

Olivenhain Municipal Water District

100% Submittal - Opinion of Probable Construction Costs

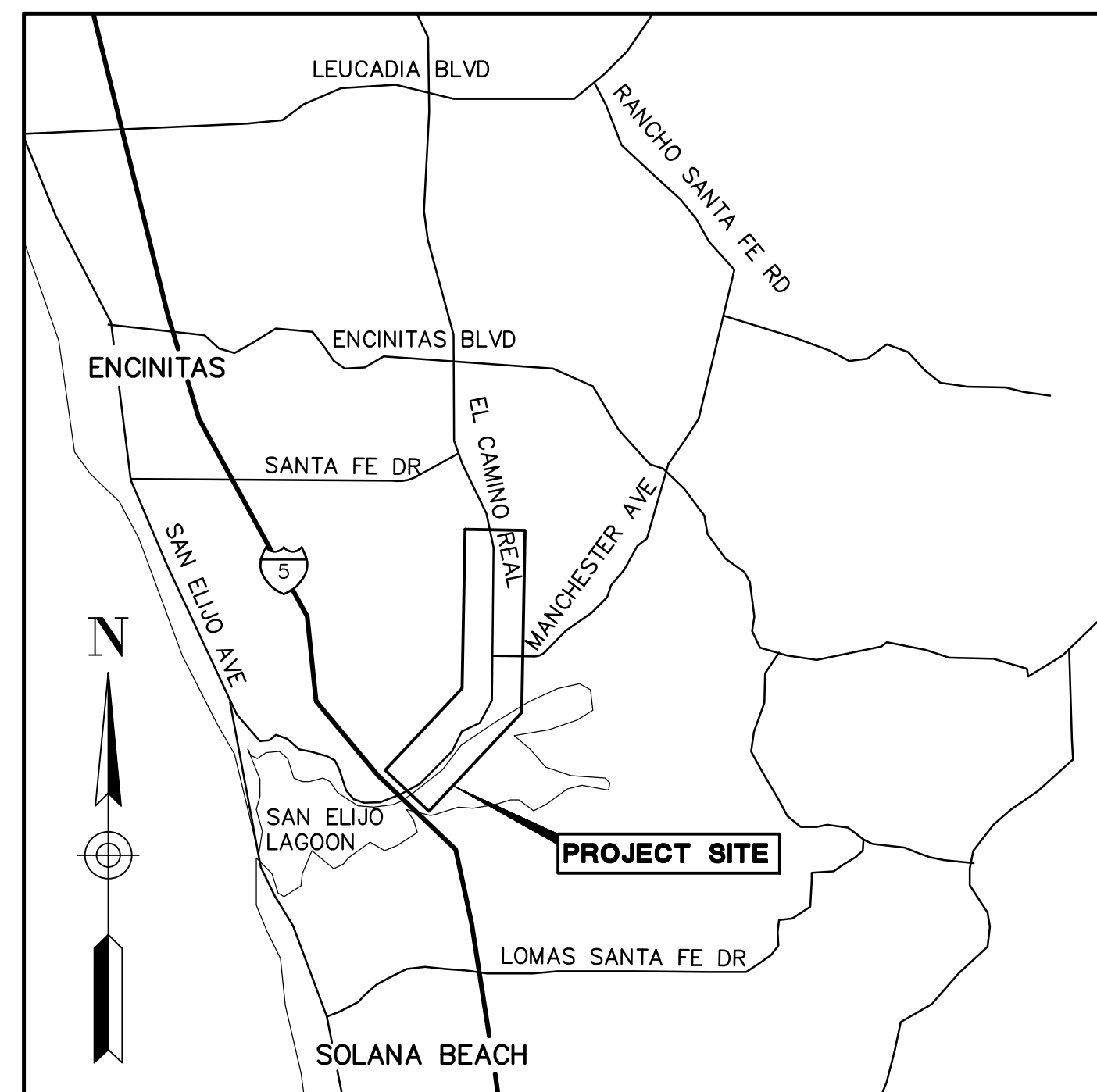
Manchester Avenue and S. El Camino Real Recycled Water Pipelines - Schedules A-C

Item	Quantity	Unit	Unit Cost	Amount
Mobilization, Demobilization, Bonds, Permits, Insurance, & Cleanup	1	LS	\$ 85,000	\$ 85,000
Excavation Support System	1	LS	\$ 21,000	\$ 21,000
Traffic Control Plans and Traffic Control	1	LS	\$ 225,000	\$ 225,000
Temporary Erosion Control/SWPPP	1	LS	\$ 25,000	\$ 25,000
Groundwater Dewatering	1	LS	\$ 135,000	\$ 135,000
Replace Pavement Marking, Striping, and Traffic Control Loops	1	LS	\$ 15,000	\$ 15,000
6-inch PVC C-900 DR14 Pipe	115	LF	\$ 230	\$ 26,450
6-inch PVC C-900 DR18 Pipe	6,905	LF	\$ 220	\$ 1,519,100
Overexcavation and Replacement of Unsuitable Soil	1,385	CY	\$ 65	\$ 90,025
1" Recycled Water Service	8	EA	\$ 7,000	\$ 56,000
2" Recycled Water Service	3	EA	\$ 8,000	\$ 24,000
4" Recycled Water Service	2	EA	\$ 16,000	\$ 32,000
Connect Existing Irrigation Service to Recycled Water Pipeline	2	EA	\$ 5,000	\$ 10,000
6-inch Gate Valve	6	EA	\$ 7,500	\$ 45,000
2" Combination Air Valve	4	EA	\$ 6,800	\$ 27,200
2" Manual Air Release Assembly (Non-Traffic)	4	EA	\$ 4,000	\$ 16,000
2" Manual Air Release Assembly (Traffic)	1	EA	\$ 5,000	\$ 5,000
2" Blow-Off Assembly	6	EA	\$ 5,000	\$ 30,000
2" Blow-Off Assembly (Traffic)	1	EA	\$ 6,000	\$ 6,000
Grind and Install 1.5" AC Overlay	250	TON	\$ 250	\$ 62,500
Demobilization/Remobilization	3	MONTHS	\$ 12,000	\$ 36,000
Pipeline Connection - STA 13+39.89	1	LS	\$ 15,000	\$ 15,000
Subtotal				\$ 2,506,280
Contingency (15%)				\$ 375,942
Total (rounded)				\$ 2,882,300



Municipal Water District

PLANS FOR THE MANCHESTER AVENUE AND S. EL CAMINO REAL RECYCLED WATER PIPELINES



VICINITY MAP
NO SCALE

W.O. D120040
JANUARY 2021

Olivenhain Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92024
(760)753-6466

BOARD OF DIRECTORS

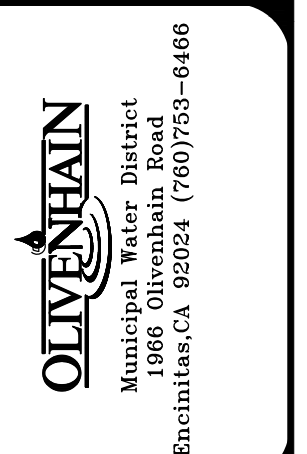
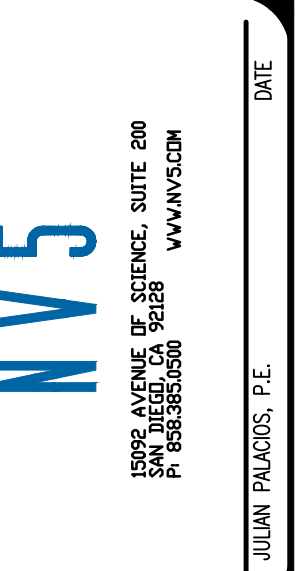
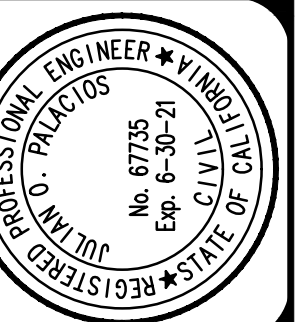
LAWRENCE A. WATT, PRESIDENT
KRISTIE BRUCE-LANE, VICE PRESIDENT
CHRISTY GUERIN, TREASURER
EDMUND K. SPRAGUE, SECRETARY
ROBERT F. TOPOLOVAC, DIRECTOR

SHEET INDEX

<u>Sheet</u>	<u>DWG.</u>	<u>SHEET TITLE</u>
<u>NO.</u>	<u>NO.</u>	
<u>GENERAL</u>		
1	G-01	TITLE SHEET
2	G-02	GENERAL NOTES
3	G-03	GENERAL NOTES, LEGEND AND ABBREVIATIONS
4	G-04	REDUCED PROFILE AND KEY MAP
<u>CIVIL</u>		
5	C-01	STA 10+07.36 - 18+00 PLAN AND PROFILE
6	C-02	STA 18+00 - 28+00 PLAN AND PROFILE
7	C-03	STA 28+00 - 38+00 PLAN AND PROFILE
8	C-04	STA 38+00 - 48+00 PLAN AND PROFILE
9	C-05	STA 48+00 - 57+10 PLAN AND PROFILE
10	C-06	STA 57+10 - 66+00 PLAN AND PROFILE
11	C-07	STA 66+00 - 76+00 PLAN AND PROFILE
12	C-08	STA 76+00 - 83+60 PLAN AND PROFILE
13	C-09	CIVIL DETAILS
<u>TRAFFIC CONTROL</u>		
14	TC-01	LEGENDS AND SPACING TABLES
15	TC-02	TRAFFIC CONTROL - PHASE 1
16	TC-03	TRAFFIC CONTROL - PHASE 2
17	TC-04	TRAFFIC CONTROL - PHASE 3
18	TC-05	TRAFFIC CONTROL - PHASE 4
19	TC-06	TRAFFIC CONTROL - PHASE 5
20	TC-07	TRAFFIC CONTROL - PHASE 6
21	TC-08	TRAFFIC CONTROL - PHASE 7

ZONING

ZONES: RR-2; RR-1; ER/OS/PK
OVERLAY ZONES: COSTAL APPEAL OVERLAY ZONE; CULTURAL/NATURAL
RESOURCES OVERLAY ZONE; SCENIC/VISUAL CORRIDOR OVERLAY ZONE

[illegible]

MANCHESTER AVENUE AND S. EL CAMINO
REAL RECYCLED WATER PIPELINES

FILE SHEET

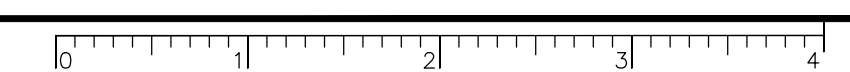
PRELIMINARY - NOT FOR CONSTRUCTION

DATE: 1/19/2021 10:35 AM
DWG: N:\226818-0000436\CADD\CIVIL\G-01.DWG

ENGINEERING MANAGER

DATE _____

ORIGINAL SCALE IN INCHES



SHEET 1 / 21 OF SHEETS	G-01
W.O. D120040	

W.O. D120040

1. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE DISTRICT AND NV5 INC., ITS EMPLOYEES, OFFICERS, AND AGENTS, 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.
2. THE CONTRACTOR ACKNOWLEDGES RESPONSIBILITY FOR JOB SITE SAFETY AND ACKNOWLEDGES THAT NEITHER THE DISTRICT NOR THE ENGINEER WILL HAVE ANY SUCH RESPONSIBILITY. TO THE FULLEST EXTENT PERMITTED BY LAW, THE CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS DISTRICT, ENGINEER, THEIR PRESENT COMPANIES, SUBSIDIARIES, AGENTS, AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING BUT NOT LIMITED TO ATTORNEY FEES AND CLAIM COSTS, ARISING OUT OF OR RESULTING FROM PERFORMANCE OF WORK BY THE CONTRACTOR, ITS SUBCONTRACTORS, OR THEIR AGENTS AND EMPLOYEES WHICH RESULTS IN DAMAGE TO PERSONS OR PROPERTY INCLUDING WRONGFUL DEATH REGARDLESS OF WHETHER OR NOT SUCH CLAIM, DAMAGE, LOSS, OR EXPENSE IS CAUSED IN WHOLE OR IN PART BY THE NEGLIGENCE, ACTIVE OR PASSIVE, OF THE DISTRICT, THE ENGINEER, THEIR PARENT AND SUBSIDIARY COMPANIES, AS WELL AS THEIR AGENTS AND EMPLOYEES, EXCEPTING ONLY THE SOLE NEGLIGENCE OF THE DISTRICT, THE ENGINEER, THEIR PARENT OR SUBSIDIARY COMPANIES AND THEIR AGENTS AND EMPLOYEES.

4. ALL EXISTING UTILITIES INDICATED ON THE DRAWINGS ARE SHOWN DIAGRAMMATICALLY AND ARE BASED ON AS-BUILT DRAWINGS AND THE ORIGINAL CONSTRUCTION DRAWINGS. THE CONTRACTOR SHALL POTHOLE AND VERIFY THE SIZE, MATERIAL, HORIZONTAL & VERTICAL LOCATION, BEARING, AND INCLINATION OF ALL EXISTING UTILITIES AT LEAST ONE WEEK PRIOR TO ANY DEMOLITION WORK OR INSTALLATION OF NEW WORK. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES AT THE WORK SITE.

6. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES REQUIRED TO PROTECT ADJACENT PROPERTIES 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.

8. CONTRACTOR SHALL SUBMIT FOR APPROVAL PRIOR TO MOBILIZATION, LOCATION AND GENERAL ARRANGEMENT OF STAGING AREA. NO MODIFICATIONS SHALL BE MADE TO CONTRACTOR'S STAGING AREA WITHOUT DISTRICT APPROVAL. ANY MODIFICATION OR NEGLIGENT ACTS MADE TO THE STAGING AREA PRIOR TO DISTRICT APPROVAL SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

1. CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE AND THE CITY OF ENCINITAS FIRE DEPARTMENT, FIRE PREVENTION AT 760-633-2821 AT LEAST 72 HOURS IN ADVANCE OF ANY STREET CLOSURES, OR POTABLE WATERLINE SHUTDOWNS. CONTRACTOR SHALL CONTACT COUNTY OF SAN DIEGO SHERIFF'S DEPARTMENT, ENCINITAS STATION AT 760-966-3500 AT LEAST 72 HOURS IN ADVANCE OF ANY STREET CLOSURES OR DETOURS.

- FOR ANY TREE OR TREE CLUSTER, THAT IS NOT SPECIFICALLY DESIGNATED FOR PROTECTION OR REMOVAL ON THE DRAWINGS, THE CONTRACTOR MAY CHOOSE TO EITHER PROTECT THE TREE, OR TREE CLUSTER, IN PLACE, OR THE CONTRACTOR MAY REQUEST TO REMOVE THE TREE AND REIMBURSE OMWD FOR THE TOTAL COST OF PROVIDING AND PLANTING A TREE OF COMPARABLE SPECIES AND SIZE AT A LOCATION DESIGNATED BY OMWD WITHIN THE CITY OF ENCINITAS. THE DECISION TO ALLOW THE REMOVAL OF A TREE, OR CLUSTER OF TREES, WITH NO PARTICULAR DESIGNATION WILL BE MADE BY THE DISTRICT AT THE DISTRICT'S SOLE DISCRETION.

- TREES LOCATED WITHIN CITY STREET RIGHT-OF-WAY, ON CITY PROPERTY, OR WITHIN CITY EASEMENTS ARE REFERRED TO AS CITY TREES AND SHALL BE PROTECTED IN PLACE DURING CONSTRUCTION UNLESS SPECIFICALLY APPROVED OTHERWISE. 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 A TREE TO THE OUTERMOST EDGE OF THE TREE CANOPY PROJECTION ON THE GROUND). IF A CITY TREE IS NOT CLEARLY LABELED TO BE REMOVED, IT MUST BE PROTECTED IN PLACE. PROPOSED SERVICES AND APPURTENANCES SHALL NOT BE CONSTRUCTED WITHIN THE DRIP LINE OF CITY TREES.

- ANY TREE DESIGNATED FOR PROTECTION IN PLACE SHALL BE PROTECTED IN ACCORDANCE WITH CITY OF ENCINITAS URBAN FOREST MANAGEMENT PLAN, ADMINISTRATIVE MANUAL PROCEDURES, DATED FEBRUARY 28, 2012, AND AS REQUIRED BY THE DISTRICT REPRESENTATIVE AND CITY OF ENCINITAS ARBORIST. TREE PROTECTION SHALL INCLUDE, BUT IS NOT LIMITED TO, NOT CUTTING ANY ROOT GREATER THAN 2 INCHES IN DIAMETER AND HAND-DIGGING AROUND THE TREE ROOTS.

- ANY TREE DESIGNATED TO BE PROTECTED IN PLACE 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.

4. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING TRAFFIC SIGNAL CONDUIT OR WIRING IMMEDIATELY AT NO COST TO THE DISTRICT OR THE CITY OF ENCINITAS.

6. ANY DAMAGE TO EXISTING PAVEMENT OR RESURFACING FAILURES NOTICED BY THE CITY OF ENCINITAS SHALL BE REPAIRED BY CONTRACTOR WITHIN 30 DAYS AT NO COST TO THE CITY. REPAIR OF DAMAGED AREAS MAY NEED TO EXTEND BEYOND THE PHYSICAL LIMITS OF WORK.

CURBS, GUTTERS, CROSS GUTTERS AND SIDEWALKS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED FROM JOINT TO JOINT PER SAN DIEGO REGIONAL STANDARDS. TUNNELING BENEATH CONCRETE IMPROVEMENTS WILL NOT BE PERMITTED. SAWCUT AS DIRECTED BY THE ENGINEER IF NO EXISTING JOINTS EXISTS. ANY DECORATIVE CONCRETE PAVING OR FLATWORK, IF DAMAGED DURING CONSTRUCTION, SHALL BE REPLACED WITH LIKE KIND INCLUDING COLOR, PATTERN, AND TEXTURE. THE FOLLOWING STANDARDS SHALL APPLY TO THE WORK AND ARE NOT CONSIDERED TO BE ALL-INCLUSIVE OF THOSE PERTINENT TO THE WORK:

ITEM	DRAWING NO.
CURB AND GUTTER – COMBINED	G-2
CURB AND GUTTER – ROLLED	G-4A
CURB AND GUTTER – MEDIANS	G-6
SIDEWALK	G-7
SIDEWALK JOINT LOCATIONS	G-9
CONCRETE JOINT DETAILS	G-10
CONCRETE CURB, GUTTER, AND SIDEWALK AND PAVEMENT REMOVAL AND REPLACEMENT	G-11
CROSS GUTTER	G-12
MID-BLOCK CROSS GUTTER	G-13
CURB RAMP – TYPES A-1 AND B-1 (FOR EXISTING SIDEWALK)	G-28
TRUNCATED DOMES (BLACK)	G-30

7. STOP BAR STRIPING OR PAVEMENT MARKINGS DAMAGED BY CONSTRUCTION SHALL BE REMOVED IN THEIR ENTIRETY AND REPLACED WITH NEW THERMOPLASTIC STRIPING OR MARKINGS CONFORMING TO SECTION 84 OF THE CALTRANS STANDARD SPECIFICATIONS, 2010 EDITION, TO THE SATISFACTION OF THE CITY OF ENCINITAS.

8. A GEOTECHNICAL INSPECTOR WILL BE ENGAGED BY THE DISTRICT TO OBSERVE AND TEST THE EXCAVATION AND RECOMPACTION WORK.

9. THE CONTRACTOR SHALL BE RESPONSIBLE THAT ANY MONUMENT OR BENCH MARK WHICH IS DISTURBED OR DESTROYED SHALL BE RE-ESTABLISHED AND REPLACED BY A REGISTERED CIVIL ENGINEER OR A LICENSED LAND SURVEYOR AND A CORNER RECORD OR RECORD OF SURVEY SHALL BE FILED WITH THE COUNTY PRIOR TO ACCEPTANCE OF IMPROVEMENTS. ALL MONUMENTS WITHIN IMMEDIATE VICINITY OF WORK SHALL BE RAISED TO GRADE IF NECESSARY.

<u>AGENCY</u>	<u>PHONE NUMBER</u>
OLIVENHAIN MUNICIPAL WATER DISTRICT 1966 OLIVENHAIN ROAD ENCINITAS, CA 92024	760-753-6466
SAN ELIJO JOINT POWERS AUTHORITY 2695 MANCHESTER AVENUE CARDIFF BY THE SEA, CA 92007	760-753-6203
SAN DIEGUITO WATER DISTRICT 160 CALLE MAGDALENA ENCINITAS, CA 92024	760-633-2810
CITY OF ENCINITAS 505 S. VULCAN AVE. ENCINITAS, CA 92024	760-633-2850
AT&T	858-886-2864
SAN DIEGO GAS AND ELECTRIC (SDG&E)	800-411-7343
COX COMMUNICATIONS	619-262-1122
CHARTER COMMUNICATIONS	858-805-7184
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA (DIGALERT)	8-1-1

1. PIPELINES SHALL BE CONSTRUCTED WITH A MINIMUM 4.0 FOOT COVER. ALL CHANGES IN DIRECTION, VERTICAL OR HORIZONTAL, SHALL BE ACCOMPLISHED USING DUCTILE IRON FITTINGS PER OMWD STANDARD SPECIFICATIONS.
2. UNLESS OTHERWISE NOTED ON THE PLANS PROVIDED THRUST BLOCKS AT ALL FITTINGS AND CHANGES IN DIRECTION, VERTICAL OR HORIZONTAL, PER OMWD STANDARD DRAWINGS. MAXIMUM LINE PRESSURE SHALL EQUAL 200 PSI. NO THRUST BLOCKS SHALL BE USED TO OFFSET VERTICAL UPRHURST.
3. THE CONTRACTOR MAY INSTALL RESTRAINED JOINTS PER OMWD STANDARD SPECIFICATIONS IN AREAS SHOWN OR WHERE THRUST BLOCK CONSTRUCTION IS NOT PRACTICAL DUE TO ADJACENT UTILITIES OR OTHER CONSTRAINTS. SUBMIT PROPOSED JOINT RESTRAINT PRODUCT METHOD TO ENGINEER FOR REVIEW AND APPROVAL. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR RESTRAINED JOINT USE. ALL RESTRAINED JOINTS SHALL BE WAX TAPE WRAPPED IN ACCORDANCE WITH OMWD STANDARD SPECIFICATIONS.
4. CONTRACTOR SHALL REMOVE ANY ABANDONED PIPE IN CONFLICT WITH THE PROPOSED PIPELINE OR WITHIN PIPE TRENCH WIDTH. ALL SECTIONS OF ABANDONED PIPE SHALL BE SEALED BY EITHER WELDING A CAP, FASTENING A WATERTIGHT CAP ON EACH END OF THE PIPE, OR COMPLETELY FILLING THE ABANDONED PIPE WITH CONCRETE SLURRY.
5. CONTRACTOR SHALL LOCATE THE EXISTING PIPELINES AND CONFIRM THE CONNECTION LOCATIONS PRIOR TO ORDERING THE MATERIALS. THE CONTRACTOR SHALL CUT AND REPLACE ANY DAMAGED PIPE WITH NEW PIPE AT ALL CONNECTION LOCATIONS.
6. CONTRACTOR SHALL NOT USE PIPE LENGTHS LESS THAN 6 FEET WITHOUT WRITTEN PERMISSION FROM THE DISTRICT.
7. RECYCLED WATER SERVICES SHALL MAINTAIN A CONTINUOUS MAXIMUM 2.0% UPWARD SLOPE FROM CORPORATION STOP TO METER STOP.
8. PIPELINES INSTALLED ALONG A CURVE SHALL UTILIZE DEFLECTION COUPLINGS TO DEFLECT THE PIPELINE STARTING BEFORE OR AT THE BEGINNING OF THE CURVE AND ENDING AT OR BEYOND THE END OF THE CURVE. MAXIMUM DEFLECTION AT EACH DEFLECTION COUPLING SHALL BE 4 DEGREES.

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

1. THE RECYCLED WATER SYSTEM SHALL CONFORM TO THE RULES AND REGULATIONS FOR RECLAIMED AND NONPOTABLE WATER SERVICE OF THE OLIVENHAIN MUNICIPAL WATER DISTRICT, ORDINANCE NO. 175, DATED MARCH 1989, AND ALL SUBSEQUENT AMENDMENTS.
2. RECYCLED 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 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 OMWD STANDARD SPECIFICATIONS ON THE JOB SITE AT ALL TIMES.
3. THE SUBMISSION AND REVIEW OF ALL SUBMITTALS (SHOP DRAWINGS, SIX SETS) AS REQUIRED BY THE OMWD STANDARD SPECIFICATIONS ARE TO BE ACCOMPLISHED PRIOR TO THE PRE-CONSTRUCTION MEETING WITH THE DISTRICT'S INSPECTOR.
4. 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.
5. 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.
6. 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.
7. 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.
8. THE CONTRACTOR MUST CALL "UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA" TO HAVE UNDERGROUND SERVICE UTILITIES LOCATED PRIOR TO CONSTRUCTION. THIS CALL WILL BE MADE AT LEAST 48 HOURS IN ADVANCE PRIOR TO ANY WORK BEING PERFORMED IN PUBLIC RIGHT-OF-WAY.
9. ALL EXISTING FACILITIES WHICH MAY AFFECT FINAL CONSTRUCTION, I.E., LINE CROSSINGS, LINE PARALLELING, OR PROPOSED CONNECTIONS SHALL BE FIELD VERIFIED.
10. THE CONTRACTOR SHALL FURNISH AND INSTALL PER THE OMWD STANDARD SPECIFICATIONS THE APPROPRIATE BURIED UTILITY WARNING AND IDENTIFICATION TAPE ABOVE ALL PUBLIC RECYCLED WATER LINES INCLUDING RECYCLED WATER LATERALS LOCATED IN PUBLIC RIGHT-OF-WAY.
11. RECYCLED WATER MAIN SHALL BE PURPLE PVC PIPE AWWA C-900, WITH TWO CONTINUOUS METALLIC TAPE STRIPS, STAMPED "RECYCLED WATER." STRIPS SHALL BE SET AT TOP OF PIPE AND AT 24" ABOVE THE PIPE.
12. WHERE ELEVATIONS AND GRADES ARE NOT SHOWN ON THE WATER MAIN PROFILE, TOP OF PIPE PROFILE IS 66-INCHES BELOW CENTERLINE OF FINISH GRADE OF STREET.
13. ALL DEFLECTIONS (HORIZONTAL AND VERTICAL) SHALL BE MADE BY USE OF JOINT COUPLINGS WITH 4" MAXIMUM DEFLECTION PER COUPLING (2" PER JOINT). NO BENDING (CURVING) OF PIPE SHALL BE PERMITTED.
14. AIR RELEASES SHALL BE INSTALLED AT ALL HIGH POINTS AND BLOW-OFFS AT ALL LOW POINTS IN THE WATER MAIN PROFILE. AIR RELEASES AND BLOW-OFFS SHALL BE LOCATED BEHIND CURB UNLESS OTHERWISE APPROVED BY DISTRICT'S REPRESENTATIVE.
15. INSTALL RECYCLED WATER SERVICE(S) IN ACCORDANCE WITH SIZE(S) DEFINED ON THE DRAWINGS. LOCATIONS OF RECYCLED WATER METERS ARE SUBJECT TO APPROVAL BY DISTRICT'S INSPECTOR. 3/4-INCH HIGH LETTERS "RW" SHALL BE CHISELED IN TOP OF EXISTING CURB OR IMPRINTED IN NEW CURB AT ALL RECYCLED WATER SERVICE CROSSINGS.
16. METER BOXES SHALL NOT BE PLACED WITHIN DRIVEWAYS OR SIDEWALKS WITHOUT THE DISTRICT'S PRIOR WRITTEN CONSENT.
17. CONTRACTOR TO TIE OFF ALL VALVE LOCATIONS AND PROVIDE WRITTEN DIMENSIONS TO INSPECTOR IMMEDIATELY UPON INSTALLATION OF VALVES.
18. LINE VALVES, WHERE REQUIRED AT STREET INTERSECTIONS SHALL BE LOCATED AT THE TEE WHENEVER POSSIBLE.
19. ALL DESIGN CHANGES TO THE RECYCLED WATER SYSTEM SHALL BE APPROVED BY THE DISTRICT REPRESENTATIVE IN WRITING PRIOR TO CONSTRUCTION AND ACCEPTANCE OF THE CHANGE.
20. THE RECYCLED 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.
21. 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.
22. CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF TWO (2) YEARS AFTER THE DATE OF ACCEPTANCE FOR THE PROJECT. 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 TWO-YEAR PERIOD FROM THE DATE OF ACCEPTANCE WITHOUT EXPENSE WHATSOEVER TO THE DISTRICT, ORDINARY WEAR AND TEAR, UNUSUAL ABUSE OR NEGLIGENCE EXCEPTED.
23. ALL BURIED METAL FITTINGS AND VALVES SHALL BE WAX TAPE WRAPPED IN ACCORDANCE WITH OMWD STANDARD SPECIFICATIONS.
24. ALL IRRIGATION METERS SHALL BE SERVED WITH RECYCLED WATER UNLESS PREVIOUSLY APPROVED IN WRITING BY THE DISTRICT.

<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p style="margin: 0;">MANCHESTER AVENUE AND S. EL CAMINO</p> <p style="margin: 0;">REAL RECYCLED WATER PIPELINES</p> </div> <div style="width: 50%; text-align: center;"> <p style="margin: 0; font-size: 24pt;">GENERAL NOTES</p> </div> </div>	
SHEET <div style="display: flex; align-items: center; justify-content: center;"> <div style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px; margin: 0 5px;">2</div> <div style="font-size: 24pt; margin: 0 5px;">/</div> <div style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px; margin: 0 5px;">21</div> </div> OF SHEETS	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 45%;"> <p style="margin: 0;">W.O. D120040</p> </div> <div style="width: 50%; text-align: center;"> <p style="margin: 0; font-size: 24pt;">G-02</p> </div> </div>

WORK TO BE DONE

THE WORK INCLUDES BUT IS NOT NECESSARILY LIMITED TO THE FOLLOWING:

THE WORK TO BE DONE SHALL INCLUDE INSTALLATION OF APPROXIMATELY 7,353 LINEAR FEET OF 6-INCH PVC C-900 DR-14/DR-18 RECYCLED WATER PIPE, AND INSTALLATION OF VALVES, FITTINGS, SERVICES, AND ALL OTHER APPURTENANCES AS SHOWN ON THE PLANS.

STANDARD SPECIFICATIONS AND DRAWINGS

OLIVENHAIN MUNICIPAL WATER DISTRICT STANDARD SPECIFICATIONS AND DRAWINGS FOR THE CONSTRUCTION OF WATER, RECYCLED WATER AND SEWER FACILITIES, LATEST EDITION.

STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.

CONTRACT SPECIFICATIONS

SPECIFICATIONS ENTITLED "OLIVENHAIN MWD MANCHESTER AVENUE RECYCLED WATER PIPELINE"

PREPARED BY: NV5 INC.
15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
CONTACT: JULIAN PALACIOS, P.E.

ACCESS

THE ACCESS ROUTES INGRESSING AND EGRESSING THE SITE SHALL BE LIMITED TO THE FOLLOWING DEFINED ROUTES TO MINIMIZE IMPACTS TO THE EXISTING RESIDENTIAL NEIGHBORHOODS:

1. ACCESS FROM INTERSTATE 5 IN ENCINITAS TO MANCHESTER AVE./ EL CAMINO REAL TO SANTA FE DRIVE.

THE CONTRACTOR SHALL ENSURE THAT ALL OPERATIONS ARE COMPLIANT WITH LOCAL ORDINANCES AND TRAFFIC REGULATIONS WITH RESPECT TO TRAFFIC AND HAULING ON LOCAL ROADWAYS.

LEGEND

1	ALIGNMENT DATA
A	NOTE CALLOUT
13+00	PROPOSED RECYCLED WATER PIPELINE
○	COMBINATION AIR VALVE
●	PROPOSED BLOW-OFF ASSEMBLY
⊗	PROPOSED GATE VALVE
RW	PROPOSED RECYCLED WATER SERVICE
⊗	EXIST. FIRE HYDRANT
WV ⊗	EXIST. WATER VALVE
WM	EXIST. WATER METER
⊙	EXIST. SEWER MANHOLE
⓪	EXIST. STORM DRAIN MANHOLE
Ⓣ	EXIST. TELCO. MANHOLE
●	EXIST. STREET LIGHT
T	EXIST. TELCO. LINE
TV	
E	EXIST. ELECTRICAL CONDUIT
G	EXIST. GAS LINE
W	EXIST. WATER LINE
W	ABANDONED WATER LINE
SS	EXIST. SANITARY SEWER
SD	EXIST. STORM DRAIN
OE	EXIST. OVERHEAD ELECTRIC
- - -	RIGHT-OF-WAY LINE
- - - - -	EASEMENT
- - - - -	PROPERTY LINE

CONSTRUCTION NOTES

- A INSTALL 6" PVC C900 RECYCLED WATER PIPE. TRENCH BACKFILL AND RESURFACING PER CITY OF ENCINITAS UTILITY TRENCH BACKFILL AND RESURFACING STANDARD DRAWING AND OMWD STD. SPEC. 02223.
- B INSTALL 2" COMB. AIR VALVE ASSEMBLY PER OMWD STD. DRAWING A-3.2.
- C INSTALL 2" BLOW-OFF ASSEMBLY (NON-TRAFFIC) PER OMWD STD. DRAWING A-1.1.
- D INSTALL 6" GATE VALVE PER OMWD STD. DRAWING D-2.4.
- E INSTALL 1" RECYCLED WATER SERVICE PER OMWD STD. DRAWING B-1.5.
- F INSTALL 2" RECYCLED WATER SERVICE PER OMWD STD. DRAWING B-1.5.
- G INSTALL 6" 45° DI BEND, MJxMJ, AND THRUST BLOCK PER OMWD STD. DRAWING D-3.5.
- H INSTALL 6" 22.5° DI BEND, MJxMJ, AND THRUST BLOCK PER OMWD STD. DRAWING D-3.5.
- I INSTALL 6" 11.25° DI BEND, MJxMJ, AND THRUST BLOCK PER OMWD STD. DRAWING D-3.5.
- J CONNECT TO EXIST. SEJPA RECYCLED WATER PIPE PER DETAIL 1, DWG C-09. CONTRACTOR SHALL TEST PIPING PRIOR TO FINAL CONNECTION PER OMWD SPECIFICATIONS.
- K CONNECT EXIST. IRRIGATION WATER METER TO NEW 6" PVC PER OMWD STD. DRAWING B-1.5. ABANDON EX. POTABLE WATER SERVICE PER DETAIL 2, DWG C-09.
- L INSTALL 4" RECYCLED WATER SERVICE PER OMWD STD. DRAWING B-1.3.
- M INSTALL END CAP AND THRUST BLOCK AT END OF PIPELINE PER OMWD STD. DRAWING D-3.4.
- N INSTALL 2" MANUAL AIR RELEASE ASSEMBLY (TRAFFIC) PER OMWD STD. DRAWING A-2.2.
- O INSTALL 2" BLOW-OFF ASSEMBLY (TRAFFIC) PER OMWD STD. DRAWING A-1.2.
- P INSTALL 3" RECYCLED WATER SERVICE PER OMWD STD. DRAWING B-1.3.
- R INSTALL 2" MANUAL AIR RELEASE ASSEMBLY (NON-TRAFFIC) PER OMWD STD. DRAWING A-2.1.
- S INSTALL 6" PVC C900 RECYCLED WATER PIPE WITH STABILIZED PIPE BEDDING PER DETAIL 3, DWG. C-09.

EXISTING UTILITIES - REFERENCE DRAWINGS

OMWD DRAWING SETS:

'MIRA COSTA COLLEGE WATER MAINS', SHOLDERS & SANFORD INC., MARCH 1986.

'LINE EXTENSION NO. 7'. BOYLE ENGINEERING, JULY 1962

'EL CAMINO REAL WIDENING - TRACT NO. 3960', CIVIL DESIGN GROUP, LTD., OCTOBER 1984.

'LUX CANYON DRAINAGE SYSTEM - TRACT NO. 3960', CIVIL DESIGN GROUP, LTD., OCTOBER 1984.

'10" & 8" PVC SEWER OUTFALL - TRACT NO. 3960', CIVIL DESIGN GROUP, LTD., OCTOBER 1984.

'8" PVC SEWER OUTFALL - TRACT NO. 3960', CIVIL DESIGN GROUP, LTD., OCTOBER 1984.

'12" ACP WATER MAIN IN MANCHESTER AVE.', KENNETH J. DISCENZA, JULY 1982.

CARDIFF SANITATION DISTRICT DRAWING SETS:

'ESCONDIDO OUTFALL AND OLIVENHAIN INTERCEPTOR SEWER', E.F. COOK & ASSOCIATES, JULY 1971

SAN DIEGO COUNTY DRAWING SETS:

'MIRA COSTA COLLEGE WATER MAINS', SAN DIEGO COUNTY WATER AUTHORITY, FEBRUARY 1958.

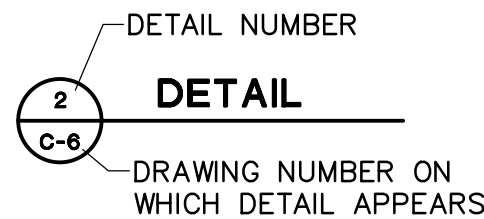
'EL CAMINO REAL (LUX CANYON)', COUNTY OF SAN DIEGO, FEBRUARY 1968

'PLANS FOR THE WIDENING OF MANCHESTER AVENUE FROM VIA POCO TO EL CAMINO REAL', NOLTE & ASSOCIATES, INC., APRIL 1999.

ABBREVIATIONS

AB	ASPHALT BASE	MAX	MINIMUM
ABAND.	ABANDONED	MIN	MAXIMUM
AC	ASPHALT CEMENT	MJ	MECHANICAL JOINT
ACP	ASBESTOS CEMENT PIPE	MRC	MAXIMUM RELATIVE COMPACTION
APN	ASSESSOR'S PARCEL NUMBER	MSL	MEAN SEA LEVEL
AR, ARV	AIR RELEASE VALVE	N	NORTHING
AVV	AIR VACUUM VALVE	NAD	NORTH AMERICAN DATUM
ASPH.	ASPHALT	NCTD	NORTH COUNTY TRANSIT DISTRICT
AWWA	AMERICAN WATER WORKS ASSOCIATION	NGVD	NATIONAL GEODETIC VERTICAL DATUM
		NTS	NOT TO SCALE
		NO, NO'S	NUMBER, NUMBERS
BO	BLOW-OFF	OC	ON CENTER
BOT	BOTTOM	OD	OUTSIDE DIAMETER
BVC	BEGINNING VERTICAL CURVE	OMWD	OLIVENHAIN MUNICIPAL WATER DISTRICT
		OVHD	OVERHEAD
CATV	CABLE TELEVISION	PC	POINT OF CURVATURE
CI	CAST IRON	PI	POINT OF INTERSECTION
CL	CENTER LINE	PIP	PROTECT IN PLACE
CL	CLASS	PROP.	PROPOSED
CMCL	CEMENT MORTAR LINED AND COATED	PSI	POUNDS PER SQUARE INCH
CMP	CORRUGATED METAL PIPE	PT	POINT OF TANGENCY
COMB.	COMBINATION	PVC	POLYVINYL CHLORIDE PIPE
CONC.	CONCRETE	PVI	POINT OF VERTICAL INTERSECTION
CP	CATHODIC PROTECTION		
CTS	CATHODIC TEST STATION	RCP	REINFORCED CONCRETE PIPE
		ROW	RIGHT-OF-WAY
		RT	RIGHT
		RW	RECYCLED WATER
DET.	DETAIL	S	SLOPE
DEFL.	DEFLECTION	SCH	SCHEDULE
DI	DUCTILE IRON	SD	SAN DIEGO, STORM DRAIN
DIA	DIAMETER	SDG&E	SAN DIEGO GAS & ELECTRIC
DIP	DUCTILE IRON PIPE	SDRSD	SAN DIEGO REGIONAL STANDARD DRAWINGS
DR	DIMENSION RATIO	SEJPA	SAN ELIJO JOINT POWERS AUTHORITY
DWG	DRAWING	SL	STREET LIGHT
		S.O.	SLIP ON
		SPEC(S)	SPECIFICATIONS
		STA	STATION
		STL	STEEL
		STD.	STANDARD
HB	HORIZONTAL BEND	TBD	TO BE DETERMINED
HDPE	HIGH DENSITY POLYETHYLENE	TELCO.	TELEPHONE/TELECOMMUNICATION
HGL	HYDRAULIC GRADE LINE	T.O.P.	TOP OF PIPE
HORIZ.	HORIZONTAL	TYP	TYPICAL
ID	INSIDE DIAMETER	VCP	VITRIFIED CLAY PIPE
IE	INVERT ELEVATION	VERT.	VERTICAL
IN	INCHES	VPI	VERTICAL POINT OF INTERSECTION
INSUL	INSULATED, INSULATING		
INV	INVERT		
		W/	WITH
LF	LINEAR FEET	WM	WATER METER
LT	LEFT	WV	WATER VALVE

DETAIL DESIGNATION



GEOTECHNICAL REPORT

GEOTECHNICAL INVESTIGATION "MANCHESTER AVENUE RECYCLED WATER PIPELINE, ENCINITAS, CA" DATED MAY 6, 2019.

PREPARED BY:
NV5 WEST, INC.
15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
(858) 385--0500

HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

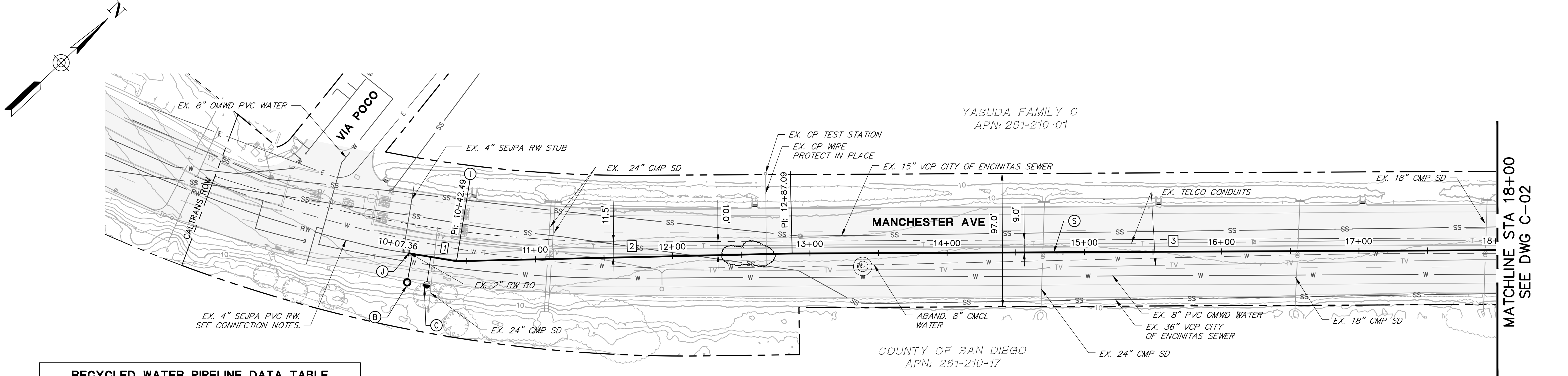
BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

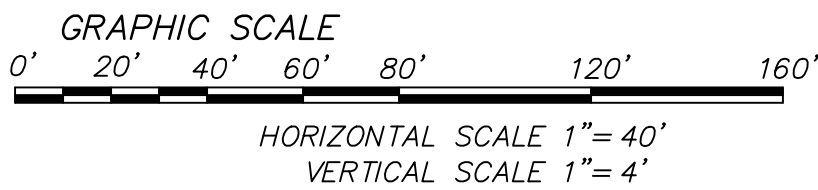
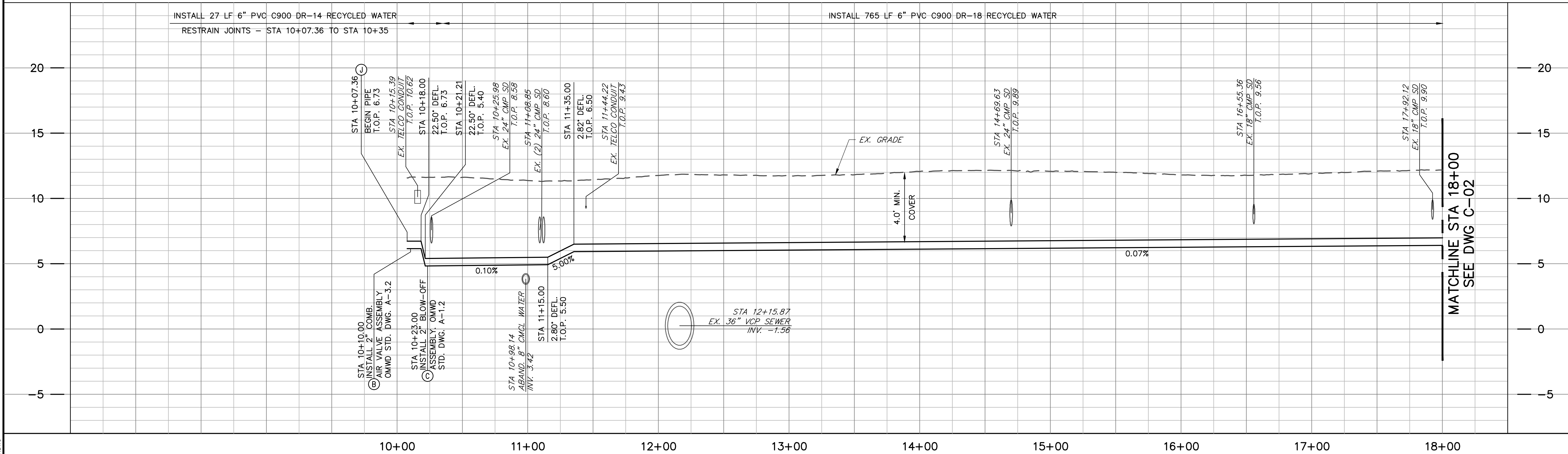
DATUM: NAVD88

DATE: 1/19/2021 10:36 AM
DWG: N:\226816-00004\6\CADD\CIVIL\C-01.DWG



RECYCLED WATER PIPELINE DATA TABLE					
NO	LENGTH	BEARING	RADIUS	DELTA	DESCRIPTION
1	35.12'	N52°52'49"E	-	-	6" PVC C900
2	244.60'	N42°10'41"E	-	-	6" PVC C900
3	701.12'	N43°13'35"E	-	-	6" PVC C900

- SEJPA RECYCLED WATER PIPELINE CONNECTION NOTES:**
- EX. 4" SEJPA PVC RECYCLED WATER PIPELINE MAY BE REPLACED BY CALTRANS WITH AN 8" PIPELINE PRIOR TO CONSTRUCTION OF THESE IMPROVEMENTS.
 - CONTRACTOR SHALL CONNECT TO PIPELINE DIAMETER WHICH EXISTS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CONFIRM PIPELINE DIAMETER/MATERIAL PRIOR TO CONSTRUCTION AND PRIOR TO STARTING WORK ON CONNECTION.



HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

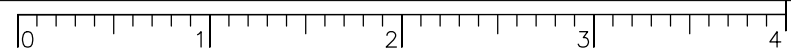
BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

DATUM: NAVD88

ORIGINAL SCALE IN INCHES



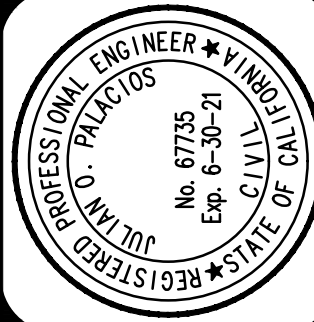
MANCHESTER AVENUE AND S. EL CAMINO
REAL RECYCLED WATER PIPELINES

STA 10+07.36 – 18+00
PLAN AND PROFILE

SHEET 5 OF 21
C-01
W.O. D120040

OLIVENHAIN
Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92024 (760) 753-6466

NV5
1999 AVENUE OF SCIENCE, SUITE 200
SAN JUAN CAPISTRANO, CA 92675
P. 949.865.6580
WWW.NV5.COM

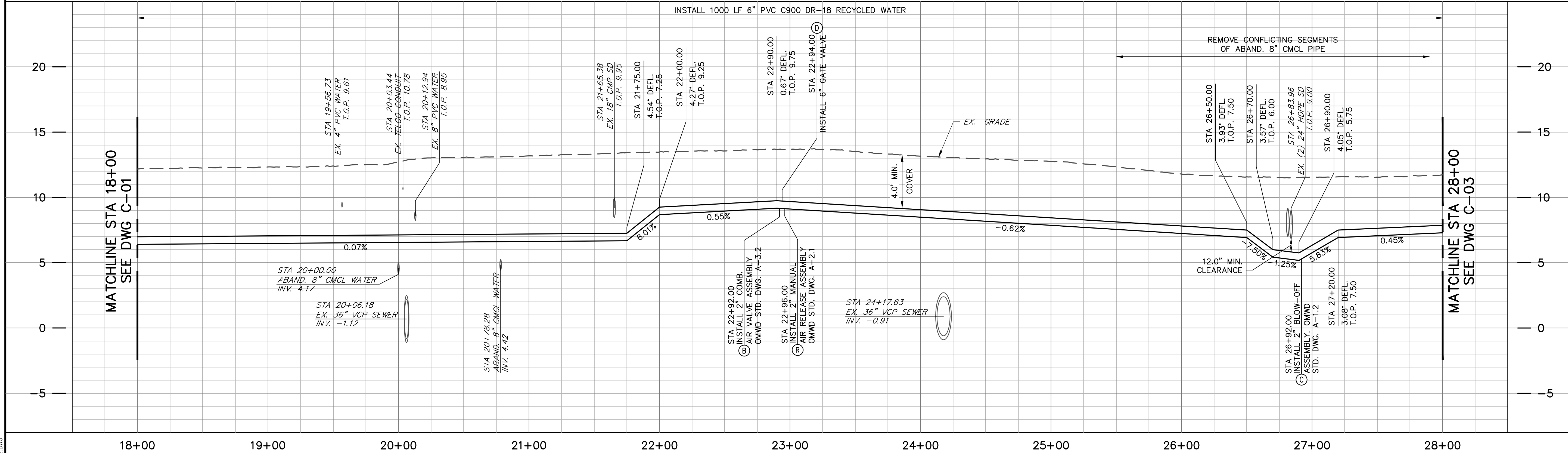
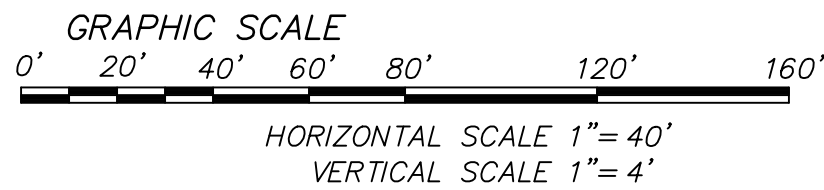


DESIGN	DRAWN	CHECK

MARK	DATE	BY	REVISIONS

PRELIMINARY - NOT FOR CONSTRUCTION

DATE: 1/19/2021 10:37 AM
DWG: N:\226818-000045\CA00\CIVIL\C-02.DWG



HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

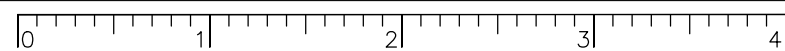
BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

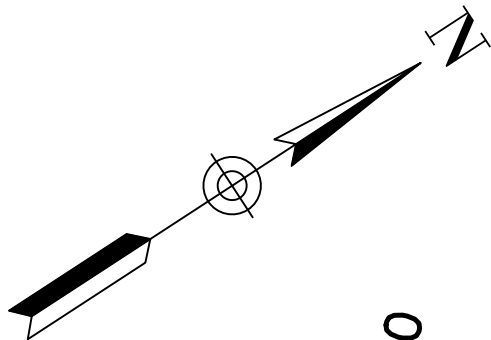
ELEVATION: 37.521

DATUM: NAVD88

ORIGINAL SCALE IN INCHES



RECYCLED WATER PIPELINE DATA TABLE					
NO	LENGTH	BEARING	RADIUS	DELTA	DESCRIPTION
3	701.12'	N43°13'35"E	-	-	6" PVC C900
4	35.36'	N88°13'35"E	-	-	6" PVC C900
5	201.14'	N43°13'35"E	-	-	6" PVC C900
6	264.59'	N31°07'05"E	626.00'	24°13'00"	6" PVC C900
7	139.58'	N19°00'35"E	-	-	6" PVC C900
8	243.09'	N30°25'34"E	610.00'	22°49'58"	6" PVC C900



MATCHLINE STA 18+00
SEE DWG C-01

MATCHLINE STA 28+00
SEE DWG C-03

MANCHESTER AVENUE AND S. EL CAMINO
REAL RECYCLED WATER PIPELINES

SHEET
6
OF SHEETS

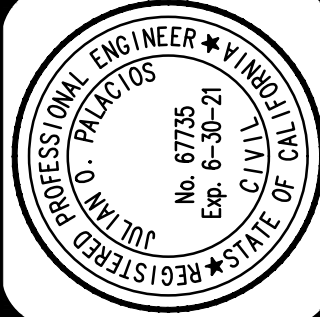
C-02

W.O. D120040

OLIVENHAIN
Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92024 (760) 753-6466

NV5
15909 AVENUE OF SCIENCE, SUITE 200
SAN JUAN CAPISTRANO, CA 92675
P. 949.865.6580
WWW.NV5.COM

JULIAN O. PALADIOS
No. 67735
Exp. 6-30-21
REGISTERED PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA

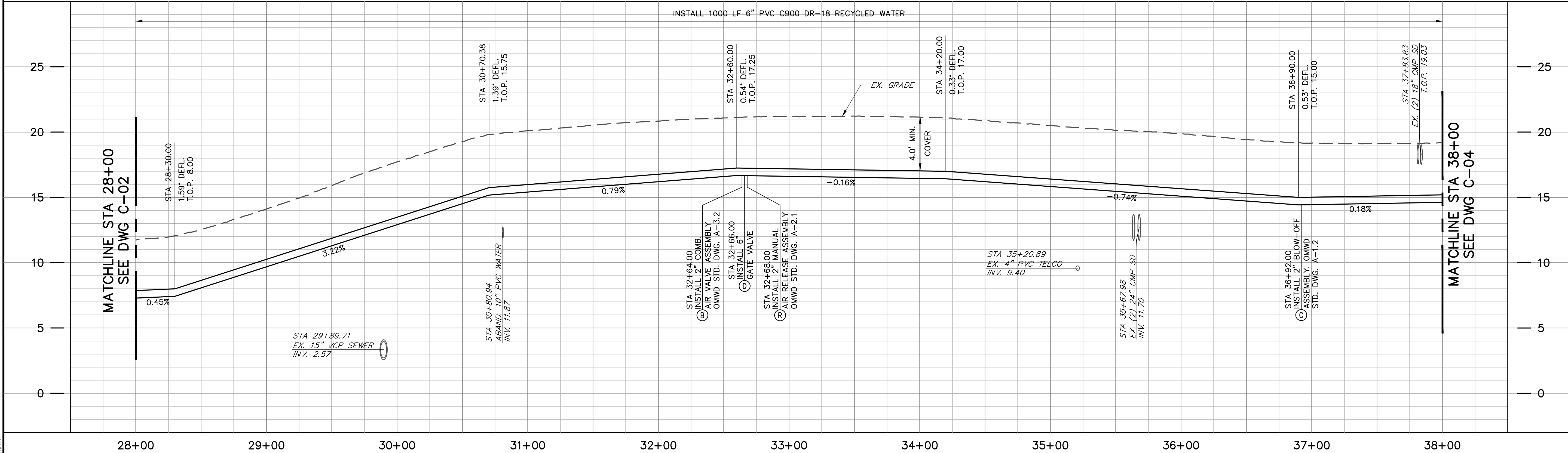
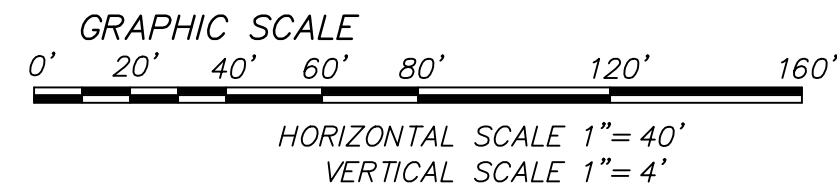


DESIGN	DRAWN	CHECK

MARK	DATE	BY	REVISIONS

PRELIMINARY - NOT FOR CONSTRUCTION

DATE: 1/19/2021 10:37 AM
DWG: N:\226816-000045\CADD\CIVIL\C-03.DWG



RECYCLED WATER PIPELINE DATA TABLE					
NO	LENGTH	BEARING	RADIUS	DELTA	DESCRIPTION
8	243.09'	N30°25'34"E	610.00'	22°49'58"	6" PVC C900
9	198.42'	N41°50'34"E	-	-	6" PVC C900
10	337.91'	N64°30'35"E	-	-	6" PVC C900
11	676.12'	N44°32'29"E	970.00'	39°56'14"	6" PVC C900

HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

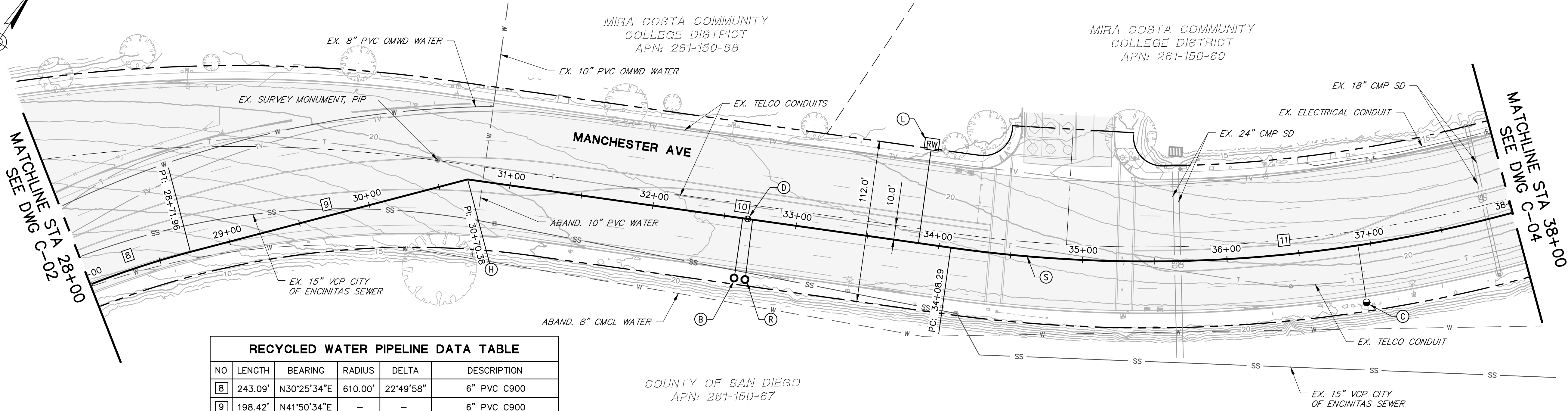
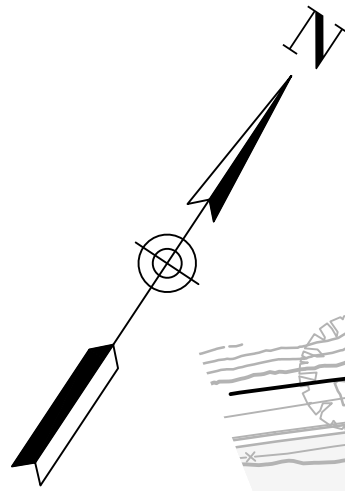
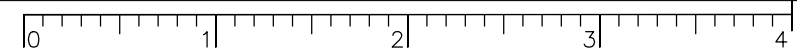
BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

DATUM: NAVD88

ORIGINAL SCALE IN INCHES



MANCHESTER AVENUE AND S. EL CAMINO
REAL RECYCLED WATER PIPELINES

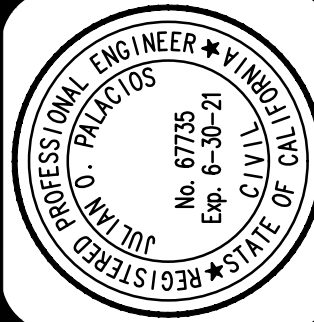
STA 28+00 - 38+00
PLAN AND PROFILE

SHEET
7
OF
21
C-03

W.O. D120040

OLIVENHAIN
Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92024 (760) 753-6466

NV5
1909 AVENUE OF SCIENCE, SUITE 200
SAN JUAN CAPITAN, CA 92078
P. 858-865000
WWW.NV5.COM

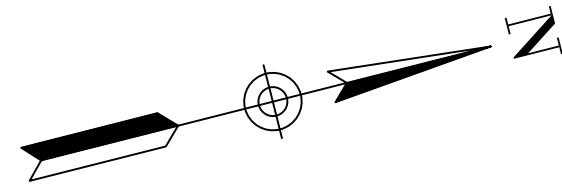


DESIGN	DRAWN	CHECK

MARK	DATE	BY	REVISIONS

PRELIMINARY - NOT FOR CONSTRUCTION

DATE: 1/19/2021 10:38 AM
DWG: N:\226816-00004\5\CA00\CIVIL\C-04.DWG



MATCHLINE STA 38+00
SEE DWG C-03

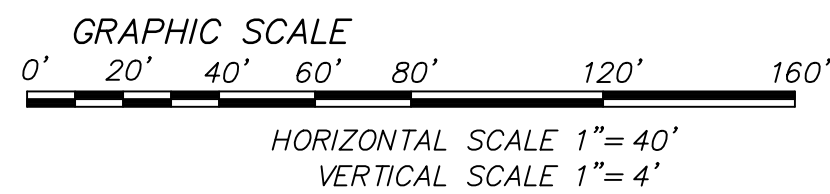
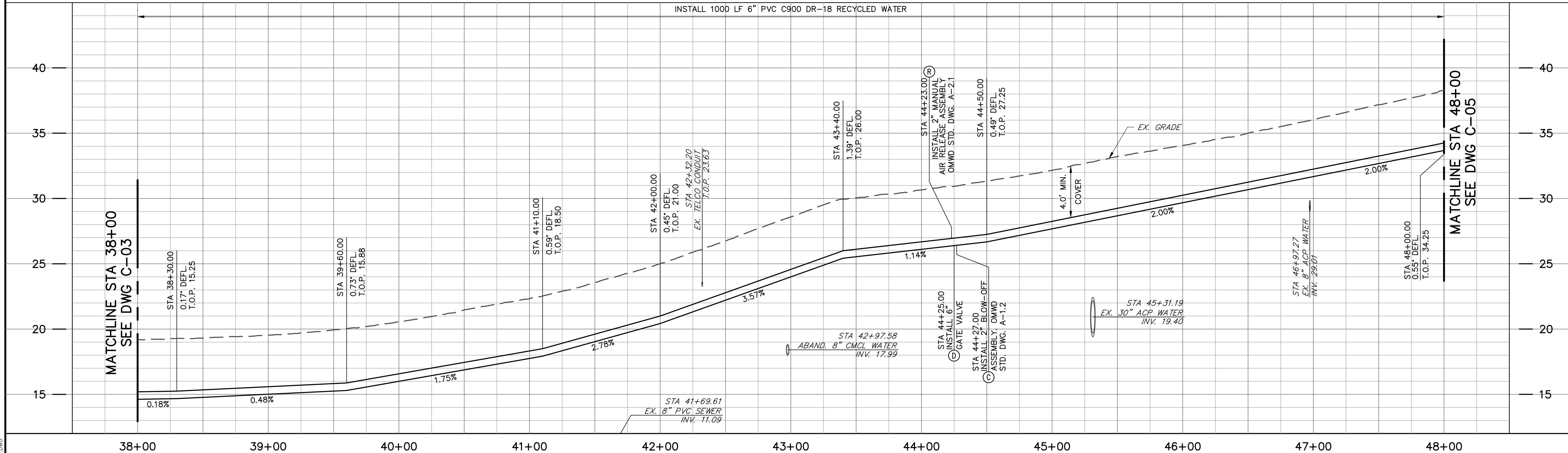
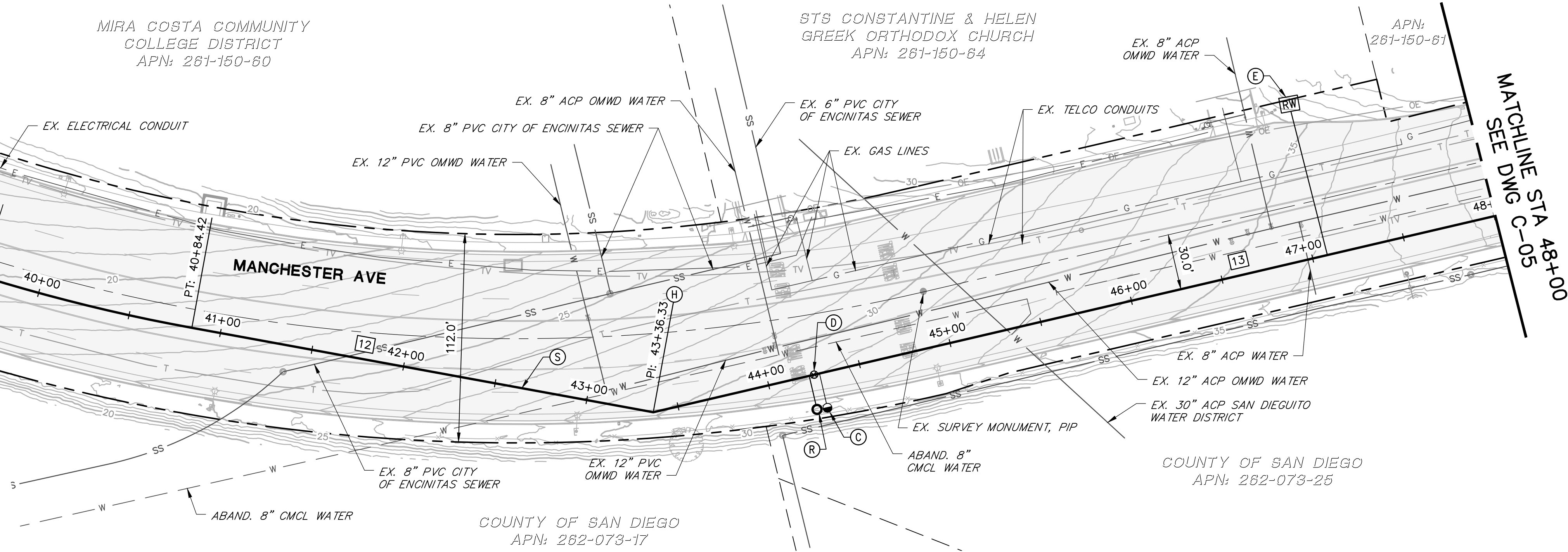
MIRA COSTA COMMUNITY
COLLEGE DISTRICT
APN: 261-150-60

ST'S CONSTANTINE & HELEN
GREEK ORTHODOX CHURCH
APN: 261-150-84

APN:
261-150-61

MATCHLINE STA 48+00
SEE DWG C-05

RECYCLED WATER PIPELINE DATA TABLE					
NO	LENGTH	BEARING	RADIUS	DELTA	DESCRIPTION
11	676.12'	N44°32'29"E	970.00'	39°56'14"	6" PVC C900
12	251.91'	N24°34'22"E	-	-	6" PVC C900
13	702.94'	N01°04'24"E	-	-	6" PVC C900



HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

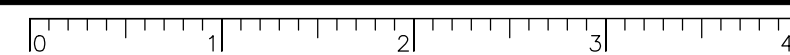
BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

DATUM: NAVD88

ORIGINAL SCALE IN INCHES

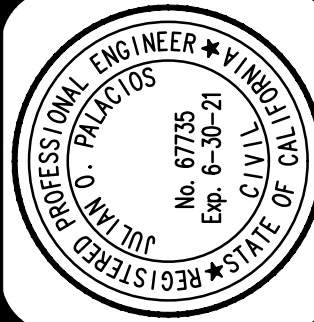


MANCHESTER AVENUE AND S. EL CAMINO
REAL RECYCLED WATER PIPELINES

STA 38+00 - 48+00
PLAN AND PROFILE

OLIVENHAIN
Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92024 (760) 753-6466

NV5
1999 AVENUE OF SCIENCE, SUITE 200
SAN JUAN CAPISTRANO, CA 92675
P 951-365-5500
WWW.NV5.COM

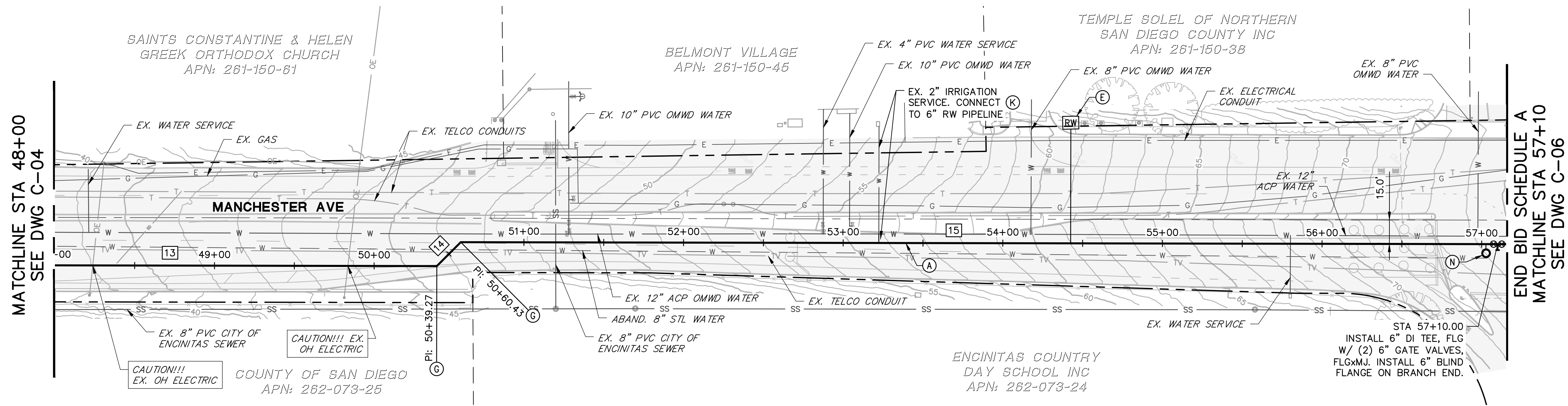


DESIGN	DRAWN	CHECK

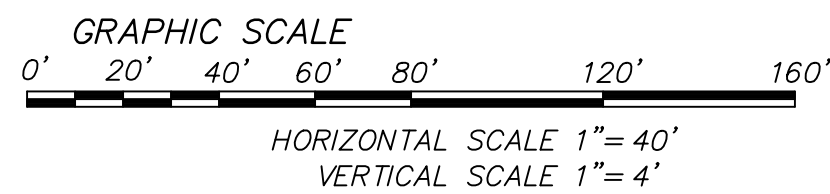
MARK	DATE	BY	REVISIONS

SHEET
8
OF
21
C-04
W.O. D120040

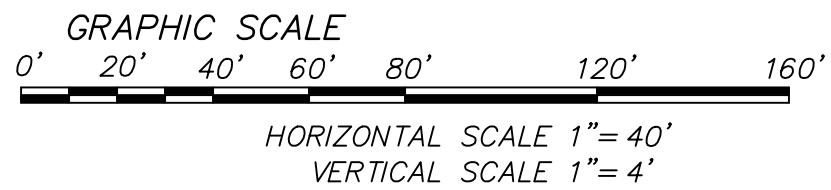
PRELIMINARY - NOT FOR CONSTRUCTION



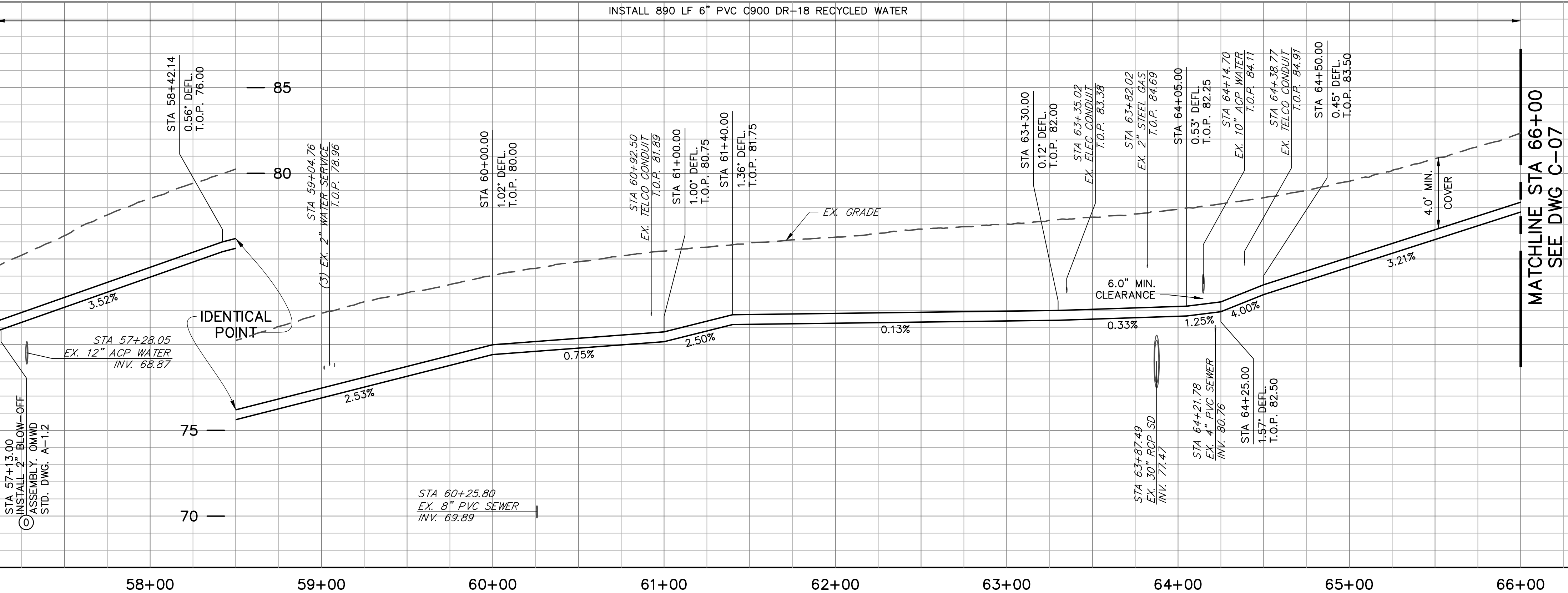
DWG: N:\226818-0000436\CADD\CIVIL\C-05.DWG



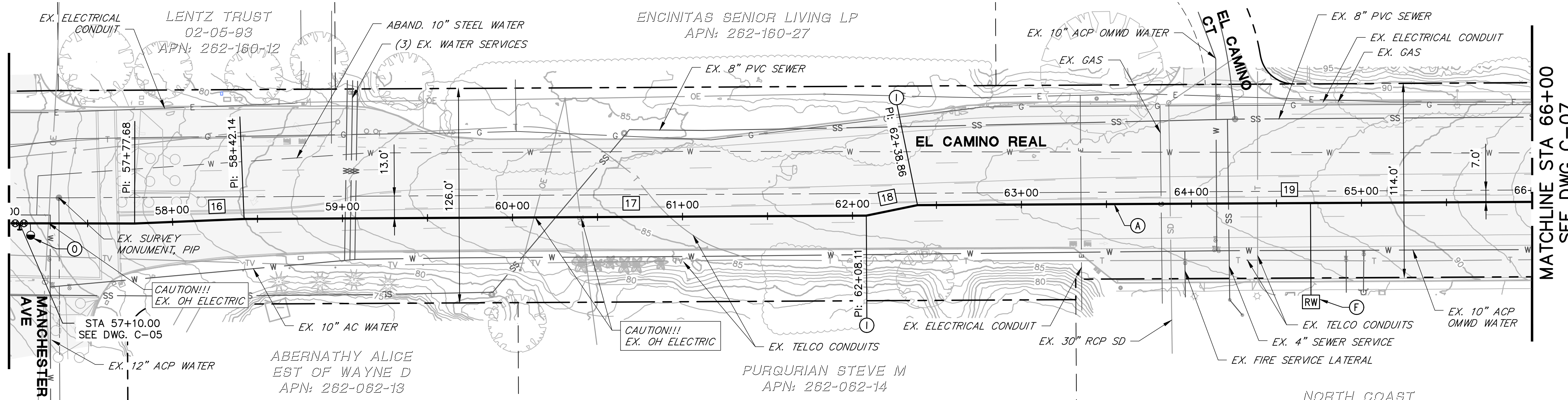
DATE: 1/19/2021 10:40 AM
DWG: N:\226816-00004\5\CA00\CIVIL\C-06.DWG



START BID SCHEDULE B
MATCHLINE STA 57+10
SEE DWG C-05



START BID SCHEDULE B
MATCHLINE STA 57+10
SEE DWG C-05



MATCHLINE STA 66+00
SEE DWG C-07

RECYCLED WATER PIPELINE DATA TABLE					
NO	LENGTH	BEARING	RADIUS	DELTA	DESCRIPTION
15	717.25'	N01°04'24"E	-	-	6" PVC C900
16	64.46'	N01°25'36"W	-	-	6" PVC C900
17	365.97'	N00°39'44"E	-	-	6" PVC C900
18	30.75'	N10°35'16"W	-	-	6" PVC C900
19	1635.10'	N00°39'44"E	-	-	6" PVC C900

HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

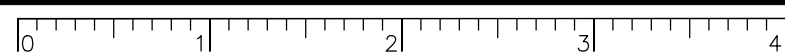
BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

DATUM: NAVD88

ORIGINAL SCALE IN INCHES



MANCHESTER AVENUE AND S. EL CAMINO
REAL RECYCLED WATER PIPELINES

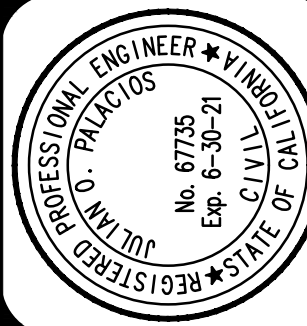
SHEET
10
OF SHEETS

W.O. D120040

STA 57+10 - 66+00
PLAN AND PROFILE

OLIVENHAIN
Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92024 (760) 753-6466

NV5
1909 AVENUE OF SCIENCE, SUITE 200
SAN JOSE, CA 95128
P 408.656.5500
WWW.NV5.COM

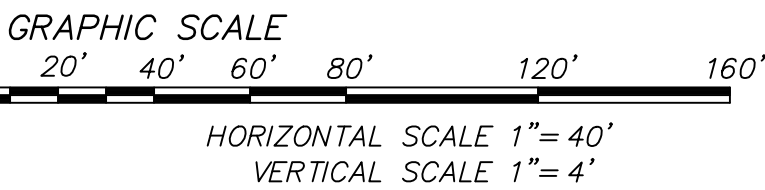
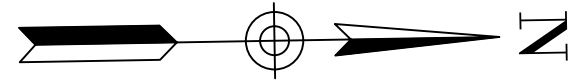


DESIGN	DRAWN	CHECK

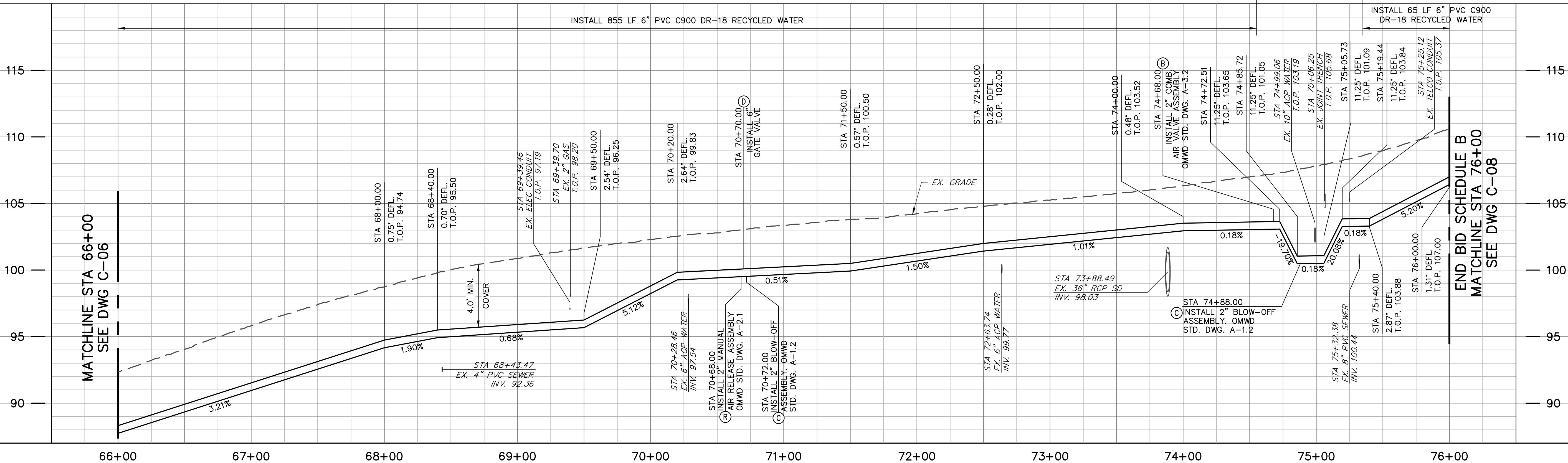
MARK	DATE	BY	REVISIONS

PRELIMINARY - NOT FOR CONSTRUCTION

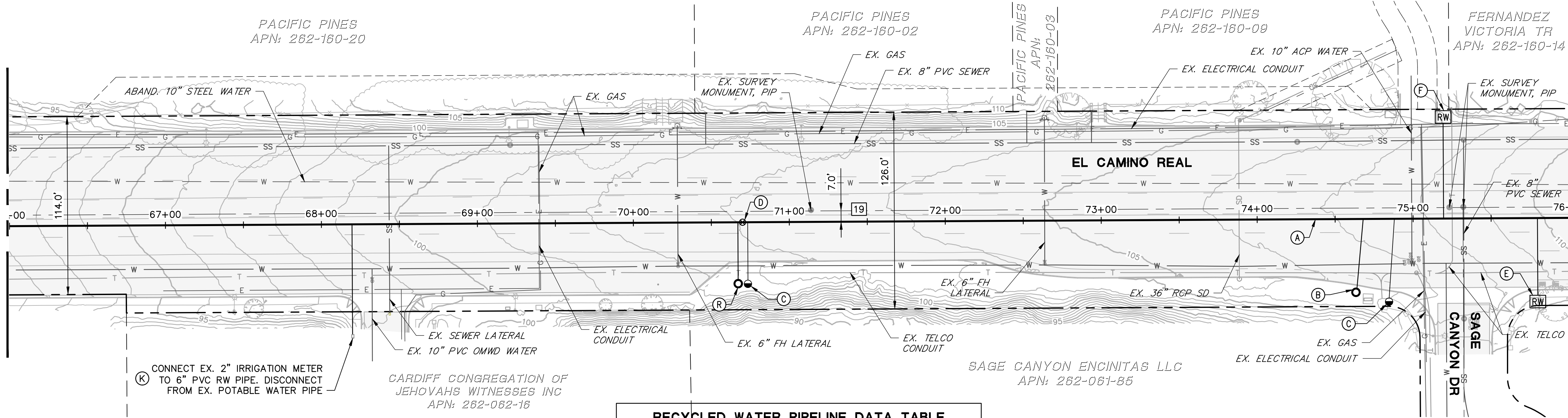
DATE: 1/19/2021 10:40 AM
DWG: N:\226816-00\04\5\CA00\CIVIL\C-07.DWG



MATCHLINE STA 66+00
SEE DWG C-06



MATCHLINE STA 66+00
SEE DWG C-06



END BID SCHEDULE B
MATCHLINE STA 76+00
SEE DWG C-08

RECYCLED WATER PIPELINE DATA TABLE					
NO	LENGTH	BEARING	RADIUS	DELTA	DESCRIPTION
19	1635.10'	N00°39'44"E	—	—	6" PVC C900

HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

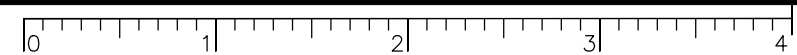
BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5\"/>

ELEVATION: 37.521

DATUM: NAVD88

ORIGINAL SCALE IN INCHES



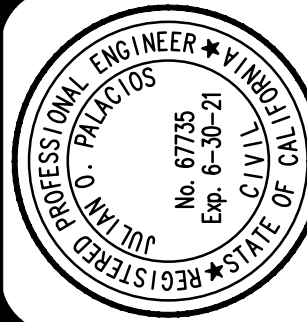
MANCHESTER AVENUE AND S. EL CAMINO
REAL RECYCLED WATER PIPELINES

SHEET
11
OF SHEETS

W.O. D120040

OLIVENHAIN
Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92024 (760) 753-6466

NV5
1909 AVENUE OF SCIENCE, SUITE 200
SAN JOSE, CA 95128
P. 408.656.5500
WWW.NV5.COM

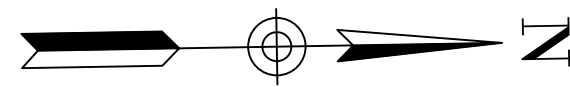


DESIGN	DRAWN	CHECK

MARK	DATE	BY	REVISIONS

PRELIMINARY - NOT FOR CONSTRUCTION

DATE: 1/19/2021 10:41 AM
DWG: N:\226816-00004\5\CA00\CIVIL\C-08.DWG



START BID SCHEDULE C
MATCHLINE STA 76+00
SEE DWG C-07

FERNANDEZ
VICTORIA TR
APN: 262-160-14

LUX ART INSTITUTE
APN: 262-160-16

GRAUER FOUNDATION FOR EDUCATION
APN: 262-160-30

S N H SOMERFORD
PROPERTIES TRUST
APN: 262-080-20

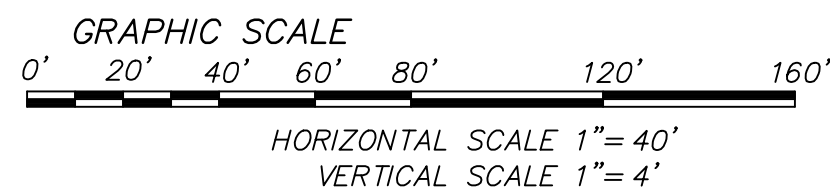
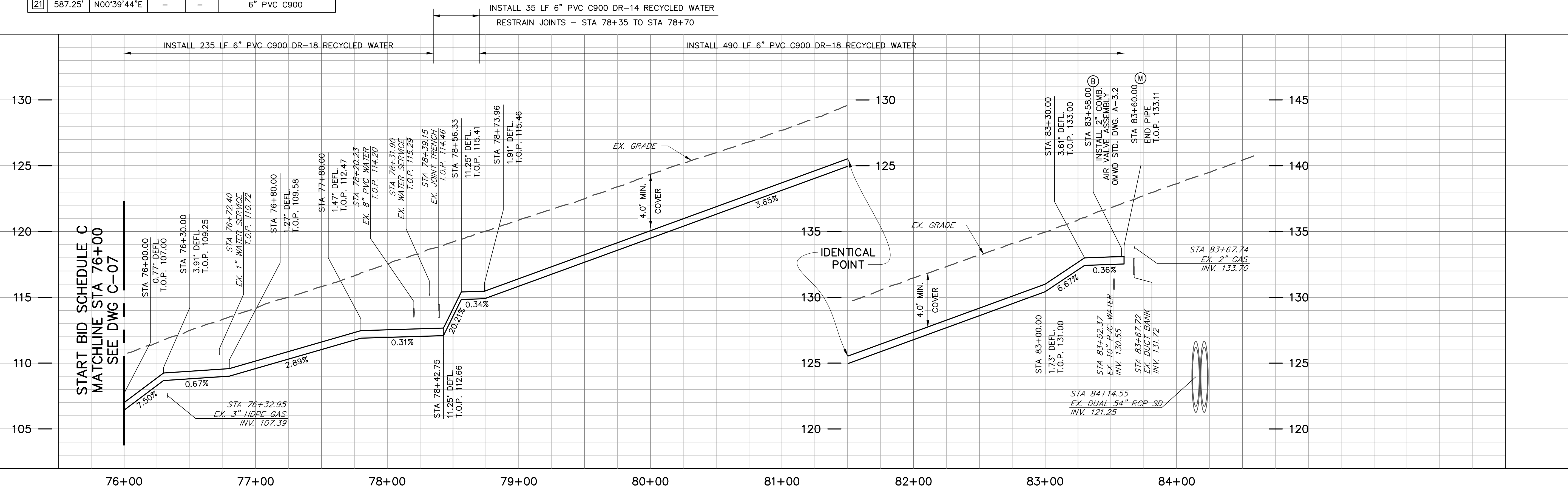
SAGE CANYON OWNERS ASSN INC
APN: 262-061-84

CALLE RYAN HOMEOWNERS ASSN
APN: 262-173-25

RECYCLED WATER PIPELINE DATA TABLE

NO	LENGTH	BEARING	RADIUS	DELTA	DESCRIPTION
19	1635.10'	N00°39'44"E	-	-	6" PVC C900
20	30.75'	N11°54'44"E	-	-	6" PVC C900
21	587.25'	N00°39'44"E	-	-	6" PVC C900

START BID SCHEDULE C
MATCHLINE STA 76+00
SEE DWG C-07



HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

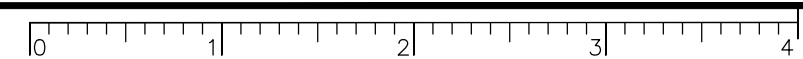
BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

DATUM: NAVD88

ORIGINAL SCALE IN INCHES



MANCHESTER AVENUE AND S. EL CAMINO
REAL RECYCLED WATER PIPELINES

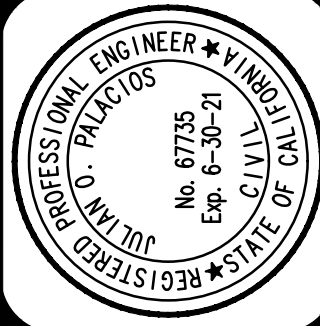
STA 76+00 - 83+60
PLAN AND PROFILE

SHEET
12
OF
21
C-08

W.O. D120040

OLIVENHAIN
Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92024 (760) 753-6466

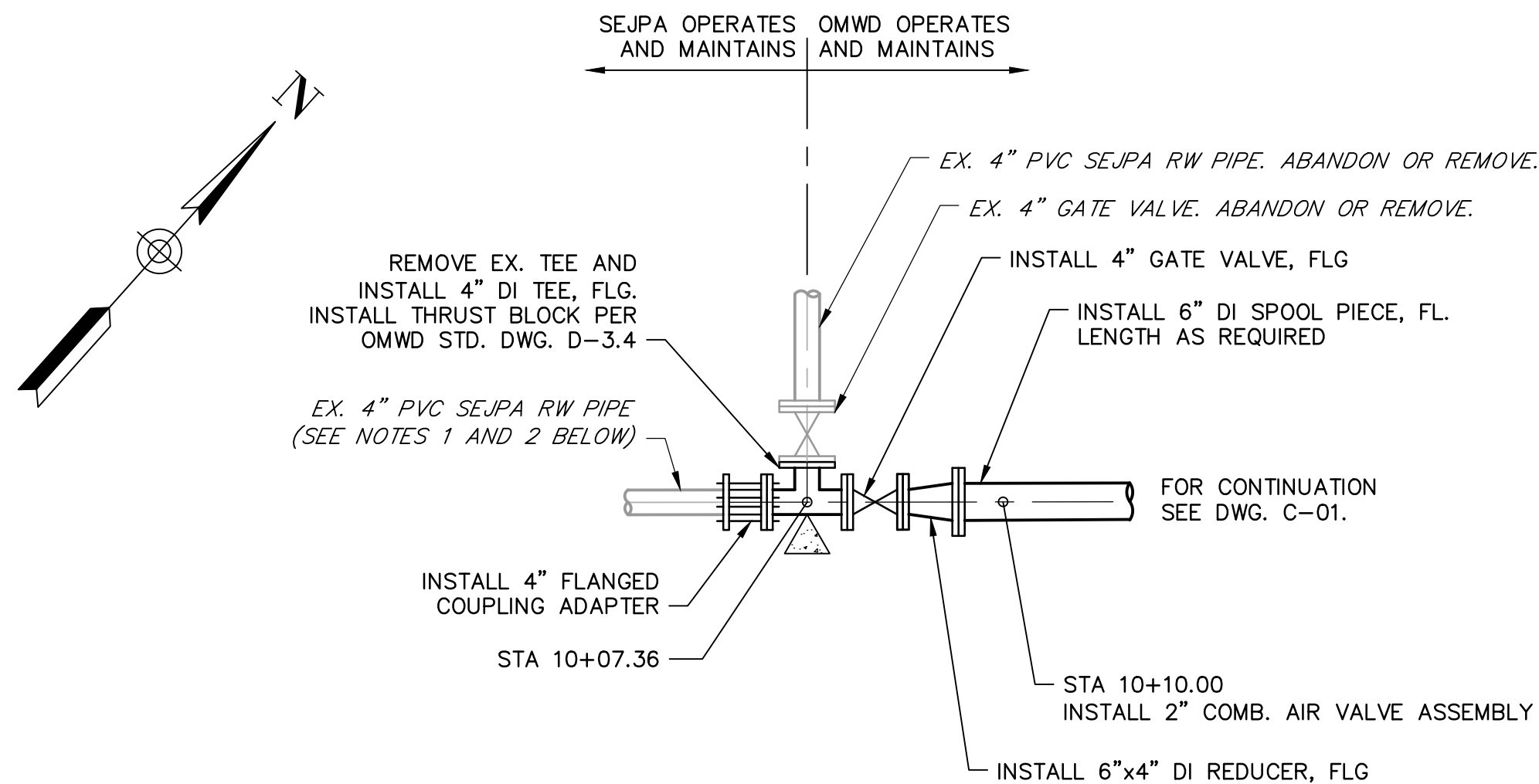
NV5
15909 AVENUE OF SCIENCE, SUITE 200
SAN JUAN CAPISTRANO, CA 92675
P. 951-365-5500
WWW.NV5.COM



DESIGN	DRAWN	CHECK

MARK	DATE	BY	REVISIONS

PRELIMINARY - NOT FOR CONSTRUCTION

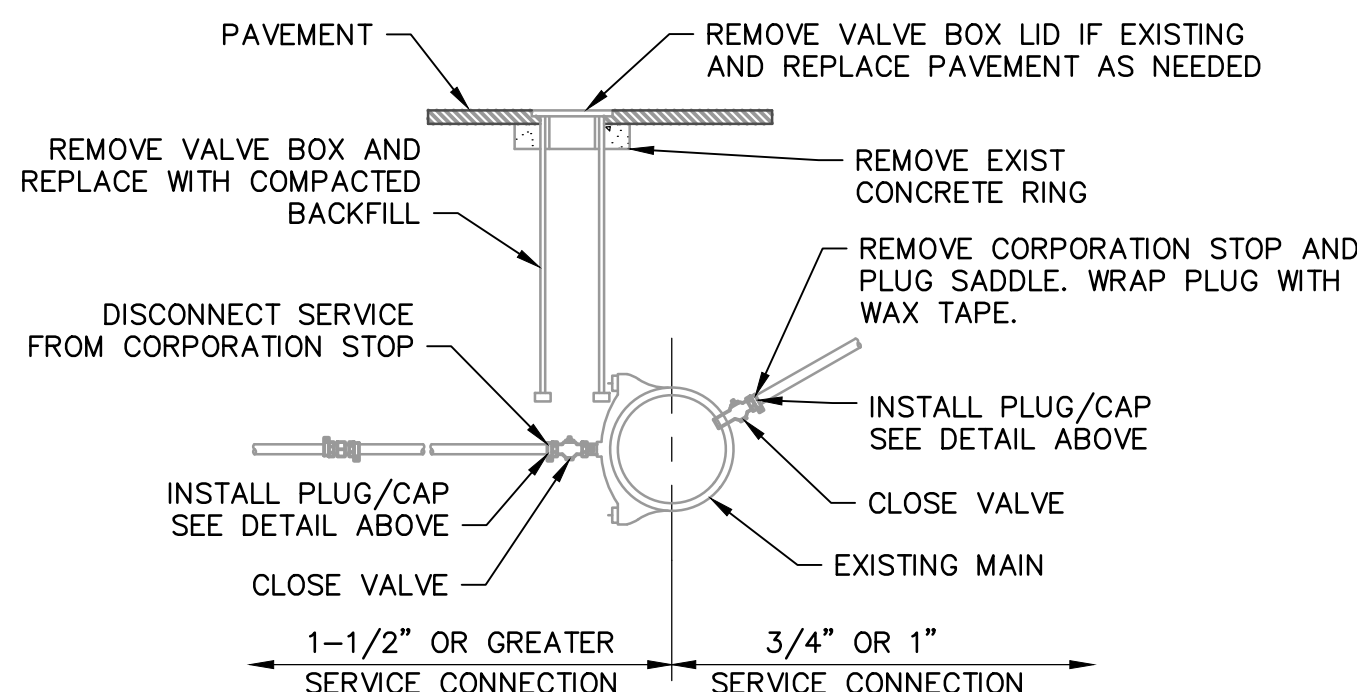
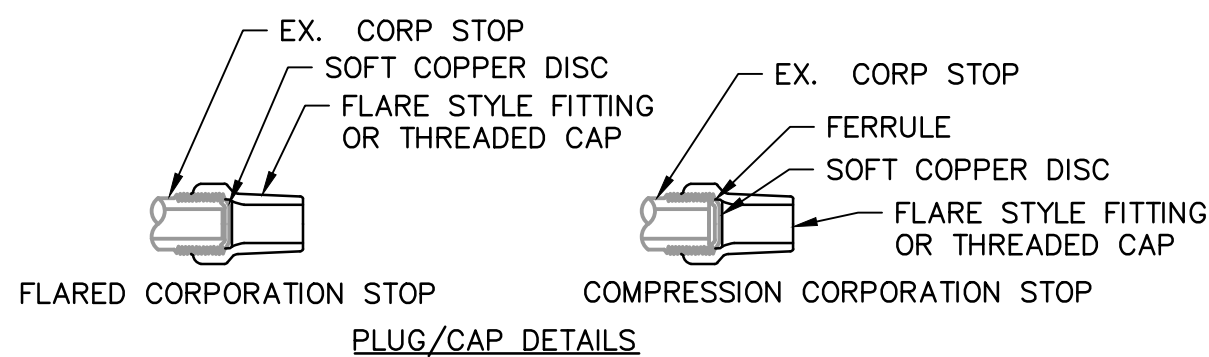


NOTES:

- CONTRACTOR SHALL COORDINATE SHUTDOWN OF EXISTING PIPELINE WITH SEJPA AND OMWD TO COMPLETE THE WORK.
- EX. 4" SEJPA PVC RECYCLED WATER PIPELINE MAY BE REPLACED BY CALTRANS WITH AN 8" PIPELINE PRIOR TO CONSTRUCTION OF THESE IMPROVEMENTS.
- CONTRACTOR SHALL CONNECT TO PIPELINE DIAMETER WHICH EXISTS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CONFIRM PIPELINE DIAMETER/MATERIAL PRIOR TO CONSTRUCTION AND PRIOR TO STARTING WORK ON CONNECTION.
- CONTRACTOR SHALL HAVE ALL CONNECTIONS MATERIALS READY FOR INSPECTION AT LEAST 48 HOURS PRIOR TO THE CONNECTION WORK.

1 CONNECTION DETAIL - STA 10+07.36

SCALE: 1/2"=1'-0"

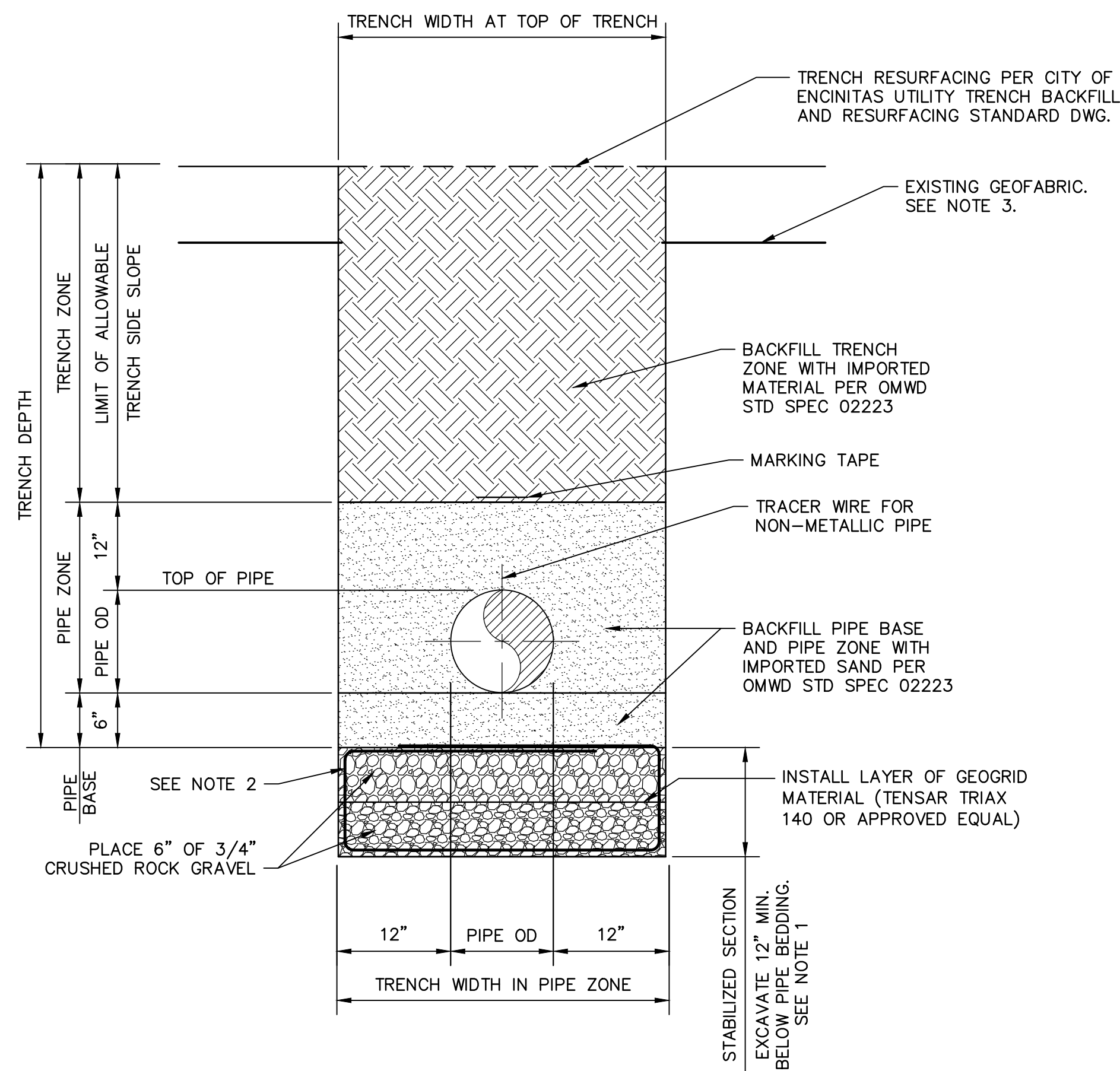


NOTES:

- EXISTING VALVES SHALL BE TURNED TO THE CLOSED POSITION AND VALVES BOXES CUT OFF AND REMOVED.
- USE THREADED PLUG TO PLUG SERVICE WITH THREADED CONNECTION.
- PRIOR DISTRICT APPROVAL REQUIRED.

2 EXISTING WATER SERVICE ABANDONMENT

NOT TO SCALE



NOTES:

- CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOR PUMPING OF GROUNDWATER SO THAT THE AMOUNT OF STANDING WATER IN THE BOTTOM OF THE EXCAVATION IS MINIMIZED.
- PLACE WOVEN GEOTEXTILE (MIRAFI HP 370 OR APPROVED EQUAL) THROUGHOUT THE ENTIRE BOTTOM OF THE EXCAVATION. OVERLAP EDGES OF GEOTEXTILE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. EXTEND WOVEN GEOTEXTILE VERTICALLY UP SIDES OF EXCAVATION TO A HEIGHT SUCH THAT THE FABRIC CAN BE OVERLAPPED AROUND THE ENTIRE STABILIZED SECTION IN A "BURRITO WRAP".
- WHERE PRESENT, CONTRACTOR TO EXCAVATE TO DEPTH OF EXISTING GEOFABRIC AND CUT AND REMOVE GEOFABRIC AT THE TRENCH LINE. CONTRACTOR SHALL NOT USE CUTTING/REMOVAL METHODS THAT WILL CAUSE TEARING OR PULLING OF THE GEOFABRIC.

3 STABILIZED PIPE BEDDING AND TRENCH BACKFILL

NOT TO SCALE

HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

DATUM: NAVD88

DATE: 6/21/2019
DWG: 1519473HW OLIVENHAIN MWD MANCHESTER ROAD SUPPLING - WSA TRAFFIC CONTROL V190473 OLIVENHAIN MWD - MANCHESTER AVE PH'S NEW DWG

SIGN LEGEND

C9A(CA)

C12(CA)

C20(CA)L

C20(CA)R

C27(CA)

C30(CA)

C30(BK)

C30A(CA)

G20-2

M4-8A

M4-10(R/L)

R1-1

R3-1

R3-2

R3-4

R3-5(R/L)

R3-6(R/L)

R3-7(R/L)

R4-7A

R4-8A

R9-3

R9-9

R9-10

R9-11(R/L)

R9-11a(R/L)

R11-2

R11-4

SC3(CA)

W1-4(R/L)

W3-4

W4-2(L)

W4-2(R)

W8-24

W11-1

W16-1

W20-1

W20-2

W20-3

W20-4

W20-5(L)

W20-5(R)

W20-5(BK)

W21-5

W21-5b(R/L)

Flagger Paddle

WATCH - Work Area Traffic Control Handbook / California MUTCD

Minimum Recommended Channelizing Device and Sign Spacing

LEGEND

APPROACH SPEED (MPH)	MINIMUM DISTANCE (FEET) BETWEEN SIGNS AND FROM LAST SIGN TO TAPER	MINIMUM TAPER LENGTHS (L) (FEET) FOR 12-FOOT LANE			BUFFER LENGTH (FEET)	MAX CONE SPACING		
		L	1/2L	1/3L		TAPER	TANGENT	CONFLICT
25	100	125	63	42	158	25	50	12
30	250	180	90	60	205	30	60	15
35	250	245	123	82	257	35	70	17
40	250	320	160	107	315	40	80	20
45	350	540	270	180	378	45	90	22
50	350	600	300	200	446	50	100	25
55	500	660	330	220	520	50	100	25

TRAFFIC CONE / DELINEATOR

TRAFFIC CONTROL SIGN

TRAFFIC CONTROL BARRICADE

APPROXIMATE BORE LOCATION

FLAGGER

SIGNALIZED INTERSECTION

FAS - FLASHING ARROW SIGN

WORK ZONE

BUS STOP

Plans must be stamped and signed by a licensed civil engineer for work on Circulation Element roads with speeds over 30 mph

HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

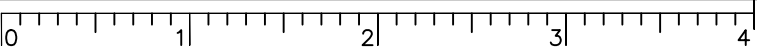
BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

DATUM: NAVD88

ORIGINAL SCALE IN INCHES



MANCHESTER AVENUE
RECYCLED WATER PIPELINE

LEGENDS AND SPACING TABLES

SHEET
14 / 21
OF SHEETS

TC-01

AIR X

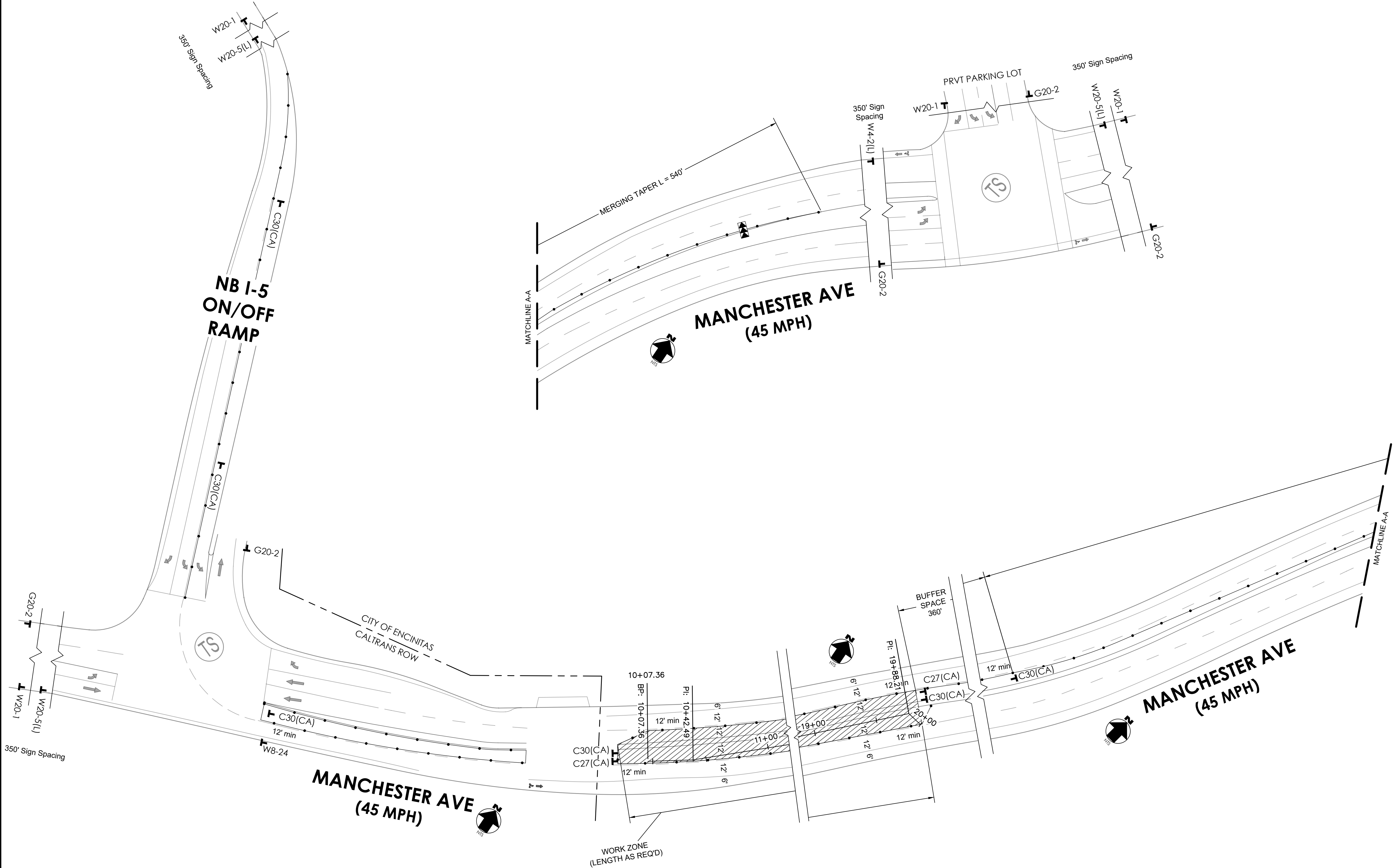
Gail McMoran
President
1866 Olivehain Road
Encinitas, CA 92024
PHONE (760) 485-2317
CELL (760) 485-3738

OLIVENHAIN

Municipal Water District
1866 Olivehain Road
Encinitas, CA 92024 (760) 753-6466

PRELIMINARY - NOT FOR CONSTRUCTION

DATE: 6/21/2019
DWG: 1519473.MXD
ENCINITAS
MWD
MANCHESTER ROAD SUPPLING - NVA TRAFFIC CONTROL
Y19473
OLIVENHAIN MWD - MANCHESTER AVE PH'S NEW DWG



NOTE: W8-24 (STEEL PLATES AHEAD)
SIGNS WILL REMAIN IN PLACE FOR
DURATION OF WORK

NOTE:
A separate Caltrans permit may
be required to do work in Caltrans
or Caltrans area of responsibility.

HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND
ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT
EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY
18416.

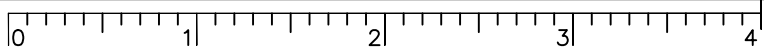
BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN
THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER
AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

DATUM: NAVD88

ORIGINAL SCALE IN INCHES



MANCHESTER AVENUE
RECYCLED WATER PIPELINE

TRAFFIC CONTROL - PHASE 1:
(10+00 - 20+00)

OLIVENHAIN
Municipal Water District
1866 Olivenhain Road
Encinitas, CA 92024 (760)753-6466

UTILITY SURVEYORS, INC.
AIRX
Gail McMoran
President
1866 EL CAMINO REAL, SUITE C
ENCINITAS, CA 92024
PHONE (760) 485-2317
CELL (760) 419-3738

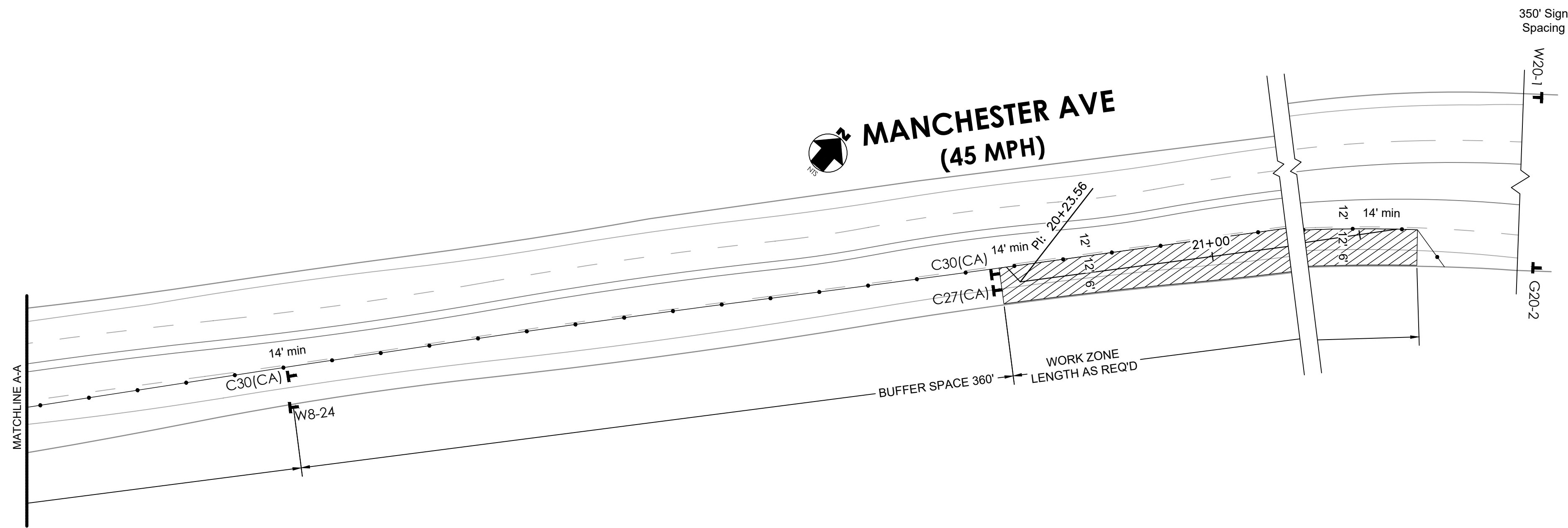
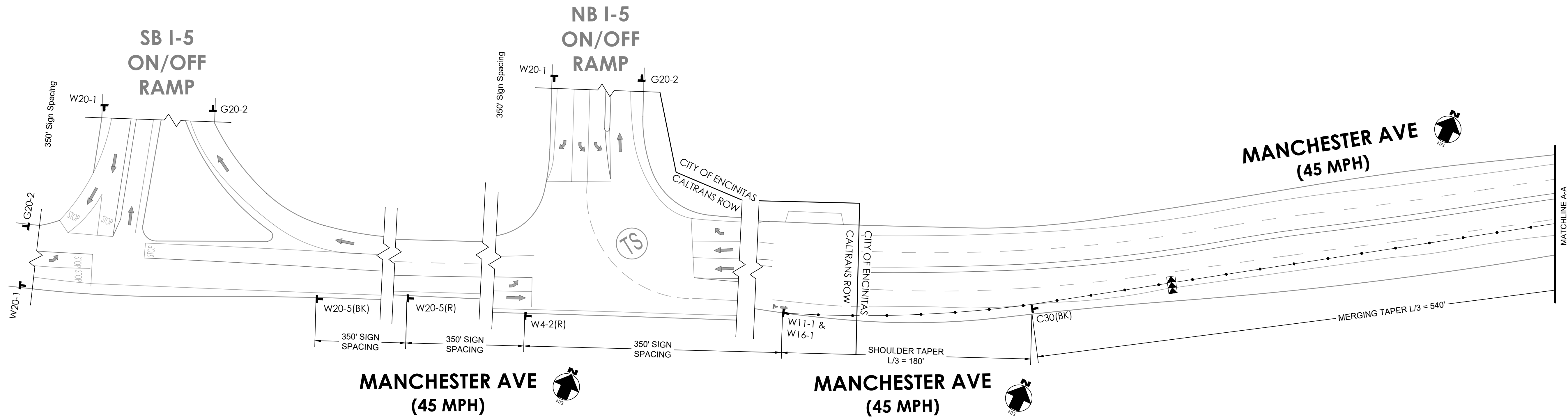
DESIGN
DRAWN
CHECK

MARK
DATE
BY
REVISIONS

SHEET
15
OF SHEETS
21
TC-02

PRELIMINARY - NOT FOR CONSTRUCTION

DATE: 6/21/2019
DWG: 1\190473.MXD MANCHESTER ROAD SUPPLING - NW\TRAFFIC CONTROL\190473 OLIVENHAIN.MXD - MANCHESTER AVE PH'S NEW.DWG



NOTE: Cyclists to Share the Lane during daily setup - separate bike lane shall be provided if traffic control will remain in place for more than 72 hours continuously

NOTE: W8-24 (STEEL PLATES AHEAD) SIGNS WILL REMAIN IN PLACE FOR DURATION OF WORK

NOTE: A separate Caltrans permit may be required to do work in Caltrans or Caltrans area of responsibility.

HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

DATUM: NAVD88

ORIGINAL SCALE IN INCHES

0 1 2 3 4

MANCHESTER AVENUE
RECYCLED WATER PIPELINE

TRAFFIC CONTROL - PHASE 2:
(20+00 - 21+80)

OLIVENHAIN
Municipal Water District
1866 Olivenhain Road
Encinitas, CA 92024 (760)753-6466

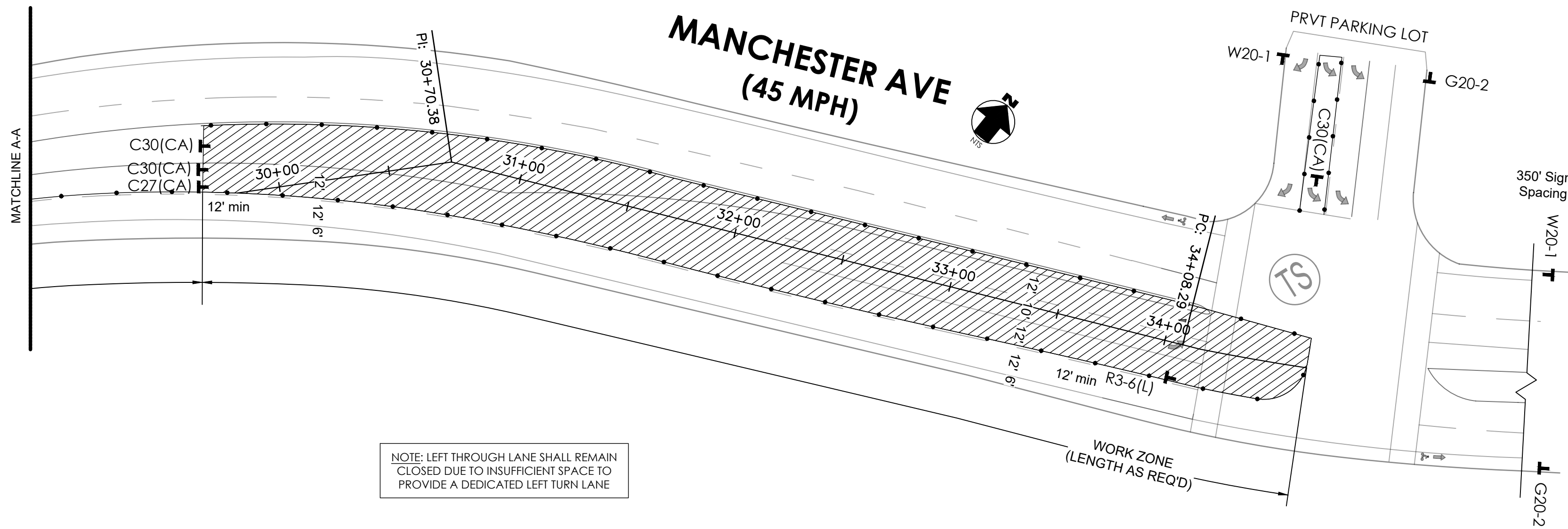
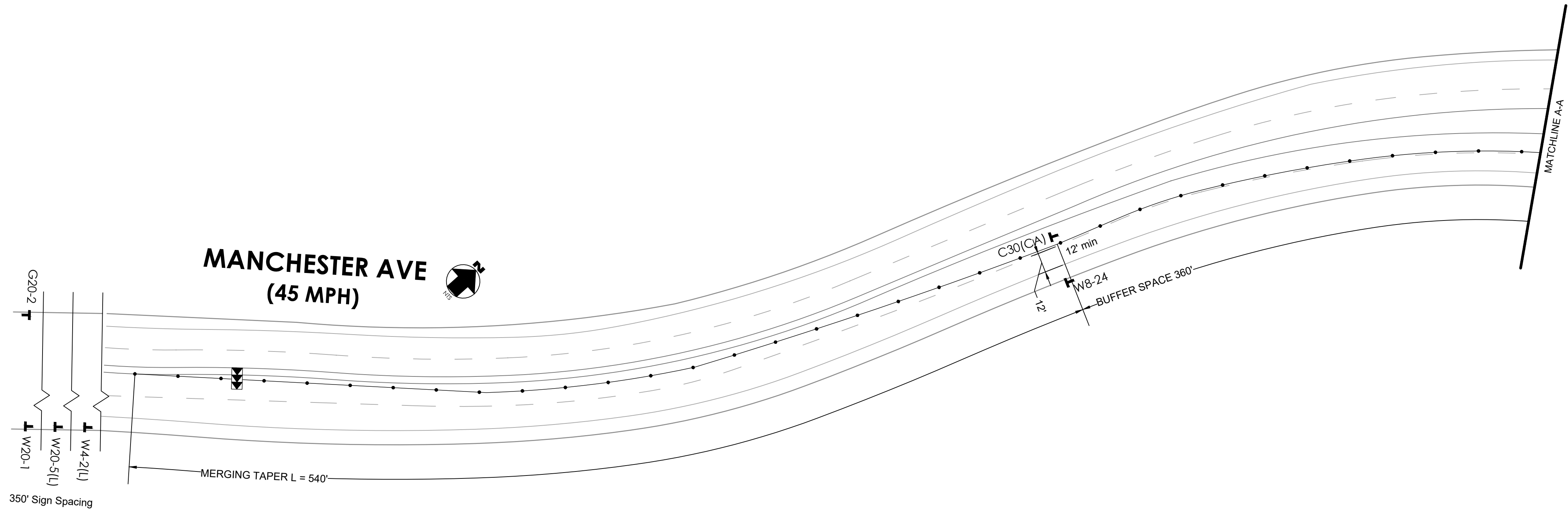
UTILITY SURVEYORS, INC.
AIRX
Gail McMoran
President
1866 EL CAMINO REAL, SUITE C
ENCINITAS, CA 92024
PHONE (760) 485-2317
CELL (760) 419-3738

DESIGN
DRAWN
CHECK

MARK
DATE
BY
REVISIONS

PRELIMINARY - NOT FOR CONSTRUCTION

DATE: 6/21/2019
DWG: 1519473.MXD OLIVENHAN MWD MANCHESTER ROAD SUPPLING - NWS TRAFFIC CONTROL V190473 OLIVENHAN MWD - MANCHESTER AVE PH3 NEW DWG



NOTE: W8-24 (STEEL PLATES AHEAD)
SIGNS WILL REMAIN IN PLACE FOR
DURATION OF WORK

NOTE:
A separate Caltrans permit may
be required to do work in Caltrans
or Caltrans area of responsibility.

NOTE: LEFT THROUGH LANE SHALL REMAIN
CLOSED DUE TO INSUFFICIENT SPACE TO
PROVIDE A DEDICATED LEFT TURN LANE

HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND
ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT
EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY
18416.

BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN
THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER
AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

DATUM: NAVD88

ORIGINAL SCALE IN INCHES

0 1 2 3 4

MANCHESTER AVENUE
RECYCLED WATER PIPELINE

TRAFFIC CONTROL - PHASE 3:
(29+70 - 34+50)

OLIVENHAN
Municipal Water District
1866 Olivenhan Road
Encinitas, CA 92024 (760)753-6466

AIRX
UTILITY SURVEYORS, INC.
Gail McMoran
President
1800 EL CAMINO REAL, SUITE C
ENCINITAS, CA 92024
PHONE (760) 485-2317
CELL (760) 419-3738

DESIGN

DRAWN

CHECK

MARK

DATE

BY

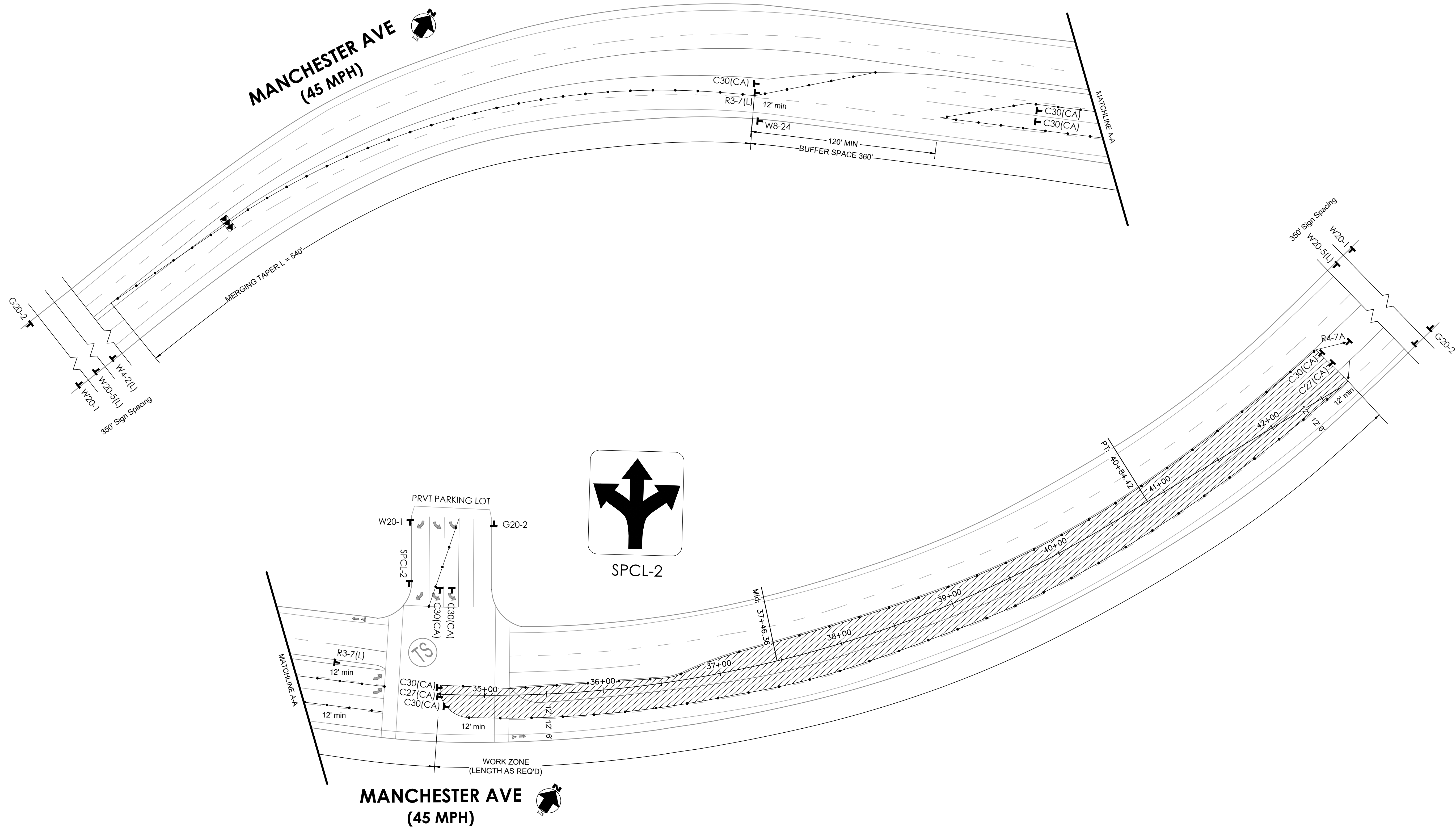
REVISIONS

SHEET
17
OF SHEETS

21
TC-04

PRELIMINARY - NOT FOR CONSTRUCTION

DATE: 6/21/2019
DWG: 1519473.MXD OLIVENHAIN MWD MANCHESTER ROAD SUPPLING - NWS TRAFFIC CONTROL Y190473 OLIVENHAIN MWD - MANCHESTER AVE PH'S NEW DWG



NOTE: W8-24 (STEEL PLATES AHEAD)
SIGNS WILL REMAIN IN PLACE FOR
DURATION OF WORK

NOTE:
A separate Caltrans permit may
be required to do work in Caltrans
or Caltrans area of responsibility.

HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND
ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT
EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY
18416.

BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN
THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER
AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

DATUM: NAVD88

ORIGINAL SCALE IN INCHES

0 1 2 3 4

MANCHESTER AVENUE
RECYCLED WATER PIPELINE

TRAFFIC CONTROL - PHASE 4:
(34+50 - 45+70)

OLIVENHAIN
Municipal Water District
1866 Olivenhain Road
Encinitas, CA 92024 (760) 753-6466

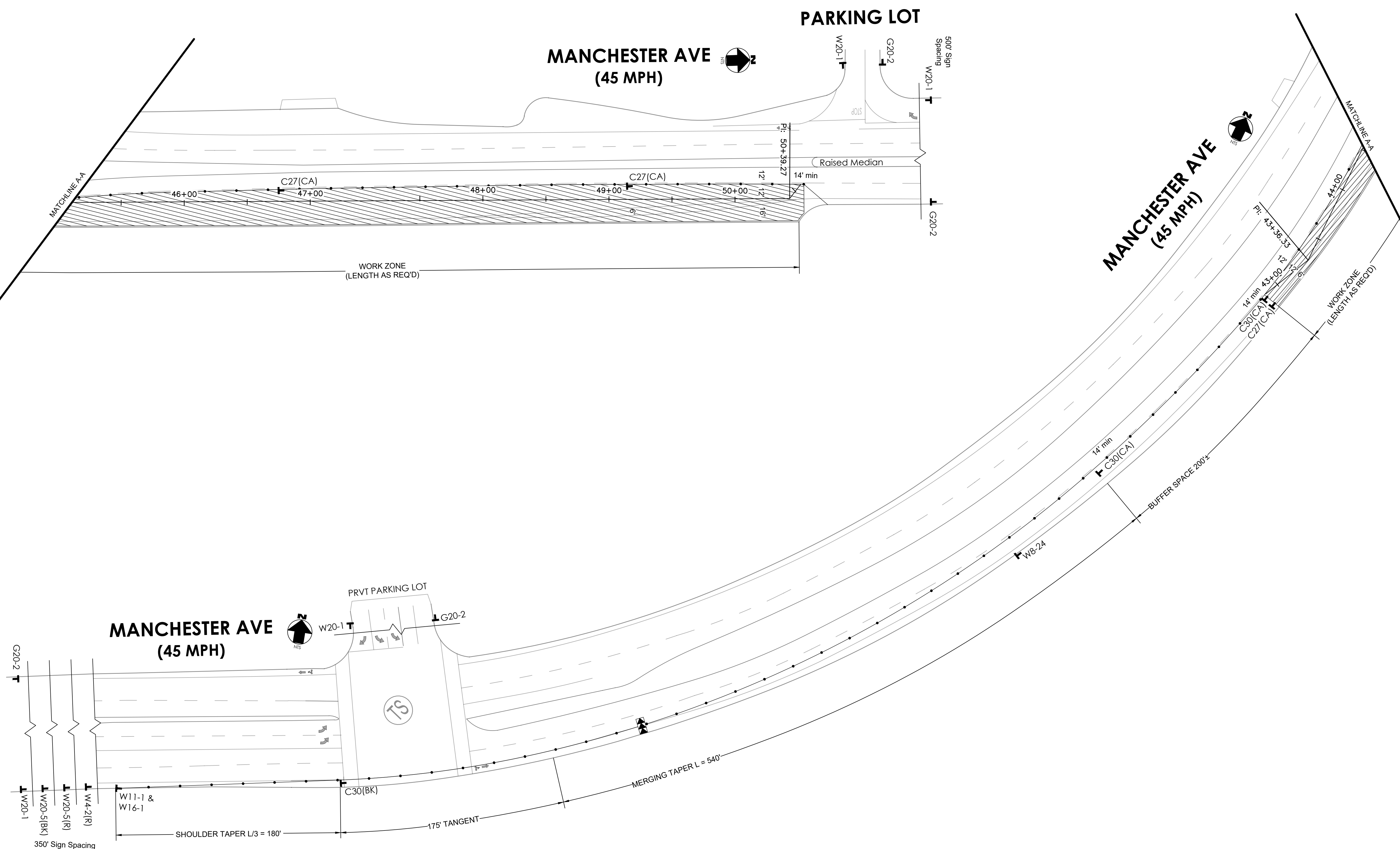
UTILITY SURVEYORS, INC.
AIRX
Gail McMoran
President
15000 EL CAMINO REAL, SUITE C
ENCINITAS, CA 92024
PHONE (760) 485-2317
CELL (760) 419-3738

DESIGN
DRAWN
CHECK

MARK
DATE
BY
REVISIONS

SHEET
18
OF SHEETS
21
TC-05

PRELIMINARY - NOT FOR CONSTRUCTION



NOTE:
A separate Caltrans permit may
be required to do work in Caltrans
or Caltrans area of responsibility.

NOTE: Cyclists to Share the Lane during daily setup - separate bike lane shall be provided if traffic control will remain in place for more than 72 hours continuously

HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

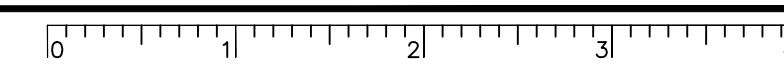
BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

DATUM: NAVD88


ORIGINAL SCALE IN INCHES



DESIGN	DRAWN	CHECK
--------	-------	-------

[illegible]

UTILITY SURVEYORS, INC.

The logo for AIRX features the word "AIRX" in a bold, black, sans-serif font. The "X" is stylized with two orange diagonal lines crossing it. To the right of the text is a black circular graphic with a white swoosh and orange lines.

Gail McMorran
President

2534 EAST EL NORTE PARKWAY, SUITE C
ESCONDIDO, CA 92027
PHONE (760) 435-6747
CELL (760) 419-3738

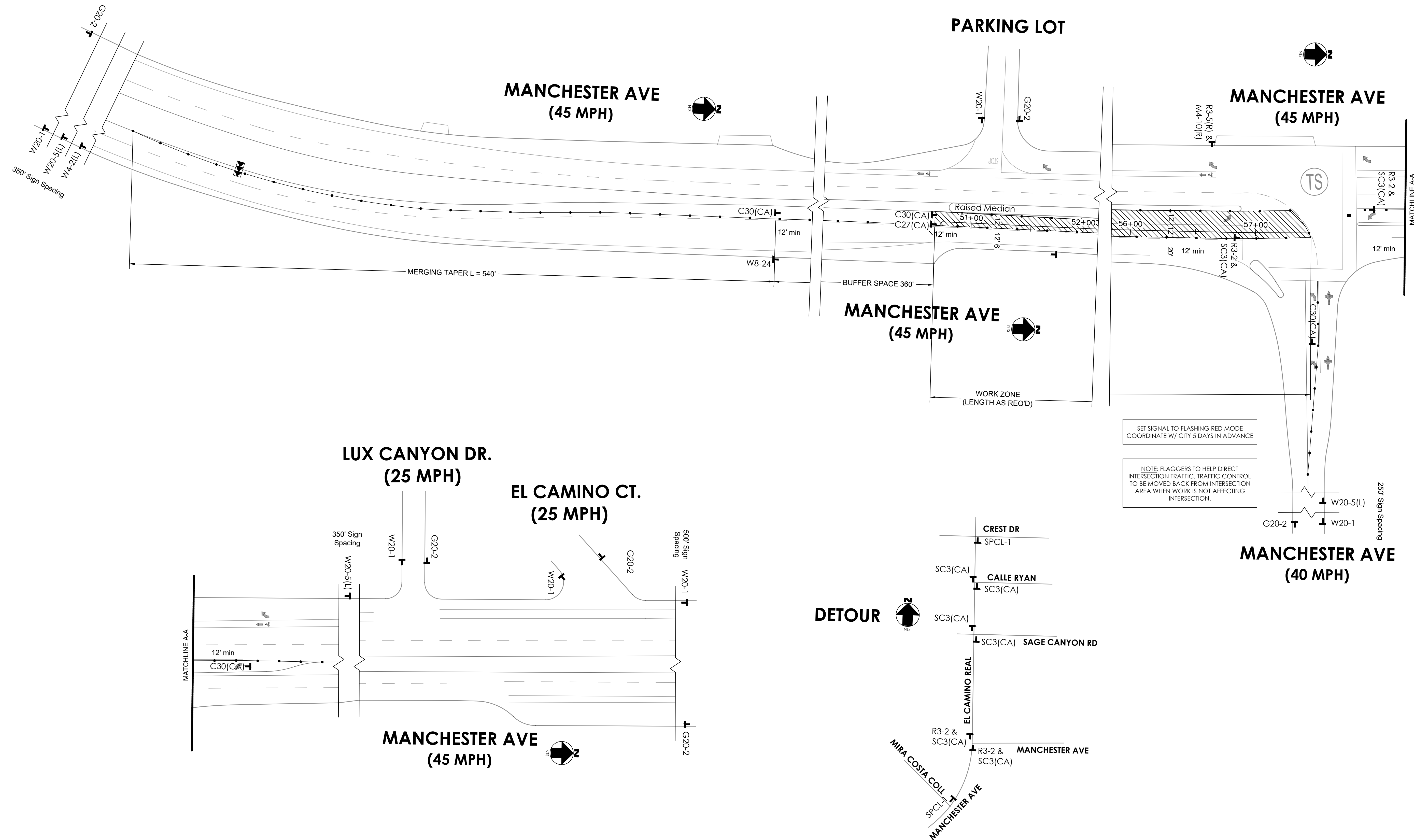
OLIVENHAIN
Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92024 (760)753-6466

MANCHESTER AVENUE
RECYCLED WATER PIPELINE

TRAFFIC CONTROL – PHASE 5:
(42+80 – 50+50)

SHEET 19 / 21 OF SHEETS	TC-06
-------------------------------	-------

PRELIMINARY - NOT FOR CONSTRUCTION



NOTE: W8-24 (STEEL PLATES AHEAD)
SIGNS WILL REMAIN IN PLACE FOR
DURATION OF WORK

NOTE:
A separate Caltrans permit may
be required to do work in Caltrans
or Caltrans area of responsibility.

HORIZONTAL DATUM

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

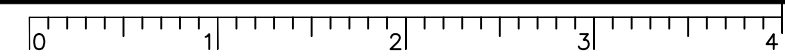
BENCHMARK

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

ELEVATION: 37.521

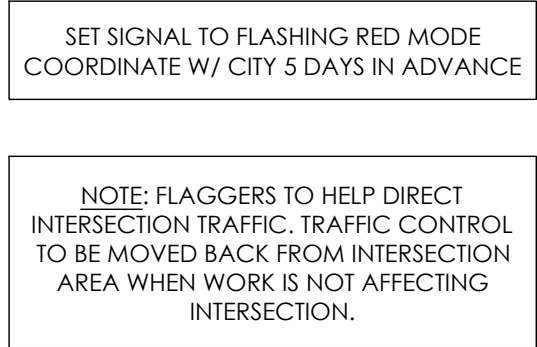
DATUM: NAVD88

ORIGINAL SCALE IN INCHES



 <p style="margin: 0;">OLIVENHAIN Municipal Water District 1988 Olivenhain Road Encinitas, CA 92024 (760)755-4466</p>		 <p style="margin: 0;">AIRX UTILITY SURVEYORS, INC. 20850 JACARILLO AVENUE, SUITE C ESCONDIDO, CA 92027 PHONE: (760) 493-2347 CELL: (760) 419-2728</p>	
<p style="margin: 0;">MANCHESTER AVENUE RECYCLED WATER PIPELINE</p>		<p style="margin: 0;">TRAFFIC CONTROL – PHASE 6: (50+50 – 57+50)</p>	
<p style="margin: 0;">SHEET 20 / 21 OF SHEETS</p>		<p style="margin: 0;">TC-07</p>	

PRELIMINARY - NOT FOR CONSTRUCTION



NOTE: FLAGGERS TO HELP DIRECT INTERSECTION TRAFFIC. TRAFFIC CONTROL TO BE MOVED BACK FROM INTERSECTION AREA WHEN WORK IS NOT AFFECTING INTERSECTION.

NOTE:
A separate Caltrans permit may be required to do work in Caltrans or Caltrans area of responsibility.

THE COORDINATES ARE REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 AND ARE EXPRESSED IN TERMS OF THE CALIFORNIA COORDINATE SYSTEM 1983, ZONE VI, AT EPOCH 2004.0, AND ARE BASED ON POINT #1038 PER PUBLISHED RECORD OF SURVEY 18416.

THE BENCHMARK IS POINT #1038, BEING A 2.5" CITY OF ENCINITAS BRASS DISC IN THE CORNER OF A DRAINAGE CURB INLET ON THE EAST SIDE OF MANCHESTER AVENUE, 0.1 MILE SOUTH OF THE INTERSECTION WITH EL CAMINO REAL.

DATUM: NAVD88

SHEET 21 / 21 OF SHEETS	TC-08
-------------------------------	-------

PRELIMINARY - NOT FOR CONSTRUCTION