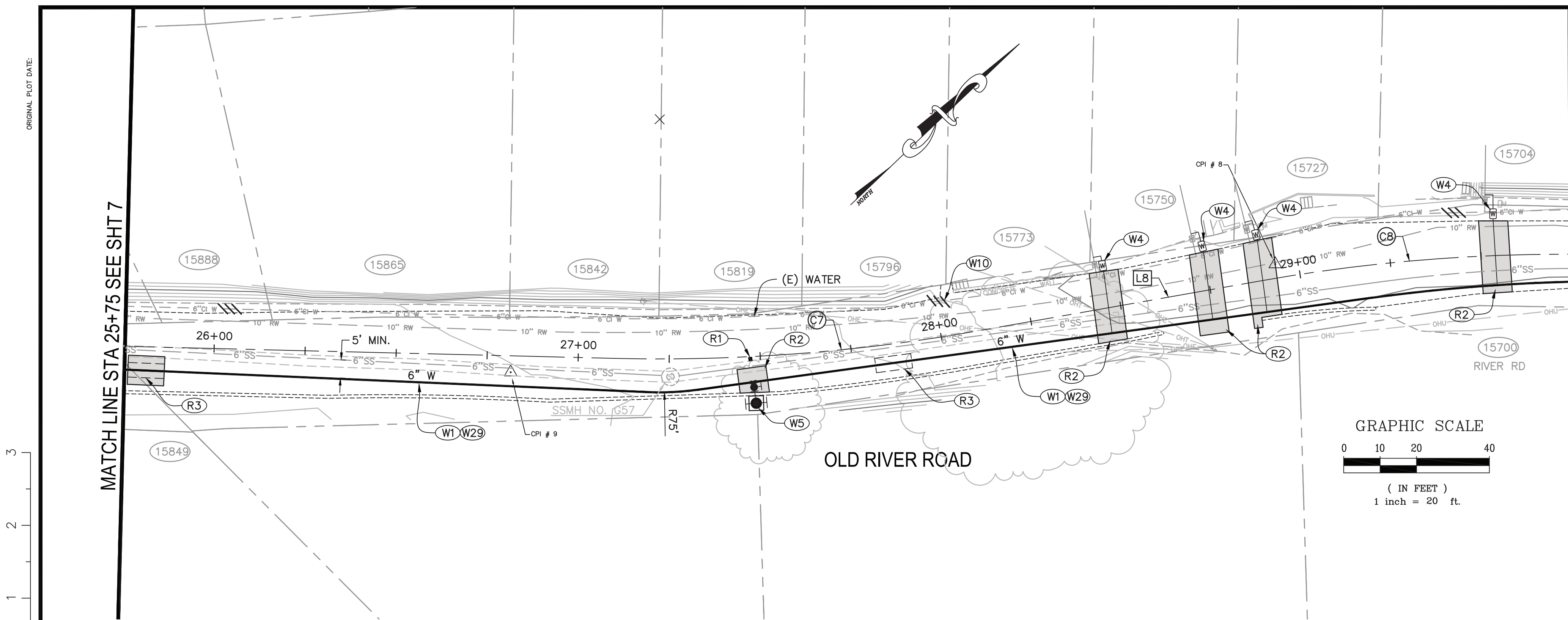
CALIFORNIA  
SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT  
GUERNEVILLE  
**OLD RIVER ROAD - PLAN AND PROFILE**  
**STA 17+75 TO STA 21+75**

PROJECT NUMBER  
88-4430  
DRAWING DATE  
JANUARY 2021  
SHEET NUMBER  
**6** OF **24**

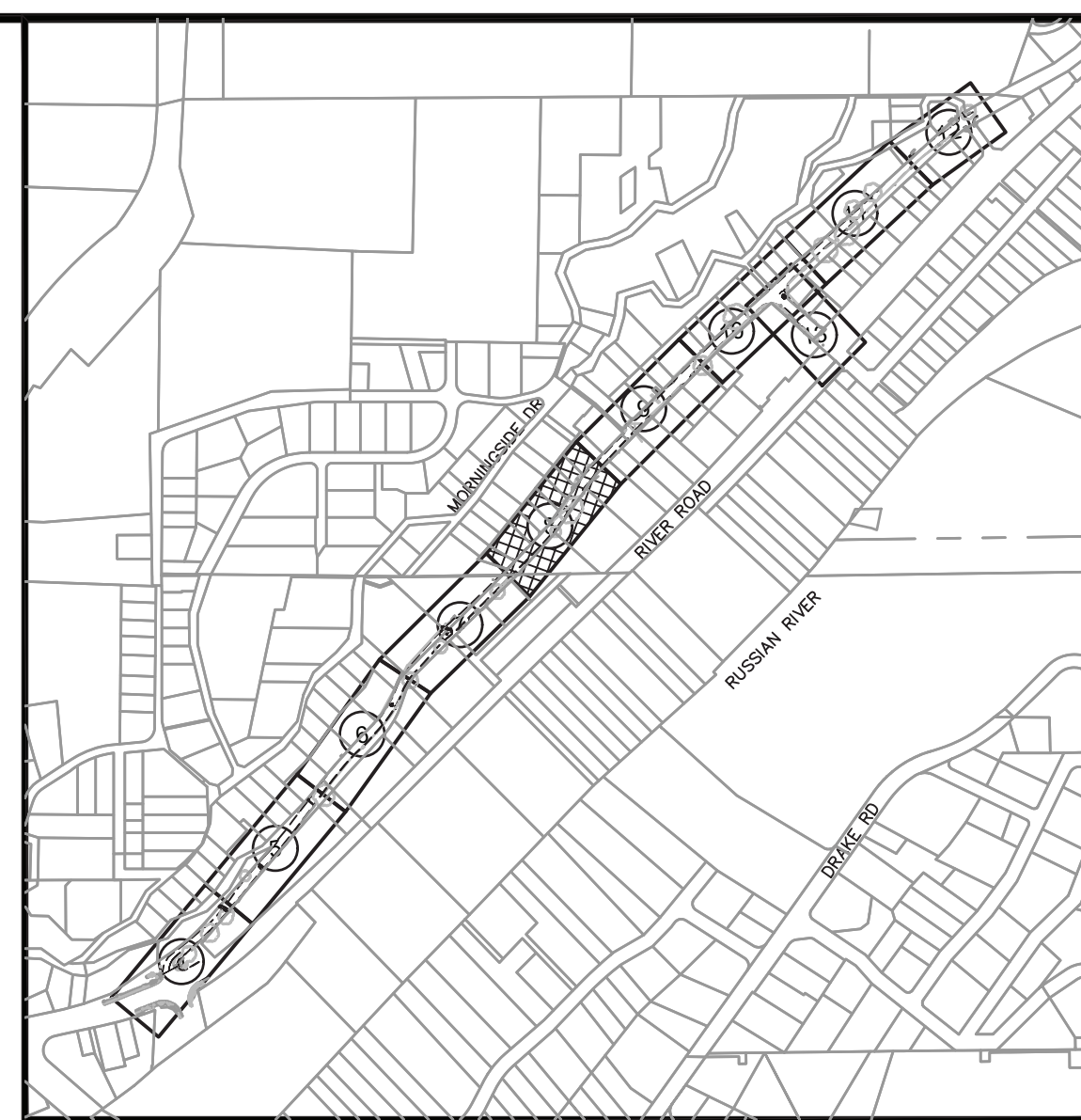
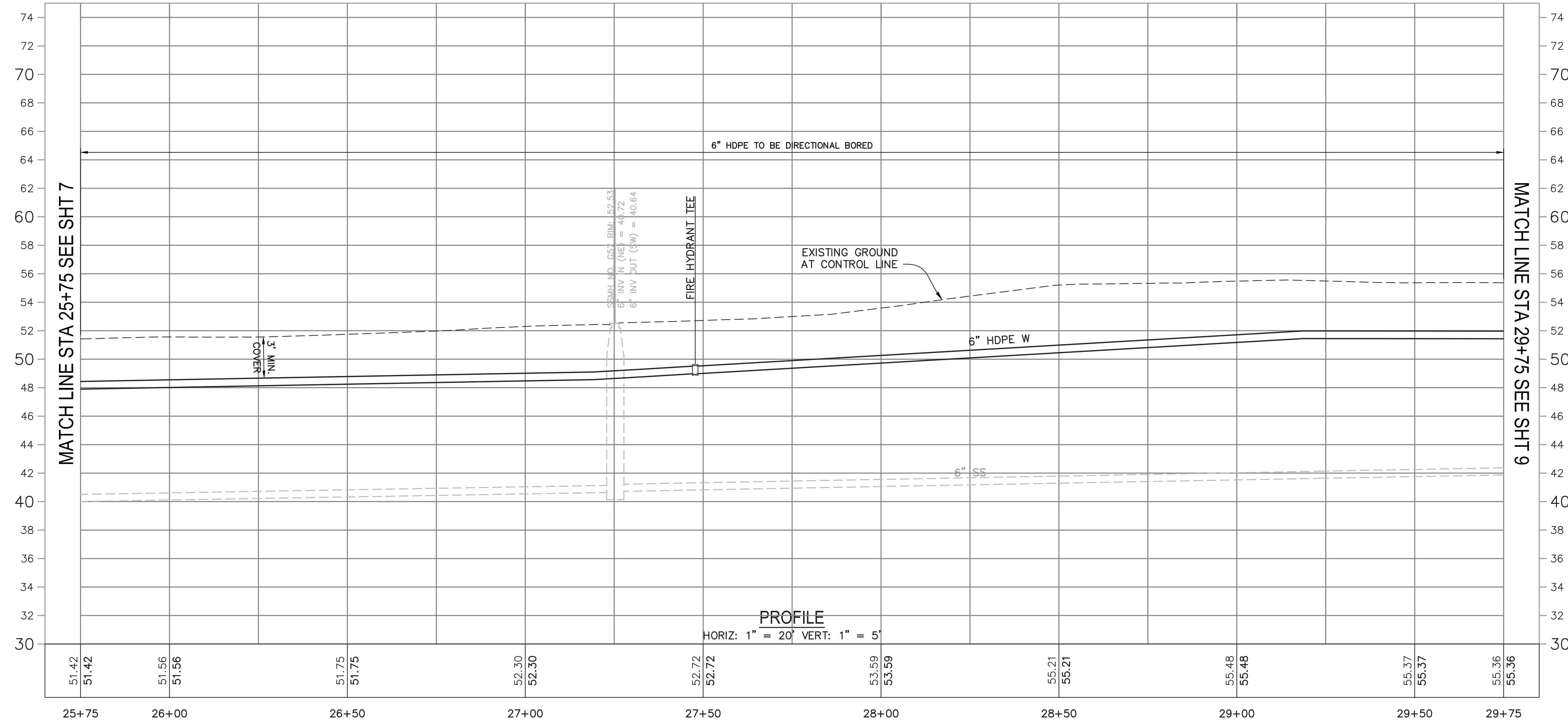








CL OLD RIVER ROAD PROFILE



SHEET INDEX MAP  
NOT TO SCALE

Line Table: Old River Rd						
Line #	Length	Direction	Start Station	Start Point	End Station	End Point
L7	473.84	N45° 04' 46.62"E	22+36.13	N: 1947282.89 E: 6277509.43	27+09.98	N: 1947617.48 E: 6277844.95
L8	79.44	N33° 38' 02.55"E	28+09.86	N: 1947694.58 E: 6277908.18	28+89.30	N: 1947760.73 E: 6277952.18
L9	171.57	N43° 31' 04.89"E	29+71.24	N: 1947824.71 E: 6278003.22	31+42.81	N: 1947949.12 E: 6278121.36

Curve Table: Old River Rd			
CURVE NO.	RADIUS	LENGTH	DELTA
C7	500.00	99.88	11°26'44"
C8	475.01	81.94	9°53'02"

CONSTRUCTION NOTES

- (R1) PLACE BLUE PAVEMENT MARKER PER DETAIL (3/21)
- (R2) GRIND 0.25' AND PLACE 0.25' OF TRENCH PAVING PER COUNTY STD. 219B, TYPE A1 AND DETAIL (16/24)
- (R3) APPROXIMATE BORE PIT LOCATION.
- (W1) CONSTRUCT 6" HDPE WATER MAIN.
- (W4) INSTALL 1" WATER SERVICE WITH 5/8" METER PER DETAIL (6/22)  
TIE INTO SERVICE AT BACK OF EXISTING METER BOX.
- (W5) INSTALL FIRE HYDRANT PER DETAIL (3/21)
- (W10) ABANDON WATER MAIN PER SPECIFICATIONS.
- (W29) WATER MAIN TO BE DIRECTIONAL BORED PER PROJECT SPECIFICATIONS.

**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021



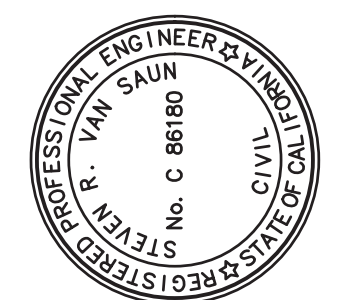
**Coastland Civil Engineering, Inc.**  
1400 Neotomas Avenue, Santa Rosa, CA 95405  
707.571.8003 Fax

CALIFORNIA  
SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT  
GUERNEVILLE

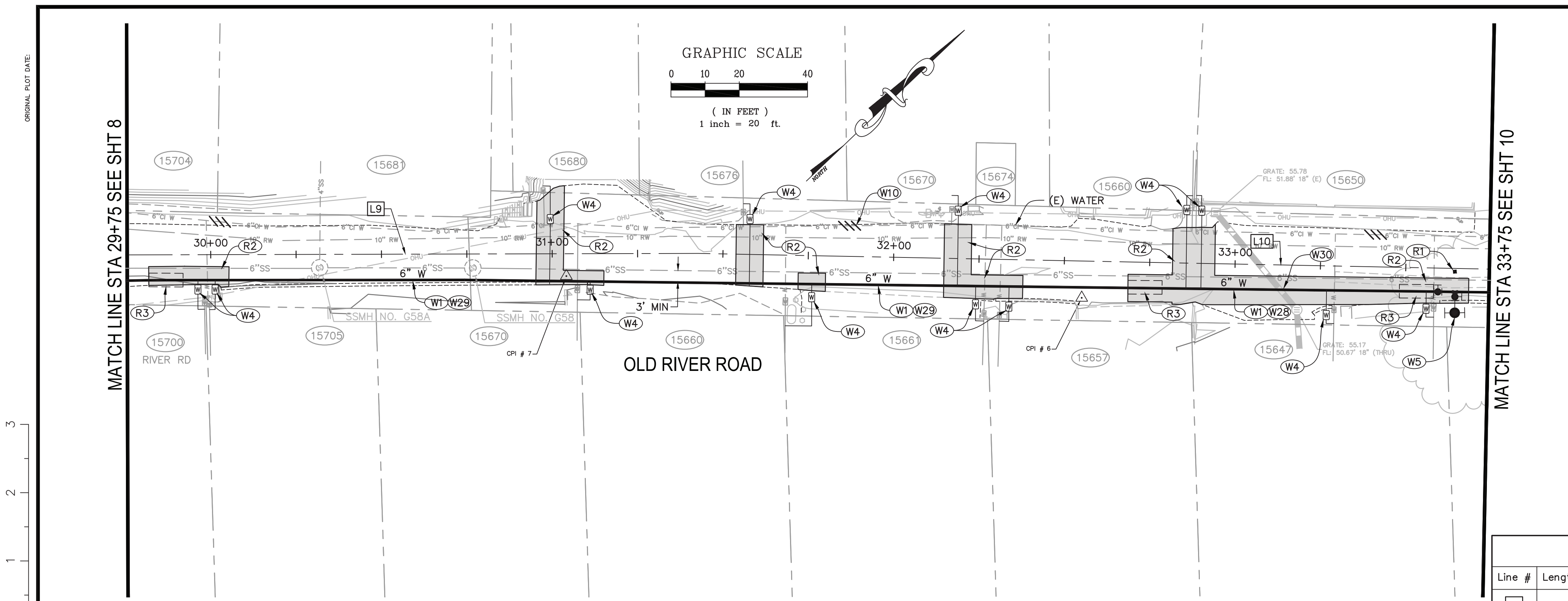
**OLD RIVER ROAD - PLAN AND PROFILE**  
STA 25+75 TO STA 29+75

PROJECT NUMBER  
88-4430  
DRAWING DATE  
JANUARY 2021  
SHEET NUMBER  
8 OF 24

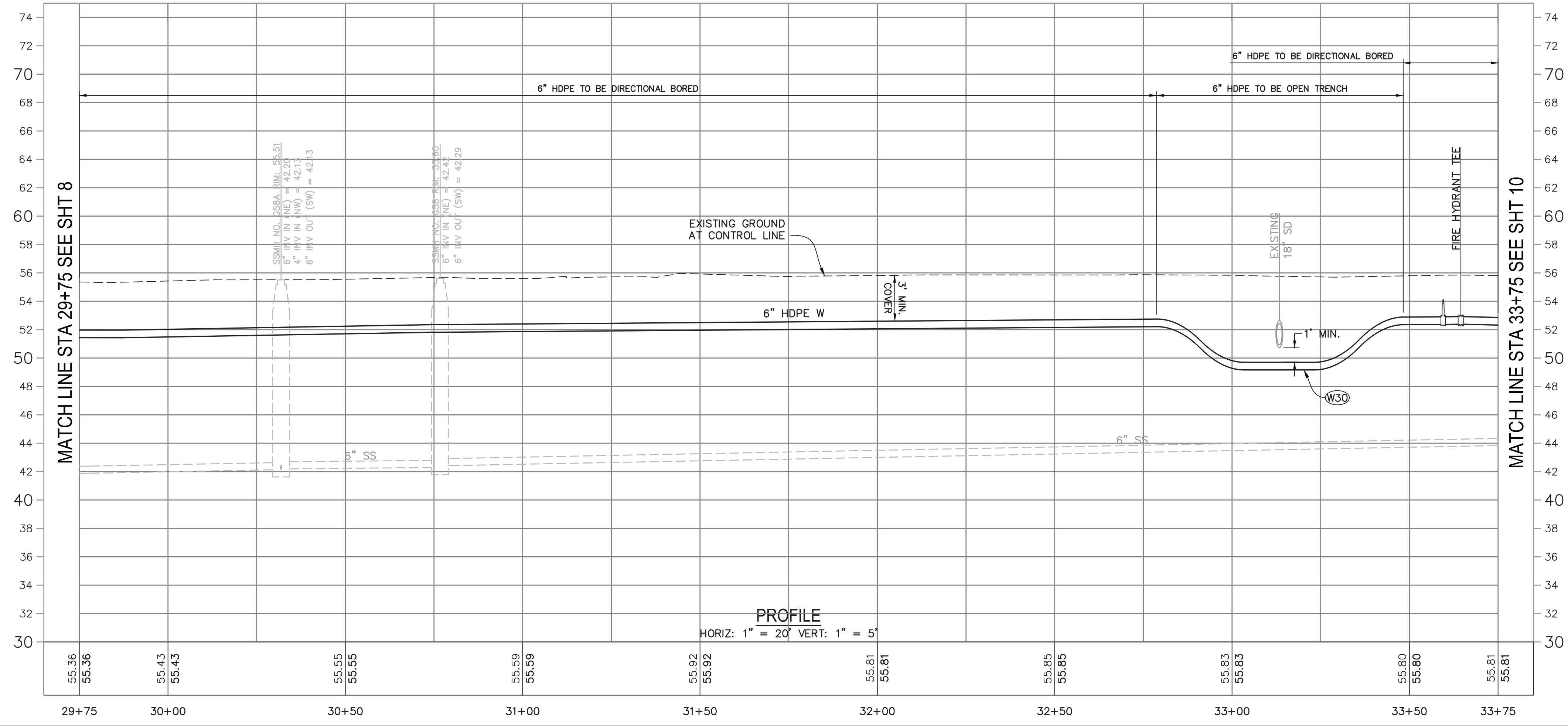
PREPARED UNDER THE DIRECTION OF  
STEVEN R. VAN SAUN, RCE 86180 DATE  
DESIGNED BY  
DRAWN BY  
REVIEWED BY  
SRV







CL OLD RIVER ROAD PROFILE



Line Table: Old River Rd						
Line #	Length	Direction	Start Station	Start Point	End Station	End Point
L9	171.57	N43° 31' 04.89"E	29+71.24	N: 1947824.71 E: 6278003.22	31+42.81	N: 1947949.12 E: 6278121.36
L10	328.01	N44° 48' 17.86"E	31+42.81	N: 1947949.12 E: 6278121.36	34+70.82	N: 1948181.85 E: 6278352.50

- CONSTRUCTION NOTES**
- (R1) PLACE BLUE PAVEMENT MARKER PER DETAIL (3/21)
  - (R2) GRIND 0.25' AND PLACE 0.25' OF TRENCH PAVING PER COUNTY STD. 219B, TYPE A1 AND DETAIL (16/24)
  - (R3) APPROXIMATE BORE PIT LOCATION.
  - (W1) CONSTRUCT 6" HDPE WATER MAIN.
  - (W2) INSTALL 6" GATE VALVE PER DETAIL (7/22)
  - (W4) INSTALL 1" WATER SERVICE WITH 5/8" METER PER DETAIL. TIE INTO SERVICE AT BACK OF EXISTING METER BOX. (6/22)
  - (W5) INSTALL FIRE HYDRANT PER DETAIL (3/21)
  - (W10) ABANDON WATER MAIN PER SPECIFICATIONS.
  - (W28) WATER MAIN TO BE OPEN CUT TRENCH.
  - (W29) WATER MAIN TO BE DIRECTIONAL BORED PER PROJECT SPECIFICATIONS.
  - (W30) "ROPE" PIPE UNDER STORM DRAIN PER DETAIL (11/23)

**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021

REGISTERED PROFESSIONAL ENGINEER  
STEVEN R. VAN SAUN  
No. C 86180  
CIVIL  
CALIFORNIA

1/8/2021  
STEVEN R. VAN SAUN, RCE 86180 DATE  
DESIGNED BY WJK  
DRAWN BY WJK  
REVIEWED BY WJK  
SRV

CALIFORNIA

SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT

GUERNEVILLE

OLD RIVER ROAD - PLAN AND PROFILE  
STA 29+75 TO STA 33+75

PROJECT NUMBER  
88-4430  
DRAWING DATE  
JANUARY 2021  
SHEET NUMBER  
9 OF 24

CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER  
STEVEN R. VAN SAUN  
No. C 86180  
CIVIL  
CALIFORNIA

1/8/2021  
STEVEN R. VAN SAUN, RCE 86180 DATE  
DESIGNED BY WJK  
DRAWN BY WJK  
REVIEWED BY WJK  
SRV

Costland Civil Engineering, Inc.

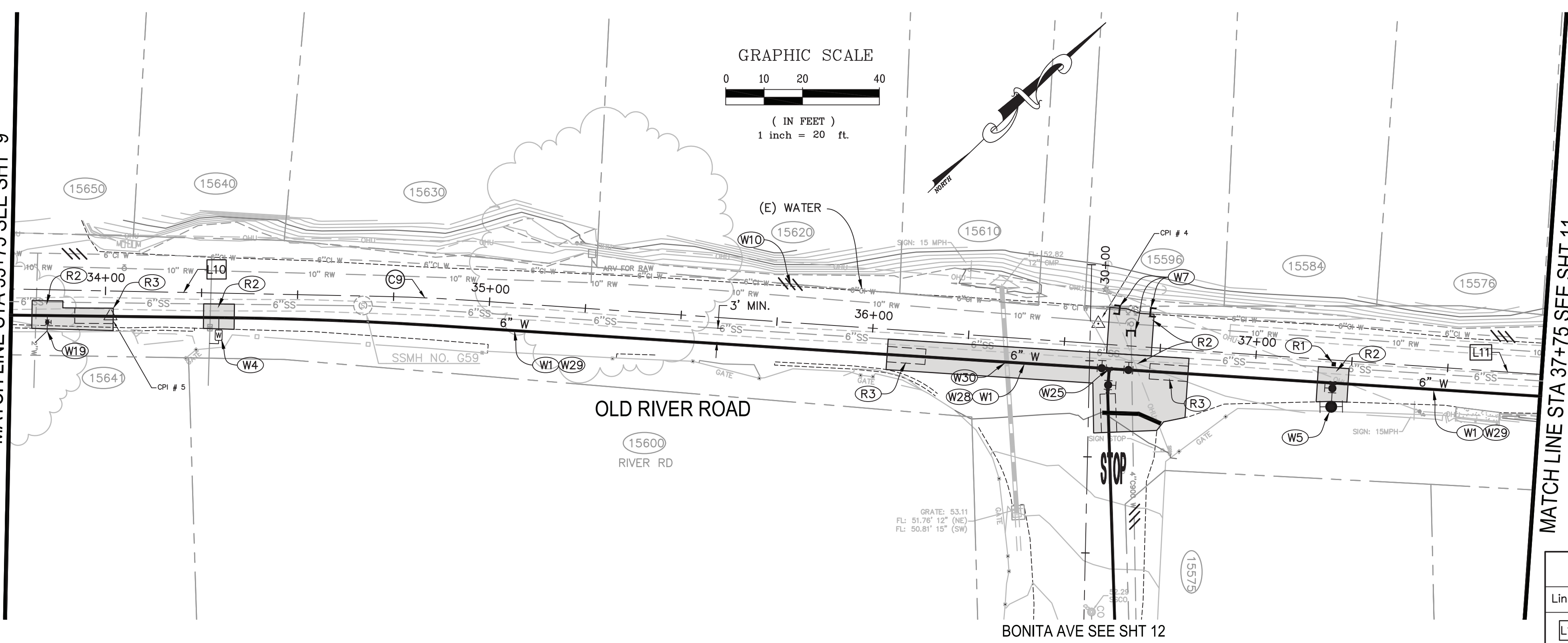
1400 Neotomas Avenue, Santa Rosa, CA 95405  
707.571.8003 Fax



FOR REDUCED PLANS, THE 0  
ORIGINAL SCALE IS IN INCHES

3  
2  
1

MATCH LINE STA 33+75 SEE SHT 9



BONITA AVE SEE SHT 12

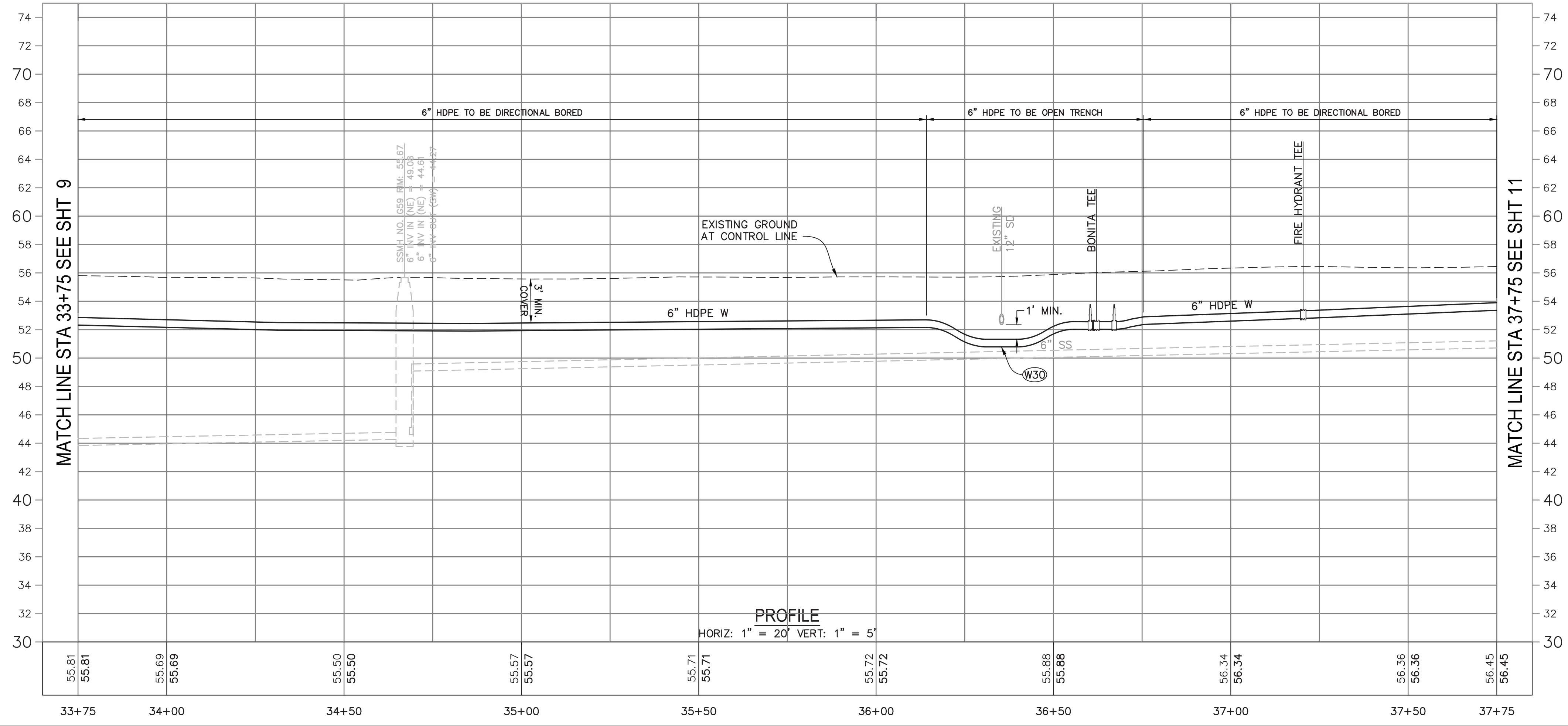
MATCH LINE STA 37+75 SEE SHT 11



SHEET INDEX MAP  
NOT TO SCALE

Line Table: Old River Rd						
Line #	Length	Direction	Start Station	Start Point	End Station	End Point
L10	328.01	N44° 48' 17.86"E	31+42.81	N:1947949.12 E:6278121.36	34+70.82	N:1948181.85 E:6278352.50
L11	552.72	N47° 37' 17.49"E	34+95.40	N:1948198.86 E:6278370.25	40+48.12	N:1948571.40 E:6278778.55

CL OLD RIVER ROAD PROFILE



Curve Table: Old River Rd			
CURVE NO.	RADIUS	LENGTH	DELTA
C9	500.00	24.58	2°49'00"

CONSTRUCTION NOTES

- (R1) PLACE BLUE PAVEMENT MARKER PER DETAIL (3/21)
- (R2) GRIND 0.25' AND PLACE 0.25' OF TRENCH PAVING PER COUNTY STD. 219B, TYPE A1 AND DETAIL (16/24)
- (R3) APPROXIMATE BORE PIT LOCATION.
- (W1) CONSTRUCT 6" HDPE WATER MAIN.
- (W4) INSTALL 1" WATER SERVICE WITH 5/8" METER PER DETAIL (6/22)  
TIE INTO SERVICE AT BACK OF EXISTING METER BOX.
- (W5) INSTALL FIRE HYDRANT PER DETAIL (3/21)
- (W7) PLUG EXISTING WATER MAIN AND ABANDON PER DETAIL (8/22)
- (W10) ABANDON WATER MAIN PER SPECIFICATIONS.
- (W19) INSTALL NEW 2" HDPE WATER SERVICE AND GATE VALVE & CONNECT TO EXISTING WATER SERVICE.
- (W25) INSTALL 6" X 6" X 6" TEE, AND (3) 6" GATE VALVES.
- (W28) WATER MAIN TO BE OPEN CUT TRENCH.
- (W29) WATER MAIN TO BE DIRECTIONAL BORED PER PROJECT SPECIFICATIONS.
- (W30) "ROPE" PIPE UNDER STORM DRAIN PER DETAIL (11/23)

**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021



**Coastland Civil Engineering, Inc.**  
1400 Neotomas Avenue, Santa Rosa, CA 95405  
707.571.8003 Fax

CALIFORNIA

SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT

GUERNEVILLE

**OLD RIVER ROAD - PLAN AND PROFILE**  
**STA 33+75 TO STA 37+75**

PROJECT NUMBER  
88-4430

DRAWING DATE  
JANUARY 2021

SHEET NUMBER  
10 OF 24

PREPARED UNDER THE DIRECTION OF

DESIGNED BY  
WJK

DRAWN BY  
WJK

REVIEWED BY  
WJK

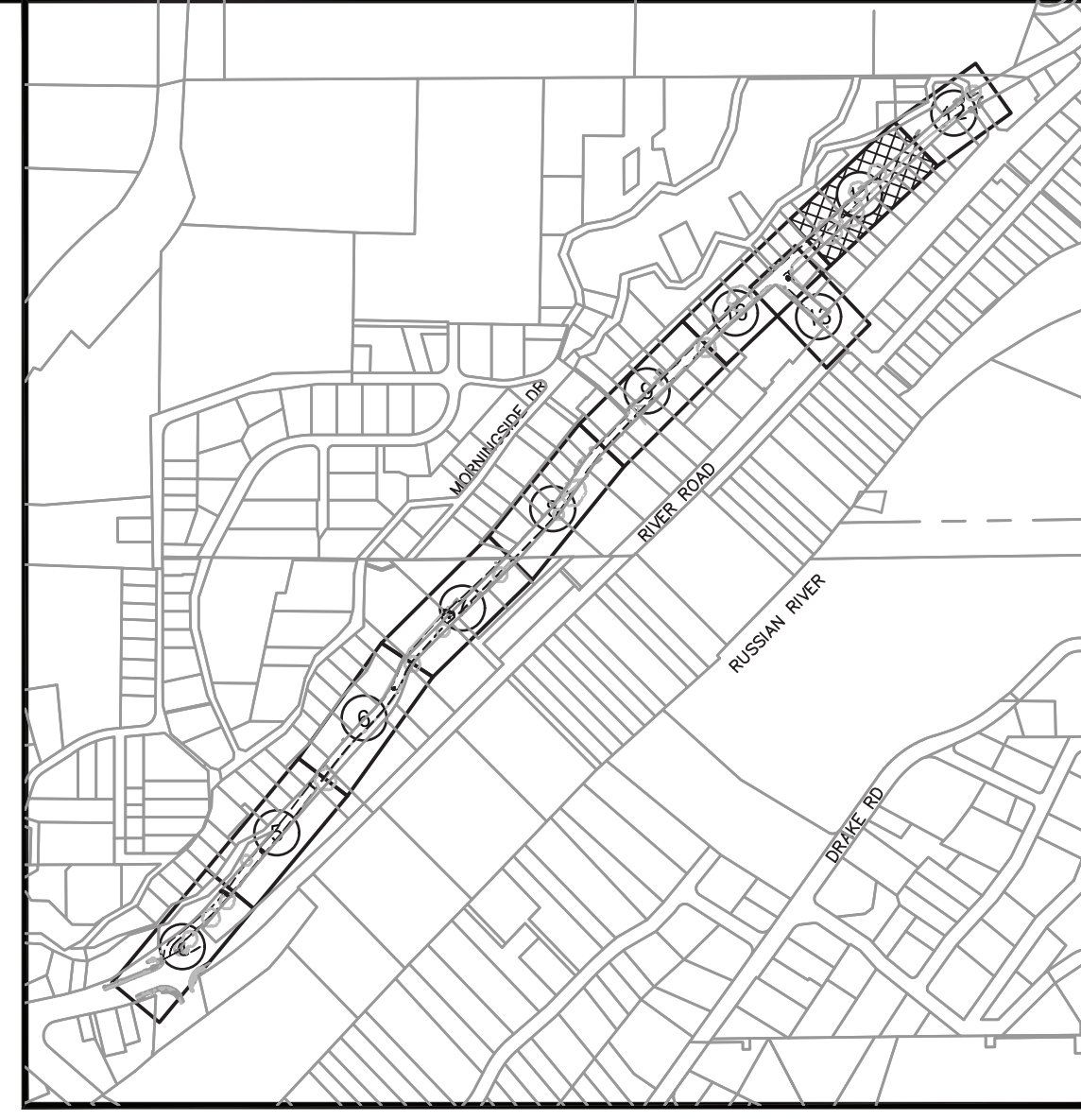
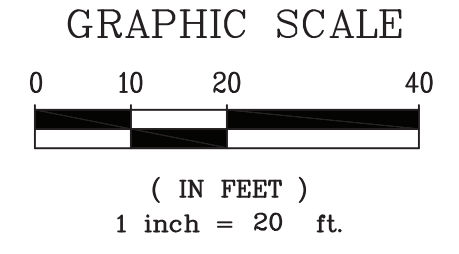
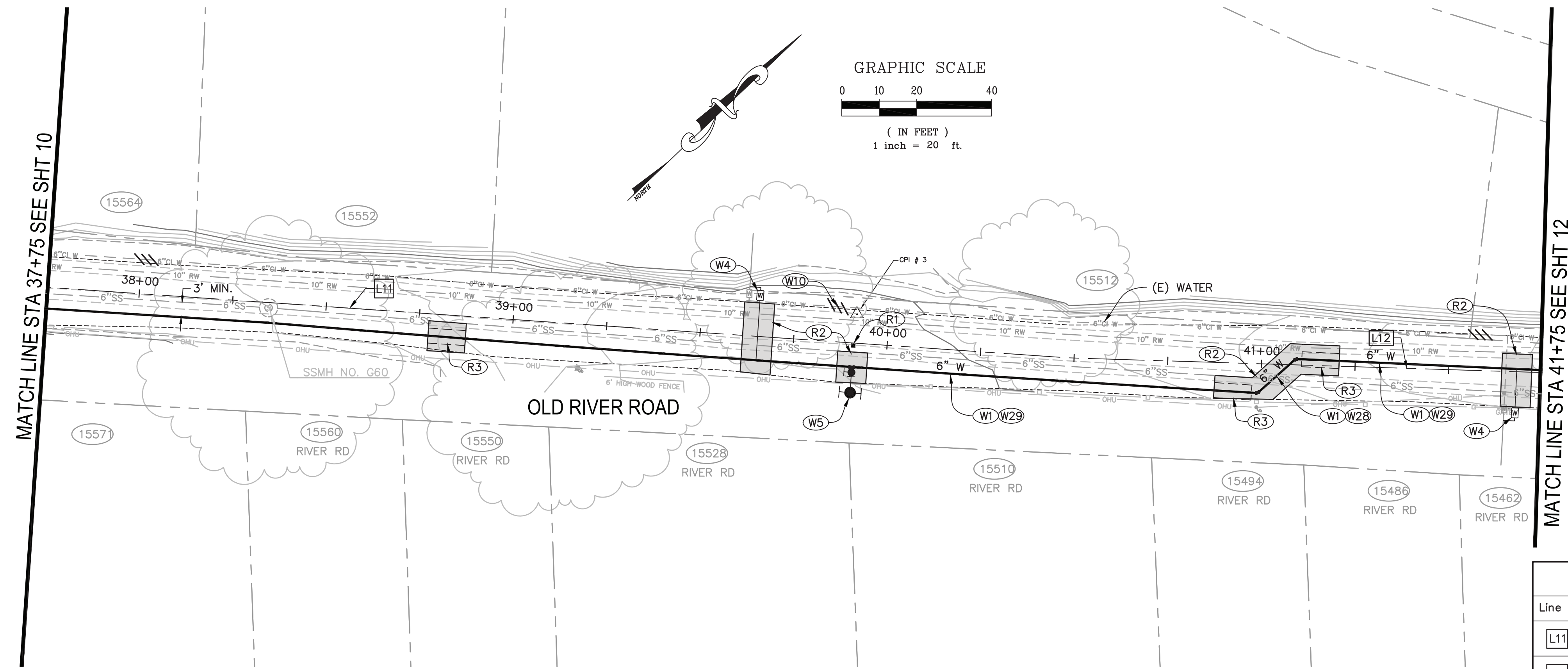
DATE  
1/8/2021





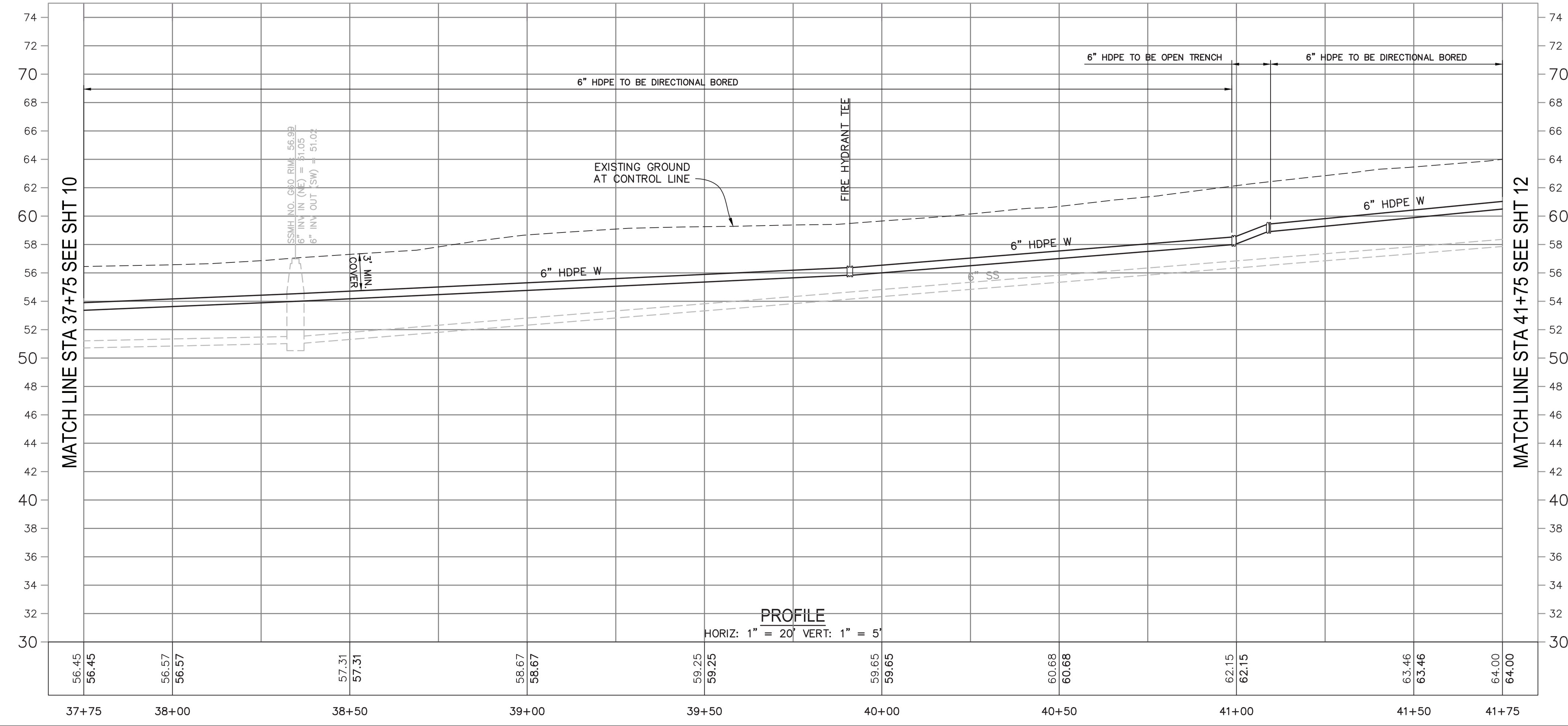
FOR REDUCED PLANS, THE ORIGINAL SCALE IS IN INCHES

0 1 2 3



Line Table: Old River Rd						
Line #	Length	Direction	Start Station	Start Point	End Station	End Point
L11	552.72	N47° 37' 17.49"E	34+95.40	N:1948198.86 E:6278370.25	40+48.12	N:1948571.40 E:6278778.55
L12	132.15	N45° 26' 42.56"E	40+48.12	N:1948571.40 E:6278778.55	41+80.27	N:1948664.12 E:6278872.71

CL OLD RIVER ROAD PROFILE



- CONSTRUCTION NOTES**
- (R1) PLACE BLUE PAVEMENT MARKER PER DETAIL (3/21)
  - (R2) GRIND 0.25' AND PLACE 0.25' OF TRENCH PAVING PER COUNTY STD. 219B, TYPE A1 AND DETAIL (16/24)
  - (R3) APPROXIMATE BORE PIT LOCATION.
  - (W1) CONSTRUCT 6" HDPE WATER MAIN.
  - (W4) INSTALL 1" WATER SERVICE WITH 5/8" METER PER DETAIL (6/22) TIE INTO SERVICE AT BACK OF EXISTING METER BOX.
  - (W5) INSTALL FIRE HYDRANT PER DETAIL (3/21)
  - (W10) ABANDON WATER MAIN PER SPECIFICATIONS.
  - (W28) WATER MAIN TO BE OPEN CUT TRENCH.
  - (W29) WATER MAIN TO BE DIRECTIONAL BORED PER PROJECT SPECIFICATIONS.

**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021

REGISTERED PROFESSIONAL ENGINEER  
STEVEN R. VAN SAUN  
No. C 86180  
CIVIL  
CALIFORNIA

DESIGNED BY  
WJK

DRAWN BY  
WJK

REVIEWED BY  
SRV

1/8/2021  
DATE

1/8/2021  
DATE

PREPARED UNDER THE DIRECTION OF

STEVEN R. VAN SAUN, RCE 86180

CALIFORNIA

SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT

GUERNEVILLE

OLD RIVER ROAD - PLAN AND PROFILE  
STA 37+75 TO STA 41+75

PROJECT NUMBER  
88-4430

DRAWING DATE  
JANUARY 2021

SHEET NUMBER  
11 OF 24

**Coastland Civil Engineering, Inc.**  
1400 Neotomas Avenue, Santa Rosa, CA 95405  
707.571.8003 Fax

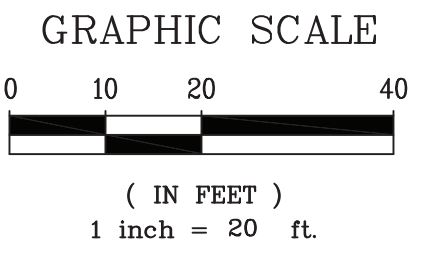
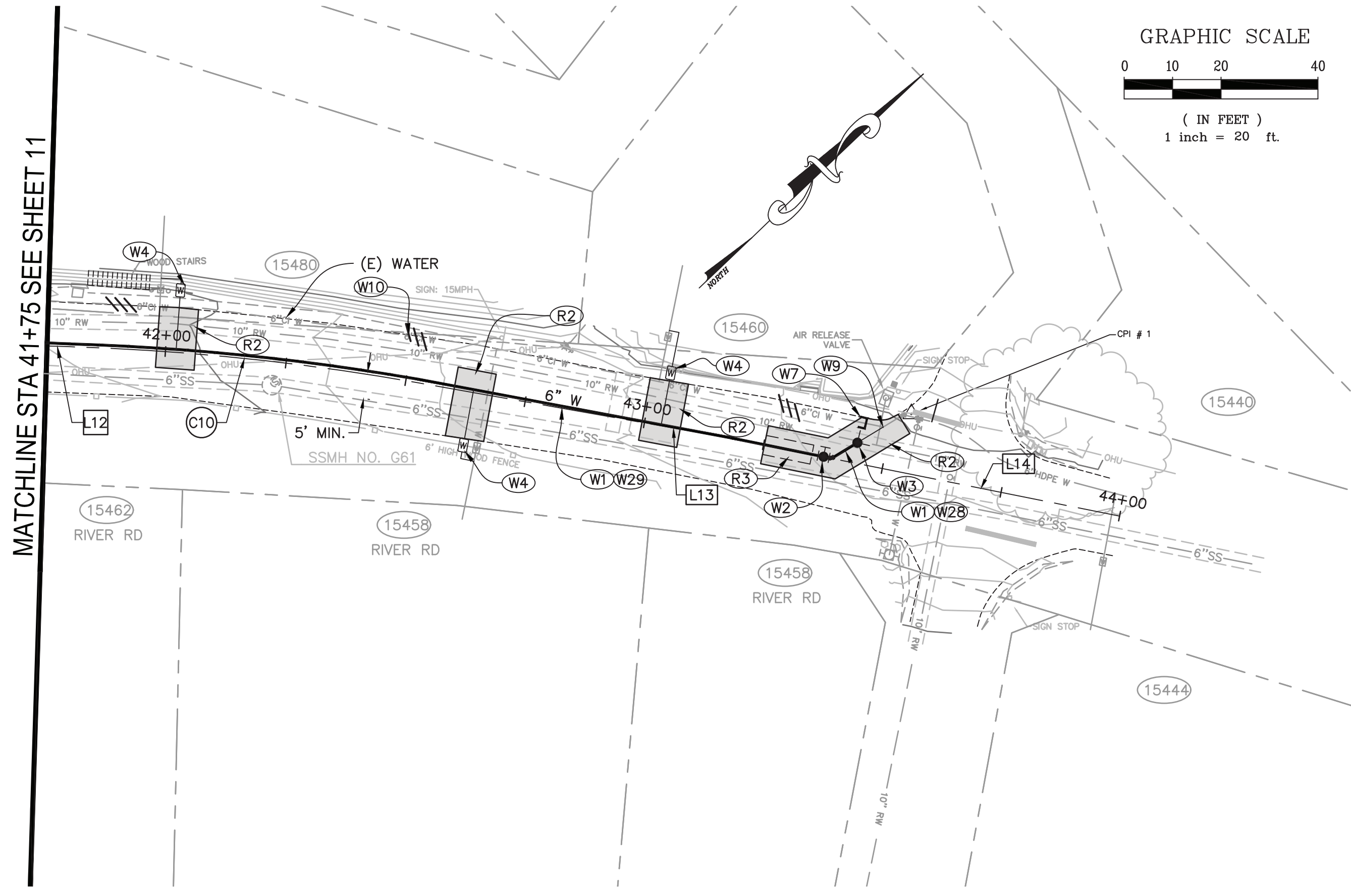


FOR REDUCED PLANS, THE ORIGINAL SCALE IS IN INCHES

3  
2  
1  
0

ORIGINAL PLOT DATE:

MATCHLINE STA 41+75 SEE SHEET 11



- CONSTRUCTION NOTES**
- (R2) GRIND 0.25' AND PLACE 0.25' OF TRENCH PAVING PER COUNTY STD. 219B, TYPE A1 AND DETAIL 16/24
  - (W1) CONSTRUCT 6" HDPE WATER MAIN. 7/22
  - (W2) INSTALL 6" GATE VALVE PER DETAIL 5/22
  - (W3) INSTALL TEMPORARY BLOW OFF PER DETAIL 6/22
  - (W4) INSTALL 1" WATER SERVICE WITH 5/8" METER PER DETAIL TIE INTO SERVICE AT BACK OF EXISTING METER BOX. 8/22
  - (W7) PLUG EXISTING WATER MAIN AND ABANDON PER DETAIL 8/22
  - (W9) CONNECT TO EXISTING WATER MAIN WITH FITTINGS AS REQUIRED UNDER THE INSPECTION OF THE DISTRICT.
  - (W10) ABANDON WATER MAIN PER SPECIFICATIONS.

Line Table: Old River Rd						
Line #	Length	Direction	Start Station	Start Point	End Station	End Point
L12	132.15	N45° 26' 42.56"E	40+48.12	N:1948571.40 E:6278778.55	41+80.27	N:1948664.12 E:6278872.71
L13	65.63	N53° 42' 54.32"E	42+52.44	N:1948710.87 E:6278927.61	43+18.07	N:1948749.71 E:6278980.51
L14	81.88	N55° 00' 21.08"E	43+18.07	N:1948749.71 E:6278980.51	43+99.95	N:1948796.67 E:6279047.59

Curve Table: Old River Rd			
CURVE NO.	RADIUS	LENGTH	DELTA
C10	500.00	72.17	8°16'12"



SHEET INDEX MAP  
NOT TO SCALE

CL OLD RIVER ROAD PROFILE



**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021

SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT

GUERNEVILLE CALIFORNIA

**OLD RIVER ROAD - PLAN AND PROFILE**  
STA 41+75 TO STA 44+00

PROJECT NUMBER  
88-4430

DRAWING DATE  
JANUARY 2021

SHEET NUMBER  
12 OF 24



**Coastland Civil Engineering, Inc.**  
1400 Neotomas Avenue, Santa Rosa, CA 95405  
707.571.8005

DESIGNED BY  
WJK

DRAWN BY  
WJK

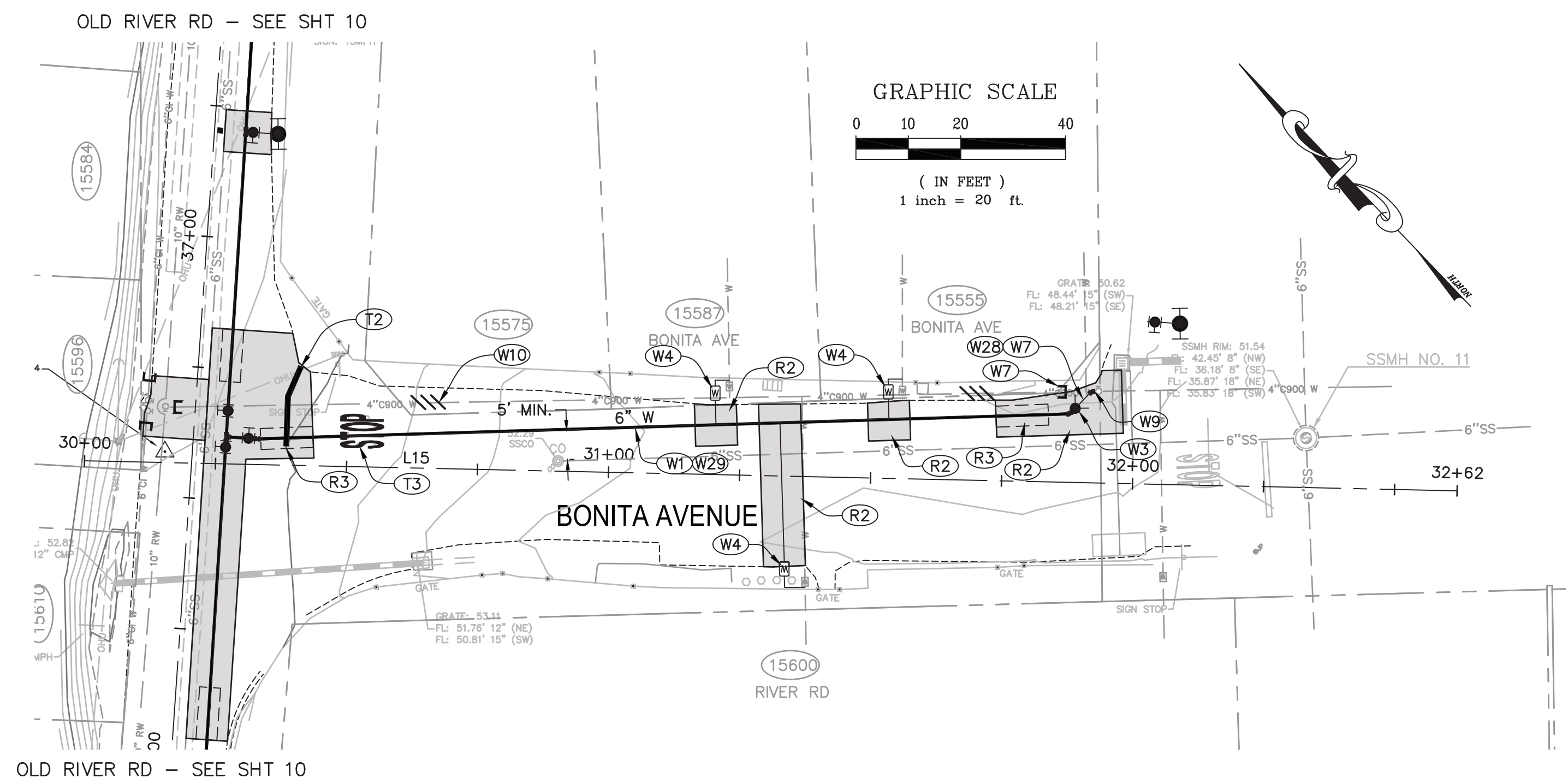
REVIEWED BY  
SRV

1/8/2021  
STEVEN R. VAN SAUN, RCE 86180 DATE





FOR REDUCED PLANS, THE 0 ORIGINAL SCALE IS IN INCHES



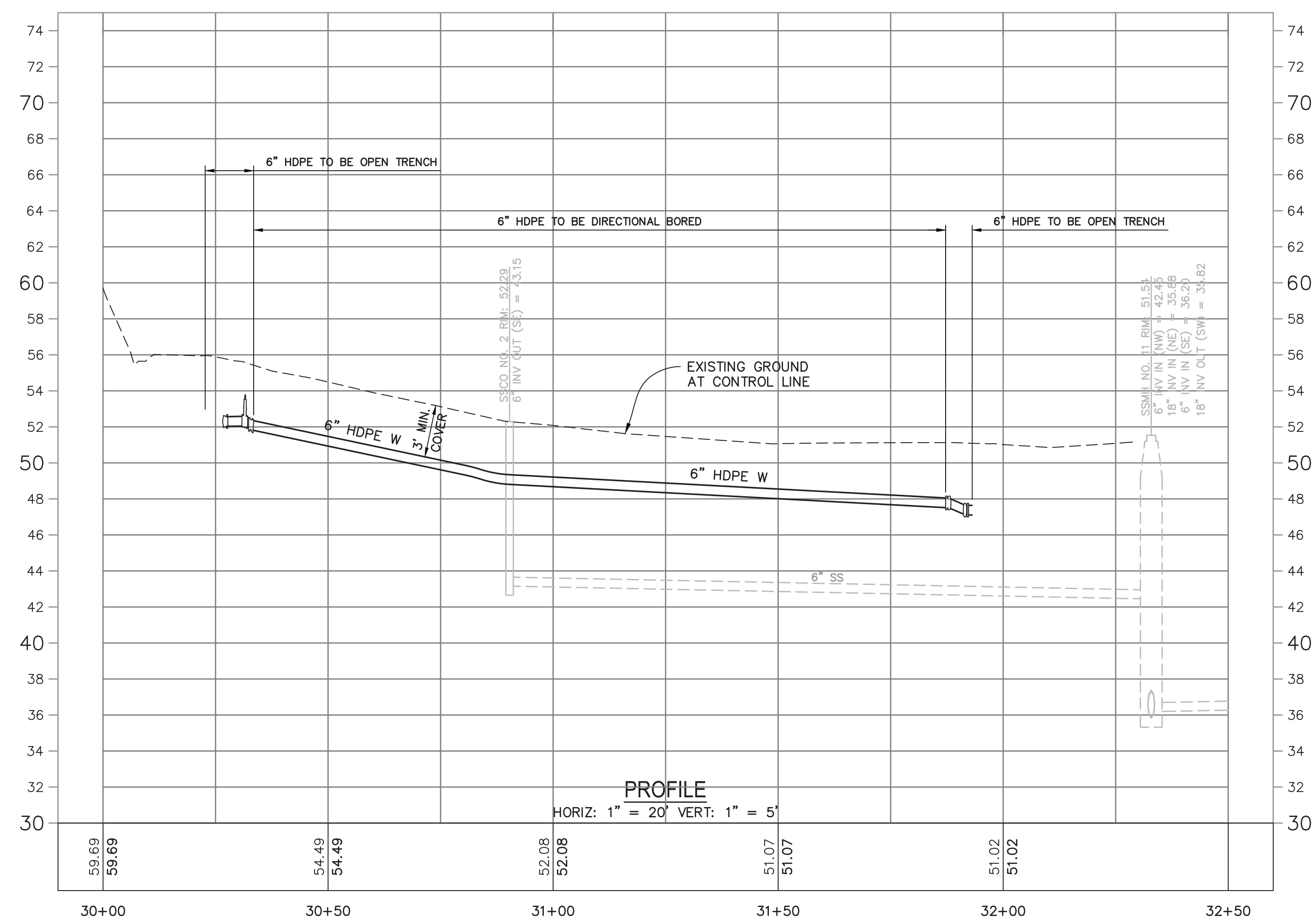
- CONSTRUCTION NOTES**
- (R2) GRIND 0.25' AND PLACE 0.25' OF TRENCH PAVING PER COUNTY STD. 219B, TYPE A1 AND DETAIL 16/24
  - (R3) APPROXIMATE BORE PIT LOCATION.
  - (T2) INSTALL WHITE 12-INCH THERMOPLASTIC CROSSWALK/LIMIT LINE PER CALTRANS STD PLAN A24E.
  - (T3) INSTALL WHITE THERMOPLASTIC PAVEMENT MARKING "STOP" PER CALTRANS STD PLAN A24D.
  - (W1) CONSTRUCT 6" HDPE WATER MAIN.
  - (W3) INSTALL TEMPORARY BLOW OFF PER DETAIL 5/21
  - (W4) INSTALL 1" WATER SERVICE WITH 5/8" METER PER DETAIL TIE INTO SERVICE AT BACK OF EXISTING METER BOX. 6/21
  - (W7) PLUG EXISTING WATER MAIN AND ABANDON PER DETAIL 8/21
  - (W9) CONNECT TO EXISTING WATER MAIN WITH FITTINGS AS REQUIRED UNDER THE INSPECTION OF THE DISTRICT.
  - (W10) ABANDON WATER MAIN PER SPECIFICATIONS.
  - (W28) WATER MAIN TO BE OPEN CUT TRENCH.
  - (W29) WATER MAIN TO BE DIRECTIONAL BORED PER PROJECT SPECIFICATIONS.

Line Table: Bonita Ave						
Line #	Length	Direction	Start Station	Start Point	End Station	End Point
L15	261.94	S45° 04' 34.60"E	30+00.00	N:1948321.97 E:6278474.89	32+61.94	N:1948136.99 E:6278660.36



**SHEET INDEX MAP**  
NOT TO SCALE

**BONITA CL PROFILE**



**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021

REGISTERED PROFESSIONAL ENGINEER  
STEVEN R. VAN SAUN  
No. C 86180  
CIVIL  
STATE OF CALIFORNIA

1/8/2021  
STEVEN R. VAN SAUN, RCE 86180 DATE  
DESIGNED BY  
WJK  
DRAWN BY  
WJK  
REVIEWED BY  
SRV

GUERNEVILLE

SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT

CALIFORNIA

BONITA AVE - PLAN AND PROFILE  
STA 20+00 TO STA 20+50

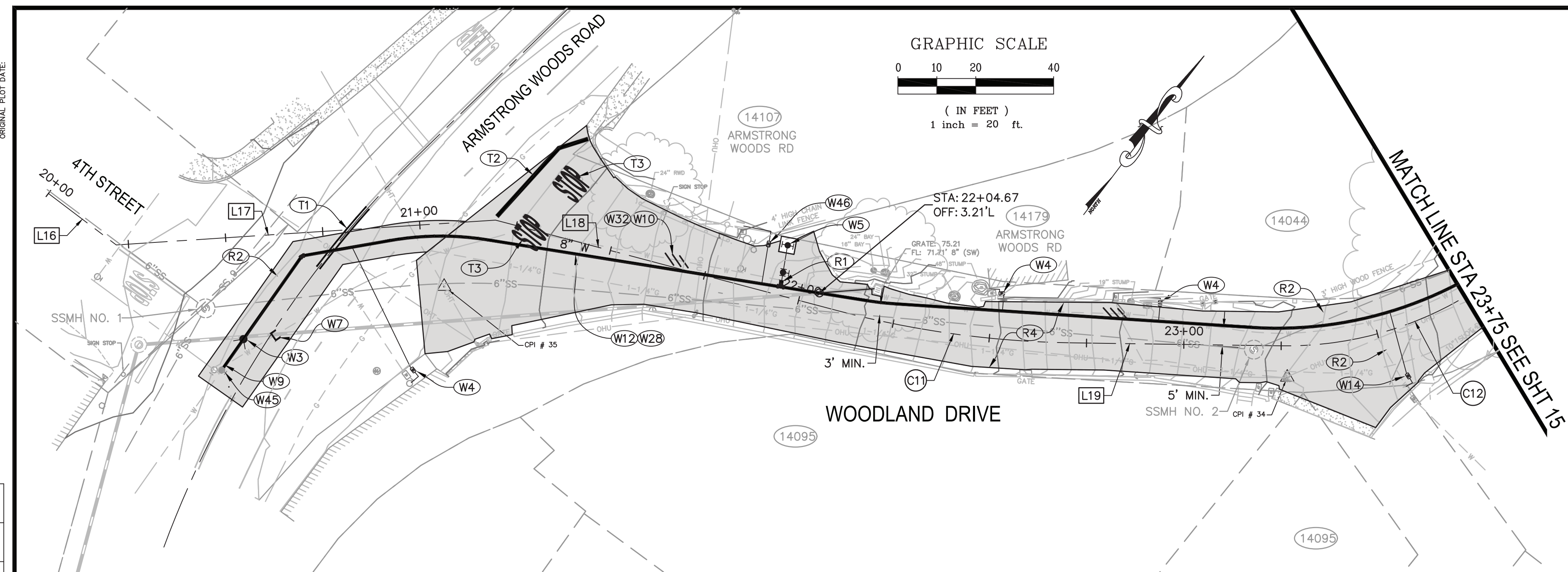
PROJECT NUMBER  
88-4430  
DRAWING DATE  
JANUARY 2021  
SHEET NUMBER  
13 OF 24

Coastland Civil Engineering, Inc.  
1400 Neotomas Avenue, Santa Rosa, CA 95405  
707.571.8005

PREPARED UNDER THE DIRECTION OF

DESIGNED BY  
WJK  
DRAWN BY  
WJK  
REVIEWED BY  
SRV



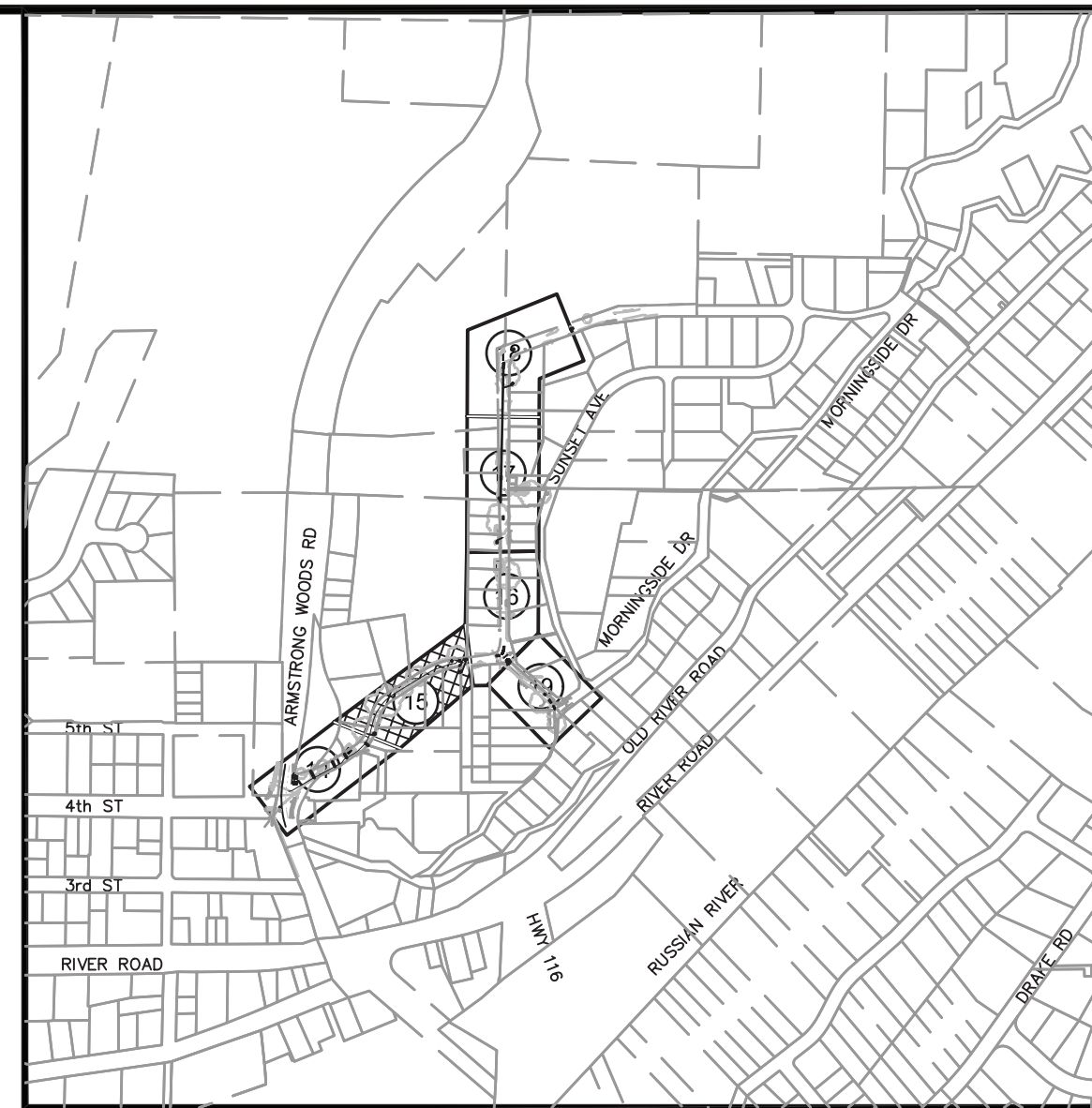
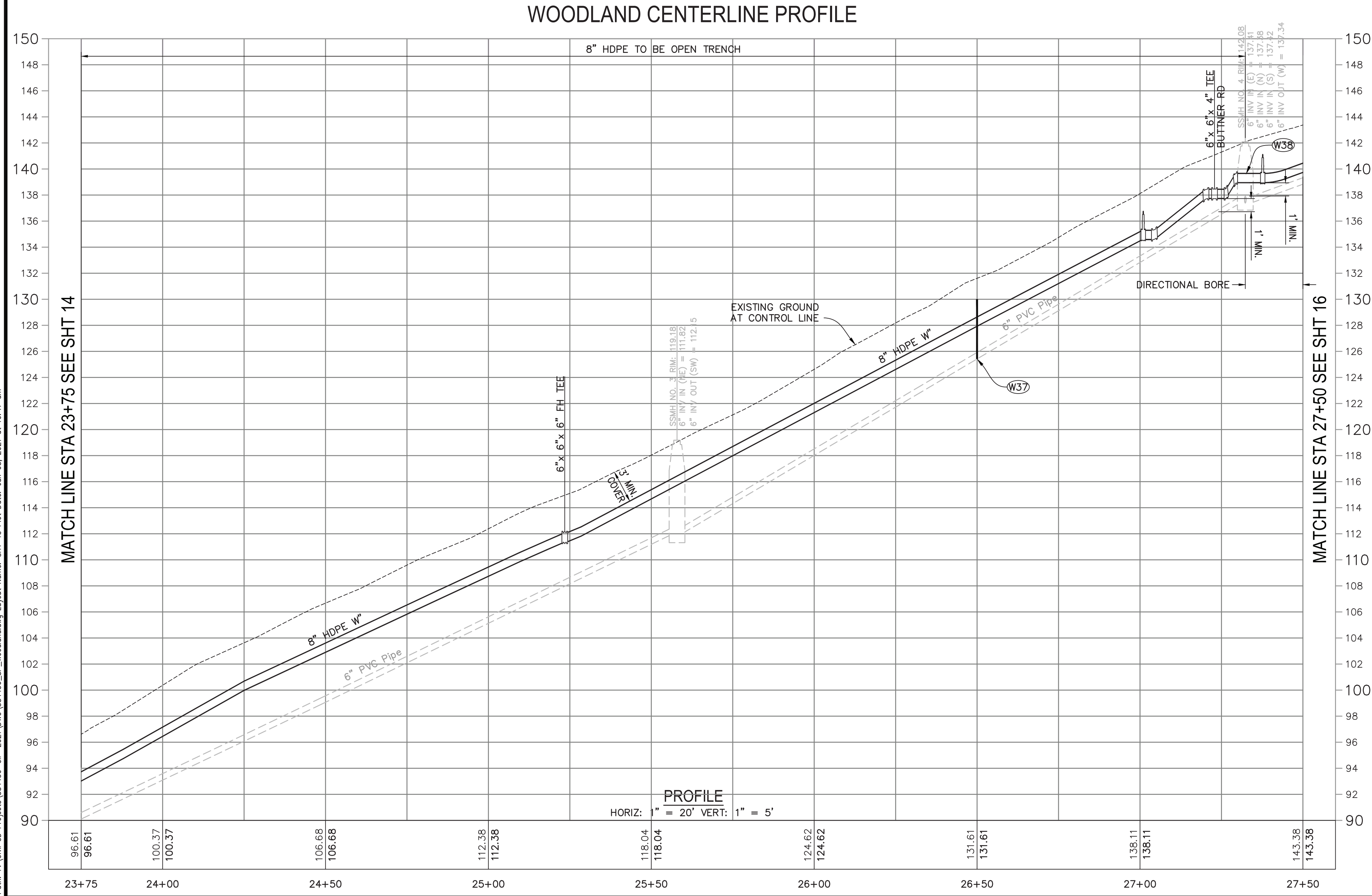
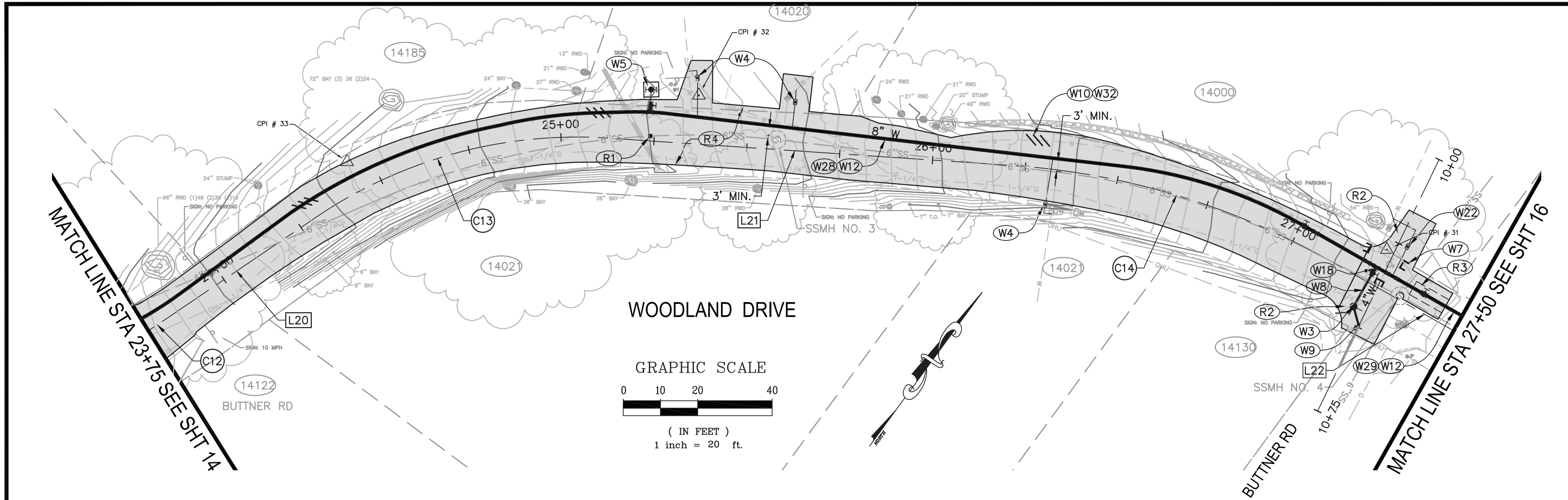




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Images:  
Patio, F:\Civil\_3D\Projects\884430-CP-2021\DWG\884430-CP, Woodland.dwg, Layout Name: SHT-15 Plot Date: Jan 08, 2021 at 10:47 am

FOR REDUCED PLANS, THE 0  
ORIGINAL SCALE IS IN INCHES

ORIGINAL PLOT DATE:



SHEET INDEX MAP  
NOT TO SCALE

#### CONSTRUCTION NOTES

- (R1) PLACE BLUE PAVEMENT MARKER PER DETAIL (3/21)
- (R2) GRIND 0.25' AND PLACE 0.25' OF TRENCH PAVING PER COUNTY STD. 219B, TYPE A1 AND DETAIL (16/24)
- (R3) APPROXIMATE BORE PIT LOCATION.
- (R4) FULL WIDTH PAVING PER COUNTY STD. 219B, TYPE A1.
- (W3) INSTALL TEMPORARY BLOW OFF PER DETAIL (5/22)
- (W4) INSTALL 1" WATER SERVICE WITH 5/8" METER PER DETAIL TIE INTO SERVICE AT BACK OF EXISTING METER BOX. (6/22)
- (W5) INSTALL FIRE HYDRANT PER DETAIL (3/21)
- (W7) PLUG EXISTING WATER MAIN AND ABANDON PER DETAIL (8/22)
- (W8) CONSTRUCT 4" HDPE WATER MAIN.
- (W9) CONNECT TO EXISTING WATER MAIN WITH FITTINGS AS REQUIRED UNDER THE INSPECTION OF THE DISTRICT.
- (W10) ABANDON WATER MAIN PER SPECIFICATIONS.
- (W12) CONSTRUCT 8" HDPE WATER MAIN.
- (W13) INSTALL 8" GATE VALVE PER DETAIL (7/22)
- (W18) INSTALL 8" X 8" X 4" TEE, (2) 8" GATE VALVES AND 4" GATE VALVE.
- (W22) INSTALL 1" WATER SERVICE WITH 1" METER PER DETAIL TIE INTO SERVICE AT BACK OF EXISTING METER BOX. (6/22)
- (W28) WATER MAIN TO BE OPEN CUT TRENCH.
- (W29) WATER MAIN TO BE DIRECTIONAL BORED PER PROJECT SPECIFICATIONS.
- (W32) TEMPORARY WATER MAIN TO BE PLACED INTO SERVICE PRIOR TO ABANDONING OF EXISTING WATER MAIN. SEE SHEET 20 FOR LOCATION AND DETAILS.
- (W37) INSTALL TRENCH CONTAINMENT CUTOFF PER DETAIL (14/23)
- (W38) INSTALL WATER MAIN OVER STRUCTURE PER DETAIL (10/23)

Line Table: Woodland Dr						
Line#	Length	Direction	Start Station	Start Point	End Station	End Point
L20	51.51	N19° 39' 19.17"E	23+78.38	N: 1946837.53 E: 6276402.16	24+29.89	N: 1946886.04 E: 6276419.49
L21	108.87	N57° 39' 55.41"E	25+12.81	N: 1946949.61 E: 6276470.34	26+21.69	N: 1947007.84 E: 6276562.33
L22	100.26	N83° 15' 31.73"E	27+11.02	N: 1947037.47 E: 6276645.83	28+11.28	N: 1947049.24 E: 6276745.39

Curve Table: Woodland Dr			
CURVE NO.	RADIUS	LENGTH	DELTA
C12	90.00	53.37	33°58'37"
C13	125.00	82.93	38°00'36"
C14	200.00	89.34	25°35'36"

**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021



**Coastland Civil Engineering, Inc.**  
1400 Neotomas Avenue, Santa Rosa, CA 95405  
707.571.8003 Fax

CALIFORNIA

SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT

GUERNEVILLE

**WOODLAND DR - PLAN AND PROFILE**  
**STA 23+75 TO STA 27+50**

PROJECT NUMBER  
88-4430

DRAWING DATE  
JANUARY 2021

SHEET NUMBER  
**15 OF 24**

PREPARED UNDER THE DIRECTION OF

DESIGNED BY  
WJK

DRAWN BY  
WJK

REVIEWED BY  
WJK

1/8/2021  
STEVEN R. VAN SAUN, RCE 86180 DATE

REVISED BY  
WJK

1/8/2021  
STEVEN R. VAN SAUN, RCE 86180 DATE












- SHEET INDEX MAP**  
NOT TO SCALE

**SHEET INDEX MAP**  
NOT TO SCALE

**SHEET INDEX MAP**  
NOT TO SCALE




**Coastland Civil Engineering, Inc.**  
 1400 Nectomas Avenue, Santa Rosa, CA 95405  
 707.571.8005      707.571.8037 Fax


PREPARED UNDER THE DIRECTION OF

STEVEN R. VAN SAUN, RCE 86180

1/8/2021

DESIGNED BY MLC	DRAWN BY MLC	REVIEWED BY MLC	SDA
--------------------	-----------------	--------------------	-----






**Coastland Civil Engineering, Inc.**  
 1400 Nectomas Avenue, Santa Rosa, CA 95405  
 707.571.8005      707.571.8037 Fax


PREPARED UNDER THE DIRECTION OF

STEVEN R. VAN SAUN, RCE 86180

1/8/2021

DESIGNED BY MLC	DRAWN BY MLC	REVIEWED BY MLC	SDA
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**Coastland Civil Engineering, Inc.**  
 1400 Nectomas Avenue, Santa Rosa, CA 95405  
 707.571.8005      707.571.8037 Fax

PREPARED UNDER THE DIRECTION OF

STEVEN R. VAN SAUN, RCE 86180


DESIGNED BY: WLS

DRAWN BY: WLS

REVIEWED BY: SDV

1/8/2021

DATE



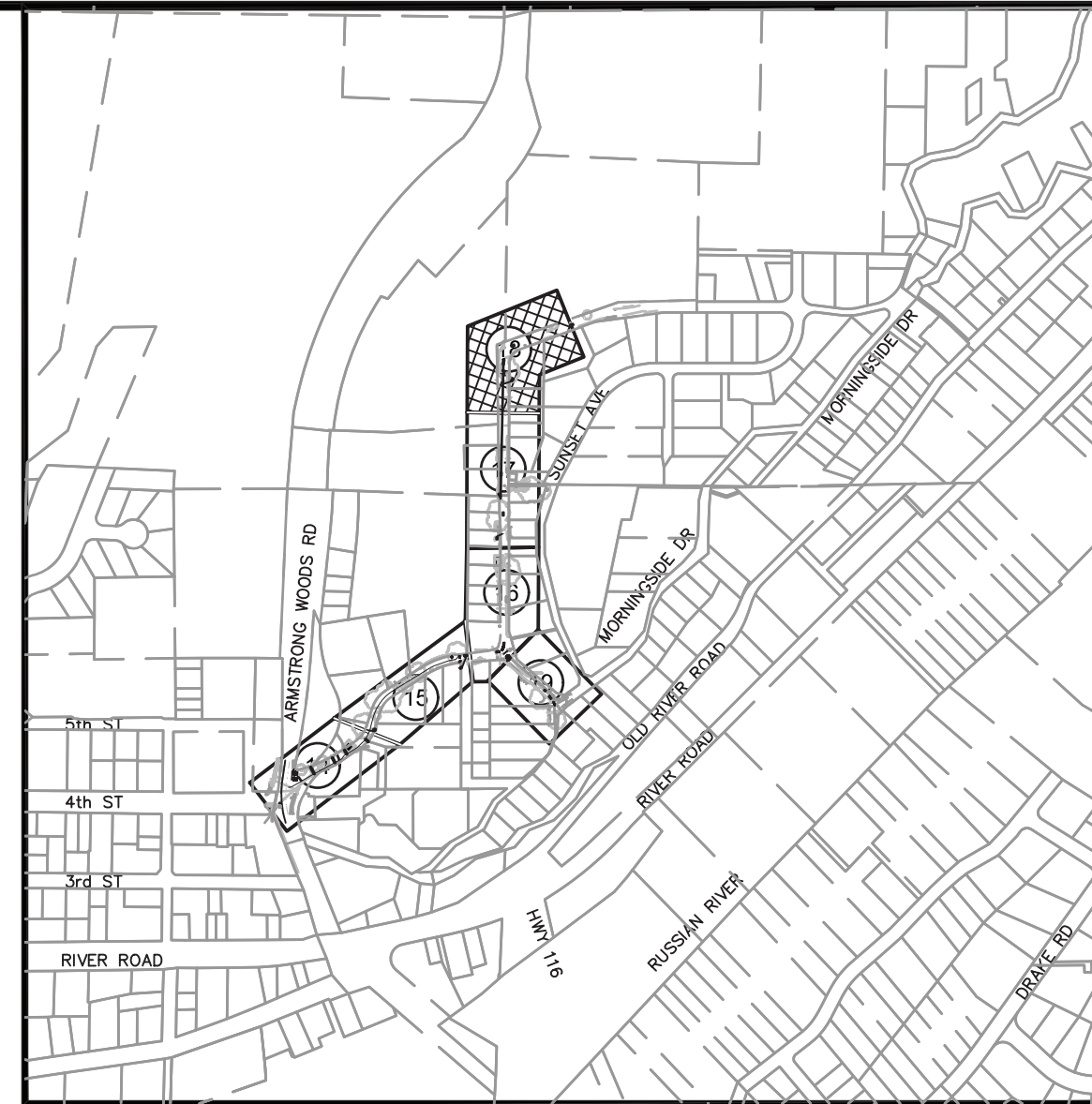
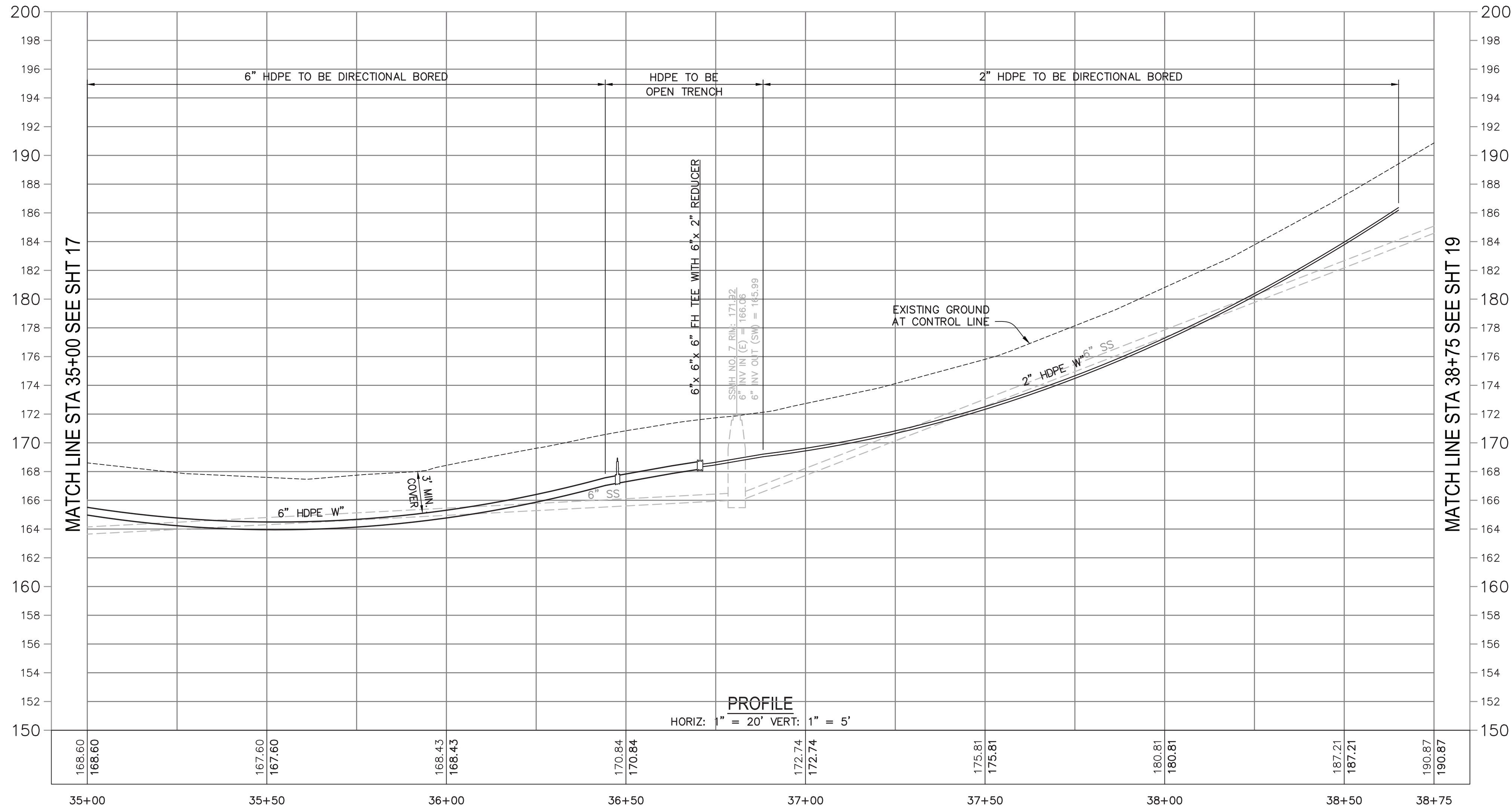


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Layout Name: SHT-18 Plot Date: Jan 08, 2021 at 10:47 am

FOR REDUCED PLANS, THE ORIGINAL SCALE IS IN INCHES

3  
2  
1

ORIGINAL PLOT DATE:



SHEET INDEX MAP  
NOT TO SCALE

CONSTRUCTION NOTES

- (R1) PLACE BLUE PAVEMENT MARKER PER DETAIL (3/21)
- (R2) GRIND 0.25' AND PLACE 0.25' OF TRENCH PAVING PER COUNTY STD. 219B, TYPE A1 AND DETAIL (16/24)
- (R3) APPROXIMATE BORE PIT LOCATION.
- (W1) CONSTRUCT 6" HDPE WATER MAIN.
- (W2) INSTALL 6" GATE VALVE PER DETAIL (7/22)
- (W4) INSTALL 1" WATER SERVICE WITH 5/8" METER PER DETAIL (6/22)  
TIE INTO SERVICE AT BACK OF EXISTING METER BOX.
- (W5) INSTALL FIRE HYDRANT PER DETAIL (3/21)
- (W10) ABANDON WATER MAIN PER SPECIFICATIONS.
- (W15) INSTALL 6" X 6" X 6" TEE WITH 6" TO 2" REDUCER.
- (W20) CONSTRUCT 2" HDPE WATER MAIN.
- (W21) INSTALL 2" ABOVE GROUND BLOW-OFF PER DETAIL (4/21)
- (W28) WATER MAIN TO BE OPEN CUT TRENCH.
- (W29) WATER MAIN TO BE DIRECTIONAL BORED PER PROJECT SPECIFICATIONS.

Line Table: Woodland Dr

Line#	Length	Direction	Start Station	Start Point	End Station	End Point
L24	387.39	N0° 46' 59.28"E	32+51.41	N:1947470.92 E:6276774.59	36+38.80	N:1947858.27 E:6276779.88
L25	201.46	N69° 14' 55.20"E	36+98.54	N:1947904.34 E:6276812.16	39+00.00	N:1947975.72 E:6277000.55

Curve Table: Woodland Dr

CURVE NO.	RADIUS	LENGTH	DELTA
C16	50.00	59.75	68°27'56"

PRELIMINARY

90% SUBMITTAL

DATE: JANUARY 2021



**Coastland Civil Engineering, Inc.**

1400 Neotomas Avenue, Santa Rosa, CA 95405  
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CALIFORNIA

SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT

GUERNEVILLE

**WOODLAND DR - PLAN AND PROFILE**  
**STA 35+00 TO STA 38+75**

PROJECT NUMBER  
88-4430

DRAWING DATE  
JANUARY 2021

SHEET NUMBER  
18 OF 24

PREPARED UNDER THE DIRECTION OF

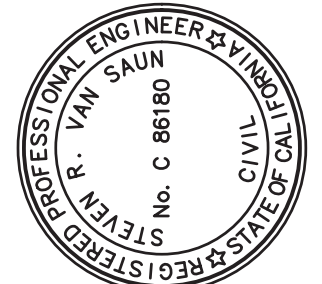
DESIGNED BY  
WJK

DRAWN BY  
WJK

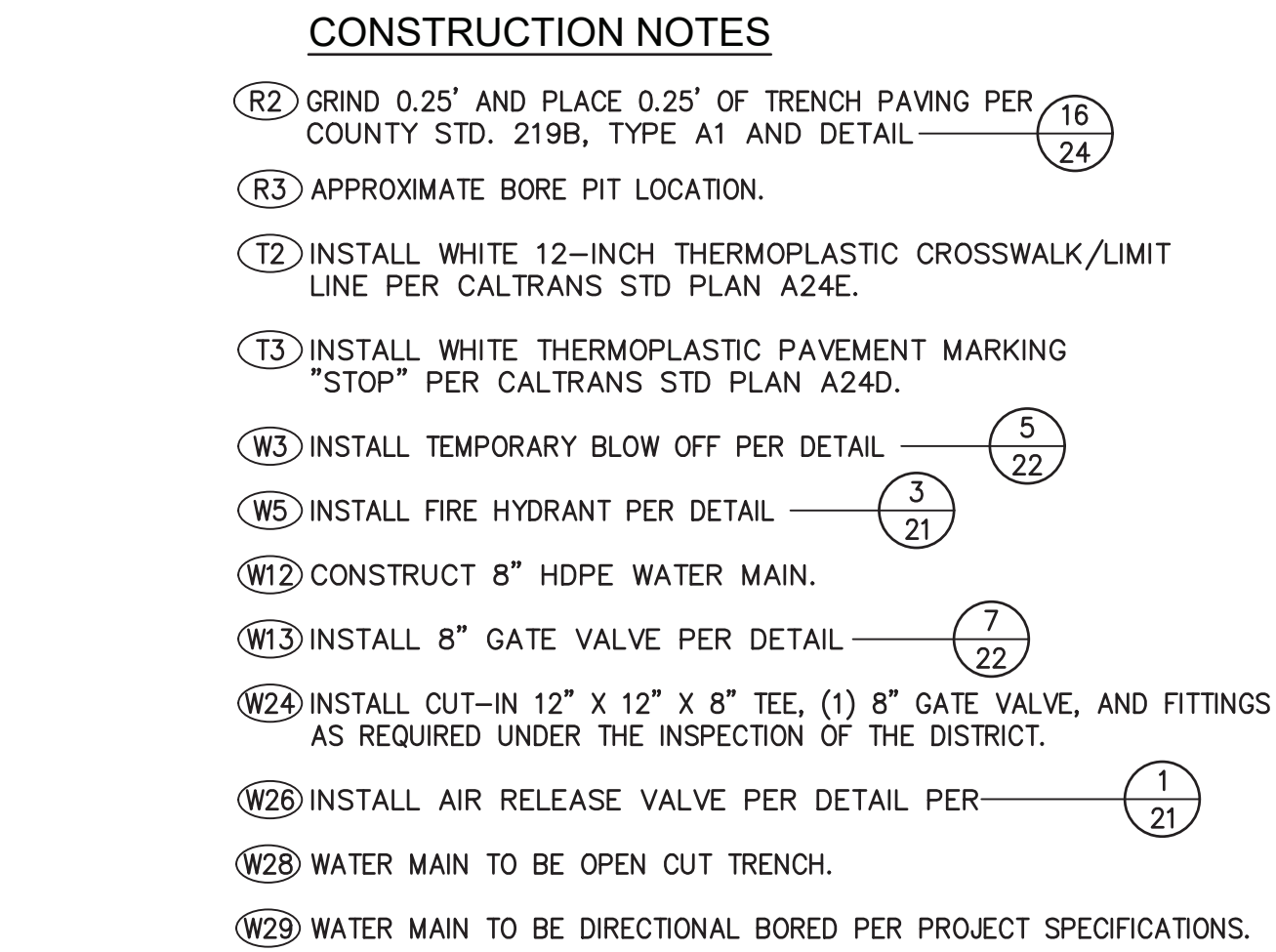
REVIEWED BY  
SRV

1/8/2021

STEVEN R. VAN SAUN, RCE 86180 DATE

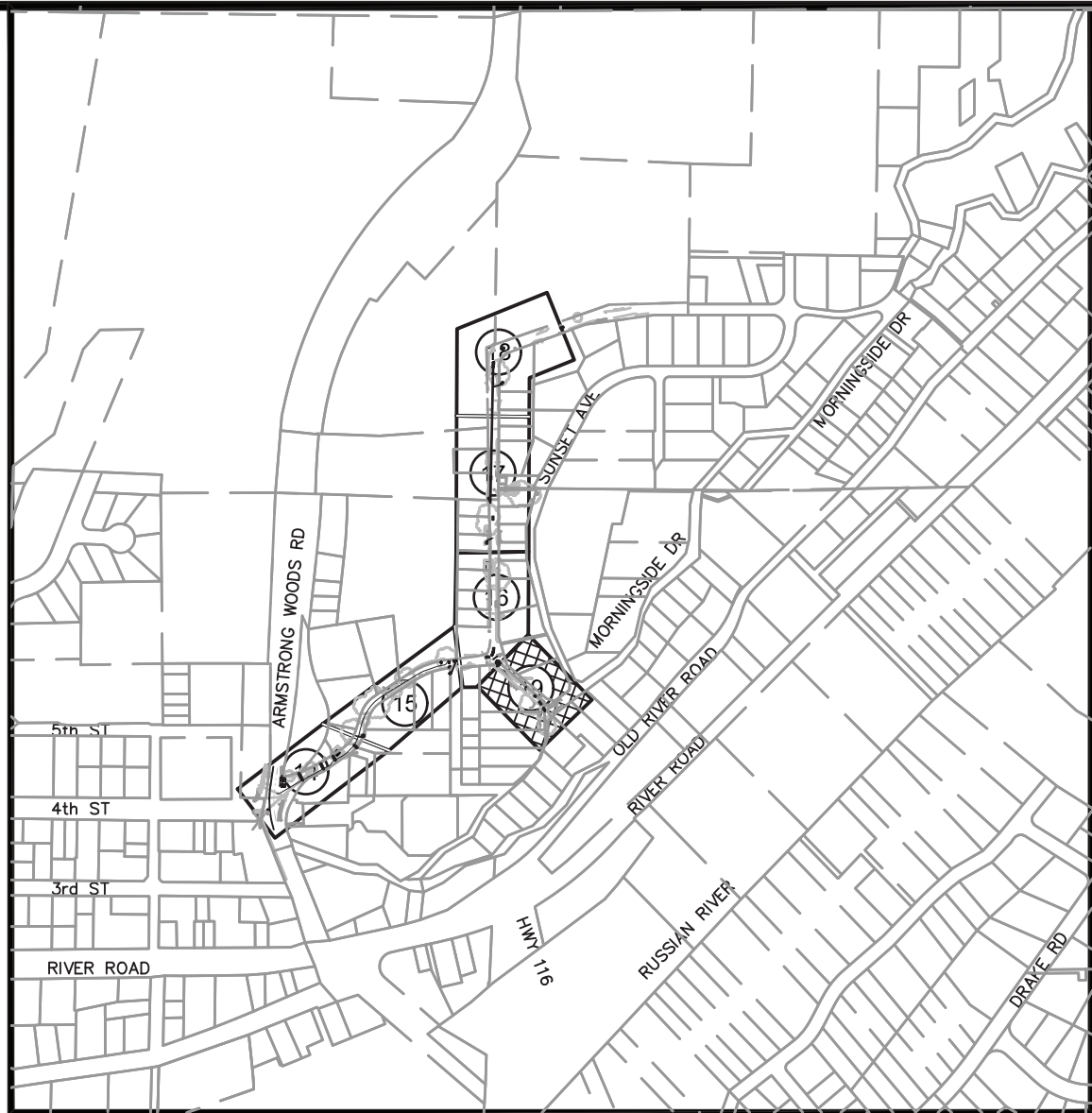




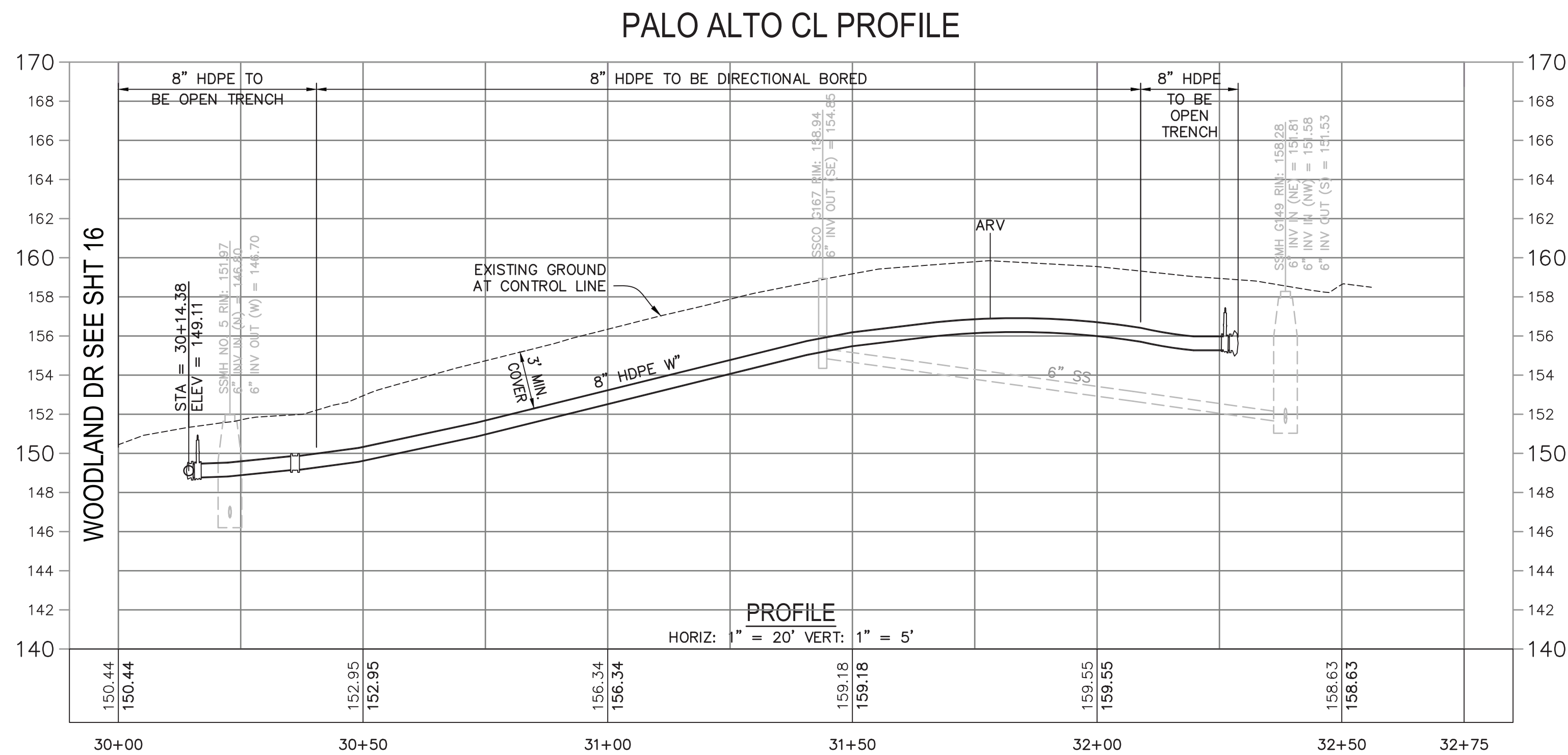


Line Table: Palo Alto Dr						
Line#	Length	Direction	Start Station	Start Point	End Station	End Point
L26	144.77	S47° 50' 23.41"E	30+00.00	N: 1947066.70 E: 6276757.46	31+44.77	N: 1946969.52 E: 6276864.78
L27	86.74	S39° 40' 37.94"E	31+73.26	N: 1946948.96 E: 6276884.47	32+60.00	N: 1946882.21 E: 6276939.85

Curve Table: Palo Alto Dr			
CURVE NO.	RADIUS	LENGTH	DELTA
C17	200.00	28.49	8°09'45"



**SHEET INDEX MAP**  
NOT TO SCALE



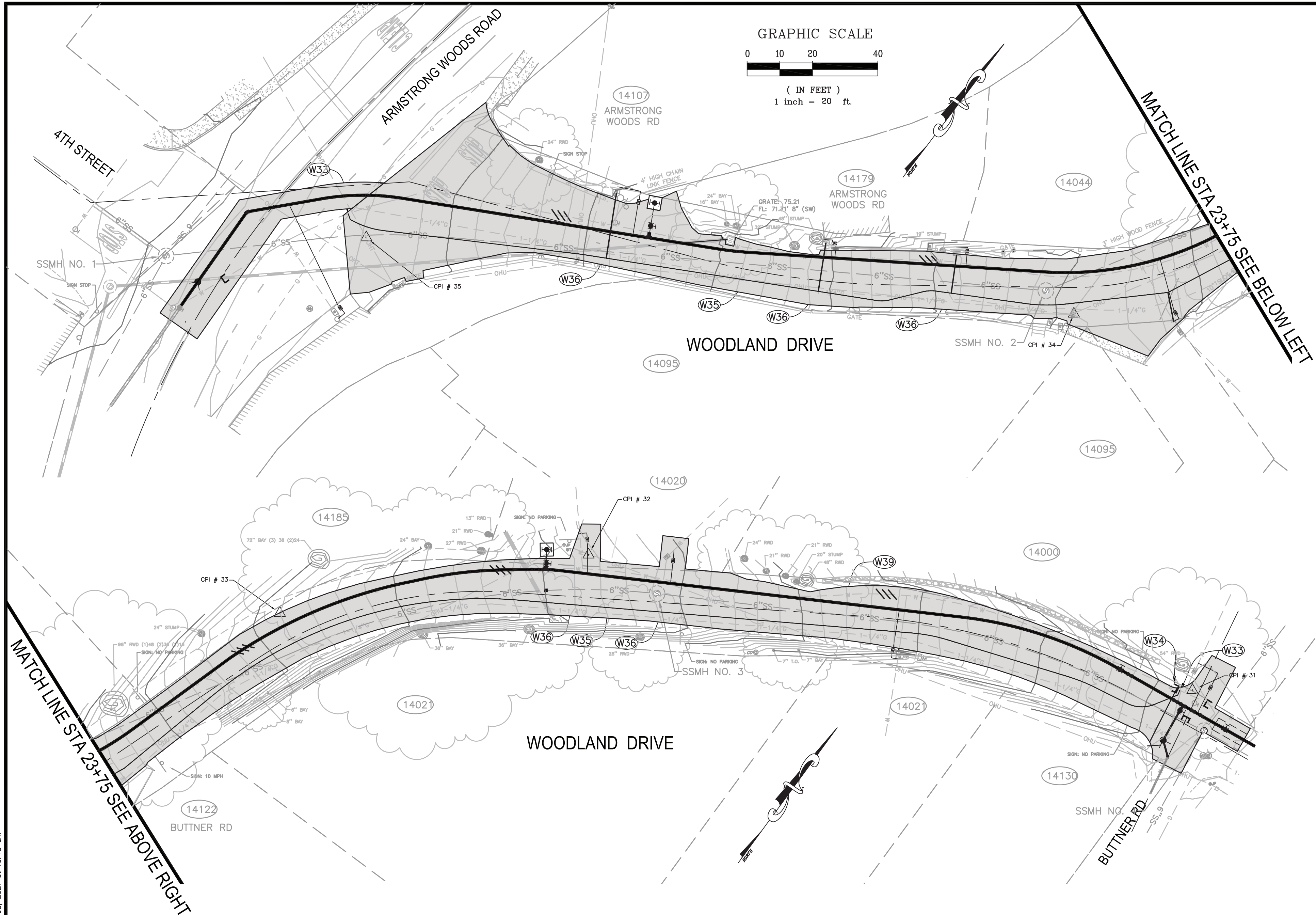


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FOR REDUCED PLANS, THE 0  
ORIGINAL SCALE IS IN INCHES

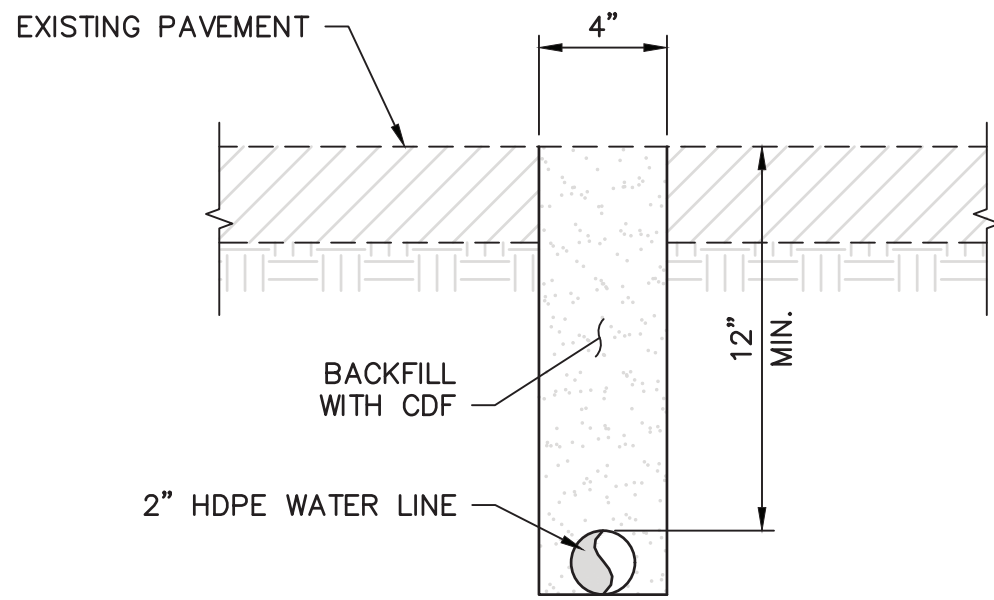
3  
2  
1  
0

ORIGINAL PLOT DATE:



#### CONSTRUCTION NOTES

- (W33) INSTALL 2" HOT TAP.  
(W34) INSTALL PLUG AND THRUST BLOCK.  
(W35) CONSTRUCT 2" HDPE TEMPORARY WATER LINE PER DETAIL 1/20  
(W36) INSTALL TEMPORARY WATER SERVICE TO EXISTING WATER METER.  
(W39) NEW 8-INCH HDPE WATER MAIN, SEE SHEETS 14 AND 15.



TEMPORARY WATER LINE INSTALLATION DETAIL 1

NOT TO SCALE

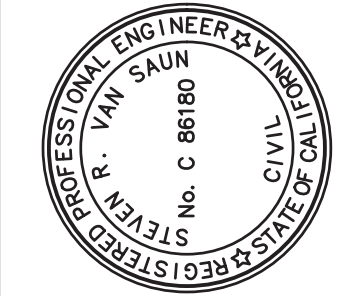
**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021

SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT  
GUERNEVILLE CALIFORNIA  
**WOODLAND DR  
TEMPORARY WATER LINE PLAN**

PROJECT NUMBER  
88-4430  
DRAWING DATE  
JANUARY 2021  
SHEET NUMBER  
20 OF 24

**Coastland Civil Engineering, Inc.**  
1400 Neotomas Avenue, Santa Rosa, CA 95405  
707.571.8005

PREPARED UNDER THE DIRECTION OF  
STEVEN R. VAN SAUN, RCE 86180 DATE  
DESIGNED BY WJK  
DRAWN BY WJK  
REVIEWED BY SRV



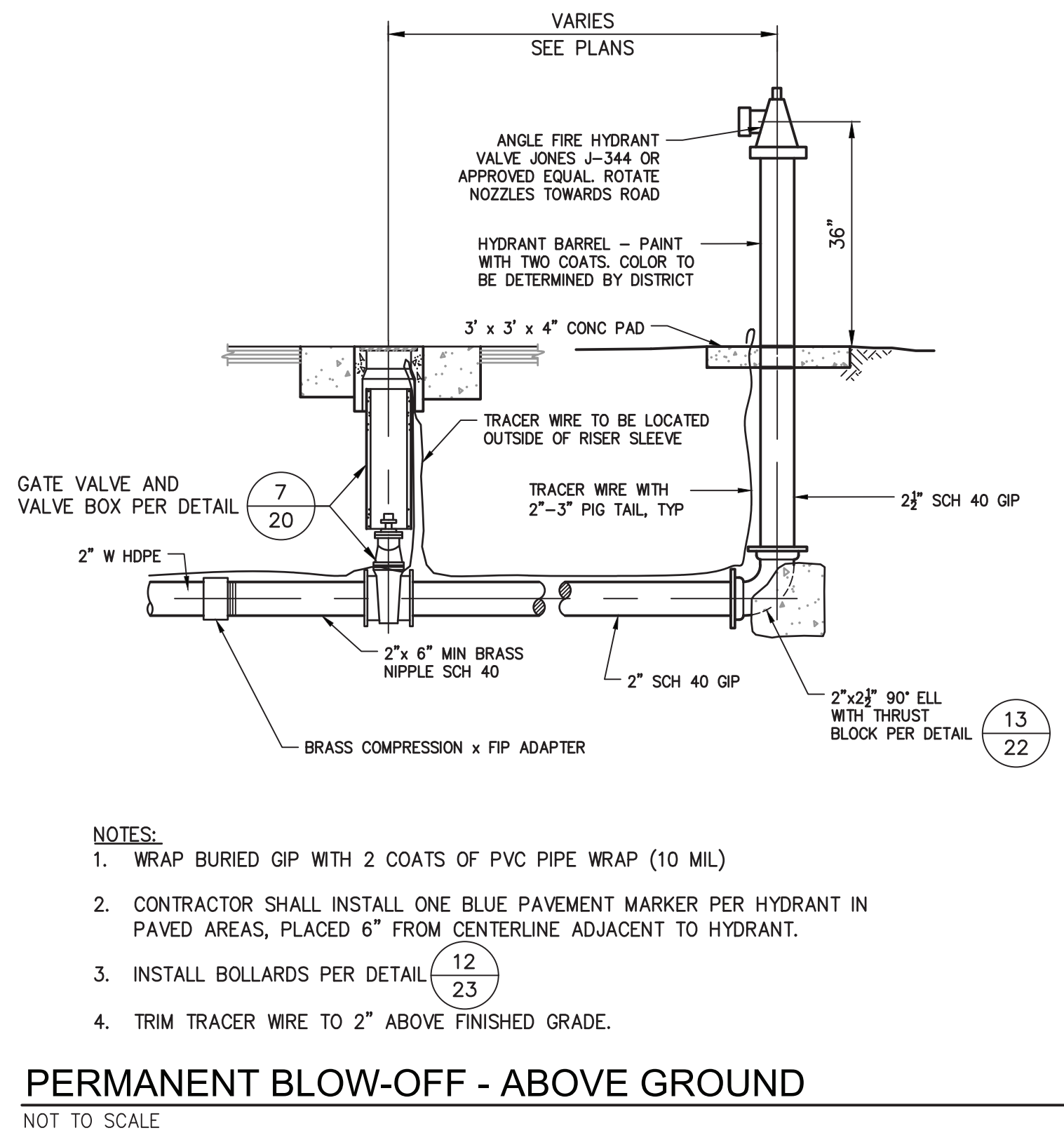
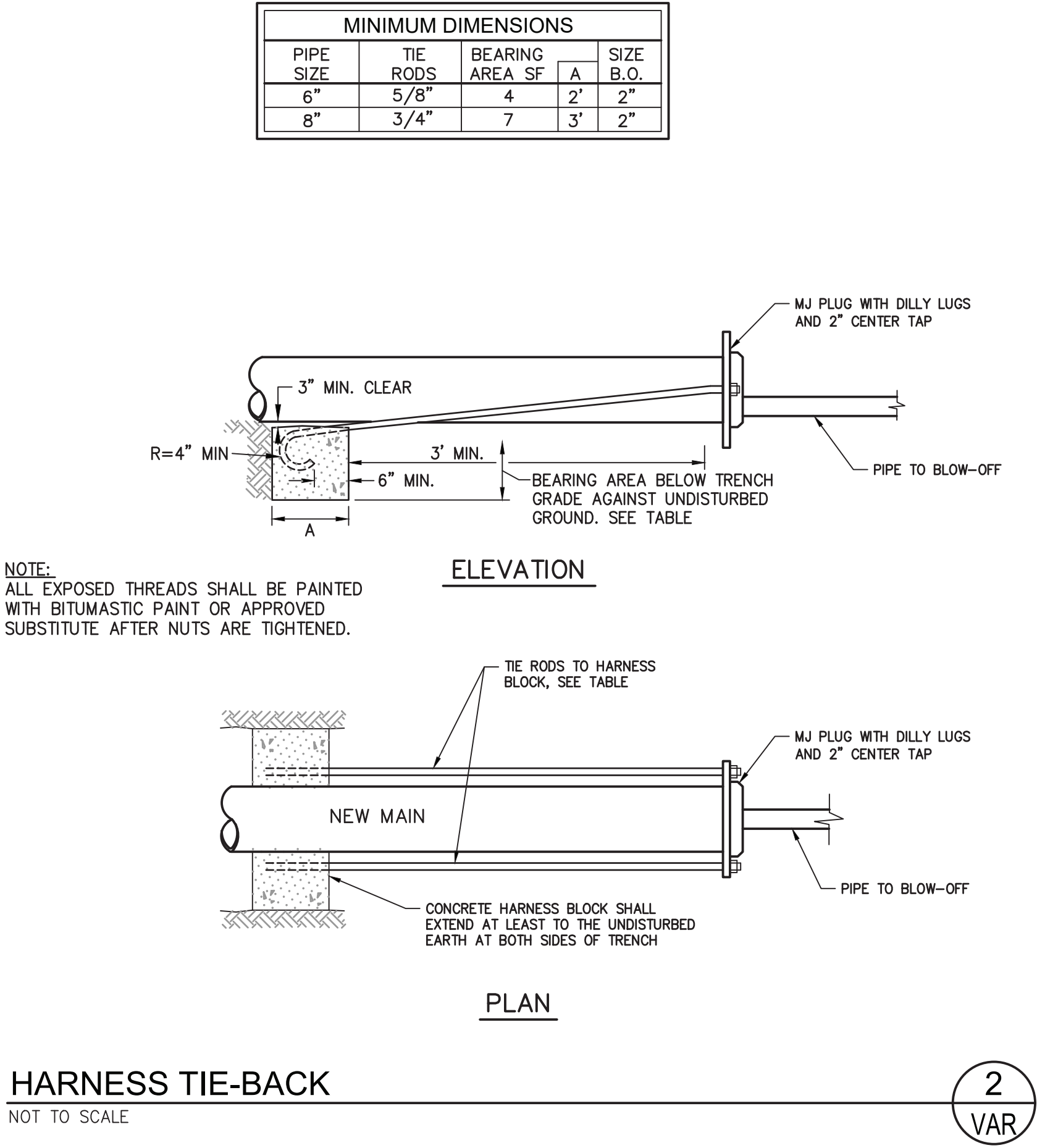
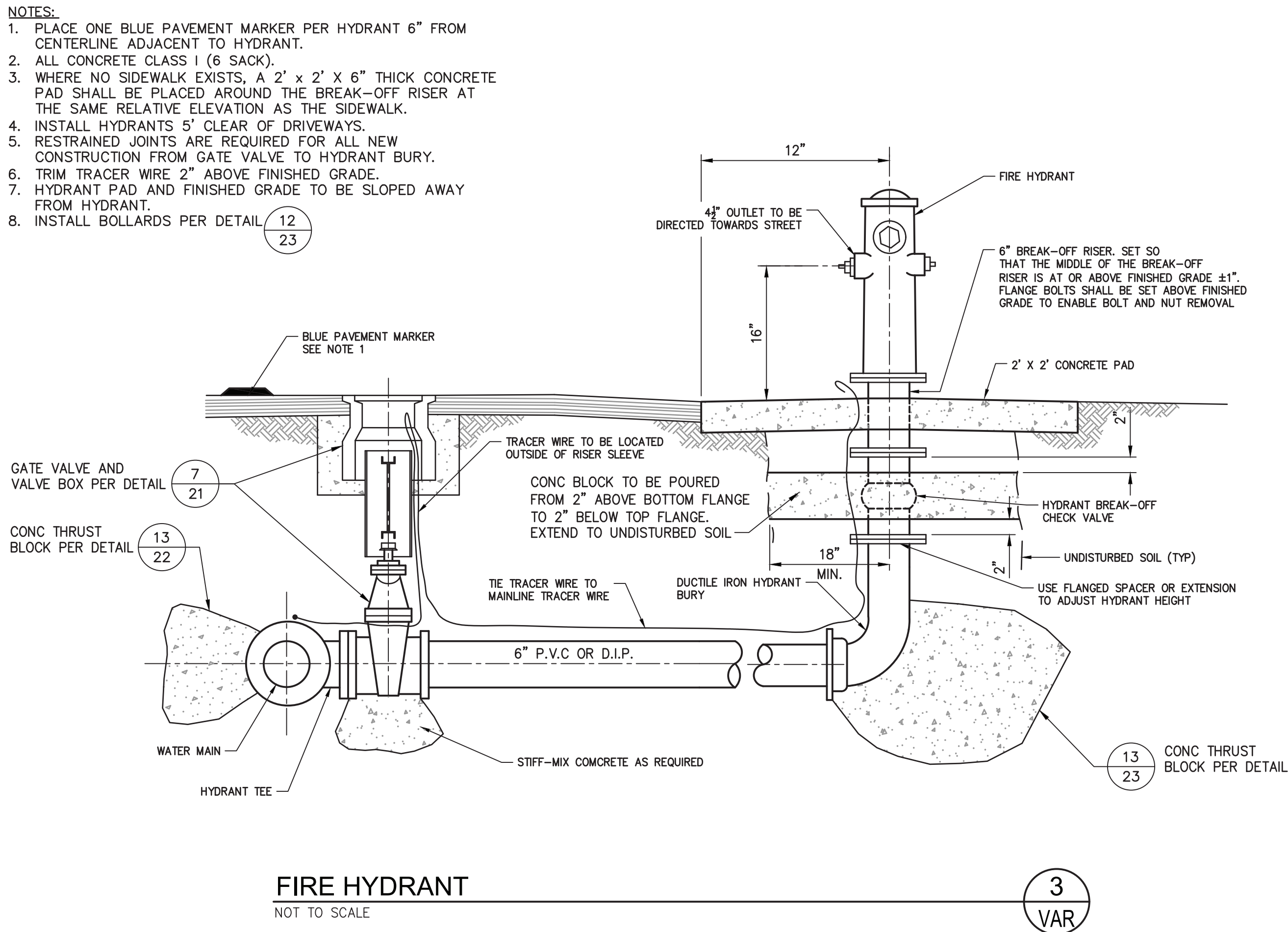
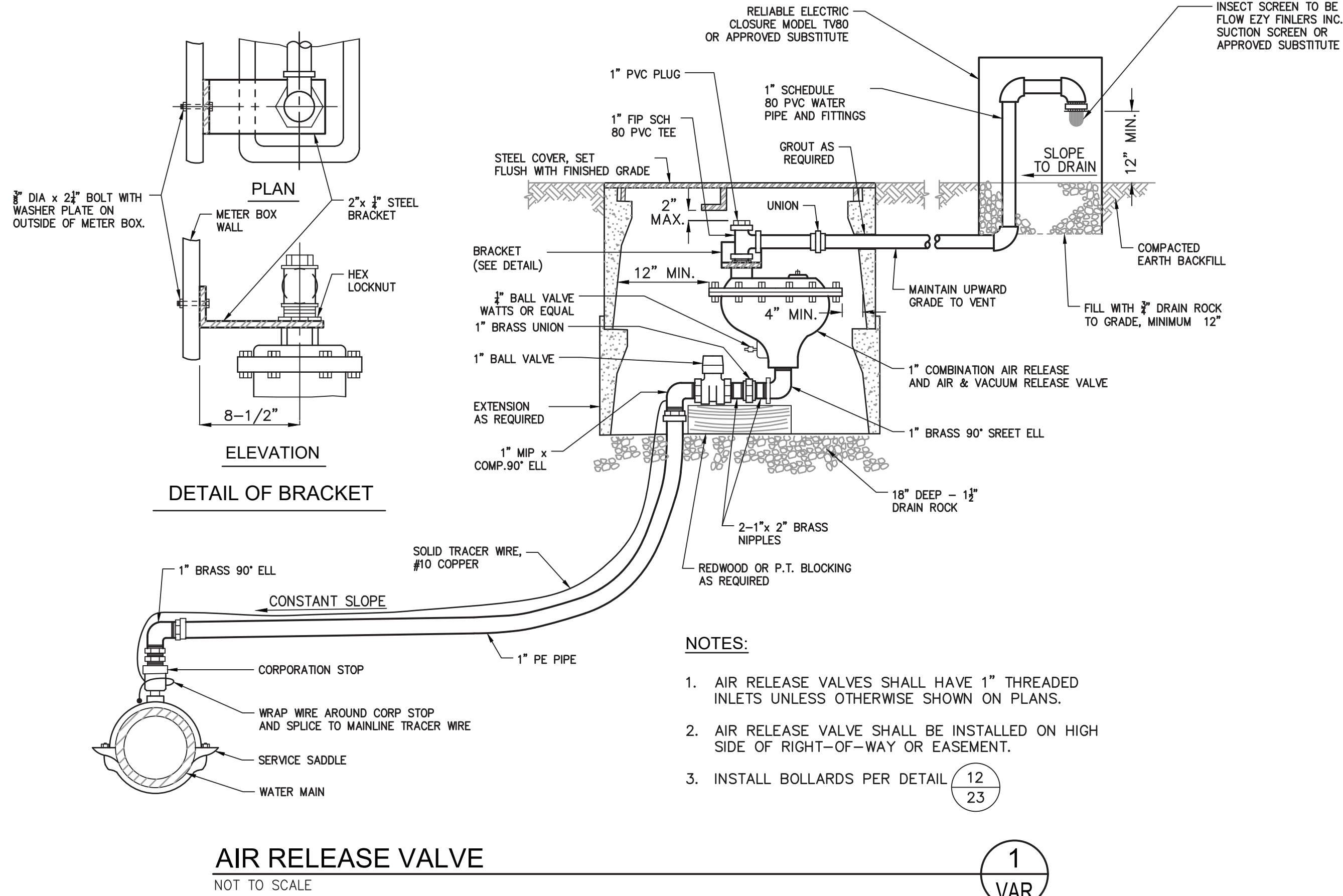


FOR REDUCED PLANS, THE ORIGINAL SCALE IS IN INCHES

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ORIGINAL PLOT DATE: \_\_\_\_\_

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Plot Date: Jan 08, 2021 at 10:48  
Layout Name: 21



**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021

PROFESSIONAL ENGINEER & LAND SURVEYOR  
No. C 86180  
STEVEN R. VAN SAUN  
CIVIL

PREPARED UNDER THE DIRECTION OF  
STEVEN R. VAN SAUN, RCE 86180 DATE 1/8/2021  
DESIGNED BY WJK  
DRAWN BY WJK  
REVIEWED BY SRV

**Coastland Civil Engineering, Inc.**  
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SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT

CALIFORNIA  
GUERNEVILLE

**MISCELLANEOUS DETAILS**  
1

PROJECT NUMBER  
88-4430

DRAWING DATE  
JANUARY 2021

SHEET NUMBER  
21 OF 24



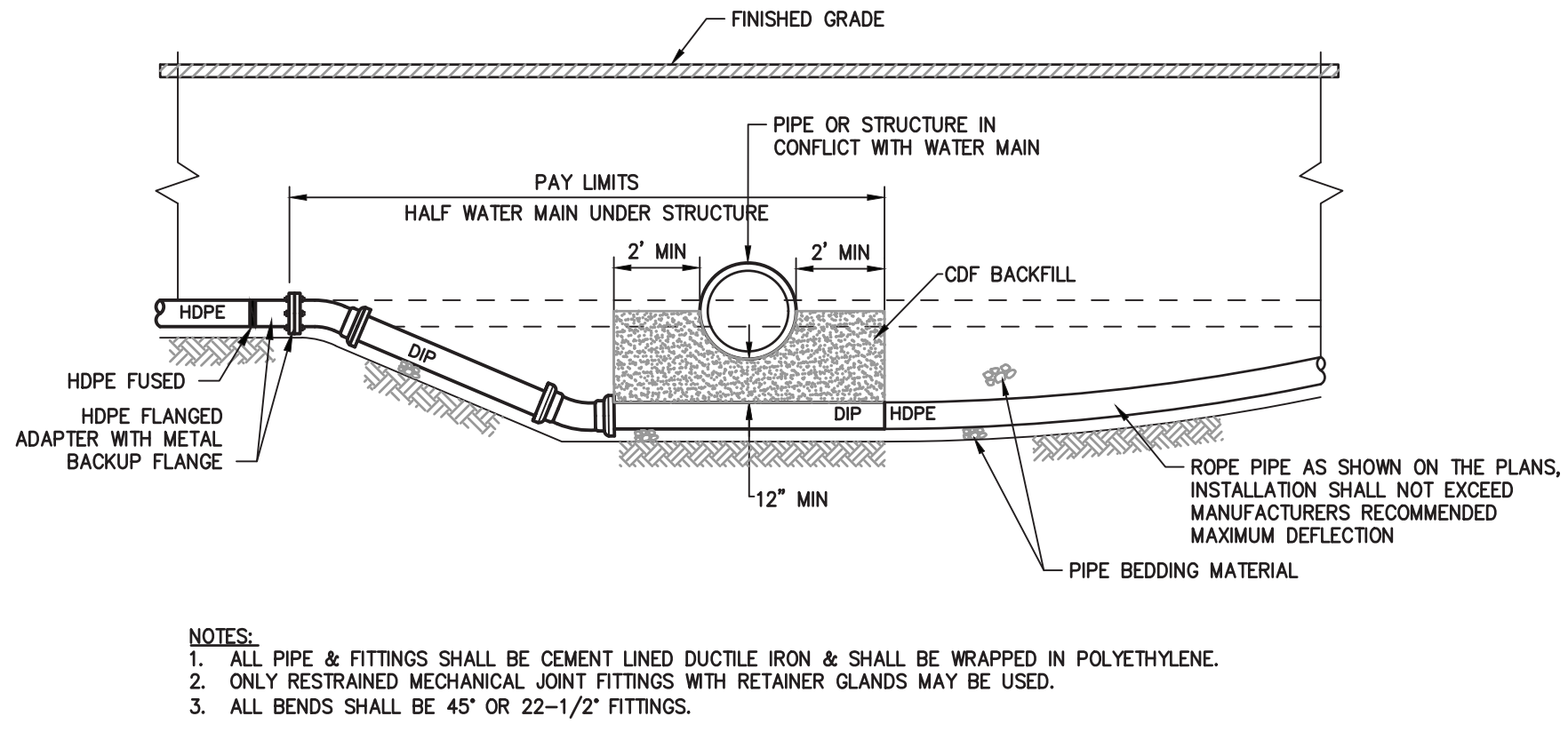




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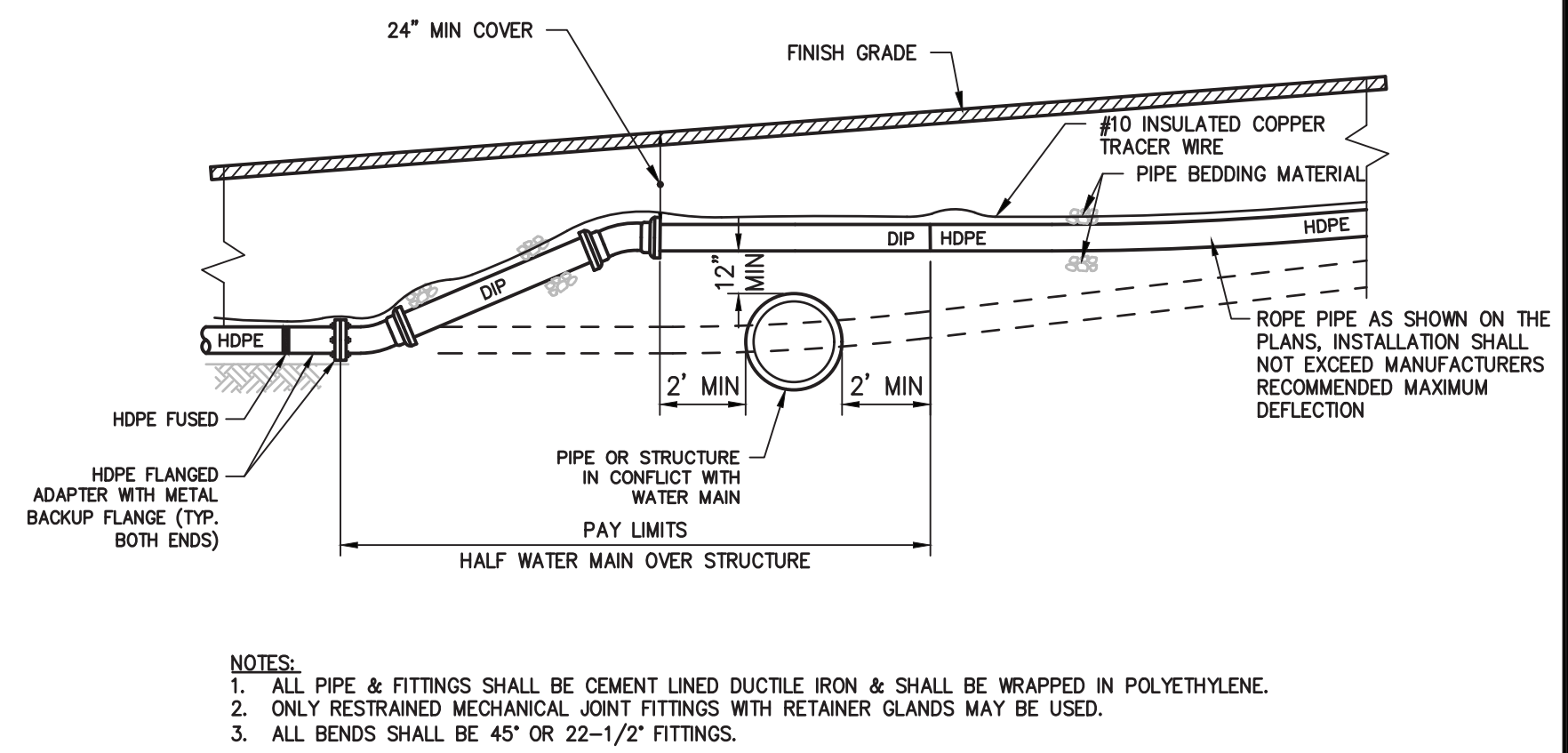
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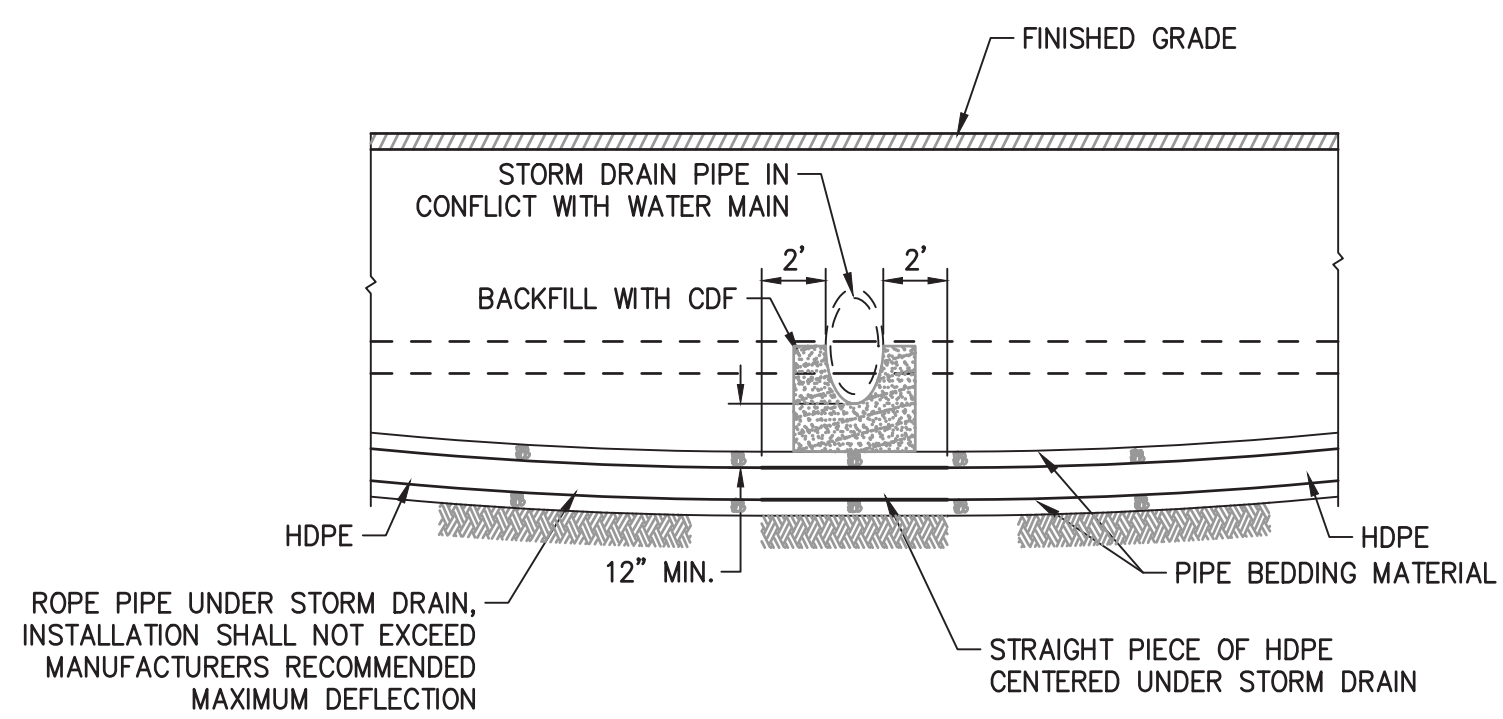
WATER MAIN LOWERING  
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9  
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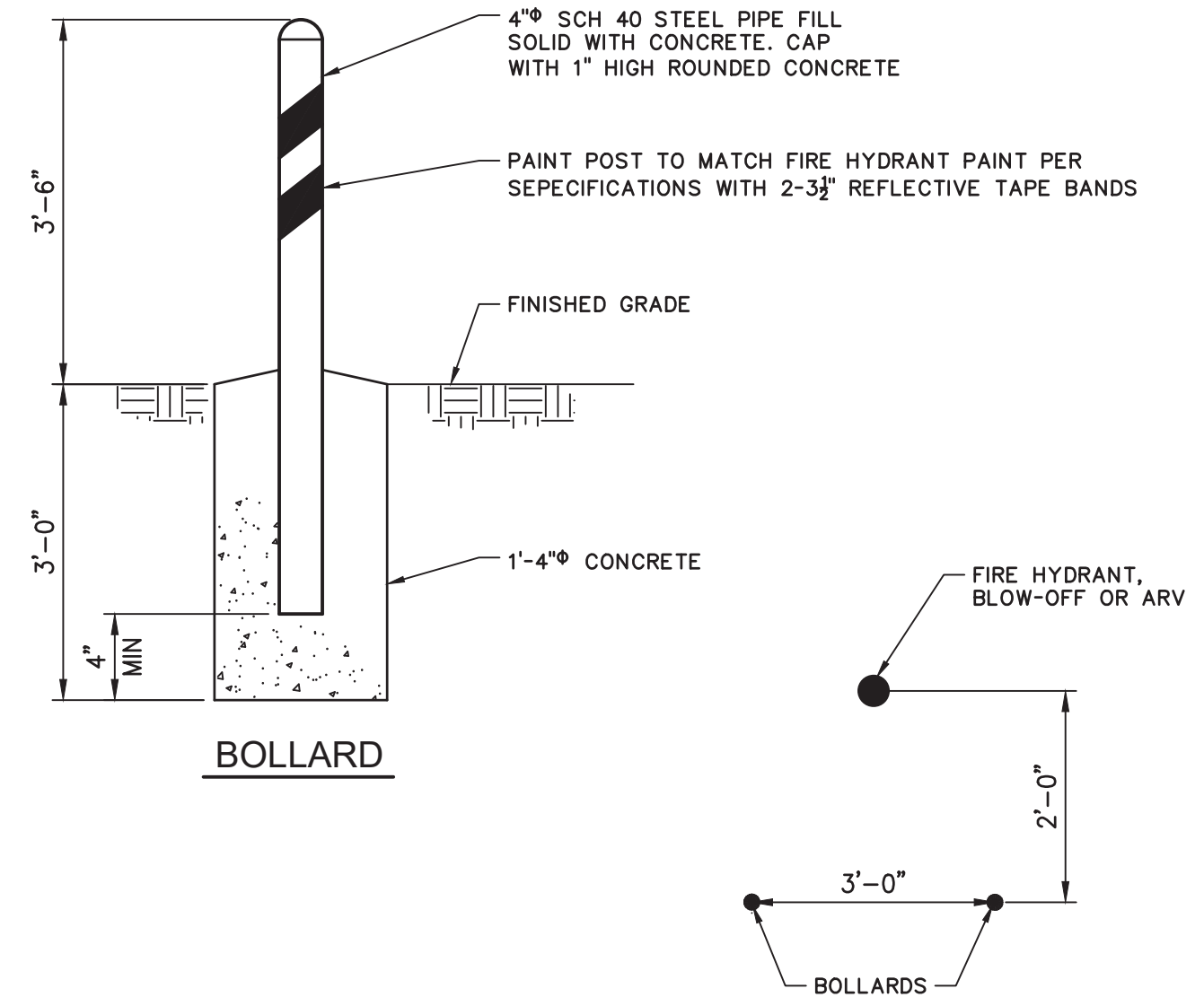
WATER MAIN OVER STRUCTURE  
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10  
VAR



WATER MAIN ROPING DETAIL  
NOT TO SCALE

11  
VAR



BOLLARD  
NOT TO SCALE

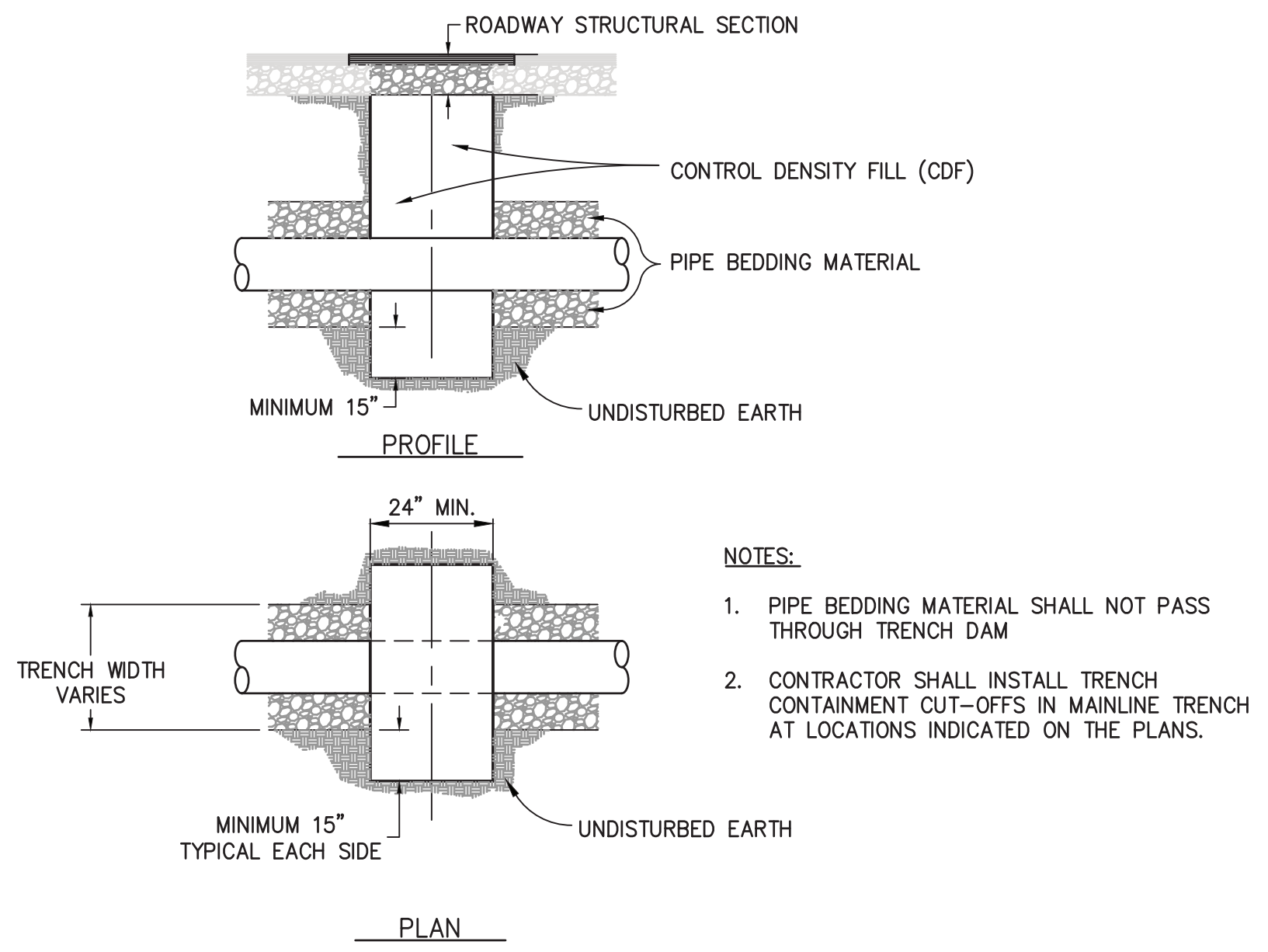
12  
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REQUIRED BEARING AREA - TOTAL SQUARE FEET					
		90° BEND	45° BEND	22 1/2° BEND	TEE OR DEAD END
SIZE OF FITTING	TYPICAL INSTALLATION				
	4"	2.6	1.4	0.7	1.8
	6"	5.3	2.9	1.5	3.8
	8"	9.1	4.9	2.5	6.5

NOTE:  
2" AND 3" FITTINGS SHALL USE THRUST BLOCKS SIZED FOR 4" FITTINGS.

THRUST BLOCK  
NOT TO SCALE

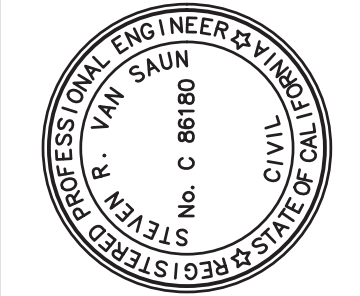
13  
VAR



TRENCH CONTAINMENT CUT-OFF  
NOT TO SCALE

14  
VAR

**PRELIMINARY**  
90% SUBMITTAL  
DATE: JANUARY 2021



PREPARED UNDER THE DIRECTION OF  
STEVEN R. VAN SAUN, RCE 86180 DATE: 1/8/2021  
DESIGNED BY: WJK  
DRAWN BY: WJK  
REVIEWED BY: WJK  
SRV

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CALIFORNIA  
SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT  
GUERNEVILLE  
**MISCELLANEOUS DETAILS**  
3


PROJECT NUMBER  
88-4430  
DRAWING DATE  
JANUARY 2021  
SHEET NUMBER  
23 OF 24



Images: Xrefs: CSE-ENGINEERS STAMPS-PLAN.dwg; 884430\_SP\_OldRiver.dwg; 884430-TP\_OldRiver.dwg  
Path: F:\Civil\_3D Projects\884430-CP-2021\DWG\884430\_det.dwg Layout Name: 24 Plot Date: Jan 08, 2021 at 10:48



1. REDUCED PRESSURE TYPE BACKFLOW DEVICES SHALL BE REQUIRED FOR ANY USE WHERE TOXIC MATERIALS ARE USED OR STORED ON SITE OR WHERE POSITIVE PROTECTION FOR THE PUBLIC WATER SUPPLY IS REQUIRED. TYPICAL APPLICATIONS INCLUDE:  
ALL IRRIGATION SERVICES & PARKS, HOSPITALS, MEDICAL & DENTAL LABORATORIES, MORTUARIES, LANDFILL PLANTS, DRY CLEANERS, AS DETERMINED BY THE CITY ENGINEER.
2. APPROVED REDUCED PRESSURE BACKFLOW DEVICE SHALL BE SHOWN ON "LIST OF APPROVED BACKFLOW PROTECTION DEVICES" (LATEST REVISION) BY THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL & HYDRAULIC RESEARCH.
3. BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED ADJACENT TO AND ON PROPERTY SIDE OF SIDEWALK WHERE APPLICABLE. WHERE NO SIDEWALK EXISTS THE ASSEMBLY SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE WATER METER LOCATION..
4. A VALVE OF THE SAME SIZE AS THE BACKFLOW PREVENTER SHALL BE INSTALLED ON EACH SIDE OF THE BACKFLOW PREVENTION ASSEMBLY. VALVES SHALL BE THREADED BALL VALVES. VALVES 3" SHALL BE WATTS BALL VALVES, AND 4" & LARGER SHALL BE RESILIENT SEATED GATE VALVES.
5. ANY COVER OR SCREENING FOR THE BACKFLOW PREVENTION ASSEMBLY MUST BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
6. IN LIMITED SPACE APPLICATIONS VALVES MAY BE INSTALLED ON RISERS, MIN. 4" ABOVE GRADE.  
THE ADDITION OF SPOOLS MUST BE APPROVED BY THE CITY INSPECTOR PRIOR TO INSTALLATION.
7. THE PIPING FROM THE REDUCED PRESSURE BACKFLOW PREVENTER & THE REDUCED PRESSURE BACKFLOW PREVENTER VALVE ASSEMBLY ITSELF MUST BE THE SAME SIZE AS THE SERVICE LINE UNLESS OTHERWISE APPROVED BY THE DISTRICT.



### DETAIL 'A'



1. AC THICKNESS TO MATCH EXISTING OR 0.25' MINIMUM WHICHEVER IS GREATER.
2. IF WIDTH IS LESS THAN 12" AND DEPTH IS LESS THAN 3', CDF BACKFILL SHALL BE USED.
3. USE 6" MIN. OF DRAIN ROCK ADDED TO BOTTOM OF UNSTABLE TRENCH AS REQUIRED.
4. FULL TACK COAT COVERAGE ON ALL VERTICAL SERVICES.
5. MINIMUM COVER SHALL BE 36-INCHES UNLESS OTHERWISE SHOWN ON THE PLANS.
6. TRENCH PAVING IN COUNTY RIGHT-OF-WAY SHALL HAVE A WIDTH AS SHOWN ON THE PLANS. NO LESS THAN 3-FOOT WIDE.



## CONSTRUCTION NOTES

- (R2) TRENCH PAVING PER COUNTY STD. 219B, TYPE A1.  
 (W3) INSTALL TEMPORARY BLOW OFF PER DETAIL ——— (5/21)  
 (W7) PLUG EXISTING WATER MAIN AND ABANDON PER DETAIL ——— (8/21)  
 (W16) INSTALL 12" x 12" x 12" TEE, 12" x 6" REDUCER AND 6" GATE VALVE.  
 (W17) INSTALL 12" x 12" x 6" CUT-IN TEE AND 6" GATE VALVE.



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# PREPARED UNDER THE DIRECTION OF

1/8/2021

DESIGNED BY	DRAWN BY	REVIEWED BY
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SWEETWATER SPRINGS WATER DISTRICT  
2021 CAPITAL IMPROVEMENT PROJECT

## MISCELLANEOUS DETAILS

4

PROJECT NUMBER  
88-4430

DRAWING DATE  
JANUARY 2021

SHEET NUMBER  
**24** - **24**

**PRELIMINARY**

## 90% SUBMITTAL

DATE: JANUARY 2021

24 OF 24