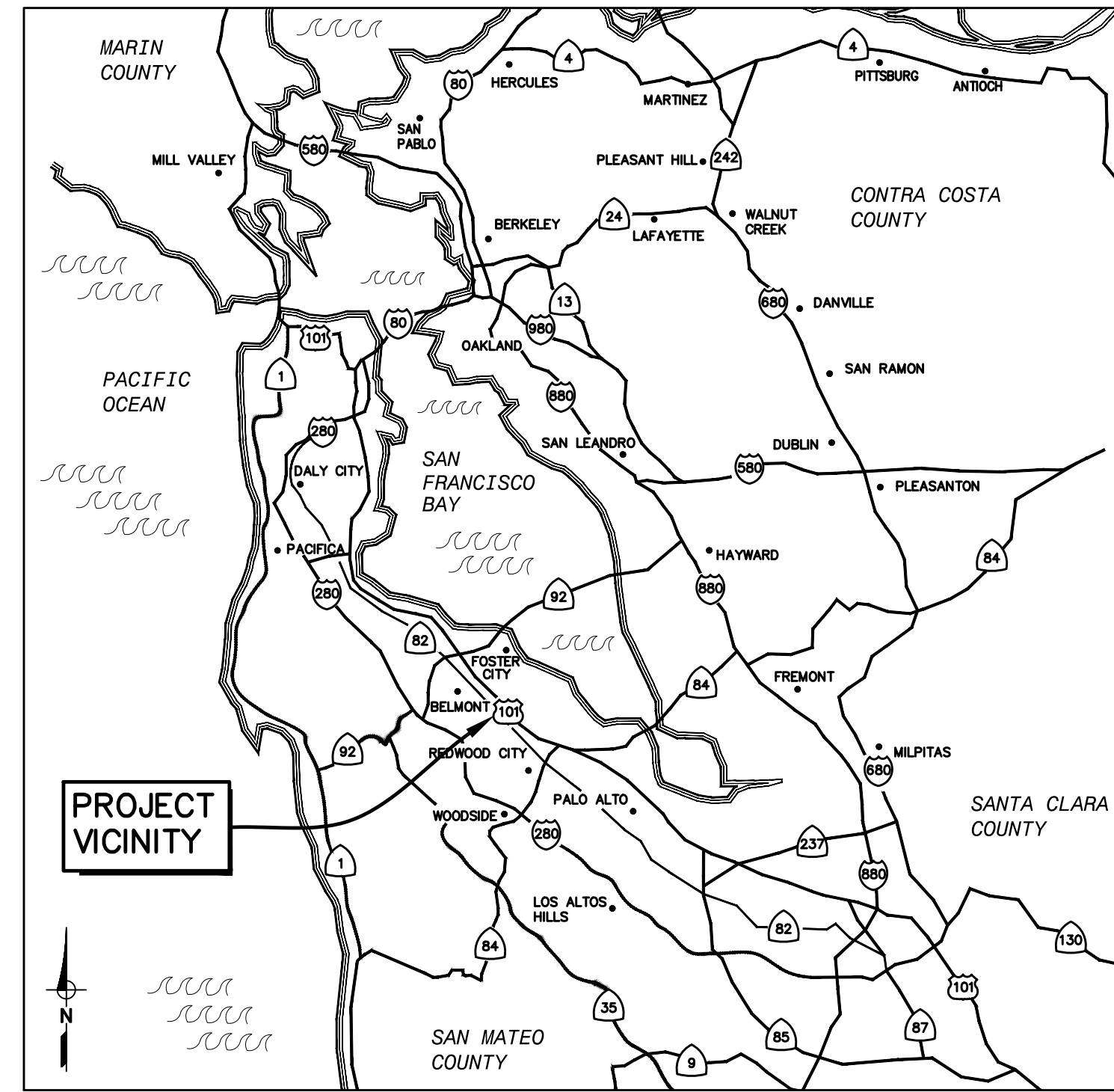


SR101 CROSSING AT PAMF PHASE 1 MID-PENINSULA WATER DISTRICT – SAN MATEO COUNTY, CA



BOARD OF DIRECTORS AND STAFF

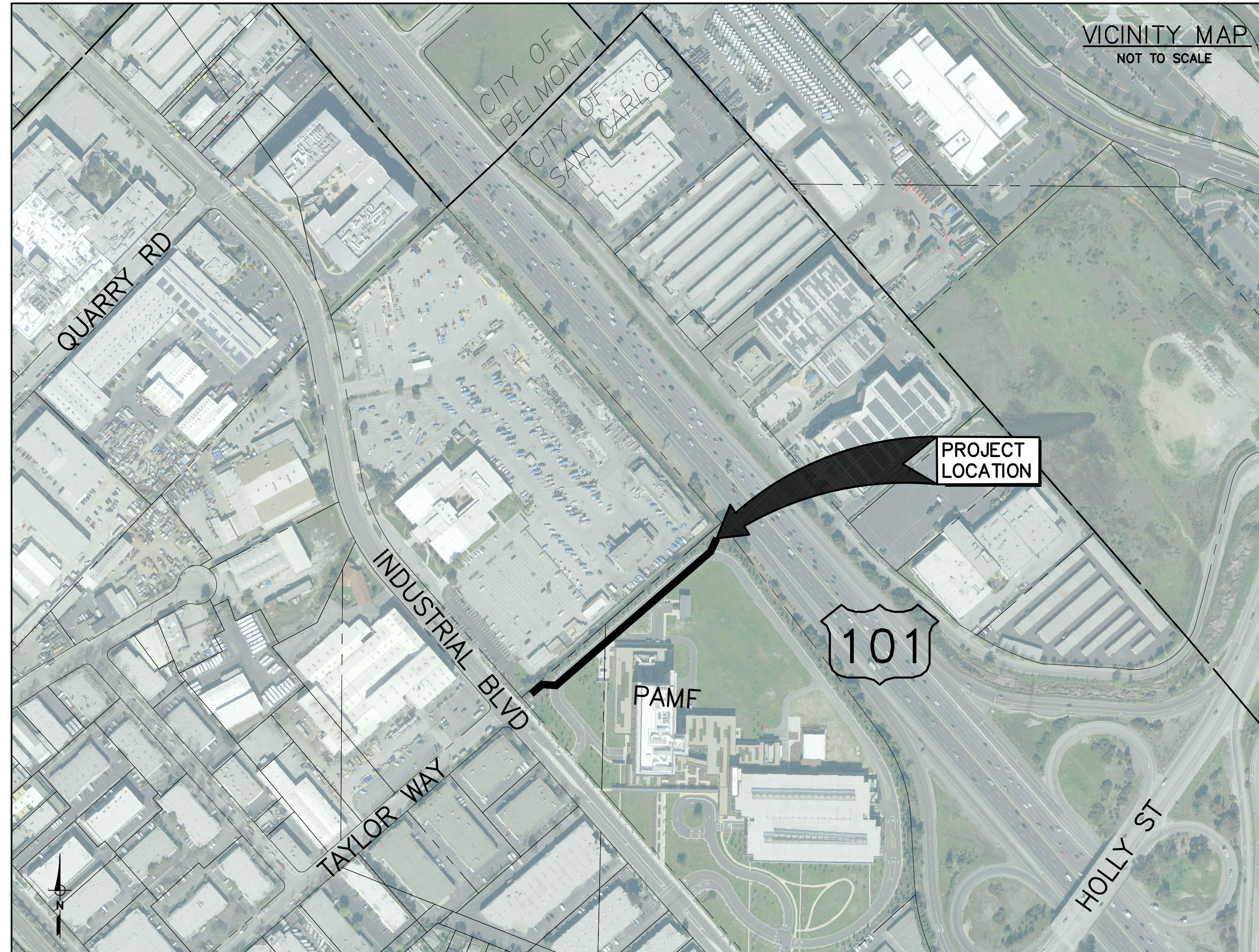
- PRESIDENT, MATTHEW P. ZUCCA
- VICE PRESIDENT, BRIAN SCHMIDT
- DIRECTOR, DAVE WARDEN
- DIRECTOR, LOUIS VELLA
- DIRECTOR, KIRK R WHEELER
- GENERAL MANAGER, TAMMY RUDOCK
- OPERATION MANAGER, RENE A RAMIREZ
- DISTRICT ENGINEER, JOUBIN PAKPOUR, P.E.
- DISTRICT COUNSEL, JULIE SHERMAN
- DISTRICT TREASURER, JEFF IRA



LOCATION MAP
NOT TO SCALE

SHEET INDEX

SHEET	PLAN	TITLE
1	G.1	TITLE SHEET, LOCATION MAP, VICINITY MAP, AND SHEET INDEX
2	G.2	LEGEND, ABBREVIATIONS, AND DETAIL DESIGNATION
3	G.3	UTILITY CONTACTS, SURVEY NOTES, AND KEY MAP
4	G.4	GENERAL NOTES
5	C.1	PLAN AND PROFILE STA 10+00 TO 13+00
6	C.2	PLAN AND PROFILE STA 13+00 TO 16+00
7	C.3	PLAN AND PROFILE STA 16+00 TO 16+74
8	CP.1	CATHODIC PROTECTION NOTES, TABLE, AND DETAILS 1
9	CP.2	CATHODIC PROTECTION DETAILS 2
10	CP.3	CATHODIC PROTECTION DETAILS 3
11	D.1	CIVIL DETAILS 1
12	D.2	CIVIL DETAILS 2



PROJECT LOCATION

REVIEWED BY:	DATE:

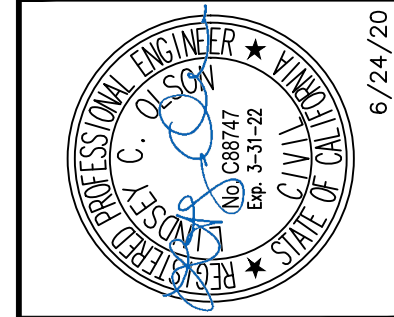


FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\CADD\2020\MidPeninsula\W0154-17-01-SR101 Crossing\CADD\Production\15814-1701-001.dwg
PLOT DATE: 06-24-20 PLOTTED BY: tsahlgren

REVISIONS

NO.	DESCRIPTION	BY	DATE	APP'D



WEST YOST ASSOCIATES

DRAWN: ERG	CHECKED: WFH
DESIGNED: LOC	APPROVED: JOC

MID-PENINSULA WATER DISTRICT
PHASE 1
SR101 CROSSING AT PAMF, PROJECT 15-72
TITLE SHEET, LOCATION MAP, VICINITY MAP,
AND SHEET INDEX

REVIEWED AND APPROVED BY
MID-PENINSULA WATER DISTRICT

Tammy A. Rudock
TAMMY A. RUDOCK, GENERAL MANAGER 6/24/20

DATE 6/24/2020	SCALE AS NOTED
PGC JOB NO. 768-14-17-01	
PLAN G.1	SHEET 1 of 12

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

LEGEND

	NATURAL GROUND OR GRADE
	COMPACTED NATIVE OR ENGINEERED FILL
	GRANULAR MATERIAL SUCH AS CRUSHED ROCK OR GRAVEL
	SLURRY SEAL
	ASPHALT PAVEMENT (PLAN)
	ASPHALT PAVEMENT (SECTION)
	CONCRETE
	CLII AB
	EXISTING GROUND SURFACE (PAVED UNO)
	FENCE
	EXISTING GRADE CONTOURS
	PROPOSED GRADE CONTOURS
	PROPERTY LINE OR RIGHT OF WAY
	EDGE OF PAVEMENT
	BACK OF WALK
	FACE OF CURB
	EXISTING SPOT ELEVATION
	EXISTING TREES, SHRUBS OR HEDGE
	FINISH GRADE SPOT ELEVATION
	ABANDON IN PLACE
	EARTH DITCH
	POT HOLE LOCATION
	BORING/RECEIVING PIT
	GEOTECH BORING LOCATION
	GEOTECH BORING LOCATION WHERE COMPLETED AS A GROUNDWATER MONITORING WELL
	EXISTING TREE

LEGEND (INFRASTRUCTURE LABELS)

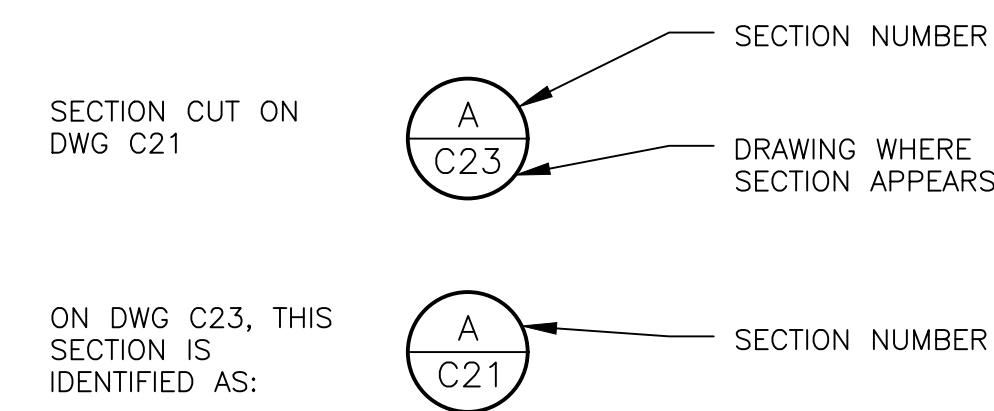
NEW		HORZ/VERT CONTROL POINT
		HORIZONTAL POINT OF INTERSECTION
		STUB OUT
		WATER
		BUTTERFLY VALVE
		GATE VALVE
		ANODE
		CATHODIC PROTECTION TEST STATION
		FIRE HYDRANT
		COMBINATION AIR VALVE

EXISTING		W	EX WATER		EX WATER SERVICE
		G	EX NAT GAS		EX POST INDICATOR VALVE
		S	EX SEWER		EX CATHODIC PROTECTION
		SD	EX STORM DRAIN		EX FIRE SERVICE CONNECTION
		FM	EX FORCE MAIN		EX CLEANOUT
		E	EX UNDERGROUND ELECTRIC		EX WATER METER
		OH	EX OH		EX LARGE ELEC TRANSMISSION TOWER
		FO	EX FIBER OPTIC		EX FIRE HYDRANT
		X	EX FENCE LINE		EX MANHOLE
			EX EDGE OF PAVEMENT		EX STORM DRAIN INLET
			EX FACE OF CURB		STREET LIGHT
			EX BACK OF WALK		EX WATER/GAS VALVE
			EX CALTRANS ROW		LIGHT/ELEC POLE
					WATER/ELEC/COMM VAULTS

ABBREVIATIONS

AB	AGGREGATE BASE	EC	END CURVE	MJ	MECHANICAL JOINT	SS	SANITARY SEWER
AC	ASPHALT CONCRETE	EP	EDGE OF PAVEMENT	MON	MONUMENT, MONITORING	SSB	STAINLESS STEEL BOLT
ACP	ASBESTOS CEMENT PIPE	EQU	EQUIPMENT	MOV	MOTOR OPERATED VALVE	SSMH	SANITARY SEWER MANHOLE
ADJ	ADJUSTABLE	EW	EACH WAY	N	NEW, NORTH	SST	STAINLESS STEEL
AFF	ABOVE FINISHED FLOOR	EX	EXISTING	N.I.C.	NOT IN CONTRACT	STA	STATION
AGG	AGGREGATE	EXP	EXPANSION	No., #	NUMBER	ST	STREET
ALT	ALTERNATIVE	FF	FINISHED FLOOR	NPT	NATIONAL PIPE THREAD TAPER	STD	STANDARD
APPROX	APPROXIMATE	FG	FINISHED GRADE	NTS	NOT TO SCALE	STL	STEEL
ARV	AIR RELIEF VALVE	FH	FIRE HYDRANT	OC	ON CENTER	SVC	SERVICE
ASPH	ASPHALT	FC	FACE OF CURB	OCT	OCTOBER	SW	SIDEWALK
BC	BEGIN CURVE	FCA	FLANGED COUPLING ADAPTER	OD	OUTSIDE DIAMETER	T	TELEPHONE
BD	BUILDING DRAIN	FCO	FLOOR CLEANOUT	OH	OVERHEAD	TCE	TEMPORARY CONSTRUCTION EASEMENT
BF	BLIND FLANGE	FD	FLOOR DRAIN	PL	PROPERTY LINE	TD	TILE DRAIN
BV, BVF	BUTTERFLY VALVE	FIG	FIGURE	PSV	PRESSURE RELIEF VALVE	T&B	TOP & BOTTOM
BW	BOTH WAYS, BACK OF WALK	FL	FLOW LINE	PRV	PRESSURE REDUCING VALVE	TESC	TEMPORARY EROSION & SEDIMENT CONTROL
CAV	COMBINATION AIR VALVE	FLG	FLANGE	PSF	POUNDS PER SQUARE FOOT	TOC	TOP OF CONCRETE
CB	CATCH BASIN	FM	FORCE MAIN	PSI	POUNDS PER SQUARE INCH	TOP	TOP OF PIPE
CDP	CONTROLLED DENSITY FILL	FO	FIBER OPTIC	PSUE	PUBLIC SERVICE & UTILITY EASEMENT	TOS	TOP OF STEEL OR TOP OF STRUCTURAL FRAME
CIP	CAST IRON PIPE	FRP	FIBERGLASS REINFORCED PLASTIC	PT	POINT	TS	TUBULAR STEEL
CL	CL CENTER LINE	F/C	FACE OF CURB	PV	PLUG VALVE	TYP	TYPICAL
CLR	CLEAR	FT,	FEET, FOOT	PVC	POLYVINYL CHLORIDE PIPE	UG	UNDERGROUND
CLSM	CONTROL LOW STRENGTH MATERIAL	G	GAS	PVM/T	PAVEMENT	UNO	UNLESS NOTED OTHERWISE
CO	CLEAN OUT	GA	GAUGE	R	RADIUS	UPRR	UNION PACIFIC RAILROAD
CONC	CONCRETE	GALV	GALVANIZED	RC	RELATIVE COMPACTION	VAR	VARIOUS
CONN	CONNECTION	GB	GRADE BREAK	RCP	REINFORCED CONCRETE PIPE	VCP	VITRIFIED CLAY PIPE
CONT	CONTINUOUS	GS	GROUND SURFACE	REDR	REDUCER, REDUCING	VN	VALVE NUT
CMU	CONCRETE MASONRY UNIT	GSP	GROUND SURFACE PROFILE	REQ'D	REQUIRED	VPI	VERTICAL POINT OF INTERSECTION
CS	CHLORINE SOLUTION	GV	GATE VALVE	REIN	REINFORCING	VTR	VENT THROUGH ROOF
CTS	CATHODIC PROTECTION TEST STATION	HC	HANDICAPPED	REV	REVISION	W	WATER, WEST
CV	CHECK VALVE	HP	HIGH POINT IN PVM/T, HIGH PRESSURE	RJ	RESTRAINED JOINT	WL	WASTE LINE
CY	CUBIC YARDS	HORZ	HORIZONTAL	RR	RAILROAD	W/	WITH
DI	DRAIN INLET	HPI	HORIZONTAL POINT OF INTERSECTION	R/W	RIGHT OF WAY	W/O	WITH OUT
E	EAST, ELECTRIC, EXISTING	IE	INVERT ELEVATION	S	SEWER, SOUTH, SLOPE	WS	WATER SURFACE
EA	EACH	IN,	INCH	SA	SAMPLE	WWF	WELDED WIRE FABRIC
EF	EACH FACE	INV	INVERT	SCH	SCHEDULE	WV	WATER VALVE
DIA, Ø	DIAMETER	IPS	IRON PIPE SIZE	SCP	STEEL CYLINDER PIPE	WWM	WELDED WIRE MESH
DIP	DUCTILE IRON PIPE	IRR	IRRIGATION	SD	STORM DRAIN		
D, DR	DRAIN	JT	JOINT TRENCH	SDI	STORM DRAIN INLET		
DWG	DRAWING	LAT	LATERAL	SDMH	STORM DRAIN MANHOLE		
DWY	DRIVEWAY	LF	LINIAL FEET	SEPT	SEPTEMBER		
EJF	EXPANSION JOINT FILLER	LG	LIP OF GUTTER	SPD	SUMP PUMP DISCHARGE		
EL	ELEVATION	LGT	LIGHT	SQ	SQUARE		
ELEC	ELECTRIC	LPM	LITERS PER MINUTE				
		MAX	MAXIMUM				
		MIN	MINIMUM				
		MH	MANHOLE				

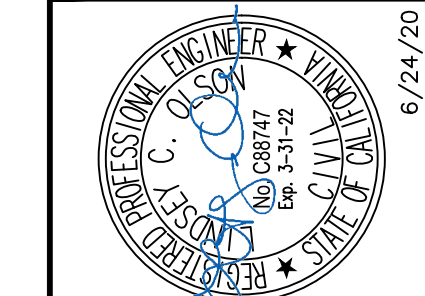
SECTION AND DETAIL DESIGNATIONS



DETAILS ARE CROSS REFERENCED IN A SIMILAR MANNER, EXCEPT THAT DETAILS ARE IDENTIFIED BY NUMBER RATHER THAN LETTER

REVISIONS

NO.	DESCRIPTION	BY	DATE	APP'VD



WEST YOST ASSOCIATES	CHECKED: WJH	APPROVED: JJC
DRAWN: ERG	DESIGNED: LJC	

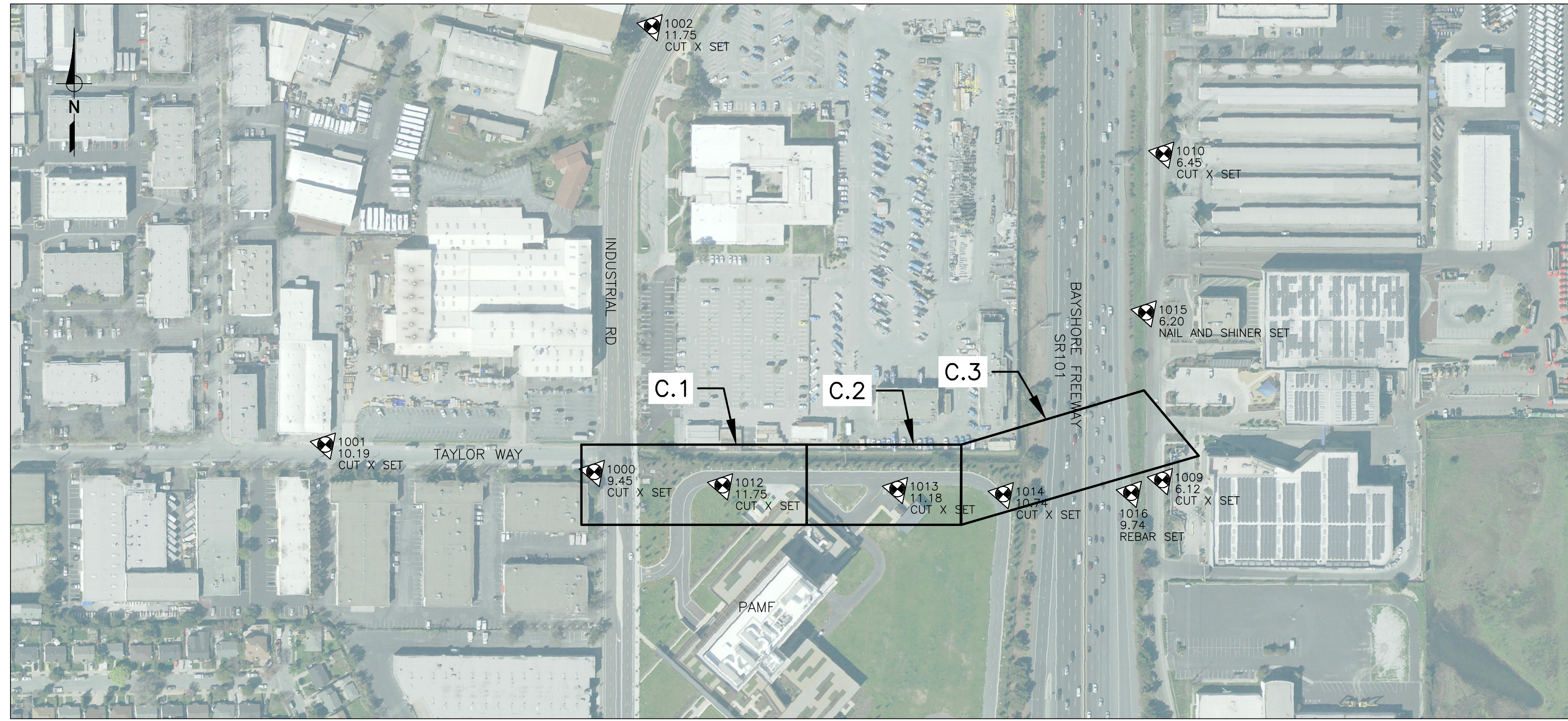
MID-PENINSULA WATER DISTRICT
 PHASE 1
 SR101 CROSSING AT PAMF, PROJECT 15-72
 LEGEND, ABBREVIATIONS, AND DETAIL DESIGNATION

DATE: 6/24/2020	SCALE: AS NOTED
PG# JOB NO.: 768-14-17-01	
PLAN: G.2	
SHEET: 2 of 12	

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\CADD\2020\MidPeninsula\W01514-17-01-SR101-Crossing\CAD\Production\15B14-1701-000.dwg
PLOT DATE: 06-24-20 PLOTTED BY: tsalgaro



KEY MAP

SURVEY NOTES

COORDINATES SHOWN ARE CCS83(2011) ZONE 3, EPOCH 2010.00
ELEVATIONS SHOWN ARE NAVD88 BASED ON THE FOUND NGS BENCHMARK PID: DG6886
HAVING AN ELEVATION OF 19.59 FEET.

COORDINATES AND ELEVATIONS SHOWN ARE IN U.S. SURVEY FEET.
AN AVERAGE COMBINED FACTOR OF 0.99994 WILL BE USED FOR THIS PROJECT.

POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1000	2014854.77	6050677.77	9.45	CUT X SET
1001	2014550.38	6050249.70	10.19	CUT X SET
1002	2015580.25	6050192.24	10.62	CUT X SET
1003*	2017870.20	6048806.32	10.09	CUT X SET
1004*	2017726.51	6048980.71	10.94	CUT X SET
1005*	2017628.37	6048575.56	11.35	CUT X SET
1006*	2018207.60	6049245.74	10.63	CUT X SET
1007*	2018685.99	6049658.75	9.98	NAIL AND SHINER FND
1008*	2017898.32	6049470.91	11.48	CUT X SET
1009	2015570.35	6051518.33	6.12	CUT X SET
1010	2016049.07	6051102.34	6.45	CUT X SET
1011*	2016489.61	6050671.06	9.02	CUT X SET
1012	2014999.47	6050882.32	11.75	CUT X SET
1013	2015217.97	6051142.77	11.18	CUT X SET
1014	2015345.99	6051303.95	10.74	CUT X SET
1015	2015794.76	6051280.07	6.20	NAIL AND SHINER SET
1016	2015512.04	6051489.23	9.74	REBAR SET

* THIS CONTROL POINT IS NOT SHOWN ON THE RESPECTIVE PLAN VIEW DUE TO ITS LOCATION. IT IS LOCATED OUTSIDE OF THE CURRENT VIEW.

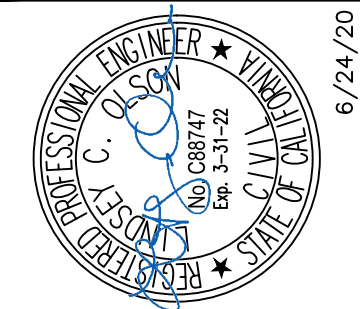
AGENCY CONTACTS

MUNICIPALITY/COMPANY	CONTACT	PHONE	COMMENTS
AT&T	MR. BRUNO CZECH	408-635-8881	
CALIFORNIA WATER SERVICE	MR. ROD ZAVALA	650-558-7859	
CITY OF BELMONT	CRAIG WEST	650-637-2972	
CITY OF REDWOOD CITY	KELLY YONG	650-780-7352	
CITY OF SAN CARLOS	HENRY PASCUAL	650-802-4200	
CITY OF SAN MATEO	ANN STILLMAN	650-599-1497	
COMCAST	DORI WOODSTRUP	707-759-4078 x259	
CITY OF SAN MATEO	GEORGE SKEEN	650-522-7300	
KINDER MORGAN	KARLY PAYNE	714-560-4604	
LEVEL 3 COMMUNICATIONS	CALEB KING	918-547-0007	
MCI WORLDCOM (VERIZON)	DEAN BOYERS	469-886-4238	
PG&E	BARBARA GARCIA	408-725-2077	
QWEST COMMUNICATIONS	GEORGE MCELVAIN	720-260-2514	
SILICON VALLEY CLEAN WATER	KIM HACKETT	650-832-2621	
WAVE BROADBAND	CRAIG CORDOVA	925-459-1077	
XO COMMUNICATIONS	CHAD AUCHEY	510-580-6363	

EXISTING VALVE NUT DEPTH TABLE

VN #	SHEET	SIZE (IN)	DEPTH TO VN (IN)	APPROX DEPTH TO TOP OF PIPE (IN)
1	C.1	6	84	99
2	C.1	10	92	112
3	C.2	8	98.5	115.5
4	C.2	6	99	114
5	C.2	6	95.5	110.5
6	C.2	6	59.5	74.5
7	C.2	10	65.5	85.5
8	C.2	6	59.5	74.5
9	C.2	6	90.5	105.5

REVISIONS



WEST YOST ASSOCIATES
 CHECKED: WFH
 APPROVED: JDC
 DRAWN: ERG
 DESIGNED: LJC

MID-PENINSULA WATER DISTRICT
 PHASE 1
 SR101 CROSSING AT PAMF, PROJECT 15-72
 UTILITY CONTACTS, SURVEY NOTES, AND KEY MAP

DATE	6/24/2020	SCALE	AS NOTED
PG# JOB NO.	768-14-17-01		
PLAN	G.3		
SHEET	3 of 12		

NO.	DESCRIPTION	BY	DATE	APP'D

GENERAL NOTES

1. THE TYPE, LOCATION, SIZE AND DEPTH OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. EFFORTS HAVE BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND FACILITIES. HOWEVER, THE ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND FACILITIES, NOR FOR EXISTENCE OF OTHER BURIED OBJECTS AND/OR FACILITIES WHICH MAY BE ENCOUNTERED BUT ARE NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL EXPOSE ALL UNDERGROUND FACILITIES THAT ARE TO BE CONNECTED TO, OR THAT ARE IN THE PATH OF, THE PROPOSED IMPROVEMENTS FOR VERIFICATION OF LOCATION AND ELEVATION PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING THE WORK OF THE PROJECT PER THE IMPROVEMENT PLANS.
2. ALL CONSTRUCTION MUST BE TO THE MID-PENINSULA WATER DISTRICT STANDARDS AND ACCEPTED BY THE DISTRICT. CONTRACTOR IS RESPONSIBLE TO MAKE ALL ARRANGEMENTS FOR SITE INSPECTIONS AND ENSURE THAT ALL CURRENT STANDARDS FOR THE DISTRICT ARE FOLLOWED PRIOR TO BEGINNING ANY PHASE OF CONSTRUCTION WORK.
3. DUST CONTROL DURING ALL PHASES OF CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN GOOD HOUSEKEEPING OF THE EXISTING IMPROVEMENTS IN THE CONSTRUCTION AREA. CONTRACTOR SHALL PROTECT EXCAVATED SOILS PER WATER POLLUTION CONTROL PLAN (WPCP) AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
4. ALL RESTORED TRENCHES WITHIN THE EXISTING PAVEMENT MUST BE SLURRY SEALED WITH TYPE II SLURRY SEAL A MINIMUM WIDTH OF 10 FEET OR THE FULL WIDTH OF THE LANE, WHICHEVER IS GREATER, IN ACCORDANCE WITH SECTION 37 OF THE CALTRANS STANDARD SPECIFICATIONS.
5. NO ASPHALT SHALL BE DELIVERED TO THE JOB SITE AFTER 3:00 P.M. ON ANY DAY WITHOUT PRIOR APPROVAL OF THE DISTRICT. NO SLURRY SEAL SHALL BE PLACED AFTER 2:00 P.M.
6. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN (INCLUDING ANY STREET CLOSURE DETAILS AND DETOUR PLANS), PREPARED AND SIGNED BY A TRAFFIC ENGINEER, TO THE DISTRICT. TRAFFIC CONTROL PLAN TO BE APPROVED BY AGENCY HAVING JURISDICTION (PAMF). NO WORK CAN BEGIN WITHOUT AN APPROVED AND SIGNED TRAFFIC CONTROL PLAN.
7. ANY DAMAGE TO EXISTING FACILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL RESTORE PAVEMENT AND OTHER FACILITIES OUTSIDE LIMITS OF WORK AFFECTED BY THE CONSTRUCTION OPERATIONS AT NO ADDITIONAL COST. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DOCUMENT EXISTING CONDITIONS PRIOR TO START OF WORK TO SUBSTANTIATE ANY PRE-EXISTING DAMAGES.
8. TIE-INS ARE DIAGRAMATIC. THE CONTRACTOR SHALL NOT BE ENTITLED TO EXTRA PAYMENT IF ADDITIONAL PIPE, COUPLINGS, OR OTHER APPURTENANCES ARE NECESSARY TO COMPLETE TIE-IN.
9. PIPE BEDDING AND TRENCH BACKFILL SHALL BE IN ACCORDANCE WITH DISTRICT STANDARDS. SEE DISTRICT STANDARD TRENCH DETAILS ON PLAN D.1.
10. THE WATER SYSTEM SHALL REMAIN IN SERVICE THROUGHOUT THE PROJECT. INTERRUPTIONS TO SERVICE SHALL BE MINIMIZED AND SHALL BE COORDINATED WITH THE DISTRICT AT (650) 591-8914.
11. THE CONTRACTOR SHALL NOT OPERATE DISTRICT FACILITIES UNLESS DIRECTED BY THE DISTRICT.
12. THE DISTRICT SHALL BE NOTIFIED AT LEAST 72 HOURS IN ADVANCE FOR ANY SCHEDULED TIE-INS. NO TIE-INS OR SHUTDOWNS WILL BE ALLOWED ON MONDAYS AND FRIDAYS OR THE DAY PRECEDING A HOLIDAY. ONLY TWO SHUTDOWNS PER WEEK ARE ALLOWED.
13. THE CONTRACTOR SHALL DESIGNATE A PERSON TO CONTACT SHOULD PROBLEMS ARISE DURING NON-WORKING HOURS OR DAYS. THE CONTRACTOR SHALL SUBMIT THAT PERSON'S NAME AND PHONE NUMBER.
14. WATER STRUCTURES REMOVED FROM THE GROUND NOT LIMITED TO GATE VALVES, CHECK VALVES, COPPER SERVICE LINES, ETC SHALL BE RETURNED TO THE DISTRICT. FITTINGS AND PIPE REMOVED FROM THE GROUND SHALL BECOME PROPERTY OF THE CONTRACTOR. CONTRACTOR TO DISPOSE OF REMOVED MATERIALS IN A LEGAL MANNER.
15. PIPE JOINTS MAY BE DEFLECTED NO MORE THAN 50% OF THE MANUFACTURER'S RECOMMENDATION.
16. EXISTING UTILITIES SHOWN ARE BASED ON FIELD VERIFICATION AND RECORD DRAWINGS AND ARE SHOWN SCHEMATICALLY ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT USA (811 OR TOLL FREE AT 1-800-642-2444) AND VERIFY SAID UTILITIES.
17. EXISTING WATER MAIN ELEVATIONS, BASED ON NEARBY GATE VALVE NUTS, ARE APPROXIMATE.
18. EXISTING STORM DRAIN AND SEWER MAIN ELEVATIONS, BASED ON NEARBY MANHOLE/CATCH BASIN INVERTS, ARE APPROXIMATE.
19. SHORING IS REQUIRED FOR TRENCH DEPTHS GREATER THAN 60".
20. NO BENDS OR JOINTS WITHIN 8' OF SANITARY SEWER MAIN OR STORM DRAIN CROSSING ARE ALLOWED UNLESS OTHERWISE DIRECTED BY THE DISTRICT.
21. CONTRACTOR TO COMPLY WITH NOISE CONTROL ORDINANCES OF THE AGENCIES WITHIN JURISDICTION.
22. CONTRACTOR SHALL LOCATE AND PRESERVE ALL FACILITIES INCLUDING SEWER, GAS, IRRIGATION, POWER, STREET LIGHTS, TRAFFIC SIGNALS, TELEPHONE AND OTHERS WHICH MAY BE IN THE AREA OF CONSTRUCTION.
23. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD SURVEYING AND ESTABLISHING GRADE STAKING. ALL CONSTRUCTION FOR WATER LINES SHALL BE PROVIDED BY CONTRACTOR. PROVIDE CUT SHEETS PRIOR TO CONSTRUCTION REFERENCING STATIONING AND IMPROVEMENTS. STAKING SHALL BE PERFORMED BY A REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR.
24. THE CONTRACTOR IS RESPONSIBLE FOR THE PRESERVATION OF SURVEY MONUMENTS LOCATED WITHIN THE AREA OF WORK. PRIOR TO THE START OF CONSTRUCTION, SURVEY MONUMENTS THAT POTENTIALLY MAY BE DISTURBED SHALL BE LOCATED AND REFERENCED BY A LICENSED LAND SURVEYOR, AND A CORNER RECORD FILED WITH THE COUNTY SURVEYOR. ANY SURVEY MONUMENTS DISTURBED DURING THE COURSE OF CONSTRUCTION SHALL BE REESTABLISHED BY A LICENSED LAND SURVEYOR. (LAND SURVEYORS' ACT SECTION 8771).
25. IT IS INTENDED THAT THESE PLANS REQUIRE ALL LABOR AND MATERIALS NECESSARY FOR COMPLETION OF WORK IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY. INTERPRETATION OR CORRECTION THEREOF SHALL BE FINAL AND CONCLUSIVE. WHERE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAILS.
26. CONTRACTOR SHALL AT ALL TIMES, KEEP WORK AREA IN A NEAT AND SAFE CONDITION. UPON COMPLETION OF ANY PORTION OF WORK, CONTRACTOR SHALL PROMPTLY REMOVE ALL ITS EQUIPMENT AND SURPLUS MATERIALS, UNLESS NOTED OTHERWISE. CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE DISTRICT, DISPOSE OF ALL RUBBISH, UNUSED MATERIALS AND REMOVE OTHER EQUIPMENT BELONGING TO OR USED IN PERFORMANCE OF WORK, TO THE SATISFACTION OF THE ENGINEER. AFTER COMPLETION OF THE PROJECT, CONTRACTOR SHALL LEAVE THE PROJECT SITE IN EQUAL OR BETTER CONDITION THAN WHEN CONSTRUCTION BEGAN.
27. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITION, PROTECTION OF PUBLIC AND PRIVATE PROPERTY ADJACENT TO WORK DURING THE CONSTRUCTION OF PROJECT.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL CURRENTLY APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL BODY. CONTRACTOR IS DIRECTED TO CONTACT STATE OF CALIFORNIA INDUSTRIAL RELATIONS DEPARTMENT (209) 948-7763. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL BARRICADES, SAFETY DEVICES AND CONTROL OF TRAFFIC WITHIN CONSTRUCTION AREAS AS REQUIRED. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR COMPLIANCE WITH ADDITIONAL PUBLIC SAFETY REQUIREMENTS WHICH MAY ARISE DURING CONSTRUCTION.
29. WATER MAIN SHALL BE INSTALLED WITH A MINIMUM OF 24" VERTICAL CLEARANCE FROM ALL EXISTING UTILITY CROSSING UNLESS OTHERWISE NOTED ON THE PLANS.
30. ALL RESTORED TRENCHES WITHIN THE EXISTING PAVEMENT MUST BE SLURRY SEALED WITH TYPE II SLURRY SEAL AND A MINIMUM WIDTH OF 10 FEET OR FULL WIDTH OF IMPACTED LANE, WHICHEVER IS GREATER, IN ACCORDANCE WITH SECTION 37 OF THE CALTRANS STANDARD SPECIFICATIONS.
31. WHEN TRENCHING OR EXCAVATING OVER (5) FEET IN DEPTH, UNDER THE LABOR CODE SECTION 6705, CONTRACTOR SHALL PROVIDE THE FOLLOWING SHORING REQUIREMENTS:
 - a. WRITTEN AND DETAILED PLAN COVERING TRENCH AND EXCAVATION SAFETY PROCEDURES THAT MEETS CALOSHA REQUIREMENTS UNDER THE CONSTRUCTION SAFETY ORDERS SECTIONS 1539-1543.
 - b. SUBMIT A WRITTEN SAFETY PLAN REVIEWED AND APPROVED BY A REGISTERED CIVIL OR STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE START OF WORK.
 - c. ASSIGN A COMPETENT PERSON TO SUPERVISE TRENCHING AND EXCAVATION OPERATIONS WHEN WORK IS BEING PERFORMED.
 - d. THE CONTRACTOR SHALL OBTAIN AND PROVIDE THE DISTRICT A COPY OF A CALOSHA PERMIT FOR ALL TRENCH AND EXCAVATION OPERATIONS.

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

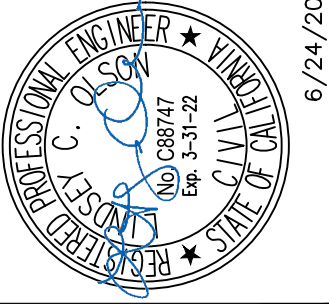


FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\Chem\1568 Midpeninsula WWS\15-01-SR101 Crossing\CAD\Production\1568-1-101-000.dwg
PLOT DATE: 06-24-20 PLOTTED BY: tsaharic

REVISIONS

NO.	DESCRIPTION	BY	DATE	APP'D



WEST YOST ASSOCIATES

DRAWN: ERG	CHECKED: WFH	APPROVED: JDC
DESIGNED: LCO		

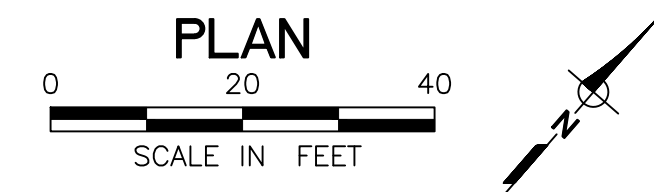
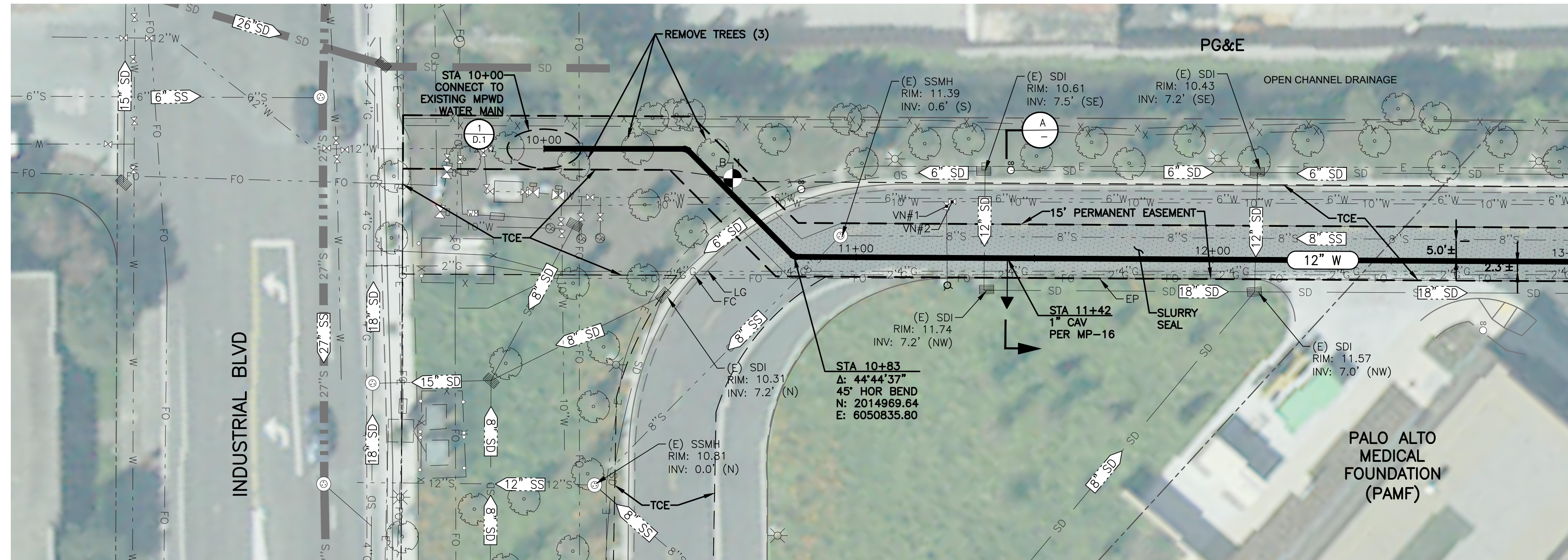
MID-PENINSULA WATER DISTRICT
PHASE 1
SR101 CROSSING AT PAMF, PROJECT 15-72
GENERAL NOTES

DATE 6/24/2020	SCALE AS NOTED
PG# JOB NO. 768-14-17-01	
PLAN G.4	SHEET 4 of 12

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

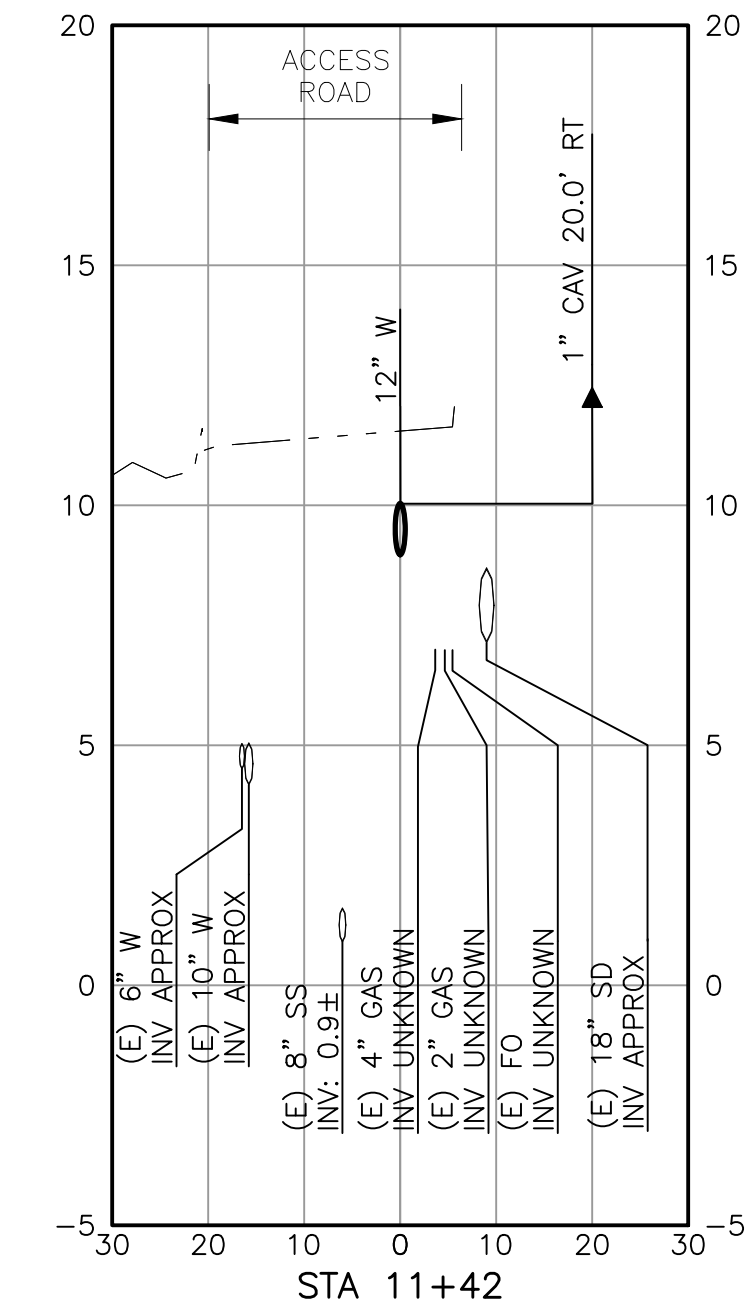
FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\Projects\1918 Mid Peninsula WWD\15.17.00 SR101 Crossing\CAD\Production\151814.1701.001.002.dwg
PLOT DATE: 06/24/20 PLOTTED BY: tsallegro

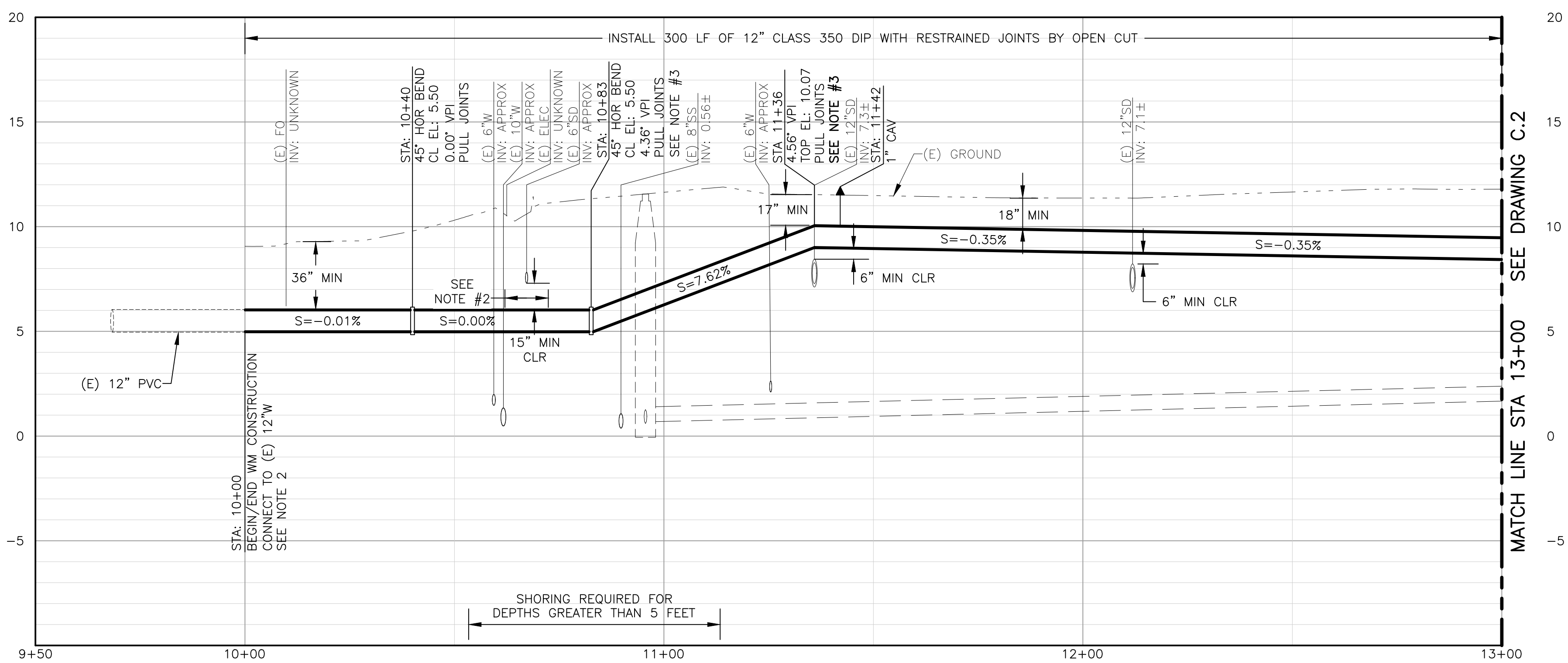


MATCH LINE STA 13+00 SEE DRAWING C.2

- NOTES:
1. POTHOLE (E) 12" W TO DETERMINE DEPTH, SLOPE & ALIGNMENT OF NEW 12"W MAIN.
 2. NO JOINTS 8 FEET EITHER SIDE OF STORM DRAIN CROSSING (WHEN STORM DRAIN IS ABOVE WATER)
 3. DISTRICT STANDARD MAXIMUM JOINT DEFLECTION IS 3 DEGREES. ANY POINT OF INFLECTION GREATER THAN 3 DEGREES SHALL BE MADE UP OVER SUCCESSIVE PIPE JOINTS.



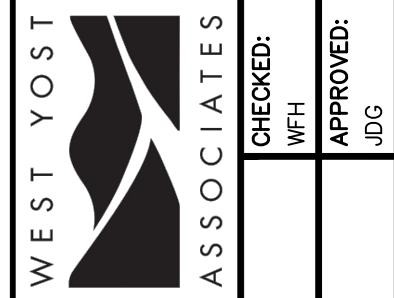
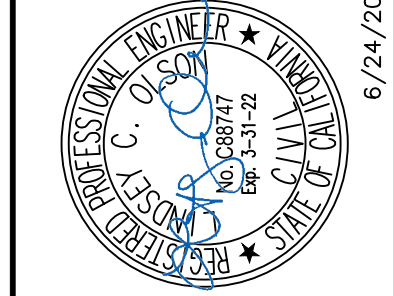
SECTION A-A
H: 1"=20', V: 1"=4'



PROFILE
SCALE: H:1"=20', V:1"=4'

MATCH LINE STA 13+00 SEE DRAWING C.2

NO.	DESCRIPTION	BY	DATE	APPROV



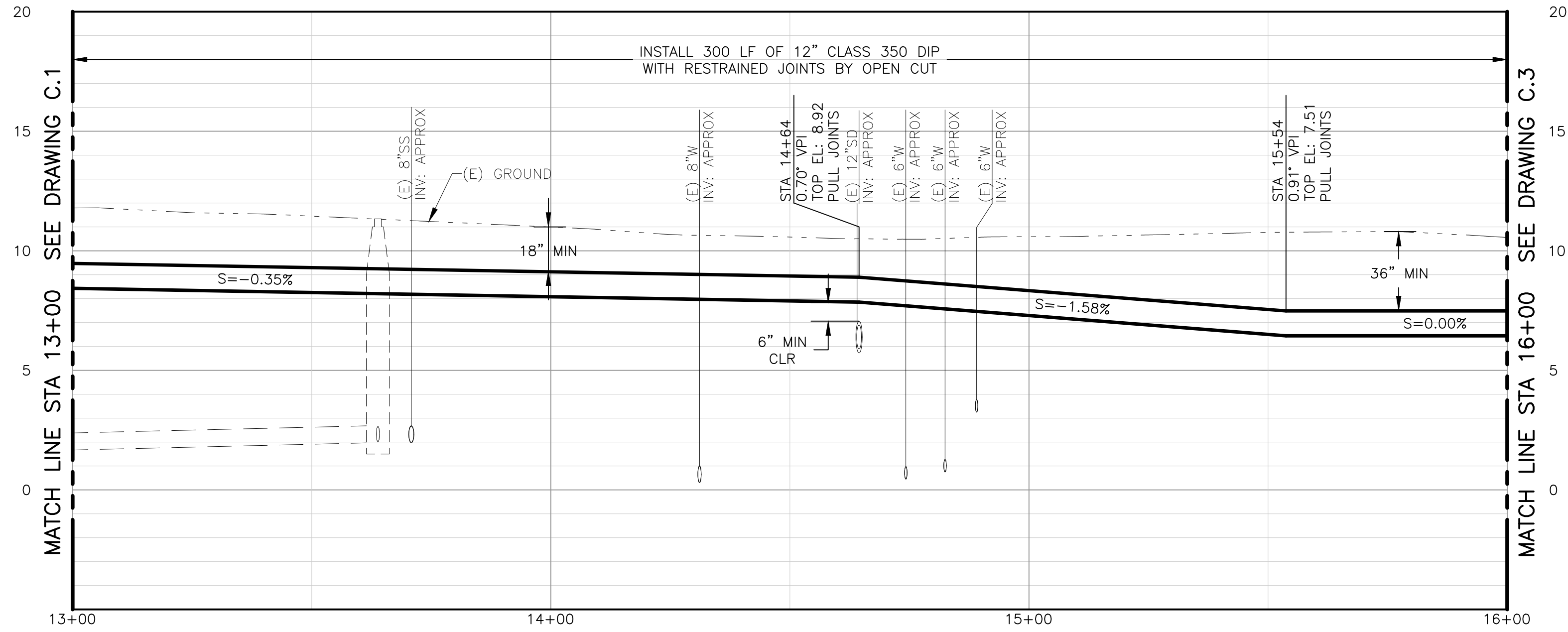
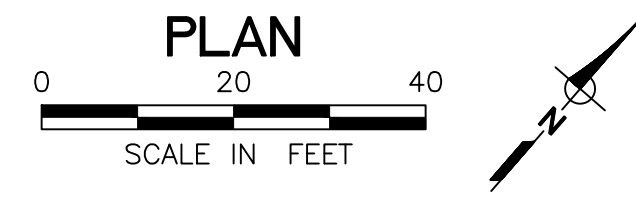
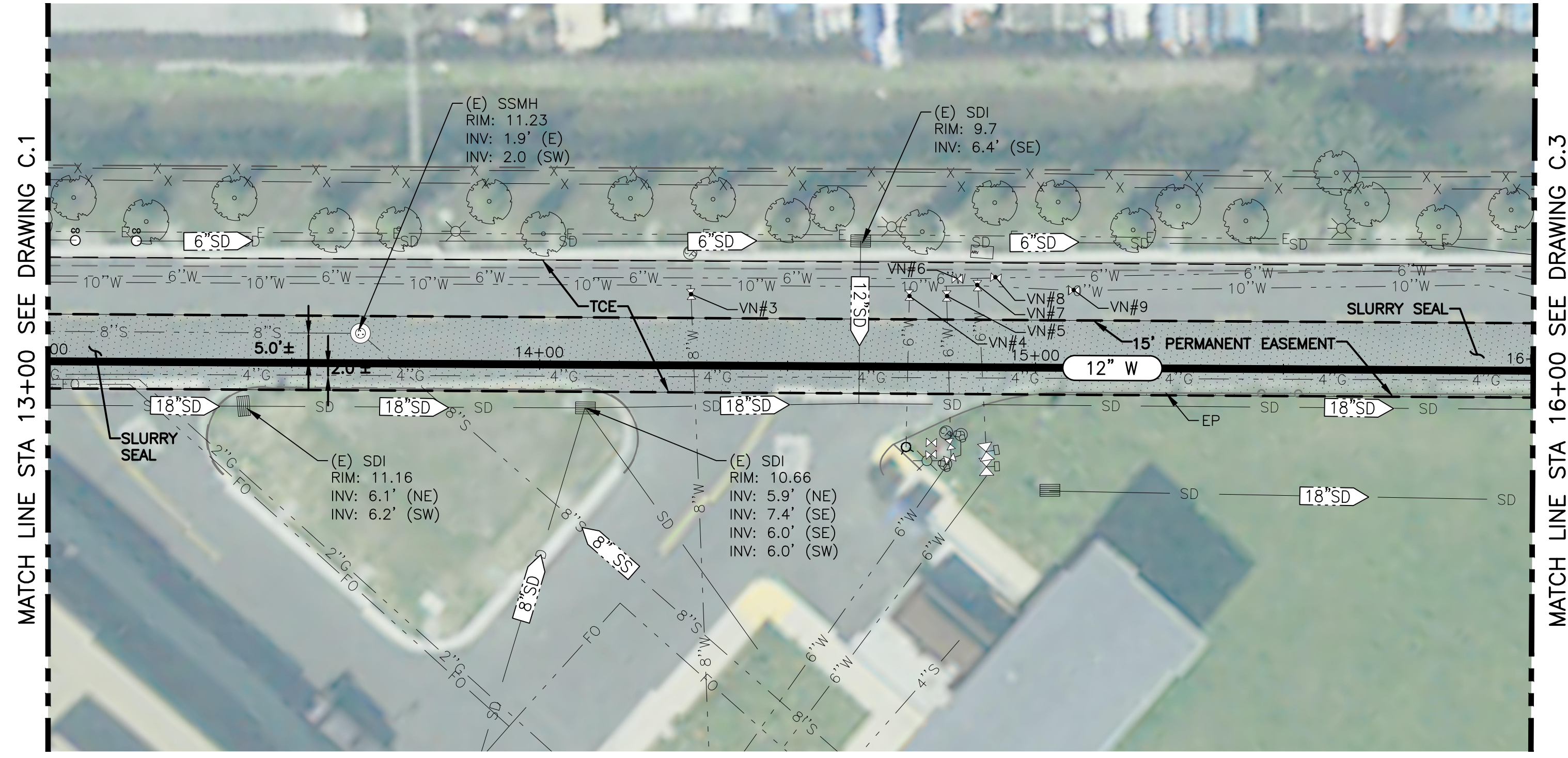
CHECKED:	W. H. YOST
DRAWN:	ERG
DESIGNED:	LCO
APPROVED:	JDC

MID-PENINSULA WATER DISTRICT	
PHASE 1	
SR101 CROSSING AT PAMF, PROJECT 15-72	
PLAN AND PROFILE STA 10+00 TO 13+00	
DATE	SCALE
6/24/2020	AS NOTED
PCG JOB NO.	768-14-17-01
PLAN	C.1
SHEET	5 OF 12

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

FOR REDUCED ENGLISH PLANS
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\City\2020 Mid-Peninsula Water District SR101 Crossing at PAMF, Project 15-72 - C2.dwg
PLOT DATE: 06-24-20 PLOTTED BY: tsalgaro



PROFILE
SCALE: H:1"=20', V:1"=4'



NO.	DESCRIPTION	BY	DATE	APP'D

WEST YOST ASSOCIATES

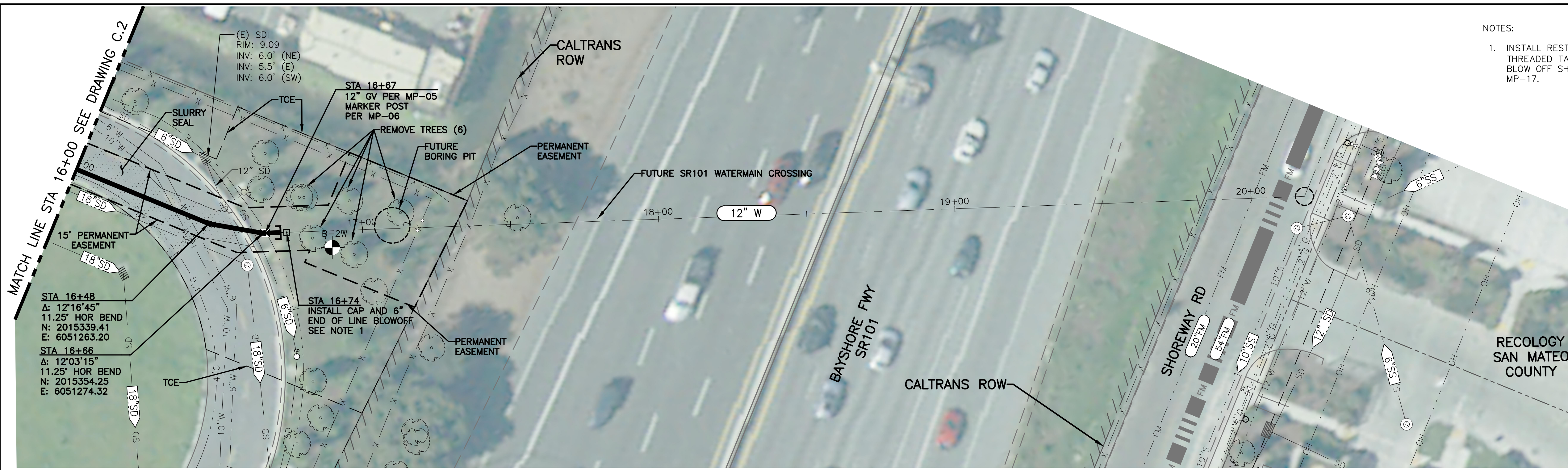
C. OLSON
REGISTERED PROFESSIONAL ENGINEER
NO. 688747
STATE OF CALIFORNIA

DRAWN: ERG
CHECKED: WFH
DESIGNED: LCC
APPROVED: JDC

MID-PENINSULA WATER DISTRICT
PHASE 1
SR101 CROSSING AT PAMF, PROJECT 15-72
PLAN AND PROFILE STA 13+00 TO 16+00

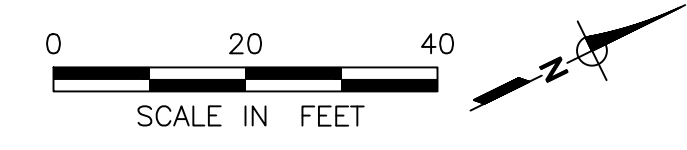
DATE	SCALE
6/24/2020	AS NOTED
PCG JOB NO.	
768-14-17-01	
PLAN	C.2
SHEET	6 of 12

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

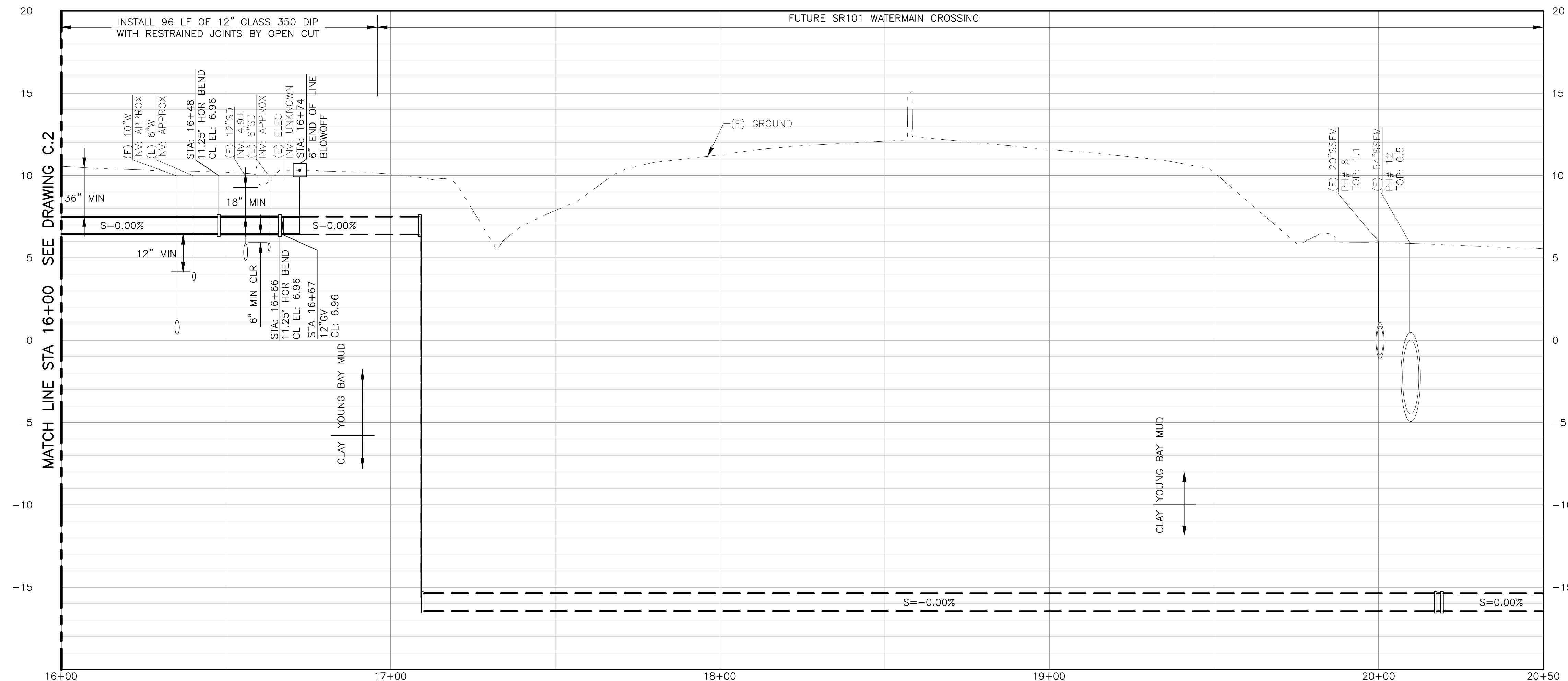


NOTES:
 1. INSTALL RESTRAINED DUCTILE IRON END CAP WITH THREADED TAP AND 6" END OF LINE BLOW OFF. BLOW OFF SHALL BE SIMILAR TO STD. DETAIL MP-17.

PLAN



FOR REDUCED ENGLISH PLANS ORIGINAL SCALE IS IN INCHES

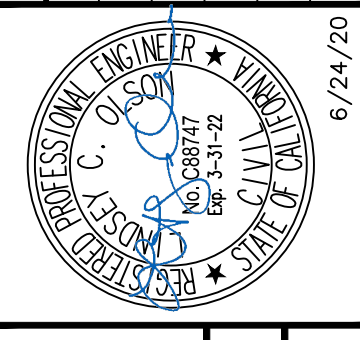


PROFILE

SCALE: H:1"=20', V:1"=4'

REVISIONS

NO.	DESCRIPTION	BY	DATE	APPVD



WEST YOST ASSOCIATES

CHECKED: WYH
 DESIGNED: LCO
 APPROVED: JDC

MID-PENINSULA WATER DISTRICT
 PHASE 1
 SR101 CROSSING AT PAMF, PROJECT 15-72
 PLAN AND PROFILE STA 16+00 TO 16+74

DATE	6/24/2020	SCALE	AS NOTED
PCG JOB NO.	768-14-17-01		
PLAN	C.3		
SHEET	7 OF 12		

CATHODIC PROTECTION GENERAL NOTES

I. 12" DOMESTIC WATER PIPELINE

A. PVC PIPE WITH DUCTILE IRON FITTINGS

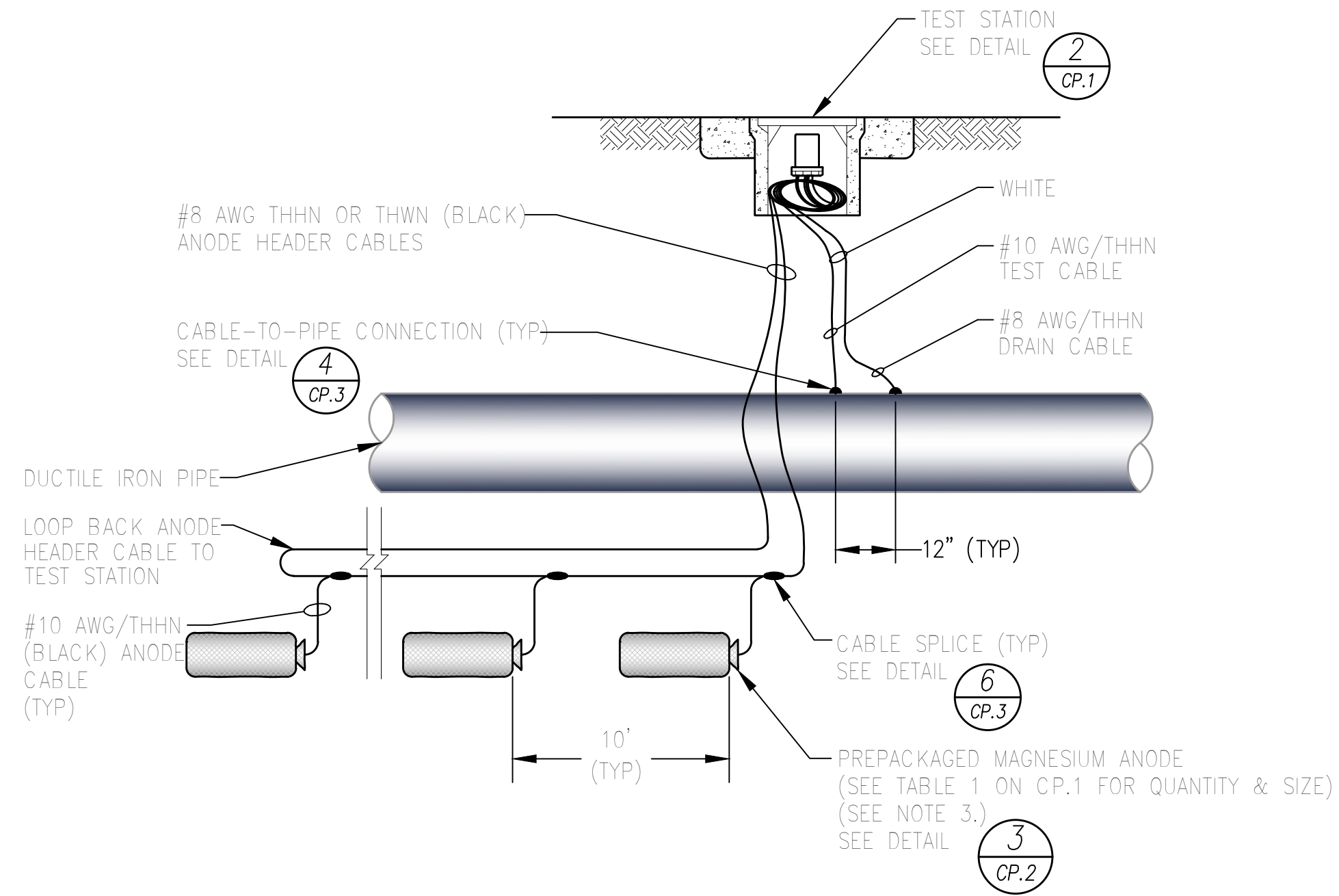
- CATHODIC PROTECTION FOR THE DUCTILE IRON PIPELINE SHALL CONSIST OF PREPACKAGED H-1 ALLOY MAGNESIUM ANODES INSTALLED AT ANODE TEST STATIONS (ATS) AS INDICATED IN THE CATHODIC PROTECTION TABLE 1 ON SHEET CP.1.
- ALL BURIED, NON-WELDED, NON-INSULATING DUCTILE PIPE JOINTS, EXCEPT INSULATING JOINTS, SHALL BE BONDED WITH TWO (2) #8 AWG HMWPE BOND CABLES PER DETAIL 3/CP.4. (THE SECOND BOND CABLE TO EBBA SERIES 2000 MEGALUG MECHANICAL JOINT RESTRAINTS MAY BE OMITTED WITH THE DISTRICT'S APPROVAL).
- ENCASE ALL BURIED DUCTILE IRON PIPE, VALVES, AND FITTINGS IN 8-MIL POLYETHYLENE PER AWWA C105.
- ALL BURIED BOLTS & NUTS SHALL BE COATED WITH BITUMASTIC AFTER INSTALLATION PER SPECIFICATIONS.

A. DUCTILE IRON PIPE

- CATHODIC PROTECTION FOR THE DUCTILE IRON PIPE SHALL CONSIST OF PREPACKAGED H-1 ALLOY MAGNESIUM ANODES INSTALLED AT ANODE TEST STATIONS (ATS) AS INDICATED IN THE CATHODIC PROTECTION TABLE 1 ON SHEET CP.1.
- ALL BURIED, NON-WELDED, NON-INSULATING DUCTILE PIPE JOINTS, EXCEPT INSULATING JOINTS, SHALL BE BONDED WITH TWO (2) #8 AWG HMWPE BOND CABLES PER DETAIL 3/CP.4. (THE SECOND BOND CABLE TO EBBA SERIES 2000 MEGALUG MECHANICAL JOINT RESTRAINTS MAY BE OMITTED WITH THE DISTRICT'S APPROVAL).
- ENCASE ALL BURIED DUCTILE IRON PIPE, VALVES, AND FITTINGS IN 8-MIL POLYETHYLENE PER AWWA C105.
- ALL BURIED BOLTS & NUTS SHALL BE COATED WITH BITUMASTIC AFTER INSTALLATION PER SPECIFICATIONS.

B. COPPER PIPE & FITTINGS

- CATHODIC PROTECTION FOR THE COPPER LATERALS OF BLOW OFFS AND CAV'S SHALL CONSIST OF PREPACKAGED ZINC ANODES DIRECTLY CONNECTED TO THE PIPE AT THE BOX AS INDICATED IN THE CATHODIC PROTECTION TABLE 1 ON SHEET CP.1.
- ALL BURIED COPPER AND/OR BRASS/BRONZE CORPORATION STOPS AND FITTINGS SHALL BE COATED WITH BITUMASTIC.
- ALL BURIED COPPER PIPE AND/OR BRASS/BRONZE CORPORATION STOPS AND FITTINGS CONNECTED TO A DUCTILE IRON PIPE/FITTING SHALL BE ELECTRICALLY ISOLATED FROM THE FITTING BY MEANS OF A NYLON BUSHING OR AN INSULATING CORPORATION STOP INSTALLED, AND SHALL BE ENCASED IN A 6-MIL POLYETHYLENE SLEEVE.



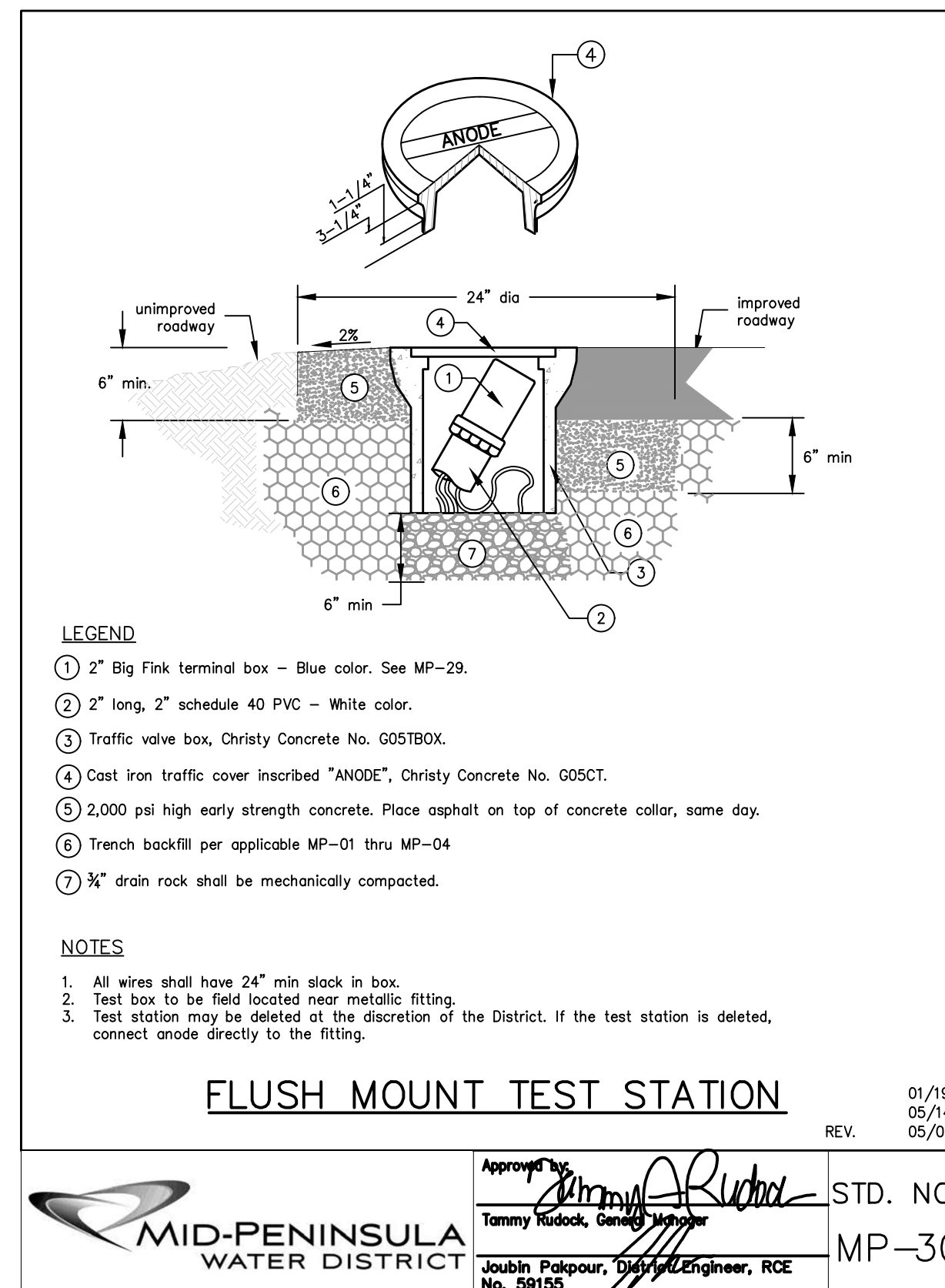
NOTES:

- INSTALL BOND CABLES ON ALL BURIED JOINTS (EXCEPT INSULATING JOINTS) PER TO DETAIL 3/CP.3.
- CONDUIT OMITTED FOR CLARITY. INSTALL ANODE HEADER CABLES AND TEST CABLES IN 1" Ø PVC CONDUIT.
- COAT ALL BURIED BOLTS & NUTS WITH BITUMASTIC, AND ENCASE ALL DUCTILE IRON PIPE AND FITTINGS IN POLYETHYLENE PER CATHODIC PROTECTION GENERAL NOTE 1. ON SHEET CP.1.

1 **ATS - ANODE TEST STATION**
CP.2 NOT TO SCALE

TABLE 1 - CATHODIC PROTECTION TEST STATION SCHEDULE

STATION	LINE	DWG #	TEST STATION TYPE	FITTING TYPE	DETAIL	PIPELINE (INCHES)	ANODE QUANTITY & SIZE (LB)
10+00	W	C.1	ATS	PIPE	1/CP.1	12"	(5)-32# MAG
11+42	W	C.1	ANODE	CAV	1/CP.2	1"	(1)-15# ZINC
16+95	W	C.2	ATS	PIPE	1/CP.1	12"	(5)-32# MAG



NOTES:

- SEE THE TEST STATION SEE DETAIL 3/CP.1 AND THE REVISION IN NOTE 2 BELOW.
- FOR TERMINAL BOX SEE DETAIL 2/CP.3. THE TERMINAL BOX AND EXTENSION SHALL BE 3-INCHES IN DIAMETER.

2 **FLUSH MOUNT TEST STATION**
CP.1 NOT TO SCALE

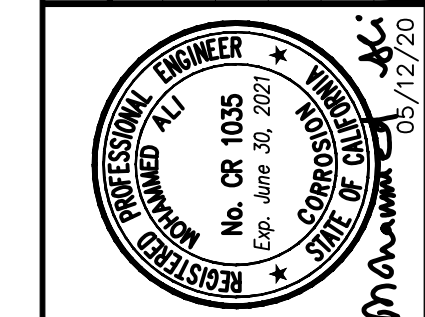
REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

3
2
1
0

FOR REDUCED ENGLISH PLANS
SCALE IS IN INCHES
DRAWING NAME: H:\Project Folder\2017 Contracts\17172 - West Coast - TD 844 - Mid Peninsula Water Dist\SSDI Creating\Design\Design\CP-1501 X NAME.MXD Rev:3.2.dwg ORIGINAL SCALE IS IN INCHES
PLOT DATE: 05/12/20

REVISIONS

NO.	DESCRIPTION	BY	DATE	APPROVED



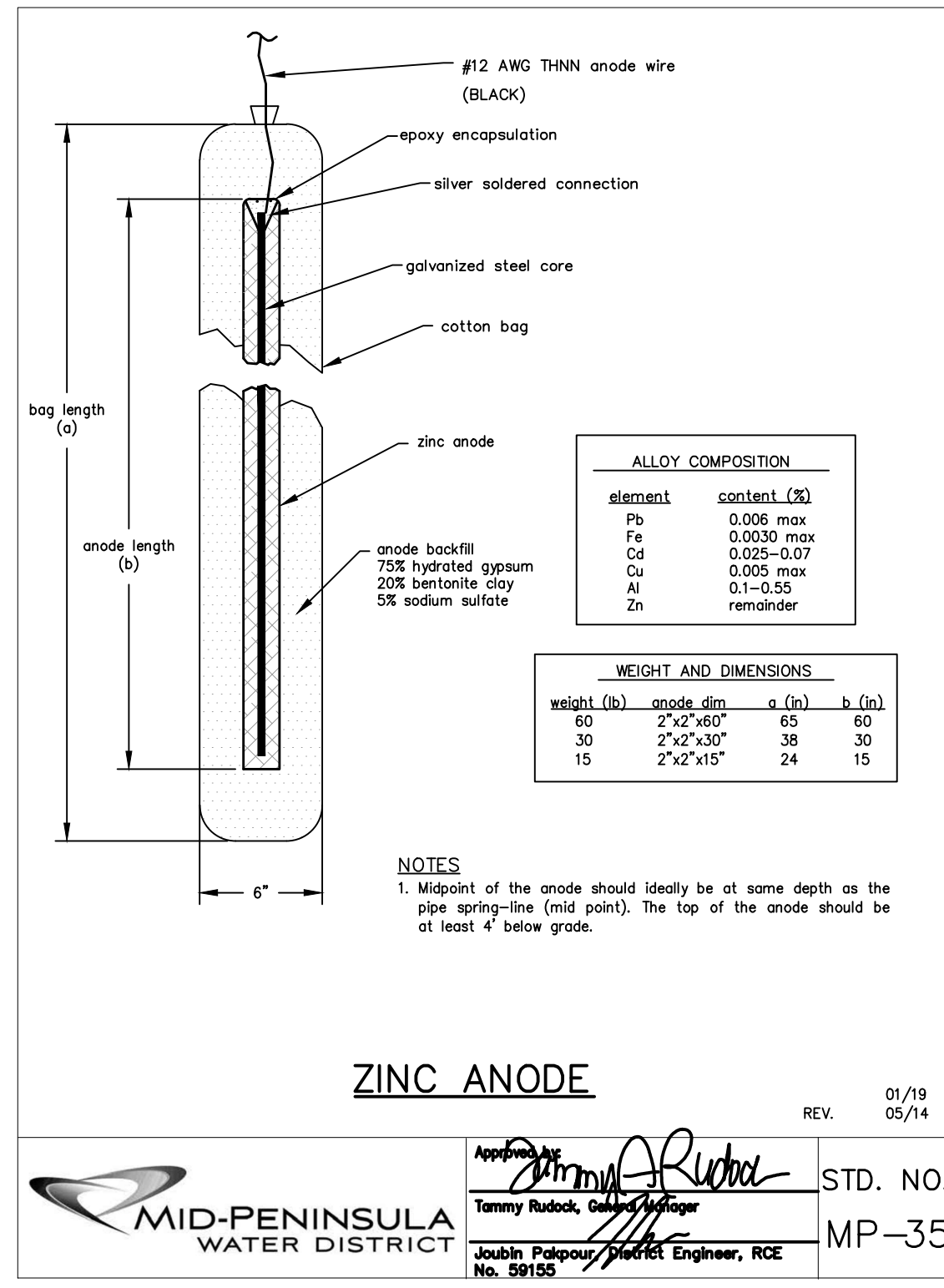
jdh corrosion
CONSULTANTS, INC.
1100 Willow Pass Ct., Concord, CA 94520
(925)927-6650; WWW.JDHCORROSION.COM

CHECKED: JDH
DESIGNED: TDH
APPROVED: MA

MID-PENINSULA WATER DISTRICT
PHASE 1
SR101 CROSSING AT PAMF, PROJECT 15-72
CATHODIC PROTECTION NOTES, TABLE
& DETAILS 1

DATE	SCALE
05/12/2020	AS NOTED
PCG JOB NO.	768-14-17-01
PLAN	CP.1
SHEET	8 OF 12

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:

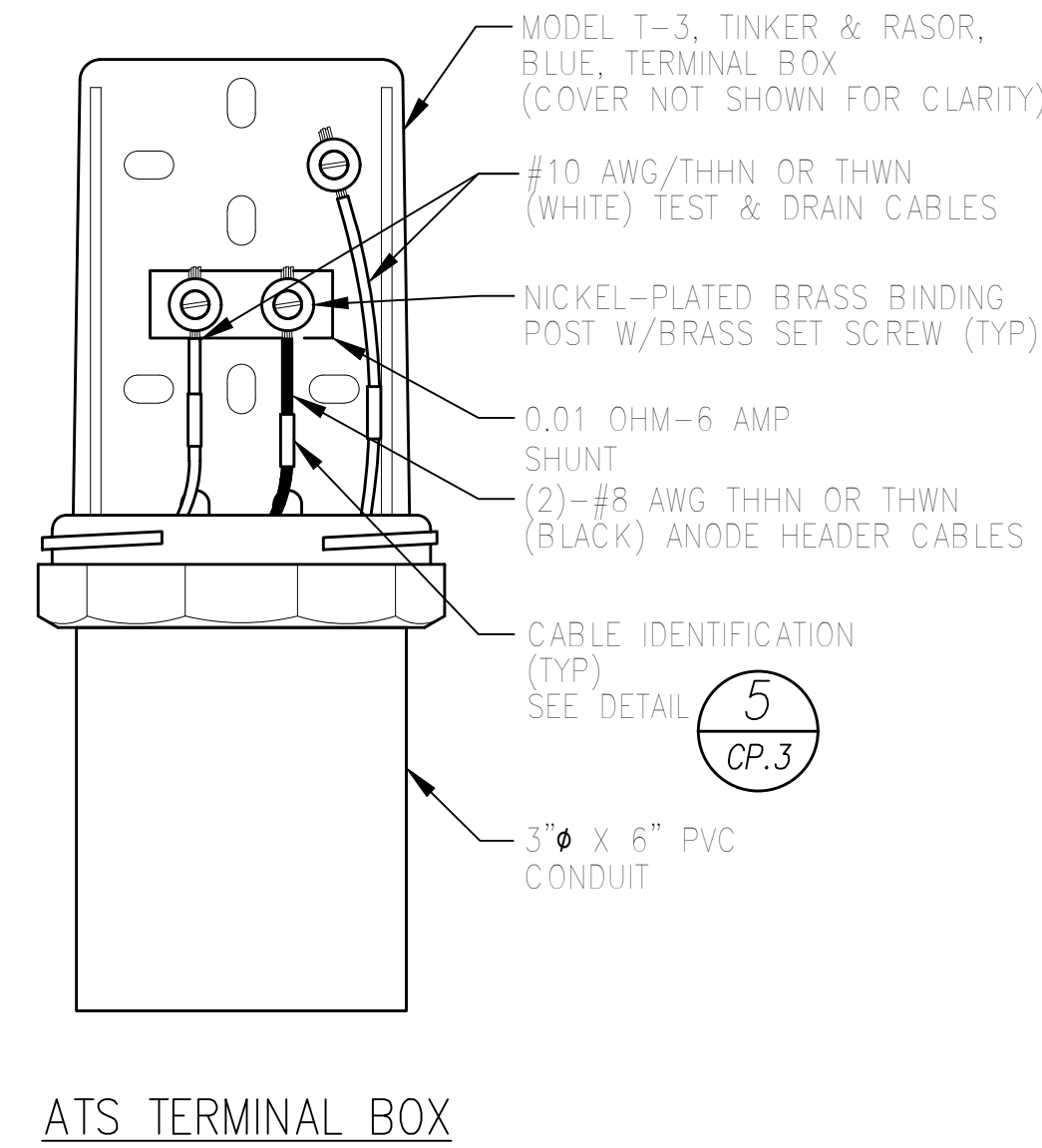


ZINC ANODE

REV. 01/19
05/14

Approved by: *Tammy Rudock*
Tammy Rudock, General Manager
Joubin Pakpour, District Engineer, RCE No. 59155

STD. NO. MP-35

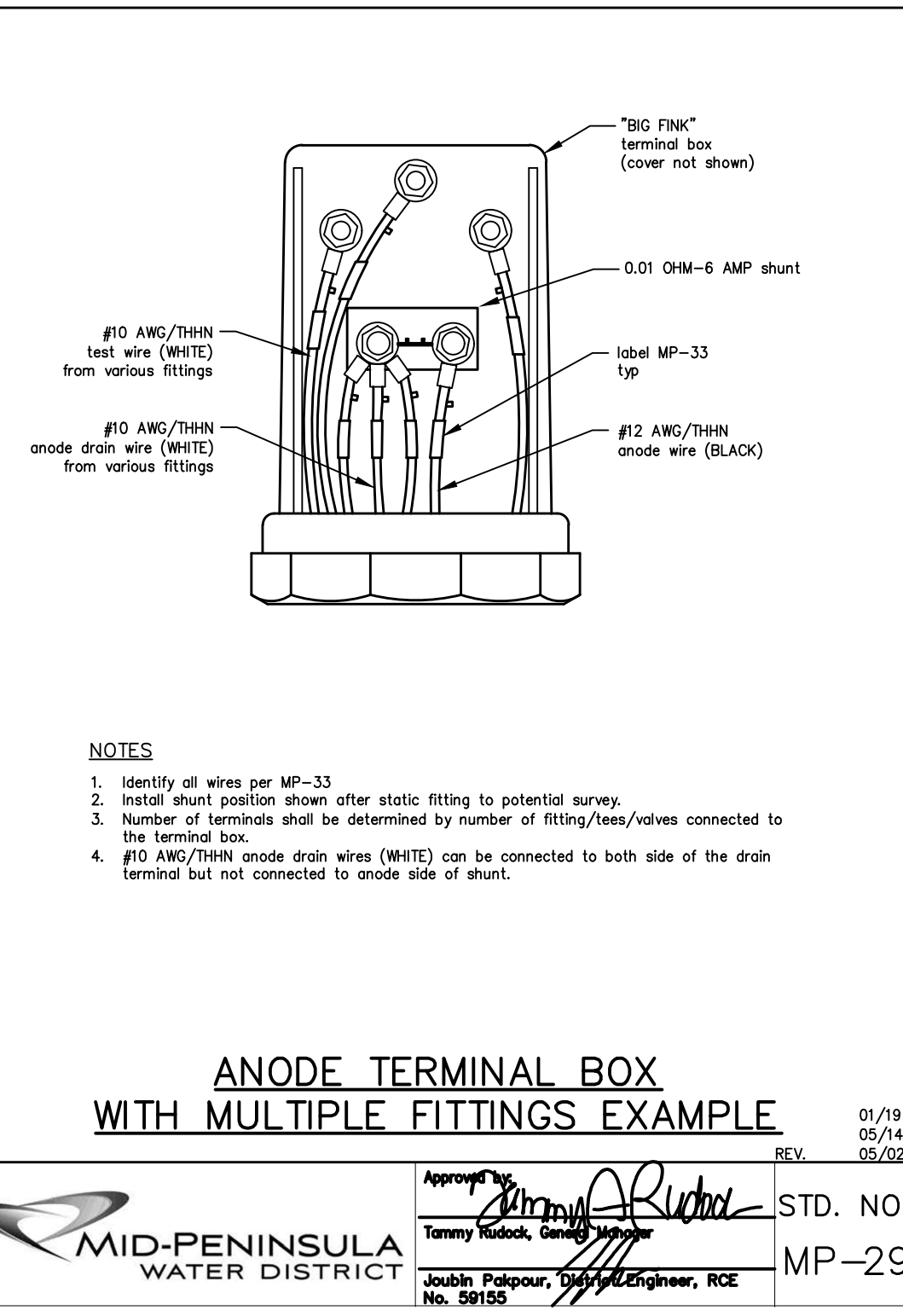


ATS TERMINAL BOX

TINKER & RASOR, T-3 OPTION

NOTE:
1. FOR BIG FINK ALTERNATIVE FOR THE TERMINAL BOX THE TERMINAL BOX AND EXTENSION SHALL BE 3-INCHES IN DIAMETER. PROVIDE RING TERMINAL CONNECTORS FOR USE WITH THE BIG FINK TERMINAL BOX. FOR THE ANODE CABLE USE #10 AWG STRANDED COPPER CABLE WITH BLACK THHN INSULATION.

2 TERMINAL BOX
CP.3 NOT TO SCALE



ANODE TERMINAL BOX WITH MULTIPLE FITTINGS EXAMPLE

REV. 01/19
05/14
05/02

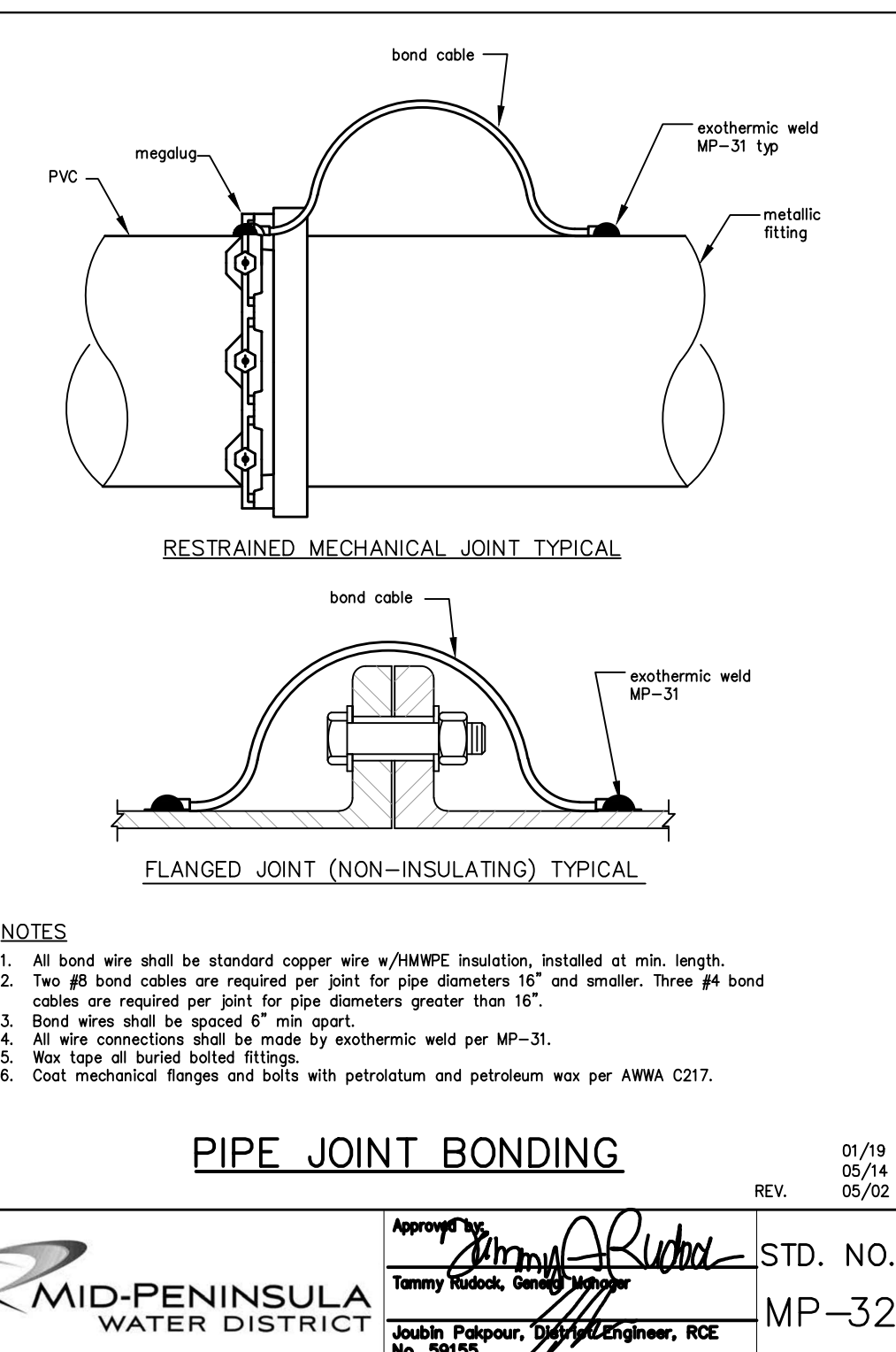
Approved by: *Tammy Rudock*
Tammy Rudock, General Manager
Joubin Pakpour, District Engineer, RCE No. 59155

STD. NO. MP-29

COTT, BIG FINK OPTION

NOTES:
1. ONLY UTILIZE ZINC ANODES FOR COPPER PIPE.
2. ANODE WIRE SHALL BE #10 AWG THHN STRANDED COPPER CABLE.

1 ZINC ANODE
CP.3 NOT TO SCALE



PIPE JOINT BONDING

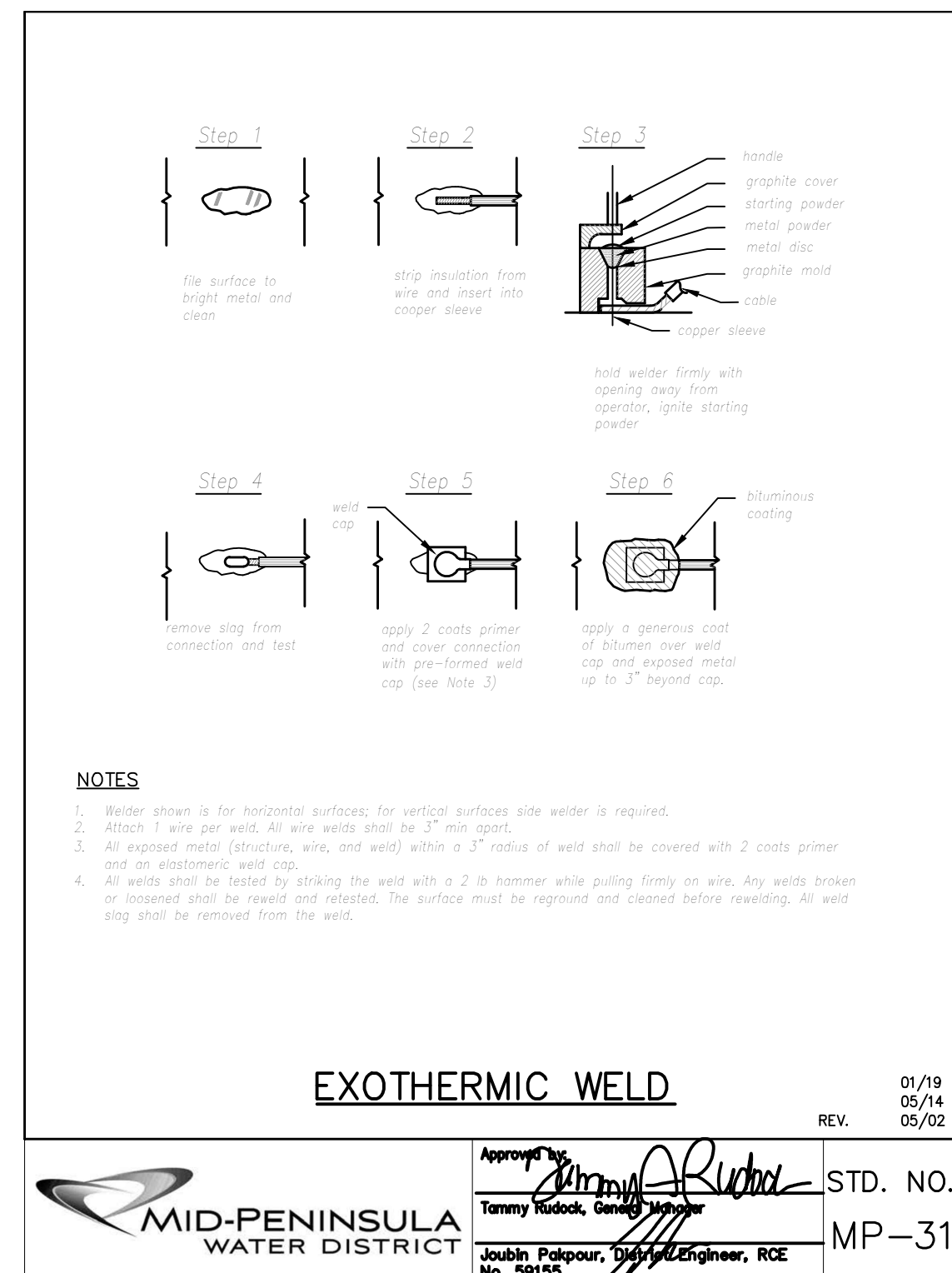
REV. 01/19
05/14
05/02

Approved by: *Tammy Rudock*
Tammy Rudock, General Manager
Joubin Pakpour, District Engineer, RCE No. 59155

STD. NO. MP-32

NOTES:
1. SEE CATHODIC PROTECTION GENERAL NOTES 1.A.3. & 1.B.3 REGARDING ERBA SERIES 2000 MEGALUG MECHANICAL JOINT RESTRAINTS.
2. SEE ALSO CABLE-TO-PIPE DETAIL 4/CP.3.

3 BOND CABLE
CP.3 NOT TO SCALE



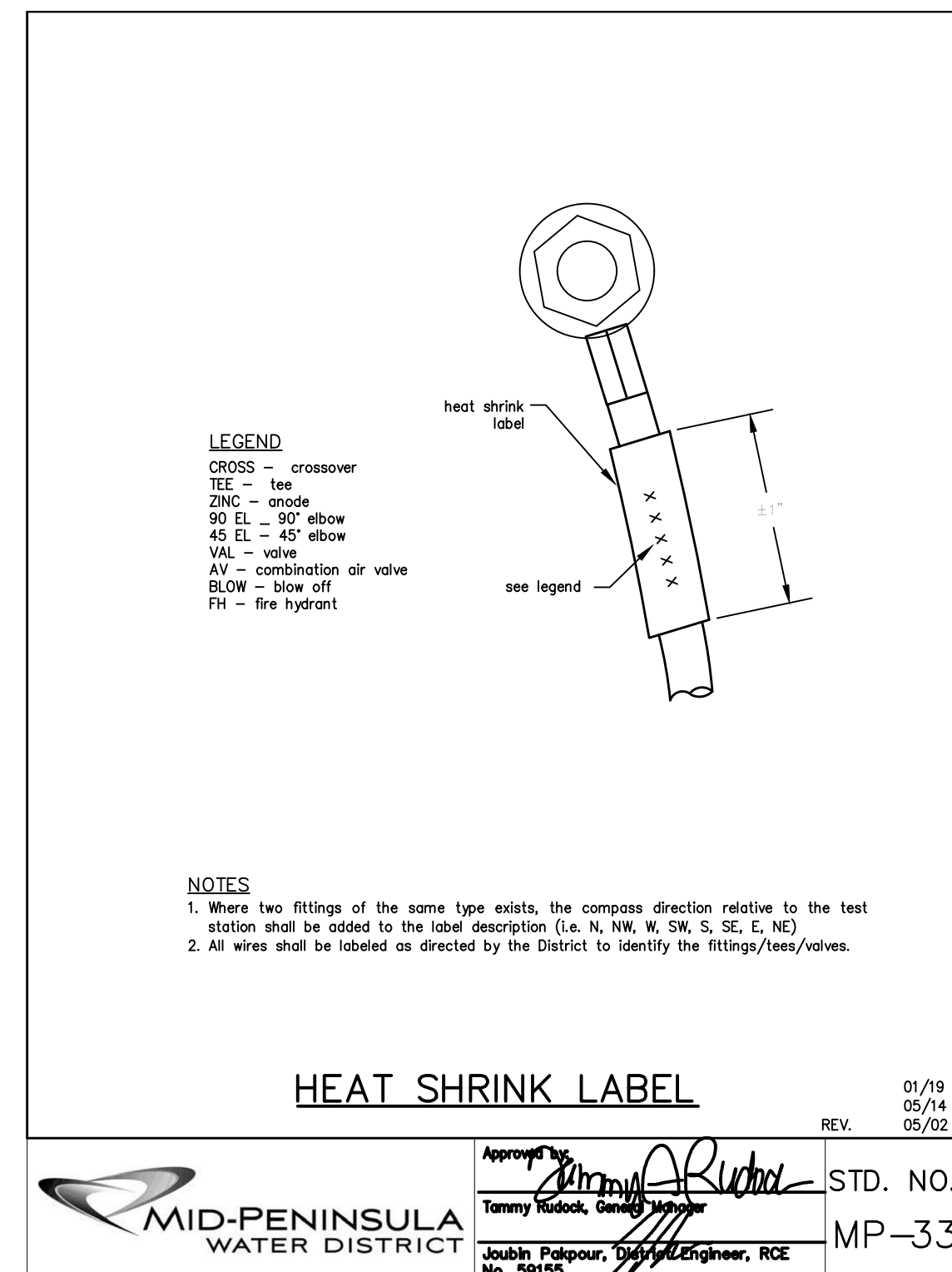
EXOTHERMIC WELD

REV. 01/19
05/14
05/02

Approved by: *Tammy Rudock*
Tammy Rudock, General Manager
Joubin Pakpour, District Engineer, RCE No. 59155

STD. NO. MP-31

4 CABLE-TO-PIPE CONNECTION
CP.3 NOT TO SCALE



HEAT SHRINK LABEL

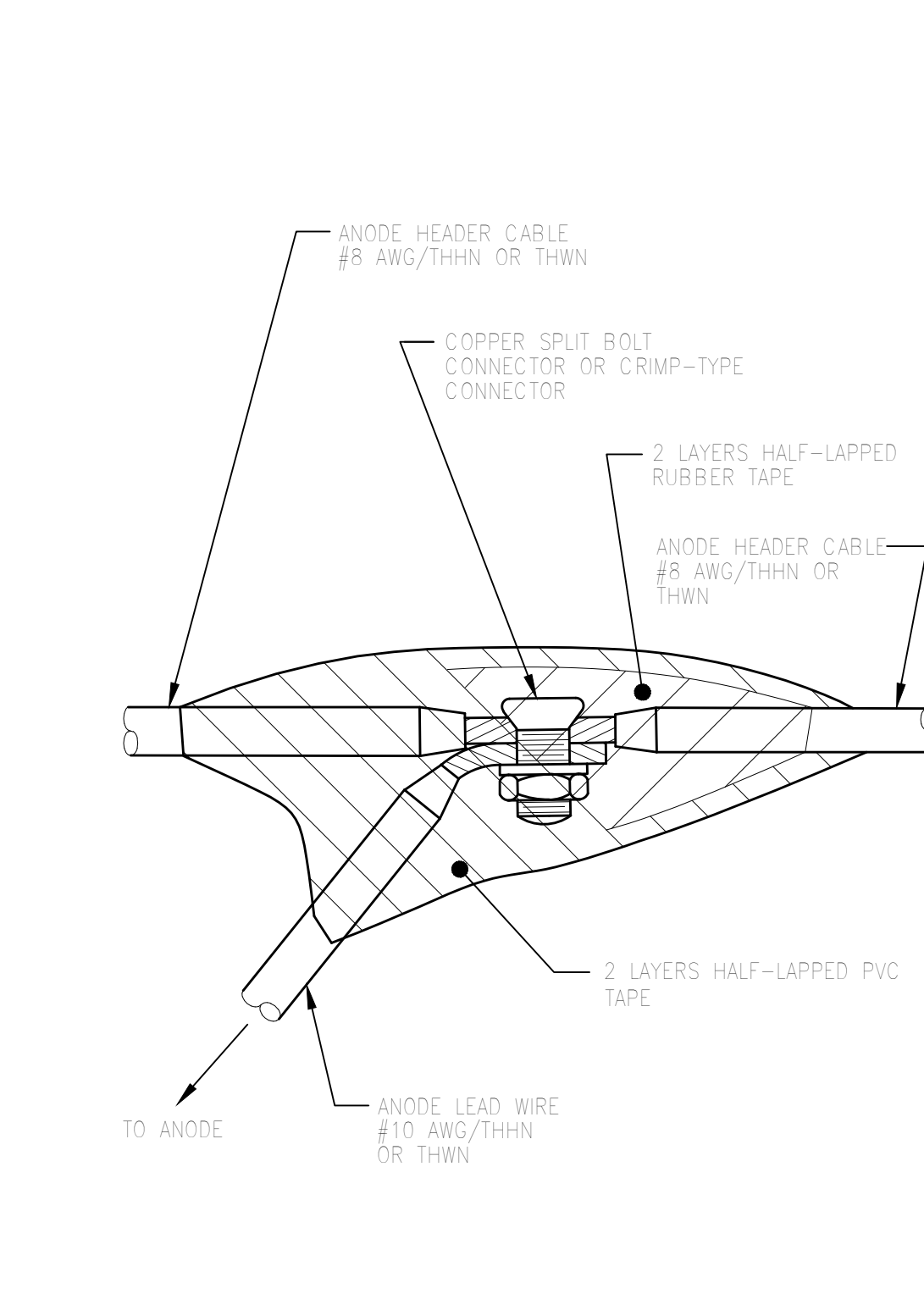
REV. 01/19
05/14
05/02

Approved by: *Tammy Rudock*
Tammy Rudock, General Manager
Joubin Pakpour, District Engineer, RCE No. 59155

STD. NO. MP-33

NOTE:
1. ADD TO THE LEGEND:
DIP = DUCTILE IRON PIPE
MAG = MAGNESIUM ANODE.

5 CABLE IDENTIFICATION
CP.3 NOT TO SCALE

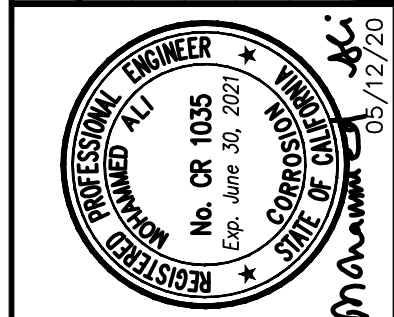


6 CABLE SPLICE
CP.3 NOT TO SCALE

FOR REDUCED ENGLISH PLANS
SCALE IS IN INCHES
ORIGINAL SCALE IS IN INCHES

DRAWING NAME: H:\Project Files\2017 Contracts\17172 - West Coast - TO 844 - Mid Peninsula Water Dist\SS01 Creating\Design\CP-3101 X NAME.MXD
REV. 05/14/20
PLOT DATE: 05/15/20

REVISIONS



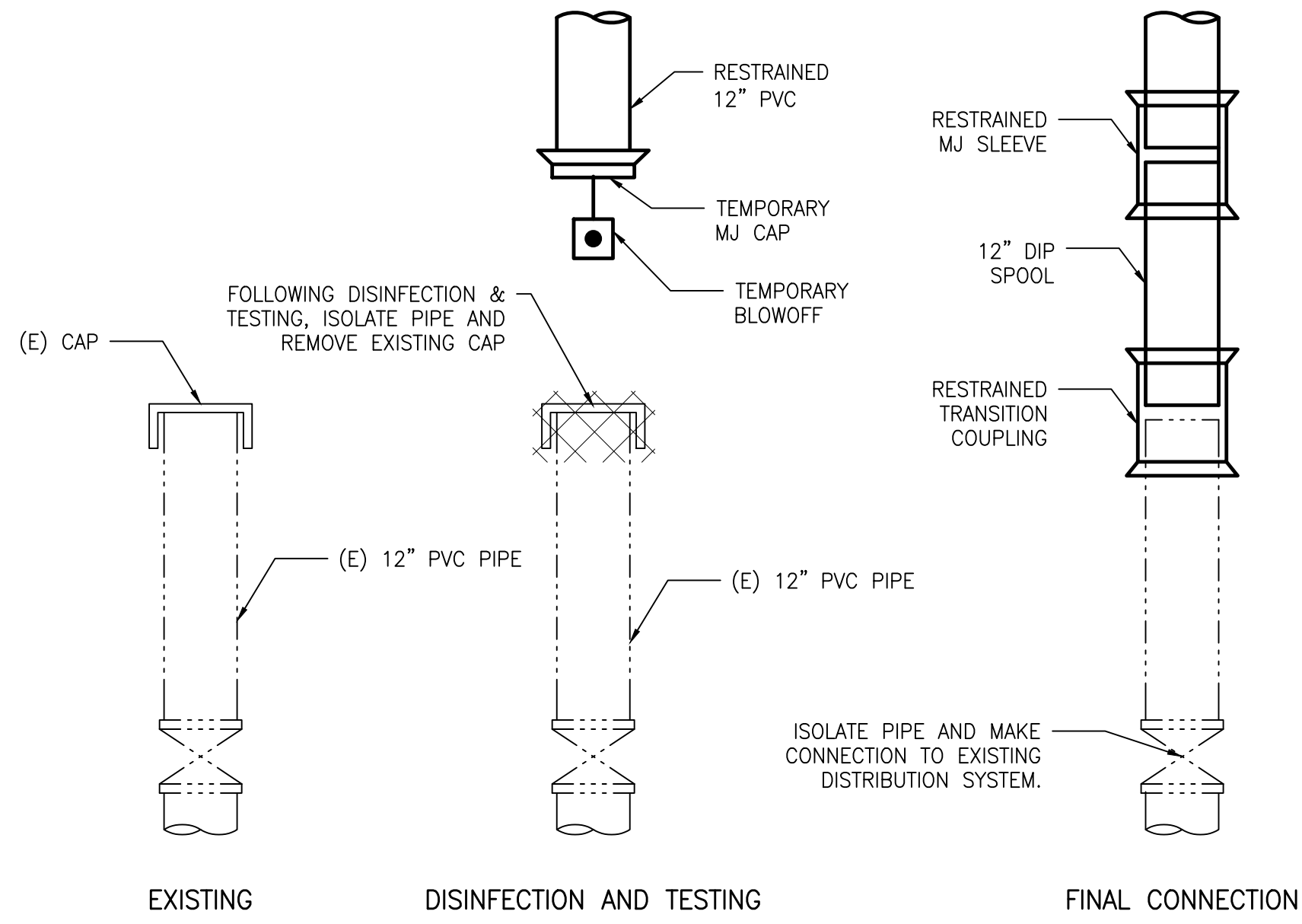
jdh corrosion
CONSULTANTS, INC.
1100 Willow Pass Ct., Concord, CA 94520
(925)927-6650; WWW.JDHCORROSION.COM

CHECKED: JDH
DRAWN: JDH
APPROVED: MA

MID-PENINSULA WATER DISTRICT
PHASE 1
SR101 CROSSING AT PAMF, PROJECT 15-72
CATHODIC PROTECTION DETAILS 3

DATE	SCALE
05/12/2020	AS NOTED
PCG JOB NO.	
768-14-17-01	
PLAN	CP.3
SHEET	10 OF 12

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:



CONNECTION TO EXISTING WATER AT INDUSTRIAL BLVD

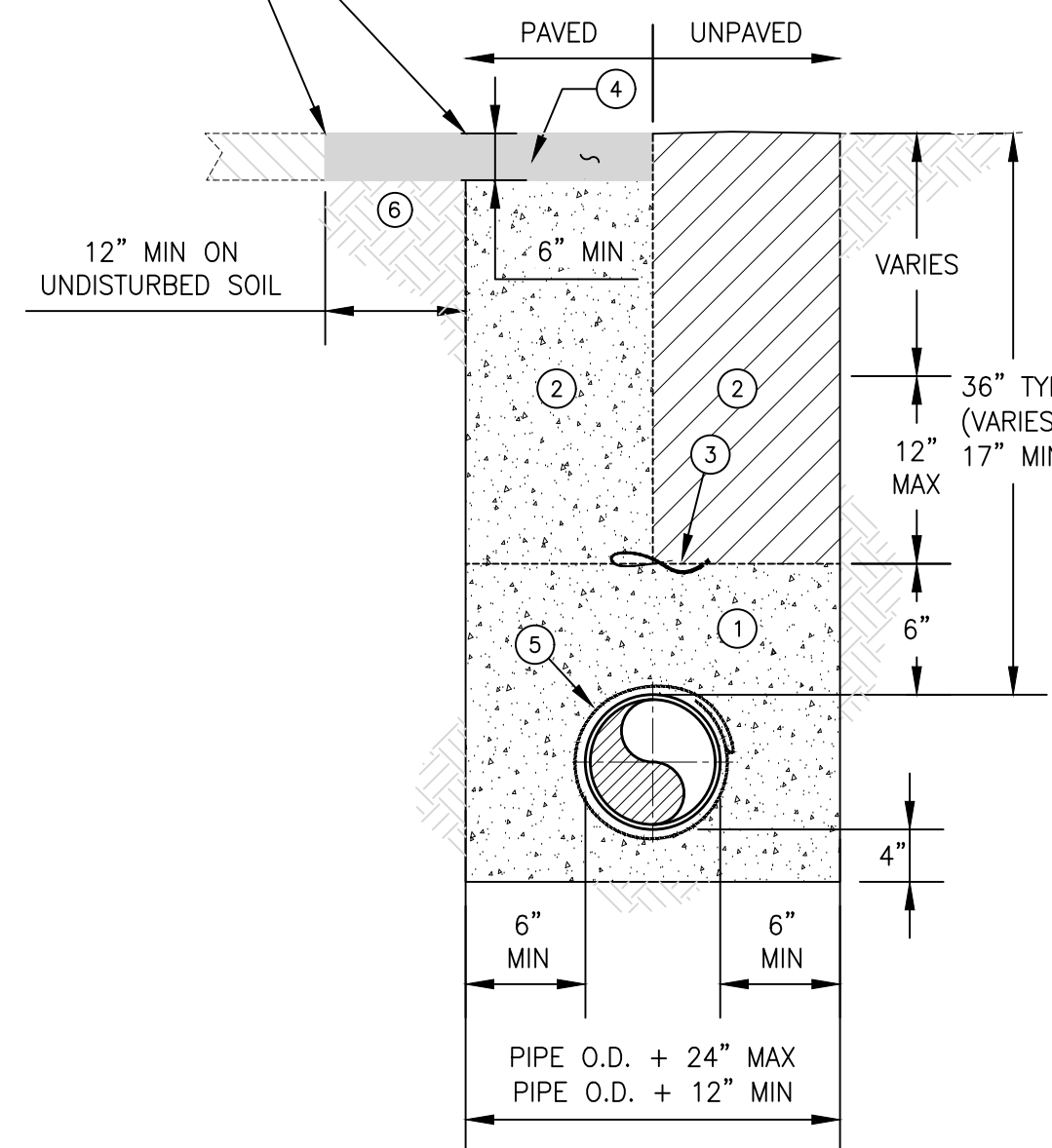
DETAIL 1
C.1

NTS

FOR REDUCED ENGLISH PLANS ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\Chem\1508 Mid Peninsula W03\4.17.00 SR101 Crossing\CAD\Production\0814.1701.001.dwg
PLOT DATE: 06-24-20 PLOTTED BY: lshelton

SAW-CUT/GRIND PAVEMENT FULL DEPTH. MAINTAIN EDGE TRUE FOR REPAVING. IF EDGE IS DAMAGED IT SHALL BE RECUT BEFORE PAVING. A TACK COAT SHALL BE APPLIED TO ALL SURFACES BEFORE PAVING. TRENCH LINES SHALL BE SAND SEALED. IF THE TRENCH EDGE FALLS WITHIN 3' OF THE GUTTER LIP OR OUTER SHOULDER EDGE, THE ENTIRE PAVEMENT SECTION BETWEEN THE TRENCH EDGE AND GUTTER LIP/OUTER SHOULDER EDGE SHALL BE REPLACED.



LEGEND

- ① EMBEDMENT ZONE (CONTROLLED DENSITY FILL) SHALL BE PLACED IN THREE LIFTS:
LIFT ONE - SHALL CONSIST OF PLACING 4" OF MATERIAL PRIOR TO THE PLACEMENT OF THE PIPE. THE PIPE SHALL THEN BE PLACED PRIOR LIFT TWO.
LIFT TWO - SHALL CONSIST OF PLACING MATERIAL TO 6" ABOVE THE PIPE.
- ② UPPER TRENCH ZONE:
PAVED AREAS - SHALL CONSIST OF PLACING CONTROLLED DENSITY FILL TO THE DEPTH OF PAVEMENT SUBGRADE.
UNPAVED AREAS - NATIVE MATERIAL SHALL BE PLACED AND COMPACTED IN 12" MAX LIFTS.
- ③ MARKER TAPE TO BE INSTALLED 6" ABOVE WATER MAIN.
- ④ ASPHALT CONCRETE SHALL BE REPLACED IN KIND BUT NO LESS THAN 6" IN DEPTH.
- ⑤ ENCASE DIP WITH V-BIO ENHANCED POLYETHYLENE ENCASEMENT. TAPE A BLUE NO. 8 AWG COPPER TRACER WIRE TO TOP OF PIPE EVERY 6'.
- ⑥ A SECOND OPERATION IS REQUIRED PRIOR TO FINAL PAVING TO ACHIEVE THE "T" CUT SECTION. SAW CUTTING/GRINDING A WIDER TRENCH LINE DURING INITIAL TRENCH EXCAVATION TO ACHIEVE A "T" CUT SECTION IS NOT PERMITTED.

NOTES:

1. REPLACE EXISTING TRACER WIRE IF DAMAGED DURING TRENCHING OPERATION. ON EXISTING STEEL PIPES, WELD THE NEW TRACER WIRE END TO THE STEEL PIPE IF TRACER WIRE IS NOT PRESENT.
2. IF WATER IS ENCOUNTERED IN THE TRENCH OR THE DISTRICT INSPECTOR DETERMINES THE SUBGRADE BELOW THE PIPE EMBEDMENT ZONE IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE AN ADDITIONAL 12" AND INSTALL 3/4" CRUSHED DRAIN ROCK. DRAIN ROCK SECTION SHALL BE WRAPPED WITH FILTER FABRIC ON ALL SIDES.

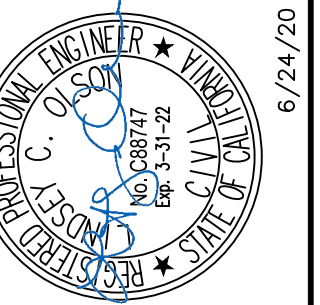
TRENCH SECTION - CONTROLLED DENSITY FILL

DETAIL 2
TYP

NTS

REVISIONS

NO.	DESCRIPTION	BY	DATE	APPROV

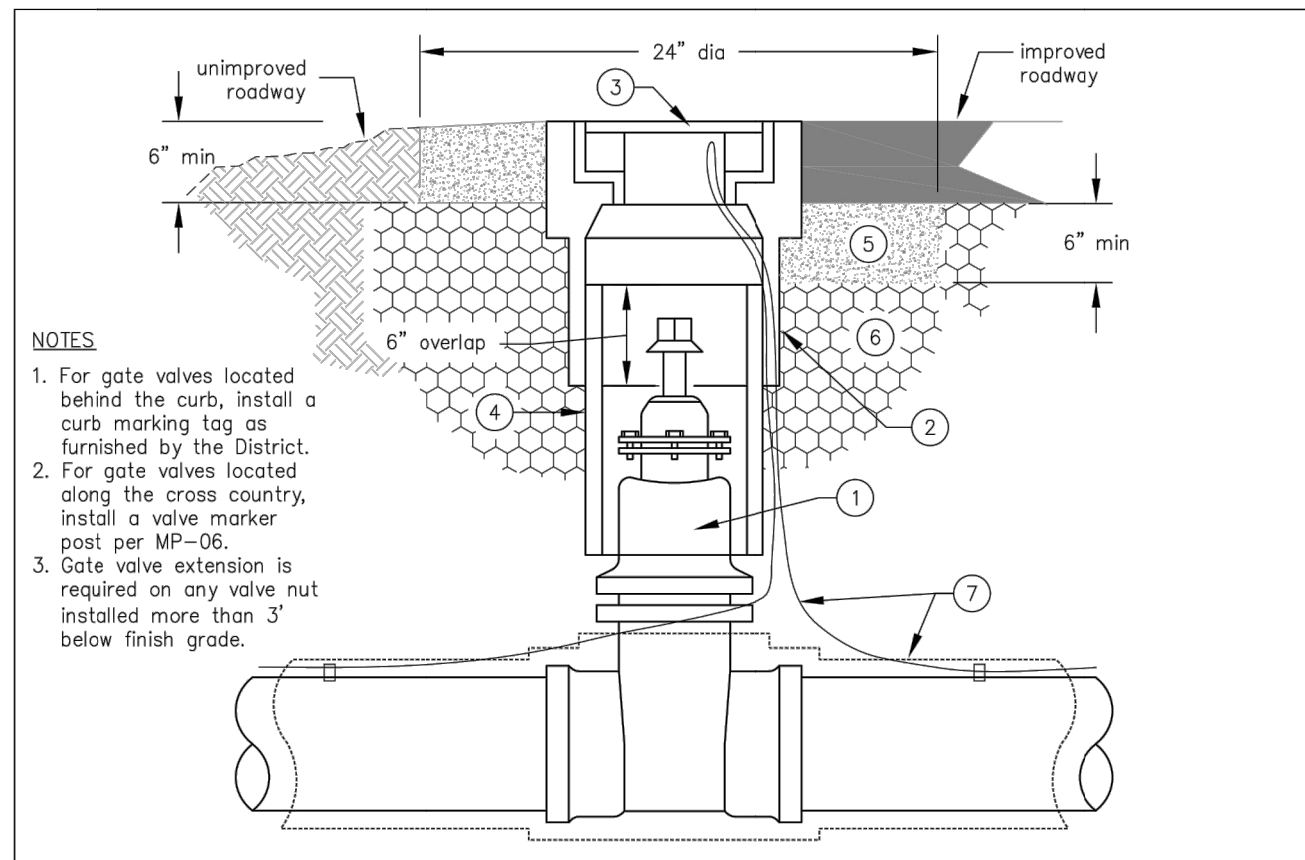


WEST YOST ASSOCIATES	CHECKED:	WYH
	DRAWN:	ERG
WEST YOST ASSOCIATES	APPROVED:	JDC
	DESIGNED:	LCO

MID-PENINSULA WATER DISTRICT
PHASE 1
SR101 CROSSING AT PAMF, PROJECT 15-72
CIVIL DETAILS 1

DATE	6/24/2020	SCALE	AS NOTED
PCG JOB NO.	768-14-17-01		
PLAN	D.1		
SHEET	11 OF 12		

REVIEWED BY:	DATE:
REVIEWED BY:	DATE:



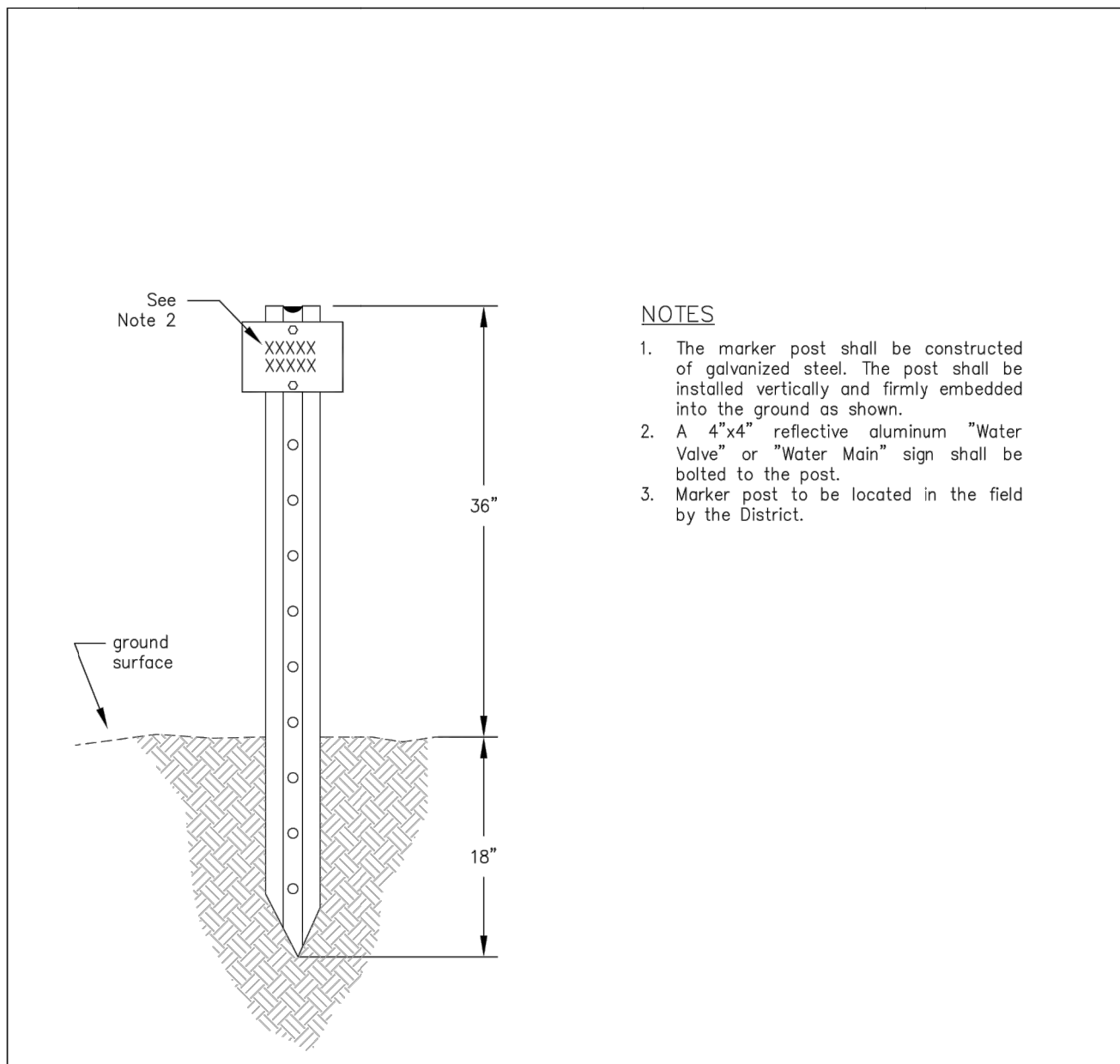
- NOTES**
- For gate valves located behind the curb, install a curb marking tag as furnished by the District.
 - For gate valves located along the cross country, install a valve marker post per MP-06.
 - Gate valve extension is required on any valve nut installed more than 3' below finish grade.

- LEGEND**
- Gate valve, Mueller No. A-2362 with Type 316 SS bolts and nuts, and 2" square bronze operation nut. Valve stem shall be made of ASTM B98-C65100/H02 (Everdur) bar stock material; EPDM rubber; machined groove below operating nut; and stuffing box aligned with the direction of the pipe. If coating on gate valve is damaged during the installation, it should be repaired using Mueller Epoxy Kit (Res) No. 280089. Valve shall be set plumb.
 - Traffic valve box, Christy Concrete No. G05TBOX.
 - Cast iron traffic cover inscribed "WATER", Christy Concrete No. G05CT.
 - SDR 35 PVC pipe - 8" min dia.
 - 2,000 psi high early strength concrete. Place asphalt on top of concrete collar, same day.
 - Trench backfill per MP-01 thru MP-04.
 - Encase DIP with V-Bio enhanced polyethylene encasement. Wrap excess film with 10-mil pipe tape. Use No. 8 AWG standard tracer wire taped on top of pipe and looped into the valve box from outside the riser. Wire to extend 12" above grade.

GATE VALVE ASSEMBLY

01/19
01/15
05/14
05/02

Approved by: *Tammy Rudock*
Tammy Rudock, General Manager
 Joubin Pakpour, District Engineer, RCE No. 59155
STD. NO. MP-05

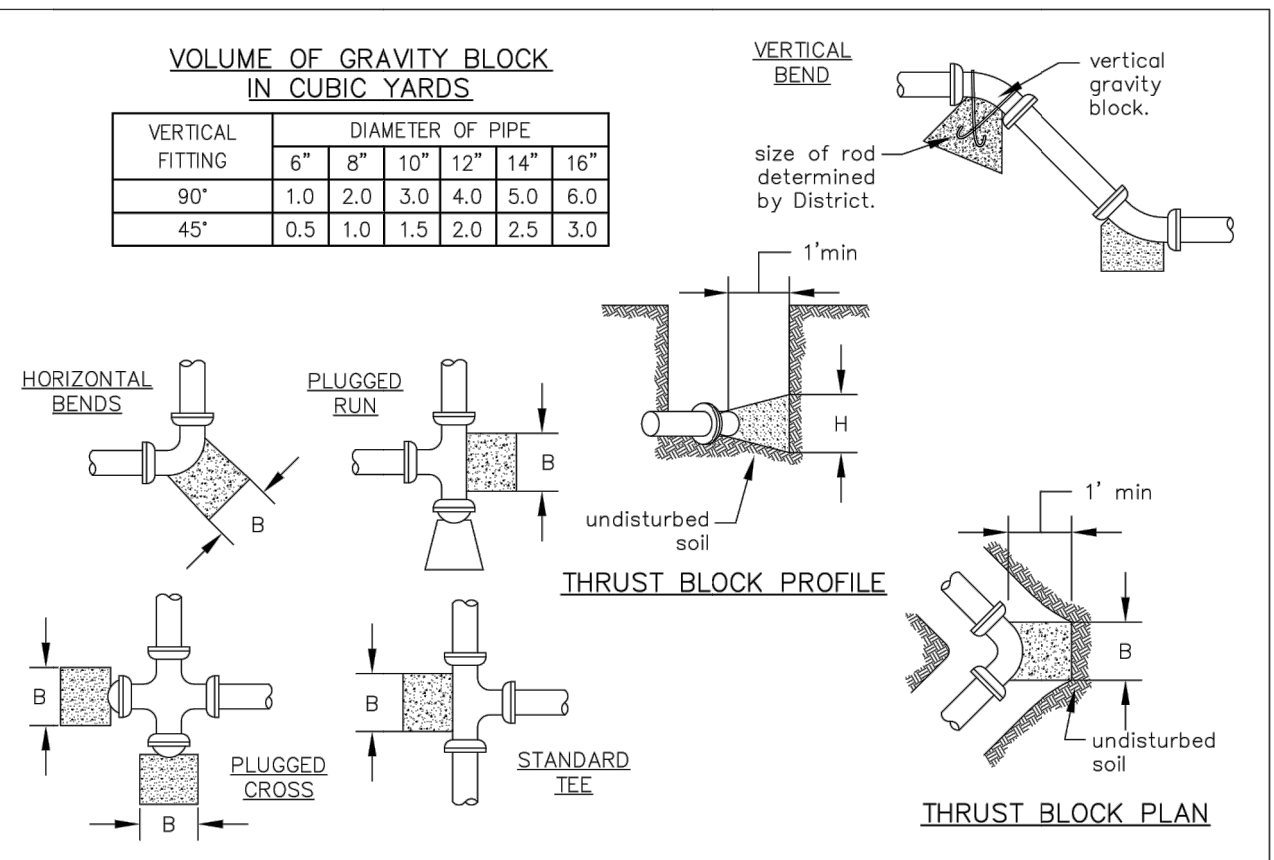


- NOTES**
- The marker post shall be constructed of galvanized steel. The post shall be installed vertically and firmly embedded into the ground as shown.
 - A 4"x4" reflective aluminum "Water Valve" or "Water Main" sign shall be bolted to the post.
 - Marker post to be located in the field by the District.

WATER VALVE/WATER MAIN MARKER POST

01/19
05/14

Approved by: *Tammy Rudock*
Tammy Rudock, General Manager
 Joubin Pakpour, District Engineer, RCE No. 59155
STD. NO. MP-06



VOLUME OF GRAVITY BLOCK IN CUBIC YARDS

VERTICAL FITTING	6"	8"	10"	12"	14"	16"
90°	1.0	2.0	3.0	4.0	5.0	6.0
45°	0.5	1.0	1.5	2.0	2.5	3.0

DIMENSIONS OF THRUST BLOCKS IN FEET

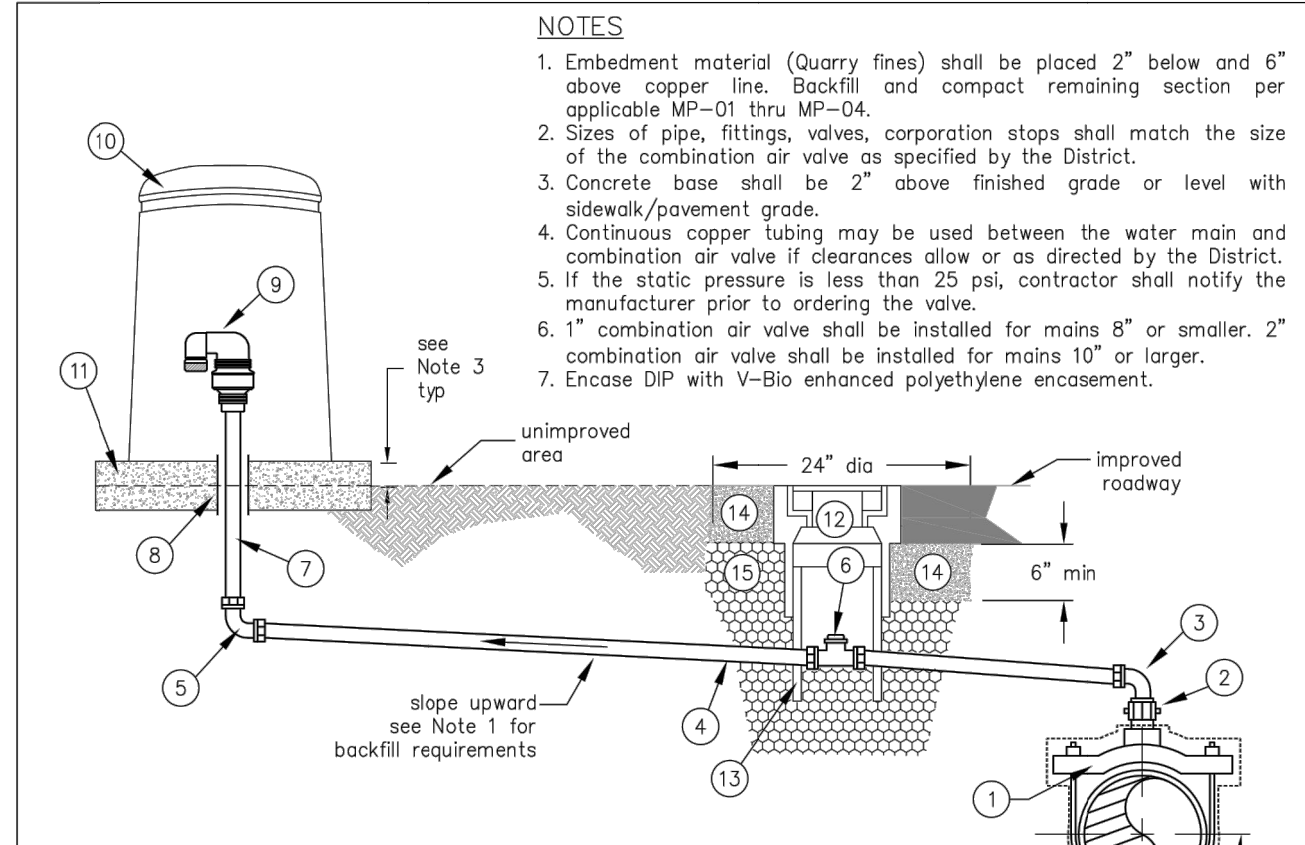
HORIZONTAL FITTING	DIAMETER OF PIPE					
	6"	8"	10"	12"	14"	16"
90°	1'-9"	1'-9"	2'-3"	2'-3"	2'-9"	2'-9"
45°	1'-0"	1'-0"	1'-6"	1'-6"	2'-0"	2'-0"
PLUG/TEE	1'-3"	1'-3"	1'-9"	1'-9"	2'-3"	2'-3"

- NOTES**
- Thrust block dimensions shall be doubled if used on non-restrained connections.
 - Use 2,000 psi high early strength concrete.
 - All thrust blocks and gravity blocks shall bear against undisturbed earth.
 - Encase DIP in V-Bio enhanced polyethylene encasement.
 - Maintain a min clearance of 2" between the thrust block reinforcing steel and pipe.
 - Concrete not to extend beyond the face of the bell.
 - Thrust block shall encompass at least one-half of the outside diameter of the pipe.
 - Flanges, bolts, and nuts shall be kept clear of concrete.
 - Dimensions above include use of mechanical restraints on pipe.
 - If groundwater is present, thrust block dimensions shall be determined by the District.

THRUST BLOCK DETAILS

01/19
01/15
05/14
05/02

Approved by: *Tammy Rudock*
Tammy Rudock, General Manager
 Joubin Pakpour, District Engineer, RCE No. 59155
STD. NO. MP-07



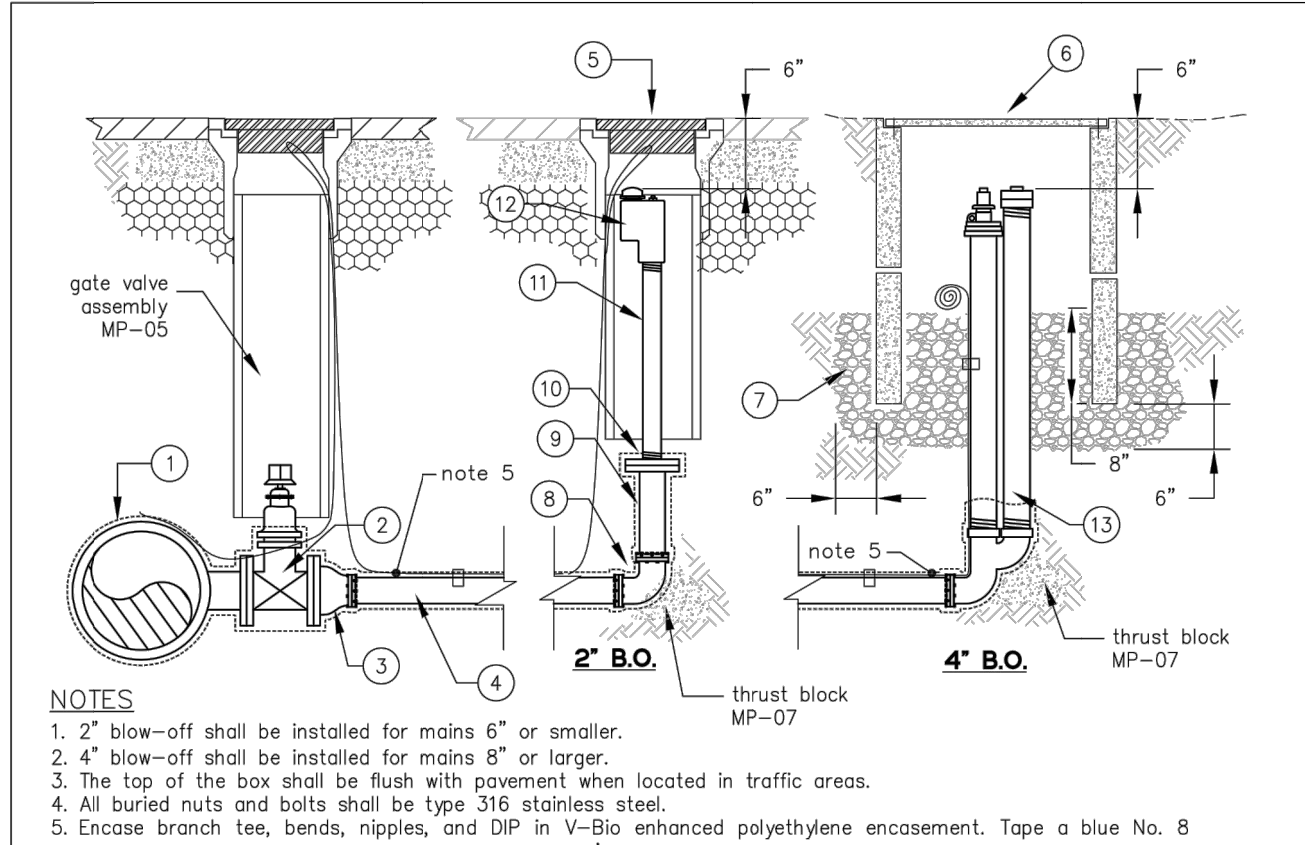
- NOTES**
- Embedment material (Quarry fines) shall be placed 2" below and 6" above copper line. Backfill and compact remaining section per applicable MP-01 thru MP-04.
 - Sizes of pipe, fittings, valves, corporation stops shall match the size of the combination air valve as specified by the District.
 - Concrete base shall be 2" above finished grade or level with sidewalk/pavement grade.
 - Continuous copper tubing may be used between the water main and combination air valve if clearances allow or as directed by the District.
 - If the static pressure is less than 25 psi, contractor shall notify the manufacturer prior to ordering the valve.
 - 1" combination air valve shall be installed for mains 8" or smaller. 2" combination air valve shall be installed for mains 10" or larger.
 - Encase DIP with V-Bio enhanced polyethylene encasement.

- LEGEND**
- Double strap bronze service saddle Mueller BR2B "CC" for DIP and Mueller BR2S "CC" for PVC.
 - Corporation stop, Mueller B-20045N (CCxFIP).
 - 90° MIP x Comp Mueller fitting.
 - Type K copper tubing. Maintain upward slope. Unions or couplings not permitted.
 - 90° Comp x Comp Mueller fitting.
 - F.I.P. x F.I.P. ball straight meter valve, Mueller B-20200N.
 - Brass pipe (low lead).
 - SDR 35 PVC - 3" dia.
 - Combination air valve A.R.I. D-040, with stainless steel screen (functions as both air release and air/vacuum valves).
 - Enclosure Pipeline Products, V-CAS-1424. Color shall be green and installed level. (Padlock furnished by District)
 - Concrete base 4" H x 24" dia w/steel wire mesh in middle. Base shall be installed level.
 - Traffic valve box, Christy Concrete No. G05T with cast iron traffic cover inscribed "WATER", Christy Concrete No. G05CT.
 - SDR 35 PVC riser - 8" min dia.
 - 2,000 psi concrete collar. 24 hours min cure prior to placement of asphalt.
 - Backfill material per applicable MP-01 thru MP-04

1" OR 2" COMBINATION AIR VALVE

01/19
01/15
05/14
05/02

Approved by: *Tammy Rudock*
Tammy Rudock, General Manager
 Joubin Pakpour, District Engineer, RCE No. 59155
STD. NO. MP-16



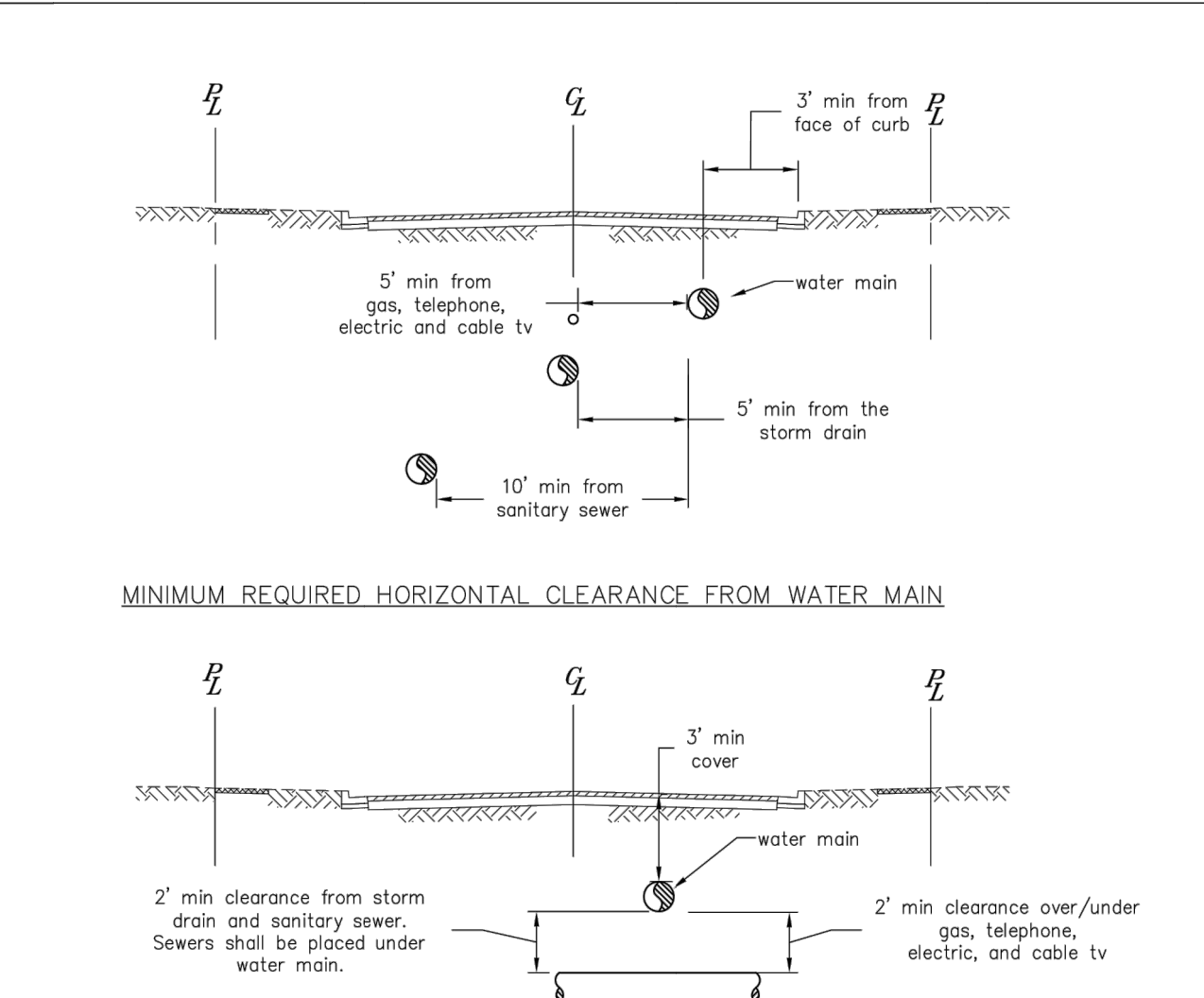
- NOTES**
- 2" blow-off shall be installed for mains 6" or smaller.
 - 4" blow-off shall be installed for mains 8" or larger.
 - The top of the box shall be flush with pavement when located in traffic areas.
 - All buried nuts and bolts shall be type 316 stainless steel.
 - Encase branch tee, bends, nipples, and DIP in V-Bio enhanced polyethylene encasement. Tape a blue No. 8 AWG, copper tracer wire to the top of pipe every 6".

- LEGEND**
- 4" branch tee (type determined by District) or tapping sleeve Mueller H-615 for 4" mains, or 6" branch tee (type determined by District) or tapping sleeve Mueller H-615 for 6" and bigger mains.
 - Gate valve, FLXFL, Mueller No. 2362.
 - 6"x4" reducer, FLXMJ (restrained) for 6" mains and bigger.
 - 4" DIP/PVC.
 - Traffic valve box with cast iron cover inscribed "WATER", install per MP-05.
 - Traffic box, Christy No. B132480X (H/20 Loading) with B1324-61H steel checker plate cover and B1324x12 extension.
 - 3/4" drain rack, up to valve only, shall be mechanically compacted.
 - 2" BLOW-OFF
 - 4" DIP 90° bend, MxMJ (restrained).
 - DIP FLXPE or PVC with restrained flanged adapter.
 - 4" Companion flange with a 2" threaded IP outlet.
 - 2" Brass nipple, 8" min.
 - 2" Blowoff/flushing hydrant, Trufo Model TF550 manufactured by Kupferle Foundry Co. (Brass low lead)
 - 4" BLOW-OFF
 - 4" Blowoff/flushing hydrant, Mainguard Model 7600 manufactured by Kupferle Foundry Co.

BLOW-OFF ASSEMBLY

01/19
01/15
05/14
05/02

Approved by: *Tammy Rudock*
Tammy Rudock, General Manager
 Joubin Pakpour, District Engineer, RCE No. 59155
STD. NO. MP-17



MINIMUM REQUIRED HORIZONTAL CLEARANCE FROM WATER MAIN

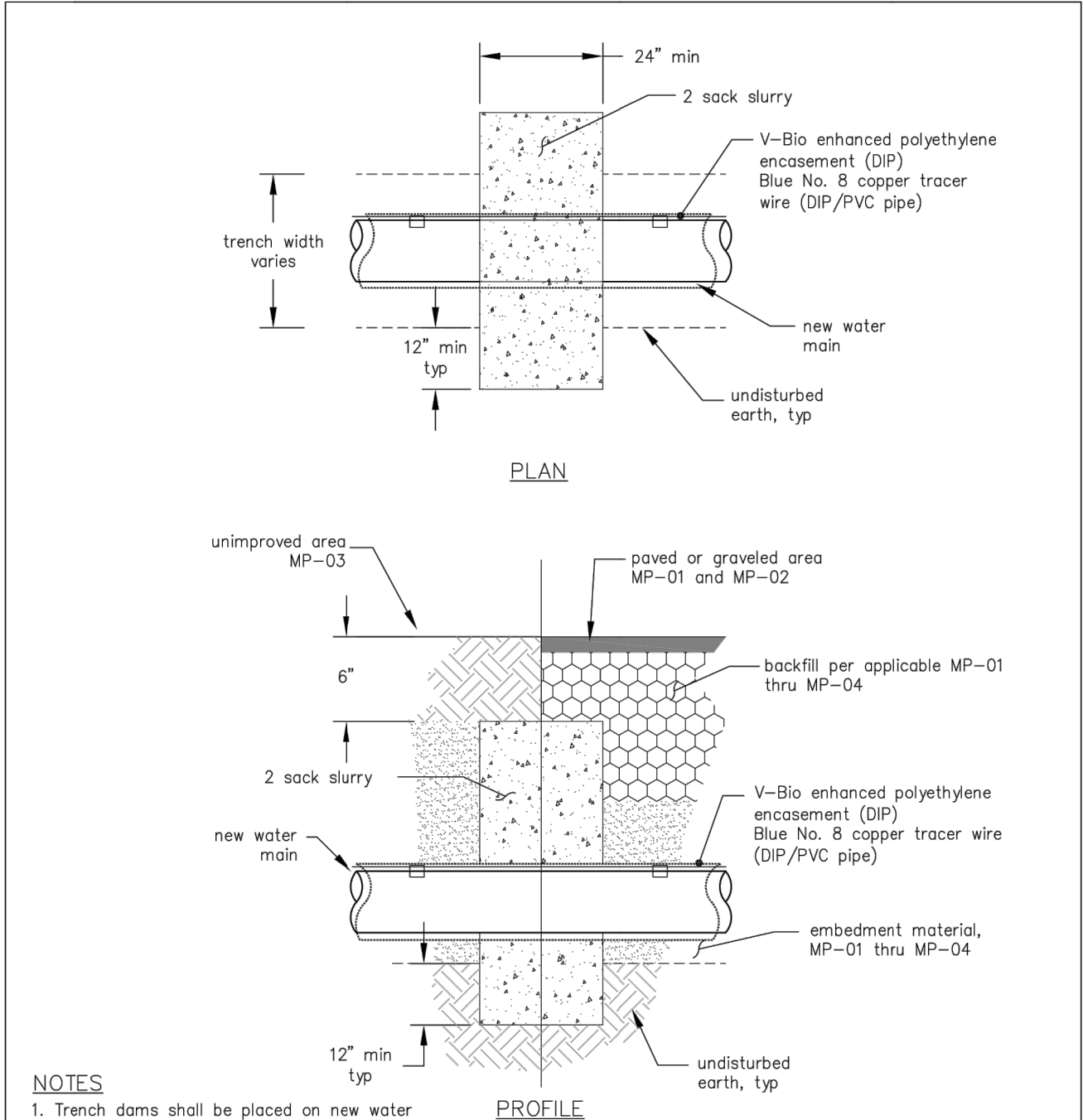
MINIMUM REQUIRED VERTICAL CLEARANCE FROM WATER MAIN AT CROSSINGS

- NOTES**
- Any deviation from these requirements requires written approval from the District.
 - All crossings shall be at 45° to 90°.
 - No connection joints shall be made in the water main within eight horizontal feet of the storm drain and sanitary sewer pipelines.
 - 12" clearance between the outer surface of near structures such as catch basins, drain inlets, and the edge of the trench is required.

MINIMUM PIPE SEPARATION REQUIREMENTS

01/19
05/14

Approved by: *Tammy Rudock*
Tammy Rudock, General Manager
 Joubin Pakpour, District Engineer, RCE No. 59155
STD. NO. MP-19



TRENCH DAM

01/19
01/15
05/14

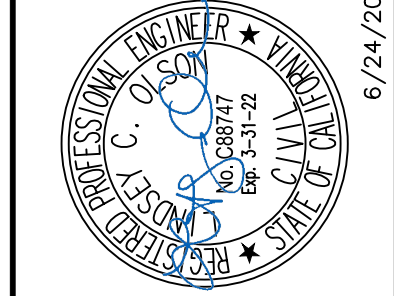
Approved by: *Tammy Rudock*
Tammy Rudock, General Manager
 Joubin Pakpour, District Engineer, RCE No. 59155
STD. NO. MP-20

FOR REDUCED ENGLISH PLANS ORIGINAL SCALE IS IN INCHES

DRAWING NAME: N:\Projects\2020\Mid-Peninsula\2020\17-00-0010_Crossing\CAD\Production\1814-1700-000.dwg
PLOT DATE: 06-24-20 PLOTTED BY: lshelton

REVISIONS

NO.	DESCRIPTION	BY	DATE	APP'D



WEST YOST ASSOCIATES

CHECKED: *WH*
 APPROVED: *JJC*
 DRAWN: *ERG*
 DESIGNED: *LCO*

MID-PENINSULA WATER DISTRICT
 PHASE 1
 SR101 CROSSING AT PAMF, PROJECT 15-72
 CIVIL DETAILS 2

DATE: 6/24/2020
 SCALE: AS NOTED
 PCS JOB NO.: 788-14-17-01

PLAN: D.2
 SHEET: 12 OF 12