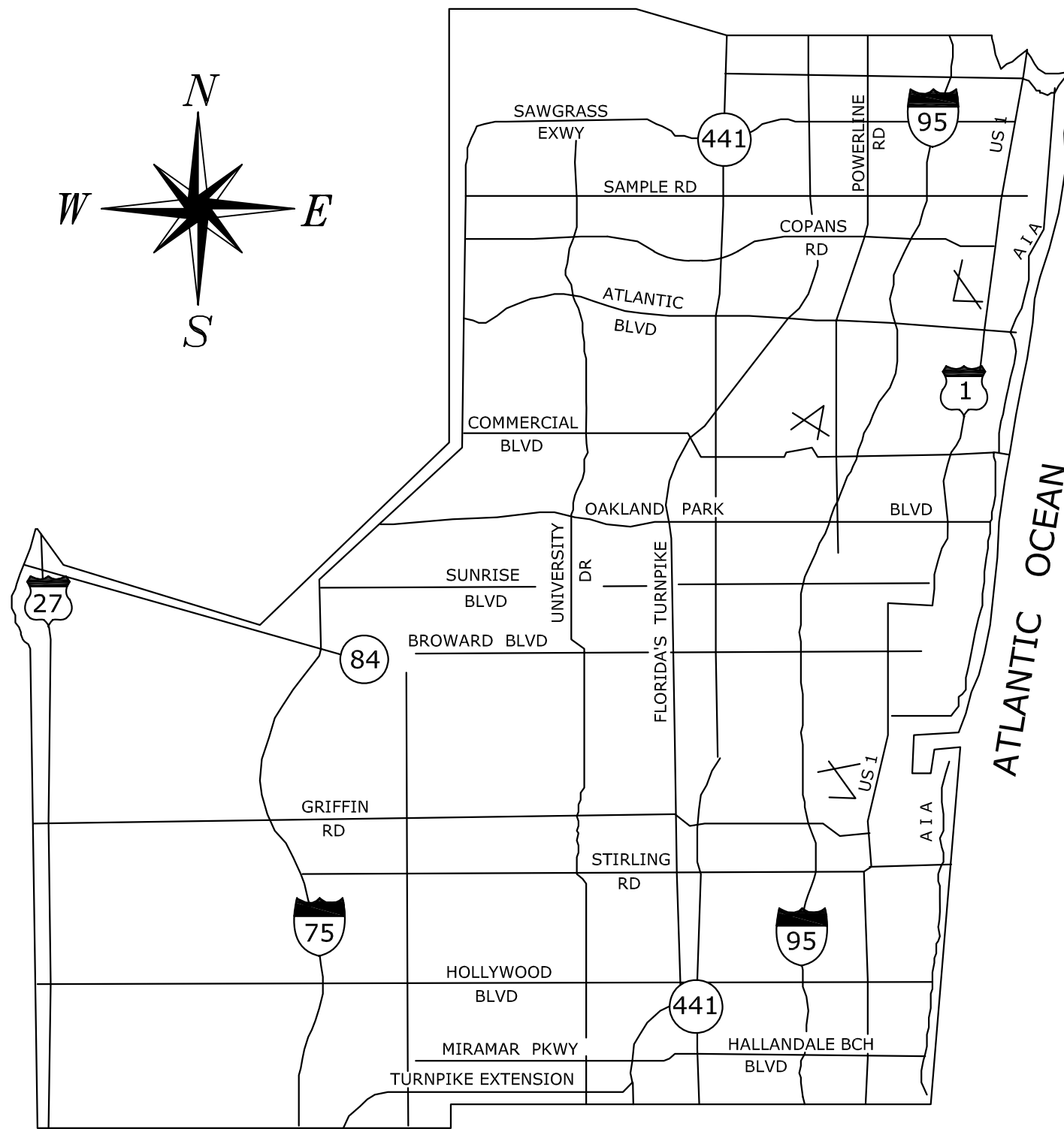


Public Works Department Water & Wastewater Services

TYPICAL STANDARD LIFT STATION

THESE TYPICAL LIFT STATION PLANS ARE INTENDED TO PROVIDE A BASIS FOR SITE ADAPTATION AND DESIGN BY A QUALIFIED ENGINEER. THE INFORMATION HEREIN CONTAINED SHALL ONLY BE USED AS A GENERAL GUIDELINE FOR THE INTENDED OPERATION AND FUNCTIONS AND SHALL NOT BE CONSTRUED AS ALL INCLUSIVE. ENGINEER OF RECORD AND CONSULTANTS USING THESE GUIDELINES SHALL VERIFY AND MODIFY ANY REQUIREMENT NOT NECESSARILY SHOWN AS MAY BE REQUIRED BY ANY AND ALL APPLICABLE CODES AND STANDARDS. ALL CHANGES TO THESE STANDARDS SHALL BE CLEARLY IDENTIFIED WHEN SUBMITTING FOR APPROVAL.

ISSUED: 4-14-2008
REVISED:



GENERAL LOCATION MAP

DRAWING INDEX

DESCRIPTION

SHEET

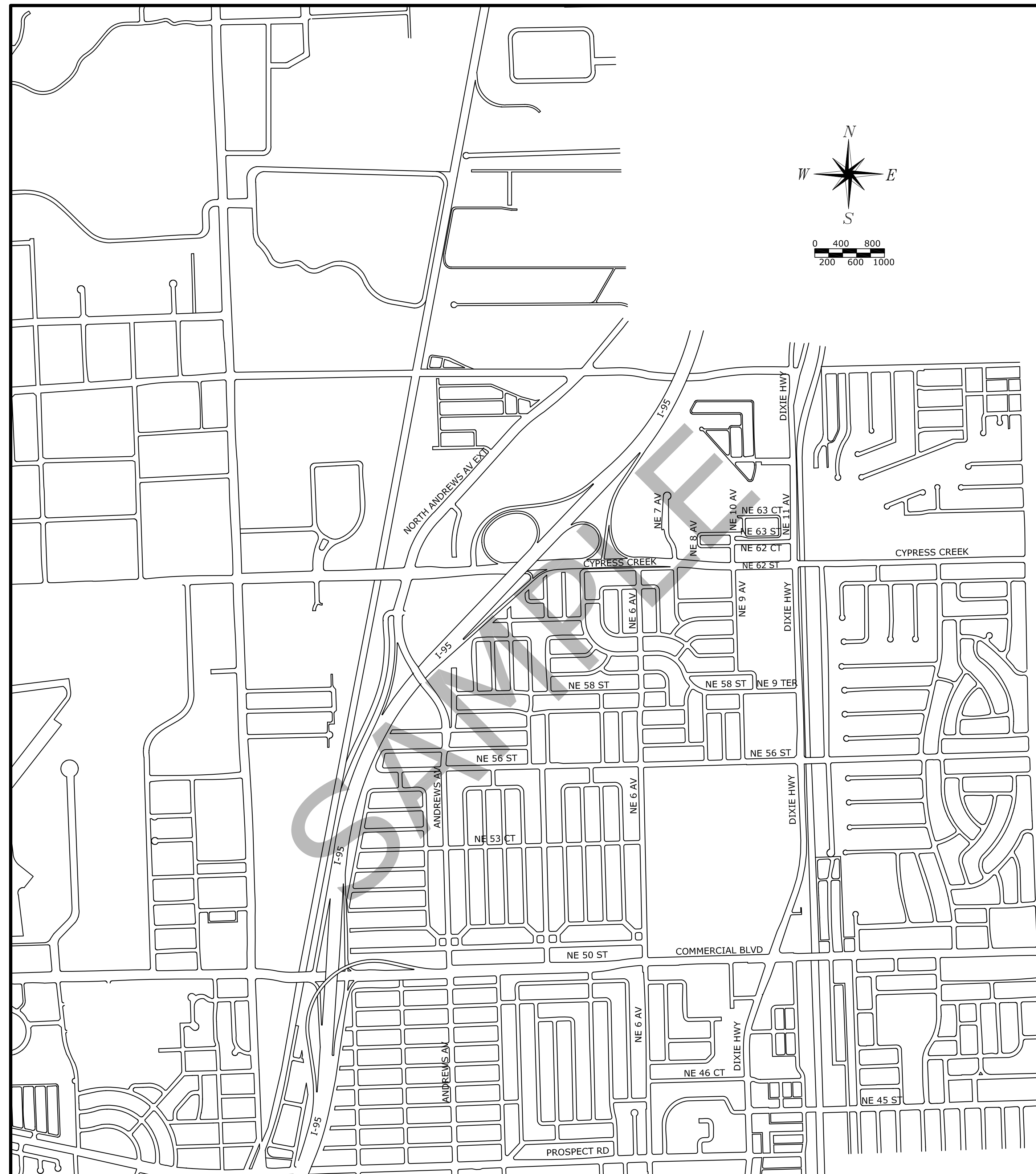
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WATER & WASTEWATER SERVICES
ENGINEERING DIVISION
2555 WEST COPANS ROAD
POMPANO BEACH, FL 33069

This document approved by the Broward County Water and Wastewater Services Technical Standards Committee.

Signed: *Steven W. Uhrick* Date: 5-5-08
Steven W. Uhrick, P.E.



LOCATION PLAN
SCALE: 1"= 1000'

CALL 48 HOURS BEFORE YOU DIG

IT'S THE LAW!
1-800-432-4770



Sunshine State One Call of Florida, Inc.

ABBREVIATIONS

A	AASHTO AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS	E	EAST	L	LAT LATERAL	R	RADIUS
ABAN	ABANDON	EA	EACH	LAV	LAVATORY	RCP	REINFORCED CONCRETE PIPE
ABAN IP	ABANDON IN PLACE	EB	ELECTRIC BOX	LB	POUND(S)	RCPP	REINFORCED CONCRETE CULVERT PIPE
ABS	ACRYLONITRILE BUTADIENE STYRENE	EC	EDGE OF CURB	LBR	LIMEROCK BEARING RATIO	RCPP	REINFORCED CONCRETE PRESSURE PIPE
ACCMP	ASPHALT-COATED CORRUGATED METAL PIPE	ECC	ECCENTRIC	LB/FT	POUNDS PER FOOT	RCW	RECLAIMED WATER
ACP	ASBESTOS CEMENT PIPE	EF	EACH FACE	LF	LINEAR FEET	RD	ROAD
ADDM	ADDENDUM	EFL	EFFLUENT	LN	LANE	RDC	REDUCER
AL	ALUMINUM	E	EASEMENT LINE	LP	LIGHT POLE	REBAR	REINFORCING STEEL
ALT	ALTERNATE	EL	ELEVATION	LS	LIFT STATION	RW	ROADWAY
AMP	AMPERE	ELAST	ELASTOMERIC	LT	LEFT	RE	RIM ELEVATION
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	ELEC	ELECTRIC	LVR	LOUVER	REV	REVISION
APPROX	APPROXIMATE	EMER	EMERGENCY	LWL	LOW WATER LEVEL	RREQ	REQUIRED
ARV	AIR OR VACUUM RELIEF VALVE	ENGR	ENGINEER			RGE	RANGE (SURVEYING)
ASPH	ASPHALT	EOS	EDGE OF SLAB	M		RJ	RESTRAINED JOINT
ASSY	ASSEMBLY	EOW	EDGE OF WATER	M	METER	RM	ROOM
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIAL	EOP	EDGE OF PAVEMENT	MAINT	MAINTENANCE	RBP	REDUCED PRESSURE BACKFLOW PREVENTER
AUX	AUXILIARY	EPDM	ETHYLENE PROPYLENE DIENE MONOMER	MAS	MASONRY	RPM	REVOLUTIONS PER MINUTE
AVE	AVENUE	EPF	EXPLOSION PROOF	MATL	MATERIAL	RR	RAILROAD
AWWA	AMERICAN WATER WORKS ASSOCIATION	EQUIP	EQUIPMENT	MAX	MAXIMUM	RT	RIGHT
A/C	AIR CONDITIONING	ER	ECCENTRIC REDUCER	MB	MAIL BOX	ROW	RIGHT OF WAY
A/W	AIR/VACUUM AIR VALVE	ES	EDGE OF SIDEWALK / SHOULDER	MCC	MOTOR CONTROL CENTER	RW	RAW WATER
		ESMT	EASEMENT	ME	MITERED END	RWM	RAW WATER MAIN
		EST	ESTIMATE	MECH	MECHANICAL	RWW	RECYCLED WASH WATER
		EW	EACH WAY	MFR	MANUFACTURE(R)	R/W	RIGHT-OF-WAY
		EXIST	EXISTING	MG	MILLION GALLONS		
		EXP	EXPANSION	MGD	MILLION GALLONS PER DAY	S	
		EXST GR	EXISTING GRADE	MH	MANHOLE	S	SOUTH
				MI	MILE(S)	SAN	SANITARY
				MIN	MINIMUM	SB	SOIL BORING
				MISC	MISCELLANEOUS	SBT	SOUTHERN BELL TEL
				MJ	MECHANICAL JOINT	SCHED	SCHEDULE
				MNR	MANOR	SE	SOUTHEAST
				MON	MONUMENT	SECT	SECTION
				MPH	MILES PER HOUR	SF	SQUARE FEET OR FOOT
				MPT	MALE PIPE THREAD	SHT	SHEET
				FIG	FIGURE	SIG	SIGNAL
				FIN	FINISH(ED)	SL	SLUDGE
				FIN FL	FINISH FLOOR	SLV	SLEEVE
				FIN GR	FINISHED GRADE	SOLN	SOLUTION
				FH	FIRE HYDRANT	SP	SAMPLING POINT
				FJ	FLANGED JOINT	SPEC	SPECIFICATION
				FL	FLORIDA	SQ	SQUARE
				FLG	FLANGE(D)	SST	STAINLESS STEEL
				FLN	FLOW LINE	ST	STREET
				FLTR	FILTER	ST	SECTION
				FM	FORCE MAIN	STA	STATION
				FPL	FLORIDA POWER AND LIGHT	STD	STANDARD
				PPM	FEET PER MINUTE	SD	STORM DRAIN (GRAVITY)
				FPS	FEET PER SECOND	SDMH	STORM DRAIN MANHOLE
				FRP	FIBERGLASS REINFORCED PLASTIC	SQ YD	SQUARE YARD
				FT	FEET OR FOOT	STL	STEEL
				FV	FOOT VALVE	STRUCT	STRUCTURAL
				FWP	FACTORY WIRED PANEL	SV	SOLENOID VALVE
				F/F	FACE TO FACE	SVCE	SERVICE
						SW	SOUTHWEST
						SWD	SEWAGE DEPTH
						SYM	SYMBOL
						S/W	SIDEWALK
				G		T	
				GA	GALLON	TAN	TANGENT
				GAL	GALLON	TDH	TOTAL DYNAMIC HEAD
				GALV	GALVANIZED	TEFC	TOTALLY ENCLOSED FAN COOLED
				GJ	GROOVE JOINT	TEL	TELEPHONE
				GLV	GLOBE VALVE	TEMP	TEMPORARY
				G LN	GAS LINE	TERR	TERRACE
				GND	GROUND	THD	THREAD(ED)
				GPD	GALLONS PER DAY	THK	THICK(NESS)
				GPH	GALLONS PER HOUR	TOB	TOP OF BANK / TOP OF BEAM
				GPM	GALLONS PER MINUTE	TOP	TOP OF PIPE / TOP OF PAVEMENT
				GR	GRADE	TOS	TOP OF SLAB / TOP OF STRUCTURE
				GRG	GRATING	TOR	TOP OF RIM
				GSP	GALVANIZED STEEL PIPE	TON	TON
				GS	GRAVITY SEWER	TFMR	TRANSFORMER
				GTV	GATE VALVE	TYP	TYPICAL
						TWN	TOWNSHIP (SURVEYING)
				H		T&B	TOP AND BOTTOM
				HB	HOSE BIBB		
				HD	HEAVY-DUTY	U	
				HDPE	HIGH-DENSITY POLYETHYLENE	UE	UTILITY EASEMENT
				HNDRL	HAND RAIL	UEC	UNDERGROUND ELECTRIC CABLE OR CONDUIT
				HOA	HAND-OFF-AUTO	UED	UNDERGROUND ELECTRIC DUCT
				HORIZ	HORIZONTAL	UEE	UTILITY EASEMENT (EXCLUSIVE)
				HP	HORSEPOWER	UGND	UNDERGROUND
				HR	HOUR	UTC	UNDERGROUND TELEPHONE CABLE
				HVAC	HEATING, VENTILATION AND AIR COND	UTL	UTILITY
				HWL	HIGH WATER LEVEL	UP	UTILITY POLE
				HWY	HIGHWAY	V	
				HZ	HERTZ	V	VOLT(S)
						VAC	VACUUM
				I		VAR	VARIATION / VARIES
				ID	INSIDE DIAMETER / DIMENSION	VCP	VITRIFIED CLAY PIPE
				IEB	INGROUND ELECTRIC BOX	VERT	VERTICAL
				IN	INCH	VFD	VARIABLE FREQUENCY DRIVE
				INF	INFLUENT		
				INV EL	INVERT ELEVATION	W	
				IP	IRON PIPE	W	WATER
				IPS	INTERNATIONAL PIPE STANDARD	W	WATT
				IW	IRRIGATION WATER	W	WEST
				I&E	INGRESS AND EGRESS EASEMENT	WAS	WASTE ACTIVATED SLUDGE
						WAY	WAY
				J		WM	WATER MAIN
				JB	JUNCTION BOX	WPR	WORKING PRESSURE
				JT	JOINT	WSP	WELDED STEEL PIPE
						WT	WATER TABLE / WATERTIGHT
				K		WTP	WATER TREATMENT PLANT
				KV	KILOVOLT	WT EL	WATER ELEVATION
				KVA	KILOVOLT-AMPERE	WW	WASH WATER
				KW	KILOWATT	WWF	WELDED WIRE FABRIC
				KWH	KILOWATT-HOUR	WWM	WELDED WIRE MESH
						WWTP	WASTEWATER TREATMENT PLANT
						W/	WITH
						W/O	WITHOUT
						Y	
						YD	YARD(S)
						YH	YARD HYDRANT

DATE:	BY:	CHECKED:

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FIELD BY:
DESIGN BY:
DRAWN BY:
CHECK BY:
DATE:
SCALE:

PERMIT SET
MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION

PERMIT FOR CONSTRUCTION MUST BE OBTAINED FROM THE BICHECKED PRIOR TO COMMENCING CONSTRUCTION IN THE PUBLIC R/W.

BROWARD COUNTY PUBLIC WORKS DEPT
HIGHWAY CONSTRUCTION & ENGINEERING DIV

PLAN CONSISTENT WITH PLAT REQUIREMENTS

PUBLIC RIGHT OF WAY APPROVAL FOR PAVING, GRADING AND DRAINAGE

DATE:

DOES NOT INCLUDE APPROVAL OF PAVEMENT MARKINGS & SIGNS



DEPARTMENT OF PUBLIC WORKS

WATER & WASTEWATER SERVICES
ENGINEERING DIVISION
2555 WEST COPANS ROAD
POMPANO BEACH, FL 33069
PHONE NO. 954-831-0745 FAX: 954-831-0925

ALL DRAWINGS TO BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER

TYPICAL STANDARD LIFT STATION

STANDARD ABBREVIATIONS & LOCATION PLAN

DESIGNATION
G-1
SHEET NO 1 OF 12

FITTING/ APPURTENANCE	PIPING LEGEND															
	FLANGED				MECHANICAL-JOINT				GROOVE-JOINT				SOLVENT-WELD			
	SINGLE-LINE		DOUBLE-LINE		SINGLE-LINE		DOUBLE-LINE		SINGLE-LINE		DOUBLE-LINE		SINGLE-LINE		DOUBLE-LINE	
	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
BEND																
TEE																
WYE																
CONCENTRIC REDUCER																
CAP					N/A	N/A	N/A	N/A								
PLUG (PLUGGED VALVE)	N/A	N/A	N/A	N/A					N/A	N/A	N/A	N/A				
BUTTERFLY VALVE																
BALL VALVE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A								
CHECK VALVE																
GATE VALVE									N/A	N/A	N/A	N/A				
PLUG VALVE													N/A	N/A	N/A	N/A
PINCH VALVE									N/A	N/A	N/A	N/A				
AUTOMATIC CONTROL VALVE																
FLEX LOK BELL&FLEX LOK BALL	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SYMBOL LEGEND	
	ADDRESS
	BACKFLOW PREVENTER
	BOLLARD
	BORING TEST HOLE No.X
	CENTERLINE
	CURB INLET 1
	CURB INLET 2
	DECORATIVE (YARD) LIGHT POLE
	DRAINAGE FLOW
	EXISTING SPOT ELEVATION (FT)
	FIRE HYDRANT
	FLAG
	GAS LP TANK
	GAS METER
	GAS VALVE
	GRAVITY SEWER MANHOLE
	GREASE TRAP
	MONITORING WELL
	POLE ANCHOR
	PRESSURE GAUGE
	PROPOSED SPOT GRADE
	SPOT/LANDSCAPING LIGHTING
	STORM WATER MANHOLE
	TELEPHONE MANHOLE
	VAULT

SYMBOL LEGEND	
	ALUMINUM LIGHT POLE
	ALUMINUM UTILITY POLE
	BENCHMARK NO X
	CABLE BOX
	CATCH BASIN
	CONCRETE LIGHT POLE
	CONCRETE SIGNAL POLE
	CONCRETE UTILITY POLE
	ELECTRIC BOX
	ELECTRIC MANHOLE
	ELECTRIC METER
	MAIL BOX
	PARKING METER
	SEWER VALVE
	SIGN
	SPRINKLER BOX
	SPRINKLER VALVE
	TELEPHONE BOX
	TRAFFIC CONTROL BOX
	WATER METER
	WATER VALVE
	WOOD UTILITY/LIGHT POLE

SURVEY LEGEND	
A/C	= AIR CONDITION
L	= ARC LENGTH
ℓ	= BASELINE
BM	= BENCHMARK
BLK	= BLOCK
BOB	= BOTTOM OF BAFFLE
BCBM	= BROWARD COUNTY BENCHMARK
BCR	= BROWARD COUNTY RECORD
BLDG	= BUILDING
ℓ	= CENTER LINE
CLF	= CHAIN LINK FENCE
CONC	= CONCRETE
CMP	= CORRUGATED METAL PIPE
D	= DELTA ANGLE
DE	= DRAINAGE EASEMENT
EOW	= EDGE OF WATER
ELEV	= ELEVATION
HWL	= HIGH WATER LINE
INV	= INVERT
DCR	= MIAMI DADE COUNTY RECORD
####	= NON VEHICULAR ACCESS LINE (NVAL)
ORB	= OFFICE RECORD BOOK
PG	= PAGE
PB	= PLAT BOOK
PC	= POINT OF CURVE/COMMENCEMENT
PI	= POINT OF INTERSECTION TWO TANGENTS
PT	= POINT OF TANGENCY
PSM	= PROFESSIONAL SURVEYOR AND MAPPER
R	= RADIUS
RGE	= RANGE
R/W	= RIGHT OF WAY
SEC	= SECTION
TBM	= TEMPORARY BENCH MARK
TOB	= TOP OF BANK
TC	= TOP OF CURB
TOS	= TOP OF SLOPE
TWN	= TOWNSHIP
TR	= TRACT
TP	= TURNING POINT
TYP	= TYPICAL
UE	= UTILITY EASEMENT
W	= WITH

TREE LEGEND	
	ACACIA
	BANANA
	BLACK OLIVE
	BOTTLE BRUSH
	BUSH/SCRUB
	BUTTONWOOD
	CACTUS
	CITRUS (TYP)
	CORN PLANT
	CREPE MYRTLE
	CYPRESS
	FICUS
	FRANGIPANGI
	GUMBO LIMBO
	HEDGE
	HIBISCUS
	MAGNOLIA
	MAHOGANY
	MALELUCA
	OAK
	PALMETTO
	PINE
	PITCH APPLE
	POND APPLE
	ROYAL PALM
	RUBBER TREE
	SCHEFFLERA
	SEA GRAPE
	STUMP
	SWEET GUM
	TABEBUIA
	TAMARIND
	(UNKNOWN)
	WAX MYRTLE
	WILLOW

REFERENCE SYMBOLS

SECTION REFERENCE
 DENOTES SECTION LETTER IDENTIFICATION
 DENOTES DRAWING NO. WHERE SECTION IS LOCATED

DETAIL REFERENCE
 DENOTES DETAIL NUMBER IDENTIFICATION
 DENOTES DRAWING NO. WHERE DETAIL IS LOCATED

SECTION TITLE
 DENOTES SECTION LETTER IDENTIFICATION
 DENOTES DRAWING NO SECTION TAKEN FROM

DETAIL TITLE
 DENOTES DETAIL NUMBER IDENTIFICATION
 DENOTES DRAWING NO. WHERE DETAIL IS REFERENCED

HATCHING LEGEND

	ASPHALT		GRAVEL
	SOD OR SEED AND MULCHED AREA		GROUT
	EARTH		CONCRETE UNIT MASONRY
	EXISTING PIPES, STRUCTURES, EQUIPMENT TO BE REMOVED		STEEL
	CONCRETE		ALUMINUM
			GRATING

LINE TYPE

	EXISTING	PROPOSED
VISIBLE LINE	---	---
HIDDEN LINE	---	---
CENTER LINE	---	---
CHAIN LINK FENCE	-X-	-X-
WOOD FENCE	o-o-o	o-o-o
GUARDRAIL	□-□-□	□-□-□
CONC WALL		
ABANDONED		
BREAK LINE		
RAIL ROAD		
DIMENSION LINES AND LEADERS	---	---
PROPERTY/RIGHT-OF-WAY	---	---

PIPING DESIGNATION

EXAMPLE

LININGS
C - CEMENT
CT - COAL TAR EPOXY
P4 - PROTECTO 401 ENAMEL
X - NONE

MAINTENANCE OF TRAFFIC TRANSIT/PEDESTRIAN

THE "MAINTENANCE OF TRAFFIC" plan, provided by the Contractor, SHALL include provisions for pedestrian and transit vehicular traffic. The following are minimum requirements.

The Contractor is responsible for providing a safe and adequate walking surface applicable to the Americans with Disabilities Act (ADA) for pedestrians. Safe walk routes for all pedestrians and transit users within the vicinity of the construction zone SHALL be maintained throughout construction. This includes safe walk routes/access to and from existing bus stop and transit vehicles. If the current walking surface and access to and from transit vehicles at bus stop cannot be maintained, then a temporary road-rock 4' walk way SHALL be created. The safe walk route SHALL be separated from the construction activity by the 4' high orange construction fence for the entire length of the project or the length of the walk route, whichever is less.

Pedestrian walkways, bus stop and pedestrian access to transit vehicles should be maintained free of any obstructions and hazards such as holes, debris, mud, construction equipment, stored materials, etc. Any hazards near or adjacent to walkways, bus stops and access to transit vehicles should be clearly delineated.

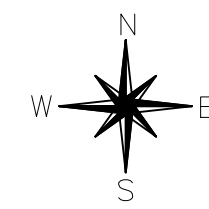
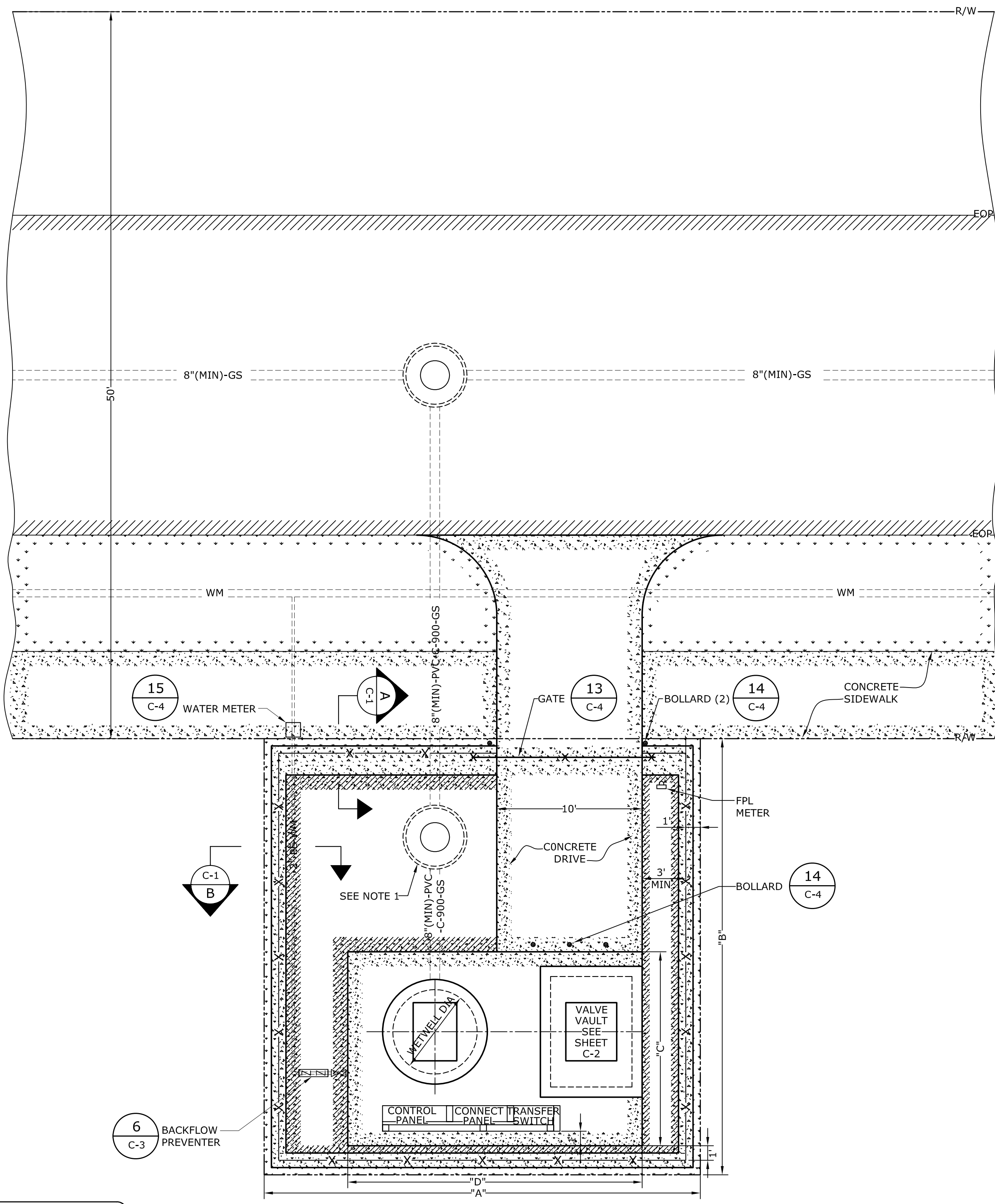
Where safe pedestrian access/walkways cannot be provided, pedestrians should be directed to alternative routes by appropriate traffic control devices. Pedestrian, bicycle, and wheelchair traffic shall be guided and maintained (special attention is directed to the existing bus stop location access) using approved warning lights, signing, and channelization devices. Such control devices shall be installed and maintained in accordance with the MUTCD sections on work zone traffic control for pedestrians and Chapter 6D, Pedestrian and Worker Safety.

If SHALL be the responsibility of the Contractor to install any necessary pavement, road rock, pavement marking and signage and/or any pedestrian signalization and/or signal modification to accommodate an existing or alternate walk route.

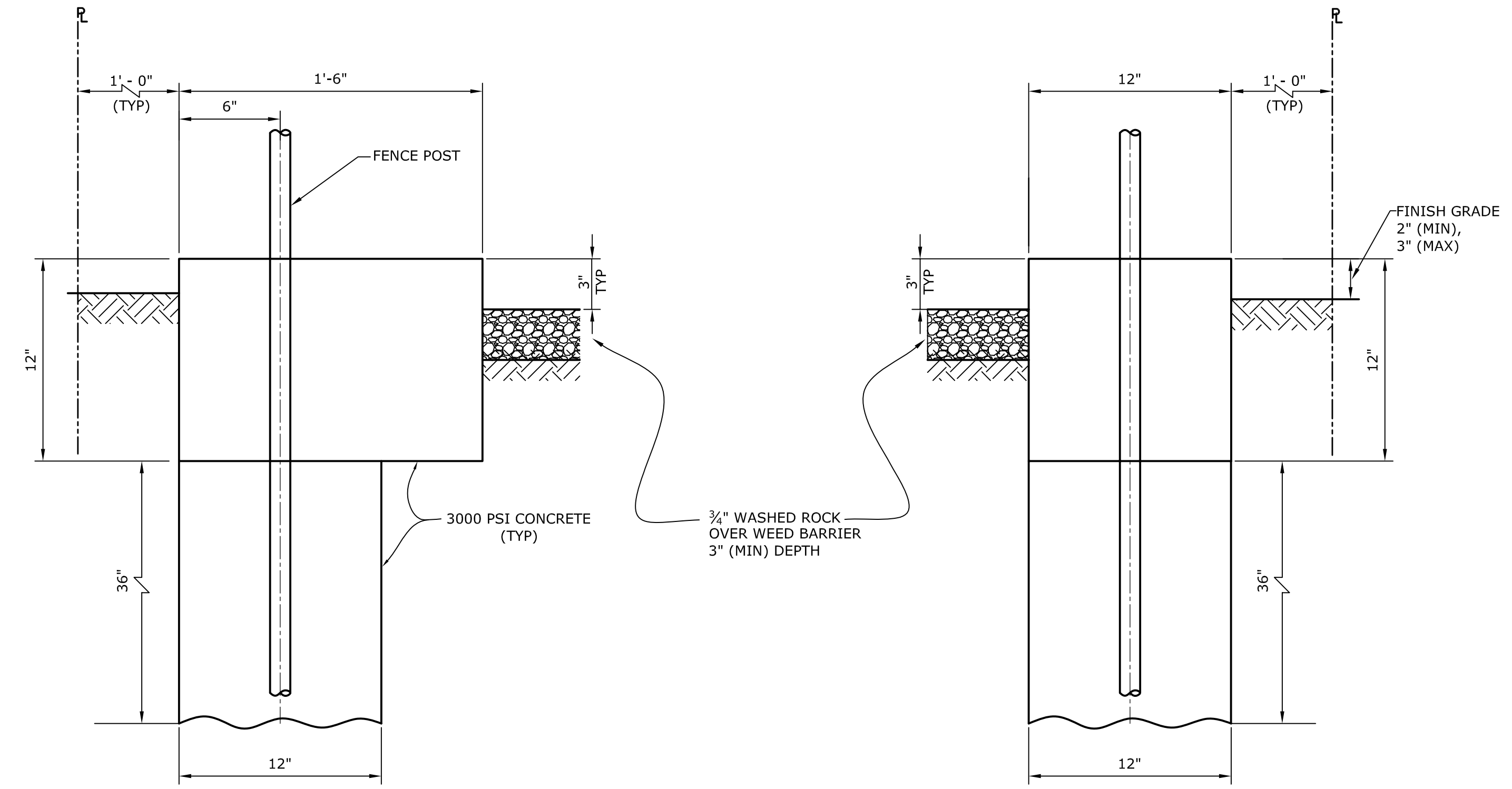
Where construction activities involve consecutive bus stop, access to and from all bus stops should be maintained. If access to and from all bus stops cannot be maintained, then a bus stop may be temporarily relocated or removed. However, no two (2) consecutive bus stops shall be affected in this manner. If a stop requires temporary removal or relocation, then the Transit Superintendent of Broward County Mass Transit Division (BCT) should be notified at (954) 357-8323 at least fourteen (14) days in advance to allow sufficient time to plan detours (in the case of a road closure) and/or to communicate with affected passengers.

Thirty (30) days prior to the beginning of construction the Contractor SHALL notify the BCT Transit Superintendent at (954) 303-7729 to arrange a pre-construction - transit route/pedestrian access safety meeting. This meeting is to determine all bus routes affected and to make any necessary arrangements for rerouting and temporary and signing or removal of bus stop furniture, i.e., benches, shelters, etc.

NOTE: Any pavement markings or signs that are damaged shall be repaired or replaced.



- NOTES:**
- WHERE REQUIRED BY BCWWS A MANHOLE SHALL BE INSTALLED WITHIN THE PUMP STATION EASEMENT AS SHOWN.
 - FINISH GRADE ELEVATION FOR WETWELL AND VALVE VAULT SHALL BE A MINIMUM OF ONE FOOT ABOVE THE FEMA 100YR FLOOD ELEVATION.
 - ALL CONCRETE SLABS ON GRADE AND DRIVEWAYS SHALL BE CLASS A, AS FURTHER DEFINED ON SHEET C-5.
 - DRIVEWAY WITHIN EASEMENT SHALL BE 8-INCH THICK CONCRETE, REINFORCED WITH # 3 BARS 24" O.C./EW. DRIVEWAY OUTSIDE OF EASEMENT SHALL BE 6-INCH THICK, UN-REINFORCED CONCRETE.



TYPICAL SITE PLAN

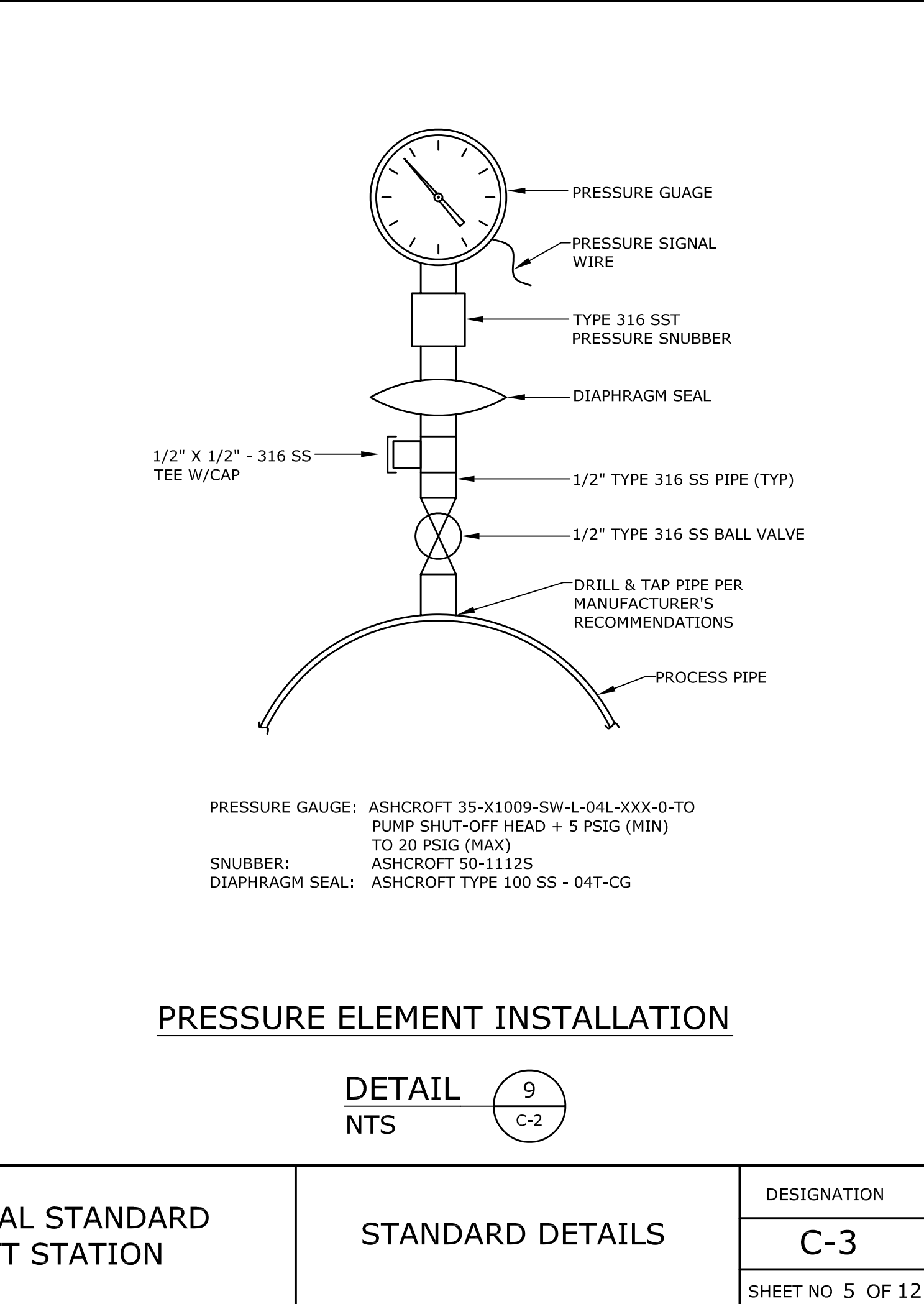
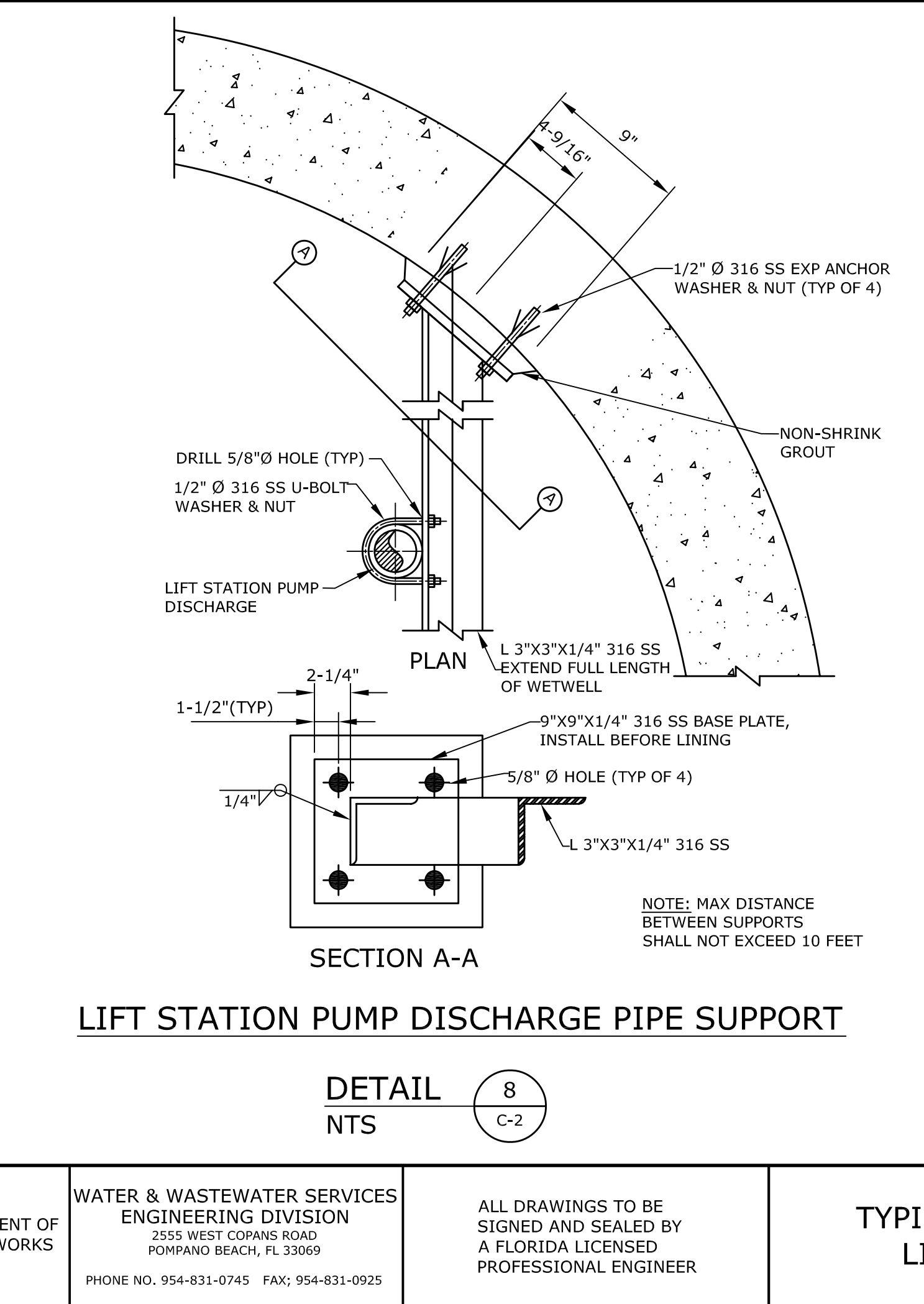
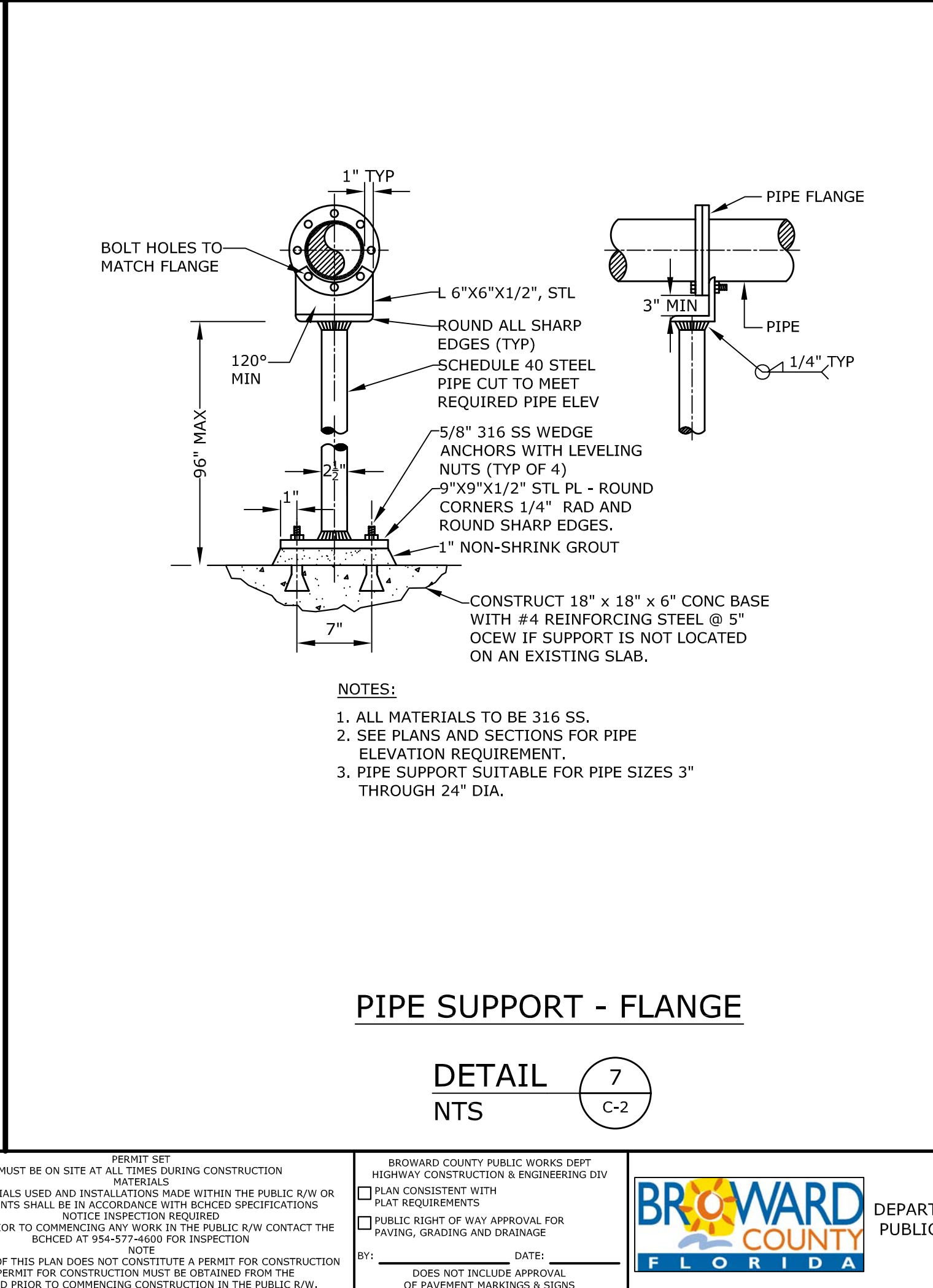
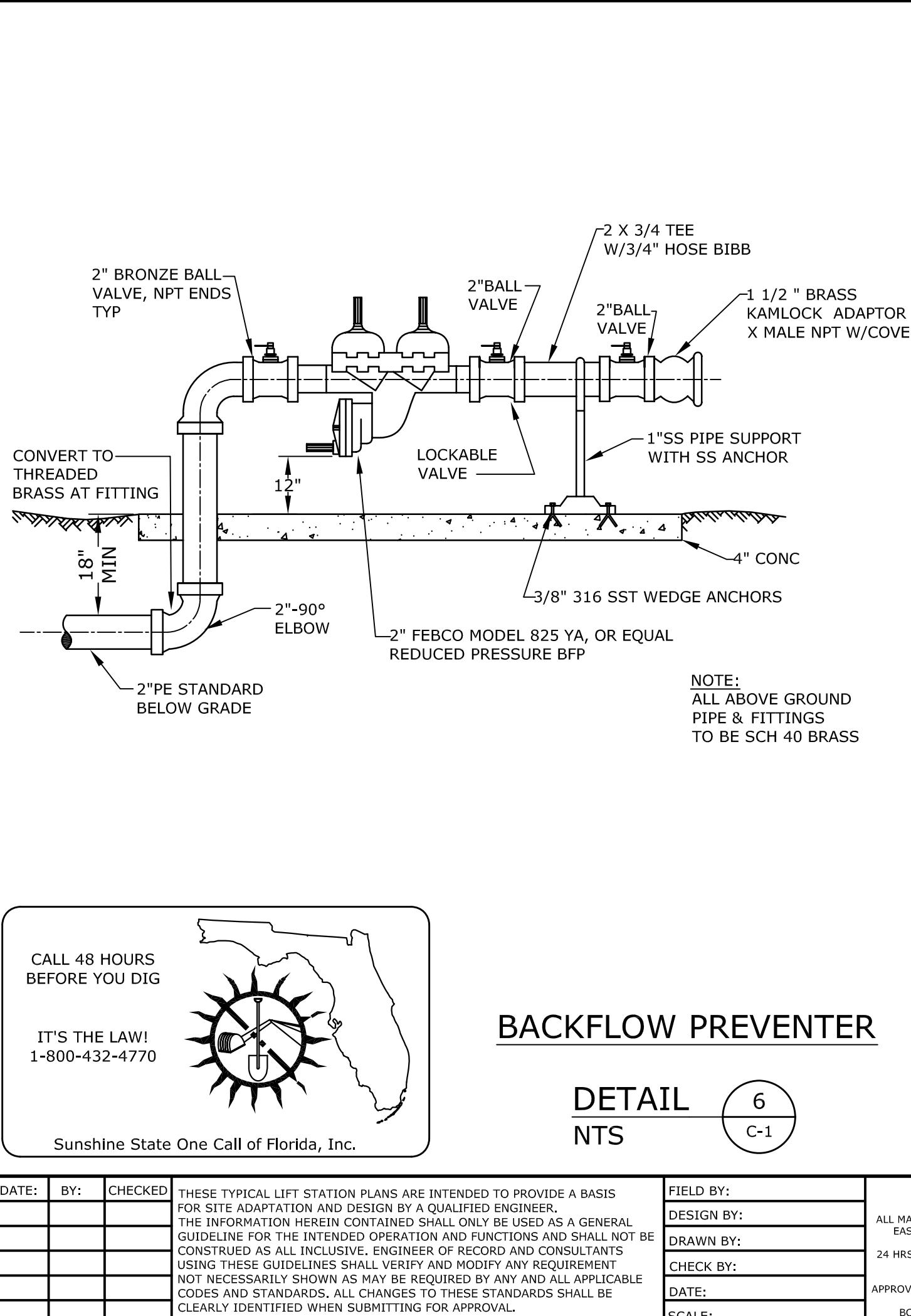
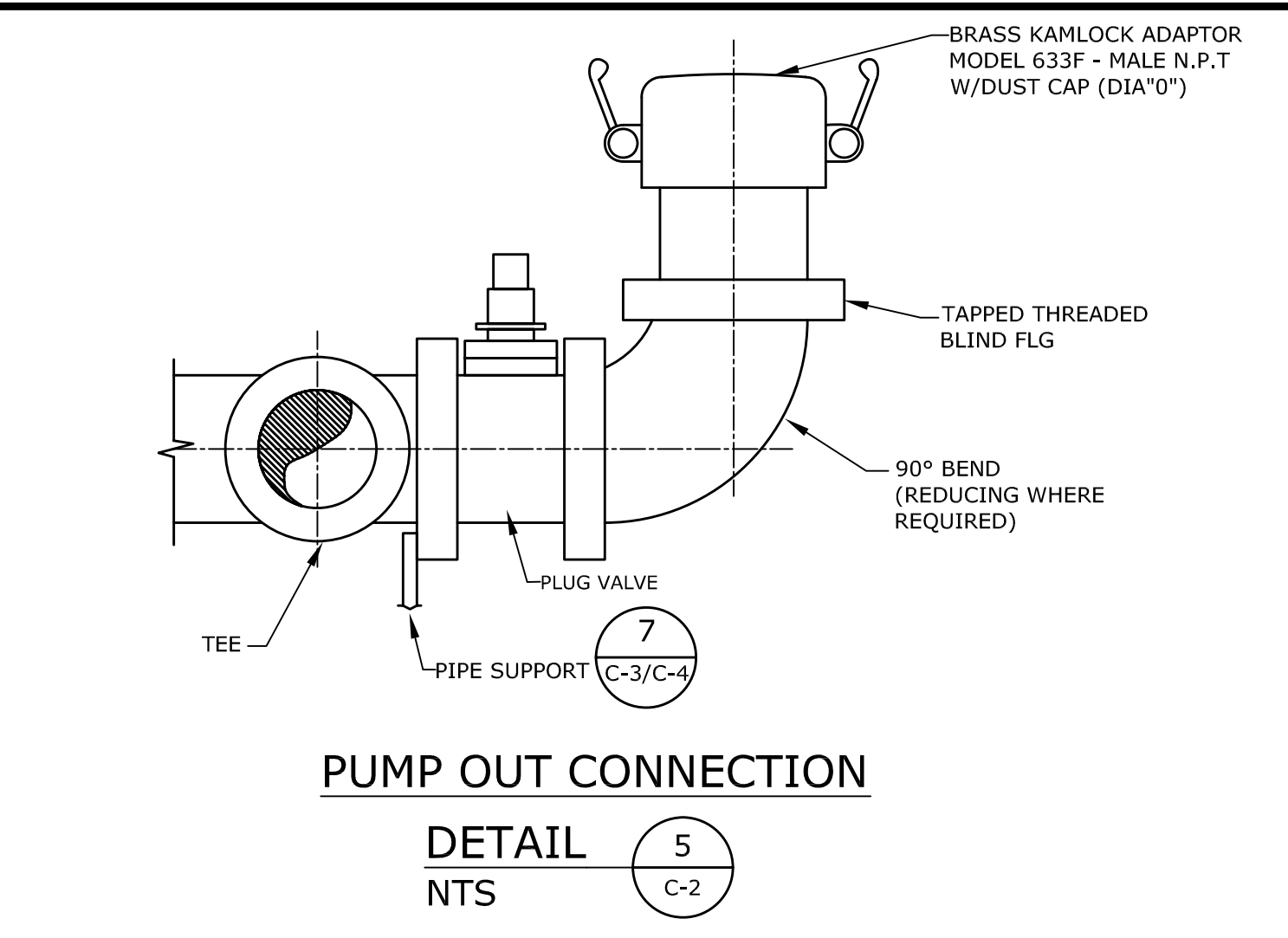
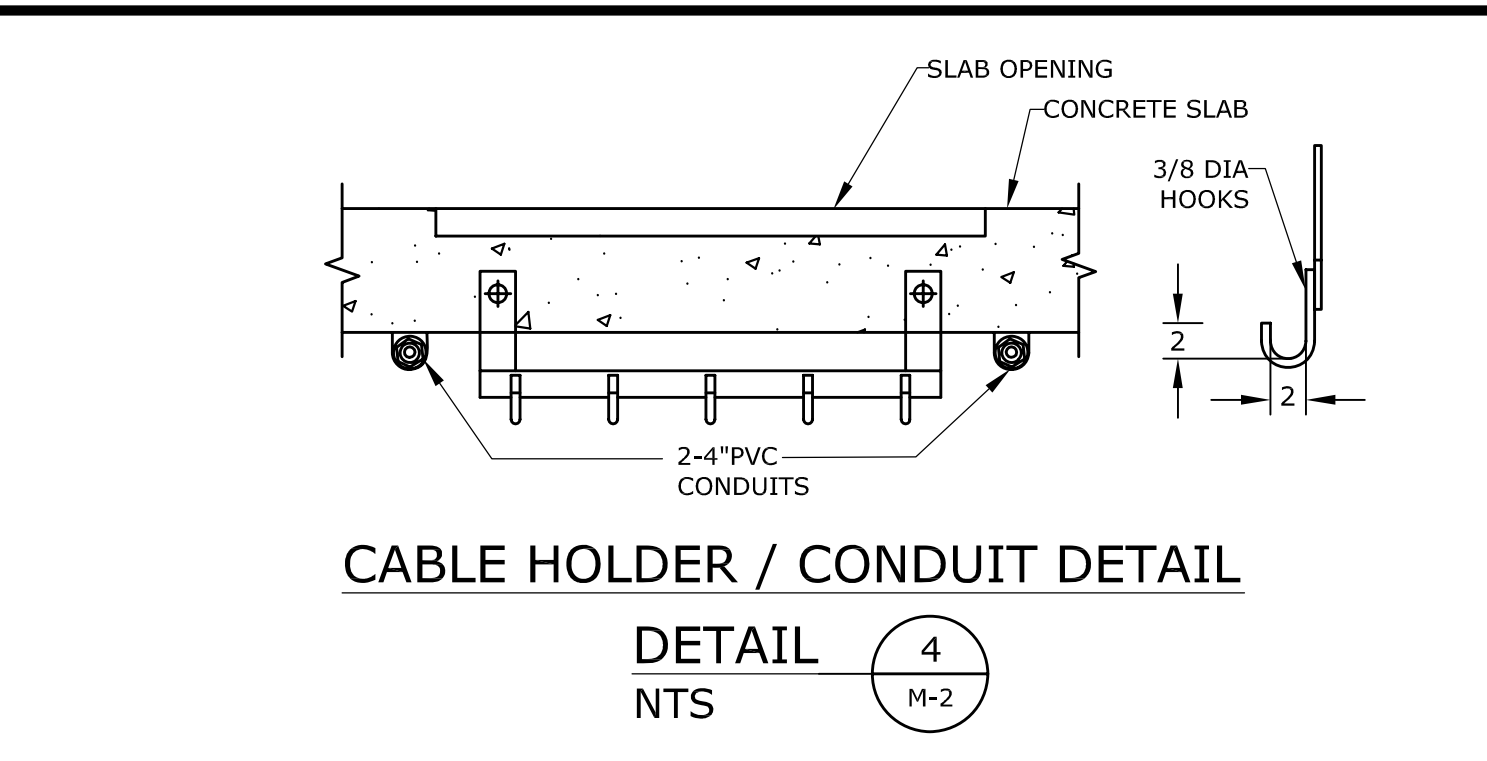
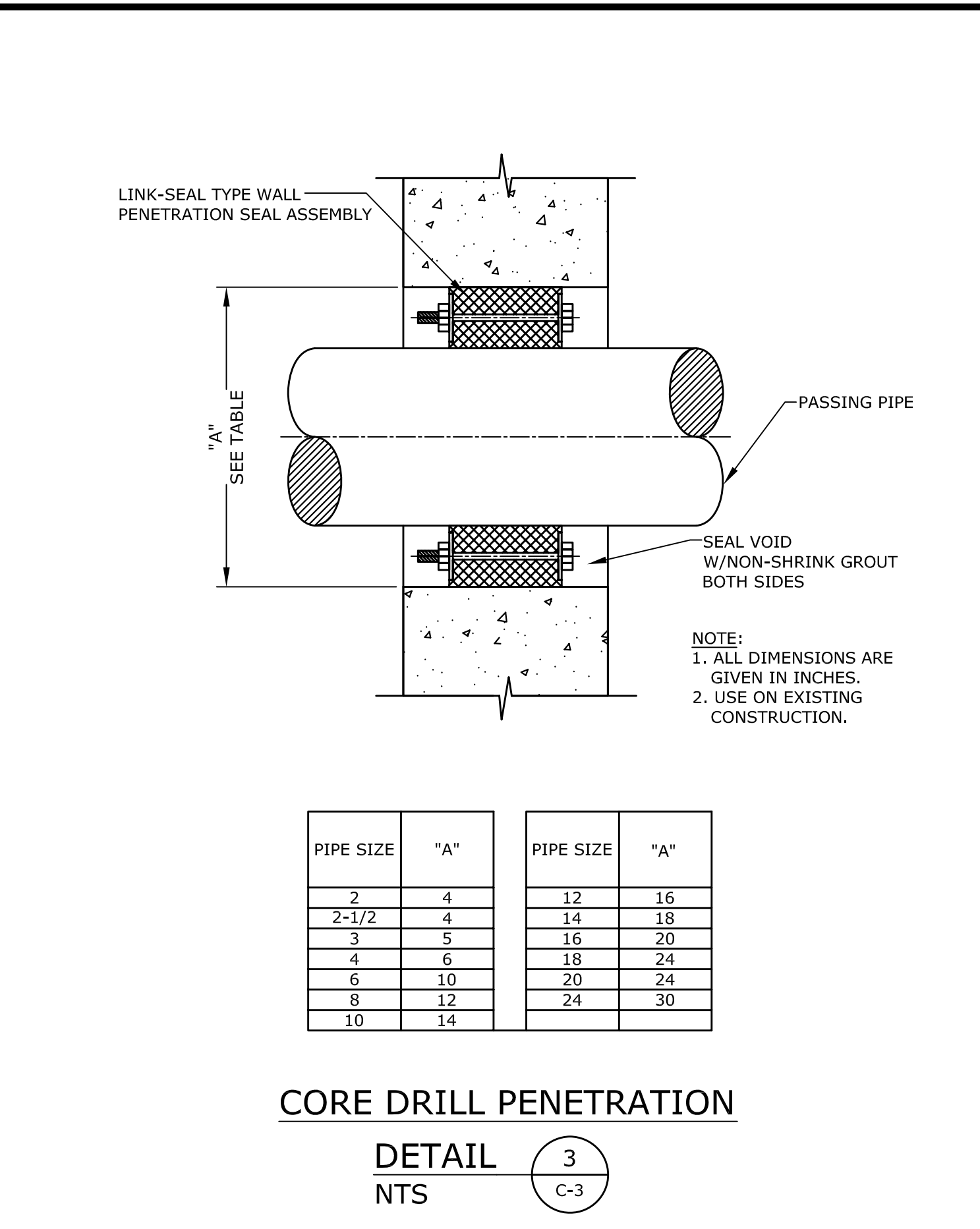
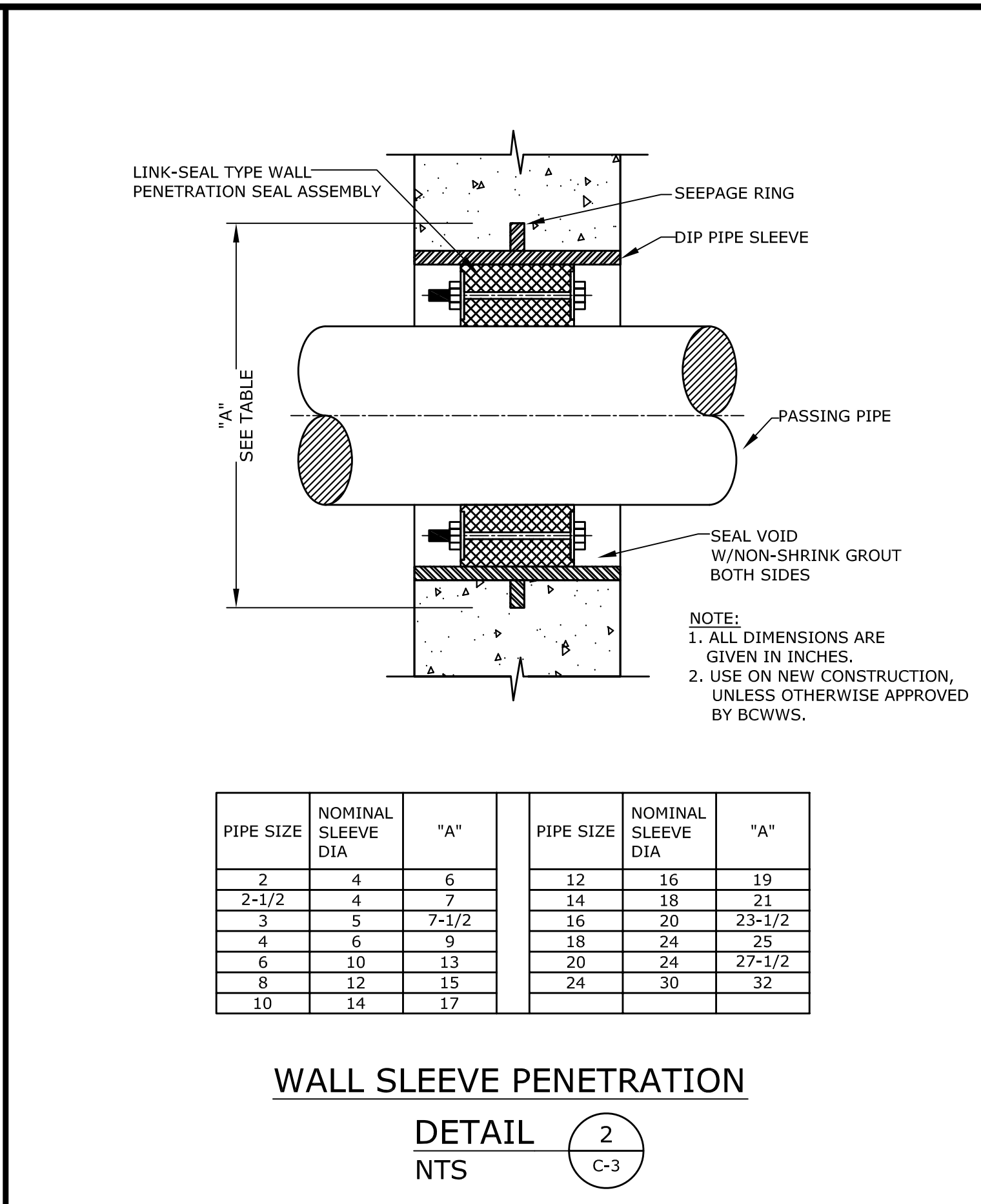
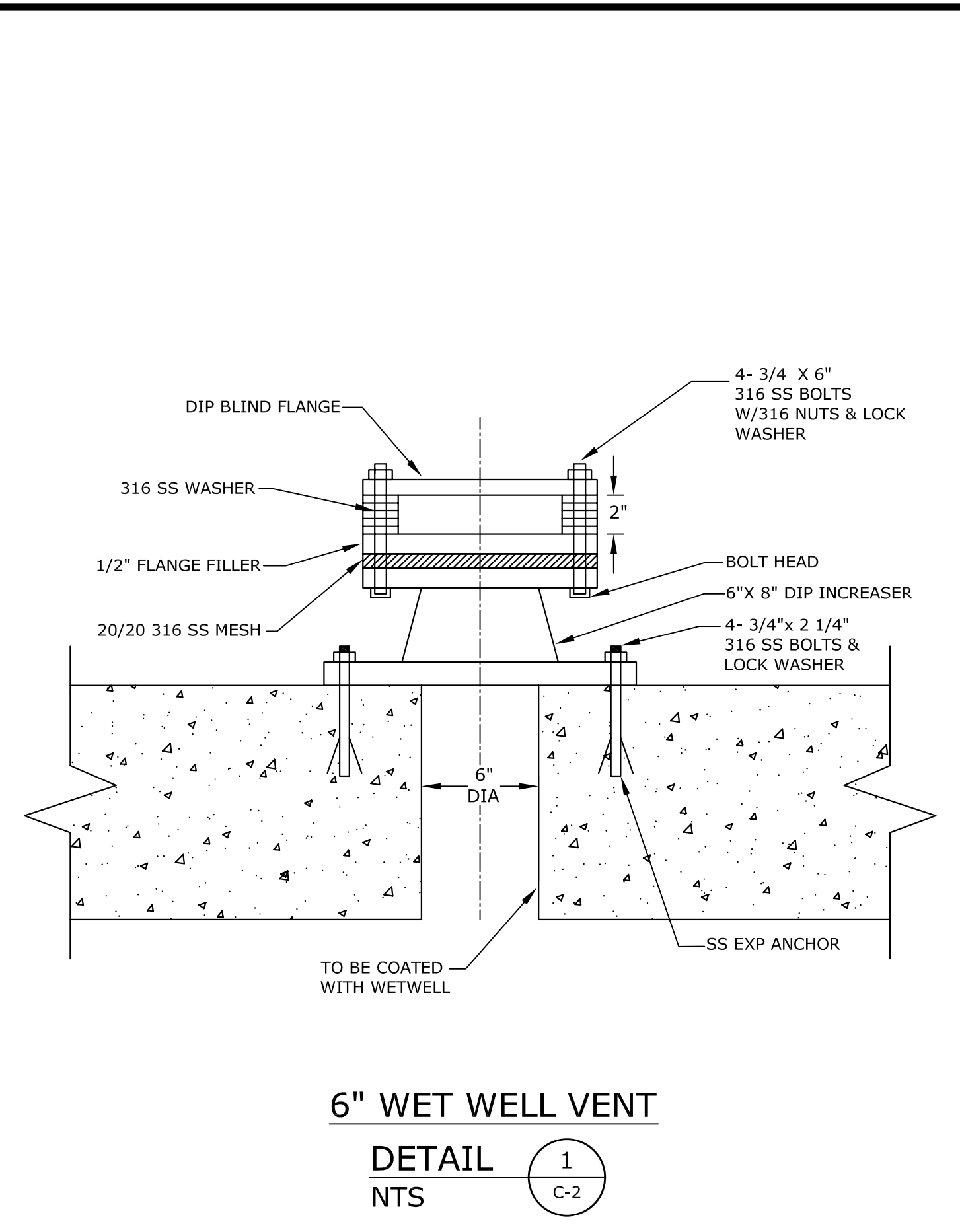
NTS

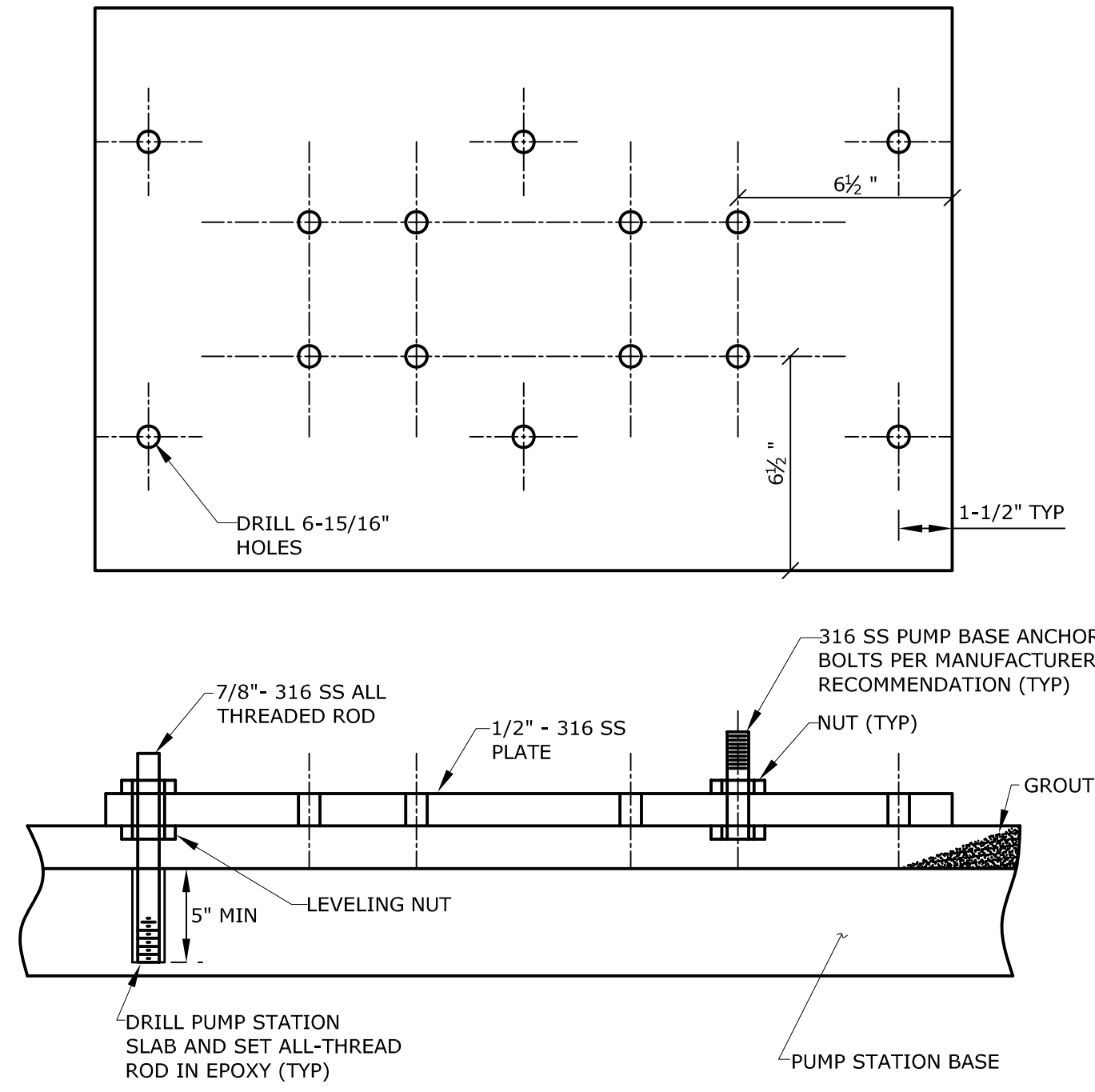
WETWELL DIAMETER	"A"	"B"	"C"	"D"
6'	30.00'	30.00'	13.34'	20.25'
8'	30.00'	30.00'	16.34'	22.25'
10'	32.00'	32.00'	19.00'	27.50'

SECTION A
NTS

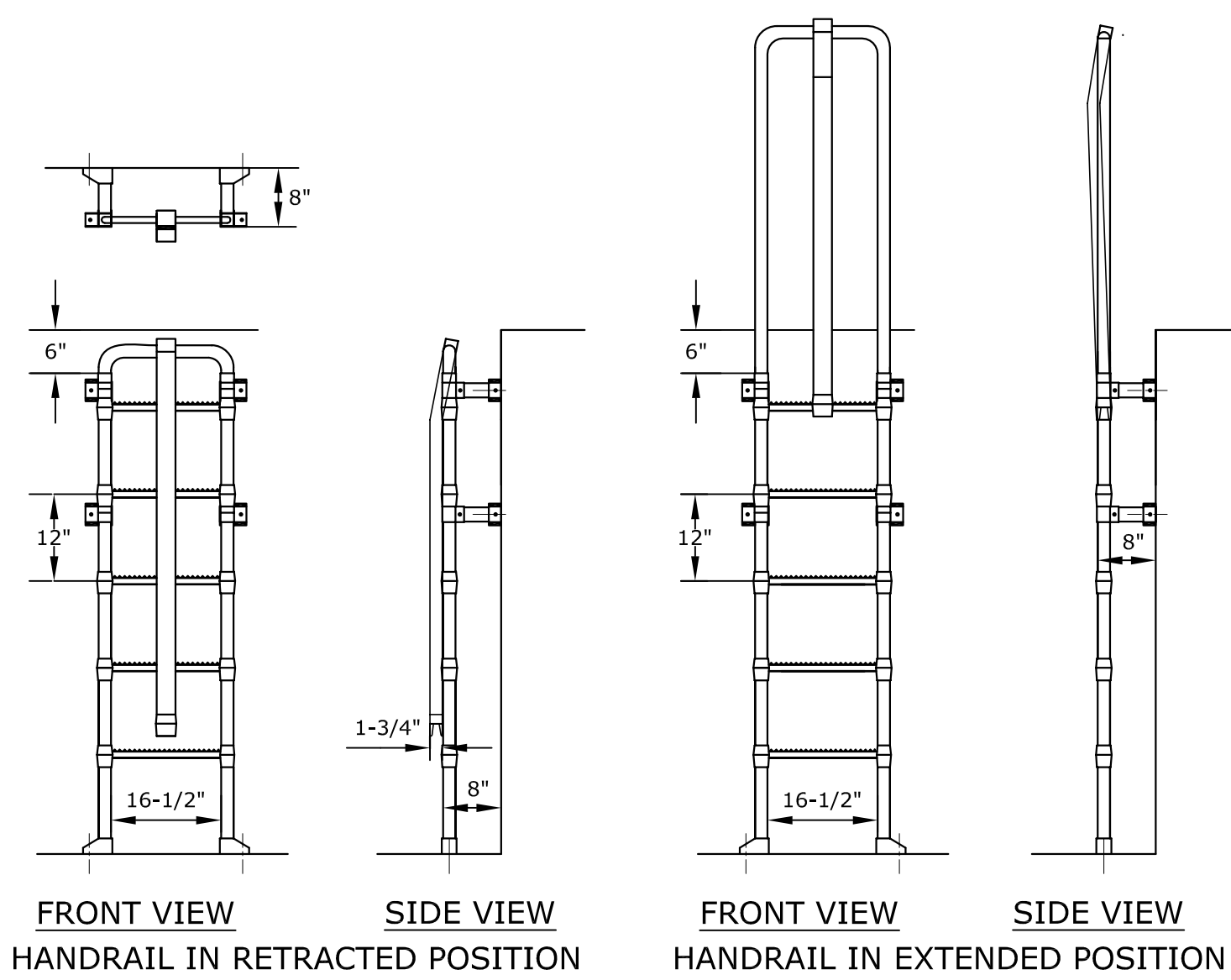
SECTION B
NTS

DATE:	BY:	CHECKED:	DESIGN BY:	PERMIT SET:	BROWARD COUNTY PUBLIC WORKS DEPT HIGHWAY CONSTRUCTION & ENGINEERING DIV	WATER & WASTEWATER SERVICES ENGINEERING DIVISION	ALL DRAWINGS TO BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER	TYPICAL STANDARD LIFT STATION	SITE PLAN	DESIGNATION C-1
			DRAWN BY:	THESE TYPICAL LIFT STATION PLANS ARE INTENDED TO PROVIDE A BASIS FOR SITE ADAPTATION AND DESIGN BY A QUALIFIED ENGINEER. THE INFORMATION HEREIN CONTAINED SHALL ONLY BE USED AS A GENERAL GUIDELINE FOR THE INTENDED OPERATION AND FUNCTIONS AND SHALL NOT BE CONSIDERED AS ALL INCLUSIVE. ENGINEERS OF RECORD AND CONSULTANTS USING THESE GUIDELINES SHALL VERIFY AND MODIFY ANY REQUIREMENT NOT NECESSARILY SHOWN AS MAY BE REQUIRED BY ANY AND ALL APPLICABLE CODES AND STANDARDS. ALL CHANGES TO THESE STANDARDS SHALL BE CLEARLY IDENTIFIED WHEN SUBMITTING FOR APPROVAL.	APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A PERMIT FOR CONSTRUCTION A PERMIT FOR CONSTRUCTION MUST BE OBTAINED FROM THE BICHECKED PRIOR TO COMMENCING CONSTRUCTION IN THE PUBLIC R/W.	2555 WEST COPANS ROAD POMPANO BEACH, FL 33069 PHONE NO. 954-831-0745 FAX: 954-831-0925	DESIGNATION C-1			

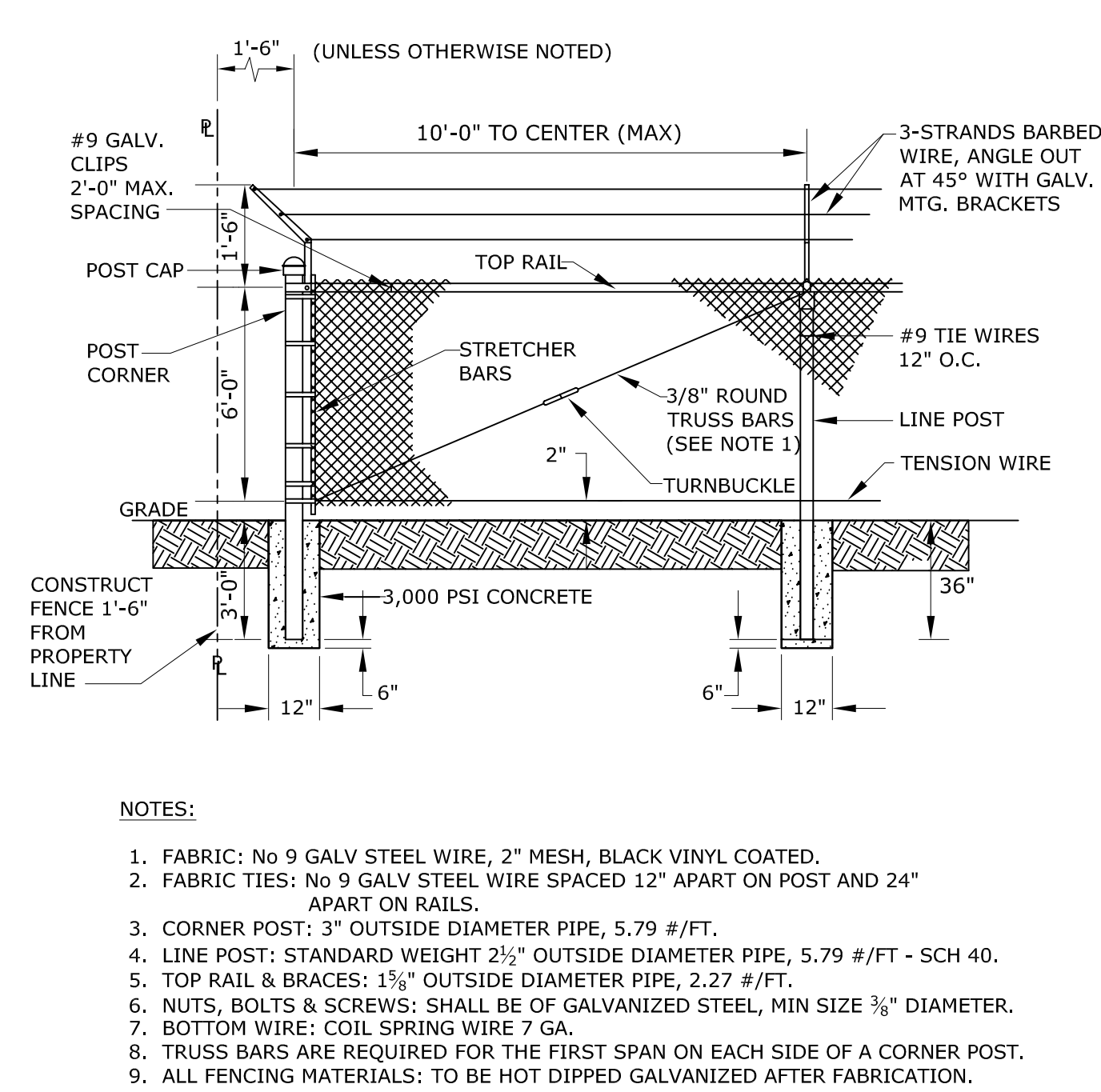




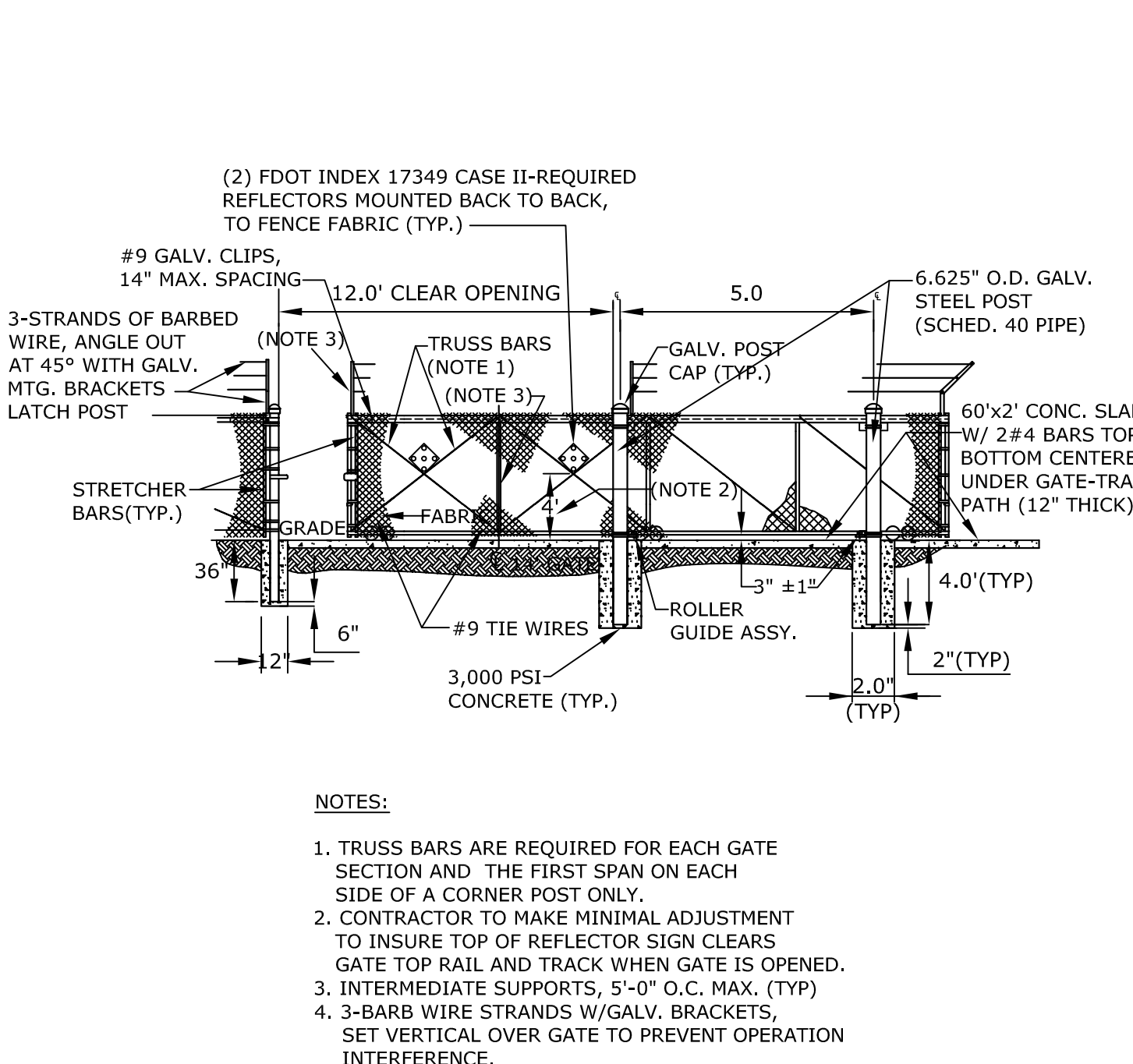
PUMP PLATFORM
DETAIL 10
 NTS (C-2)



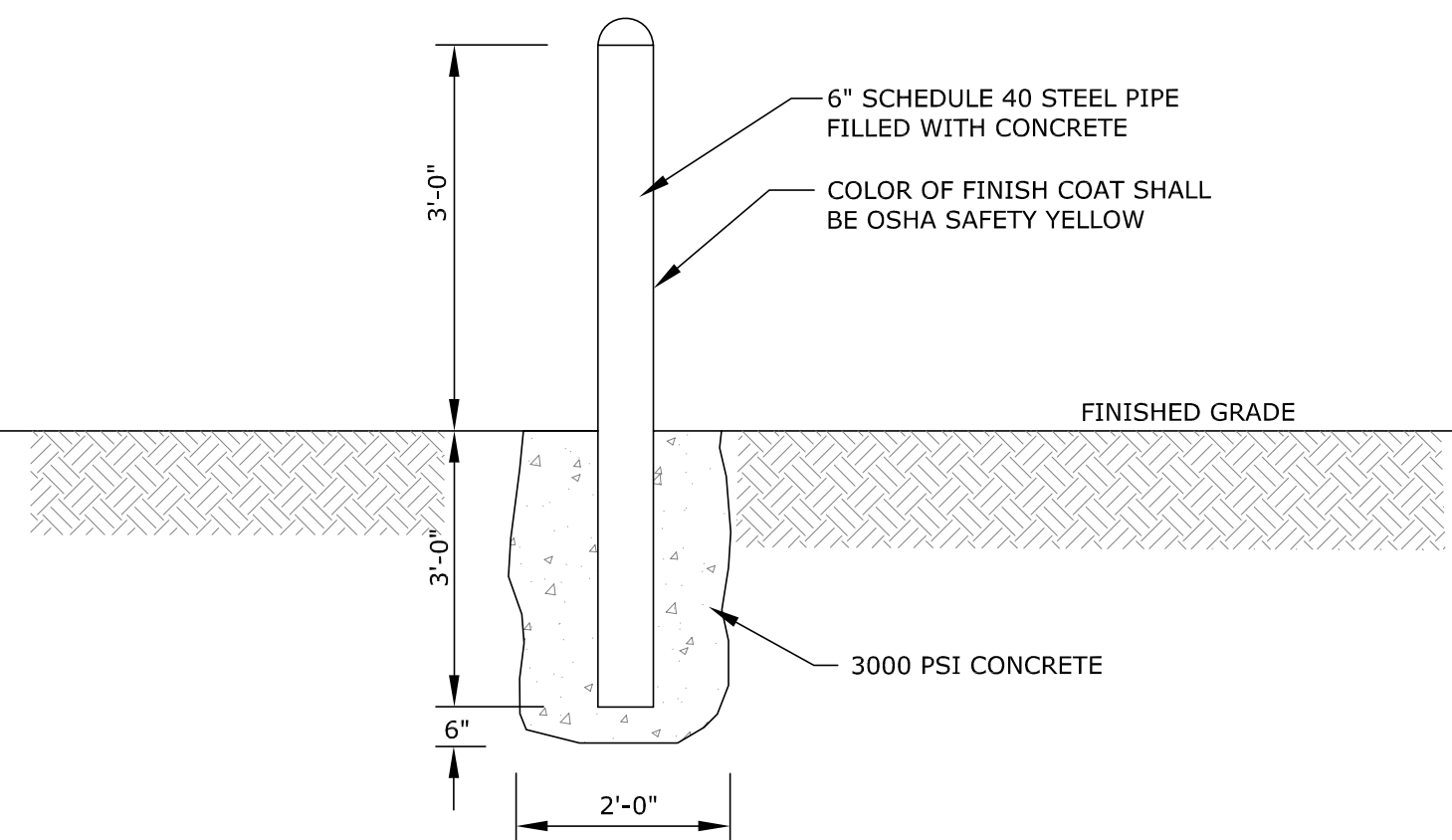
Vault Ladder with Pull-up Handrail
DETAIL 11
 NTS (C-4)



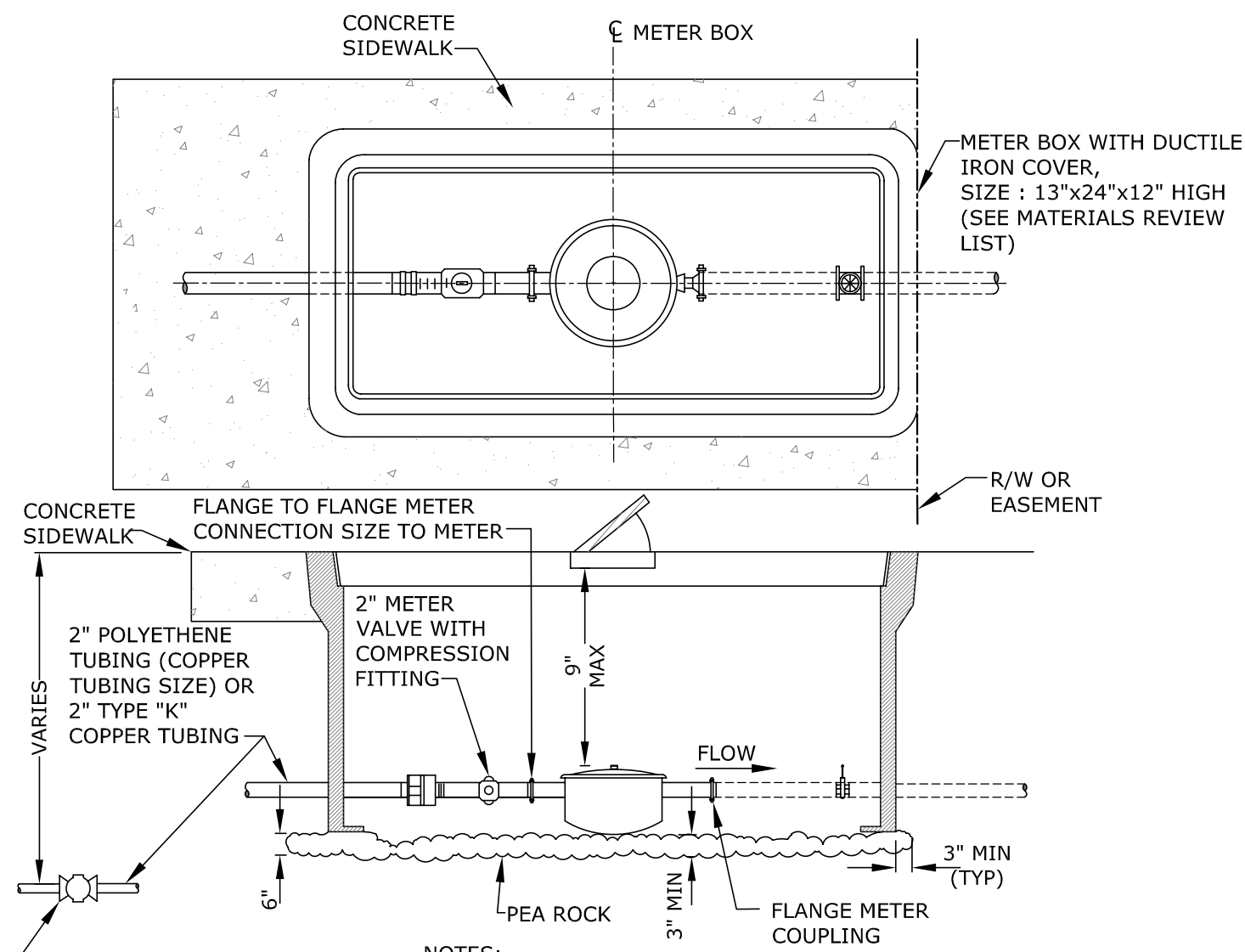
CHAIN-LINK FENCE
DETAIL 12
 NTS (C-4)



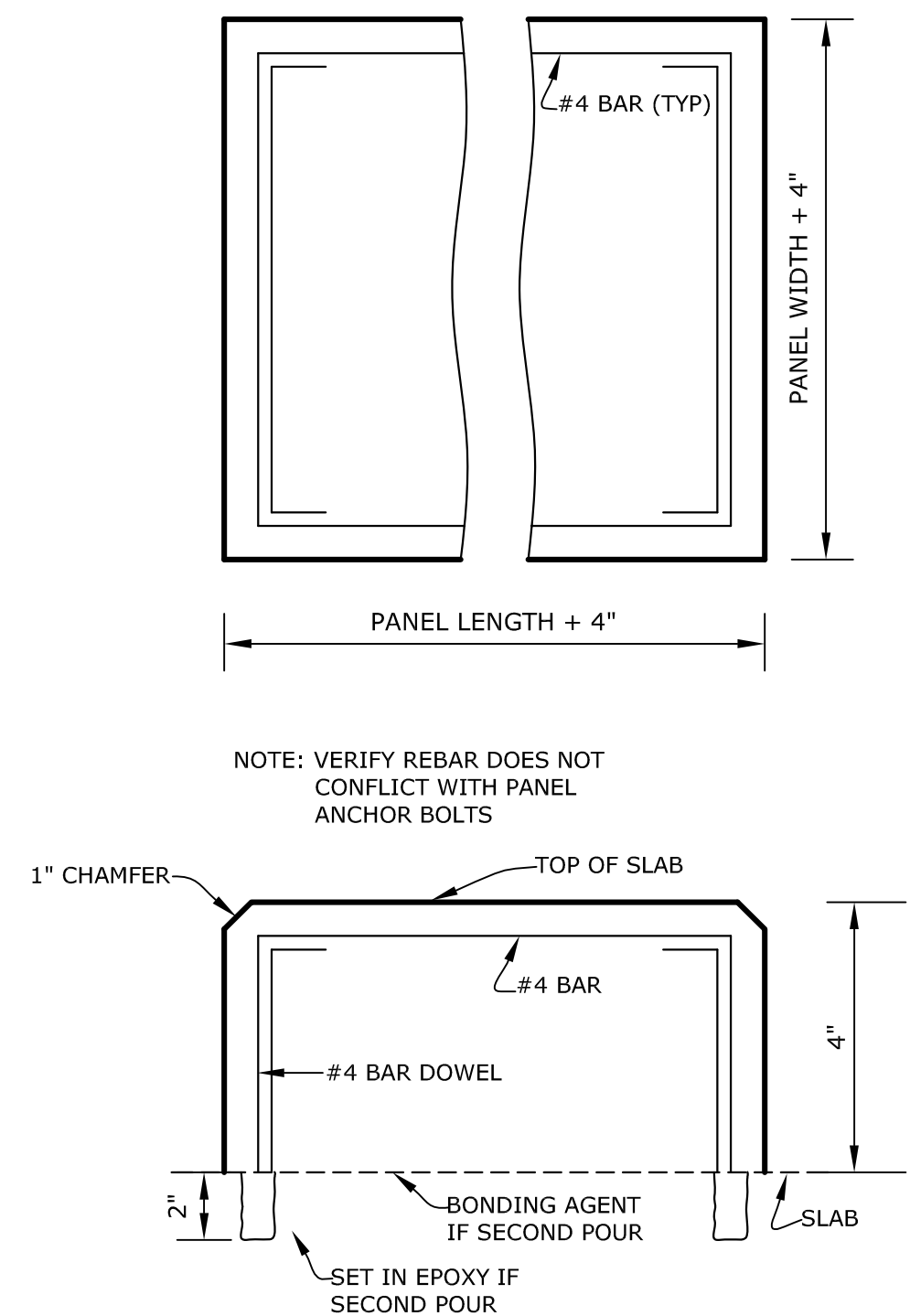
ROLLER GATE
DETAIL 13
 NTS (C-4)



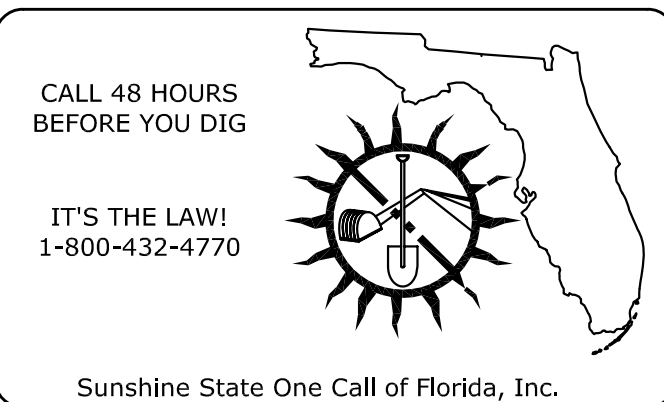
BOLLARD
DETAIL 14
 NTS (C-4)



2" METER
DETAIL 15
 NTS (C-4)



ELECTRICAL PANEL SLAB
DETAIL 16
 NTS (C-4)



DATE:	BY:	CHECKED:

FIELD BY:	
DESIGN BY:	
DRAWN BY:	
CHECK BY:	
DATE:	
SCALE:	

PERMIT SET
 MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION
 ALL MATERIALS USED AND INSTALLATIONS MADE WITHIN THE PUBLIC R/W OR EASEMENTS SHALL BE IN ACCORDANCE WITH BROWARD COUNTY SPECIFICATIONS
 NOTICE INSPECTION REQUIRED
 24 HRS PRIOR TO COMMENCING ANY WORK IN THE PUBLIC R/W CONTACT THE BICHECKED AT 954-577-4600 FOR INSPECTION
 APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A PERMIT FOR CONSTRUCTION A PERMIT FOR CONSTRUCTION MUST BE OBTAINED FROM THE BICHECKED PRIOR TO COMMENCING CONSTRUCTION IN THE PUBLIC R/W.

BROWARD COUNTY PUBLIC WORKS DEPT
 HIGHWAY CONSTRUCTION & ENGINEERING DIV
 PLAN CONSISTENT WITH PLAT REQUIREMENTS
 PUBLIC RIGHT OF WAY APPROVAL FOR PAVING, GRADING AND DRAINAGE
 DATE:



WATER & WASTEWATER SERVICES
 ENGINEERING DIVISION
 2555 WEST COPANS ROAD
 POMPANO BEACH, FL 33069
 PHONE NO. 954-831-0745 FAX: 954-831-0925

ALL DRAWINGS TO BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER

TYPICAL STANDARD LIFT STATION

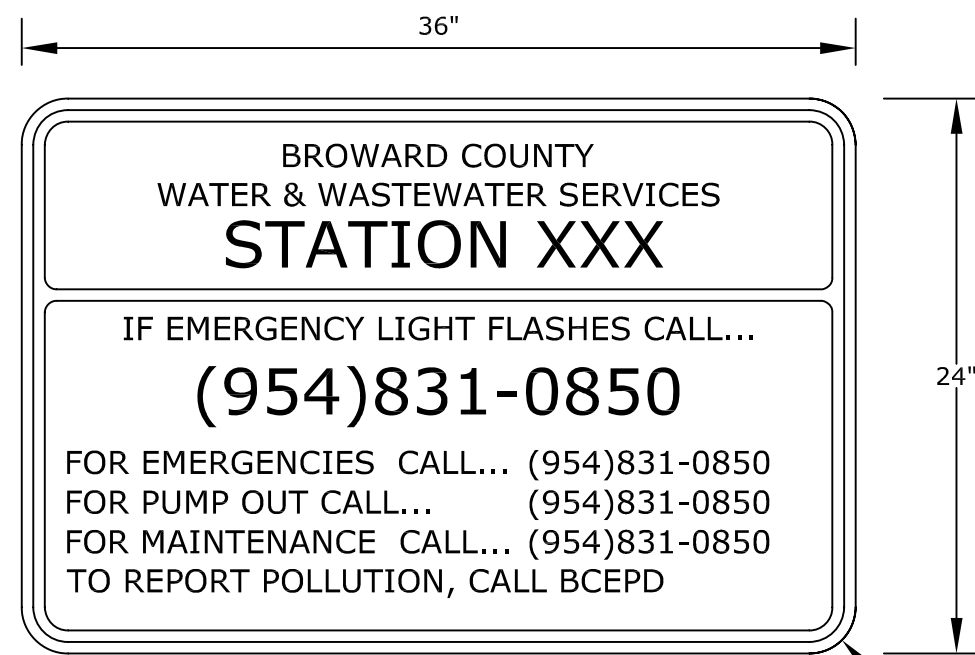
STANDARD DETAILS

DESIGNATION
C-4
 SHEET NO 6 OF 12

NOTES

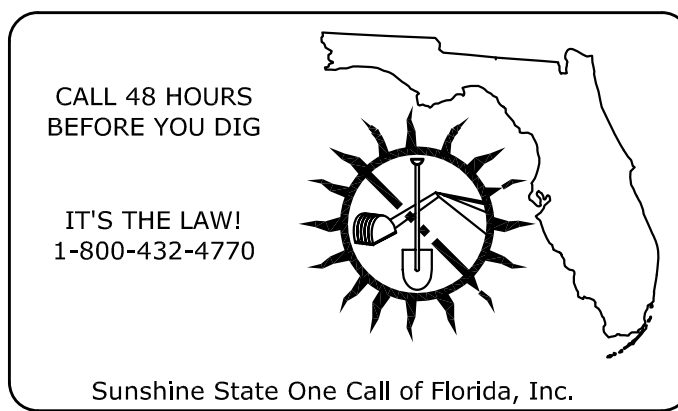
GENERAL

- ALL CONSTRUCTION AND MATERIALS SHALL COMPLY WITH BROWARD COUNTY WATER AND WASTEWATER SERVICES MINIMUM STANDARDS AND APPLICABLE LOCAL AND NATIONAL CODES.
- WHENEVER A MATERIAL, ARTICLE OR PIECE OF EQUIPMENT IS IDENTIFIED IN THE PROJECT MANUAL INCLUDING DRAWINGS (PLANS) AND SPECIFICATIONS BY REFERENCE TO MANUFACTURER'S OR VENDOR'S NAME, TRADE NAMES, CATALOG NUMBERS, OR OTHERWISE, IT IS INTENDED MERELY TO ESTABLISH A STANDARD, AND UNLESS IT IS FOLLOWED BY WORDS INDICATING THAT NO SUBSTITUTION IS PERMITTED, ANY MATERIAL, ARTICLE, OR EQUIPMENT OF OTHER MANUFACTURERS AND VENDORS WHICH WILL PERFORM OR SERVE THE REQUIREMENTS OF THE GENERAL DESIGN WILL BE CONSIDERED EQUALLY ACCEPTABLE, PROVIDED THE MATERIAL, ARTICLE OR EQUIPMENT SO PROPOSED IS, IN THE OPINION OF THE BC WATER & WASTEWATER SERVICES, EQUAL IN SUBSTANCE, QUALITY, AND FUNCTION.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO COMPLETE THE WORK AS SPECIFIED.
- THE CONTRACTOR SHALL SUPPLY ALL LABOR AND EQUIPMENT NECESSARY TO BY-PASS THE LIFT STATION DURING CONSTRUCTION AND MAINTAIN SAID BYPASS FOR THE DURATION OF ITS USE.
- COMPLIANCE TO "TRENCH SAFETY ACT" IS REQUIRED FOR ALL EXCAVATIONS IN EXCESS OF 5 FEET DEEP.
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY:
 - SUNSHINE STATE 1 CALL 1-800-432-4700
 - BCWWS NETWORK (954)-831- 0838
 - BCWWS INSPECTOR..... (954)-831- 0901
- THE CONTRACTOR SHALL ATTACH PUMP GUIDE RAILS AS PER MANUFACTURER'S RECOMMENDATIONS.
- ALL VALVES ARE TO BE TAGGED, STATING TYPE OF VALVE AND NUMBER OF TURNS TO OPERATE. IF THE VALVE IS BURIED, A BRASS PLATE WILL BE CAST IN THE CONCRETE APRON AROUND THE VALVE COVER. IF THE VALVE IS LOCATED IN A PIT, THE TAG SHALL BE HUNG FROM THE VALVE WITH A PLASTIC STRAP.
- ALL VALVE BOXES SHALL HAVE LOCKING LIDS.
- DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO ANSI A 21.51/AWWA C151-91 WITH WALL THICKNESS CLASS 350 FOR 4" - 24", CLASS 250 FOR 30" AND ABOVE. FOR POTABLE WATER USE THEY SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI A 21.4/AWWA C104-90. AN EPOXY LINING SHALL BE USED ON FORCE MAINS AND GRAVITY SEWER PIPE, FITTINGS AND APPURTENANCES. ALL FLANGED DUCTILE IRON PIPE SHALL BE CLASS 53.
- ALL JOINTS SHALL BE RESTRAINED IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND IN COMPLIANCE WITH AWWA STANDARDS.
- COMPLETE "AS-BUILT" INFORMATION RELATIVE TO VALVES, FITTINGS, LENGTH OF PIPE AND THE LIKE, SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER PRIOR TO FINAL ACCEPTANCE OF THE WORK. ALL ELEVATIONS SHALL BE TAKEN BY AN INDEPENDENT REGISTERED LAND SURVEYOR OR PROFESSIONAL SURVEYOR AND MAPPER AND INCLUDED IN THE "AS-BUILT" INFORMATION FURNISHED BY THE CONTRACTOR. FINAL APPROVAL OF THE PROJECT IS SUBJECT TO THE FINAL REVIEW AND APPROVAL OF THE "AS-BUILT" INFORMATION FURNISHED TO THE REGULATORY AGENCIES AND BCWWS.
- CONTRACTOR SHALL PROVIDE A IDENTIFICATION SIGN. SIGN SHALL BE FABRICATED OF 1/2" ALUMINUM WITH WHITE REFLECTIVE BACKGROUND AND RED LETTERS. LARGE LETTERS SHALL BE 2" HIGH SMALL LETTERS SHALL BE 1" HIGH BORDER SHALL BE 1/2" THICK, OFFSET 1/2" FROM EDGE OF SIGN SIGN SHALL BE PERMANENTLY ATTACHED TO THE FENCE, IF AVAILABLE, OR CONTROL PANEL WHERE VISIBLE FROM THE STREET
- FLEXIBLE EXPANSION JOINTS SHALL BE INSTALLED IN THE LOCATIONS INDICATED ON THE DRAWINGS AND SHALL BE MANUFACTURED OF DUCTILE-IRON CONFORMING TO THE MATERIAL PROPERTIES OF ANSI/AWWA C153/A21.53. ALL FLEXIBLE EXPANSION JOINTS SHALL CONSIST OF AN EXPANSION JOINT DESIGNED AND CAST AS AN INTEGRAL PART OF A BALL AND SOCKET TYPE FLEXIBLE JOINT, HAVING A MINIMUM OF 15" DEFLECTION PER BALL AND 4" MINIMUM EXPANSION. SURFACES IN CONTACT WITH WASTEWATER SHALL BE LINED WITH A MINIMUM OF 15 MILS OF FUSION BONDED EPOXY CONFORMING TO THE APPLICABLE REQUIREMENTS OF ANSI/AWWA C213 AND SHALL BE HOLIDAY TESTED WITH A 1500 VOLT SPARK TEST CONFORMING TO SAID SPECIFICATION. ALL FLEXIBLE EXPANSION JOINTS SHALL BE FLEX-TEND AS MANUFACTURED BY EBAA IRON INC. OR APPROVED EQUAL.
- ENGINEER SHALL PROVIDE FLOATION CALCULATIONS FOR EACH STRUCTURE TO BE CONSTRUCTED.



SIGN DETAIL
NTS
PUMPS AND CONTROL PANEL

- PUMPS AND CONTROL PANEL WILL BE PROVIDED TO THE CONTRACTOR, BY BCWWS, FOR INSTALLATION INTO THE WORK. ALL APPURTENANCES REQUIRED TO MAKE A COMPLETE AND OPERATING SYSTEM SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.



CAST-IN-PLACE CONCRETE

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE TO FLORIDA BUILDING CODE (FBC), AMERICAN CONCRETE INSTITUTE (ACI) 318 AND THE CONTRACT SPECIFICATIONS.
- COMPLETE ENGINEERING AND PRODUCT DATA SHALL BE SUBMITTED TO THE ENGINEER ON ALL ADMIXTURES, CURING COMPOUNDS, HARDENERS, SEALERS, REINFORCING STEEL AND WATER STOPS IN ACCORDANCE WITH THE SPECIFICATIONS.
- REINFORCEMENT STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615.
- CONCRETE COVER FOR STEEL REINFORCEMENT SHALL BE AS SPECIFIED ON ACI 318.
- PIPES, INSERTS, AND OTHER METAL OBJECTS SHOWN SHALL BE BUILT INTO, SET IN, OR ATTACHED TO THE CONCRETE. ALL REQUIRED HOLES SHALL BE CAST AT TIME OF MANUFACTURE.
- ALL CAST-IN-PLACE CONCRETE SHALL BE ACCURATELY FORMED AND PROPERLY PLACED AND FINISHED AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN.
- CONCRETE SHALL BE EITHER CLASS A OR CLASS B, AS INDICATED ON THE DRAWINGS OR SPECIFIED IN THESE SPECIFICATIONS. IN GENERAL CLASS A CONCRETE SHALL BE USED FOR REINFORCED CONCRETE CAST-IN-PLACE IN FORMS FOR SLABS, FOOTINGS, FOUNDATIONS, MANHOLES AND SIMILAR REINFORCED CONCRETE STRUCTURES COMING UNDER THE SCOPE OF ACI 318. CLASS B CONCRETE SHALL BE PLAIN CONCRETE AND SHALL BE USED FOR PIPE CRADLES, PIPE AND CONDUIT ENCASEMENT, BEDDING, GRADE CORRECTION, ANCHORS, COLLARS, THRUST BLOCKS, MASSIVE SECTIONS AND OTHER NON-REINFORCED CONCRETE.
- CONCRETE INGREDIENTS SHALL BE SELECTED, PROPORTIONED, AND MIXED IN SUCH A MANNER AS WILL PRODUCE A WATERTIGHT DURABLE CONCRETE THAT WILL DEVELOP THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT AN AGE OF 28 DAYS WHEN SAMPLED, CURED, AND TESTED IN ACCORDANCE WITH THE PROCEDURES SPECIFIED IN ASTM C 31 AND C 39:

CLASS OF CONCRETE	AGE	AVERAGE OF THREE CONSECUTIVE SPECIMENS	MINIMUM ANY ONE SPECIMEN
A	28 DAYS	4,000 PSI	3,500 PSI
B	28 DAYS	3,000 PSI	2,500 PSI

FINISHING UNFORMED SURFACES

NO SURFACE TREATMENT WILL BE REQUIRED FOR BURIED CONCRETE NOT FORMING AN INTEGRAL PART OF STRUCTURE EXCEPT THAT REQUIRED TO OBTAIN THE SURFACE ELEVATIONS OR CONTOURS AND SURFACES FREE OF LAITANCE. THE UNFORMED SURFACES OF ALL OTHER CONCRETE SHALL BE SCREEDED AND GIVEN AN INITIAL FLOAT FINISH FOLLOWED BY ADDITIONAL FLOATING FOLLOWED BY TROWELING WHERE REQUIRED. CARE SHALL BE TAKEN THAT NO EXCESS WATER IS PRESENT WHEN THE FINISH IS MADE. NO SPECIAL CONCRETE OR CEMENT MORTAR TOPPING COURSE SHALL BE USED UNLESS SO SHOWN ON THE DRAWING.

- SCREEDING: SCREEDING SHALL PROVIDE A CONCRETE SURFACE CONFORMING TO THE PROPER ELEVATION AND CONTOUR WITH ALL AGGREGATES COMPLETELY EMBEDDED IN MORTAR. ALL SCREEDED SURFACES SHALL BE FREE OF SURFACE IRREGULARITIES WITH A HEIGHT OR DEPTH IN EXCESS OF 1/4 INCH AS MEASURED FROM A 10-FOOT STRAIGHT EDGE.
- FLOATING: SCREEDED SURFACES SHALL BE GIVEN AN INITIAL FLOAT FINISH AS SOON AS THE CONCRETE HAS STIFFENED SUFFICIENTLY FOR PROPER WORKING. INITIAL FLOATING SHALL BE FOLLOWED BY A SECOND FLOATING AT THE TIME OF INITIAL SET. THE SECOND FLOATING SHALL PRODUCE A FINISH OF UNIFORM TEXTURE AND COLOR. UNLESS ADDITIONAL FINISHING IS SPECIFICALLY REQUIRED, THE COMPLETED FINISH FOR UNFORMED SURFACES SHALL BE THE FLOAT FINISH PRODUCED BY THE SECOND FLOATING.
- BROOMING: SURFACES OF EQUIPMENT BASES AND SLABS ON GRADE SHALL BE GIVEN A LIGHT BROOM FINISH PROVIDING A NONSLIP SURFACE. BROOMING SHALL BE DONE AFTER THE SECOND FLOATING AND FOR TRAFFIC AREAS SHALL BE AT RIGHT ANGLES TO THE NORMAL TRAFFIC DIRECTION.
- EDGING: ALL PERMANENTLY EXPOSED EDGES OF UNFORMED SURFACES SHALL BE CHAMFERED WITH A 3/4 INCH APPROVED EDGING TOOL UNLESS OTHER EDGE TREATMENT IS INDICATED ON THE DRAWINGS.
- CURING: ALL CONCRETE SHALL BE PROTECTED FROM LOSS OF MOISTURE BY CURING FOR AT LEAST 14 DAYS FOLLOWING PLACEMENT. CURING OPERATIONS SHALL TAKE PLACE IMMEDIATELY AFTER CONCRETE FINISHING IS COMPLETE OR FORMS ARE REMOVED. BREAKING OF FORM TIES OR OTHERWISE BREAKING THE SEAL BETWEEN THE CONCRETE SURFACE AND THE FORM SHALL BE CONSIDERED FORM REMOVAL.

PRE-CAST CONCRETE

- WALL AND SLAB THICKNESSES SHOWN ON THESE STANDARDS ARE MINIMUMS. MANUFACTURER IS SOLELY RESPONSIBLE FOR STRUCTURAL DESIGN. SIGNED AND SEALED SHOP DRAWINGS SHALL BE PROVIDED.
- PRE-CAST UNITS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478
- LIFTING HOLES THROUGH THE STRUCTURE ARE NOT PERMITTED
- THE BOTTOM SLAB SHALL BE CAST MONOLITHICALLY WITH THE LOWER WALL SECTION
- ALL STRUCTURES SHALL BE DESIGNED TO SUPPORT AN H-20 WHEEL LOADING
- COMPLETE ENGINEERING AND PRODUCT DATA, SIGNED AND SEALED BY A FLORIDA PROFESSIONAL ENGINEER, SHALL BE SUBMITTED TO THE ENGINEER.

ACCESS HATCH

- EACH HATCH SHALL BE DESIGNED ACCORDING TO THE OPENINGS SHOWN ON THE DRAWINGS. THE ALUMINUM ACCESS FRAMES SHALL BE MANUFACTURED FROM 1/4-INCH THICK, EXTRUDED 6063-T5 ALUMINUM. THE FRAME SHALL BE DRAINABLE WITH A 1 1/2-INCH THREADED DRAIN COUPLING LOCATED ON CORNER FRAME. THE DOOR PANELS SHALL CLOSE FLUSH AND SHALL BE 1/4-INCH THICK 5086-H34 ALUMINUM DIAMOND (CHECKER) PLATE REINFORCED FOR AASHTO H-20-44 WHEEL LOADS. REMOVABLE ALUMINUM CROSS-BEAMS SHALL BE PROVIDED BY THE HATCH SUPPLIER AS REQUIRED TO ACCOMPLISH THE STATED LOADING. THE DOORS SHALL HAVE HEAVY DUTY STAINLESS STEEL BUTT HINGES WITH TAMPER-PROOF FASTENERS. ALL HARDWARE SHALL BE MADE OF TYPE 316 STAINLESS STEEL. EACH DOOR SHALL HAVE SPRING OPERATORS, SUCH THAT THE MAXIMUM LIFTING EFFORT IS LESS THAN 25 POUNDS. THE HATCH SUPPLIER SHALL PROVIDE THE NUMBER OF SPRING OPERATORS AS REQUIRED TO ACCOMPLISH THE MAXIMUM LIFTING REQUIREMENT. EACH DOOR SHALL OPEN TO 90° AND LOCK AUTOMATICALLY WITH A STAINLESS STEEL POSITIVE LOCKING ARM AND A STAINLESS STEEL RELEASE HANDLE. EACH DOOR SHALL HAVE A RECESSED STAINLESS STEEL LIFTING HANDLE AND LOCKABLE 316 SS HASP. THE HATCH SHALL BE PROVIDED WITH A TYPE 316 STAINLESS STEEL SNAP-LOCK WITH A REMOVABLE HANDLE.
- ALL ACCESS DOORS SHALL BE DESIGNED WITH A NEOPRENE GASKET ON THE INSIDE LIP OF THE FRAME PERIMETER, TO FORM AN ESSENTIALLY AIR-TIGHT SEAL.
- ALL ACCESS DOORS SHALL BE EQUIPPED WITH A MINIMUM OF FOUR (4) STAINLESS STEEL BOLTS TO SECURE THE DOORS IN THE DOWN POSITION. BOLTS SHALL BE PER THE MANUFACTURERS RECOMMENDATION.

WET WELL REHABILITATION

- SURFACE PREPARATION
 - ANY LOOSE, UNSOUND, OR CRACKED BRICK OR CONCRETE SHALL BE CHISELED OR HAMMERED OUT
 - ALL SURFACES TO RECEIVE EITHER THE ONE COMPONENT REINFORCED MORTAR OR EPOXY LINING SHALL BE STRUCTURALLY SOUND AND SHALL BE CLEANED TO REMOVE LAITANCE, GREASE, LOOSE MORTAR, PAINT OR OTHER SURFACE CONTAMINANTS USING SAND BLASTING, HYDRO-GRIT BLASTING AT 3,500 PSI MINIMUM OR OTHER MECHANICAL SCARIFICATION TECHNIQUES APPROVED BY THE ENGINEER. SURFACE SHALL BE TESTED BY THE CONTRACTOR, IN THE PRESENCE OF THE ENGINEER, USING A SURFACE PH TESTER EQUAL TO INSTA-CHECK SURFACE PH PENCIL AS MANUFACTURED BY PHYDRION. SURFACE SHALL INDICATE A pH=7.0 OR GREATER.
 - ALL ACTIVE LEAKS IN THE STRUCTURE SHALL BE STOPPED USING CHEMICAL GROUTING AND HYDRAULIC CEMENT. ALL CRACKS, VOIDS AND REMOVED STEP HOLES SHALL BE FILLED USING A WATER RESISTANT FAST-SETTING CEMENT PATCH.
 - REBUILDING CONCRETE SURFACES
 - THE CONCRETE SHALL BE RETURNED TO ITS ORIGINAL WALL THICKNESS USING A ONE COMPONENT MORTAR, MINIMUM INSTALLED THICKNESS SHALL BE 1/2".
 - ONE COMPONENT REINFORCED WET MORTAR: THE ONE COMPONENT MORTAR SHALL BE MICROSILICA ENHANCED, FIBER REINFORCED AND BE DESIGNED FOR CORROSIVE ENVIRONMENTS WITH A pH=2.0 OR HIGHER. REINFORCED MORTAR SHALL HAVE THE FOLLOWING MINIMUM PHYSICAL PROPERTIES:
 - FLEXURAL STRENGTH 1000 PSI @ 28 DAYS ASTM C78-84
 - COMPRESSIVE STRENGTH 9000 PSI @ 28 DAYS ASTM C109-92
 - DENSITY (WET): 130 LB/CU. FT. ASTM C138-92
 - SPLITTING TENSILE STRENGTH: 700 PSI @ 28 DAYS ASTM C496-90
 - SLANT SHEAR BOND STRENGTH: 2250PSI @ 28 DAYS ASTM C882-91
 - SULFATE RESISTANCE WEIGHTLOSS 84 DAY IMMERSION pH 1.0 <.97% ASTM C-267 pH 2.0 <.30% pH 3.0 <.18%
- C. MATERIAL SHALL BE BASF SP15, OR APPROVED EQUAL.

PAINTING & COATINGS:

- WETWELL & METER VAULT EXTERIOR: THE EXTERIOR OF WET WELL & METER VAULTS SHALL BE COATED WITH TWO (2), 10 MILS (DFT) EACH COAT OF A BITUMASTIC COATING (20 MILS TOTAL DFT). BITUMASTIC COATING SHALL BE CARBOLINE (KOPPERS) 300M, OR APPROVED EQUAL.
- WET WELL INTERIOR, OPTION A: THE INTERIOR OF A NEW OR REHABILITATED WET WELL, WHERE DIRECTED BY BCWWS, SHALL BE COATED WITH TWO (2) COATS, 15 MILS (DFT) EACH, OF A BITUMASTIC COATING (30 MILS DFT, TOTAL). BITUMASTIC COATING SHALL BE CARBOLINE (KOPPERS) 300M, OR APPROVED EQUAL.
- WET WELL INTERIOR, OPTION B: THE INTERIOR OF A NEW OR REHABILITATED WET WELL, WHERE DIRECTED BY BCWWS, SHALL BE COATED WITH A SPRAYABLE, HIGH BUILD, MOISTURE TOLERANT, CHEMICAL RESISTANT EPOXY COATING DESIGNED TO BE APPLIED ON DRY OR DAMP CONCRETE SURFACES AND YIELDING A HARD DURABLE CHEMICAL RESISTANT FINISH TO A pH OF 1.0. EPOXY COATING SHALL BE BASF SEWER GUARD HBS 100, OR OTHER APPROVED MATERIAL ON THE BCWWS PRODUCT APPROVAL LIST. APPLY MATERIAL USING A 30:0 OR 45:1 AIRLESS SPRAYER TO A MINIMUM DRY THICKNESS OF 60 MILS IN TWO 30 MILS COATS.
- METER VAULT CONCRETE INTERIOR SURFACES: THE INTERIOR CONCRETE SURFACES OF METER VAULTS SHALL BE COATED WITH A 100% SOLIDS POLYAMINE EPOXY SPECIFICALLY DESIGNED FOR WASTEWATER IMMERSION AND LOW PERMEATION TO H2S GAS. MATERIAL SHALL BE TNEPEC PERMA-GLAZE, SERIES 435, OR APPROVED EQUAL, APPLIED IN TWO (2) COATS, 15.0 MILS (DFT) EACH, (30.0 MILS DFT, TOTAL). FINAL COLOR TO BE BEIGE. SURFACE PREPARATION, PRIMING AND APPLICATION SHALL BE IN ACCORDANCE WITH THE MORE STRINGENT OF THE MANUFACTURERS RECOMMENDATIONS OR THE BCWWS SPECIFICATIONS.
- DUCTILE IRON PIPE AND FITTING: DIP EXTERIOR SURFACES SHALL BE COATED WITH A 100% POLYAMINE EPOXY SPECIFICALLY DESIGN FOR WASTEWATER IMMERSION AND LOW PERMEATION TO H2S GAS. MATERIAL SHALL BE TNEPEC PERMA-GLAZE, SERIES 435,OR APPROVED EQUAL, APPLIED IN TWO (2) COATS 20 MILS (DFT) EACH (40.0 MIL DFT, TOTAL). VALVES SHALL RECEIVE ONLY THE FINAL 20 MIL (DFT) COAT. FINAL COLOR TO BE BEIGE. SURFACE PREPARATION, PRIMING AND APPLICATION SHALL BE IN ACCORDANCE WITH THE MORE STRINGENT OF THE MANUFACTURER'S RECOMMENDATIONS OR THE BCWWS SPECIFICATIONS. DIP INTERIOR SURFACES SHALL BE COATED WITH 40 MILS (DFT) OF PROTECTO 401. SURFACE PREPARATION AND APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. CERTIFICATION OF MANUFACTURER SHALL BE PROVIDED.

METER VAULT LADDER

- LADDERS SHALL BE 6061-T6 ALUMINUM, TYPE 304 STAINLESS STEEL, POLYPROPYLENE OR FIBERGLASS AS SHOWN ON THE PLANS. RUNG DIAMETER SHALL BE 1" MINIMUM, WITH 12" BETWEEN RUNGS, AND 16" MINIMUM BETWEEN LADDER RAILS. LADDERS SHALL HAVE A MINIMUM OF THREE PAIRS OF BRACKETS FOR ATTACHMENT. LADDERS SHALL MEET THE REQUIREMENTS OF OSHA AND ANSI STANDARDS.
- EXTENDIBLE HANDRAILS (LADDER-UPS) SHALL BE 48" LONG WHEN FULLY EXTENDED. THE HANDRAIL SHALL HAVE A TELESCOPING TUBULAR SECTION THAT LOCKS AUTOMATICALLY WHEN FULLY EXTENDED AND A RELEASE LEVER TO ALLOW IT TO BE RETURNED TO ITS LOWERED POSITION. HANDRAILS SHALL BE 1-1/2", MINIMUM.
- ALL MOUNTING HARDWARE SHALL BE 316 STAINLESS STEEL.
- LADDER SHALL BE AS MANUFACTURED BY LANE INTERNATIONAL CORP OR APPROVED EQUAL.

DATE:	BY:	CHECKED:	THESE TYPICAL LIFT STATION PLANS ARE INTENDED TO PROVIDE A BASIS FOR SITE ADAPTATION AND DESIGN BY A QUALIFIED ENGINEER. THE INFORMATION HEREIN CONTAINED SHALL ONLY BE USED AS A GENERAL GUIDELINE FOR THE INTENDED OPERATION AND FUNCTIONS AND SHALL NOT BE CONSIDERED AS ALL INCLUSIVE. ENGINEERS OF RECORD AND CONSULTANTS USING THESE GUIDELINES SHALL VERIFY AND MODIFY ANY REQUIREMENT NOT NECESSARILY SHOWN AS MAY BE REQUIRED BY ANY AND ALL APPLICABLE CODES AND STANDARDS. ALL CHANGES TO THESE STANDARDS SHALL BE CLEARLY IDENTIFIED WHEN SUBMITTING FOR APPROVAL.	FIELD BY:	DESIGN BY:	DRAWN BY:	CHECK BY:	DATE:	SCALE:	PERMIT SET MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION MATERIALS ALL MATERIALS USED AND INSTALLATIONS MADE WITHIN THE PUBLIC R/W OR EASEMENTS SHALL BE IN ACCORDANCE WITH POWER SPECIFICATIONS NOTICE INSPECTION REQUIRED 24 HRS PRIOR TO COMMENCING ANY WORK IN THE PUBLIC R/W CONTACT THE BCHED AT 954-577-4600 FOR INSPECTION	BROWARD COUNTY PUBLIC WORKS DEPT HIGHWAY CONSTRUCTION & ENGINEERING DIV <input type="checkbox"/> PLAN CONSISTENT WITH PLAT REQUIREMENTS <input type="checkbox"/> PUBLIC RIGHT OF WAY APPROVAL FOR PAVING, GRADING AND DRAINAGE	BY:	DATE:	DOES NOT INCLUDE APPROVAL OF PAVEMENT MARKINGS & SIGNS		DEPARTMENT OF PUBLIC WORKS	WATER & WASTEWATER SERVICES ENGINEERING DIVISION 2555 WEST COPANS ROAD POMPANO BEACH, FL 33069 PHONE NO. 954-831-0745 FAX: 954-831-0925	ALL DRAWINGS TO BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER	TYPICAL STANDARD LIFT STATION	CIVIL NOTES	DESIGNATION C-5	SHEET NO 7 OF 12
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TO BE COMPLETED
BY ENGINEER

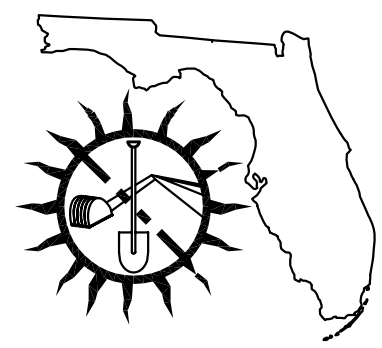
TO BE COMPLETED
BY ENGINEER

SITE PLAN


ELECTRICAL RISER DIAGRAM
NTS

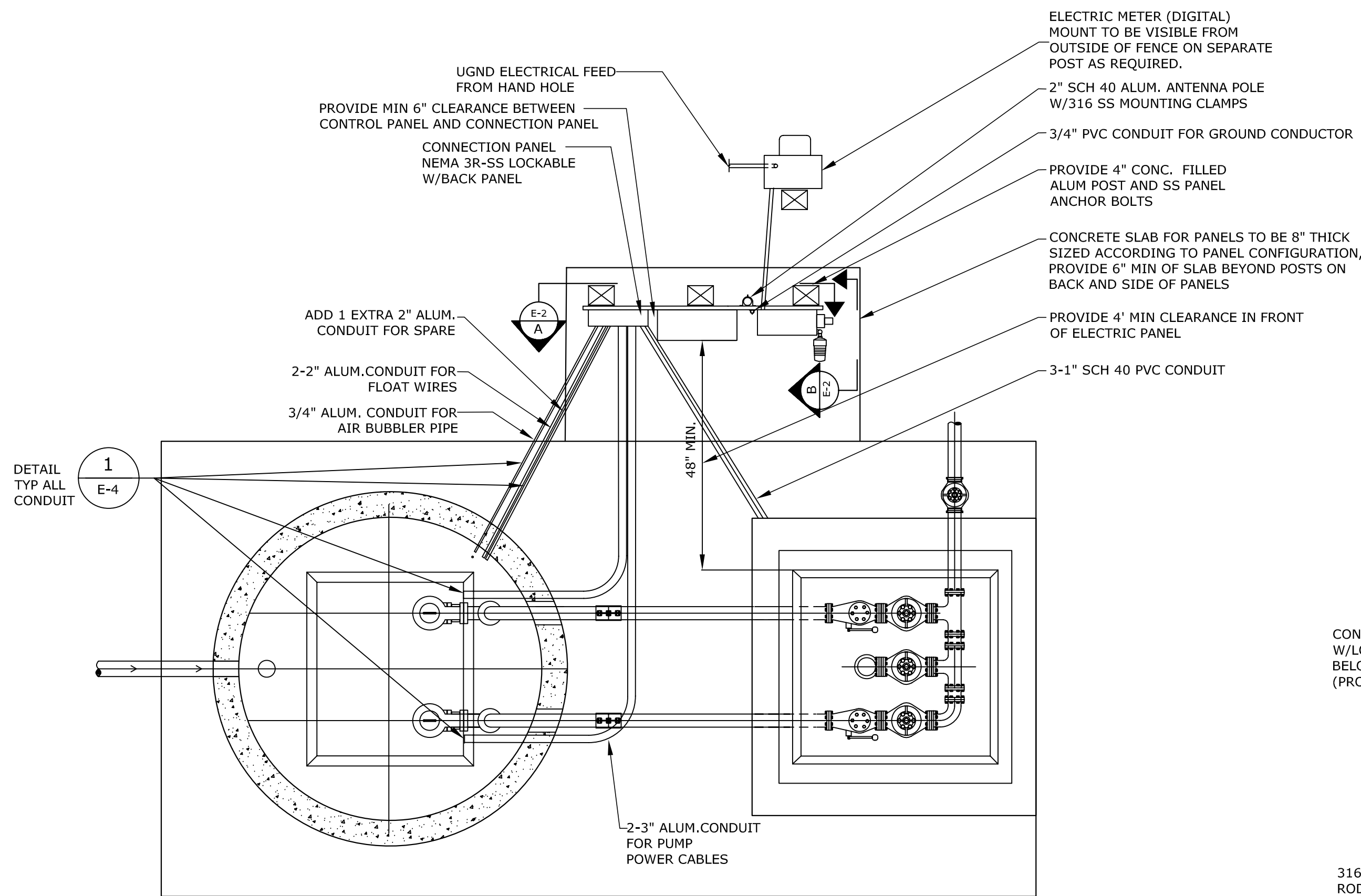
CALL 48 HOURS
BEFORE YOU DIG

IT'S THE LAW!
1-800-432-4770

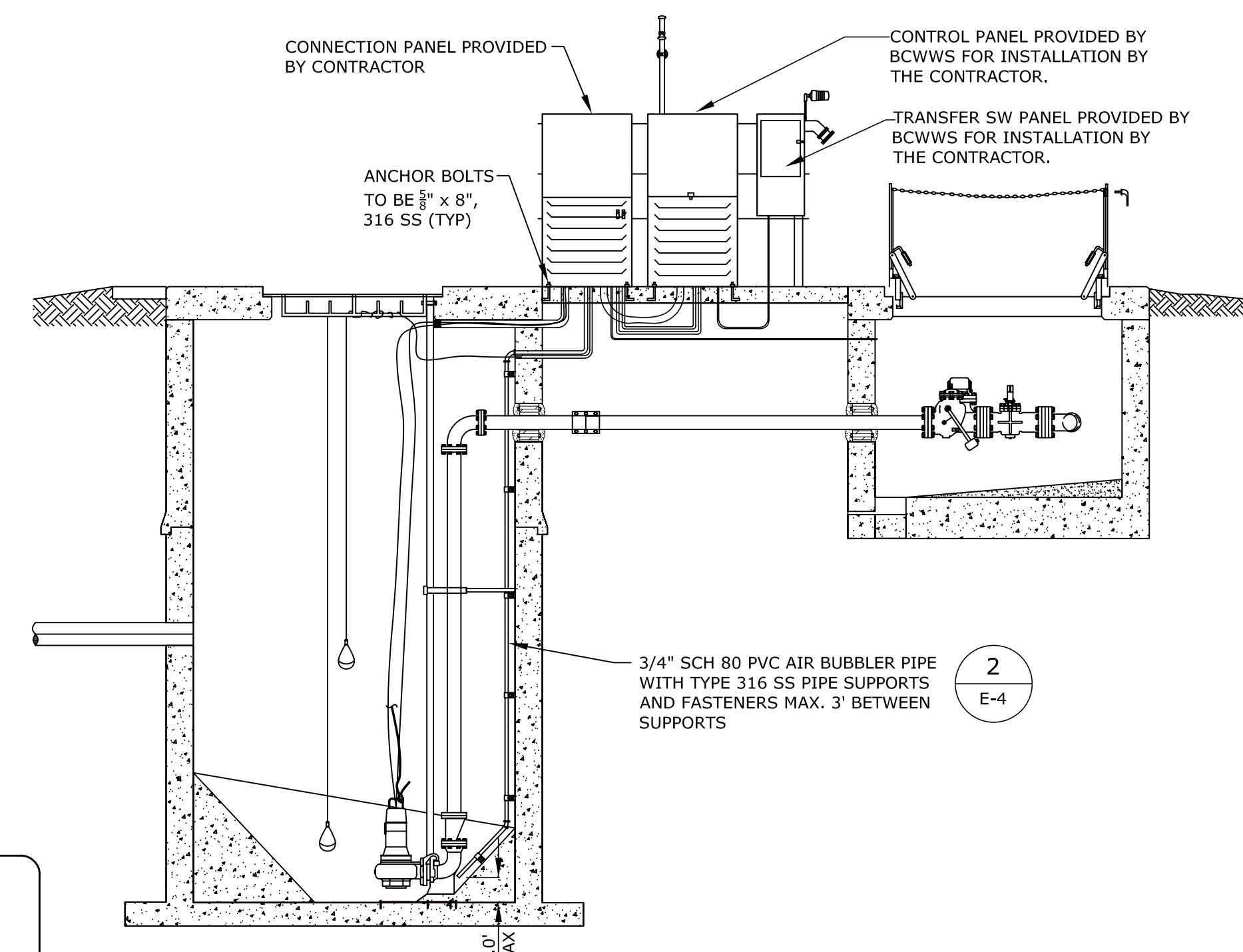


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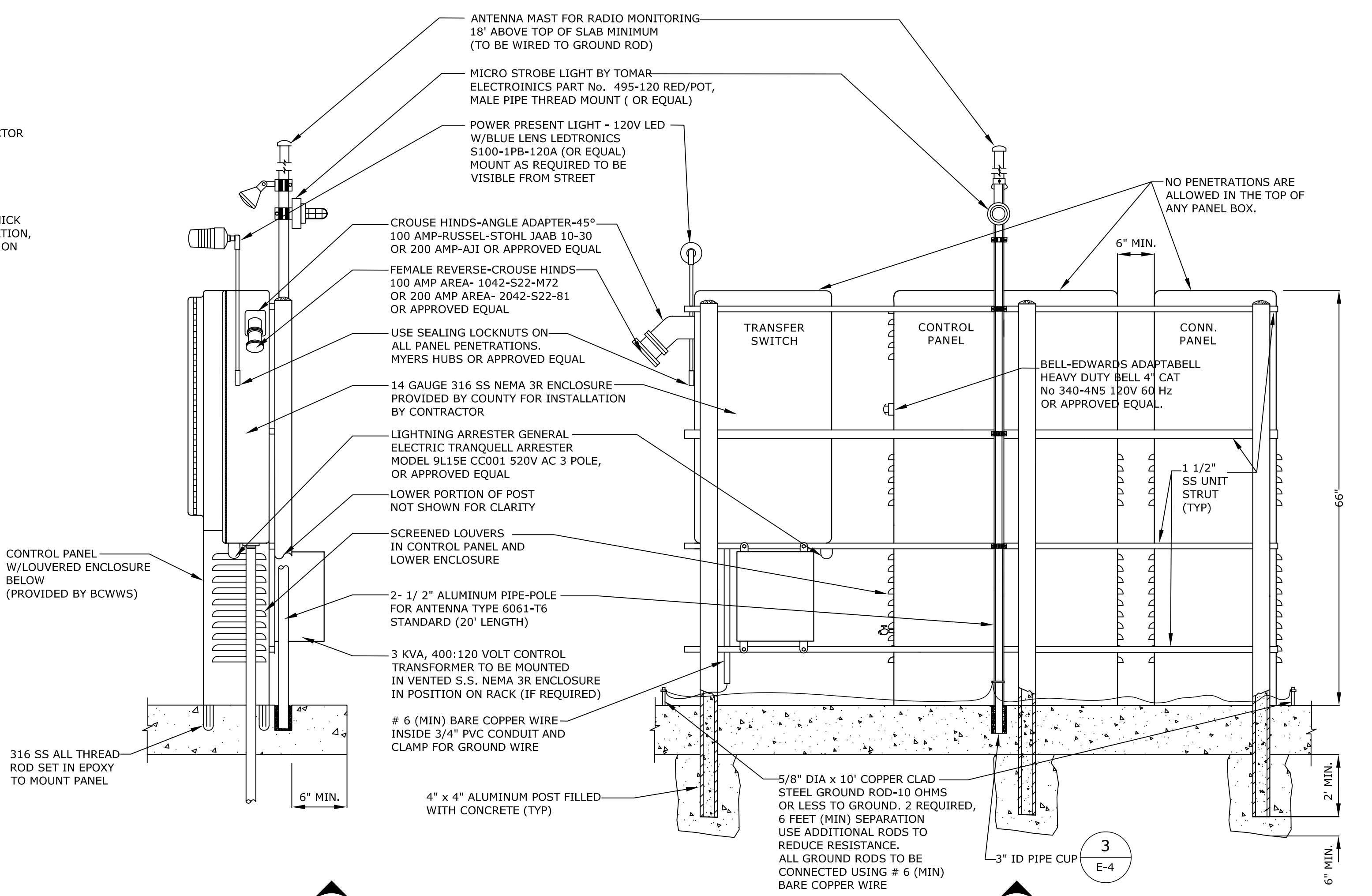
DATE:	BY:	CHECKED:	THESE TYPICAL LIFT STATION PLANS ARE INTENDED TO PROVIDE A BASIS FOR SITE ADAPTATION AND DESIGN BY A QUALIFIED ENGINEER. THE INFORMATION HEREIN CONTAINED SHALL ONLY BE USED AS A GENERAL GUIDELINE FOR THE INTENDED OPERATION AND FUNCTIONS AND SHALL NOT BE CONSIDERED AS ALL INCLUSIVE. ENGINEERS OF RECORD AND CONSULTANTS USING THESE GUIDELINES SHALL VERIFY AND MODIFY ANY REQUIREMENT NOT NECESSARILY SHOWN AS MAY BE REQUIRED BY ANY AND ALL APPLICABLE CODES AND STANDARDS. ALL CHANGES TO THESE STANDARDS SHALL BE CLEARLY IDENTIFIED WHEN SUBMITTING FOR APPROVAL.	FIELD BY:	PERMIT SET MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION MATERIALS.	BROWARD COUNTY PUBLIC WORKS DEPT HIGHWAY CONSTRUCTION & ENGINEERING DIV	 DEPARTMENT OF PUBLIC WORKS	WATER & WASTEWATER SERVICES ENGINEERING DIVISION 2555 WEST COPANS ROAD POMPANO BEACH, FL 33069 PHONE NO. 954-831-0745 FAX: 954-831-0925	ALL DRAWINGS TO BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER	TYPICAL STANDARD LIFT STATION	ELECTRICAL SITE PLAN AND ELECTRICAL RISER DIAGRAM	DESIGNATION E-1 SHEET NO 8 OF 12
				DESIGN BY:	ALL MATERIALS USED AND INSTALLATIONS MADE WITHIN THE PUBLIC R/W OR EASEMENTS SHALL BE IN ACCORDANCE WITH BOICED SPECIFICATIONS NOTICE INSPECTION REQUIRED 24 HRS PRIOR TO COMMENCING ANY WORK IN THE PUBLIC R/W CONTACT THE BOICED AT 954-577-4600 FOR INSPECTION	<input type="checkbox"/> PLAN CONSISTENT WITH PLAT REQUIREMENTS <input type="checkbox"/> PUBLIC RIGHT OF WAY APPROVAL FOR PAVING, GRADING AND DRAINAGE		APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A PERMIT FOR CONSTRUCTION A PERMIT FOR CONSTRUCTION MUST BE OBTAINED FROM THE BOICED PRIOR TO COMMENCING CONSTRUCTION IN THE PUBLIC R/W.				



PLAN VIEW
NTS

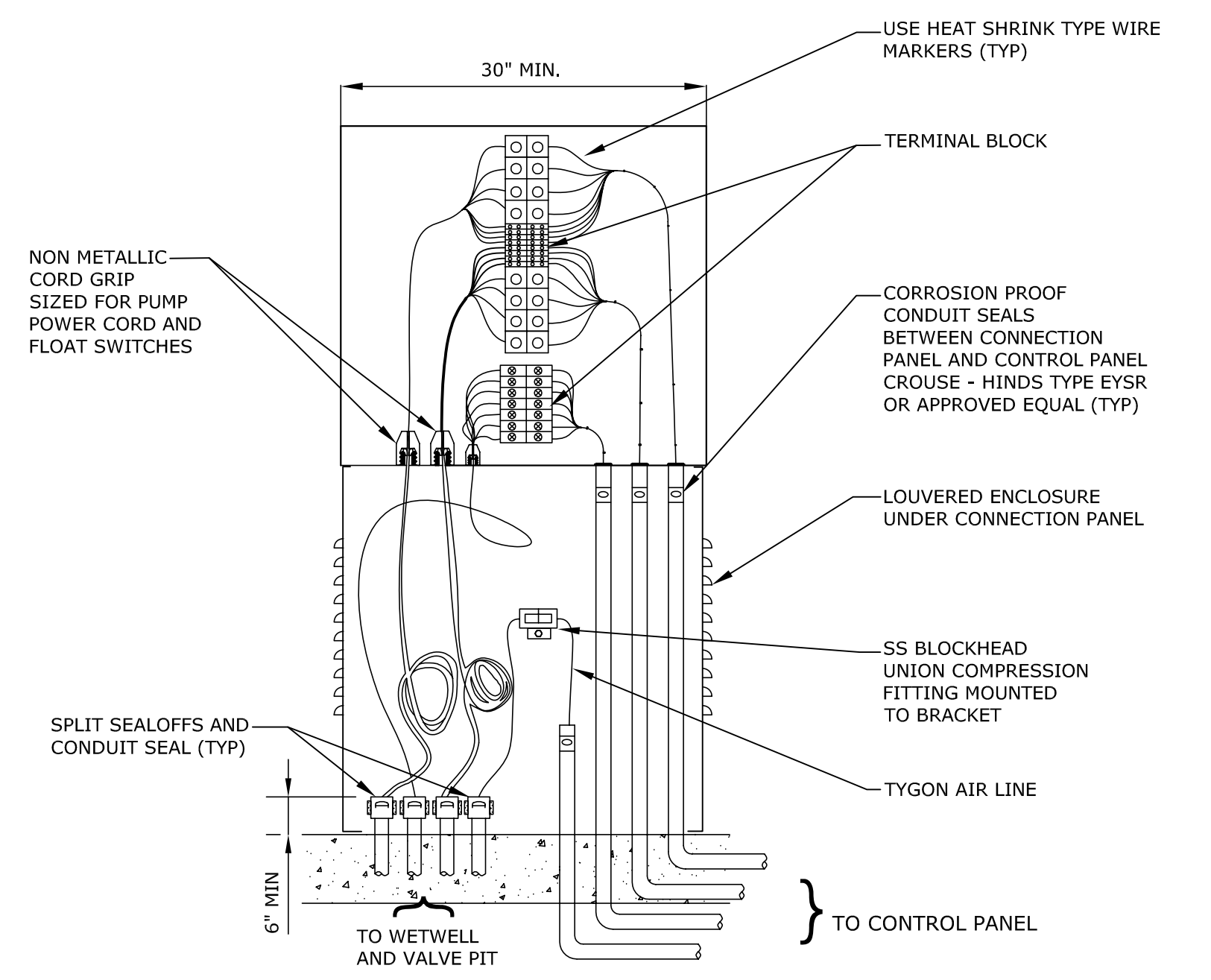


ELEVATION
NTS



SECTION B
SCALE: NTS
E-2

SECTION A
SCALE: NTS
E-2



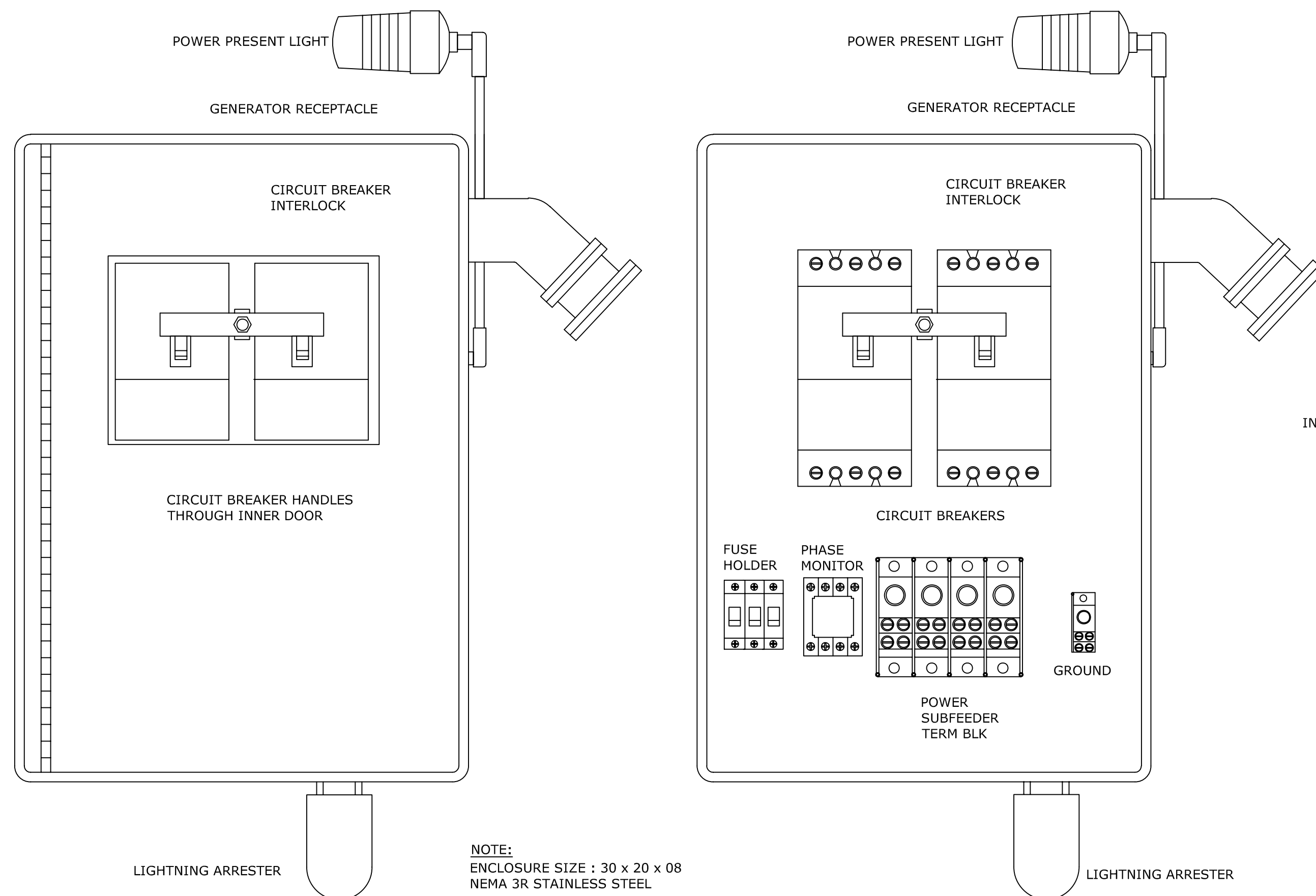
CONNECTION PANEL DETAIL
NTS

- NOTE:**
1. AREA INSIDE WET WELL IS CONSIDERED A CLASS 1, DIVISION 2 AREA IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
 2. ALL OTHER AREAS ARE NOT CLASSIFIED
 3. NO PENETRATIONS SHALL BE PERMITTED IN THE TOP OF ANY PANEL BOX

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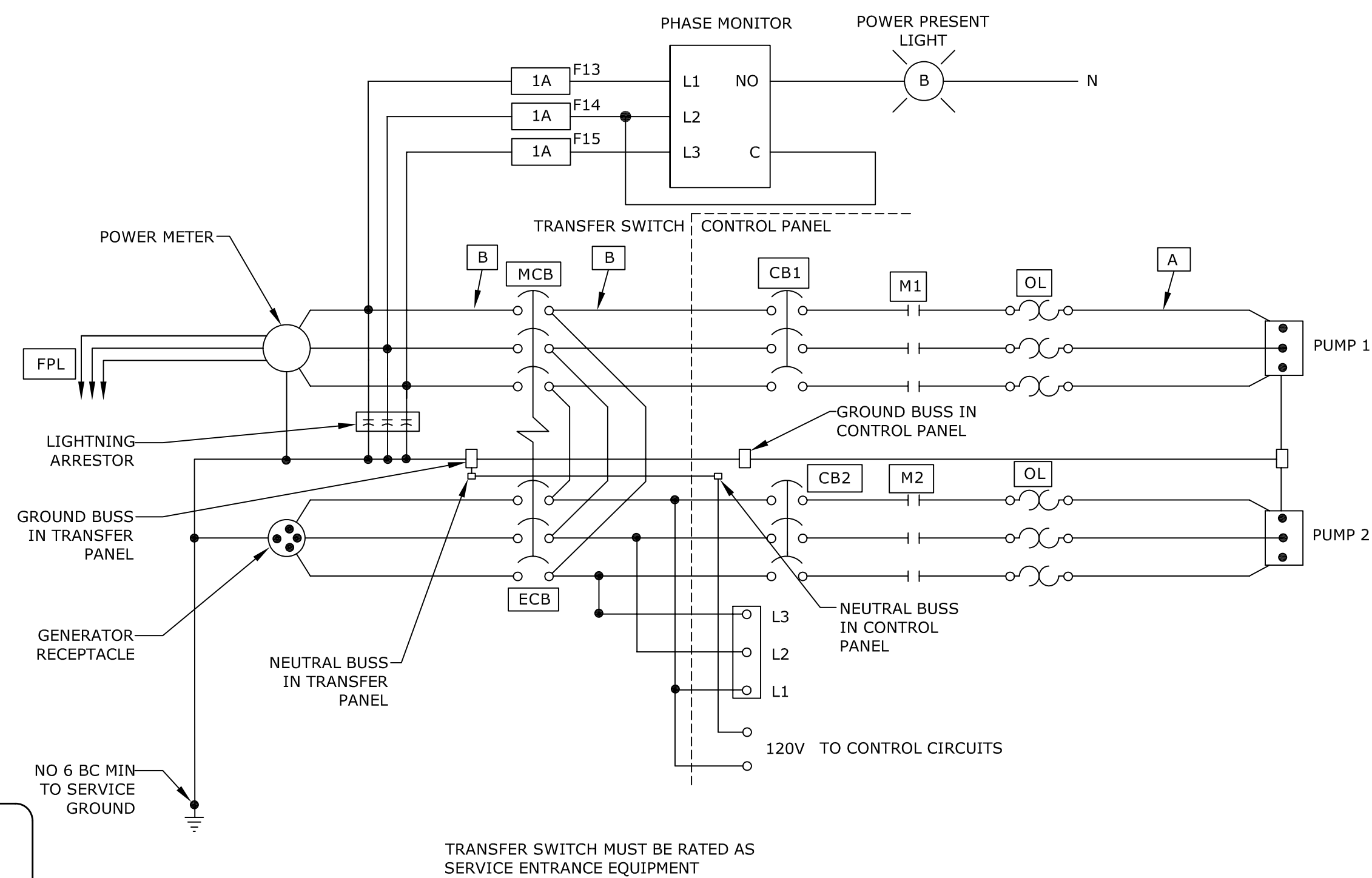
Sunshine State One Call of Florida, Inc.

DATE:	BY:	CHECKED:	DESIGN BY:	PERMIT SET	BROWARD COUNTY PUBLIC WORKS DEPT HIGHWAY CONSTRUCTION & ENGINEERING DIV	WATER & WASTEWATER SERVICES ENGINEERING DIVISION	ALL DRAWINGS TO BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER	TYPICAL STANDARD LIFT STATION	ELECTRICAL PLAN AND CONNECTION PANEL DETAIL	DESIGNATION
				MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION	PLAN CONSISTENT WITH PLAT REQUIREMENTS	2555 WEST COPANS ROAD POMPAHO BEACH, FL 33069				E-2
				ALL MATERIALS USED AND INSTALLATIONS MADE WITHIN THE PUBLIC R/W OR EXEMPTIONS SHALL BE IN ACCORDANCE WITH BICHD SPECIFICATIONS	PUBLIC RIGHT OF WAY APPROVAL FOR PAVING, GRADING AND DRAINAGE	PHONE NO. 954-831-0745 FAX: 954-831-0925				SHEET NO 9 OF 12
				24 HRS PRIOR TO COMMENCING ANY WORK IN THE PUBLIC R/W CONTACT THE BICHD AT 954-577-4620 FOR INSPECTION	DATE:					
				APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A PERMIT FOR CONSTRUCTION A PERMIT FOR CONSTRUCTION MUST BE OBTAINED FROM THE BICHD PRIOR TO COMMENCING CONSTRUCTION IN THE PUBLIC R/W.	DATE:					
					DOES NOT INCLUDE APPROVAL OF PAVEMENT MARKINGS & SIGNS					



EMERGENCY CONNECTION/TRANSFER SWITCH

NTS



240V MAIN POWER CIRCUIT

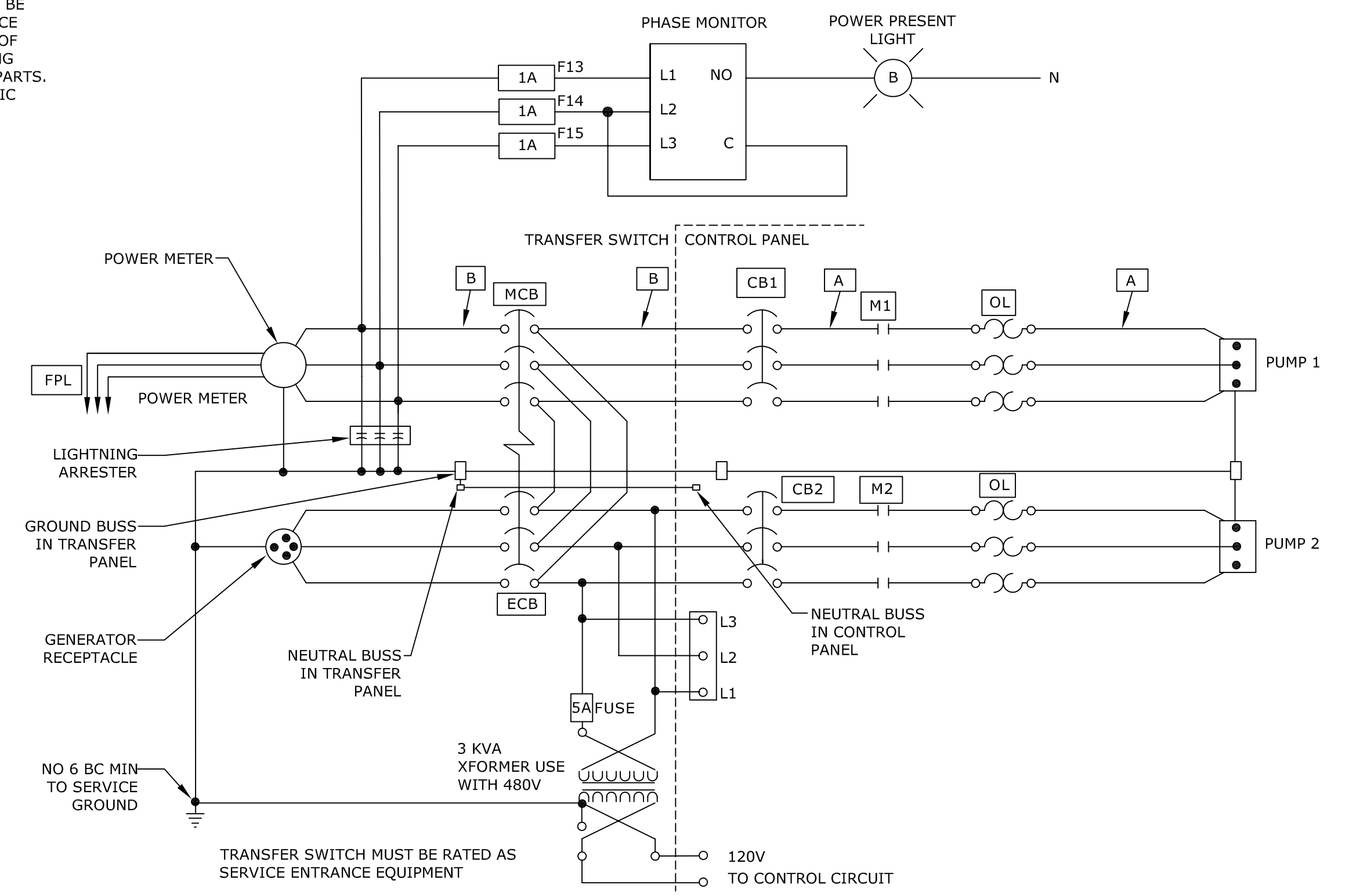
240 VOLT								
HP	MOTOR AMP (I)	STARTER SIZE	CONDUCTOR (A)	PUMP CB	MAIN/EMER CB	CONDUCTOR (B)	GENERATOR PLUG*	SERVICE RACEWAY
3	9.6	1	12	20	100	1 (44A)	100	1 1/2"
5	15.2	1	10	40	100	1 (58A)	100	1 1/2"
7.5	22	2	10	50	125	1 (75A)	100	1 1/2"
10	28	2	8	70	125	1 (90A)	100	1 1/2"
15	42	3	6	100	175	0 (125A)	100	1 1/2"
20	54	3	4	150	225	0 (155A)	100	1 1/2"
25	68	4	4	175	300	00 (190A)	100	2"
30	80	4	3	200	300	000 (220A)	100	2"

480 VOLT								
HP	MOTOR AMP (I)	STARTER SIZE	CONDUCTOR (A)	PUMP CB	MAIN/EMER CB	CONDUCTOR (B)	GENERATOR PLUG*	SERVICE RACEWAY
3	5	1	12	15	100	1 (32.5A)	200	1 1/2"
5	8	1	12	15	100	1 (40A)	200	1 1/2"
7.5	11	1	12	20	100	1 (47.5A)	200	1 1/2"
10	14	2	12	30	100	1 (55A)	200	1 1/2"
15	21	2	10	50	125	1 (72.5A)	200	1 1/2"
20	27	2	10	60	125	1 (87.5A)	200	1 1/2"
25	34	2	8	90	150	1 (105A)	200	1 1/2"
30	40	3	6	100	150	1 (120A)	200	1 1/2"
40	52	3	4	150	225	0 (150A)	200	1 1/2"
50	65	4	4	175	250	00 (182.5A)	200	2"
60	77	4	3	200	300	000 (212.5A)	200	2"
75	96	4	1	250	350	0000 (260A)	200	2"

INDICATE APPLICABLE DATA

NOTE : THE ABOVE TABLE COMPILED PER CURRENT NATIONAL ELECTRIC CODE SECTION 430 TABLE 430.250
GROUNDING ELECTRODE SIZED PER NATIONAL ELECTRICAL CODE
* GENERATOR PLUGS ARE SIZED TO MATCH THE GENERATOR'S CORD, NOT THE ELECTRICAL SERVICE.
CONDUCTOR B IS A MOTOR CIRCUIT FEEDER, RATED AT 90° C, SIZED FOR 2 PUMPS AT 125% OF FLA PLUS A 20 AMP GENERAL LOAD.

NOTE:
MCB AND ECB ARE TO BE SUITABLE FOR USE AS SERVICE EQUIPMENT ARE TO BE PERMANENTLY IDENTIFIED AS SERVICE DISCONNECTS, ARE TO BE CAPABLE OF BEING OPERATED WITHOUT EXPOSING OPERATOR TO CONTACT WITH LIVE PARTS. GROUND FAULT PROTECTION-25000 IC AT 240 V, 30000 IC AT 480 V.



480V MAIN POWER CIRCUIT

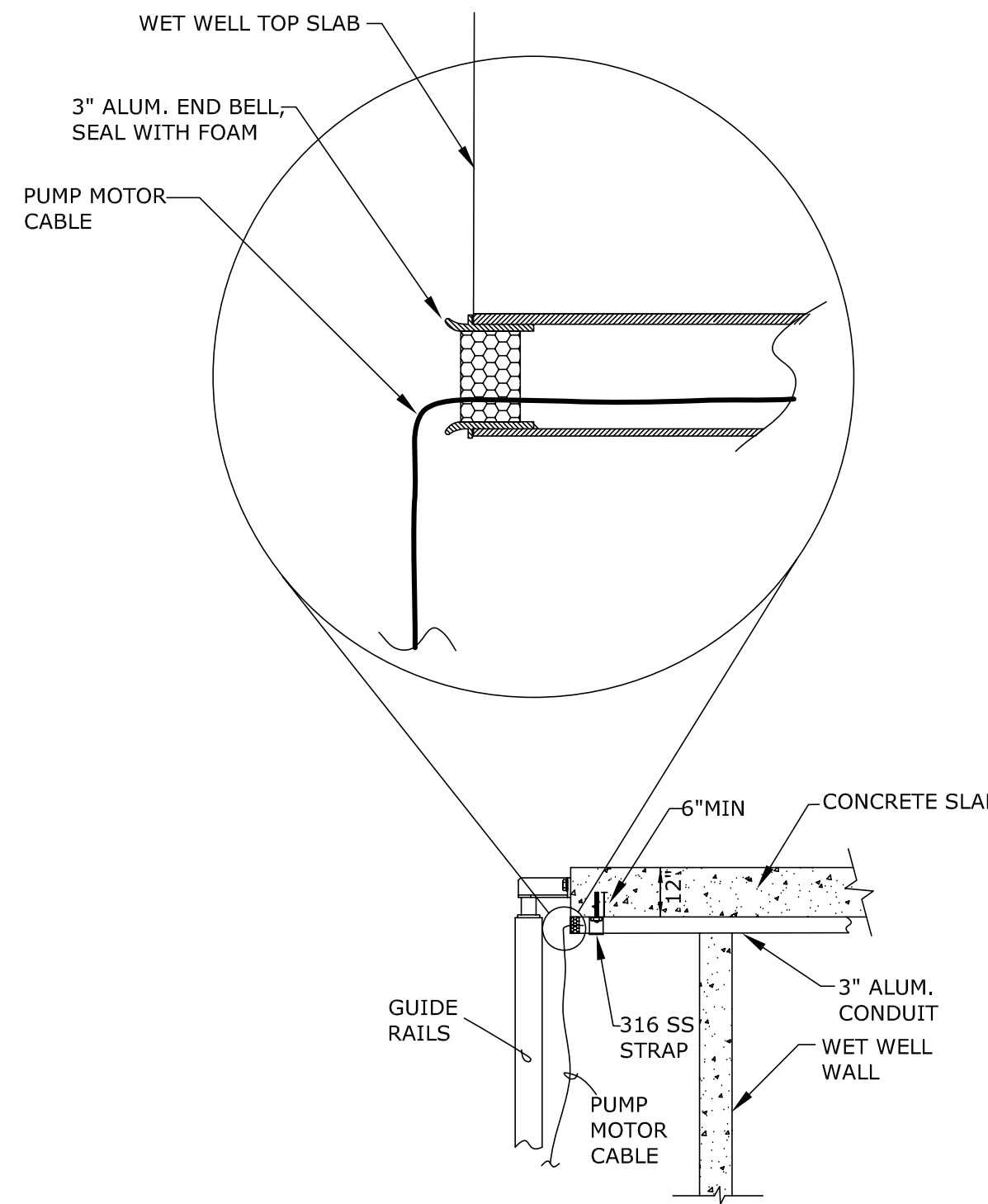
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Sunshine State One Call of Florida, Inc.

DATE:	BY:	CHECKED:	DESIGN BY:	PERMIT SET	BROWARD COUNTY PUBLIC WORKS DEPT HIGHWAY CONSTRUCTION & ENGINEERING DIV	WATER & WASTEWATER SERVICES ENGINEERING DIVISION	ALL DRAWINGS TO BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER	TYPICAL STANDARD LIFT STATION	ELECTRIC SERVICE AND TRANSFER SWITCH	DESIGNATION
			DRAWN BY:	MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION MATERIALS	PLAN CONSISTENT WITH PLAT REQUIREMENTS	2555 WEST COPANS ROAD POMPANO BEACH, FL 33069				E-3
			CHECK BY:	24 HRS PRIOR TO COMMENCING ANY WORK IN THE PUBLIC R/W OR CONTACT THE BICHECKED AT 954-577-4620 FOR INSPECTION	PUBLIC RIGHT OF WAY APPROVAL FOR PAVING, GRADING AND DRAINAGE	PHONE NO. 954-831-0745 FAX: 954-831-0925				SHEET NO 10 OF 12
			DATE:	APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A PERMIT FOR CONSTRUCTION A PERMIT FOR CONSTRUCTION MUST BE OBTAINED FROM THE BICHECKED PRIOR TO COMMENCING CONSTRUCTION IN THE PUBLIC R/W.	DATE:					
			SCALE:		DOES NOT INCLUDE APPROVAL OF PAVEMENT MARKINGS & SIGNS					

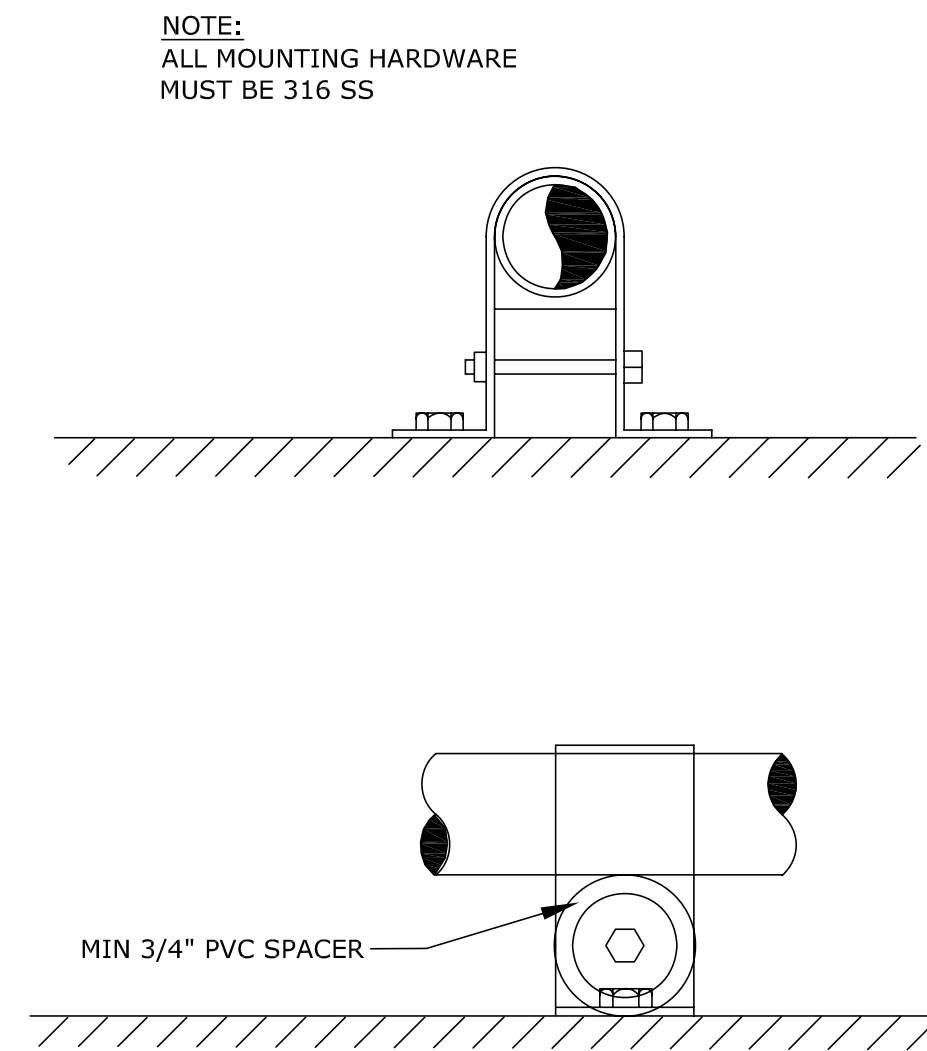
ELECTRICAL NOTES

- PUMPING STATION CONTROL PANEL SHALL BE PROVIDED BY BROWARD COUNTY WATER & WASTEWATER SERVICES. ALL OTHER PANELS, COMPONENTS, PARTS AND APPURTENANCES TO BE PROVIDED BY THE CONTRACTOR. CONTRACTOR IS DIRECTED TO BCWWS WEB SITE, WWW.BROWARD.ORG - FIND AN AGENCY - WATER & WASTEWATER SERVICES - WATER/WASTEWATER TECHNICAL STANDARDS - PUMP STATION DETAILS FOR INFORMATION OF CONTROL PANELS.
- CONTROL PANEL ELECTRICAL SYSTEM SHALL BE COMPLETELY AND EFFECTIVELY GROUNDED AS REQUIRED BY NEC.
- ALL ELECTRICAL INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE NEC AND SHALL COMPLY WITH ALL NATIONAL AND LOCAL RULES, ORDINANCES, AND CODES AT TIME OF INSTALLATION.
- ALL SERVICE CONDUCTORS SHALL BE STRANDED COPPER TYPE THWN.
- ALL ENCLOSURES SHALL BE 316 STAINLESS STEEL WATERTIGHT NEMA 3R RIGHT SIDE OPENING. ALL MOUNTING HARDWARE MUST BE 316 SS.
- USE T & B CORROSION RESISTANT LIQUIDTIGHT-STRAIN RELIEF THERMO-PLASTIC FLEXIBLE CORD & CABLE CONNECTOR ON THE INSIDE OF THE TOP CONNECTION PANEL TO FIT APPROPRIATE CABLE SIZE. TRANSFER SWITCH MAY BE MOUNTED ON EITHER END BUT GENERATOR RECEPTACLE MUST BE ON OUTSIDE. (STATE LEFT OR RIGHT SIDE GEN. RECEPT. WHEN ORDERING.)
- ALL PUMP MOTORS SHALL BE 3 PHASE.
- ALL CONTROL CIRCUIT WIRES SHALL BE TERMINATED WITH FORK TYPE CRIMP-ON CONNECTORS AND SHALL HAVE AN ADJACENT HEAT SHRINK NUMBER, CORRESPONDING EACH CONNECTOR WITH NUMBERS AS INDICATED ON THE SCHEMATIC. NO CONCEALED WIRING SHALL BE PERMITTED BEHIND THE SUB PANEL.
- EACH DEVICE IN THE CONTROL CIRCUIT SHALL BE IDENTIFIED WITH THE PROPER CONTROL CIRCUIT ABBREVIATION AS SHOWN IN THE TABLE AND ON THE SCHEMATIC.
- FROM THE REAR SIDE OF THE DEAD FRONT HINGED PANEL, ALL WIRES SHALL BE NEATLY LACED TOGETHER INTO A HARNESS AND TERMINATED INTO A TERMINAL STRIP.
- DRIVEN GROUND ROD WHICH DOES NOT HAVE A RESISTANCE TO GROUND OF 10 OHMS OR LESS SHALL BE AUGMENTED UNTIL THE RESISTANCE TO GROUND IS 10 OHMS OR LESS. LIGHTNING ARRESTER LEADS TO BE ATTACHED TO THE MCB AS PER MOST RECENT NEC ARTICLE # 280.
- ALL BRANCH CIRCUITS SHALL HAVE PROPER SIZE WIRING.
- WHEN CONNECTIONS ARE COMPLETE IN THE CONNECTION BOX, COAT THE TERMINAL BLOCKS AND WIRE ENDS WITH PROTECTIVE COMPOUND, NO-OXIDE OR EQUAL, TO PREVENT CORROSION.
- SCHEMATIC DRAWINGS TO BE PLACED IN STATION ARE TO BE ENCASED BETWEEN TWO PIECES OF 3/16" PLEXIGLASS.
- ELECTRICAL SERVICE SHALL BE A MINIMUM OF 100 AMPS OF # 1 THWN STRANDED COPPER WIRE IN RIGID ALUMINUM CONDUIT-MINIMUM SIZE = 1 1/2". INTERMEDIATE METAL CONDUIT UNACCEPTABLE.
- UNDERGROUND SERVICE PULL BOXES ARE TO BE INSTALLED AT EACH 250 FEET OF SERVICE PULL. VOLTAGE DROP TO BE LIMITED TO A MAXIMUM OF 3 PERCENT DROP.
- BUBBLER TUBING SHALL BE CLEAR, 3/4" TYGON (OR EQUAL). BACK-UP SENSOR TUBING TO BE RED. TUBING FITTINGS SHALL BE SWAGELOK BRASS FITTING OR EQUAL.
- COLOR CODING:
 - SINGLE PHASE 120/240V-BLACK, WHITE, AND RED.
 - THREE PHASE 120/240V 4 WIRE-HI LEG CENTER AND ORANGE, WHENEVER NEUTRAL IS PRESENT. IN THE ABSENCE OF NEUTRAL, THEY WILL BE MARKED BLACK, RED, AND BLUE AND/OR A-B-C. WILL CONSTITUTE CLOCKWISE ROTATION OF ALL 3-PHASE MOTORS. THIS IS TO ASSURE PHASE RELATION THROUGHOUT THE SYSTEM.
 - 120/208V, 4 WIRE, THREE PHASE SHALL BE BLACK, WHITE, RED, AND BLUE WHERE THE NEUTRAL IS PRESENT. IF THE NEUTRAL IS ABSENT, BLACK, RED, AND BLUE AND/OR A-B-C WILL CONSTITUTE CLOCKWISE ROTATION OF ALL THREE PHASE MOTORS. THIS IS TO ASSURE PHASE RELATION THROUGHOUT THE SYSTEM.
 - 277/480V, 4-WIRE-BROWN, ORANGE, YELLOW AND WHITE WHEN THE NEUTRAL IS PRESENT. IF THE NEUTRAL IS ABSENT, A-B-C WILL CONSTITUTE CLOCKWISE ROTATION OF ALL THREE PHASE MOTORS. THIS IS TO ASSURE PHASE RELATION THROUGHOUT THE SYSTEM.
- PAINT PVC PIPES, CONDUITS AND ANY PARTS NOT STAINLESS OR ALUMINUM WITH TWO (2) COATS OF ALUMINUM PAINT.
- FABRICATE ANTENNA MAST FROM A 21 FOOT LENGTH OF 2" DIAMETER SCHEDULE 40 ALUMINUM PIPE. PAINT LOWER THREE (3) FEET WITH ASPHALTUM PAINT, CAP THE TOP OF PIPE.
- RUN 3/4 INCH RIGID ALUMINUM CONDUIT UP THE MAST FOR THE ANTENNA CABLE TO WITHIN 16 INCHES OF THE TOP. RUN SECOND 3/4 INCH CONDUIT UP THE MAST FOR ALARM AND FLOOD LIGHTS AS SHOWN. USE STAINLESS STEEL UNISTRUT AND CLAMPS TO HOLD CONDUITS TO THE MAST.
- MOUNT FLOOD LIGHT AND FLASHING RED LIGHT ON THE ANTENNA MAST AT TEN (10) FEET AND EIGHT (8) FEET ABOVE GRADE.
- TEST PUMPS AS FOLLOWS:
 - TECHNICIAN MUST BE PRESENT TO CONDUCT TESTS.
 - MEGGER MOTORS, MOTORS SHALL BE 20 MEGOHMS OR MORE TO GROUND, DO NOT MEGGER LOW VOLTAGE CONTROLS.
 - CHECK VOLTAGE, CHECK PUMP ROTATION, RECORD VOLTAGE AND AMPS UNDER LOAD.
 - DEMONSTRATE PROPER OPERATION OF ALL CONTROLS.
 - CONDUCT DRAWDOWN TESTS AS REQUIRED.
 - CHECK OPERATION WITH OWNER'S PORTABLE GENERATOR AND CHANGE WIRE CONNECTIONS IN THE PANEL TO GIVE CORRECT ROTATION.



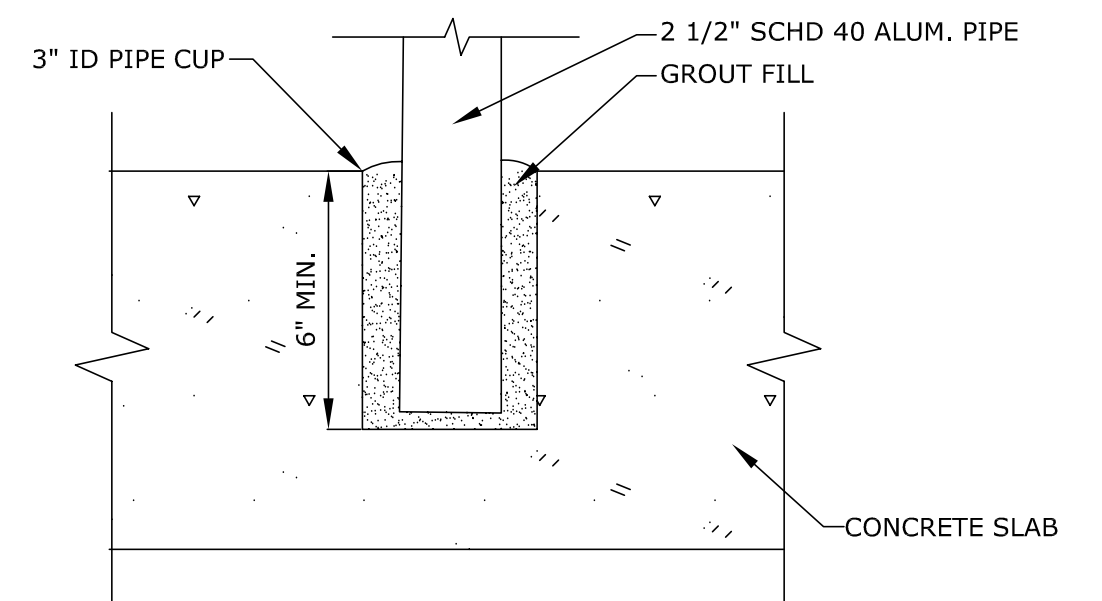
GUIDE RAIL AND PUMP CONDUIT DETAILS

NTS
DETAIL 1
 NTS E-2



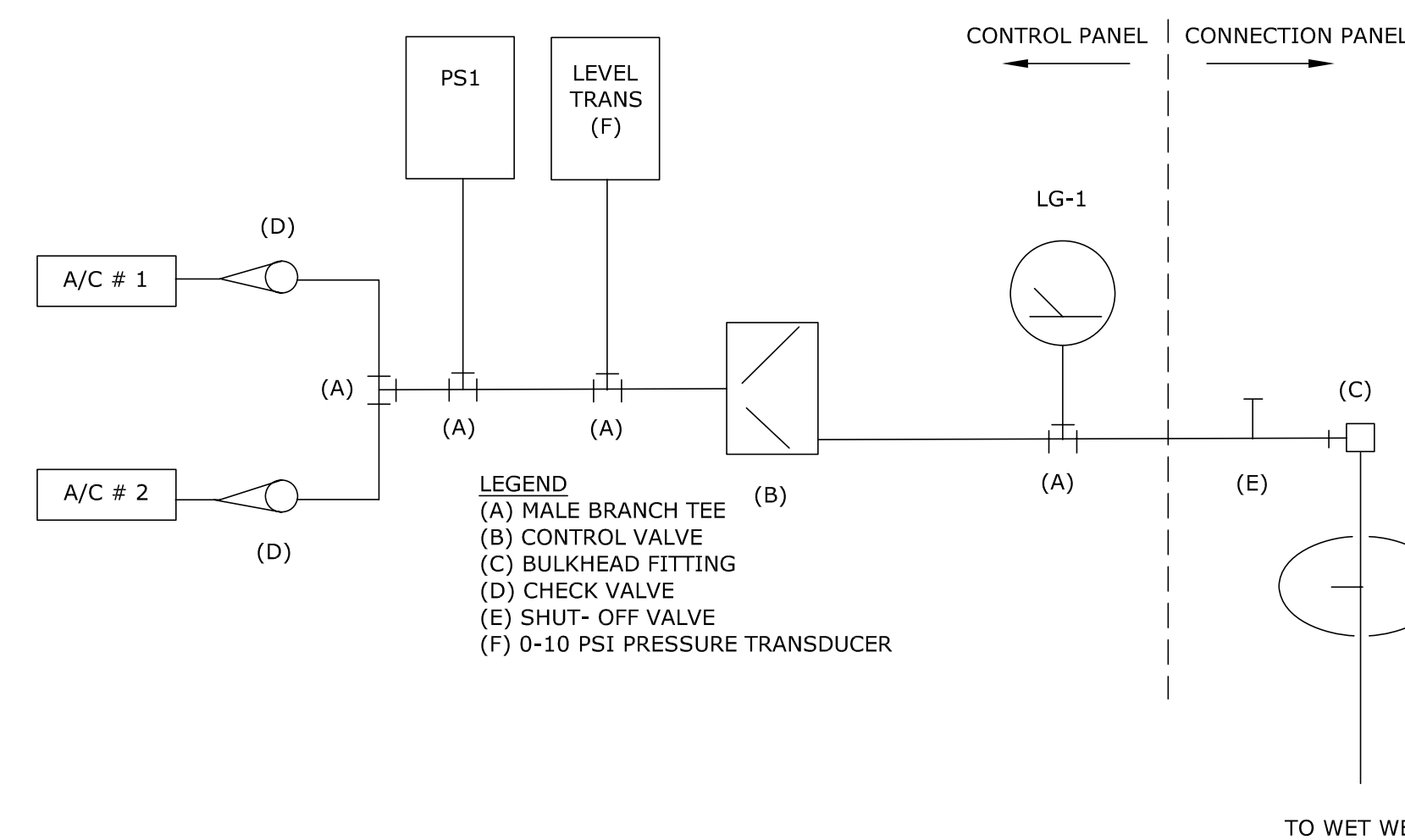
BUBBLER PIPE SPACER

NTS
DETAIL 2
 NTS E-2

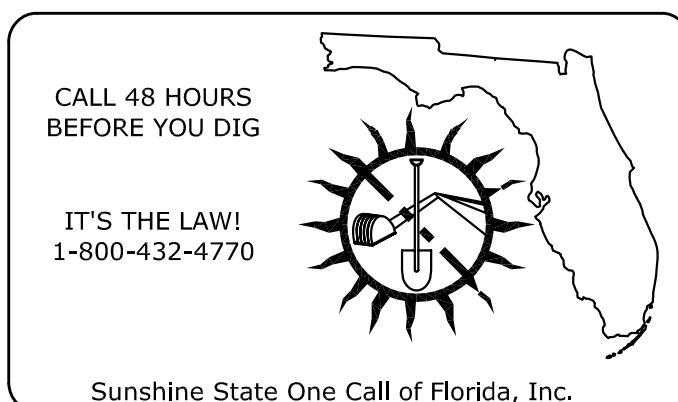


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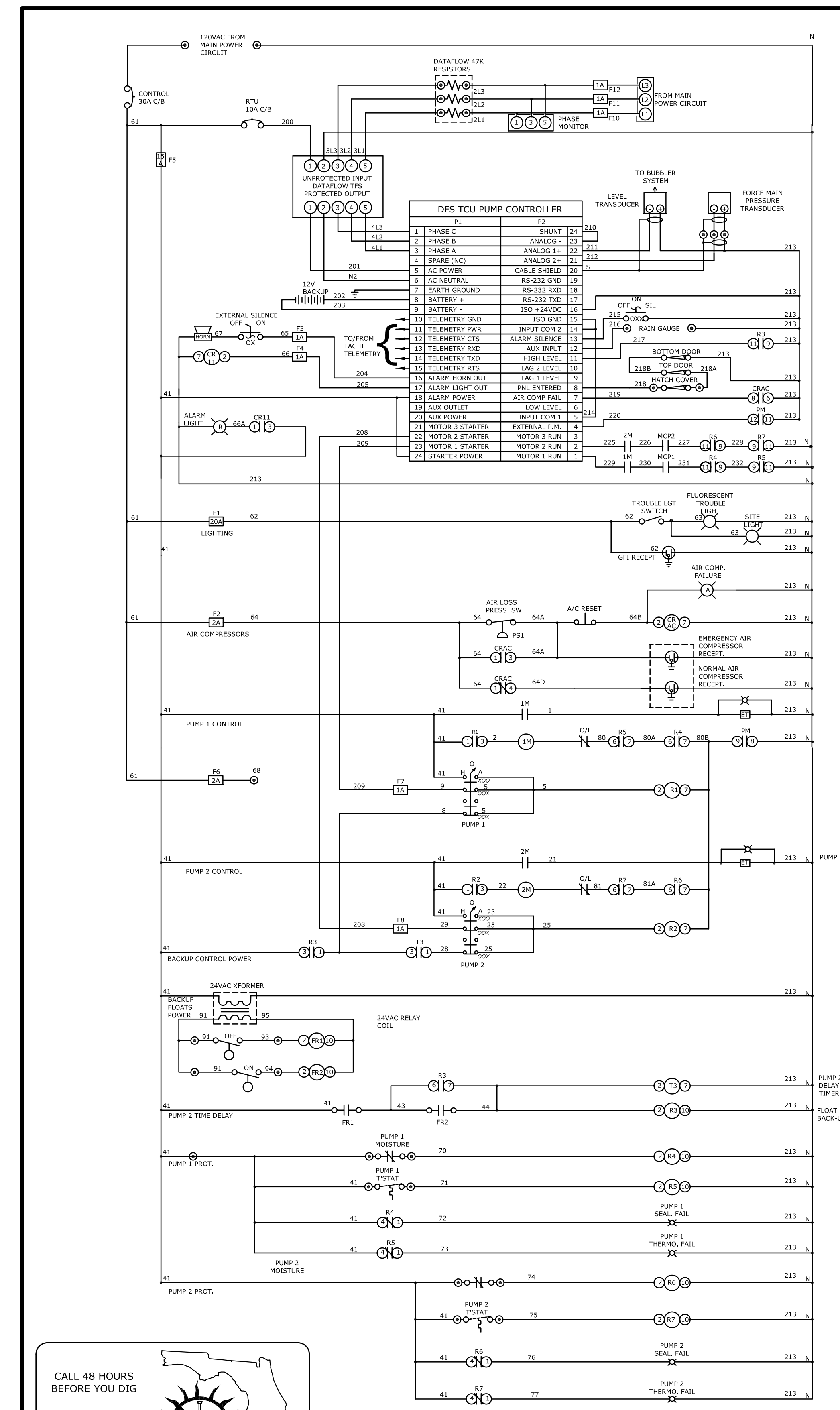
NTS
DETAIL 3
 NTS E-2



BUBBLER PIPING
 NTS



DATE:	BY:	CHECKED:	DESIGN BY:	PERMIT SET:	BROWARD COUNTY PUBLIC WORKS DEPT HIGHWAY CONSTRUCTION & ENGINEERING DIV	WATER & WASTEWATER SERVICES ENGINEERING DIVISION	ALL DRAWINGS TO BE SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER	TYPICAL STANDARD LIFT STATION	ELECTRICAL NOTES AND DETAILS	DESIGNATION
			DRAWN BY:	MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION	PLAN CONSISTENT WITH PLAT REQUIREMENTS	2555 WEST COPANS ROAD POMPANO BEACH, FL 33069				E-4
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			DATE:	24 HRS PRIOR TO COMMENCING ANY WORK IN THE PUBLIC R/W CONTACT THE BICHD AT 954-577-4620 FOR INSPECTION	DOES NOT INCLUDE APPROVAL OF PAVEMENT MARKINGS & SIGNS					
			SCALE:	APPROVAL OF THIS PLAN DOES NOT CONSTITUTE A PERMIT FOR CONSTRUCTION A PERMIT FOR CONSTRUCTION MUST BE OBTAINED FROM THE BICHD PRIOR TO COMMENCING CONSTRUCTION IN THE PUBLIC R/W.						



ELECTRICAL CONTROLS CIRCUIT

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Sunshine State One Call of Florida, Inc.

DATE:	BY:	CHECKED:

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FIELD BY:
DESIGN BY:
DRAWN BY:
CHECK BY:
DATE:
SCALE:

PERMIT SET
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BROWARD COUNTY PUBLIC WORKS DEPT HIGHWAY CONSTRUCTION & ENGINEERING DIV
PLAN CONSISTENT WITH PLAT REQUIREMENTS
PUBLIC RIGHT OF WAY APPROVAL FOR PAVING, GRADING AND DRAINAGE
DATE:
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WATER & WASTEWATER SERVICES
ENGINEERING DIVISION
2555 WEST COPANS ROAD
POMPANO BEACH, FL 33069
PHONE NO. 954-831-0745 FAX: 954-831-0925

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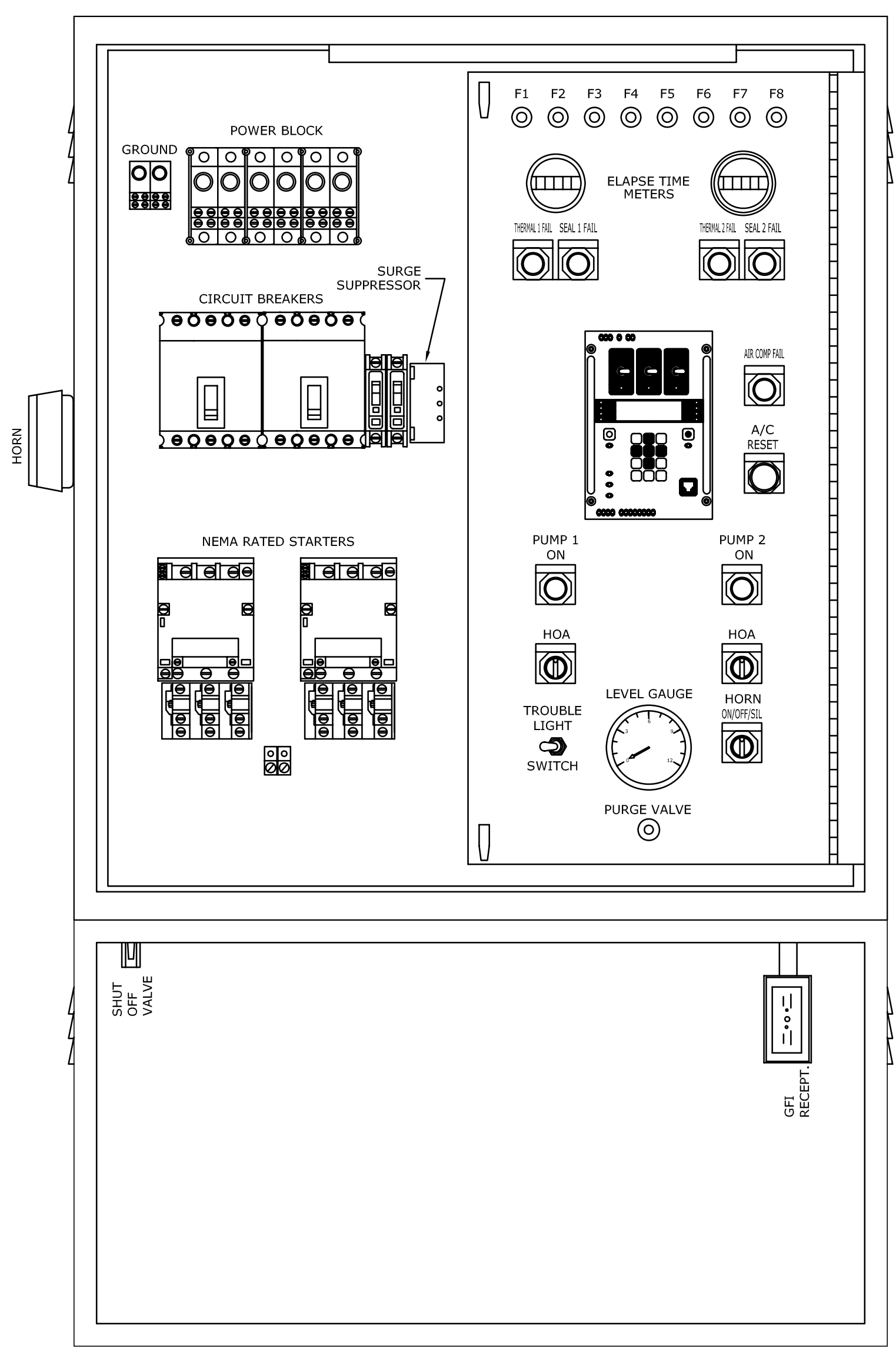
TYPICAL STANDARD LIFT STATION

ELECTRICAL SCHEMATIC AND CONTROL PANEL LAYOUT

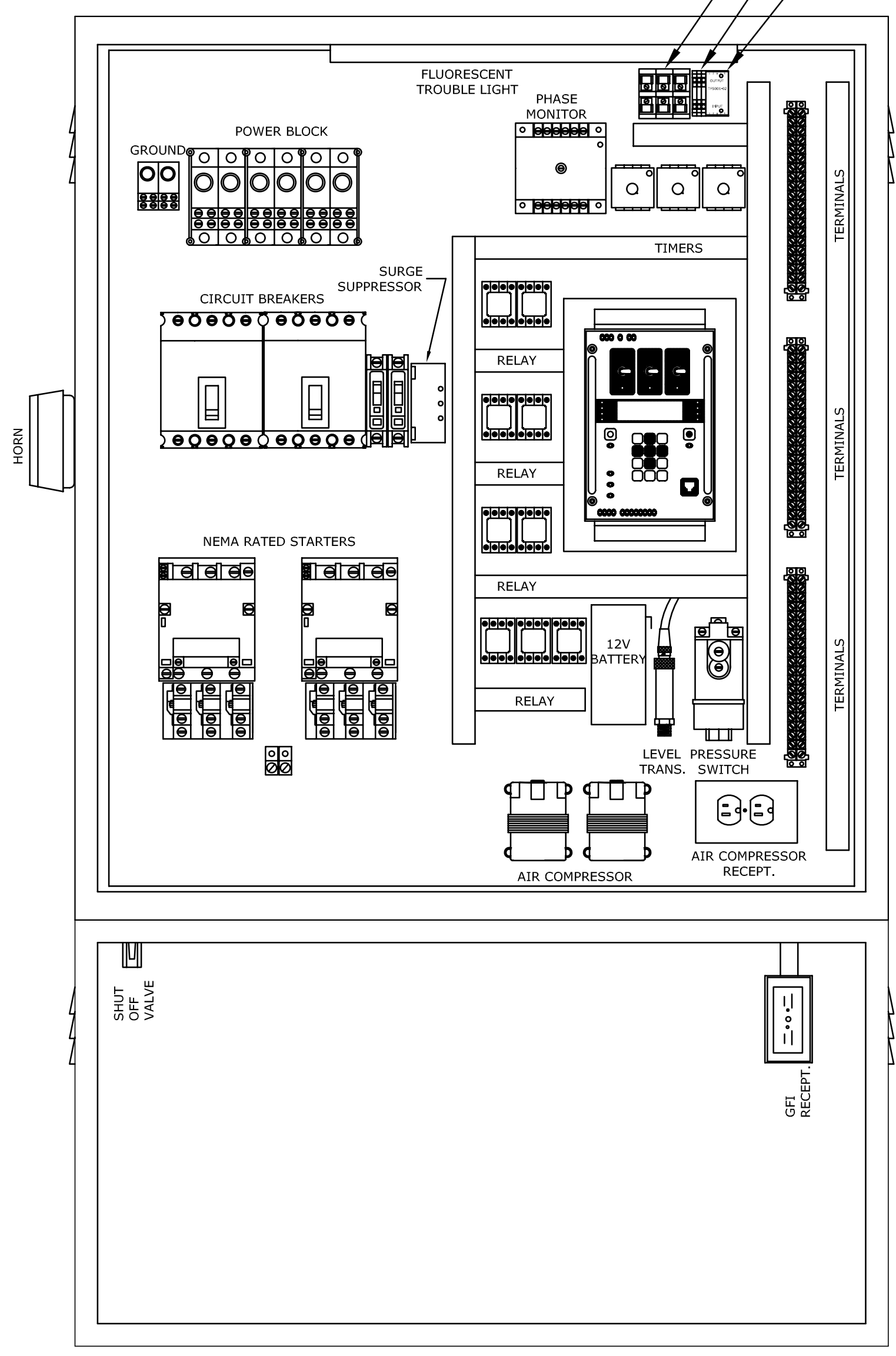
DESIGNATION
E-5
SHEET NO 12 OF 12

PANEL LAYOUT

W/DEAD FRONT

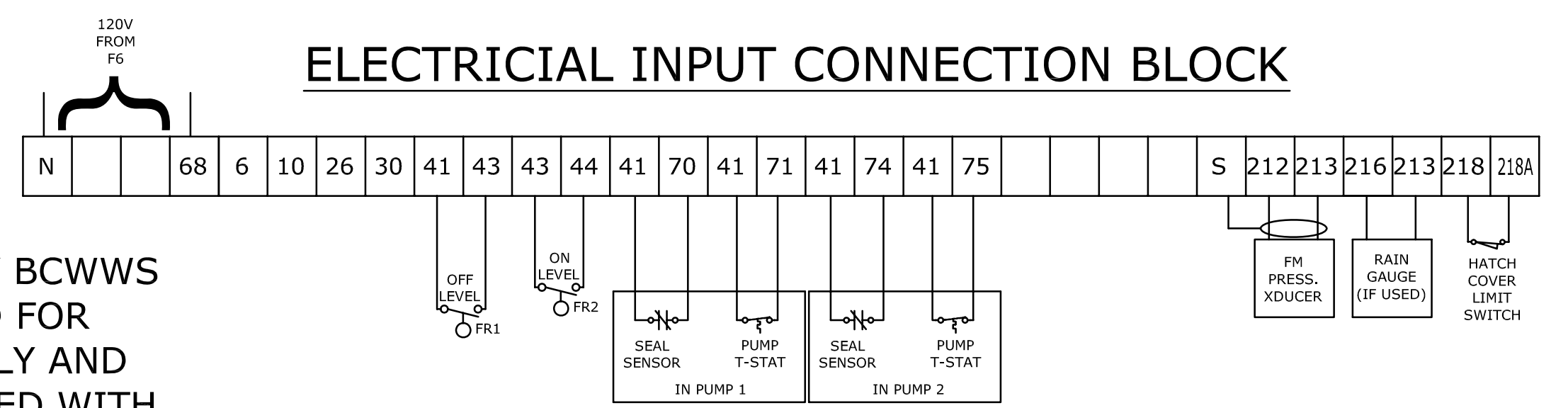


W/OUT DEAD FRONT



PHASE MONITOR
1A FUSES
DATAFLOW 47K RESISTOR TERMINALS
DATAFLOW TFS

ELECTRICAL INPUT CONNECTION BLOCK



CONTROL PANEL IS PROVIDED BY BCWWS
THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND IS NOT INTENDED TO BE INCLUDED WITH BID OR PERMIT SETS