

PLANS

DESIGNED

CHECKED

BY

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DATE

12/07/20

12/07/20

REGISTERED PROFESSIONAL ENGINEER

ADAM HOCH

C77635

Exp. 06-30-21

5/5/21

CIVIL

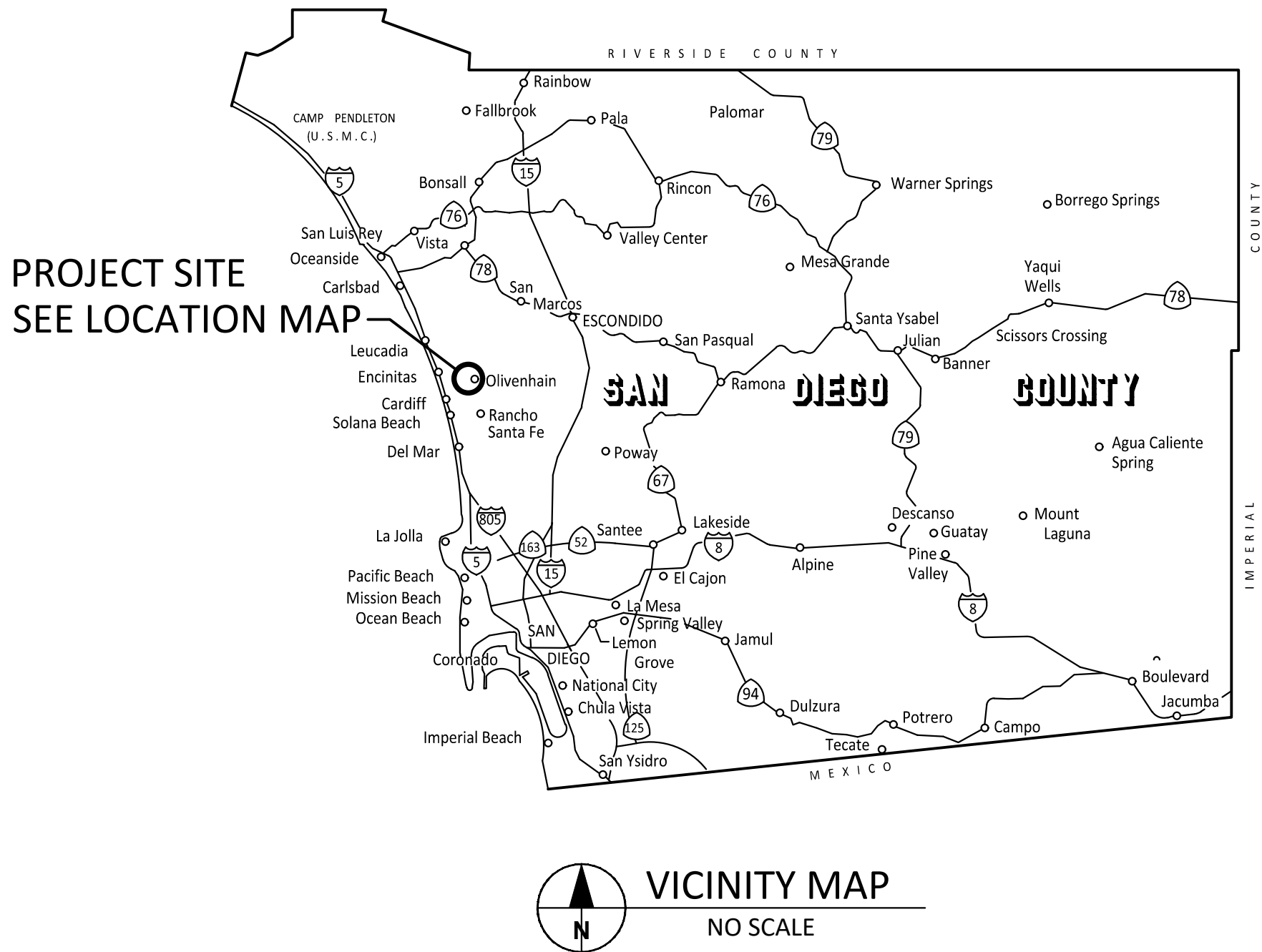
STATE OF CALIFORNIA

5/5/21

DATE

REGISTERED CIVIL ENGINEER

MANCHESTER AVENUE POTABLE WATER  
PIPELINE REPLACEMENT PROJECT  
OMWD WO NUMBER D120049

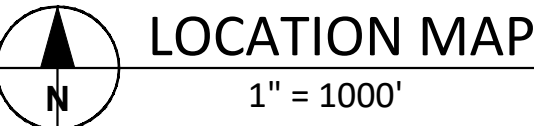
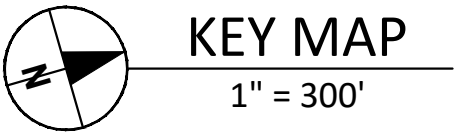
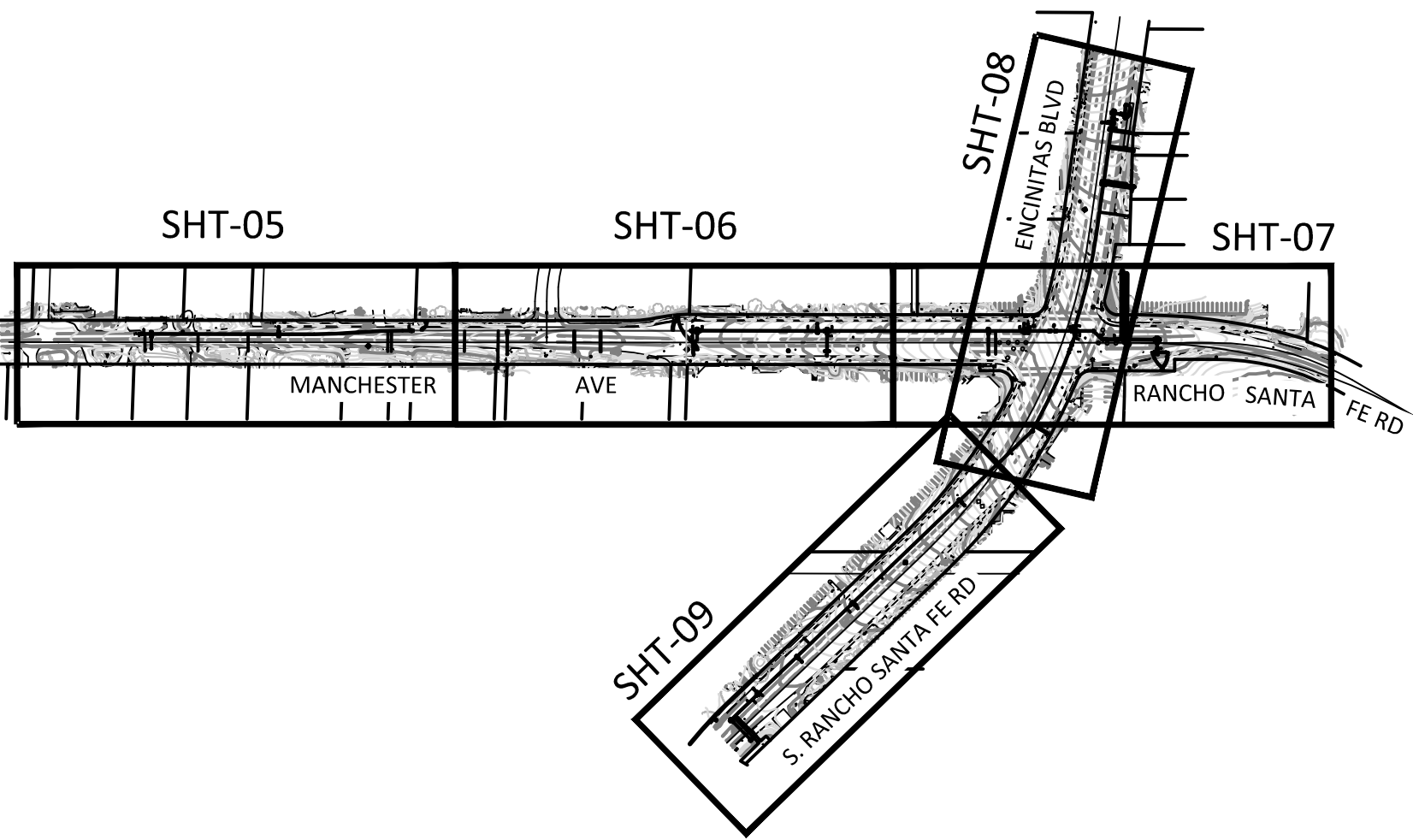


Municipal Water District

BOARD OF DIRECTORS

LAWRENCE A. WATT - PRESIDENT  
KRISTIE BRUCE-LANE - VICE PRESIDENT  
CHRISTY GUERIN - TREASURER  
EDMUND K. SPRAGUE - SECRETARY  
ROBERT F. TOPOLOVAC - DIRECTOR

MAY 2021



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PM 4406	WATER LINE SYSTEM RANCHO PROFESSIONAL PLAZA (MAIN EXT #96)
C001-195-50	MANCHESTER AVE MAIN REPLACEMENT
DWG 414-G	SWC OF ENCINITAS BLVD & MANCHESTER AVE
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CITY OF ENCINITAS	
PLANNING DIVISION	DATE
OLIVENHAIN MUNICIPAL WATER DISTRICT	
RCE NO.:	C60317
DATE	5-18-21

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE DISTRICT AND THE CITY OF ENCINITAS DOES NOT RELIEVE ME AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

FIRM: HOCH CONSULTING  
ADDRESS: 804 PIER VIEW WAY - SUITE 100  
CITY, ST.: OCEANSIDE, CALIFORNIA 92054  
TELEPHONE: 858-431-9767  
BY: ADAM HOCH, PE DATE: 5/5/21  
RCE NO.: C77635  
REGISTRATION EXPIRATION DATE: 06-30-21



REVISIONS	BY	APPROVED	DATE	COORDINATE INDEX
				317 N. 1698 E.
				CONST. COMPL.
				FIELD REVISIONS

MANCHESTER AVE POTABLE WATER  
PIPELINE REPLACEMENT PROJECT  
TITLE SHEET

SCALE: HOR. AS SHOWN	VERT. NONE
W.A. RS11810	R.S. 11810
SHEET 01 OF 12 SHEETS	



THE WORK INCLUDES BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:  
THE CONSTRUCTION OF APPROX 2,000 LF OF NEW 12" PVC, 20 LF OF NEW 10" PVC, 1,050 LF OF NEW 8" PVC, AND 320 LF OF NEW 6" PVC WATER PIPELINE; 2,500 LF OF NEW SERVICE LATERAL CONNECTIONS TO 73 EXISTING METERS; 50 LF OF 20" (TRENCHLESS) STEEL CASING; THE INSTALLATION OF 10 - 12" GATE VALVES, 1 - 10" GATE VALVE, 5 - 8" GATE VALVES, 13 - 6" GATE VALVES, 1-12" OCCLUDE VALVE, STANDARD WATER APPURTENANCES; 3700 LF OF EXISTING WATER PIPELINE ABANDONMENT;  
DEWATERING OF TRENCH EXCAVATIONS; AND ALL INCIDENTAL WORK AS SHOWN OR OTHERWISE REQUIRED IN THE CONTRACT DOCUMENTS.

IN ORDER OF PRECEDENCE:

1. CONTRACT DRAWINGS
2. CONTRACT SPECIFICATIONS
3. OLIVENHAIN MUNICIPAL WATER DISTRICT STANDARD SPECIFICATIONS AND DRAWINGS FOR THE CONSTRUCTION OF WATER MAINS AND FACILITIES (LATEST EDITION). REVISIONS THERETO, AS CONTAINED IN THESE PROJECT SPECIFIC DRAWINGS AND SPECIFICATIONS, SHALL TAKE PRECEDENCE OVER THE STANDARD SPECIFICATIONS AND DRAWINGS.
4. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION).
5. SAN DIEGO COUNTY HYDRAULIC DESIGN MANUAL (LATEST EDITION).
6. SAN DIEGO REGIONAL STANDARD DRAWINGS (LATEST EDITION).

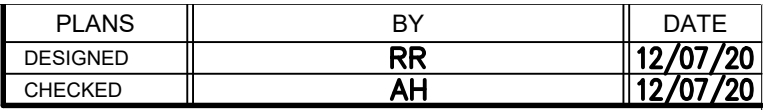
1. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS.
2. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES REQUIRED TO PROTECT ADJACENT PROPERTIES AND IMPROVEMENTS DURING ALL PROJECT OPERATIONS. DAMAGED OR DESTROYED ITEMS SHALL BE REPAIRED OR REPLACED TO THE CONDITION EXISTING PRIOR TO WORK BY THE CONTRACTOR AT NO COST TO THE DISTRICT.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONUMENTATION AND/OR BENCHMARKS WHICH WILL BE DISBURSED OR DESTROYED BY CONSTRUCTION. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH AN APPROPRIATE MONUMENTATION BY A LICENSED LAND SURVEYOR OR A REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED BY THE LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER AS REQUIRED BY THE LAND SURVEYOR'S ACT. THE CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTS THAT ARE LOCATED WITHIN 10 FEET OF THE CENTERLINE OF CONSTRUCTION BY COVERING THE MONUMENTS WITH 1-INCH THICK STEEL PLATE DURING EXCAVATION AND BACKFILL OPERATIONS OR SHALL EMPLOY ALTERNATIVE PROTECTION MEASURES NECESSARY TO AVOID DISTURBANCE OR DAMAGE TO THE MONUMENTS. ALTERNATIVE PROTECTION MEASURES SHALL BE SUBMITTED FOR DISTRICT REVIEW AND APPROVAL IN ACCORDANCE WITH SECTION 01300.
4. THESE DOCUMENTS HAVE BEEN PREPARED FOR A SPECIFIC PROJECT AND SHALL NEITHER BE ALTERED NOR REUSED FOR ANY OTHER PURPOSE. ALSO, THESE DOCUMENTS DO NOT REPRESENT AS-BUILT CONDITIONS. IF THESE DOCUMENTS ARE ALTERED INTENTIONALLY OR UNINTENTIONALLY, OR REUSED WITHOUT THE DESIGN ENGINEER'S WRITTEN APPROVAL, IT WILL BE AT THE SOLE RISK AND RESPONSIBILITY OF THE USER. THE ACT OF ALTERING OR REUSING IS CONSTRUED AS INDEMNIFYING AND HOLDING THE DESIGN ENGINEERING FIRM AND ITS EMPLOYEES AND SUBCONSULTANTS HARMLESS FROM ALL CLAIMS, DAMAGES, AND EXPENSES, INCLUDING ATTORNEY FEES, ARISING OUT OF SUCH ACT.
5. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS SHOWN ON THESE PLANS. ITEMS INCLUDE, BUT ARE NOT LIMITED TO, RECORDING FINAL FINISHED GRADE ELEVATION, CONTOURS, AND FINAL SLOPES.
6. IF REQUIRED TO COMPLETE WORK, FINISH GRADE OF NEW CONCRETE PAVING SHALL CONFORM TO EXISTING SITE GRADES OR AS SHOWN ON THESE DRAWINGS AS DIRECTED BY THE ENGINEER. STRAIGHT GRADES SHALL BE MAINTAINED BETWEEN FINISH ELEVATIONS AS SHOWN.
7. ALL SURPLUS SEDIMENT, EXCAVATED SOIL, AND DEBRIS SHALL BE LEGALLY DISPOSED OFF SITE. ALL COSTS FOR TRANSPORTATION AND DISPOSAL SHALL BE INCLUDED IN THEIR APPURTENANT ITEMS OF WORK. ESTIMATED QUANTITIES FOR EARTHWORK AND IMPORTED MATERIALS ARE APPROXIMATE AND CONTRACTOR SHALL DEVELOP HIS/HER OWN ESTIMATES FOR BIDDING PURPOSES.
8. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE DISTRICT AND HOCH CONSULTING, ITS EMPLOYEES, OFFICERS, AGENTS, OR SUBCONSULTANTS HARMLESS AGAINST ANY AND ALL CLAIMS BY ANY PARTIES ARISING FROM, OR RELATED TO, ANY AND ALL DAMAGES, INCLUDING LEGAL COSTS AND ATTORNEY'S FEES, RESULTING FROM INTERFERENCE WITH, INTERRUPTION OF, DAMAGE TO, OR ANY AND ALL INJURIES WHICH RESULT FROM DAMAGE CAUSED TO SUBSURFACE INSTALLATION, WHICH IS UNFORESEEN AND DESPITE ENGINEER'S EFFORT DURING THE DESIGN PROCESS WAS NOT LOCATED, EXCEPTING ONLY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE ENGINEER IN PROVIDING ITS SERVICES.
9. NO REVISIONS WILL BE MADE TO THESE PLANS WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER, NOTED WITHIN THE REVISION BLOCK, ON THE APPROPRIATE SHEET OF THE PLANS AND TITLE SHEET.
10. CONTRACTOR SHALL ADJUST EXISTING WATER SERVICES TO ACCOMMODATE MAINLINE CONSTRUCTION.

11. CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
12. THE CONTRACTOR SHALL CONFORM TO LABOR CODE SECTION 6705 BY SUBMITTING A DETAIL PLAN TO THE ENGINEER THE DESIGN OF SHORING, BRACING SLOPE OR OTHER PROVISIONS TO BE MADE OF WORKER PROTECTION FROM THE HAZARD OF CAVING GROUND DURING THE EXCAVATION OF SUCH TRENCH OR TRENCHES OR DURING THE PIPE INSTALLATION THEREIN. THIS PLAN MUST BE PREPARED FOR ALL TRENCHES FIVE FEET (5') OR MORE IN DEPTH AND APPROVED BY THE CITY ENGINEER AND/OR CONCERNED AGENCY PRIOR TO EXCAVATION. IF THE PLAN VARIES FROM THE SHORING SYSTEM STANDARDS ESTABLISHED BY THE CONSTRUCTION SAFETY ORDERS, TITLE 8 CALIFORNIA ADMINISTRATIVE CODE, THE PLAN SHALL BE PREPARED BY A REGISTERED ENGINEER AT THE CONTRACTORS EXPENSE. A COPY OF THE OSHA EXCAVATION PERMIT MUST BE SUBMITTED TO THE INSPECTOR PRIOR TO EXCAVATION.
13. THE EXISTENCE AND LOCATION OF UTILITY STRUCTURES AND FACILITIES SHOWN ON THE CONSTRUCTION PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. ATTENTION IS CALLED TO THE POSSIBLE EXISTENCE OF OTHER UTILITY FACILITIES OR STRUCTURES NOT SHOWN OR IN A LOCATION DIFFERENT FROM THAT SHOWN ON THE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN ON THE PLANS AND ANY OTHER EXISTING FACILITIES OR STRUCTURES NOT SHOWN.
14. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES (ABOVEGROUND AND UNDERGROUND) WITHIN THE PROJECT SITE SUFFICIENTLY AHEAD OF THE CONSTRUCTION TO PERMIT THE REVISIONS OF THE CONSTRUCTION PLANS IF IT IS FOUND THAT THE ACTUAL LOCATIONS ARE IN CONFLICT WITH THE PROPOSED WORK.
15. THE CONTRACTOR SHALL NOTIFY AFFECTED UTILITY COMPANIES (SEE BELOW) AT LEAST TWO FULL WORKING DAYS PRIOR TO STARTING CONSTRUCTION NEAR THEIR FACILITIES AND SHALL COORDINATE WORK WITH A COMPANY REPRESENTATIVE.

OLIVENHAIN MUNICIPAL WATER DISTRICT	(760)753-6466
UNDERGROUND SERVICE ALERT	(800)422-4133
SAN DIEGO GAS AND ELECTRIC	(800)411-7343
SOUTHERN CALIFORNIA GAS	
TIME WARNER/CHARTER COMMUNICATIONS	(855)411-0725
COX CABLE	(800)234-3993
CROWN CASTLE	(800)788-7011
CITY OF ENCINITAS (PUBLIC WORKS)	(760)633-2840
SAN DIEGUI TO WATER DISTRICT	(760)633-2650
CARDIFF SANITATION DISTRICT	(760)753-5018
SAN ELIJO JOINT POWERS AUTHORITY	(760)802-0104

<p>PT. # 1029</p>  <p>WELL MONUMENT IN CENTERLINE OF ENCINITAS BLVD, 300' EAST OF INTERSECTION WITH WILLOW SPRINGS AT BEGINNING OF LEFT TURN POCKET.</p> <p>N 1960165.668' E 6257029.935' ELEV. 218.103' (NAVD 88) RECORD OF SURVEY 18416</p>	<p>PT. # 1036</p>  <p>2.5" CITY OF ENCINITAS BRASS DISC IN THE NORTHEAST CORNER OF DRAINAGE INLET ON THE NORTH SIDE OF RANCHO SANTA FE RD, 200' WEST OF THE INTERSECTION WITH LA BADJADA AND EL MIRLO.</p> <p>N 1957305.454' E 6259823.741' ELEV. 37.309' (NAVD 88) RECORD OF SURVEY 18416</p>
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1. THE POTABLE WATER WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS AND MATERIALS AS SPECIFIED IN THE MOST RECENT EDITION OF THE OLIVENHAIN MUNICIPAL WATER DISTRICT (DISTRICT) STANDARD SPECIFICATIONS AND DRAWINGS FOR THE CONSTRUCTION OF WATER MAINS AND FACILITIES, INCLUDING ALL AMENDMENTS ADOPTED PRIOR TO THE DISTRICT APPROVAL DATE ON THESE PLANS. CONTRACTOR SHALL HAVE A COPY OF THE STANDARD SPECIFICATIONS ON THE JOB SITE AT ALL TIMES.
2. THE SUBMISSION AND REVIEW OF ALL SUBMITTALS (SHOP DRAWINGS) AS REQUIRED BY THE STANDARD SPECIFICATIONS ARE TO BE ACCOMPLISHED PRIOR TO THE PRE-CONSTRUCTION MEETING WITH THE DISTRICT'S INSPECTOR.
3. UNLESS OTHERWISE NOTED, CONNECTIONS TO EXISTING MAINS SHALL BE MADE DRY. THE TIME AND DURATION OF ANY SHUTDOWNS OF EXISTING MAINS SHALL BE SUBJECT TO APPROVAL BY THE DISTRICT. DISTRICT SHALL BE NOTIFIED TWO WEEKS MINIMUM IN ADVANCE OF ANY SHUTDOWN.
4. CONTRACTOR SHALL COORDINATE WITH DISTRICT ALL ARRANGEMENTS FOR HIGH-LINING TEMPORARY SERVICES PRIOR TO SHUTDOWNS. NO SHUTDOWNS WILL BE SCHEDULED ON A MONDAY OR FRIDAY.
5. CONTRACTOR SHALL REVIEW ALL PROPOSED TRENCH WORK WITH CAL/OSHA. A COPY OF EXEMPTION LETTER OR TRENCHING PERMIT, IF REQUIRED, SHALL BE SUBMITTED TO THE DISTRICT PRIOR TO CONSTRUCTION.
6. NO WORK MAY BEGIN OR PROCEED WITHOUT DIRECTION OF DISTRICT'S INSPECTOR. CONTRACTOR SHALL NOTIFY THE DISTRICT INSPECTIONS DEPARTMENT 48 HOURS PRIOR TO THE BEGINNING OF WORK TO ARRANGE FOR INSPECTION OF THE PROJECT.
7. ALL EXISTING FACILITIES WHICH MAY AFFECT PROJECT CONSTRUCTION, I.E., LINE CROSSINGS, LINE PARALLELING, OR PROPOSED CONNECTIONS SHALL BE FIELD VERIFIED BEFORE ANY CONSTRUCTION BEGINS.
8. THE CONTRACTOR SHALL FURNISH AND INSTALL PER THE STANDARD SPECIFICATIONS THE APPROPRIATE BURIED UTILITY WARNING AND IDENTIFICATION TAPE ABOVE ALL PUBLIC WATER LINES INCLUDING WATER LATERALS LOCATED IN PUBLIC RIGHT-OF-WAY.
9. WHERE ELEVATIONS AND GRADES ARE NOT SHOWN ON THE WATER MAIN PROFILE, TOP OF PIPE PROFILE IS 48-INCHES BELOW CENTERLINE OF FINISH GRADE OF STREET.
10. ALL DEFLECTIONS (HORIZONTAL AND VERTICAL) SHALL BE MADE BY USE OF JOINT COUPLINGS WITH 4 DEGREES MAXIMUM DEFLECTION PER COUPLING (2 DEGREES PER JOINT), NO BENDING (CURVING) OF PIPE SHALL BE PERMITTED.
11. MANUAL AIR RELEASES SHALL BE INSTALLED AT ALL HIGH POINTS AND BLOW-OFFS AT ALL LOW POINTS IN THE WATER MAIN PROFILE. PLACE MANUAL AIR RELEASES AND BLOW-OFFS WITHIN METER BOX AND LOCATE BEHIND CURB UNLESS OTHERWISE APPROVED BY DISTRICTS REPRESENTATIVE. FIRE HYDRANTS MAY BE USED IN LIEU OF A MANUAL AIR RELEASE OR BLOW-OFF WHEN LOCATED AT OR NEAR HIGH OR LOW POINTS, AS APPROVED BY THE DISTRICTS REPRESENTATIVE.
12. METER BOXES SHALL NOT BE PLACED WITHIN DRIVEWAYS OR SIDEWALKS WITHOUT THE DISTRICTS PRIOR WRITTEN CONSENT.
13. ALL WATER SERVICES FOR IRRIGATION, MULTIPLE RESIDENTIAL COMPLEXES, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL HAVE APPROVED BACKFLOW PREVENTION DEVICE ON CUSTOMER'S SIDE OF WATER METER.
14. CONTRACTOR SHALL TIE OFF ALL VALVE LOCATIONS AND PROVIDE WRITTEN DIMENSIONS TO INSPECTOR IMMEDIATELY UPON INSTALLATION OF VALVES.
15. LINE VALVES, WHERE REQUIRED AT STREET INTERSECTIONS SHALL BE LOCATED AT THE TEE WHENEVER POSSIBLE.
16. FIRE HYDRANTS, AS APPROVED BY THE APPROPRIATE FIRE DISTRICT AND MEETING THE DISTRICTS STANDARD SPECIFICATIONS, ARE TO BE INSTALLED AT LOCATIONS SPECIFIED BY THE FIRE DISTRICT.
17. ALL DESIGN CHANGES TO THE WATER SYSTEM SHALL BE APPROVED BY THE DISTRICT REPRESENTATIVE IN WRITING PRIOR TO CONSTRUCTION AND ACCEPTANCE OF THE CHANGE.
18. THE WATER SYSTEM SHALL BE PRESSURE TESTED IN ACCORDANCE WITH THE PROCEDURES IN THE OMWD STANDARD SPECIFICATIONS. THE CLASS OF PIPE SHALL BE USED AS THE DESIGNATED WORKING PRESSURE FOR TESTING ALL PIPE, VALVES (CLOSED) AND APPURTENANCES.
19. PIPELINES AND APPURTENANCES SHALL BE DISINFECTED IN ACCORDANCE WITH SECTION 15041 OF THE OMWD STANDARD SPECIFICATIONS PRIOR TO TIE-IN OR CONNECTION TO EXISTING SYSTEM FACILITIES. BACTERIOLOGIC QUALITY TEST RESULTS SHALL CONFORM TO THE CRITERIA SPECIFIED IN THAT SPECIFICATION.
20. CONTRACT RECORD DRAWINGS MUST BE SUBMITTED PRIOR TO FINAL ACCEPTANCE OF WORK. THE PLANS MUST PROVIDE POST CONSTRUCTION VERIFICATION OF THE LOCATION AND ELEVATION OF PIPES AND APPURTENANCES.
21. IN ACCORDANCE WITH THE GENERAL PROVISIONS AND SUPPLEMENTAL GENERAL PROVISIONS, THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF TWO (2) YEARS AFTER THE DATE OF ACCEPTANCE FOR THE PROJECT.
22. CONTRACTOR SHALL REPAIR OR REPLACE ANY OR ALL SUCH WORK, TOGETHER WITH ANY OTHER WORK WHICH MAY BE DISPLACED IN SO DOING THAT MAY PROVE DEFECTIVE IN WORKMANSHIP AND/OR MATERIALS WITHIN THE ONE-YEAR PERIOD FROM THE DATE OF ACCEPTANCE WITHOUT EXPENSE WHATSOEVER TO THE DISTRICT, ORDINARY WEAR AND TEAR, UNUSUAL ABUSE OR NEGLIGENCE EXCEPTED.
23. ALL IRRIGATION METERS SHALL BE SERVED WITH RECYCLED WATER UNLESS PREVIOUSLY APPROVED IN WRITING BY THE DISTRICT.
24. ALL BURIED FITTINGS AND VALVES SHALL BE WAX TAPE WRAPPED IN ACCORDANCE WITH OMWD STANDARD SPECIFICATIONS.
25. IF ASBESTOS CEMENT PIPE MUST BE CUT AND HANDLED IN THE FIELD TO ACCOMPLISH THE WORK, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR AND SHALL TAKE ALL APPROPRIATE PRECAUTIONS FOR PROTECTING AGAINST THREATS TO HEALTH AND SAFETY OF THE WORK FORCE AND GENERAL PUBLIC ARISING OUT OF CONSTRUCTION INVOLVING ASBESTOS. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS FOR THE HANDLING, CUTTING, SHAPING, INSTALLATION AND DISPOSAL OF ASBESTOS. ASBESTOS CEMENT PIPE TO BE DISPOSED SHALL BE PROPERLY MANIFESTED, PREPARED FOR TRANSPORT FOLLOWING CRITERIA OF COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS, SOLID WASTE DIVISION, AND DELIVERED TO A LANDFILL PERMITTED FOR DISPOSAL OF NON-FRIABLE ASBESTOS CONTAINING MATERIALS. THE COMPLETED GENERATOR COPY (YELLOW) MANIFEST SHALL BE RETURNED TO THE DISTRICT'S REPRESENTATIVE. ALL COSTS FOR HANDLING AND DISPOSAL OF THE AC PIPE SHALL BE INCLUDED IN THE CONTRACTOR'S BID.
26. THE CONTRACTOR SHALL INSTALL NEW WATER SERVICE ASSEMBLIES TO EXISTING WATER SERVICES PER DETAIL D ON SHEET 11, UNLESS OTHERWISE DIRECTED BY THE DISTRICT. CONTRACTOR SHALL FIELD VERIFY EXISTING SERVICE CONNECTIONS SIZES AT THE METERS PRIOR TO COMMENCING WORK.
27. DURING SHUTDOWNS AND TIE-IN WORK THE CONTRACTOR SHALL EXPECT NUISANCE WATER FLOWS FROM EXISTING ISOLATION VALVES WHICH HAVE A HISTORY OF LEAKS AND DO NOT SEAL PROPERLY. THE CONTRACTOR SHALL PREPARE FOR DEWATERING ACTIVITIES IN ACCORDANCE WITH SECTION 01305 AND SECTION 02140 AND COORDINATE SHUTDOWN ACTIVITIES IN ADVANCE WITH THE DISTRICT IN ACCORDANCE WITH SECTION 01305.
28. ANY AND ALL UTILITY VALVE COVERS, INCLUDING VALVE BOXES, AND CONCRETE COLLARS, SHALL BE RAISED TO GRADE WITHIN THE LIMITS OF STREET RESURFACING AREA.



	EX INDEX CONTOUR
	EX INTERMEDIATE CONTOUR
	EX RIGHT-OF-WAY
	EX WATER METER
	EX FIRE HYDRANT
	EX WATER VALVE
	EX BLOWOFF
	EX MANUAL AIR RELEASE
	EX BACK FLOW PREVENTER
	EX POWER POLE
	EX STREET LIGHT
	EX PULLBOX
	EX ELECTRIC CONTROL PANEL
	EX TELEPHONE RISER
	EX GAS VALVE
	EX SEWER MANHOLE
	EX SEWER CLEANOUT
	EX STORM DRAIN MANHOLE
	EX TREE
	EX SIGN
B-1	GEOTECHNICAL BORING
	SURVEY MONUMENT
PH 09	POTHOLE LOCATION

AT	ASBESTOS CEMENT PIPE
ACP	APPROXIMATE
APPROX	ASSEMBLY
ASSY	BEGINNING OF CURVATURE
BC	BLOW-OFF
BO	CENTERLINE, CLASS
CL	CONCRETE
CONC	CEMENT MORTAR LINED & COATED
CML&C	CATHODIC PROTECTION
CP	COUPLING
CPG	DECOMPOSED GRANITE
DG	DRIVEWAY
DRWY	DRAWING
DWG	EASTING
E	END OF CURVATURE
ECC	ECCENTRIC
ELEV	ELEVATION
E'LY	EASTERLY
EX	EXISTING
F	FLANGE
FC	FACE OF CURB
FL	FLOWLINE
FM	FORCE MAIN
FO	FIBER OPTIC
FS	FINISH SURFACE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HP	HIGH PRESSURE
INT	INTERSECTION
IRR	IRREGULAR
LF	LINEAR FEET
LN	LANE
LT	LEFT
MAR	MANUAL AIR RELEASE
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MOD	MODIFIED
N	NORTHING
NG	NATURAL GROUND
OMWD	OLIVENHAIN MUNICIPAL WATER DISTRICT
PCC	PORTLAND CEMENT CONCRETE
PE	PLAIN END
PED	PEDESTRIAN
PH	POTHOLE
PRC	POINT OF REVERSING CURVATURE
PVC	POLYVINYL CHLORIDE
RCB	REINFORCED CONCRETE BOX
RCF	REINFORCED CONCRETE PIPE
REQ	REQUIRED
RFCA	RESTRAINED FLANGE COUPLING ADAPTER
RPBFA	REDUCED PRESSURE BACKFLOW PREVENTER
	ASSY
R/W	RIGHT OF WAY
RT	RIGHT
SD	STORM DRAIN
SDCO	STORM DRAIN CLEANOUT
SDMH	STORM DRAIN MANHOLE
SDSD	SAN DIEGO STANDARD DRAWING
SDWD	SAN DIEGUITO WATER DISTRICT
STD	STANDARD
STL	STEEL
SWR	SEWER
TER	TERRACE
TG	TOP OF GRATE
TOT	TOTAL
TYP	TYPICAL
UNK	UNKNOWN
VCP	VITRIFIED CLAY PIPE
W/	WITH
W'LY	WESTERLY
WTR	WATER



	REVISIONS	BY	APPROVED	DATE	COORDINATE INDEX	
					<u>317</u> N.	<u>1698</u> E.
					CONST. COMPL. _____	
					FIELD REVISIONS _____	

MANCHESTER AVE POTABLE WATER  
PIPELINE REPLACEMENT PROJECT  
NOTES, ABBREVIATIONS, LEGEND & MISCELLANEOUS

SCALE: HOR. NONE VERT. NONE  
W.A. RS11810 R.S. 11810  
SHEET 02 OF 12 SHEETS



HORIZONTAL BORING FOR METER SERVICE CONNECTIONS

1. FOR METER SERVICE PIPES 1-INCH OR LARGER IN DIAMETER, THE MAXIMUM BORE HOLE SIZE PERMISSIBLE SHALL BE TWICE THE INTERNAL DIAMETER OF THE SERVICE LINE BEING INSTALLED. FOR METER SERVICE PIPES SMALLER THAN 1-INCH IN DIAMETER, THE MAXIMUM BOREHOLE SIZE SHALL BE (2) INCHES IN DIAMETER.

WATER MAIN SHUTDOWN NOTES

1. FOR SHUTDOWNS THAT ARE NECESSARY TO ACCOMPLISH THE WORK, THE CONTRACTOR SHALL MAKE WRITTEN REQUEST TO OMWD AT LEAST THREE (3) CALENDAR WEEKS BEFORE THE SHUTDOWN. REQUESTS SHALL SPECIFY LOCATION, SIZE OF LINE, DURATION, DATE, AND TIME FOR EACH SHUTDOWN. WITHIN ONE (1) WEEK, THE DISTRICT WILL SCHEDULE SHUTDOWN AND GIVE WRITTEN NOTIFICATION TO THE CONTRACTOR. ANY SCHEDULE REVISIONS REQUESTED BY THE CONTRACTOR MUST BE IN WRITING. OMWD'S REVISED SCHEDULE WILL BE AVAILABLE WITHIN ONE (1) WEEK. THE DISTRICT DOES NOT GUARANTEE A TOTALLY DRY LINE. THE CONTRACTOR SHALL BE PREPARED TO DE-WATER AS NECESSARY TO ACCOMPLISH THE WORK.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCESSIBILITY TO THE VALVE OPERATING NUTS FOR ALL VALVES WITHIN THE PROJECT BOUNDARIES. FAILURE TO MAINTAIN ACCESSIBILITY TO VALVES SHALL BE CAUSE FOR CANCELING SHUTDOWN, AND THE CONTRACTOR WILL BE REQUIRED TO REQUEST A REVISED SCHEDULE.
3. THE DISTRICT IS INDEMNIFIED FOR ANY AND ALL RESULTANT COSTS INCURRED BY THE CONTRACTOR SUCH AS, BUT NOT LIMITED TO TRAFFIC CONTROL, DELAYS, LOSS OF INCENTIVES, STANDBY AND PENALTIES IF THE CONTRACTOR DID NOT PROPERLY REQUEST A SHUTDOWN; FAILURE TO MAINTAIN ACCESSIBILITY TO VALVES; OR IF THE CONTRACTOR'S SCHEDULED WORK DID NOT PROGRESS TO THE ANTICIPATED SHUTDOWN SCHEDULE.

EXCAVATION NOTE

1. THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF INDUSTRIAL SAFETY BEFORE ANY EXCAVATION AND SHALL PROVIDE PROOF OF OSHA NOTIFICATION AND SHALL ADHERE TO ALL PROVISIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.

SIGNING AND STRIPING NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ALL SIGNING AND STRIPING THAT WAS REMOVED OR DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES.
2. ALL SIGNING, STRIPING AND PAVEMENT MARKINGS SHALL CONFORM TO THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST VERSION), THE CALTRANS STANDARD PLANS AND SPECIFICATIONS (LATEST VERSION), THESE PLANS AND THE SPECIAL PROVISIONS.
3. ALL SIGNING AND STRIPING IS SUBJECT TO THE APPROVAL OF THE CITY OF ENCINITAS TRAFFIC DEPARTMENT, PRIOR TO INSTALLATION.
4. ANY DEVIATION FROM THESE SIGNING AND STRIPING PLANS SHALL BE APPROVED BY THE CITY OF ENCINITAS TRAFFIC DEPARTMENT TO ANY CHANGE IN THE FIELD.
5. ALL STRIPING SHALL BE REFLECTIVE PER CALTRANS SPECIFICATIONS. STRIPING SHALL BE REPAINTED TWO WEEKS AFTER INITIAL PAINTING.
6. ALL SIGNAGE SHALL BE REFLECTIVE PER ASTM DESIGNATION D4956 AND SHALL USE TYPE IV PRISMATIC REFLECTIVE SHEETING (HIGH INTENSITY PRISMATIC OR EQUAL) UNLESS OTHERWISE SPECIFIED. R1-1 "STOP", R1-2 "YIELD", R2-1 "SPEED LIMIT" AND STREET NAME SIGNS SHALL USE TYPE IX PRISMATIC CUBE-CORNER REFLECTIVE SHEETING (DIAMOND GRADE VIP OR EQUAL).
7. PRIOR TO FINAL ACCEPTANCE OF STREET IMPROVEMENTS, ALL STREET STRIPING AND MARKINGS WITHIN A 500' PERIMETER OF THE CONSTRUCTION PROJECT WILL BE RESTORED TO A "LIKE NEW" CONDITION, IN A MANNER MEETING THE APPROVAL OF THE CITY INSPECTOR.
8. EXACT LOCATION OF STRIPING AND STOP LIMIT LINES SHALL BE APPROVED BY THE CITY OF ENCINITAS TRAFFIC DEPARTMENT PRIOR TO INSTALLATION.
9. CONTRACTOR SHALL REMOVE ALL CONFLICTING PAINTED LINES, MARKINGS AND PAVEMENT. ALL PAVEMENT LEGENDS SHALL BE THE LATEST VERSION OF THE CALTRANS STENCILS.
10. ALL CROSSWALKS, LIMIT LINES, STOP BARS, PAVEMENT ARROWS AND PAVEMENT LEGENDS SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED. PREFORMED THERMOPLASTIC ARROWS AND LEGENDS SHALL NOT BE ACCEPTABLE.
11. SHOULD THERE BE ANY DAMAGE TO STOP BAR STRIPING, THE ENTIRE STOP BAR SHALL BE REMOVED AND NEW THERMO PLASTIC STOP BAR BE INSTALLED. ANY STRIPING TO BE REMOVED SHALL BE WET SANDBLASTED UNLESS APPROVED BY THE CITY OF ENCINITAS TRAFFIC DEPARTMENT.

MONUMENTATION / SURVEY NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LICENSED LAND SURVEYOR OR LICENSED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING IN THE STATE OF CALIFORNIA SHALL FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR ANY EARTHWORK, DEMOLITION OR SURFACE IMPROVEMENTS. IF DESTROYED, A LICENSED LAND SURVEYOR SHALL REPLACE SUCH MONUMENT(S) WITH APPROPRIATE MONUMENTS. WHEN SETTING SURVEY MONUMENTS USED FOR RE-ESTABLISHMENT OF THE DISTURBED CONTROLLING SURVEY MONUMENTS AS REQUIRED BY SECTIONS 6730.2 AND 8771 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILLED WITH THE COUNTY SURVEYOR. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE CITY OF ENCINITAS FIELD SURVEY SECTION SHALL BE NOTIFIED IN WRITING AT LEAST 7 DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REPLACING AND VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.

TRAFFIC CONTROL, STAGING AND WORK HOURS NOTES

1. AT LEAST ONE PERSON SHALL BE ASSIGNED TO FULL TIME MAINTENANCE OF TRAFFIC CONTROL DEVICES ON ALL NIGHT LANE CLOSURES.
2. ALL WARNING SIGNS FOR NIGHT LANE CLOSURES SHALL BE ILLUMINATED REFLECTORIZED AS SPECIFIED IN THE SPECIFICATIONS.
3. ALL ADVANCE WARNING SIGN INSTALLATIONS SHALL BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES OF ALL MAJOR AND PRIME ARTERIALS. FLASHING BEACONS SHALL BE USED DURING NIGHT LANE CLOSURES.
4. A G20-2 "END ROAD WORK" SIGN SHALL BE PLACED AT THE END OF THE LANE CLOSURE UNLESS THE END OF THE WORK AREA IS OBVIOUS, OR ENDS WITHIN A LARGER PROJECT LIMITS.
5. ALL CONES USED FOR NIGHT LANE CLOSURES SHALL BE ILLUMINATED TRAFFIC CONES OR FITTED WITH 13" REFLECTIVE SLEEVES.
6. FLASHING ARROW SIGNS SHALL BE USED PER THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CALIFORNIA MUTCD, LATEST EDITION) SILENT TYPE SHALL BE USED IN RESIDENTIAL AREAS.
7. THE MAXIMUM SPACING BETWEEN CONES IN A TAPER OR A TANGENT SHALL BE APPROXIMATELY 10 FEET.
8. ADDITIONAL ADVANCE FLAGGERS SHALL BE REQUIRED WHEN TRAFFIC QUEUES DEVELOP. FLAGGER STATIONS FOR WORK AT NIGHT SHALL BE ILLUMINATED AS NOTED IN SECTION 6G.20 OF THE MUTCD.
9. PLACE C30 (CA) "LANE CLOSED" SIGN AT 500'-1000' INTERVALS THROUGHOUT EXTENDED WORK AREAS.
10. ALL REQUIRED SIGNS THAT ARE TO BE LEFT IN PLACE OVER A WEEKEND OR HOLIDAY SHALL BE POST MOUNTED USING SQUARE PERFORATED STEEL TUBING WITH BREAKAWAY BASE PER SDRSD M-45.
11. CONSTRUCTION AREA TRAFFIC CONTROL DEVICES SHALL MEET THE PROVISIONS OF SECTION 12 OF THE MOST RECENT EDITION OF THE CALTRANS STANDARD SPECIFICATIONS.
12. ALL DRIVEWAYS SHALL REMAIN OPEN AND CLEAR OF ANY OBSTRUCTIONS AT ALL TIMES.
13. ALL TRAVEL LANES SHALL BE A MINIMUM OF 12-FEET WIDE.
14. THE CONTRACTOR SHALL REPAIR OR REPLACE ALL EXISTING IMPROVEMENTS WITHIN THE RIGHT-OF-WAY WHICH ARE NOT DESIGNATED FOR REMOVAL WHICH ARE DAMAGED OR REMOVED AS A RESULT OF OPERATIONS. TRENCH REPAIR SHALL BE IN ACCORDANCE WITH CITY OF ENCINITAS STANDARDS.
15. WORK ON ENCINITAS BLVD, RANCHO SANTA FE RD, S. RANCHO SANTA FE RD, AND MANCHESTER AVE FROM THE INTERSECTION TO 150-FEET SOUTH OF THE RANCHO SANTA FE PLAZA ENTRANCE (APPROX STA 21+00), INCLUDING THE MANCHESTERAVE/ENCINITAS BLVD INTERSECTION, SHALL BE PERFORMED AT NIGHT FROM 8:00PM TO 6:00AM. WORK ON THEREMAINING PORTIONS OF MANCHESTER AVE SHALL BE PERFORMED DURING THE DAY FROM 9:00AM TO 3:30PM
16. PARCEL APN #259-221-57 HAS BEEN IDENTIFIED AS A POTENTIAL STAGING AREA FOR THIS PROJECT. CONTRACTOR TO MAKE THEIR OWN ARRANGEMENTS FOR THIS OR ANY OTHER PRIVATE PROPERTY FOR STAGING, SUBJECT TO APPROVAL BY OMWD AND PER THE SPECIFICATIONS.

GENERAL TRAFFIC SIGNAL NOTES

1. DAMAGE TO TRAFFIC SIGNAL CONDUIT OR WIRING SHALL BE REPAIRED IMMEDIATELY AT NO COST TO THE CITY OR THE DISTRICT.
2. THE TRAFFIC LOOPS SHALL BE REPLACED WITHIN 3 DAYS OF COMPLETING WORK IN THE AREA TO CURRENT CALTRANS STANDARD TO DETECT BICYCLES PER TRAFFIC OPERATIONS POLICY DIRECTIVE 09-06 AT NO COST TO THE CITY OR THE DISTRICT.

CITY OF ENCINITAS - CITY TREES

TREES WITH TRUNKS GREATER THAN 3 INCHES IN DIAMETER SHALL BE HANDLED BY THE CONTACTOR ACCORDING TO THE FOLLOWING REQUIREMENTS:

- ALL TREES IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED IN PLACE. TREES LOCATED WITHIN THE CITY OF ENCINITAS' STREET RIGHT-OF-WAY, ON CITY OF ENCINITAS PROPERTY, OR WITHIN CITY OF ENCINITAS EASEMENTS ARE REFERRED TO AS CITY TREES AND SHALL BE PROTECTED IN PLACE DURING CONSTRUCTION UNLESS SPECIFICALLY APPROVED OTHERWISE BY THE CITY ARBORIST. NO GRADING, EXCAVATION, OR DISTURBANCE OF CITY TREE ROOT SYSTEMS SHALL OCCUR WITHIN THE CITY TREE DRIP LINE AREA (THE AREA FROM THE TRUNK OF THE TREE TO THE OUTERMOST EDGE OF THE TREE CANOPY PROJECTION ON THE GROUND). WATER PIPELINES AND APPURTENANCES SHALL NOT BE CONSTRUCTED WITHIN THE DRIP LINE OF CITY TREES.
- ANY CITY TREE SHALL BE PROTECTED IN PLACE IN ACCORDANCE WITH CITY OF ENCINITAS URBAN FOREST MANAGEMENT PROGRAM ADMINISTRATIVE MANUAL PROCEDURES DATED FEBRUARY 12, 2012, AND AS REQUIRED BY THE DISTRICT REPRESENTATIVE AND CITY OF ENCINITAS ARBORIST. TREE PROTECTION SHALL INCLUDE, BUT NOT BE LIMITED TO, NOT CUTTING ANY TREE ROOT GREATER THAN 2 INCHES IN DIAMETER, AND HAND-DIGGING AROUND TREE ROOTS.
- ANY TREE THAT IS DAMAGED, AS DEFINED BY THE CITY OF ENCINITAS ARBORIST, SHALL BE REPLACED IN KIND BY THE CONTRACTOR, AT NO ADDITIONAL COST TO THE DISTRICT OR THE CITY OF ENCINITAS.

PLANS

DESIGNED

CHECKED

BY

RR

AH

DATE

12/07/20

12/07/20

REGISTERED PROFESSIONAL ENGINEER

ADAM HOCH

C77635

Exp. 06-31-21

5/5/21

CIVIL

STATE OF CALIFORNIA



SHUTDOWN 1 - CLOSE GV F12-061, F12-025 & F12-034 + OCC1, TIE IN DETAIL B SHEET 10. CLOSE WESTERN VALVE AT TIE IN LOCATION BUT OPEN SOUTHERN VALVE TO RE-ENERGIZE THE EXISTING MAIN. AT STA 28+60.00, OPEN GV F12-061, F12-025 & F12-034 + OCC1. WESTERN VALVE AT CROSS AT STATION 27+09.53 IN THE INTERSECTION TO BE CLOSED; ALL OTHER VALVES AT STA 27+09.52 TO REMAIN OPEN.

SHUTDOWN 2 - CLOSE OCC01, GV F13-002, TIE IN DETAIL A, SHEET 10. CLOSE NORTHERN VALVE AT STA 10+01.25 BUT LEAVE EXISTING MAIN ENERGIZED. OPEN OCC01, GV-F13-002.

SHUTDOWN 3 - CLOSE OCC01, GV-F13-002, TIE IN DETAIL E SHEET 10, CUT AND WELD NEW FLANGE ON STEEL PIPE @ STA. 17+25. BLIND FLANGE. OPEN NEW GV AT STA 28+60.00 (SHUTDOWN 1) AND STA 10+01.25 (SHUTDOWN 2) TO ENERGIZE THE NEW MAIN IN MANCHESTER, RANCHO SANTA FE, AND S. RANCHO SANTA FE. OPEN OCC01; THE EXISTING MAIN WILL REMAIN ENERGIZED. WESTERN VALVE AT CROSS AT STA 27+09.52 IN THE INTERSECTION TO REMAIN CLOSED; ALL OTHER VALVES AT STA 27+09.52 TO REMAIN OPEN.

SHUTDOWN 4 - CLOSE GV F12-025, F12-022, F12-027, & F12-034 AND VALVE AT ENCINITAS PRS, TIE-IN DETAIL C ON SHEET 10 AND DETAIL B ON SHEET 11. REPLACE VALVES AT VIA DEL CERRITO. OPEN GV AT ENCINITAS PRS, AND WESTERN VALVE AT INTERSECTION. ALL EXISTING AND NEW WATER MAINS WILL BE ENERGIZED.

METER AND SERVICE RECONNECTION - PHASE I. ALL METERS AND SERVICES THAT CAN BE ISOLATED FROM THE EXISTING AND NEW MAINS SHALL BE RECONNECTED. THIS IS ANTICIPATED TO INCLUDE ALL RECONNECTIONS EXCEPT POTENTIALLY FOR THOSE AT STA. 12+55.55, 22+39.30, 26+17.18, 26+24.18, 58+61.54, 61+34.00, 62+75.57, AND 63+73.20, FOR WHICH FIELD SHUTOFF VALVES COULD NOT BE CONFIRMED OR WERE NOT IN THE TYPICAL LOCATION. CONTRACTOR TO FIELD VERIFY SHUTOFF VALVES FOR ALL POTENTIAL RECONNECTIONS AND RECONNECT ALL FEASIBLE SERVICES AND LATERALS IN THIS PHASE.

SHUTDOWN 5 - CLOSE OCC01, GV-F13-002, TIE IN STA. 12+55.55. OCC01 AND GV-F13-002 TO REMAIN CLOSED.

SHUTDOWN 6 - IF NECESSARY, CLOSE GV-F12-025 AND F12-034, & THE SOUTHERN MOST VALVE INSTALLED AS PART OF SHUTDOWN 1 AT STA 28+60.00, TIE-IN TO ALL REMAINING SERVICES NOT CONNECTED TO AS PART OF THE METER AND SERVICE RECONNECTION - PHASE I. AFTER ALL TIE-INS ARE COMPLETED, ALL GATE VALVES CLOSED AS PART OF THIS SHUTDOWN WILL REMAIN CLOSED. ADDITIONALLY, CLOSE EASTERN MOST VALVE AT STA 50+83.20 INSTALLED AS PART OF SHUTDOWN 4. ALL NEW PIPELINE WILL BE ENERGIZED. ALL PIPELINES TO BE ABANDONED WILL BE DE-ENERGIZED.

CONTRACTOR SHALL REPLACE EX VALVES NO. F12-012 (8" GATE VALVE) AND NO. F12-012 (12" BUTTERFLY VALVE) WITH NEW GATE VALVES AT THE INTERSECTION OF ENCINITAS BLVD AND VIA DEL CERRITO DURING THE SHUTDOWN. SEE AS-BUILTS PROVIDED IN ATTACHMENT TO THE SPECIFICATIONS.

ENCINITAS BLVD PRS AND VALVING (NOT SHOWN). OWNER SHALL ISOLATE THE EX 12" LINE AT THE ENCINITAS PRESSURE REDUCING STATION, LOCATED APPROX. 600 LF WEST OF VIA DEL CERRITO ON ENCINITAS BOULEVARD.

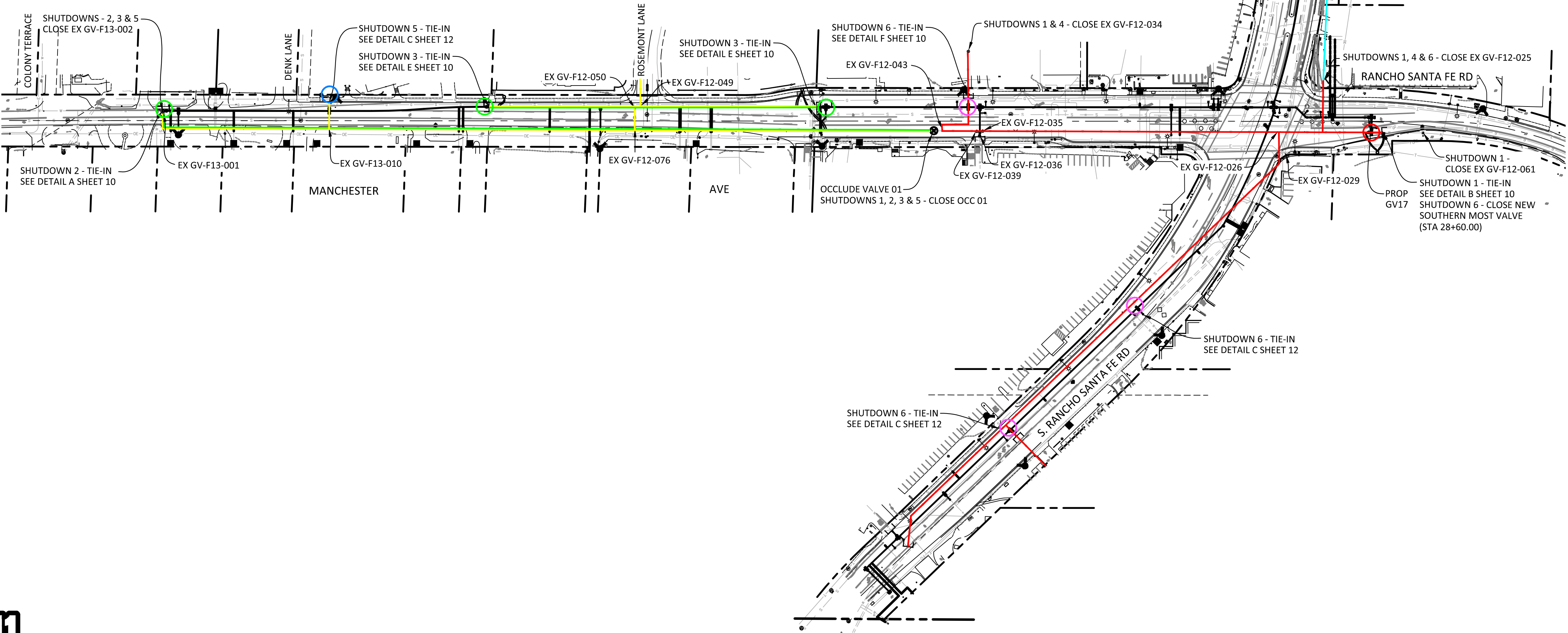
LEGEND:

- EX FIRE HYDRANT LOCATION
- EX WATER METER LOCATION
- PROPOSED WATERLINE ALIGNMENT
- INDICATES CONNECTION POINT TO EXISTING WATER PIPELINE
- EX GV-F12-026 VALVE ASSET NUMBER PER OMWD
- OCCCLUDE INSERT VALVE

- SHUTDOWN 1
- SHUTDOWN 2
- SHUTDOWN 3
- SHUTDOWN 4
- SHUTDOWN 5
- SHUTDOWN 6

PHASING NOTES:

- THE DISTRICT SHALL PERFORM ALL LIVE VALVE ACTUATIONS.
- PRIOR TO SHUTDOWN/TRANSFER OF SERVICES, CONTRACTOR SHALL PROVIDE A MINIMUM OF 2 WEEKS NOTICE TO OWNER TO PERFORM PRELIMINARY SHUTDOWN TO CONFIRM LIMITS OF REQUIRED HIGHLIGHTING.
- CONTRACTOR SHALL OUTLINE THE PROPOSED WORK SEQUENCE FOR OWNER'S REVIEW AND APPROVAL.
- UTILIZING INDEPENDENT MEANS AND METHODS, THE CONTRACTOR SHALL SEEK TO OPTIMIZE CONSTRUCTION COSTS BY GROUPING SIMILAR WORK ITEMS, INCLUDING PIPELINE CONSTRUCTION, TIE-INS, TESTING AND INSPECTION, DISINFECTION, AND ABANDONMENTS INTO A LINEAR AND LOGICAL CONSTRUCTION TIMELINE. PROJECT GUIDELINES AND STANDARDS SET IN PLACE BY THE OWNER ARE STATED AS FOLLOWS:
  - MINIMIZE THE USE OF INLINE OCCCLUDE VALVES AND/OR LINE STOPS, PER PLAN THAT WOULD BE SUBSEQUENTLY ABANDONED.
  - LIMIT EACH AFFECTED CUSTOMER TO ONE MAINLINE SHUTDOWN PER METER, UNLESS OTHERWISE APPROVED BY OWNER.
  - LIMIT THE AMOUNT OF WORK AND PLAN THE SHUTDOWNS SO THEY CAN BE ACCOMPLISHED IN A 6-HOUR SHUTDOWN WINDOW DURING NIGHT TIME WORK HOURS, AS APPROVED BY OWNER.
- COMPLY WITH ALL WORK RESTRICTION REQUIREMENTS OF SECTION 01305 UNLESS OTHERWISE DIRECTED BY OWNER.
- SHUT-DOWN PHASE IDENTIFICATION PER SECTION 01305. CONTRACTOR SHALL FIELD VERIFY ISOLATION VALVE LOCATIONS PRIOR TO COMMENCING WORK AND COMPLY WITH ALL REQUIREMENTS OF SECTION 01350.

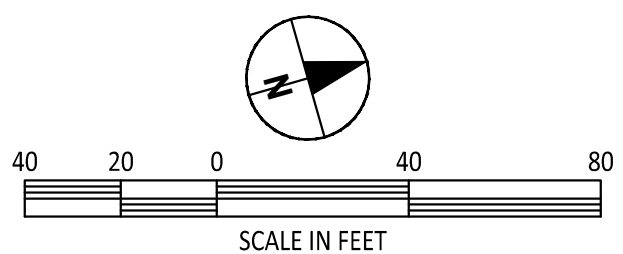
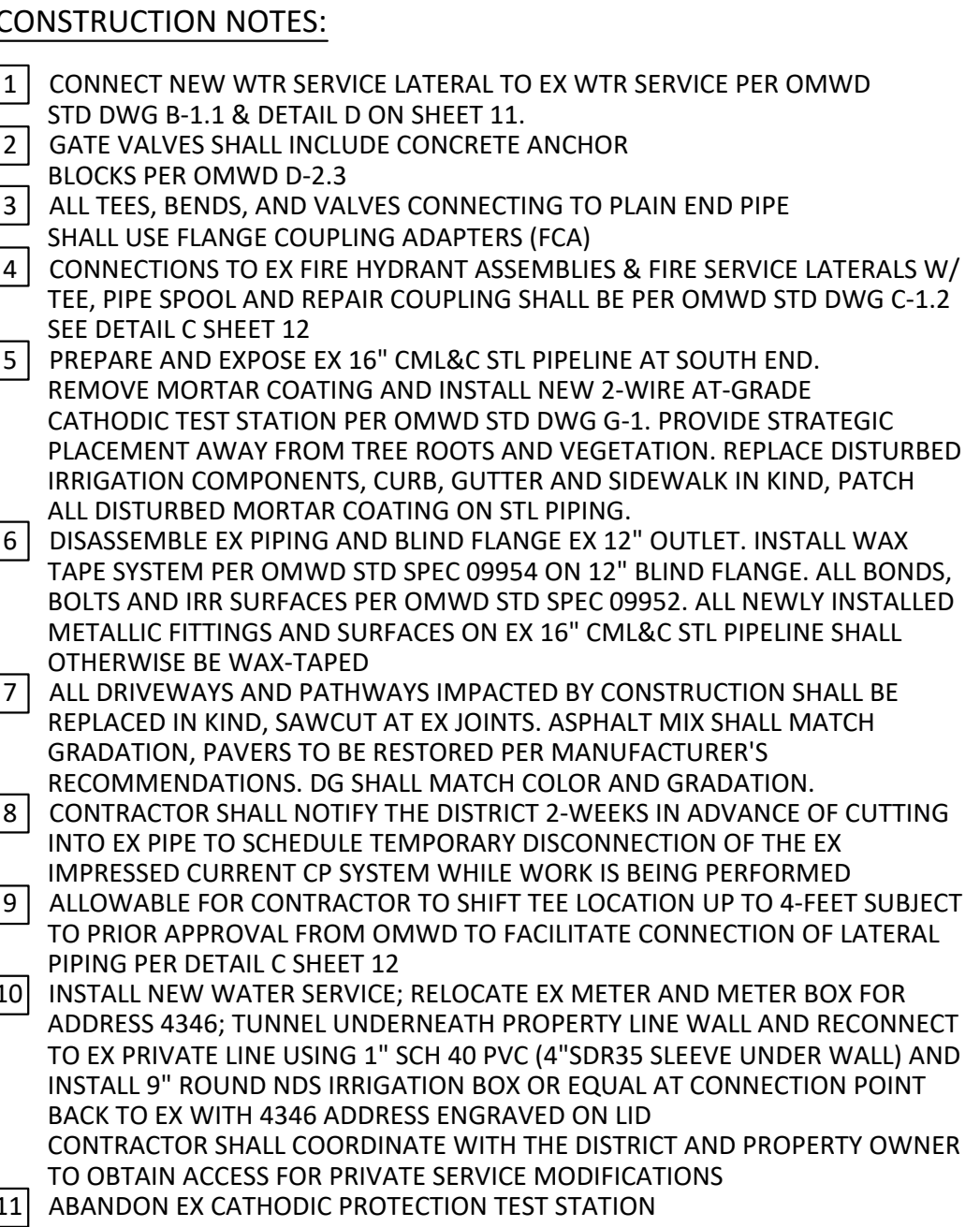


REVISIONS	BY	APPROVED	DATE	COORDINATE INDEX
				317 N. 1698 E.
				CONST. COMPL.
				FIELD REVISIONS

MANCHESTER AVE POTABLE WATER PIPELINE REPLACEMENT PROJECT  
CONSTRUCTION PHASING PLAN

SCALE: HOR. 1" = 100'	VERT. NONE
W.A. RS11810	R.S. 11810
SHEET 04 OF 12 SHEETS	

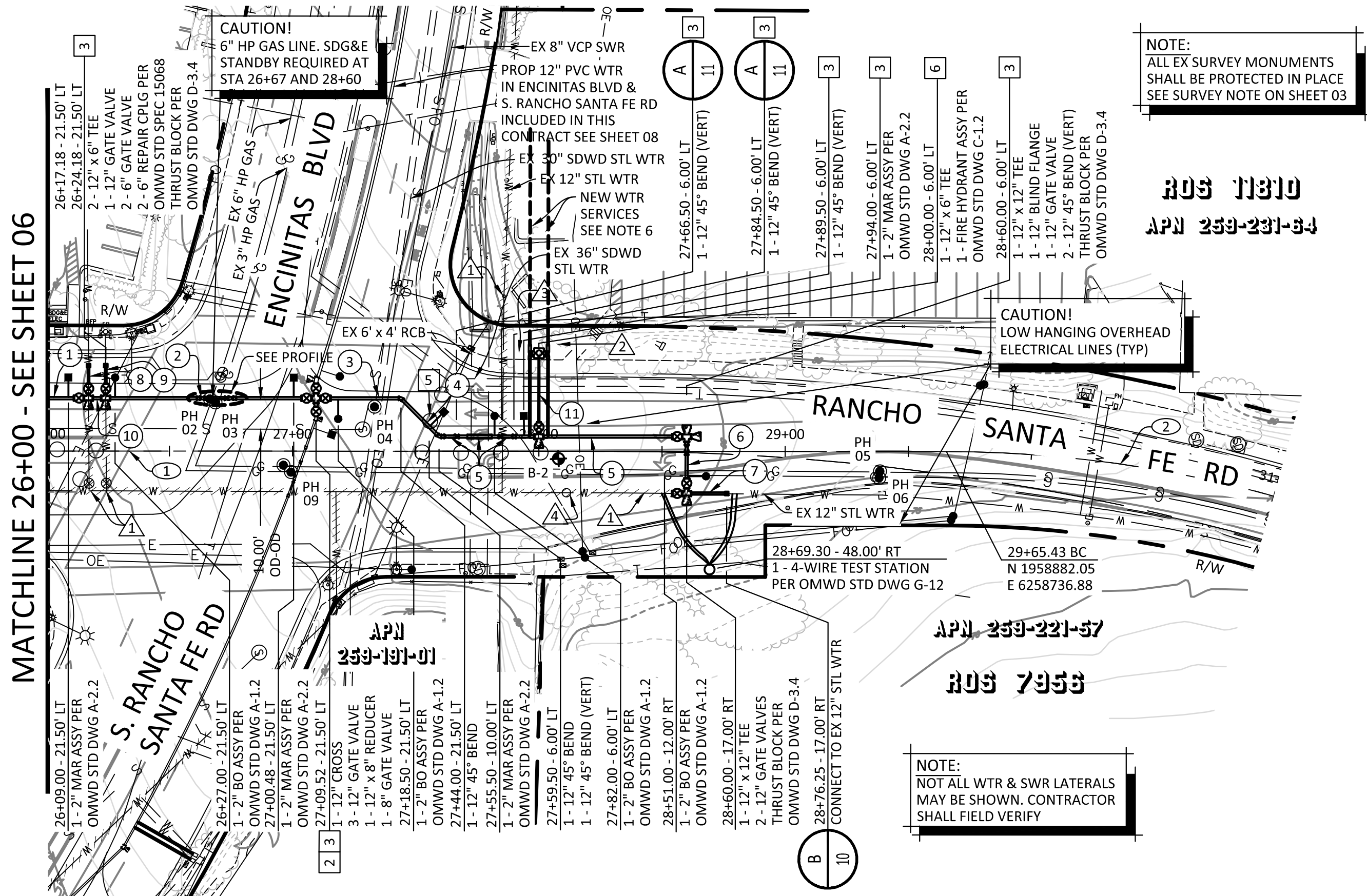
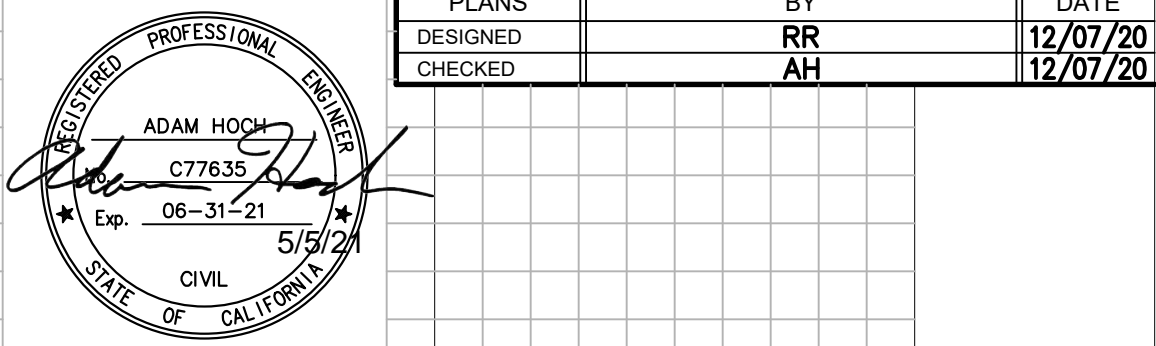






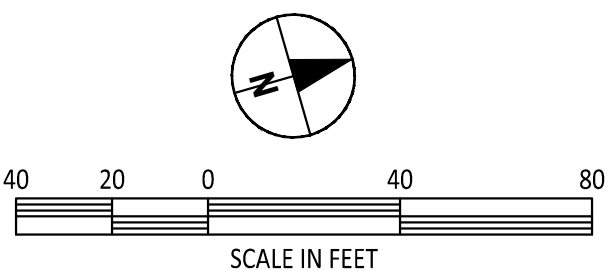






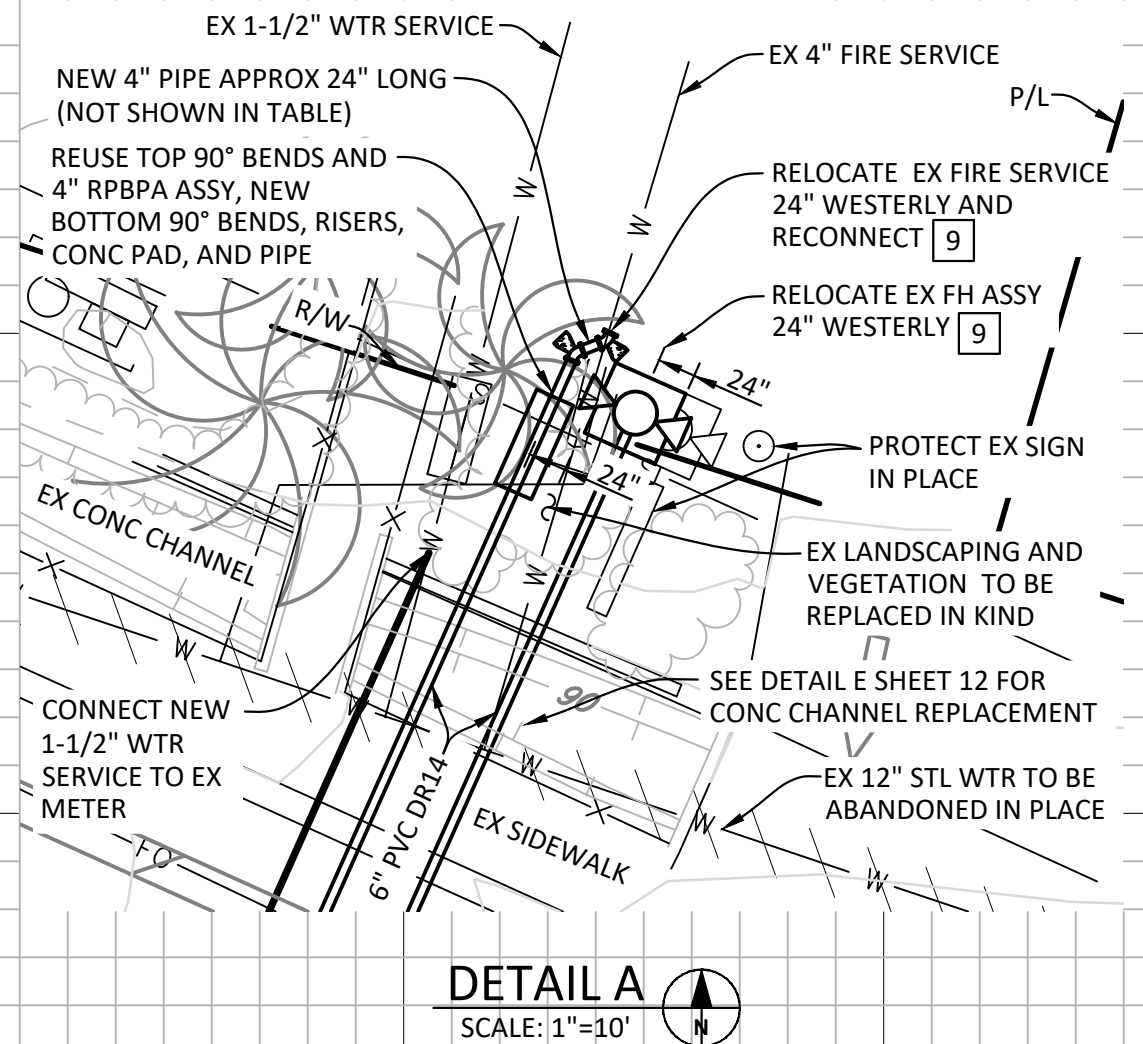
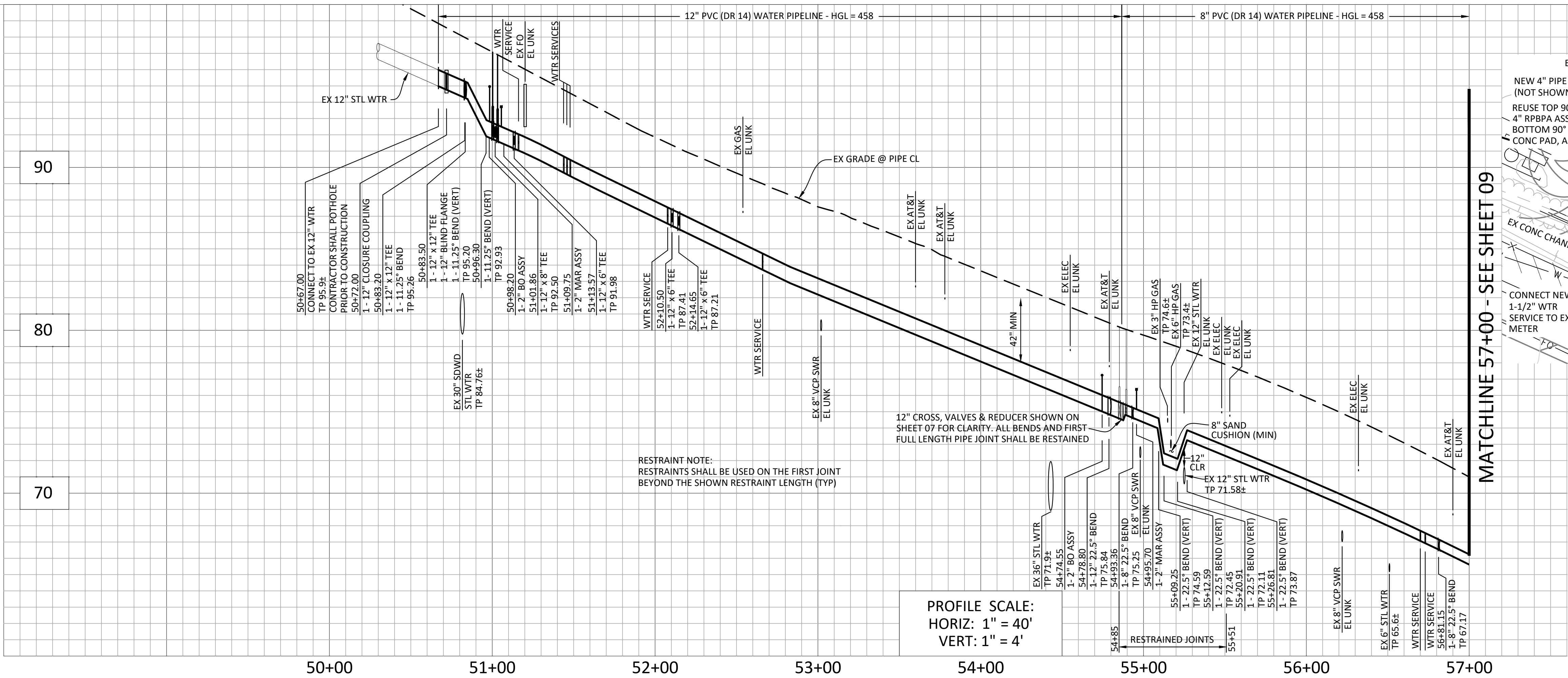
2. PROTECT EX TREES IN PLACE
3. PROTECT EX CATHODIC PROTECTION TEST STATION IN PLACE
4. ABANDON EX MANUAL AIR RELEASE IN PLACE

1. CONNECT WATER SERVICE LATERAL TO EX METER PER OMWD STD DWG B-1.1 SEE DETAIL D ON SHEET 11
2. GATE VALVES SHALL INCLUDE CONCRETE ANCHOR BLOCKS PER OMWD D-2.7
3. ALL TEES, BENDS, AND VALVES CONNECTING TO PLAIN END PIPE SHALL USE FLANGE COUPLING ADAPTERS (FCA)
4. CONNECTIONS TO EX FIRE HYDRANT ASSEMBLIES & FIRE SERVICE LATERALS W/ TEE, PIPE SPOOL AND REPAIR COUPLING SHALL BE PER OMWD STD DWG C-1.2 SEE DETAIL C SHEET 12
5. TRAFFIC DETECTION LOOPS REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN KIND PER THE CITY OF ENCINITAS WITHIN 72 HOURS
6. EXISTING OR NEW 24" WATER SERVICE ASSEMBLIES PER OMWD STD DWG B-1.1, 2-BACKFLOW PREVENTERS (RPBA) PER OMWD STD DWG C-2.1, AND 1-FIRE HYDRANT ASSY PER OMWD STD DWG C-1.2, FROM APPROX STA 53-65 ENCINITAS BLVD TO STA 28-00 MANCHESTER AVE. CUT & PLUG ABANDONED WTR SERVICES & FIRE HYDRANT LATERAL/SPOOL. CONSTRUCT NEW PRIVATE LATERAL FROM RELOCATED RPBA TO CONNECTION POINT. CONTRACTOR SHALL COORDINATE WITH THE DISTRICT AND PROPERTY OWNER TO OBTAIN ACCESS FOR PRIVATE SERVICES FROM RPBA TO EX SERVICE LOCATION CONNECTIONS. REMOVE AND REPLACE EX CURB, GUTTER AND SIDEWALK PER CITY OF ENCINITAS STANDARDS, AS NECESSARY FOR CONSTRUCTION. REMOVE AND REPLACE, OR PROTECT IN PLACE, ALL OTHER INFRASTRUCTURE, LANDSCAPING AND IRRIGATION. PROTECT ALL SIGNAGE IN PLACE.



	REVISIONS	BY	APPROVED	DATE	COORDINATE INDEX	
					<b>317</b> N.	<b>1698</b> E.
					CONST. COMPL. _____	
					FIELD REVISIONS _____	



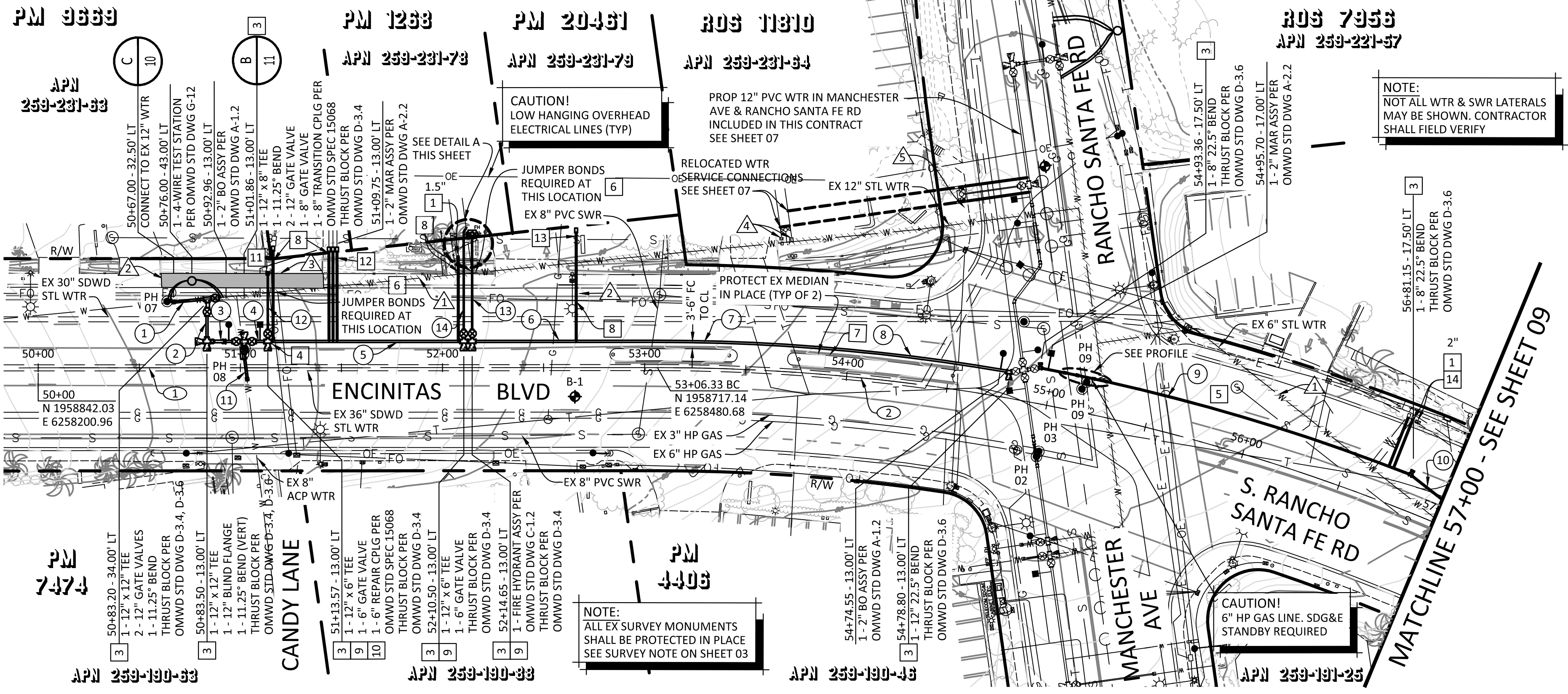



- DEMOLITION NOTES:**
- CUT, PLUG & ABANDON EXIST 12" STL PIPELINE IN PLACE INCLUDING REMOVING CONNECTED APPURTENANCES AND ABANDONING VALVE CANS PER OMWD STD SPEC 00810
  - REMOVE, DISPOSE AND REPLACE EX CONC CURB, GUTTER & SIDEWALK PER SDRSD G-02 & G-07 AS REQUIRED FOR CONSTRUCTION. SAWCUT AT EX JOINTS PROTECT AND REUSE EX METAL HANDRAIL AT BACK OF WALK. PROTECT EX LIGHT STANDARD IN PLACE
  - REMOVE, DISPOSE AND REPLACE EX CONC COMMERCIAL DRIVEWAY PER SDRSD G-14D AS REQUIRED FOR CONSTRUCTION. SAWCUT AT EX JOINTS
  - RELOCATE EX FIRE HYDRANT, WATER METERS (2) AND BACKFLOW PREVENTERS (2). CONTRACTOR SHALL COORDINATE THESE ACTIVITIES WITH THE DISTRICT'S REPRESENTATIVE. EX STEEL MAIN AT THIS LOCATION SHALL NOT BE CUT
  - PROTECT EX CATHODIC PROTECTION TEST STATION IN PLACE
- CONSTRUCTION NOTES:**
- CONNECT 1" WATER SERVICE LATERAL TO EX METER PER OMWD STD DWG B-1.1 SEE DETAIL D ON SHEET 11
  - NOT USED
  - ALL TEES, BENDS, AND VALVES CONNECTING TO PLAIN END PIPE SHALL USE FLANGE COUPLING ADAPTERS (FCA)
  - CONNECTIONS TO EX FIRE HYDRANT ASSEMBLIES & FIRE SERVICE LATERALS W/ TEE, PIPE SPOOL AND REPAIR COUPLING SHALL BE PER OMWD STD DWG C-1.2 SEE DETAIL C SHEET 12
  - TRAFFIC DETECTION LOOPS REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN KIND PER THE CITY OF ENCINITAS WITHIN 72 HOURS
  - EX 12" STL PIPE FROM STA 50+67 TO STA 55+50 SHALL NOT BE CUT UNLESS WORK IS TO BE PERFORMED AS DESCRIBED ON THESE PLANS. WHERE PIPE IS TO BE CUT FOR LATERAL CONNECTIONS, 2 - #2 AWG JUMPERS SHALL BE INSTALLED PER OMWD STD SPECIFICATIONS.
  - MEDIAN CURB SHALL BE REMOVED AND REPLACED PER CITY OF ENCINITAS STANDARDS AS NECESSARY FOR CONSTRUCTION. EX SIGNS AND COLORED CONCRETE SHALL BE PROTECTED IN PLACE.
  - WATER AND FIRE HYDRANT SERVICES SHALL HAVE A MINIMUM OF 12" CLEARANCE BELOW CONCRETE CHANNEL UNDERCROSSING. BACKFILL UNDERCROSSING WITH 2-SACK SLURRY IN PIPE ZONE BENEATH STORM DRAIN CHANNEL. SEE DETAIL E SHEET 12 FOR CONC CHANNEL REPLACEMENT DETAIL. CONTRACTOR SHALL PROVIDE LAYOUT DRAWINGS PRIOR TO INSTALLATION FOR DISTRICT APPROVAL. REMOVE AND REPLACE EX CURB, GUTTER AND SIDEWALK PER CITY OF ENCINITAS STANDARDS, FENCING, AND CONC CHANNEL. CONTRACTOR SHALL REMOVE AND REPLACE OR PROTECT IN PLACE ALL OTHER INFRASTRUCTURE, LANDSCAPING AND IRRIGATION. PROTECT ALL SIGNAGE IN PLACE.
  - CONTRACTOR SHALL COORDINATE WITH THE DISTRICT AND PROPERTY OWNER TO OBTAIN ACCESS FOR PRIVATE SERVICE MODIFICATIONS
  - ALLOWABLE FOR CONTRACTOR TO SHIFT TEE LOCATION UP TO 4-FEET SUBJECT TO PRIOR APPROVAL FROM OMWD TO FACILITATE CONNECTION OF LATERAL PIPING PER DETAIL C SHEET 12
  - INSTALL NEW 1" WTR SERVICE TO NEW LOCATION BETWEEN EX FH & EDGE OF CONC DRWY, RELOCATE EX METER BOX TO EDGE OF ROW; RECONNECT EX COPPER TO CUSTOMER SIDE VALVE & ADD 30LB ANODE PER G-14 TO CUSTOMER SIDE COPPER; MAKE A COPPER x PVC CONNECTION AT LOCATION OF OLD METER BOX & RESTORE TO EXISTING CONDITIONS.
  - INSTALL 3 NEW 1" WTR SERVICES TO NEW LOCATION; RELOCATE EX METER (2) & METER BOX (3) TO EDGE OF ROW; MINIMIZE VEGETATION REMOVAL; RECONNECT EX COPPER TO CUSTOMER SIDE VALVE & ADD 30LB ANODE PER G-14 TO CUSTOMER SIDE COPPER; MAKE A COPPER x PVC CONNECTION AT LOCATION OF OLD METER BOX & RESTORE TO EXISTING CONDITIONS.
  - INSTALL NEW 1" WTR SERVICE TO NEW LOCATION, RELOCATE EX METER BOX TO EDGE OF ROW OUT OF PARKING LOT, RECONNECT EX COPPER TO CUSTOMER SIDE VALVE & ADD 30LB ANODE PER G-14 TO CUSTOMER SIDE COPPER; MAKE A COPPER x PVC CONNECTION AT LOCATION OF OLD METER BOX & RESTORE TO EXISTING CONDITIONS.
  - INSTALL NEW 30-LB ANODE TO EX WTR SERVICE PER OMWD STD DWG B-1.1 AND DETAIL D SHEET 11

CONSTRUCTION BASELINE				
NO.	BEARING/DELTA	RADIUS	LENGTH	REMARKS
1	N 65°56'26" W	-	306.33'	CALC'D ROAD CENTERLINE
2	22°33'20"	1000.00'	393.67'	CALC'D ROAD CENTERLINE

WATERLINE ALIGNMENT TABLE				
NO.	BEARING/DELTA	RADIUS	LENGTH	REMARKS
1	N 71°29'51" W	16.52'	12" PVC (DR14)	
2	N 24°03'34" E	21.07'	12" PVC (DR14)	
3	N 65°56'26" W	18.38' (TOT)	12" PVC (DR14)	
4	N 65°56'26" W	11.72'	12" PVC (DR14)	
5	N 65°56'26" W	100.93'	12" PVC (DR14)	
6	N 65°56'26" W	91.83'	12" PVC (DR14)	
7	03°24'32"	1013'	12" PVC (DR14)	
8	06°28'22"	1013'	12" PVC (DR14)	
9	10°45'33"	1017.50'	8" PVC (DR14)*	
10	N 27°50'49" W	18.16'	8" PVC (DR14)	
11	N 16°56'12" E	11.50'	8" PVC (DR14)	
12	N 24°03'34" E	33.65'	6" PVC (DR14)	
13	N 24°03'34" E	51.90'	6" PVC (DR14)	
14	N 24°03'34" E	45.00'	6" PVC (DR14)	

PIPELINES ARE MEASURED FROM CENTERLINE OF FITTINGS AND INCLUDE VERTICAL BENDS  
\* PORTIONS OF THESE SEGMENTS REQUIRE RESTRAINED JOINTS

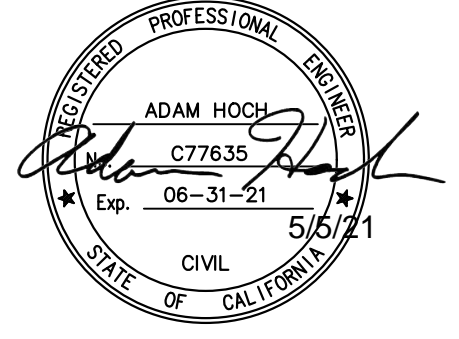




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Call before you dig.

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

CALL 811  
AT LEAST TWO DAYS  
BEFORE YOU DIG



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REVISIONS				BY	APPROVED	DATE
COORDINATE INDEX						
	317	N.	1698	E.		
CONST. COMPL.						
FIELD REVISIONS						

**MANCHESTER AVE POTABLE WATER  
PIPELINE REPLACEMENT PROJECT**  
**WATER PIPELINE STA 50+00 TO STA 57+00**

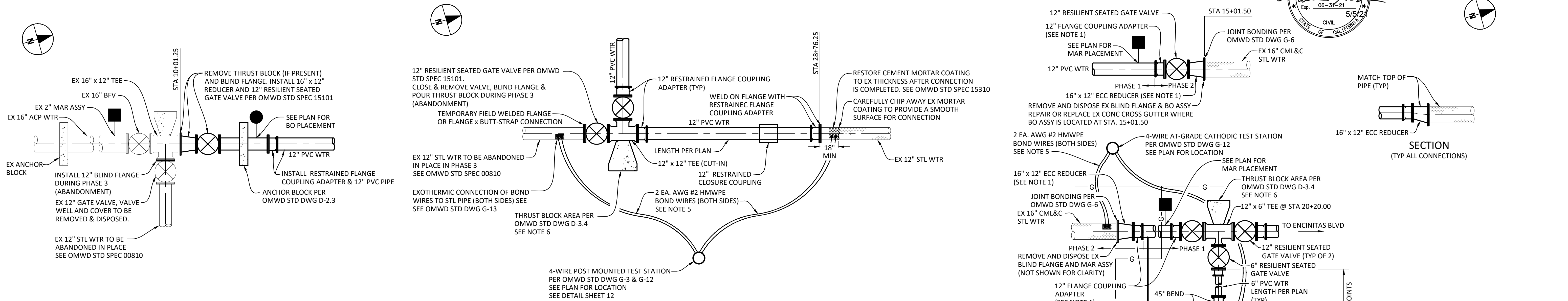
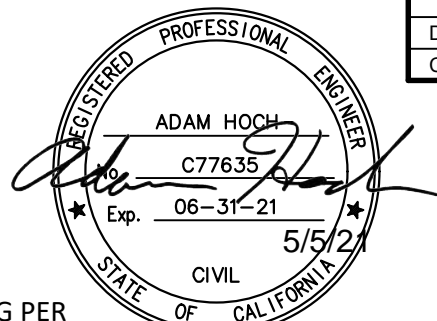
SCALE: HOR: 1" = 40'	VERT: 1" = 4'
W.A. RS11810	R.S. 11810
SHEET 08 OF 12 SHEETS	







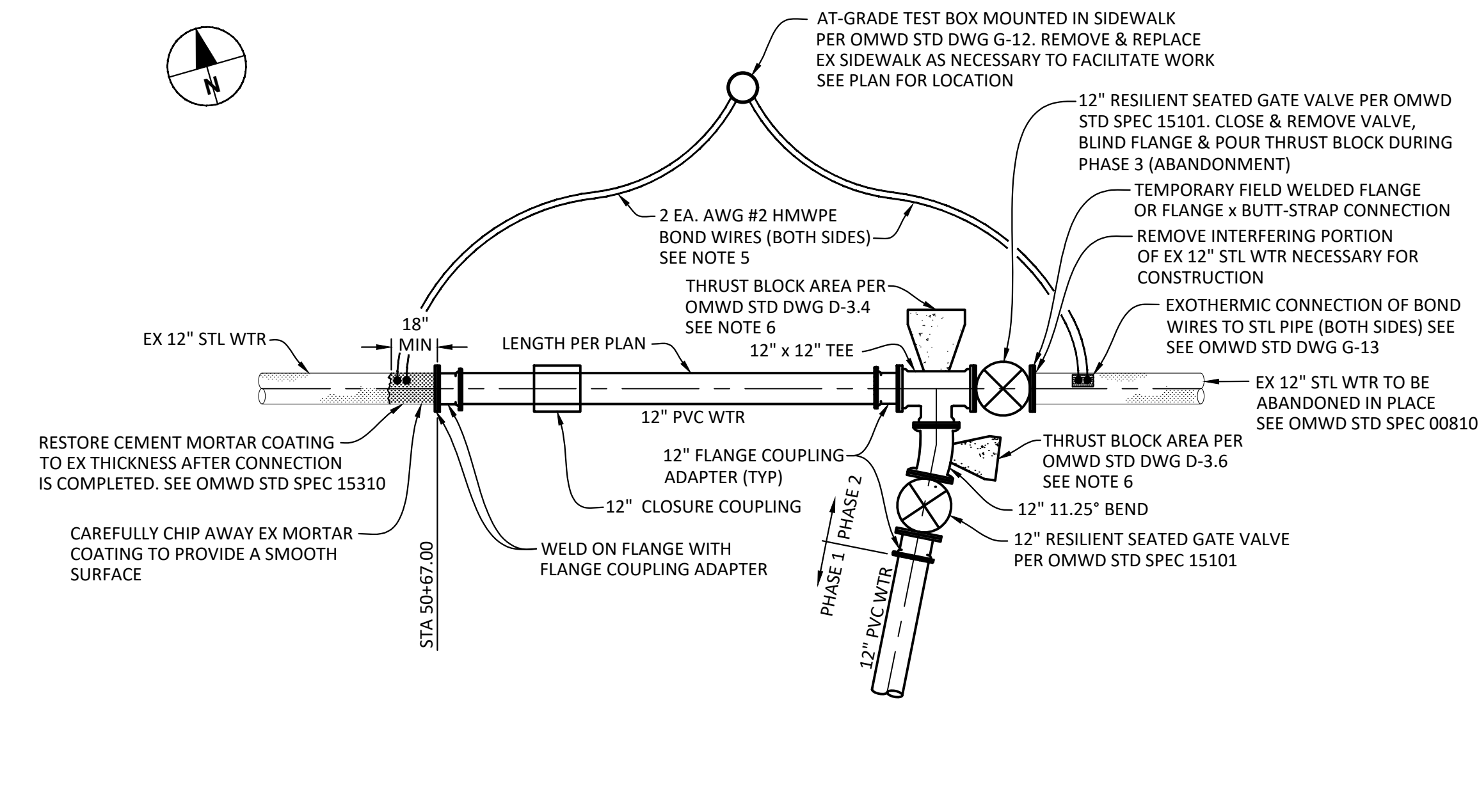
PLANS	BY	DATE
DESIGNED	RR	12/07/20
CHECKED	AH	12/07/20



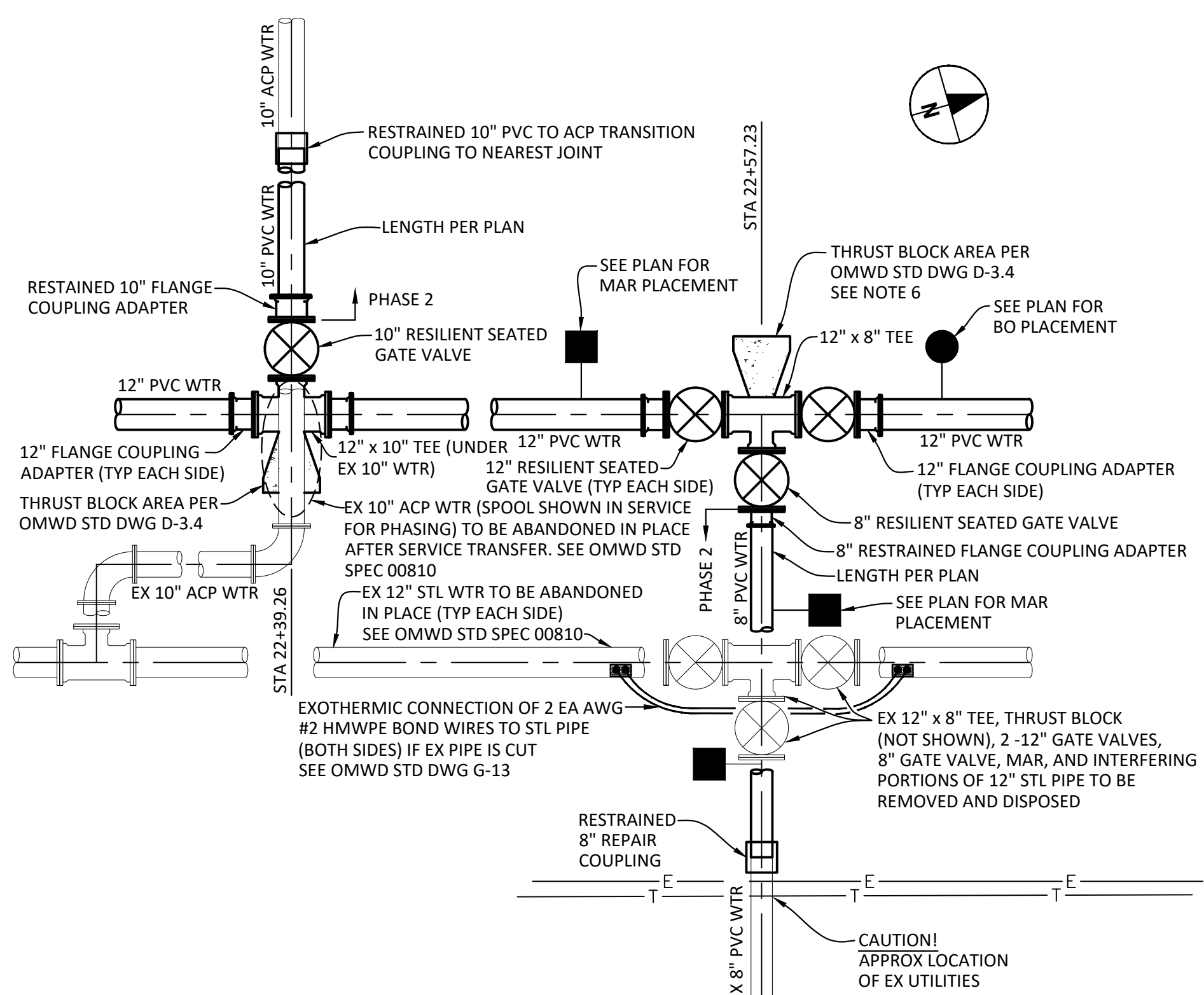
CONNECTION DETAIL AT STA. 10+01.25  
SCALE: 1/4" = 1'-0"

CONNECTION & CP DETAIL AT STA. 28+76.25  
SCALE: 1/4" = 1'-0"

CONNECTION DETAIL AT STA. 15+01.50/20+06.25/20+20.00  
SCALE: 1/4" = 1'-0"



CONNECTION & CP DETAIL AT STA. 50+67.00  
SCALE: 1/4" = 1'-0"



CONNECTION DETAIL AT STA. 22+39.26 / 22+57.23  
SCALE: 1/4" = 1'-0"

- NOTES:
- WAX TAPE METALLIC FITTINGS, BONDS, BOLTS, AND IRR SURFACES. ALL FERROUS METALS AND HARDWARE SHALL BE PROTECTED PER OMWD STD SPEC 09952
  - SEE PHASING PLAN FOR SHUTDOWN PROCEDURES
  - TESTING AND DISINFECTION PROCEDURES NOT SHOWN. SEE OMWD STD SPEC 15144 AND 15141 RESPECTIVELY
  - ECCENTRIC REDUCERS SHALL MATCH TOP OF PIPE
  - ALL JUMPER WIRES CONNECTING PIPE SHALL BE INSTALLED IN 3" SCH 40 SOLVENT WELD CONDUIT WITH A 12" x 12" SAND PIPE ZONE WITH WARNING TAPE PLACED 12" ABOVE THE CONDUIT
  - CONCRETE SET ACCELERATING ADMIXTURE SHALL BE USED PER OMWD STD SPEC 03000-2.18
  - PHASE 1 = MAINLINE CONSTRUCTION  
PHASE 2 = INTERCONNECTIONS
  - CONTRACTOR SHALL NOTIFY THE DISTRICT 2-WEEKS IN ADVANCE OF CUTTING INTO EX PIPE TO SCHEDULE TEMPORARY DISCONNECTION OF THE EX IMPRESSED CURRENT CP SYSTEM WHILE WORK IS BEING PERFORMED



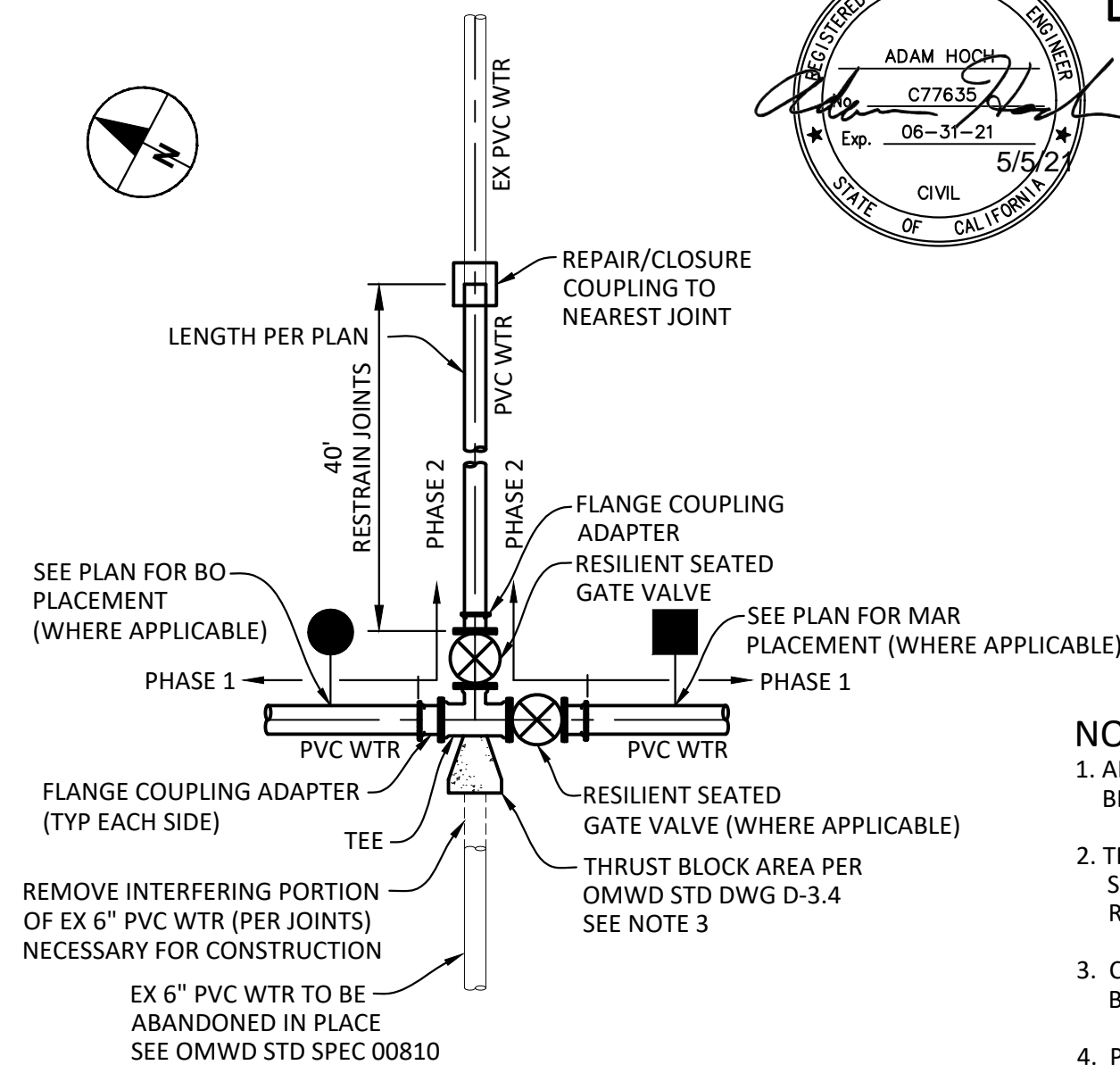
REVISIONS	BY	APPROVED	DATE

COORDINATE INDEX
317 N. 1698 E.
CONST. COMPL.
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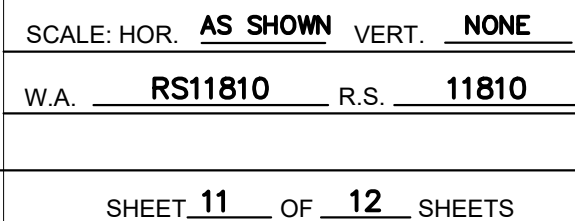
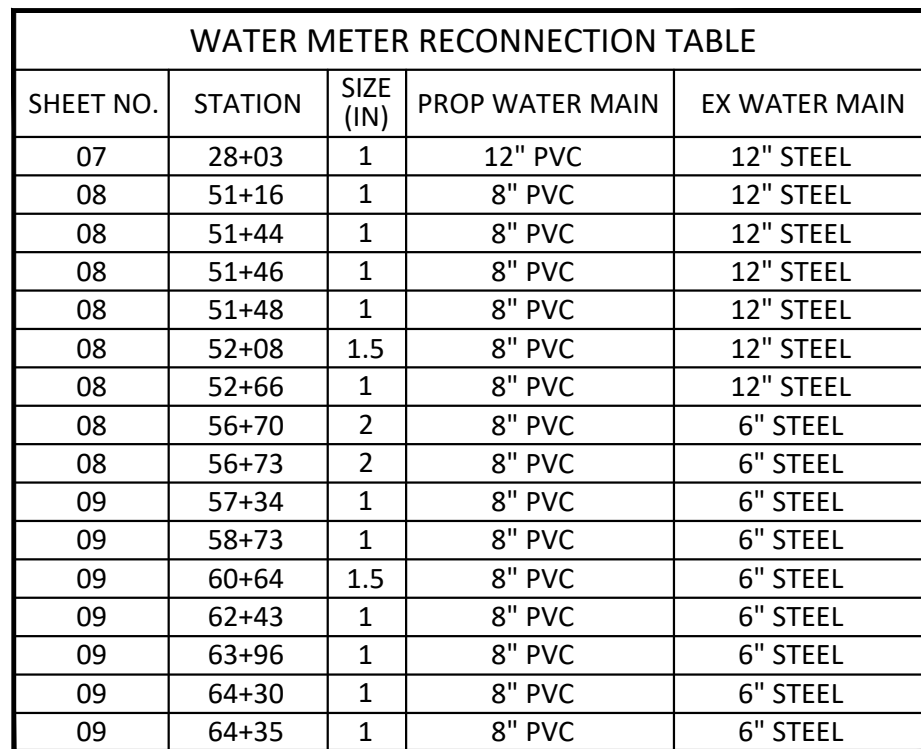
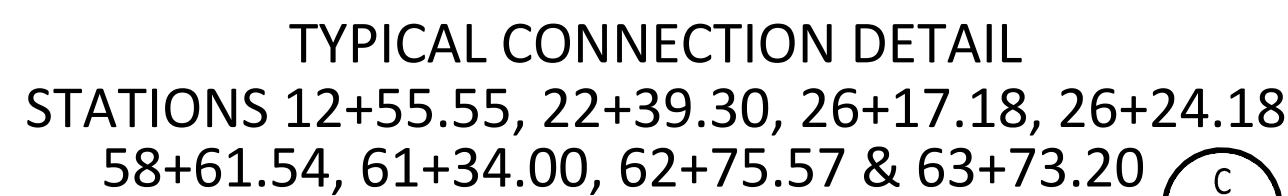
MANCHESTER AVE POTABLE WATER  
PIPELINE REPLACEMENT PROJECT  
DETAILS

SCALE: HOR. AS SHOWN	VERT. NONE
W.A. RS11810	R.S. 11810
SHEET 10	OF 12 SHEETS





1. ALL FERROUS METALS AND HARDWARE SHALL BE PROTECTED PER OMWD STD SPEC 09952
2. TESTING AND DISINFECTION PROCEDURES NOT SHOWN. SEE OMWD STD SPEC 15144 AND 15141 RESPECTIVELY
3. CONCRETE SET ACCELERATING ADMIXTURE SHALL BE USED PER OMWD STD SPEC 03000-2.18
4. PHASE 1 = MAINLINE CONSTRUCTION  
PHASE 2 = INTERCONNECTIONS
5. THIS DETAIL IS GENERIC IN NATURE AND APPURTENANCES MAY VARY
6. CONTRACTOR SHALL NOTIFY THE DISTRICT 2-WEEKS IN ADVANCE OF CUTTING INTO EX PIPE TO SCHEDULE TEMPORARY DISCONNECTION OF THE EX IMPRESSED CURRENT CP SYSTEM WHILE WORK IS BEING PERFORMED



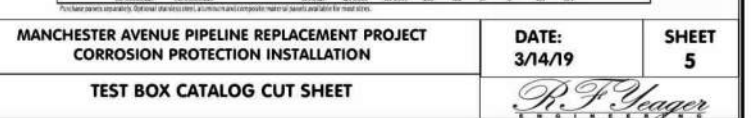
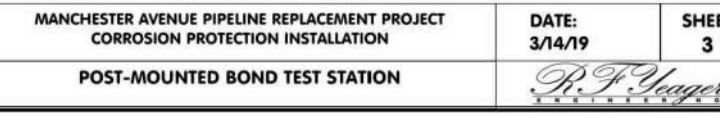
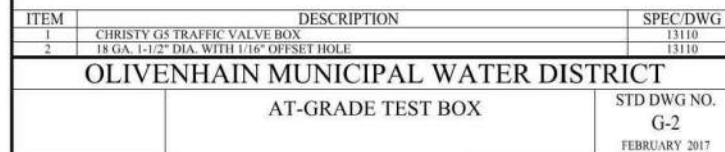
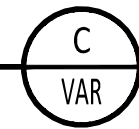




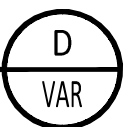
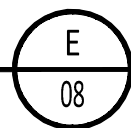
NO SCALE



NO SCALE



NO SCALE



REVISIONS		BY	APPROVED	DATE	COORDINATE INDEX  317 N. 1698 E.  CONST. COMPL. _____  FIELD REVISIONS _____	MANCHESTER AVE POTABLE WATER PIPELINE REPLACEMENT PROJECT  DETAILS	SCALE: HOR. <u>AS SHOWN</u> VERT. <u>NONE</u>
							W.A. <u>RS11810</u> R.S. <u>11810</u>
							SHEET <u>12</u> OF <u>12</u> SHEETS