

Tampa Construction Specifications
Contract 26-C-00042; Forest Hills Park Pump Station Replacement

CITY OF TAMPA, FLORIDA

PLANS FOR

Contract 26-C-00042 Forest Hills Park Pump Station Replacement

These Plans for the referenced projects come from uncontrolled sources and do not conform to WCAG 2.1 at level AA. Individuals with disabilities seeking assistance with the individual project plans or specifications should e-mail Contractadministration@tampagov.net.

City of Tampa

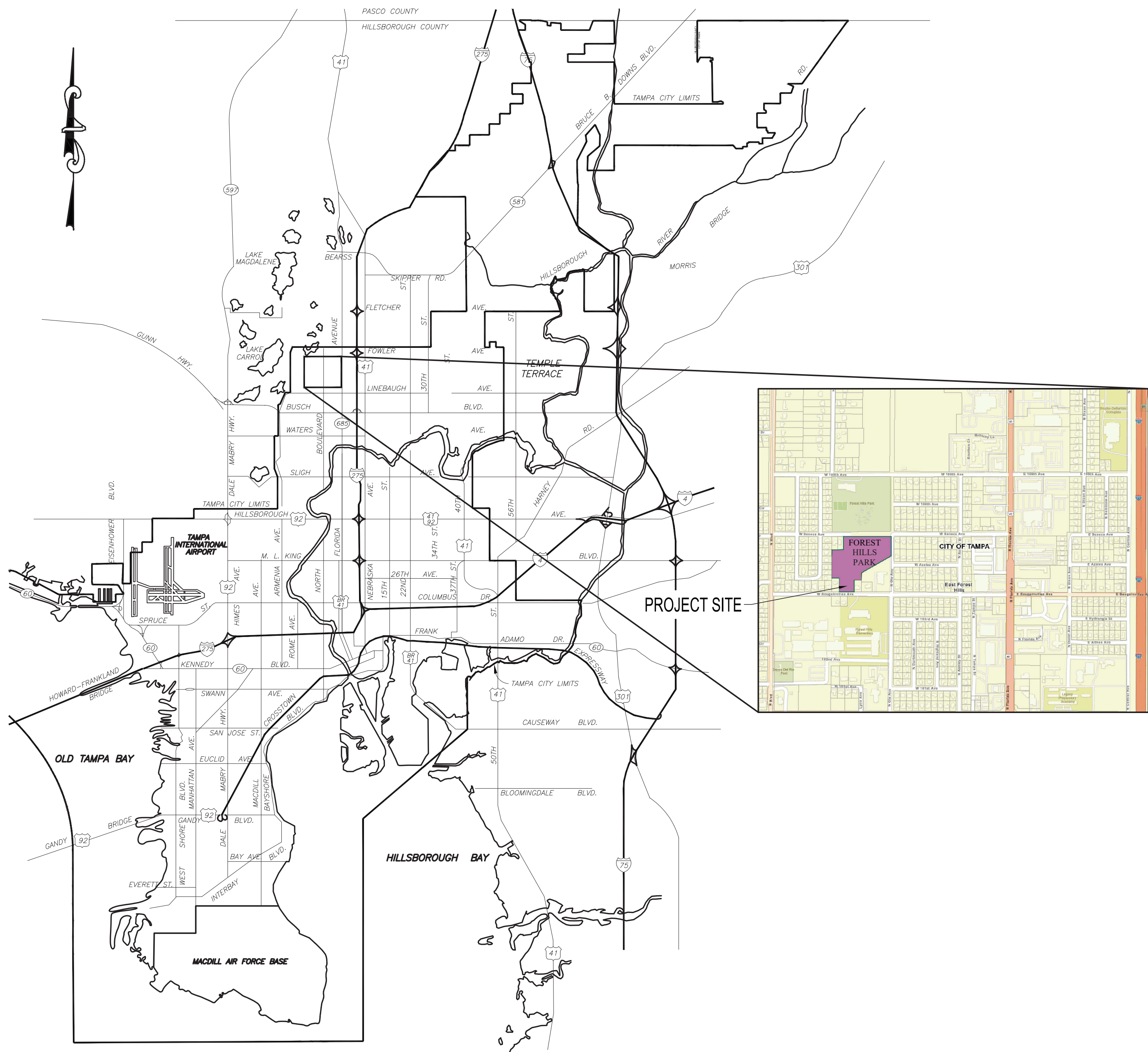
Contract Administration Department

Tampa Municipal Office Building

306 E Jackson Street #280A4N Fourth Floor

Tampa, Florida 33602

JULY 2026



CITY of TAMPA



**MOBILITY DEPARTMENT
STORMWATER ENGINEERING DIVISION**

PLANS FOR
FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
709 W. BOUGAINVILLEA AVE, TAMPA, FL 33612
CONTRACT NO. 26-C-00042

CIVIL ENGINEER MPH CIVIL CONSULTANTS, INC. P.O. BOX 1121 ODESSA, FL 33556 (813) 731-0052 H. DUANE MILFORD, P.E. #42657	ELECTRICAL ENGINEER KBA ENGINEERING, INC. 201 FLAGSHIP DRIVE, SUITE 106 LUTZ, FL 33549 (813) 909-1845 KEVIN G. CARLSON, P.E. #48052	STRUCTURAL ENGINEER RICHARD ADAMS ENGINEERS & CONSULTANTS, INC. 5507 E. BUSCH BLVD. TAMPA, FL 33617 (813) 985-4600 RICHARD R. ADAMS, P.E. #35836	GEOTECHNICAL ENGINEER GHD 5904 HAMPTON OAKS PKWY, SUITE F TAMPA, FL 33610 (813) 731-0052 JOHN C. PHILLIPS, P.E. #47586
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FLORIDA CA. NO. 30727

DES: HDM/CM
DRN: CM
CKD: HDM
DATE: 6/11/2026

No.	DATE	REVISIONS
3		
2		
1		

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

COVER SHEET

SHEET
1
OF 36

ABBREVIATIONS

AIR RELEASE VALVE	ARV
APPROXIMATE LOCATION	AL
BACK OF CURB	B.O.C.
BENCH MARK	BM
BURIED TELEPHONE	BT
CONCRETE PIPE	CP
DIAMETER RATIO	DR
DUCTILE IRON PIPE	DIP
EDGE OF PAVEMENT	E.P.
FIBER OPTIC CABLE	FOC
FLORIDA DEPT. OF TRANSPORTATION	FDOT
FORCE MAIN	FM
HIGH DENSITY POLYETHYLENE PIPE	HDPE
EL INVERT ELEVATION	IE OR INV
MAINTENANCE OF TRAFFIC	MOT
MANHOLE	MH OR M
PLUG VALVE	PV
POINT OF BEGINNING	P.O.B.
POINT OF COMMENCEMENT	P.O.C.
POINT OF INTERSECTION	PI
POLYVINYL CHLORIDE PIPE	PVC
REINFORCED CONCRETE PIPE	RCP
RESTRAINED MECHANICAL JOINT	RMJ
TOP OF BANK	TOB
TOP OF PIPE	TOP
VERIFIED VERT. AND HORZ. LOCATION	VVH
VITRIFIED CLAY PIPE	VCP
WASTEWATER	WW

LEGEND

RIGHT of WAY LINE		SILT SCREEN TO BE MAINTAINED THROUGHOUT CONSTRUCTION	
EDGE of PAVEMENT		PROPOSED TREE BARRICADE	
WATER LINE		PROPOSED CONCRETE PAYMENT	
PROPERTY OWNERSHIP		PROPOSED ASPHALT PAYMENT	
STORM SEWER		PROPOSED TURFBLOCK PAVING	
SANITARY SEWER		PROPOSED SHELL STRIP	
FENCE		PROPOSED HAMELIA PATENS	
VALVE		PROPOSED SODDED MOW STRIP	
BUTTERFLY VALVE		PROPOSED TRIPSACRUM DACTYLOIDES	
HYDRANT		PROPOSED GRADE - PAVED	
CATCH BASIN, GRATE		PROPOSED GRADE - UNPAVED	
WOOD POWER POLE		SERENOA REPENS	
CONCRETE LIGHT POLE		CALLICARPA AMERICANA	
GUY ANCHOR		GALPHIMIA GLAUCA	
FOUND CAPPED IRON ROD (F.C.I.R.)		HAMELIA PATENS	
FOUND NAIL & DISK (F.N.&D.)		JUNIPERUS VIRGINIANA	
FIBER OPTIC CABLE SPLICE BOX		FOREST AREA TO BE PLANTED BY PARKS DEPARTMENT AFTER THIS CONSTRUCTION	
WATER METER			
SANITARY MANHOLE			
CABLE TELEVISION SPLICE BOX			
MAILBOX			
BOLLARD			
OAK TREE			
PINE TREE			
EXISTING GRADE - PAVED			
EXISTING GRADE - UNPAVED			

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CITY PURCHASED ITEMS TO BE RECEIVED AND INSTALLED BY THE CONTRACTOR

ITEM DESC.	QTY.
Items from Xylem Water Solutions USA, Inc.	
Flygt NP-3202.095-616 Submersible Pumps 45HP/3PH/460V with 50' Motor Cable, FM Rated	2
Pump Test Certification	2
Extended Lifting Bails, 316SS	2
Spare Pump Seal	1
12" x 12" Discharge Connections, CI	2
Base Plates (Per Plans) w/ (8) Anchor Rods & Adhesive	2
15' Lifting Chain, 316SS	2
15' x 3" Guide Rails, 316SS	4
3" Guide Rail Brackets Upper, 316SS	2
Duplex MCP 460/3 Motor Control Panel (Per Plans & Specs)	1
Duplex PCP/PCSR Pump Control Panel per plans & specs with Motorola ACE 3600 RTU, Siemens Level Indicator and Transducer, Bracket, Leak Sensors	1
MCP J-Box	1
PCP J-Box	1
PM J-Box	1
Cable Holder Large, 316SS	1
Cable Holder Small, 316SS	2
Wetwell Hatch Cover 54" x 100" Clear Opening	1
Start-Up Service for Pumps, Controls, RTU Programming/Interfacing with Motorola SCADA System	1
Items from Ring Power Corporation	
Cat D125 GC Diesel Generator Set with Enclosure and Fuel Tank Assembly	1
Transfer Switch	1
Work Platform with Stairs - North	1
Work Platform with Stairs - South	1

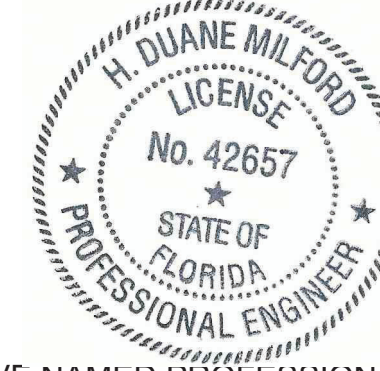
NOTE: Coordinate all items with provider's submittals to the City and with electrical drawings.

Digitally signed by Heyward Milford
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 Date: 2026.06.25 21:53:28-0400

Digitally signed by Kevin G Carlson
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 Date: 2026.06.26 10:33:31-0400

Digitally signed by Richard Ray Adams
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 Date: 2026.06.26 10:33:31-0400

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:



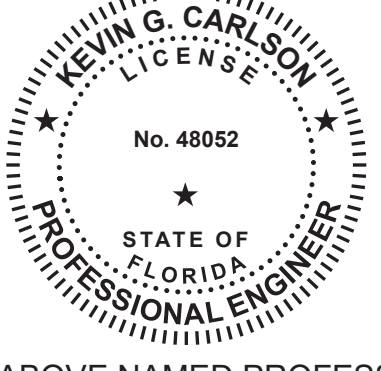
H. DUANE MILFORD, P.E. NO. 42657
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 P.O. BOX 1121
 ODESSA, FL 33556

THE ABOVE NAMED PROFESSIONAL SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.:

SHEETS 3 THROUGH 17

PRINTED COPIES OF THIS ITEM ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

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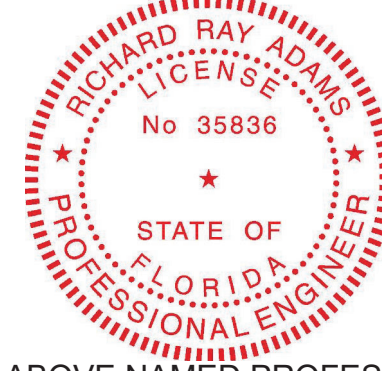
KEVIN G. CARLSON, P.E. NO. 48052
 KBA ENGINEERING, INC.,
 201 FLAGSHIP DRIVE, SUITE 106
 LUTZ, FL 33548

THE ABOVE NAMED PROFESSIONAL SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.:

SHEETS E1 THROUGH E14 AND G1.

PRINTED COPIES OF THIS ITEM ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:





RICHARD RAY ADAMS, P.E. NO. 35836
 RICHARD ADAMS ENGINEERS & CONSULTANTS, INC.,
 5507 E. BUSCH BOULEVARD
 TAMPA, FL 33617

THE ABOVE NAMED PROFESSIONAL SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.:

SHEETS S1 THROUGH S4

PRINTED COPIES OF THIS ITEM ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Plot Date: Wednesday, June 17, 2026

	No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES: HDM/CM DRN: CM CKD: HDM DATE: 6/11/2026		FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT INDEX, LEGEND & LIST OF CITY PURCHASES	SHEET 2 OF 36
	3			6						
	2			5						
	1			4						

SW 2026-02

GENERAL NOTES:

1. THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION IN ACCORDANCE WITH THE LINES AND GRADES SHOWN ON THE PLANS AND TO TOLERANCES STATED HEREIN OR IN THE SPECIFICATIONS. REFER TO THE BOUNDARY AND/OR TOPOGRAPHIC SURVEY FOR ADDITIONAL INFORMATION ON EXISTING CONDITIONS. AN ELECTRONIC CADD DRAWING OF THE EXISTING SURVEY DATA AND OF THE PROPOSED SITE IMPROVEMENTS IS AVAILABLE AND MAY BE USED FOR CONVENIENCE IN LAYOUT OF THE WORK. HOWEVER, USE OF THIS ELECTRONIC FORMAT IS AT THE CONTRACTOR'S SOLE RESPONSIBILITY AS ALL WORK MUST BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS FOR THE PROJECT. THE ACCURACY OF THESE FILES SHALL BE CHECKED AND VERIFIED BY THE USER. ANY DISCREPANCIES ARE TO BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO USE OF THIS INFORMATION.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROL MARKERS, RIGHT-OF-WAY AND PROPERTY CORNERS (MONUMENTS, PIPES, ETC.) FOR THE DURATION OF CONSTRUCTION. MARKERS SHALL BE CONTINUOUSLY FLAGGED AND SHALL BE RESET IMMEDIATELY BY A FLORIDA LICENSED LAND SURVEYOR IF ANY SHOULD BECOME DISTURBED.
3. CONTRACTOR IS TO EXERCISE CAUTION WHEN OPERATING NEAR OR ADJACENT TO EXISTING PUBLIC AND PRIVATE UTILITIES. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE DRAWINGS AND DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, ETC. AFFECTING HIS WORK PRIOR TO CONSTRUCTION.
4. IF UTILITY FIELD LOCATION MARKINGS ARE REQUIRED, THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION SCHEDULE WITH ALL UTILITY COMPANIES AS WELL AS ANY AFFECTED CITY AND COUNTY DEPARTMENTS BY PROVIDING A MINIMUM 48-HOUR NOTICE OF WHEN CONSTRUCTION WILL COMMENCE IN AN AREA IN ORDER TO PERMIT FIELD LOCATION OF UTILITY LINES PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING SUNSHINE 811 FOR THIS PURPOSE BY DIALING 811. FURTHER, THE CONTRACTOR IS CAUTIONED THAT THE SUNSHINE 811 SYSTEM MAY NOT REVEAL ALL ONSITE UTILITIES AND HIS FURTHER INVESTIGATION MAY BE REQUIRED. CONTRACTOR SHALL COORDINATE UTILITY RELOCATION WORK WITH AFFECTED UTILITY OWNER(S) AND SHALL ENDEAVOR TO COORDINATE HIS OWN WORK TO AVOID DELAYS IN HIS SCHEDULE.
5. ALL UTILITIES SHALL BE KEPT IN OPERATION EXCEPT WITH THE EXPRESS WRITTEN CONSENT OF THE UTILITY OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE EXISTING UTILITIES AND ANY AND ALL DAMAGE TO EXISTING UTILITIES AS A RESULT OF THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
6. THE CONTRACTOR SHALL ENDEAVOR TO PROTECT ALL ADJACENT IMPROVEMENTS WITHIN THE PROJECT AREA AND REPLACE ALL PAVEMENT, STABILIZED EARTH, DRIVEWAYS, SIDEWALKS, RETAINING WALLS, MAILBOXES, TRAFFIC SIGNS, ETC. REMOVED OR DAMAGED DURING CONSTRUCTION WITH THE SAME MATERIAL REMOVED OR DAMAGED OR AS OTHERWISE DIRECTED BY THE ENGINEER.
7. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK WITH WHICH A CONFLICT HAS ARISEN DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN IN THESE DOCUMENTS.
8. CONSTRUCTION SHALL BE CARRIED OUT "IN THE DRY". THE CONTRACTOR SHALL REVIEW SITE CONDITIONS AND DETERMINE METHODS AND EXTENT OF DEWATERING NECESSARY AND SHALL INCLUDE COSTS OF DEWATERING IN THE BID. NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR CONTROL OF GROUND OR SURFACE WATER OR FOR ADDITIONAL MATERIALS OR REWORK REQUIRED AS A RESULT OF INADEQUATE OR INSUFFICIENT DEWATERING.
9. ALL WORK TO BE PERFORMED ON THIS PROJECT SHALL BE CONSTRUCTED ACCORDING TO THE BEST PRACTICES OF THE INDUSTRY AND IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, COUNTY AND/OR CITY CODES, ORDINANCES, TECHNICAL STANDARDS AND PERMIT CONDITIONS.
10. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY RIGHT OF WAY PERMITS FOR WORK WITHIN THE RIGHTS OF WAY.
11. THE CONTRACTOR SHALL COORDINATE WITH TECO REGARDING THE PROPOSED ELECTRICAL SERVICE (SEE ELECTRICAL PLANS AND SPECIFICATIONS).
12. NO PARKING OR STORAGE OF VEHICLES, EQUIPMENT, OR MATERIALS IS ALLOWED WITH THE PROTECTIVE RADIUS OF ANY TREE TO REMAIN.
13. ALL FORCE MAIN BENDS, FITTINGS, AND VALVES SHALL HAVE RESTRAINED MECHANICAL JOINTS AS MANUFACTURED BY "MEGA-LUG", OR APPROVED EQUAL. ADDITIONAL PIPE JOINTS UPSTREAM AND DOWNSTREAM OF EACH BEND, FITTING, OR VALVE SHALL ALSO BE RESTRAINED IN ACCORDANCE WITH THE TABLE INCLUDED IN THIS PLAN SET.
14. THE FORCE MAIN SHALL BE CONSTRUCTED IN A STRAIGHT ALIGNMENT BETWEEN THE SPECIFIED POINTS OF HORIZONTAL AND VERTICAL DEFLECTION. THERE SHALL BE NO INTERMEDIATE HIGH OR LOW POINTS BETWEEN THE VERTICAL POINTS OF DEFLECTION.
15. THRUST BLOCKS ARE NOT PERMITTED ON FORCE MAINS.
16. FORCE MAINS SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING A RECORD SURVEY(S) PREPARED AND SUBMITTED BY A LICENSED PROFESSIONAL SURVEYOR AND MAPPER INCLUDING, BUT NOT LIMITED TO, LOCATION AND FINISHED GRADE ELEVATIONS SUFFICIENT TO DETERMINE DIRECTION OF DRAINAGE AND ELEVATIONS OF RETENTION/DETENTION AREAS, MITIGATION AREAS AND DITCH/CHANNEL CONVEYANCES INCLUDING TOPS OF BANKS, TOES OF SLOPES, POND BOTTOMS AND WATER LEVELS; ELEVATIONS AND DIMENSIONS OF POND CONTROL STRUCTURES, SPILLWAYS, SKIMMERS/BAFFLES, SUMPS AND UNDERDRAINS; TIES TO WATER LINES, VALVES, BENDS, SERVICE CONNECTIONS; WATER LINE ELEVATIONS AND CLEARANCES FROM SANITARY AND STORM SEWER PIPES; TIES TO SANITARY SEWER LINES, CLEANOUTS AND SERVICE CONNECTIONS; MANHOLE RIM AND INVERT ELEVATIONS; TIES TO STORM SEWER LINES AND STORM STRUCTURE TOP AND INVERT ELEVATIONS; PLUS LOCATIONS, DIMENSIONS AND ELEVATIONS OF ALL OTHER CONSTRUCTION COMPONENTS WHICH VARY FROM THE DESIGN. TIES TO UNDERGROUND UTILITIES SHALL BE DIMENSIONED FROM PERMANENT ABOVE GROUND STRUCTURES (BUILDINGS, WALKS, POLES, MANHOLES, VALVE BOXES, ETC.) FOUR COPIES OF THE SIGNED AND SEALED RECORD SURVEY AND ONE COPY OF THE SURVEY IN AUTOCAD (.DWG) FORMAT SHALL BE PROVIDED. A RECORD SURVEY DEPICTING THE AS-BUILT CONDITION OF ONLY WATER AND SEWER UTILITIES SHALL BE PROVIDED IF THESE UTILITIES ARE TO BE PLACED IN SERVICE PRIOR TO CLOSEOUT OF THE PROJECT.

PROJECT NOTES:

1. REFERENCE SURVEY: LIMITED TOPOGRAPHIC SURVEY PREPARED BY IMPACT SURVEYING AND MAPPING, INC., DATED 5/6/24.
2. THE PROJECT SITE IS LOCATED WITHIN ZONE AE, SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD, AS SHOWN ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 120114-12057C0212H, DATED 8/28/200/. BASE FLOOD ELEVATION IS 31.7, NAVD 1988.
3. ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND REFERENCE RTK GPS OBSERVATIONS TIED TO THE FLORIDA FPRN NETWORK.
4. BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE AS REFERENCED TO THE NORTH AMERICAN DATUM 1983, ADJUSTMENT OF 2011, NAD83(2011) AND ARE SHOWN IN US SURVEY FEET.

ROAD, DRAINAGE AND GRADING CONSTRUCTION NOTES:

1. ALL IMPROVEMENTS WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, AND THE LATEST EDITION OF CITY OF TAMPA TECHNICAL STANDARDS, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARD INDEXES, AND THE FDOT UTILITY ACCOMMODATION MANUAL OR IN ACCORDANCE WITH THE REQUIREMENTS OF THE STATE OR COUNTY HAVING JURISDICTION OVER THE RIGHT-OF-WAY, AS APPLICABLE.
2. PAVEMENT AND GRADING SHALL BE SLOPED TO THE PROPOSED ELEVATIONS AND/OR CONTOURS SHOWN ON THE DRAWINGS. SMOOTH, CONSTANT SLOPES SHALL BE MAINTAINED BETWEEN PROPOSED ELEVATIONS AND CONTOURS. PROPOSED CONTOUR ELEVATIONS, SPOT ELEVATIONS AND FINISHED GRADE ELEVATIONS IN NON-PAVED AREAS REFER TO FINISHED SURFACE ELEVATIONS ONCE SODDING OR SEEDING IS COMPLETE AND IN PAVED AREAS REFER TO FINISHED PAVEMENT ELEVATIONS.
3. FINISHED GRADES ADJACENT TO WALKS, CURBS OR SLABS SHALL BE 1 INCH BELOW ADJACENT SURFACE, UNLESS NOTED OTHERWISE IN THE PLANS.
4. ALL STORM SEWER PIPES SHALL BE REINFORCED CONCRETE PIPE (RCP), UNLESS OTHERWISE NOTED. DRAINAGE INLET STRUCTURES SHALL BE PRECAST AND CONSTRUCTED IN ACCORDANCE WITH THE CITY OF TAMPA TECHNICAL STANDARDS AND STANDARD DETAILS. CAST-IN-PLACE OR PRECAST JUNCTION BOXES OR MANHOLES SHALL BE CONSTRUCTION IN ACCORDANCE WITH FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS.
5. MITERED END SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX 430-021 OR -022, AS APPLICABLE. IN ALL CASES, MITER SLOPE SHALL MATCH THE POND OR DITCH SIDE SLOPE. FLARED END SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT INDEX 430-020 WITH TOE WALL AND JACKET FOR ALL OUTLET LOCATIONS WHICH ARE ABOVE POND OR DITCH BOTTOMS. WHERE PIPE-END RIP RAP IS CALLED FOR, STONE OR SAND-CEMENT RIP RAP SHALL BE PLACED IN A RECTANGULAR PATTERN, 3 FEET WIDER THAN THE OUTLET WIDTH AND 5 PIPE DIAMETERS LONG.
6. ALL PIPES WITH INVERTS LOWER THAN POND BOTTOMS SHALL BE INSTALLED WITH A 5' LONG (MIN.) RIP-RAP SUMP, 2 PIPE DIAMETERS WIDE.
7. ALL AREAS DISTURBED DURING CONSTRUCTION (EXCEPT LANDSCAPE BEDS), SHALL BE SODDED OR SEEDED AND MULCHED TO PROVIDE A FULLY GRASSED SITE AT SUBSTANTIAL COMPLETION. CONTRACTOR IS RESPONSIBLE FOR CONTROLLING SITE EROSION AND SHALL PROVIDE ADDITIONAL SOD, SOD STAKING OR SEED & MULCH AND SHALL FILL, LEVEL, REPAIR AND RE-GRASS ALL ERODED OR DEAD AREAS AS NECESSARY, TO ACHIEVE AN EROSION-FREE SITE (FREE FROM RUTTING, ETC.) TO THE LINES & GRADES SHOWN HEREIN UPON FINAL ACCEPTANCE. ALL SWALES AND ALL SURFACES 6:1 OR STEEPER SHALL BE SODDED IN ADDITION TO OTHER LOCATIONS SHOWN ON OR DETAILED IN THE PLANS. SEED AND SOD SHALL BE 95% WEED-FREE ARGENTINE BAHIA UNLESS OTHERWISE INDICATED OR REQUIRED TO MATCH EXISTING AND SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH FDOT SPECIFICATION SECTION 570 AND 575, AS APPLICABLE, INCLUDING THE INITIAL ROLLING TO FULLY SEAT SOD TO THE SUBGRADE AND ELIMINATE IRREGULAR SURFACE.
8. EROSION CONTROL FABRIC SHALL BE PROVIDED IN AREAS SHOWN ON THE PLANS. FABRIC SHALL BE LANDLOK TRM 435, OR APPROVED EQUAL AND SHALL BE INSTALLED (INCLUDING ANCHORING, TRENCHING AND OVERLAPPING) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE SOD OVER FABRIC AND WATER AS NECESSARY TO ESTABLISH A FULLY GRASSED INSTALLATION. CORRECT ANY EROSION AREAS IN OR ADJACENT TO FABRIC INSTALLATION.

DEMOLITION NOTES:

1. ALL EXISTING UNDERGROUND WATER, SEWER, IRRIGATION AND STORM SEWER PIPING AND STRUCTURES WHICH FALL WITHIN 5 FEET OF THE LIMITS OF NEW INFRASTRUCTURE, UNLESS OTHERWISE NOTED, SHALL BE COMPLETELY REMOVED AND LEGALLY DISPOSED OF OFFSITE. ALL OTHER FOUND UNDERGROUND UTILITIES LEFT IN PLACE SHALL BE CLEARLY SHOWN ON THE CONTRACTOR AS-BUILTS AND GROUTED IN-PLACE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2. ALL INCIDENTAL PAVING, SIDEWALKS, BOLLARDS, FENCES, HEDGES, BUSHES AND OTHER APPURTENANCES WITHIN CONSTRUCTION LIMITS SHALL ALSO BE REMOVED. TREES NOT SPECIFICALLY SHOWN TO BE REMOVED SHALL BE PROTECTED WITH TREE BARRICADES FOR THE DURATION OF CONSTRUCTION. TREE LIMB OR ROOT PRUNING SHALL BE DONE IN THE PRESENCE OF A CERTIFIED ARBORIST AND IN ACCORDANCE WITH THE CITY TREE PERMIT.
3. ALL MATERIALS DEMOLISHED OR REMOVED SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF AT THE CONTRACTOR'S EXPENSE UNLESS ON-SITE USE IS OTHERWISE APPROVED.
4. NO OPEN BURNING WILL BE ALLOWED AT THE SITE UNLESS A PLAN IS APPROVED BY THE OWNER, ENGINEER AND THE APPROPRIATE REGULATORY AUTHORITY.
5. CONTRACTOR SHALL REPAIR, IN KIND, ALL ADJACENT STRUCTURES, PAVEMENTS, ETC. DAMAGED DURING DEMOLITION OR CONSTRUCTION.

ENVIRONMENTAL PROTECTION NOTES

GENERAL:

1. CONSTRUCTION SHALL PROCEED SUCH THAT ALL STORMWATER FACILITIES (PONDS, RETENTION AREAS, CONTROL STRUCTURES, STORM SEWERS) TO WHICH A CONSTRUCTION AREA DRAINS ARE IN PLACE AND OPERATIONAL PRIOR TO CONSTRUCTION OF IMPERVIOUS SURFACES WITHIN THAT AREA.
2. NO EXCAVATION SHALL EXTEND BELOW THE PERMITTED DESIGN DEPTHS OR ELEVATIONS SHOWN ON THE DRAWINGS UNLESS ADDITIONAL TESTING SUPPORTS SUCH OVER-EXCAVATION AND NO LOWER SEMI-CONFINING UNIT CLAYEY SOIL MATERIAL AND/OR LIMESTONE MATERIALS SHALL BE EXCAVATED REGARDLESS IF THESE MATERIALS ARE ENCOUNTERED WITHIN THE PERMITTED EXCAVATION DEPTHS OR ELEVATIONS. IF ANY LOWER SEMI-CONFINING UNIT CLAYEY SOIL MATERIALS OR LIMESTONE MATERIALS ARE ENCOUNTERED ABOVE THE PERMITTED DEPTHS OR ELEVATIONS, EXCAVATION OPERATIONS SHALL IMMEDIATELY CEASE IN THE GENERAL AREA. CONTRACTOR SHALL NOTIFY THE ENGINEER (AND SWFWMD AND/OR HILLS. CTY. E.P.C., AS APPLICABLE) PRIOR TO ANY FURTHER EXCAVATION IN THESE AREAS.

DEWATERING ACTIVITIES:

1. PRIOR TO ANY GROUNDWATER DEWATERING ACTIVITIES, CONTRACTOR SHALL OBTAIN COVERAGE UNDER THE FDEP GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUNDWATER FROM ANY NON-CONTAMINATED SITE ACTIVITY PURSUANT TO CHAPTER 62-621.300(2), F.A.C.
2. ALL WATER COLLECTED AND PUMPED DURING TRENCH DEWATERING ACTIVITIES SHALL BE DISPOSED OF IN UPLAND AREAS INTO DOUBLE STAKED HAY BALES. DISCHARGE LOCATIONS SHALL BE A MINIMUM OF 75 FEET FROM THE NEAREST PROPERTY BOUNDARY, WETLAND JURISDICTIONAL OR SURFACE WATER AREA, TO ALLOW FOR MAXIMUM OVERLAND FILTRATION OF SOIL PARTICLES.



EROSION & SEDIMENT CONTROL BMPS:

1. STAKED OR FLOATING SILT SCREENS, HAY BALES, OR OTHER APPROPRIATE BEST MANAGEMENT PRACTICES (BMPS), SHALL BE UTILIZED AS SILT BARRIERS AND PLACED IN LOCATIONS SHOWN ON THE PLANS AND AT OTHER LOCATIONS AS REQUIRED TO KEEP SEDIMENT FROM REACHING WATER BODIES, WETLAND AREAS, ADJACENT PROPERTIES OR RIGHTS-OF-WAY. THESE BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION AND SHALL BE CONSIDERED AS LIMITS OF CONSTRUCTION. PERIMETER CLEARING AND GRUBBING ALONG THE LIMITS OF CONSTRUCTION IS ALLOWED, IF NECESSARY, TO FACILITATE INSTALLATION OF SILT BARRIERS PROVIDING THAT DISTURBANCE IS THE MINIMUM WIDTH NECESSARY FOR SUCH WORK. PERIMETER BARRIERS SHALL BE FULLY INSTALLED, INCLUDING BACKFILLING IF NECESSARY, PRIOR TO ANY ADDITIONAL CLEARING AND GRUBBING OPERATIONS WITHIN THE CONSTRUCTION LIMITS.
2. TEMPORARY STOCKPILES SHALL NOT BE LOCATED ADJACENT TO STORM SEWER INLETS, DITCHES, UNDISTURBED WETLANDS OR SURFACE WATER AREAS WHERE SEDIMENTATION FROM STOCKPILES MAY CAUSE DAMAGE. ADDITIONALLY, SILT BARRIERS SHALL CONTINUOUSLY AND FULLY ENIRCLE ALL STOCKPILES WHICH WILL REMAIN FOR LONGER THAN 24 HOURS TO CONTAIN MATERIALS WITHIN A REASONABLY CONFINED AREA.
3. OFF-SITE VEHICLE TRACKING OF SEDIMENT SHALL BE MINIMIZED BY CLEANING VEHICLE UNDERCARRIAGE AREAS OR OTHER EFFECTIVE METHODS PRIOR TO SITE DEPARTURE.
4. ALL FUGITIVE DUST SHALL BE CONTROLLED ON SITE. ONLY AREAS SCHEDULED FOR IMMEDIATE CONSTRUCTION SHALL BE CLEARED OR STRIPPED OF VEGETATION. WATERING, APPLICATION OF CALCIUM CHLORIDE OR OTHER PRIOR APPROVED MEANS OF DUST CONTROL SHALL BE EMPLOYED TO PREVENT THE EMANATION OF DUST FROM THE SITE. PERMANENT GRASSING, LANDSCAPING AND OTHER SITE WORK SHALL BE INCORPORATED AS SOON AS POSSIBLE.
5. CONTRACTOR SHALL USE OTHER STRUCTURAL BMPS, AS NECESSARY, TO DIVERT RUNOFF FROM EXPOSED SOILS, STORE RUNOFF AND/OR SEDIMENT ON-SITE, OR OTHERWISE LIMIT RUNOFF AND THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE.
6. CONTRACTOR SHALL INSPECT AND MAINTAIN ALL SEDIMENT AND EROSION CONTROL BMPS TO ASSURE PROPER OPERATION. INSPECTIONS SHALL OCCUR AT A MINIMUM INTERVAL OF ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 1/4-INCH OR GREATER.
7. ANY MAINTENANCE OPERATIONS NEEDED TO ASSURE PROPER OPERATION OF ALL CONTROLS, SHALL BE DONE IN A TIMELY MANNER, BUT IN NO CASE LATER THAN 7 CALENDAR DAYS FOLLOWING THE INSPECTION IN WHICH THE NEED IS IDENTIFIED.
8. TEMPORARY OR PERMANENT STABILIZATION BMPS SHALL BE USED AS SOON AS PRACTICABLE, BUT IN NO CASE LESS THAN 14 DAYS, IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE BEEN TEMPORARILY OR PERMANENTLY CEASED. STABILIZATION BMPS MAY INCLUDE TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, GEOTEXTILES, SOD STABILIZATION, SWALE SODDING, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, PRESERVATION OF MATURE VEGETATION, AND OTHER APPROPRIATE MEASURES.
9. ONCE CONSTRUCTION IS COMPLETED AND FINISHED GRADING AND FINAL STABILIZATION HAS BEEN ACHIEVED, SILT BARRIERS SHALL BE COMPLETELY REMOVED TO THE SATISFACTION OF THE ENGINEER AND PRIOR TO FINAL ACCEPTANCE.

WETLANDS & TREE PROTECTION:

1. CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED IN WETLAND JURISDICTIONAL OR SURFACE WATER AREAS UNLESS SUCH CONSTRUCTION PRACTICES ARE SPECIFICALLY IDENTIFIED IN THIS PLAN OR APPROVED IN A PLAN OF OPERATION SUBMITTED TO THE ENGINEER & THE APPROPRIATE REGULATORY AUTHORITIES.
2. WHERE CONSTRUCTION IS NECESSARY ACROSS OR ADJACENT TO WETLAND JURISDICTIONAL OR SURFACE WATER AREAS, SILT BARRIERS SHALL BE INSTALLED AS SHOWN ON THE PLANS.
3. THE CONTRACTOR SHALL NOT REMOVE ANY TREES WITHOUT PRIOR AUTHORIZATION FROM THE CITY'S NATURAL RESOURCES DEPT. OTHER THAN THOSE SPECIFICALLY SHOWN TO BE REMOVED.
4. FERTILIZERS OR PESTICIDES SHALL NOT BE USED EXCEPT TO THE EXTENT ALLOWED BY THE LANDSCAPE SPECIFICATIONS. NUTRIENTS SHALL BE APPLIED ONLY AT RATES NECESSARY TO ESTABLISH AND MAINTAIN VEGETATION.
5. ANY AND ALL TREE TRIMMING OR ROOT PRUNING SHALL BE SUPERVISED BY A CERTIFIED ARBORIST AND PERFORMED CLEANLY WITH APPROVED CUTTING TYPE EQUIPMENT, SUCH AS CHAINSAW OR HAND SAW.

Plot Date: Wednesday, June 17, 2026

	BY _____ DATE: H. Duane Milford, P.E. No. 42657 FLORIDA PROFESSIONAL ENGINEER	No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES: HDM/CM		FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT	SHEET 3 OF 36
		3			6			DRN: CM		GENERAL NOTES	
		2			5			CKD: HDM			
		1			4			DATE: 6/11/2026			

SW 2026-02



LEGEND

FOREST HILL PARK PROPERTY
 FOREST HILL PARK DRAINAGE AREA



Plot Date: Wednesday, June 17, 2026

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FLORIDA, CA. NO. 30727

BY

DATE: H. Duane Milford, P.E. No. 42657
 FLORIDA PROFESSIONAL ENGINEER

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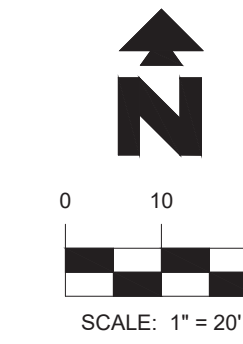
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 DRN: CM
 CKD: HDM
 DATE: 6/11/2026

CITY of TAMPA
 Mobility Department
 Stormwater Engineering Division

FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT

DRAINAGE BASIN MAP

SHEET
4
 OF 36



CONTRACTOR TO SECURE ENTIRE WORK AREA DURING ALL PHASES OF CONSTRUCTION.

PHASING / SEQUENCING NOTES:

1. THESE NOTES SHALL BE COORDINATED WITH ALL OTHER APPLICABLE DEMOLITION AND CONSTRUCTION REQUIREMENTS, INCLUDING PERMIT CONDITIONS, FOR THIS PROJECT.
2. THE INTENT OF THIS PHASING PLAN (IN ORDER OF PRIORITY) IS TO:
 - a. ADEQUATELY SECURE THE CONSTRUCTION SITE TO PROTECT THE SAFETY OF PARK USERS IN AREAS TO BE MAINTAINED FOR PARK USE.
 - b. MINIMIZE DISRUPTION TO PARK USE TO THE GREATEST EXTENT POSSIBLE.
 - c. ADEQUATELY ACCOMMODATE CONSTRUCTION ACTIVITIES.
3. THESE NOTES ARE INTENDED TO BE A GUIDE TO THE CONTRACTOR AND ARE NOT INTENDED TO BE A COMPLETE LIST OF SEQUENCING. CONSTRUCTION NOT SPECIFICALLY DESCRIBED IN THIS SEQUENCING DOES NOT ALLEVIATE THE CONTRACTOR'S RESPONSIBILITY TO COMPLETE ALL CONSTRUCTION REQUIRED BY THESE PLANS. PROPOSED ALTERATIONS TO THIS SEQUENCING SHALL BE REVIEWED WITH THE CITY STORMWATER DIVISION.
4. EROSION CONTROL AND TREE PROTECTION SHALL BE IN PLACE BEFORE ANY OTHER WORKS BEGINS.

PHASING SHALL PROCEED AS FOLLOWS:

PHASE 1:

1. CONSTRUCT PHASE 1 PORTION OF STORMSEWER IN ORDER TO MAINTAIN FLOW OF WATER FROM BOUGAINVILLE AVENUE TO THE STORMWATER POND, AND FROM THE STORMWATER POND TO THE EXISTING PUMP; AND TO SUBSEQUENTLY MAINTAIN ACCESS TO THE TEMPORARY TRAIL THROUGHOUT THE REMAINDER OF CONSTRUCTION.
2. COMPLETE EARTHWORK NECESSARY TO INSTALL TEMPORARY TRAIL, CONSTRUCT TEMPORARY TRAIL, AND STABILIZE ALL IMPACTED AREAS.
3. CONSTRUCT NEW PERMANENT FITNESS STATION SLAB, AND RELOCATE / REINSTALL FITNESS EQUIPMENT IN COORDINATION WITH PARKS DEPARTMENT PERSONNEL.
4. COMPLETE TRAIL DEMOLITION, STABILIZED AREAS FURTHER IMPACTED, AND PROVIDE TEMPORARY SIGNAGE FOR TRAIL USE.
5. SECURE THE WORK AREA WITH TEMPORARY CONSTRUCTION FENCING AND SIGNAGE.

PHASE 2:

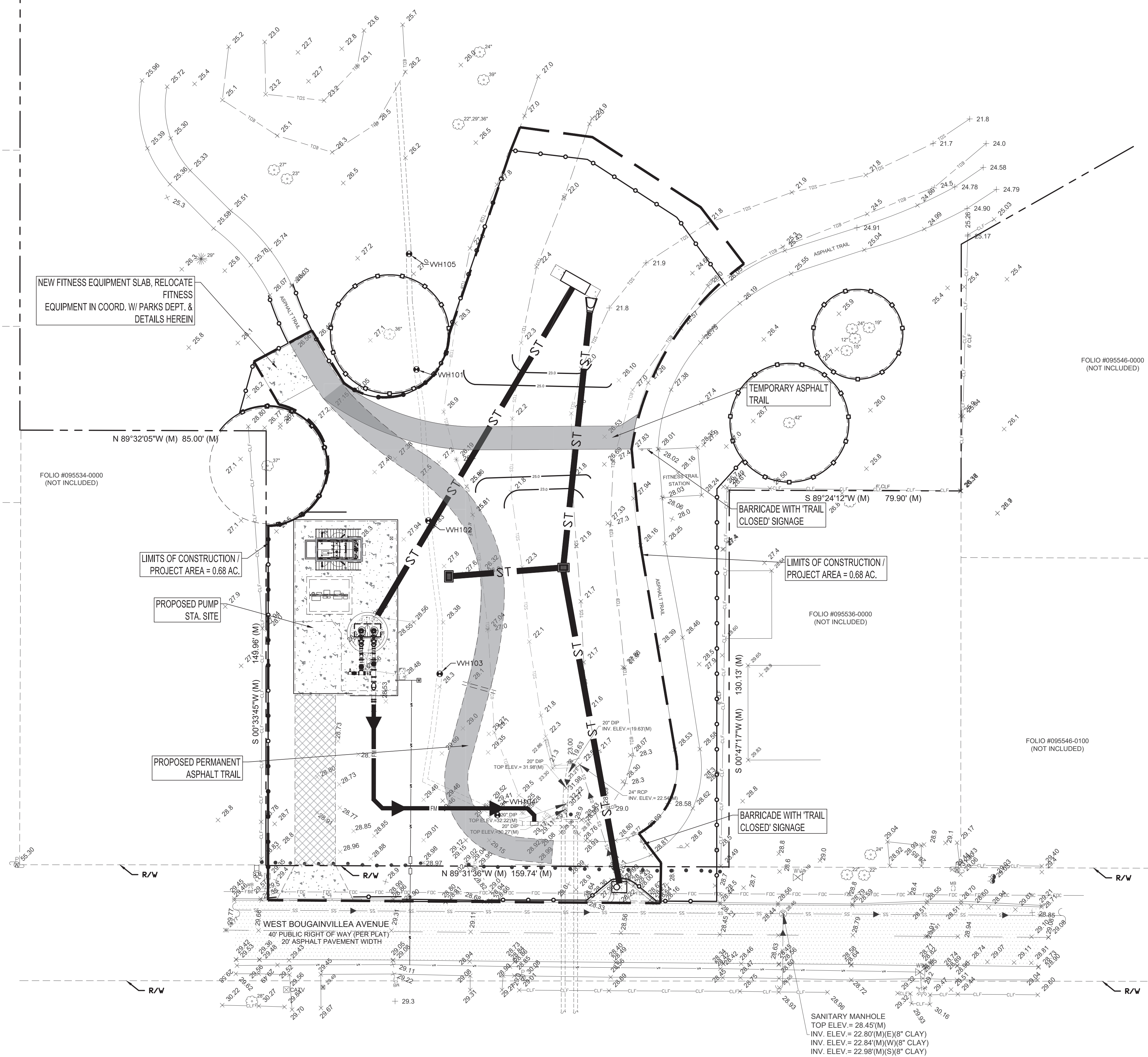
1. CONSTRUCT / INSTALL NEW LIFT STATION WETWELL AND COMPLETE STORMSEWER INFLUENT PIPE FROM POND.
2. CONSTRUCT COMPLETE LIFT STATION SITE AND DRIVEWAY. ALWAYS, PROTECT SLAB AND DRIVEWAY FROM HEAVY CONSTRUCTION LOADS. SEQUENCE AS NECESSARY TO AVOID DAMAGE FROM SUCH LOADS.
3. CONSTRUCT & CONNECT TO FORCE MAIN TO DOWNSTREAM POINT OF CONNECTION WITHOUT DISTURBING ANY APPURTENANCES ASSOCIATED WITH THE EXISTING PUMPING SYSTEM. COORDINATE WITH CITY STORMWATER FOR POSSIBLE TEMPORARY SHUT DOWN OF THE UPSTREAM EASTRIDGE PUMP STATION. ALSO, COORDINATE WITH WEATHER FORECASTS TO AVOID SHUTDOWN OF BOTH STATIONS DURING RAINY SEASON OR FORECASTED TROPICAL STORMS.
4. STABILIZE IMPACTED AREAS.
5. INSTALL STATION SITE FENCE AND GATE, SECURE NEW STATION SITE.

PHASE 3:

1. ACHIEVE SUBSTANTIAL COMPLETION OF NEW PUMP STATION.
2. COORDINATE PRELIMINARY START-UP WITH PUMP EQUIPMENT SUPPLIER.
3. ONLY AFTER NEW PUMP STATION IS FULLY OPERATIONAL, DISMANTLE AND REMOVE EXISTING PUMP AND PIPING.
4. COMPLETE ALL STORMSEWER INSTALLATION INCLUDING THE NEW CURB INLET IN BOUGAINVILLE AVENUE.
5. COMPLETE SITE EARTHWORK AND PERMANENT TRAIL.
6. COMPLETE LANDSCAPING AND SODDING.

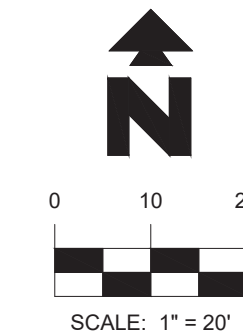
PHASE 4 - PROJECT COMPLETION:

1. COMPLETE ALL CONSTRUCTION REQUIREMENTS PER CONTRACT DOCUMENTS.
2. COORDINATE FINAL START-UP WITH PUMP EQUIPMENT SUPPLIER.



Plot Date: Wednesday, June 17, 2026

<p>MPH CIVIL CONSULTANTS, INC. P.O. Box 1121, Odessa, FL 33556 813.731.0052 duane@mpciv.com www.mpciv.com</p>	<p>DATE: _____</p> <p>H. Duane Milford, P.E. No. 42657 FLORIDA PROFESSIONAL ENGINEER</p>	No.	DATE	REVISIONS	No.	DATE	REVISIONS	<p style="font-size: 1.2em; font-weight: bold;">CITY of TAMPA</p> <p style="font-weight: bold;">Mobility Department Stormwater Engineering Division</p>	<p style="font-weight: bold;">FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT</p> <p style="font-size: 1.5em; font-weight: bold;">CONSTRUCTION PHASING PLAN</p>	<p style="font-size: 1.5em; font-weight: bold;">SHEET 5 OF 36</p>
		3			6					
		2			5					
		1			4					



TEST HOLE TABLE:

TEST HOLE DATE	TEST HOLE NUMBER	UTILITY SIZE, MATERIAL & TYPE (SIZE MEASURED IN INCHES AND IS O.D.)	NORTHING	EASTING	GROUND ELEVATION	MANUAL DEPTH (TOP)	UTILITY ELEVATION (TOP)	UTILITY OWNER	UTILITY DIRECTION	SURFACE TYPE
9/3/2025	VVH101	24" Ductile Iron Pipe	1349046.1	506116.2	27.1'	3.65'	23.47'	Hills Co	N-S	Soil
9/3/2025	VVH102	24" Ductile Iron Pipe	1348994.0	506120.3	27.9'	3.45'	24.41'	Hills Co	N-S	Soil
9/3/2025	VVH103	24" Ductile Iron Pipe	1348941.1	506124.2	28.6'	3.24'	25.31'	Hills Co	N-S	Soil
9/3/2025	VVH104	24" Ductile Iron Pipe	1348892.3	506144.1	29.5'	4.42'	25.06'	Hills Co	NE-SW	Soil
10/9/2025	VVH105	24" Ductile Iron Pipe	1349086.0	506113.6	27.19'	4.16'	23.03'	Hills Co	NE-SW	Soil

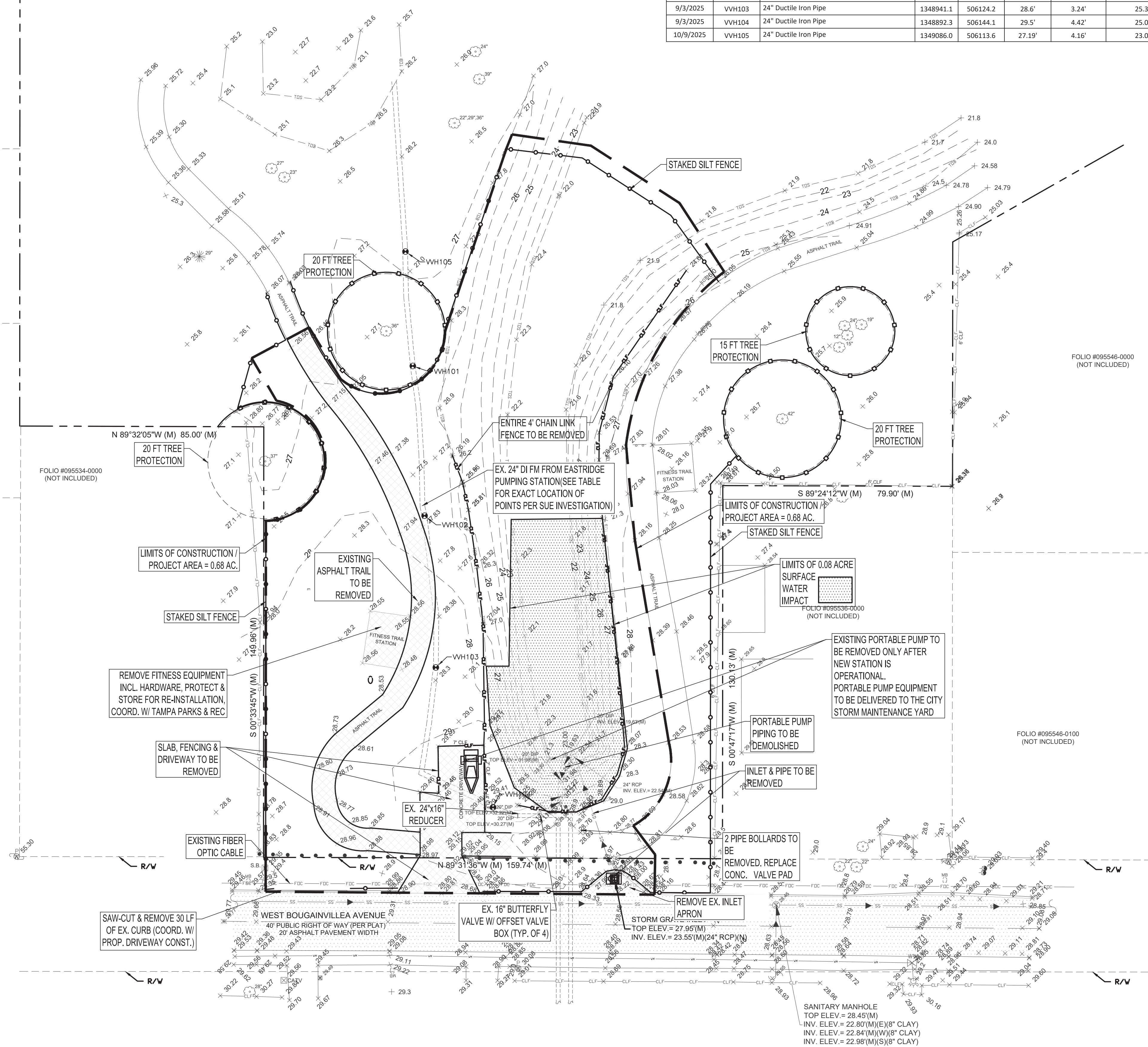
LEGEND

- PAVING TO BE REMOVED IN COORDINATION WITH CONSTRUCTION PHASING
- TREE BARRICADE
- SILTATION BARRIER TO BE MAINTAINED THROUGHOUT CONSTRUCTION
- CLF - EXISTING CHAIN LINK FENCE

CONTRACTOR TO SECURE ENTIRE WORK AREA DURING ALL PHASES OF CONSTRUCTION.

COORDINATE WITH SEQUENCING ON SHEET 5 AND ALL OTHER PROJECT REQUIREMENTS.

IF ANY DAMAGE OCCURS TO THE RIGHT OF WAY OF WEST BOUGAINVILLE AVENUE, COMPLY WITH THE CITY OF TAMPA MOBILITY DEPARTMENT PAVEMENT AND RIGHT OF WAY RESTORATION REQUIREMENTS, REVISION MARCH 2024.



Plot Date: Wednesday, June 17, 2026

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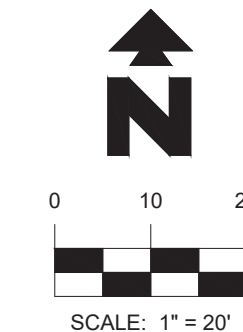
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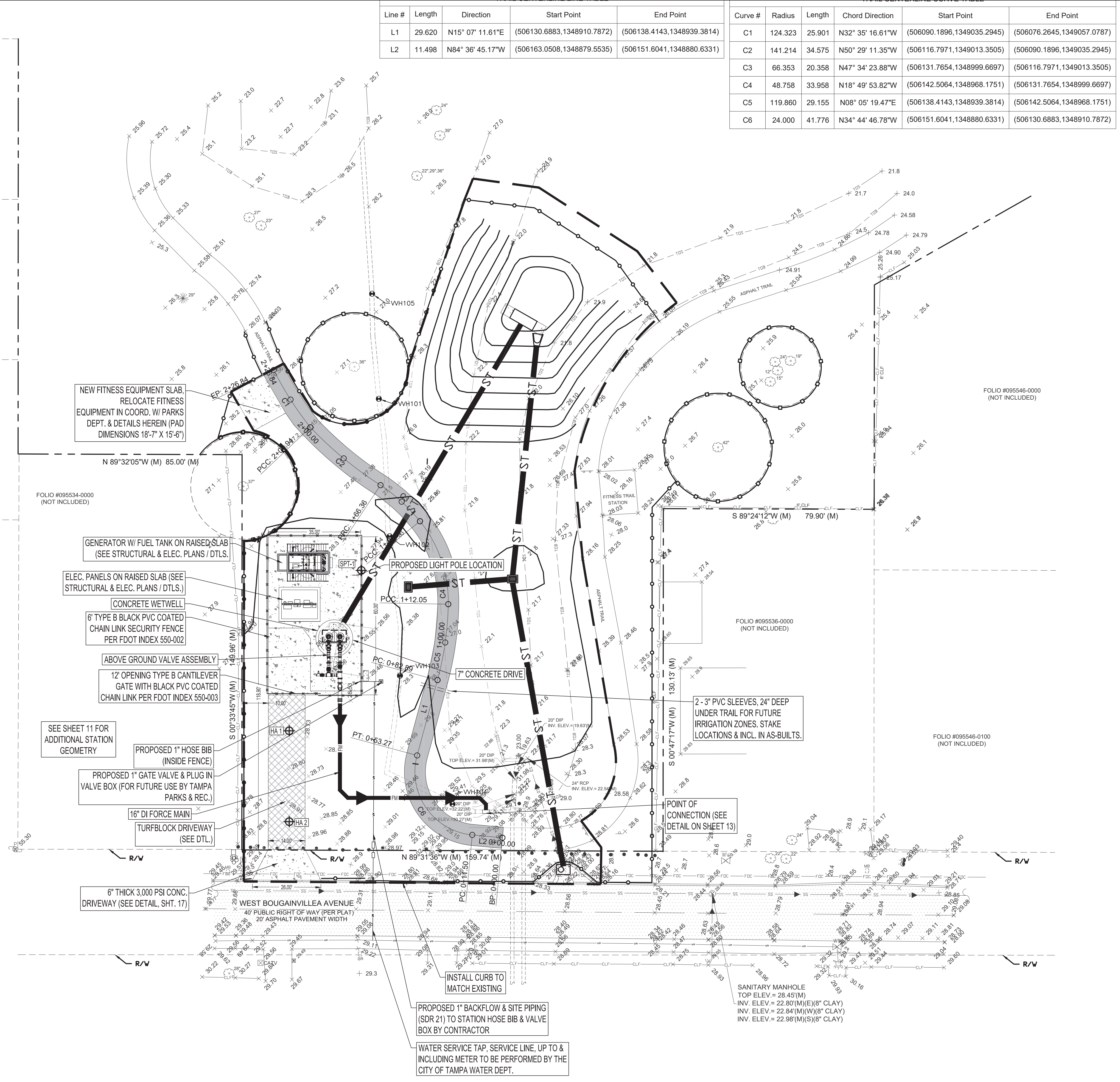
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 Stormwater Engineering Division

FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
EXISTING CONDITIONS & SITE DEMOLITION



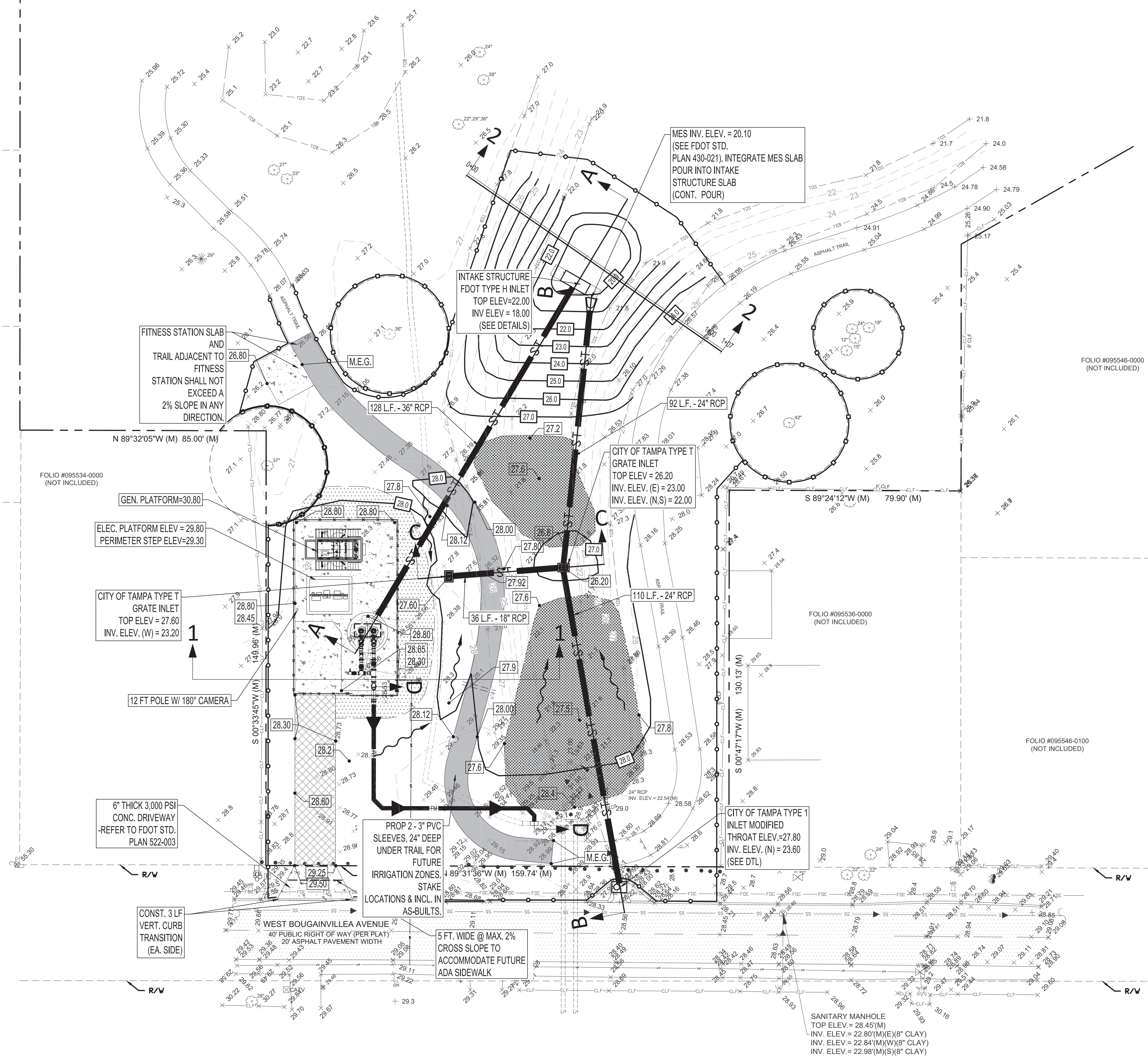
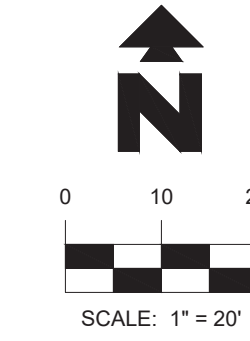
Line #	Length	Direction	Start Point	End Point	Curve #	Radius	Length	Chord Direction	Start Point	End Point
L1	29.620	N15° 07' 11.61"E	(506130.6883,1348910.7872)	(506138.4143,1348939.3814)	C1	124.323	25.901	N32° 35' 16.61"W	(506090.1896,1349035.2945)	(506076.2645,1349057.0787)
L2	11.498	N84° 36' 45.17"W	(506163.0508,1348879.5535)	(506151.6041,1348880.6331)	C2	141.214	34.575	N50° 29' 11.35"W	(506116.7971,1349013.3505)	(506090.1896,1349035.2945)
					C3	66.353	20.358	N47° 34' 23.88"W	(506131.7654,1348999.6697)	(506116.7971,1349013.3505)
					C4	48.758	33.958	N18° 49' 53.82"W	(506142.5064,1348968.1751)	(506131.7654,1348999.6697)
					C5	119.860	29.155	N08° 05' 19.47"E	(506138.4143,1348939.3814)	(506142.5064,1348968.1751)
					C6	24.000	41.776	N34° 44' 46.78"W	(506151.6041,1348880.6331)	(506130.6883,1348910.7872)



CONTRACTOR TO SECURE ENTIRE WORK AREA DURING ALL PHASES OF CONSTRUCTION.

Plot Date: Wednesday, June 17, 2026

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	DATE: H. Duane Milford, P.E. No. 42657 FLORIDA PROFESSIONAL ENGINEER								



IF ANY DAMAGE OCCURS TO THE RIGHT OF WAY OF WEST BOUGAINVILLE AVENUE, COMPLY WITH THE CITY OF TAMPA MOBILITY DEPARTMENT PAVEMENT AND RIGHT OF WAY RESTORATION REQUIREMENTS, REVISION MARCH 2024.

Plot Date: Wednesday, June 17, 2026

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FLORIDA, CA. NO. 30727
 BY: _____
 DATE: _____
 H. Duane Milford, P.E. No. 42657
 FLORIDA PROFESSIONAL ENGINEER

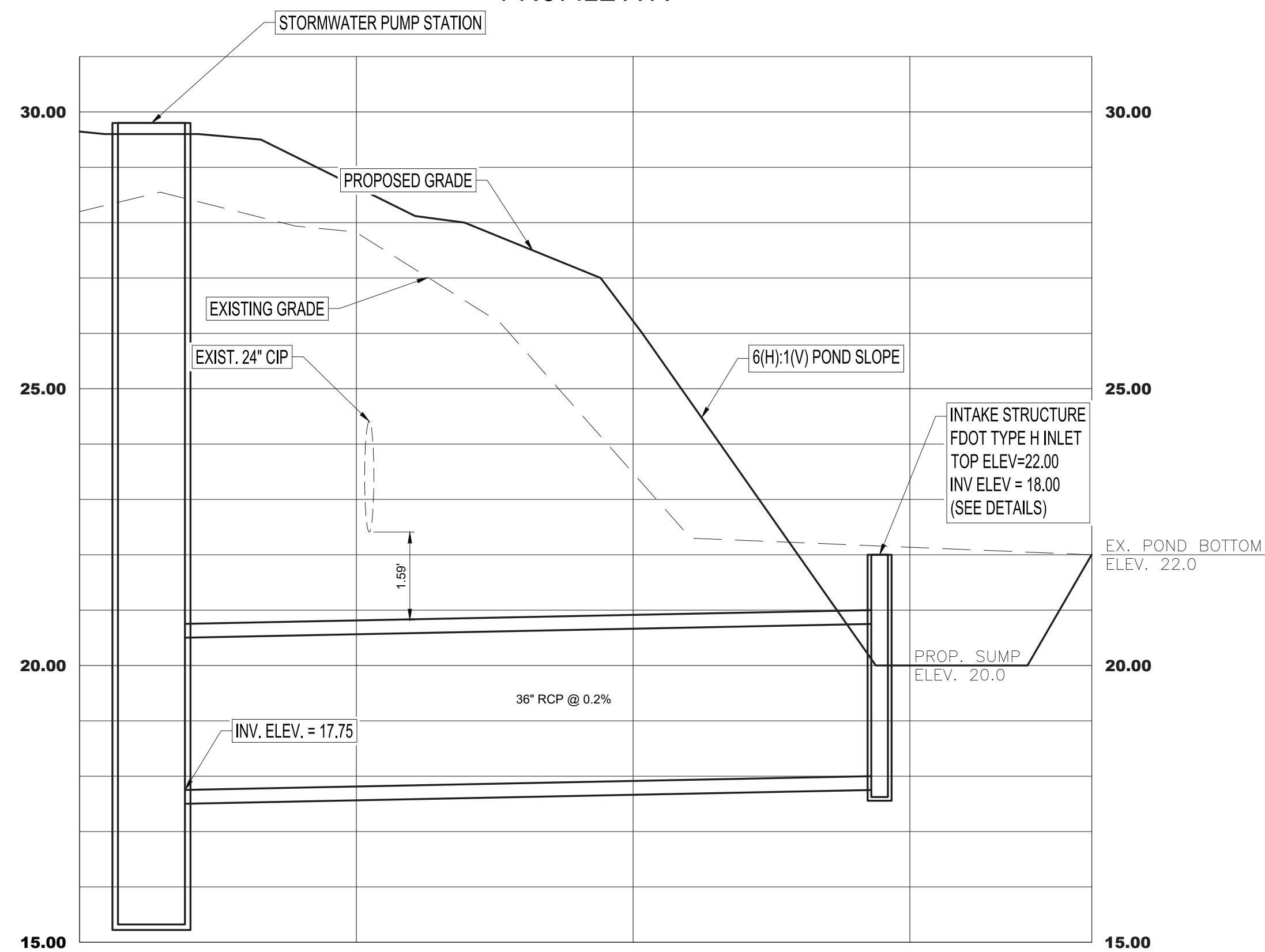
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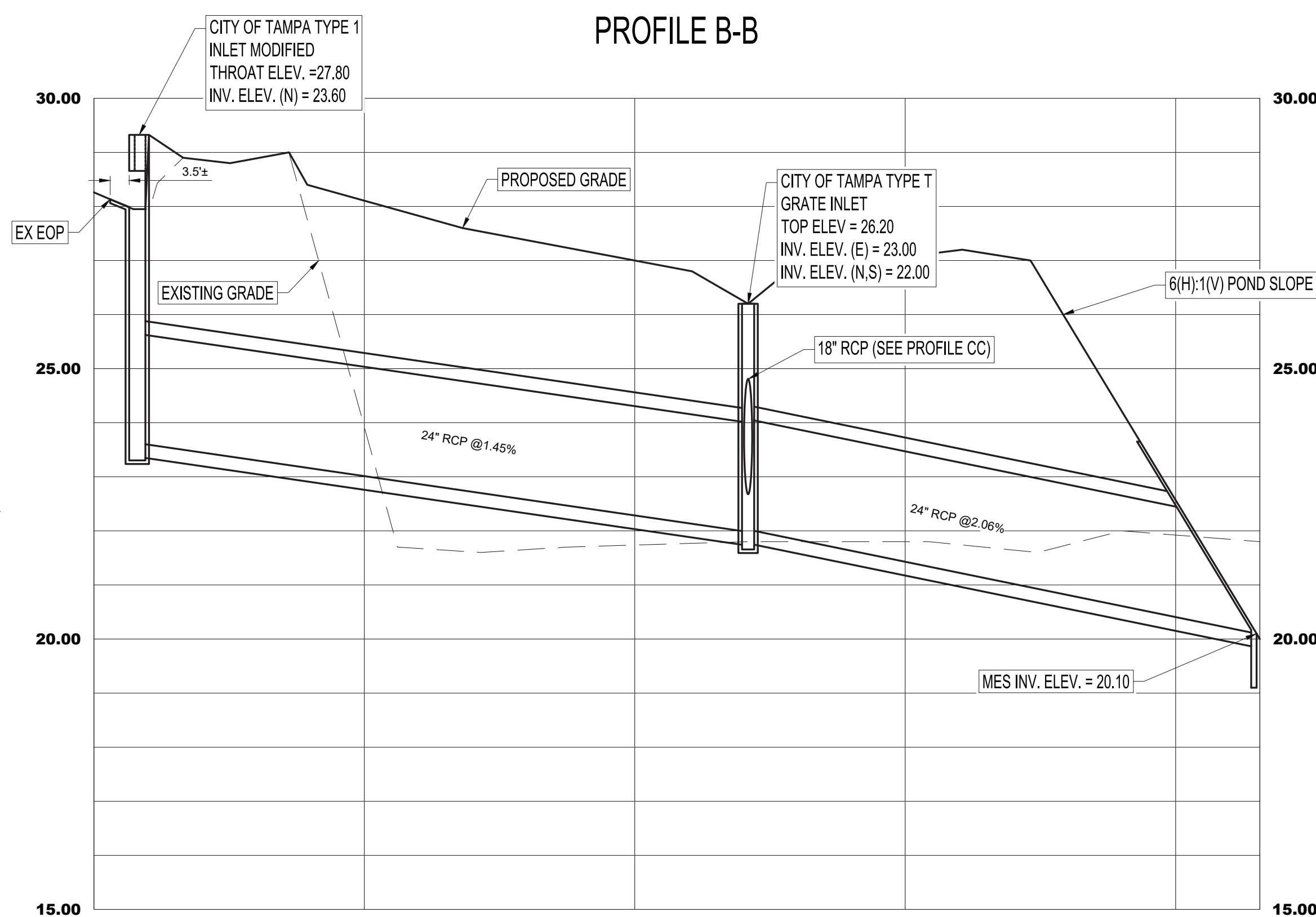
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 Stormwater Engineering Division

FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
PAVING, GRADING & DRAINAGE PLAN

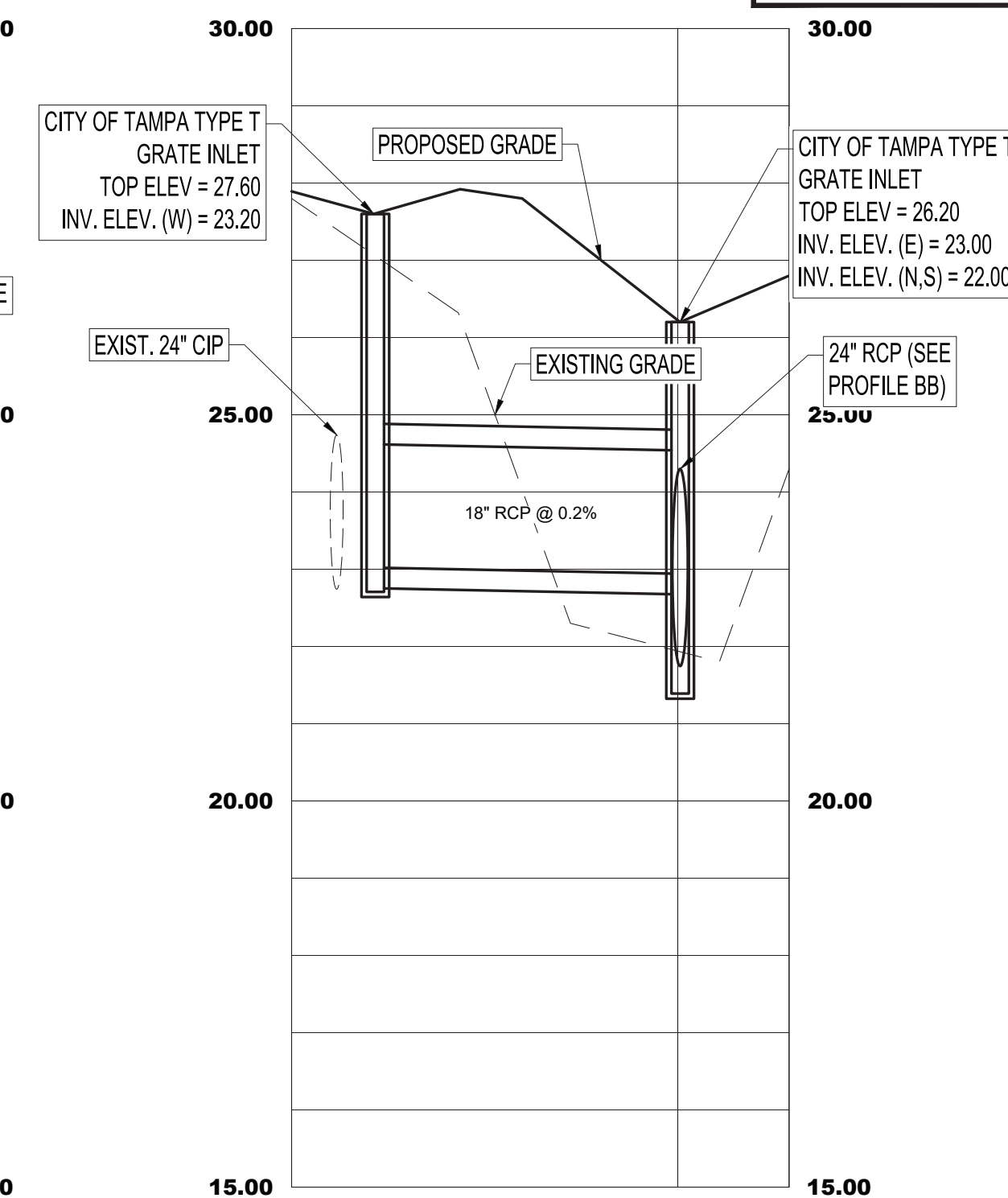
PROFILE A-A



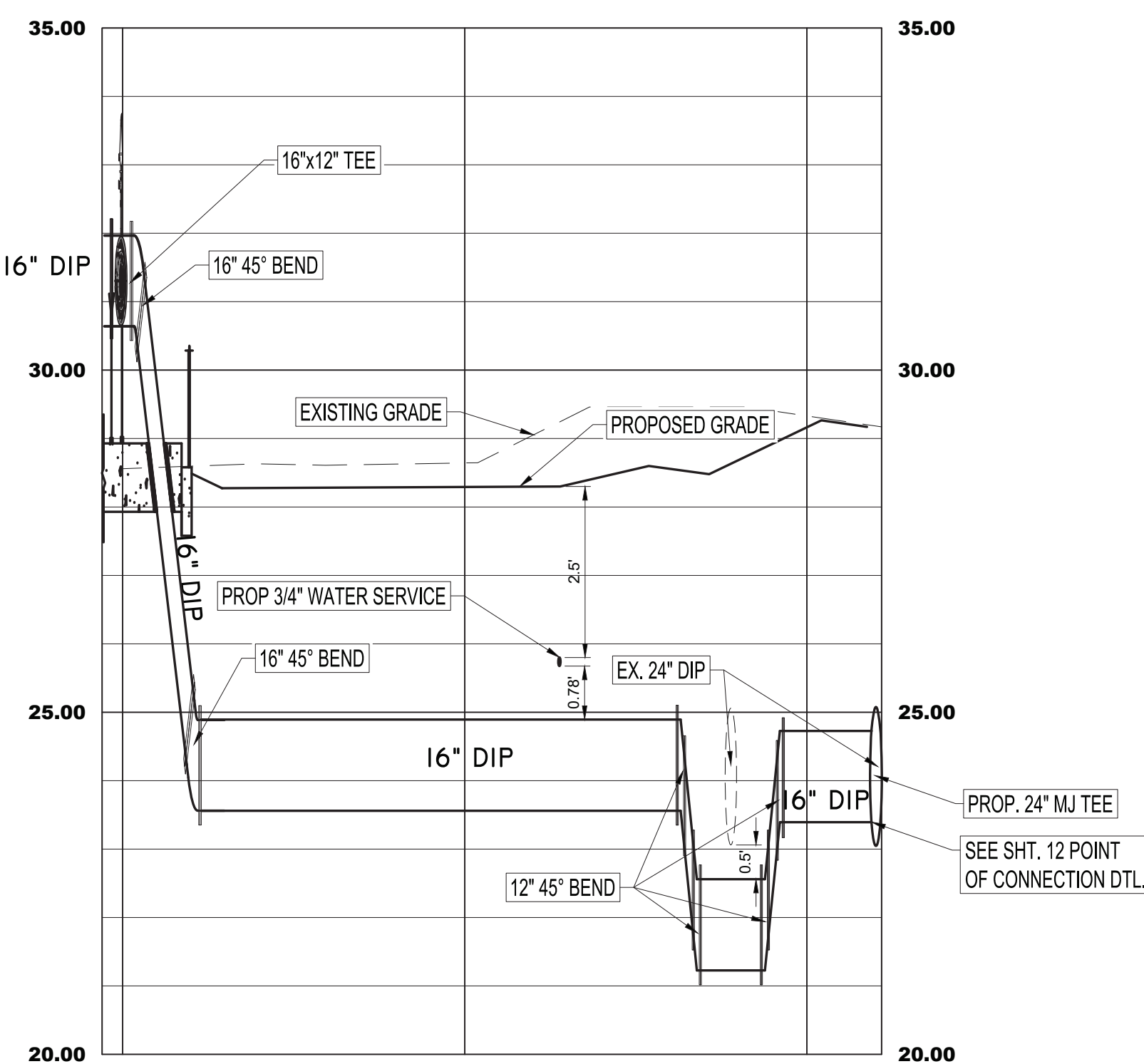
PROFILE B-B



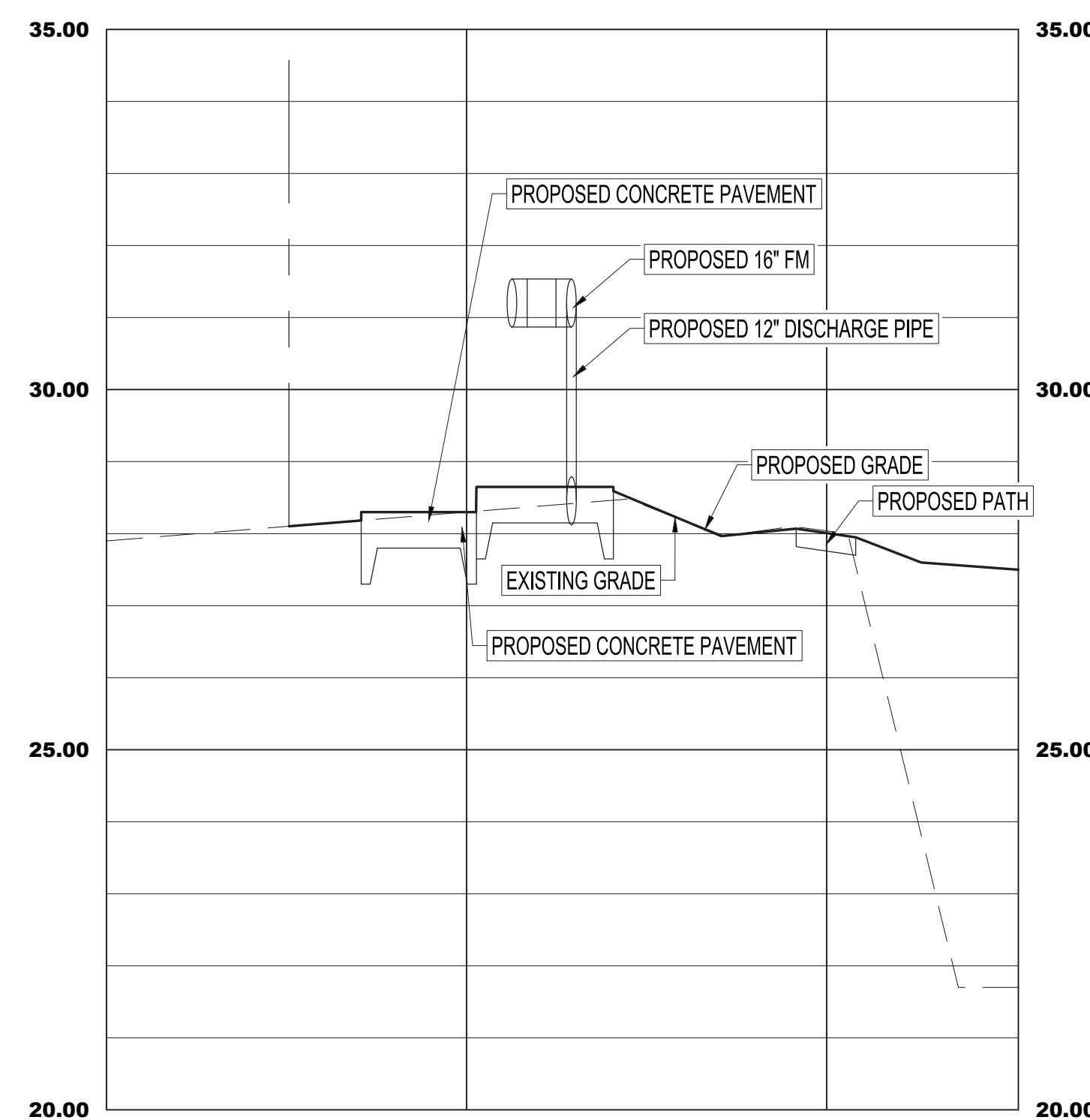
PROFILE C-C



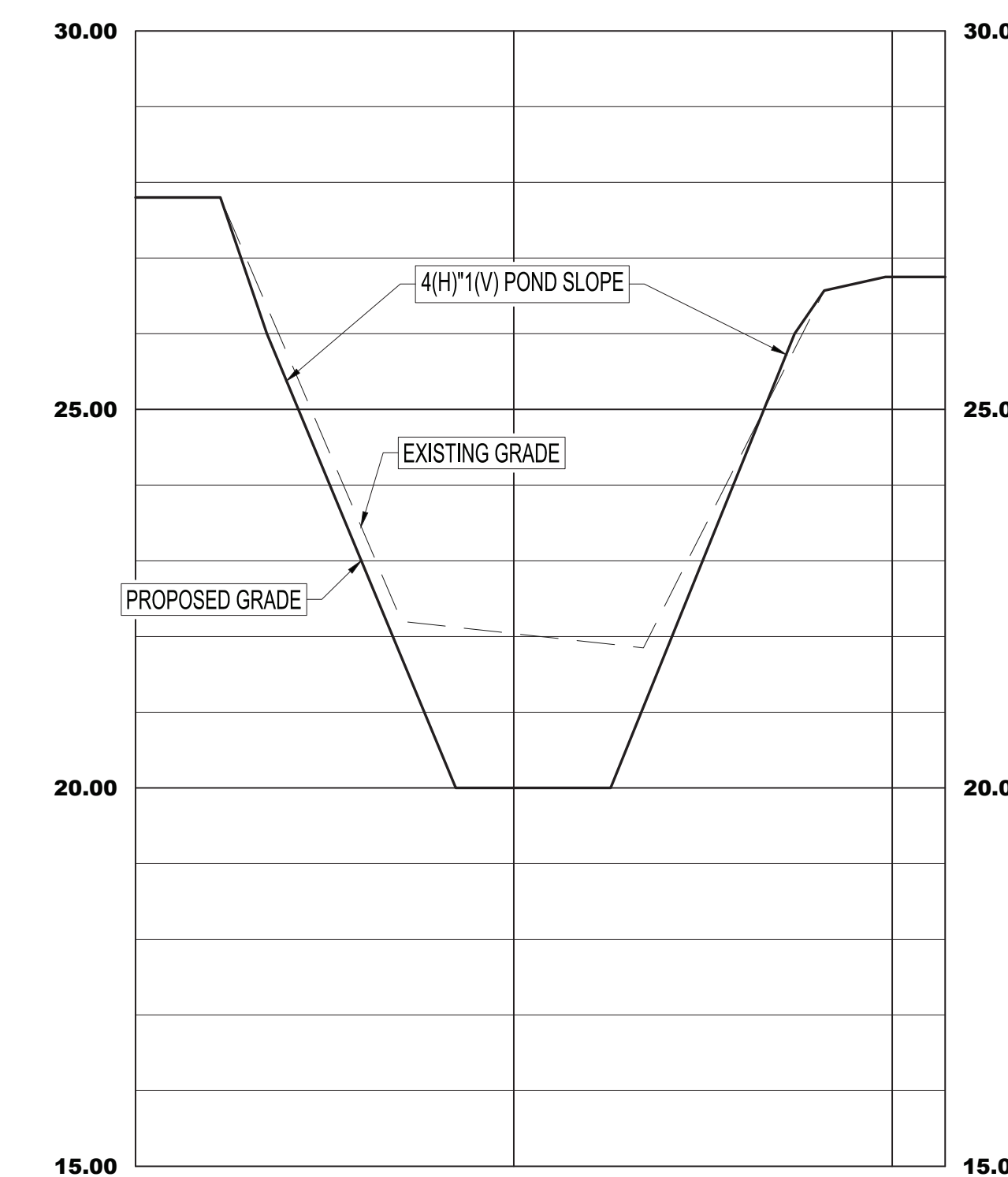
PROFILE D-D



SECTION 1-1



SECTION 2-2



SCALE: HORIZ: 1" = 20'
VERT: 1" = 2'

Plot Date: Wednesday, June 17, 2026

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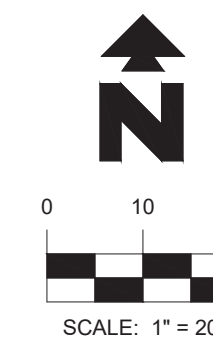
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CITY of TAMPA
Mobility Department
Stormwater Engineering Division

FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT

PROFILES/SECTIONS

SHEET
9
OF 36



LEGEND

	EXISTING TREE (TYPE / SIZE VARIES)
	EXISTING ASPHALT
	PROPOSED CONCRETE
	PROPOSED PAVEMENT
	PLANTED FOREST AREA
	EXISTING TREE (TYPE / SIZE VARIES)
	SILT FENCE TO BE MAINTAINED THROUGHOUT CONSTRUCTION
	TREE BARRICADE

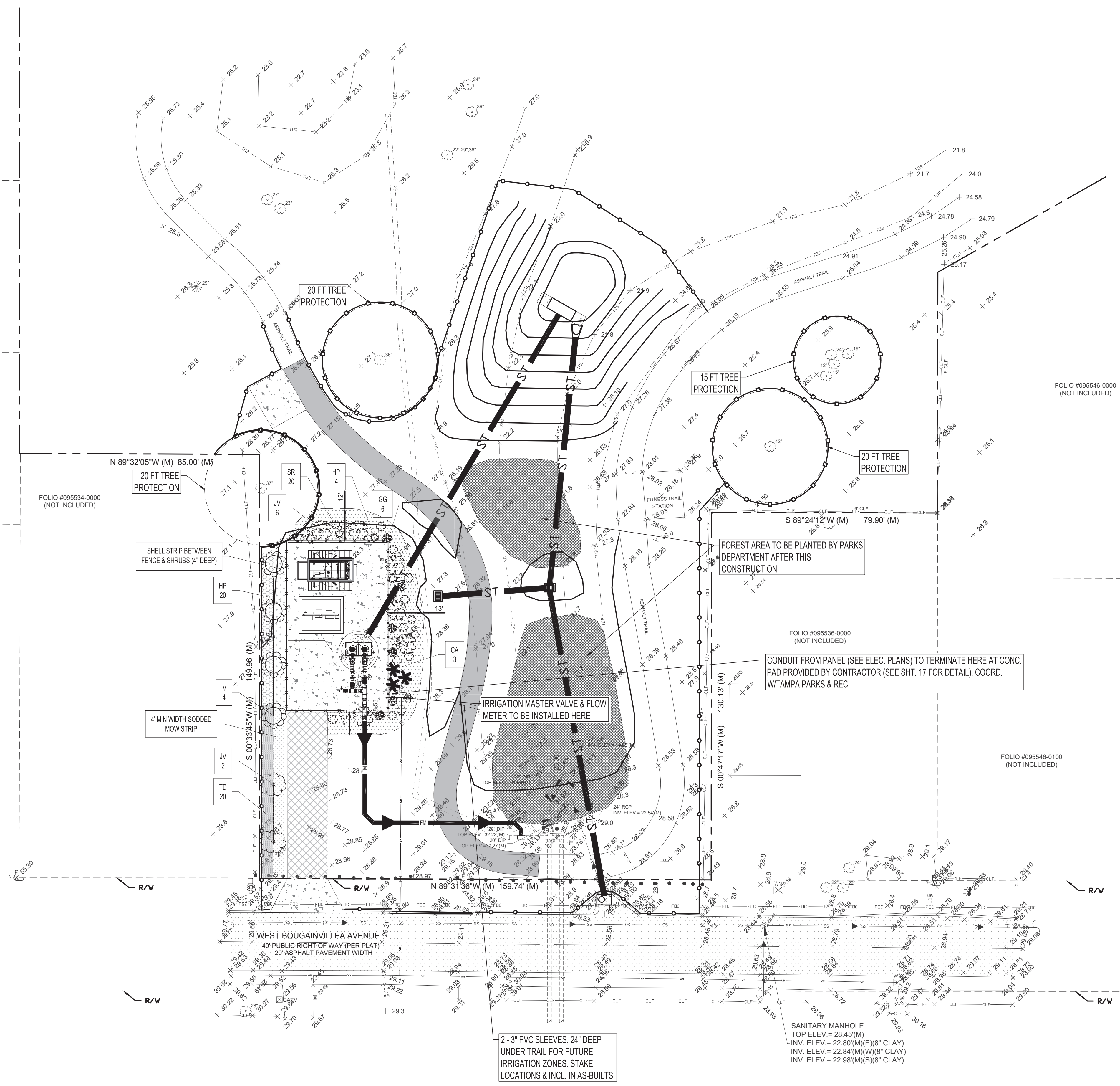
LANDSCAPE AND IRRIGATION NOTES:

- ALL DISTURBED AREAS NOT OTHERWISE COVERED SHALL BE SODDED WITH BAHIA.
- GRASS STRIPS SHALL BE A MINIMUM OF 4 FEET WIDE FOR MOWING PURPOSES.
- LANDSCAPE BEDS ALONG WEST PROPERTY LINE AND AROUND PUMP STATION SHALL BE 6" DEEP LOOSE PINE STRAW MULCH.
- FORESTED AREAS FOR FUTURE PLANTING BY PARKS DEPARTMENT SHALL BE 6" DEEP LOOSE PINE STRAW MULCH.
- CONTRACTOR TO PROVIDE CONDUIT FROM PANEL TO IRRIGATION CONTROL PAD, AS WELL AS THE CONCRETE PAD FOR THE CONTROLLER. THE CITY PARKS & RECREATION DEPARTMENT WILL INSTALL THE CONTROLLER AND THE IRRIGATION SYSTEM. THE CONTRACTOR SHALL COORDINATE WITH PARKS & RECREATION FOR THE TIMING OF THE INSTALLATION RELATIVE TO THE TIMING OF PLANT INSTALLATION.
- CONTRACTOR TO REVIEW PLANT MATERIAL LAYOUT WITH PARKS & RECREATION REP PRIOR TO INSTALLATION.

PLANT MATERIAL LIST

Abbr.	Qty.	Botanical Name	Common Name	Specifications	Tree Type
CA	3	<i>Callicarpa americana</i>	Beautyberry	7 gal., 5' o.c.	N/A
GG	6	<i>Galphimia glauca</i>	Thryallis	7 gal., 5' o.c.	N/A
HP	24	<i>Hamelia patens</i>	Firebush	7 gal., 30" Ht., 18" Spread, 42" o.c., 3' offset from West Boundary	N/A
SR	20	<i>Serenoa repens</i>	Saw Palmetto	7 gal., 5' o.c.	N/A
IV	4	<i>Ilex vomitoria</i>	Yaupon Holly	Field Grown, 3" Cal., 8' Ht., 3.5' Spread	2
JV	8	<i>Juniperus virginiana</i>	Red Cedar	45 gal., 3" Cal., 8' Ht., 4' Spread	2
TD	20	<i>Tripsacum dactyloides</i>	Fakahatchee Grass	30" Ht., 12" Spread, 36" o.c., 3' offset from West Boundary	N/A

ALL PLANT MATERIAL SHALL BE FLORIDA GRADE #1.



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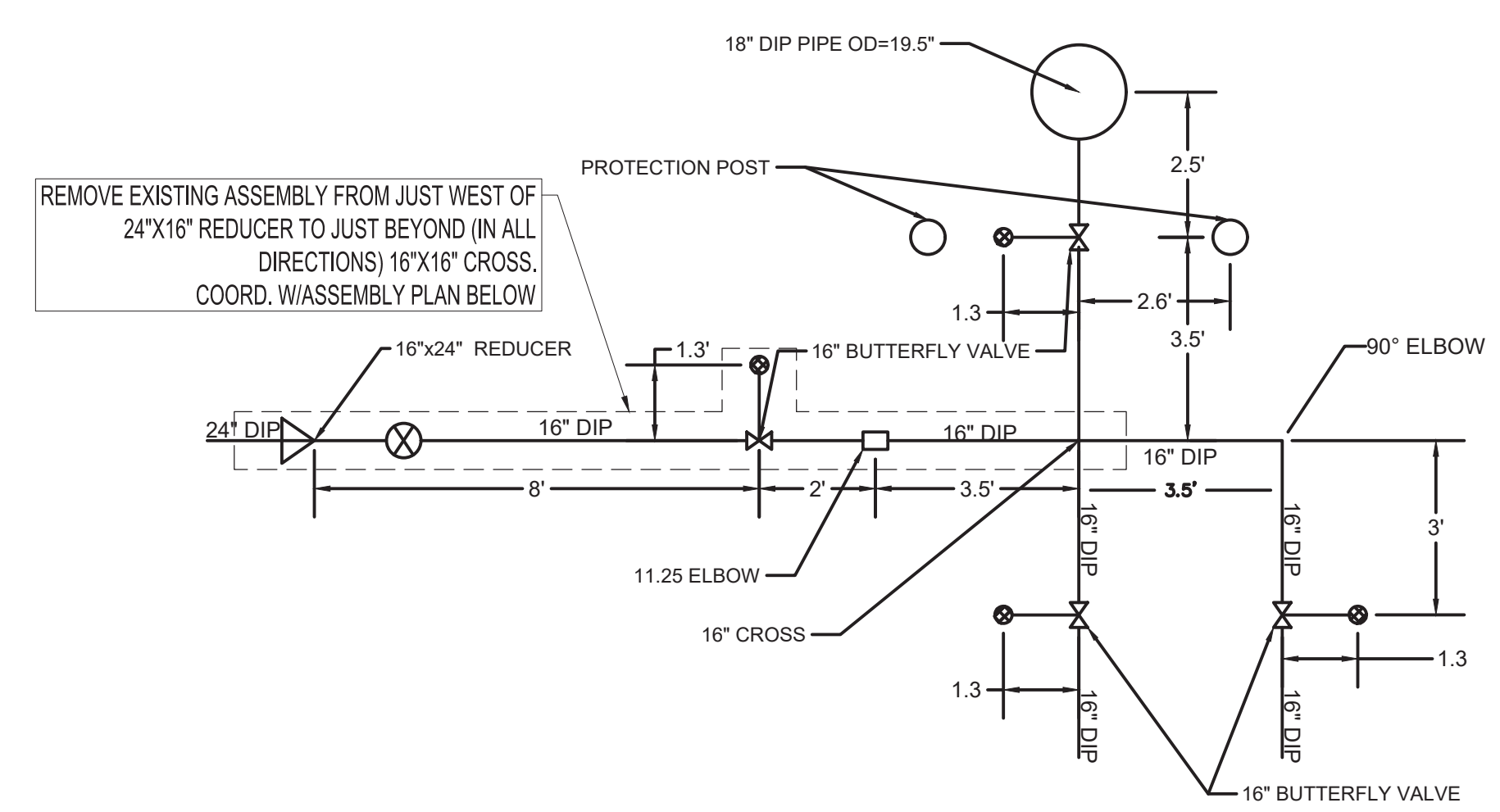
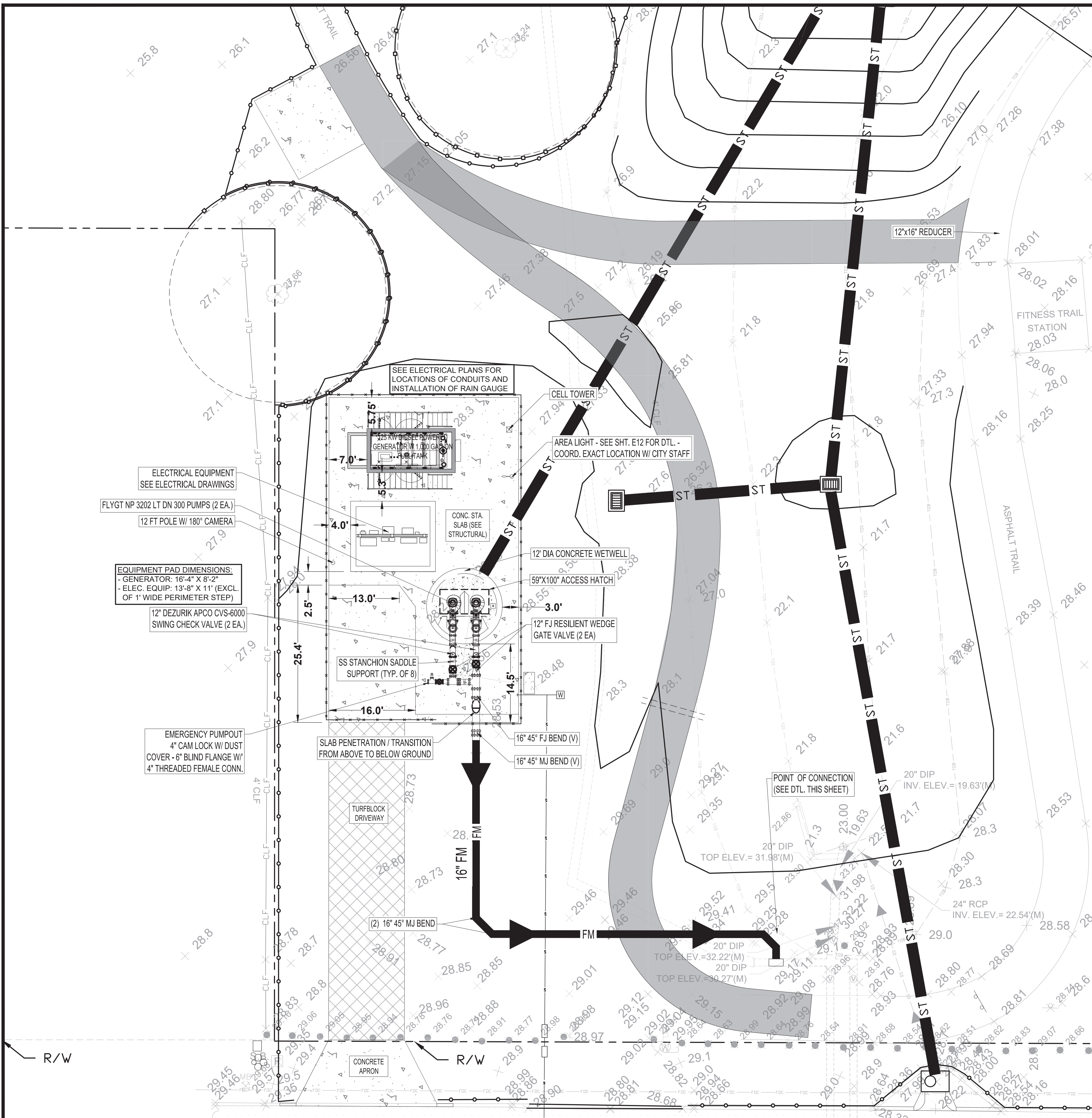
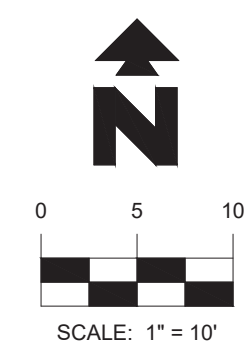
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 Mobility Department
 Stormwater Engineering Division

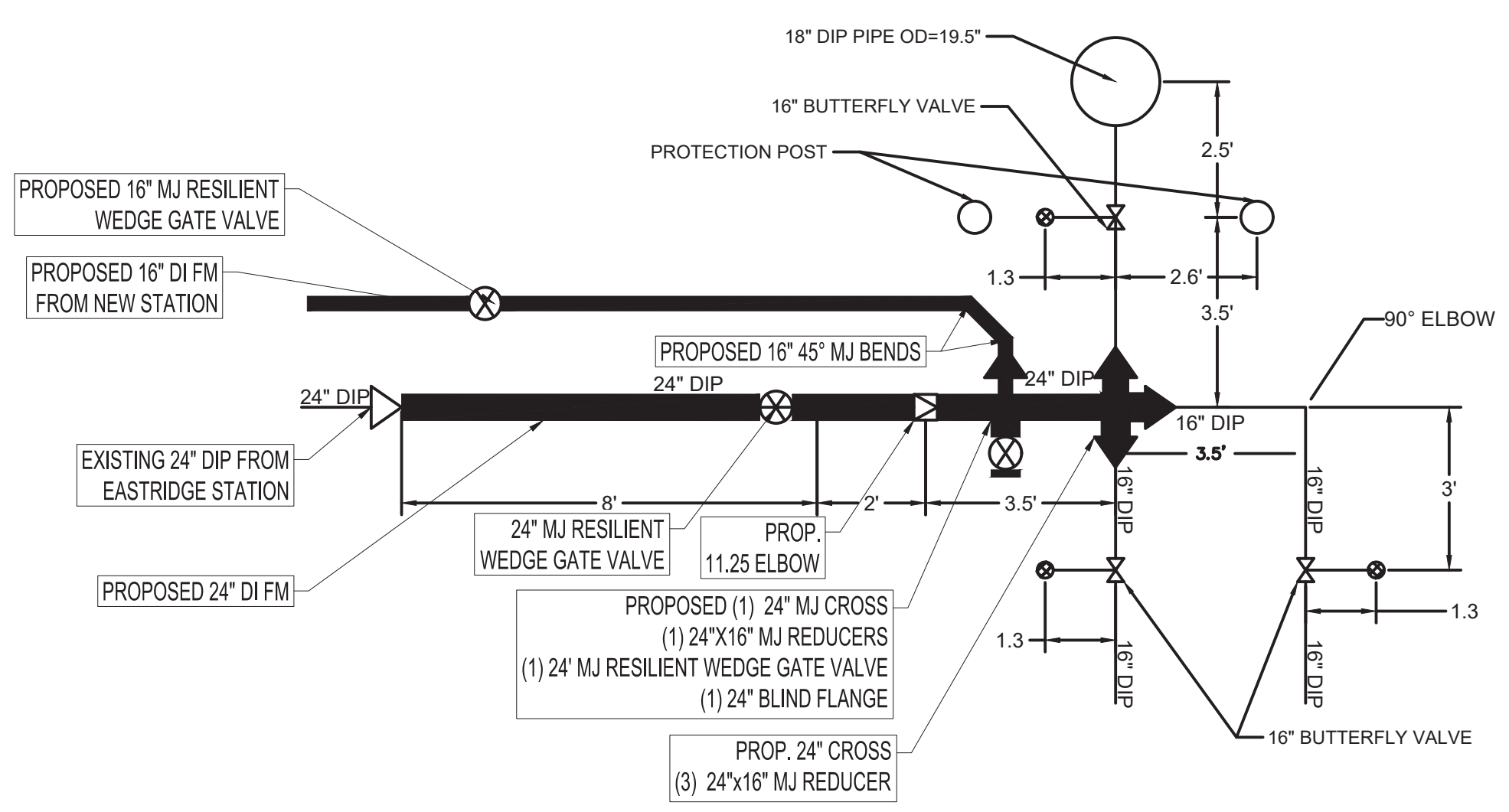
FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT

LANDSCAPE PLAN



1
11 EXISTING CONDITIONS / DISASSEMBLY PLAN
N.T.S. - SCHEMATIC

NEW ASSEMBLY SHOWN BELOW MAY BE PARTIALLY PRE-ASSEMBLED ABOVE GROUND IN ORDER TO MINIMIZE DOWNTIME OF PUMPING STATION(S)



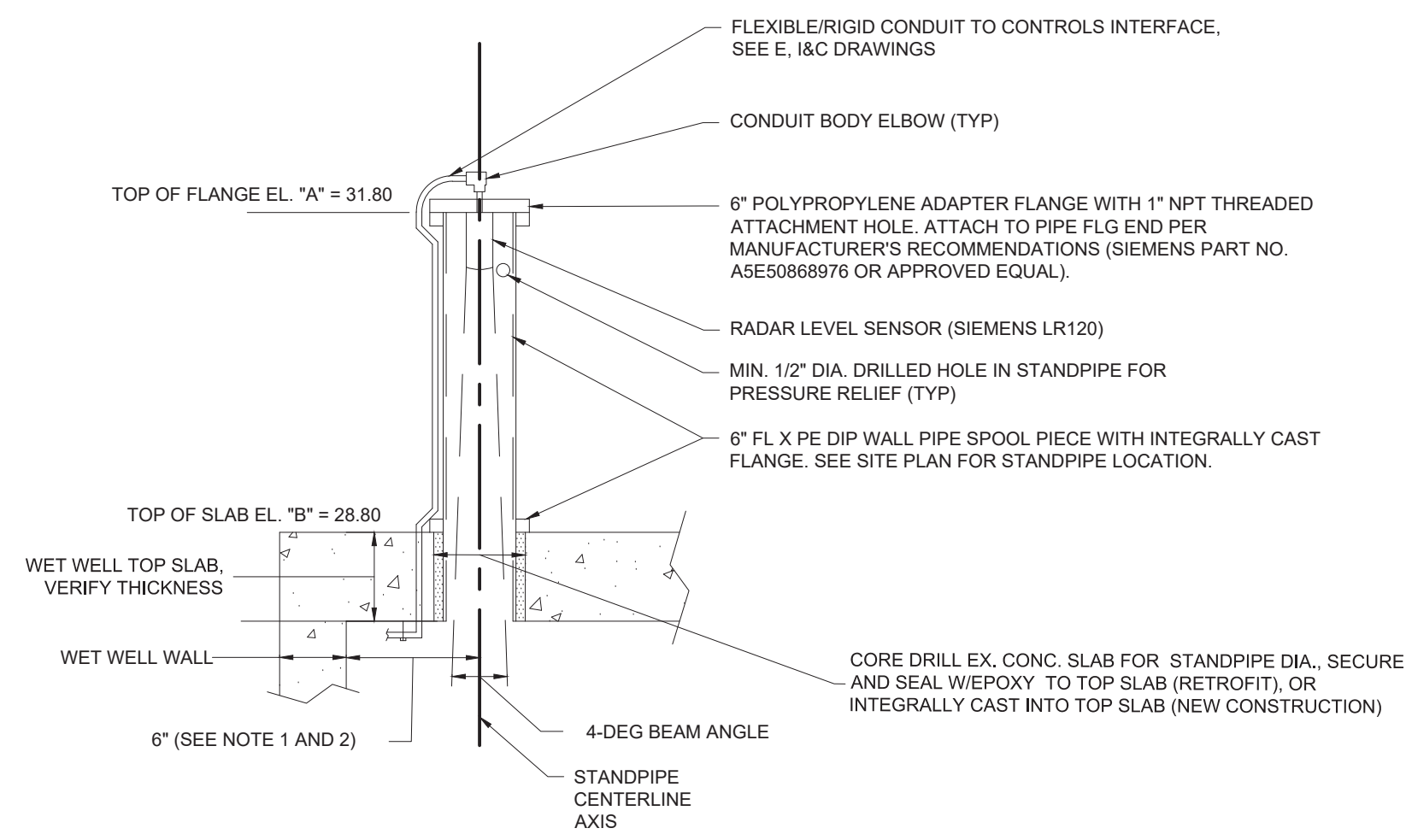
1
11 PROPOSED CONDITIONS / ASSEMBLY PLAN
N.T.S. - SCHEMATIC

POINT OF CONNECTION DETAIL

Plot Date: Thursday, June 18, 2026

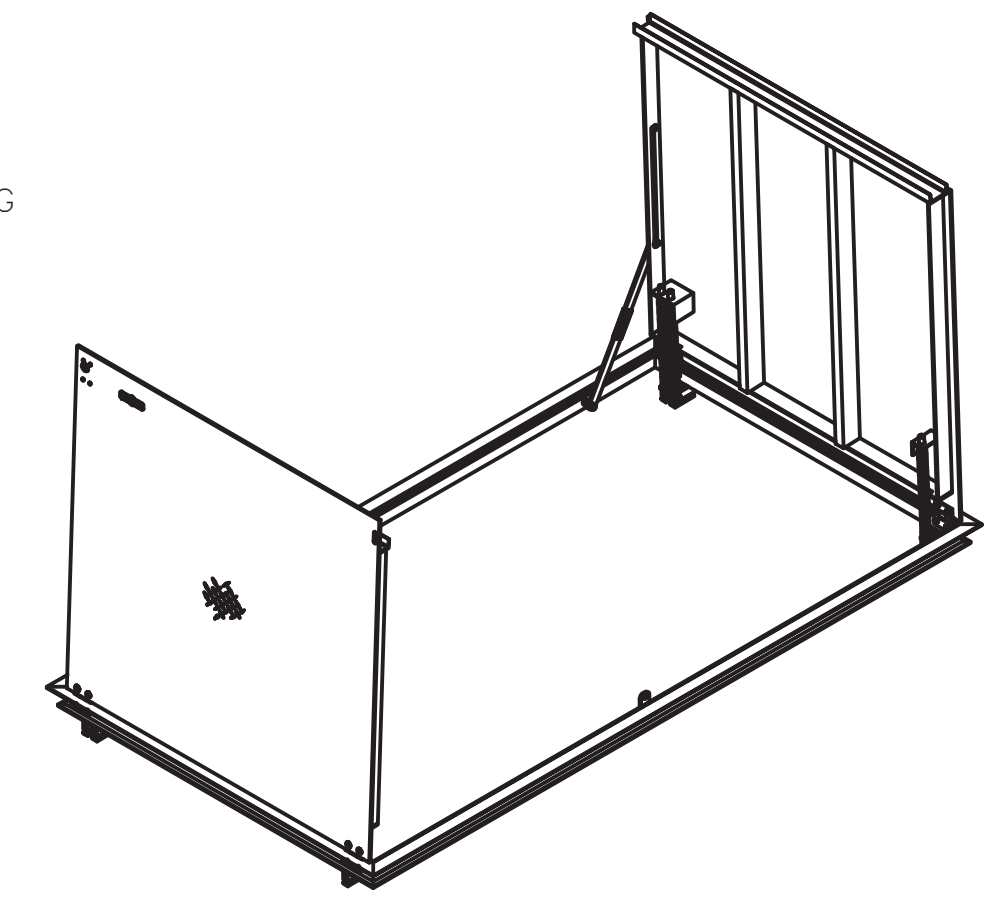
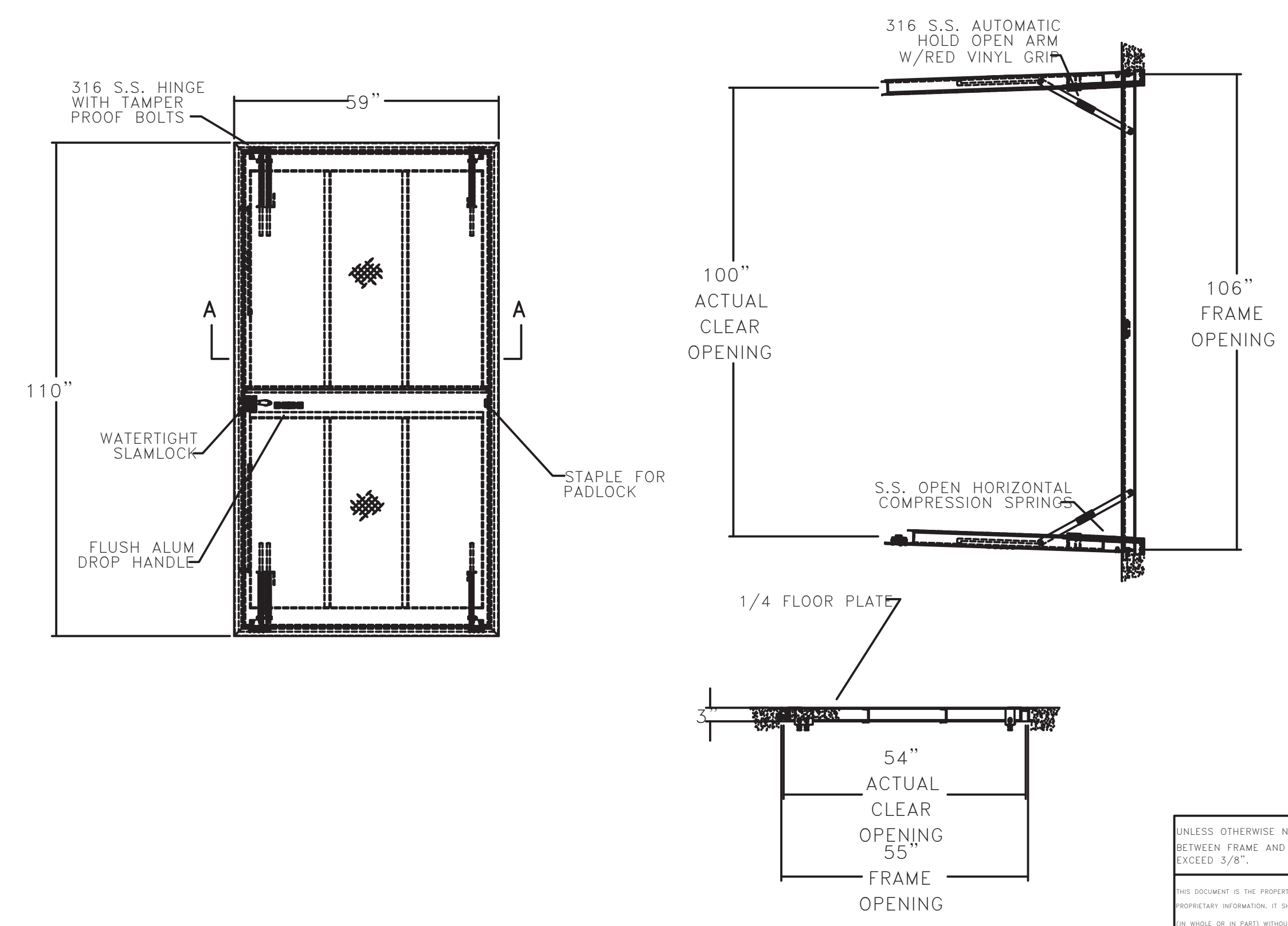
<p>MPH CIVIL CONSULTANTS, INC. MPH Civil Consultants, Inc. Civil Engineering Services P.O. Box 1121, Odessa, FL 33556 813.731.0052 duane@mpcivcivil.com www.mpcivcivil.com</p>	No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES: HDM/CM DRN: CM CKD: HDM DATE: 6/11/2026	<p>CITY of TAMPA Mobility Department Stormwater Engineering Division</p>	FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT STATION SITE PLAN & FM CONNECTION DETAILS	SHEET 11 OF 36
	3			6						
	2			5						
	1			4						

SW 2026-02

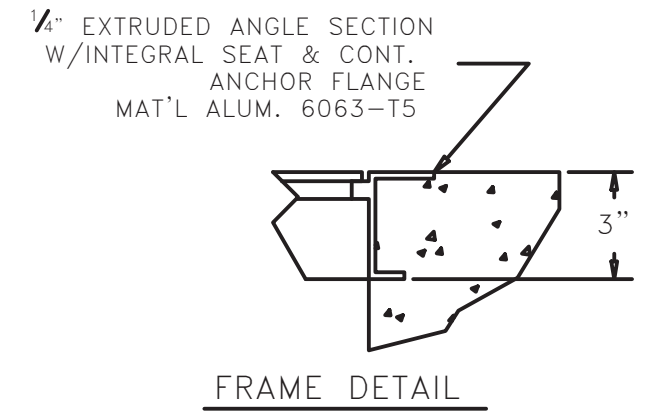


B
11 LEVEL SENSING STANDPIPE DETAIL
N.T.S.

NOTES:
1. LOCATE STANDPIPE SUCH THAT THE VERTICAL AXIS IS 12 INCHES FROM INTERIOR WETWELL WALLS AS INDICATED. CONFIRM NO OTHER OBSTRUCTIONS INSIDE THE WETWELL ARE WITHIN 18 INCHES OF THE CENTER OF THE STANDPIPE AXIS.
2. FINAL STANDPIPE LOCATION SHALL BE REVIEWED AND APPROVED BY THE OWNERS REPRESENTATIVE PRIOR.



- OPTIONS:
1-SPRINGS OPEN HORIZONTAL
2-SLAMLOCK STANDARD
3-EXTERIOR STAPLE
4-BITUMINOUS PAINT
5-MILL FINISH
- NOTES:
1-MATERIAL: ALUMINUM
2-LOADING: 300 PSF
3-AREA OF FRAME IN CONTACT WITH CONCRETE TO BE PAINTED WITH BITUMINOUS COATING.
4-APPROXIMATE WEIGHT: 275.66 LBS.



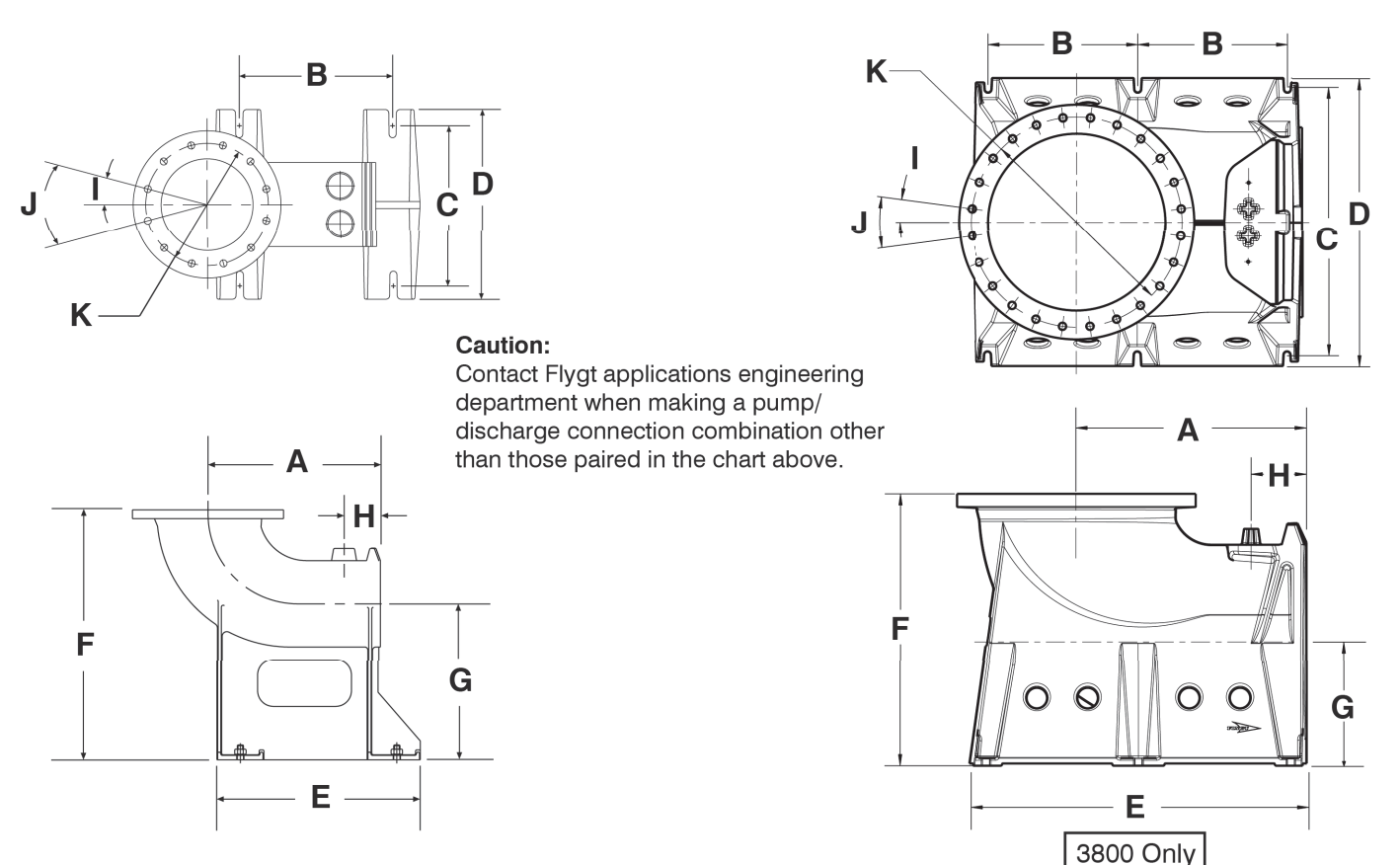
UNLESS OTHERWISE NOTED ON THIS DRAWING, CLEARANCE BETWEEN FRAME AND COVER(S) IS DESIGNED NOT TO EXCEED 3/8".	INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M	<p>HATCH APD 55X106 A1C1D1N1n1 GENERAL ARRANGEMENT</p>
BREAK ALL SHARP CORNERS & EDGES	TOLERANCES UNLESS OTHERWISE SPECIFIED IN INCHES AND FRACTIONS: <10' = ± 1/8 >10' = ± 1/4	
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APP'D: SBOB	REV. NO: 1000290726	SHEET: C

FLYGT
a xylem brand

Issued: 10/17 Supersedes: 3/12

Standard CP/NP Discharge Connections (Cast Iron)

Pump Model	Part Number	Disch. Inlet	Disch. Outlet	A	B	C	D	E	F	G	H	I	J	K
8" - 3102, 3127.	444 71 06	8"	8"	16 3/4	11	10	12 3/16	15	17 3/4	10 1/8	4 9/16	22.5"	45" x 8	11 3/4
8" - 3153, 3202.	374 76 06	8"	8"	16 3/4	11	10	12 3/16	15 3/8	17 3/4	10 1/4	4 9/16	22.5"	45" x 8	11 3/4
8" - 3231	695 77 06	8"	8"	21 5/8	19 3/4	15 3/4	19 3/4	23 5/8	17 3/4	9 1/8	6 7/8	22.5"	45" x 8	11 3/4
8" - 3240	695 77 08	8"	8"	21 5/8	19 3/4	15 3/4	19 3/4	23 5/8	17 3/4	9 1/8	6 7/8	15"	30" x 12	13
10" - 3153, 3171, 3301, 3315.	604 59 05	10"	10"	18 3/4	19 3/4	10	12 3/16	24 3/4	18 3/4	10	4 9/16	15"	30" x 12	14 1/4
12" - 3202, 3301, 3315.	604 61 05	12"	12"	21 5/8	19 3/4	20 3/4	24 7/16	28	31 1/2	19 11/16	4 9/16	15"	30" x 12	17
12" - 3306, 3312.	373 92 05	12"	12"	24 5/8	25 5/8	23 3/4	27 9/16	29 1/2	23 3/4	10 13/16	6 7/8	15"	30" x 12	17
14" - 3301, 3315, 3356	388 27 05	14"	14"	25 5/8	25 5/8	23 3/4	27 9/16	29 1/2	23 3/4	11 13/16	6 7/8	15"	30" x 12	18 3/4
14" - 3306, 3312.	442 16 05	14"	14"	25 5/8	25 5/8	23 3/4	27 9/16	29 1/2	23 3/4	11 13/16	6 7/8	15"	30" x 12	18 3/4
14" - 3351	557 00 05	14"	14"	27 9/16	31 1/2	27 3/4	31 1/2	35 7/16	23 3/4	11 13/16	6 7/8	15"	30" x 12	18 3/4
16" - 3400	581 98 05	16"	16"	29 9/16	31 1/2	31 1/2	35 1/2	35 1/2	29	13 3/4	8 13/16	11.25"	22.5" x 18	21 1/4
20" - 3501, 3531.	387 90 05	20"	20"	30 5/8	31 1/2	27 3/4	31 1/2	35 1/2	33	15 3/8	8 7/8	9"	18" x 20	25
24" - 3602	388 05 05	24"	24"	33	35 1/2	31 1/2	35 7/16	39 3/8	37 1/2	17 3/4	8 7/8	9"	18" x 20	29 1/2
32" - 3800	566 03 05	32"	32"	40 1/4	26 5/8	47 1/4	51 1/4	57 1/4	47 1/2	22	9 3/4	6.43"	12.86" x 28	38 1/2



xylem
Let's Solve Water

FLYGT
a xylem brand

NP 3202 LT 3" 616 | Dimensional Data & Drawing

Weight (lbs)
with cooling jacket: 1745
without cooling jacket: 1635

Pump Discharge
1745 645
1635 645

Project: NP 3202 LT 3" 616
Created By: Stephen Toolise
Created On: 10/6/25
Last Update:

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a xylem brand

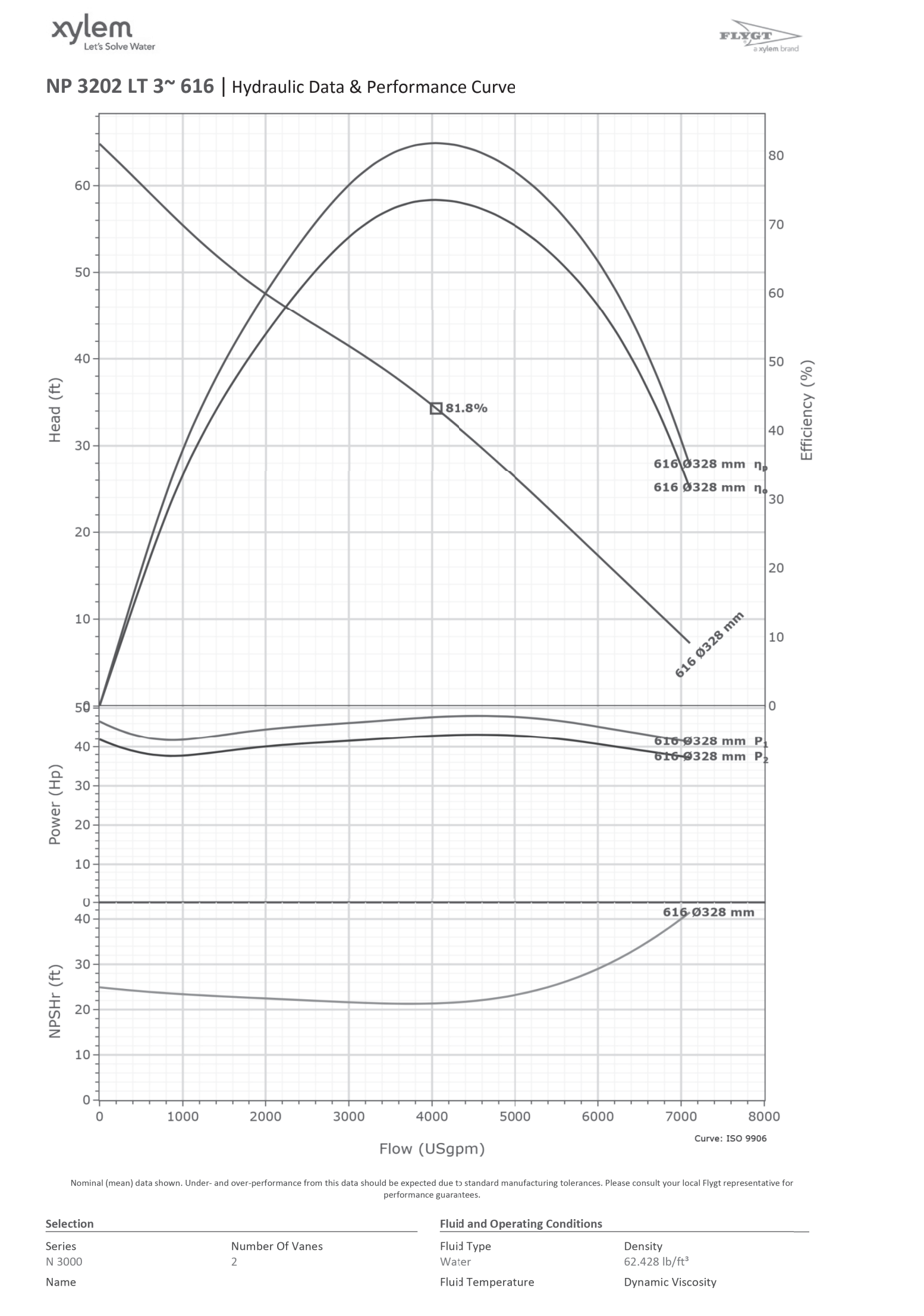
Issued: 9/13 Supersedes: 11/11

FP/NP-3202

NOTES:
1. CONFIGURATION AND DIMS. SHOWN ARE SUGGESTED REQUIREMENTS ONLY. ALL DETAILS, INCLUDING SIZING OF PIT, TYPE, LOCATION AND ARRANGEMENT OF VALVES AND PIPING, ETC. ARE TO BE SPECIFIED BY THE CONSULTING ENGINEER AND ARE SUBJECT TO THEIR APPROVAL.
2. REFERENCE GENERIC DUPLEX LIFT STATION LAYOUT FOR ELEVATION VIEW.
3. LOCATE ANCHOR BOLTS USING INSIDE EDGE OF CLEAR OPENING AND PUMP CENTERLINE AS REFERENCE POINT. BOLT LOCATIONS MUST BE HELD TO MAINTAIN EXACT POSITION OF PUMP TO CLEAR OPENING.
4. FLYGT MIX-FLUSH VALVE.

ALL DIMENSIONS ARE IN INCHES

MODEL	NOM. SIZE	VERSION	SIMPLEX												DUPLEX											
			A	B	C	D	S	T	U	V	W	X	Y	Z	P	Q	R	S	T	U	V	W	X	Y	Z	
FP/NP 4"	SH	1	9 1/4	6	3	16 1/8	60	11 1/2	23 1/2	39	16	11 1/8	72	12	23 1/2	47 1/2	39									
FP/NP 4"	HT	1	19 1/4	6	3	25 1/2	20 1/2	84	14	34	40 1/2	28	23 1/2	96	15	29	64	40 1/2								
FP/NP 6"	HT	2	28 1/2	10	5	22 1/2	17 1/2	84	14	34	40 1/2	22 1/2	96	15	29	64	40 1/2									
FP/NP 8"	HT	3	31 1/2	10	5	26 1/2	17 1/2	84	16	36 1/2	43 1/2	22 1/2	96	15	29	64	40 1/2									
NP 12"	LT	7	119 1/2	20 1/2	10 1/2	33 1/2	21 1/2	120 1/2	41 1/2	52	35 1/2	23 1/2	144	28	48 1/2	97 1/2	52									



Plot Date: Wednesday, June 17, 2026

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P.O. Box 1121, Odessa, FL 33556
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duane@mpciv.com www.mpciv.com

FLORIDA, CA. NO. 30727
DATE: H. Duane Milford, P.E. No. 42657
FLORIDA PROFESSIONAL ENGINEER

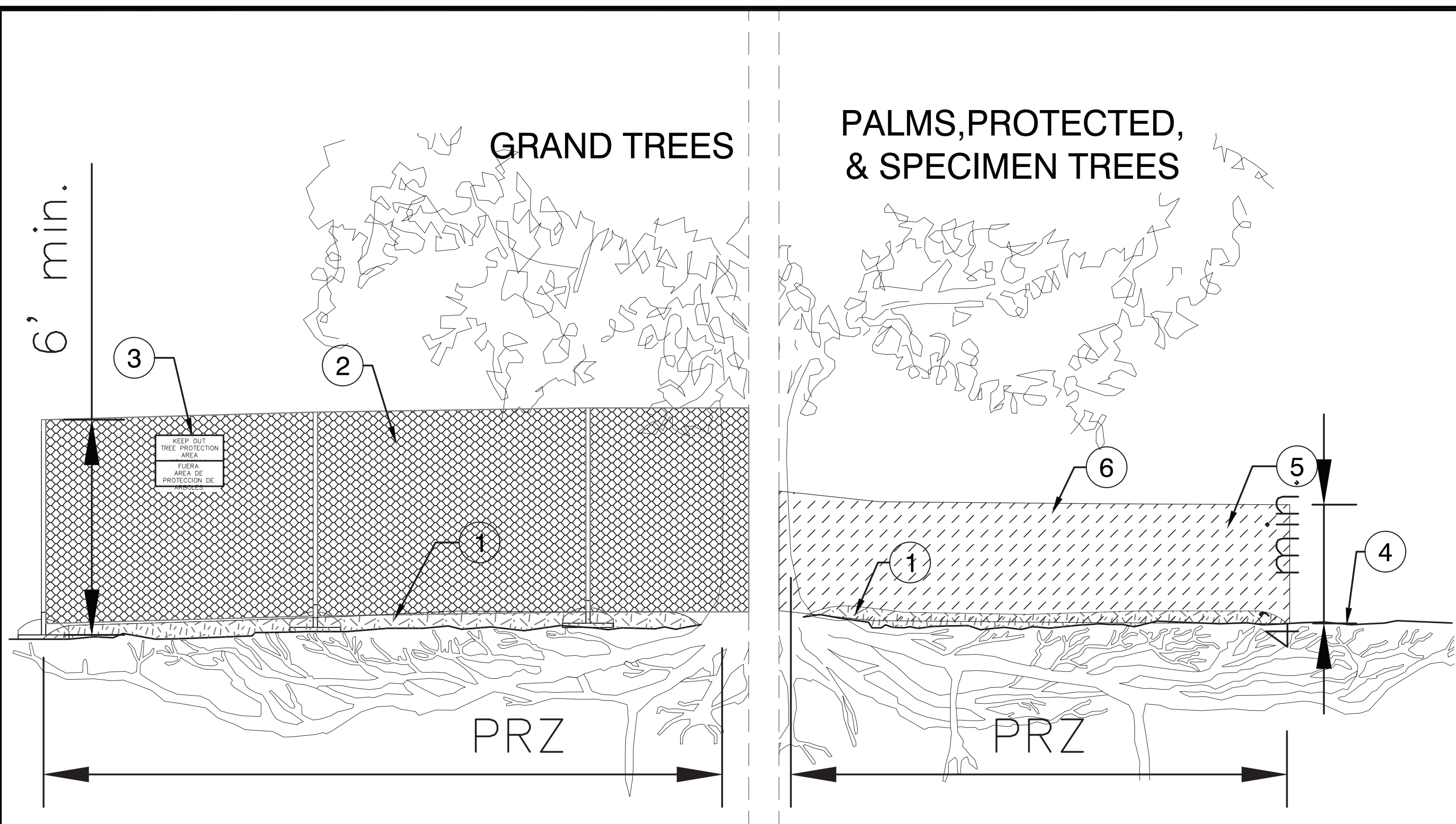
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2			5		
1			4		

DES: HDM/CM
DRN: CM
CKD: HDM
DATE: 6/11/2026

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
STATION DETAILS

SHEET
13
OF 36



- ① 3-inch layer of mulch (eucalyptus or city approved equivalent); no mulch shall be placed within one foot of the trunk.
- ② Grand Tree Protection Fence: 6-foot or 8-foot high chain link in metal frame sections; mount with stanchions or steel posts on movable core drilled concrete blocks, installed on 8' on center max spacing.
- ③ Notice Sign: 8.5" x 11" corrugated plastic warning with 2" high black lettering. Fasten to fence with plastic zip toes or similar. Locate one sign every 50' of along the fence.
- ④ Maintain existing natural grade within the tree protection fence unless noted otherwise on the plans.
- ⑤ Standard Tree Protection Fence: high density polyethylene fencing with 3.5-inch x 1.5-inch openings; color orange; attach to steel or wood posts installed at eight-foot on center max.
- ⑥ 2x2x6' posts embedded a minimum of 24-inches (or similar approved post)

TREE PROTECTION NOTES

1. Minimum protection standards shall be met for all protected trees, prior to commencement of any construction activities on a development site and/or in public or private right-of-way, in accordance with the tree protection graphics below.
2. No changes to the predevelopment conditions within the approved protective root zone during the construction process.
3. Protective barricades may be removed only to prepare the development site for final landscaping activities. During this activity only non-mechanical techniques may occur within the designated protective root zone. No alteration(s), of any kind, shall be made to any part of the tree (roots, trunk, canopy/crown), other than those that are approved by the Natural Resources Coordinator or designee, as part of the related permit.
4. No parking or storing of vehicles, equipment, or materials is permitted within the minimum protective area, at any time.
5. No site clearing or grading is permitted within the minimum protective area, other than those changes that are approved by the Natural Resources Coordinator or designee, as part of the related permit.
6. All canopy pruning must Meet ANSI A300 pruning per "American National Standards for Tree Care Operations". ANSI A300, current edition. Work should be planned and supervised by an ISA Certified Arborist.
7. Root Pruning shall be performed to ANSI A300 standards; must be clean, severed cuts (not jagged or frayed). Root pruning shall be performed with specifically designed mechanical root pruning tools (Vermeer or Dosko) or hand pruners, loppers, hand saws, reciprocating saws, oscillating saws, or small chain saws. Trenchers, excavators, and backhoes shall not be used to prune or crush roots.

PRZ:
Protective Root Zone:
The entire surface and subsurface soil area encompassed by prescribed radius for protected, specimen, and grand trees.

- See plan for fence extents, but typically the extents are as follows:
- Palms: 3' offset FFT
 - Protected Trees (5- to 23-inch DBH): 10' offset from face of trunk (FFT)
 - Specimen Trees (24- to 31-inch DBH): 15' offset FFT
 - Grand Trees (32-inch DBH): 20' offset FFT

00 TAMPA TREE PROTECTION DETAIL AND NOTES

Plot Date: Wednesday, June 17, 2026

NOTES:

1. THESE TABLES ARE BASED ON:
 - a. MAXIMUM TEST PRESSURE OF 100 PSI
 - b. CLASS "C" PIPE BEDDING
 - c. POOR SOIL CONDITIONS
 - d. PVC PIPE
 - e. FOR VERTICAL OFFSETS, SHALL LOWER VERTICAL FITTING HAS A MINIMUM COVER OF 3 FEET.
2. RESTRAINING DEVICES FOR PVC PIPE SHALL BE BY MEGALUG (SERIES 2000 PV) OR EQUAL, MEETING ASTM F1674.
3. ANY ADDITIONAL FITTINGS WITHIN THE RESTRAINED SECTION SHALL BE RESTRAINED ACCORDINGLY.
4. ONE STANDARD LENGTH OF PVC PIPE (20 FEET) SHALL BE LAID ON EITHER SIDE OF THE FITTING WHERE POSSIBLE.

HORIZONTAL OFFSET:

FITTING TYPE	RESTRAIN "A" (LF)								
	4"	6"	8"	10"	12"	16"	18"	20"	24"
11-1/4"	1*	2*	2*	2*	3*	3*	3*	4*	4*
22-1/2"	2*	3*	3*	4*	5*	6*	6*	7*	8*
45"	4*	5*	7*	8*	9*	11*	13*	14*	16*
90"	9*	12*	15*	18*	21	27	29	32	37
PLUG / CAP / ISOLATION VALVE	26	36	47	56	66	85	94	102	119

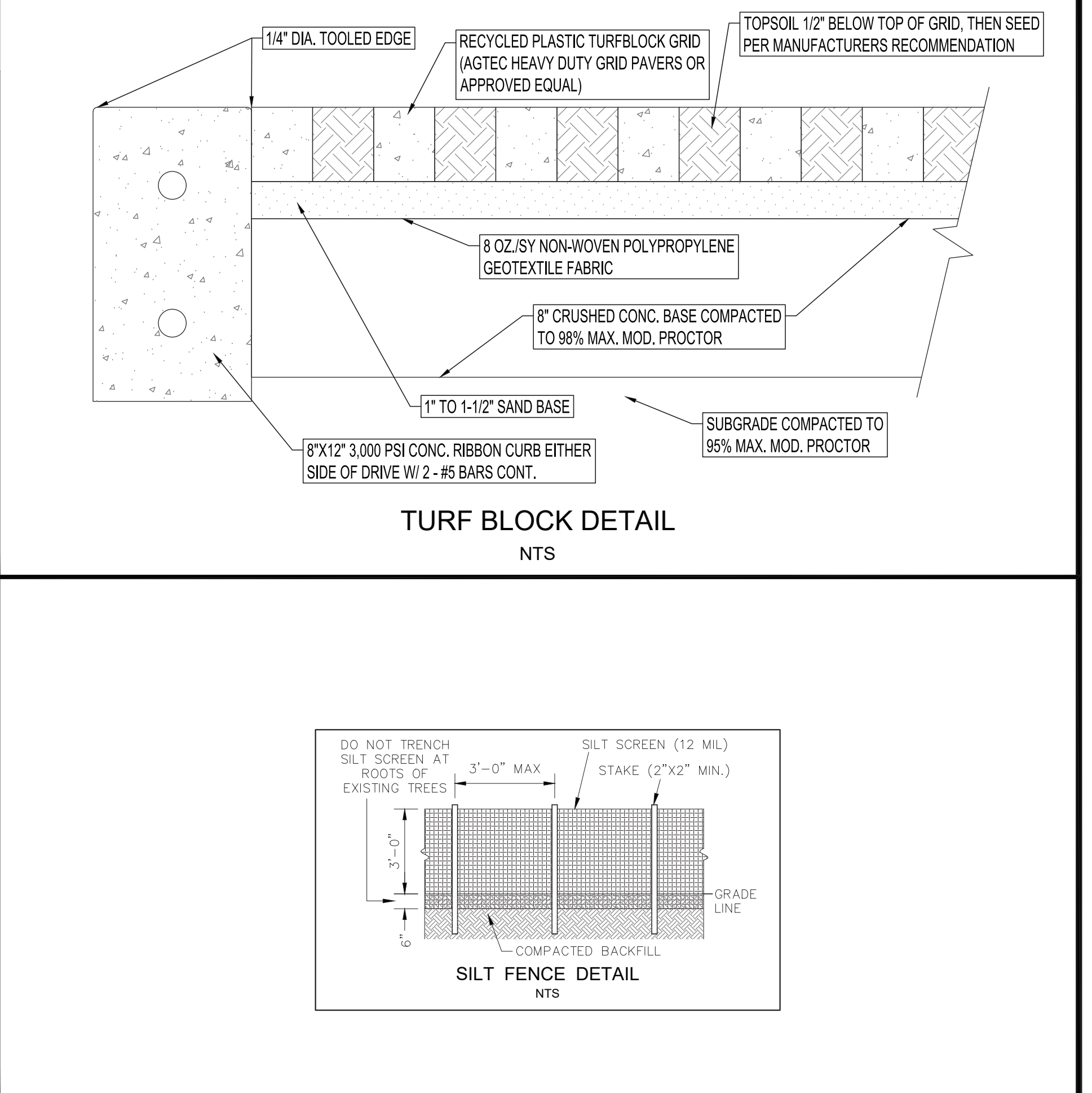
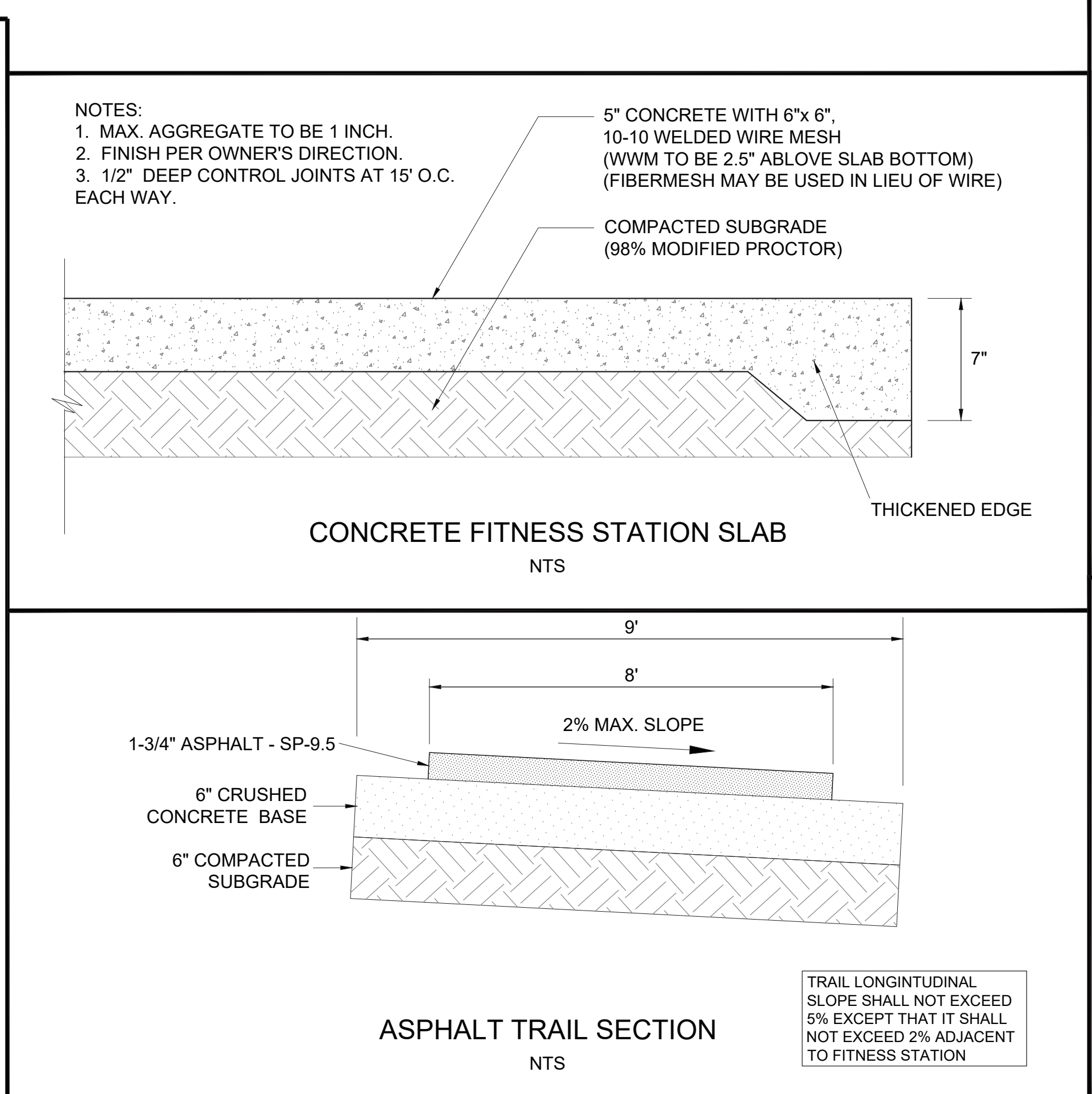
A = MINIMUM FOOTAGE OF PIPE TO BE RESTRAINED
* MINIMUM ONE PIPE JOINT UPSTREAM AND DOWNSTREAM OF EACH FITTING SHALL BE RESTRAINED

VERTICAL OFFSET:

FITTING TYPE	RESTRAIN "A" (LF)								
	4"	6"	8"	10"	12"	16"	18"	20"	24"
11-1/4"	3*	4*	5*	6*	7*	9*	10*	11*	12*
22-1/2"	5*	8*	10*	12*	14*	17*	19*	21	24
45"	11*	15*	20	23	28	35	39	43	50

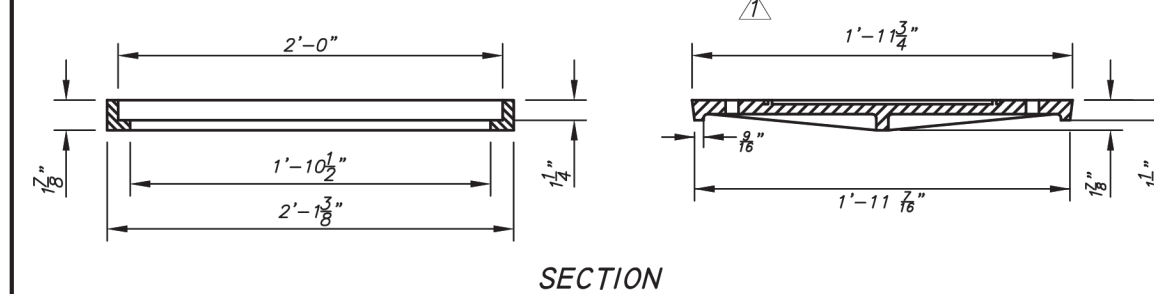
A = MINIMUM FOOTAGE OF PIPE TO BE RESTRAINED
* MINIMUM ONE PIPE JOINT UPSTREAM AND DOWNSTREAM OF EACH FITTING SHALL BE RESTRAINED

FITTING RESTRAINT DETAIL
N.T.S.





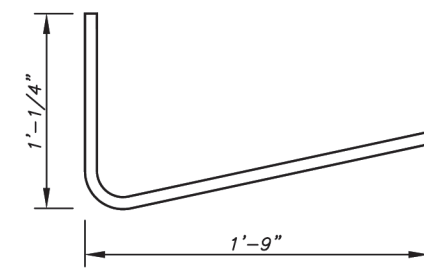
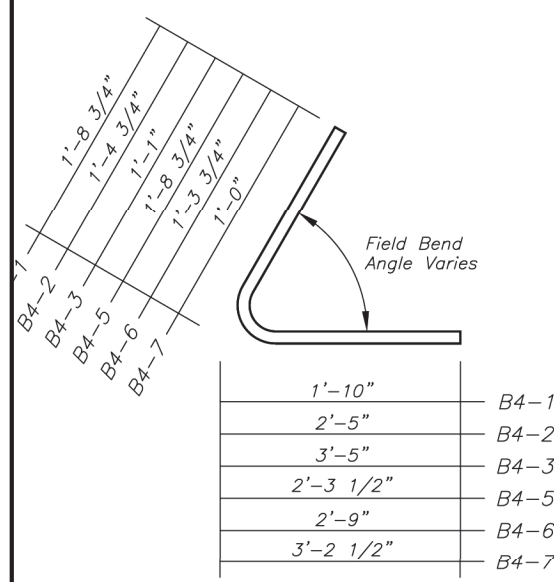
PLAN



SECTION

STANDARD CAST IRON INLET RING AND COVER

Scale: 1" = 1'-0"



BENDING DIAGRAMS

Not To Scale

STANDARD INLET DETAILS WITH NP (SNOOK) LID

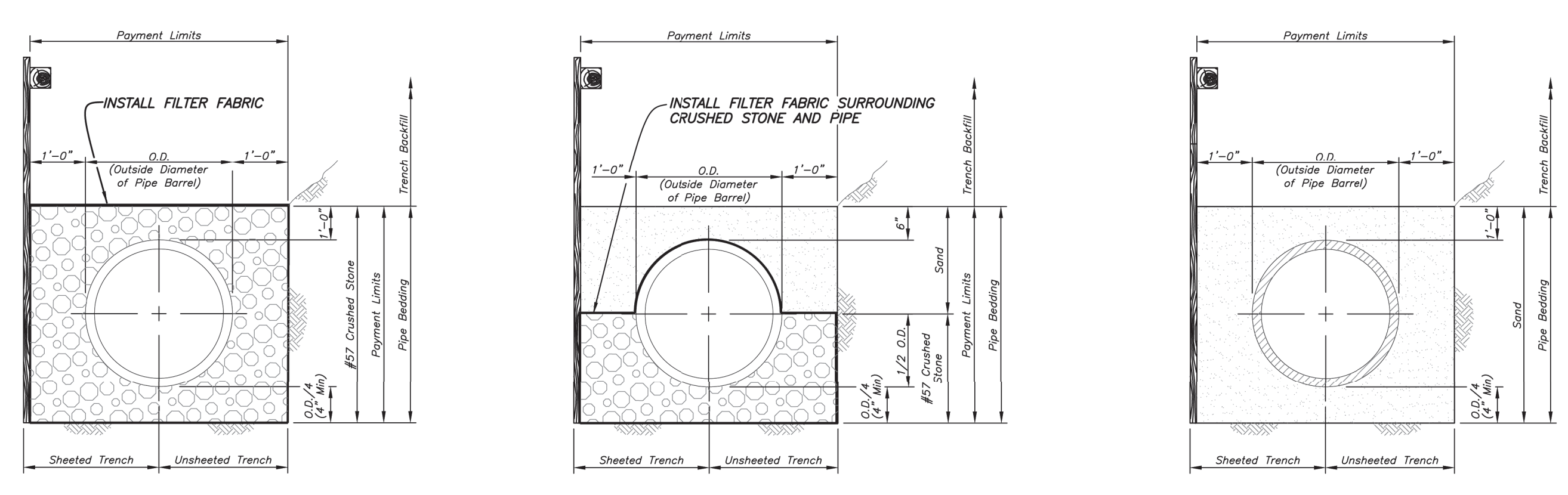
CURB INLET CONSTRUCTION NOTES

TYPES 1,2,3 AND BS-1, BV-1, BR-1, BR-2

- Concrete for top slabs, bottom slabs, walls, aprons and curb-and-gutter transition sections shall be Class II Concrete, conforming to Section 346 of the project specifications, with reinforcing bars placement and spacing as indicated herein. Top slabs shall not be poured until all reinforcing bars have been placed, inspected and approval obtained.
- Curb inlets are typically designed with the outlet pipe at the front wall of the structure. Otherwise, maximum pipe size that will fit the side wall of any standard curb inlet is 24 inches. Larger pipe sizes and 24-inch pipes meeting the side wall at an angle other than 90 degrees require a larger substructure. Curb inlets may be modified to utilize inlet risers and tops meeting City Inlet standards with substructures meeting FDOT standards for structure bottoms (Index #200). Design of these non-standard inlet structures shall be on case-specific basis.
- Refer to FDOT Standard Index #200 for reinforcing steel requirements at pipe openings. Any portion of the pipe protruding beyond the inside wall surface of the box shall be broken off and mortared to a smooth finish flush with the inside wall surface.
- At the discretion of the Engineer, boxes may be constructed of solid clay or portland cement concrete brick and mortar. The inside surface of all brick walls shall be plastered with one-half inch minimum thickness of 1:2 mix sand-cement mortar and left with a smooth finish.
- Minimum brick wall thickness shall be 7 1/2 inches when the distance (depth) from the rim of the cast ring and cover to the top of the bottom slab does not exceed 8 feet, and shall be 12 inches when such depth exceeds 8 feet. Brick shall be laid in stretcher courses with every sixth course a header course.
- Minimum clearance for all reinforcing bars shall be 1 1/2 inches from the nearest surface of the concrete member. Top slab reinforcement shall be 2 inches from the bottom of the slab. Other minimum clearances are as shown in drawings.
- Wing for inlet Types 2, BS-1 and BR-2 shall be placed on the upstream side of the center of box, with plan reversed if necessary because of the direction of gutter flow.
- Curb transition sections shall be included in the contract price of the inlet, and no separate payment shall be made.
- Top slab of all curb inlets shall be sloped at 2 percent toward the street.
- Dimensions shown for inlet types BR-1 and BR-2 are for the indicated curb radius only. Chord dimensions at the curb shall remain constant for other curb radii. Contractor shall adjust other inlet dimensions and reinforcing steel quantities to fit actual curb radius shown in the project plans.
- Reinforcing steel shall be ASTM Grade 60. Ring and cover material shall be ASTM-A48 Class 30 B Gray Iron.
- Inlet cover weight is 85 lbs. (approximate).
- All construction joints shall follow FDOT Standard Index #201.
- Side openings (slots) for curb inlets are to be used on Type 1 inlets (offset) only. Rear openings (slots) may be used on any curb inlet type. Refer to Sheet 10 for guidance.
- Refer to Section 425 of the project specifications for additional requirements.

NOTE TO ENGINEER:
Inlet types BS-1 and BV-1 shall be the preferred types for application on tangents. Inlet types 1, 2 and 3 shall only be used when dictated by conditions that would preclude the use of types BS-1 and BV-1.

- Notes:
- All types of pipe bedding shall extend to undisturbed earth at sides and bottom of the trench.
 - Sand and crushed stone pipe bedding shall be placed and compacted in accordance with specifications.
 - Bedding materials shall meet project specifications for Class B and Class C Bedding.
 - Filter fabric shall meet FDOT Standard Specification 441-2.3.



BEDDING DETAILS

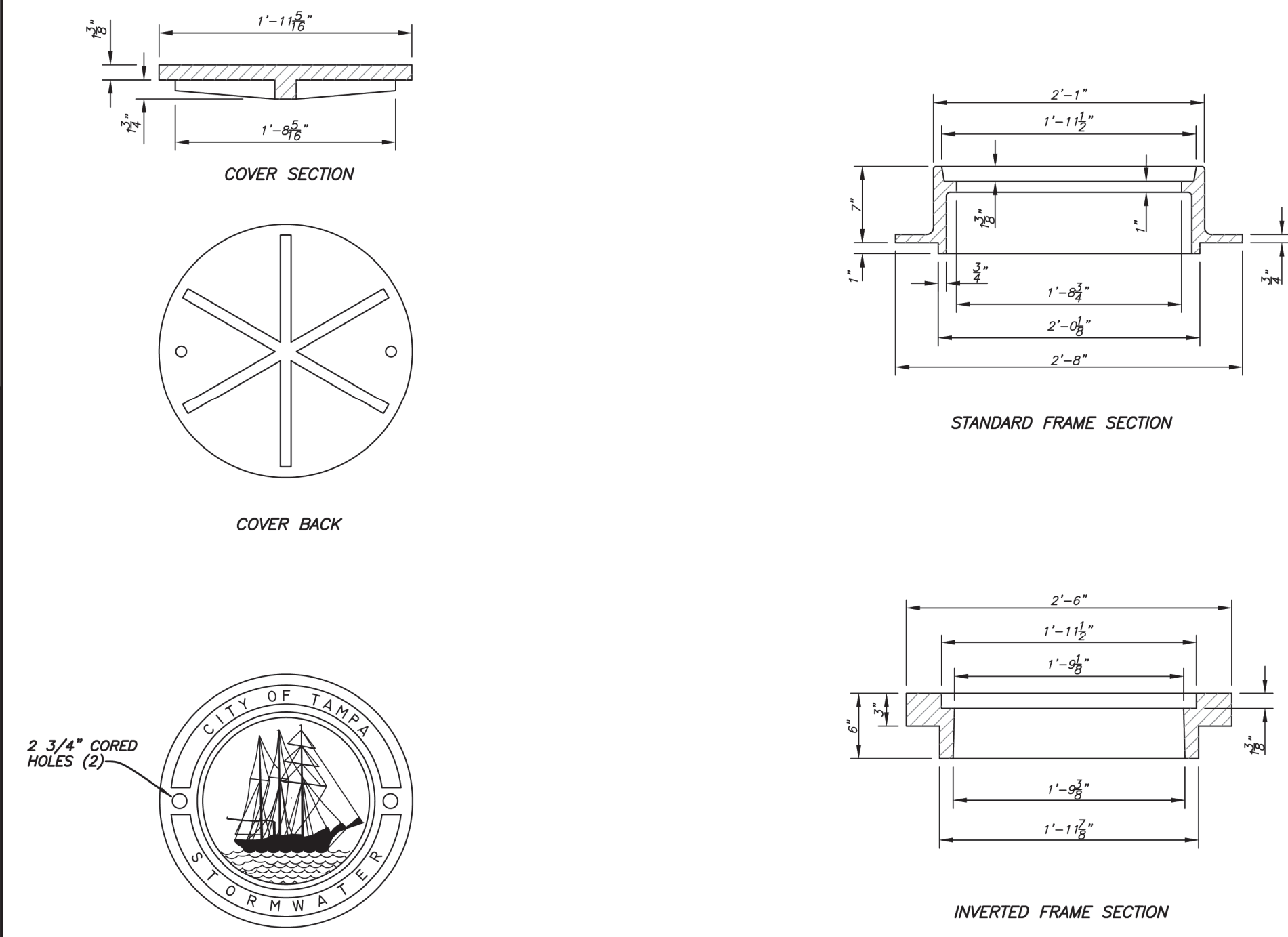
CITY OF TAMPA STORMWATER DEPARTMENT STANDARD DETAILS GENERAL NOTES

- ALL DRAINAGE STRUCTURES (MANHOLES, INLETS, OUTFALL STRUCTURES AND OTHERS) SHALL INCLUDE A 6" THICK COMPACTED #57 AGGREGATE FOUNDATION, WRAPPED COMPLETELY WITH FILTER FABRIC MEETING FDOT STANDARD SPECIFICATIONS 441-2.3.
- ALL PIPE JOINTS (ROUND, ELIPTICAL AND BOX CULVERTS) SHALL BE WRAPPED COMPLETELY WITH FILTER FABRIC MEETING FDOT STANDARD SPECIFICATIONS 441-2.3. FABRIC SHALL EXTEND ONE FOOT ONTO EACH PIPE SECTION (JOINT) AND SHALL OVERLAP A MINIMUM OF ONE FOOT CIRCUMFERENTIALLY. FABRIC SHALL BE HELD IN PLACE WITH RUST-PROOF METAL STRAPPING.
- THE STRUCTURAL DESIGN SHALL BE CONSISTENT WITH FDOT INDEX 200 AND AS APPROVED BY THE ENGINEER.

CITY OF TAMPA STANDARD DETAILS	
SCHEDULE OF CASTINGS	
STRUCTURE TYPE	
All Curb Inlets (Cover)	USF 1190 (85 lb.)
All Curb Inlets (Ring)	USF 1190
All Manholes (Cover)	USF Type AO (160 lb.)
All Manholes (Standard Ring)	USF 575
All Manholes (Inverted Ring)	USF 1175
Type T Grate Inlets	USF 6289
Type E Grate Inlets	USF 6286
Type H grate Inlets	USF 6288
Grate Seats	USF 7100

NOTES:

- All castings are as above or equal.
- All castings outside City of Tampa ROW or easements shall not include the words "City of Tampa" nor the ship logo.
- Manhole covers shall include the text "Stormwater" as shown in the Standard Drawing.

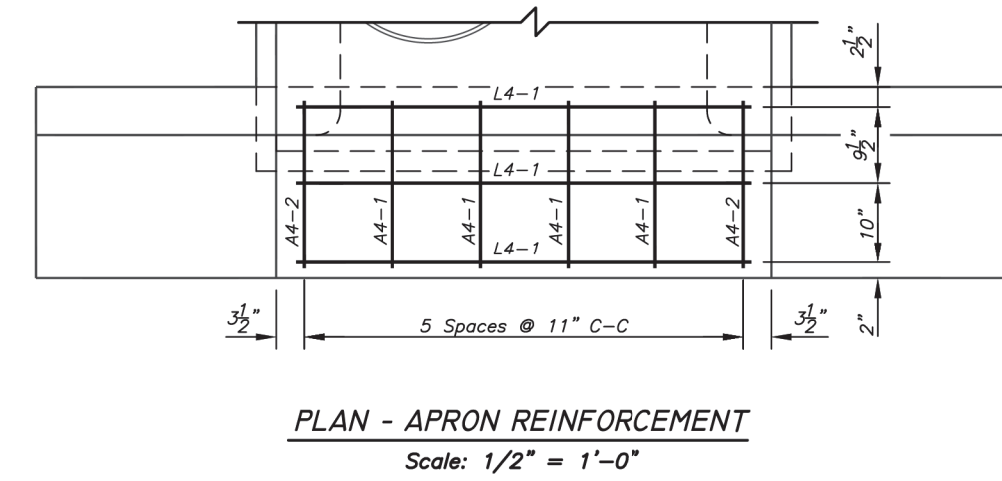
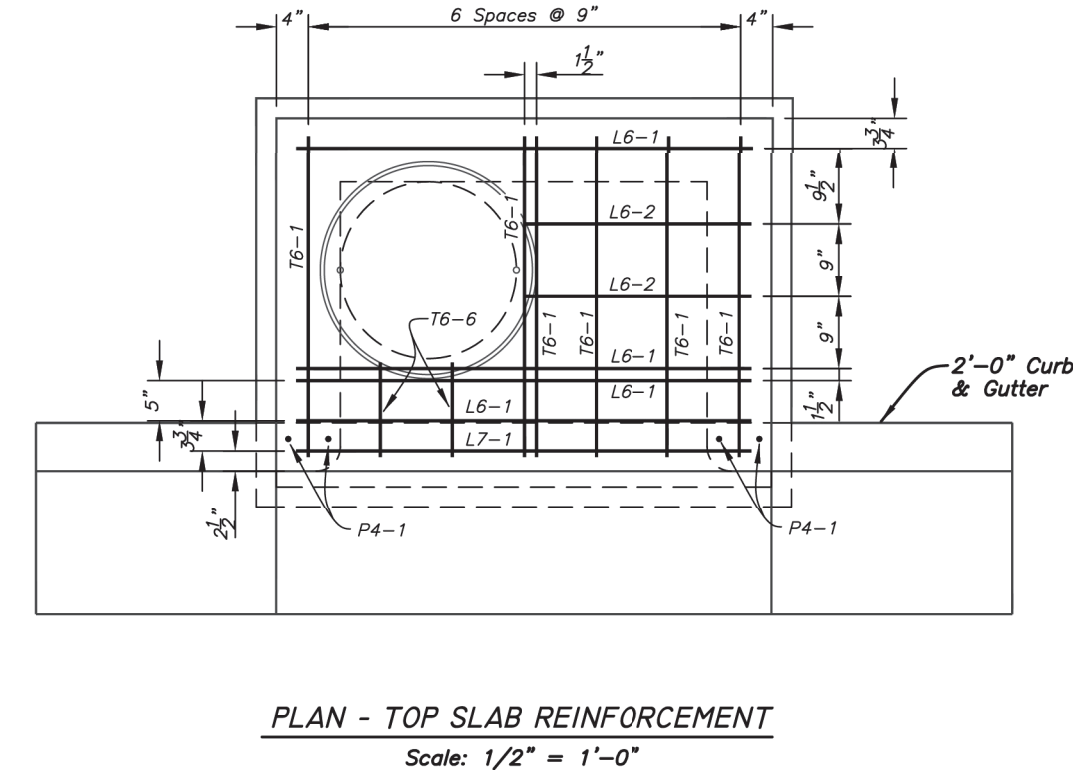
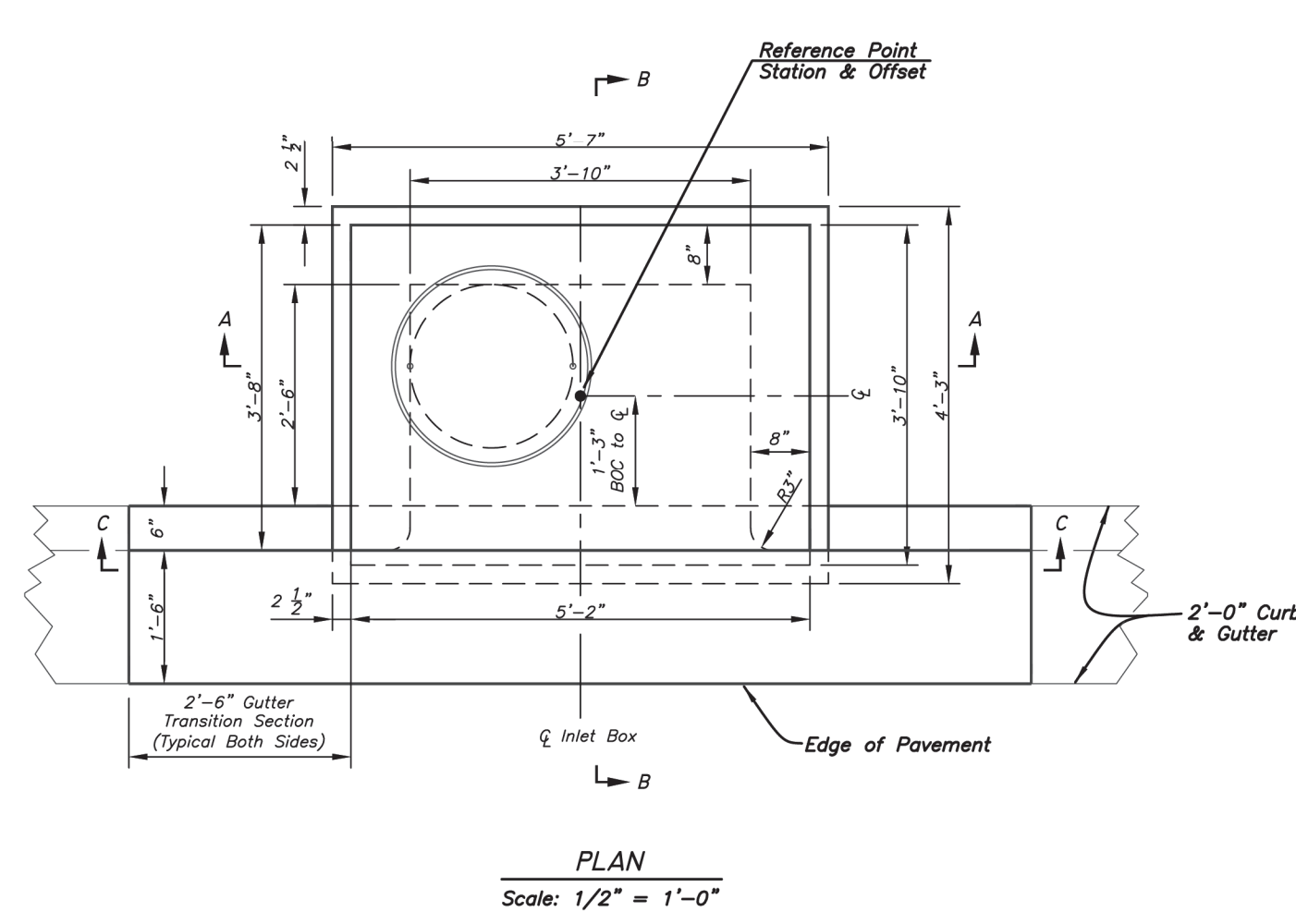


MANHOLE FRAMES & COVER
Not To Scale
FOR CLOSED BASINS
STANDARD MANHOLE DETAILS

NOTE: Manhole structures shall be per FDOT Standard Index #200.

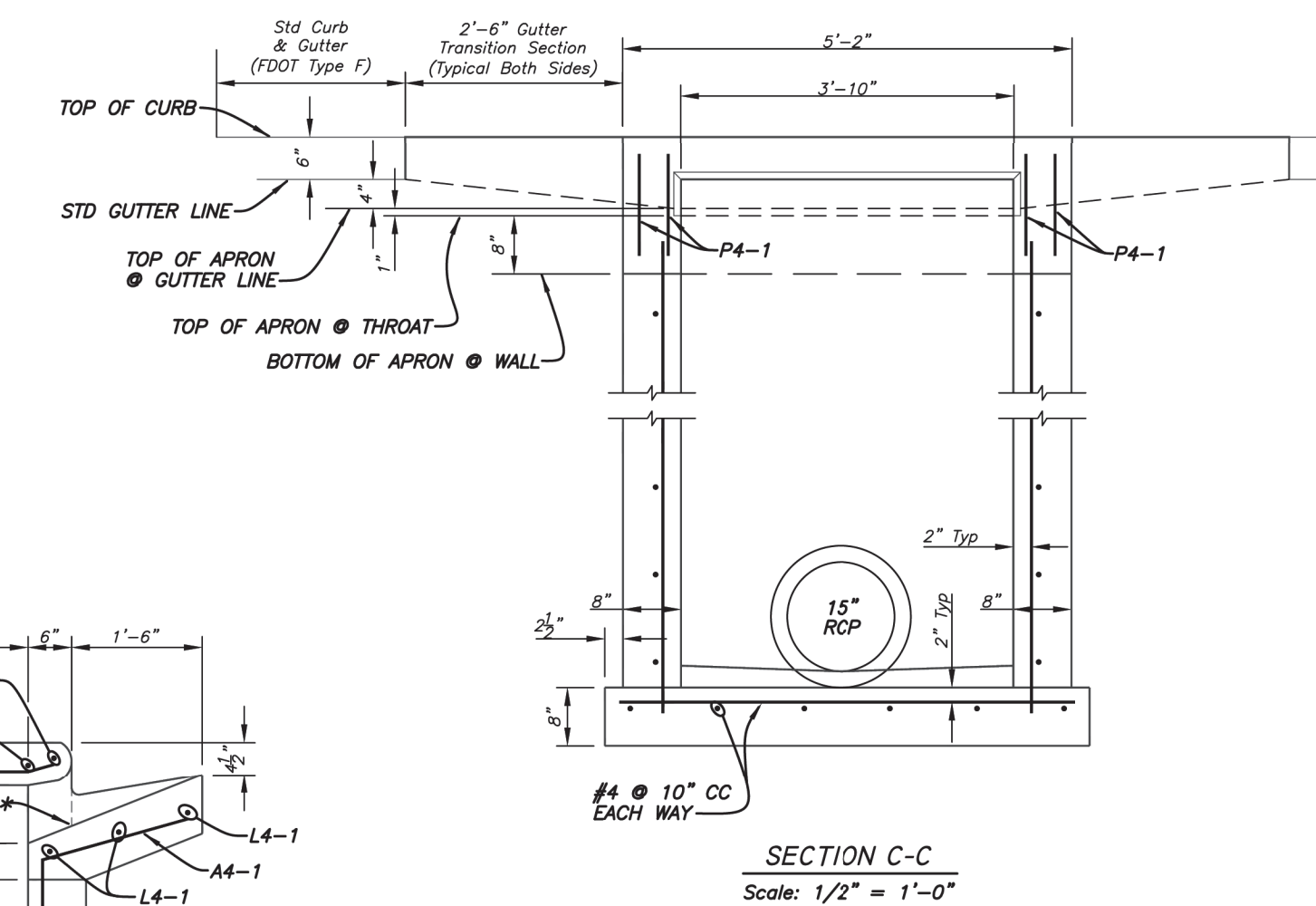
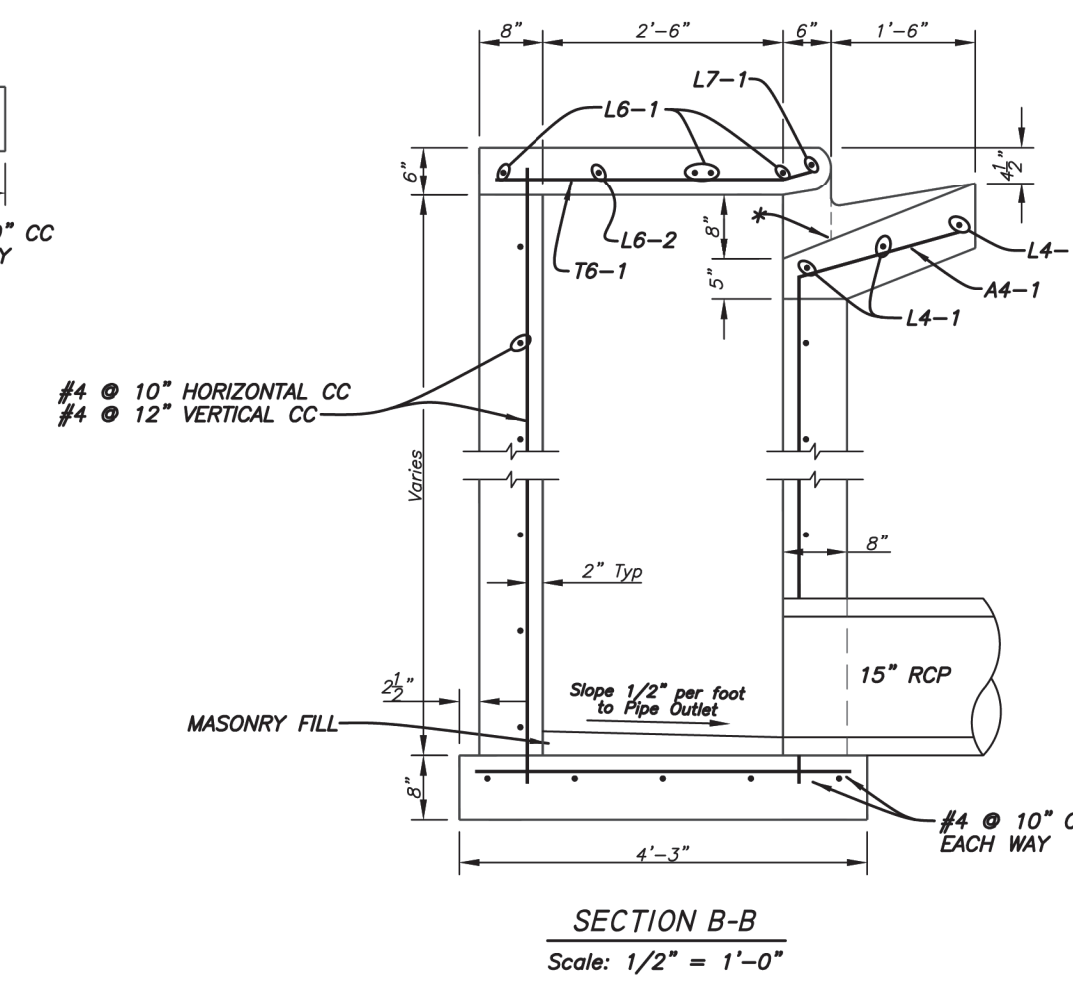
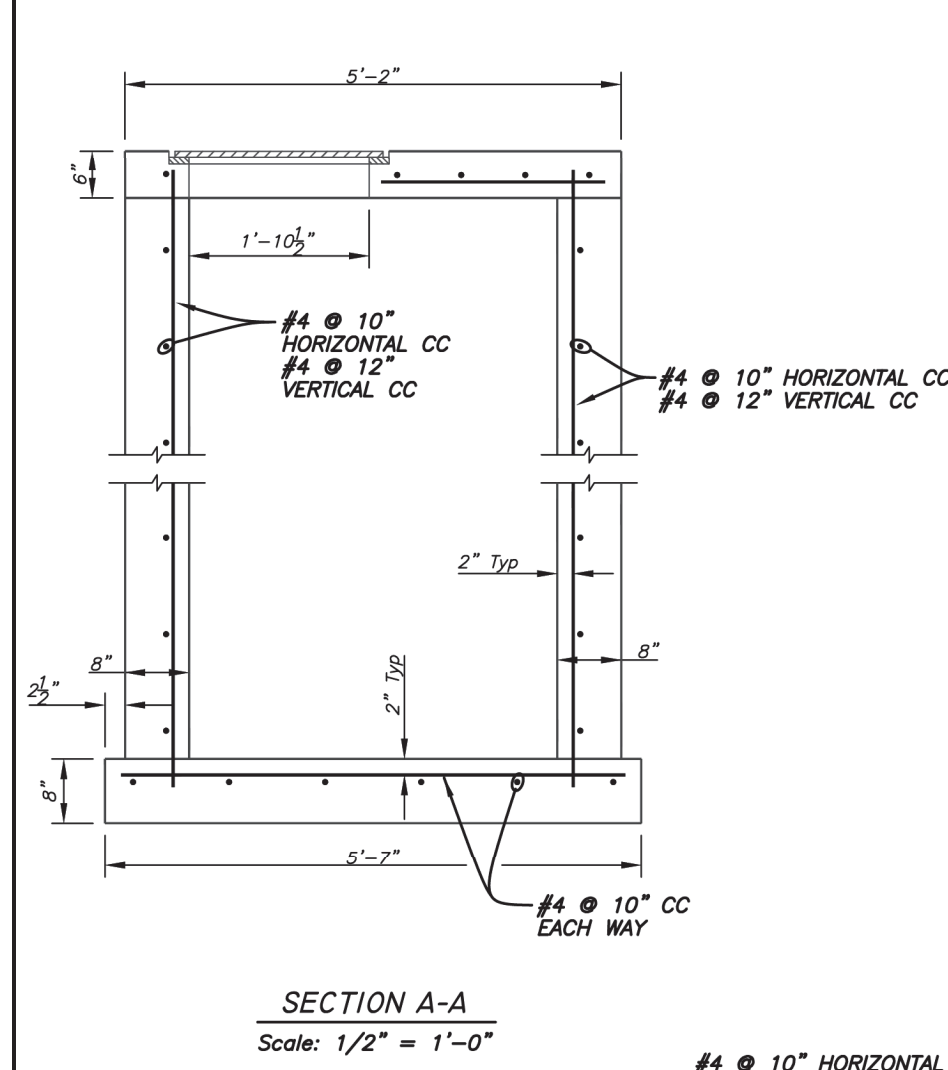
Plot Date: Wednesday, June 17, 2026

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1			4		

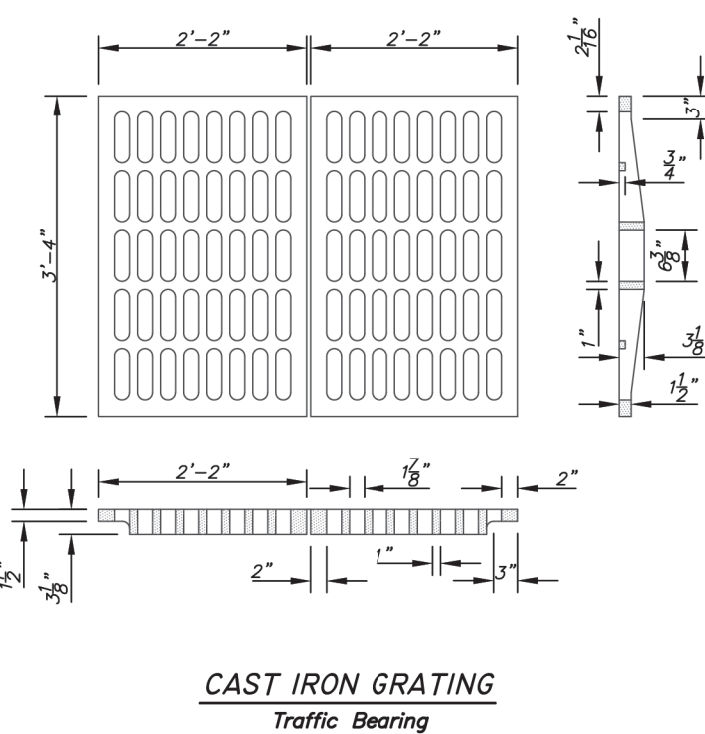
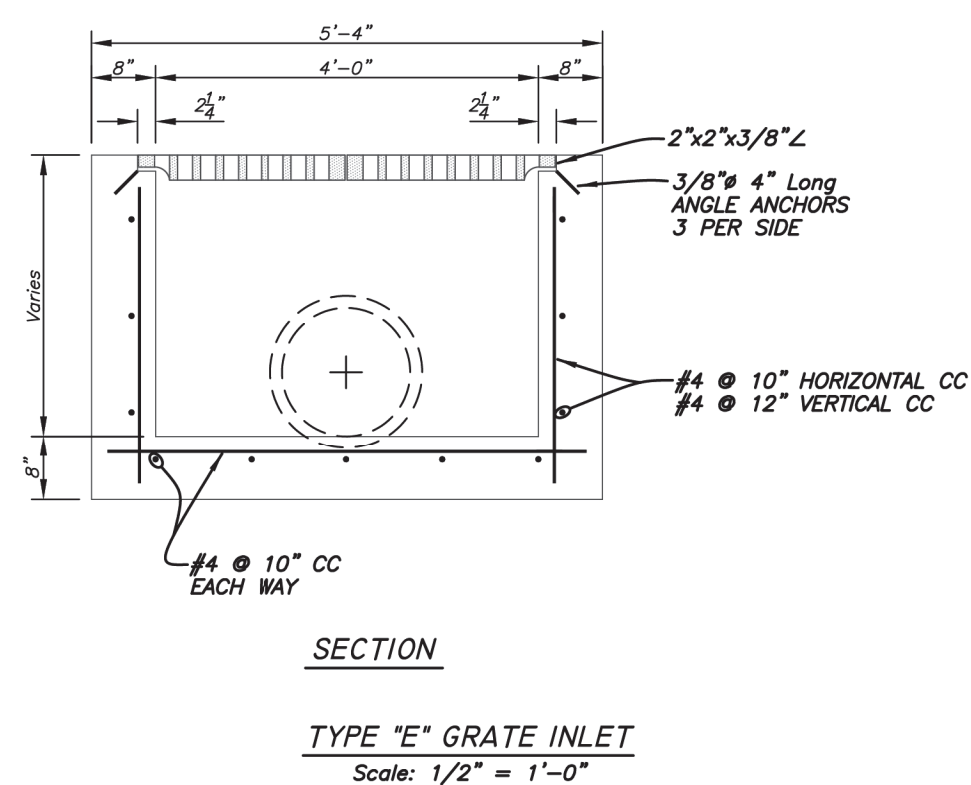
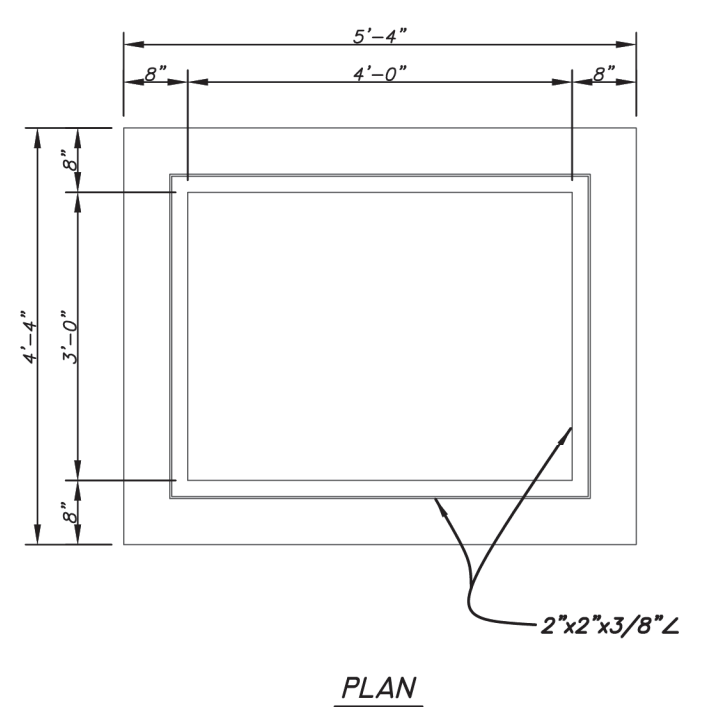
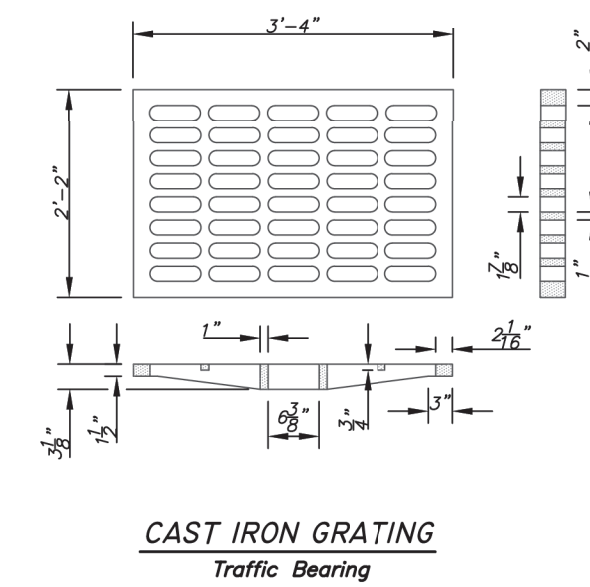
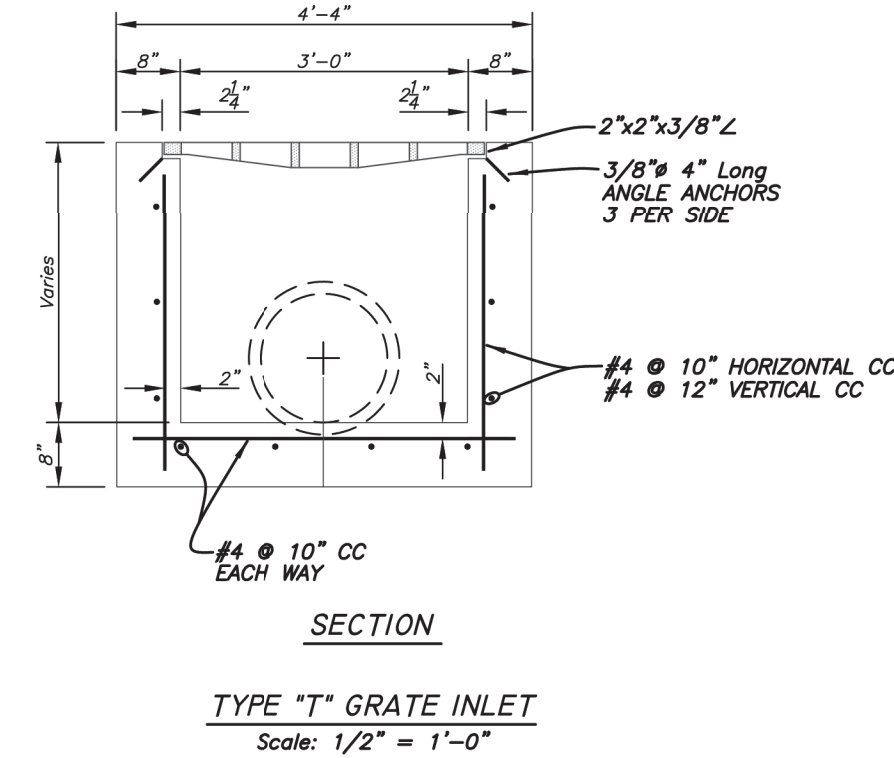
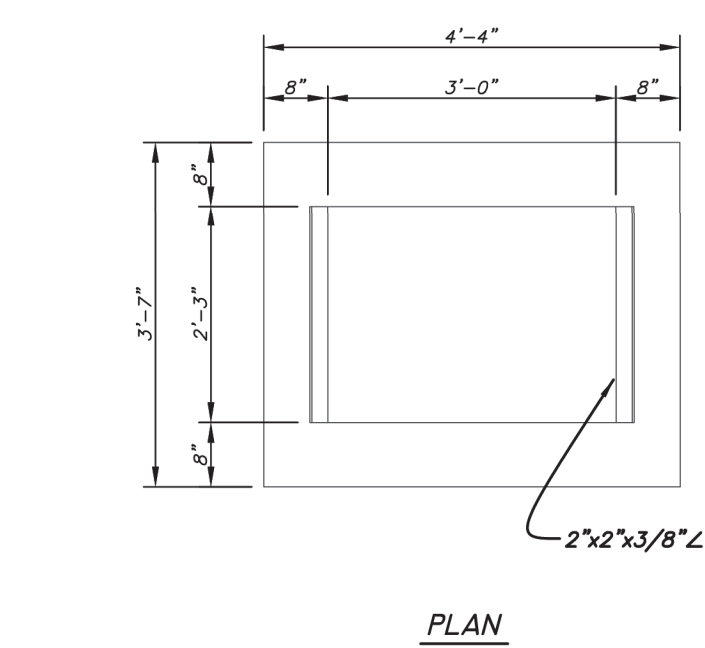


SCHEDULE OF REINFORCING STEEL BARS (FOR INLET TOP AND APRON ONLY)					
MARK	SIZE	COUNT	LENGTH	WT EACH	TOTAL WT
TB-1	No 6	6	3' 5"	5.132	30.794
TB-6	No 6	2	1' 1"	1.627	3.253
L4-1	No 4	3	4' 11"	3.285	9.854
L6-1	No 6	4	4' 11"	7.385	29.541
L6-2	No 6	2	2' 5 1/2"	3.692	7.384
L7-1	No 7	1	4' 11"	10.050	10.050
A4-1	No 4	4	1' 9"	1.189	4.678
A4-2	No 4	2	2' 9 1/4"	1.851	3.702
P4-1	No 4	4	1' 1 1/2"	0.752	3.008
TOTAL WEIGHT IN POUNDS					102.281

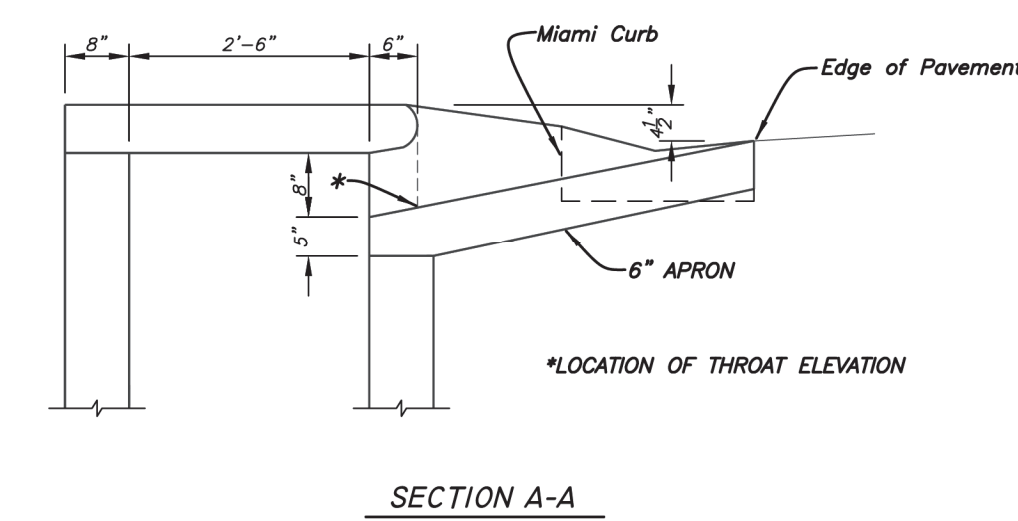
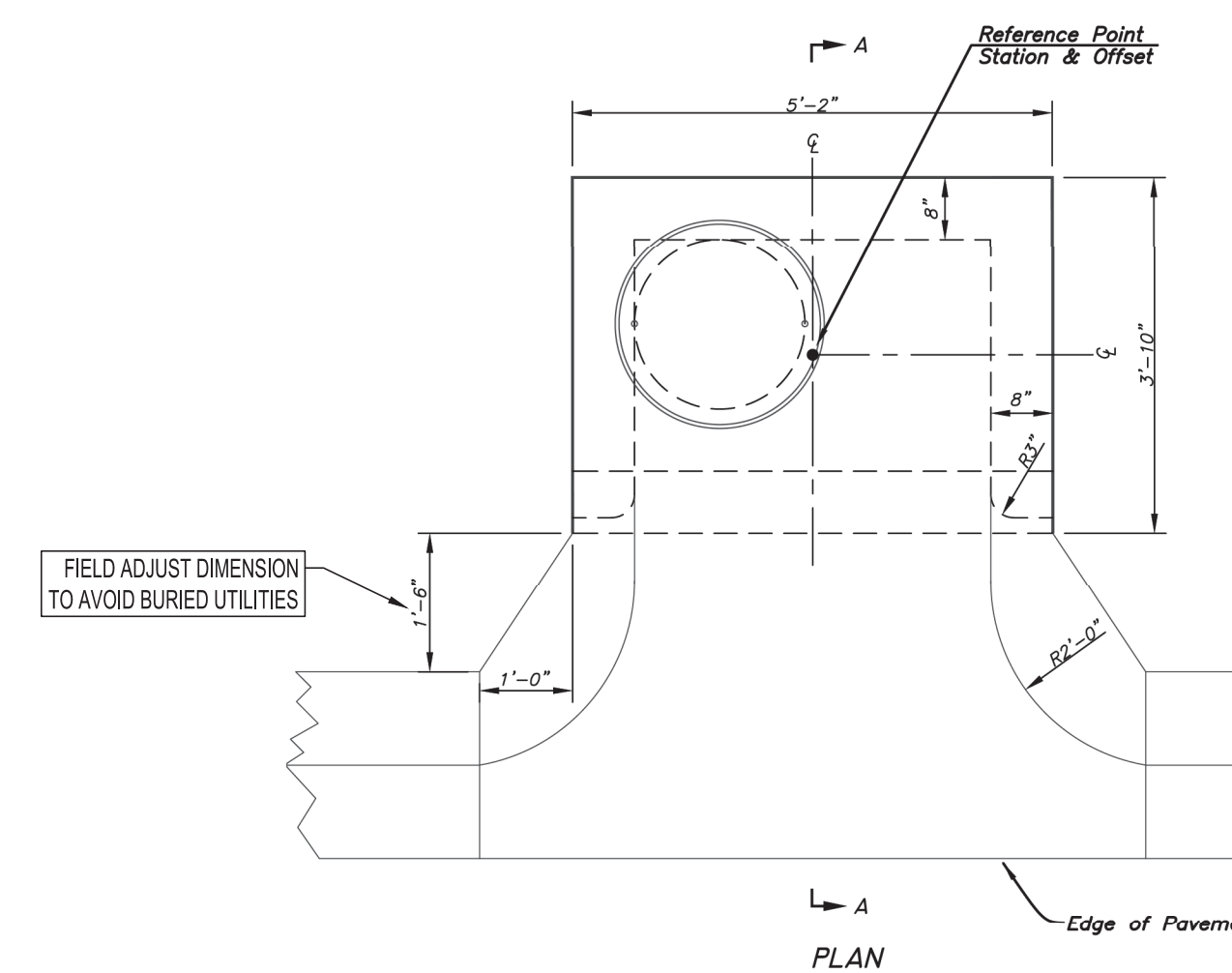
STANDARD INLET DETAILS - TYPE 1 INLET



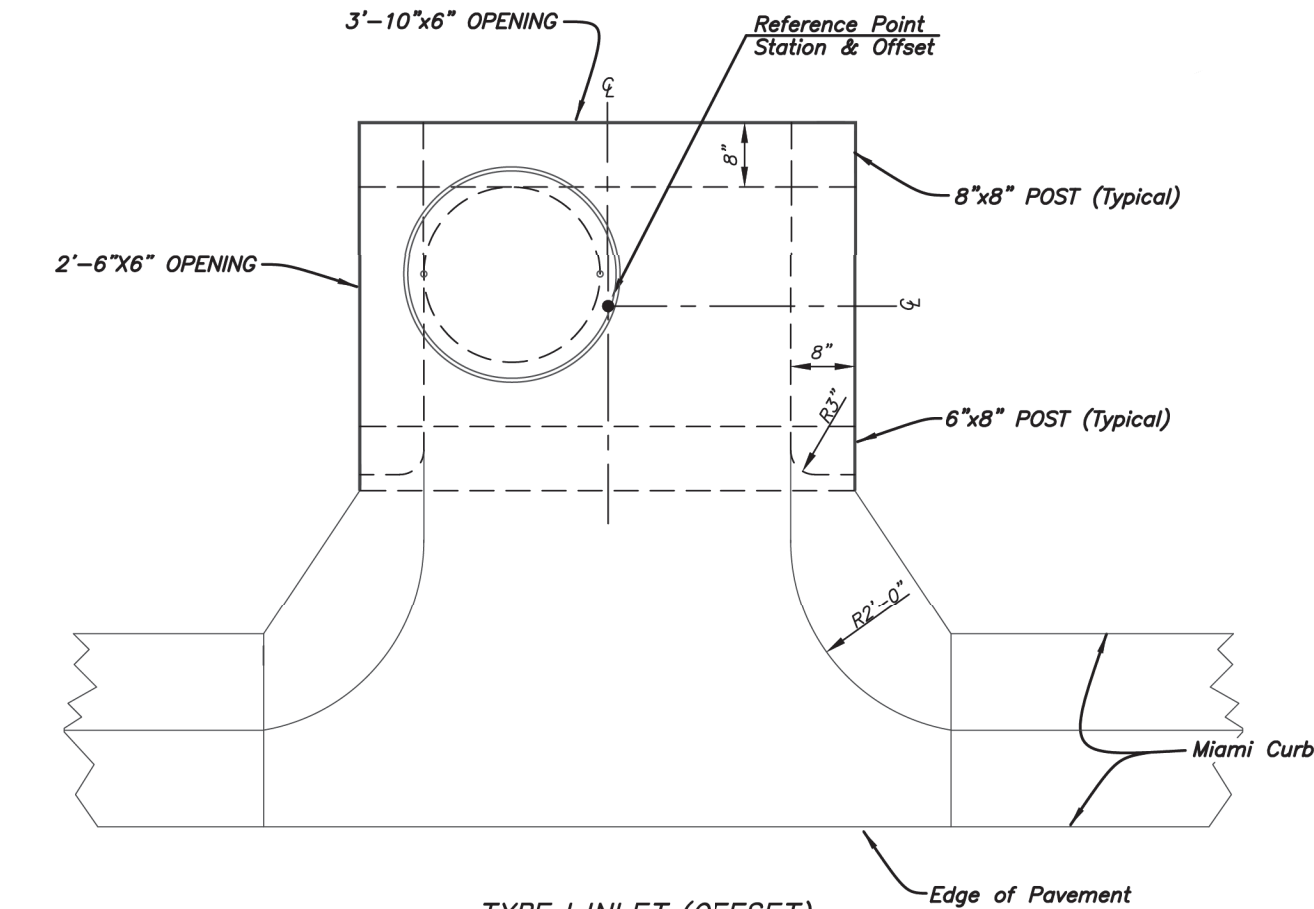
STANDARD INLET DETAILS - TYPE 1 INLET



STANDARD INLET DETAILS - TYPE 'T' & 'E' GRATE INLET



TYPE 1 INLET (OFFSET)
Scale: 1/2" = 1'-0"



TYPE 1 INLET (OFFSET)

In cases where a curb inlet is used but no barrier curb is present, the Type 1 inlet shall be offset as shown herein. Preferably, Miami curb shall be used to convey runoff along the edge of pavement to the inlet.

In cases where no Miami curb is used, the offset shall remain as shown herein and the concrete apron shall be extended on a 1.5-to-1 horizontal angle to meet the edge of pavement. The concrete apron shall be reinforced with Number 4 steel bars at 11" on center. (Disregard the A4-designated bar counts and lengths in the Schedule of Reinforcing.)

Payment for the concrete apron, curb transitions and all other work incidental to offsetting the inlet shall be made under the Type 1 inlet contract pay item and no separate nor additional payment shall be made for this modification to the standard.

TYPE 1 INLET WITH TYPE D CURB

In cases where a curb inlet is used with Type D Curb, the Type 1 inlet may be offset as shown in "Type 1 Inlet (Offset)" or may be constructed in the same alignment as the standard detail, i.e. with the face of the inlet top aligned with the face of curb.

If the standard alignment is used, the concrete inlet throat shall be constructed as shown in the standard. A 2'6" long concrete transition section shall be constructed on each side of the concrete inlet throat. This section shall transition from the Type D Curb (no gutter) to the 1'6" wide concrete inlet throat.

Payment for the concrete apron or concrete inlet throat, curb transitions and all other work incidental to offsetting the inlet or adapting the inlet to a Type D Curb shall be made under the Type 1 inlet contract pay item and no separate nor additional payment shall be made for this modification to the standard.

TYPE 1 INLET WITH SIDE AND/OR BACK OPENINGS

If side and/or back openings are called for in the project plans, dimensions of the openings shall be as shown in the detail included herein. Additional P4-1 reinforcing bars shall be used at the rate of four (4) per post section, as applicable. Six (6) inch thick concrete apron(s) as shown in the project plans shall be constructed at each side and back opening.

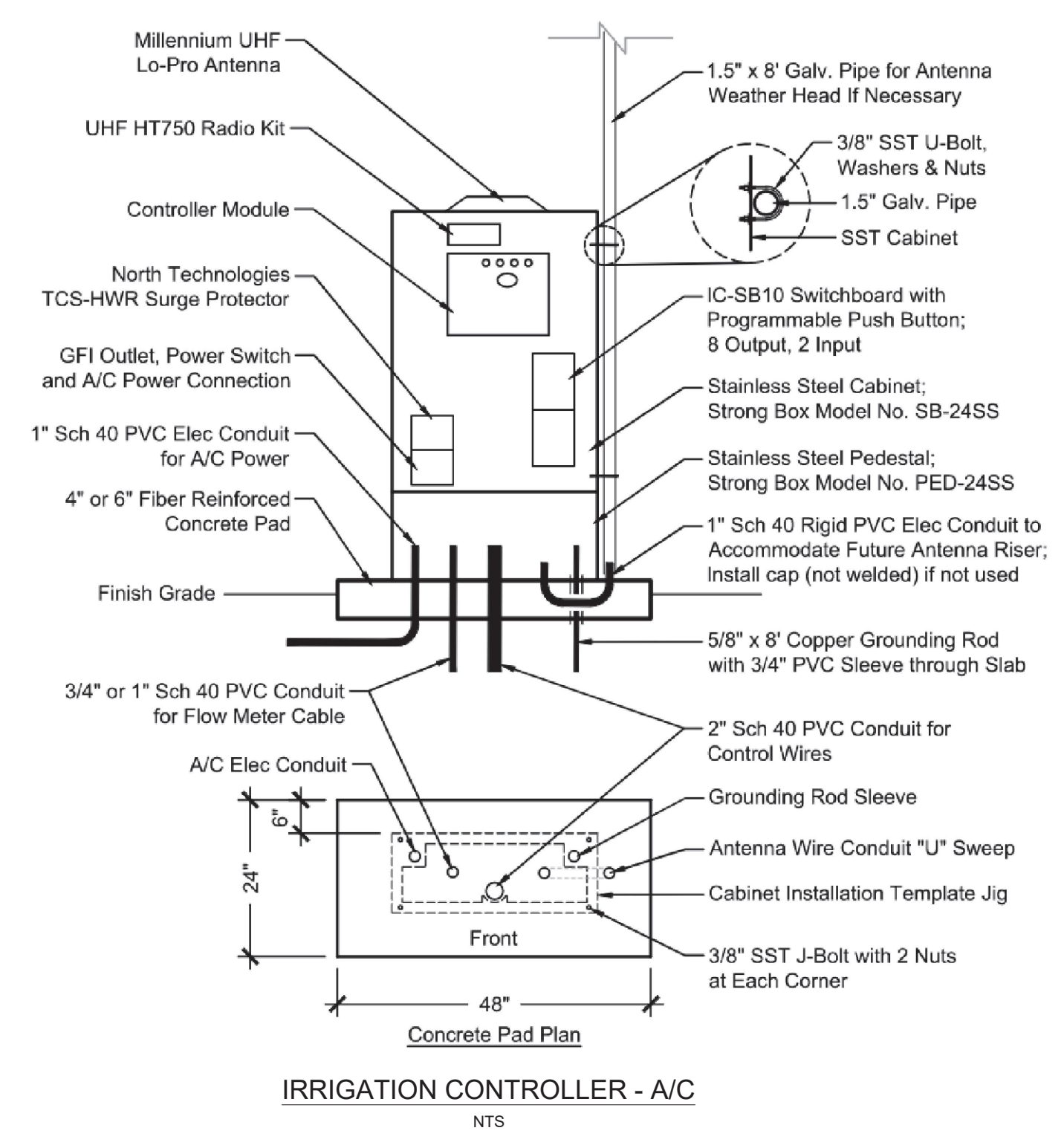
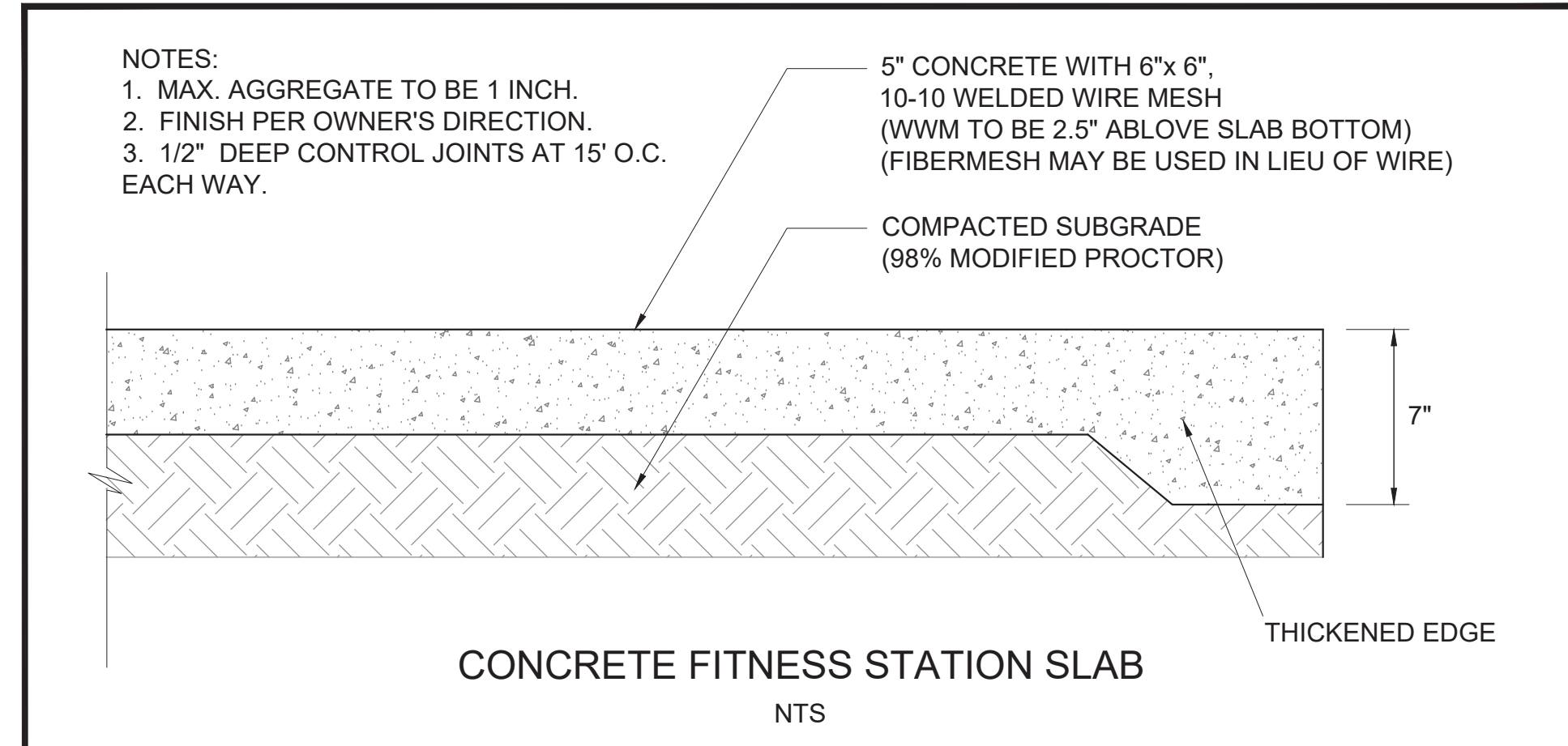
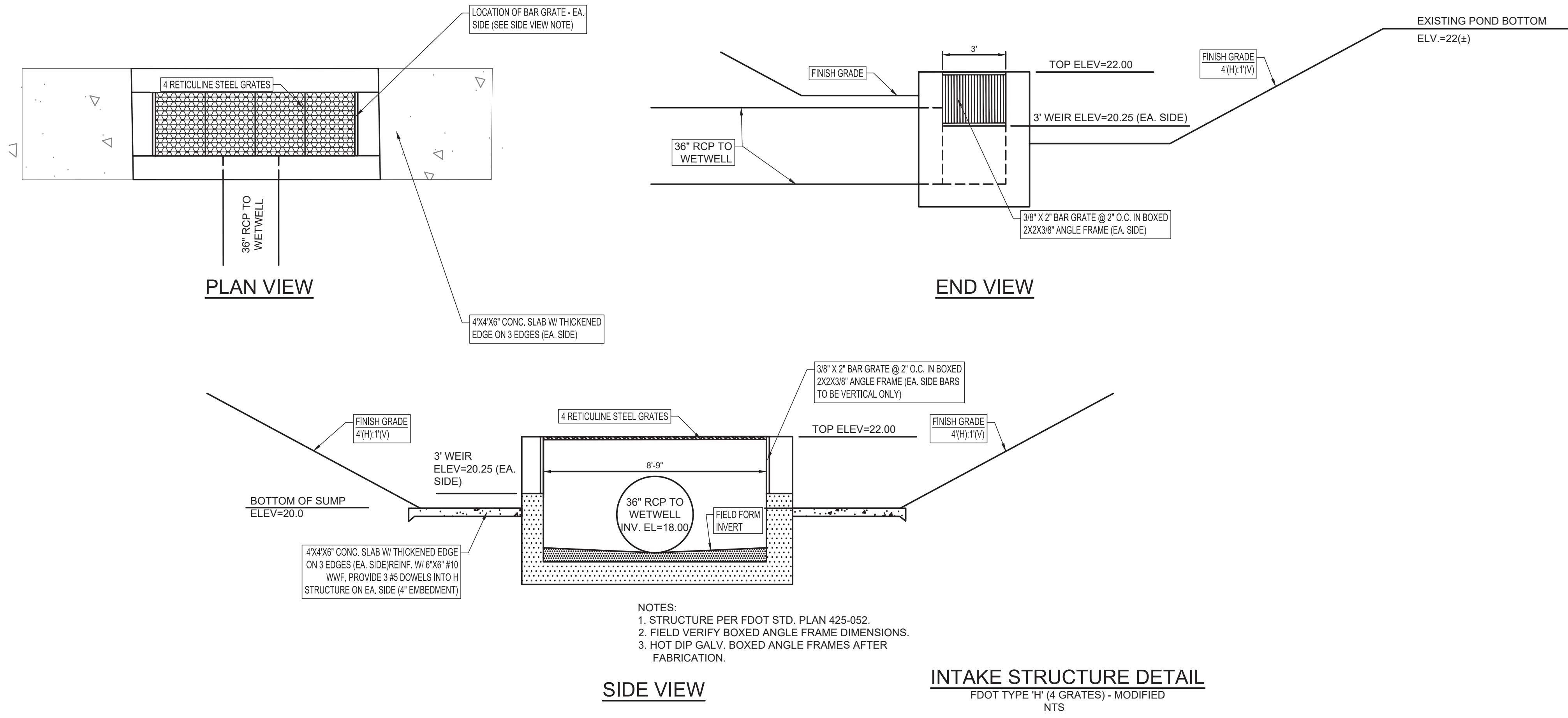
Payment for concrete aprons and all other work incidental to constructing inlets with side and/or back openings shall be made under the Inlet contract pay item and no separate nor additional payment shall be made for this modification to the standard.

STANDARD INLET DETAILS - TYPE 1 INLET MODIFIED

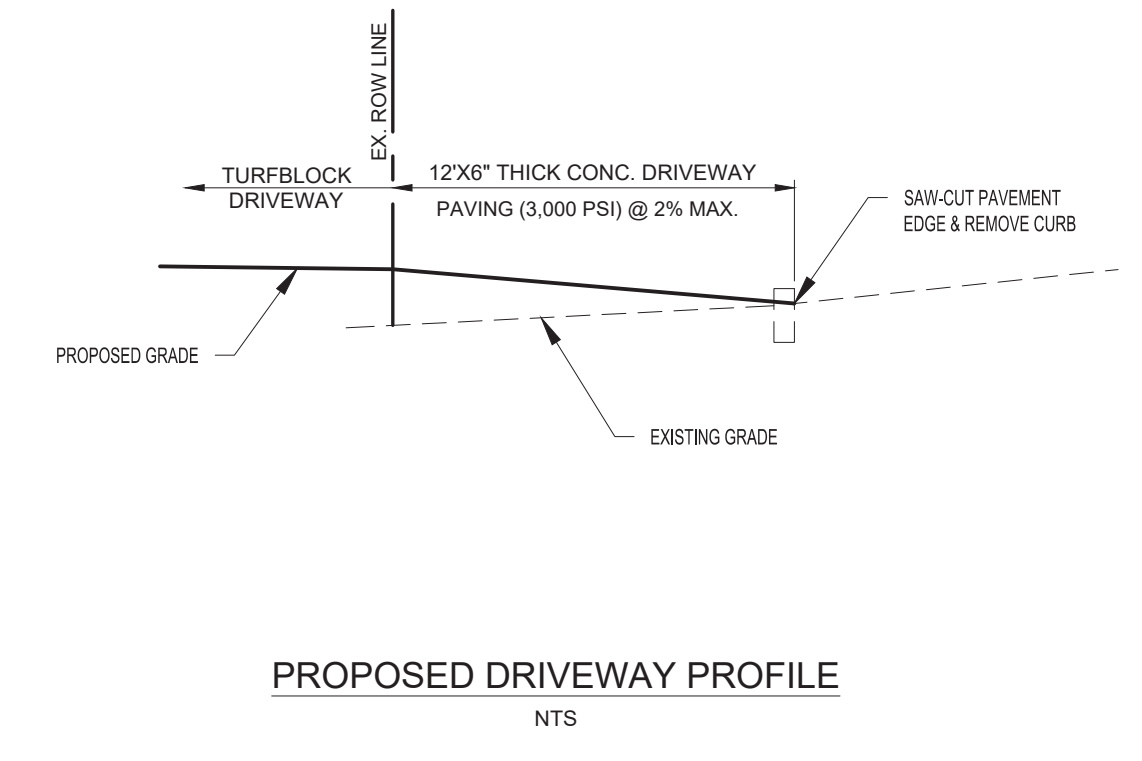
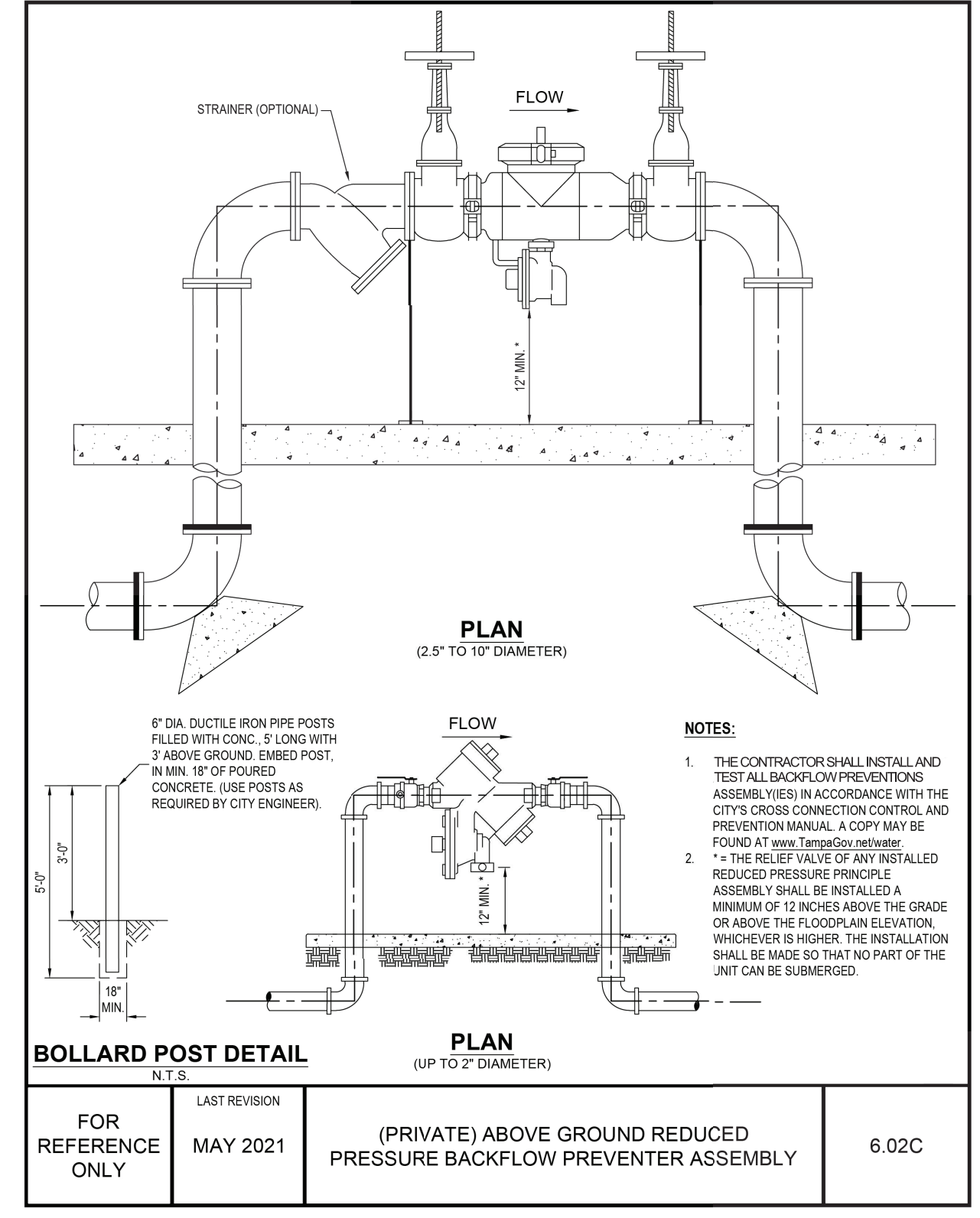
Plot Date: Wednesday, June 17, 2026

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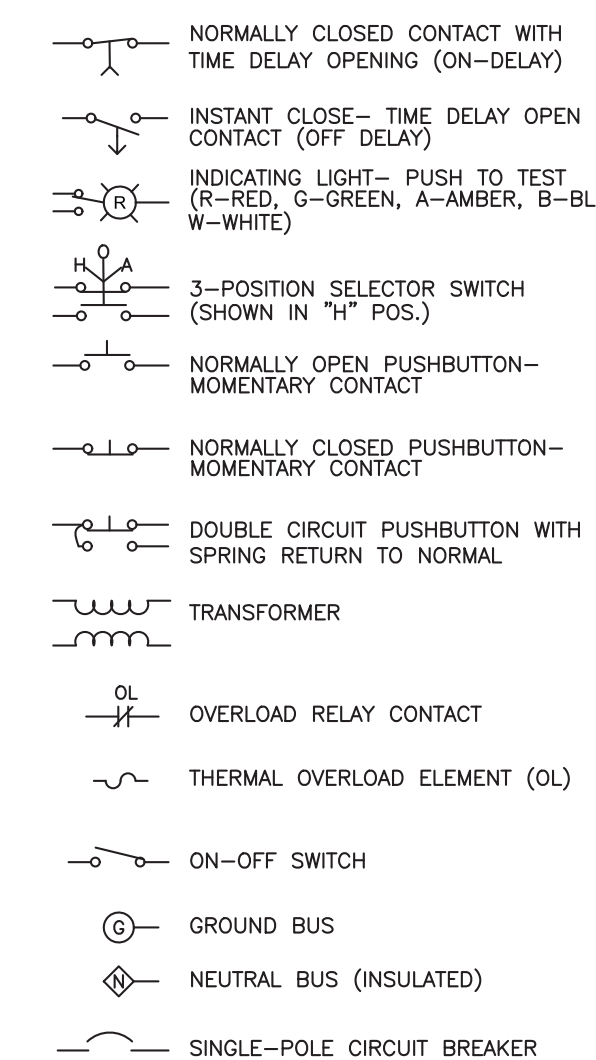
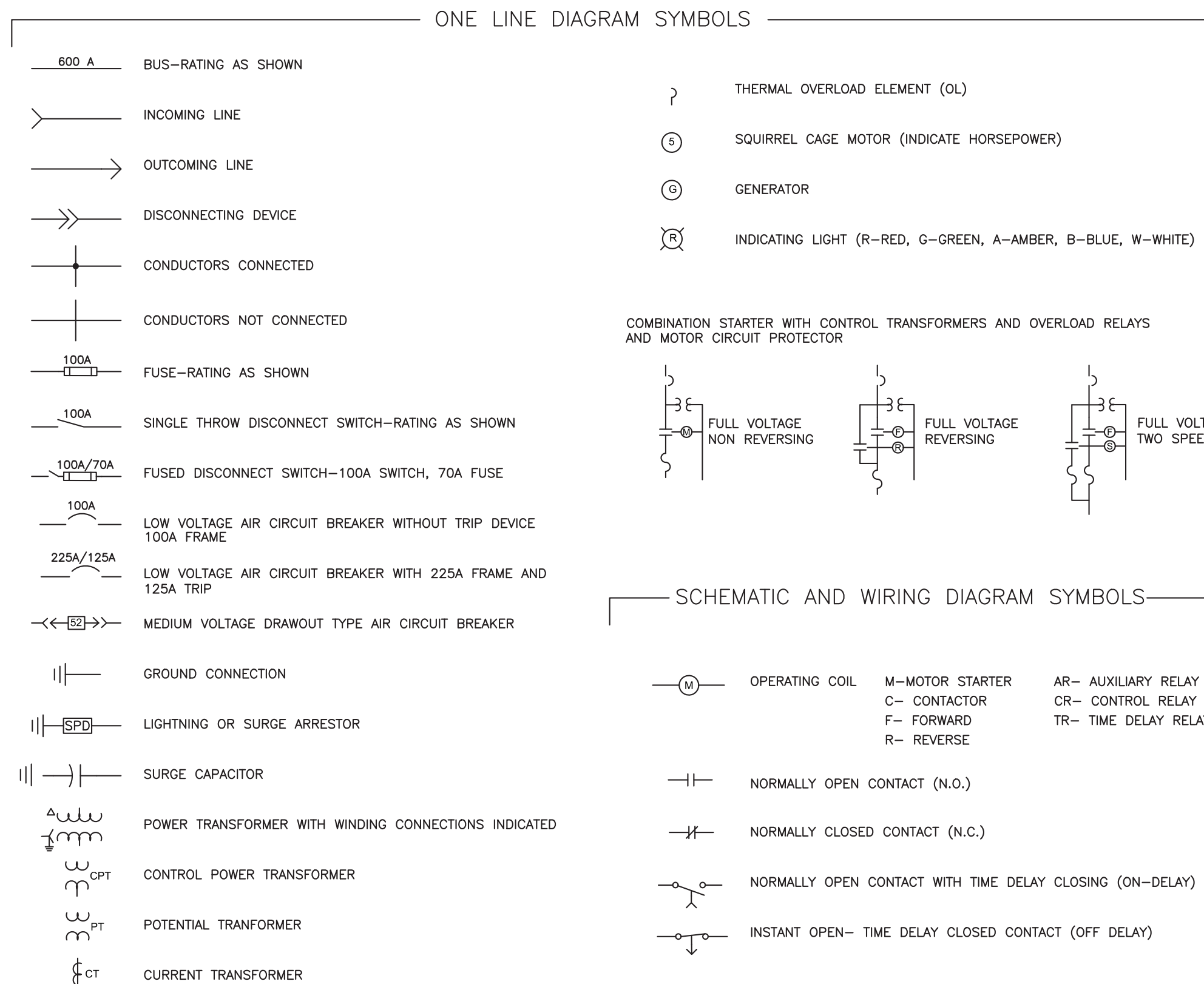
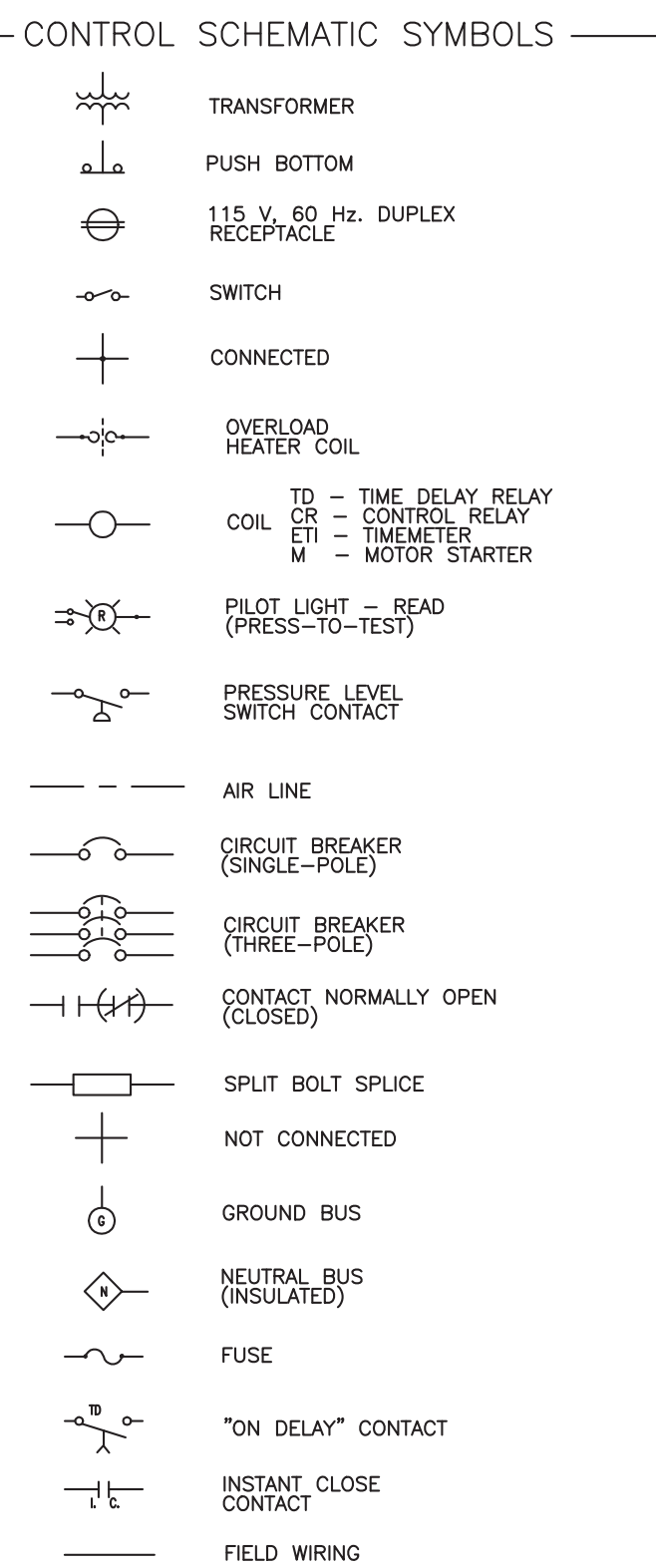
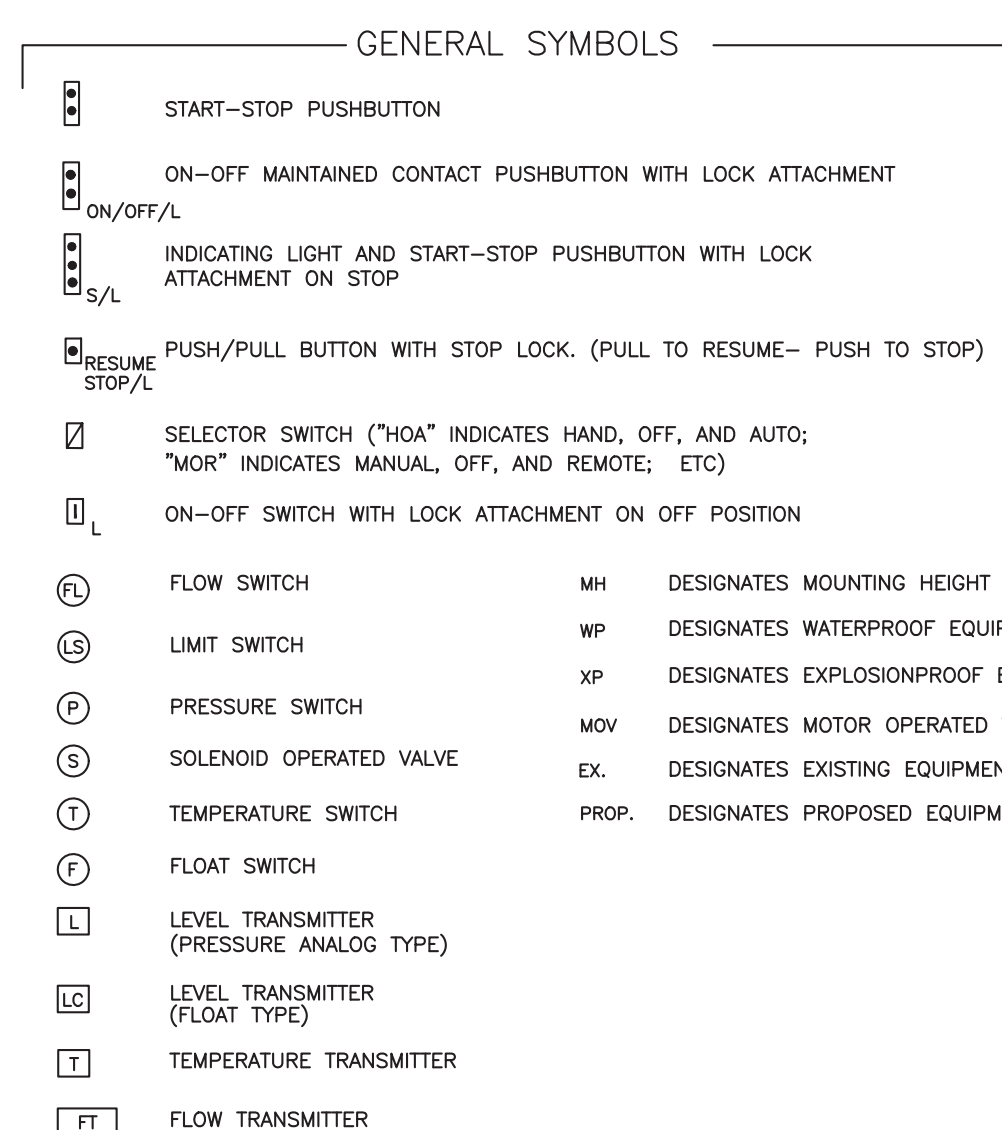
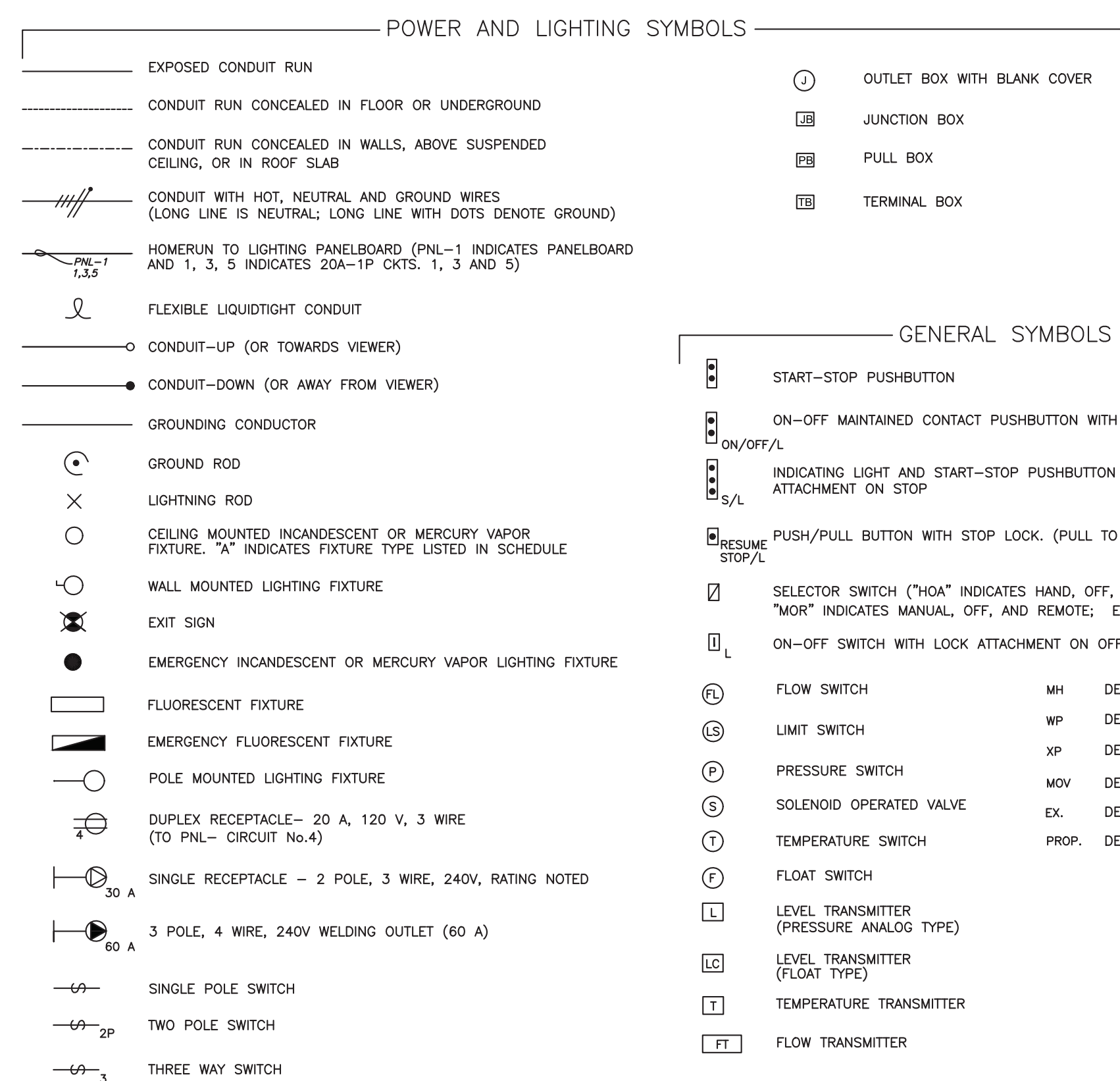


NOTES TO CONTRACTOR:
 - CONCRETE PAD BY CONTRACTOR
 - CONTROLLER BY CITY PARKS & REC
 - CONTRACTOR TO COORD. WITH P&R.



Plot Date: Wednesday, June 17, 2026

 MPH Civil Consultants, Inc. Civil Engineering Services P.O. Box 1121, Odessa, FL 33556 813.731.0052 duane@mpciv.com www.mpciv.com	BY	No.	DATE	REVISIONS	No.	DATE	REVISIONS	DES: HDM/CM DRN: CM CKD: HDM DATE: 6/11/2026	CITY of TAMPA Mobility Department Stormwater Engineering Division	FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT SITE DETAILS	SHEET 17 OF 36
	DATE:	3			6						
	H. Duane Milford, P.E. No. 42657 FLORIDA PROFESSIONAL ENGINEER	2			5						
		1			4						



NOTE: THE SYMBOLS SHOWN COMPRISE A GENERAL LEGEND TO FACILITATE THE USE OF PLANS. REFER TO THE PLANS AND SPECIFICATIONS FOR ITEMS REQUIRED.

UTILITY LOAD SUMMARY			
LOAD DESCRIPTION	kVA		
PUMP MOTORS (2) 45 hp	91.45		
Controls	15.00		
Generator Accessories	4.50		
Site Lighting/ Misc	2.00		
TOTAL = 112.95 kVA			
amperes at	480 V	3 PHASE	135.86 amps
Demand Factor 1.25			
Minimum Utility Service 169.83 amps			

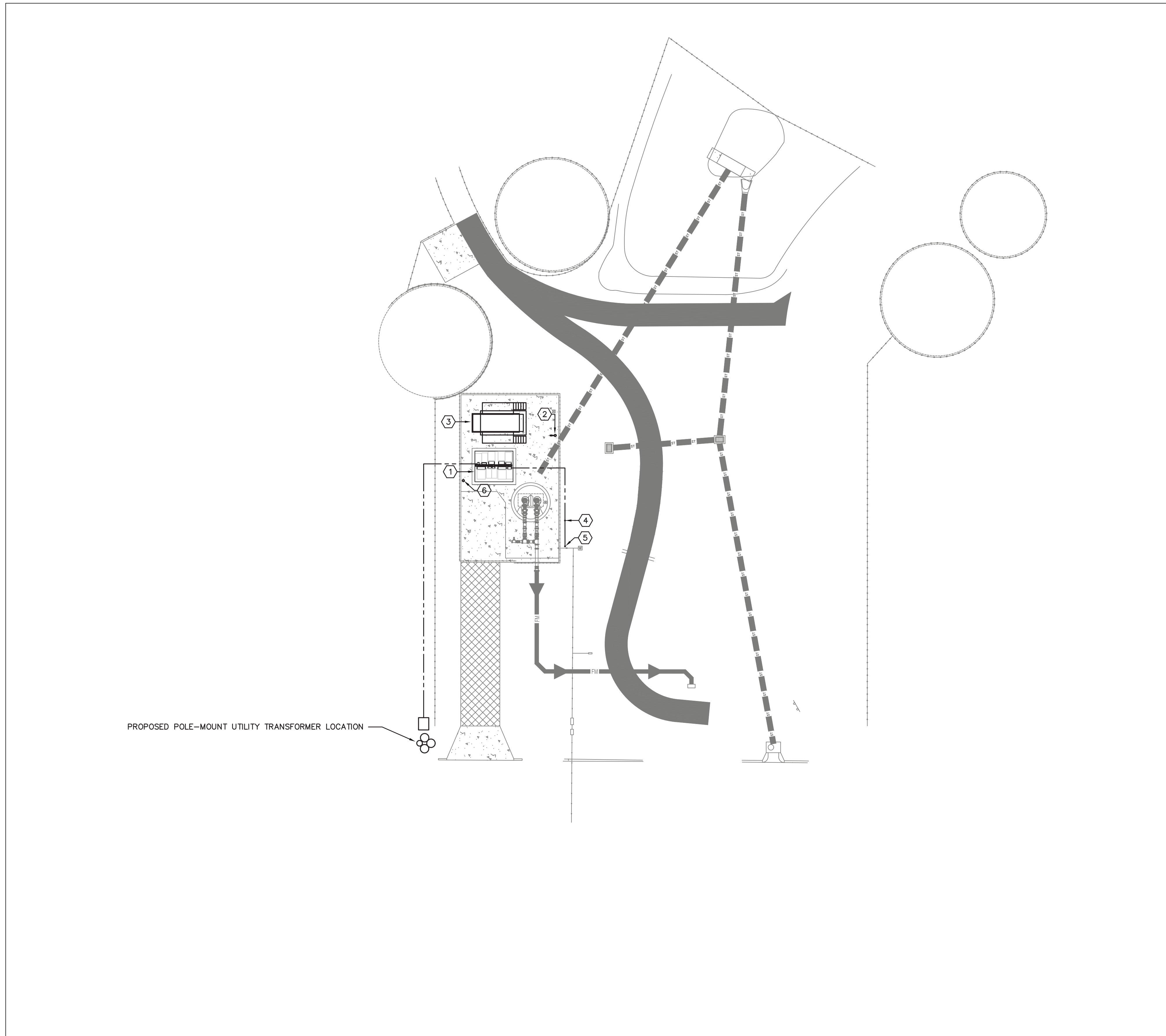
SCOPE OF WORK:

- THE SERVICE VOLTAGE TO THIS FACILITY SHALL REMAIN 277/480 VAC., 3-PHASE, 4-WIRE, WYE.
- PROVIDE AND INSTALL A NEW ELECTRICAL METER SOCKET, LIGHTNING ARRESTOR AND GROUNDING, AS SHOWN ON PLANS.
- PREPARE THE SITE FOR THE INSTALLATION OF THE PROPOSED CONTROL EQUIPMENT.
- OWNER TO PROVIDE AND CONTRACTOR TO INSTALL A NEW DUPLEX PUMP CONTROL PANEL. THE PUMP CONTROL PANEL SHALL CONTAIN CONTROL COMPONENTS, INDICATOR LIGHTS, AND SCADA RTU, AS SHOWN ON PLANS AND DETAILED IN SPECIFICATIONS.
- PROVIDE AND INSTALL NEMA 4X WET WELL ISOLATION JUNCTION BOX FOR PUMP MOTOR CONNECTIONS.
- OWNER TO PROVIDE AND CONTRACTOR TO INSTALL A NEW DUPLEX MOTOR CONTROL PANEL. THE MOTOR CONTROL PANEL SHALL CONTAIN CIRCUIT BREAKERS AND MOTOR STARTERS, AS SHOWN ON PLANS AND DETAILED IN SPECIFICATIONS.
- OWNER TO PROVIDE AND CONTRACTOR TO INSTALL NEMA 4X WET WELL ISOLATION BOX FOR INSTRUMENTATION AND CONTROL CONNECTIONS.
- OWNER TO PROVIDE AND CONTRACTOR TO INSTALL A NEMA 4X, SERVICE ENTRANCE RATED, AUTOMATIC TRANSFER SWITCH, AS SHOWN ON PLANS.
- PROVIDE AND INSTALL FUSED DOUBLE THROW SWITCH (FDTS) AND DOCKING STATION TO FACILITATE PORTABLE GENERATOR CONNECTION AS SHOWN ON PLANS.
- OWNER TO PROVIDE AND CONTRACTOR TO INSTALL A NEMA 4X, EMERGENCY GENERATOR AS SHOWN ON PLANS.
- PROVIDE AND INSTALL FIBER OPTIC COMMUNICATION AS A PRIMARY AND SCADA ANTENNA/CELLULAR COMMUNICATION FOR BACKUP AS INDICATED.
- PROVIDE AND INSTALL AREA LIGHT, AS SHOWN ON PLANS.
- PROVIDE AND INSTALL PROPOSED RAIN GAUGE.
- CALIBRATE AND ADJUST SETPOINTS FOR ALL SENSING DEVICES, ALARM DEVICES, AND TIMERS. CALIBRATION AND SETPOINTS SHALL BE PROVIDED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE FOR PROPER GROUNDING AS SHOWN, SPECIFIED, AND REQUIRED.
- PROVIDE AND INSTALL ALL NECESSARY CONDUITS AND CONDUCTORS, AS SHOWN, SPECIFIED AND REQUIRED.
- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE 2020 EDITION OF THE NATIONAL ELECTRIC CODE AND CHAPTER 5 OF THE CITY OF TAMPA CODE.
- REFER TO CIVIL/MECHANICAL SHEETS FOR BYPASS PUMPING REQUIREMENTS. IF ELECTRICALLY DRIVEN BYPASS PUMPS ARE UTILIZED, THE CONTRACTOR SHALL COORDINATE ALL TEMPORARY ELECTRICAL SERVICE REQUIREMENTS WITH TAMPA ELECTRIC COMPANY (TECO). ANY COSTS ASSOCIATED WITH TEMPORARY ELECTRICAL POWER ARE TO BE INCLUDED IN THE LUMP SUM PRICE AND NO SEPARATE PAYMENT WILL BE MADE.

PUMP MOTOR DATA	
MAKE:	FLYGT
MODEL:	NP3202 LT3~616 460V 3φ
H.P.:	45
	480V, 3-PHASE, 55 FLA
TOTAL PUMP LOAD: 110 AMPS, 91.45 KVA	

SHORT CIRCUIT CALCULATIONS	
AVAILABLE SHORT-CIRCUIT CURRENT AT 480V UTILITY SERVICE IS 9,021 AMPERES. AS PER (TECO REPRESENTATIVE);	
TECO CONTACT: JAMES WILSON (813) 462-8902	
UTILITY SERVICE: 480/277, 3 PH, TRANSFORMER AVAILABLE FAULT CURRENT AT SECONDARY SIDE OF TECO'S TRANSFORMER: 9,021 AMP RMS SYM. SERVICE CONDUCTOR LENGTH: 140 FEET SERVICE CONDUCTOR SIZE: 250 kCMIL THWN CU. FUSE RATING: 250 AMPS ISCA AT LINE SIDE OF FTDS:	
$ISCA = \left[1 + \frac{1}{\left[\frac{(1.73)(140)(9,021)}{(18,594)(480)} \right]} \right] * 9,021 = 7,245$	
SHORT CIRCUIT CURRENT AVAILABLE AT MAIN LUGS OF MCP=4,500 AMPS RMS, SYMMETRICAL	

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SITE DRAWING NOTES

1. PROPOSED LOCATION FOR ELECTRICAL SERVICE PLATFORM. SEE SHEET E3 FOR ADDITIONAL INFORMATION.
2. PROPOSED LOCATION FOR POLE-MOUNTED AREA LIGHT. COORDINATE EXACT LOCATION WITH CITY STAFF. SEE SHEET E12 FOR ADDITIONAL INFORMATION.
3. PROPOSED LOCATION FOR 125 kW GENERATOR. COORDINATE EXACT LOCATION WITH CIVIL DRAWINGS. SEE SHEET G1 FOR ADDITIONAL INFORMATION.
4. CONDUIT STUB UP FOR FUTURE IRRIGATION CONTROLLER.
5. CONDUIT STUB UP FOR FUTURE CHILLED WATER FOUNTAIN.
6. PROPOSED LOCATION FOR POLE-MOUNTED 180-DEGREE CCTV CAMERA. POLE SHALL BE PRESTRESSED CONCRETE UTILITY POLE (LONESTAR PRESTRESS MFG., INC. PART# 251002 OR EQUAL). COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH CITY STAFF. SEE SPECIFICATIONS AND SHEET E14 FOR ADDITIONAL INFORMATION.

ELECTRICAL SITE PLAN
SCALE: 1" = 20'



Kevin G. Carlson, PE
FL REG NO. PE0048052
201 Flagship Dr, Suite 106, Lutz, FL 33549
813-909-1845 VOICEMAIL 813-909-0764 FAX
Florida Registry Number: RY8135

MPH
CIVIL CONSULTANTS, INC.
MPH Civil Consultants, Inc.
Civil Engineering Services
P.O. Box 1121, Odessa, FL 33556
813.731.0052
duane@mphcivil.com www.mphcivil.com

FLORIDA CA NO. 30727
DATE: _____

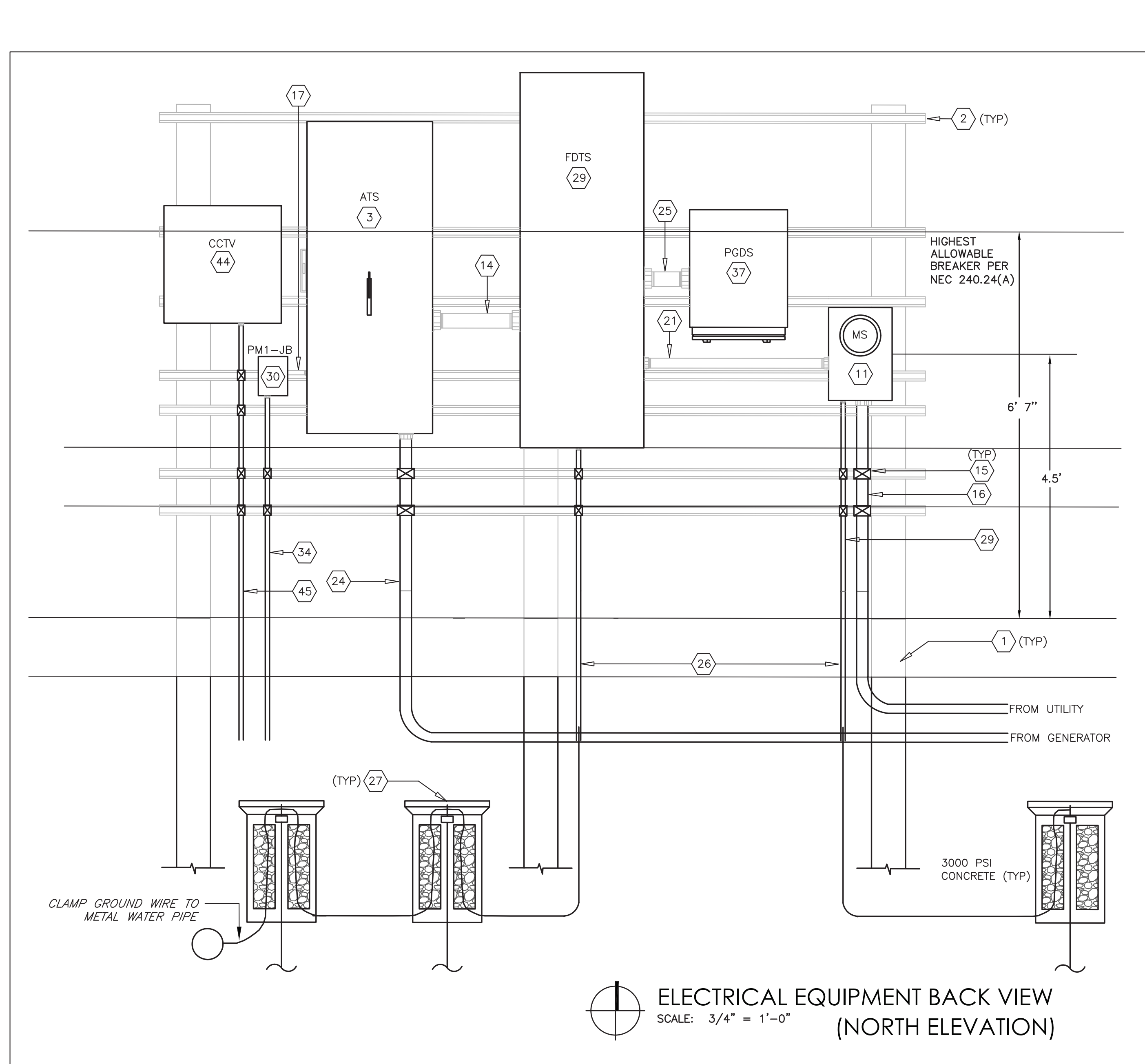
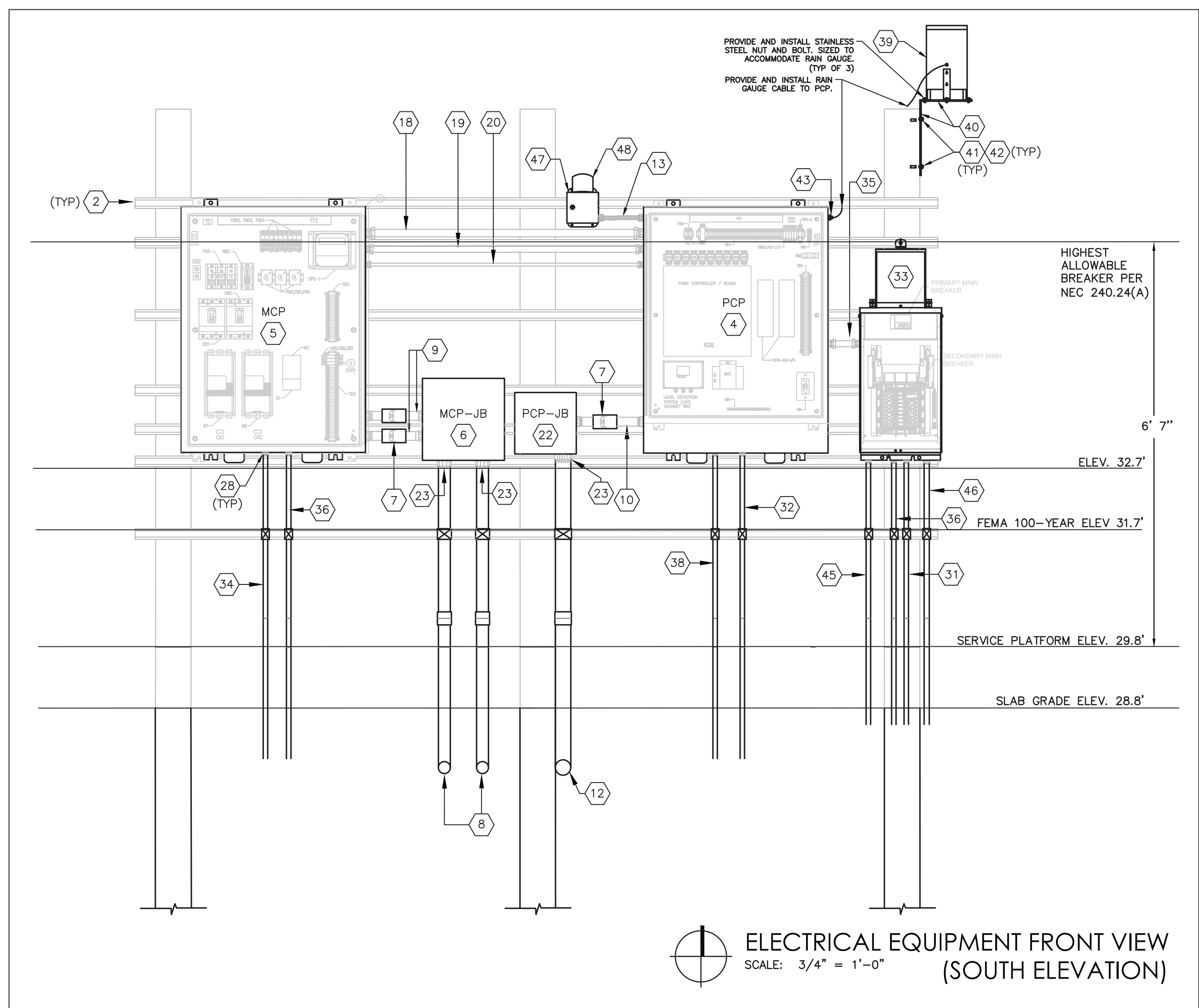
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DES:
DRN: SPM
CKD: KGC
DATE: 06/11/26

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
ELECTRICAL SITE PLAN

SHEET
E2
OF



- 1 PROVIDE AND INSTALL THREE (3) 6" X 6" X 13' REINFORCED SQUARE CONCRETE POSTS.
- 2 PROVIDE AND INSTALL 1-5/8" X 1-5/8" 316 STAINLESS STEEL UNISTRUT WITH 316 STAINLESS STEEL HARDWARE. NOTE: INSTALL ALL BOLTS FOR UNISTRUT COMPLETELY THROUGH CONCRETE POSTS.
- 3 EATON AUTOMATIC TRANSFER SWITCH. REFER TO PARTS SCHEDULE ON SHEET E5.
- 4 INSTALL PUMP CONTROL CABINET. REFER TO DETAIL ON SHEET E4.
- 5 INSTALL MOTOR CONTROL CABINET. REFER TO DETAIL ON SHEET E5.
- 6 PUMP MOTOR CONNECTIONS J.B.-USED AS A DEMARCATION BOX TO PROVIDE ISOLATION BETWEEN THE WET WELL AND PUMP CONTROLS. PROVIDE AND INSTALL A 16"x16"x6" NEMA 4X, STAINLESS STEEL JUNCTION BOX WITH HINGED DOOR, HAMMOND #1418N4SSG6. INSTALL A STAINLESS STEEL LOUVER PLATE KIT (4.75" X 4.5") ON SIDE OF BOX TO PROVIDE NATURAL ASPIRATION, WIEGMANN #WAVK0304SSA. TERMINATIONS SHALL BE MADE USING POWER DISTRIBUTION BLOCKS. CAREFULLY TAPE CONNECTIONS TO PROVIDE A 600V INSULATION LEVEL (TYPICAL FOR EACH CONDUCTOR) SEE SHEET E13 FOR JB DETAILS.
- 7 PROVIDE AND INSTALL CROUSE-HINDS EYS TYPE SEALS W/CHICO COMPOUNDS.
- 8 PROPOSED 2" PVC COATED ALUMINUM CONDUITS FOR MOTOR CONDUCTORS. CORE DRILL WET WELL WALLS AS REQUIRED TO INSTALL CONDUIT. SEE CIVIL SHEETS FOR PIPE PENETRATION INTO WET WELL DETAIL.
- 9 PROVIDE AND INSTALL (3)-#4 XHHW-2 CU + (1)-#6 XHHW-2 CU GND + (2)-#12 XHHW-2 CU (LEAK/TEMP) IN 1-1/4" CONDUIT FOR SUBMERSIBLE PUMP POWER.
- 10 PROVIDE AND INSTALL (3)-#14 XHHW-2 CU + (1)-#14 XHHW-2 CU GND + (1)-3/C-#18 TWISTED SHIELDED CABLE IN 1-1/4" CONDUIT FOR FLOAT AND WET WELL LEVEL TRANSMITTER.
- 11 PROVIDE AND INSTALL METER SOCKET IN ALUMINUM ENCLOSURE.
- 12 MANUFACTURER SUPPLIED CABLES FOR FLOAT SWITCH AND WET WELL LEVEL TRANSMITTER INSTALL IN 3" PVC COATED CONDUIT TO WET WELL FROM JUNCTION BOX. CORE DRILL WET WELL AS NEEDED TO INSTALL. PATCH SEAL WITH APPROVED PRODUCT. SEE CIVIL SHEETS FOR PIPE PENETRATION INTO WET WELL DETAIL.
- 13 PROVIDE AND INSTALL ANTENNA CABLES IN 1" NON-METALLIC, SEAL-TITE CONDUIT.
- 14 PROVIDE AND INSTALL (3)-250 kCMIL CONDUIT XHHW-2 CU, (1)-#1 XHHW-2 NEU, AND (1)-#4 XHHW-2 CU GND. IN 3" CONDUIT.
- 15 PROVIDE AND INSTALL ALUMINUM CONDUIT STRAPS.
- 16 PROVIDE AND INSTALL (3)-250 kCMIL + (1)-#1. NEU. IN PROPOSED 3" CONDUIT TO TECO HANDHOLE.
- 17 PROVIDE AND INSTALL (3)-#12 XHHW-2 CU + (1) 12 XHHW-2 CU GND. IN 3/4" C.
- 18 PROVIDE AND INSTALL (26)-#12 XHHW-2 CU + (1) 12 XHHW-2 CU GND. IN 1-1/4" C. FOR 120VAC CONTROL SIGNALS. REFER TO MCP TO PCP INTERCONNECTIONS WIRING DIAGRAM ON SHEET E11.
- 19 PROVIDE AND INSTALL (15)-#14 XHHW-2 CU + (1)-#14 XHHW-2 CU GND. IN 1" C. FOR 24V DC CONTROL SIGNALS. REFER TO MCP TO PCP INTERCONNECTIONS WIRING DIAGRAM ON SHEET E11.
- 20 PROVIDE AND INSTALL (1)-#12 XHHW-2 CU H. + (1)-#12 XHHW-2 CU NEU. + (1) 12 XHHW-2 CU GND. IN 3/4" CONDUIT FROM MOTOR CONTROLS PANEL TO PUMP CONTROL PANEL FOR 120V POWER CIRCUIT.
- 21 PROVIDE AND INSTALL (3)-250 kCMIL XHHW-2 CU + (1)-#1 XHHW-2 NEU. IN 2" CONDUIT.
- 22 INSTRUMENTATION AND CONTROLS J.B.-USED AS DEMARCATION BOX TO PROVIDE ISOLATION BETWEEN THE WET WELL AND PUMP CONTROLS. PROVIDE AND INSTALL A 12"x12"x6" NEMA 4X, STAINLESS STEEL JUNCTION BOX WITH HINGED DOOR, WIEGMANN #BN4121206CHSS. INSTALL A STAINLESS STEEL LOUVER PLATE KIT (4.75"x4.5") ON SIDE OF BOX TO PROVIDE NATURAL ASPIRATION, WIEGMANN #WAVK0304SSA. SEE SHEET E13 FOR JB DETAILS.
- 23 PROVIDE DUCT SEALING COMPOUND IN ALL CONDUITS EXTENDING TO THE WET WELL.
- 24 PROVIDE AND INSTALL (3)-250 kCMIL XHHW-2 CU, (1)-#1 XHHW-2 NEU, AND (1)-#4 XHHW-2 CU GND. IN 3" CONDUIT FROM EMERGENCY GENERATOR.
- 25 PROVIDE AND INSTALL (3)-250 kCMIL XHHW-2 CU, (1)-#1 XHHW-2 NEU, AND (1)-#4 XHHW-2 CU GND. IN 3" CONDUIT.
- 26 PROVIDE AND INSTALL A 3/4" SCHEDULE 80 PVC CONDUIT FOR #2 AWG GROUNDING CONDUCTOR.
- 27 PROPOSED GROUNDING CONDUCTOR. EXOTHERMICALLY WELDED TO TWO APPROVED GROUNDING RODS (MINIMUM SPACING 6'-0") GROUNDING CONDUCTOR SHALL BE AWG #2AWG MIN. BARE STRANDED COPPER. SEE SHEET E12 FOR DETAILS.
- 28 PROVIDE AND INSTALL WATER-TIGHT / DUST-TIGHT (TYP.) MYERS HUB AND UNION (TYP.).
- 29 PROVIDE AND INSTALL HEAVY DUTY, DOUBLE THROW, FUSIBLE SWITCH, 3-POLE, 600 VAC, 400 AMP IN NEMA 4X TYPE ENCLOSURE, 600 VOLT, DUAL-ELEMENT, TIME-DELAY CLASS RK5 FUSES; SWITCH--EATON DT365FWK, DT000NK-NEUTRAL KIT, DS468GK-GROUND LUG KIT, DS66FK-"R" FUSE ADAPTER KIT.
- 30 PROVIDE AND INSTALL A 3-PHASE POWER MONITOR RELAY W/480 VAC LINE INPUT-ALARM ON PHASE LOSS, UNDERVOLTAGE, OR WRONG ROTATION, PANEL MOUNT, ATC DIVERSIFIED, MODEL SUA-440-ASA, FUSE BOX DISCONNECT(FGBD1)-ALLEN BRADLEY 1492-FB3C30-L W/ BUSSMAN KTK-R-2 FUSES IN A NEMA 4X CONTINUOUS HINGE ENCLOSURE-HAMMOND MANUFACTURING MODEL EJ863S16, 8"x6"x3.5", NEMA 4X SS.
- 31 PROVIDE AND INSTALL A 3/4" CONDUIT BETWEEN MINI POWER ZONE "LP" AND EMERGENCY GENERATOR.
- 32 PROVIDE AND INSTALL A 1" CONDUIT FOR EMERGENCY GENERATOR CONTROLS/SCADA.
- 33 PROVIDE AND INSTALL 480V-120/240V, 7.5KVA MINI POWER-ZONE "LP" IN NEMA 3R STAINLESS STEEL ENCLOSURE SQUARE-D MPZB7540FSS.
- 34 PROVIDE AND INSTALL (2)-#14 + (1)-#14 GND IN 3/4" C. (24V DC CONTROLS).
- 35 PROVIDE AND INSTALL 2-#2 XHHW-2 CU. + 1-#12 XHHW-2 CU. GND IN 3/4" CONDUIT FROM MINI POWER ZONE "LP" TO PUMP CONTROL PANEL FOR 120V POWER CIRCUIT.
- 36 PROVIDE AND INSTALL 2-#12 AWG + 1-#12 CU. GND IN 3/4" CONDUIT FROM MINI POWER ZONE "LP" TO MOTOR CONTROL PANEL FOR 120V POWER CIRCUIT.
- 37 PROVIDE AND INSTALL PORTABLE GENERATOR DOCKING STATION.
- 38 PROVIDE AND INSTALL A 3/4" CONDUIT TO PROPOSED AREA LIGHT, (AL), SEE SHT. E12 FOR DETAILS.
- 39 PROVIDE AND INSTALL NEW RAIN GAUGE. TEXAS ELECTRONICS TR-525I-S 8' RAIN GAUGE, 0.01"/TIP WITH 10' CABLE.
- 40 PROVIDE AND INSTALL 1/2" THICK ALUMINUM BRACKET. 6" WIDTH, 14" LENGTH VERTICAL SECTION AT CONCRETE POST, WIDTH AS REQUIRED TO SECURE RAIN GAUGE.
- 41 PROVIDE AND INSTALL STAINLESS STEEL WEDGE ANCHORS (TYPICAL OF 4 TOTAL).
- 42 PROVIDE AND INSTALL 1/2" STAINLESS STEEL BOLTS.
- 43 PROVIDE AND INSTALL WATERTIGHT GROMMET FOR RAIN GAUGE CABLE.
- 44 PROVIDE AND INSTALL CCTV NETWORK SWITCH PANEL. SEE SHEET E14 FOR ADDITIONAL
- 45 PROVIDE AND INSTALL 2-#12 AWG + 1-#12 CU. GND IN 3/4" CONDUIT FROM MINI POWER ZONE "LP" TO CCTV NETWORK SWITCH PANEL FOR 120V POWER CIRCUIT.
- 46 PROVIDE AND INSTALL A 1" CONDUIT FOR FUTURE IRRIGATION CONTROLLER AND CHILLED WATER FOUNTAIN.
- 47 PROVIDE AND INSTALL 6" X 6" X 4" NEMA 4X 316 STAINLESS STEEL JUNCTION BOX (HAMMOND EJ664S16 OR EQUAL).
- 48 PROVIDE AND INSTALL CELLULAR ANTENNA WITH MANUFACTURER'S INTEGRAL CABLES. REFER ALSO TO PARTS SCHEDULE ON SHEET E4.

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DRN: SPM
CKD: KGC
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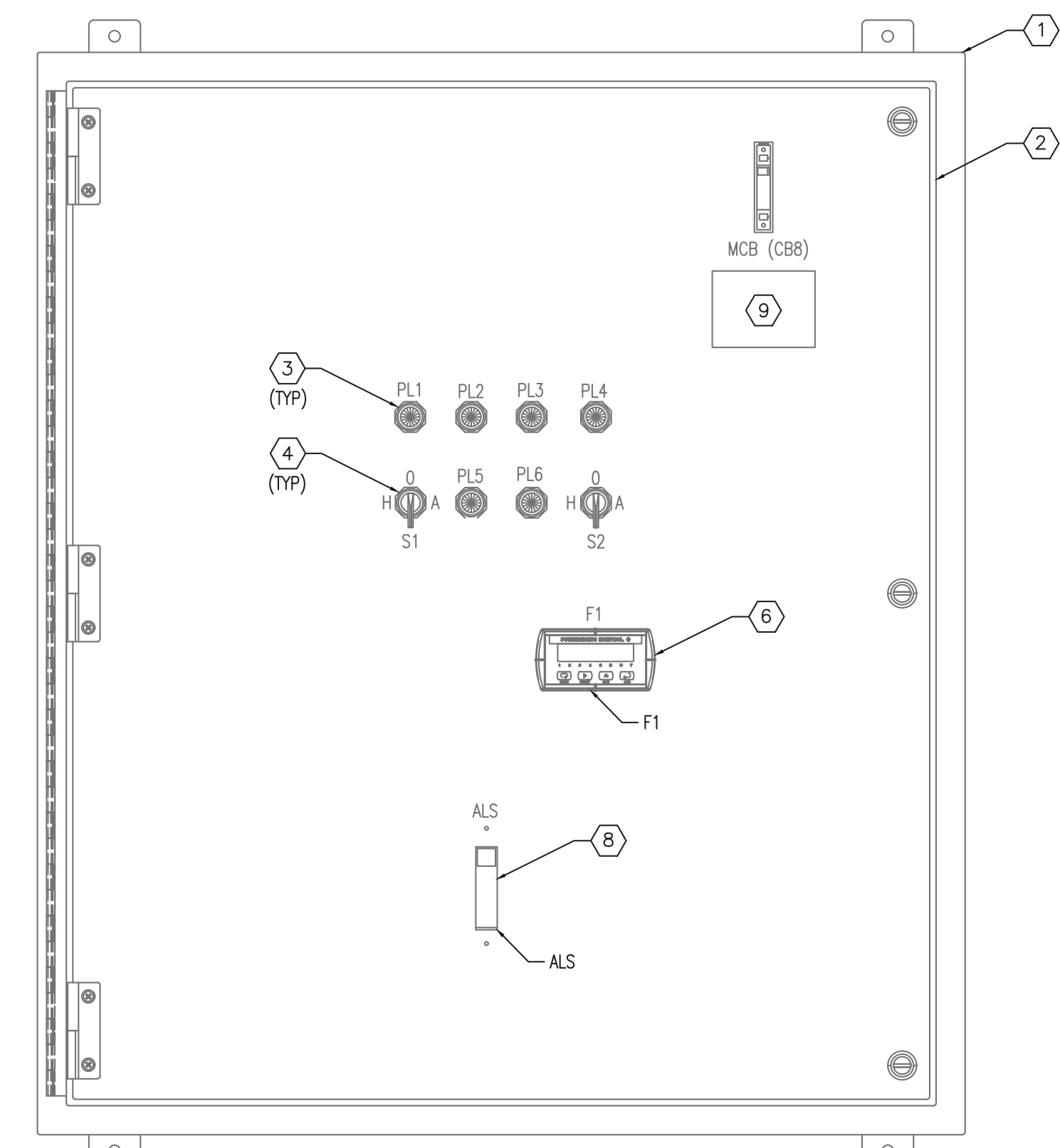
CITY of TAMPA
Mobility Department
Stormwater Engineering Division

FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
ELECTRICAL EQUIPMENT ELEVATIONS

SHEET
E3
OF

PARTS SCHEDULE (PUMP CONTROL PANEL)

SYMBOL	NAME	PART				REMARKS	
		PCSR PARTS LIST					
		MAKE	TYPE	MODEL OR CAT. #	RATING		
PCSR	PLC BASED PUMP CONTROLLER, SCADA, AND RADIO SYSTEM	MOTOROLA CORP.	DUPLEX PUMP CONTROLLER BASED ON ACE 3600 PROGRAM CONTROLLER	PART #F7509	BASIC MODEL	PROVIDE (1) SPARE	
		MOTOROLA CORP.	MOTORBO ANALOG RADIO INSTALLATION KIT	VA00194 (PART #FLN1059)			
		MOTOROLA CORP.	MOTORBO XPR5350 RADIO	VA00161 (PART #UE1078A)		UHF Rf: 403-470MHZ	
		MOTOROLA CORP.	METAL CHASIS	PART #V214		MEDIUM 14" x 14"	
		MOTOROLA CORP.	AC POWER SUPPLY 85-264V	PART #V261		100-240 VAC W/ 12V SMART CHARGER	PROVIDE (1) SPARE
		MOTOROLA CORP.	BACKUP BATTERY	PART #V32B		10.0 Ah SEALED LEAD-ACID	
		MOTOROLA CORP.	3-1/0 SLOT FRAME	PART #V103			FITS IN SEPARATE LOCATION FROM METAL CHASSIS; INCLUDE: FKN8376 BATTERY POWER CABLE, FHN601 MOUNTING BRACKET, AND FNN7898 10 AH BACKUP BATTERY
		MOTOROLA CORP.	20 PIN TB HOLDER KIT	PART #V158			
		MOTOROLA CORP.	1/0 SLOT COVER	PART #V20		BLANK MODULE	UTILIZE WHERE NEEDED
		MOTOROLA CORP.	16 DI + 4 DO (EE) + (4)± 20 mA AI	PART #V245		PART #V245	MIXED I/O, PROVIDE (2) SPARES
		MOTOROLA CORP.	24 VDC PLUG-IN POWER SUPPLY	PART #V260 (FPM1653A)		24V FLOATING MAX, 150 mA OUTPUT	FLOATING POWER SUPPLY
		WILKERSON	SCADA INTERFACE BOARD	PART #SIB-V 245/V453			PROVIDE (2) SPARES
		FORTINET FORTIGATE	5G CELLULAR	FGR-50G-5G			12-54 VDC DIN RAIL MOUNTING REQUIRED
		PCTEL	5G/LTE W/SMA PLUGS (MALE PIN)	PCTHPDLTE-LTB			WITH TWO -17' PRO-FLEX CABLES
		PANORAMA	CELLULAR ANTENNA	DW-IN2713			4X4 MMx6 46/50 ANTENNA W/INTEGRATED COAX CS32 CABLE
		PROXICAST	LIGHTNING SURGE ARRESTOR	ANT-211-002			COAX LIGHTNING SURGE ARRESTOR N-FEMALE/N-FEMALE (USED W/ABOVE)
		PROXICAST	LIGHTNING SURGE ARRESTOR	ANT-212-002			COAX LIGHTNING SURGE ARRESTOR N-MALE/N-FEMALE (USED W/ABOVE)
		SYMBOL	NAME	PART			
REMAINING PARTS LIST							
MAKE	TYPE			MODEL OR CAT. #	RATING		
PC-1	BACKUP PUMP CONTROLLER	WILKERSON	DUPLEX LIFT STATION	DR1920	10 AMP CONTACTS	DIN RAIL MOUNTING	
FTB1	FUSED TERMINAL BLOCKS	PHOENIX CONTACT		UK 5-HESI	PROVIDE 1, 2, & 5A FUSES	PROVIDE COOPER BUSSMAN GDB SERIES FUSES	
F1	PROCESS METER	PRECISION DIGITAL		PD765-6R3-10		PROVIDE 4-20 mA OUTPUT	
CB 9, 10, 12	CIRCUIT BREAKER	SQUARE D	SINGLE POLE	QOU-115	120 V, 15A		
CB 8, 11	CIRCUIT BREAKER	SQUARE D	SINGLE POLE	QOU-120	120 V, 20A		
PL1, PL4	INDICATOR LIGHT	SQUARE D	CLASS 9001	SKT - 38LYA9	120 V, LED TYPE	YELLOW LENS & PRESS TEST	
PL2, PL3	INDICATOR LIGHT	SQUARE D	CLASS 9001	SKT - 38LRR9	120 V, LED TYPE	RED LENS & PRESS TEST	
PL5, PL6	INDICATOR LIGHT	SQUARE D	CLASS 9001	SKT - 38LRR9	120 V, LED TYPE	RED LENS & PRESS TEST	
S1, S2	HOA SWITCH ASSEMBLY	SQUARE D	OIL-TIGHT CLASS 9001	SKS - 43B H2	10A @ 120V		
ZS1	CONTROL PNL INTRUSION SENSOR	OMRON	CYLINDRICAL, SHORT BARREL	E2F-X5F1 (GRAINGER-1EA77)	12-24VDC, 3-WIRE PNP	W/TELEMECANIQUE MTG. BRACKET (GRAINGER - 5B233)	
FF1 & TS	LED LIGHTING FIXTURE	HOFFMAN	LED	LEDA1S35	120 V, 5W	W/TOGGLE SWITCH-TS	
WR	WALL RECEPTACLE	HUBBELL	DUPLEX W/GFI	GF5262	120V AC, 15A GFI	W/ALUMINUM OUTLET BOX AND COVER	
TB1, TB2	TERMINALS	PHOENIX CONTACT		UK5N TERMINALS	30 A W/ ALUM. DIN RAIL	50 CONTACTS (MIN)	
ITS	INSULATED TERMINAL STRIP	ALLEN-BRADLEY	STYLE AA	1492-15-T	600 V AC NEUTRAL BLOCK	4 CONTACTS (MIN) W/ SHORTING BARS	
GB1	GROUND BAR SYSTEM	PANDUIT	12 PORT WITH MAIN LUG	UGB2/O-414-12		COPPER CONSTRUCTION	
GB2	GROUNDING BLOCK	ILSCO	AS REQUIRED	AS REQUIRED			
TA1, TA2	CONTROL RELAY	POTTER & BRUMFIELD	8 PIN PLUG-IN	KRPA-11AG-120	120V AC COIL, 10A CONTACTS	DPDT W/ SOCKET AND HOLD DOWN SPRING	
FM1, FM2	CONTROL RELAY	POTTER & BRUMFIELD	11 PIN PLUG-IN	KRPA-14AG-120	120V AC COIL, 10A CONTACTS	3PDT W/ SOCKET AND HOLD DOWN SPRING	
LEV	WET WELL LEVEL SENSOR	SIEMENS	SITRANS LR120	7ML5320-1BA06-0GP0-Z	98.43 FT RANGE 115VAC/24VDC POWERED W/ 4-20MA AND (4) RELAY OUT W/ KEY PAD, DISPLAY, AND TROPICALIZATION	CITY FORCES WILL PROVIDE ASSISTANCE WITH MOUNTING AND CALIBRATION	
CR1, CR2, CR3, CR4, CR5, CR6	CONTROL RELAY	POTTER & BRUMFIELD	14-BLADE SQUARE PLUG-IN	KUP-17A19-120	120V AC COIL, 10A CONTACTS	4PDT W/ SOCKET AND HOLD DOWN SPRING	
PCP	PUMP CONTROL PANEL ENCLOSURE	HOFFMAN	NEMA 4X, 3P LATCH, 42"x36"x12"	42"x36"x12" SS	304 SS, POWDER COATED WHITE	3P LATCH W/STOP KIT, EXTERNAL FINISH DURABLE RAL 9003 WHITE POWER COAT.	
PP	ENCLOSURE PANEL	HOFFMAN	39" X 33", STEEL	A42P36	STEEL, 12 GAUGE		
NB1, 2	NEUTRAL DISTRIBUTION BLOCK	BUSSMAN	SINGLE POLE	16220-1	600V, 175A		
ALS	AREA LIGHT SWITCH	HUBBELL	SINGLE POLE	HBL1221	277V, 20A		
SPD-2	SURGE PROTECTION DEVICE TYPE 3	PHOENIX CONTACT	3 CONDUCTOR SYSTEM (L, N, G)	2905228	120V, 25A		

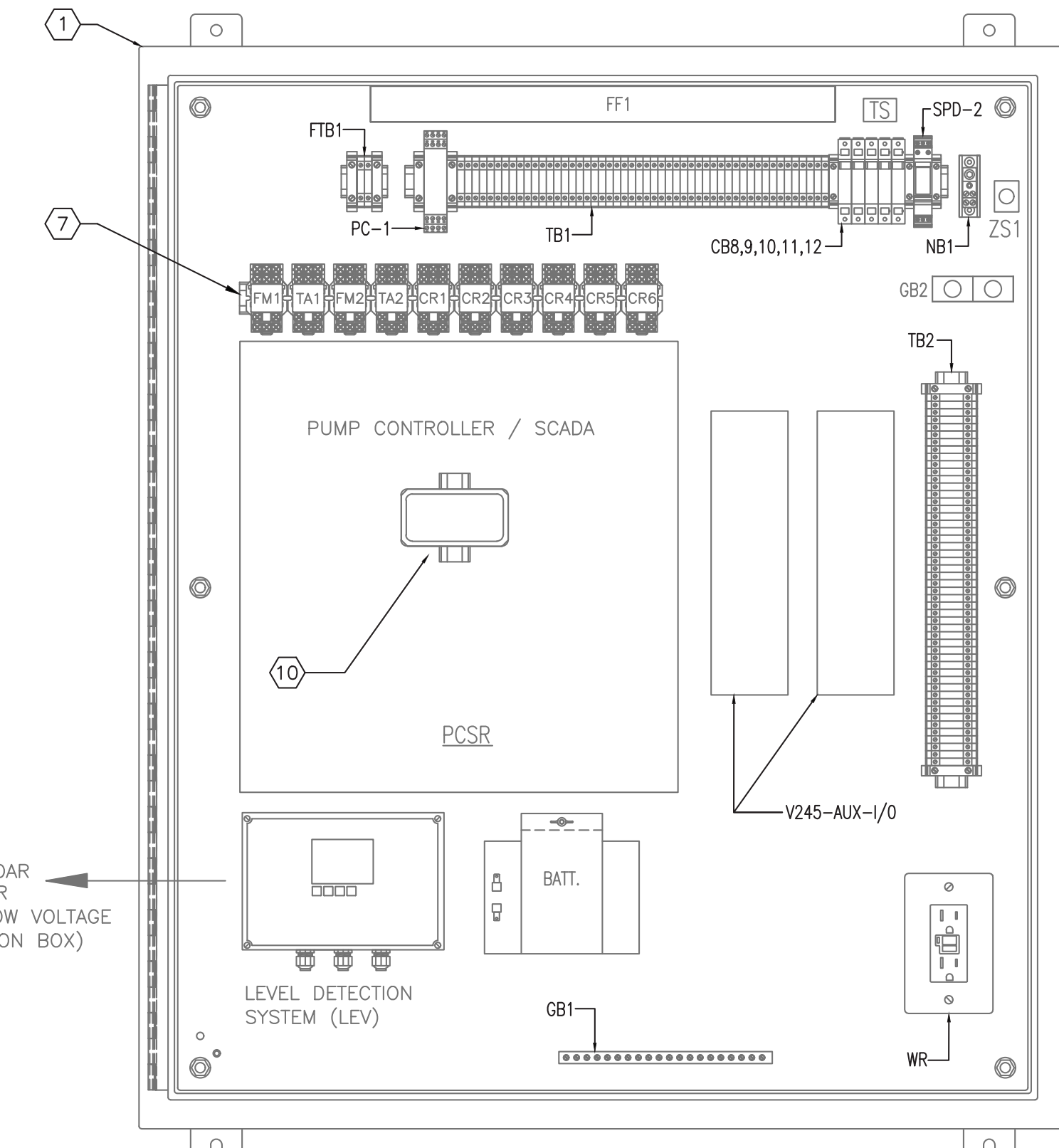


PUMP CONTROL PANEL DETAILS

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

NOTE: FRONT ENCLOSURE DOOR NOT SHOWN FOR CLARITY

SYMBOL	DEVICE	LEGEND
PL1	YELLOW PILOT LIGHT	PUMP NO. 1 ON
PL2	RED ILLUMINATED PUSH BUTTON	PUMP NO. 1 TEMP. ALARM
PL3	RED ILLUMINATED PUSH BUTTON	PUMP NO. 2 TEMP. ALARM
PL4	YELLOW PILOT LIGHT	PUMP NO. 2 ON
PL5	RED PILOT LIGHT	PUMP NO. 1 SEAL LEAK ALARM
PL6	RED PILOT LIGHT	PUMP NO. 2 SEAL LEAK ALARM
S1	3 POSITION SWITCH	PUMP NO. 1 HAND-OFF-AUTO
S2	3 POSITION SWITCH	PUMP NO. 2 HAND-OFF-AUTO
MCB (CB8)	PUMP CONTROL PANEL MAIN CIRCUIT BREAKER	MAIN CIRCUIT BREAKER
F1	DIGITAL PROCESS METER	WET WELL LEVEL
ALS	TOGGLE SWITCH	AREA LIGHT SWITCH



PANEL INTERIOR

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

NOTE: FRONT ENCLOSURE DOOR NOT SHOWN FOR CLARITY

- KEYED NOTES:
- PUMP CONTROL CABINET, 42" X 36" X 12" NEMA 4X SS, PAINTED WHITE.
 - PROVIDE AND INSTALL ALUMINUM DEADFRONT DOOR WITH STOP KIT.
 - PROVIDE AND INSTALL PILOT LIGHT. REFER ALSO TO PARTS SCHEDULE ON THIS SHEET.
 - PROVIDE AND INSTALL SELECTOR SWITCH. REFER ALSO TO PARTS SCHEDULE ON THIS SHEET.
 - RESERVED.
 - PROVIDE AND INSTALL PRECISION DIGITAL PROCESS METER, MODEL PD765-6R3-10 WITH 4-20mA OUTPUT. REFER ALSO TO PARTS SCHEDULE ON THIS SHEET.
 - PROVIDE AND INSTALL ALUMINUM DIN RAIL WHERE REQUIRED.
 - PROVIDE AND INSTALL SINGLE-POLE 120/277V, 20A LIGHT SWITCH TO CONTROL AREA LIGHT. REFER ALSO TO PARTS SCHEDULE ON THIS SHEET.
 - PROVIDE WARNING LABEL ABOVE OR BELOW CBB. LABEL TO READ:
WARNING: THE 120VAC SUPPLY FOR THIS PUMP CONTROL PANEL (PCP) IS FED FROM MOTOR CONTROL PANEL MCP AND WILL BE PRESENT AT THE LINE SIDE OF MCB (CB-6) LOCATED IN THIS PANEL. LOCK AND TAG OUT THE MOTOR CONTROL PANEL DISCONNECT PRIOR TO OPENING DEAD FRONT DOOR.
 - PROVIDE AND INSTALL FORTINET 5G CELLULAR MODEM ON ALUMINUM DIN RAIL ABOVE ACE METAL CHASSIS. REFER ALSO TO PARTS SCHEDULE ON THIS SHEET.

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No.	DATE	REVISIONS
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CITY of TAMPA
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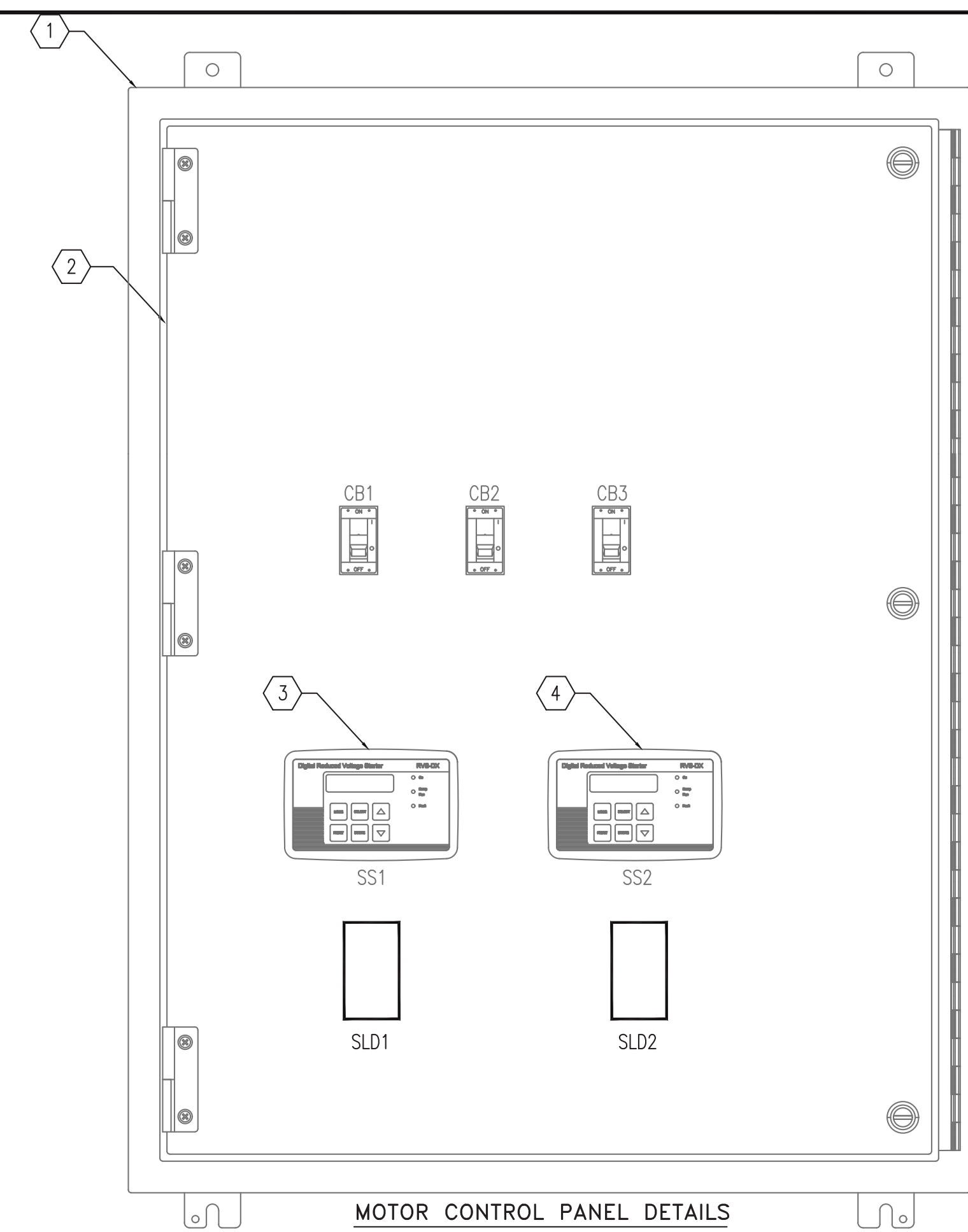
FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
PUMP CONTROL PANEL DETAILS



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Florida Registry Number: RY8135

PARTS SCHEDULE (MOTOR CONTROL PANEL)

SYMBOL	NAME	PART			RATING	REMARKS
		MAKE	TYPE	MODEL OR CAT. #		
CB 1	CIRCUIT BREAKER	SQUARE D	THREE POLE	HDL36110	600 V, 110A	18 KAIC @ 480VAC
CB 2	CIRCUIT BREAKER	SQUARE D	THREE POLE	HDL36110	600 V, 110A	
CB 3	CIRCUIT BREAKER	SQUARE D	TWO POLE	HDL26020	600 V, 20A	18 KAIC @ 480VAC
CB 4, 5, 6,	CIRCUIT BREAKER	SQUARE D	SINGLE POLE	QOU-120	120 V, 20A	18 KAIC @ 480VAC
M1, 2	MOTOR STARTER	SOLCON	RVSS	RVS-DX 105-480-115-8-U-S	105 A	PROVIDE REMOTE KEYPAD
CA1, CA2	CIRCUIT SENSOR	ENERCORP INSTRUMENTS	4-20mA OUTPUT	SC200-2	0-100A, 0-150, 0-200A	ADJUSTABLE RANGE
ZS2	CONTROL PNL INTRUSION SENSOR	OMRON	CYLINDRICAL, SHORT BARREL	E2F-XSF1 (GRAINGER-1EA77)	12-24VDC, 3-WIRE PNP	W/ TELEMECANIQUE MTG. BRACKET (GRAINGER - SB233)
FF2 & TS	LED LIGHTING FIXTURE	HOFFMAN	LED	LED1S35	120 V, 5W	W/TOGGLE SWITCH-TS
SPD-1	SURGE PROTECTIVE DEVICE TYPE 1	ASCO POWER TECHNOLOGIES	MOTOR CONTROL PANEL SPD	430277YP20ACA10	277/480 V, 3ø, 4W	200 KA SURGE CAPACITY
TB3, TB4	TERMINALS	PHOENIX CONTACT		UK5N TERMINALS	30 A W/ ALUM. DIN RAIL	50 CONTACTS (MIN)
ITS	INSULATED TERMINAL STRIP	ALLEN-BRADLEY	STYLE AA	1492-15-T	600 V AC NEUTRAL BLOCK	4 CONTACTS (MIN) W/ SHORTING BARS
MCP	MOTOR CONTROL PANEL ENCLOSURE	SCHAEFER'S	NEMA 4X, 3P LATCH, 48"x36"x12"	SPN4SS-483612	304 SS, POWDER COATED WHITE	3P LATCH W/STOP KIT. EXTERNAL FINISH DURABLE RAL 9003 WHITE POWDER COAT.
MP	ENCLOSURE PANEL	SCHAEFER'S	45" X 33", STEEL	SPP-4836	STEEL, 12 GAUGE	W/ OPTIONAL 5-SEC RELEASE AND DIN RAIL SOCKET-RB08PC
PM2, PM3, PM4	3-PHASE POWER MONITOR	ATC DIVERSIFIED ELECTRONICS	8 PIN PLUG-IN	SUA-440-ASA	440 VAC	
PDB	PWR DIST. BLOCK	BUSSMANN/EATON	THREE POLE	PDBFS330	600 V, 380 AMP	FINGER-SAFE, ENCLOSED
FBD 2, 3, 4	FUSE BLOCK / DISCONNECT	ALLEN BRADLEY	THREE PHASE- HIGH INTER. CAP.	1492-FB3C30-L	600 VAC, 200KAC	W/ BUSSMANN KTK-R-2 FAST ACTING REJECTION FUSES
FTB2	FUSED TERMINAL BLOCKS	PHOENIX CONTACT		UK 5-HESI	PROVIDE 1, 2, & 5A FUSES	PROVIDE COPPER BUSSMAN GDB SERIES FUSES
SLD1, SLD2	PUMP MONITORING UNIT	XYLEM		MINI-CAS 120	10A AT 240V AC	
GB2	GROUNDING BLOCK	ILSCO	AS REQUIRED	AS REQUIRED		



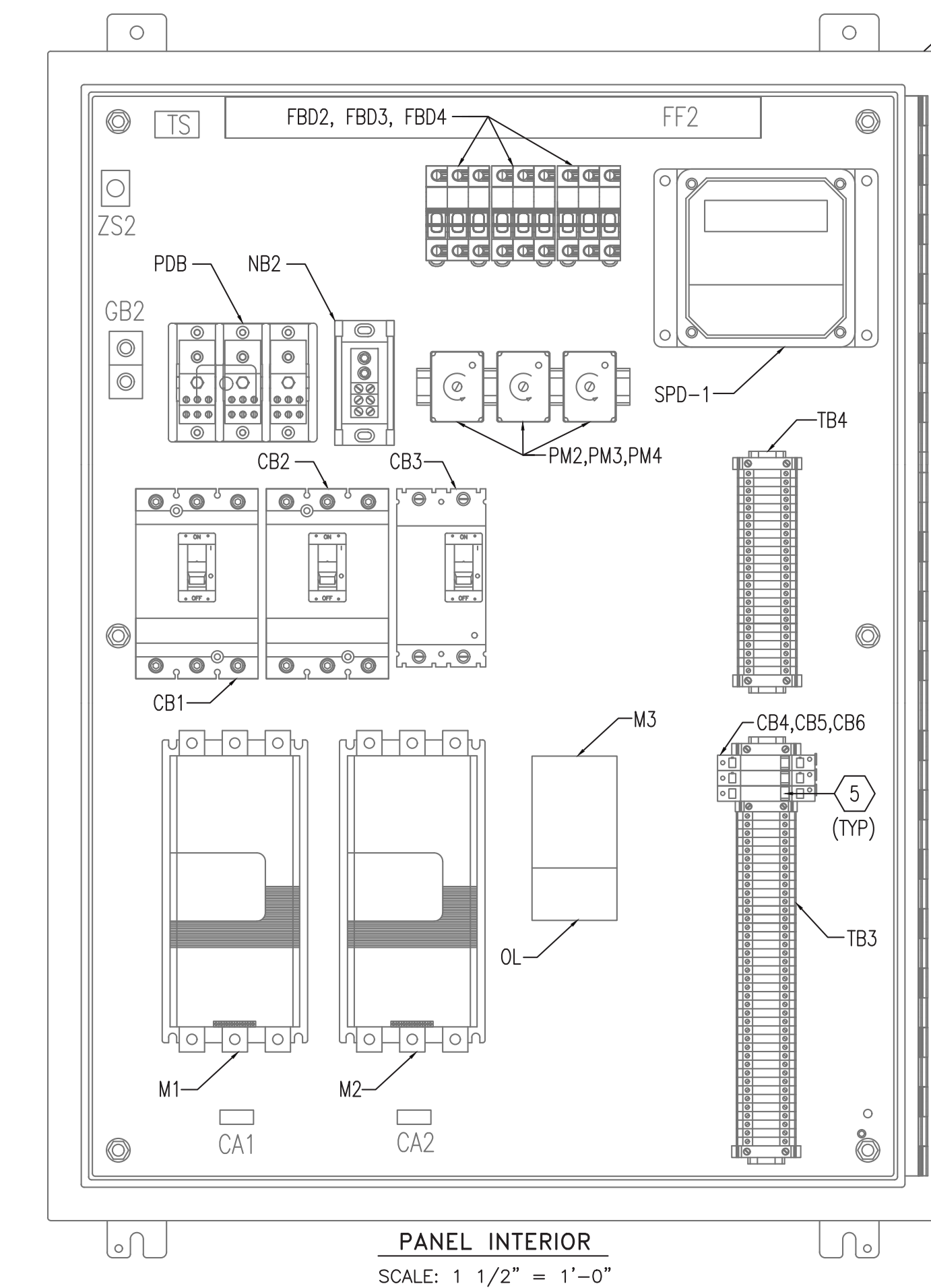
LEGEND PLATE SCHEDULE

SYMBOL	DEVICE	LEGEND
CB1	CIRCUIT BREAKER	PUMP NO. 1 CIRCUIT BREAKER
CB2	CIRCUIT BREAKER	PUMP NO. 2 CIRCUIT BREAKER
CB3	CIRCUIT BREAKER	MINI POWER-ZONE "LP" 480V FEEDER
SS1	SOFTSTARTER KEYPAD	SOFTSTARTER NO. 1 KEYPAD
SS2	SOFTSTARTER KEYPAD	SOFTSTARTER NO. 2 KEYPAD
SLD1	PUMP MONITORING UNIT	PUMP NO. 1 SEAL LEAK DETECTOR
SLD2	PUMP MONITORING UNIT	PUMP NO. 2 SEAL LEAK DETECTOR

PARTS SCHEDULE (MISCELLANEOUS)

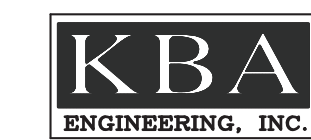
PM1- JUNCTION BOX						
SYMBOL	NAME	PART			RATING	REMARKS
		MAKE	TYPE	MODEL OR CAT. #		
PM1	3-PHASE POWER MONITOR	ATC DIVERSIFIED ELECTRONICS	8 PIN PLUG-IN	SUA-440-ASA	440 VAC	W/ OPTIONAL 5-SEC RELEASE AND DIN RAIL SOCKET-RB08PC
FBD1	FUSE BLOCK / DISCONNECT	ALLEN BRADLEY	THREE PHASE- HIGH INTER. CAP.	1492-FB3C30-L	600 VAC, 200KAC	W/ BUSSMANN KTK-R-2 FAST ACTING REJECTION FUSES
PM1-JB	PHASE MONITOR JUNCTION BOX	HAMMOND MANUFACTURING	NEMA 4X, 8"x6"x6"D	EJ866S16	316 S.S.	INSTALL DIN RAILS TO MOUNT PM1 AND TB3
TB5	TERMINALS	PHOENIX CONTACT		UK5N TERMINALS	30 A W/ ALUM. DIN RAIL	5 CONTACTS (MIN)

EXTERNAL ELECTRICAL						
SYMBOL	NAME	PART			RATING	REMARKS
		MAKE	TYPE	MODEL OR CAT. #		
FDT5	FUSED DOUBLE THROW DISCONNECT SWITCH	EATON	SERVICE ENTRANCE RATED, HEAVY DUTY	DT365FWK	400A, 600V, NEMA 4X, S/S	TIME DELAY CLASS RK5 FUSES (3) EDISON ECSR 250 (3) EDISON ECSR 200 PROVIDE (3) SPARES FOR EACH
MS	METER SOCKET	MILBANK	7 TERMINAL, RINGLESS	UAP3566-X-HSP	600 VAC, 320 AMP	ALUMINUM CONSTRUCTION
LA SPD 1	LIGHTNING ARRESTER	SQUARE D	THREE POLE, 4 WIRE	SDS A3850	40 KA, 600 V MAX	
MCP-JB	MOTOR CONTROL PANEL JUNCTION BOX	HAMMOND	NEMA 4X, 16"x16"x6"	#1418M4SSG6	304 S.S.	INSTALL S.S. LOUVER PLATE KIT WIEGMANN #WAK0304SSA
PCP-JB	PUMP CONTROL PANEL JUNCTION BOX	WIEGMANN	NEMA 4X, 12"x12"x6"	BN4121206HSS	304 S.S.	INSTALL S.S. LOUVER PLATE KIT WIEGMANN #WAK0304SSA
PDB	PWR DIST. BLOCK	BUSSMANN/EATON	THREE POLE	PDBFS220	600 V, 175 AMP	BARRIER TERMINAL BLOCKS
	SEAL FITTING	CROUSE-HINDS	COPPER-FREE ALUMINUM	AS REQUIRED		
	CONDUIT BODIES	CROUSE-HINDS	COPPER-FREE ALUMINUM, FORM 7 OR 9	AS REQUIRED		
LP	MINI POWER-ZONE	SQUARE D	NEMA 3R	MP2B754DFSS	480V-120/240V, 7.5 KVA	18 KA INTERRUPT RATING
	SCADA ANTENNA	LAIRD TECHNOLOGY	GOLD ANODIZED	Y4503	450-470 MHz	
FL	FLOAT SWITCH	ANCHOR SCIENTIFIC	SPDT	S30N0NC	10 A @ 120 V	
ATS	AUTOMATIC TRANSFER SWITCH	EATON	SERVICE ENTRANCE RATED	ADN9P3B3030XDA	250A, 480V, NEMA 4X, S/S	
PGDS	PORTABLE GENERATOR DOCKING STATION	POWER ASSEMBLIES	NEMA 4, 20"x24"x26.625"	PWA-GDS-04M-6	400A, 480V, NEMA 4X, S/S	
RAIN GAUGE	RAIN GAUGE	TEXAS ELECTRONICS	POLE MOUNT	TR-529I-S		6" FUNNEL, TIPPING BUCKET STYLE



KEYED NOTES:

- ① MOTOR CONTROL CABINET. 48" X 36" X 12" NEMA 4X SS, POWDER COAT WHITE.
- ② PROVIDE AND INSTALL ALUMINUM DEADFRONT DOOR WITH STOP KIT.
- ③ PROVIDE AND INSTALL NEW KEYPAD FOR SOFTSTARTER #1. REFER ALSO TO PARTS SCHEDULE ON THIS SHEET.
- ④ PROVIDE AND INSTALL NEW KEYPAD FOR SOFTSTARTER #2. REFER ALSO TO PARTS SCHEDULE ON THIS SHEET.
- ⑤ PROVIDE AND INSTALL ALUMINUM RAIL WHERE REQUIRED.



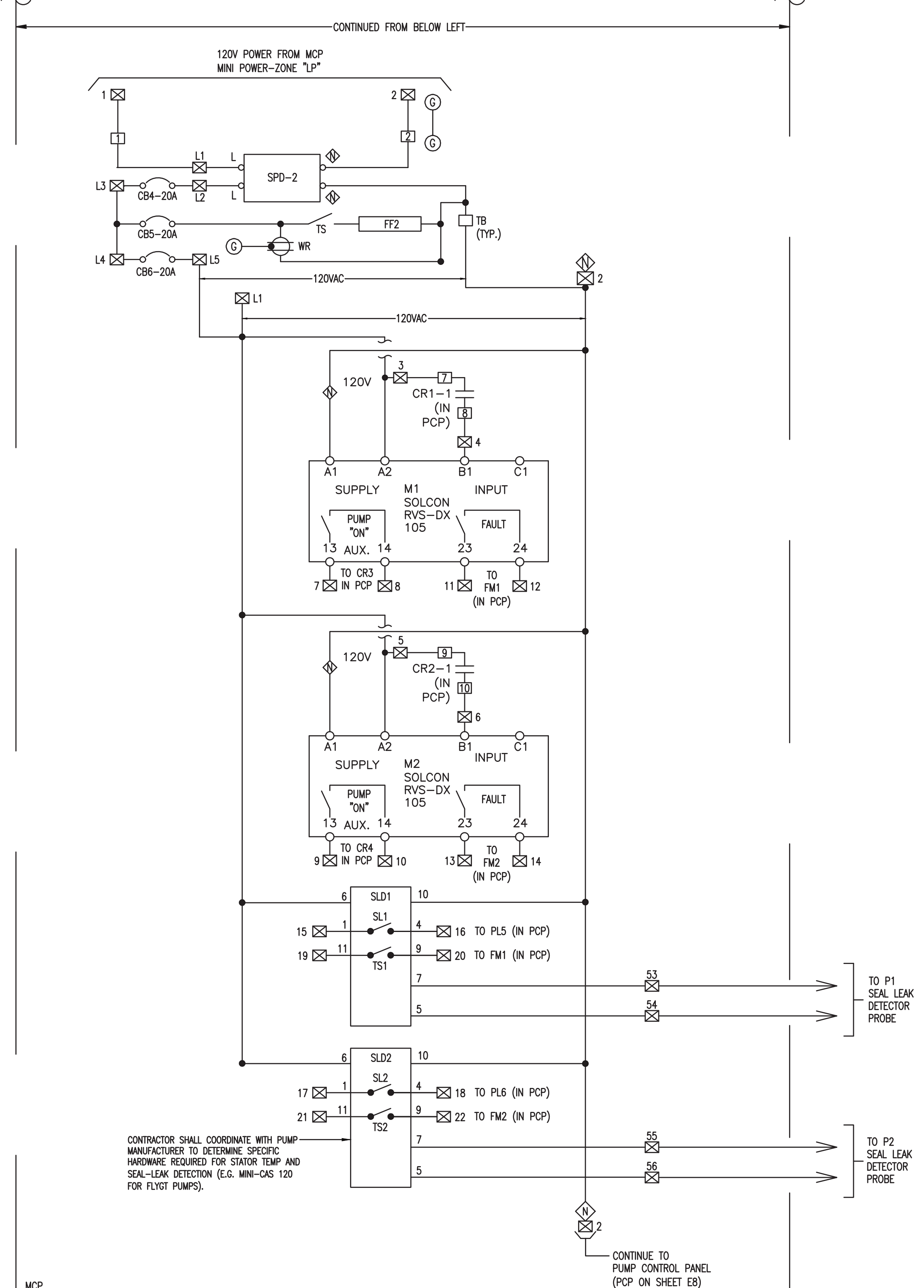
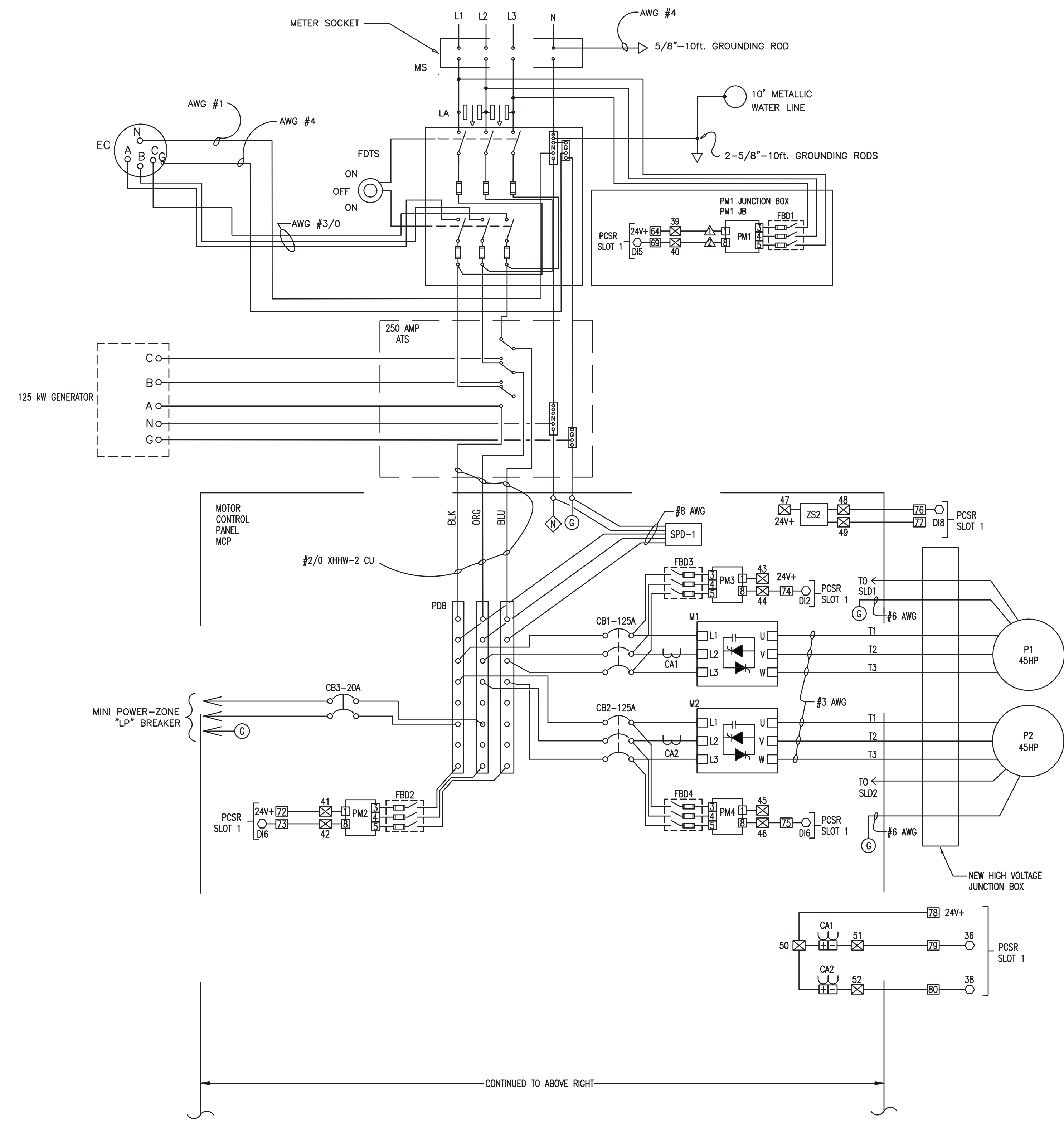
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DES:
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CKD: KGC
DATE: 06/11/26

CITY of TAMPA
Mobility Department
Stormwater Engineering Division

FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
MOTOR CONTROL PANEL DETAILS



- TERMINALS ON ACE I/O MODULE (GENERAL)
- TERMINALS IN PUMP CONTROL PANEL
- ⊗ TERMINALS IN MOTOR CONTROL PANEL
- △ TERMINALS IN PM1 JUNCTION BOX

CONTRACTOR SHALL COORDINATE WITH PUMP MANUFACTURER TO DETERMINE SPECIFIC HARDWARE REQUIRED FOR STATOR TEMP AND SEAL-LEAK DETECTION (E.G. MINI-CAS 120 FOR FLYGT PUMPS).



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FLORIDA CA NO. 30727
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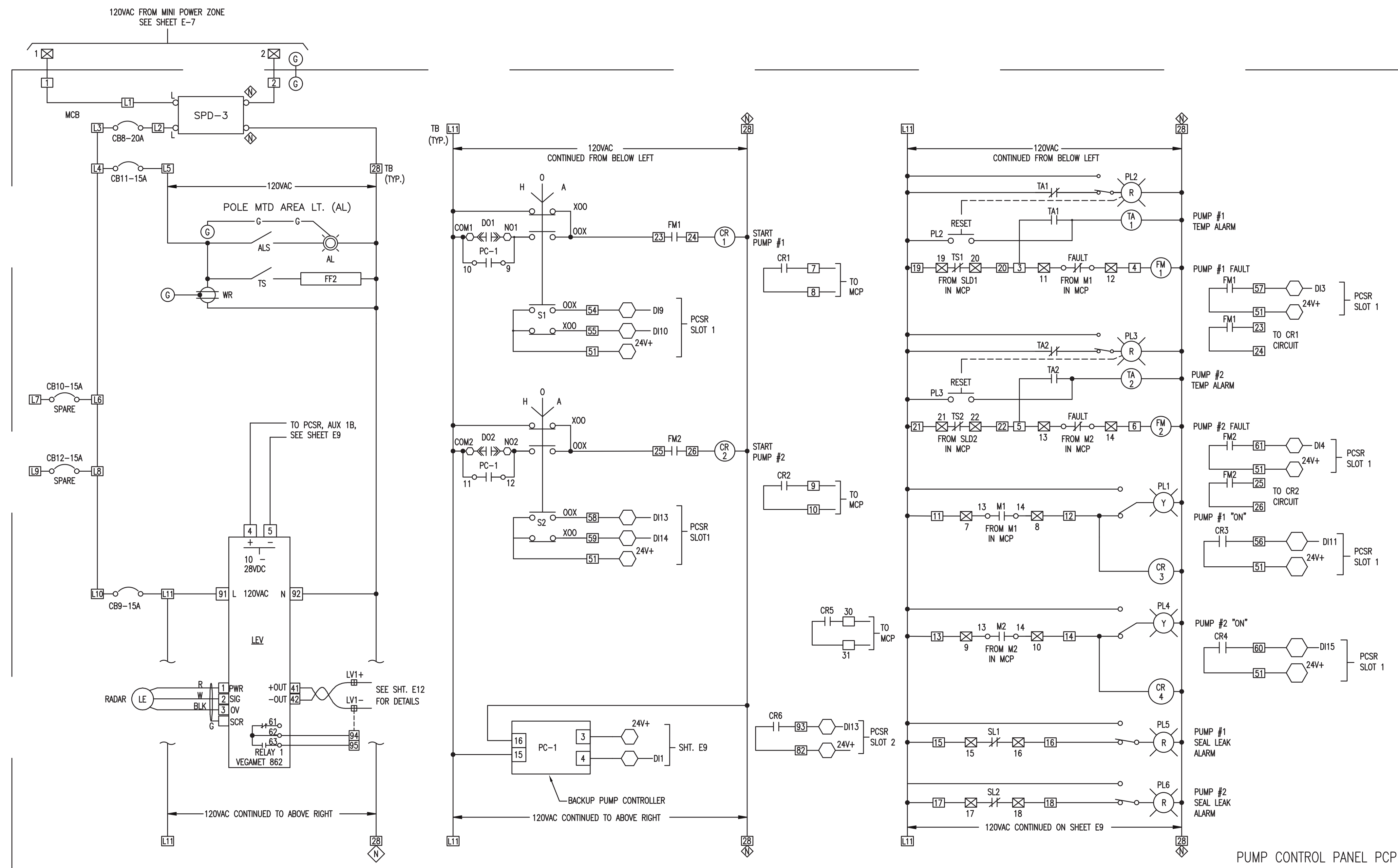
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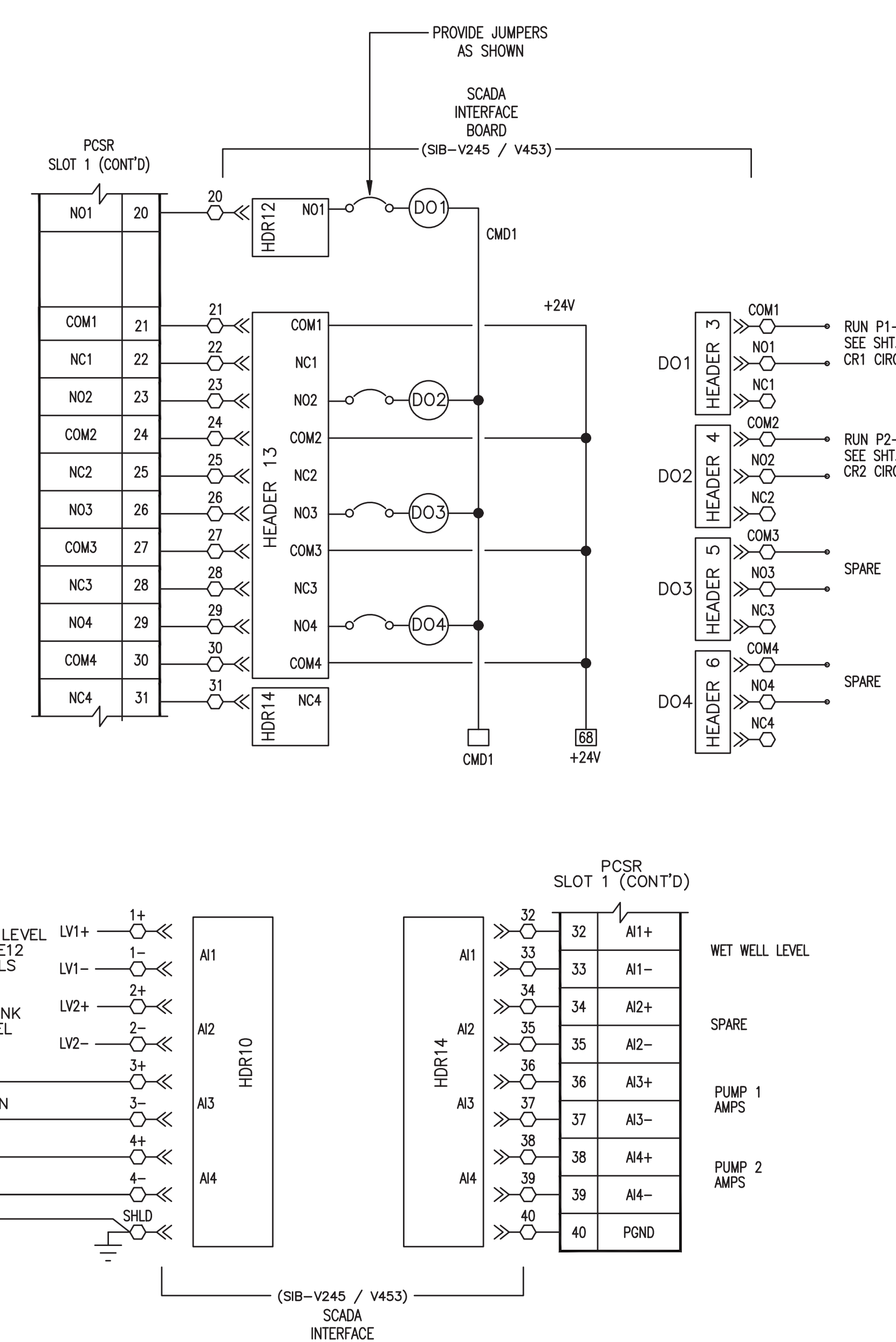
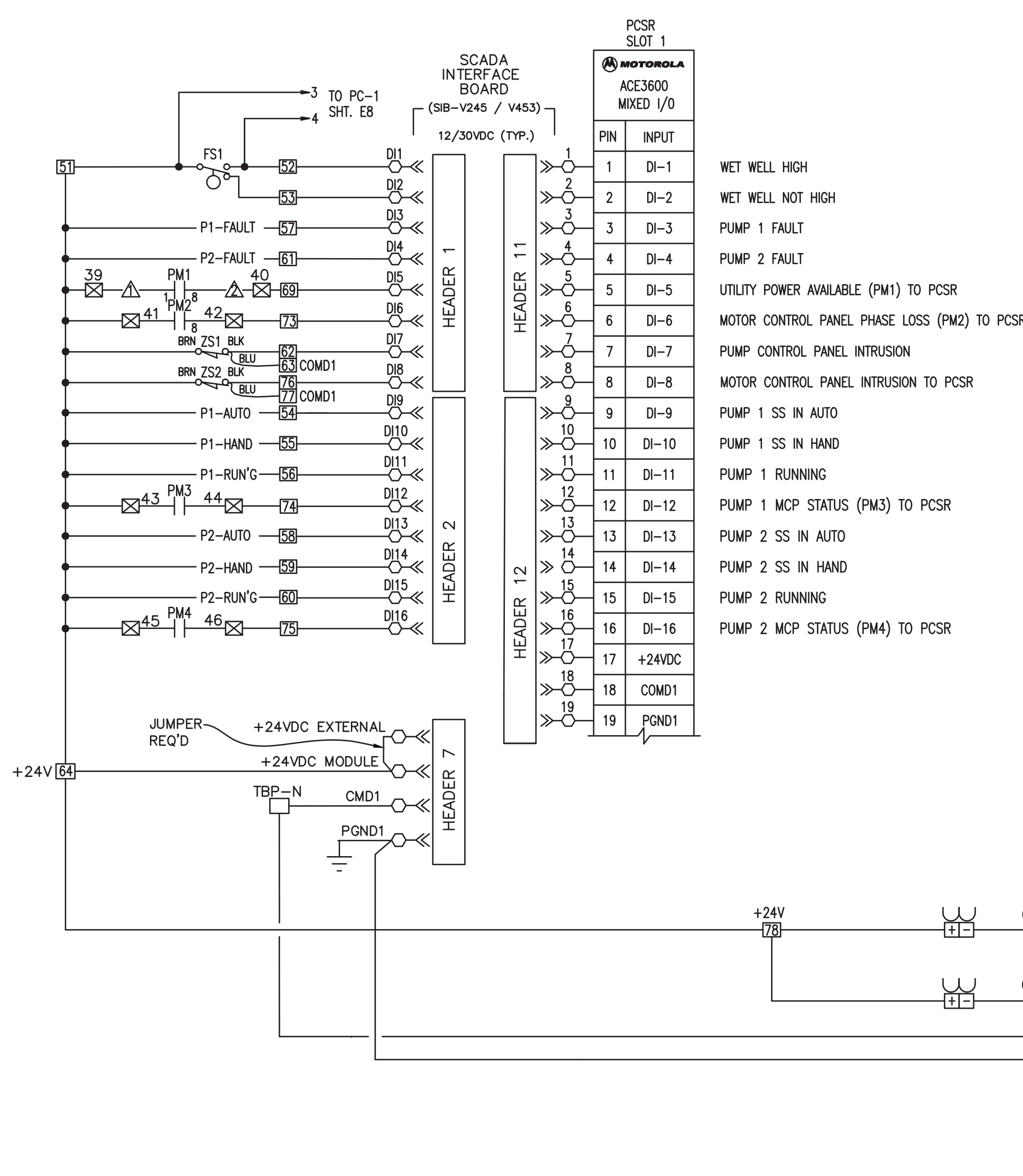
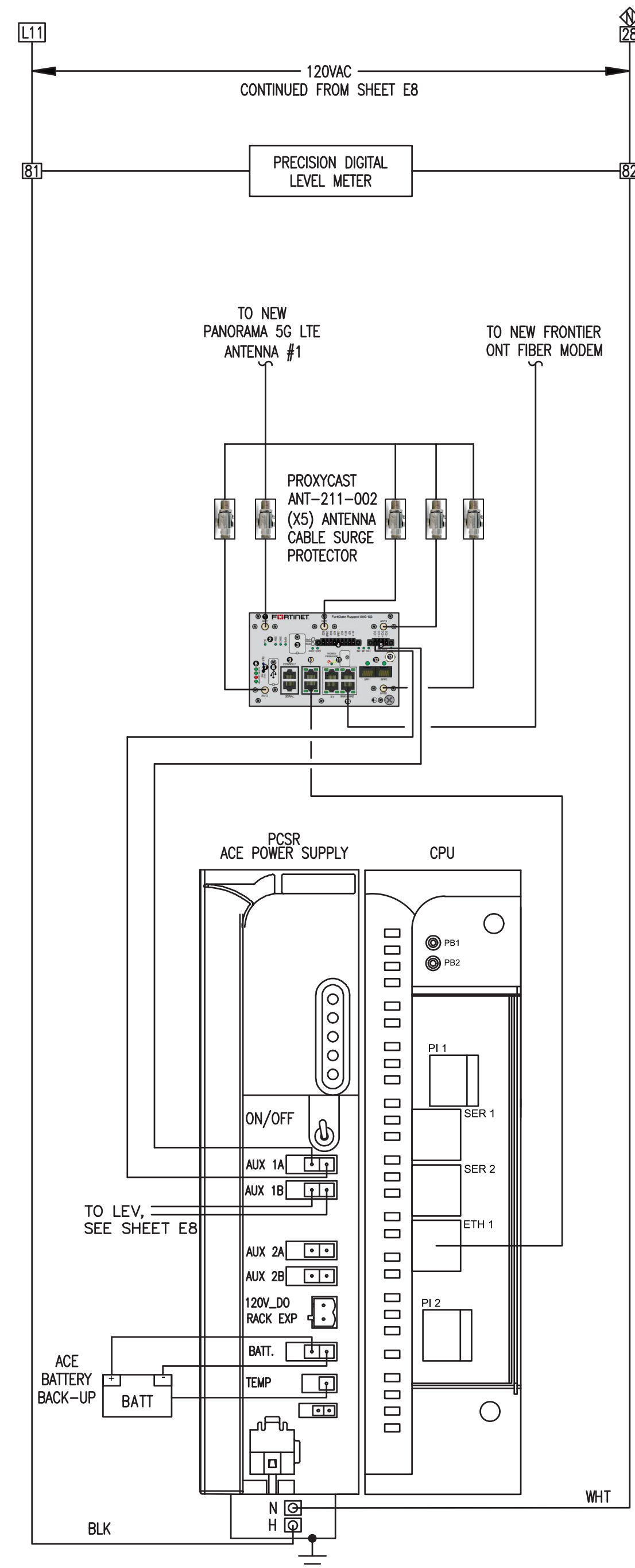
FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
 ELECTRICAL SCHEMATICS - MOTOR CONTROL PANEL

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 OF



- TERMINALS ON ACE I/O MODULE (GENERAL)
- TERMINALS IN PUMP CONTROL PANEL (PCP)
- ⊗ TERMINALS IN MOTOR CONTROL PANEL (MCP)

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- TERMINALS ON ACE I/O MODULE (GENERAL)
- TERMINALS IN PUMP CONTROL PANEL
- ⊗ TERMINALS IN MOTOR CONTROL PANEL
- △ TERMINALS IN PM1 JUNCTION BOX

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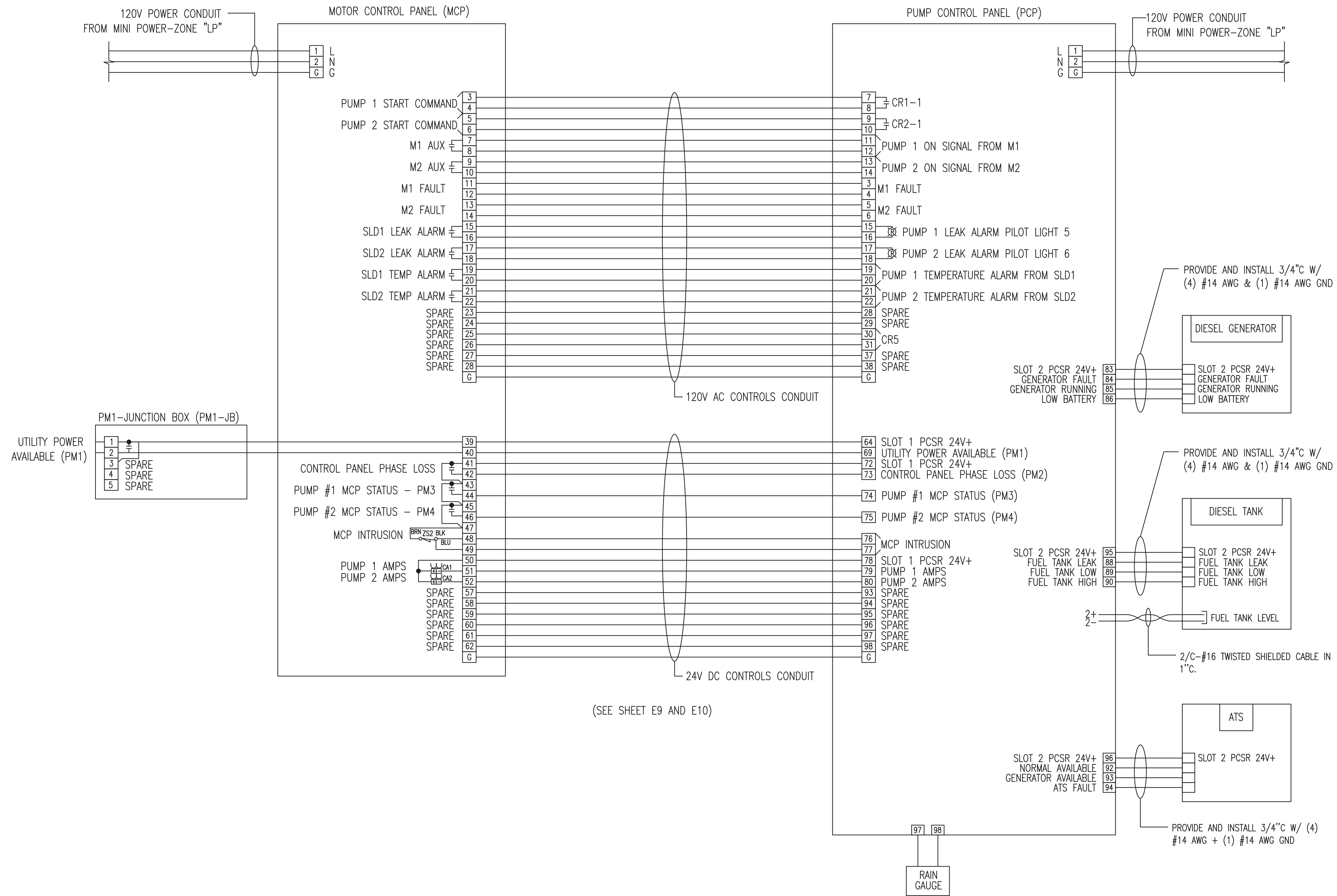
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FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
ELECTRICAL SCHEMATICS - PUMP CONTROL PANEL





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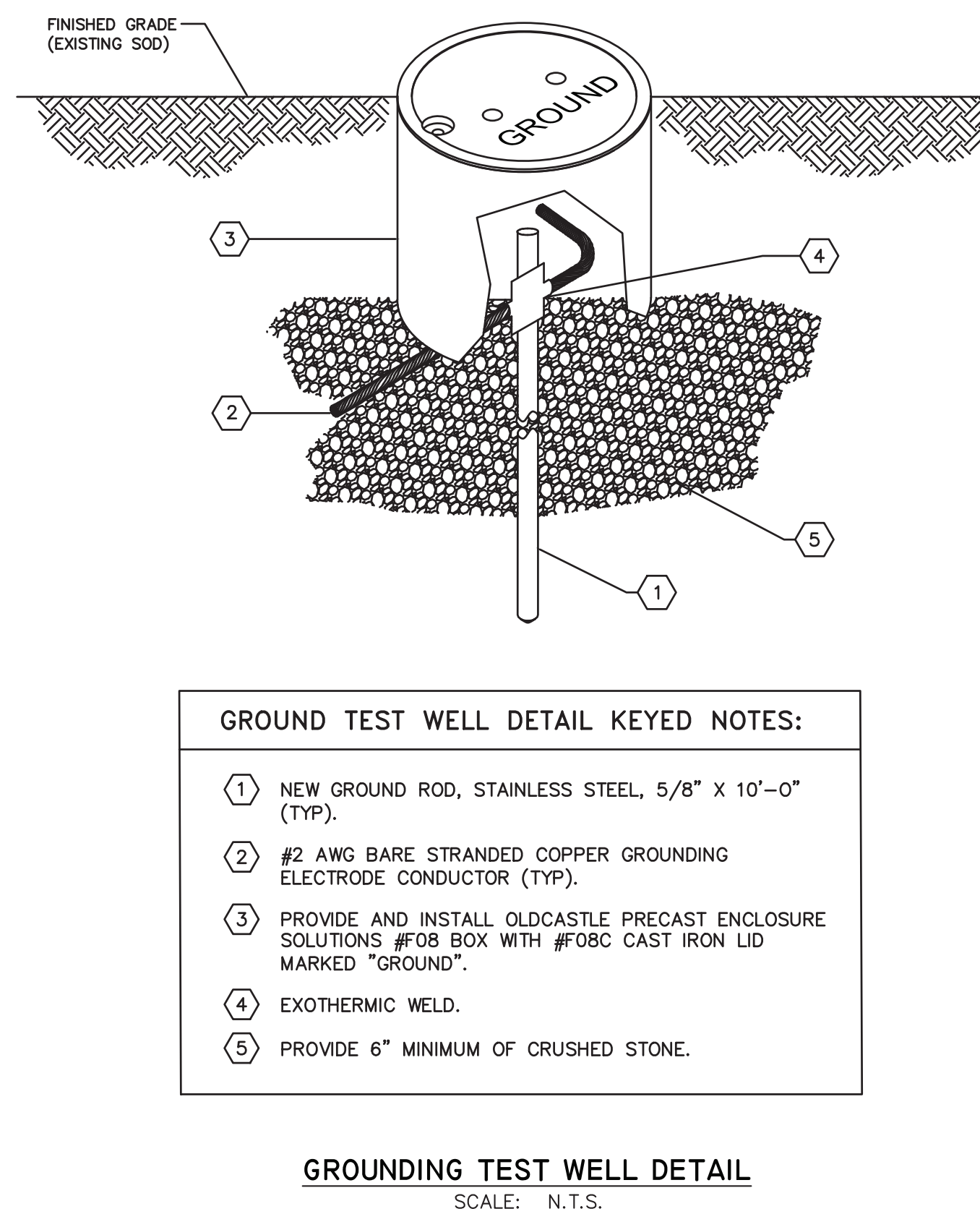
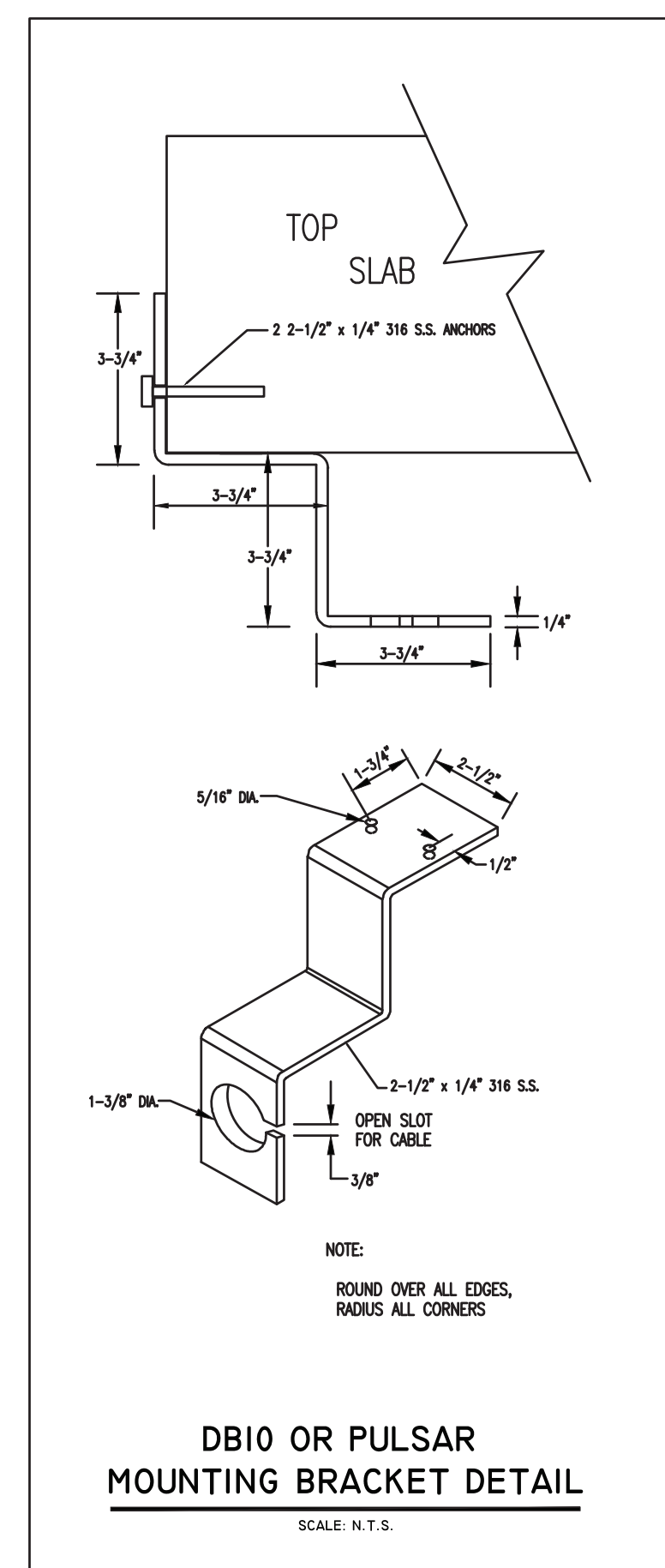
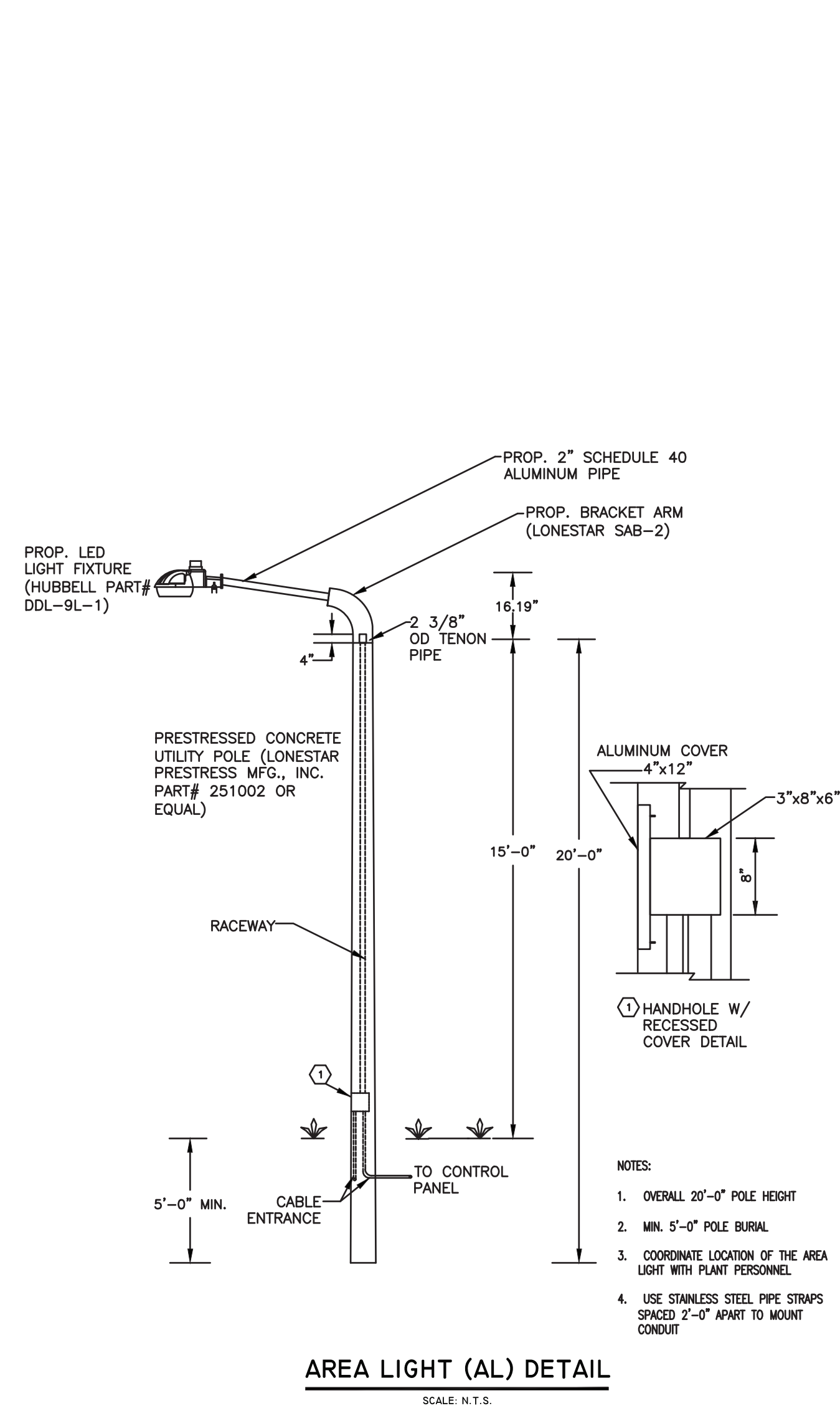
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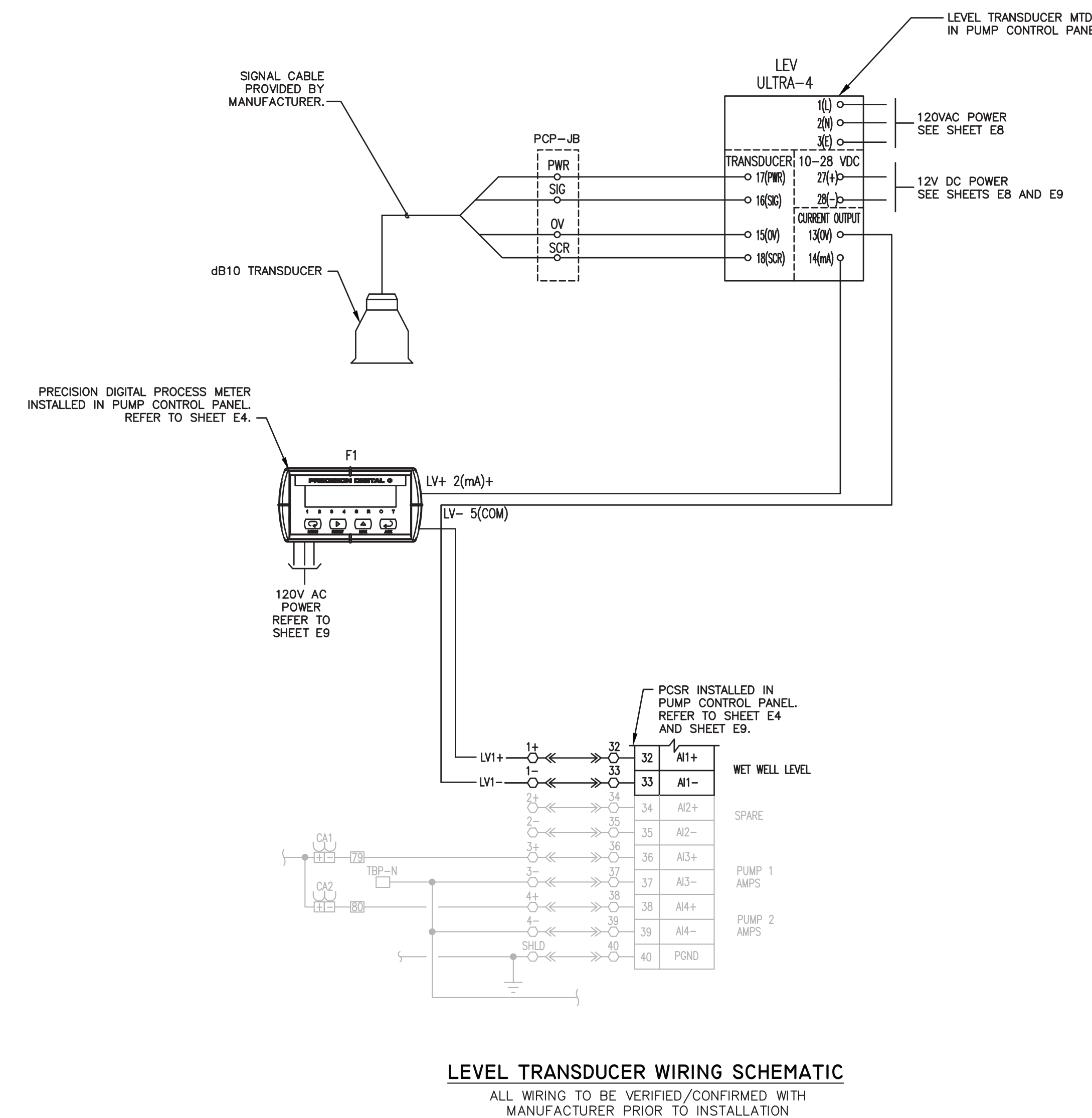
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FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
INTERCONNECTION WIRING DIAGRAM

SHEET
E11
OF



- GROUND TEST WELL DETAIL KEYED NOTES:**
- ① NEW GROUND ROD, STAINLESS STEEL, 5/8" X 10'-0" (TYP).
 - ② #2 AWG BARE STRANDED COPPER GROUNDING ELECTRODE CONDUCTOR (TYP).
 - ③ PROVIDE AND INSTALL OLDCASTLE PRECAST ENCLOSURE SOLUTIONS #F08 BOX WITH #F08C CAST IRON LID MARKED "GROUND".
 - ④ EXOTHERMIC WELD.
 - ⑤ PROVIDE 6" MINIMUM OF CRUSHED STONE.



ELECTRICAL DETAILS
SCALE: NO SCALE

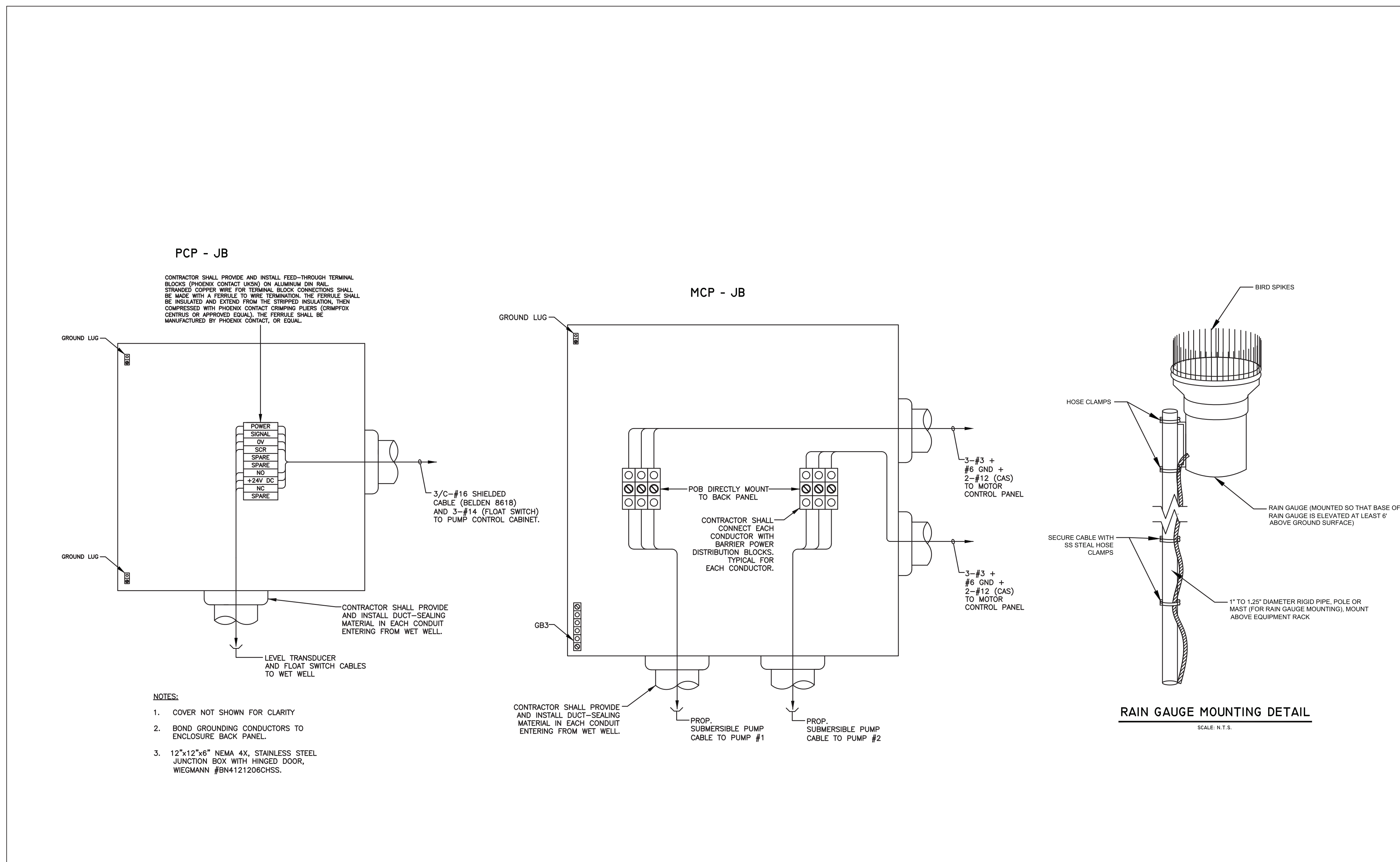
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CITY of TAMPA
Mobility Department
Stormwater Engineering Division

FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT

ELECTRICAL DETAILS



ELECTRICAL DETAILS
SCALE: NO SCALE



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813-909-1845 VOICEMAIL 813-909-0764 FAX
Florida Registry Number: RY8135

FLORIDA CA NO. 30727

DATE: _____

No.	DATE	REVISIONS	No.	DATE	REVISIONS
3			6		
2			5		
1			4		

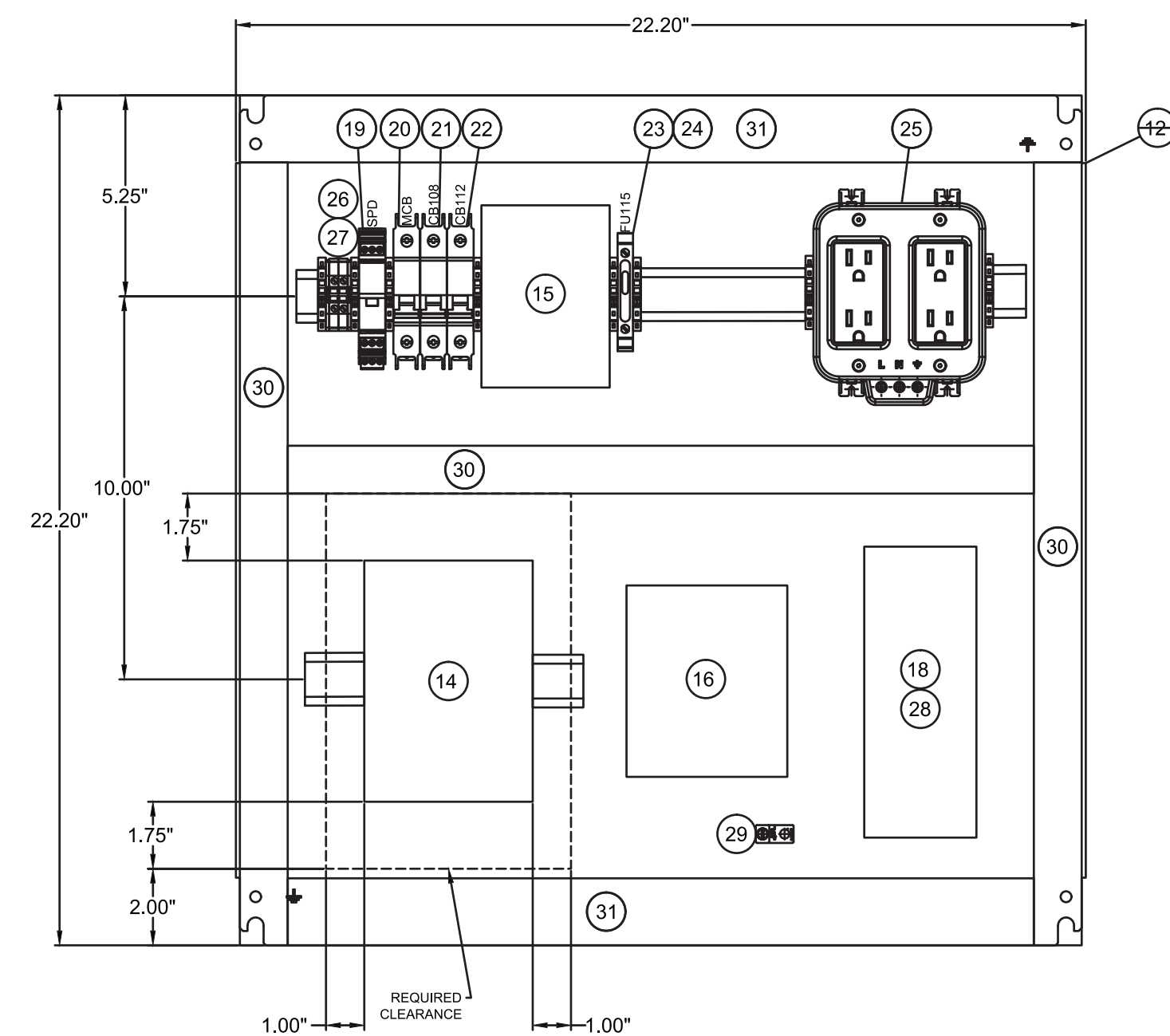
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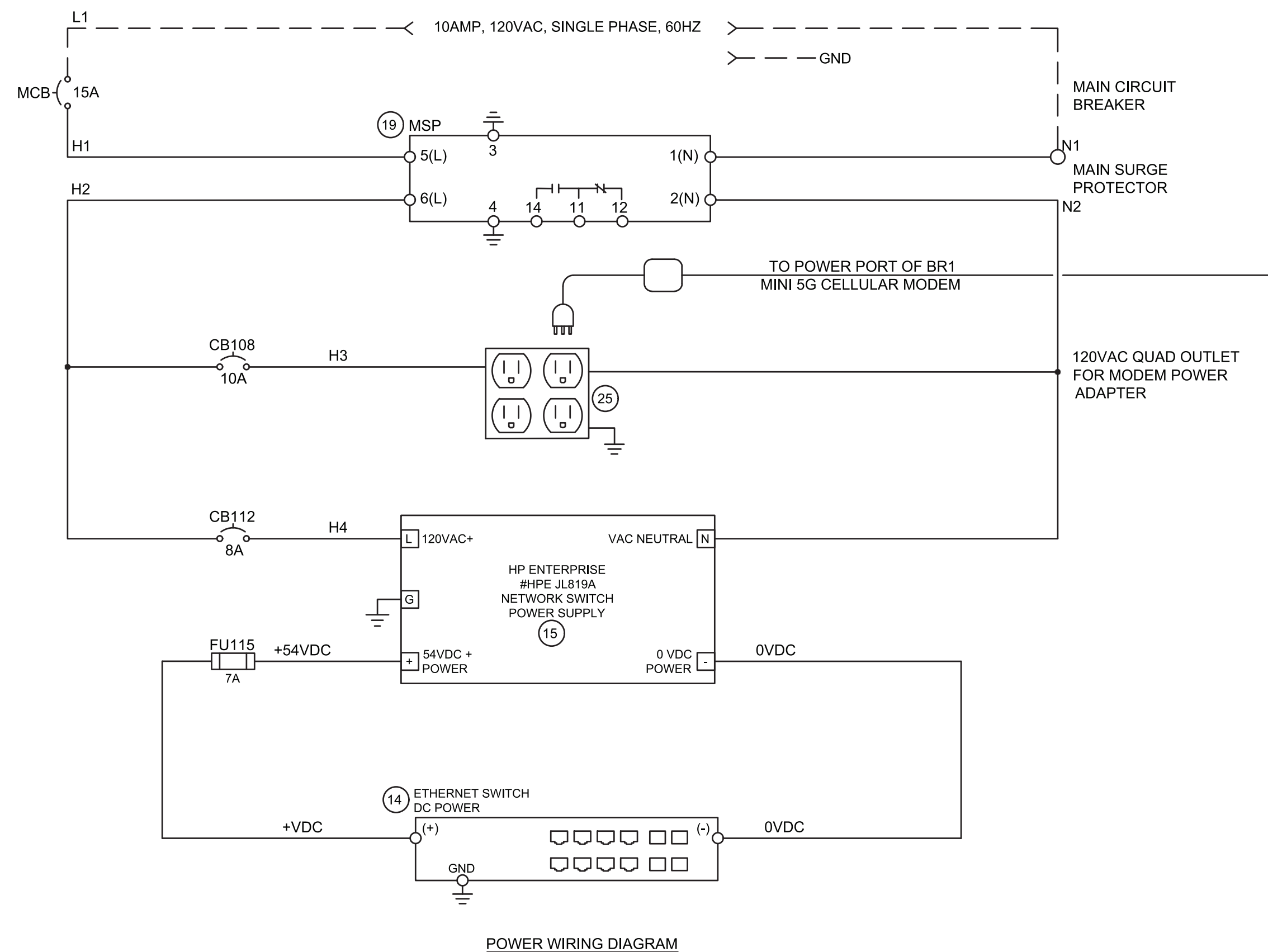
FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT

ELECTRICAL DETAILS

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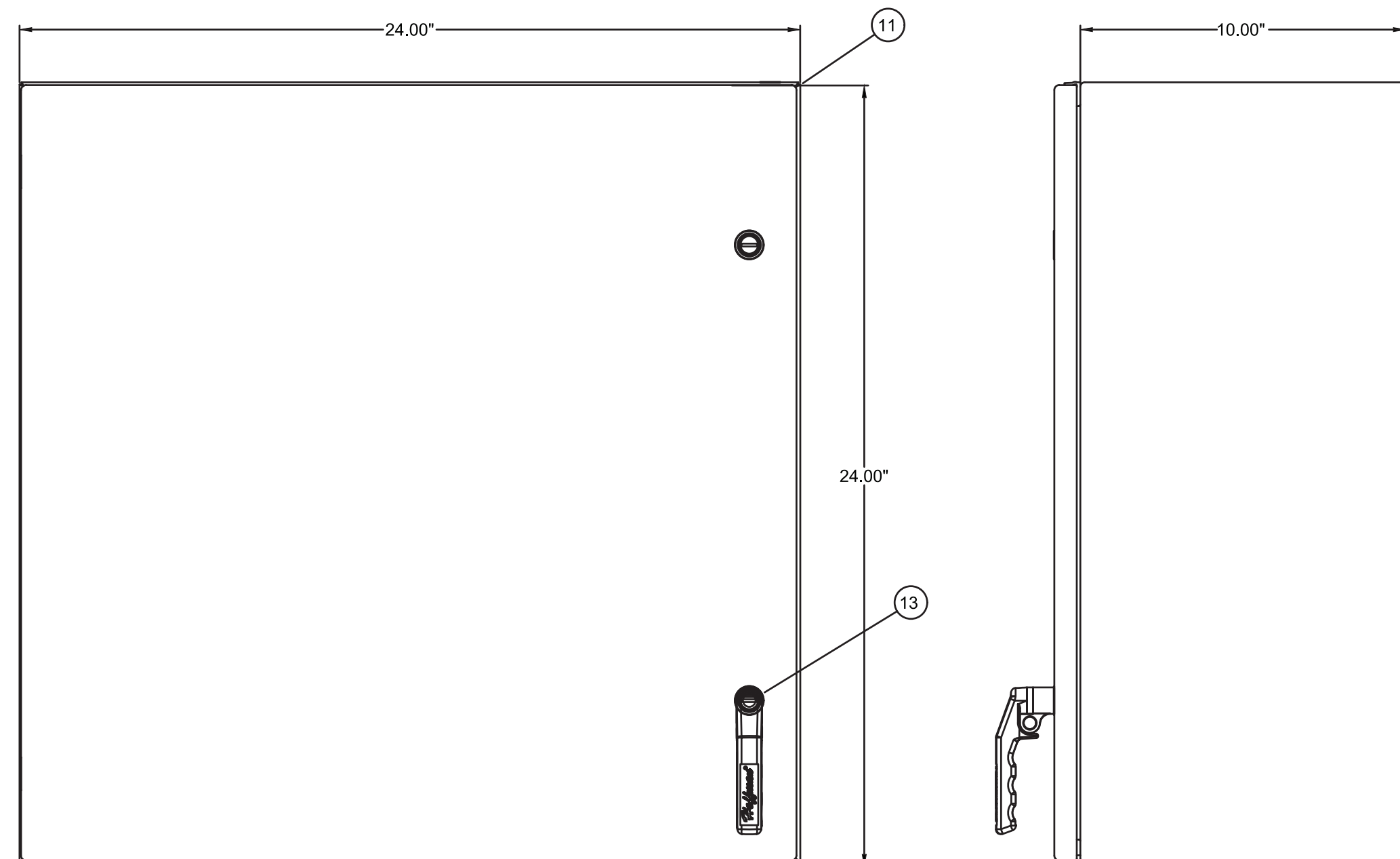
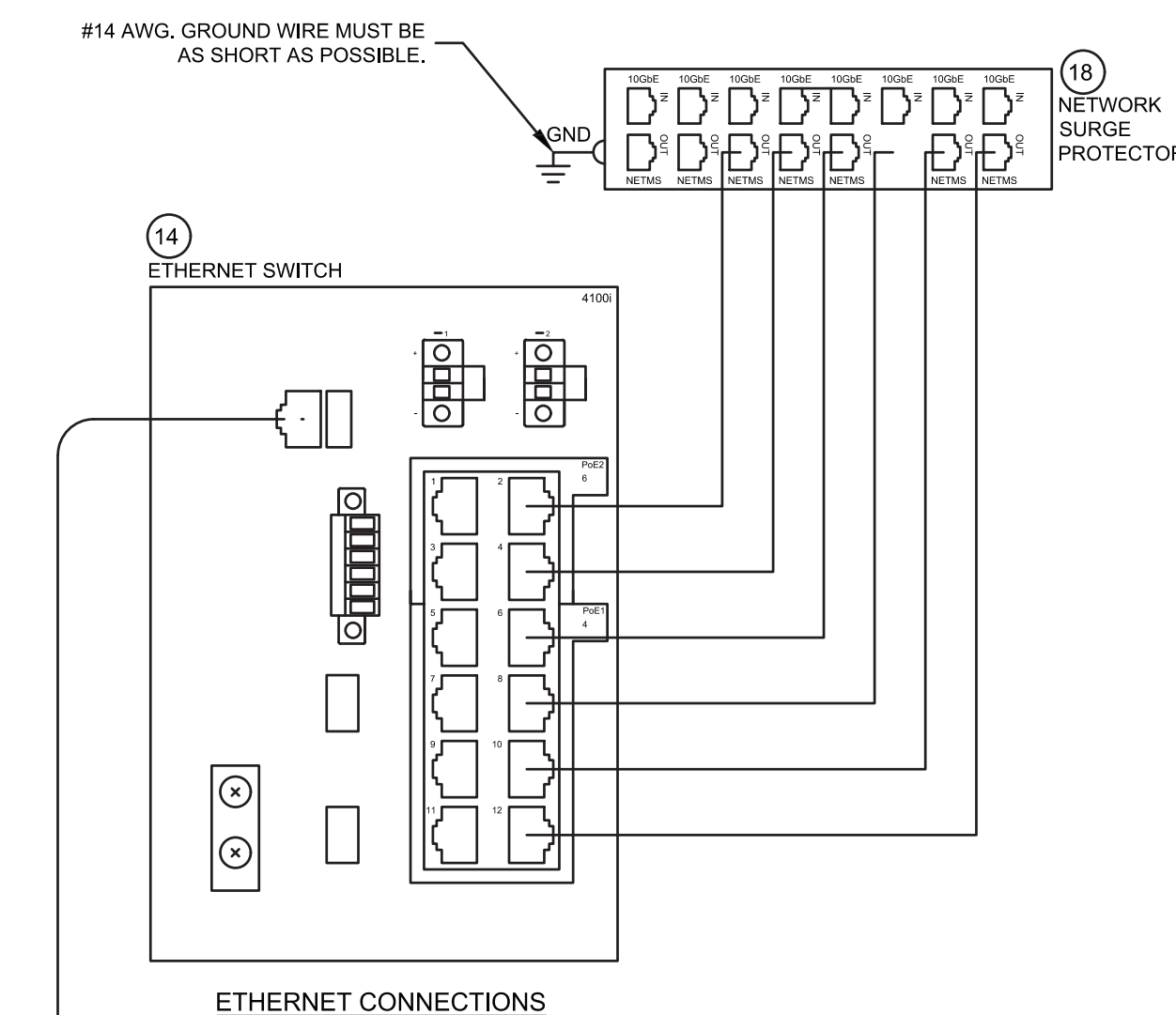


NETWORK SWITCH BACK PANEL LAYOUT



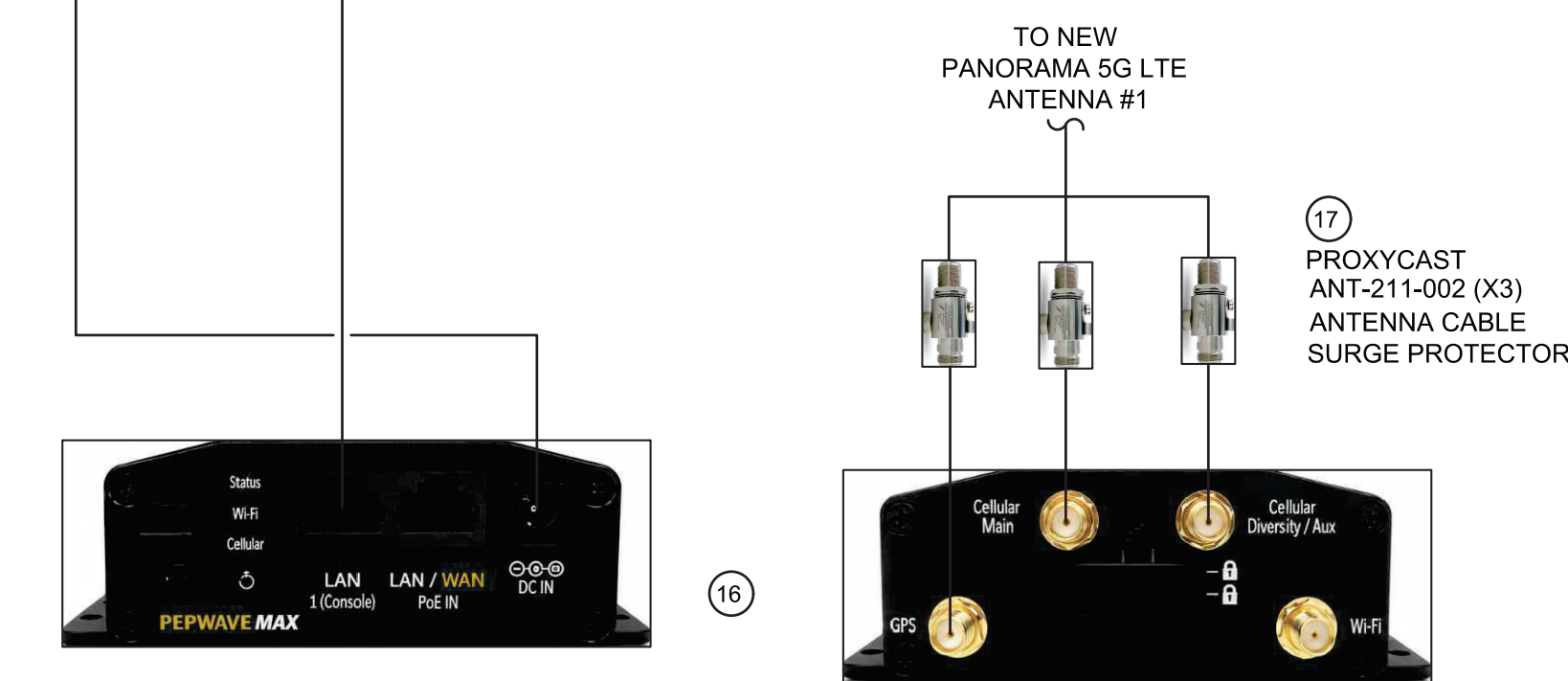
POWER WIRING DIAGRAM

ETHERNET CONNECTIONS:
 "IN" = UNPROTECTED (CABLES FROM FIELD)
 "OUT" = PROTECTED (RJ45 MALE TO MALE 3-FOOT CAT5e PATCH CABLES)

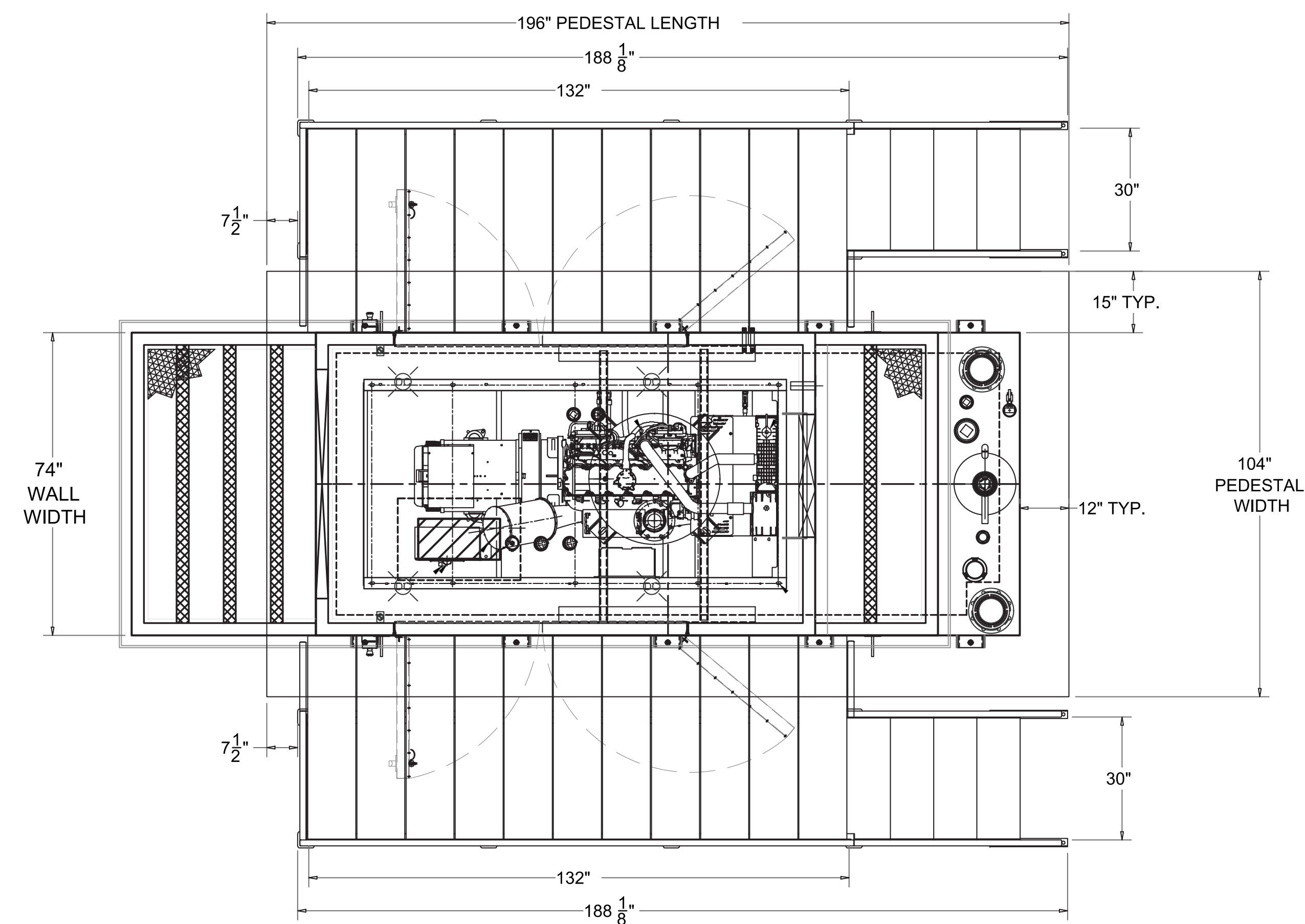


NETWORK SWITCH ENCLOSURE LAYOUT

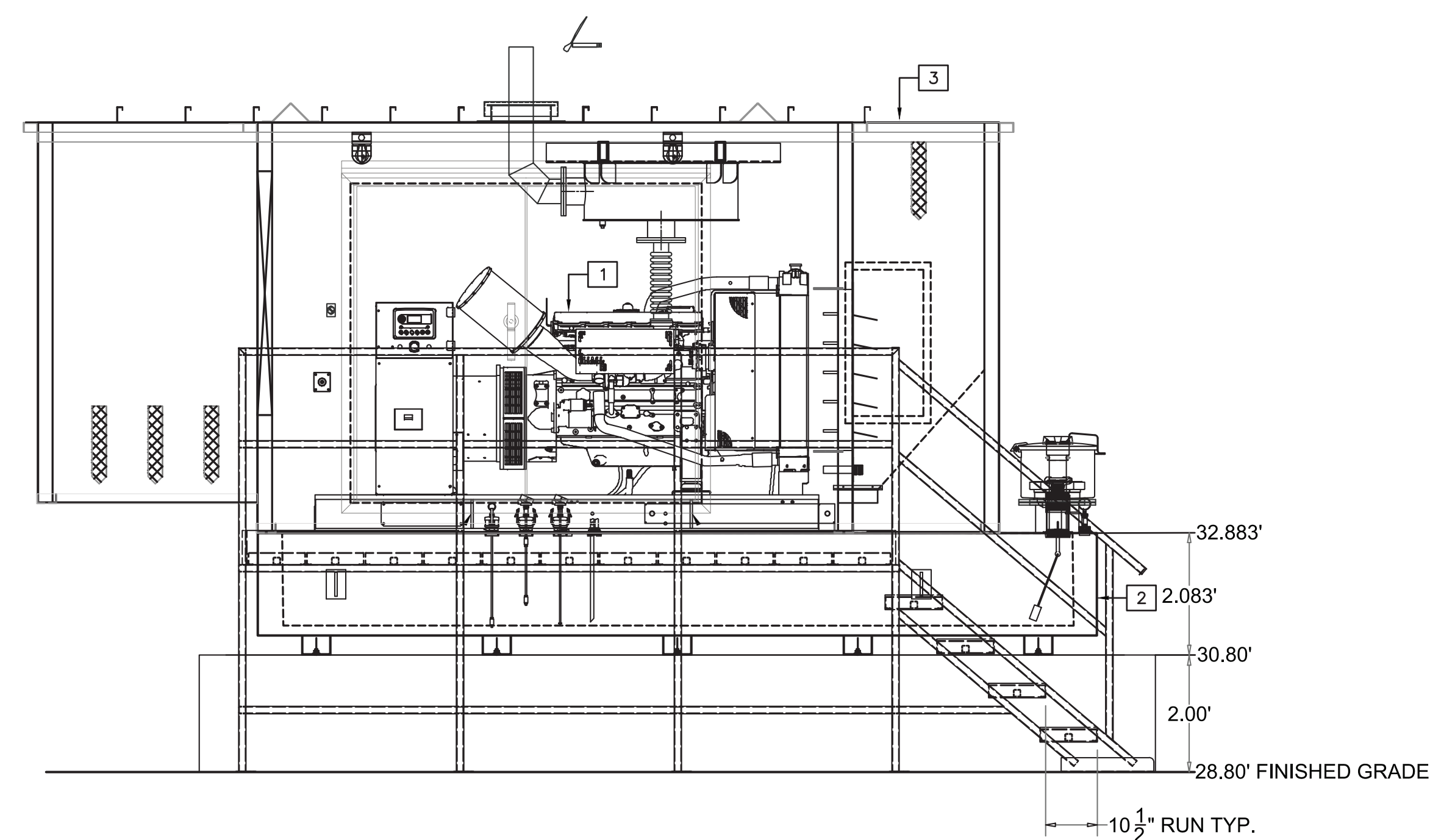
PARTS SCHEDULE (POE ENCLOSURE)				
ITEM NO.	QTY	MANUFACTURER	PART NO.	DESCRIPTION
11	1	HOFFMAN	CSD242410	ENCLOSURE, NEMA 4, 24"H x 24"W x 10"D
12	1	HOFFMAN	CP2424	SUBPANEL, 22.2"H x 22.2"W
13	1	HOFFMAN	GPDLCKHDL	HANDLE, PADLOCK, TYPE 12, 4 & 4X
14	1	HP ENTERPRISE	HPE JL817A	ARUBA NETWORK SWITCH 4100 SERIES
15	1	HP ENTERPRISE	HPE JL819A	NETWORK SW. POWER SUPPLY, 120VAC/3.5A to 54VDC/4.4A
16	1	PEPLINK	MAX-BR1-MINI-5GN-T-M-PRM	5G. CELLULAR MODEM
17	1	PANORAMA	DW-IN2713	4x4 MIMO 4G /5G ANTENNA w/INTEGRATED COAX CS32 CABLE
	AR	PROXICAST	ANT-211-002	COAX LIGHTNING SURGE ARRESTOR N-FEMALE/N-FEMALE (used w/above)
	AR	PROXICAST	ANT-212-002	COAX LIGHTNING SURGE ARRESTOR N-MALE/N-FEMALE (used w/above)
18	1	DITEK	DTK-WM8NETS	8-CHANNEL WALL MOUNT NETWORK SURGE PROTECTOR
19	1	PHOENIX CONTACT	2907918	120VAC SURGE PROTECTOR, PLUG AND BASE
20	1	SCHNEIDER	M9F43115	15A CIRCUIT BREAKER, UL489
21	1	SCHNEIDER	M9F43110	10A CIRCUIT BREAKER, UL489
22	1	SCHNEIDER	M9F43108	8A CIRCUIT BREAKER, UL489
23	1	PHOENIX CONTACT	3004265	FUSE BLOCK, UK 6.3-HESILED 24
24	1	EATON / BUSSMANN	MDL-7-R	7A FUSE
25	1	GLADIATOR (AUTOMATION DIRECT)	GR-REC-4	QUAD RECEPTACLE, DIN RAIL MOUNTABLE, 15A
26	2	PHOENIX CONTACT	304102	TERMINAL BLOCK, UT 4
27	8	PHOENIX CONTACT	3022276	TERMINAL END STOP
-	AR	PHOENIX CONTACT	0801733	DIN RAIL, NS 35/7.5 PERF
28	6	CABLES.COM (or equal)	CSE-3-WH-SHLD	RJ45 MALE TO MALE PATCH CABLE, Cat5e, WHITE (MIN 3')
29	1	BURNDY	KA6U	GROUND LUG
30	1	PANDUIT	F1X4LG6	SLOTTED WIREWAY, GRAY, 1" X 4" (6' STICK)
	1	PANDUIT	C1LG6	1" WIREWAY COVER, GRAY (6' STICK)
31	1	PANDUIT	F1.5X4LG6	SLOTTED WIREWAY, GRAY, 1.5" X 4" (6' STICK)
	1	PANDUIT	C1.5LG6	1.5" WIREWAY COVER, GRAY (6' STICK)
32	1	AXIS	P3747-PLVE	270 TO 360 DEGREE CCTV CAMERA
33	-	AXIS	Q6355-LE PTZ	360 DEGREE PAN/TILT/ZOOM CCTV CAMERA
34	-	AXIS	P3278-LVE	90 DEGREE CCTV CAMERA



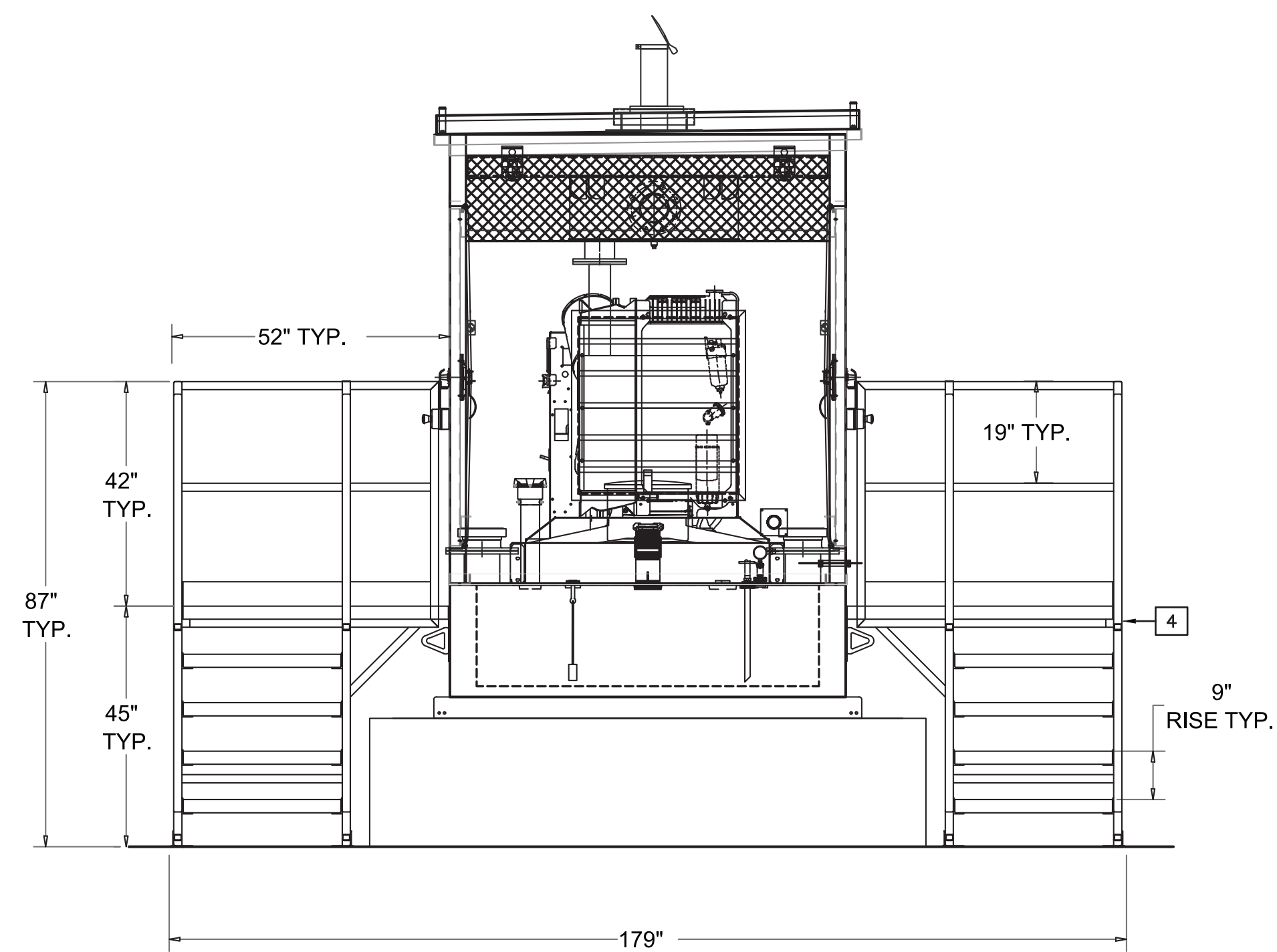
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PLAN-TANK, GENSET, ENCLOSURE & STAIRS



RIGHT SIDE ELEVATION-TANK, GENSET, ENCLOSURE & STAIRS



RADIATOR END ELEVATION-TANK, GENSET, ENCLOSURE & STAIRS

GENERATOR DRAWING NOTES

1. CATERPILLAR DIESEL POWERED EMERGENCY 125kW/156.25kVA GENERATOR
2. 803 GALLON SUB BASE TANK
3. ALUMINUM SOUND ATTENUATED SKIN-TIGHT ENCLOSURE WITH 151 MPH WIND RATING. MINIMUM WIND SPEED RATING SPECIFIED IN FLORIDA BUILDING CODE 1609.3(2) AT THIS SITE IS 141 MPH.
4. ALUMINUM DOUBLE DOOR STAIR ASSEMBLY

GENERATOR DATA

- FUEL TANK MUST BE SUFFICIENT FOR 72 HOURS OF RUN TIME.
- FUEL CONSUMPTION AT 100% LOAD = 9.7 GAL/HR.
- FUEL TANK SIZE = 803 GALLONS
- RUN TIME AT 100% LOAD = 803 ÷ 9.7 = 82 HOURS



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GENERATOR DETAILS

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STRUCTURAL NOTES

I. GOVERNING CODES:

- This design is based on the following codes:
- A. Florida Building Code 2023 (8th Edition)
- B. International Building Code 2018 (IBC 2018)
- C. Building Code Requirements for Structural Concrete ACI 318
- D. Building Code Requirements for Environmental engineering Concrete Structures ACI 350
- E. Structural Welding Code D1.1

II. DESIGN LOADS:

- A. Wind load based on ASCE 7-22 "Minimum Design Loads for Buildings and Other Structures" methods of calculation for wind pressures and the following factors:
 1. Structure Height less than 15'-0"
 2. Risk Category III
 3. Wind speed of V(ULT)=150 MPH, V(ASD)=116 MPH
 4. Exposure Category 'C'.
- B. Lift Station Lid Live load 150 psf
- C. Allowable soil bearing of 2,500 PSF.
- D. Precast wall design loads based on the following:
 1. Rankine earth pressure coefficient of 0.5.
 2. Vertical surcharge on backfill of 100 psf.
 3. Soil wall friction angle of 20 degrees.
 4. Coefficient of friction of 0.35.
 5. Soil unit weight of 110 pcf.
 6. Concrete unit weight of 145 pcf.

III. SHOP DRAWINGS:

- A. Contractor shall allow for (10) ten business days for shop drawing review.
- B. Our office will accept shop drawings in both electronic and paper format.
- C. If the Shop Drawings are in a paper format, we will require (3) three copies minimum submitted with (1) one copy to be retained by our office.
- D. If the Shop Drawings are in electronic format the following shall apply:
 1. The only accepted electronic format shall be PDF format.
 2. Electronic Files distributed through a project management cloud based service, such as Procore, shall provide direct notifications utilizing the Project Engineers business email address. The reviewed shop drawings will be uploaded to the cloud based service. No cloud based service requiring subscription fee or form of payment from our office will be accepted.
 3. Electronic files that are directly e-mailed to our office, shall be forwarded to the Project Engineers business email address. The reviewed shop drawings shall be returned to Project Architect (or directed party) in either electronic format or paper format as directed by Client. If paper format is requested, it shall be blackline copies with any comments generated by our office in contrasting font or "boxed". Additionally we will invoice for the printing costs associated with the production of these drawings based on the prevailing prints costs in the Tampa Bay Area.
- E. If the shop drawings are re-submitted with changes, these changes shall be clouded to identify them. Submittals which are not clouded will be returned to the Contractor.

IV. DRAWINGS AND SPECIFICATIONS:

- A. Do not scale these drawings for dimensions that are not given. Advise the Project Architect of any conflicts between these drawings and the Architectural drawings. Verify all field conditions and confirm column locations in respect to architectural wall alignment prior to the start of work.
- B. These drawings are to be used in combination with the architectural, mechanical, plumbing and civil drawings. Refer to these other drawings for details that relate to structural components.
- C. These construction documents have been prepared from the most complete information available to the engineer. All data on existing construction conditions are approximate and shall be verified prior to commencing work.
- D. The contractor shall comply with the manufacturer's instructions and recommendations to the extent-printed information are more detailed or stringent than the requirements contained in the plans.
- E. The plans show the location of all fixtures and equipment and are intended to convey the general intent of the work in scope and layout. They are not intended to show in minute detail every and all of the accessories intended for the purpose of execution of the work, but it is understood that such details are part of this work.
- F. The Contractor shall not perform any portion of the work at any time without Contract Documents or, where required, approved shop drawings, product data or supplemental details for such portion of the work.
- G. The Contractor is responsible for means and methods of construction to ensure the safety of the building until the structural system is completed. The structural system is unstable until all connections have been made and all concrete has reached the minimum design strength as specified in these drawings.
- H. The use of electronic files or reproductions of these contract documents by any contractor, subcontractor, erector, fabricator or material supplier in lieu of prepared shop drawings signifies their acceptance of all information shown hereon as correct, and obligates themselves to any job expense, real or implied, arising due to any error that may occur hereon.

V. CONCRETE:

- A. Concrete to be used in Slab on Ground:
 1. Design compressive strength: 4,000 psi
 2. Maximum Slump: 4" (+/- 1") prior to the addition of any admixture as measured at the point of discharge. Any concrete with a slump exceeding 5 1/2" shall be rejected.
 3. The water / cement ratio shall not exceed 0.52.
 4. Concrete to be used for interior slabs shall contain only "entrapped air". Concrete with air entrapment above 3% shall be rejected.
 5. The concrete shall contain the maximum size aggregate permitted by ACI Code up to 1" maximum, with 3% (minimum) of all aggregate retained on the 3/4" sieve. The guidelines for maximum aggregate size are not greater than 1/5 the narrowest opening in the forms, and/or 1/3 the depth of the slab. Coarse aggregate shall be crushed
 6. Floor slabs which are 6" and greater shall have #467 and # 6 "blended" coarse aggregate as defined in ASTM C 33.
 7. The combined aggregate volume shall plot within Zone II of the coarseness factor chart.
 8. The combined aggregate gradation shall conform with the requirements of the tarantula curve developed by Oklahoma State University.
 9. The mortar fraction shall be approximately 54%.
 10. Current (no older than 2 months) aggregate gradations shall be included with the slab mixture submittal.
 11. Sand shall be Lignite free.
 12. Fly ash, if used, shall not exceed 20% by weight of total cementitious content.
 13. Blast slag if used, shall not exceed 30% by weight of total cementitious content.
- B. The concrete supplier shall provide mix designs of all concrete used in structural and slab on ground applications to Richard Adams Engineers. Each concrete mix in the submittal shall identify the structural components or building areas the mix is intended to be used.
- C. Concrete formwork: Concrete formwork shall be in clean condition for use as finished surface forms. Forms shall not be removed until the concrete is of sufficient strength to support its own weight and proposed construction loads.
- D. Minimum Concrete Cover for Cast-In-Place Concrete (Not Prestressed, nor Precast)
 1. Footings= 3" all sides unless specifically noted otherwise.
 2. Concrete cast against and permanently exposed to earth = 3 inches.
 3. Concrete exposed to earth or weather:
 - a) #5 bar, W31 or D31 wire or smaller= 1-1/2 inches
- E. All concrete shall meet or exceed "Specification for Tolerances for Concrete Construction and Materials (ACI 117)"
- F. Concrete must be batched, mixed, and transported in accordance with The Specifications for Ready-Mixed Concrete ASTM C94. Concrete shall be placed within 90 minutes of batch time.
- G. A qualified testing laboratory shall be retained to perform the following concrete tests. The concrete samples shall be taken in accordance with ASTM C 172 and specimens made in accordance with ASTM C 31. Testing of specimens shall be in accordance with ASTM C 39. Each test shall consist of a minimum of 5 cylinders. One sample shall be tested at 7 days, three at 28 days and one hold for later testing if required. Reports showing the results of testing shall be submitted at the earliest possible date following testing and shall indicate date, time, weather conditions (temperature), composition of mix (per delivery ticket), slump, location of concrete, compressive strength, type of break, and other pertinent information helpful in the evaluation of the tests. All tests shall be sequentially numbered for easy identification. The concrete test cylinders shall be taken for each type of class of concrete and not less than once per daily pour, nor less than the following intervals:
 1. Footings and sidewalks: One set of samples for each 10 cubic yards of concrete placed, nor less than once per daily pour.
 2. Concrete testing is not required for daily concrete pours of 50 cubic yards or less.
- H. Concrete Mix submittals shall include any relevant information regarding the use of fiber (Poly and/or Steel) reinforcing that will be added at the batch plant. Fiber shall not be added at the job site.
- I. The addition of Calcium Sulfate to a mix design to increase the Heat of Hydration to offset cold weather pours where freezing is possible is not permitted.
- J. Concrete pours where freezing is possible shall follow the recommendations of ACI 306.

VI. CONCRETE SLAB ON GROUND:

- A. The concrete slab on ground has been designed upon the following assumptions:
 1. Soil Bearing pressure of 2,500 PSF
 2. Soil constant k value of 150psi/in
- B. The slab on ground can accommodate a working uniform load as listed below based on the following slab thicknesses: Slab on ground loading exceeding 700 PSF for 7" slab shall be confirmed by Geotechnical Engineer.
- C. The following guidelines should apply to the layout of contraction joints in the slab. These joints shall not be spaced no greater than: 15'-0" o.c. for slabs 7" and thicker
- D. The following limitations to the water to cement ratio and admixtures shall apply:
 1. The addition of water in the field is acceptable ONLY where the concrete supplier provides a "Water Stamp" on the mix ticket indicating how much additional water can be added to the mix without exceeding the design water / cement ratio.
 2. The use of admixtures such as high range water reducers and super plasticizers in the slab mix to obtain the required slump and performance is acceptable. The GC shall take the responsibility of any admixtures beyond those required by these structural drawings.

VII. CONCRETE REINFORCEMENT:

- A. Reinforcing steel bars shall be Grade 60 (60 KSI ASTM A615) steel and tied with drawn steel wire.
- B. Welded Wire Fabric shall conform to ASTM A1064.
- C. Placement of reinforcing steel shall be as shown on plans and per the "Manual of Standard Practice for Detailing Reinforced Concrete Structures", ACI 315 manual on placing steel reinforcing.
- D. Provide minimum lap splice of 48 bar diameters, but not less than 18 inches, for all reinforcing bars, unless noted otherwise. Stagger splices in adjacent bars at least 24 inches, except in strip footings, masonry tie beams (top of wall) and as noted otherwise.

VIII. CAST IN PLACE CONCRETE:

- A. The concrete supplier shall provide mix designs of all concrete used in structural applications to Richard Adams Engineers.
- B. When pouring against earth, the embankment shall be wetted first and all pours on direct sun days will be misted at least twice following initial set. Isolation joints shall be provided at all columns and expansion felt at the perimeter of the slab.
- C. Finish on the surface of floor shall be machined troweled followed by hand finishing as required.
- D. Exterior walks and parking areas to be light brushed finished.
- E. Curing of concrete shall be in accordance with ACI 306.1 for cold-weather protection and with recommendations in ACI 305R for hot-weather protection during curing.

IX. FOUNDATIONS:

- A. Maximum soil bearing pressure used for design.....2500 PSF
- B. Prepare subgrade in accordance with Geotechnical Report No. 12656938 dated January 16, 2025, prepared by GHD.
- C. Notify Engineer if footing excavation reveals unsuitable or unstable soils, or materials or conditions not anticipated in the original Report.
- D. Concrete placement shall occur immediately after footing excavation and placement of reinforcing steel. Any freestanding water shall be pumped out of footing excavation prior to concrete placement

X. DELEGATED (SPECIALTY) ENGINEERING REQUIREMENTS:

- A. GENERAL REQUIREMENTS:
 1. See "Minimum Required Submittals" table in these drawings for structural elements / products which require submittals.
 2. Definition of Delegated (Specialty) Engineer: A Professional Engineer, who is licensed in the same state as the Project, not the Structural Engineer of Record, who specializes in and who undertakes the design of structural components prepared for this Project.
 3. Submittals for custom designed, manufactured or fabricated load-carrying items and custom fabricated items that are required by codes or standards to resist forces and stresses, including their connections, anchorages, and attachments require a Delegated Engineer.
 4. For each category of submittal requiring input from a Delegated Engineer, the Contractor shall attach to the first submittal a signed and sealed letter from the responsible Delegated Engineer stating "I certify that the design and drafting of the shop drawings which are signed and sealed by me were prepared under my direct supervision and control and to the best of my knowledge the shop drawings comply with the applicable minimum building codes and contract drawings."
 5. Review by the Structural Engineer of Record of submittals is LIMITED TO the following:
 - a) The specified structural submittals have been furnished.
 - b) The structural submittals have been signed and sealed by the Delegated Engineer.
 - c) The Delegated Engineer has understood the design intent and has used the specified structural criteria. No detailed check of calculations will be made.
 - d) The configuration set forth in the structural submittals is consistent with the contract documents. No detailed check of dimensions or quantities will be made.
 6. SUBMITTALS NOT MEETING THE ABOVE CRITERIA WILL NOT BE REVIEWED.

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R.A.E. JOB No. 25155

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TO THE BEST OF THE ENGINEER'S KNOWLEDGE THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM BUILDING CODES.

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CITY of TAMPA
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FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT

STRUCTURAL GENERAL NOTES

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STRUCTURAL NOTES (Continued)

XI. POST-INSTALLED ANCHORS:

The below Products are the design basis for this project. Substitution requests for products other than those listed below may be submitted by the contractor to the Engineer-of-Record (EOR) for review. Substitutions will only be considered for products having a code Report recognizing the product for the appropriate application and project building code. Substitution submittals shall demonstrate that the substituted product is capable of achieving the equivalent performance values of the design basis product.

A. Adhesive Anchors (Epoxy):

1. **Into Concrete:** Adhesive for rebar and anchors shall have been tested in accordance with ACI 355.4 and ICC-ES AC308 for cracked concrete and seismic applications. Pre-approved products include:
 - a) HILTI HIT-HY 200-R V3 (ICC-ES ESR-4878)
 - b) SIMPSON STRONG-TIE "SET-3G" (ICC-ES ESR-4057)
 - c) SIMPSON STRONG-TIE "AT-XP" (IAPMO-UES ER-0268)
 2. Anchoring System shall utilize traditional preparation of the anchor hole (Blowing and brushing) per the manufactures requirements. Other methods (i.e. no cleaning with HIT-Z rods or hollow drill bits/vacuum for the Hilti HIT-200 system) may not be used without EOR approval.
 3. Anchoring adhesive shall be a two-part component 100% solid epoxy based system supplied through a static-mixing nozzle supplied by the manufacturer. This requirement shall be met regardless of which epoxy product or manufacturer that is used on this project.
 4. The threaded rods to be used in combination with Epoxy system shall be fabricated from steel meeting or exceeding the properties of ASTM A36.
- B. Mechanical Anchors (Expansion/Screw Anchors)**
1. **Into Concrete:** Anchors shall have been tested in accordance with ACI 355.2 and ICC-ES AC193 for cracked concrete and seismic applications. Adhesive anchors shall be installed by a certified adhesive anchor installer Where designated on the contract documents. Pre-approved products include:
 - a) Screw Anchor- HILTI "KWIK HUS-EZ" (ICC-ES ESR 3027)
 - b) Expansion Anchor- HILTI "KWIK BOLT TZ2" (ICC-ES ESR 4266)
 - c) Screw Anchor- SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR 2713)
 - d) Expansion Anchor- SIMPSON STRONG-TIE "STRONG-BOLT 2" (ICC ES ESR-3037) OR "WEDGE-ALL" (ICC-ES ESR-1396)

Minimum Required Submittals						
	Epoxy and Mechanical Anchors	Misc. Conc Products	Concrete Mix Design	Precast Wetwell	Rebar	
Product Literature	●	●	●			
Shop Drawings					●	
Shop Drawings (Signed and Sealed)				●		
Calculations (Signed and Sealed)						
Shop Drawings & Calculations (Signed and Sealed)						
Deferred Submittal				●		

RAE ABBREVIATION KEY

ADDL.	-ADDITIONAL	HORIZ.	-HORIZONTAL
ARCH.	-ARCHITECT	H.P.	-HIGH POINT
B.O.	-BOTTOM OF	HSS	-HOLLOW STEEL SECTION
B.O.A.	-BACK OF ANGLE	K.O.	-KNOCK OUT
BOT.	-BOTTOM	K.O.B.	-KNOCK OUT BLOCK
BRG.	-BEARING	L.L.H.	-LONG LEG HORIZONTAL
C.J.	-CONSTRUCTION JOINT	L.L.V.	-LONG LEG VERTICAL
C.L.	-CENTER LINE	L.P.	-LOW POINT
CLR.	-CLEAR	MAX.	-MAXIMUM
CMU	-CONCRETE MASONRY UNIT	MIN.	-MINIMUM
COL.	-COLUMN	N.I.C.	-NOT IN CONTRACT
CONC.	-CONCRETE	N.S.	-NEAR SIDE
CONT.	-CONTINUOUS	N.T.S.	-NOT TO SCALE
DBL.	-DOUBLE	O.C.	-ON CENTER
DIA.	-DIAMETER	O.H.	-OPPOSITE HAND
DWGS.	-DRAWINGS	P.D.F.	-POWDER DRIVEN FASTENER
(E)	-EXISTING	P.E.M.B.	-PRE ENGINEERED METAL BUILDING
EXIST.	-EXISTING	P.I.P.	-POURED IN PLACE
EA.	-EACH	PL	-PLATE
E.F.	-EACH FACE	REINF.	-REINFORCEMENT
E.W.	-EACH WAY	R.D.	-ROOF DRAIN
E.J.	-EXPANSION JOINT	RTU	-ROOF TOP UNIT
EL.	-ELEVATION	S.O.G.	-SLAB ON GRADE
ELEV.	-ELEVATOR	T&B	-TOP AND BOTTOM
E.O.S.	-EDGE OF SLAB	THK.	-THICK
EQ.	-EQUAL	T.O.	-TOP OF
F.F.	-FINISHED FLOOR	TYP.	-TYPICAL
FND.	-FOUNDATION	U.N.O.	-UNLESS NOTED OTHERWISE
FRTU	-FUTURE ROOF TOP UNIT	VERT	-VERTICAL
F.S.	-FAR SIDE	V.I.F.	-VERIFY IN FIELD
FTG.	-FOOTING	W/	-WITH
GA.	-GAUGE	W/O	-WITHOUT
GALV.	-GALVANIZED	WP	-WORK POINT
HD.	-HEADED	W.W.F.	-WELDED WIRE FABRIC

NOTE:
THIS KEY PERTAINS TO THIS JOB ONLY AND MAY DIFFER FROM OTHER PROJECTS PRODUCED BY THIS OFFICE AND THOSE USED BY OTHER FIRMS AND DISCIPLINES.

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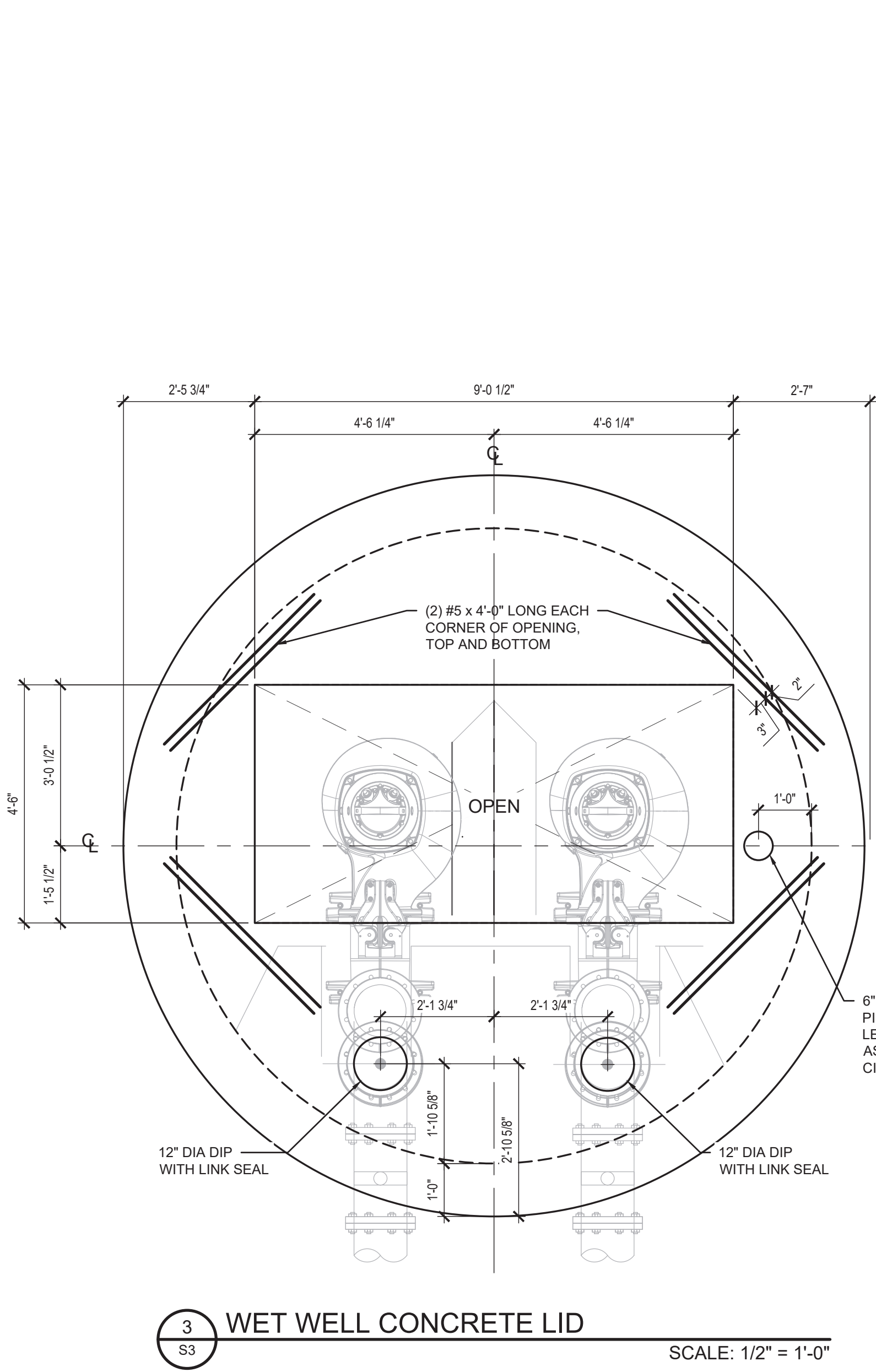
No.	DATE	REVISIONS	No.	DATE	REVISIONS

DES: CB
 DRN: JDC
 CKD: RA
 DATE: 6/11/26

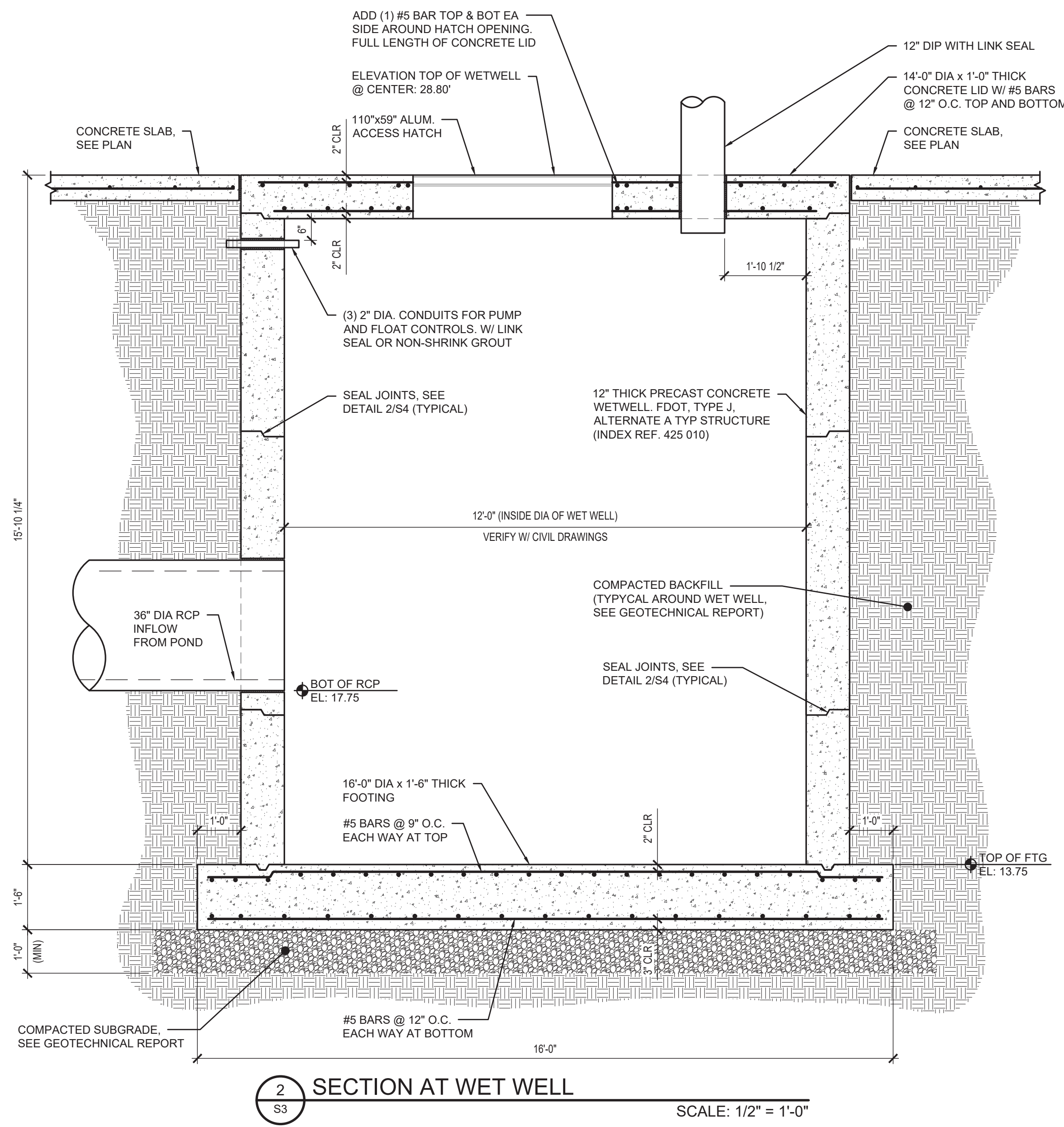
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FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
STRUCTURAL GENERAL NOTES

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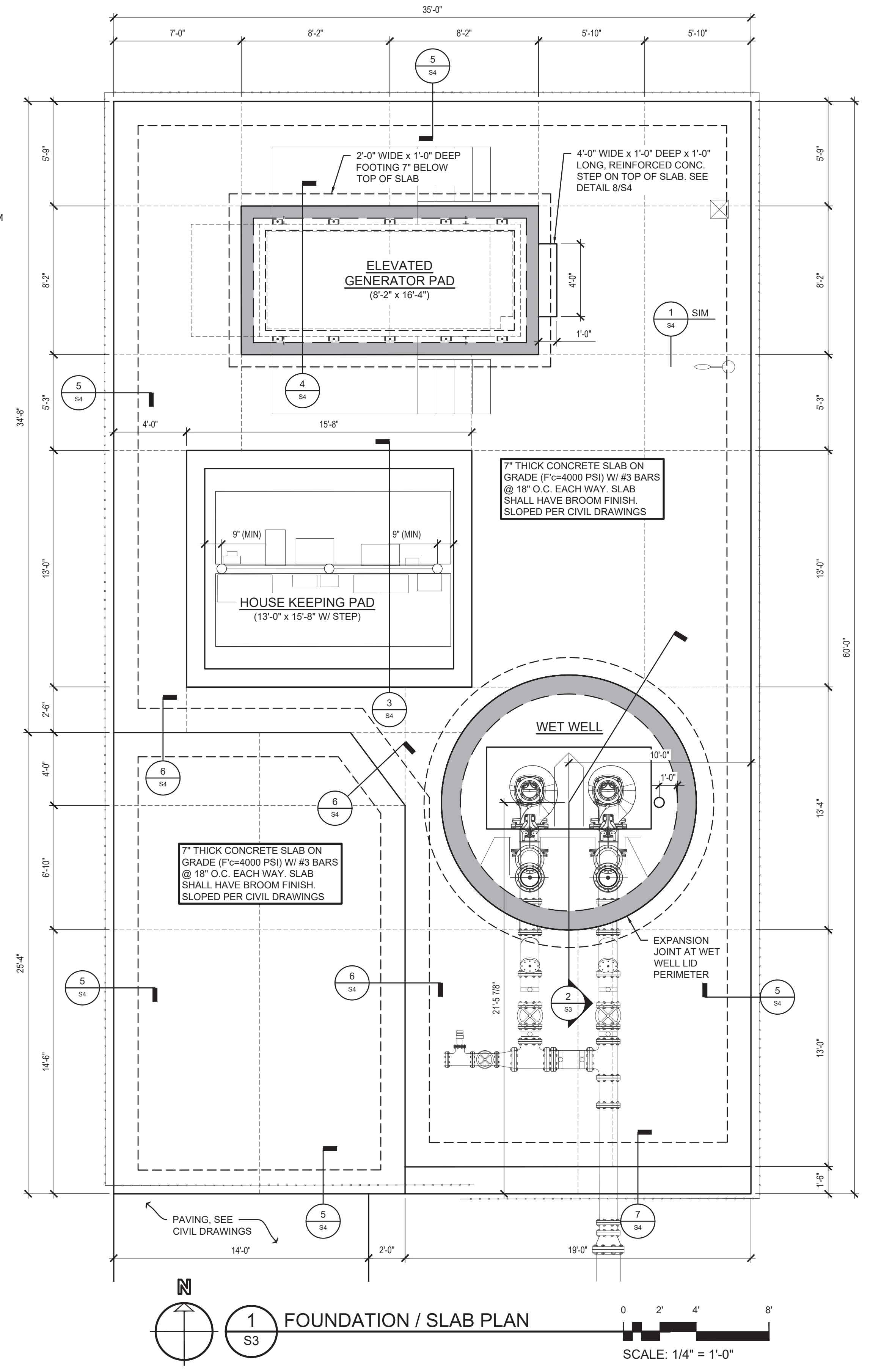


3 S3 WET WELL CONCRETE LID SCALE: 1/2" = 1'-0"



2 S3 SECTION AT WET WELL SCALE: 1/2" = 1'-0"

NOTE:
 PRECAST JOINTS SHALL BE LOCATED A MINIMUM OF 6" FROM ALL PIPE PENETRATIONS. PRECAST SECTIONS SHOULD BE MINIMIZED TO REDUCE NUMBER OF JOINTS.



1 S3 FOUNDATION / SLAB PLAN SCALE: 1/4" = 1'-0"

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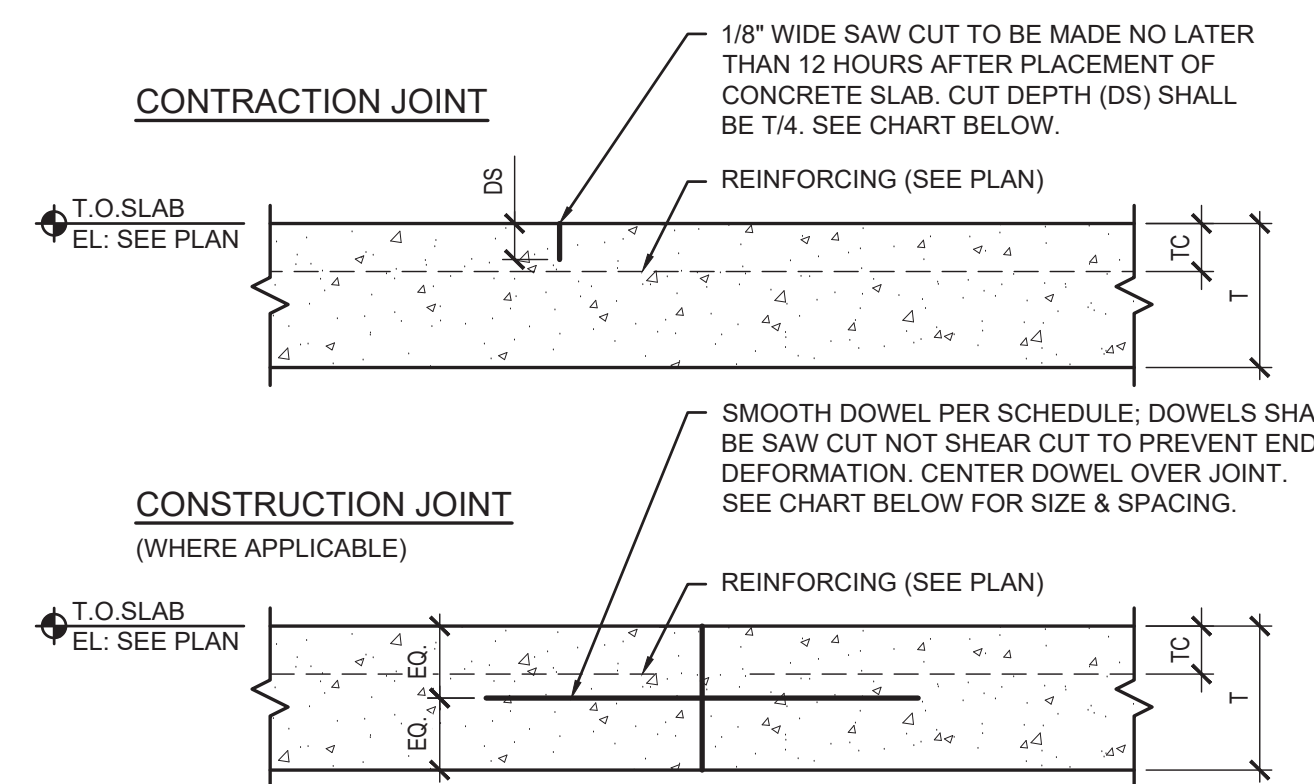
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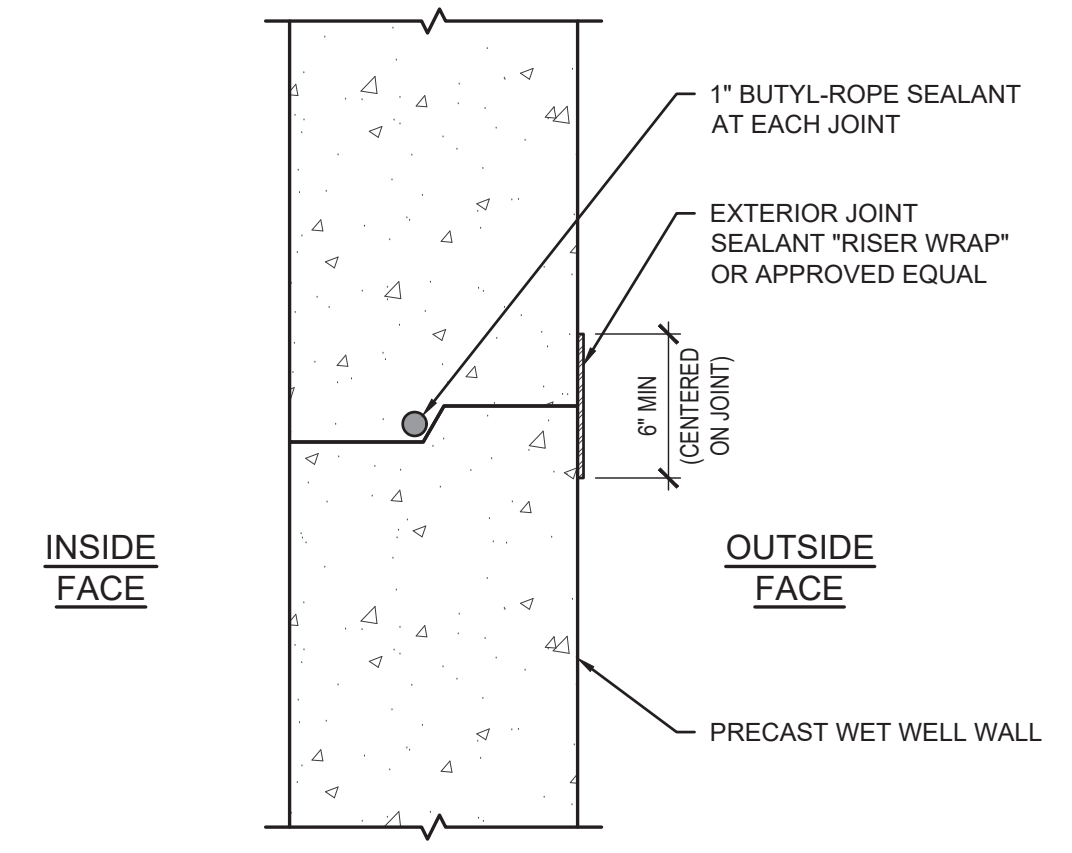
FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
SLAB PLAN AND SECTIONS

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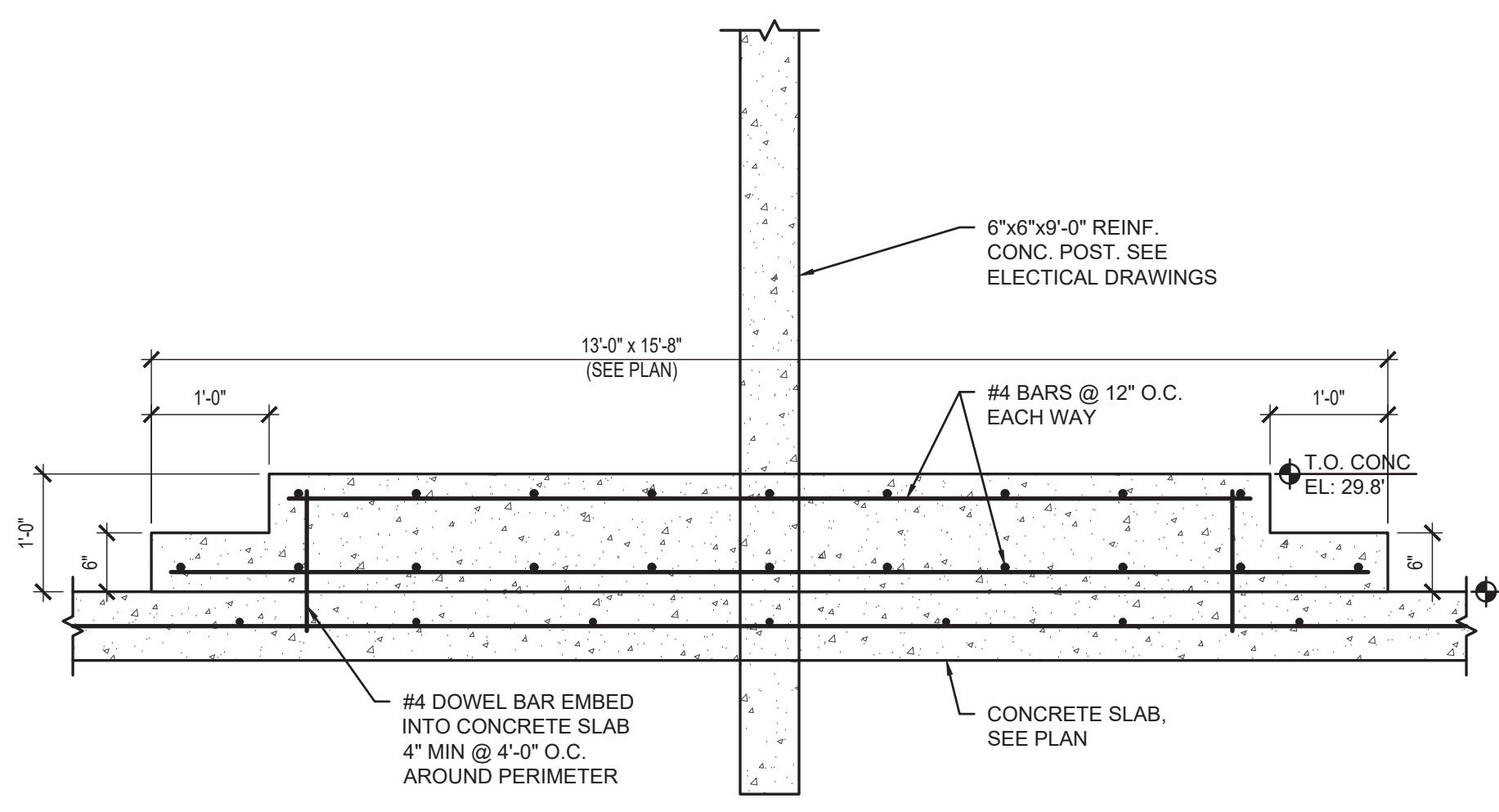


SLAB DEPTH (T)	CONTRACTION JOINT		CONSTRUCTION JOINT		
	SAW CUT DEPTH (DS)	REINFORCING TOP COVER (TC)	DOWEL DIAMETER	DOWEL LENGTH	DOWEL SPACING
7"	1 3/4"	2 3/4"	1"	18"	12"

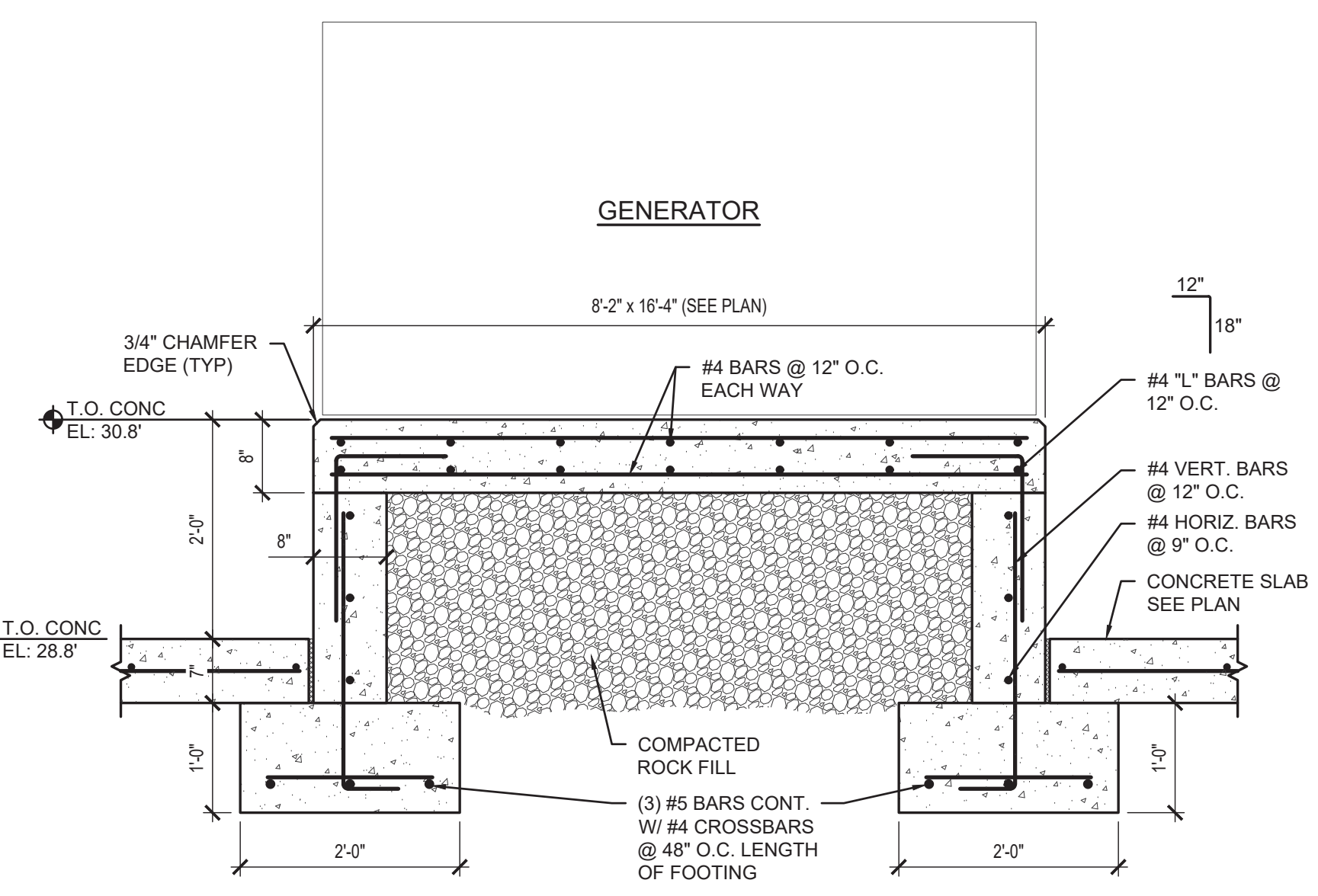
1 CONTRACTION & CONSTRUCTION JOINTS
SMOOTH DOWEL
SCALE: N.T.S.



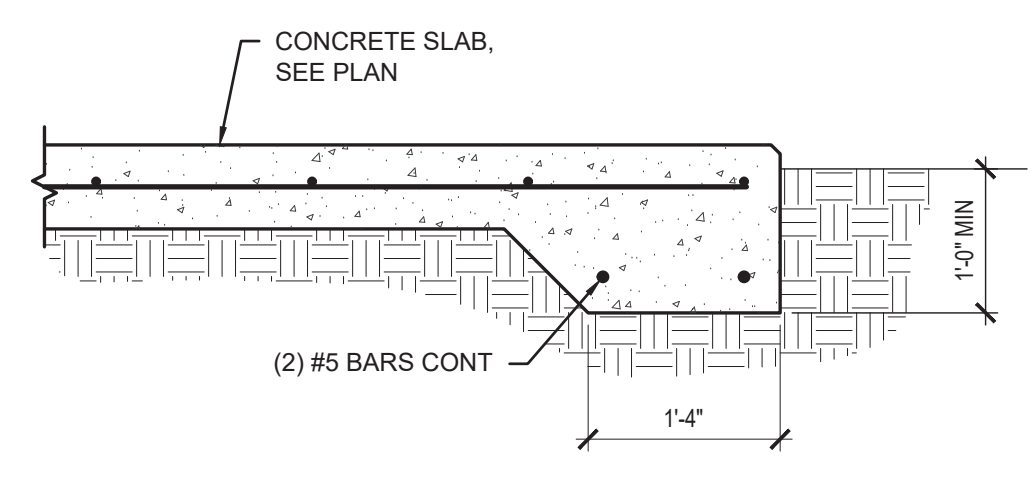
2 TYPICAL PRECAST JOINT SEALANT
SCALE: 1 1/2" = 1'-0"



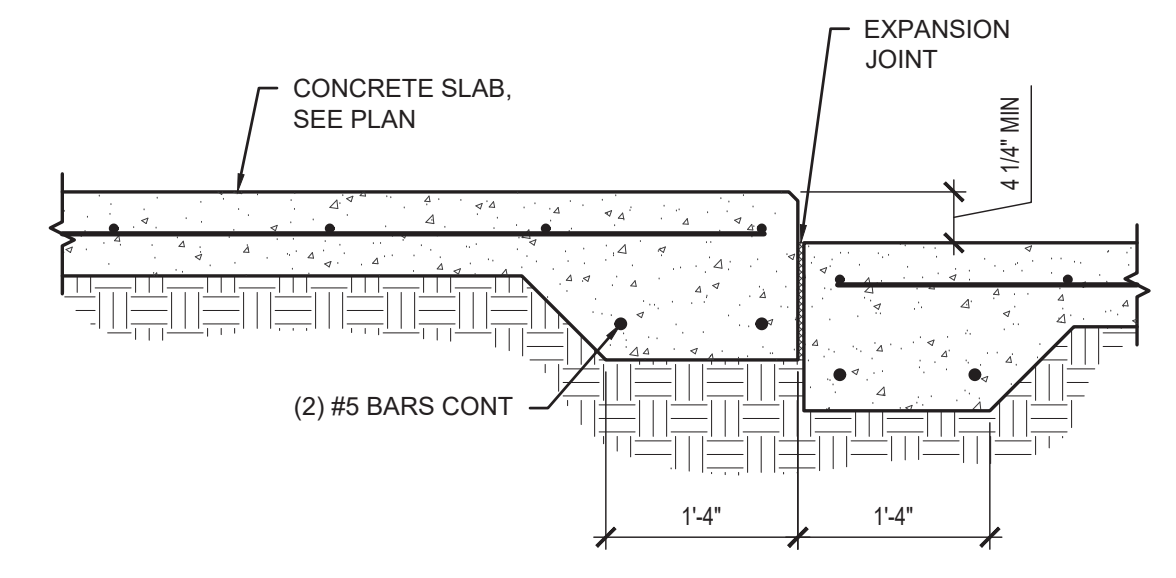
3 ELECTRICAL HOUSE KEEPING PAD
SCALE: 3/4" = 1'-0"



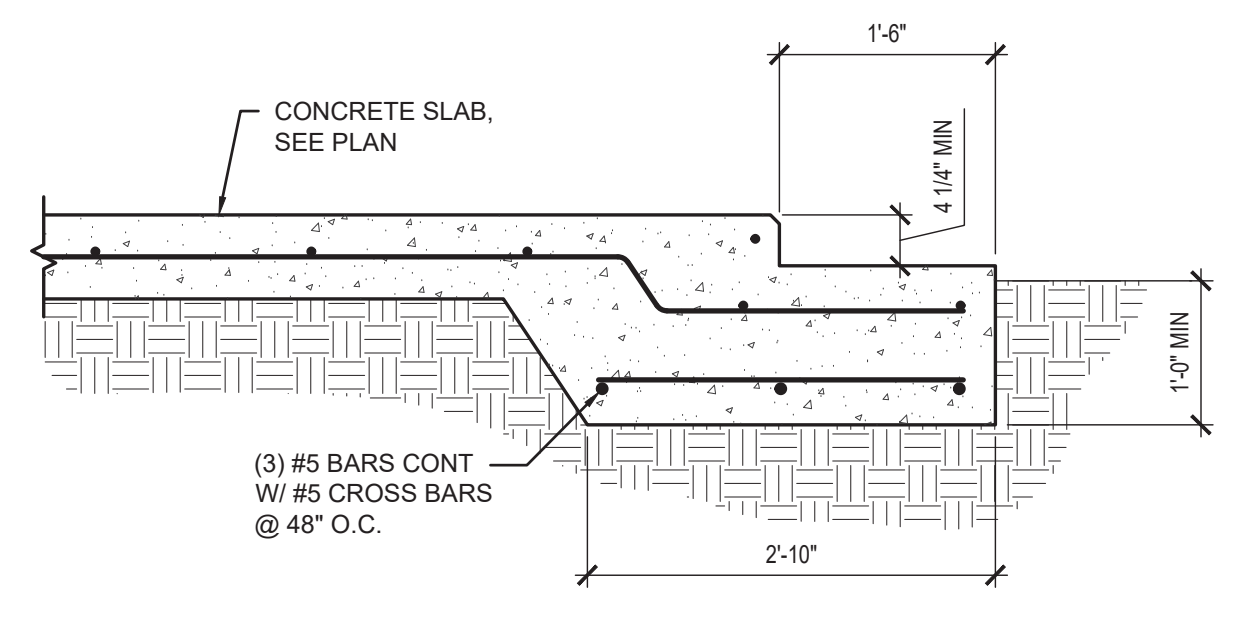
4 GENERATOR PLATFORM
SCALE: 3/4" = 1'-0"



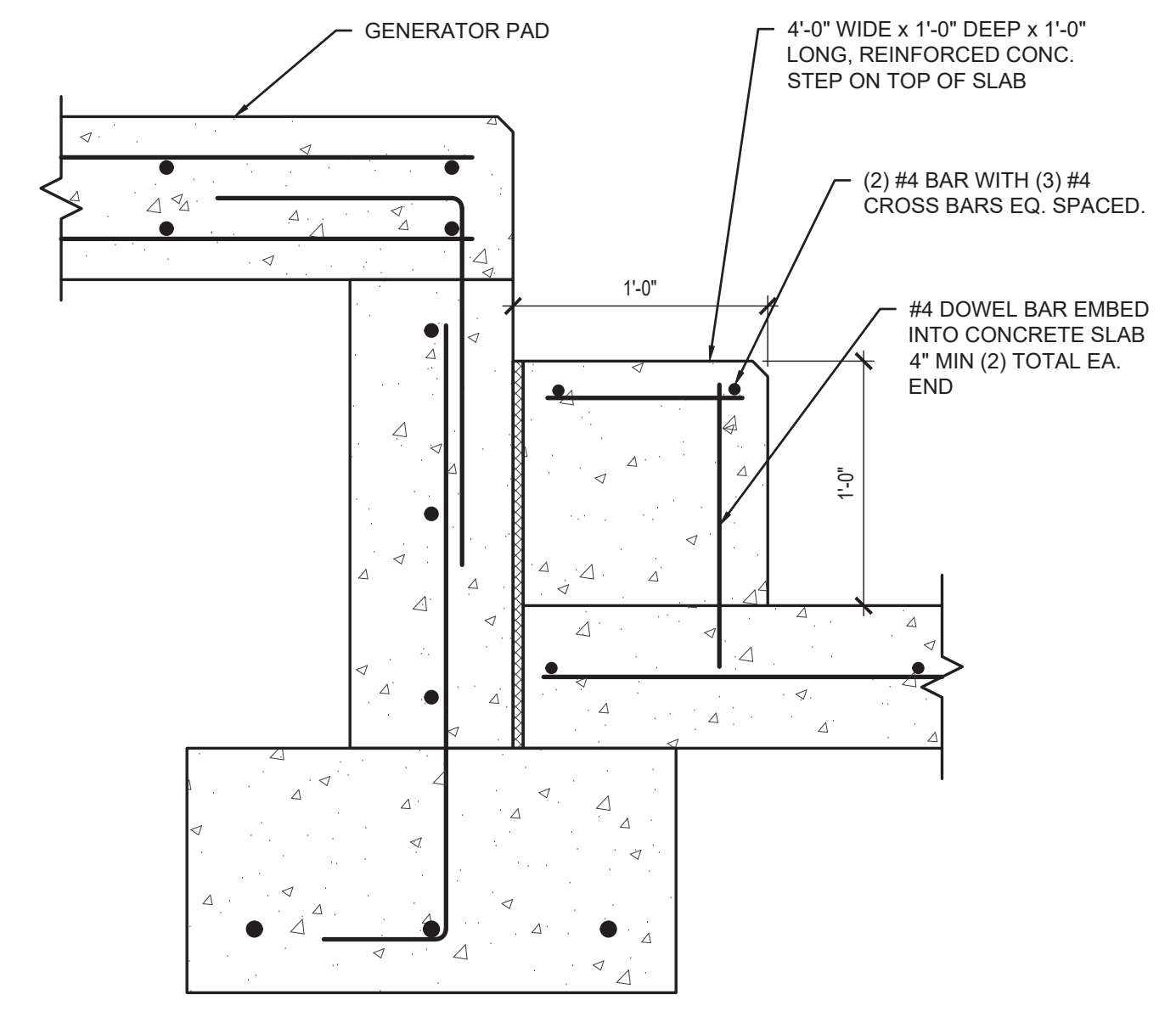
5 THICKENED SLAB EDGE
SCALE: 3/4" = 1'-0"



6 THICKENED SLAB EDGE TRANSITION
SCALE: 3/4" = 1'-0"



7 THICKENED SLAB EDGE TRANSITION
SCALE: 3/4" = 1'-0"



8 CONCRETE STEP
SCALE: 1 1/2" = 1'-0"

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CITY of TAMPA
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FOREST HILLS PARK STORMWATER PUMP STATION REPLACEMENT
STRUCTURAL DETAILS

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