



# CITY OF OCEANSIDE

## PLANS FOR THE CONSTRUCTION OF:

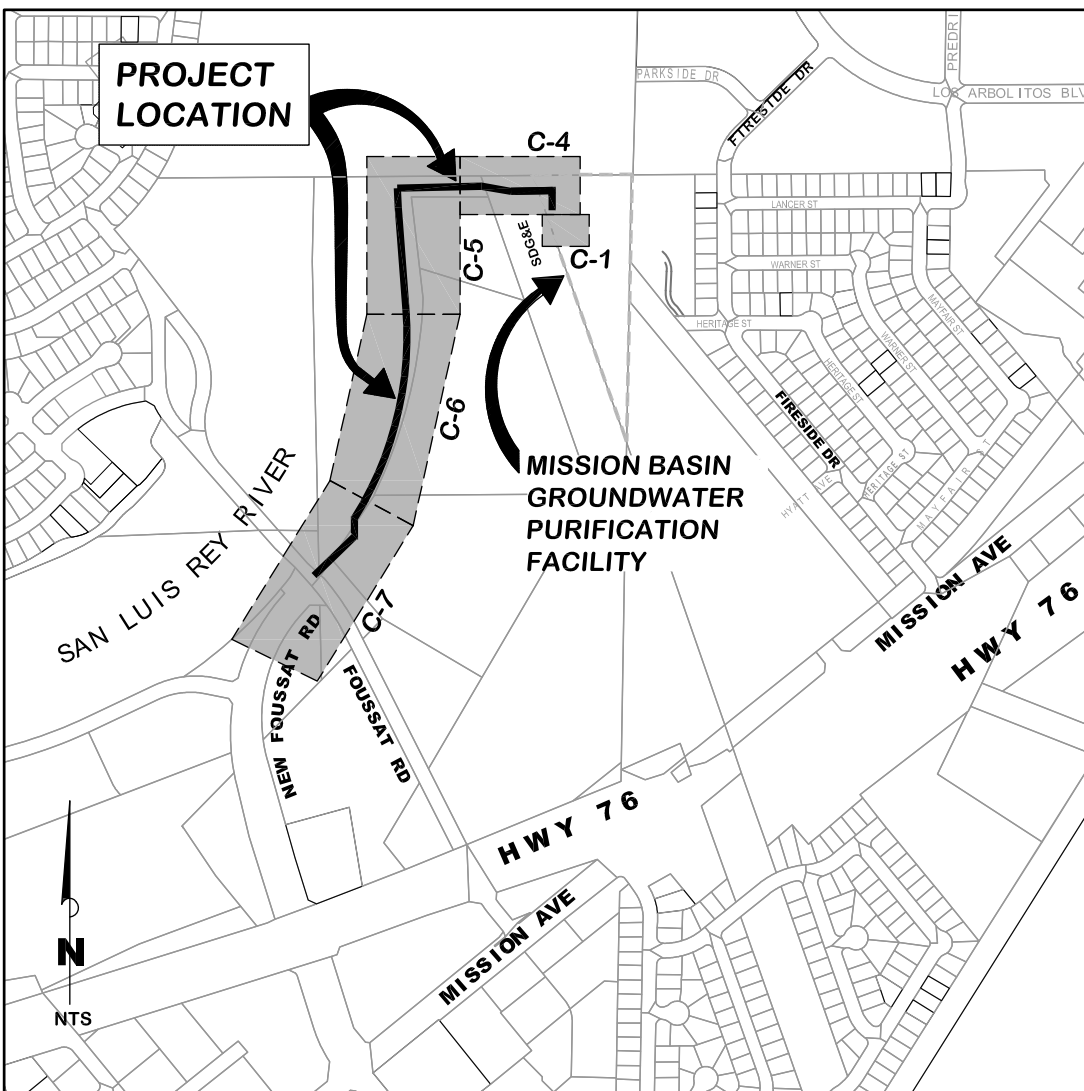
# 511 PUMP STATION

## 100 % DESIGN

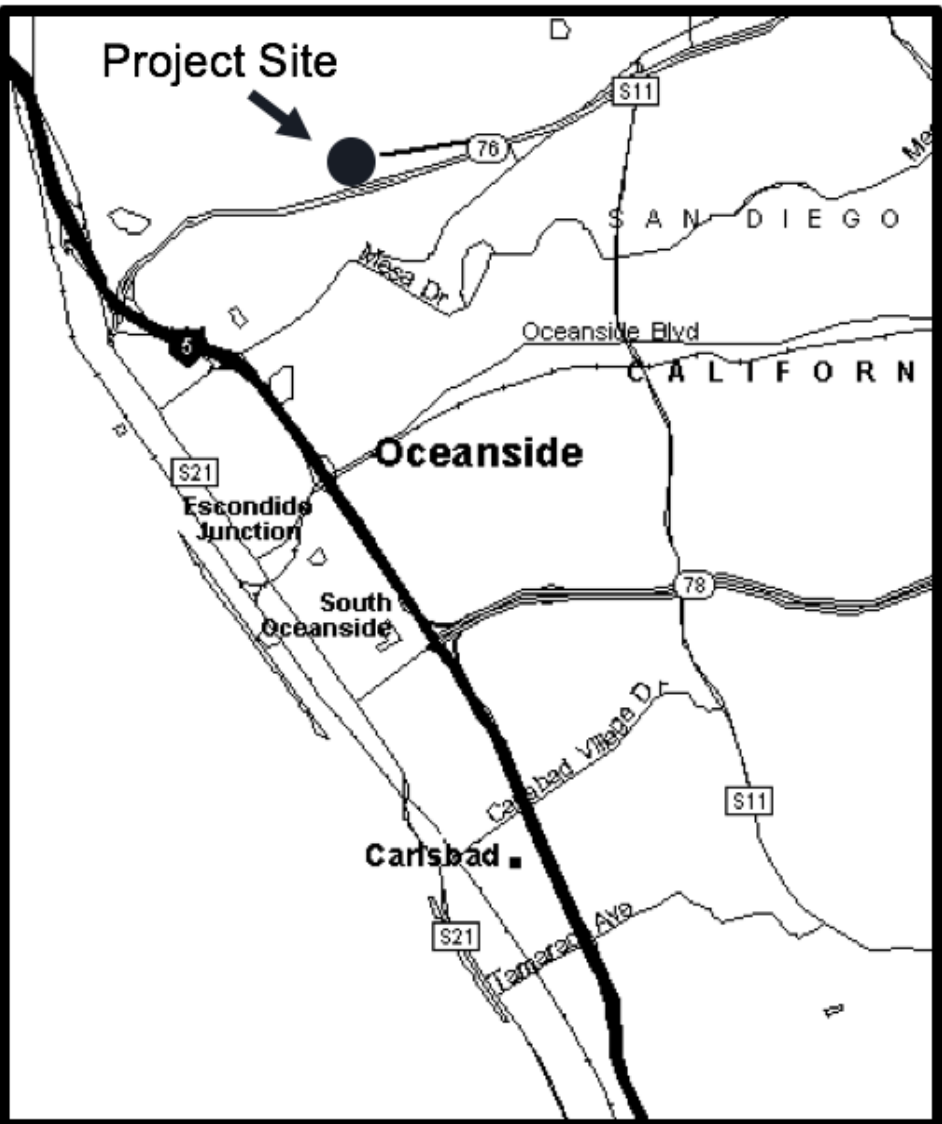
### MAY 2020

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LOCATION MAP



VICINITY MAP

 <div>CITY OF OCEANSIDE WATER UTILITES DEPARTMENT</div>			
SCALE VERIFICATION THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.			
DRAWING STATUS			
Status	Date	Initial	
TITLE SHEET			
100% DESIGN 511 PUMP STATION			
G - 01			
NERO CONSULTANTS 			
Source Reference:			
Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020	
Scale:	Project N°: 908122600715	Report N°:	Drawing N°: 1 of 20



GENERAL NOTES

1. FOLLOWING NOTES ARE GENERAL AND APPLY TO ALL SHEETS OF THESE CONTRACT DOCUMENTS AS IF THEY WERE WRITTEN IN THE ENTIRETY ON EACH SHEET.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE STARTING WORK AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF WORK OF ANY DISCREPANCIES.
3. THE CONTRACTOR SHALL NOTIFY THE SAN DIEGO GAS AND ELECTRIC COMPANY AND THE PACIFIC TELEPHONE AND TELEGRAPHY COMPANY PRIOR TO STARTING WORK NEAR COMPANY REPRESENTATIVES.
4. NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600, AT LEAST TWO (2) WORKING DAYS FOR LOCATION OF ELECTRIC CABLES, GAS PIPING, AND TELEPHONE CABLES AND APPURTENANCES AND REFER TO CITY STANDARDS.
5. ALL PERMITS REQUIRED BY LAW SHALL BE ACQUIRED BY CONTRACTOR BEFORE COMMENCING WORK WHICH INCLUDES A PERMIT FOR WORK WITHIN EXISTING CITY RIGHT-OF-WAYS.
6. THE CONTRACTOR SHALL NOTIFY THE CITY OF OCEANSIDE ENGINEERING INSPECTION DEPARTMENT 48 HOURS PRIOR TO STARTING WORK SO THAT INSPECTION MAY BE PROVIDED (TELEPHONE NUMBER: 760-435-5081)
7. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, WITH SUPPLEMENTS (APWA SPECIFICATIONS); THE SAN DIEGO COUNTY REGIONAL STANDARD DRAWINGS (SDRSD); CITY OF OCEANSIDE "WATER, SEWER, AND RECLAIMED WATER DESIGN AND CONSTRUCTION" MANUAL; AND CITY OF OCEANSIDE ENGINEERS DESIGN AND PROCESSING MANUAL (OCEANSIDE ENGINEERS MANUAL).
8. THE CONTRACTOR SHALL MAINTAIN THE WORK AREA IN A NEAT, SAFE, CLEAN AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE AGENCY HAVING JURISDICTION OVER THE AREA. PAVED ROADWAYS SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCES BEING CONTROLLED AT ALL TIMES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT AREAS AFFECTED BY THE CONSTRUCTION.
9. PAVEMENT SECTIONS SHOWN ARE TO BE VERIFIED BY "R" VALUE TESTS (TEST METHOD NO. CALIFORNIA 301) AND PAVEMENT DESIGN REPORT, TO BE SUBMITTED BY SOILS ENGINEER AFTER UNDERGROUND UTILITIES CONSTRUCTION IS COMPLETE, FOR CITY ENGINEER'S APPROVAL.
10. ALL METALS PLACED IN THE GROUND SHALL BE ENCASED IN 6 INCHES OF NEUTRAL SAND.
11. CONSTRUCTION EXPANSION JOINTS IN CURB AND GUTTER AT RETURNS AND AT DRIVEWAY INTERSECTIONS ARE REQUIRED PER SDRSD G-9 AND G-10.
12. ALL UNDERGROUND UTILITIES LATERALS SHALL BE INSTALLED BEFORE CONSTRUCTION OF CURBS, CROSS GUTTERS, OR SURFACING OF THE STREETS AND SHALL BE MARKED FOR EASY LOCATION. THE ENGINEER OF WORK SHALL CERTIFY ALL IMPROVEMENTS TO WITHIN 0.1 FEET OF THE DESIGN
13. A MINIMUM VERTICAL SEPARATION OF 12 INCHES SHALL BE MAINTAINED BETWEEN UTILITIES AT ALL TIMES UNLESS OTHERWISE NOTED EXPLICITLY.
14. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF INDUSTRIAL SAFETY AND ADHERE TO ALL PROVISIONS OF THE STATE CONSTRUCTION SAFETY ORDERS.
15. SOILS REPORTS ON ALL TRENCHES SHALL BE SUBMITTED TO THE ENGINEER OF WORK AND THE CITY ENGINEER BY THE SOILS ENGINEER OF RECORD, WHICH CERTIFIES THAT TRENCH BACKFILL WAS COMPACTED AS DIRECTED BY THE SOILS ENGINEER IN ACCORDANCE WITH EARTHWORK SPECIFICATIONS AND CITY OF OCEANSIDE SPECIFICATIONS AND GRADING ORDINANCE.
16. BLUE FIRE HYDRANT MARKERS SHALL BE PLACED ON THE PAVEMENT PER CITY OF OCEANSIDE STANDARD DRAWING.
17. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CURRENT STATE OF CALIFORNIA MANUAL OF TRAFFIC CONTROLS.
18. ALL OPERATIONS CONDUCTED ON THE PREMISES, INCLUDING THE WARMING UP, REPAIR, ARRIVAL, DEPARTURE, OR RUNNING OF TRUCKS, EARTH MOVING, EQUIPMENT, CONSTRUCTION EQUIPMENT, AND ANY OTHER ASSOCIATED EQUIPMENT SHALL BE LIMITED TO THE PERIOD BETWEEN 7:00 A.M. AND 4:00 P.M. MONDAY THROUGH FRIDAY; AND, NO EARTH MOVING OR GRADING OPERATIONS SHALL BE CONDUCTED ON THE PREMISES ON SATURDAYS OR SUNDAYS OR LEGAL HOLIDAYS, UNLESS WAIVED BY THE CITY ENGINEER. IF THE HOURS OF WORK SPECIFIED ON THE CONTRACTOR'S APPROVED TRAFFIC CONTROL PLANS AND/ OR THE CALTRANS ENCROACHMENT PERMIT ARE MORE RESTRICTIVE, THAN THE TRAFFIC CONTROL PLANS AND/ OR THE CALTRANS ENCROACHMENT PERMIT HOURS OF WORK SHALL TAKE PRECEDENCE.
19. STRIPING SHALL BE DONE BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE, UNLESS OTHERWISE DIRECTED.
20. TRAFFIC STRIPES AND PAVEMENT MARKINGS SHALL NOT BE APPLIED OVER EXISTING STRIPES THAT ARE TO BE REMOVED. EXISTING STRIPES SHALL BE FIRST REMOVED BY SANDBLASTING BEFORE ANY NEW APPLICATION.
21. REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED BY CONTRACTOR ON PERMANENT STRIPING. ALL STREET SIGNS SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SIGN SPECIFICATIONS AND INSTALLATION SHALL BE IN ACCORDANCE WITH CITY OF OCEANSIDE STANDARD DRAWING T-3 AND THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION SPECIFICATION FOR REGULATORY, WARNING AND GUIDE SIGNS.
22. ALL VALVE CANS AND RISERS ON THE CITY'S OPERATIONAL SYSTEM WILL BE RAISED TO GRADE, INCLUDING COMPACTION AROUND THE RISER AND PAVING AROUND VALVE CAN, WITHIN 48 HOURS AFTER PAVEMENT HAS BEEN PLACED. THIS INCLUDES VALVE CANS AND RISERS ON THE EXISTING SYSTEM AND ON ALL NEW SYSTEMS THAT ARE TIED INTO THE CITY'S EXISTING SYSTEM.
23. CONTRACTOR SHALL WORK WITHIN CONSTRUCTION LIMITS.

WATER NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE CITY OF OCEANSIDE WATER, SEWER, AND RECLAIMED WATER DESIGN AND CONSTRUCTION MANUAL; AND CITY OF OCEANSIDE DESIGN AND PROCESSING MANUAL (OCEANSIDE ENGINEERS MANUAL; SAN DIEGO AREA REGIONAL STANDARD DRAWINGS (SDRSD); AND, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC OR GREEN BOOK) AND SUPPLEMENTAL AMENDMENTS.
2. A "W" SHALL BE INSCRIBED ON CURB DIRECTLY ABOVE ALL WATER SERVICES. SERVICES SHALL BE SHOWN ON AS-BUILT PLANS AND SHALL BE LOCATED BY A WATERLINE STATIONING.
3. PRESSURE TEST, DISINFECT, SAMPLE TEST(S), AND FLUSH THE WATER SYSTEM IN ACCORDANCE WITH THE GUIDELINE TITLED, "CONSTRUCTION GUIDELINES AND REQUIREMENTS", INCLUDED AS SECTION OF THE CITY OF OCEANSIDE "WATER, SEWER, AND RECLAIMED WATER DESIGN AND CONSTRUCTION" MANUAL'S.
4. NO DISRUPTION TO EXISTING WATER DISTRIBUTION MAINS WILL BE ALLOWED ON MONDAYS OR FRIDAYS. ALL SHUTDOWNS FOR SYSTEM TIE-NS WILL BE SCHEDULED BETWEEN TUESDAY, WEDNESDAY AND THURSDAY, AND WILL BE CONFINED TO NORMAL WORKING HOURS. REFER TO THE GUIDELINE TITLED, "ADMINISTRATIVE PROCEDURES FOR WATER LINE SHUTDOWNS" IN THE CONSTRUCTION GUIDELINES AND REQUIREMENTS APPENDIX OF THE CITY OF OCEANSIDE "WATER, SEWER, AND RECLAIMED WATER DESIGN AND CONSTRUCTION" MANUAL.
5. NO CONNECTIONS FOR THE PURPOSE OF OBTAINING WATER SUPPLY DURING CONSTRUCTION SHALL BE MADE TO ANY FIRE HYDRANT OR BLOW-OFF STRUCTURE WITHOUT FIRST OBTAINING A CONSTRUCTION WATER PERMIT FROM THE CITY OF OCEANSIDE WATER UTILITIES DEPARTMENT. A REDUCED PRESSURE PRINCIPLE ASSEMBLY (RP ASSEMBLY) SHALL PROTECT THE METER.
6. ALL WATER USED ON A CONSTRUCTION PROJECT SHALL BE METERED. THE COST OF THE WATER WILL BE CHARGED TO THE CONTRACTOR. THIS INCLUDES WATER FOR LOADING OF NEW WATERLINES, FLUSHING OF LINES PRESSURE TESTING, ETC. CITATIONS WILL BE ISSUED TO PARTIES TAKING WATER FROM NON-METERED FACILITIES.
7. THE CONTRACTOR SHALL NOTIFY THE UNDERGROUND SERVICE ALERT TWO (2) WORKING DAYS PRIOR TO STARTING EXCAVATION SO THAT EXISTING WATER FACILITIES SHALL BE MARKED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION (UNDERGROUND SERVICE ALERT: 811).
8. LOCATION AND ELEVATION OF EXISTING WATER FACILITIES SHALL BE CONFIRMED BY FIELD MEASUREMENTS AND EXCAVATION EXPLORATION (POT HOLING) BY THE CONTRACTOR, AFTER USA MARK-OUT HAS BEEN COMPLETED AND THE WATER UTILITIES DEPARTMENT HAS BEEN GIVEN A TWO (2) WORKING DAY NOTICE.
9. THE EXISTENCE AND LOCATION OF WATER FACILITIES AS SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE CITY RECORDS TO THE BEST OF OUR KNOWLEDGE, THE EXISTING WATER FACILITIES ARE AS SHOWN ON THE PLANS THE CITY OF OCEANSIDE SHALL NOT BE HELD RESPONSIBLE FOR ANY ERROR IN THE LOCATION AND ELEVATION OF THE EXISTING WATER FACILITIES.
10. NUTS AND BOLTS ON ALL FLANGE FITTINGS SHALL BE CADMIUM PLATED AND COATED PER THE CITY OF OCEANSIDE "WATER, SEWER, AND RECLAIMED WATER DESIGN AND CONSTRUCTION" MANUAL. EXCEPT FOR BURIED SERVICE. ALL PLATED NUT AND BOLT THREADS SHALL BE COATED WITH NON-OXIDE GREASE PRIOR TO INSTALLATION. APPLY ANT-SEIZE TO ALL STAINLESS STEEL NUT AND BOLT THREADS. BURIED SERVICE VALVES, FITTINGS, AND APPURTENANCES WILL BE COATED AND WRAPPED PER SECTION 4.12 OF THE OCEANSIDE ENGINEERS MANUAL.
11. THE CITY INSPECTOR SHALL BE NOTIFIED AT LEAST TWO (2) WORKING DAYS PRIOR TO ANY INSPECTION. TO ARRANGE FOR INSPECTION, CALL THE WATER UTILITIES DEPARTMENT 760-435-5800.
12. PIPE BEDDING AND TRENCH BACKFILL SHALL CONFORM TO SAN DIEGO REGIONAL STANDARD DRAWING WP-2, EXCEPT THAT COMPACTION SHALL BE 95%. THE PIPE SHALL BE LAID ON 6-INCH MINIMUM SAND BED WITH SAND EQUIVALENT OF SE-30 OR MORE. THE BACKFILL MATERIAL FOR THE PIPE ZONE SHALL BE SAND OR NATIVE MATERIAL WITH A. S. E. OF 30 OR MORE, FREE FROM STONES, CLODS AND OTHER DELETERIOUS MATERIALS.
13. ALL FITTINGS AND SERVICES SHALL BE ENCASED WITH A MINIMUM OF SIX (6) INCHES OF NEUTRAL SAND PER SECTIONS 2.12.C AND G OF THE CITY OF OCEANSIDE "WATER, SEWER, AND RECLAIMED WATER DESIGN AND CONSTRUCTION" MANUAL.
14. PIPE DEFLECTIONS FOR SHORT RADIUS CURVES AND ANGLE POINTS SHALL NORMALLY BE ACCOMPLISHED BY MEANS OF STANDARD FITTINGS.
15. POLYETHYLENE ENCASEMENT: ALL UNDERGROUND INSTALLED VALVES, DUCTILE IRON PIPE, AND FITTINGS SHALL BE ENCASED IN 2 LAYERS OF 8-MIL POLYETHYLENE ENCASEMENT AND INSTALLATION SHALL BE IN ACCORDANCE WITH ANSI AWWA C105/ A21.5
16. PIPE INSTALLATION: THE INSIDE AND OUTSIDE OF THE PIPE SHALL BE CLEAN AND FREE FROM FOREIGN MATERIAL OF ANY KIND BEFORE BEING INSTALLED.
17. 3-INCH MINIMUM WIDTH COLOR CODED DETECTOR TAPE MARKED "WATER" IN 1-1/2 INCH BLACK LETTERS SHALL BE PLACED ON THE COMPACTED AND GRADED SAND BEDDING ONE FOOT ABOVE AND CENTERED OVER THE WATER MAIN PRIOR TO BACK FILLING THE TRENCH.
18. WATER QUALITY TESTS SHALL INCLUDE BACTERIOLOGICAL(BT) AND GENERAL PHYSICAL (GP) TESTING. ALL TESTING WILL COMPLY WITH THE PROVISIONS OF SECTION (F) "WATER SYSTEM TESTING REQUIREMENTS" IN THE CONSTRUCTION GUIDELINES AND REQUIREMENTS APPENDIX OF THE CITY OF OCEANSIDE "WATER, SEWER, AND RECLAIMED WATER DESIGN AND CONSTRUCTION" MANUAL. ALL TESTING WILL BE SUCCESSFULLY COMPLETED BEFORE CONNECTION (TIE-IN) SUBMITTAL AND APPROVAL.
19. ALL WATER DISCHARGE FROM FLUSHING, TESTING, AND DEWATERING SHALL COMPLY WITH ALL REQUIREMENTS OF THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION (SDRWQCB) REGULATIONS.

WATER POLLUTION NOTES

1. CONTRACTOR SHALL PROVIDE A STORM WATER POLLUTION CONTROL PLAN (PREPARED BY A CALIFORNIA REGISTERED CIVIL ENGINEER) FOR WORK DURING CONSTRUCTION CONFORMING TO THE NPDES PERMIT REQUIREMENTS.
2. ALL REQUIREMENTS OF THE COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED WATER POLLUTION CONTROL PLAN.
3. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.
4. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.
5. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL MEASURES.

ENVIRONMENTAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO IMPLEMENT ALL REQUIRED LOCAL, STATE, AND FEDERAL STANDARDS, LAWS, AND/OR REGULATIONS AND ANY MITIGATION MONITORED REQUIRED AS PART OF ANY PREVIOUSLY ADOPTED ENVIRONMENTAL DOCUMENTATION PREPARED BY THE DISTRICT OR ON BEHALF OF THE DISTRICT. THE CONTRACTOR SHALL COORDINATE CLOSELY WITH DISTRICT STAFF TO OBTAIN ASSISTANCE IN GATHERING ANY RELATED PERMIT OR ENVIRONMENTAL MONITORING REQUIREMENTS.
2. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES. CONTRACTOR'S ATTENTION IS DRAWN TO SECTION 01560 OF THE SPECIFICATIONS FOR SPECIFIC ENVIRONMENTAL PROTECTION MEASURES. CONTRACTOR SHALL ALSO OBTAIN NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) NOTICE OF INTENT.
3. IDENTIFY STAGING AND/OR LETDOWN AREAS PRIOR TO CONSTRUCTION AND LOCATE IN DISTURBED HABITAT OR DEVELOPED SITES. THE CONTRACTOR WILL CHOOSE THESE AREAS. STAGING AREAS SHALL BE PROHIBITED WITHIN OR ADJACENT TO SENSITIVE HABITAT UNLESS ABSOLUTELY NECESSARY. STAGING AREAS SHALL BE DELINEATED ON THE GRADING PLANS AND REVIEWED BY THE DISTRICT'S ENVIRONMENTAL SPECIALIST. IF STAGING AREAS ARE PROPOSED TO BE OUTSIDE OF THE STUDY CORRIDOR OR IN A PREVIOUSLY UNDISTURBED OR UNDEVELOPED AREAS, ADDITIONAL FIELD ASSESSMENTS MAY BE REQUIRED, AND ADDITIONAL IMPACTS COULD OCCUR THAT COULD REQUIRE ADDITIONAL PERMITTING.

UTILITY CONTACTS

(CONTACTS ARE SUBJECT TO CHANGE BY UTILITY OWNERS, DESIGN-BUILD TEAM MUST VERIFY ALL CONTACTS AND MAINTAIN UPDATED UTILITY CONTACT LIST FOR ALL REGARD OFFICE AND FIELD PERSONNEL)		
AGENCY	CONTACT NAME	PHONE NUMBER
CITY OF OCEANSIDE 300 N. COAST HIGHWAY OCEANSIDE, CA 92054	GARY BODMAN	(760) 435-5908
SDG&E - GAS 6875 CONSOLIDATED WAY, SD 1313 SAN DIEGO, CA 92121-2602	GAS TECHNICAL SERVICES	(858) 547-2080
SDG&E -ELEC 8316 CENTURY PARK COURT (CP51C) SAN DIEGO, CA 92123	PROJECT MANAGEMENT	(619) 696-2000
COX 5159 FEDERAL BLVD SAN DIEGO, CA 92105	NEIL PETERS	(619) 263-9251
CITY OF CARLSBAD 1635 FARADAY AVE CARLSBAD, CA 92008	LINDA ONTIVEROS	(760) 702-2773
FALLBROOK PUBLIC (FPUD) P.O BOX 2290 FALLBROOK, CA 92088-2290	TIM STERGER	(760) 728-1125
FALLBROOK PUBLIC (FPUD) (ENGINEERING / PLANNING - MANAGER) P.O BOX 2290 FALLBROOK, CA 92088-2290	JACK BEBEE	(760) 728-1125
NEXTG NETWORKS 890 TASMAN DR MILPITAS, CA 950357439	DELFIN GUERZON	(408) 954-1580
KINDER MORGAN (RIGHT OF WAY - FIELD) 1100 TOWN & COUNTRY RD ORANGE, CA 92868	AL GIESE	(310) 930-3145
KINDER MORGAN (ENGINEERING - DESIGN) 1100 TOWN & COUNTRY RD ORANGE, CA 92868	GEORGE REED	(714) 560-4770
ATT 950 WEST WASHINGTON AVENUE ESCONDIDO, CA 92025	JULIE NYBERG	(760) 489-3632

Call before you Dig

Avoid cutting underground utility lines. It's costly.



OR  
1-800-227-2600

CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION
THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.
<div></div>

DRAWING STATUS		
Status	Date	Initial

GENERAL AND PROJECT NOTES

100% DESIGN 511 PUMP STATION

G - 02

NERO CONSULTANTS



Source Reference:			
Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020	
Scale:	Project Nº: 908122600715	Report Nº:	Drawing Nº: 2 of 20



ABBREVIATIONS				GENERAL SYMBOLS		LINE WORK										
A	ABC	AGGREGATE BASE COURSE	M	MAX	MAXIMUM	PLAN/TITLE	NEW STRUCTURES									
	AC	ASPHALT CONCRETE		ME	MATCH EXISTING		EXISTING STRUCTURES									
	ACI	AMERICAN CONCRETE INSTITUTE		MFG	MANUFACTURER		NEW PIPING (TRIPLE LINES)									
	AFF	ABOVE FINISHED FLOOR		MG	MILLION GALLONS		NEW PIPING (SINGLE LINE)									
	ANG	ANGLE		MGD	MILLION GALLONS PER DAY		EXISTING PIPING (TRIPLE LINES)									
	ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE		MH	MANHOLE		EXISTING PIPING (SINGLE LINE)									
B	APPROX	APPROXIMATELY	N	MID	MIDDLE	SECTION CUT	HIDDEN LINE									
	AVAR	AIR VACUUM AND RELEASE VALVE		MIN	MINIMUM		HIDDEN LINE (EXISTING)									
	AVE	AVENUE		O	OD		OUTSIDE DIAMETER	CENTER, MONUMENT, OR SURVEY LINE								
	AWS	AMERICAN WELDING SOCIETY						OH	OVERHEAD	GUARDRAIL						
	AWWA	AMERICAN WATER WORKS ASSOCIATION								OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION	EXISTING CONTOURS				
	C	B										BORING	P	PE	PLAIN END	NEW CONTOURS
BC		BEGIN CURVE	PERF			PERFORATED						NEW FENCE				
BF		BLIND FLANGE		PERIM	PERIMETER		EXISTING FENCE									
BFV		BUTTERFLY VALVE					PG	PRESSURE GAUGE	POWER POLE & LINE							
BVLD		BOULEVARD							PL	PROPERTY LINE	PROPERTY LINE OR RIGHT OF WAY					
BO	BLOW OFF	PR	PRESSURE RATING	SLOPE												
BOP	BOTTOM OF PIPE			PSI	POUNDS PER SQUARE INCH	RAILROAD										
BOW	BOTTOM OF WALL	PT	POINT	CITY LIMITS												
BVC	BEGIN VERTICAL CURVE	PTZ	POINT TILT ZOOM	FUTURE ROAD												
C	CATV	CABLE TELEVISION	R	PVC	POLYVINYL CHLORIDE	DRAWING REFERENCE	EXISTING ROAD									
	CAV	COMBINATION AIR RELEASE/VACUUM VALVE		PVI	POINT OF VERTICAL CURVE											
	CC	CENTER TO CENTER		PW	POTABLE WATER											
	CCTV	CLOSED CIRCUIT TELEVISION		S	RAD		RADIUS									
	CFM	CUBIC FEET PER METER						RCP	REINFORCED CONCRETE PIPE							
	CI	CAST IRON						RD	ROAD							
C/L	CENTER LINE	RED	REDUCER													
CL	CLASS	REINF	REINFORCED													
CLR	CLEARANCE	REQ'D	REQUIRED													
CMC	CEMENT MORTAR COATED	REV	REVOLUTIONS													
CML	CEMENT MORTAR LINED	RG	ROUGH GRADE													
CML&C	CEMENT MORTAR LINED AND COATED	RPM	REVOLUTION PER MINUTE													
CML&E	CEMENT MORTAR LINED AND EPOXY COATED	ROW	RIGHT OF WAY													
CMU	CONCRETE MASONRY UNIT	S	SCH	SCHEDULE												
CO	CLEAN OUT				SD	STORM DRAIN										
CP	CATHODIC PROTECTION				SDG&E	SAN DIEGO GAS & ELECTRIC										
CPLG	COUPLING				SDRSD	SAN DIEGO REGIONAL STANDARD DRAWINGS										
CT	COURT				SF	SQUARE FEET										
CTS	CATHODIC TESTING STATION				SHT	SHEET										
CY	CUBIC YARDS	SP	SPECIFIC PRESSURE													
D	DEFL	DEFLECTION	T	SS	STAINLESS STEEL	TYPICAL DETAIL REFERENCE										
	DG	DECOMPOSED GRANITE		SSPWC	STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION											
	DI	DRAIN INLET		ST	STREET											
	DIA	DIAMETER					STA	STATION								
	DIP	DUCTILE IRON PIPE					STD	STANDARD								
	DR	DRAIN, DRIVE					STL	STEEL								
DTL	DETAIL	ST LT	STREET LIGHT													
DWG	DRAWING	SWPPP	STORM WATER POLLUTION PREVENTION PLAN													
E	E	EAST	U	T	THICKNESS	EQUIPMENT/DEVICE TAG AND NUMBER										
	EA	EACH					TB	THRUST BLOCK								
	EC	END CURVE					TBD	TO BE DETERMINED								
	EL, ELEV	ELEVATION					TCE	TEMPORARY CONSTRUCTION EASEMENT								
	ELB	ELBOW					TEL	TELEPHONE								
	ELEC	ELECTRIC					TEMP	TEMPERATURE								
EP	EXISTING EDGE OF PAVEMENT	TMAC	TIRE MODIFIED ASPHALT CONCRETE													
EQ	EQUAL	TOC	TOP OF CONCRETE													
ESMT	EASMENT	TOP	TOP OF PIPE													
EVC	END OF VERTICAL CURVE	TOR	TOP OF ROOF													
EXIST	EXISTING	TOW	TOP OF WALL													
F	FCA	FLANGED COUPLING ADAPTER	V	TYP	TYPICAL	BRACKET										
	FE	FLANGE END					VFD	VARIABLE FREQUENCY DRIVE								
	FF	FINISH FLOOR														
	FH	FIRE HYDRANT														
	FG	FINISH GRADE														
	FL	FLOW LINE														
FLG	FLANGE															
FM	FORCEMAIN															
FPUD	FALLBROOK PUBLIC UTILITIES DISTRICT															
FRP	FIBERGLASS REINFORCED POLYESTER															
FS	FINISH SURFACE															
FT, '	FEET															
G	G	GAS	W	W, WTR	WATER	PIPE CONTINUATION (SINGLE LINE)										
	GA	GAUGE					WM	WATER METER								
	GB	GRADE BREAK							WS&RW	WATER, SEWER, AND RECYCLED WATER DESIGN						
	GEN	GENERAL, GENERATOR									DC&M	AND CONSTRUCTION MANUAL				
	GPM	GALLONS PER MINUTE											WV	WATER VALVE		
															WS	WELDED STEEL
I	ID	INSIDE DIAMETER	X	XXX-XXX-XX	EQUIPMENT	KEY NOTE										
	IE	INVERT ELEVATION					Y	SLOPE								
	I & M	IRON AND MAGANESE							Z	STORM DRAIN						
	IN, "	INCHES									AA	SAN DIEGO GAS & ELECTRIC				
	IRR	IRRIGATION											AB	SAN DIEGO REGIONAL STANDARD DRAWINGS		
															AC	SQUARE FEET
L	L	LENGTH	BB	SHEET	SPECIFICATION	NORTH ARROW/PLANT NORTH										
	LB	POUNDS					CC	STAINLESS STEEL								
	LF	LINEAR FEET							DD	STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION						
	LWL	LOW WATER LEVEL									EE	STREET				
													FF	STATION		
															FG	STEEL
		GG	STREET LIGHT													
				HH	STORM WATER POLLUTION PREVENTION PLAN											
		II	T													
				JJ	THICKNESS											
		KK	THRUST BLOCK													
				LL	TO BE DETERMINED											
		MM	TEMPORARY CONSTRUCTION EASEMENT													
				NN	TELEPHONE											
		OO	TEMPERATURE													
				PP	TIRE MODIFIED ASPHALT CONCRETE											
		QQ	TOP OF CONCRETE													
				RR	TOP OF PIPE											
		SS	TOP OF ROOF													
				TT	TOP OF WALL											
		UU	TYPICAL													
				VV	UNIFORM BUILDING CODE											
		WW	UNDERGROUND													
				XX	UNKNOWN											
		YY														
				ZZ												
		</														



PIPE SCHEDULE			
MATERIAL	SIZE (DIAMETER)	CLASS	FITTINGS
DUCTILE IRON, AWWA, C150, PC150, CEMENT MORTAR LINED AND COATED, RESTRAINED	10-INCH, 12-INCH, 18-INCH	52	DUCTILE IRON, AWWA C110, C151

VALVE SCHEDULE						
VALVE TYPE	SIZE (INCHES)	MATERIAL	VALVE END	CLASS	LOCATION	ADDITIONAL INFORMATION
BUTTERFLY	10	DUCTILE IRON	FLANGED	250B	PUMP STATION	DEZURIK BAW
BUTTERFLY	18	DUCTILE IRON	FLANGED	250B	PUMP STATION	DEZURIK BAW
BUTTERFLY	18	DUCTILE IRON	FLANGED	250B	DISTRIBUTION	DEZURIK BAW
COMBINATION AIR RELEASE / VACUUM VALVE	2	DUCTILE IRON	FLANGED	250	PUMP STATION	VENT-O-MAT (MODEL 050RBX2521CS4)
COMBINATION AIR RELEASE / VACUUM VALVE	2	DUCTILE IRON	FLANGED	250	DISTRIBUTION	VENT-O-MAT (MODEL 050RBX2521CS4)
SWING CHECK	10	DUCTILE IRON	FLANGED	250	PUMP STATION	CLA-VAL

PUMP SCHEDULE						
TAG NUMBER	DESCRIPTION	DRIVER (HP)	FLOW (GPM)	HEAD (FT)	SERVICE TYPE	ADDITIONAL INFORMATION
PMP- 511-01	511 PUMP STATION, PUMP NO. 1	60 (ELECTRIC)	1,560	485	POTABLE WATER	FAIRBANKS MORSE VERTICLE TURBINE
PMP- 511-02	511 PUMP STATION, PUMP NO. 2	60 (ELECTRIC)	1,560	485	POTABLE WATER	FAIRBANKS MORSE VERTICLE TURBINE
PMP- 511-03	511 PUMP STATION, PUMP NO. 3	60 (ELECTRIC)	1,560	485	POTABLE WATER	FAIRBANKS MORSE VERTICLE TURBINE

EQUIPMENT SCHEDULE		
TAG NUMBER	DESCRIPTION	ADDITIONAL INFORMATION
GEN - 511- 01	511 PUMP STATION, STANDBY GENERATOR NO. 1	750 KW 0.8 PF 938 KVA RATED, KOHLER COMPANY (MODEL 750REOZMB)
ALT - 511- 01	511 PUMP STATION, ALTERNATOR NO. 1	BAY CITY ELECTRIC WORKS (MODEL 5M4036)
FST - 511- 01	511 PUMP STATION, FUEL STORAGE TANK NO. 1	
ENG - 511- 01	511 PUMP STATION, NATURAL FUEL ENGINE NO. 1	
VFD - 511- 01	511 PUMP STATION, VFD NO. 1 (PMP - 511 - 01)	PWM DESIGN, 480 VAC RATED, THREE PHASE, EATON / CUTLER - HAMMER
VFD - 511- 02	511 PUMP STATION, VFD NO. 2 (PMP - 511 - 02)	PWM DESIGN, 480 VAC RATED, THREE PHASE, EATON / CUTLER - HAMMER
VFD - 511- 03	511 PUMP STATION, VFD NO. 3 (PMP - 511 - 03)	PWM DESIGN, 480 VAC RATED, THREE PHASE, EATON / CUTLER - HAMMER
FAN - ELC- 01	ELECTRICAL ROOM EXHAUST FAN NO. 1	GREENHECK (MODEL SBE-IL30-5) FACTORY-ASSEMBLED, BELT-DRIVEN, WALL PROPELLER FAN INCLUDING HOUSING PROPELLER DRIVE ASSEMBLY, MOTOR, AND ACCESSORIES. ALUMINUM CONSTRUCTION W/ WELDED JOINTS, NOT LESS THAN 2000,000 HOURS AVERAGE LIFE.
FAN - ELC- 02	ELECTRICAL ROOM EXHAUST FAN NO. 2	GREENHECK (MODEL SBE-IL30-5) FACTORY-ASSEMBLED, BELT-DRIVEN, WALL PROPELLER FAN INCLUDING HOUSING PROPELLER DRIVE ASSEMBLY, MOTOR, AND ACCESSORIES. ALUMINUM CONSTRUCTION W/ WELDED JOINTS, NOT LESS THAN 2000,000 HOURS AVERAGE LIFE.
ACU - ELC- 01	ELECTRICAL ROOM AIR CONDITION UNIT NO. 1	DAIKIN (MODEL PKA-RP60KAL) DUCTLESS, HIGH WALL AIR CONDITIONING SYSTEM INCLUDING AN INDOOR DX DUCTLESS FAN, FAN MOTOR, PIPING CONNECTORS, ELECTRICAL CONTROLS, WALL MOUNT THERMOSTAT W/ LOCK AND FULLY INSULATED UNIT CABONETS.

WINDOW / SKYLIGHT SCHEDULE							
NO	LOCATION	INTERIOR / EXTERIOR	BOTTOM ELEVATION	SIZE	FRAME MATERIAL	DETAIL / TYPE	ADDITIONAL INFORMATION
W-01	PUMP STATION	INTERIOR	5'-5" AFF	4'-0" x 4'-0"	ALUMINUM	AJ300 / E	FIXED WINDOW, CONTINUOUS SEALANT ON JAMB, SILL AND HEAD
W-02	ELECTRICAL ROOM	INTERIOR	5'-5" AFF	4'-0" x 4'-0"	ALUMINUM	AJ300 / E	FIXED WINDOW, CONTINUOUS SEALANT ON JAMB, SILL AND HEAD
W-03	PUMP STATION	INTERIOR	5'-5" AFF	4'-0" x 4'-0"	ALUMINUM	AJ300 / E	FIXED WINDOW, CONTINUOUS SEALANT ON JAMB, SILL AND HEAD
W-04	PUMP STATION	INTERIOR	5'-5" AFF	4'-0" x 4'-0"	ALUMINUM	AJ300 / E	FIXED WINDOW, CONTINUOUS SEALANT ON JAMB, SILL AND HEAD
W-05	PUMP STATION	INTERIOR	5'-5" AFF	4'-0" x 4'-0"	ALUMINUM	AJ300 / E	FIXED WINDOW, CONTINUOUS SEALANT ON JAMB, SILL AND HEAD
SK-01	PUMP STATION	EXTERIOR	12'-0" AFF	5'-0" x 10'-0"	METAL	A624	CPI DAYLIGHTING, SINGLE SLOPE QUADWALL, DUAL PANE REMOVABLE, ESR-1253
SK-02	PUMP STATION	EXTERIOR	12'-0" AFF	5'-0" x 10'-0"	METAL	A624	CPI DAYLIGHTING, SINGLE SLOPE QUADWALL, DUAL PANE REMOVABLE, ESR-1253
SK-03	PUMP STATION	EXTERIOR	12'-0" AFF	5'-0" x 10'-0"	METAL	A624	CPI DAYLIGHTING, SINGLE SLOPE QUADWALL, DUAL PANE REMOVABLE, ESR-1253
SK-04	PUMP STATION	EXTERIOR	12'-0" AFF	5'-0" x 10'-0"	METAL	A624	CPI DAYLIGHTING, SINGLE SLOPE QUADWALL, DUAL PANE REMOVABLE, ESR-1253
SK-05	PUMP STATION	EXTERIOR	12'-0" AFF	5'-0" x 10'-0"	METAL	A624	CPI DAYLIGHTING, SINGLE SLOPE QUADWALL, DUAL PANE REMOVABLE, ESR-1253

DOOR SCHEDULE											
NO	LOCATION	INTERIOR / EXTERIOR	DOOR SIZE (WxH)	DOOR THICKNESS	FRAME SIZE (WxH)	MATERIAL	ELEVATIONS DETAIL / TYPE	FRAME DETAIL / TYPE	HEAD DETAIL / TYPE	JAMB DETAIL / TYPE	SILL DETAIL / TYPE
D-01	PUMP STATION	EXTERIOR	3'-0" x 7'-10"	1-3/4"	3'-4" x 8'-0"	METAL	AJ103 / G	AJ104 / R	AJ105 / A	AJ107 / D	AJ109 / D
D-02	ELECTRICAL ROOM	INTERIOR	3'-0" x 7'-10"	1-3/4"	3'-4" x 8'-0"	METAL	AJ103 / G	AJ104 / R	AJ105 / A	AJ107 / D	AJ109 / D
D-03	ELECTRICAL ROOM	EXTERIOR	3'-0" x 7'-10"	1-3/4"	3'-4" x 8'-0"	METAL	AJ103 / G	AJ104 / R	AJ105 / A	AJ107 / D	AJ109 / D
D-04	PUMP STATION	EXTERIOR	3'-0" x 7'-10"	1-3/4"	3'-4" x 8'-0"	METAL	AJ103 / G	AJ104 / R	AJ105 / A	AJ107 / D	AJ109 / D

FITTINGS SCHEDULE				
FITTING TYPE	SIZE (INCHES)	MATERIAL	LOCATION	INTERIOR
REDUCER (CONTRACTOR / EXPANSION)	12 X 18	DUCTILE IRON	PUMP STATION	DOUBLE CEMENT-MORTER-LINED, C104
TEE - FLOW THRU BRANCH	18	DUCTILE IRON	PUMP STATION	DOUBLE CEMENT-MORTER-LINED, C104
TEE - FLOW THRU BRANCH	24 X 24 X 18	DUCTILE IRON	DISTRIBUTION	DOUBLE CEMENT-MORTER-LINED, C104
15 DEGREE BEND	18	DUCTILE IRON	DISTRIBUTION	DOUBLE CEMENT-MORTER-LINED, C104
30 DEGREE BEND	18	DUCTILE IRON	DISTRIBUTION	DOUBLE CEMENT-MORTER-LINED, C104
45 DEGREE BEND, FLANGED COUPLING ADAPTER	18	DUCTILE IRON	DISTRIBUTION	DOUBLE CEMENT-MORTER-LINED, C104
90 DEGREE BEND	18	DUCTILE IRON	PUMP STATION	DOUBLE CEMENT-MORTER-LINED, C104
90 DEGREE BEND	18	DUCTILE IRON	DISTRIBUTION	DOUBLE CEMENT-MORTER-LINED, C104

LIGHTING SCHEDULE			
LAMPS WATT	VOLTS	LOCATION	ADDITIONAL INFORMATION
50W	120V	PUMP STATION	WARELIGHT, 4 FT LED PARABOLIC GRILLE FIXTURE W/ ALUMINUM SHIELD, 0-10 DIMMING
50W	120V	ELECTRICAL ROOM	WARELIGHT, 4 FT LED PARABOLIC GRILLE FIXTURE W/ ALUMINUM SHIELD, 0-10 DIMMING

OTHER APPURTENANCES			
APPURTENANCE TYPE	SIZE (INCHES)	LOCATION	ADDITIONAL INFORMATION
PRESSURE TRANSMITTER	N/A	DISTRIBUTION	BONDED STRAIN GAUGE, ELECTRONIC, LED INDICATOR, ROSEMONT DP TRANSMITTER (MODEL 3051)
PRESSURE GAUGE	N/A	PUMP STATION	ASHCROFT
MAGNETIC FLOW METER, FLANGED	12	PUMP STATION	DUCTILE IRON, SPARKING INSTRUMENTS (MODEL FM 656 TIGERMAG EP WITH HART PROTOCOL KP602 PROGRAMMER)
FLOW INDICATOR	N/A	PUMP STATION	KEP (MODEL PMT - 555)
DRAIN INLET SPOOL, FLANGED	24	DISTRIBUTION	DUCTILE IRON
CAV ENCLOSURE	N/A	DISTRIBUTION	ARMORCAST (MODEL P6002002 - SND)
VALVE COVER	N/A	DISTRIBUTION	SOUTH BAY FOUNDRY (MODEL SBF 1208)

SECURITY SYSTEM SCHEDULE					
CAMERA LABEL	TYPE	LOCATION	MOUNT	HEIGHT (feet)	ORIENTATION
CAM - 511- 01	PTZ	MAIN GATE	PEDESTAL	5	DRIVER FACE / MAIN ENTERANCE
CAM - 511- 02	FIXED	BUILDING 01	PARPET	30	WEST PUMP STATION
CAM - 511- 03	THERMAL	S CORNER	POLE	25	NORTH SITE, EAST ELECTRICAL ROOM
CAM - 511- 04	THERMAL	N CORNER	POLE	25	SOUTH SITE, PEDESTRIAN GATE ENTERANCE

GENERAL NOTES

1. THE INFORMATION INCLUDED IN THESE SCHEDULES IS FOR THE CONTRACTOR'S CONVENIENCE ONLY. DRAWINGS (PLANS, SECTIONS, SCHEMATICS) AND SPECIFICATIONS SHALL TAKE PRECEDENCE FOR DETERMINING THE NUMBER, TYPE AND SIZE OF EQUIPMENT TO BE FURNISHED AND INSTALLED.
2. ALL BOLTS AND NUTS FOR ABOVE GROUND INSTALLATION SHALL BE CADMIUM-PLATED CARBON STEEL ASTM A307, GRADE B OR APPROVED EQUAL. ALL BOTLS, NUTS, SCREWS, AND WASHERS FOR BURIED SERVICES SHALL BE TYPE 316 STAINLESS STEEL.
3. FLANGES ON DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO AWWA/ANSI C110/A21.10 HAVING FACE AND DRILLING PATTERN IDENTICAL TO AWWA/ANSI C115/A21.15 OR ANSI B16.1 CLASS 125 FLANGES OF 250 PSI FOR 12-INCH AND SMALLER, AND 250 PSI FOR 14-INCH TO 48-INCH DIAMETER PIPE.
4. USE OF FLEXIBLE COUPLINGS ARE NOT ALLOWED.



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.



DRAWING STATUS

Status	Date	Initial

SCHEDULES

100% DESIGN 511 PUMP STATION

G - 04

NERO CONSULTANTS



Source Reference:

Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project NP: 908122600715	Report NP: Drawing NP: 4 of 29





**A OVERALL SITE PLAN**  
FILE: 908122600715\_C-01.ext



SCALE VERIFICATION  
THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

DRAWING STATUS		
Status	Date	Initial

SITE PLAN - 1
100% DESIGN 511 PUMP STATION
C - 01

NERO CONSULTANTS

Source Reference:		
Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project NP: 908122600715	Report NP: 5 of 20



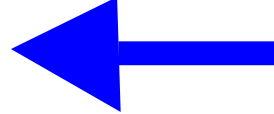
LEGEND



Property Line



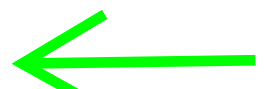
Limits of Disturbance / Construction



Direction of flow of water



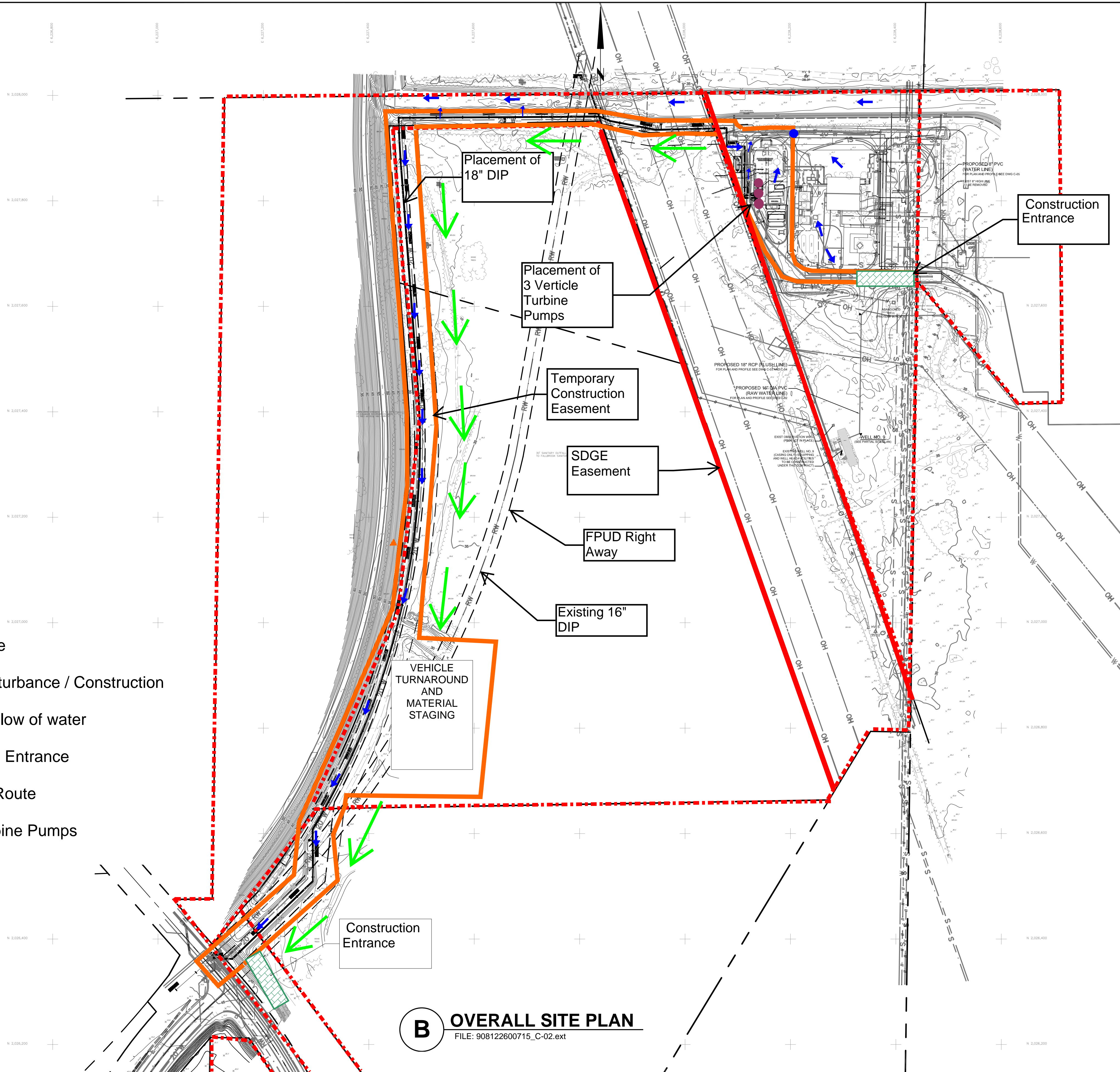
Construction Entrance



Excavation Route



Vertical Turbine Pumps



**B OVERALL SITE PLAN**  
FILE: 908122600715\_C-02.ext



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

DRAWING STATUS

Status	Date	Initial

SITE PLAN - 2

100% DESIGN 511 PUMP STATION

C - 02

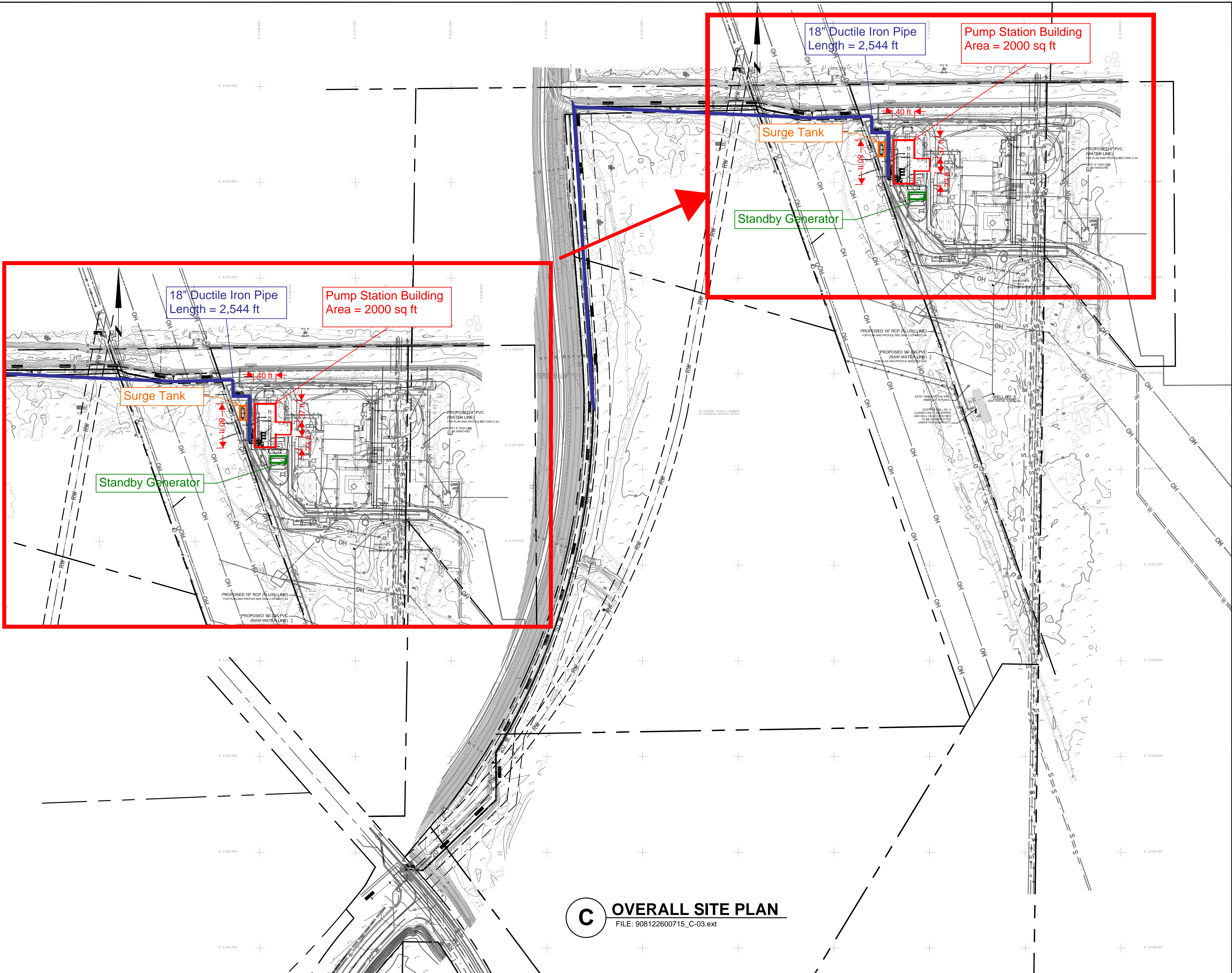
NERO CONSULTANTS



Source Reference:

Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project NP: 908122600715	Report NP: Drawing NP: 6 of 29





- GENERAL NOTES**
1. PIPELINE AND PUMP STATION LAYOUT OBTAINED FROM THE CITY OF OCEANSIDE 30% DESIGN PACKAGE
  2. SURGE TANK SHOWN IS PART OF THE ORIGINAL DESIGN TO UPGRADE FLOW CAPACITY. DESIGN DETAILS NOT INCLUDED IN THIS PLAN SET.
  3. STANDBY GENERATOR SPECIFIED AS KOHLER POWER SYSTEMS MODEL 750REOZMB 750 KW CAPACITY



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

DRAWING STATUS

Status	Date	Initial

SITE PLAN 3

100% DESIGN 511 PUMP STATION

C-03

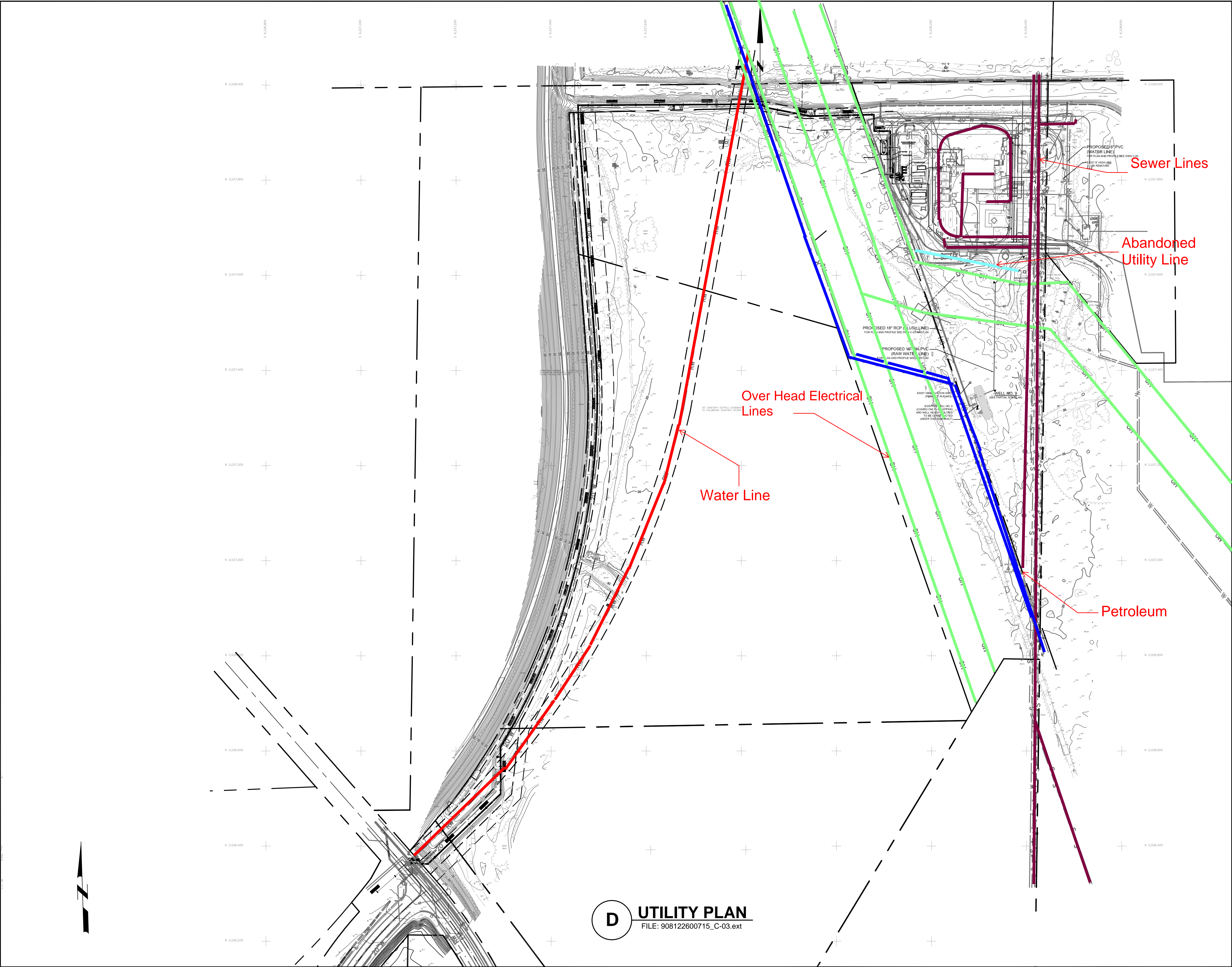
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Source Reference:

Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale: As Shown	Project N°: 908122600715	Report N°: - Drawing N°: 7 of 29





**GENERAL NOTES**

1. NERO CONSULTANTS IS TO NOTIFY THE SAN DIEGO GAS AND ELECTRIC COMPANY PRIOR TO START OF WORK.
2. NERO CONSULTANTS IS TO NOTIFY THE CITY OF OCEANSIDE INSPECTION DEPARTMENT 48 HOURS PRIOR TO START OF WORK (CALL 760-435-5081).
3. NERO CONSULTANTS WILL OBTAIN A RIGHT OF WAY PERMIT FROM THE CITY OF OCEANSIDE PRIOR TO START OF WORK.
4. FOR LOCATION OF ANY UTILITIES, CONTACT UNDERGROUND SERVICE ALERT.
5. ALL UTILITIES INDICATED ON THIS DRAWING ARE BASED ON FILED RESEARCH, AS-BUILT DRAWINGS AND ORIGINAL CONSTRUCTION DRAWINGS. NERO CONSULTANTS WILL POTHOLE TO VERIFY THE SIZE, MATERIAL AND INCLINATION OF ANY EXISTING UTILITIES PRIOR TO INSTALLATION WORK.
6. ALL WATER FACILITY LOCATIONS SHALL BE CONFIRMED BY NERO CONSULTANTS BY POT HOLING.
7. NERO CONSULTANTS WILL NOTIFY DIG ALERT TWO (2) WORKING DAYS PRIOR TO EXCAVATION IN ORDER TO MARK WATER FACILITIES IN THE FIELD.



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

**SCALE VERIFICATION**

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

**DRAWING STATUS**

Status	Date	Initial

**UTILITY PLAN**

100% DESIGN 511 PUMP STATION

C-04

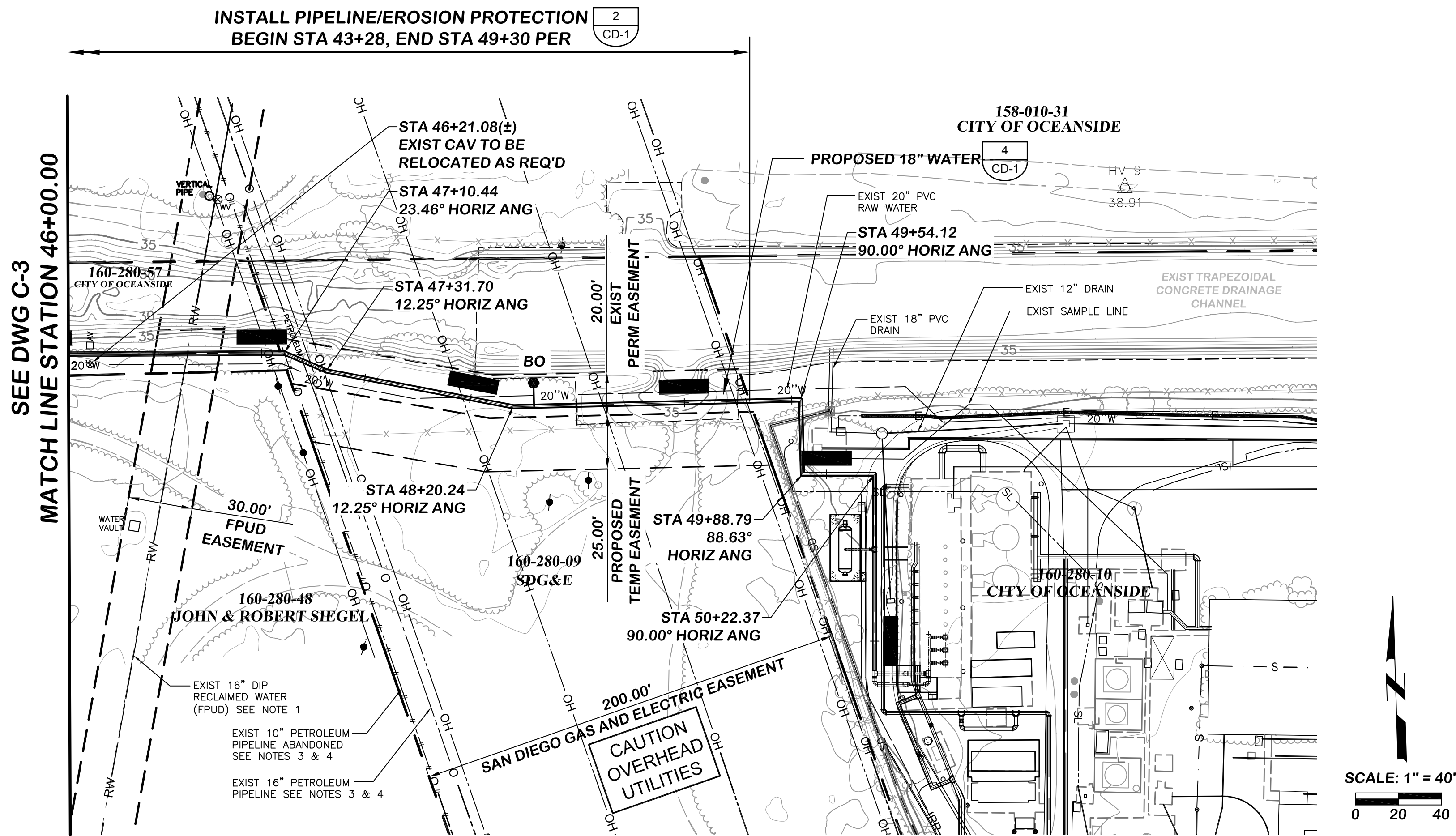
NERO CONSULTANTS



Source Reference:

Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project NP: 908122600715	Report NP: 8 of 29



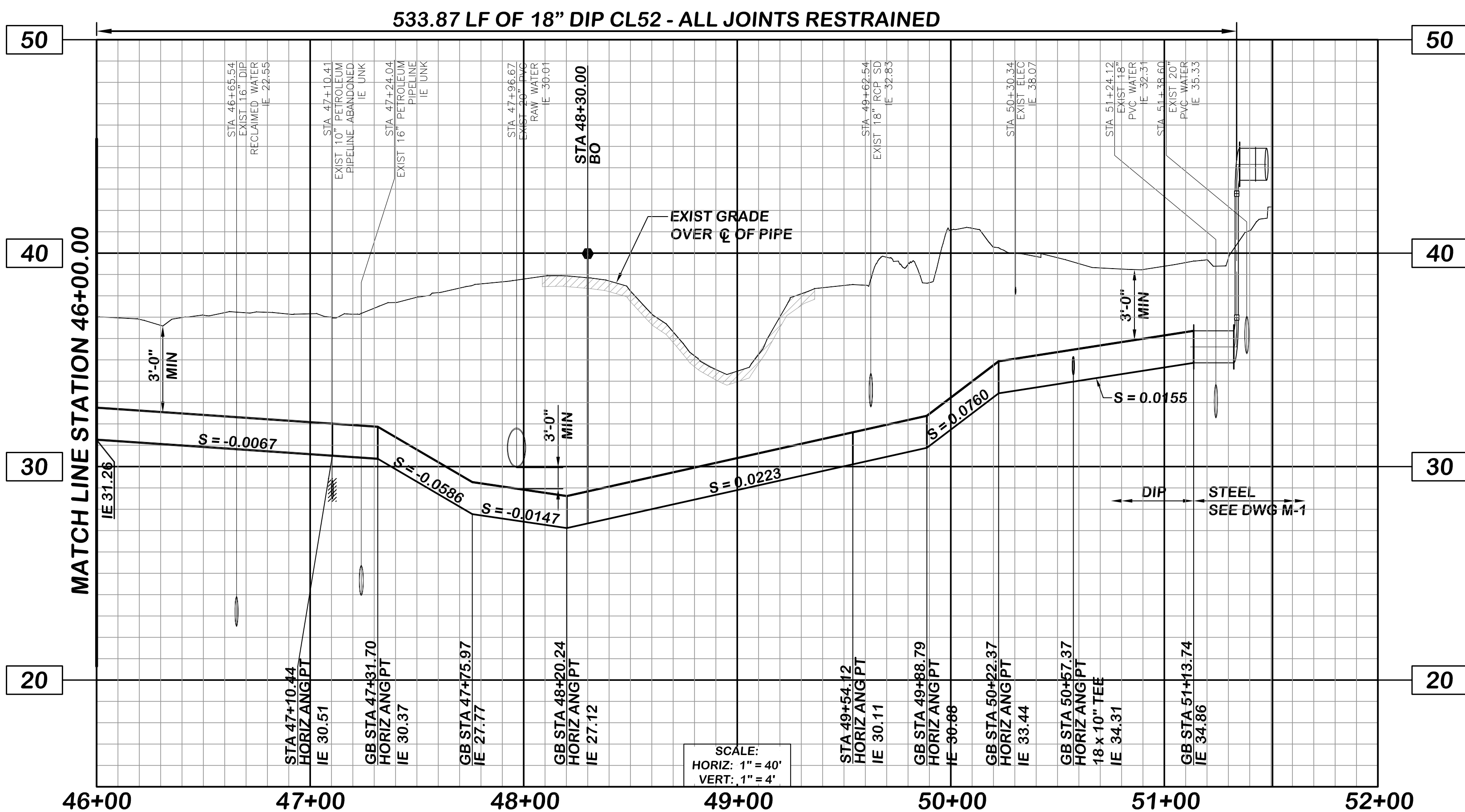


NOTES CONTINUED:

- EXIST 16" PETROLEUM PIPELINE INCLUDES AN ACTIVE IMPRESSED CURRENT CATHODIC PROTECTION SYSTEM. CONTRACTOR TO PROVIDE DESIGN OF PROPOSED 18" DIP BY A CORROSION ENGINEER LICENSED IN THE STATE OF CALIFORNIA. CONTRACTOR SHALL CONTACT KINDER MORGAN TO COORDINATE KINDER MORGAN REVIEW AND ACCEPTANCE OF PROPOSED PIPELINE DESIGN DOCUMENTS AND CONSTRUCTION SCHEDULE, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL CONTACT SDG&E TO COORDINATE SDG&E REVIEW AND ACCEPTANCE OF PROPOSED PIPELINE DESIGN DOCUMENTS AND CONSTRUCTION SCHEDULE, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL CONTACT FPUD TO COORDINATE FPUD REVIEW AND ACCEPTANCE OF PROPOSED PIPELINE DESIGN DOCUMENTS AND CONSTRUCTION SCHEDULE, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- PROTECT IN PLACE ALL EXIST TREES, VEGETATION IN MISSION BASIN DESALTING FACILITY.
- ALL PIPE JOINTS SHALL BE RESTRAINED
- CITY SHALL BE RESPONSIBLE FOR OBTAINING TEMPORARY EASEMENT. DESIGN / BUILDER TO CONFIRM WITH CITY TEMPORARY EASEMENT HAS BEEN OBTAINED

NOTES:

- PIPELINE AND PUMP STATION LAYOUT OBTAINED BY THE CITY OF OCEANSIDE 30 PERCENT DESIGN PACKAGE.
- THE SIZE, VERTICAL AND HORIZONTAL LOCATION, AND EXTENT OF ALL EXISTING AND PROPOSED FACILITIES, TOPOGRAPHY, PROPERTY LINES, AND GRADES SHOWN ON THESE PLANS ARE APPROXIMATE AND ARE INTENDED TO CONVEY THE GENERAL INTENT OF THE PROJECT. THERE MAY BE EXISTING FACILITIES NOT SHOWN ON THESE PLANS, ABOVE AND/OR BELOW GRADE, WHICH MAY EXIST. DESIGN / BUILDER IS RESPONSIBLE FOR RECORDS RESEARCH AND FIELD VERIFICATION OF ALL EXISTING CONDITIONS AND IMPROVEMENTS DURING DESIGN AND PRIOR TO ORDERING MATERIALS. FIELD VERIFICATION IS AT THE DESIGN / BUILDER EXPENSE, AND MUST BE BY WHATEVER MEANS NECESSARY, INCLUDING BUT NOT LIMITED TO RECORDS RESEARCH, INSPECTION, FIELD SURVEY, AND POTHOLING. DESIGN / BUILDER IS RESPONSIBLE FOR PROVIDING ACCURATE MAPPING OF EXISTING FACILITIES AND PROPOSED IMPROVEMENTS DURING DESIGN AND FOR POST-CONSTRUCTION RECORD DRAWINGS, WHICH SHALL INCLUDE COORDINATE TABLES FOR ALL NEW FACILITIES. COORDINATE TABLES SHALL BE BASED ON THE BASIS-OF-SURVEY (TO BE FIELD VERIFIED BY THE DESIGN / BUILDER) AS DESCRIBED ON THESE PLANS.
- EXACT PIPELINE LOCATION CAN ONLY BE DETERMINED BY POTHOLE. THE POTHOLE WORK MUST BE PERFORMED BY HAND EXCAVATION AND IN THE PRESENCE OF A PIPELINE REPRESENTATIVE BY CONTACTING KINDER MORGAN RIGHT OF WAY SPECIALIST, MR. AL GIESE (310) 930-3145, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF WORK. MR. GIESE WILL ARRANGE FOR A PIPELINE REPRESENTATIVE TO BE PRESENT DURING WORK NEAR THE PIPELINES.
- SEE SPECIFICATIONS FOR KINDER MORGAN REQUIREMENTS, INCLUDING DOCUMENTS:
  - L-OM200-29 "GUIDELINES FOR DESIGN AND CONSTRUCTION" RELATING TO PROPOSED PROJECTS AFFECTING KINDER MORGAN PIPELINES AND
  - INFORMATION BULLETIN #03100, ISSUED FROM THE OFFICE OF THE CALIFORNIA STATE FIRE MARSHAL CONCERNING ENCROACHMENTS WITHIN AND ADJACENT TO PIPELINE EASEMENTS THAT MUST BE FOLLOWED.



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

DRAWING STATUS

Rev	Description	Date	By	Check

PLAN AND PROFILE  
STA 46+00.00 TO 51+00.00

100% DESIGN 511 PUMP STATION

C-05

NERO CONSULTANTS



Source Reference:

Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project N°: 908122600715	Report N°: Drawing N°: 9 of 29



NOTES:

- PIPELINE AND PUMP STATION LAYOUT OBTAINED BY THE CITY OF OCEANSIDE 30 PERCENT DESIGN PACKAGE.
- THE SIZE, VERTICAL AND HORIZONTAL LOCATION, AND EXTENT OF ALL EXISTING AND PROPOSED FACILITIES, TOPOGRAPHY, PROPERTY LINES, AND GRADES SHOWN ON THESE PLANS ARE APPROXIMATE AND ARE INTENDED TO CONVEY THE GENERAL INTENT OF THE PROJECT. THERE MAY BE EXISTING FACILITIES NOT SHOWN ON THESE PLANS, ABOVE AND/OR BELOW GRADE, WHICH MAY EXIST. DESIGN / BUILDER IS RESPONSIBLE FOR RECORDS RESEARCH AND FIELD VERIFICATION OF ALL EXISTING CONDITIONS AND IMPROVEMENTS DURING DESIGN AND PRIOR TO ORDERING MATERIALS. FIELD VERIFICATION IS AT THE DESIGN / BUILDER EXPENSE, AND MUST BE BY WHATEVER MEANS NECESSARY, INCLUDING BUT NOT LIMITED TO RECORDS RESEARCH, INSPECTION, FIELD SURVEY, AND POTHOLING. DESIGN / BUILDER IS RESPONSIBLE FOR PROVIDING ACCURATE MAPPING OF EXISTING FACILITIES AND PROPOSED IMPROVEMENTS DURING DESIGN AND FOR POST-CONSTRUCTION RECORD DRAWINGS, WHICH SHALL INCLUDE COORDINATE TABLES FOR ALL NEW FACILITIES. COORDINATE TABLES SHALL BE BASED ON THE BASIS-OF-SURVEY (TO BE FIELD VERIFIED BY THE DESIGN / BUILDER) AS DESCRIBED ON THESE PLANS.
- ALL PIPE JOINTS SHALL BE RESTRAINED
- CITY SHALL BE RESPONSIBLE FOR OBTAINING TEMPORARY EASEMENT. DESIGN / BUILDER TO CONFIRM WITH CITY TEMPORARY EASEMENT HAS BEEN OBTAINED.



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

DRAWING STATUS

Status	Date	Initial

PLAN AND PROFILE  
STA 38+00.00 TO 46+00.00

100% DESIGN 511 PUMP STATION

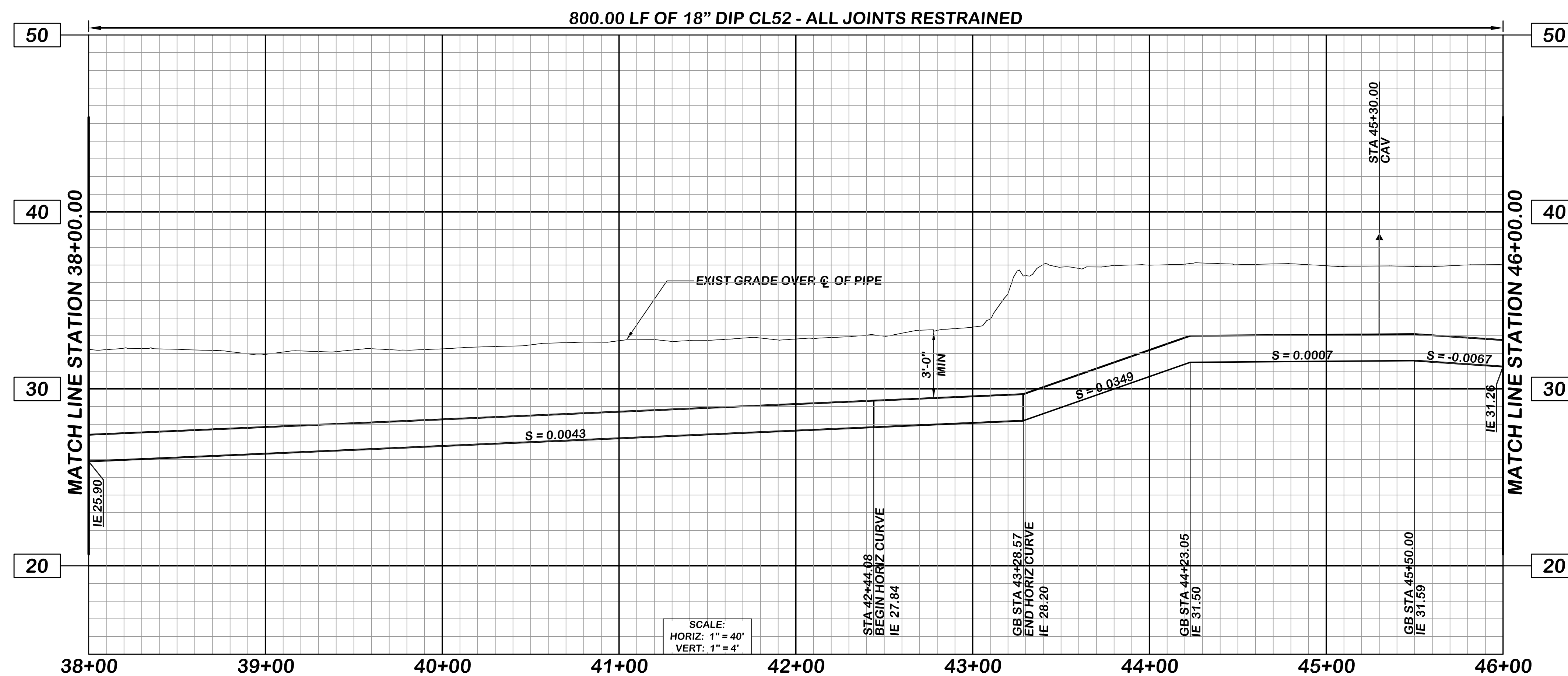
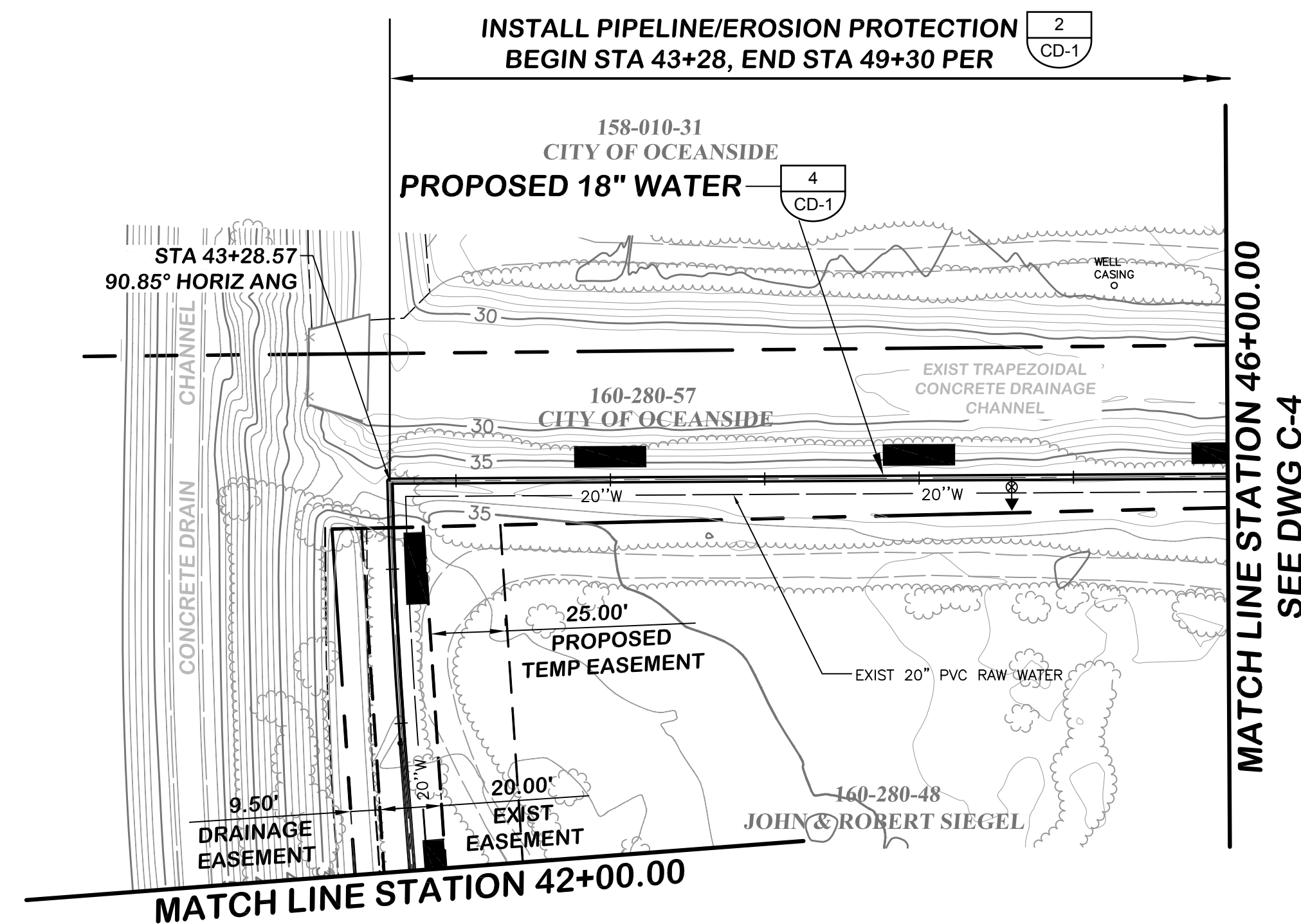
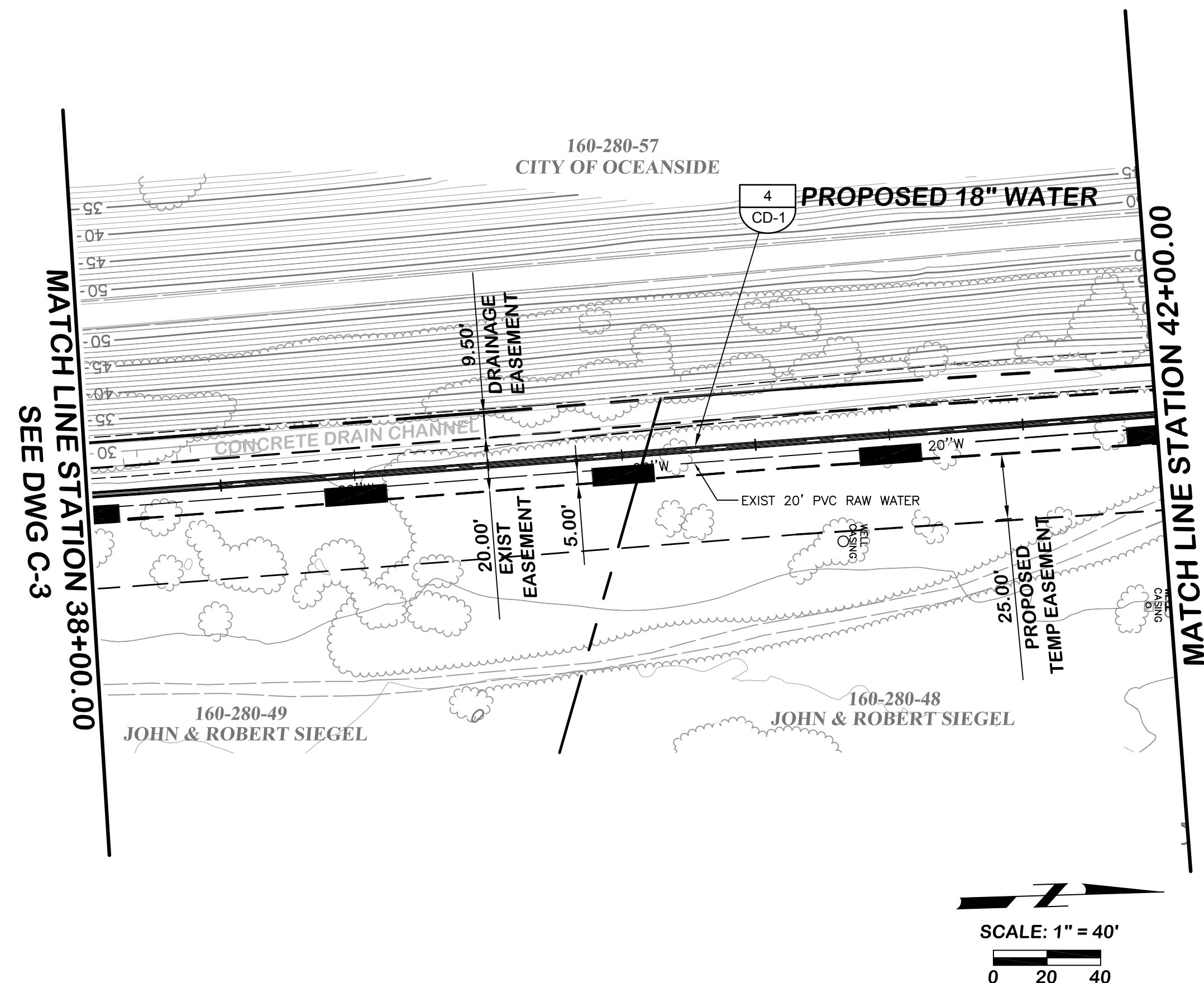
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NERO CONSULTANTS

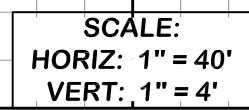
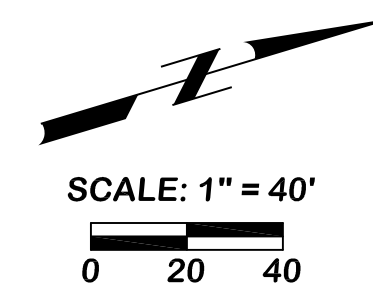


Source Reference:

Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project NP: 908122600715	Report NP: Drawing NP: 10 of 29

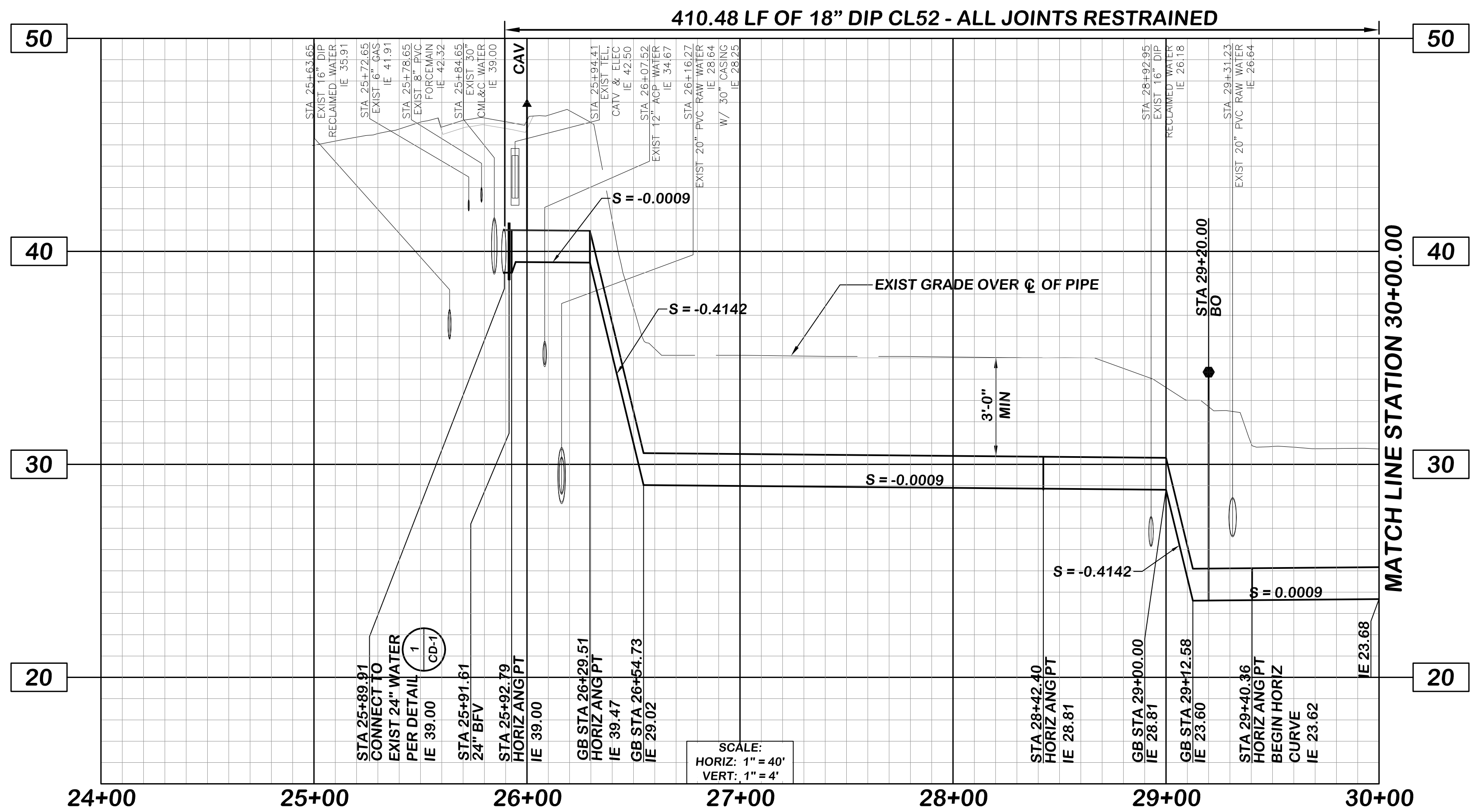
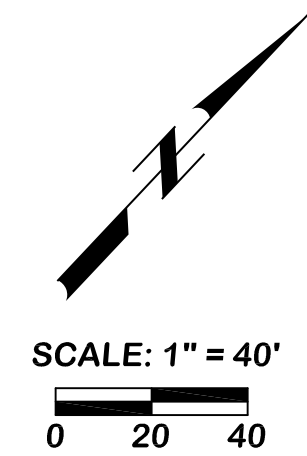
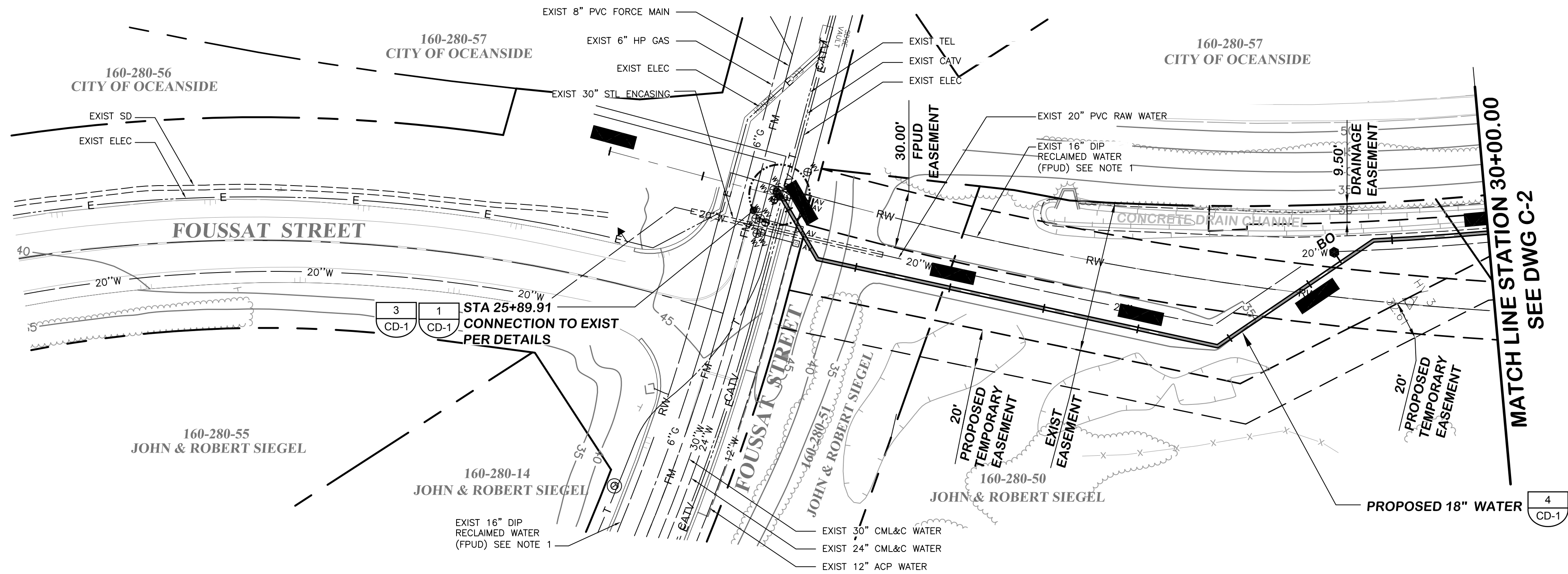






Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020	
Scale:	Project №: 908122600715	Report №:	Drawing №: 11 of 29





- NOTES:**
- PIPELINE AND PUMP STATION LAYOUT OBTAINED BY THE CITY OF OCEANSIDE 30 PERCENT DESIGN PACKAGE.
  - THE SIZE, VERTICAL AND HORIZONTAL LOCATION, AND EXTENT OF ALL EXISTING AND PROPOSED FACILITIES, TOPOGRAPHY, PROPERTY LINES, AND GRADES SHOWN ON THESE PLANS ARE APPROXIMATE AND ARE INTENDED TO CONVEY THE GENERAL INTENT OF THE PROJECT. THERE MAY BE EXISTING FACILITIES NOT SHOWN ON THESE PLANS, ABOVE AND/OR BELOW GRADE, WHICH MAY EXIST. DESIGN / BUILDER IS RESPONSIBLE FOR RECORDS RESEARCH AND FIELD VERIFICATION OF ALL EXISTING CONDITIONS AND IMPROVEMENTS DURING DESIGN AND PRIOR TO ORDERING MATERIALS. FIELD VERIFICATION IS AT THE DESIGN / BUILDER EXPENSE, AND MUST BE BY WHATEVER MEANS NECESSARY, INCLUDING BUT NOT LIMITED TO RECORDS RESEARCH, INSPECTION, FIELD SURVEY, AND POTHOLING. DESIGN / BUILDER IS RESPONSIBLE FOR PROVIDING ACCURATE MAPPING OF EXISTING FACILITIES AND PROPOSED IMPROVEMENTS DURING DESIGN AND FOR POST-CONSTRUCTION RECORD DRAWINGS, WHICH SHALL INCLUDE COORDINATE TABLES FOR ALL NEW FACILITIES. COORDINATE TABLES SHALL BE BASED ON THE BASIS-OF-SURVEY (TO BE FIELD VERIFIED BY THE DESIGN / BUILDER) AS DESCRIBED ON THESE PLANS.
  - ALL PIPE JOINTS SHALL BE RESTRAINED
  - CITY SHALL BE RESPONSIBLE FOR OBTAINING TEMPORARY EASEMENT. DESIGN / BUILDER TO CONFIRM WITH CITY TEMPORARY EASEMENT HAS BEEN OBTAINED.
  - CONTRACTOR SHALL CONTACT FPUD TO COORDINATE FPUD REVIEW AND ACCEPTANCE OF PROPOSED PIPELINE DESIGN DOCUMENTS AND CONSTRUCTION SCHEDULE, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

DRAWING STATUS

Status	Date	Initial

PLAN AND PROFILE  
STA 24+89.91 TO 30+00.00

100% DESIGN 511 PUMP STATION

C-08

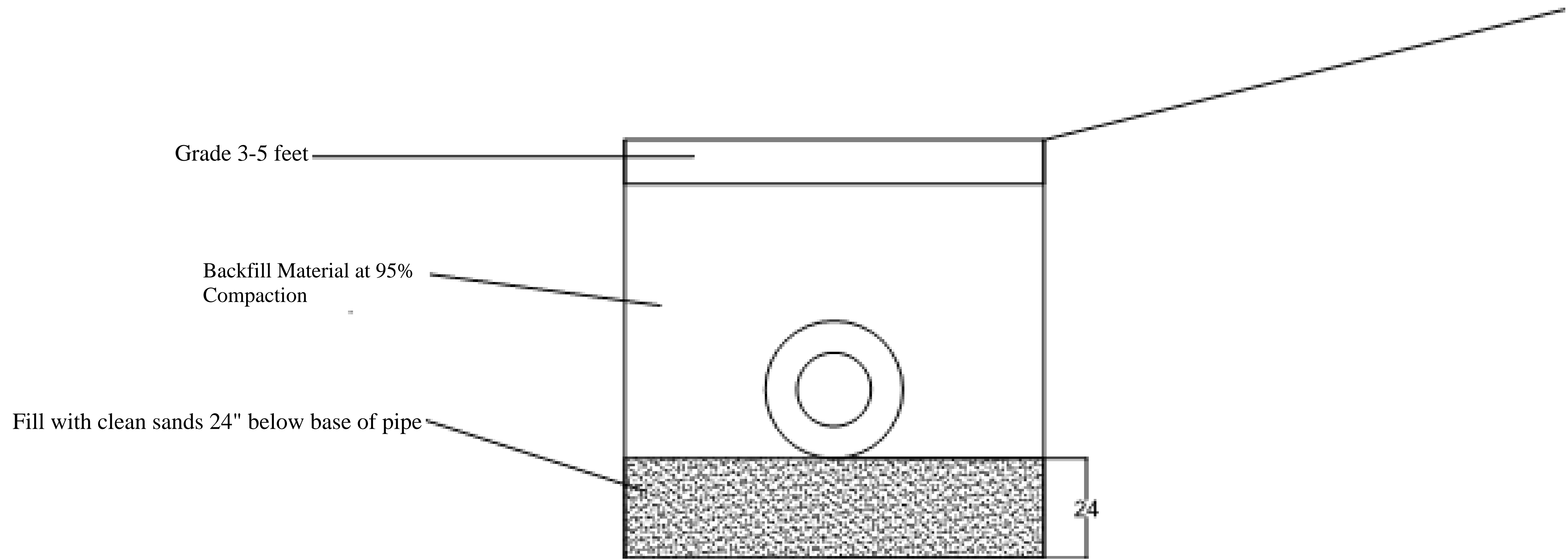
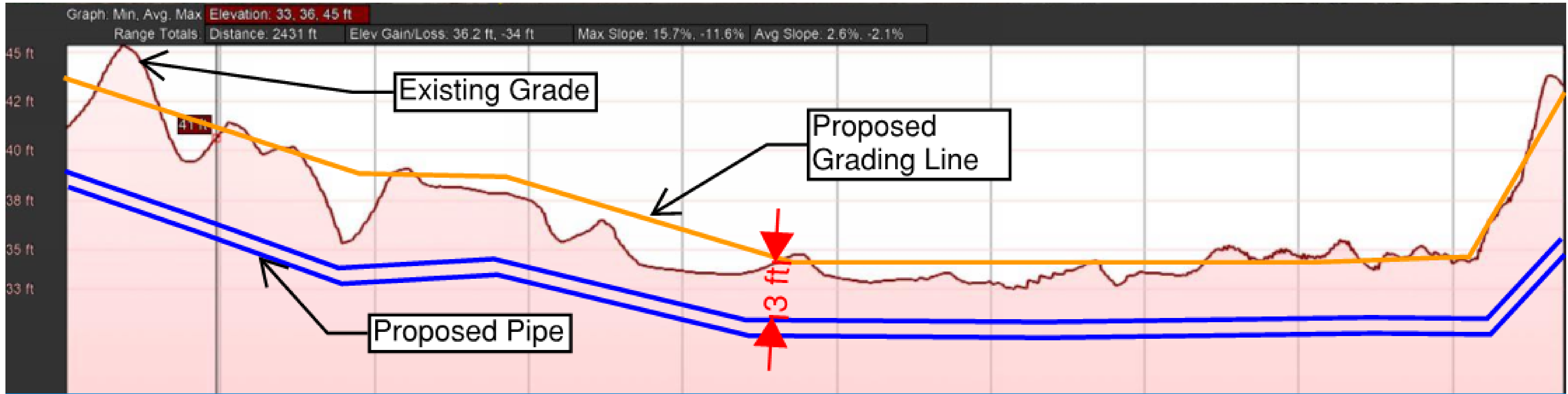
NERO CONSULTANTS



Source Reference:

Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project N°: 908122600715	Report N°: 12 of 29





**GENERAL NOTES**

1. PIPE BEDDING AND TRENCH BACKFILL SHOULD CONFORM TO SAN DIEGO REGIONAL STANDARD DRAWING WP-2 (SDRSD)
2. COMPACTION OF MATERIAL SHALL BE 95%.
3. ACCORDING TO SDRSD, PIPE SHALL REST ON 6 INCH MINIMUM OF CLEAN SAND.
4. GRADE 3 TO 5 FEET SURFACE TO REMOVE LOOSE FILL.



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

**SCALE VERIFICATION**

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

**DRAWING STATUS**

Status	Date	Initial

**GRADING PLAN**

100% DESIGN 511 PUMP STATION

C-09

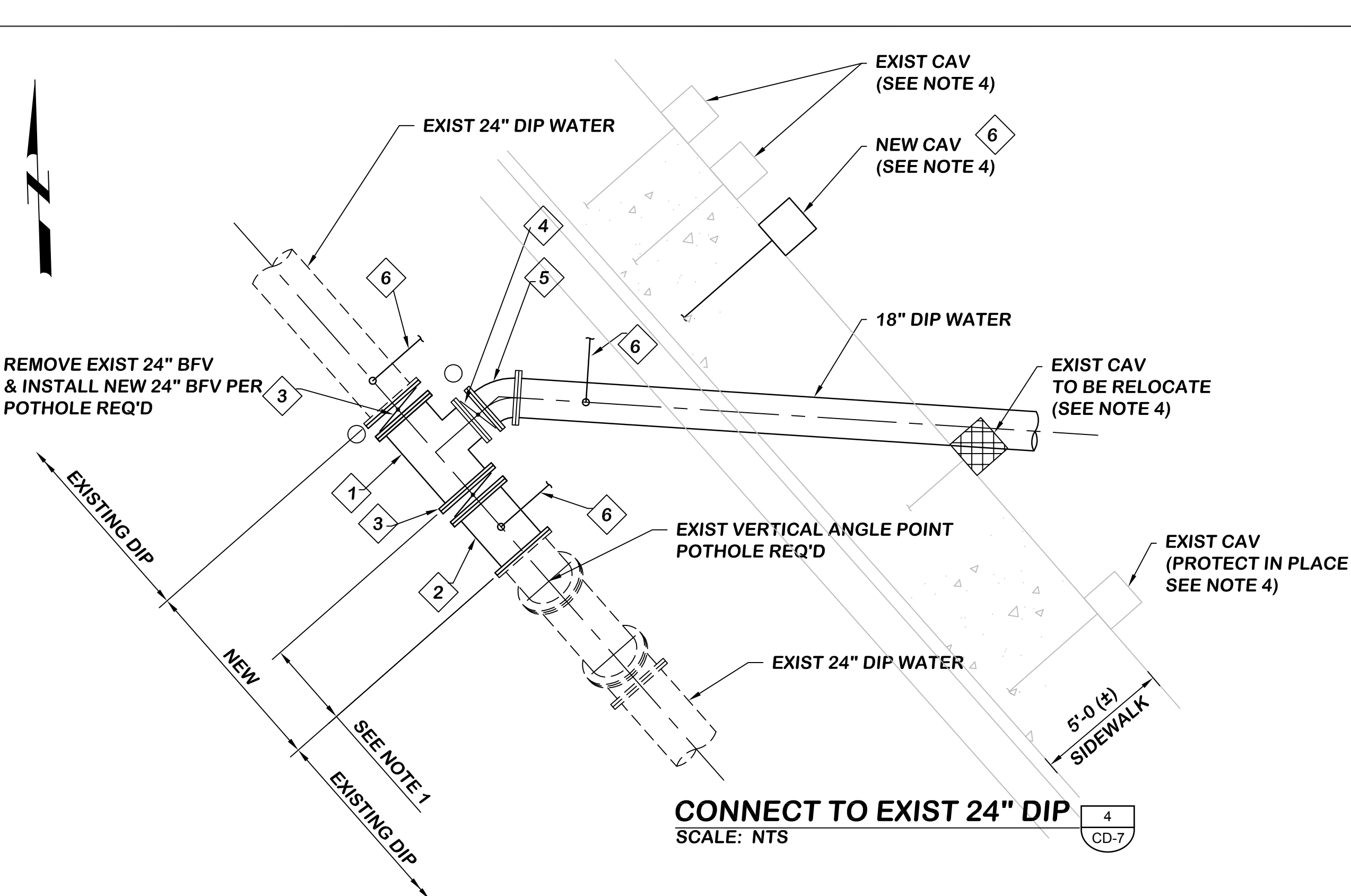
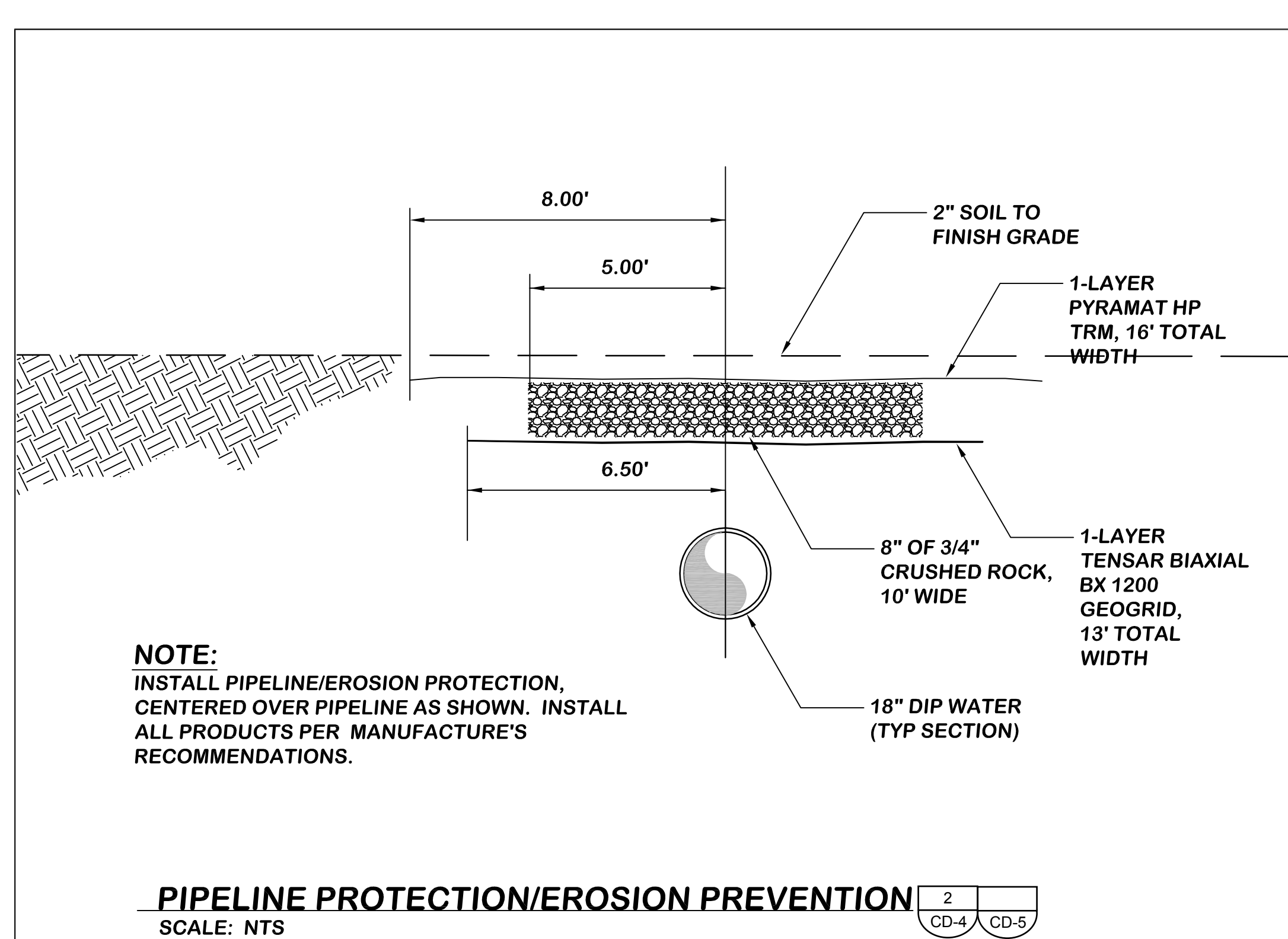
NERO CONSULTANTS



Source Reference:

Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale: 1/2" = 1' 0"	Project NP: 908122600715	Report NP: 13 of 29



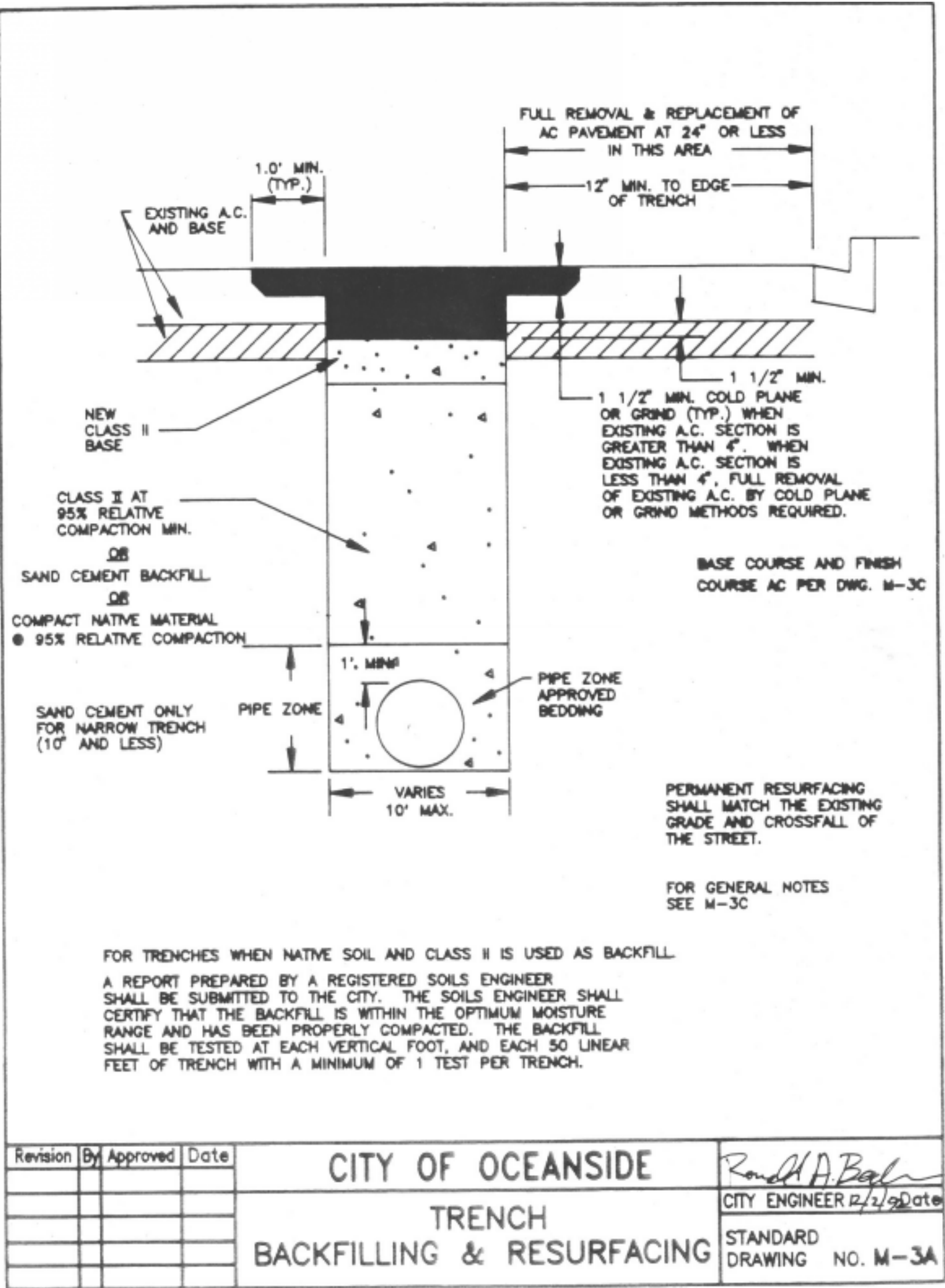
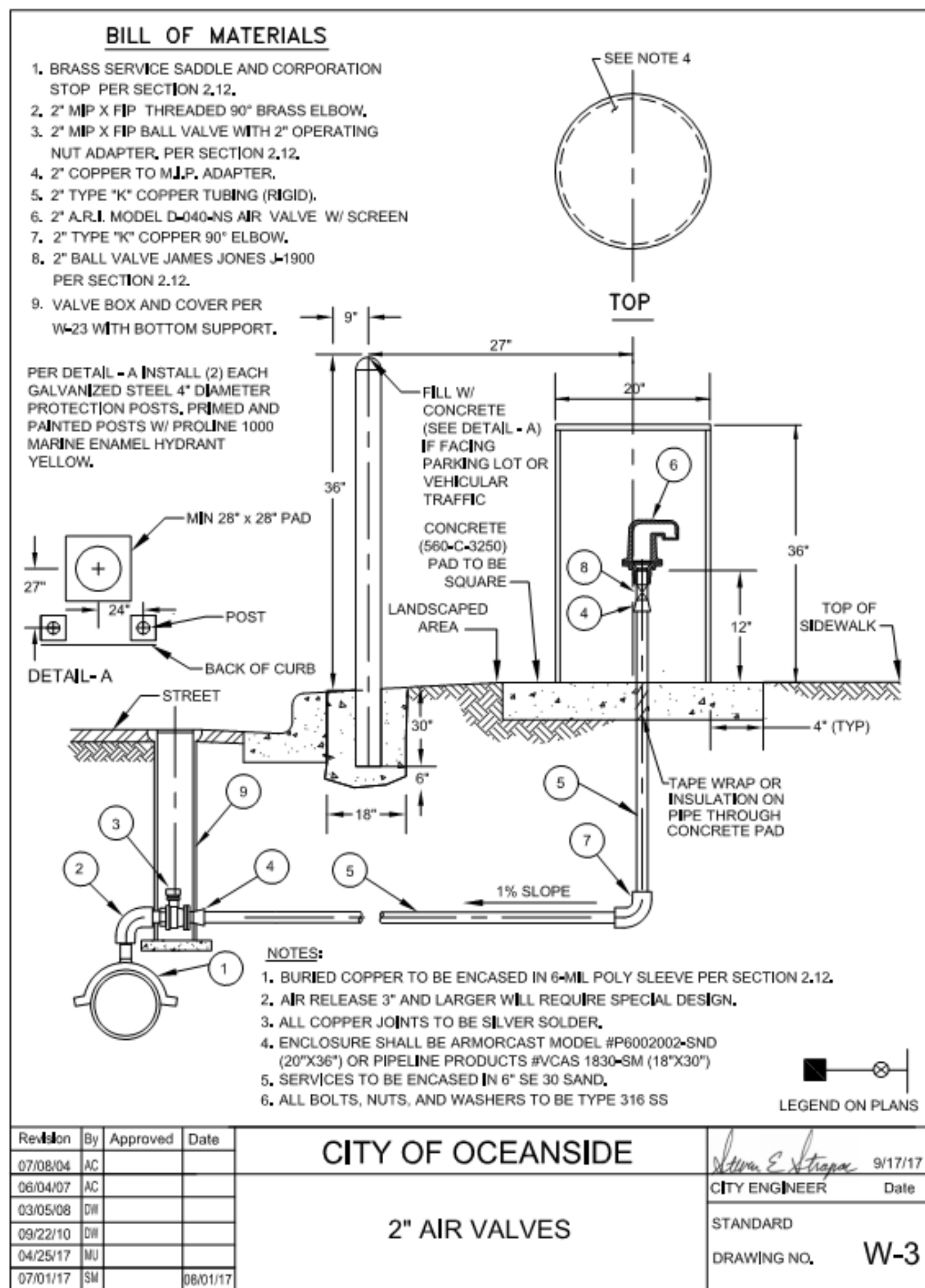


### MATERIAL LIST:

- 24" x 24" x 18" FLANGED DI TEE
- 24" DI SPOOL W/ FCA AS REQ'D
- 24" 250 LB FLANGED BUTTERFLY VALVE W/ VALVE BOX AND COVER
- 18" 250LB FLANGED BUTTERFLY VALVE W/ VALVE BOX AND COVER
- 18" x 45° ELBOW W/ FLANGED COUPLING ADAPTER AS REQ'D
- CAV

### NOTES:

- PIPELINE AND PUMP STATION LAYOUT OBTAINED BY THE CITY OF OCEANSIDE 30 PERCENT DESIGN PACKAGE.
- FIELD VERIFY DISTANCE PRIOR TO FABRICATION
- PROVIDE FCA / CLOSURE FITTINGS AS REQ'D
- DO NOT USE FITTING W/ ANCHOR BOLTS OR SERRATED RINGS THAT GRIP THE PIPE
- PROTECT IN PLACE (OR REMOVE AND REINSTALL) EXISTING AIR VALVES, PIPING, AND APPURTENANCES. ALL ITEMS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

### SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

### DRAWING STATUS

Status	Date	Initial

### CIVIL DETAILS

100% DESIGN 511 PUMP STATION

CD-01

NERO CONSULTANTS



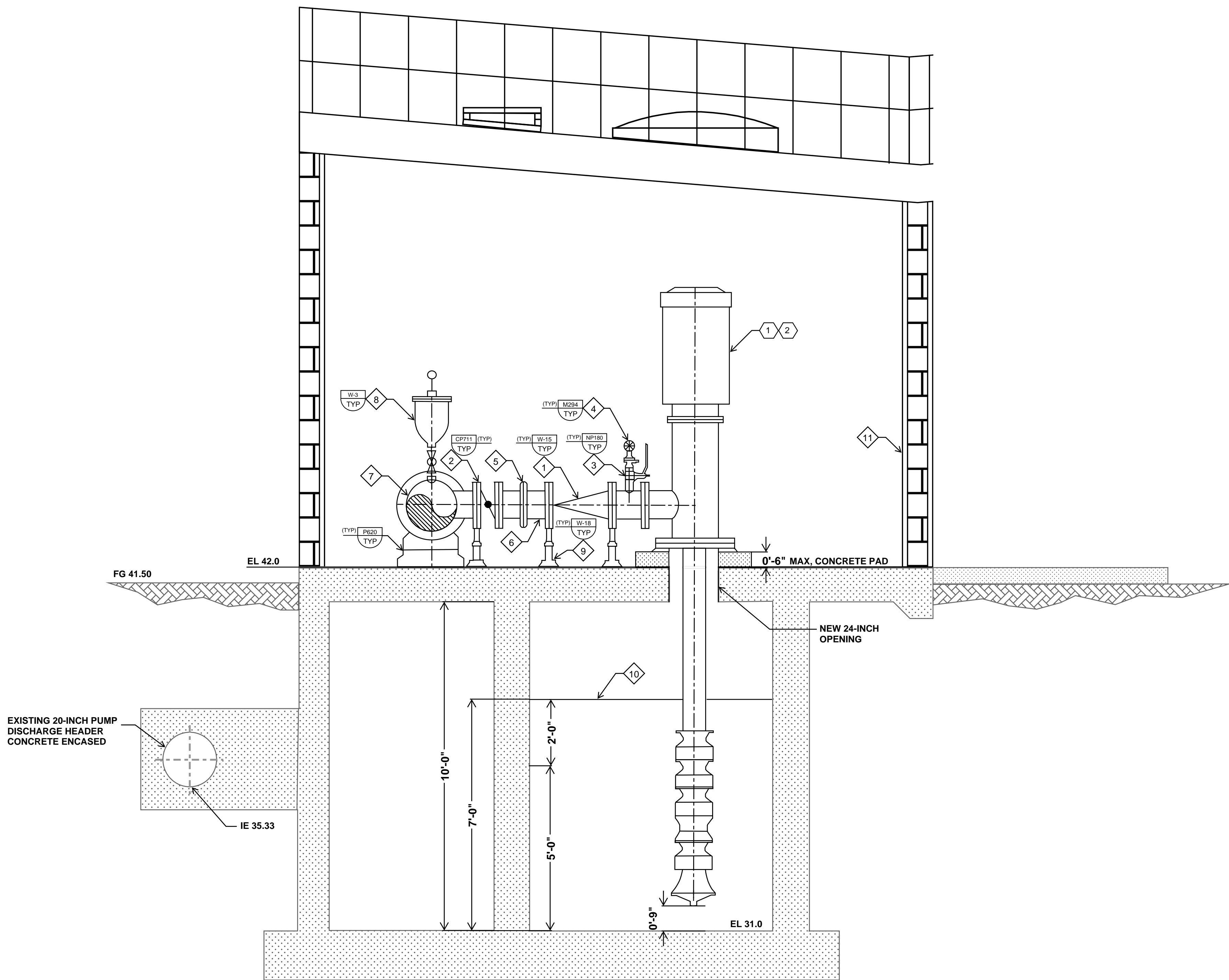
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Project Manager: C. Thornbury	Reviewed By: 5/10/2020	Report N°: 908122600715	Drawing N°: 14 of 29
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**1**  
SECTION  
M - 01

FILE: 908122600715\_M-02.ext

**GENERAL NOTES**

- PIPELINE AND PUMP STATION LAYOUT OBTAINED BY THE CITY OF OCEANSIDE 30 PERCENT DESIGN PACKAGE.
- SAWCUT EXISTING 18-INCH OPENING TO PROVIDE 24-INCH NEW OPENING.
- ALL EXPOSED REINFORCE DUE TO SAWCUTTING MUST BE PATCHED WITH EXPOY.

**KEY NOTES**

- 1 10-INCH SWING CHECK VALVE
- 2 10-INCH BUTTERFLY VALVE
- 3 PRESSURE TRANSMITTER
- 4 PRESSURE GAUGE
- 5 VICTAULIC COUPLING
- 6 10-INCH DUCTILE IRON PIPE
- 7 18-INCH DUCTILE IRON DISCHARGE HEADER
- 8 CAV
- 9 GALVANIZED PIPE SUPPORT
- 10 CONCRETE BAFFLE WALLS
- 11 CONCRETE MASONRY UNIT

**EQUIPMENT TAG NUMBERS**

- 1 VERTICAL TURBINE PUMP NO. 3 PMP-511-03
- 2 VARIABLE FREQUENCY DRIVE NO. 3 VFD-511-03



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

**SCALE VERIFICATION**

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

**DRAWING STATUS**

Status	Date	Initial

**MECHANICAL SECTION**

100% DESIGN 511 PUMP STATION

M - 02

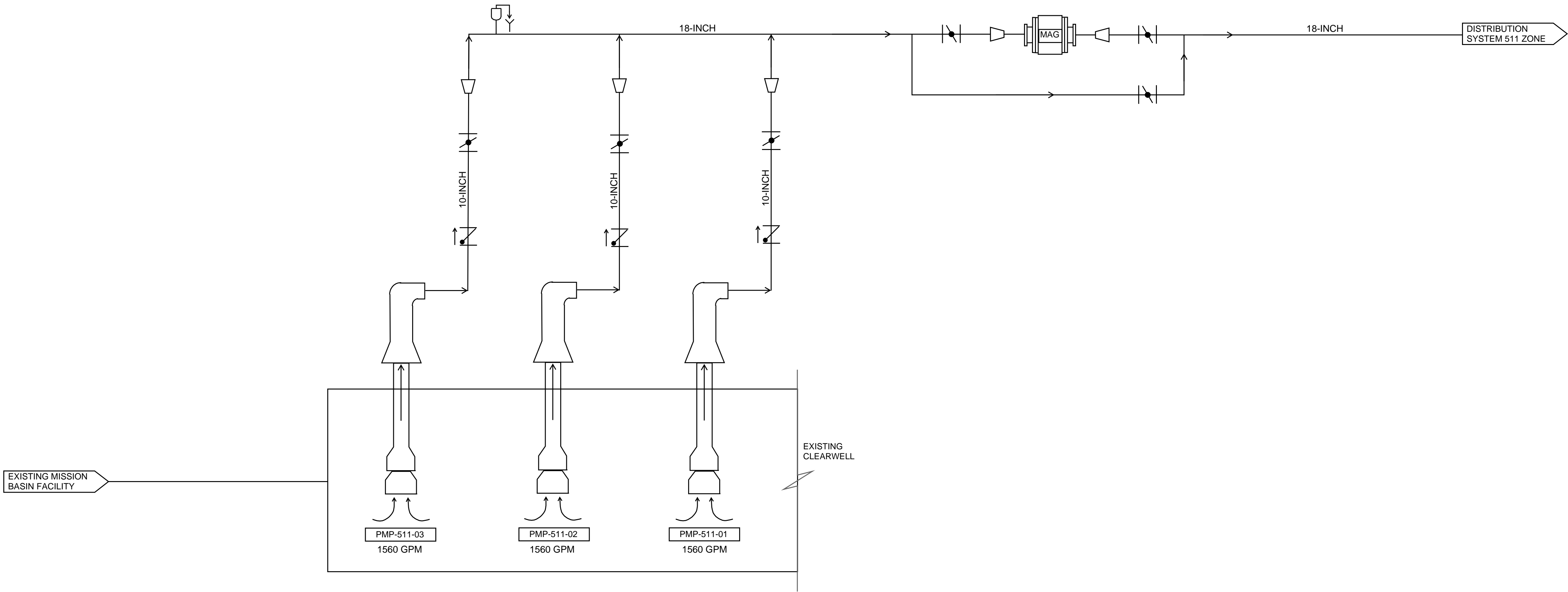
NERO CONSULTANTS



Source Reference:

Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale: 1/2" = 1' 0"	Project N°: 908122600715	Report N°: 16 of 29





CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

DRAWING STATUS		
Status	Date	Initial

PROCESS FLOW DIAGRAM

100% DESIGN 511 PUMP STATION

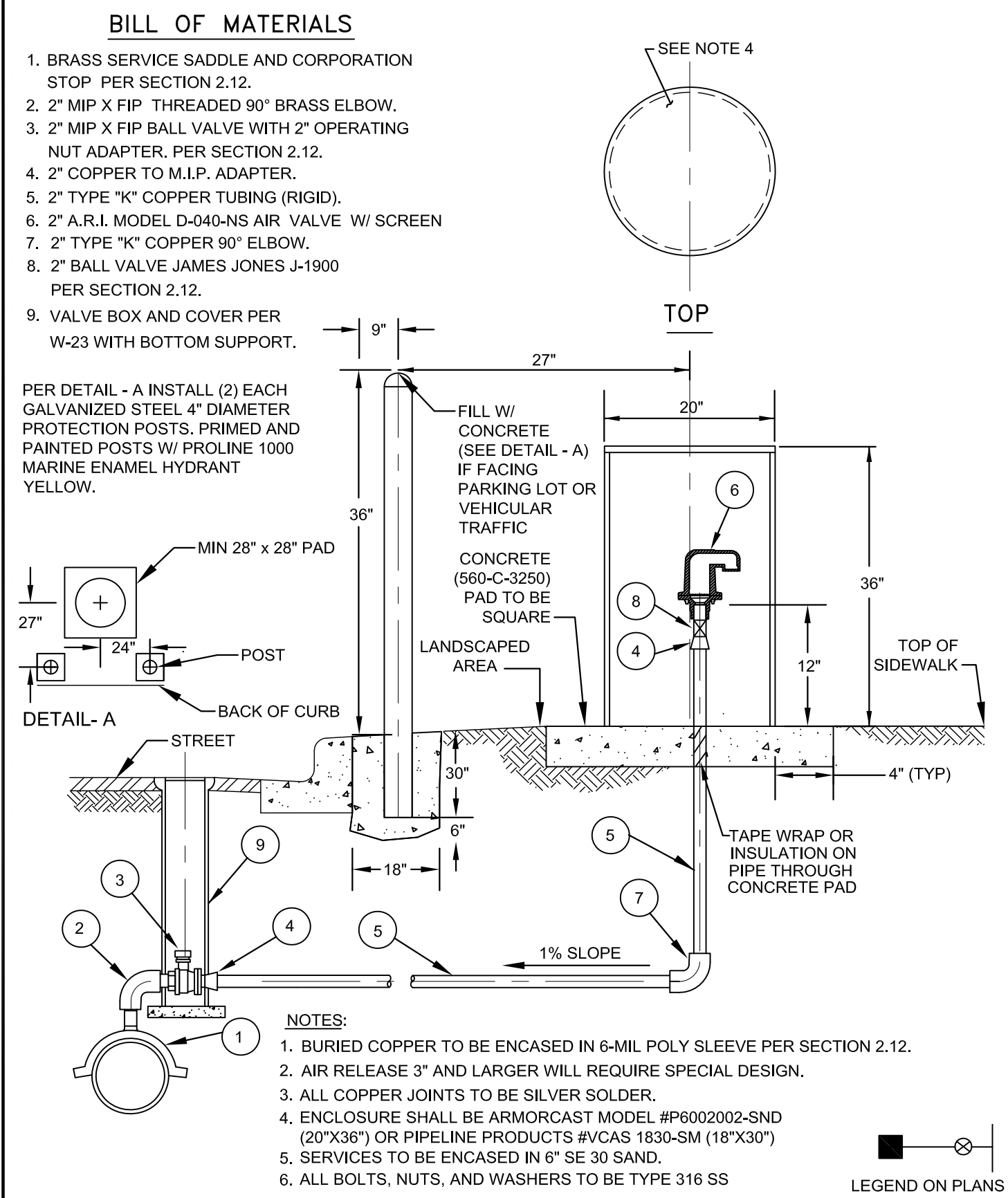
M - 03

NERO CONSULTANTS



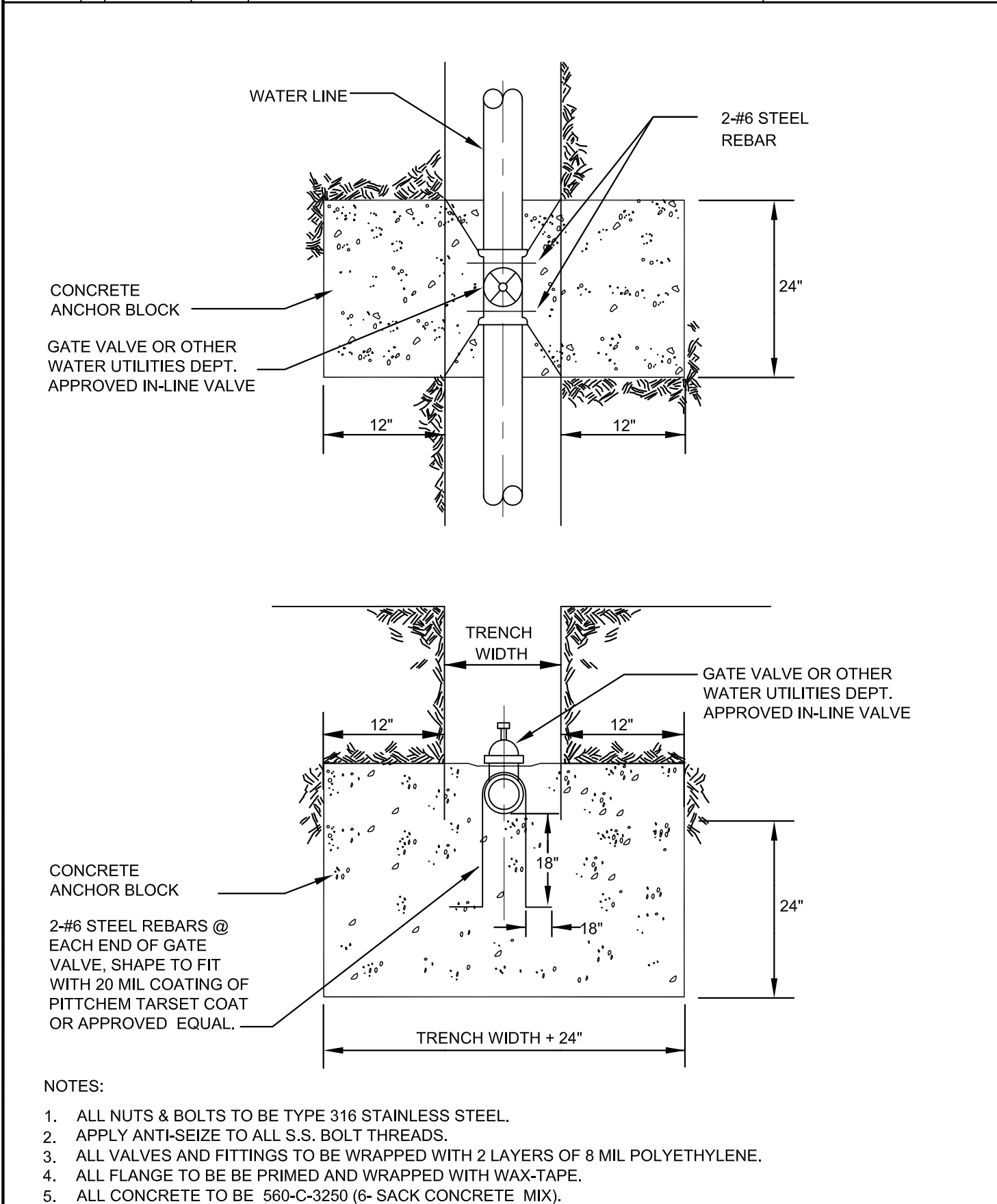
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Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project N°: 908122600715	Report N°: Drawing N°: 17 of 29





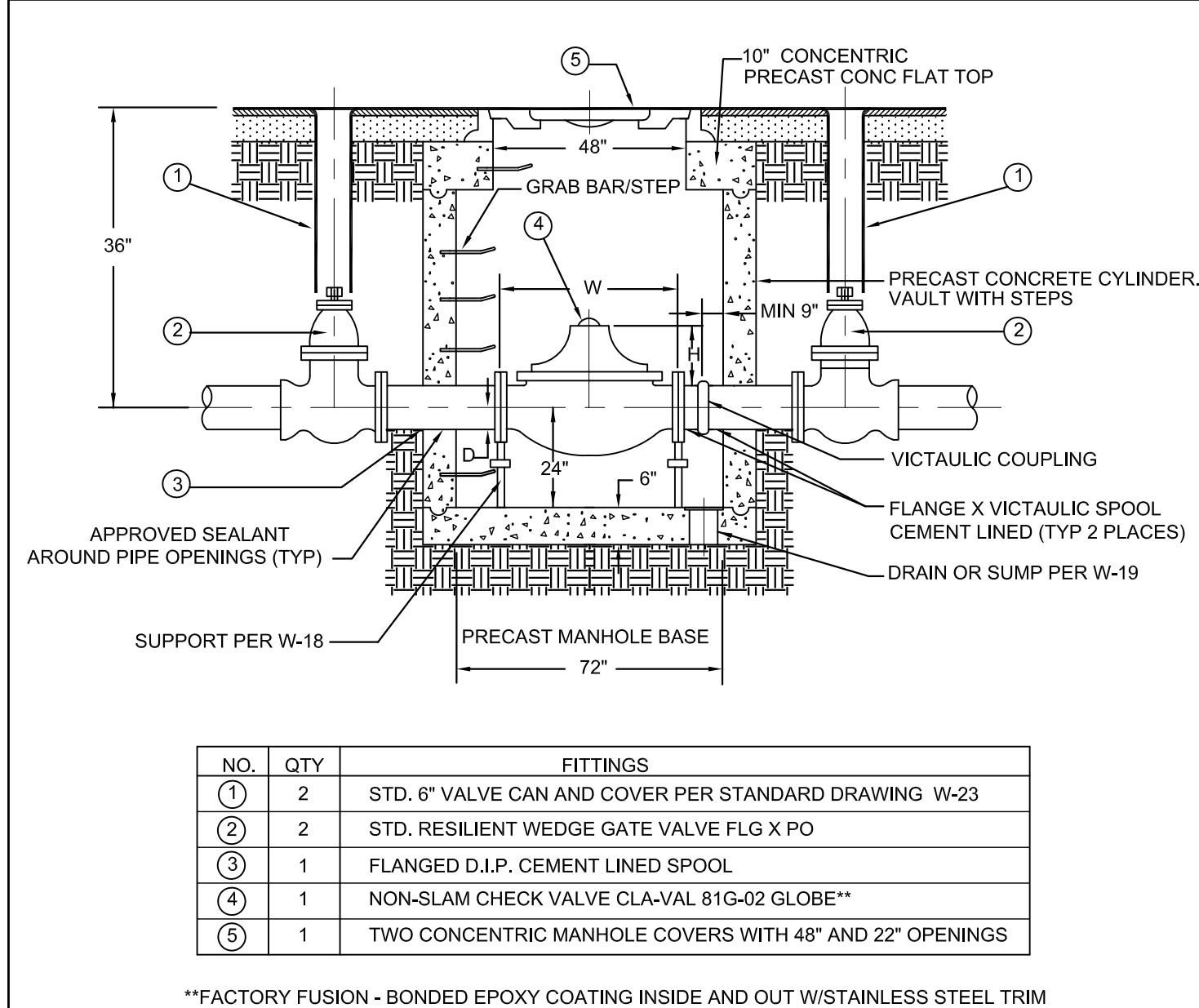
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07/08/04	AC				
06/04/07	AC				
03/05/08	DW				
09/22/10	DW				
04/25/17	MU				
07/01/17	SM		08/01/17		

Revision	By	Approved	Date	CITY OF OCEANSIDE	9/17/17
07/08/04	AC				
06/04/07	AC				
03/05/08	DW				
09/22/10	DW				
04/25/17	MU				
07/01/17	SM		08/01/17		



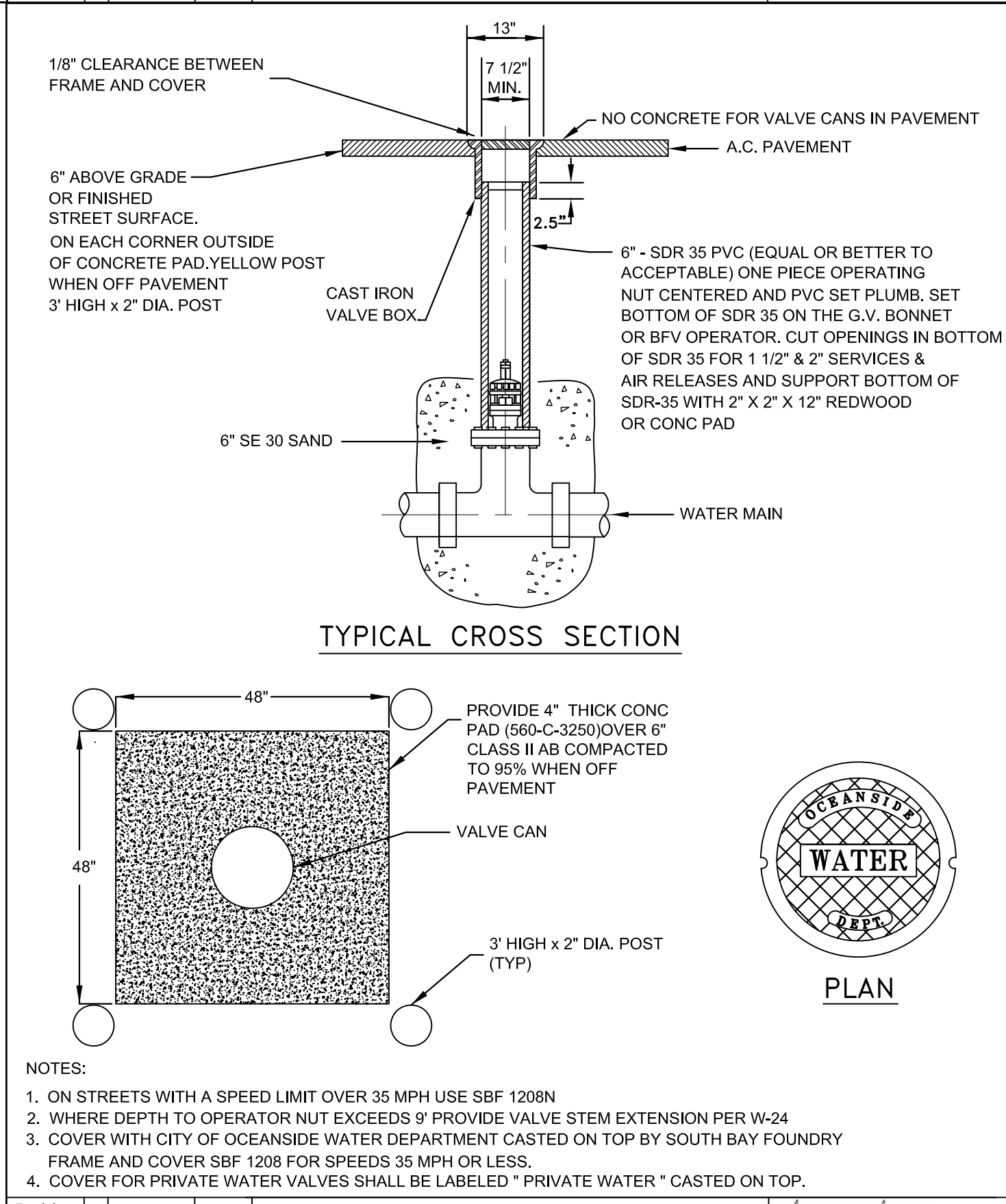
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11/08/00	kal				
09/18/02	DW				
08/29/04	AC				
01/04/16	MU				
07/01/17	SM		08/01/17		

Revision	By	Approved	Date	CITY OF OCEANSIDE	9/17/17
11/08/00	kal				
09/18/02	DW				
08/29/04	AC				
01/04/16	MU				
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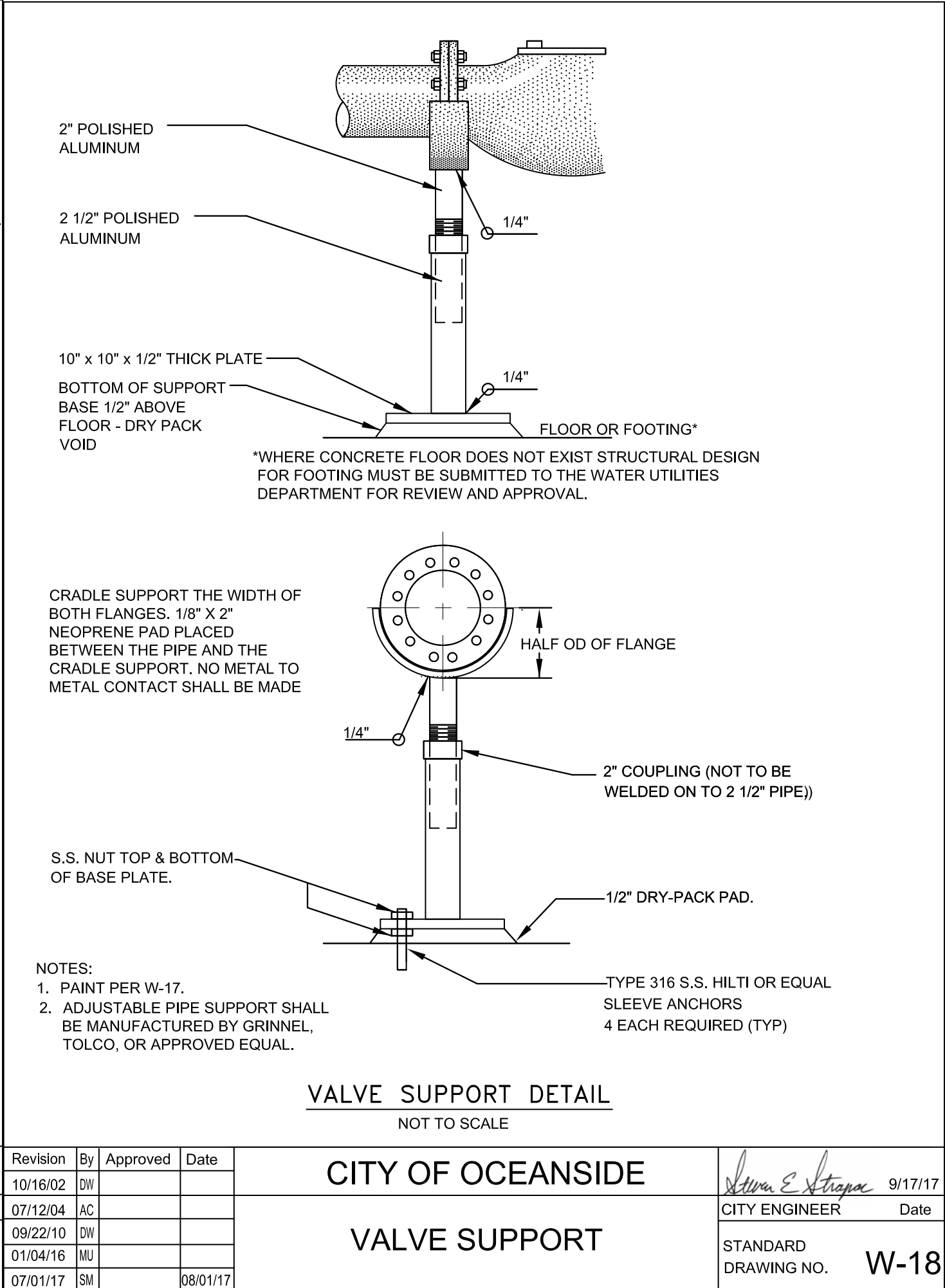
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07/01/17	SM		08/01/17		

Revision	By	Approved	Date	CITY OF OCEANSIDE	9/17/17
06/08/01	DW				
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07/08/04	AC				
01/04/16	MU				
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Revision	By	Approved	Date	CITY OF OCEANSIDE	9/17/17
10/22/02	DW				
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03/05/08	DW				
09/22/10	DW				
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Revision	By	Approved	Date	CITY OF OCEANSIDE	9/17/17
10/22/02	DW				
06/04/07	AC				
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Revision	By	Approved	Date	CITY OF OCEANSIDE	9/17/17
10/16/02	DW				
07/12/04	AC				
09/22/10	DW				
01/04/16	MU				
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Revision	By	Approved	Date	CITY OF OCEANSIDE	9/17/17
10/16/02	DW				
07/12/04	AC				
09/22/10	DW				
01/04/16	MU				
07/01/17	SM		08/01/17		



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION  
THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.  



DRAWING STATUS  

Status	Date	Initial

MECHANICAL TYPICAL  
DETAILS 1

100% DESIGN 511 PUMP STATION

MD-01

NERO CONSULTANTS 

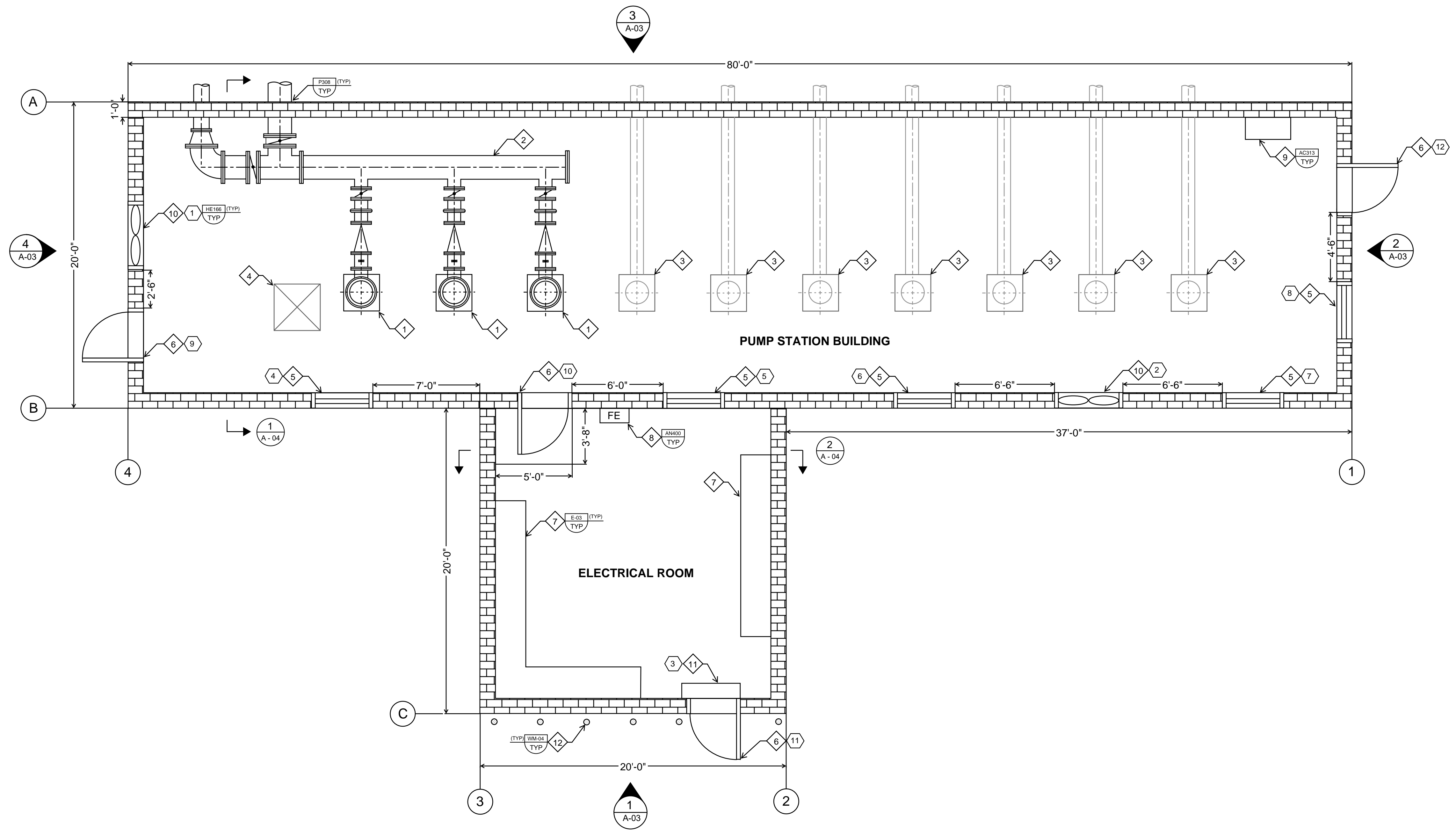
Source Reference:

Project Manager: <b>C. Thornbury</b>	Reviewed By:	Date: <b>5/10/2020</b>
Scale:	Project N°: <b>908122600715</b>	Report N°: <b>18 of 29</b>










**A FLOOR PLAN**  
FILE: 908122600715\_A-01.ext

- GENERAL NOTES**
- PIPELINE AND PUMP STATION LAYOUT OBTAINED BY THE CITY OF OCEANSIDE 30 PERCENT DESIGN PACKAGE.
  - DIMENSIONS ON PLAN ARE TAKEN FROM FACE OF BLOCK UNLESS OTHERWISE NOTED.
  - CONTRACTOR TO VERIFY EQUIPMENT AND CABINET SIZES IN THE ELECTRICAL ROOM AND INSTALL PRIOR TO DOOR INSTALLAION IF NEEDED.
  - FINISHED FLOOR @ PUMP STATION AND ELECTRICAL ROOM = 42.0'.

- KEY NOTES**
- 511 ZONE PUMP EQUIPMENT (SEE MECHANICAL DWGS)
  - 511 ZONE PIPING (SEE CIVIL / MECHANICAL DWGS)
  - EXISITING 320 ZONE PUMP EQUIPMENT AND PIPING
  - ACCESS HATCH
  - INTERIOR FIXED WINDOW (SEE G-04 FOR SCHEDULE)
  - HOLLOW METAL DOOR AND FRAME (SEE G-04 FOR SCHEDULE)
  - ELECTRICAL EQUIPMENT
  - WALL MOUNTED FIRE EXTINGUISHER
  - ALUMINUM LADDER
  - EXHAUST FAN (SEE MECHANICAL DWGS)
  - WALL MOUNTED AC UNIT (SEE MECHANICAL DWGS)
  - 4-INCH STEEL PROTECTION POST


- TAG NUMBERS**
- |   |                         |               |
|---|-------------------------|---------------|
| 1 | EXHAUST FAN NO. 1       | FAN-ELC-01    |
| 2 | EXHAUST FAN NO. 2       | FAN-ELC-01    |
| 3 | AIR CONITION UNIT NO. 1 | ACU-ELC-01    |
| 4 | WINDOW NO. 1            |               |
| 5 | WINDOW NO. 2            | 9 DOOR NO. 1  |
| 6 | WINDOW NO. 3            | 10 DOOR NO. 2 |
| 7 | WINDOW NO. 4            | 11 DOOR NO. 3 |
| 8 | WINDOW NO. 5            | 12 DOOR NO. 4 |



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.



DRAWING STATUS


Status	Date	Initial

**FLOOR PLAN**

100% DESIGN 511 PUMP STATION

**A - 01**

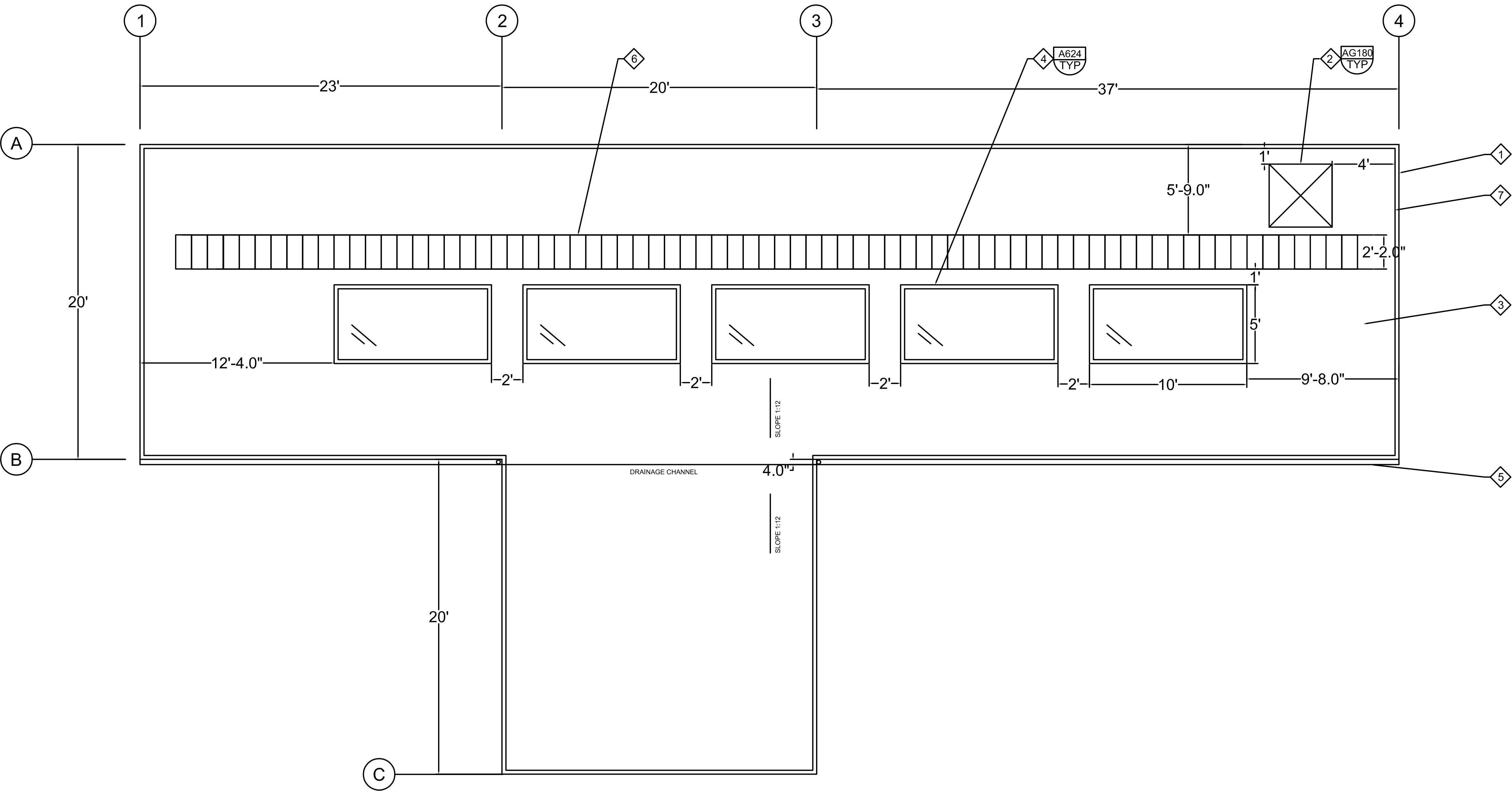
NERO CONSULTANTS



Source Reference:

Project Manager: <b>C. Thornbury</b>	Reviewed By:	Date: <b>5/10/2020</b>
Scale: <b>1/4" = 1' 0"</b>	Project N°: <b>908122600715</b>	Report N°: <b>20 of 29</b>





GENERAL NOTES

1. GRID LINE DIMENSIONS TAKEN FROM OUTSIDE BLOCK WALL

KEY NOTES

- 1 CONCRETE MASONRY UNIT  
2 ROOF ACCESS HATCH  
3 REINFORCED CONCRETE SLAB ROOF  
4 REMOVABLE SKYLIGHT CENTERED BETWEEN EVERY TWO PUMPS (SEE G-04 FOR SKYLIGHT SCHEDULE)  
5 PREFINISHED 4" GUTTER W/ GUARD  
6 KEEWALK ROOF TOP WALKWAY SYSTEM - DESIGNED AND INSTALLED BY MANUFACTURE'S CONTRACTOR  
7 ROOF RAILING 42" PER OSHA STANDARDS



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

DRAWING STATUS

Status	Date	Initial

ROOF PLAN

100% DESIGN 511 PUMP STATION

A - 02

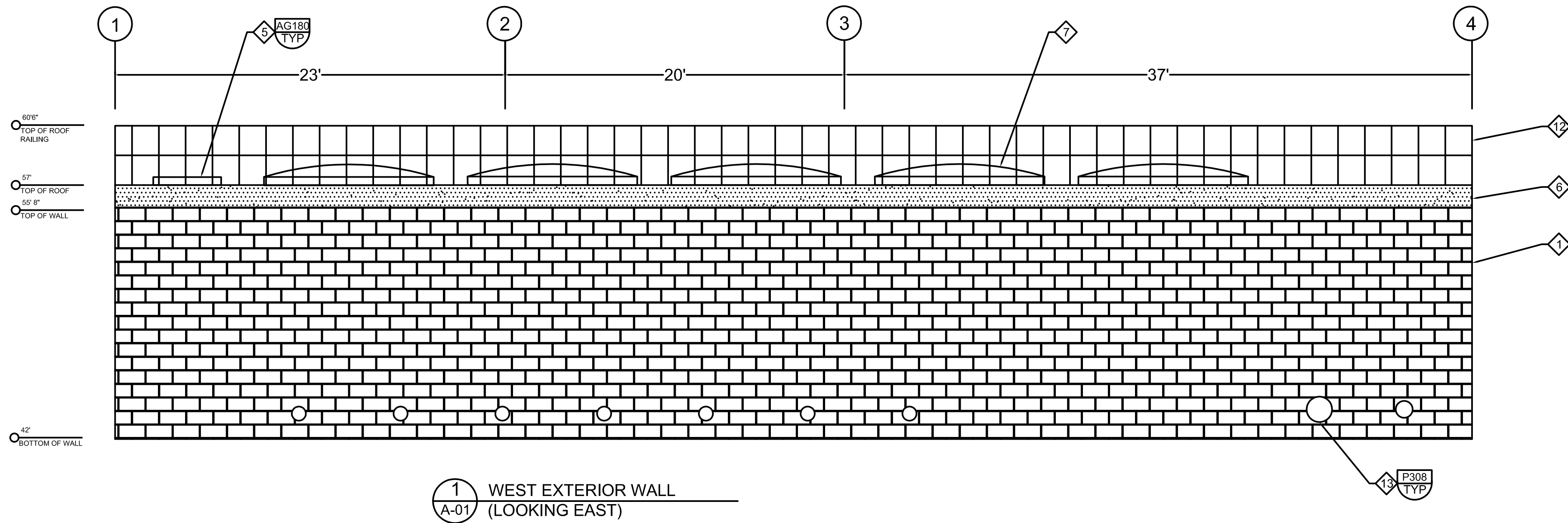
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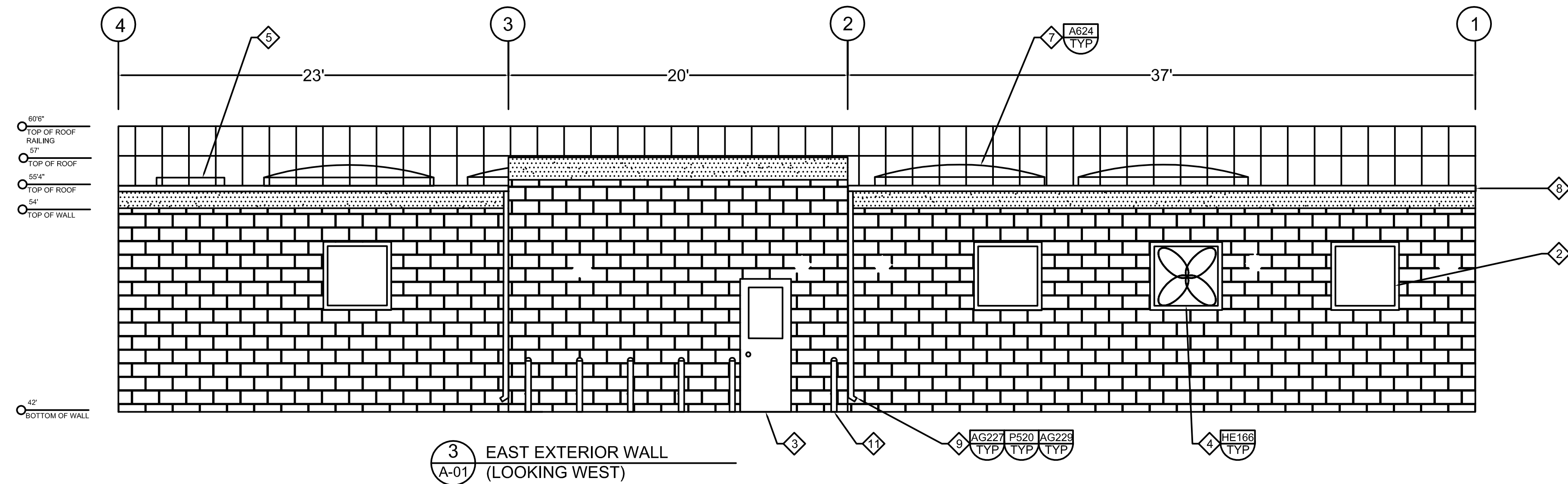
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Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
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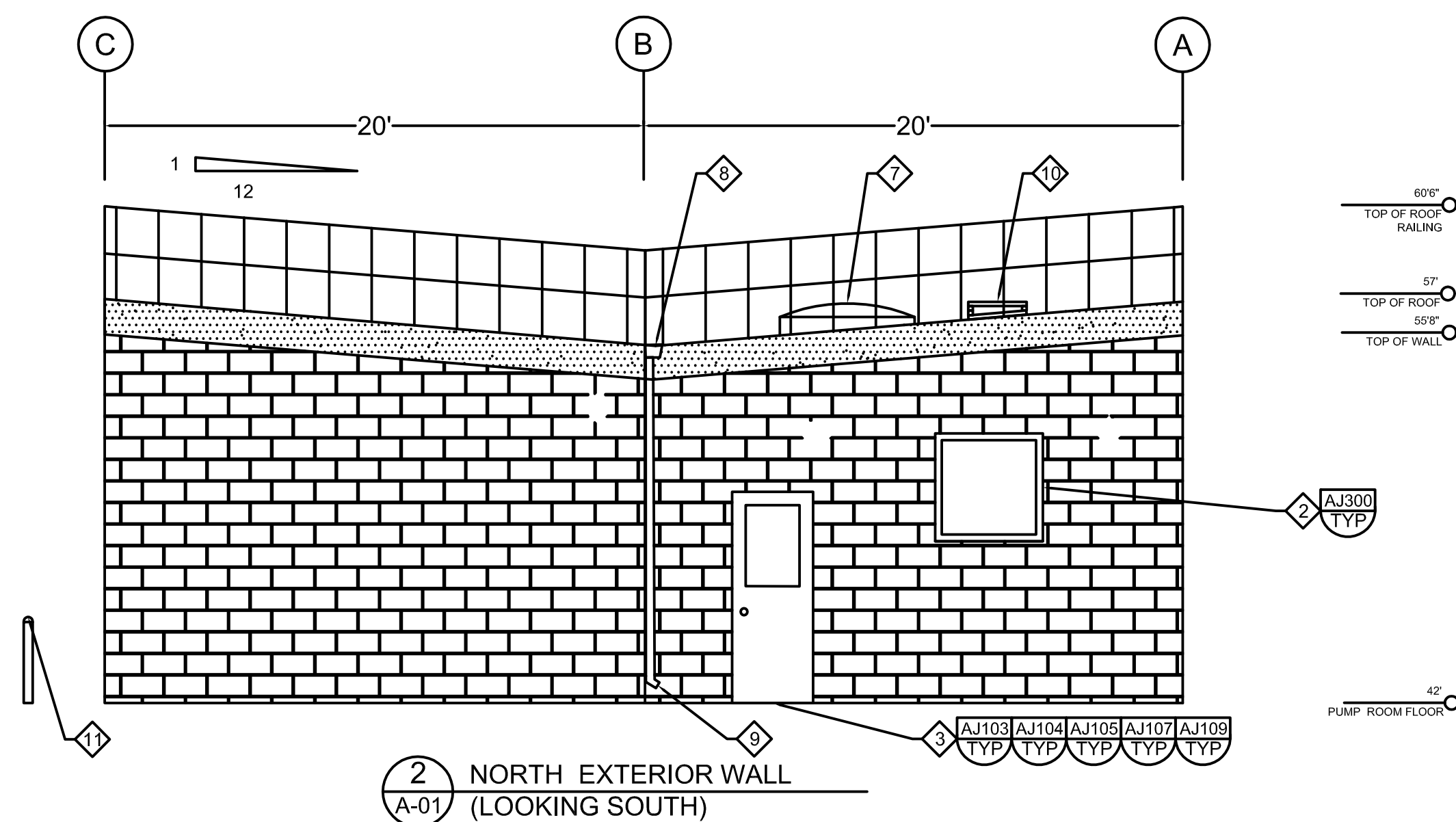




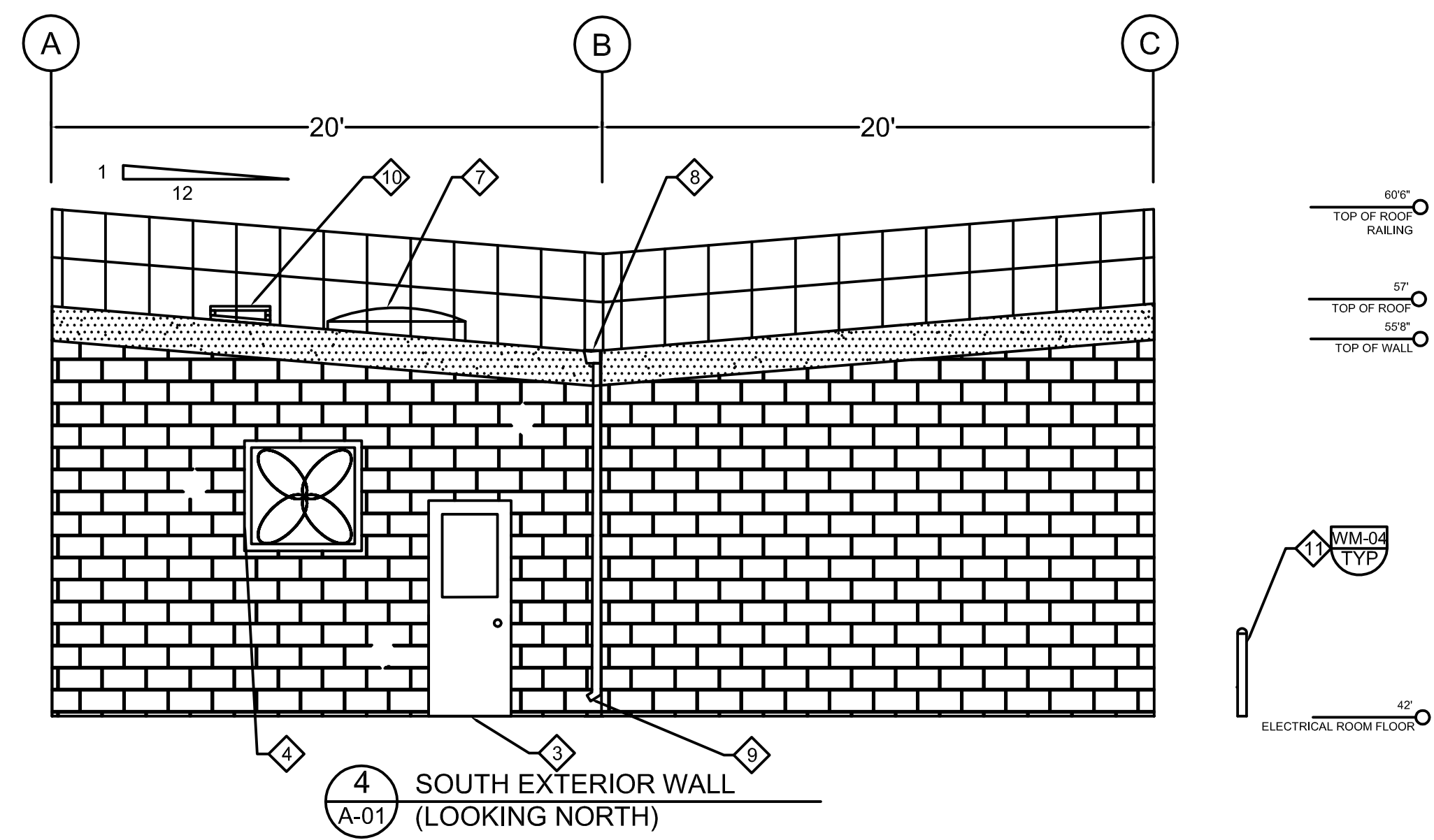
1 WEST EXTERIOR WALL  
A-01 (LOOKING EAST)



3 EAST EXTERIOR WALL  
A-01 (LOOKING WEST)



2 NORTH EXTERIOR WALL  
A-01 (LOOKING SOUTH)



4 SOUTH EXTERIOR WALL  
A-01 (LOOKING NORTH)

#### GENERAL NOTES

- GRID LINE DIMENSIONS TAKEN FROM OUTSIDE BLOCK WALL

#### KEY NOTES

- CONCRETE MASONRY UNIT
- INTERIOR FIXED WINDOW (SEE G-04 FOR SCHEDULE)
- HOLLOW METAL DOOR AND FRAME (SEE G-04 FOR SCHEDULE)
- EXHAUST FAN (SEE MECHANICAL DWGS)
- ROOF ACCESS HATCH
- REINFORCED CONCRETE SLAB ROOF
- REMOVABLE SKYLIGHT CENTERED BETWEEN EVERY TWO PUMPS (SEE G-04 FOR SKYLIGHT SCHEDULE)
- PREFINISHED 4" GUTTER W/ GUARD
- PREFINISHED DOWNSPOUT W/ SPLASH BLOCK
- KEEWALK ROOF TOP WALKWAY SYSTEM - DESIGNED AND INSTALLED BY MANUFACTURE'S CONTRACTOR
- PROTECTION POST 3'
- ROOF RAILING 42" PER OSHA STANDARDS
- DISCHARGE PIPE HEADER



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

#### SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

#### DRAWING STATUS

Status	Date	Initial

## EXTERIOR ELEVATIONS

100% DESIGN 511 PUMP STATION

A - 03

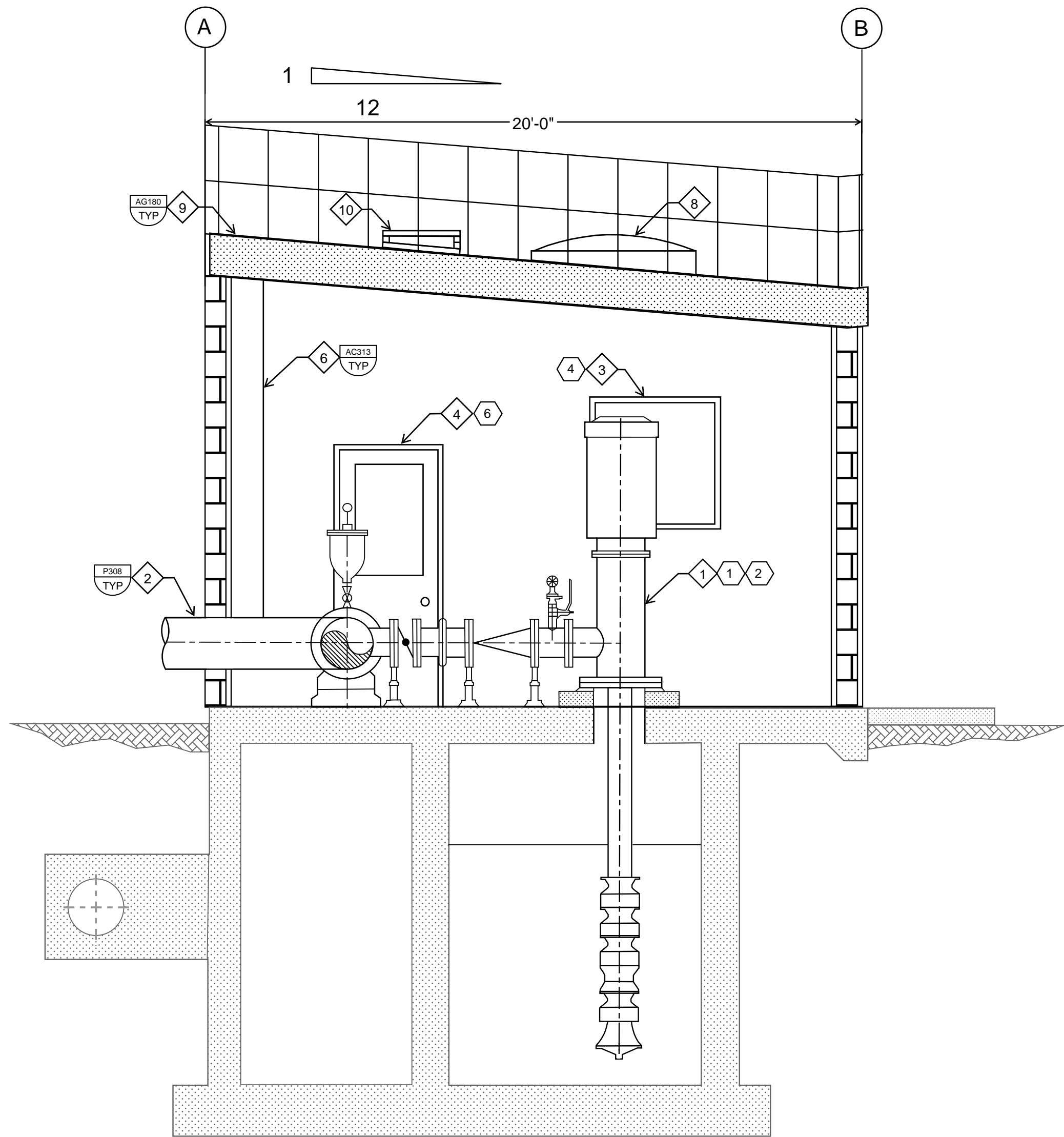
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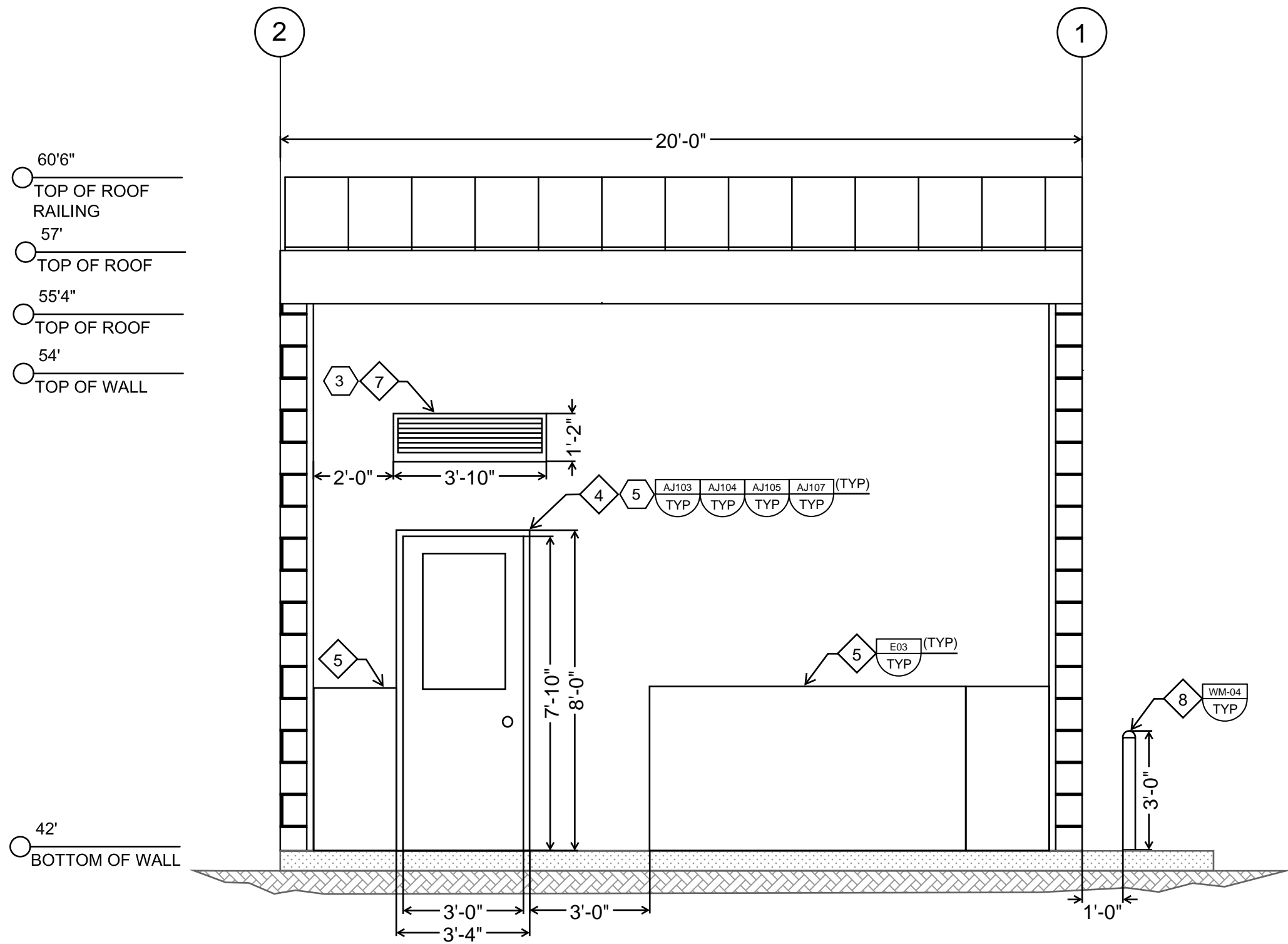
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Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project N°: 908122600715	Report N°: 22 of 29





**1 SECTION**  
A - 01 FILE: 908122600715\_A-04.ext



**2 SECTION**  
A - 01 FILE: 908122600715\_A-04.ext

**GENERAL NOTES**

- PIPELINE AND PUMP STATION LAYOUT OBTAINED BY THE CITY OF OCEANSIDE 30 PERCENT DESIGN PACKAGE.
- DIMENSIONS ON PLAN ARE TAKEN FROM FACE OF BLOCK UNLESS OTHERWISE NOTED.
- ALL GRID LIKE DIMENSIONS ARE TAKEN FROM FACE OF BLOCK WALL.
- CONTRACTOR TO VERIFY EQUIPMENT AND CABINET SIZES IN THE ELECTRICAL ROOM AND INSTALL PRIOR TO DOOR INSTALLAION IF NEEDED.

**KEY NOTES**

- 511 ZONE PUMP EQUIPMENT (SEE MECHANICAL DWGS)
- 511 ZONE PIPING (SEE CIVIL / MECHANICAL DWGS)
- INTERIOR FIXED WINDOW (SEE G-04 FOR SCHEDULE)
- HOLLOW METAL DOOR AND FRAME (SEE G-04 FOR SCHEDULE)
- ELECTRICAL EQUIPMENT
- ALUMINUM LADDER
- WALL MOUNTED AC UNIT (SEE MECHANICAL DWGS)
- 20 MINUTE FIRE RATING, REMOVABLE SKYLIGHT CENTERED BETWEEN EVERY TWO PUMPS (SEE G-04 FOR SCHEDULE)
- ROOF SYSTEM ACCESS HATCH (NOT SHOWN)
- KEEWALK ROOF TOP WALKWAY SYSTEM - DESIGN AND INSTALLED BY MANUFACTURER'S CONTRACTOR

**TAG NUMBERS**

- |   |                                |            |
|---|--------------------------------|------------|
| 1 | VERTICAL TURBINE PUMP NO. 3    | PMP-511-03 |
| 2 | VARIABLE FREQUENCY DRIVE NO. 3 | VFD-511-03 |
| 3 | AIR CONDITION UNIT NO. 1       | ACU-ELC-01 |
| 4 | WINDOW NO. 5                   |            |
| 5 | DOOR NO. 3                     |            |
| 6 | DOOR NO. 4                     |            |



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

**SCALE VERIFICATION**

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

**DRAWING STATUS**

Status	Date	Initial

**ARCHITECTURAL SECTIONS**

100% DESIGN 511 PUMP STATION

A - 04

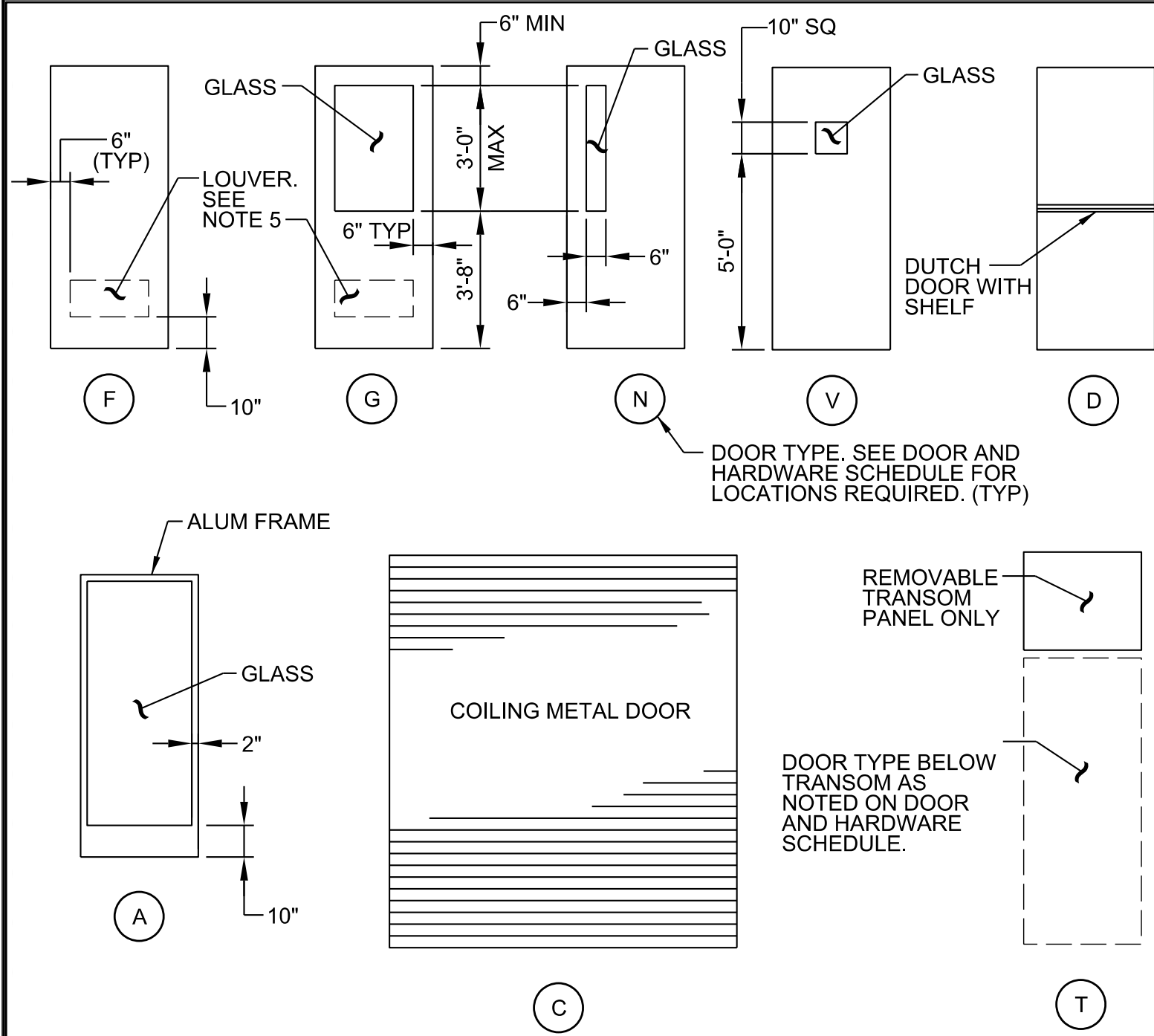
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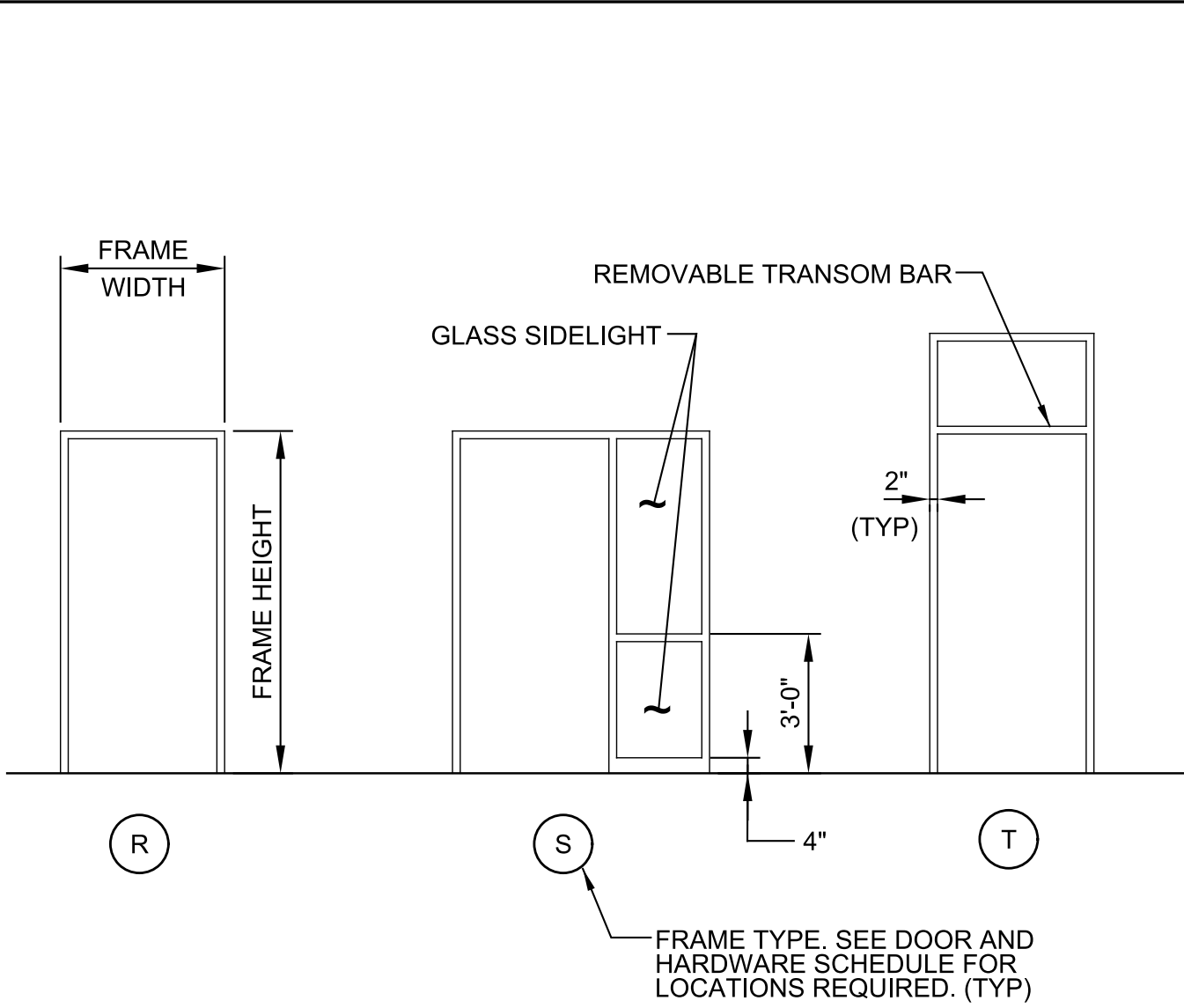
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Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale: 1/3" = 1' 0"	Project NP: 908122600715	Drawing NP: 23 of 29

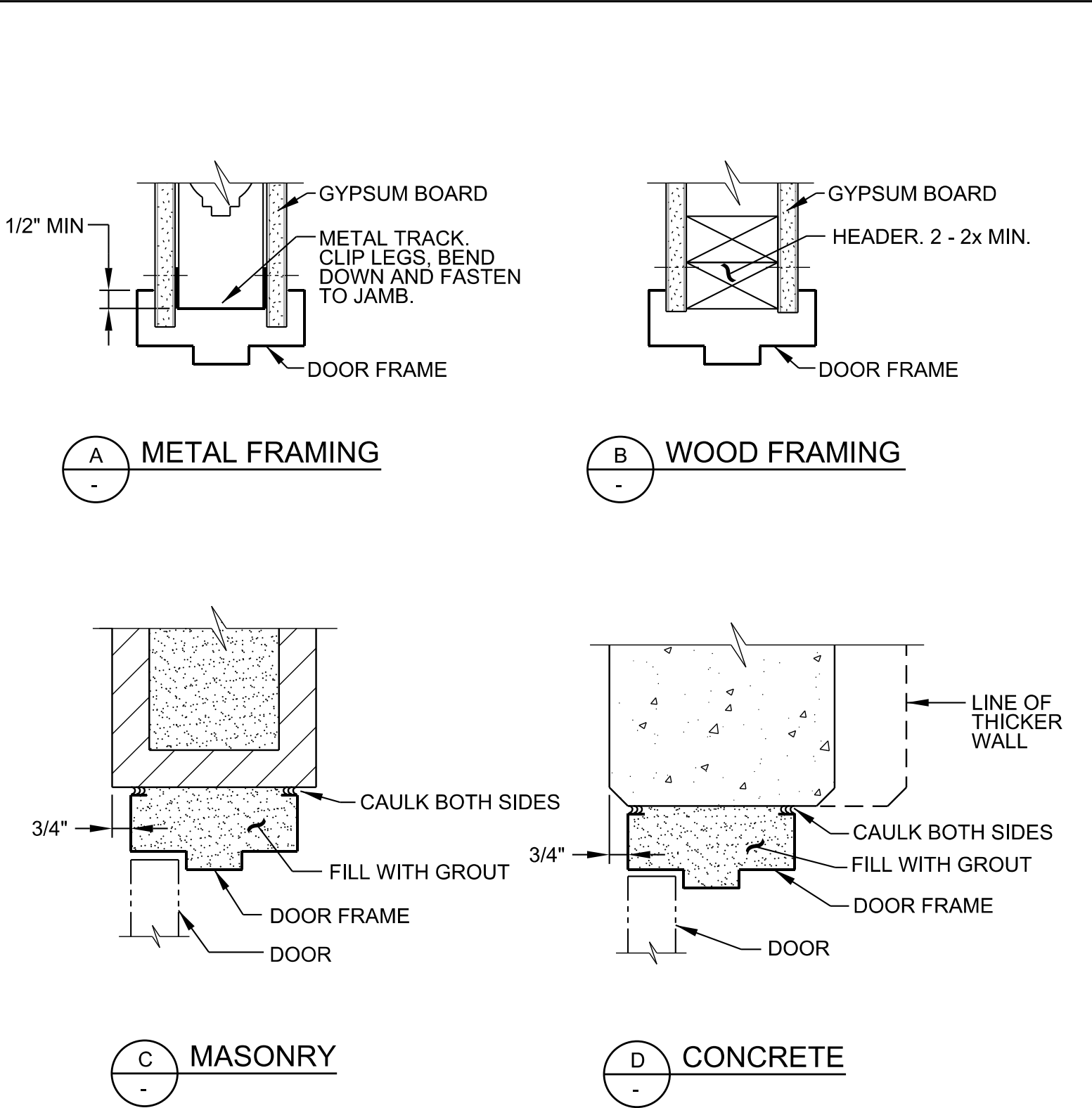




- NOTES:
1. DOOR SIZE AND TYPE SHALL BE IN ACCORDANCE WITH DOOR AND HARDWARE SCHEDULE.
  2. GLASS AT DOORS SHALL BE TEMPERED UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
  3. GLASS AT INTERIOR DOORS SHALL BE CLEAR. GLASS AT EXTERIOR DOORS SHALL BE TINTED.
  4. PROVIDE WIRE GLASS AT LABELED DOORS.
  5. LOUVER MAY BE REQD AT ANY DOOR TYPE. IF A LOUVER IS REQUIRED, SIZES AND LOCATIONS WILL BE NOTED ON DOOR AND HARDWARE SCHEDULE.
  6. PROVIDE LABELED DOORS IN ACCORDANCE WITH DOOR AND HARDWARE SCHEDULE.



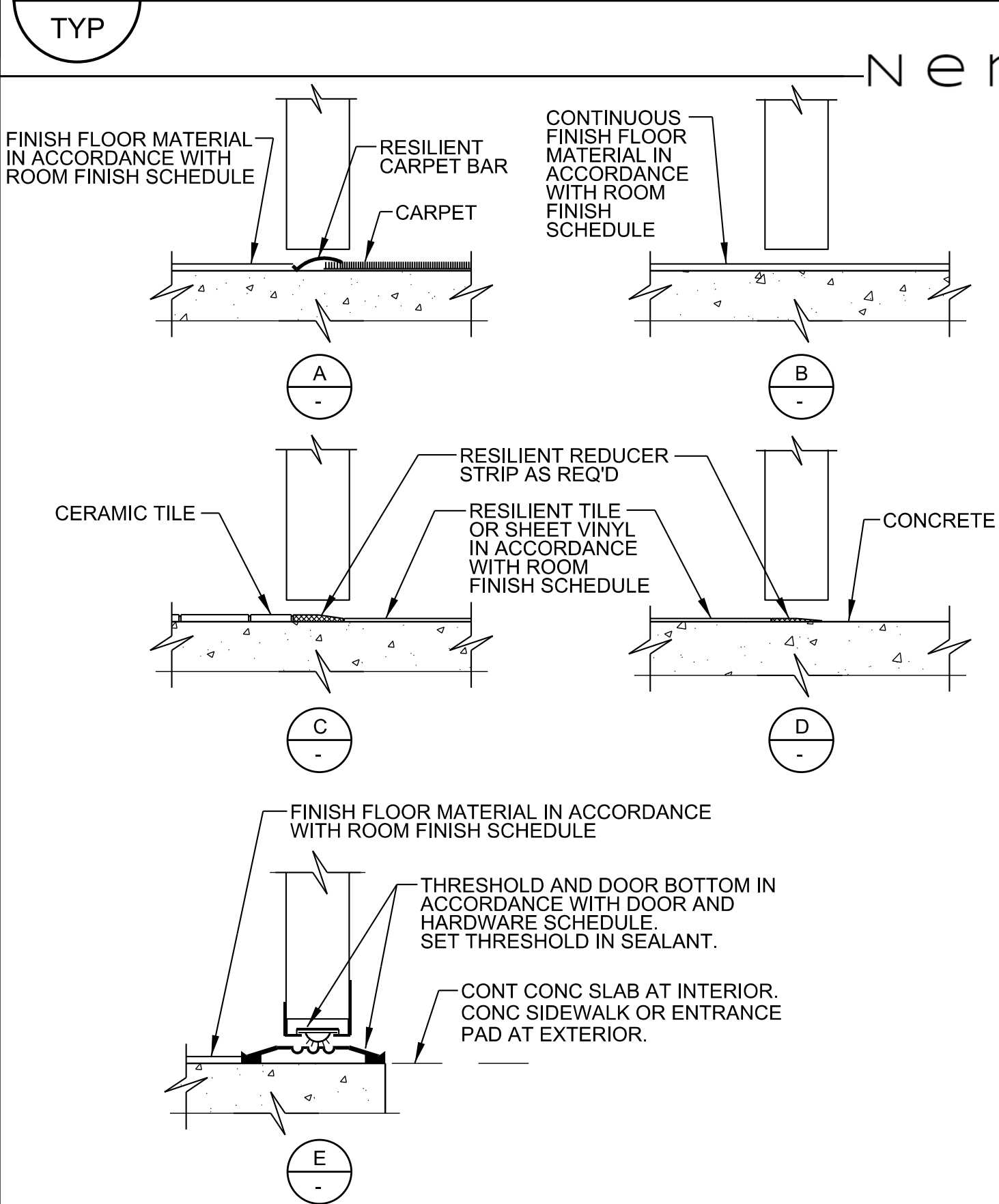
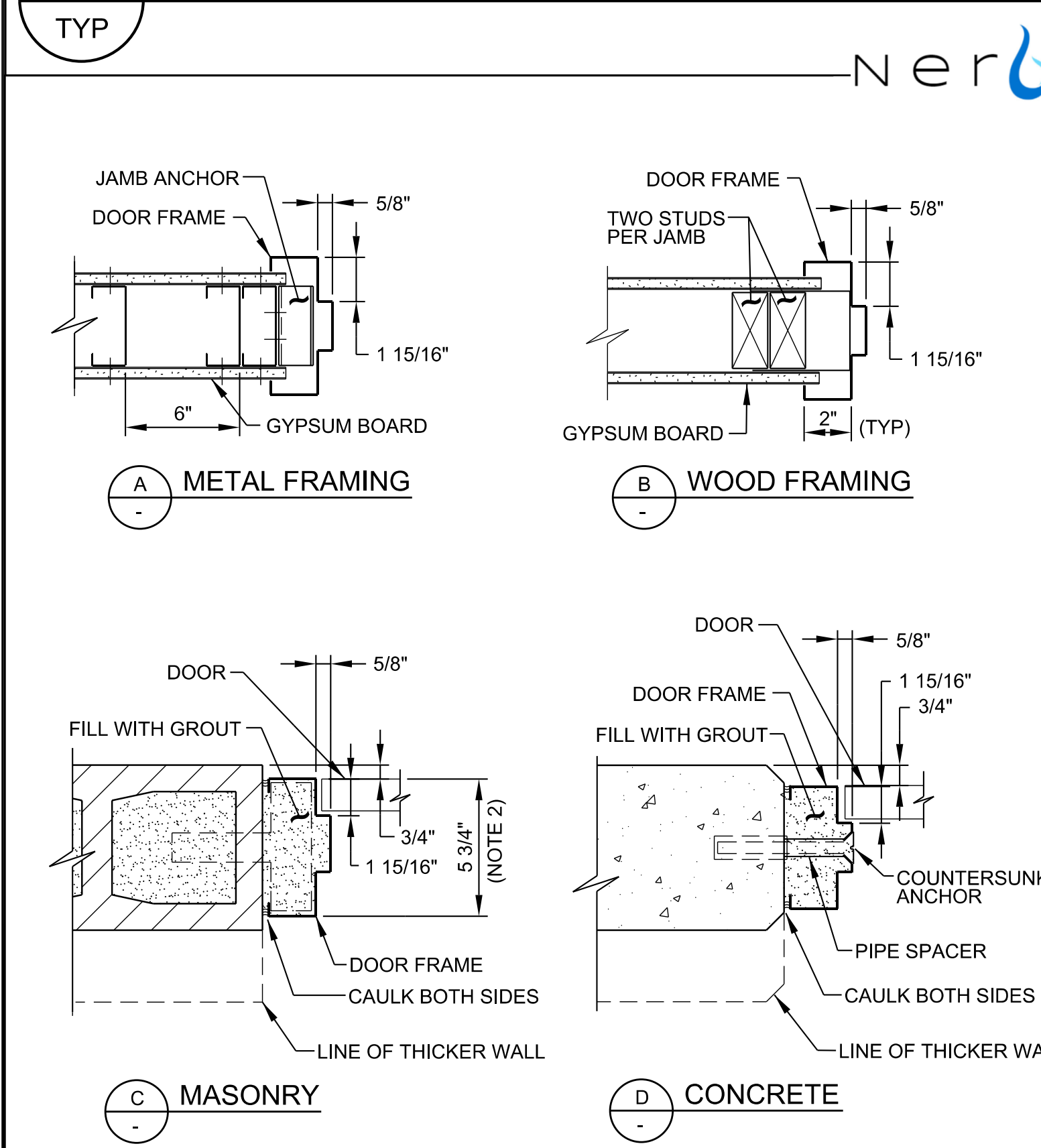
- NOTES:
1. SEE DOOR AND HARDWARE SCHEDULE FOR FRAME SIZE, MATERIAL, AND DETAILS.
  2. SIDELIGHT MAY BE ON EITHER SIDE OF DOOR. SEE DRAWINGS FOR REQUIRED SIDELIGHT LOCATION.
  3. GLASS AT SIDELIGHTS SHALL BE TEMPERED.
  4. GLASS AT INTERIOR SIDELIGHTS SHALL BE CLEAR. GLASS AT EXTERIOR SIDELIGHTS SHALL BE TINTED INSULATING GLASS.



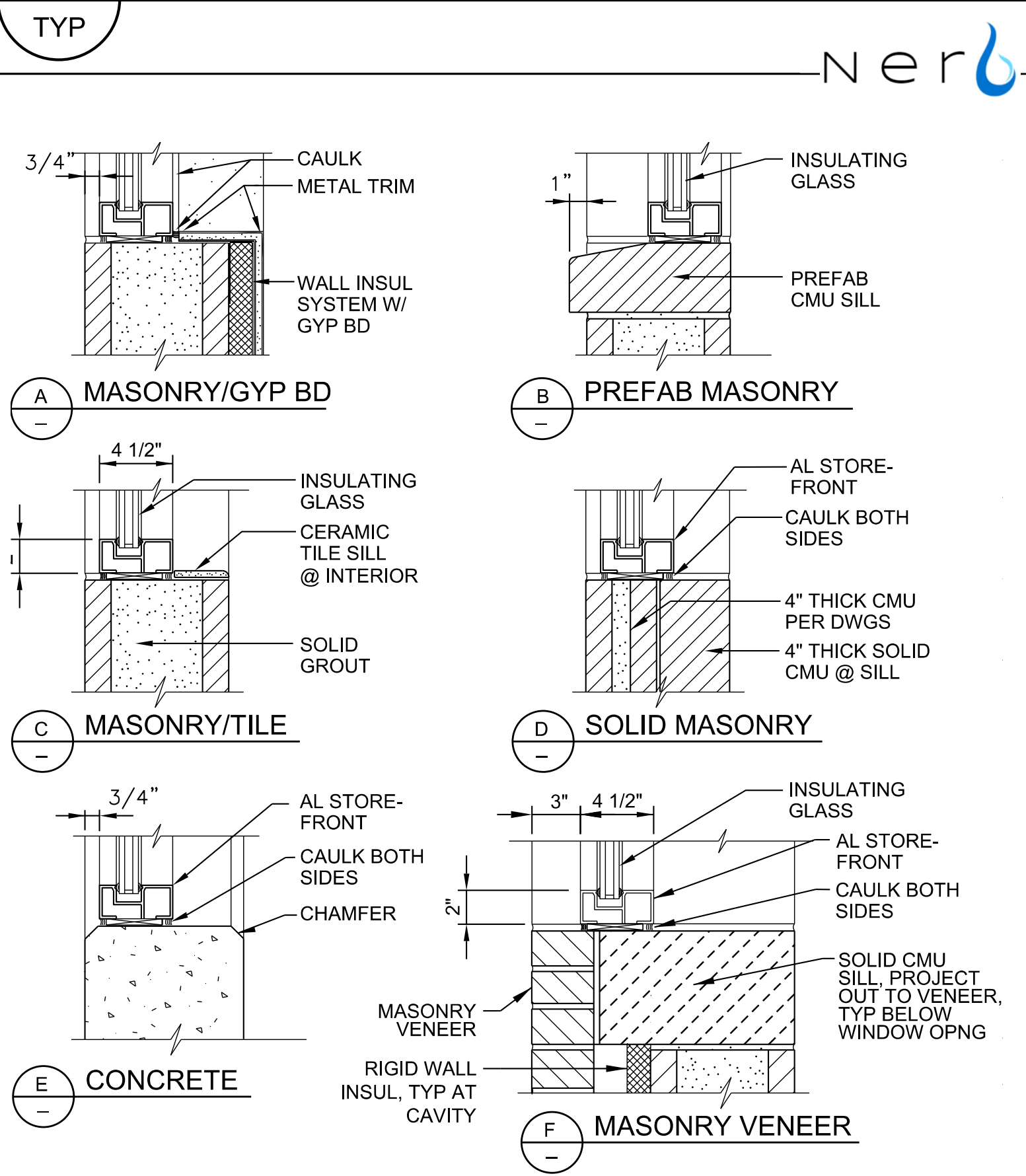
AJ103 DOOR - ELEVATIONS - TYPES

A104 DOOR FRAME TYPES

AJ105 DOOR - HEAD - DETAILS




- NOTE:
1. DOOR CLEARANCE AT BOTTOM OF DOOR SHALL BE 1/4" MIN AND 3/8" MAX.



AJ107 DOOR - JAMB - DETAILS

AJ109 DOOR - SILL - DETAILS

AJ300 WINDOW - SILL - DETAILS



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

DRAWING STATUS


Status	Date	Initial

DOOR / WINDOW TYPICAL  
DETAILS

100% DESIGN 511 PUMP STATION

AD - 01

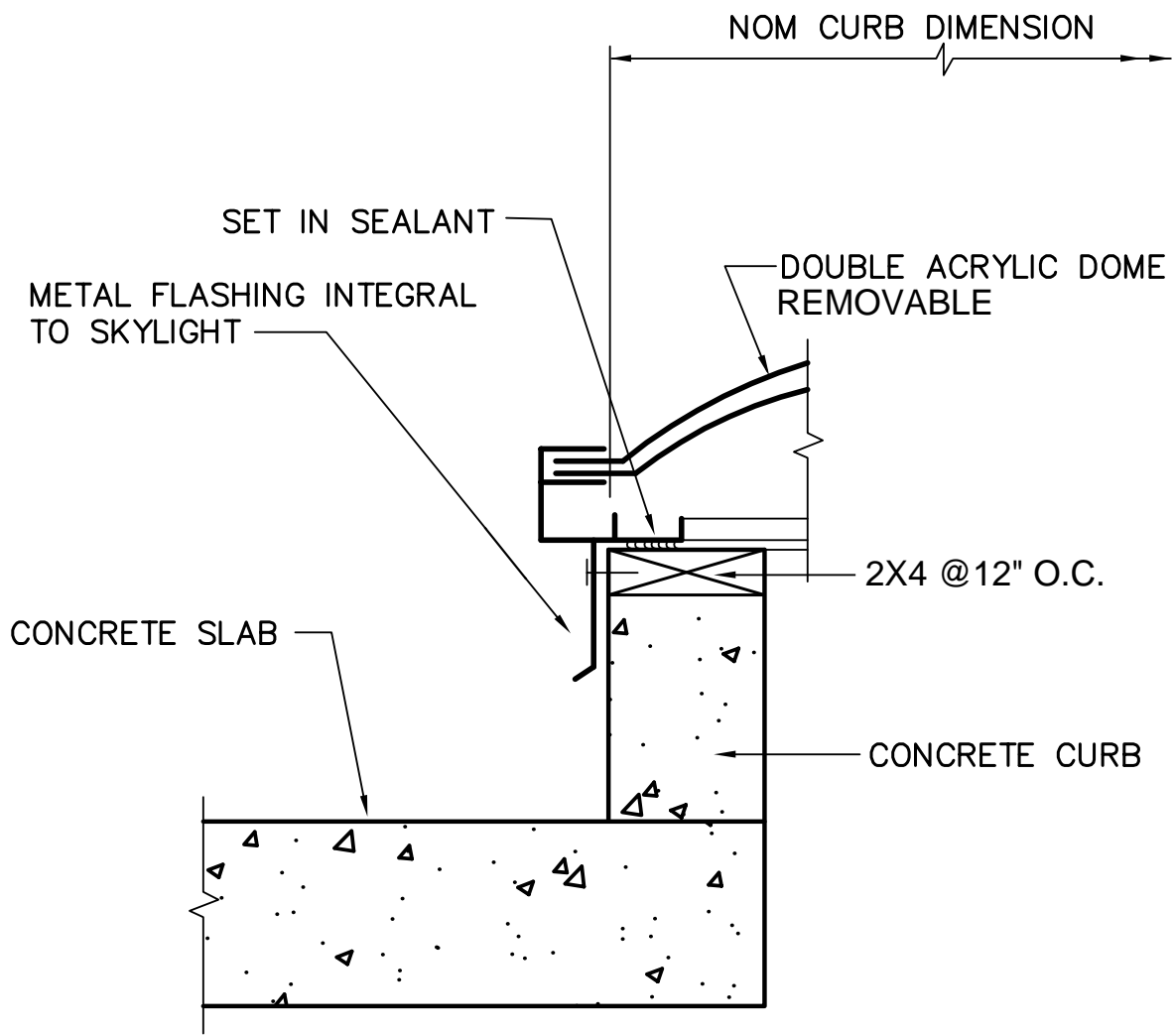
NERO CONSULTANTS



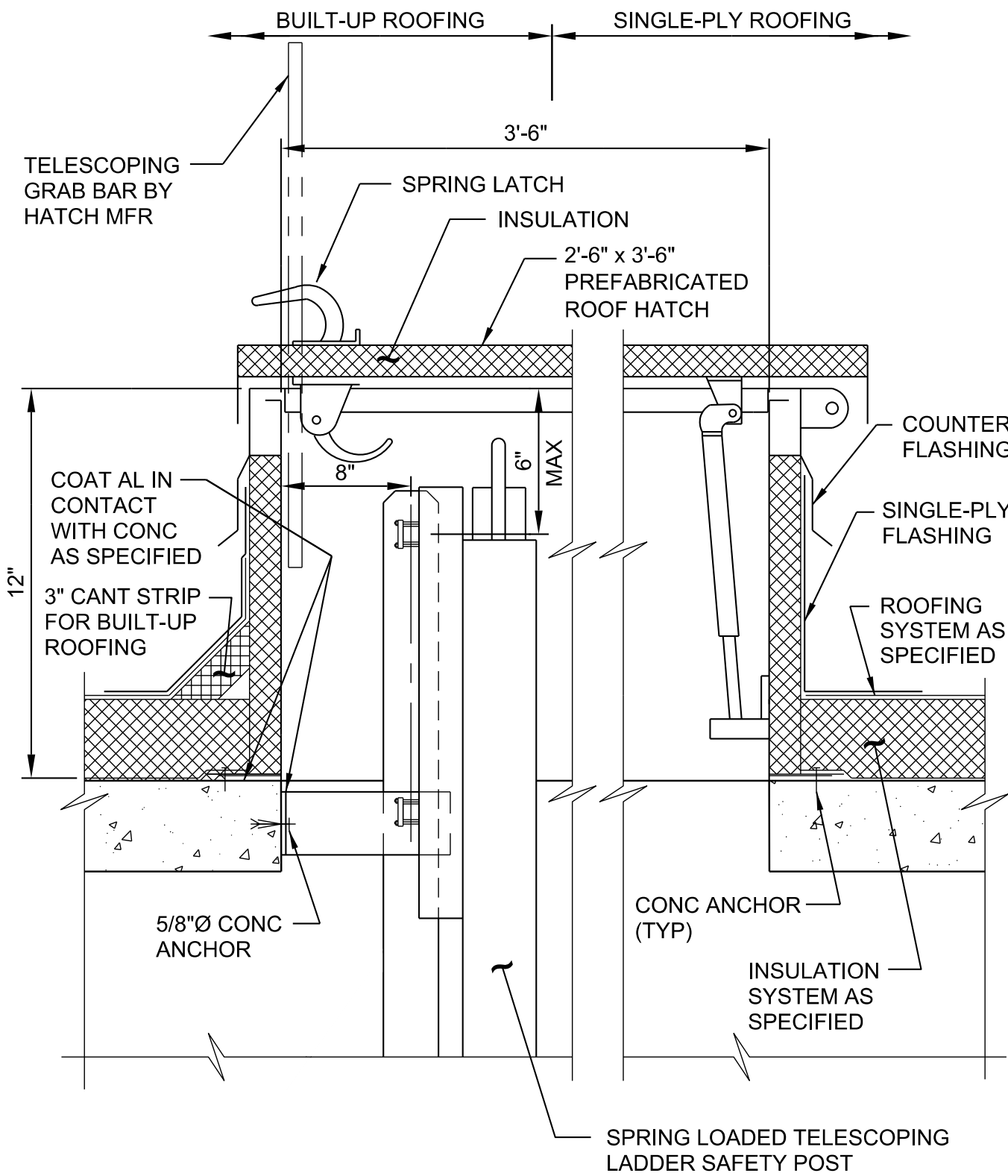
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Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project N°: 908122600715	Report N°: 24 of 29

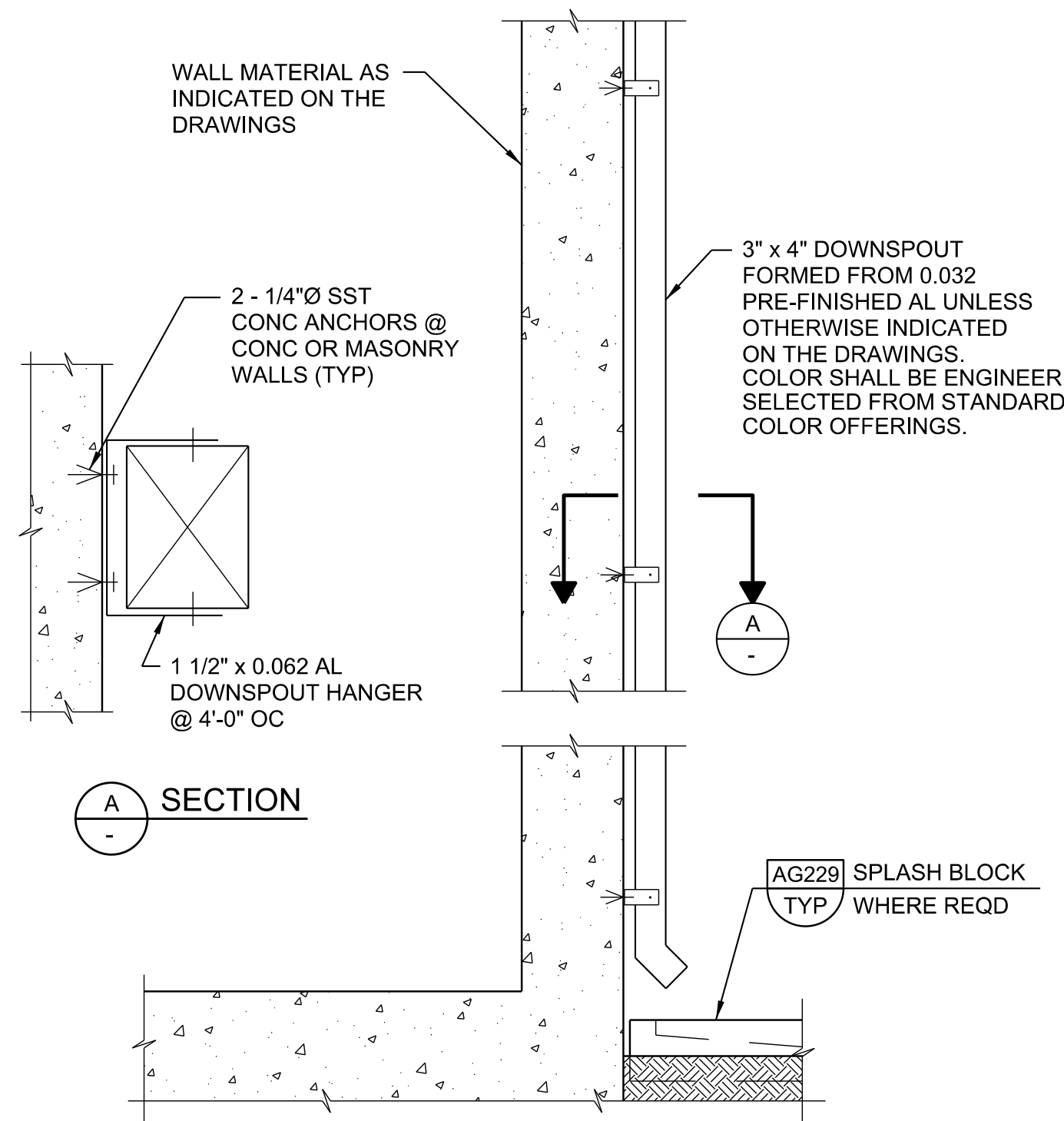




A624 SKYLIGHT - CONCRETE CURB  
TYP

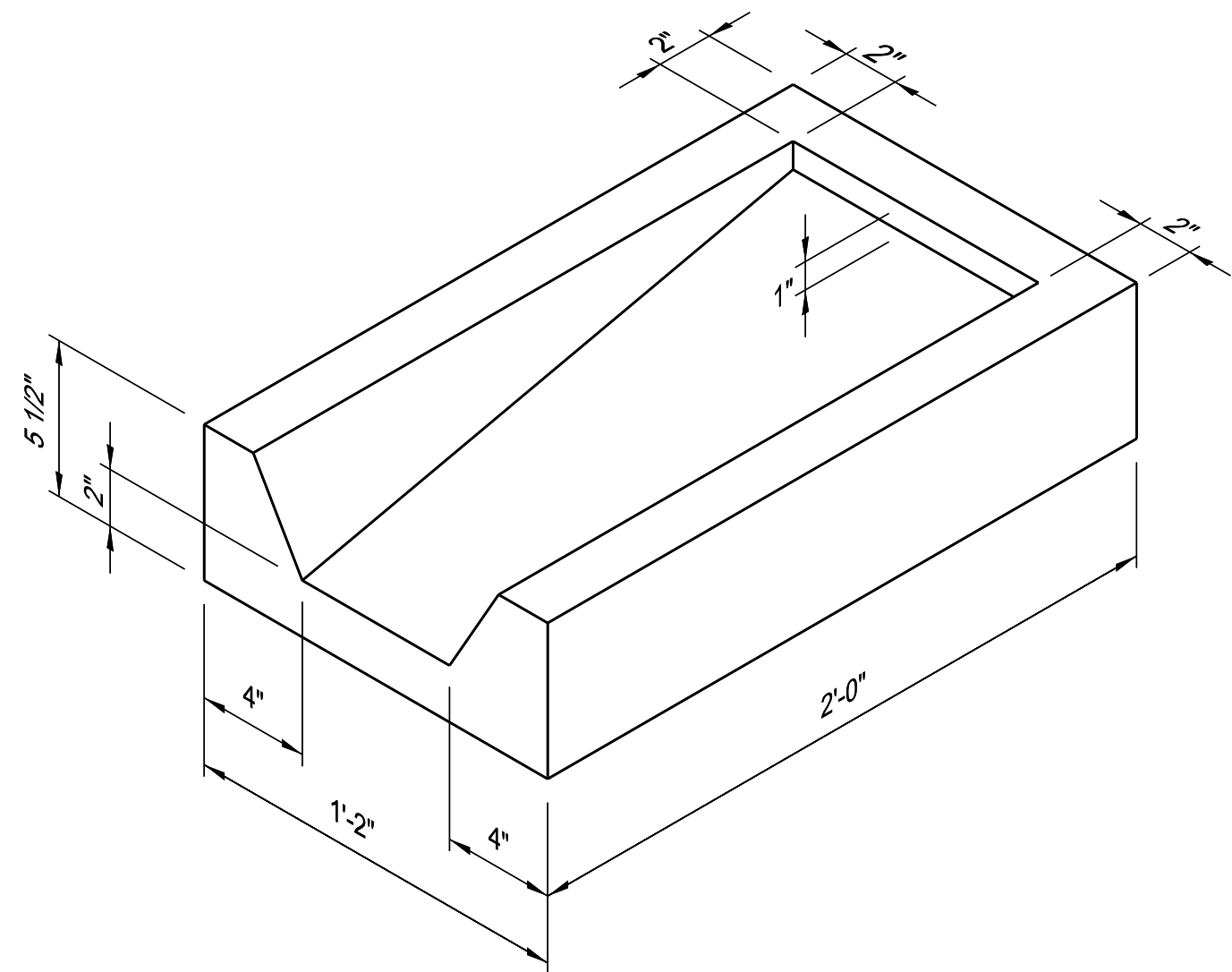


AG180 ROOF SYSTEM - HATCH  
WITH LADDER - CONCRETE ROOF  
TYP

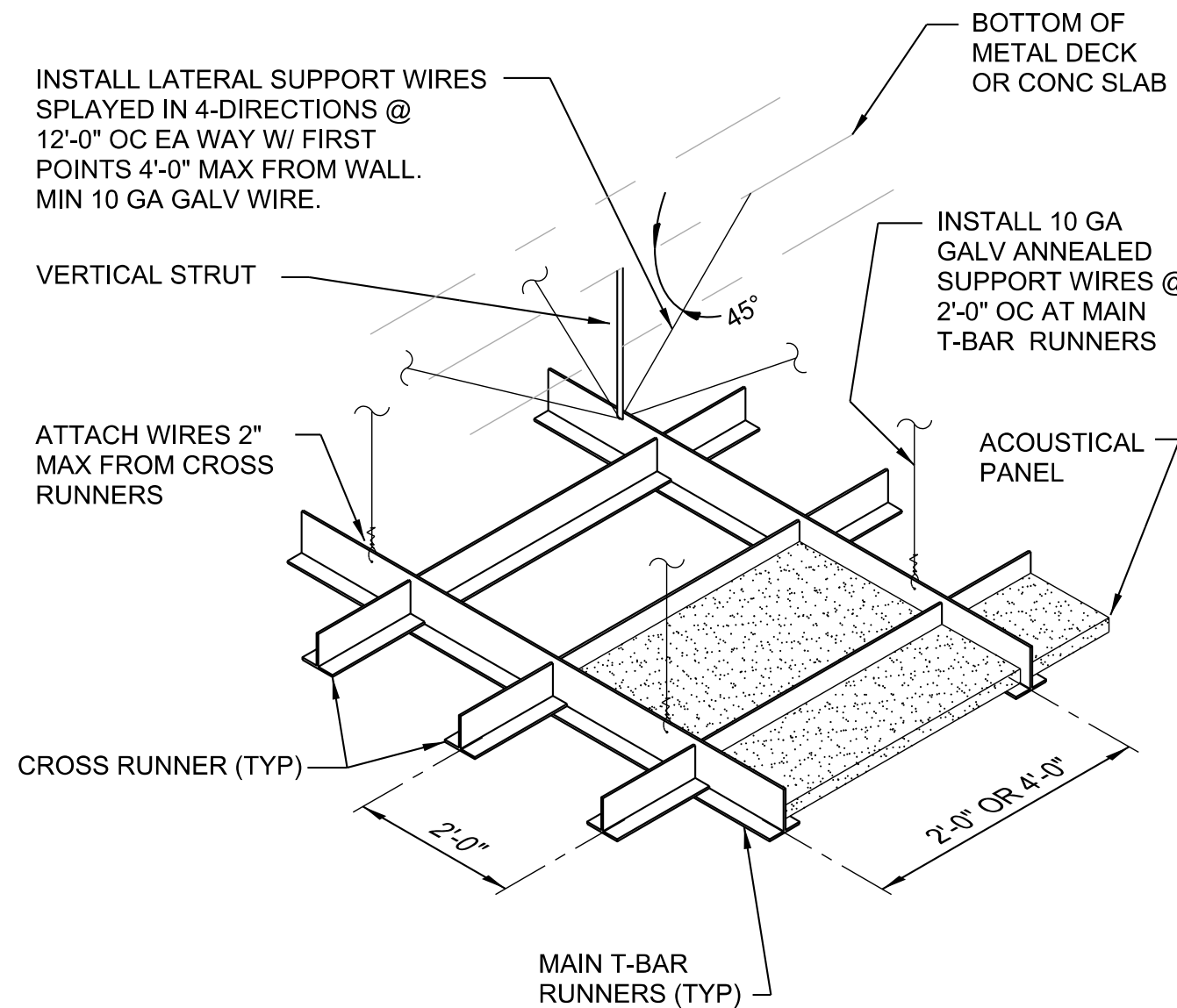


- NOTE:
1. PROVIDE SPLASH BLOCK AS SHOWN EXCEPT AT PAVING AND SIDEWALKS.
  2. ALTERNATE SIZE DOWNSPOUTS WILL BE REQUIRED, IF SO INDICATED ON THE DRAWINGS.
  3. COAT AL IN CONTACT WITH CONC AND CMU AS SPECIFIED.

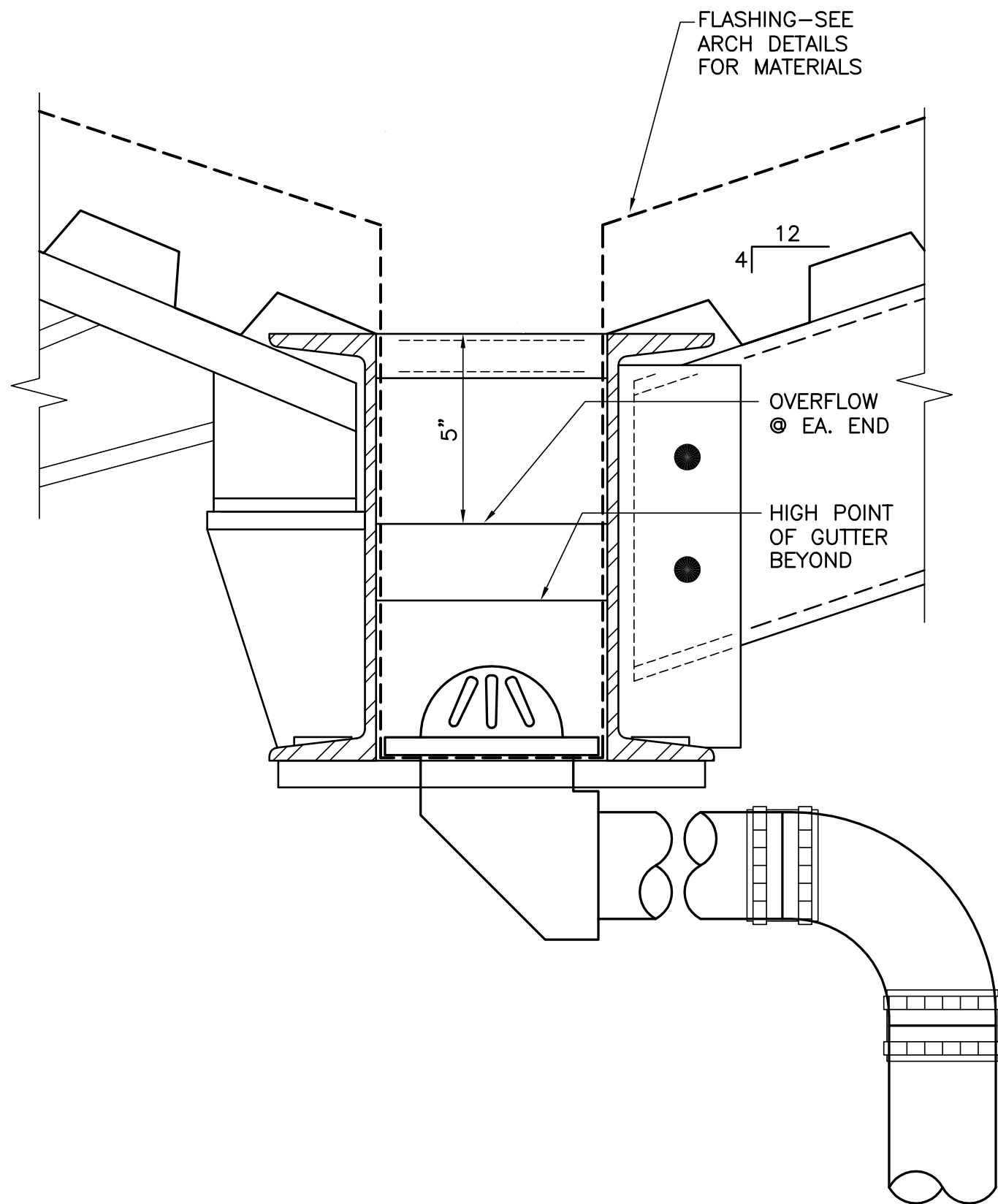
AG227 DOWN SPOUT - ALUMINUM  
TYP



AG229 SPLASH BLOCK - CONCRETE - SURFACE MOUNTED  
TYP



AL200 CEILING - ACOUSTICAL - ASSEMBLY  
TYP



P520 GUTTER - ROOF DRAIN  
TYP



CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

DRAWING STATUS

Status	Date	Initial

ROOF / DRAINAGE TYPICAL  
DETAILS

100% DESIGN 511 PUMP STATION

AD - 02

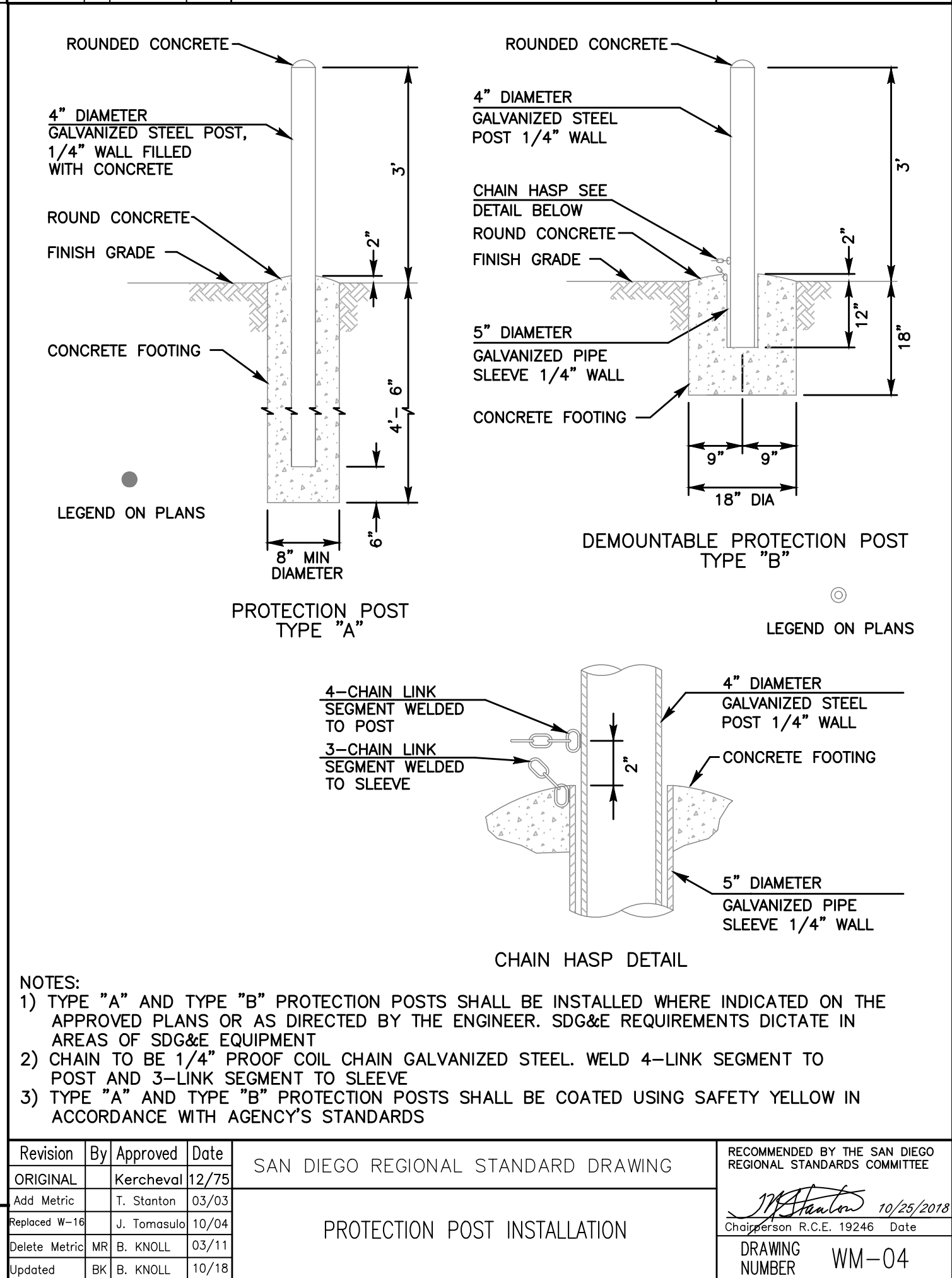
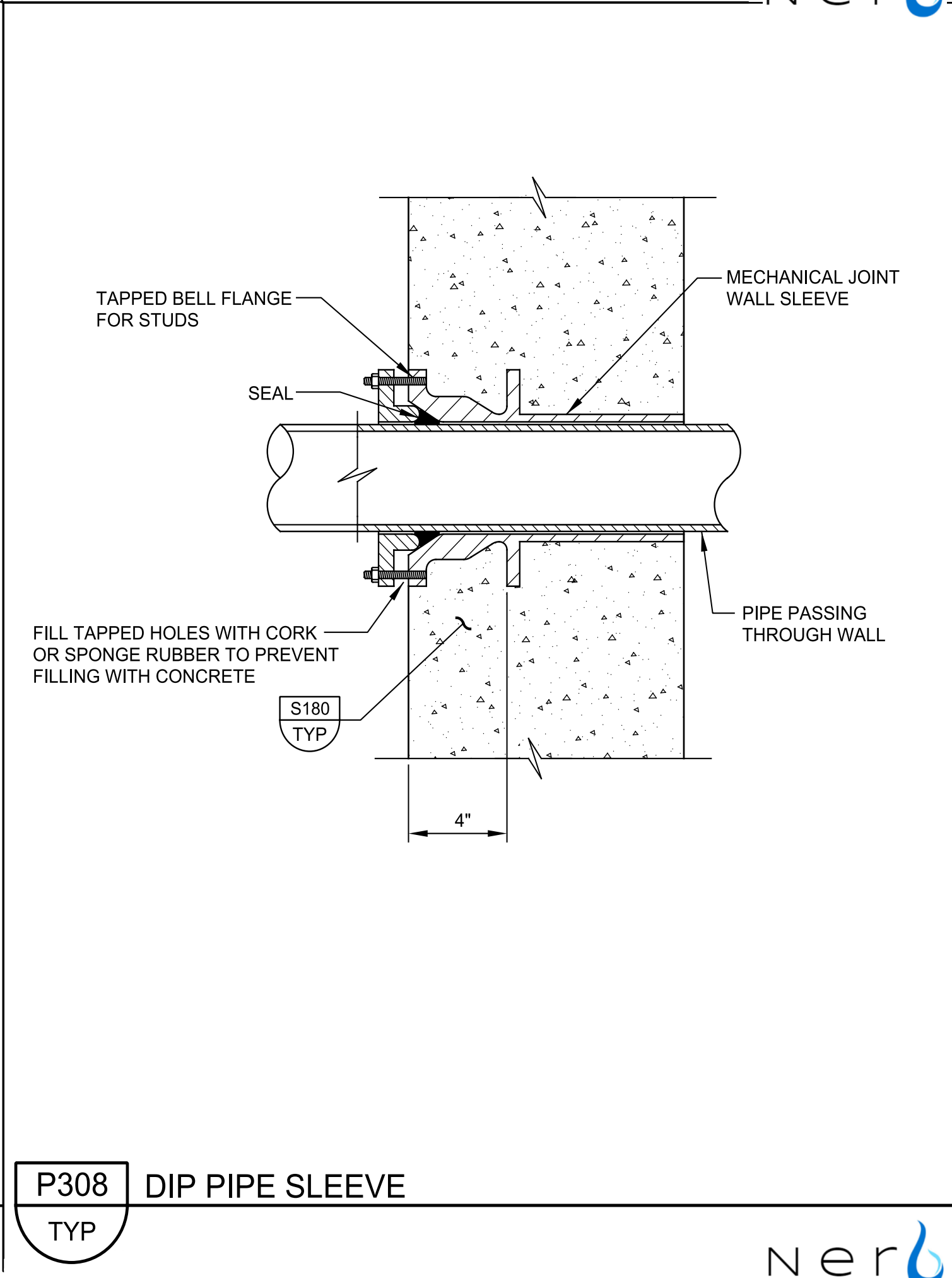
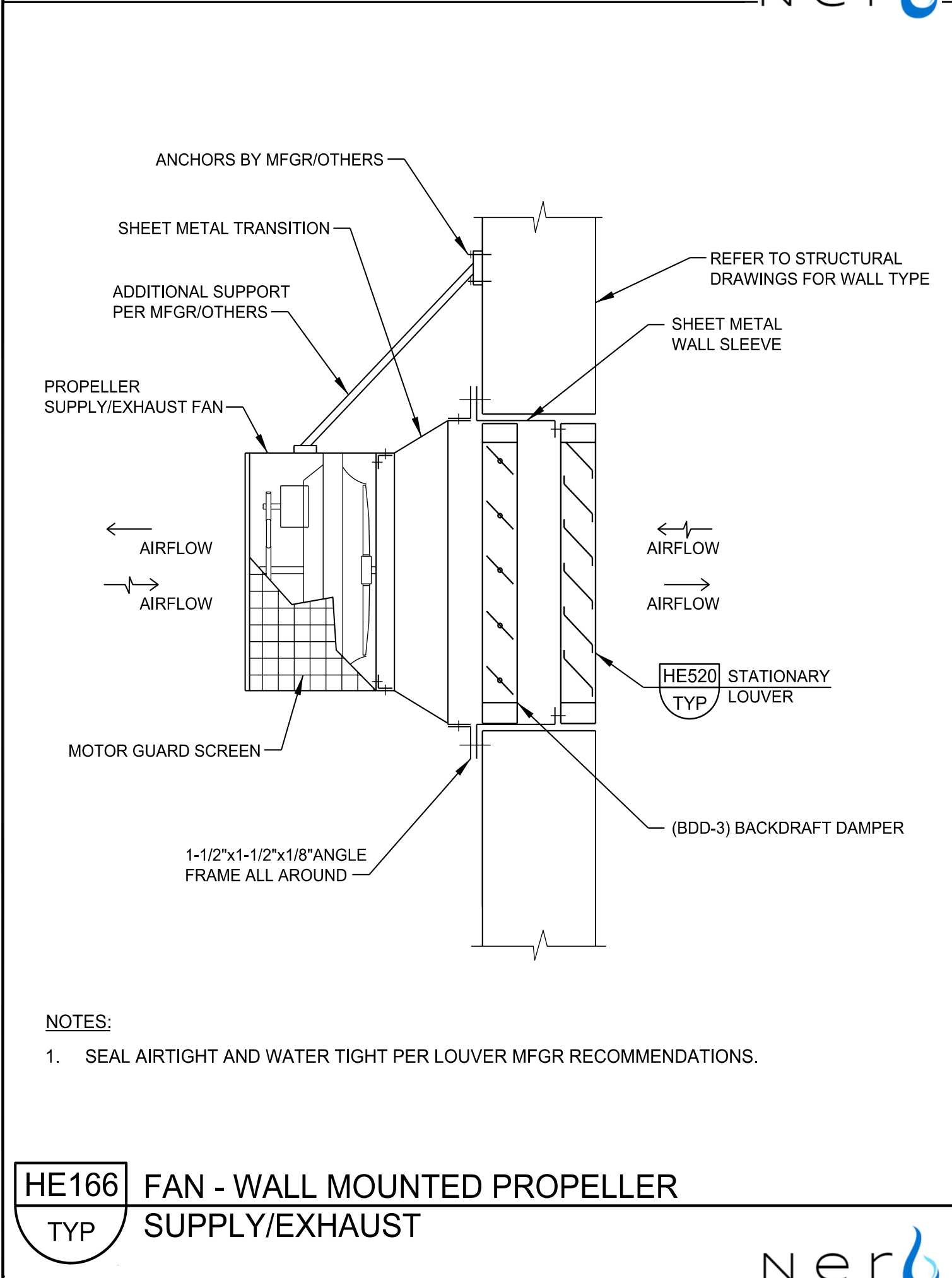
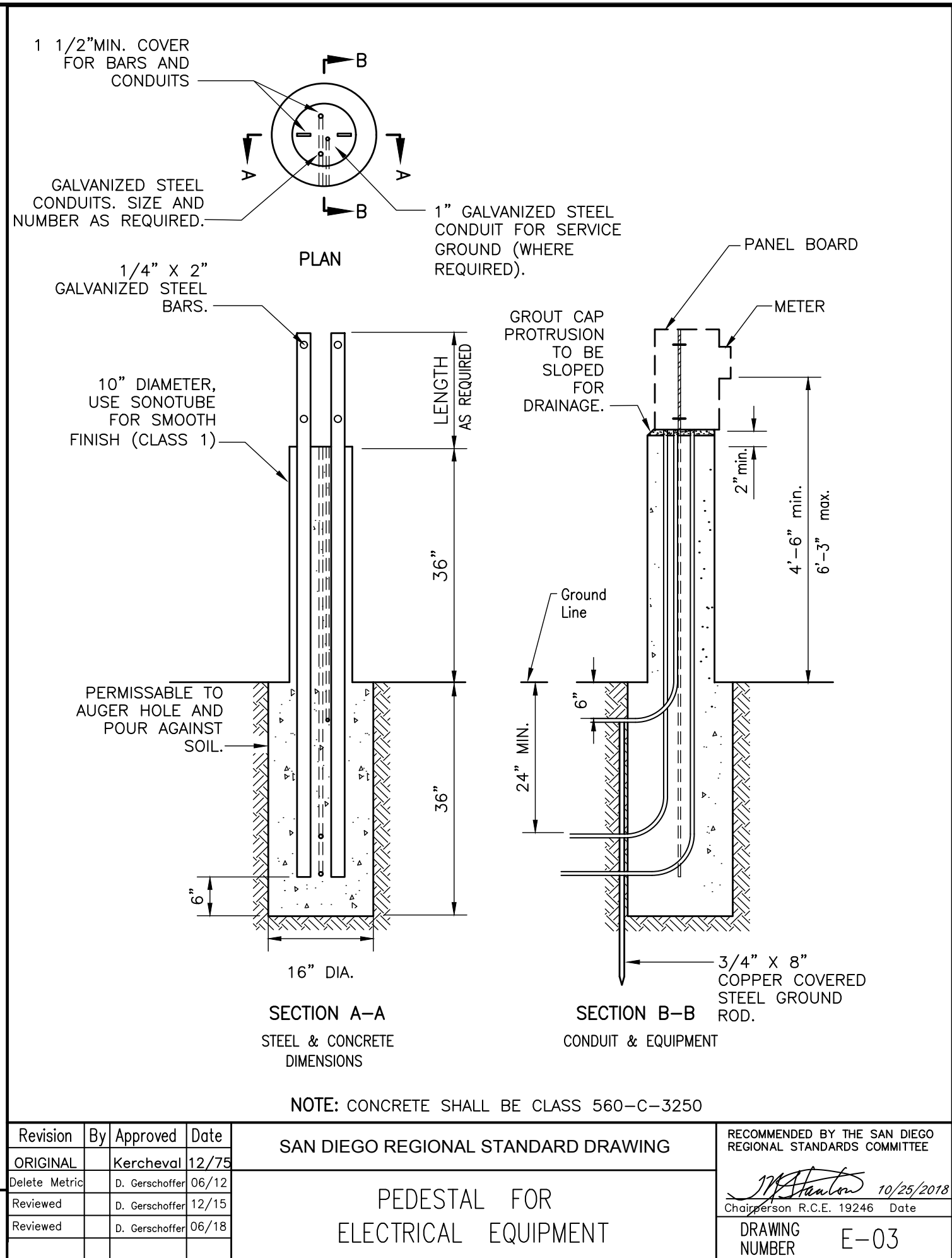
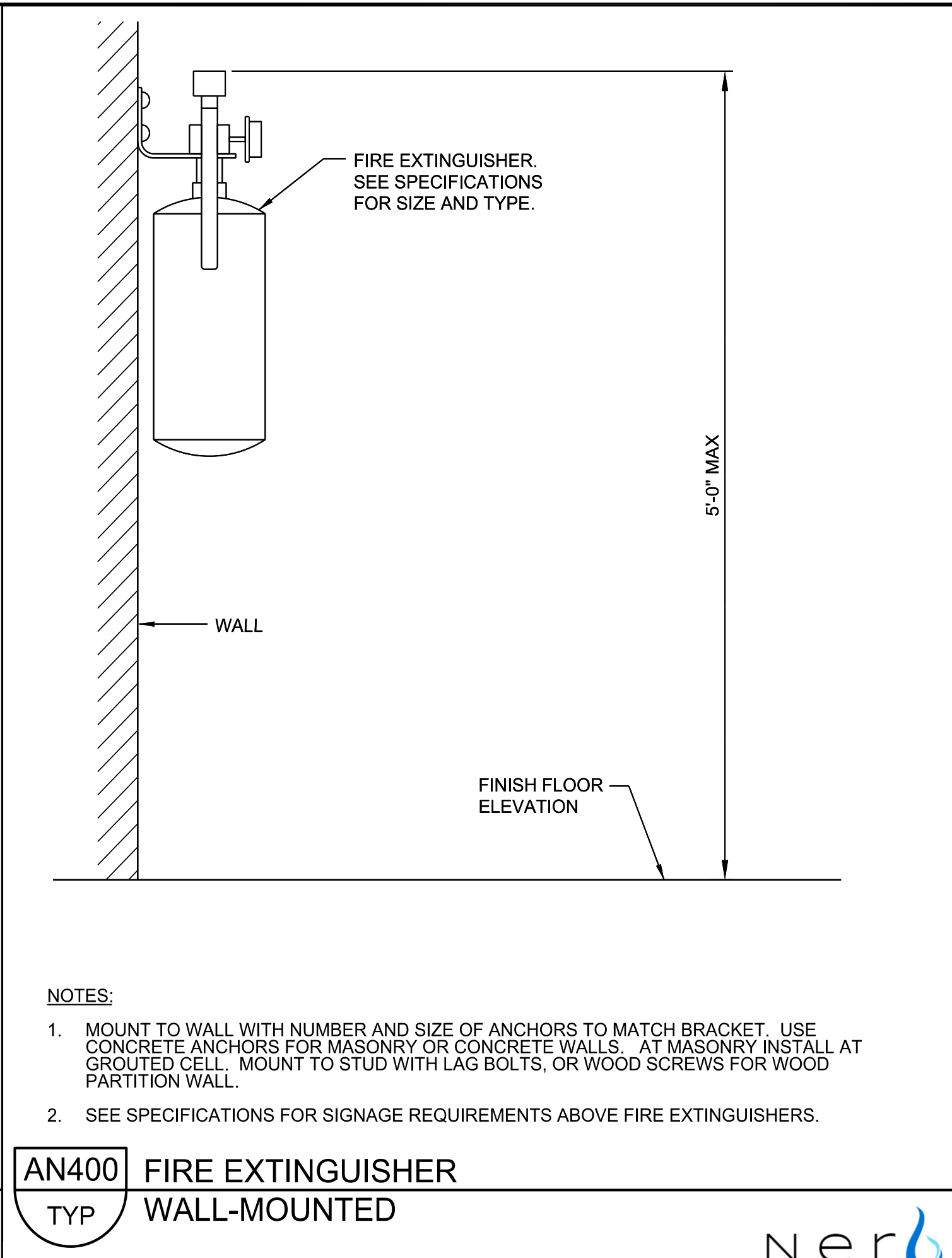
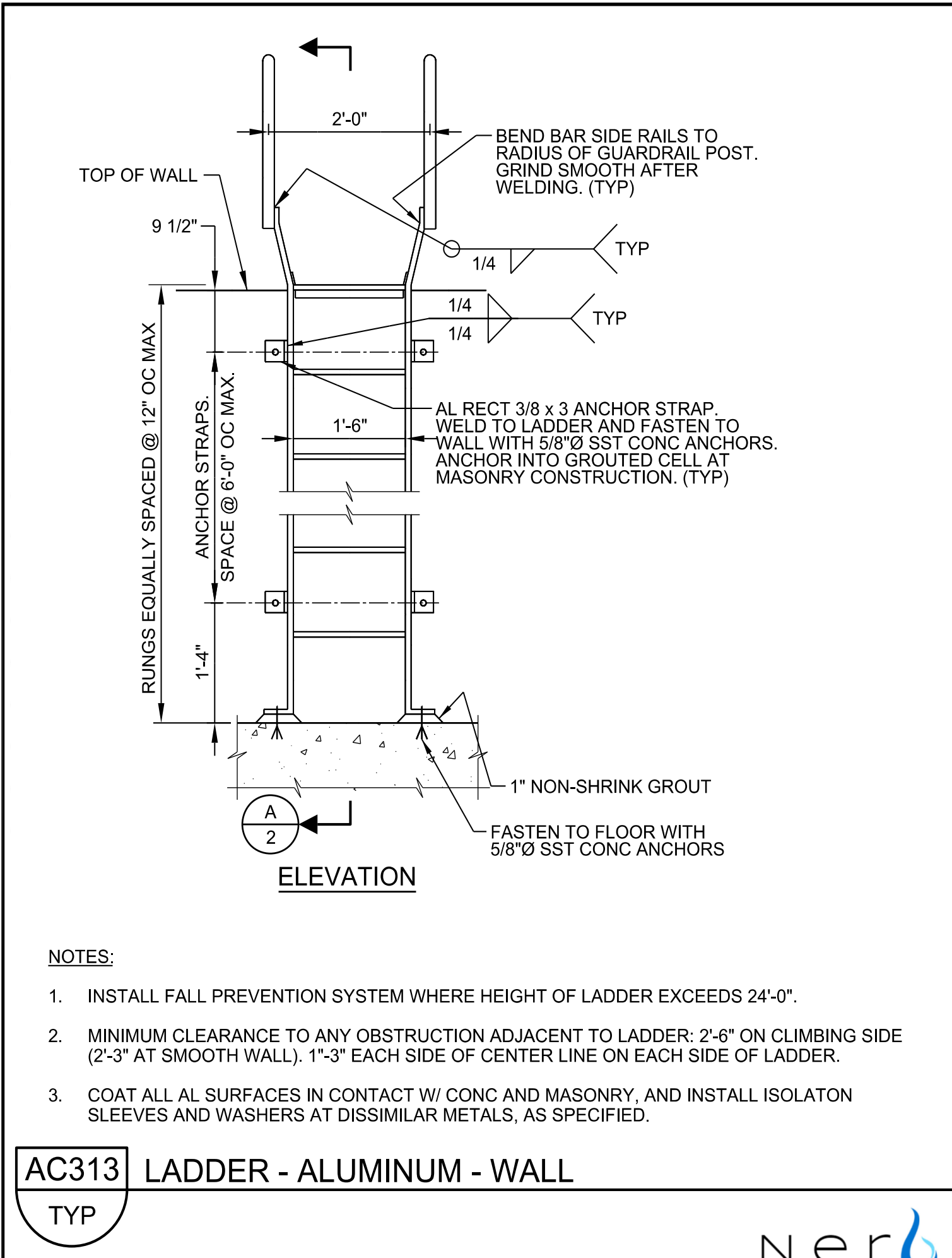
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Source Reference:

Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project N°: 908122600715	Report N°: Drawing N°: 25 of 29





CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

DRAWING STATUS

Status	Date	Initial

MISCELLANEOUS  
TYPICAL DETAILS

100% DESIGN 511 PUMP STATION

AD - 03

NERO CONSULTANTS

Source Reference:

Project Manager:	Reviewed By:	Date:
C. Thornbury		5/10/2020

Scale:	Project NP:	Report NP:	Drawing NP:
	908122600715		26 of 29





**A CONSTRUCTION STAGING PLAN**  
FILE: 908122600715\_CN-01.ext



CITY OF OCEANSIDE  
WATER UTILITIES DEPARTMENT

SCALE VERIFICATION

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

DRAWING STATUS

Status	Date	Initial

CONSTRUCTION STAGING  
PLAN

100% DESIGN 511 PUMP STATION

CN - 01

NERO CONSULTANTS



Source Reference:

Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project NP: 908122600715	Report NP: 27 of 29






- GENERAL NOTES**
1. THE RECIPIENTS OF THESE SECURITY DESIGN DOCUMENTS ARE NOT PERMITTED TO PRINT, COPY, OR DISCLOSE THE CONTENT OF THESE DOCUMENTS TO OUTSIDE PARTIES WITHOUT EXPLICIT PERMISSION FROM NERO CONSULTANTS OR CITY OF OCEANSIDE.
  2. REFER TO G-04 FOR SECURITY SCHEDULE.
  3. APPROXIMATE LOCATIONS SHOWN.
  4. GATE SIZES AND LOCATION OF DEVICES TO BE FIELD VERIFIED WITH ENGINEER.

- KEY NOTES**
- 1 MAIN GATE ACCESS
  - 2 DOUBLE SWING CHAIN LINK GATE
  - 3 SECURITY CAMERA REGION OF CAPTURE
  - 4 CHAIN LINK FENCING WITH EXTENSION ARM AND BARBED WIRE
  - 5 PEDESTRIAN ACCESS GATE
  - 6 PROVIDE 25 FT POLE


**EQUIPMENT TAG NUMBERS**

1 SECUTIRY CAMERA NO. 1	CAM-511-01
2 SECUTIRY CAMERA NO. 2	CAM-511-02
3 SECUTIRY CAMERA NO. 3	CAM-511-03
4 SECUTIRY CAMERA NO. 4	CAM-511-04

- LEGEND**
- P PTZ CAMERA
  - F FIXED CAMERA
  - T THERMAL CAMERA




CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT

SCALE VERIFICATION  
THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.  


DRAWING STATUS		
Status	Date	Initial

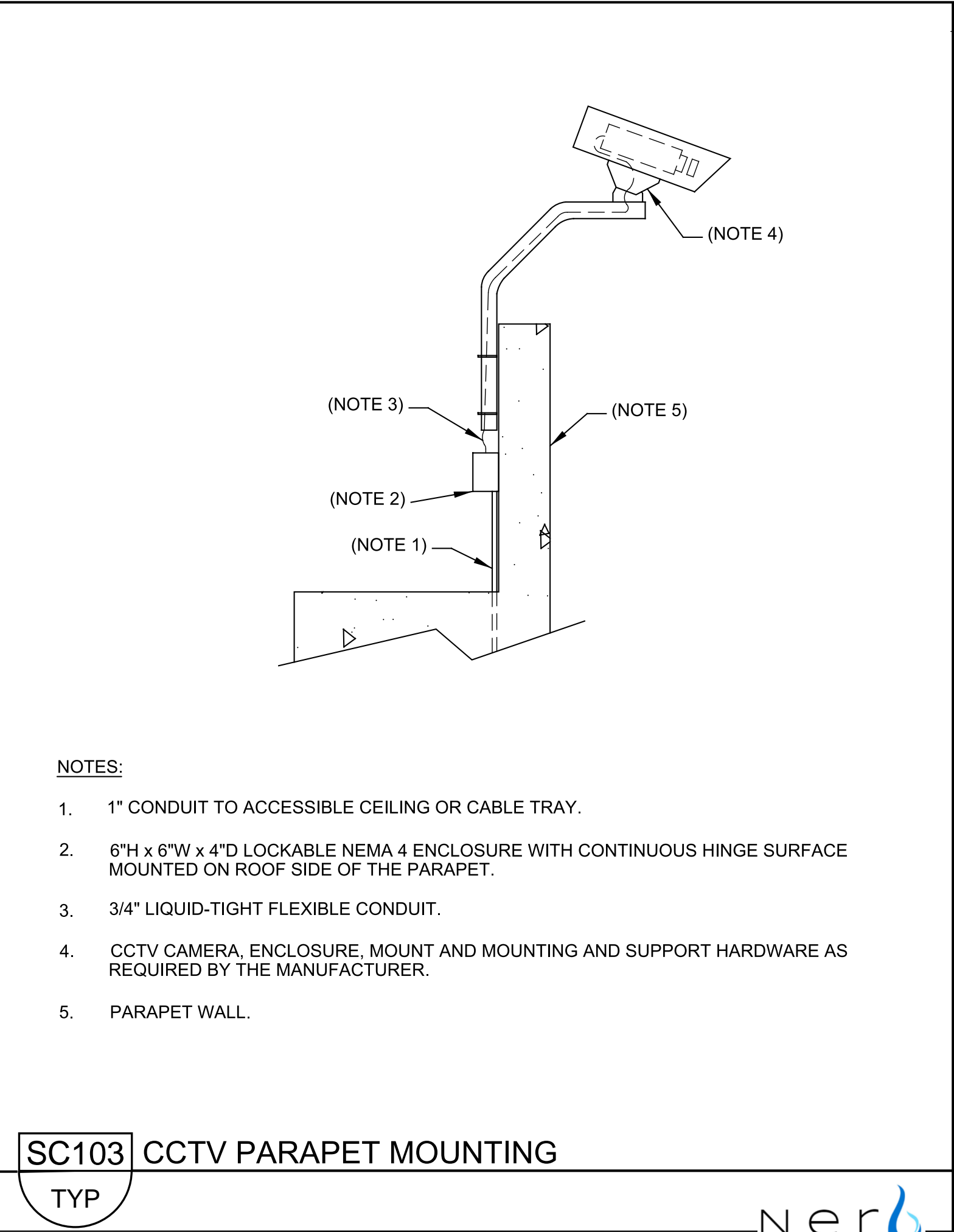
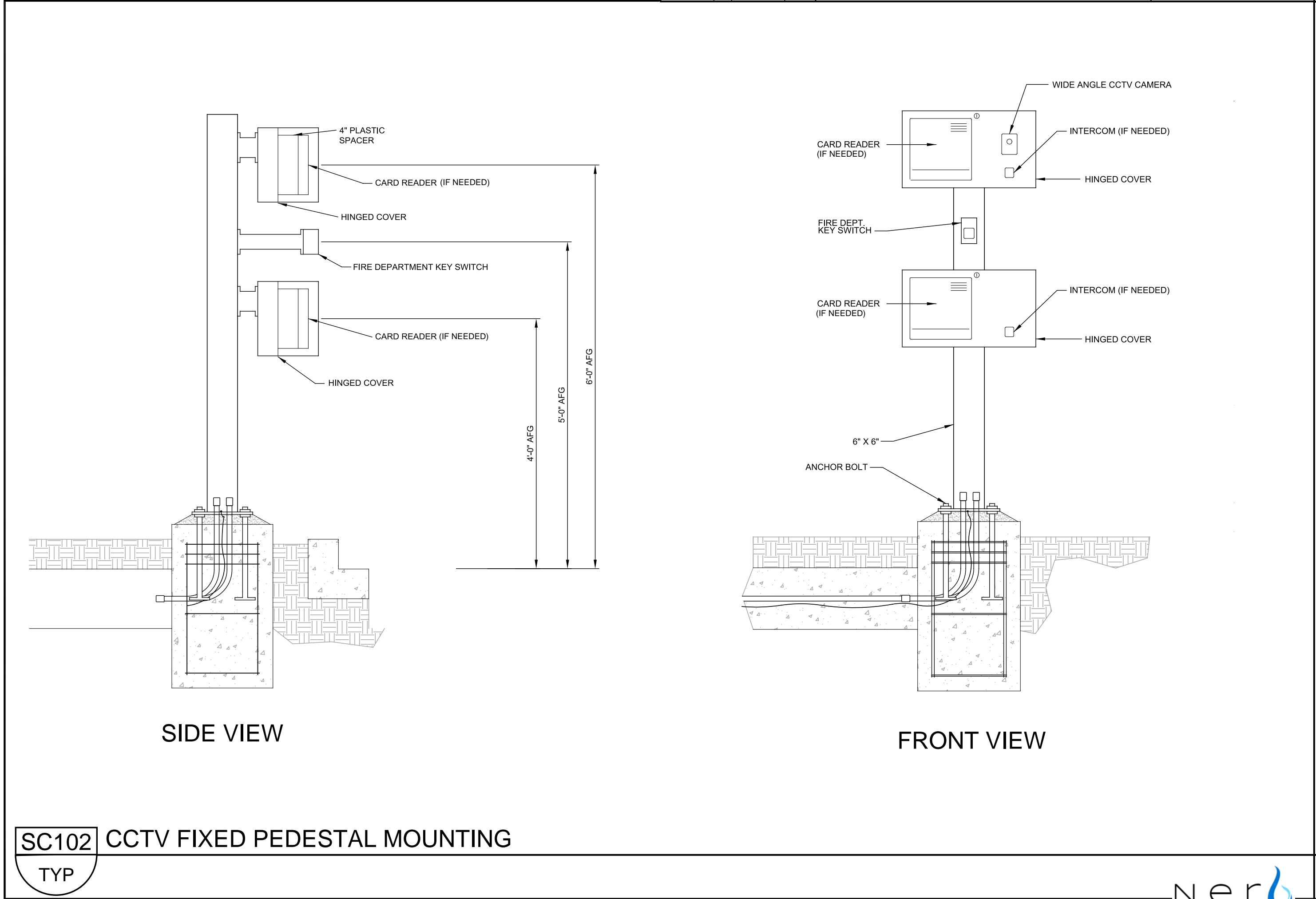
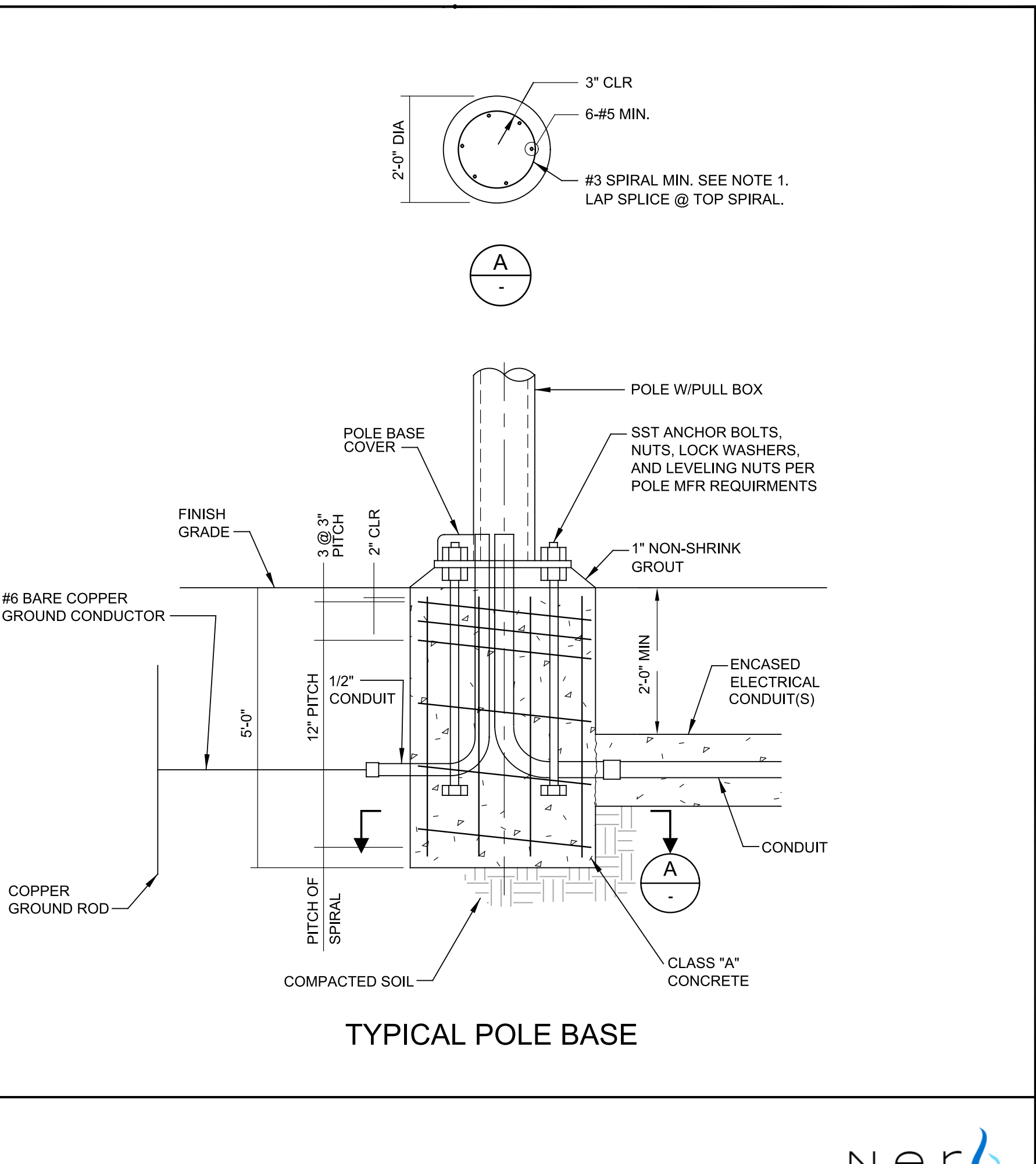
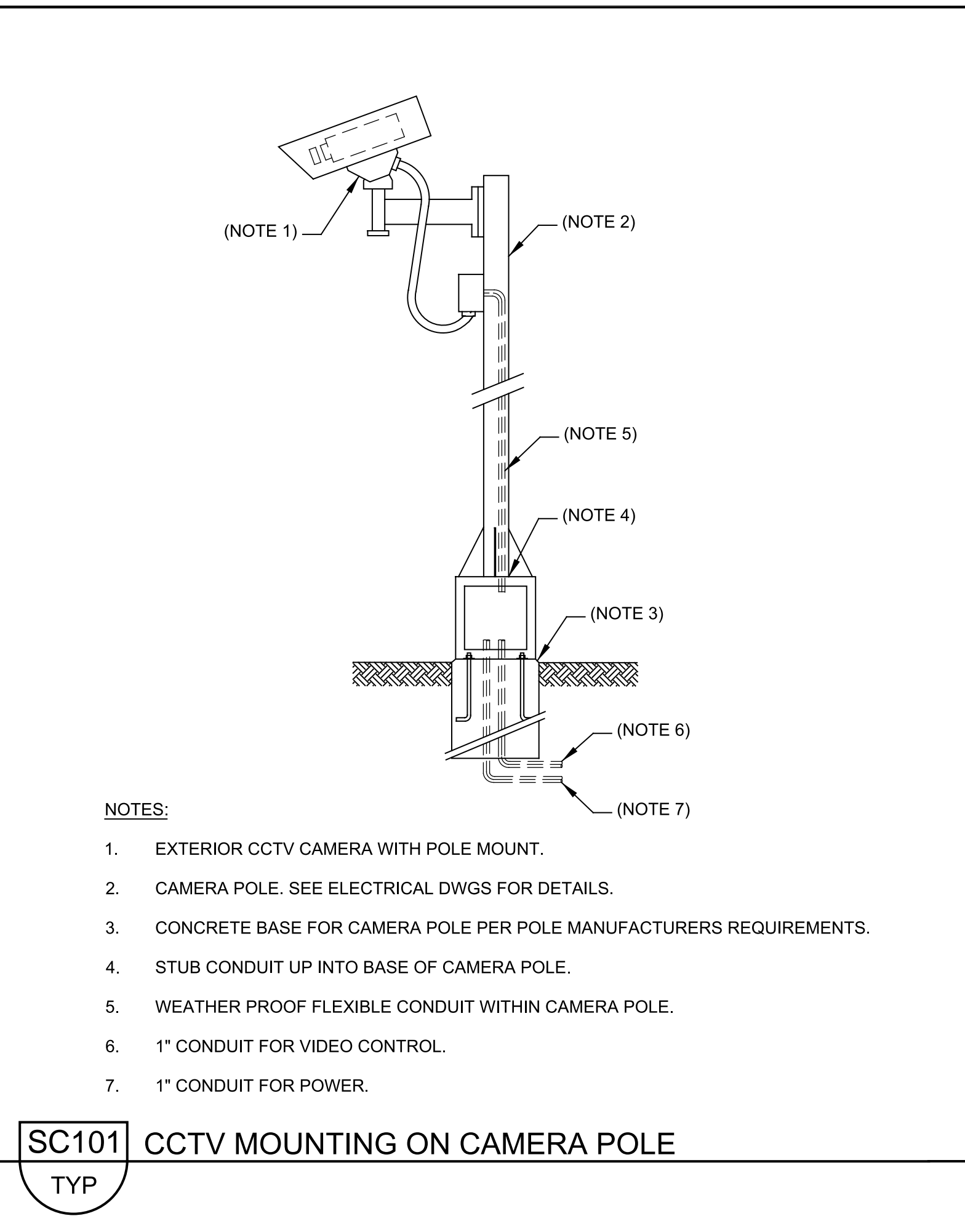
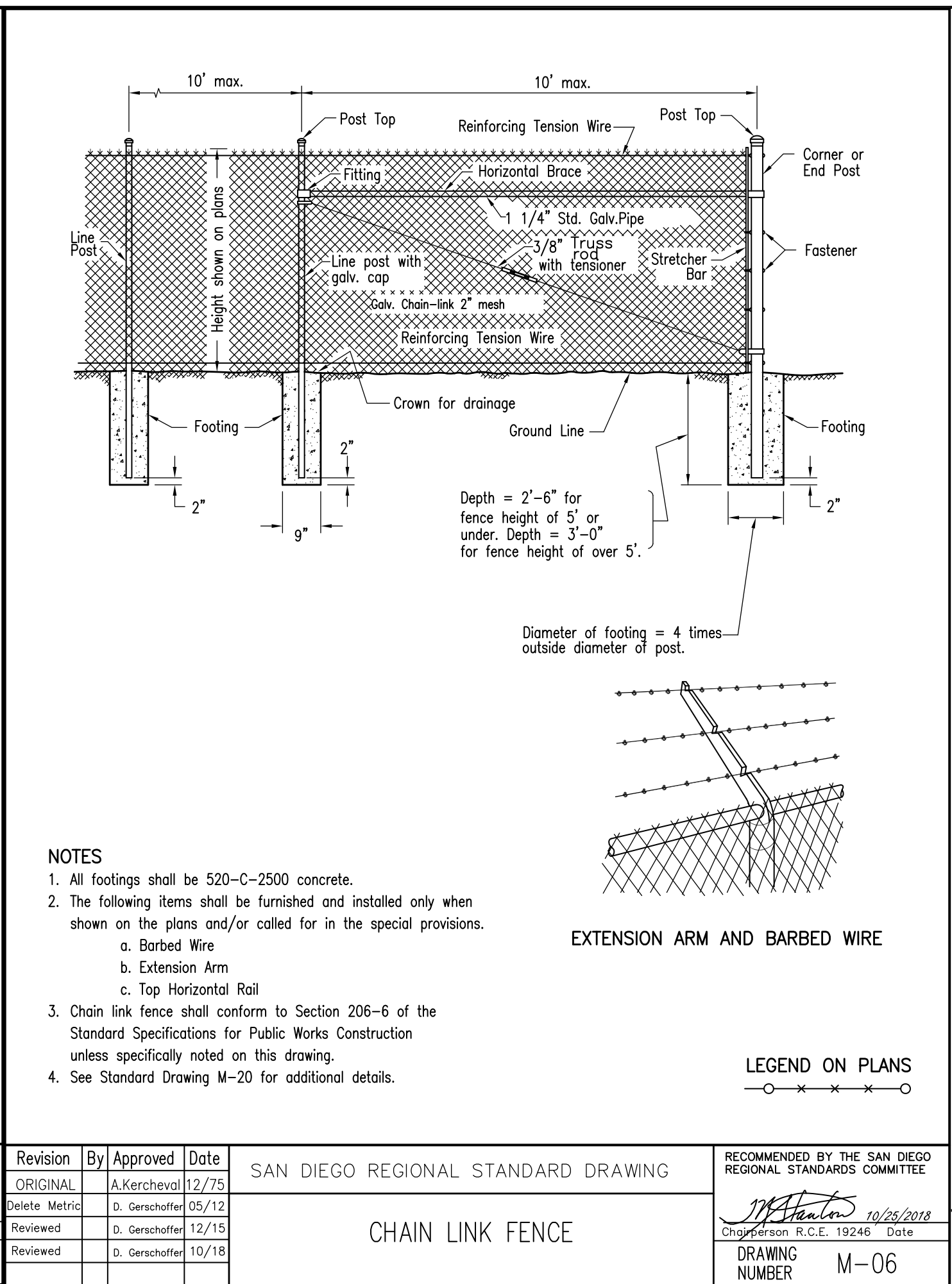
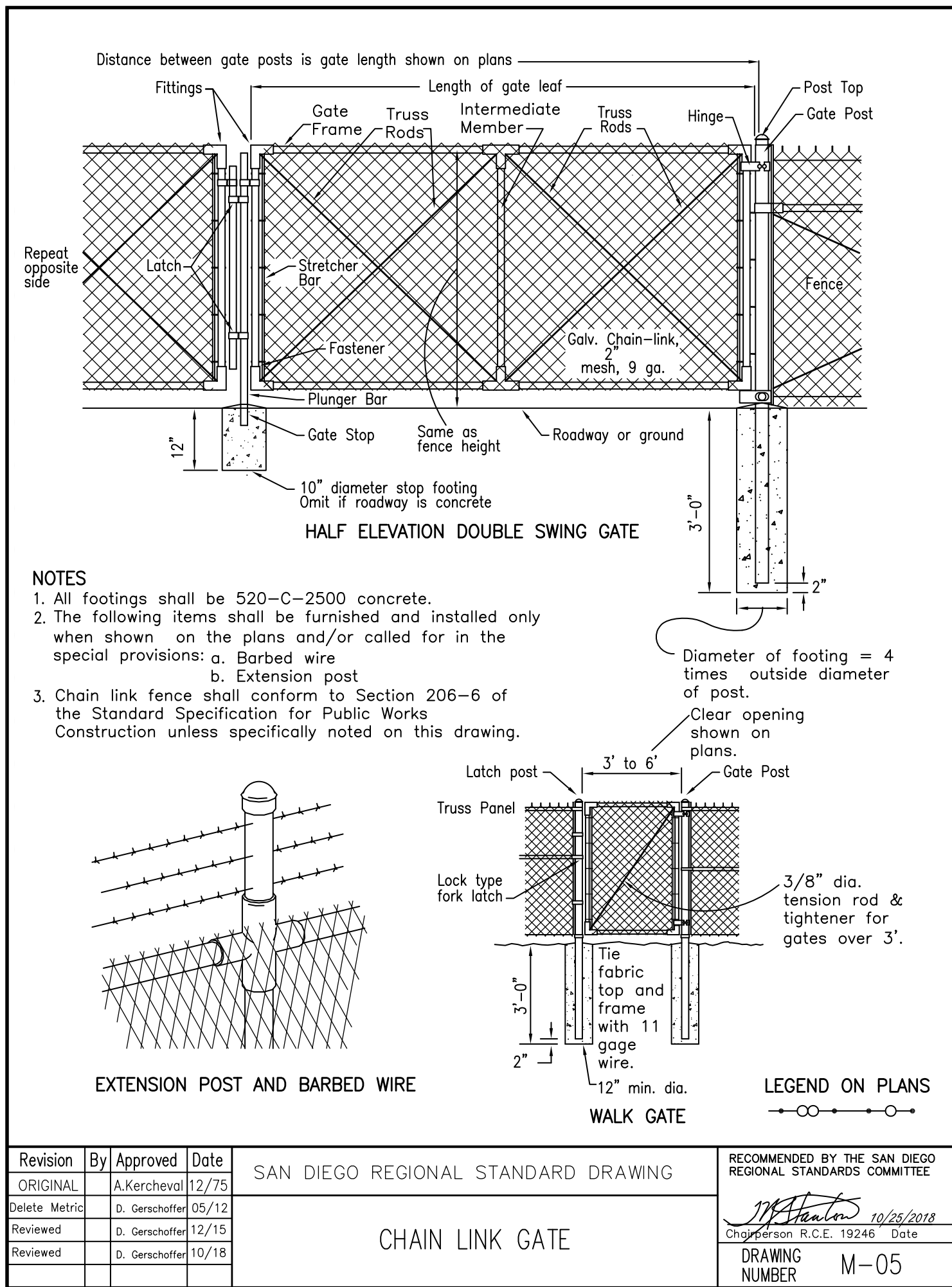
SECURITY PLAN  
100% DESIGN 511 PUMP STATION  
CN - 02

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Source Reference:

Project Manager: C. Thornbury	Reviewed By:	Date: 5/10/2020
Scale:	Project N°: 908122600715	Report N°: Drawing N°: 28 of 29





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**CITY OF OCEANSIDE  
WATER UTILITES DEPARTMENT**

**SCALE VERIFICATION**

THIS BAR MEASURES 50mm ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

**DRAWING STATUS**

Status	Date	Initial

**SECURITY TYPICAL DETAILS**

100% DESIGN 511 PUMP STATION

**SCD-01**

**NERO CONSULTANTS**

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Source Reference:

Project Manager:	Reviewed By:	Date:
C. Thornbury		5/10/2020

Scale:	Project N°:	Report N°:	Drawing N°:
	908122600715		29 of 29