



# CITY OF PACIFICA

## DEPARTMENT OF PUBLIC WORKS

### WASTEWATER DIVISION

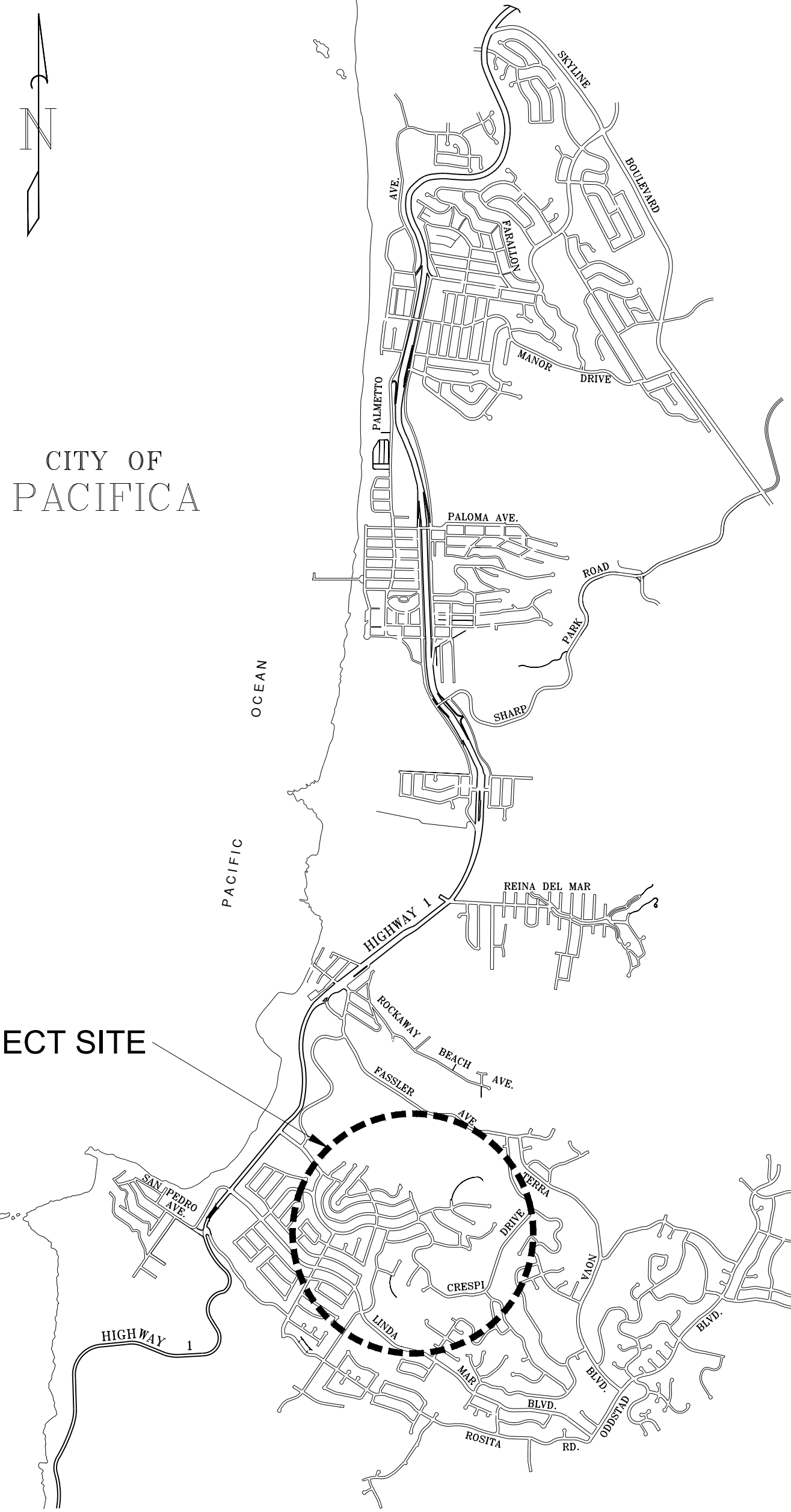
# LOWER LINDA MAR

## REHABILITATION AND REPAIR PROJECT C044

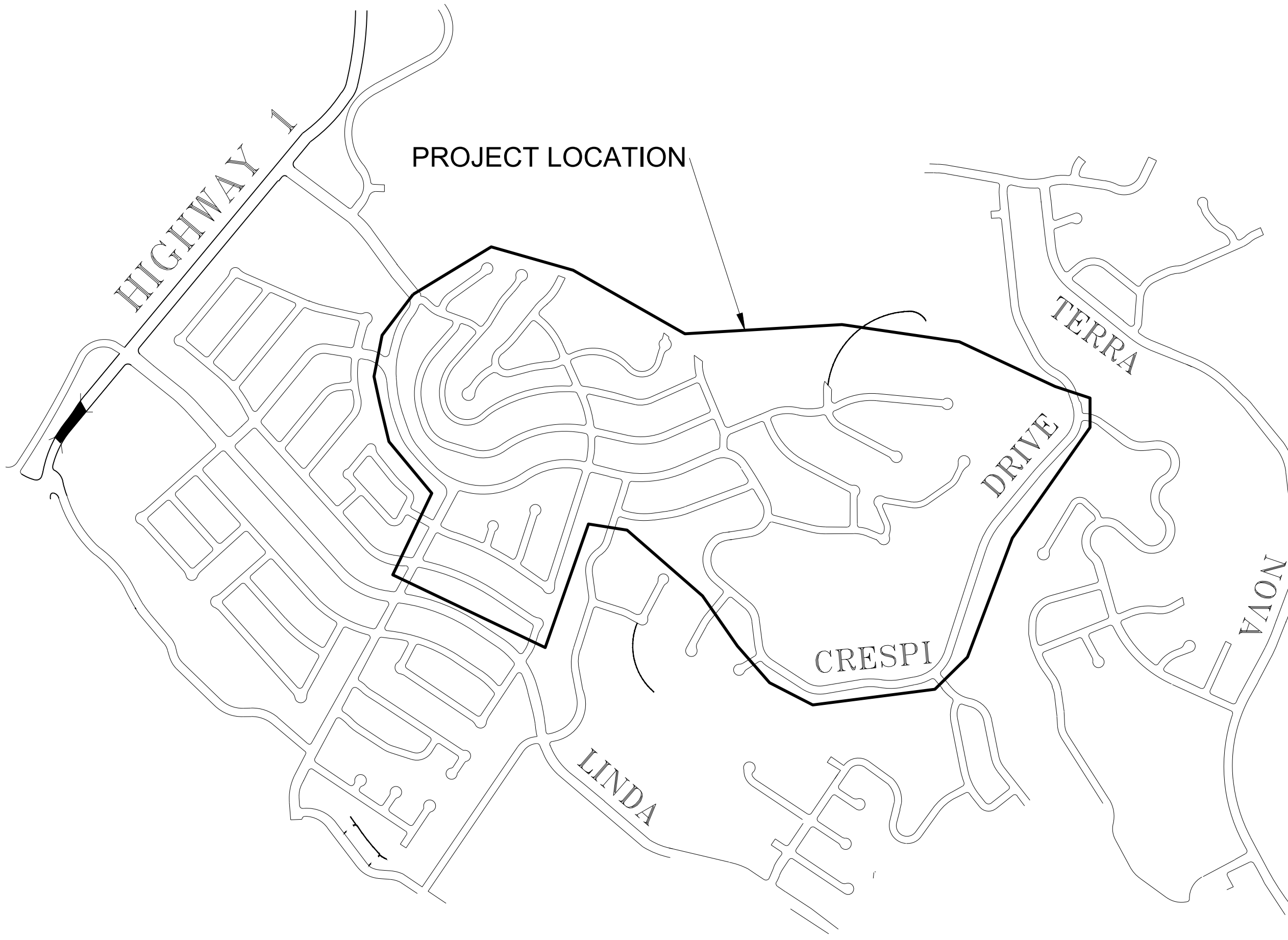
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NO	REVISIONS	DATE	APPR



**VICINITY MAP**  
NO SCALE



**LOCATION MAP**  
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DATE	DATE



CITY OF PACIFICA  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 TITLE SHEET

SUBMITTED BY:   
 BENJAMIN L. SHICK, PE 68813  
 DATE: 03/22/24

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**GENERAL NOTES:**

- CONTRACTOR SHALL MAINTAIN A COPY OF THE PROJECT PLANS ON THE JOBSITE AT ALL TIMES.
- NO CHANGE TO THE PROJECT IMPROVEMENT PLANS SHALL BE PERMITTED WITHOUT PRIOR APPROVAL BY THE CITY ENGINEER AND DESIGN ENGINEER.
- ALL SURPLUS AND UNSUITABLE MATERIAL SHALL BE REMOVED FROM PUBLIC RIGHT-OF-WAY.
- CONTRACTOR SHALL PROVIDE ADEQUATE DUST CONTROL AND KEEP MUD AND DEBRIS OFF THE PUBLIC RIGHT-OF-WAY AT ALL TIMES.
- ALL TRENCHES AND EXCAVATIONS SHALL BE CONSTRUCTED IN STRICT COMPLIANCE WITH THE APPLICABLE SECTIONS OF CALIFORNIA AND FEDERAL O.S.H.A. REQUIREMENTS AND OTHER APPLICABLE SAFETY ORDINANCES. CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR TRENCH SHORING DESIGN AND INSTALLATION.
- CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY. ALL EXCAVATIONS SHALL BE PLATED WITH NON-SKID PLATES WHEN INACTIVE. BARRICADES WITH LIGHTS SHALL DELINEATE CONSTRUCTION ZONE.
- CONTRACTOR SHALL VISIT SITES IN THE PUBLIC RIGHT-OF-WAY PRIOR TO SUBMITTING BID.
- CONTRACTOR SHALL NOTIFY THE CITY AT LEAST 48 HOURS IN ADVANCE OF THE START OF CONSTRUCTION ACTIVITY. ALL UTILITY SHUTDOWNS ARE TO BE COORDINATED THROUGH THE CITY PUBLIC WORKS DEPARTMENT. ANY TEMPORARY SUBSEQUENT RESUMPTION OF WORK REQUIRES THE NOTIFICATION OF THE CITY AND THE ENGINEER.
- CONTRACTOR SHALL REPLACE, AT HIS EXPENSE, ALL TREES, SHRUBS, LAWNS, FENCES, IRRIGATION SYSTEMS AND IMPROVEMENTS WHICH ARE TO REMAIN INTACT BUT HAVE BEEN REMOVED OR DAMAGED DURING CONSTRUCTION. CONTRACTOR SHALL NOT REMOVE OR DAMAGE IMPROVEMENTS LOCATED WITHIN CITY PROPERTY WITHOUT WRITTEN PERMISSION FROM THE CITY, OR FROM PRIVATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE PROPERTY OWNER.
- CONTRACTOR BEARS SOLE RESPONSIBILITY FOR THE DESIGN AND IMPLEMENTATION OF SHORING.
- THE CONTRACTOR SHALL NEITHER WASTE NOR DEPOSIT ANY HAZARDOUS MATERIALS ON THE GRADING SURFACES OR WITHIN THE GRADED CUT AND FILL AREAS OF THIS PROJECT, INCLUDING BUT NOT LIMITED TO GASOLINE OR DIESEL FUELS, MOTOR OILS OR TRANSMISSION FLUIDS, ANTIFREEZE, HYDRAULIC FLUIDS, LUBRICANTS, STARTING FLUIDS AND FILTERS, AND/OR CONTAINERS FOR THESE PRODUCTS. HAZARDOUS MATERIAL SPILLS THAT OCCUR AS A RESULT OF EITHER EQUIPMENT FAILURES OR VANDALISM, INCLUDING ALL ADJACENT CONTAMINATED SOILS, SHALL BE REMOVED AND TRANSPORTED TO AN ENVIRONMENTALLY APPROVED DISPOSAL SITE. ALL REMOVAL, TRANSPORTATION AND DISPOSAL COSTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR HIS SUBCONTRACTOR.
- THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTIES. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.
- EXCAVATIONS SHALL BE ADEQUATELY SHORED, BRACED AND SHEETED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS OF ANY KIND WILL BE FULLY PROTECTED FROM DAMAGE. ANY DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING, BRACING AND SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND HE SHALL EFFECT NECESSARY REPAIRS OR RECONSTRUCTION AT HIS OWN EXPENSE. WHERE THE EXCAVATION FOR A CONDUIT TRENCH, AND/OR STRUCTURE IS FIVE FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING, SHORING AND BRACING OR EQUIVALENT METHOD, FOR THE PROTECTION OF LIFE, OR LIMB, WHICH SHALL CONFORM TO THE APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA. THE CONTRACTOR SHALL ALWAYS COMPLY WITH OSHA REQUIREMENTS.
- THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF AIRBORNE DUST NUISANCE AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS FAILURE TO DO SO.
- THE CONTRACTOR SHALL PROVIDE ALL INGRESS AND EGRESS FOR PRIVATE/PUBLIC PROPERTY ADJACENT TO WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGGERS OR OTHER DEVICES NECESSARY TO PROVIDE SAFETY.
- THE CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBER FOR POLICE, FIRE, AMBULANCE, AND THOSE AGENCIES RESPONSIBLE FOR MAINTENANCE OF UTILITIES IN THE VICINITY OF THE JOB SITE.
- EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. MOST UTILITY SERVICE LINES ARE NOT SHOWN ON THE PLANS, AND THE LOCATION OF THE SERVICE LINES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES AT LEAST 2 WORKING DAYS IN ADVANCE OF CONSTRUCTION TO FIELD LOCATE UTILITIES. CALL UNDERGROUND SERVICE ALERT (U.S.A.) AT 800-227-2600. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THOSE UTILITIES SHOWN ON THESE PLANS, INDICATED IN THE FIELD BY LOCATING SERVICES, OR EVIDENCED BY FACILITIES VISIBLE AT OR ADJACENT TO THE JOB SITE. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED AND MERGED IN THE CONTRACT UNIT PRICE.
- CONTRACTOR SHALL EXCAVATE AND EXPOSE ALL UTILITY CROSSINGS OR CONNECTIONS AFFECTED BY THE WORK. ALL EXISTING UTILITIES SHALL BE ADEQUATELY SUPPORTED AND PROTECTED TO THE SATISFACTION OF THE CITY. IN THE EVENT OF DAMAGE TO ANY UTILITY OCCASIONED BY THE CONTRACTOR OPERATIONS, THE CONTRACTOR, AT HIS SOLE COST AND EXPENSE WILL IMMEDIATELY CAUSE REPAIRS TO BE MADE TO THE SATISFACTION OF THE AFFECTED UTILITY. NOTIFY THE ENGINEER OF ANY ADJUSTMENTS NECESSITATED BY WAY OF CONFLICT WITH EXISTING UTILITIES.
- CONTRACTOR SHALL EXERCISE DUE CARE AND CONCERN TO AVOID INJURY TO EXISTING FACILITIES IMPROVEMENTS, UTILITIES, AND PROPERTY. CONTRACTOR TO REPLACE OR RESTORE TO INITIAL CONDITIONS ANY FACILITIES, IMPROVEMENT, UTILITIES, OR OTHER PROPERTY DAMAGE OR DISTURBED AS A RESULT OF CONSTRUCTION. ALL REPAIRS SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER AND THE OWNER THEREOF, AT THE CONTRACTOR'S SOLE EXPENSE.

- CONTRACTOR SHALL RESTORE SURFACE TO PRE-CONSTRUCTION CONDITIONS.
- THE CONSTRUCTION OF GRAVITY UNDERGROUND LINES (SANITARY SEWER) SHALL BEGIN AT THE MOST DOWNSTREAM END, UNLESS OTHERWISE SPECIFICALLY APPROVED BY THE ENGINEER OR THE COLLECTION SYSTEM MANAGER.
- THE CONTRACTOR SHALL COMPLY WITH AND FOLLOW ALL NPDES REQUIREMENTS IN EFFECT AT THE TIME OF CONSTRUCTION.

- IF ACP IS DISCOVERED DURING THE COURSE OF WORK, CONTRACTOR SHALL NOTIFY CITY, EXPOSE, REMOVE, MANAGE AND DISPOSE OF ANY EXPOSED ACP IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND GUIDELINES TO THE EXTENT NECESSARY TO COMPLETE THE WORK. ACP SHALL NOT BE PIPE BURST, AND IS REQUIRED TO BE OPEN TRENCH REPLACED. ACP REMOVAL, TRANSPORTATION, AND DISPOSAL SHALL BE PERFORMED BY THE CONTRACTOR AND WILL BE PAID FOR UNDER A CONTRACT CHANGE ORDER

- PROPERTY LINES OR EASEMENTS SHOWN ARE FOR INFORMATION ONLY AND ARE APPROXIMATE WHICH MAY NOT SHOW THE CURRENT CONFIGURATIONS.

**TREE PROTECTION:**

- CONTRACTOR SHALL COMPLY WITH CITY OF PACIFICA ORDINANCE 884-C.S. REGARDING TREE PRESERVATION.
- CONTRACTOR SHALL HAVE A CERTIFIED ARBORIST ONSITE TO REVIEW BORE PITS AND EXCAVATIONS WITHIN PUBLIC EASEMENTS.
- CONTRACTOR SHALL PREPARE AND IMPLEMENT TREE PROTECTION PLANS FOR ALL EXCAVATIONS WITHIN THE DRIP LINES OF TREES.
- REFERENCE THE TREE PROTECTION SPECIFICATIONS WITHIN THE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.


**BENCHMARK:**  
THE SURVEY ELEVATION DATA IS TIED INTO NGS DATASHEET "HT0462" ELEVATION 70.710' (NAVD 88)

**BASIS OF BEARING:**  
THE BASIS OF BEARINGS FOR THIS SURVEY IS FROM GPS OBSERVATIONS USING THE "CDS VIRTUAL SURVEY NETWORK" BASED ON THE NORTH AMERICAN DATUM OF 1983, CALIFORNIA STATE PLANE ZONE 3, EPOCH 2011.00, AS DETERMINED FROM GEODETIC VALUES PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC).

**CONSTRUCTION NOTES:**

- ALL CONSTRUCTION MATERIALS AND METHODS SHALL COMPLY WITH THE ORDINANCES, SPECIFICATIONS, AND STANDARDS OF THE CITY OF PACIFICA.
- TRAFFIC CONTROL MAINTENANCE AND OPERATION SHALL COMPLY WITH THE FOLLOWING STATE STANDARD SPECIFICATIONS: SECTION 7-1.09 "PUBLIC SAFETY", 7-1.08 "PUBLIC CONVENIENCE", AND SECTION 12, "CONSTRUCTION AREA TRAFFIC CONTROL DEVICES".
- EXISTING CURB, SIDEWALK, DRIVEWAY, LANDSCAPE OR OTHER IMPROVEMENTS THAT ARE DAMAGED OR DISPLACED, EVEN THOUGH THEY WERE NOT TO BE REMOVED, SHALL BE REPAIRED OR REPLACED EVEN IF DAMAGE OR DISPLACEMENT OCCURRED PRIOR TO ANY WORK PERFORMED BY THE CONTRACTOR.
- MANHOLES, WATER VALVE BOXES, AND CLEANOUT FRAMES AND COVERS SHALL BE BROUGHT TO FINISH GRADE BY THE CONTRACTOR AFTER PAVING IS COMPLETED.
- REPLACE ALL EXISTING SIGNS AND STRIPING DAMAGED BY CONSTRUCTION IN KIND AT THE EXACT LOCATION OF THE EXISTING SIGN OR STRIPING PER THE CITY OF PACIFICA GENERAL AND TECHNICAL SPECIFICATIONS.
- CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE CITY OF PACIFICA PRIOR TO COMMENCING WORK.
- CONTRACTOR SHALL NOTIFY THE POLICE AND FIRE DEPARTMENTS IF SEGMENT OF A ROAD WILL BE TEMPORARILY CLOSED.
- SANITARY SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT PLANS, SPECIFICATIONS AND CITY OF PACIFICA STANDARD DRAWINGS.
- WHENEVER SEWER LINES (TRUNK, INTERCEPTOR, MAIN OR LATERAL) CROSS STORM OR WATER MAIN LINES, CLASS 51 POLYETHYLENE LINED DUCTILE IRON PIPE WILL BE REQUIRED FOR SEWER LINE AS FOLLOWS:  
A. WHENEVER CLEARANCE BETWEEN SANITARY SEWER PIPE AND ANY UTILITY PIPE (EXCEPT WATER MAIN) IS 6" OR LESS.  
B. WHENEVER CLEARANCE BETWEEN SANITARY SEWER PIPE AND WATER MAIN IS LESS THAN 12"; HOWEVER, CLEARANCE SHALL NEVER BE LESS THAN 4" THE CENTERLINE. 51 D.I.P. SHALL BE ONE CONTINUOUS LENGTH SUFFICIENTLY LONG TO SPAN THE OPPOSING TRENCH AND EXTEND A MINIMUM OF TWO FEET (2') BEYOND ON EACH SIDE.
- EXISTING SERVICE CONNECTIONS SHALL BE LOCATED BEFORE INITIATING SEWER MAIN REPLACEMENT OPERATIONS. SERVICE LATERAL SHALL BE RECONNECTED TO THE NEW SEWER LINE AFTER REPLACEMENT AND BEFORE VIDEO INSPECTION IS COMPLETED. ANY SERVICES REMAINING OFF LINE FOR AN EXTENDED PERIOD OF TIME, OR ANY CONNECTIONS AS DEEMED NECESSARY BY THE CITY TO PROTECT THE CUSTOMER, SHALL BE BYPASS PUMPED UNTIL SUCH TIME THAT THEY CAN BE RECONNECTED.
- ALL FUSING BEADS SHALL BE REMOVED FROM THE INTERIOR OF THE PIPE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND GETTING PERMISSION FOR STAGING AREA.
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING LATERAL CONNECTIONS.

**MANHOLE REHABILITATION:**

- MANHOLE REHABILITATION SHALL BE DONE IN ACCORDANCE TO THESE NOTES, SPECIFICATION SECTION IX-A2-2.15, THE MANHOLE REHABILITATION TABLES PROVIDED ON SHEET T3, AND DETAIL .
- CONTRACTOR SHALL MAINTAIN SEWER FLOW AT ALL TIMES DURING CONSTRUCTION, SEE SPECIFICATION SECTION IX-A1.2.

**POTHOLING**

- THE CONTRACTOR SHALL POTHOLE ALL UTILITIES THAT MAY CONFLICT WITH SEWER ALIGNMENT AS LEAST 2 WEEKS PRIOR TO NEW PIPELINE WORK AND PRIOR TO EXCAVATING AS DESCRIBED BELOW:
  - PIPE BURSTING LOCATIONS:
    - CONTRACTOR SHALL POTHOLE ALL UTILITIES THAT MAY CONFLICT WITH THE SEWER ALIGNMENT PRIOR TO EXCAVATING AND PIPE BURSTING.
    - ALL UTILITIES WITHIN 3 FEET OF THE SEWER MAIN SHALL BE POTHOLED AND EXPOSED DURING PIPE BURSTING OPERATION.
    - CONTRACTOR SHALL POTHOLE AND EXPOSE WATER MAINS WHERE IT IS WITHIN 5 FEET OF THE SEWER MAIN.
  - OPEN TRENCH AND EXCAVATION LOCATIONS:
    - CONTRACTOR SHALL POTHOLE ALL UTILITIES THAT MAY CONFLICT WITH THE SEWER ALIGNMENT.

**OVERHEAD ELECTRIC**

- LOW HANGING HIGH VOLTAGE OVERHEAD POWER TRANSMISSION UTILITIES ARE PRESENT AT PROJECT LOCATIONS.
- CONTRACTOR SHALL CONSIDER THE PROXIMITY OF OVERHEAD ELECTRIC UTILITIES WHEN BIDDING, AND NO ADDITIONAL COMPENSATION SHALL BE MADE FOR ADDITIONAL WORK NECESSITATED BY THE PRESENCE OF OVERHEAD ELECTRIC UTILITIES (SMALLER EQUIPMENT, ETC.).
- CONTRACTOR SHALL MAINTAIN A MINIMUM CLEARANCE BETWEEN THE POWER LINES AND THE WORK AT ALL TIMES AS DICTATED BY OSHA AND PG&E REGULATIONS.


**ABBREVIATIONS**

Ø	DIAMETER	EP	EDGE OF PAVEMENT	OD	OUTSIDE DIAMETER	SSLH	SANITARY SEWER LAMPHOLE
@	AT	FIG	FIGURE	PDPWF	PEAK DRY WEATHER FLOW	SSMH	SANITARY SEWER MANHOLE
(E)	EXISTING	FM	FORCE MAIN	PH	POTHOLE	SSRI	SANITARY SEWER RODDING INLET
(N)	NEW	FT	FOOT	PL	PLASTIC	STA	STATION
AB	AGGREGATE BASE	GALV	GALVANIZED	PS	PUMP STATION	STL	STEEL
AC	ASPHALT CONCRETE / ASBESTOS CEMENT	GPM	GALLONS PER MINUTE	PSI	POUNDS PER SQUARE INCH	T	THICKNESS
ACP	ASBESTOS CEMENT PIPE	HDPE	HIGH DENSITY POLYETHYLENE	PVC	POLYVINYLCHLORIDE	TCP	TRAFFIC CONTROL PLAN
BMP	BEST MANAGEMENT PRACTICES	HMA	HOT-MIX ASPHALT	PWWF	PEAK WET WEATHER FLOW	TYP	TYPICAL
CCP	CONCRETE CYLINDER PIPES	HOR	HORIZONTAL	R	RADIUS, RIGHT	VCP	VITRIFIED CLAY PIPE
CDF	CONTROLLED DENSITY FILL	INV	INVERT	RC	RELATIVE COMPACTION	VAR	VARIES
CI	CAST IRON	L	LENGTH	RCB	REINFORCE CONCRETE BOX	VER	VERTICAL
CLR	CLEARANCE	LBS	POUNDS	RCP	REINFORCE CONCRETE PIPE	W	WEST
CLSM	CONTROLLED LOW STRENGTH MATERIAL	LF	LINEAR FOOT	ROW	RIGHT-OF-WAY	W	WITH
CO	CLEANOUT	MAX	MAXIMUM	RSC	RAPID STRENGTH CONCRETE	WPCP	WATER POLLUTION CONTROL PLAN
CONC	CONCRETE	MFG	MANUFACTURER	S	SOUTH	WSP	WELDED STEEL PIPE
CPLG	COUPLING	MH	MANHOLE	SCH	SCHEDULE		
DI	DUCTILE IRON	MIN	MINIMUM	SD	STORM DRAIN		
DIA	DIAMETER	N	NORTH, NORTHING	SDR	STANDARD DIMENSION RATIO		
DPW	DEPARTMENT OF PUBLIC WORKS	NO	NUMBER	SF	SQUARE FOOT		
E	EAST, EASTING	NTS	NOT TO SCALE	SS	SANITARY SEWER, STAINLESS STEEL		
EL	ELEVATION	OC	ON CENTER	SSFM	SANITARY SEWER FORCE MAIN		


**GENERAL PIPELINE NOTES**

- CONTRACTOR SHALL MAINTAIN SEWER FLOW AT ALL TIMES DURING CONSTRUCTION, SEE SPECIFICATIONS.
- PIPE LENGTHS AND DISTANCES IDENTIFIED ON THESE PLANS ARE HORIZONTAL LENGTHS. ACTUAL LENGTHS MAY VARY. CONTRACTOR WILL BE PAID BY THE HORIZONTAL DISTANCE AS IDENTIFIED ON THE PLANS AND SHOWN ON THE BID TAB UNLESS THE ACTUAL DISTANCE PER PIPE SEGMENT VARIES BY MORE THAN 10 FEET.
- EXISTING SEWER MAINS AND MANHOLES MAY BE SURCHARGED AND CONTAIN DEBRIS, SLUDGE, ROOTS, GREASE, ETC. THE CONTRACTOR IS RESPONSIBLE FOR DEWATERING, CLEANING, REMOVING AND DISPOSING OF ALL ITEMS WITHIN THE SEWER SYSTEM WHERE WORK IS TO OCCUR.
- CONTRACTOR SHALL CCTV INSPECT EXISTING SANITARY SEWER AFTER CLEANING AND PRIOR TO CONSTRUCTION. CCTV INSPECTION SHALL BE COMPLETED A MINIMUM OF 2-WEEKS PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL SUBMIT CCTV INSPECTION VIDEOS AND REPORTS TO CITY FOR REVIEW.


**PIPE BURSTING:**


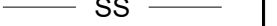




















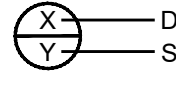
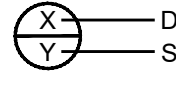









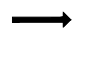




- PIPES INDICATED TO BE BURST SHALL BE PIPE BURST PER SPECIFICATION SECTION IX-A11.
- CONTRACTOR SHALL POTHOLE UTILITIES PRIOR TO BURSTING. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY PARALLEL UTILITIES ARE WITHIN 3 FEET OF THE SEWER MAIN.
- CONTRACTOR SHALL CONFIRM LOCATION OF LATERALS DURING CCTV INSPECTION AND MARK LOCATION PRIOR TO BURSTING SEWER MAIN. CONTRACTOR SHALL COORDINATE W/ CITY INSPECTOR ANY LOCATIONS WITH SIGNIFICANT ISSUES THAT WOULD PREVENT RESTORING THE SITE TO PRE-CONSTRUCTION CONDITIONS.
- CONTRACTOR SHALL REPAIR COLLAPSED SEWER, SEWER BREAKS, AND LATERAL TAP BREAK INS THAT MAY INTERFERE W/ INSTALLATION OF THE NEW SEWER MAIN PRIOR TO BURSTING.
- SEWER LATERALS ARE NOT SHOWN ON THE PLANS. CONTRACTOR SHALL LOCATE ALL SEWER LATERALS AND DETERMINE IF EACH LATERAL IS ACTIVE. CONTRACTOR SHALL INVESTIGATE ALL LATERALS TO DETERMINE IF THEY ARE ACTIVE BY COORDINATING WITH THE PROPERTY OWNERS, PERFORM DYE TESTING, AND OTHER METHODS. CONTRACTOR SHALL RECONNECT ALL ACTIVE SEWER LATERALS. LATERALS THAT ARE CAPPED OR ABANDONED SHALL NOT BE RECONNECTED.
- THE ESTIMATED NUMBER OF LATERAL CONNECTIONS TO BE REPLACED IS INCLUDED IN THE BID TAB.
- CONTRACTOR SHALL LOCATE, EXPOSE AND DISCONNECT ALL SEWER LATERALS FROM THE SEWER MAIN PRIOR TO PIPE BURSTING.
- ALL ACTIVE LATERALS SHALL BE RECONNECTED TO THE SEWER MAIN PER DETAIL .
- CONTRACTOR SHALL MARK THE PROPOSED LOCATIONS OF THE ENTRANCE AND EXIT PITS FOR THE PROPOSED PIPE BURSTING OPERATIONS A MINIMUM OF 2 WEEKS PRIOR TO PERFORMING THE WORK. CONTRACTOR SHALL NOTIFY THE CITY OF PACIFICA PUBLIC WORKS ONCE THE LOCATIONS ARE MARKED SO THEY CAN BE REVIEWED FOR ANY POTENTIAL CONFLICTS OR ISSUES. IF NECESSARY, CONTRACTOR SHALL MAKE ADJUSTMENTS AS NECESSARY TO MINIMIZE IMPACTS TO EXISTING UTILITIES.
- CONTRACTOR SHALL EXPOSE UTILITIES WITHIN 3-FEET OF SEWER MAIN DURING PIPE BURSTING.
- CONTRACTOR SHALL COORDINATE WITH NORTH COAST COUNTY WATER DISTRICT DURING CONSTRUCTION TO DETERMINE IF THEY REQUIRE THEIR WATER MAINS TO BE DEPRESSURIZED DURING EXCAVATION AND/OR PIPE BURSTING.
- EXCAVATIONS WITHIN 24 INCHES FROM USA MARKINGS FOR GAS MAINS AND UNDERGROUND ELECTRICAL LINES SHALL BE PERFORMED WITH HAND TOOLS TO EXPOSE THE UNDERGROUND UTILITY LINES PER PG&E REQUIREMENTS.
- ALL FUSED WELDS MUST BE DE-BEADED AND ACCEPTED BY THE CITY PER SPECIFICATION SECTION IX-A1-1.02.

**MONUMENTS:**

- NOT ALL STREET MONUMENTS ARE SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL PROTECT EXISTING STREET MONUMENTS TO THE EXTENT FEASIBLE.
- WHERE NECESSARY THE CONTRACTOR SHALL REMOVE, REPLACE, DOCUMENT, AND RECORD EXISTING STREET MONUMENTS AS NECESSARY FOR CONSTRUCTION.
- STREET MONUMENTS SHALL BE REPLACED PER .
- REFERENCE TECHNICAL SPECIFICATION SECTION IX-A4-3 FOR ADDITIONAL REQUIREMENTS.

**REMOVAL OF DROP MANHOLE CONNECTIONS:**

- ALL SEWER MAIN CONNECTIONS TO MANHOLES THAT ARE MORE THAN 0.5 FEET HIGHER THAN THE OUTLET ELEVATION SHALL BE ADJUSTED TO ELIMINATE THE DROP CONNECTION. THE SEWER MAIN SHALL BE OPEN TRENCH REPLACED OUTSIDE OF THE MANHOLE AND THE PIPE SHALL BE DEFLECTED TO ELIMINATE THE MANHOLE DROP CONNECTION PER DETAIL .

	NEW	EXISTING
SANITARY SEWER		
LATERAL		
CAPPED LATERAL		
RIGHT-OF-WAY/ PROPERTY LINE		
WATER MAIN		
GAS MAIN		
STORM DRAIN		
OVERHEAD ELECTRIC		
REPLACE/BURST SANITARY SEWER (BASE BID)		
REPLACE/BURST SANITARY SEWER ADDITIVE BID ITEM 1		
REPLACE/BURST SANITARY SEWER ADDITIVE BID ITEM 2		
DETAIL		
SANITARY SEWER MANHOLE		
SANITARY SEWER MANHOLE ADDITIVE BID ITEM #1		
SANITARY SEWER MANHOLE ADDITIVE BID ITEM #2		
SANITARY SEWER RODDING INLET/LAMPHOLE		
FLOW ARROW		
STORM DRAIN MANHOLE		
STORM DRAIN INLET		

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SHEET  
**T2**  
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MH ID#	ADDRESS		REPLACE MH	NEW MH	REPLACE LAMP HOLE	MODIFY MH FOR PIPE BURSTING	RESET FRAME	REHABILITATE MANHOLE	REMOVE LADDER RUNGS (EA)	INVERT DEPTH	NOTES
	NUMBER	Street Name									
LLEa	944	Corona			X					N/A	Lamp Hole
LLEa1	936	Corona				X		X	1	5.11'	
LLEa2	928	Corona				X		X	1	5.35'	
LLEa3	916	Corona				X		X	1	4'	
LLEa4	908	Corona				X		X	1	4.97'	
LLE2		Escalero / Corona				X		X	3	7.22'	
LLGC	660	Alta Vista				X			2	4.95'	
LLGC1	684	Alta Vista				X		X	2	7.26'	
LLG5		Alta Vista / Ladera				X		X	4	5.53'	
LLGD5	716	Alta Vista				X		X	2	4.52'	
LLGD4	736	Alta Vista				X		X	2	4.73'	
LLGD3	756	Alta Vista				X		X	2	4.86'	
LLGD2	784	Alta Vista				X		X	2	4.9'	
LLGD1	815	Alta Vista				X		X	2	5.25'	
LLGD	872	Alta Vista				X			0	3.95'	
LLEd	884	Alta Vista			X				0	N/A	Lamp Hole is Buried
LLE3		Escalero / Alta Vista				X		X	4	7.9'	
LLEC2	940	Alta Vista				X		X	2	4.95'	
LLF1	995	Serena				X		X	1	4.92'	
LLF2	952	Serena				X		X	1	4.56'	
LLF3	912	Serena				X		X	2	4.84'	
LLFa	748	Serena			X				0	N/A	Lamp Hole
LLGF	744	Serena			X				0	N/A	Lamp Hole
LLF4	796	Serena				X		X	2	4.98'	
LLL4	820	Arguello				X		X	2	6.49'	
LLL3	844	Arguello				X		X	2	5.75'	
LLL2	867	Arguello				X		X	3	6.3'	
LLL1	883	Arguello			X				0	N/A	Lamp Hole
LLEe	995	Serena				X			0	4.75'	
LLEe1	952	Serena				X		X	1	4.55'	
LLEe2	912	Serena				X		X	2	5.39'	
LLFa1	756	Serena				X			0	4.25'	
LLGF1	732	Serena				X		X	2	4.5'	
LLGF2	720	Serena				X		X	2	4.91'	
LLKB	19	Chico				X		X	2	5.06'	
LLKa1	8	Cadiz				X		X	2	5.2'	
LLKa	36	Cadiz				X		X	2	4.49'	
LLD19	912	Crespi				X		X	3	6.3'	
LLD21	867	Crespi				X		X	1	4.69'	
LLD20		Escalero / Crespi				X		X	2	6.07'	Upstream from Trough Escalero
LLD23	819	Crespi	X						0	5.25'	
LLD24	803	Crespi				X		X	0	6.2'	
LLD23a	824	Crespi				X		X	0	4.03'	
LLD24a	808	Peralta				X		X	0	5.4'	
LLD22a	843	Crespi				X		X	0	5.3'	
LLF5	790	Serena				X	X	X	3	8'	Needs 2 (4") Risers Concrete Heavy Roots Inside
LLF6	803	Crespi				X		X	2	6.65'	
LLGa	674	Corona				X			0	4.3'	
LLC2	948	La Mirada				X		X	5	8.28'	
LLC3	960	La Mirada				X		X	1	4.7'	
LLC4	990	La Mirada / Valencia				X		X	3	6.6'	
LLC5	1003	La Mirada / Crespi				X		X	3	6.49'	
LLG6	689	Serena / Ladera				X		X	4	7.94'	
LLGe1	7	Ortega				X		X	3	5.89'	
LLG7		Ladera / Ortega				X		X	2	6.3'	
LLG8		Ladera / Crespi				X		X	3	6.61'	Cap 6" Lateral coming into manhole
LLD25		Escalero / Peralta				X		X	0	7.44'	
LLD25A	1179	Peralta				X			0	5.25'	
LLD27		Peralta / Arguello				X			0	9.29'	
LLK7	1283	Escalero				X		X	3	6.29'	
LLK6	1251	Escalero				X		X	2	5.88'	Trough Too Wide Upstream (Chico CT)
LLK5	1223	Escalero				X		X	2	5.55'	Trough Too Wide Upstream (Cadiz CT)
LLK4	1195	Escalero	X						0	6.91'	Shelf 4 Trough Laterals 1191-1195 Remove Drop Hole
LLK3	1159	Escalero	X						0	5.19'	
LLK2	1119	Escalero				X		X	2	5.31'	
LLK1	1108	Escalero			X				0	N/A	Lamp Hole
LLE1	1040	Escalero			X					N/A	Lamp Hole

MH ID#	ADDRESS		REPLACE MH	NEW MH	REPLACE LAMP HOLE	MODIFY MH FOR PIPE BURSTING	RESET FRAME	REHABILITATE MANHOLE	REMOVE LADDER RUNGS (EA)	INVERT DEPTH	NOTES
	NUMBER	STREET NAME									
LLE5		Serena / Escalero				X		X	1	5.77'	
LLE4		Escalero				X			0	7.01'	
LLGe	24	Ortega				X		X	2	5'	
LLF	895	Serena			X				0	N/A	Lamp Hole
LLD17	960	Crespi				X		X	3	8.75'	TRIM (E) LATERAL PIPE FLUSH WITH MANHOLE WALL.
LLD18	923	Crespi				X		X	3	8.75'	
LLD18A	919	Crespi		X						9.4'	
LLEC1	968	Alta Vista				X		X	2	4.73'	
LLEC	996	Alta Vista				X		X	2	5.02'	
LLEB	880	Corona			X				0	N/A	Lamp Hole
LLG1	865	Corona			X				0	N/A	Lamp Hole
LLG2	820	Corona				X		X	2	5.35'	
LLG3	796	Corona				X		X	2	5.45'	
LLGb	760	Cordova				X		X	1	4.75'	
LLG4	720	Corona				X		X	2	6.3'	
LLGa3	715	Corona				X		X	1	5.06'	
LLGa2	696	Corona				X		X	1	4.89'	
LLGA1	676	Corona				X		X	1	4.5'	
LLGAA	676	Corona			X					N/A	Lamp Hole
LLJ9	1112	Seville	X							4.31'	
LLJ8	1128	Seville	X							5.75'	
LLJB3	915	Regina				X		X		6.63'	
LLJB2	936	Regina				X		X		5.32'	
LLJB1	960	Regina				X		X		5.55'	
LLJB	985	Regina			X					N/A	Lamp Hole
TOTAL			5	1	12	74	1	66	124		

ADDITIVE BID ITEM #1									
MH ID#	ADDRESS		REPLACE LAMP HOLE	NEW MH	MODIFY MH FOR PIPE BURSTING	REHABILITATE MANHOLE	REMOVE LADDER RUNGS (EA)	INVERT DEPTH	NOTES
	NUMBER	STREET NAME							
LLB7	1031	Valencia			X	X	2	5.1'	Trough in Both Directions Only
LLB6	1055	Valencia			X	X	2	5.45'	
LLB5	1095	Valencia			X	X	3	5.84'	
LLB4	1111	Valencia			X	X	4	7.4'	Trough Only
LLB3	1136	Valencia			X	X	3	6.5'	
LLB2	1156	Valencia			X	X	6	9.55'	
LLB1	1163	Valencia	X				0	N/A	Lamp Hole
LLBa	991	Hinton Ranch Road			X		0	5.5'	2" Diameter
LLBa1	992	Hinton Ranch Road		X				5'	
LLB8	1016	Valencia			X	X	3	5.6'	
LLBb2	1096	Zamora			X	X	5	8.06'	
LLBb1	1024	Zamora			X	X	3	6.44'	
LLBb	1044	Zamora	X				0	N/A	Lamp Hole
LLBC2	1012	Granada			X	X	4	6.75'	
LLBC1	1048	Granada			X	X	3	5.31'	
LLBC	1084	Granada			X	X	3	5.3'	
LLBC1a	1090	Granada	X				0	N/A	Lamp Hole
TOTAL			4	1	13	12	44		

ADDITIVE BID ITEM #2							
MH ID#	ADDRESS		REPLACE LAMP HOLE	REPLACE MH	MODIFY MH FOR PIPE BURSTING	INVERT DEPTH	NOTES
	NUMBER	STREET NAME					
LLD15	1004	Crespi			X	5.35'	
LLD14	1035	Crespi			X	5.12'	
LLD13	1040	Crespi			X	6.96'	
LLD12	1044	Crespi			X	7.9'	
LLD11	1072	Crespi			X	4.66'	
LLD10	1084	Crespi			X	5.27'	
LLD9	1095	Crespi			X	5.6'	
LLD8	1112	Crespi		X		5.92'	
LLD7	1131	Crespi		X		5.96'	
LLD6	1144	Crespi		X		5.25'	
LLD5	1160	Crespi			X	5.1'	
LLD4	1180	Crespi		X		7.69'	
LLD3	1204	Crespi		X		5.6'	
ULD10	1235	Crespi		X		5.64'	
ULD9	1267	Crespi		X		6.94'	
ULD8	1303	Crespi		X		5.89'	
ULD7	1323	Crespi		X		6.97'	
ULD6	1343	Crespi		X		6.09'	
ULD5	1351	Crespi		X		5.35'	
ULD4	1367	Crespi		X		6.09'	
ULD3	1390	Crespi		X		5.95'	
ULD2	1395	Crespi / Lerida		X		5.72'	
ULD1	1406	Crespi	X			N/A	
LLD2	1395	Crespi / Manzanita		X		6.4'	
LLA1	1175	Barcelona	X			N/A	
LLA2	1168	Barcelona			X	6.15'	
LLA3	1147	Barcelona			X	6.44'	
LLA4	1135	Barcelona			X	8.75'	
LLA5	1120	Barcelona			X	8.74'	
LLA6	1120	Barcelona			X	5	
LLA7	1104	Barcelona			X	4.49'	
LLA8	1050	Barcelona			X	6.89'	
LLA9	1010	Barcelona			X	6.72'	
TOTAL			2	16	15		

**MANHOLE REHABILITATION TABLE NOTES:**

- REHABILITATE (E) MANHOLE PER TECHNICAL SPECIFICATIONS SECTION IX-A2-2.15 AND DETAIL
- MODIFY (E) MANHOLE FOR PIPE BURSTING, PER
- REFORM BENCH AND INVERT IN MANHOLE PER
- GROUT INVERT OF (E) MANHOLE PER SPECIFICATION SECTION IX-A2-2.12.
- REMOVE (E) LADDER RUNGS WITHIN MANHOLE.
- REMOVE (E) SANITARY MANHOLE AND REPLACE PER
- REMOVE (E) FRAME, RISER, AND CASTING AND REPLACE PER
- GROUT GRADE RINGS OF (E) MANHOLE PER SPECIFICATION SECTION IX-A2-2.11.
- REMOVE (E) SANITARY LAMP HOLE AND REPLACE PER

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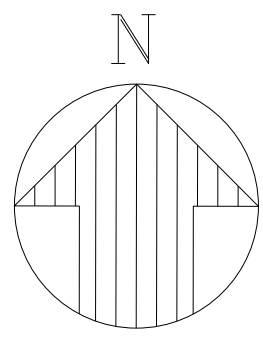
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CITY ENGINEER  
LOUIS SUN, P.E.  
DEPUTY PUBLIC WORKS DIRECTOR



**CITY OF PACIFICA**  
**LOWER LINDA MAR**  
**REHABILITATION AND REPAIR PROJECT**  
**MANHOLE REPAIR TABLES**

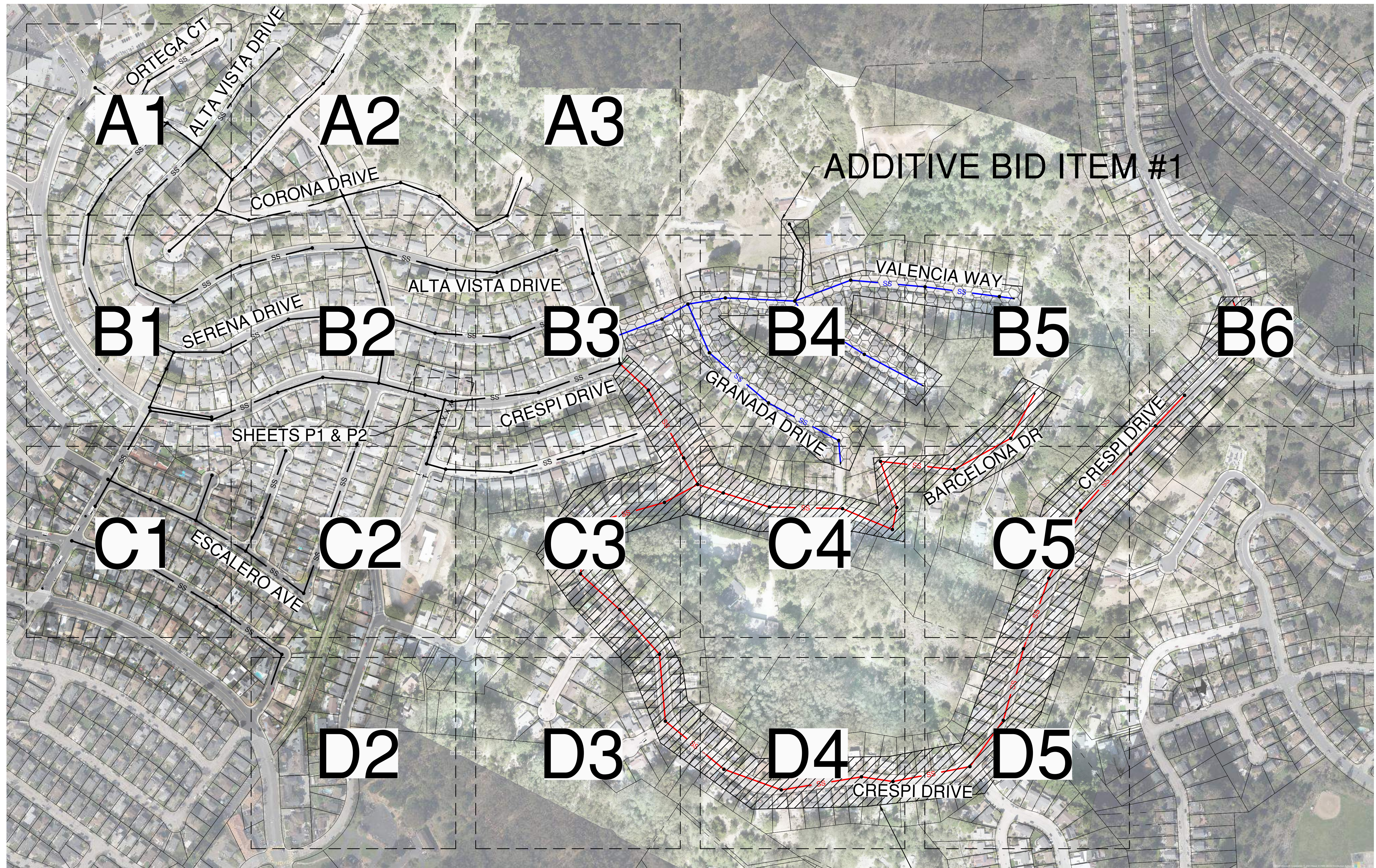
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SCALE: 1 INCH = 200 FEET

REPLACE/BURST SANITARY SEWER (BASE BID) — SS —  
REPLACE/BURST SANITARY SEWER ADDITIVE BID ITEM 1 — SS —  
REPLACE/BURST SANITARY SEWER ADDITIVE BID ITEM 2 — SS —



**SHEET INDEX**  
SCALE: 1" = 200'

ADDITIVE BID ITEM #1

ADDITIVE BID ITEM #2

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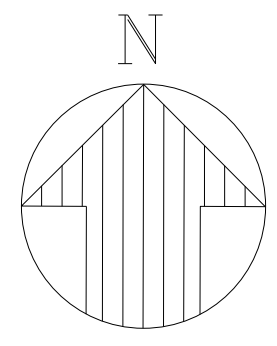


CITY OF PACIFICA  
LOWER LINDA MAR  
REHABILITATION AND REPAIR PROJECT  
SHEET INDEX

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SHEET  
**T4**  
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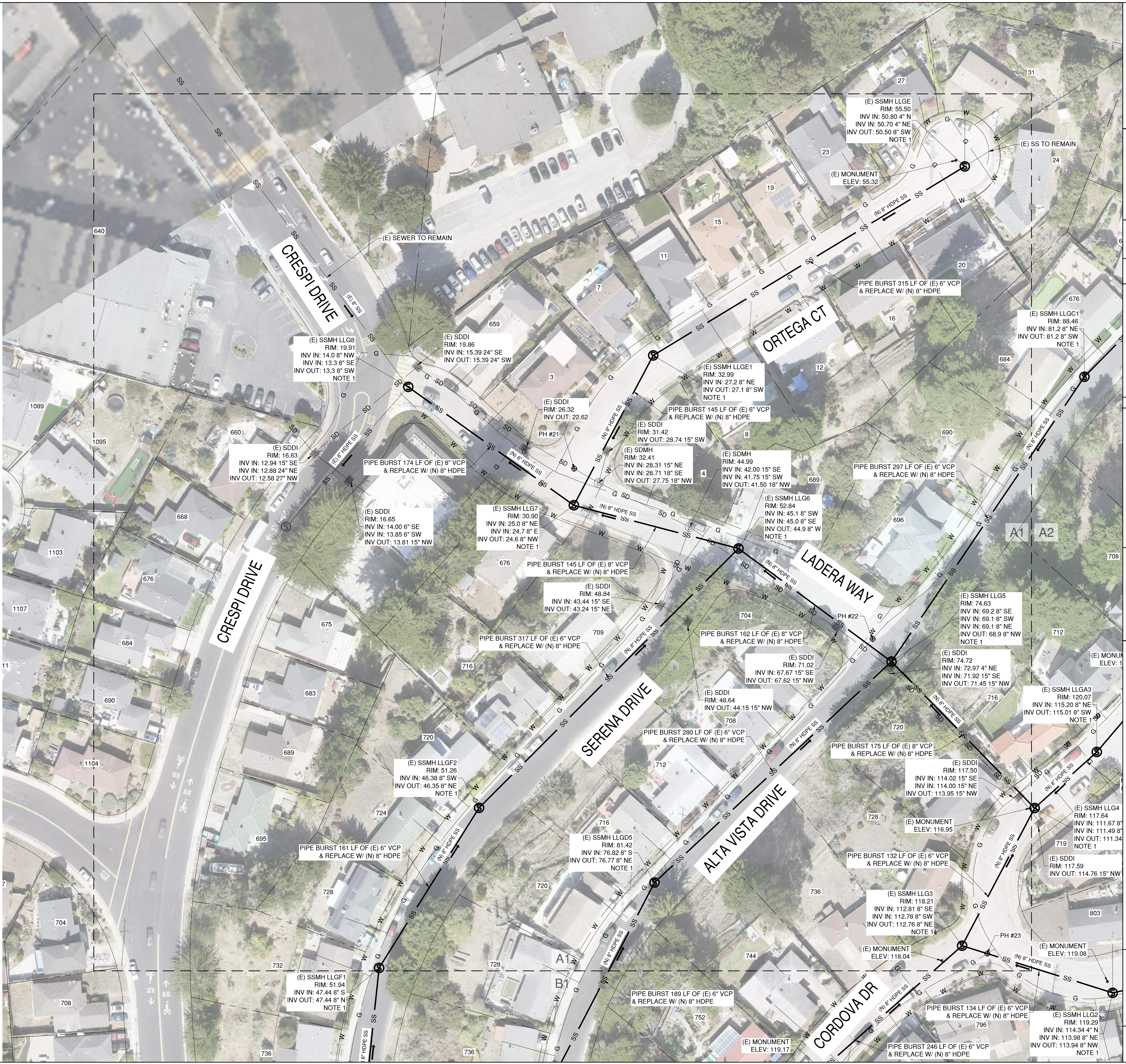




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SCALE: 1 INCH = 40 FEET

**NOTES:**

1. PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
2. WORK WITHIN EXISTING EASEMENTS IS LIMITED TO FOOT TRAFFIC AND HANDHELD EQUIPMENT. CONTRACTOR SHALL REPLACE ALL EXISTING SITE IMPROVEMENTS, LANDSCAPING, FENCES AND IRRIGATION THAT ARE DAMAGED OR REMOVED DURING THE COURSE OF WORK. CONTRACTOR SHALL ADJUST CONSTRUCTION METHODS AS NECESSARY TO MINIMIZE IMPACTS TO PRIVATE IMPROVEMENTS. REFERENCE THE SITE INFORMATION REPORT INCLUDED AS APPENDIX D TO THE TECHNICAL SPECIFICATIONS. INFORMATION SHOWN ON THE SITE INFORMATION REPORT SHALL BE USED FOR THE CONTRACTOR TO DETERMINE SITE CONDITIONS AND POTENTIAL IMPACTS.



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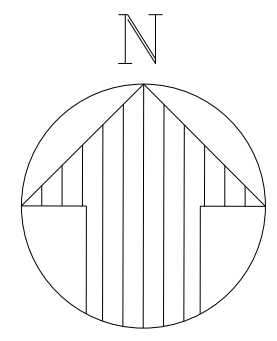
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**LOWER LINDA MAR**  
**REHABILITATION AND REPAIR PROJECT**  
**LADERA WAY & ORTEGA COURT**

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SHEET A1	
5 OF 28	

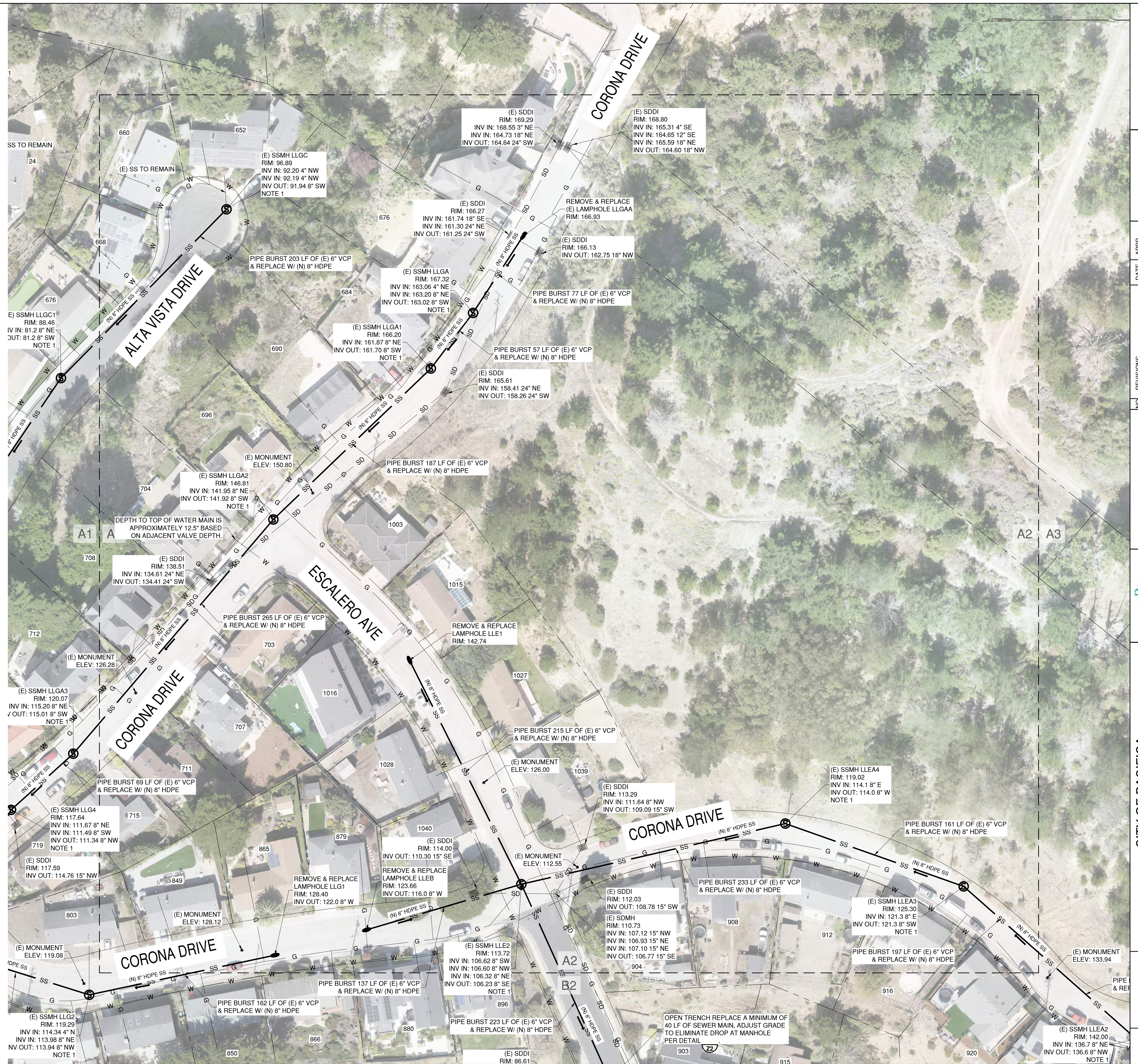




SCALE: 1 INCH = 40 FEET

**NOTES:**

- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.



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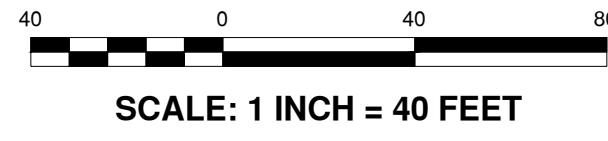
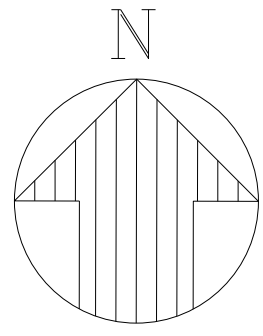
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**CITY OF PACIFICA**  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 ESCALERO AVENUE & CORONA DRIVE

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SHEET A2				
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- NOTES:**
- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.



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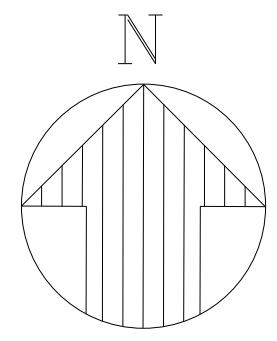
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**CITY OF PACIFICA**  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 CORONA DRIVE

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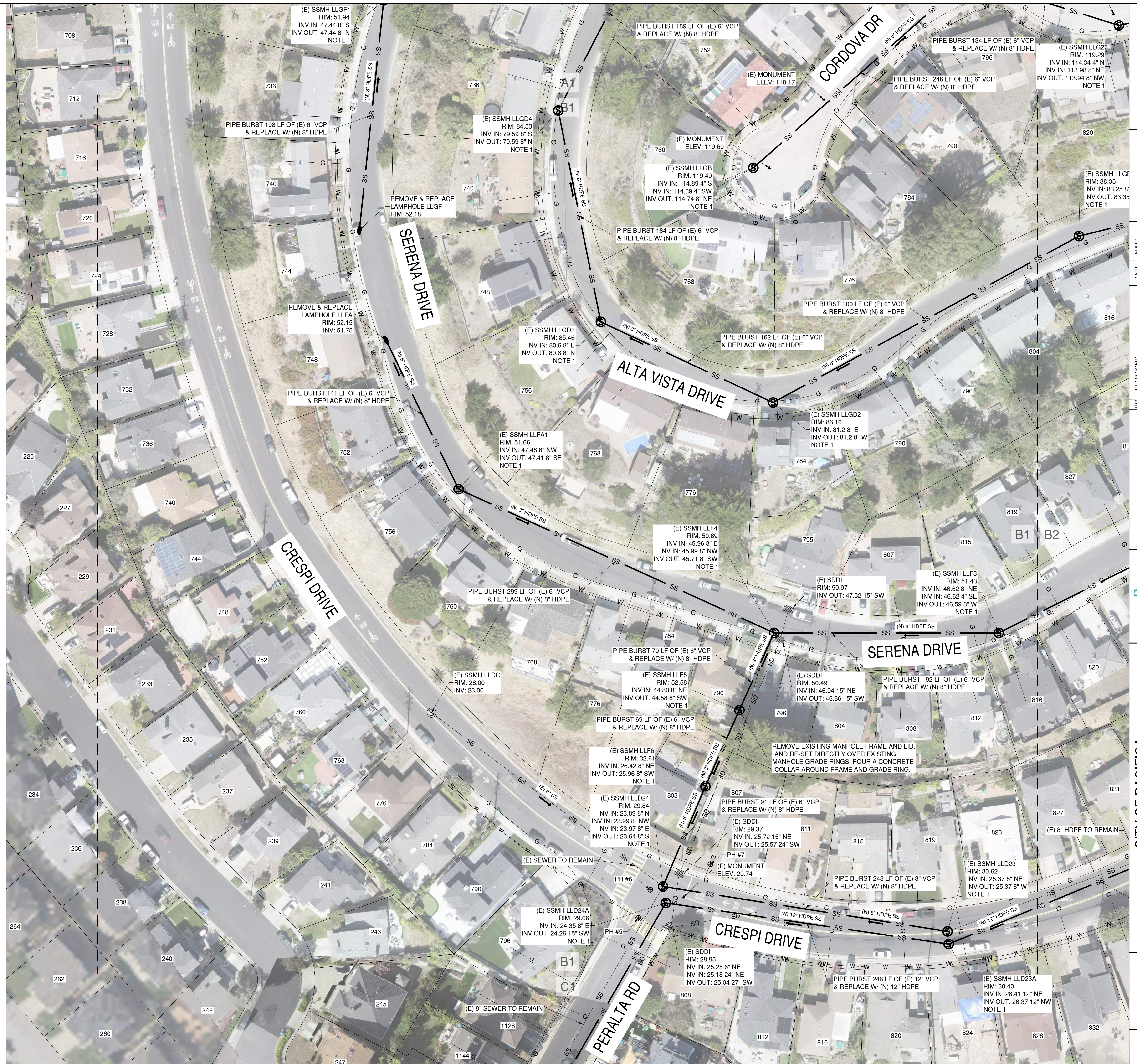




SCALE: 1 INCH = 40 FEET

**NOTES:**

- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
- WORK WITHIN EXISTING EASEMENTS IS LIMITED TO FOOT TRAFFIC AND HANDHELD EQUIPMENT. CONTRACTOR SHALL REPLACE ALL EXISTING SITE IMPROVEMENTS, LANDSCAPING, FENCES AND IRRIGATION THAT ARE DAMAGED OR REMOVED DURING THE COURSE OF WORK. CONTRACTOR SHALL ADJUST CONSTRUCTION METHODS AS NECESSARY TO MINIMIZE IMPACTS TO PRIVATE IMPROVEMENTS. REFERENCE THE SITE INFORMATION REPORT INCLUDED AS APPENDIX D TO THE TECHNICAL SPECIFICATIONS. INFORMATION SHOWN ON THE SITE INFORMATION REPORT SHALL BE USED FOR THE CONTRACTOR TO DETERMINE SITE CONDITIONS AND POTENTIAL IMPACTS.



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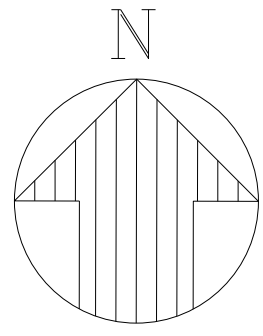


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 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 SERENA DRIVE & ALTA VISTA DRIVE

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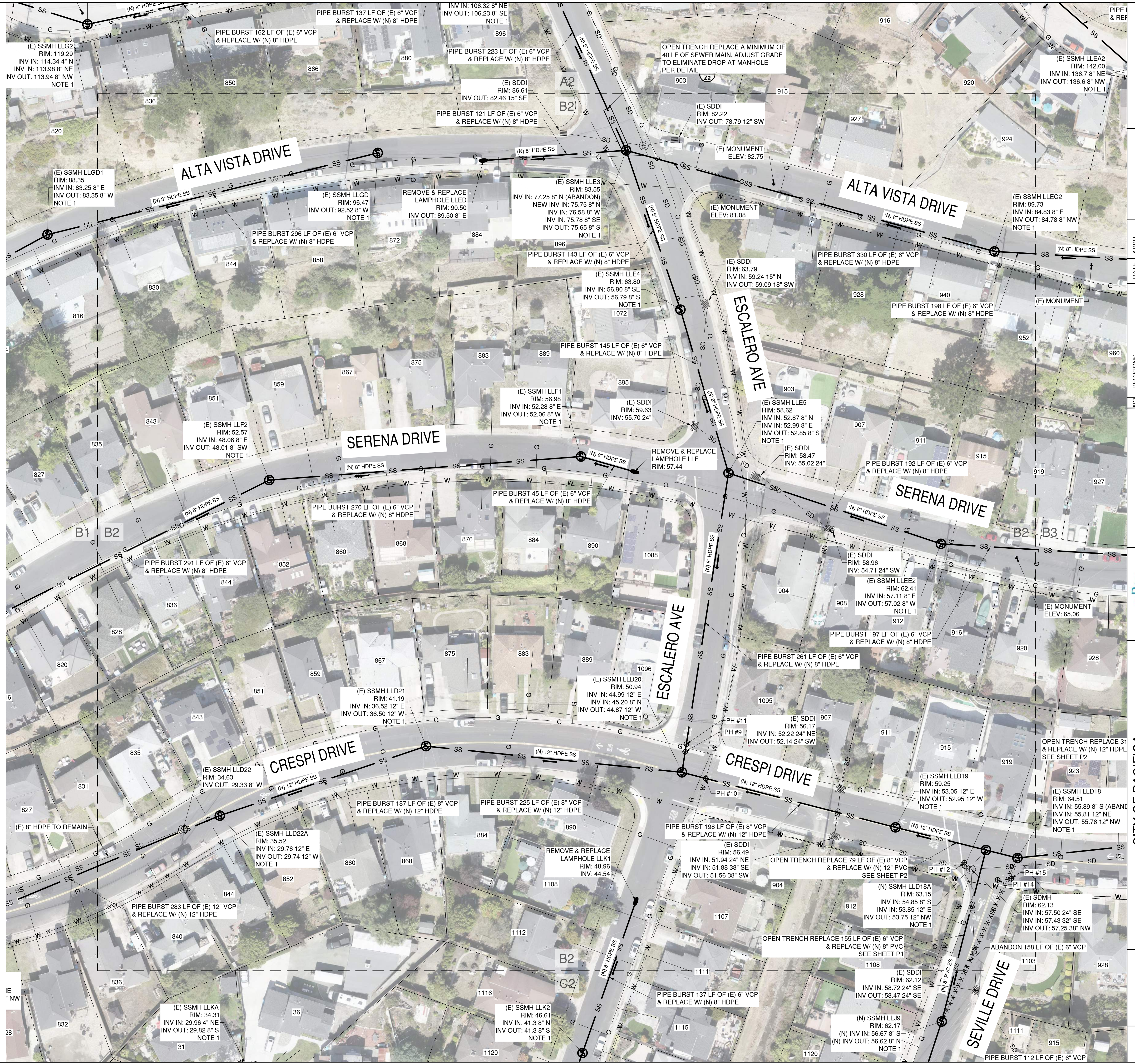




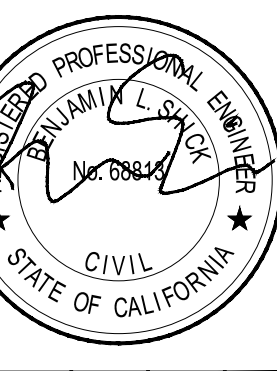
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**NOTES:**

- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.



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 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 SERENA DRIVE & ESCALERO AVENUE

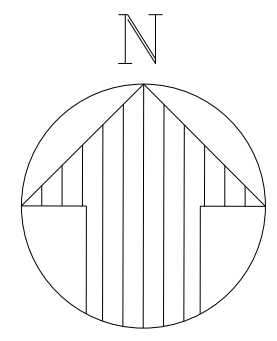
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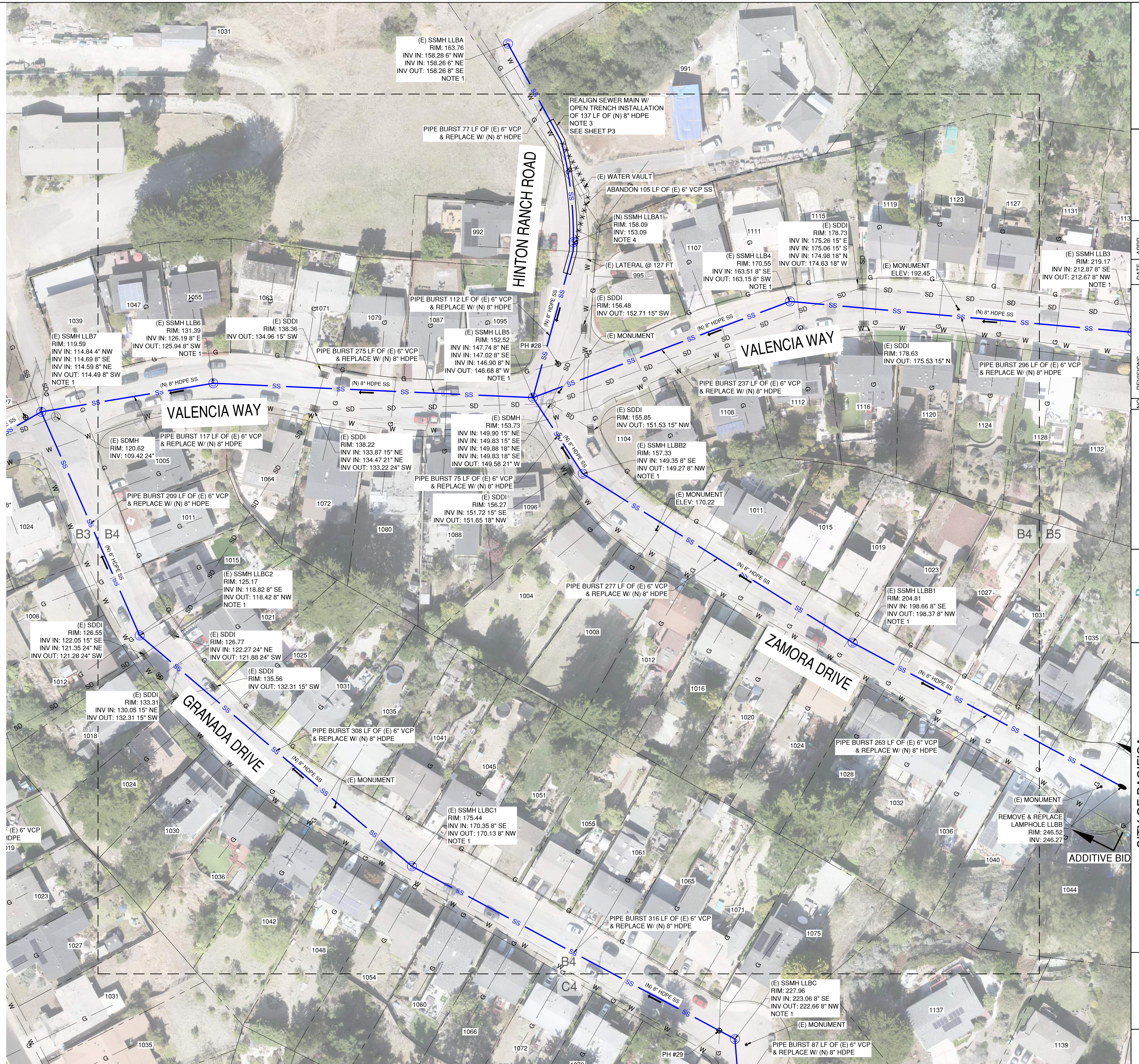






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- NOTES:**
- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
  - ALL WORK ON THIS SHEET IS INCLUDED UNDER ADDITIVE BID ITEM 1.



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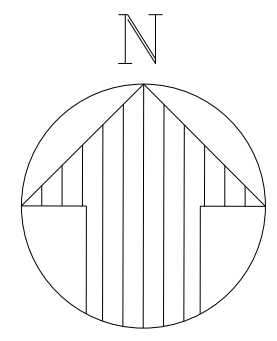
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**CITY OF PACIFICA**  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 VALENCIA WAY & ZAMORA DRIVE

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SCALE: 1 INCH = 40 FEET

**NOTES:**

1. PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
2. ALL PIPE BURSTING AND MANHOLE REHABILITATIONS ON VALENCIA WAY WEST OF LAMPHOLE LLB1 AND NORTHWEST OF LAMPHOLE LLBB ARE INCLUDED UNDER ADDITIVE BID ITEM 1.
3. ALL PIPE BURSTING AND MANHOLE REHABILITATIONS ON BARCELONA DRIVE SOUTHWEST OF LAMPHOLE LLA1 ARE INCLUDED UNDER ADDITIVE BID ITEM 2.



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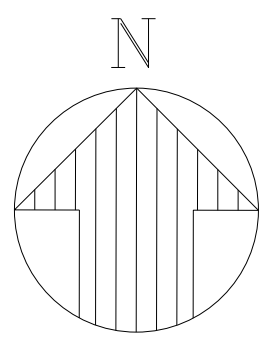
ROLAND YIP, P.E. CITY ENGINEER	DATE
LOUIS SUN, P.E. DEPUTY PUBLIC WORKS DIRECTOR	DATE



**CITY OF PACIFICA**  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 VALENCIA WAY & BARCELONA DRIVE

DATE: 03/22/2024	SCALE: AS SHOWN
DESIGN: JTY	DRAWN: JTY
CHECKED: BLS	





SCALE: 1 INCH = 40 FEET

**NOTES:**

1. PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
2. ALL WORK ON THIS SHEET INCLUDED UNDER ADDITIVE BID ITEM 2.



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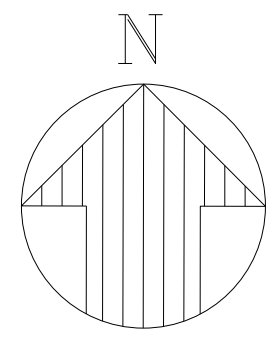
ROLAND YIP, P.E. CITY ENGINEER	DATE	DATE
LOUIS SUN, P.E. DEPUTY PUBLIC WORKS DIRECTOR		



**CITY OF PACIFICA**  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 CRESPI DRIVE & LERIDA WAY

DATE: 03/22/2024	SCALE: AS SHOWN
DESIGN: JTV	DRAWN: JTV
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SCALE: 1 INCH = 40 FEET

**NOTES:**  
1. PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.



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CITY ENGINEER

LOUIS SUN, P.E.  
DEPUTY PUBLIC WORKS DIRECTOR

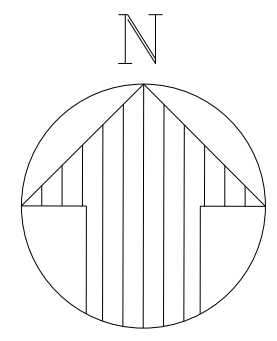


**CITY OF PACIFICA**  
LOWER LINDA MAR  
REHABILITATION AND REPAIR PROJECT  
ARGUELLO BOULEVARD & PERALTA ROAD

DATE: 03/22/2024	SCALE: AS SHOWN
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SHEET  
**C1**  
OF 28





SCALE: 1 INCH = 40 FEET

- NOTES:**
- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.



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ROLAND YIP, P.E.  
CITY ENGINEER

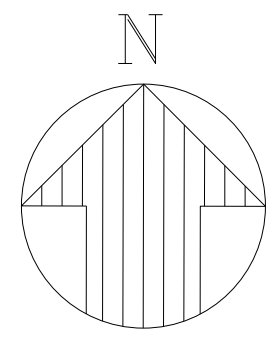
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**CITY OF PACIFICA**  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 ESCALERO AVENUE & CADIZ STREET

DATE: 03/22/2024	SCALE: AS SHOWN
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SCALE: 1 INCH = 40 FEET

- NOTES:**
- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
  - ALL PIPE BURSTING AND MANHOLE REHABILITATIONS ON CRESPI DRIVE WITHIN THIS SHEET ARE INCLUDED UNDER ADDITIVE BID ITEM 2.



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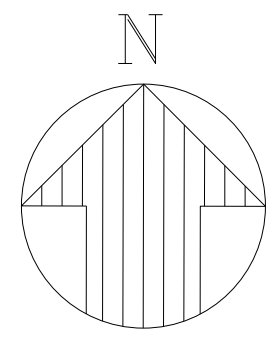
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**CITY OF PACIFICA**  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 CRESPI DRIVE

DATE:	03/22/2024
SCALE:	AS SHOWN
DESIGN:	JTY
DRAWN:	JTY
CHECKED:	BLS





SCALE: 1 INCH = 40 FEET

**NOTES:**

1. PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
2. ALL PIPE BURSTING AND MANHOLE REHABILITATIONS ON GRANADA DRIVE NORTH OF LAMPHOLE LLBC1A ARE INCLUDED UNDER ADDITIVE BID ITEM 1.
3. ALL PIPE BURSTING AND MANHOLE REHABILITATIONS ON BARCELONA DRIVE EAST OF SSMH LLD13 ARE INCLUDED UNDER ADDITIVE BID ITEM 2.



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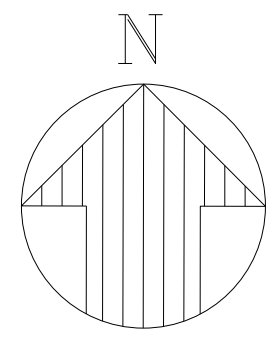
ROLAND YIP, P.E. CITY ENGINEER	DATE	LOUIS SUN, P.E. DEPUTY PUBLIC WORKS DIRECTOR	DATE
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**CITY OF PACIFICA**  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 BARCELONA DRIVE & GRANADA DRIVE

DATE: 03/22/2024	SCALE: AS SHOWN
DESIGN: JTV	DRAWN: JTV
CHECKED: BLS	





SCALE: 1 INCH = 40 FEET

- NOTES:**
- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
  - ALL WORK ON THIS SHEET IS INCLUDED UNDER ADDITIVE BID ITEM 2.



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 CITY ENGINEER

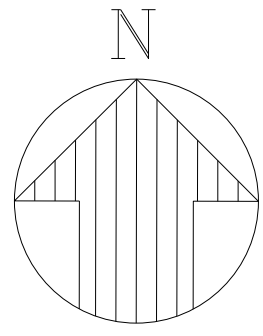
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**CITY OF PACIFICA**  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 CRESPI DRIVE

DATE: 03/22/2024  
 SCALE: AS SHOWN  
 DESIGN: JTY  
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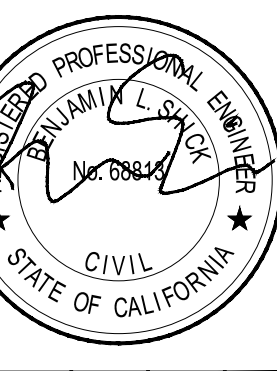
SCALE: 1 INCH = 40 FEET

**NOTES:**

- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.



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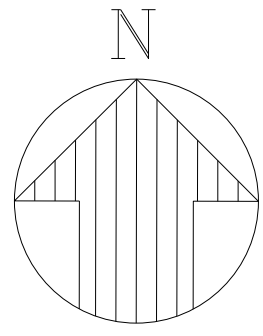
ROLAND YIP, P.E. CITY ENGINEER	DATE
LOUIS SUN, P.E. DEPUTY PUBLIC WORKS DIRECTOR	DATE



**CITY OF PACIFICA**  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 ARGUELLO BOULEVARD

DATE: 03/22/2024	SCALE: AS SHOWN
DESIGN: JTV	DRAWN: JTV
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SCALE: 1 INCH = 40 FEET

**NOTES:**

1. PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
2. ALL WORK ON THIS SHEET INCLUDED UNDER ADDITIVE BID ITEM 2.



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NO	REVISIONS	DATE	APPR

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 CITY ENGINEER

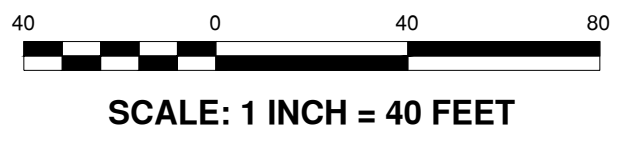
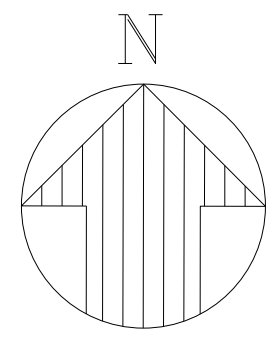
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**CITY OF PACIFICA**  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 CRESPI DRIVE

DATE: 03/22/2024	SCALE: AS SHOWN
DESIGN: JTV	DRAWN: JTV
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	20 OF 28





- NOTES:**
- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
  - ALL WORK ON THIS SHEET INCLUDED UNDER ADDITIVE BID ITEM 2.



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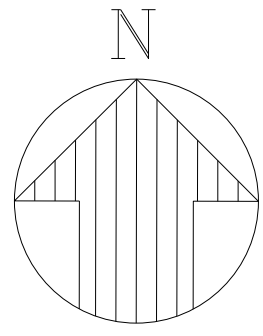
ROLAND YIP, P.E. CITY ENGINEER	DATE
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**CITY OF PACIFICA**  
**LOWER LINDA MAR**  
**REHABILITATION AND REPAIR PROJECT**  
**CRESPI DRIVE**

DATE: 03/22/2024	SCALE: AS SHOWN
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	21 OF 28





SCALE: 1 INCH = 40 FEET

**NOTES:**

1. PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
2. ALL WORK ON THIS SHEET IS INCLUDED UNDER ADDITIVE BID ITEM 2.



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 CITY ENGINEER

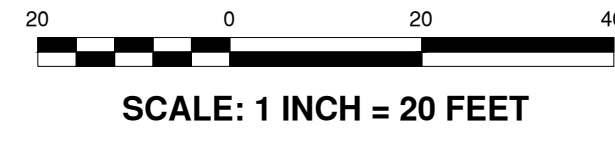
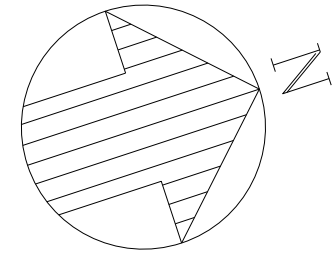
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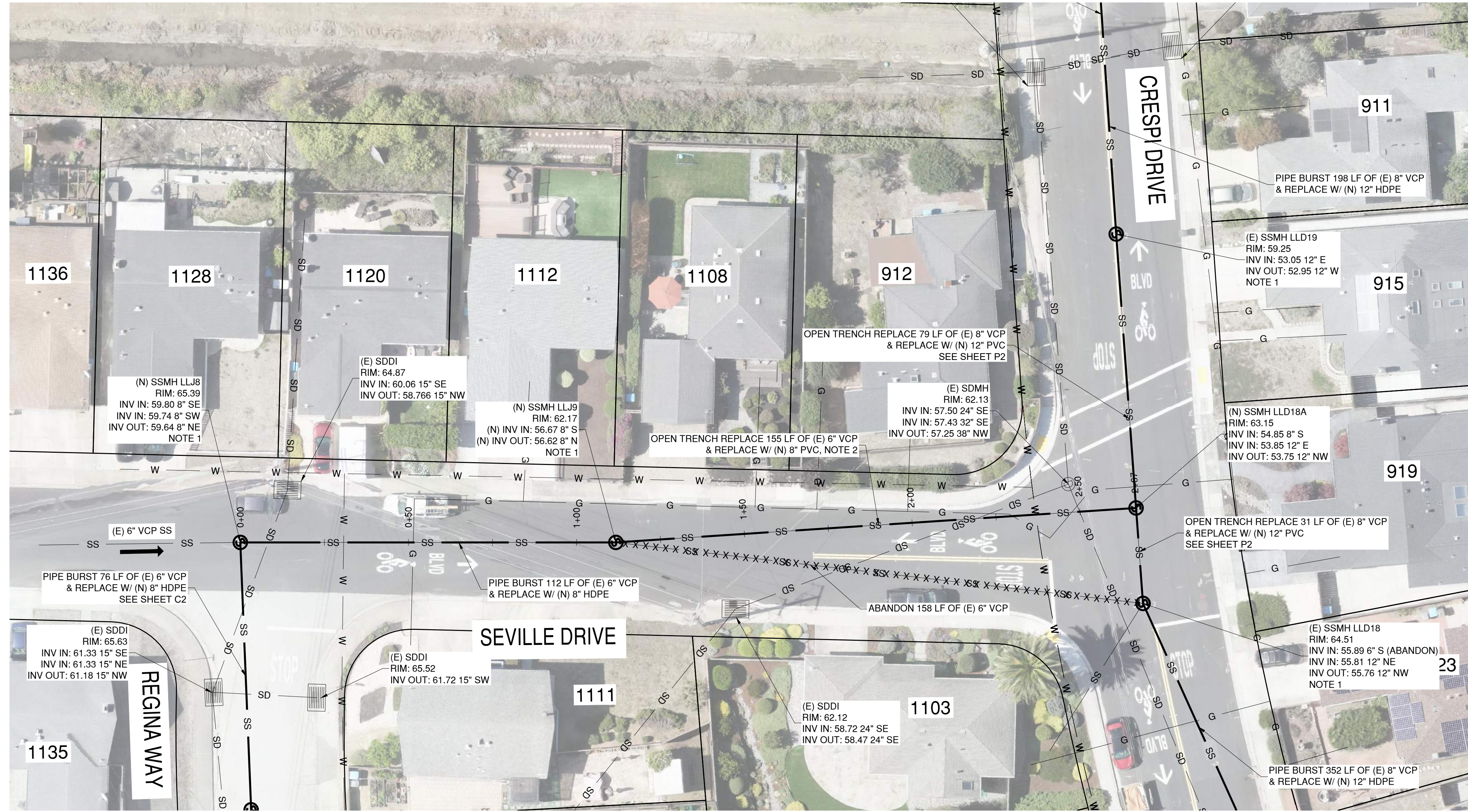
**CITY OF PACIFICA**  
 LOWER LINDA MAR  
 REHABILITATION AND REPAIR PROJECT  
 CRESPI DRIVE & MANZANITA DRIVE

DATE:	03/22/2024
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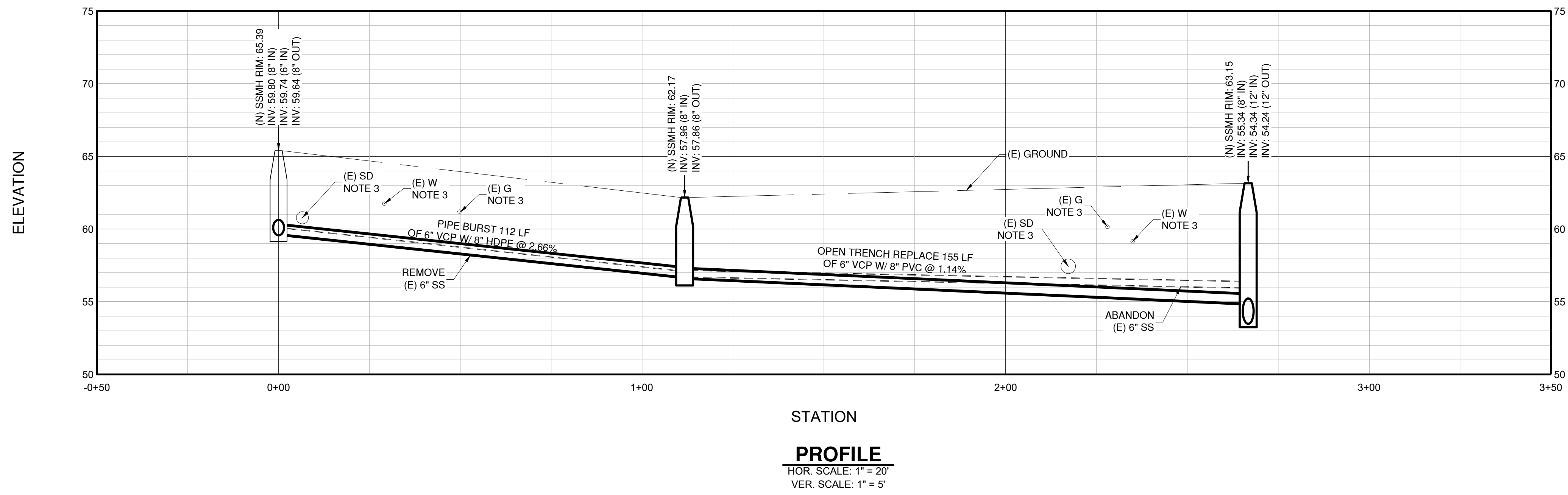




- NOTES:**
- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
  - CONTRACTOR SHALL EXTEND AND TRIM EXISTING LATERALS TO CONNECT TO THE NEW SEWER MAIN. CONTRACTOR SHALL EXPECT ONE LATERAL EXTENSION FROM 1103 SEVILLE DRIVE AND TWO LATERALS TO TRIM FROM 1108 SEVILLE DRIVE AND 912 CRESPI DRIVE. ALL WORK ASSOCIATED WITH EXTENSION AND TRIMMING OF SEWER LATERALS SHALL BE INCLUDED IN THE COST TO REPLACE LATERAL CONNECTION.
  - ALL UTILITY ELEVATIONS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.



**PLAN**  
SCALE: 1" = 20'



**PROFILE**  
HOR. SCALE: 1" = 20'  
VER. SCALE: 1" = 5'

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SANTA ROSA, CA 95403  
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NO.	REVISIONS	DATE	APPR.
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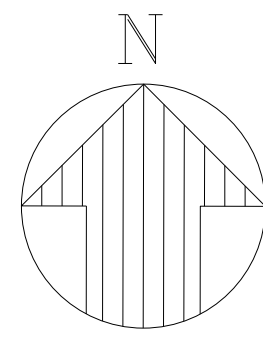
DATE	DATE
ROLAND YIP, P.E. CITY ENGINEER	LOUIS SUN, P.E. DEPUTY PUBLIC WORKS DIRECTOR



**CITY OF PACIFICA**  
**LOWER LINDA MAR**  
**REHABILITATION AND REPAIR PROJECT**  
**CRESPI DRIVE & SEVILLE DRIVE**  
**PLAN & PROFILE**

DATE: 03/22/2024	SCALE: AS SHOWN
DESIGN: JTV	DRAWN: JTV
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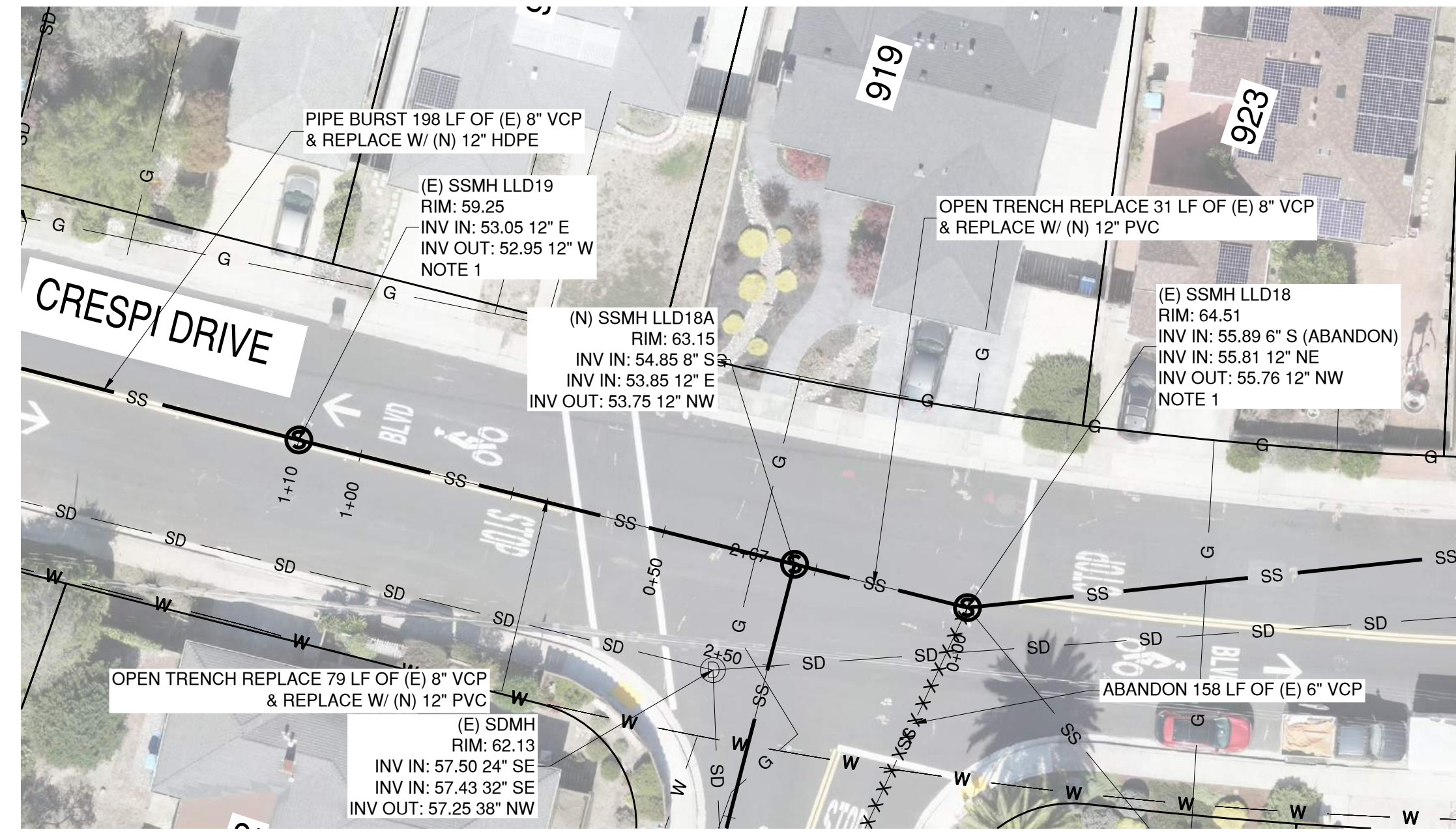




SCALE: 1 INCH = 20 FEET

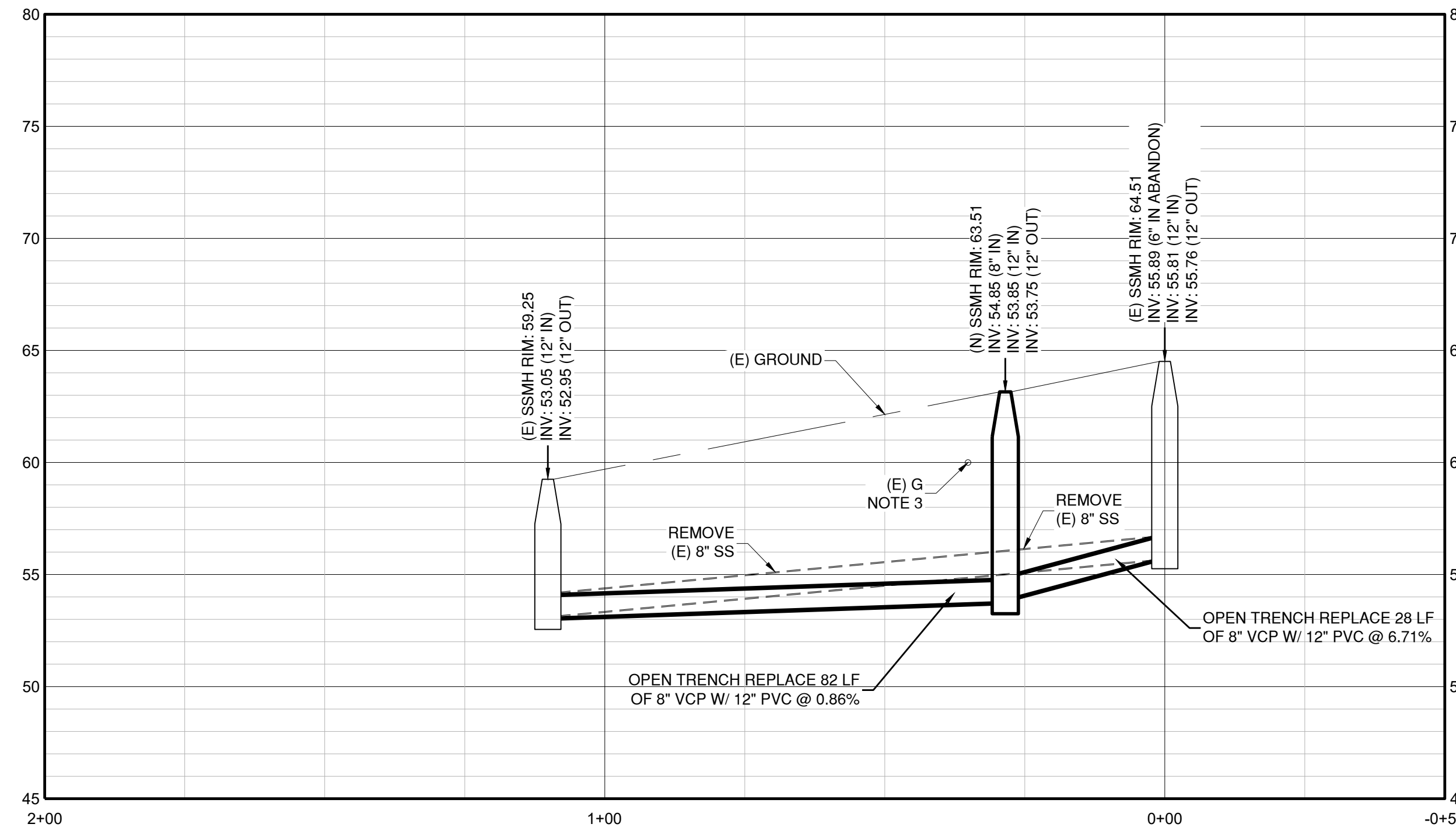
**NOTES:**

- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
- CONTRACTOR SHALL EXTEND AND TRIM EXISTING LATERALS TO CONNECT TO THE NEW SEWER MAIN. CONTRACTOR SHALL EXPECT ONE LATERAL EXTENSION FROM 1103 SEVILLE DRIVE AND TWO LATERALS TO TRIM FROM 1108 SEVILLE DRIVE AND 912 CRESPI DRIVE.
- ALL UTILITY ELEVATIONS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.



**PLAN**

SCALE: 1" = 20'

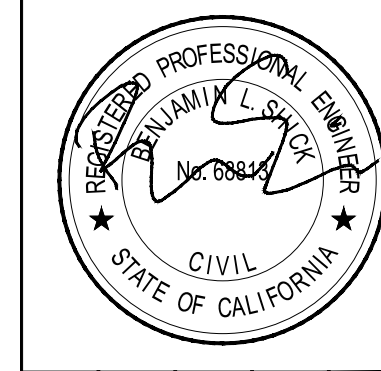


**PROFILE**

HOR. SCALE: 1" = 20'

VER. SCALE: 1" = 5'

ELEVATION



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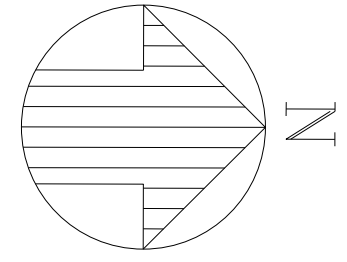
ROLAND YIP, P.E. CITY ENGINEER	DATE	DATE
LOUIS SUN, P.E. DEPUTY PUBLIC WORKS DIRECTOR		



**CITY OF PACIFIC**  
**LOWER LINDA MAR**  
**REHABILITATION AND REPAIR PROJECT**  
**CRESPI DRIVE**  
**PLAN & PROFILE**

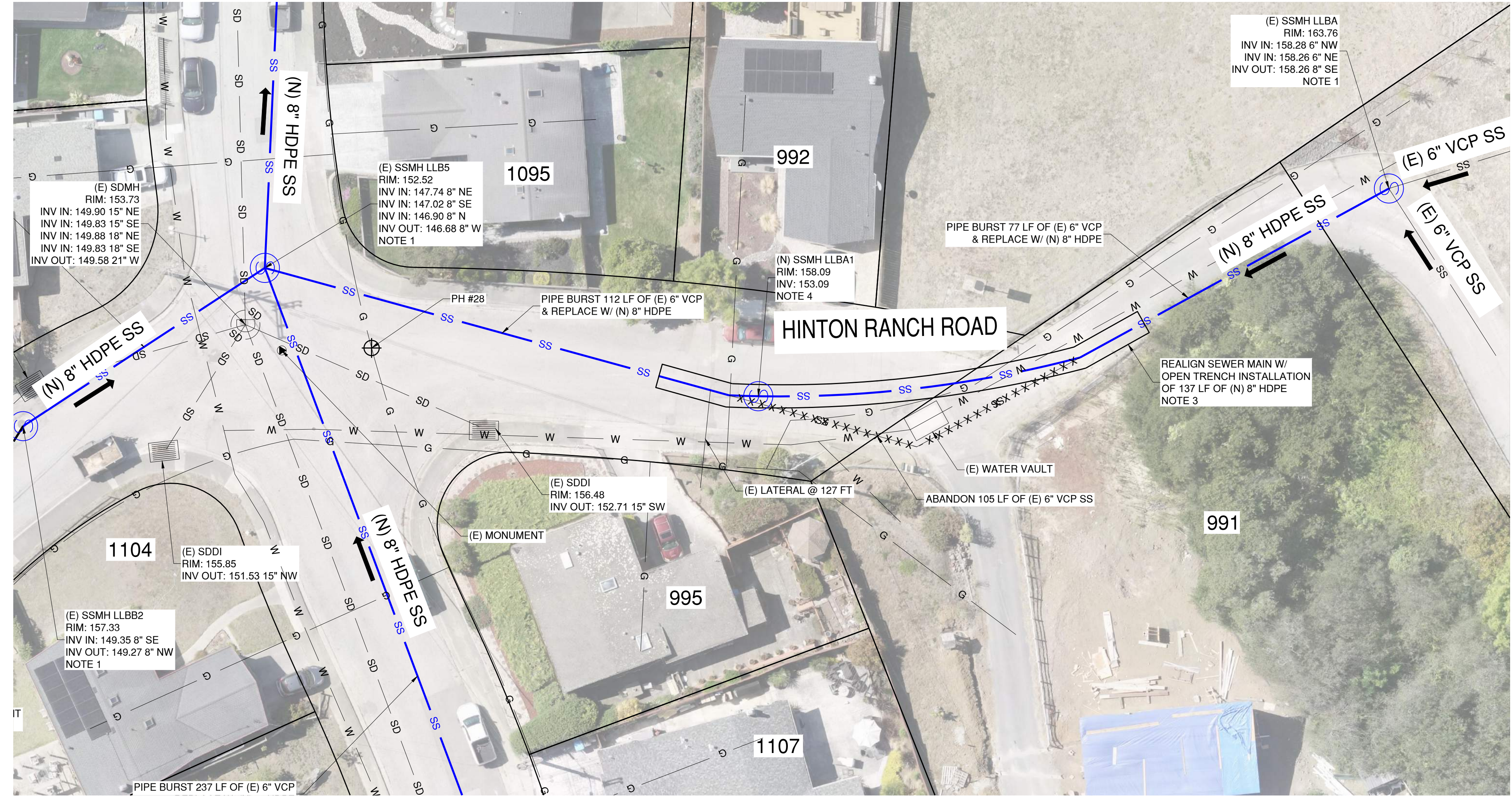
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SCALE: 1 INCH = 20 FEET

- NOTES:**
- PERFORM MANHOLE REPAIRS PER MANHOLE REHABILITATION TABLES ON SHEET T3.
  - CONTRACTOR SHALL EXTEND AND TRIM EXISTING LATERALS TO CONNECT TO THE NEW SEWER MAIN. CONTRACTOR SHALL EXPECT ONE LATERAL EXTENSION FROM 995 HINTON RANCH ROAD. NOT ALL LATERALS ARE SHOWN ON THE PLANS. CONTRACTOR SHALL LOCATE ALL LATERALS PRIOR TO CONSTRUCTION.
  - INSTALL ELECTROFUSION COUPLINGS AS NECESSARY TO CONNECT SEGMENTS OF NEW SEWER MAIN. SEWER MAIN ALIGNMENT SHALL BE ADJUSTED AS SHOWN HEREIN. THE NEW SEWER MAIN SHALL BE LOCATED APPROXIMATELY 5 FEET FROM THE CORNER OF THE EXISTING WATER UTILITY VAULT. THE SEWER MAIN SHALL BE CURVED WITH AN APPROXIMATE BEND RADIUS OF 325 FEET. CONTRACTOR SHALL POTHOLE ALL UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM THAT THE PROPOSED SEWER MAIN ROUTE IS FEASIBLE. CONTRACTOR SHALL SUBMIT A POTHOLOG REPORT TO THE CITY AND SHALL NOTIFY THE CITY IF THERE ARE ANY CONFLICTS.
  - RIM AND INVERT ELEVATION OF (N) SSMH LLBA1 IS APPROXIMATED BASED ON SURROUNDING SURVEY DATA. CONTRACTOR SHALL CONFIRM ELEVATION OF RIM AND INVERT TO PRESERVE CURRENT CONDITIONS. CONTRACTOR SHALL LOCATE THE NEW SEWER MANHOLE APPROXIMATELY 137 FEET UPSTREAM OF SSMH LLB5.



**PLAN**  
SCALE: 1" = 20'

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CITY ENGINEER

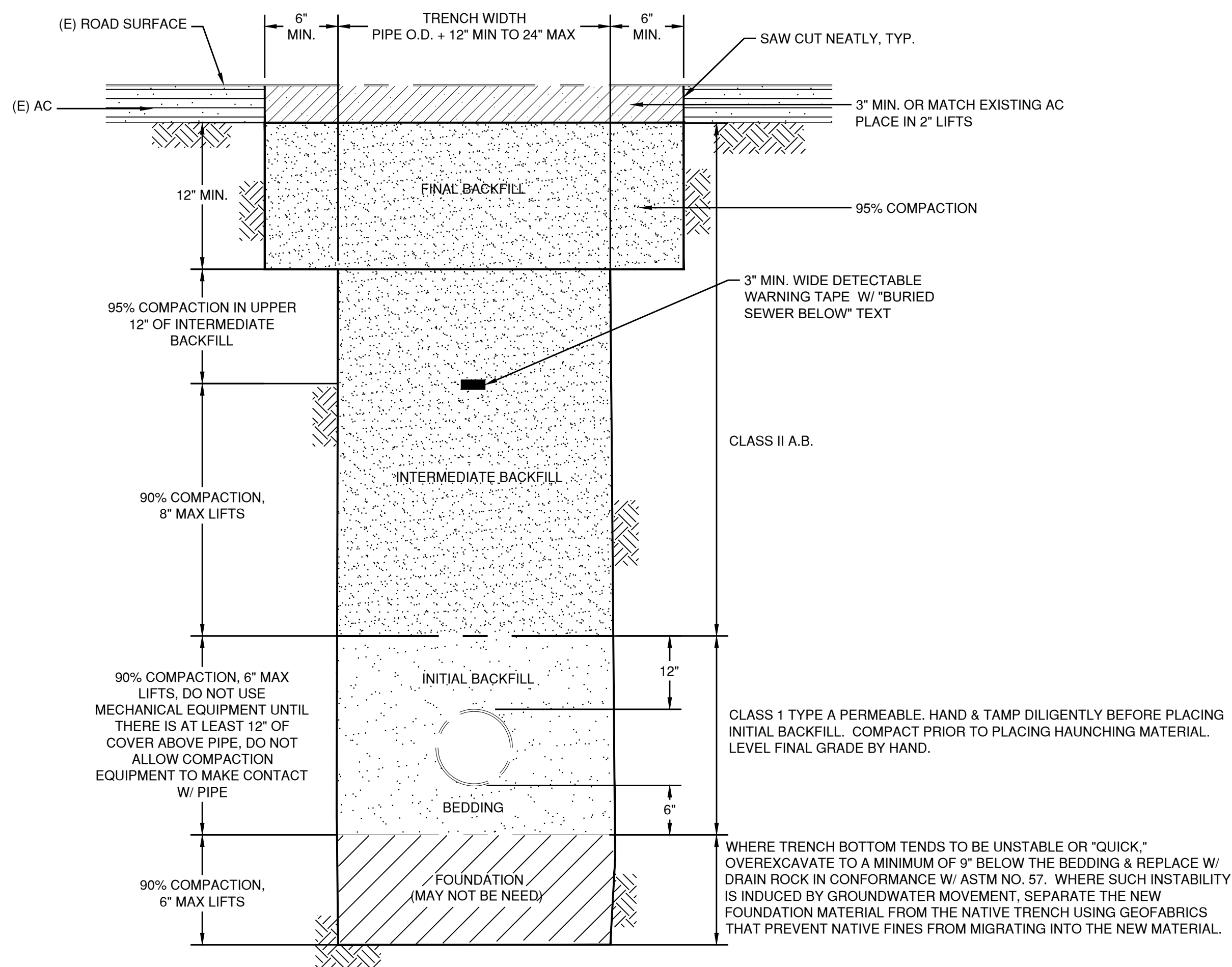
LOUIS SUN, P.E.  
DEPUTY PUBLIC WORKS DIRECTOR



**CITY OF PACIFICA**  
LOWER LINDA MAR  
REHABILITATION AND REPAIR PROJECT  
HINTON RANCH ROAD

DATE: 03/22/2024  
SCALE: AS SHOWN  
DESIGN: JTV  
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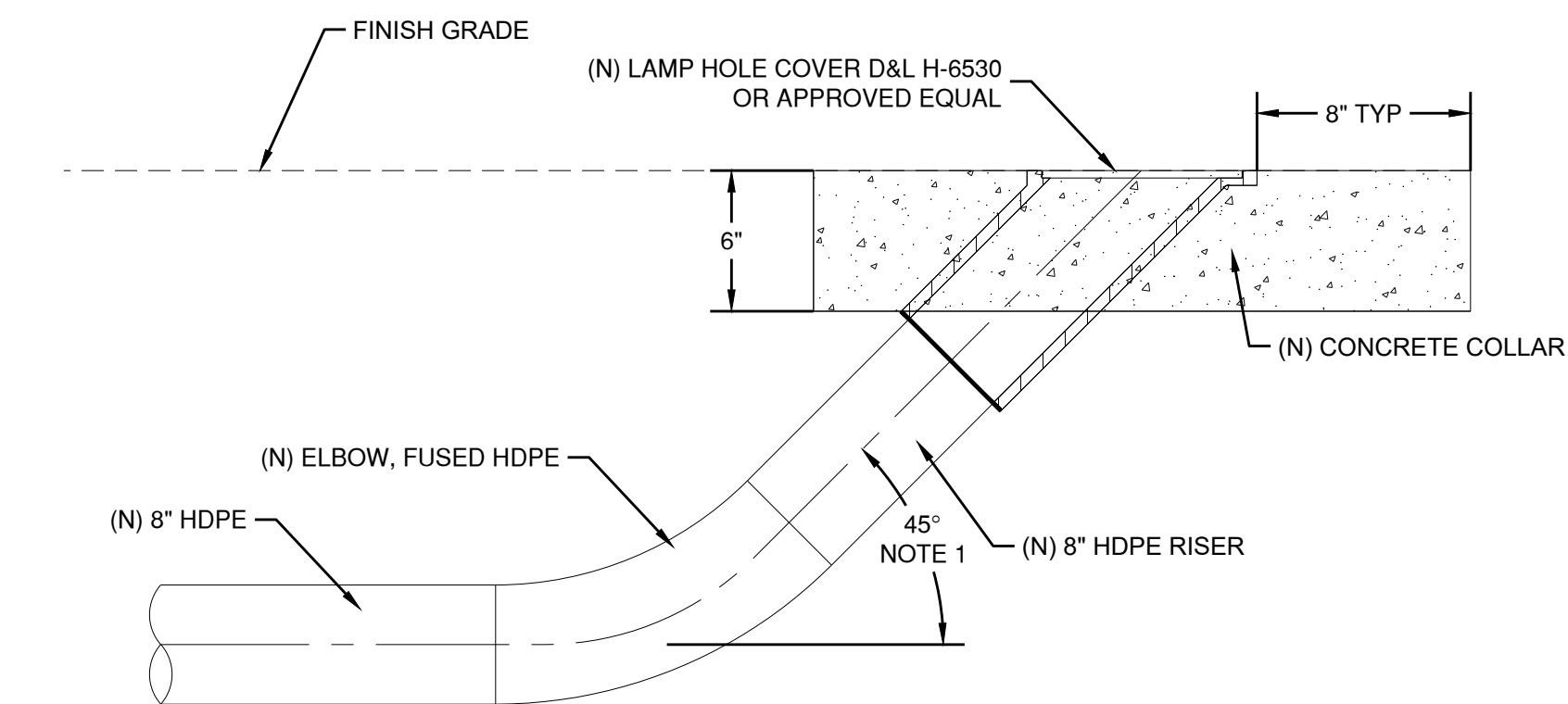




- NOTES:
- CALL WWTP INSPECTOR OR ENGINEER (650-738-7472) 24 HOURS PRIOR TO TRENCHING, SEWER TAP, PIPE INSTALLATION, BACKFILLING AND OTHER SEWER WORK.
  - CALL WWTP INSPECTOR OR ENGINEER (650-738-7472) 24 HOURS PRIOR TO PAVEMENT RESTORATION (PLACING CLASS II BASE ROCK AND ASPHALT).
  - ALL TRENCHES AND/OR POTHOLES SHALL BE RESTORED BY 4:00 P.M. OF THE SAME DAY.
  - SEWER TAP TRENCH SHALL BE 3' x 5' MAX. OR AS DIRECTED BY THE WASTEWATER DEPT.
  - APPLY ASPHALTIC EMULSION TO EDGES OF EXISTING A.C. AND TO SURFACE OF EXISTING A.C. TO 12" ON EACH SIDE OF TRENCH BEFORE FINAL PAVING.
  - ALL TRENCH WORK SUBJECT TO STATE AND CITY REGULATIONS AND INSPECTION.
  - A CONCRETE SLURRY TEE WILL BE REQUIRED WHEN THE 36" MINIMUM DEPTH OF COVER BETWEEN TOP OF PIPE BARREL AND ELEVATION OF FINISHED GRADE CANNOT BE ATTAINED, OR WHEN DIRECTED BY THE WWTP INSPECTOR OR ENGINEER.
  - SEE CITY STANDARD DWG NOS. 300 AND 301 FOR ADDITIONAL REQUIREMENTS.

**STANDARD TRENCH 1**  
SCALE: NTS

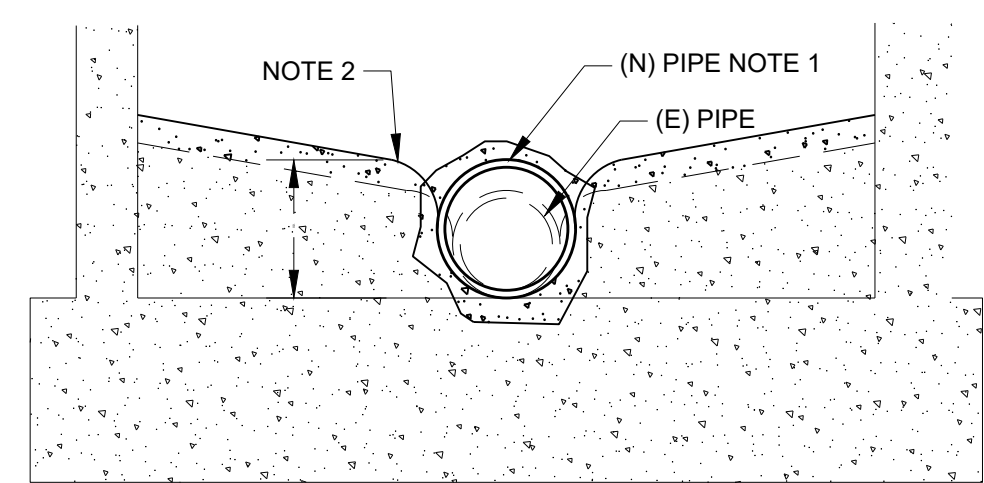
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- NOTES:
- USE 22.25° BENDS WHERE SEWER MAIN SLOPE IS MORE THAN 30%.

**STANDARD LAMPHOLE 3**  
SCALE: NTS

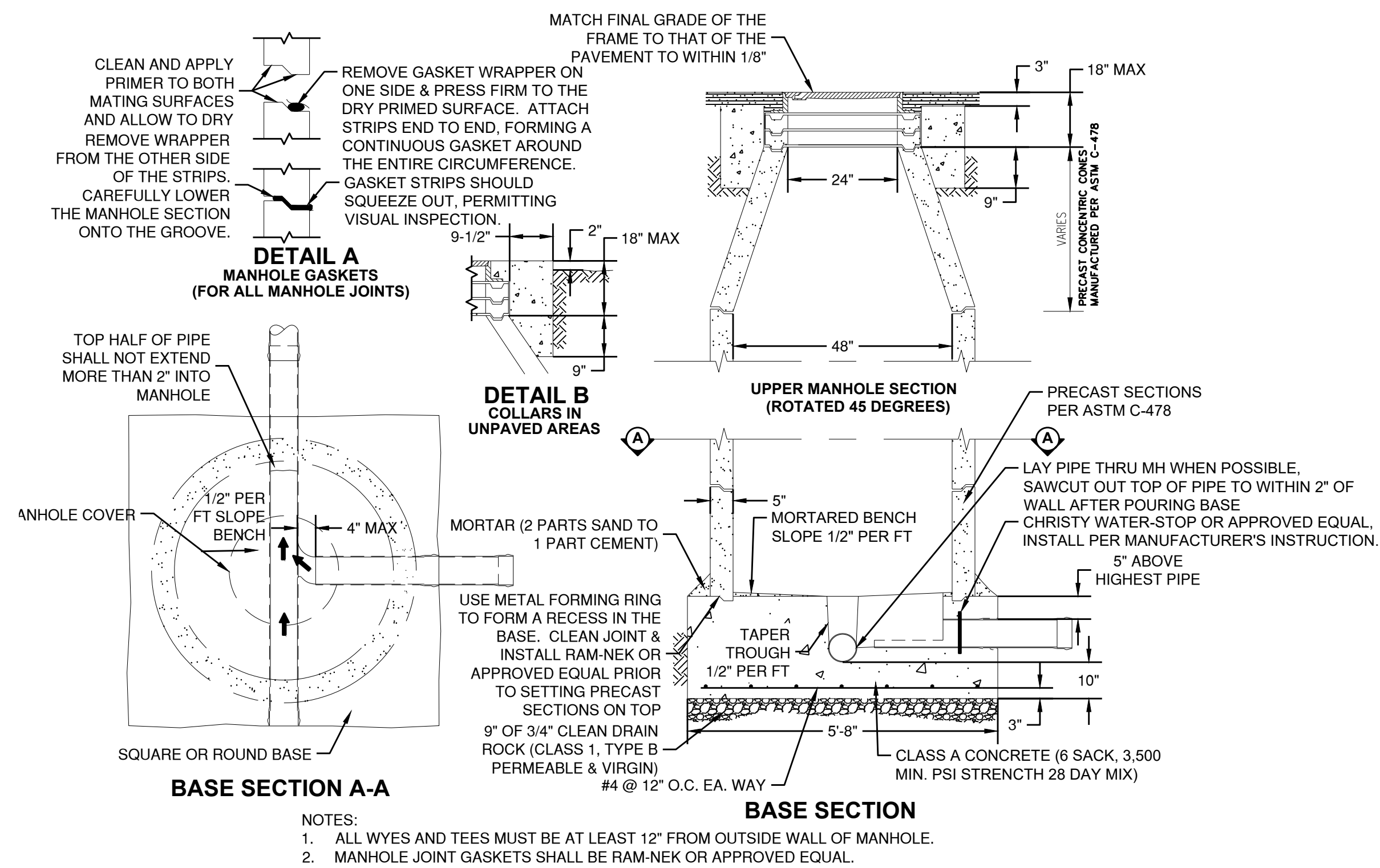
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- NOTES:
- REMOVE PORTION OF (E) MH WALL TO ALLOW INSERTION OF (N) PIPE. INSTALL WATERSTOP AROUND NEW CONNECTION. FILL VOIDS W/ NON-SHRINK GROUT.
  - REMOVE PORTION OF (E) TROUGH & BENCH TO ALLOW FOR (N) PIPE. BUILD UP BENCH & REFORM TROUGH FOR (N) PIPE W/ GROUT. SLOPE BENCH AT 1/2" PER FOOT TOWARDS CHANNEL.

**MANHOLE MODIFICATION 4**  
SCALE: NTS

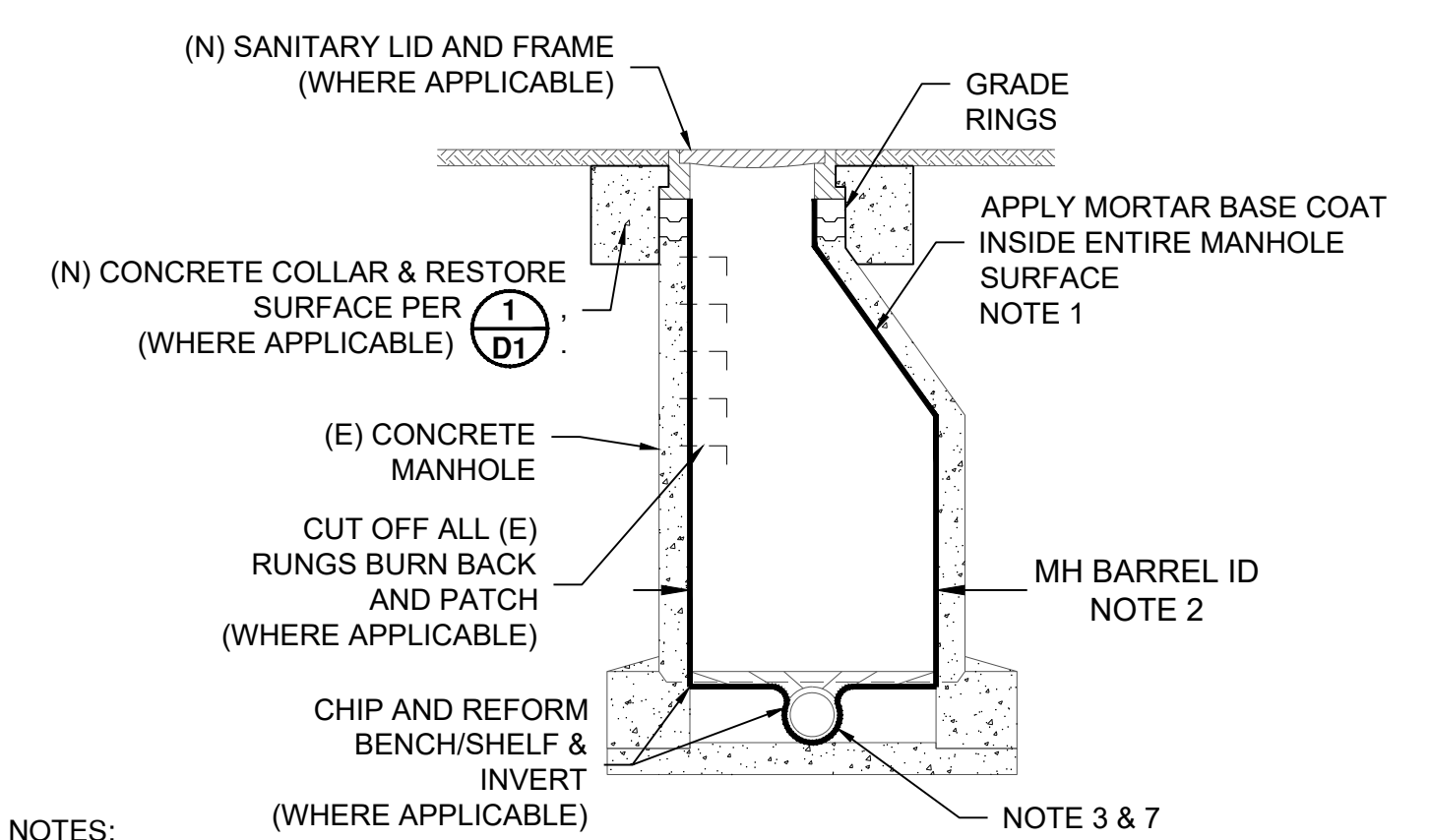
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- NOTES:
- ALL WYES AND TEES MUST BE AT LEAST 12" FROM OUTSIDE WALL OF MANHOLE.
  - MANHOLE JOINT GASKETS SHALL BE RAM-NEK OR APPROVED EQUAL.

**STANDARD MANHOLE 2**  
SCALE: NTS

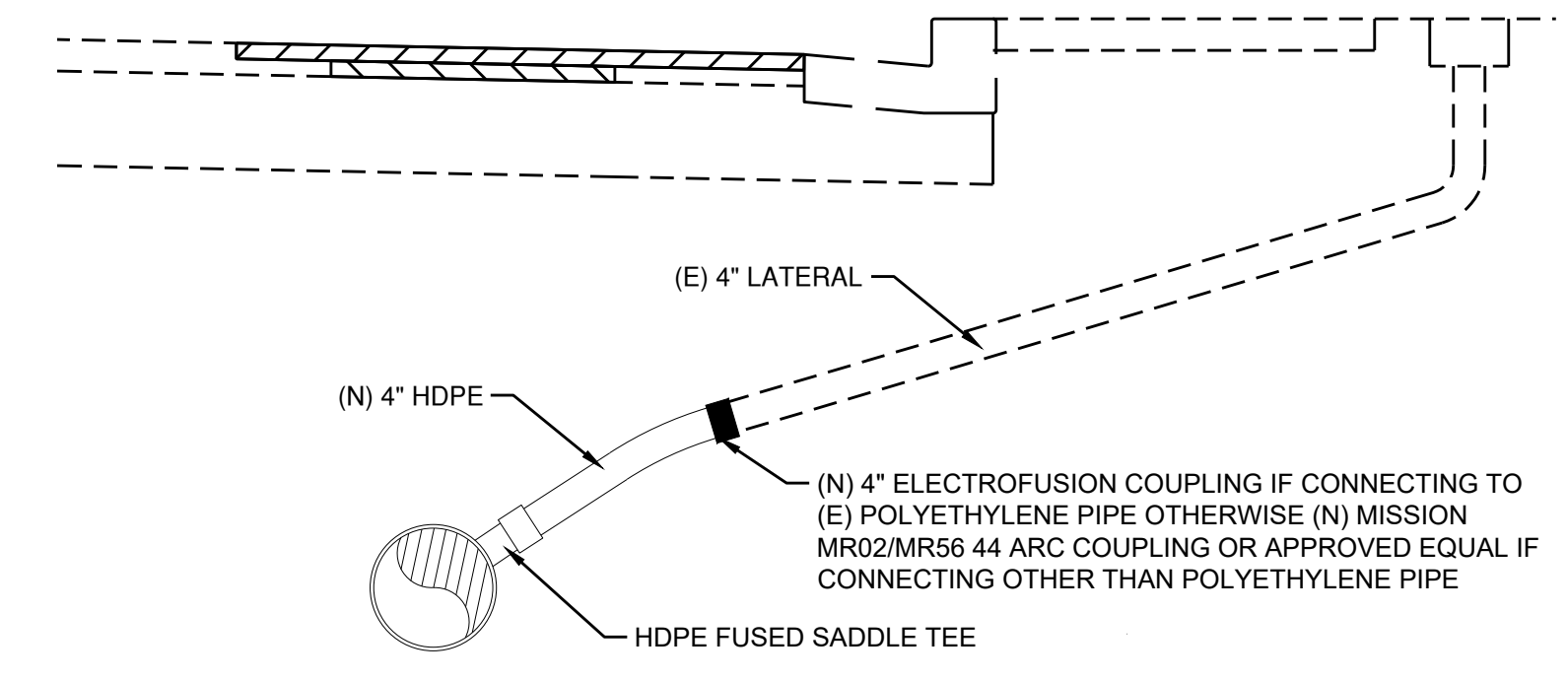
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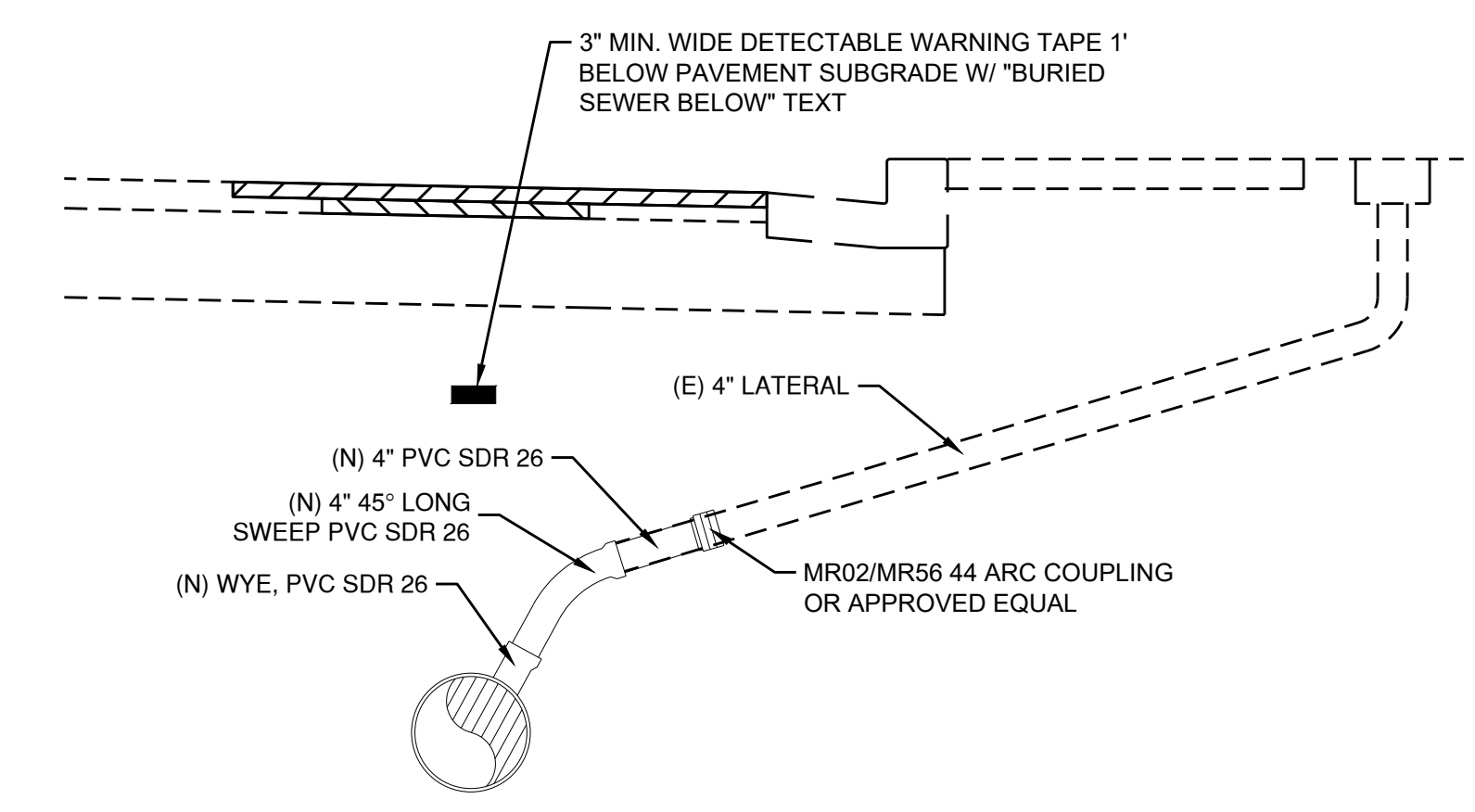
- NOTES:
- CONTRACTOR SHALL COAT ALL INTERIOR CONCRETE, BRICK, OR MORTAR SURFACES INSIDE OF MANHOLE INCLUDING WALLS, CONES, BASE, AND CHANNEL WITH A 1-INCH MINIMUM COATING THICKNESS, UNLESS OTHERWISE NOTED. MINIMUM COATING THICKNESS SHALL BE MEASURED FROM THE FLAT SURFACE OF THE EXISTING MANHOLE. CONTRACTOR SHALL CLEAN AND PREPARE ALL SURFACES IN ACCORDANCE WITH COATING MANUFACTURER'S RECOMMENDATIONS AND PER SPECIFICATION SECTION IX-A2-2.15. PERFORM TESTING IN ACCORDANCE WITH SPECIFICATIONS SECTION IX-A2-2.15.
  - REPAIR DETERIORATED SURFACES INSIDE OF MANHOLE WITH HYDRAULIC CEMENT MORTAR IN CONFORMANCE WITH COATING MANUFACTURER RECOMMENDATIONS. THE REPAIR MATERIAL THICKNESS SHALL BE SUCH THAT THE NEW MATERIAL SURFACE MATCHES THE MANHOLE'S ORIGINAL INSIDE DIAMETER, OR AS DIRECT BY THE CITY OR ITS REPRESENTATIVES.
  - PERFORM TESTING OF EXISTING SURFACE PRIOR TO PLACING HYDRAULIC CEMENT IN ACCORDANCE WITH HYDRAULIC CEMENT MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATION SECTION IX-A2-2.15.
  - CONTRACTOR SHALL COMPLY WITH ALL CAL-OSHA CONFINED SPACE ENTRY REQUIREMENTS.
  - PERFORM BYPASS PUMPING AS REQUIRED AND IN ACCORDANCE WITH SPECIFICATION SECTION IX-A12.
  - WHERE REQUIRED, CONTRACTOR SHALL REPAIR EXISTING CHANNEL AND BASE PRIOR TO INSTALLING COATING MATERIAL. FORM A SMOOTH CHANNEL AND MINIMIZE DISTURBANCE TO FLOW.
  - CONTRACTOR SHALL CHIP OUT AND REPAIR EXISTING INVERT PRIOR TO INSTALLING COATING MATERIAL, SO THAT FINISHED INVERT SURFACES MATCH EXISTING INVERT. CHANNEL SHALL BE SMOOTH AND MINIMIZE DISTURBANCE TO FLOW.
  - MANHOLE REHABILITATION SHALL BE DONE IN ACCORDANCE TO THESE NOTES, SPECIFICATION SECTION IX-A2-2.15, AND MANHOLE REHABILITATION TABLES ON SHEETS T2 & T3.

**MANHOLE REHABILITATION 5**  
SCALE: NTS

Z1



**RECONNECT (E) LATERAL TO (N) MAINLINE (PIPE BURSTING INSTALLATION OF MAINLINE)**



**RECONNECT (E) LATERAL TO (N) MAINLINE (OPEN TRENCH INSTALLATION OF MAINLINE)**

**LATERAL CONNECTION 6**  
SCALE: NTS

Z1



APPR	
DATE	
REVISIONS	
NO	
DATE	
DATE	

ROLAND YIP, P.E.  
CITY ENGINEER

LOUIS SUN, P.E.  
DEPUTY PUBLIC WORKS DIRECTOR



**CITY OF PACIFICA**  
**LOWER LINDA MAR**  
**REHABILITATION AND REPAIR PROJECT**  
**DETAILS**

DATE:	03/22/2024
SCALE:	AS SHOWN
DESIGN:	JTY
DRAWN:	JTY
CHECKED:	B.S





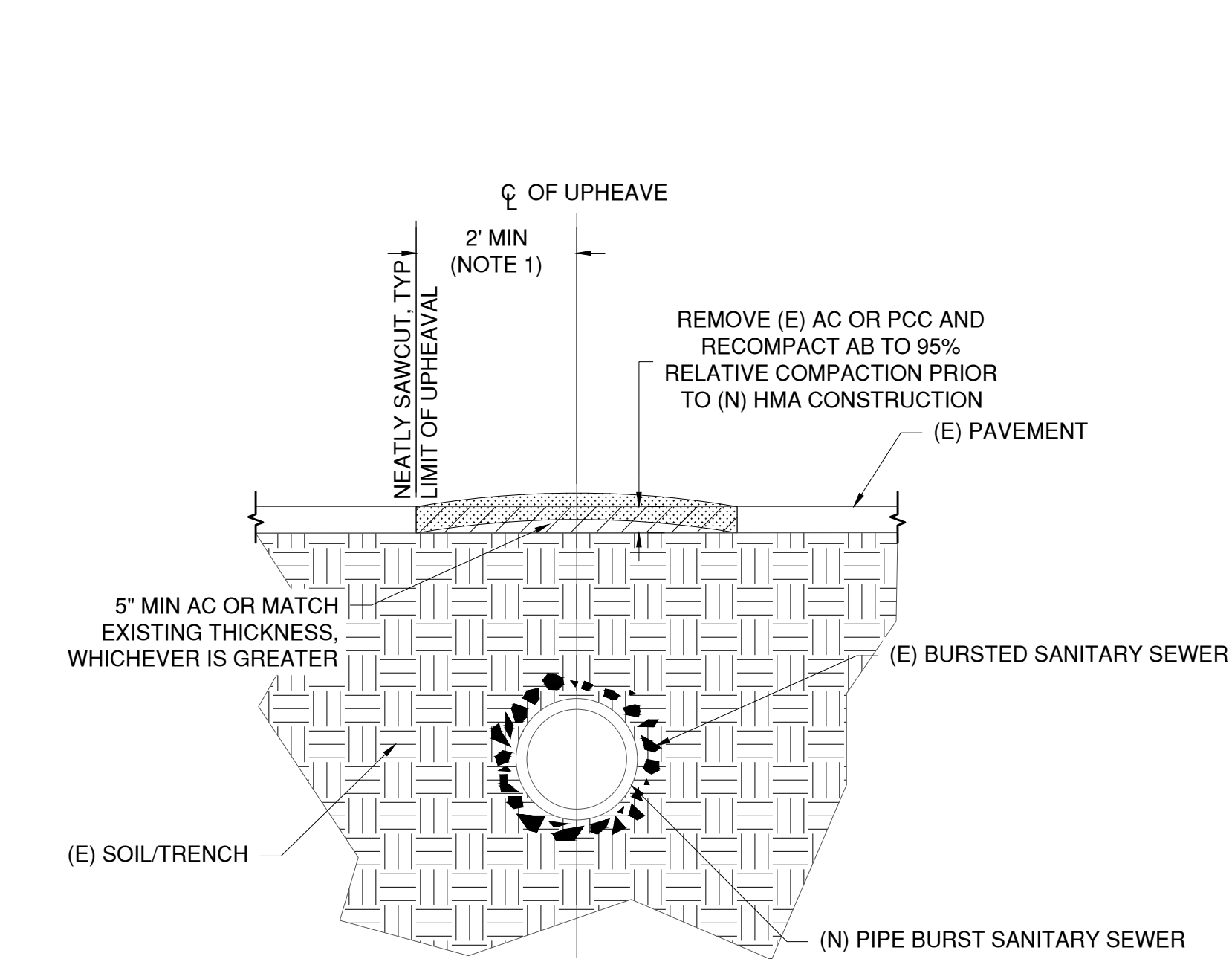
NO.	REVISIONS	DATE	APPR.
1			
2			
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DATE	AUG 2014
DATE	AUG 2014
DATE	
DATE	



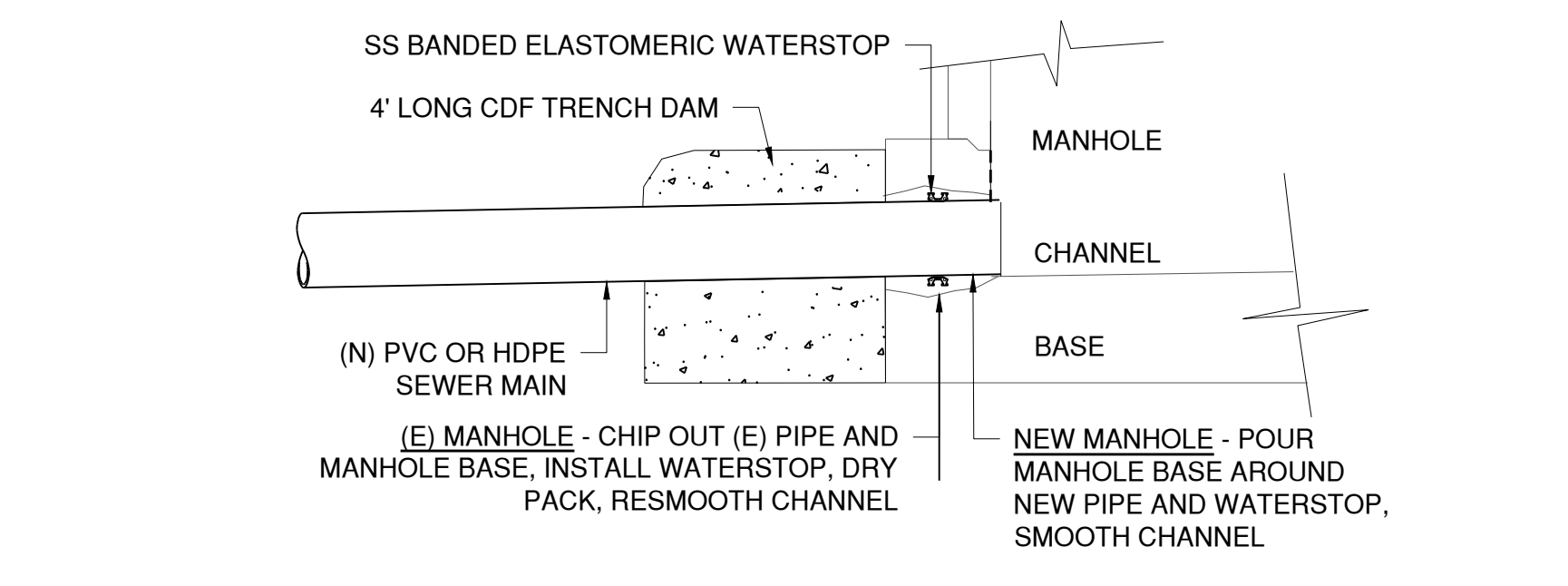
**CITY OF PACIFICA**  
**LOWER LINDA MAR**  
**REHABILITATION AND REPAIR PROJECT**  
**DETAILS**

DATE:	03/22/2024
SCALE:	AS SHOWN
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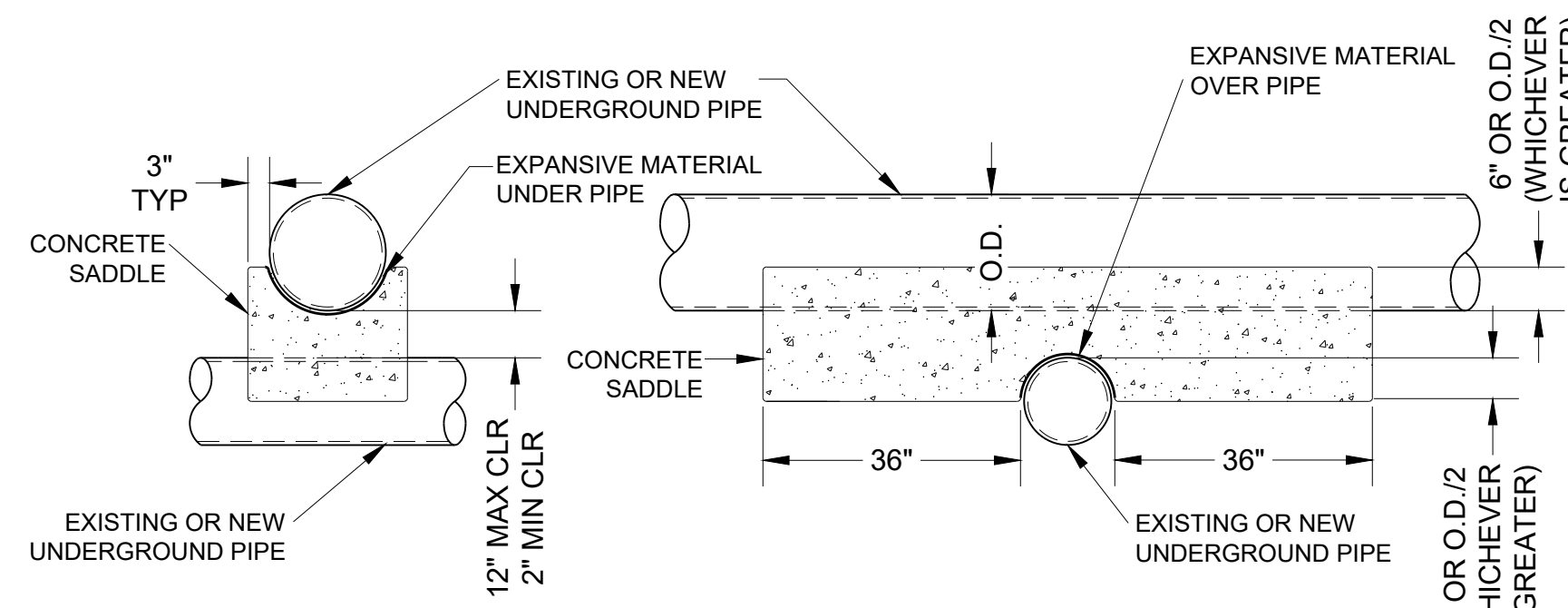


**NOTES:**  
 1. LIMITS OF PAVEMENT REPAIR TO BE VERIFIED BY CITY AFTER PIPE BURSTING. CONTRACTOR SHALL MARK THE PROPOSED LIMITS OF UPHEAVED PAVEMENT IN THE FIELD PRIOR TO REMOVAL. ADDITIONAL REMOVAL AND REPLACEMENT OF SUBGRADE MATERIAL MAY BE REQUIRED AS DIRECTED BY THE CITY.

**PAVEMENT UPHEAVAL DETAIL 1**  
 SCALE: NTS

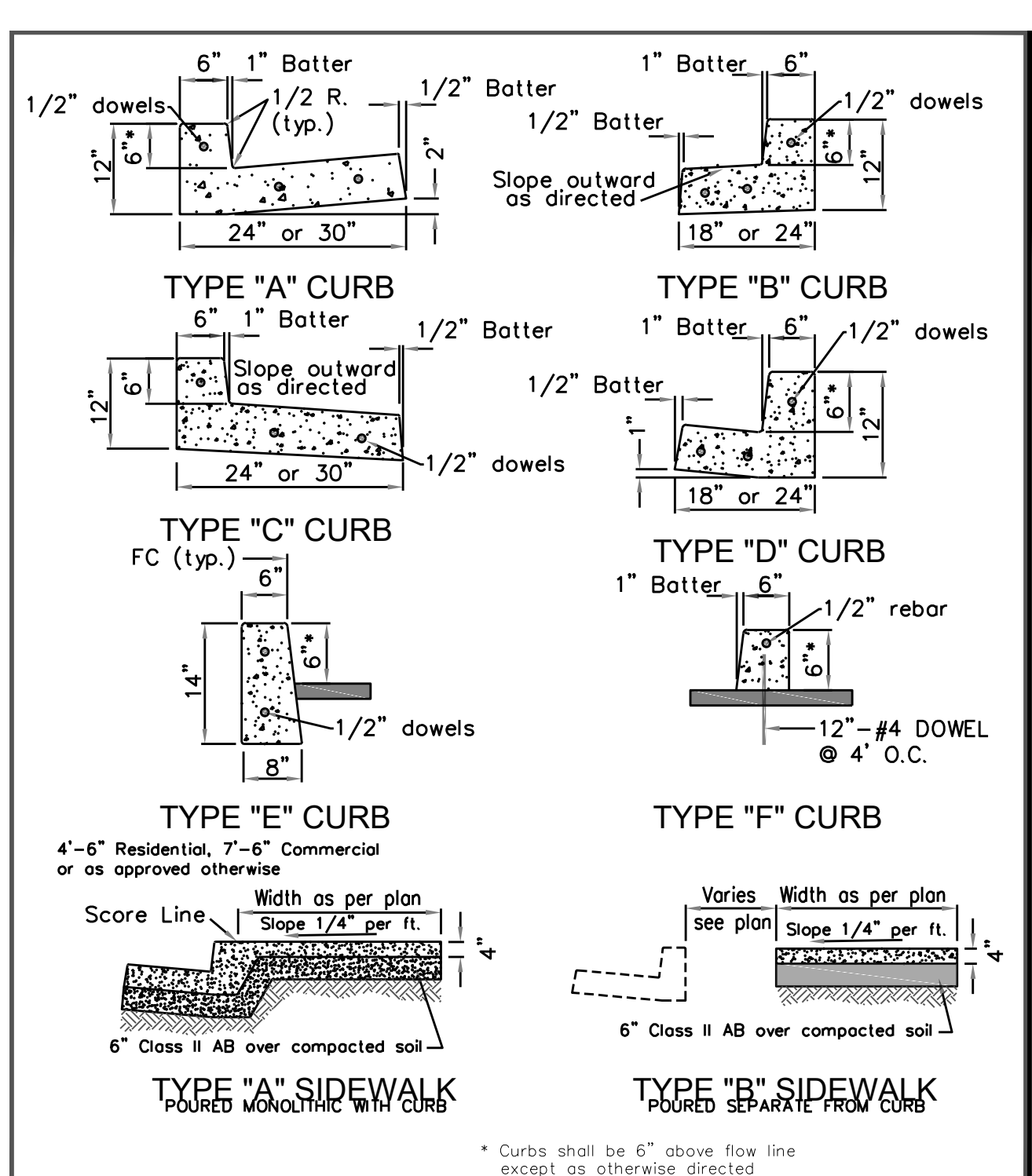


**CONNECTION TO MANHOLE DETAIL 2**  
 SCALE: NTS



**NOTE:**  
 INSTALL CONCRETE SADDLE AT EACH LOCATION WHERE A NEW UNDERGROUND UTILITY CROSSES IN EXISTING UNDERGROUND UTILITY WITH LESS THAN 12" CLEARANCE. MINIMUM ALLOWABLE CLEARANCE IS 2".

**CONCRETE SADDLE DETAIL 3**  
 SCALE: NTS



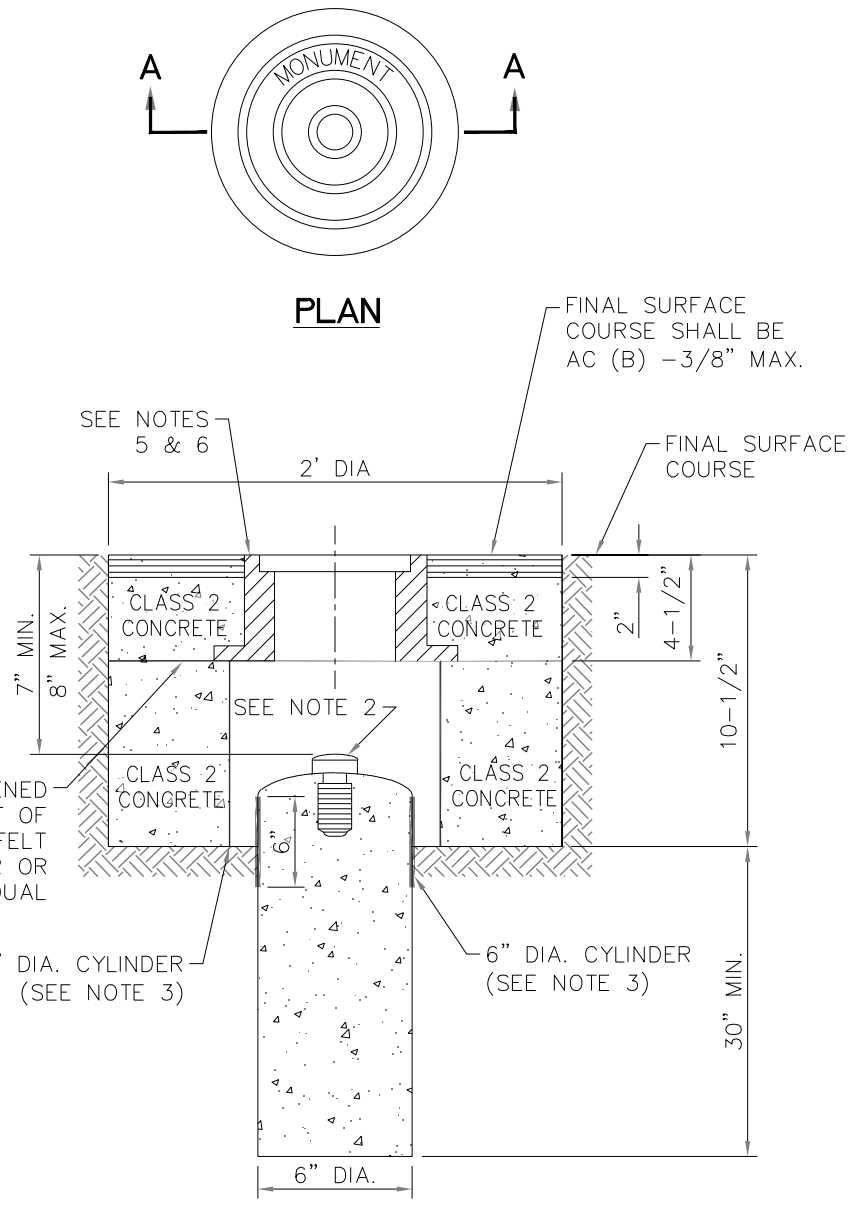
<b>CITY OF PACIFICA</b> DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION	<b>STANDARD CURB, GUTTER &amp; SIDEWALK</b>	<b>AUG 2014</b> <b>DWG. NO. 101B</b>
REV	DATE	BY

- Subgrade shall be compacted to at least 90% of maximum density in the top 6 inches prior to placing base material as specified below.
- Where unstable subgrade material is encountered, the City Engineer may require remedial work to be done, including, but not limited to, removing additional soil and placing an additional layer of crushed rock and/or geotextile fabric under the base material.
- Base material under curb, gutter, and sidewalk must be Caltrans Class 2 Aggregate Base, compacted to approximately 95% of maximum density. The compacted thickness of base material must not be less than 6 inches.
- Existing concrete shall be removed at expansion joints or shall be saw cut. Saw-cuts in sidewalk or curb shall be at an existing score line in the sidewalk.
- Concrete thicker than 4 inches must be saw-cut to at least 4 inches deep before chipping out the rest, but if remaining concrete becomes cracked or damaged it shall be replaced as well.
- No utility boxes, cleanouts, poles, or structures of any kind will be permitted in the sidewalk area without the written approval of the City Engineer.
- New work shall reasonably match existing texture and color of adjacent existing concrete.
- Base material shall be designated as 3,000 psi 28-day compressive strength with Type II or V Portland cement and 1/2 inch maximum crushed rock aggregate. No admixtures shall be used without the written permission of the City Engineer. For in-fill or replacement concrete, where adjacent concrete is darkened with age, one pound of lampblack may be added per C.Y.
- Concrete shall have a slump of not more than 4 inches.
- New sidewalk, curb or gutter shall be connected to adjacent existing concrete using 12 inch long by 1/2 inch diameter steel dowels (#4 rebar is acceptable) in tight fitting holes drilled into the existing concrete (approximately 6 inches into adjacent sidewalk, curb and gutter, or 4" into the back of curb).
- Half inch thick expansion joints shall be placed on both sides of driveway approaches, curb and sidewalk return points, fixed structures (including storm drain inlets), and at approximately 24 feet on center. An expansion joint shall also be placed between the back of sidewalk or driveway approach and any driveway, walkway or foundation poured against it. Weakened plane joints shall be placed at all inside corners (including tree wells and parkway strips), both sides of utility boxes and wherever shrinkage would concentrate stresses, and otherwise at no more than 12 feet on centers. See standard 110 for more. Expansion joint material shall completely separate the concrete all the way to the forms and down to base material, and it shall be cut to match curved surfaces. Expansion joints within sidewalk, curb and gutter shall have steel dowels joining the concrete on both sides of the joint. These dowels shall be smooth, or one side of the joint shall have the dowels wrapped with sleeves to allow them to move.
- One quarter inch deep by one quarter inch radius score lines in sidewalks shall be evenly spaced at approximately 4 feet apart or as directed by the City Engineer. In addition, a similar score mark shall be placed 6 inches back from the face of curb where curb and sidewalk are poured monolithically. See Standard 110.
- No concrete shall be placed until the City Engineer has inspected and approved forms, subgrade and base material, and dowels into adjacent existing concrete.
- All exposed edges shall be rounded with a 1/2 inch radius tool. Sidewalk shall have a medium broom finish cross-wise to the direction of travel. Curbs and gutters shall have a light wood float finish.
- No voids or rock-pockets shall be present in any exposed surfaces. Any patching done must blend completely with the surrounding surface. If any standing water fails to drain off sidewalk or gutter surfaces, that portion of sidewalk or gutter must be replaced.
- Curbs, sidewalks and driveway approaches shall be backfilled within 7 days after pouring.
- Form faces shall not vary from the dimensions shown by more than 1/8 inch.
- Unless otherwise specified on the plans, concrete shall be cured by means of a light wood float finish.
- All new sidewalk constructed adjacent to new curbs shall be Type "A" (poured monolithically with curb) unless otherwise approved in writing by the City Engineer. See Standard 101A.
- Whenever a portion of existing curb or gutter needs to be replaced it shall be replaced as a complete, curb-and-gutter unit monolithically with sidewalk if contiguous.
- Saw-cut, remove and replace a section of pavement at least sixteen inches wide by the full depth of the pavement alongside any replaced or new section of concrete curb, gutter or valley gutter, including where new ADA access ramps or driveway approach ramps are installed in existing sidewalk.
- Edges of remaining pavement shall be heavily coated with approved tack-coat material before new asphalt concrete is placed against them. The joint between the old and new pavement shall be sealed with tack-coat and covered with sand.
- Asphalt concrete pavement adjacent to new concrete shall not be installed for at least 7 days after pouring concrete. Concrete shall be heavily coated with approved tack-coat material before asphalt concrete is placed against it.

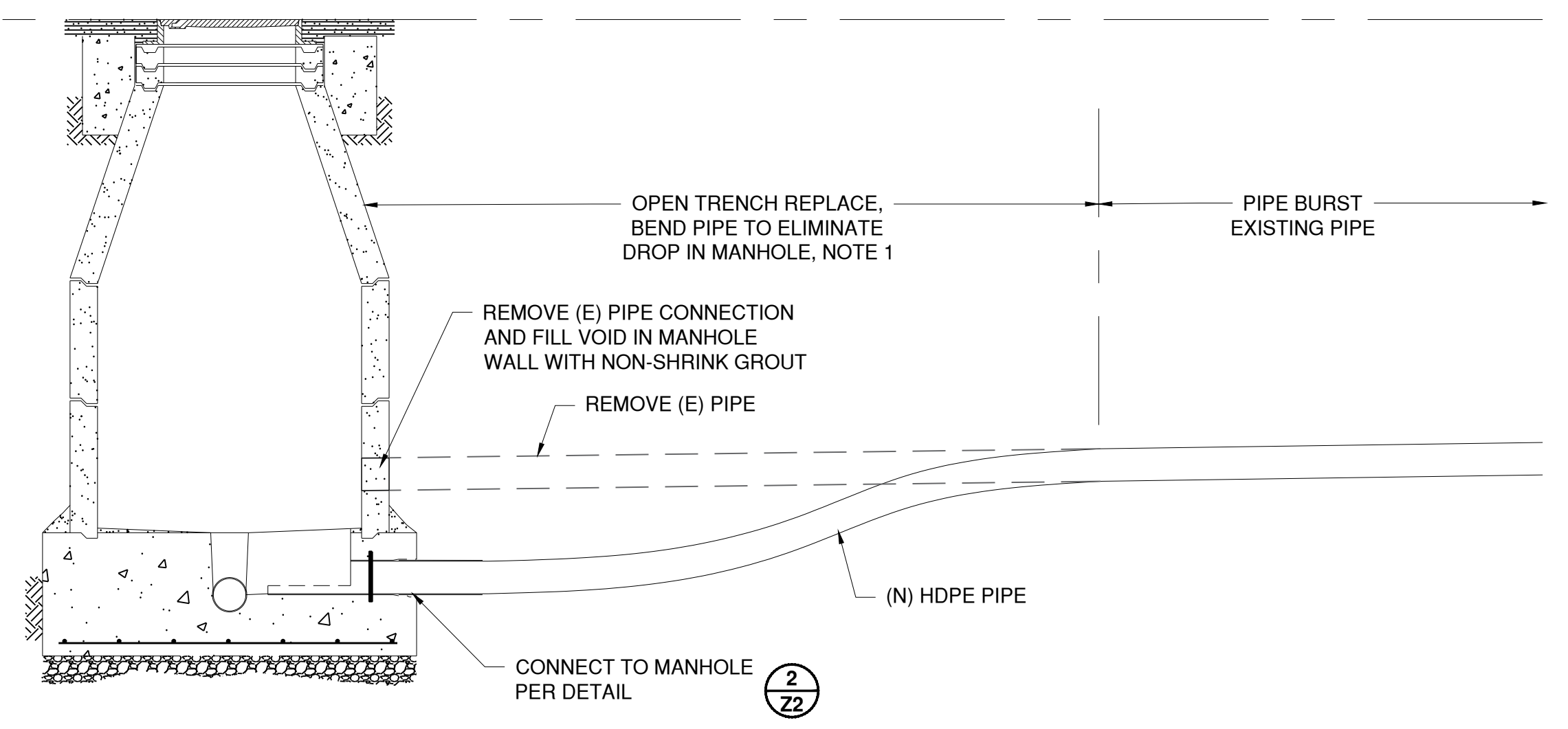
**CURB, GUTTER, AND SIDEWALK DETAIL 4**  
 SCALE: NTS

**NOTES:**

- MONUMENT FRAME & COVER SHALL BE PHOENIX IRON WORKS P-2001-A WITH MONUMENT COVER OR APPROVED EQUAL.
- BRASS MARKER FURNISHED BY COUNTY. (CONCRETE SHALL BE PACKED TIGHTLY AROUND STEM OF BRASS MARKER).
- 6" & 10" DIA. CYLINDERS TO BE FURNISHED BY CONTRACTOR.
- CONCRETE SHALL BE CLASS 2 (RODDED OR VIBRATED).
- MONUMENT CASTING SHALL BE HELD SECURELY IN PLACE (TO FINISH LINE & GRADE) PRIOR TO POURING THE UPPER 4-1/2 INCHES OF CONCRETE. (SUGGESTED METHOD - WIRE THE CASTING TO A 2" X 4" TIMBER 3 FEET LONG).
- MONUMENT CASTINGS SHALL BE INSTALLED AFTER THE FINAL SURFACE COURSE HAS BEEN COMPLETED.



**MONUMENT, FRAME, AND COVER 5**  
 SCALE: NTS

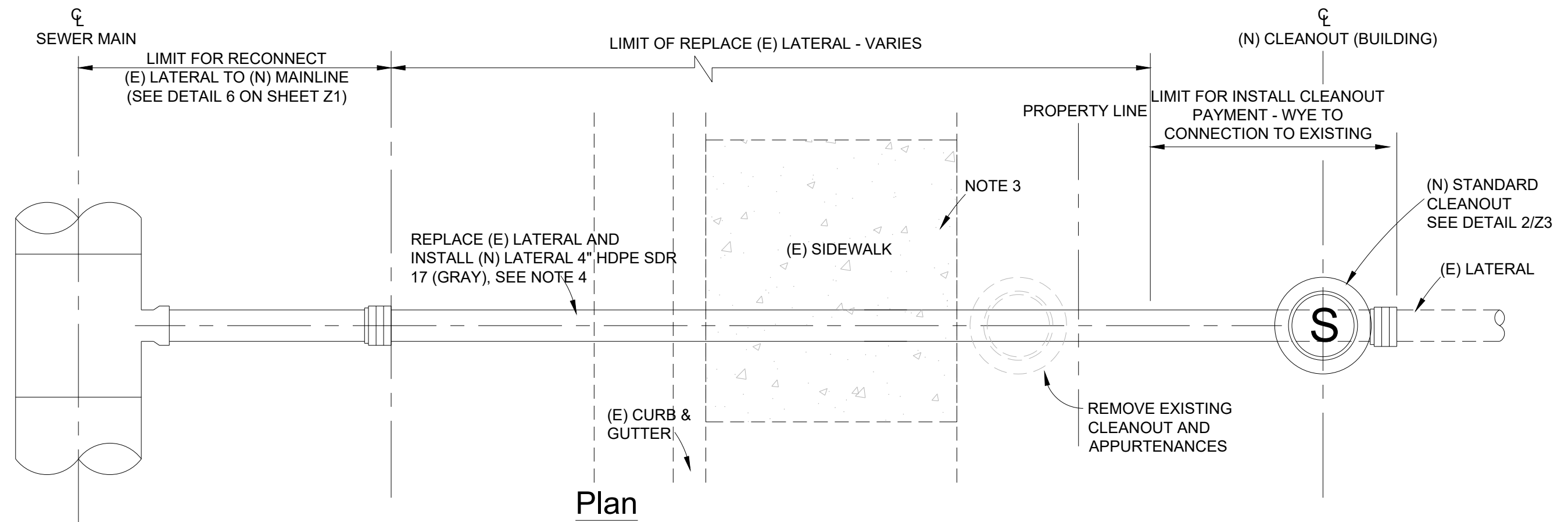


**NOTES:**  
 1. MINIMUM LENGTH OF OPEN TRENCH REPLACEMENT SHALL BE 40 FEET. MINIMUM BEND RADIUS OF PIPE SHALL BE 100 FEET.  
 2. ADJUST LENGTH OF OPEN TRENCH REPLACEMENT AS NECESSARY TO ACHIEVE MINIMUM BEND RADIUS.

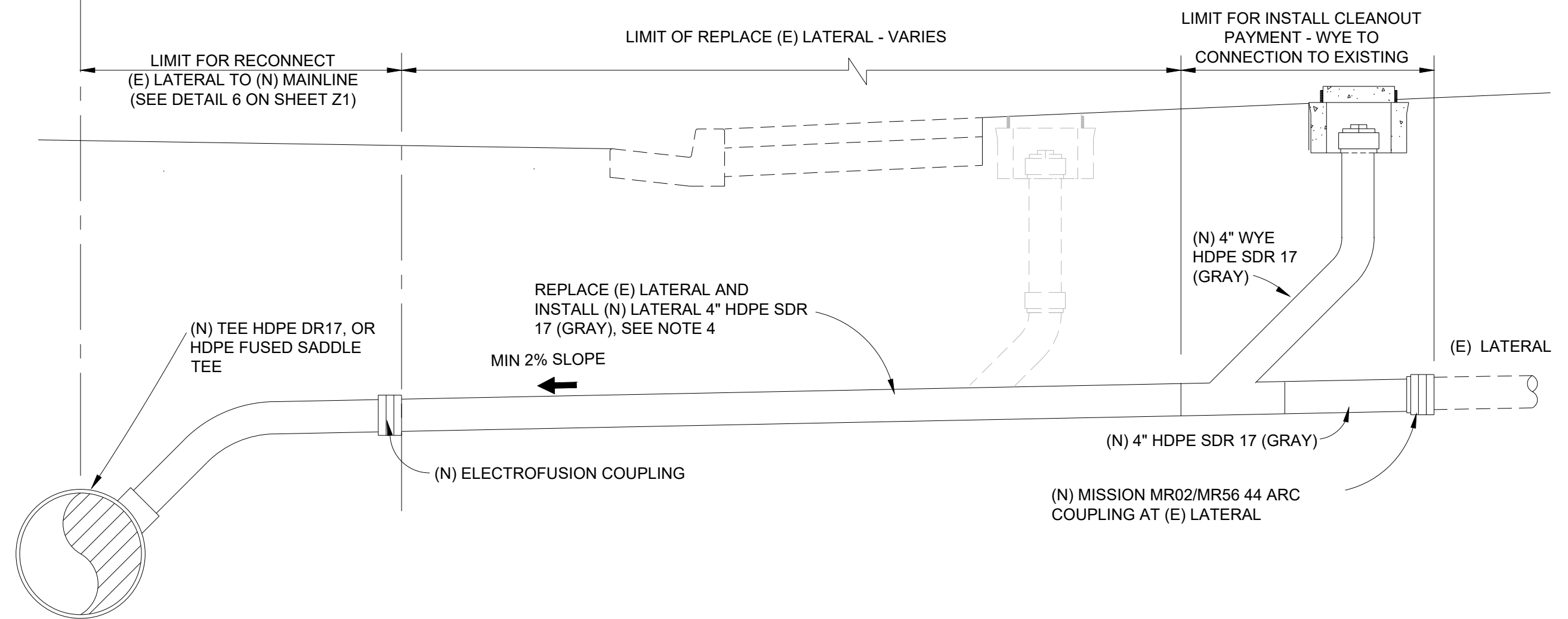
**DROP MH ELIMINATION DETAIL 6**  
 SCALE: NTS



**NOTE: REPLACE 4" LATERAL, INSTALL (N) CLEANOUT AND REPLACEMENT OF CONCRETE/SIDEWALK ARE OPTIONAL ITEMS THE CONTRACTOR IS REQUIRED TO SUBMIT UNIT COST IN THE CONTRACTORS BID. CONTRACTOR WILL HAVE SEPARATE CONTRACTS WITH EACH PROPERTY OWNER FOR ALL WORK ASSOCIATED WITH THE PRIVATE LATERAL REPLACEMENT. PAYMENT IS NOT THE RESPONSIBILITY OF THE CITY.**



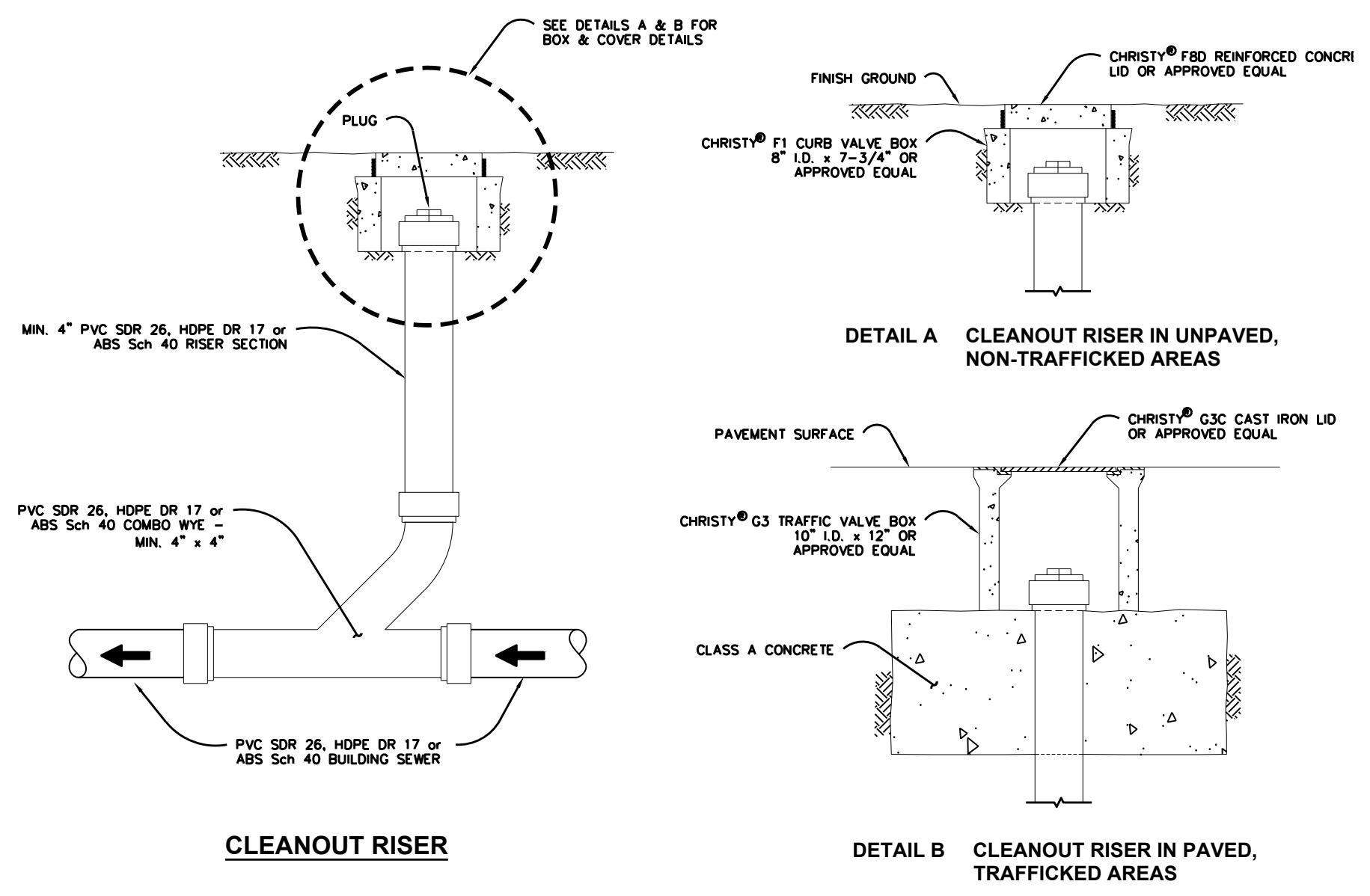
Plan



NOTES:

1. PAYMENT FOR "REPLACE 4" LATERAL" SHALL BE PER LINEAR FEET AND SHALL INCLUDE: PIPE BURSTING OR OPEN TRENCH REPLACEMENT; INSTALLATION OF PIPE AND FITTINGS, ALL COUPLINGS; TRENCHING AND PAVEMENT RESTORATION; AND ALL INCIDENTAL COSTS NEEDED FOR SATISFACTORY COMPLETION OF THE LATERAL REPLACEMENT.
2. PAYMENT FOR "INSTALL CLEANOUT" SHALL BE PER EACH AND SHALL INCLUDE: TRENCHING AND PAVEMENT RESTORATION; INSTALLATION OF PIPE AND FITTINGS, WYE AND COUPLINGS; REMOVAL AND INSTALLATION OF CLEANOUT; AND ALL INCIDENTAL COSTS NEEDED FOR SATISFACTORY COMPLETION OF THE CLEANOUT INSTALLATION.
3. PAYMENT FOR "REMOVAL AND INSTALLATION OF SIDEWALK/CONCRETE SHALL BE INCLUDED IN THE COST FOR LATERAL REPLACEMENT, AND SHALL INCLUDE ALL INCIDENTAL COSTS NEEDED FOR SATISFACTORY COMPLETION OF THE REMOVE AND INSTALLATION OF SIDEWALK/CONCRETE. LIMIT OF SIDEWALK REMOVAL SHALL BE AT COLD JOINTS AND AS DIRECTED AND APPROVED BY THE WWTP INSPECTOR OR ENGINEER. REFERENCE DETAIL 4 ON SHEET Z2.
4. TRENCHING AND PAVEMENT RESTORATION SHALL BE PERFORMED PER DETAIL 1 ON SHEET Z1.
5. LANDSCAPING, DRIVEWAY AND OTHER IMPROVEMENTS DISPLACED DURING CONSTRUCTION SHALL BE RESTORED IN KIND AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
6. IF THE EXISTING LATERAL DOES NOT MEET THE MINIMUM SLOPE REQUIREMENTS AND IT IS FEASIBLE TO INCREASE THE SLOPE OF THE LATERAL BEING REPLACED, THE CONTRACTOR SHALL OPEN TRENCH REPLACE THE LATERAL TO MEET THE MINIMUM SLOPE REQUIREMENTS, OR TO THE MAXIMUM SLOPE POSSIBLE IF THE MINIMUM SLOPE CANNOT BE MET.
7. PRIVATE LATERAL REPLACEMENT SHALL ADHERE TO THE REQUIREMENTS OF CITY'S STANDARD DRAWING NO. WW100. LATERALS SHALL BE TESTED AND INSPECTED.

**PRIVATE LATERAL REPLACEMENT DETAIL 1**  
SCALE: NTS



**STANDARD CLEANOUT DETAIL 2**  
SCALE: NTS

**Schaaf & Wheeler**  
CONSULTING CIVIL ENGINEERS  
2200 RANGE AVENUE, SUITE #201  
SANTA ROSA, CA 95403  
(707) 528-4848



NO.	REVISIONS	DATE	APPR.
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ROLAND YIP, P.E. CITY ENGINEER	DATE
LOUIS SUN, P.E. DEPUTY PUBLIC WORKS DIRECTOR	DATE



**CITY OF PACIFICA**  
**LOWER LINDA MAR**  
**REHABILITATION AND REPAIR PROJECT**  
**DETAILS**

DATE: 03/22/2024	SCALE: AS SHOWN
DESIGN: JTV	DRAWN: JTV
CHECKED: BLS	