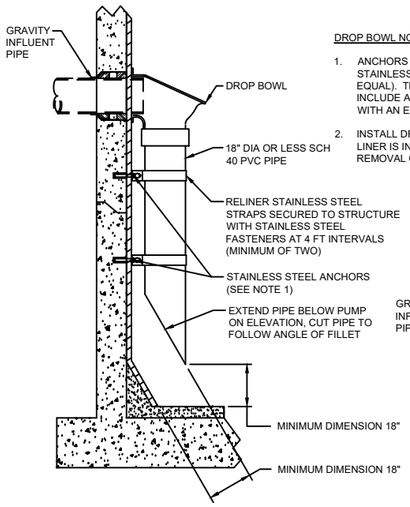
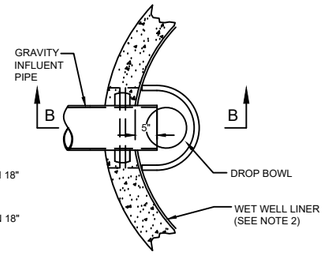


SECTION "B-B"



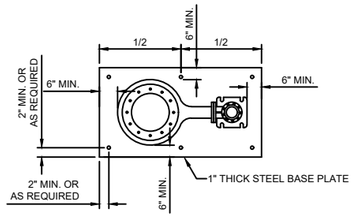
PLAN VIEW

DROP BOWL DETAIL

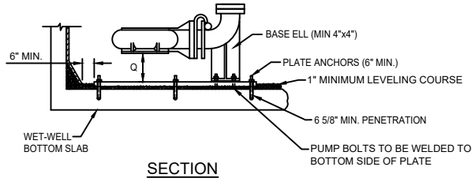
NOT TO SCALE

DROP BOWL NOTES:

1. ANCHORS TO BE CONSTRUCTED OF 316 STAINLESS STEEL "H.A.S." ROD BY HILTI OR EQUAL). THE ANCHORING SYSTEM SHALL INCLUDE ADHESIVE (HILTI H.V.U. OR EQUAL) WITH AN EMBEDMENT DEPTH OF 4 1/4".
2. INSTALL DROP BOWL AFTER THE WET WELL LINER IS INSTALLED. THIS WILL ENSURE EASY REMOVAL OF THE DROP BOWL (IN THE FUTURE).



PLAN



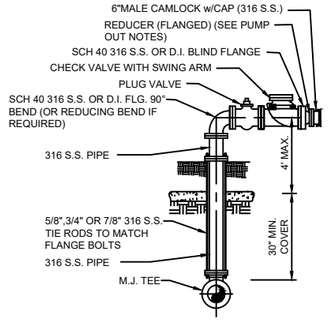
SECTION

SUBMERSIBLE PUMP BASE PLATE DETAIL

NOT TO SCALE

BASE PLATE NOTES:

1. PLATE ANCHORS TO BE 3/4" DIAMETER, CONSTRUCTED OF 316 S.S. (H.A.S. ROD) w/ "HVU" ADHESIVE CAPSULE PROVIDING AN EMBEDMENT DEPTH OF 6 5/8". ACCEPTABLE: HILTI OR JEA APPROVED EQUAL.
2. NO EXPANSION ANCHORS ALLOWED.
3. PLATE SIZE: 6" LARGER THAN BASE ELL & PUMP VOLUTE TYP. ALL AROUND.
4. BASE ELL BOLTS AND STUDS TO BE TYPE 316 STAINLESS STEEL. 5. BASE ELL BOLT HEADS SHALL BE WELDED TO UNDER SIDE OF STEEL PLATE.

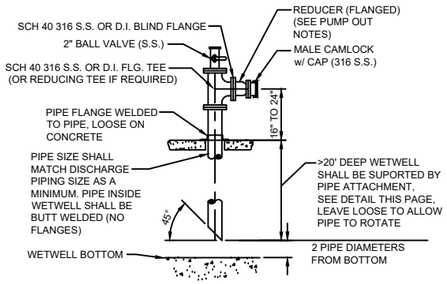


OUTSIDE WETWELL

FOR FLOWS GREATER THAN 1000 GPM OR DISCHARGE PIPING GREATER THAN 6"

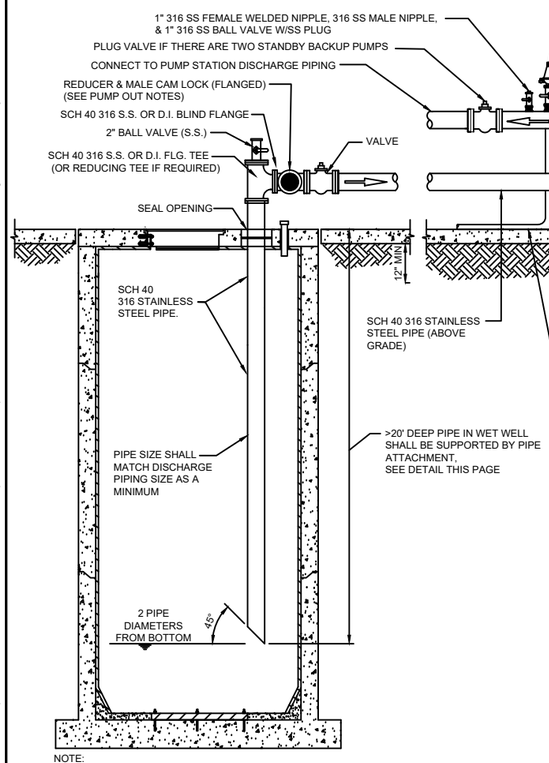
FREE STANDING PUMP OUT DETAIL

NOT TO SCALE



EMERGENCY SUCTION PIPE DETAIL

NOT TO SCALE

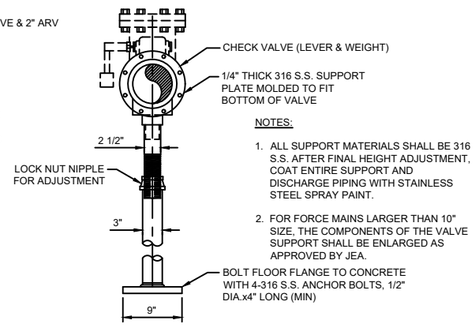


NOTE:
ENGINEER SHALL BE RESPONSIBLE FOR SIZING PIPING FOR NET POSITIVE SUCTION HEAD REQUIRED.

THE ABOVE PIPING IS SHOWN FOR CLARITY, SEE PLAN VIEW FOR PIPE ORIENTATION.

WETWELL CONNECTION TO STANDBY BACKUP PUMP DETAIL

NOT TO SCALE

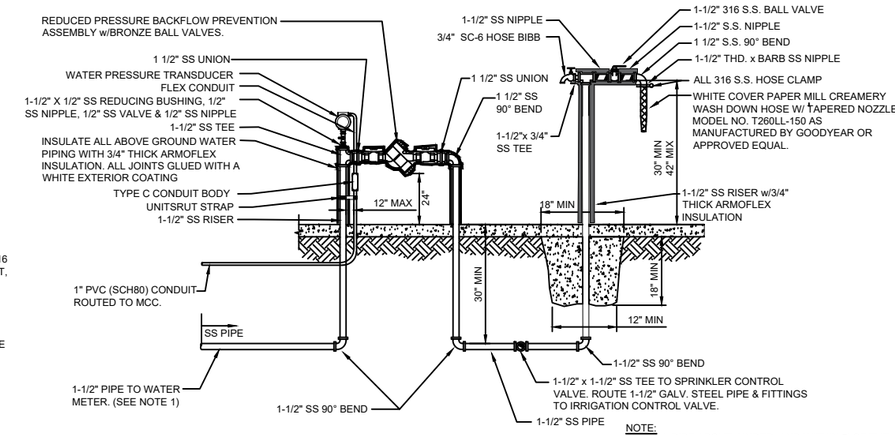


NOTES:

1. ALL SUPPORT MATERIALS SHALL BE 316 S.S. AFTER FINAL HEIGHT ADJUSTMENT, COAT ENTIRE SUPPORT AND DISCHARGE PIPING WITH STAINLESS STEEL SPRAY PAINT.
2. FOR FORCE MAINS LARGER THAN 10" SIZE, THE COMPONENTS OF THE VALVE SUPPORT SHALL BE ENLARGED AS APPROVED BY JEA.

ADJUSTABLE VALVE SUPPORT DETAIL

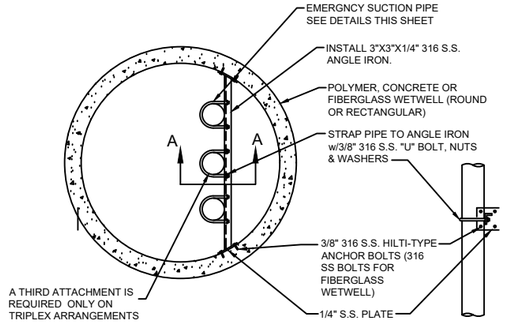
NOT TO SCALE



NOTE:
1. ALL PIPE ABOVE, UNDER, AND WITHIN 5' OF THE CONCRETE SLAB OR DRIVEWAY, SHALL BE 1-1/2" 316 SS. ALL OTHER WATER SERVICE PIPING SHALL BE 1-1/2" SCHEDULE 80 PVC.

1-1/2" HOSE STATION DETAIL

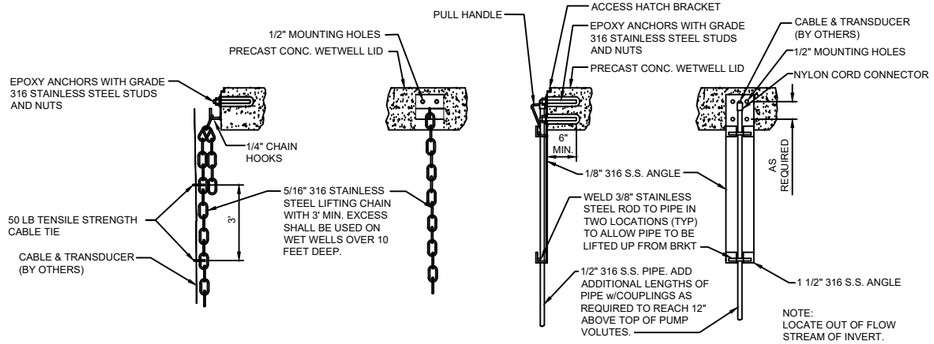
NOT TO SCALE



PLAN SECTION 'A-A'

PIPE ATTACHMENT TO WALL DETAIL

REQUIRED FOR ALL PUMPING STATIONS WITH WETWELL 20' DEEP AND GREATER (INSTALLED PRIOR TO SPECIALTY LINER)
NOT TO SCALE



NOTE:
LOCATE OUT OF FLOW STREAM OF INVERT.

SECTION VIEW FRONT VIEW SECTION VIEW FRONT VIEW

TRANSDUCER BRACKET DETAIL

NOT TO SCALE

NO.	BY	DATE	REVISIONS
1.			
2.			
3.			
4.			

DESIGN ENGINEER
FLORIDA REGISTRATION NO.

DESIGNED:
DRAWN BY:
DATE:
CHECKED BY:
DATE:

JEA sm Building Community

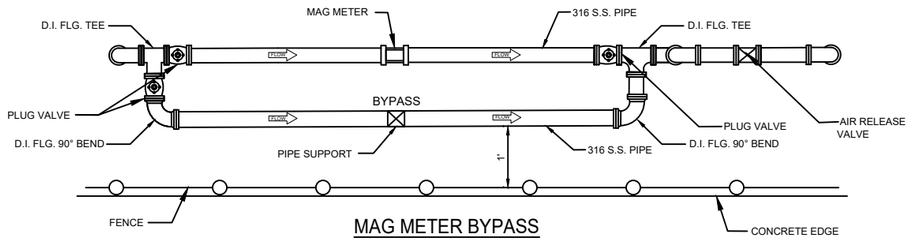
JEA STANDARD
PUMP STATION CONSTRUCTION DETAILS
MISCELLANEOUS DETAILS

PROJ. NO.
DATE:
SCALE:

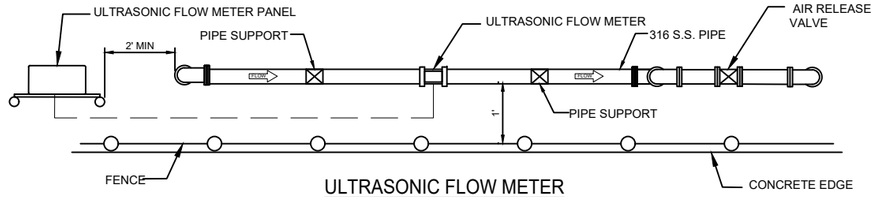
NO. SHEETS
SHEET NO.
DRAWING NO.

G:\Services\Shared\STANDARDS TEAM\2025 Water Wastewater Standards Manual\2025 Volume 2\PUMP STATION STANDARD DETAILS 2025.dwg Current Layout Tab = MISCELLANEOUS DETAILS 1 Wed Feb 19, 2025 - 14:55

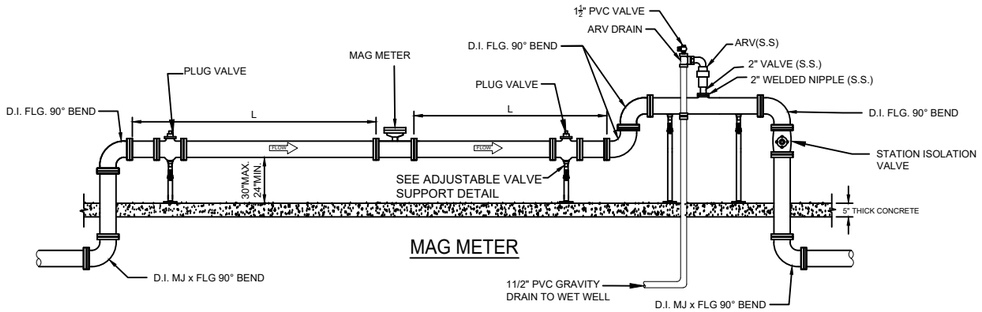
Xrefs Attached=



MAG METER BYPASS



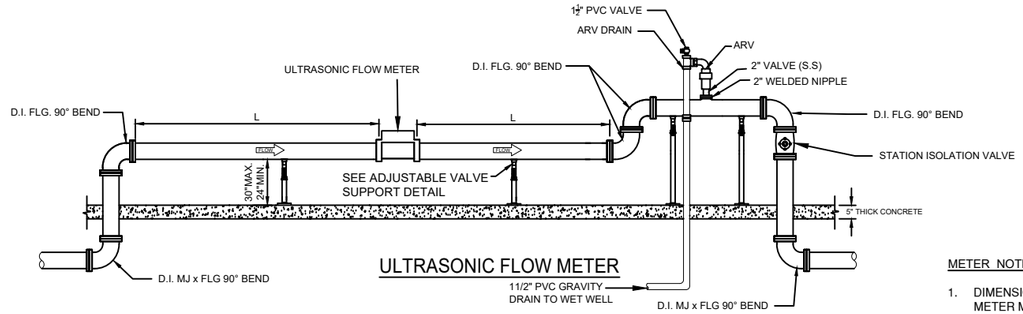
ULTRASONIC FLOW METER



MAG METER

MAG METER DETAIL

NOT TO SCALE



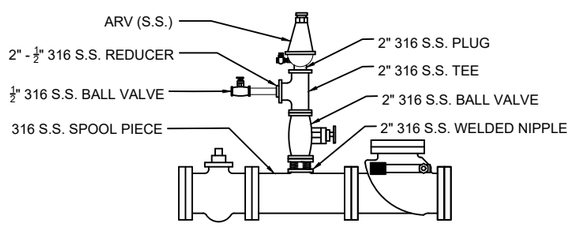
ULTRASONIC FLOW METER

ULTRASONIC FLOW METER DETAIL

NOT TO SCALE

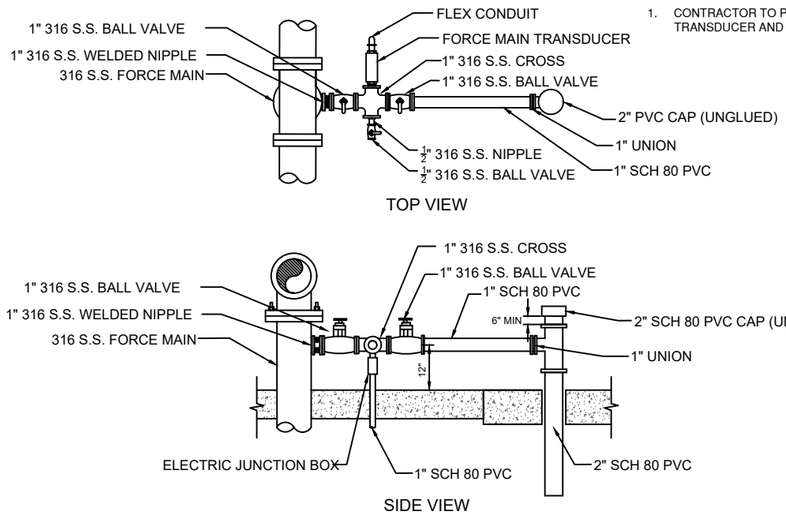
METER NOTES:

1. DIMENSION "L" AS SPECIFIED BY THE METER MANUFACTURER TO PROVIDE THE MAXIMUM STATED ACCURACY.
2. FLOW METERS ONLY REQUIRED FOR FLOWS GREATER THAN 350GPM.



DISCHARGE ARV DETAIL

NOT TO SCALE

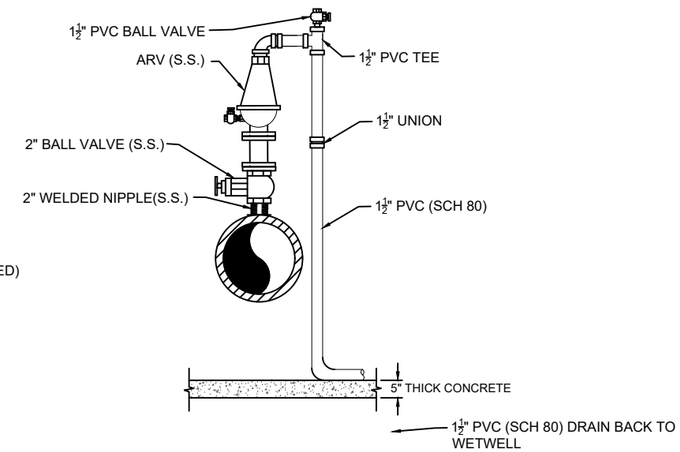


FORCE MAIN TRANSDUCER DETAIL

NOT TO SCALE

NOTES:

1. CONTRACTOR TO PROVIDE AND INSTALL TRANSDUCER AND GAUGE PER JEA SPECIFICATIONS.



ARV DRAIN DETAIL

NOT TO SCALE

REVISIONS

NO.	BY	DATE
4.		
3.		
2.		
1.		

DESIGN ENGINEER

FLORIDA REGISTRATION NO.

DESIGNED:
DRAWN BY:
DATE:
CHECKED BY:
DATE:

JEA
Building Communitysm

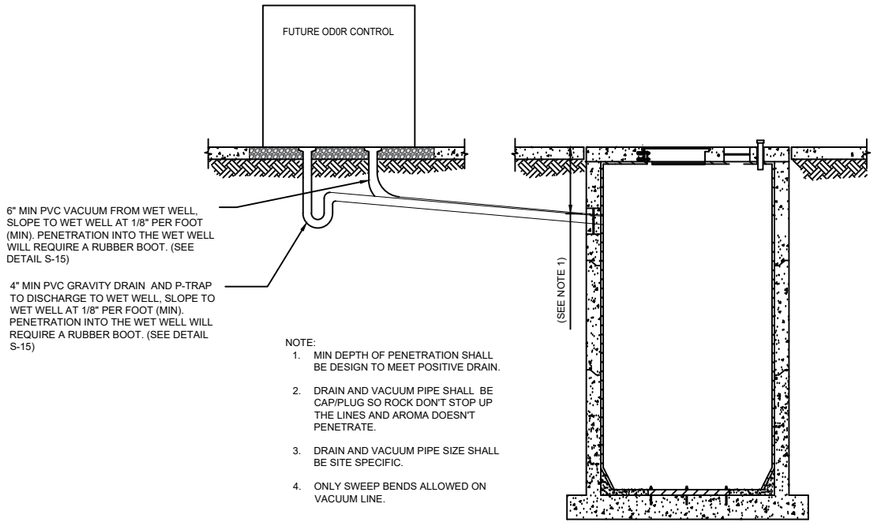
JEA STANDARD
PUMP STATION CONSTRUCTION DETAILS
MISCELLANEOUS DETAILS 2

PROJ. NO.
DATE:
SCALE:

NO. SHEETS
SHEET NO.
DRAWING NO.

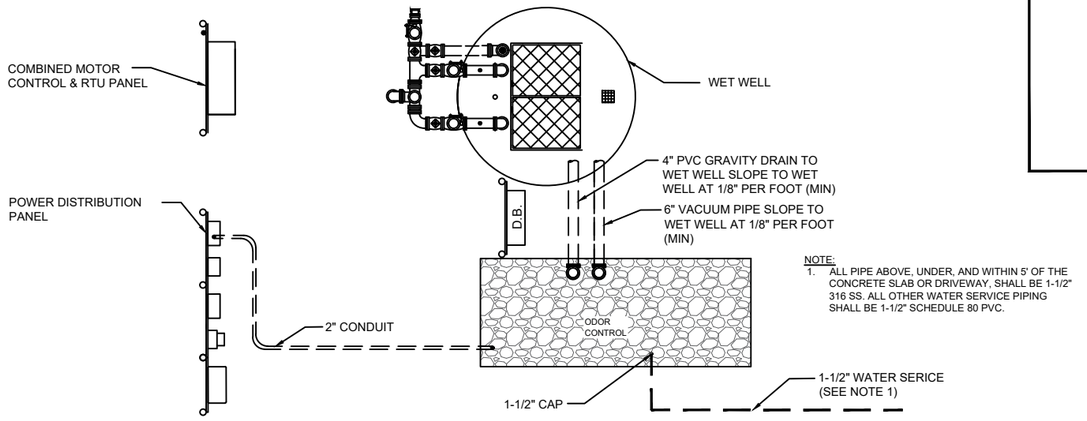
G:\Services\Shared\STANDARDS TEAM\2025 Water Wastewater Standards Manual\2025 Volume 2\PUMP STATION STANDARD DETAILS 2025.dwg Current Layout Tab = MISCELLANEOUS DETAILS 2 Wed Feb 19, 2025 - 14:55

Xrefs Attached=



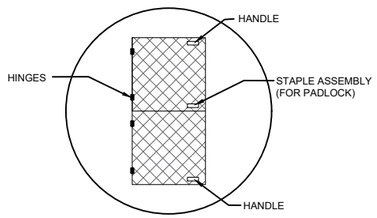
ODOR CONTROL DRAIN AND VACUUM CONNECTION TO WET WELL DETAIL

NOT TO SCALE



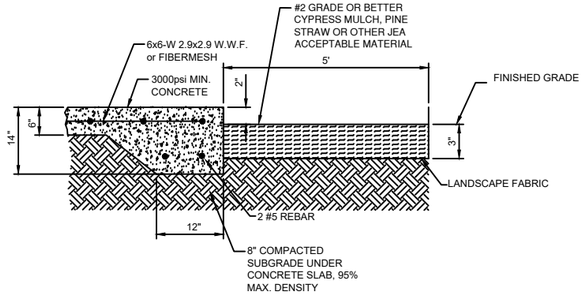
ODOR CONTROL STUB OUT DETAIL

NOT TO SCALE



WET WELL HATCH DETAIL

NOT TO SCALE



CONCRETE SLAB AND GROUND COVER DETAIL

NOT TO SCALE

REVISIONS

NO.	BY	DATE
4.		
3.		
2.		
1.		

DESIGN ENGINEER

FLORIDA REGISTRATION NO.

DESIGNED:
DRAWN BY:
DATE:
CHECKED BY:
DATE:

JEA
Building Community sm

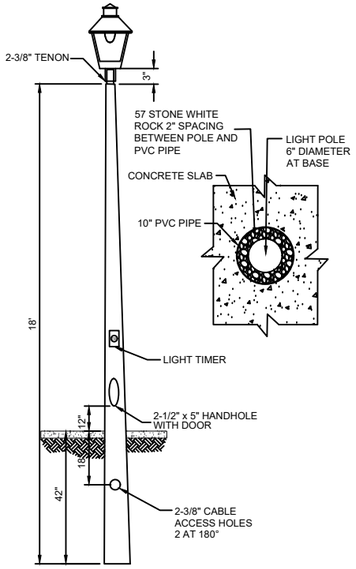
JEA STANDARD
PUMP STATION CONSTRUCTION DETAILS
MISCELLANEOUS DETAILS 2

PROJ. NO.
DATE:
SCALE:

NO. SHEETS
SHEET NO.
DRAWING NO.

G:\Services\Shared\STANDARD\STANDARDS TEAM\2025 Water Wastewater Standards Manual\2025 Volume 2\PUMP STATION STANDARD DETAILS 2025.dwg Current Layout Tab = MISCELLANEOUS DETAILS 3 Wed Feb 19, 2025 - 14:55

Xrefs Attached=



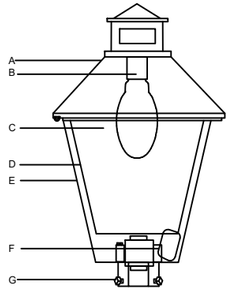
SPECIFICATION:

COOPER LIGHTING
LEXINGTON LXF
CATALOG No.: LWF70SH233U0115
70W HPS REC-HPF 120V PCR, TOOL-LESS

70W
HIGH PRESSURE SODIUM
METAL HALIDE MERCURY

SITE LIGHT DETAIL

NOT TO SCALE



A. TOP
HINGED DIE-CAST ALUMINUM TOP WITH CUPOLA COVER.

B. SOCKET
VERTICAL: BASE UP STANDARD ON TYPE I,

C. LAMP
70W HIGH PRESSURE SODIUM

D. REFACTOR
INJECTION MOLDED ACRYLIC REFRACTOR PANELS.

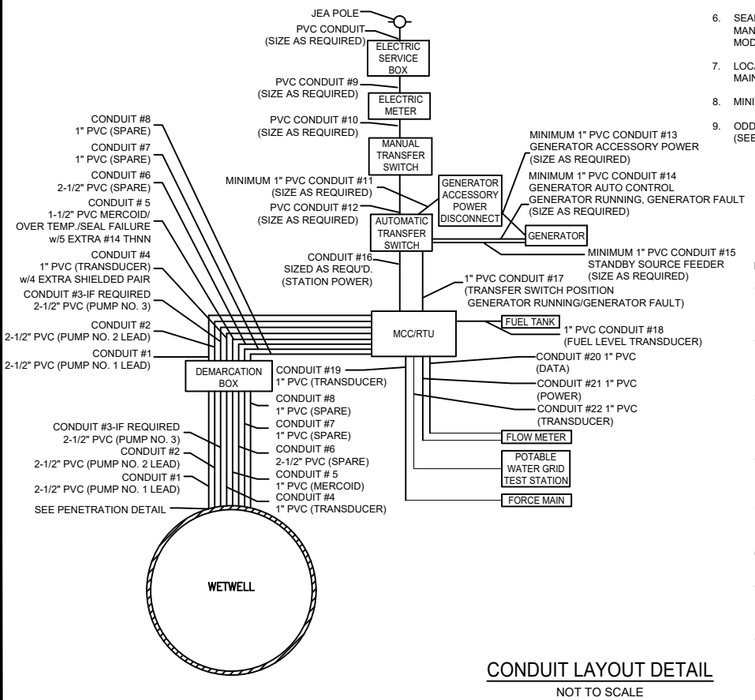
E. HOUSING
DIE-CAST ALUMINUM BADE HOUSING.
STANDARD COLOR: BLACK

F. STARTER
PLUG-IN STARTER

G. MOUNTING
SELF-ALIGNING POLE TOP FITTER FOR 2-3/8 O.D. TENONS. SQUARE HEADED 1-1/4" POLYMER COATED MOUNTING BOLTS.

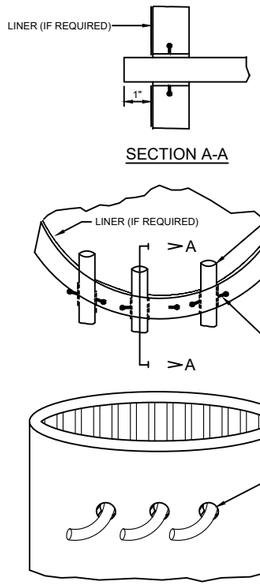
H. TERMINAL BLOCK
TERMINAL BLOCK STANDARD.

I. POLE
FIBERGLASS DIRECT BURIED
A: BLACK



CONDUIT LAYOUT DETAIL

NOT TO SCALE



NOTES:

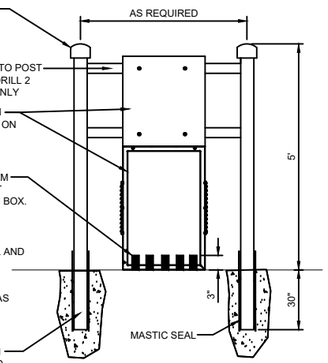
1. CORE BORING FOR CONDUITS SHALL BE ALLOWED FOR EXISTING WET WELLS ONLY.
2. EXTEND CONDUITS AND ARV DRAIN 1" INSIDE WET WELL.
3. FOR POLYMER WET WELLS USE POLYMER GROUT TO SEAL AROUND CONDUIT PENETRATIONS.
4. FOR CONCRETE WET WET WELLS USE NON-SHRINKING GROUT TO SEAL AROUND CONDUIT PENETRATIONS.
   MANUFACTURER: QUIKRETE MODEL: 1585
5. IF INTERIOR OF THE CONCRETE WET WELL IS DAMAGED, REPAIR USING A SPECIAL LINING PRODUCT: SEE SPEC. SECTION #446.
6. SEAL CONDUIT AT THE WET WELL USING DUCT SEAL.
   MANUFACTURER: BLACKBURN
   MODEL: DX5, S-1# DUCT SEAL
7. LOCATE CONDUIT SLEEVE SO AS NOT TO INTERFERE WITH WET WELL MAINTENANCE AND OPERATION.
8. MINIMUM FOUR 1-INCH AND THREE 2-1/2-INCH CONDUITS.
9. ODDER CONTROL VACUUM PIPING WILL REQUIRE A RUBBER BOOT (SEE DETAIL S-15)

WET WELL PENETRATION DETAIL

NOT TO SCALE

NOTES:

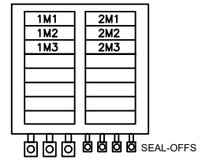
1. MINIMUM SCHEDULE 80 PVC CONDUIT SIZE AS SHOWN. CONDUIT SIZE MUST MEET NEC REQUIREMENTS FOR CONDUIT FILL.
2. ALL CONDUITS THAT RUN STRAIGHT FROM THE MCC TO THE DEMARCATION BOX SHALL BE ALLOWED TWO 90° BENDS. EACH CONDUIT SHALL ENTER THE BOTTOM OF THE CONTROL PANEL SEPARATELY.
3. INSTALL SPARE WIRE FROM DEMARCATION BOX TO MCC AND LABEL AS PER SPECS.
   A) 5-#14 THHN
   B) 4-SHIELDED PAIR
4. SPARE CONDUIT BETWEEN WETWELL AND DEMARCATION BOX TO BE THREADED, CAPPED AND TERMINATED INSIDE BOX.
5. SPARE CONDUIT BETWEEN DEMARCATION BOX AND MCC. CAP OFF BELOW DEMARCATION BOX AND TERMINATE INSIDE THE MCC CABINET
6. CONDUIT BETWEEN DEMARCATION BOX AND WETWELL SHALL HAVE ONLY ONE 90° BEND.
7. INSTALL MALLEABLE SEAL OFF'S AT DEMARCATION BOX END FOR CONDUITS BETWEEN DEMARCATION BOX AND MCC.
8. INSTALL END BELLS AND LARGE CABLE HOOKS ON PUMP LEAD CONDUITS.



DEMARCATION BOX DETAILS

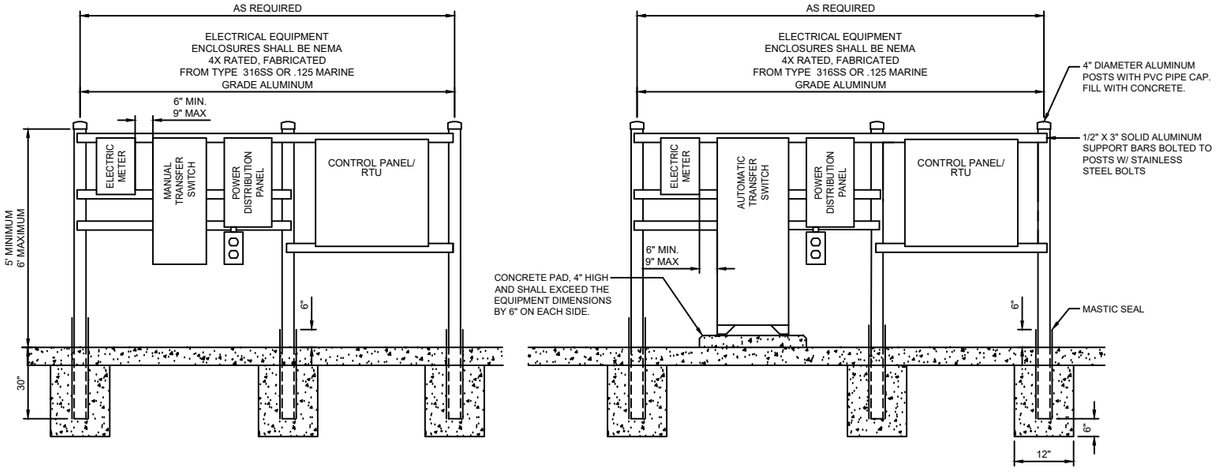
NOT TO SCALE

MOTOR TERMINAL BLOCKS SHALL BE WAGO "POWER CAGE CLAMP" SERIES. CONDUCTOR AMPACITY, VOLTAGE, AND WIRE SIZE SHALL DETERMINE FINAL SELECTION.



SEAL-OFF DETAIL

SEE DEMARCATION BOX DRAWINGS FOR ADDITIONAL INFORMATION

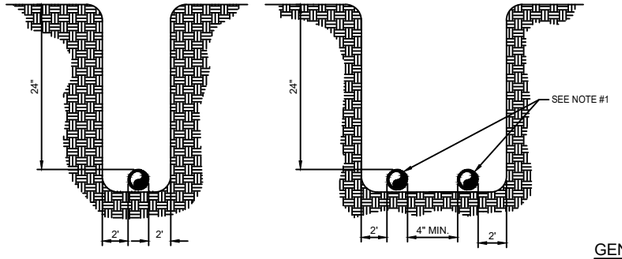


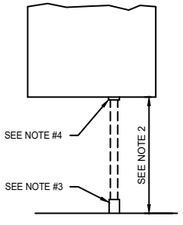
PUMP STATIONS WITHOUT STANDBY GENERATOR

PUMP STATIONS WITH STANDBY GENERATOR

ELECTRICAL EQUIPMENT RACK DETAIL

NOT TO SCALE





NOTES:

1. UNDERGROUND CONDUIT SCHEDULE 80 PVC.
   MANUFACTURER: CARLON
2. CONDUIT ABOVE GROUND TO CABINETS SCHEDULE 80 PVC NEMA TC-2 SUNLIGHT RESISTANT.
   MANUFACTURER: CARLON
3. UNDERGROUND PVC COUPLED TO ABOVE GROUND PVC WITH A PVC COUPLING. MANUFACTURER: CARLON
4. ABOVE GROUND PVC CONNECTED TO RTU AND MCC USING A PVC CONNECTOR. MANUFACTURER: CARLON

ABOVE AND UNDERGROUND ELECTRICAL RACEWAY DETAILS

NOT TO SCALE

NO.	REVISIONS	BY	DATE
4.			
3.			
2.			
1.			

DESIGN ENGINEER
FLORIDA REGISTRATION NO.

DESIGNED:
DRAWN BY:
DATE:
CHECKED BY:
DATE:

JEA Building Community sm

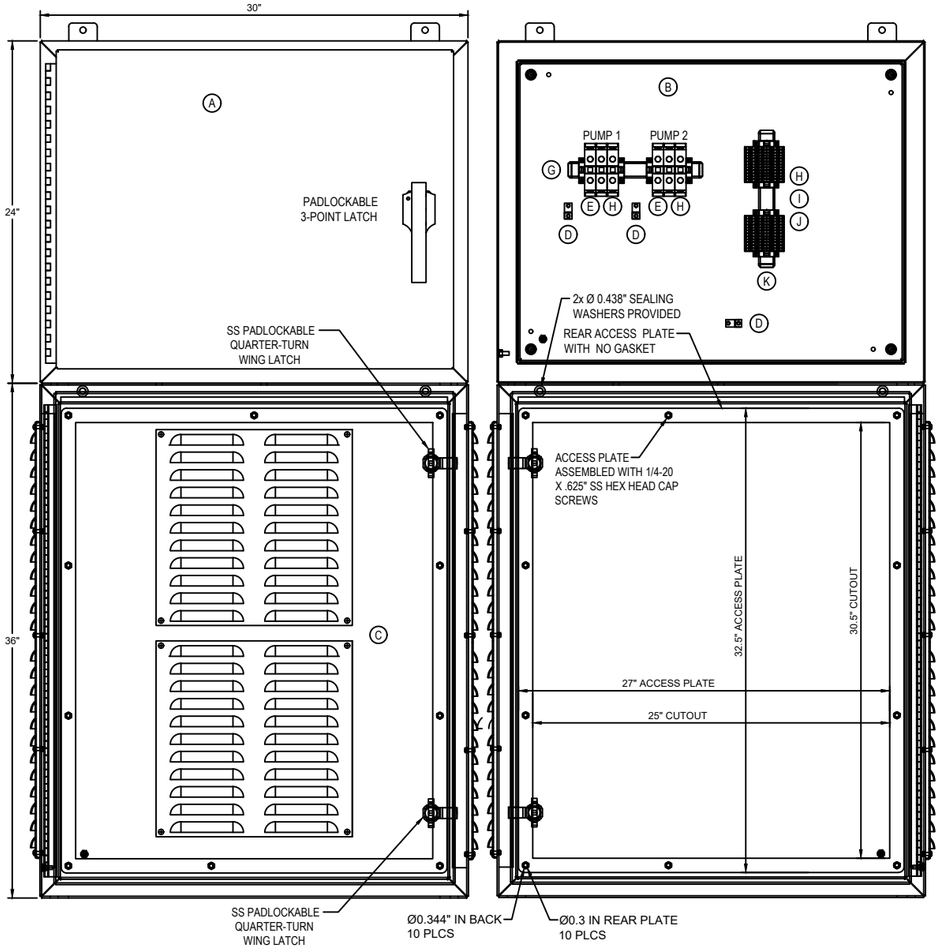
JEA STANDARD
PUMP STATION CONSTRUCTION DETAILS
MISCELLANEOUS DETAILS 2

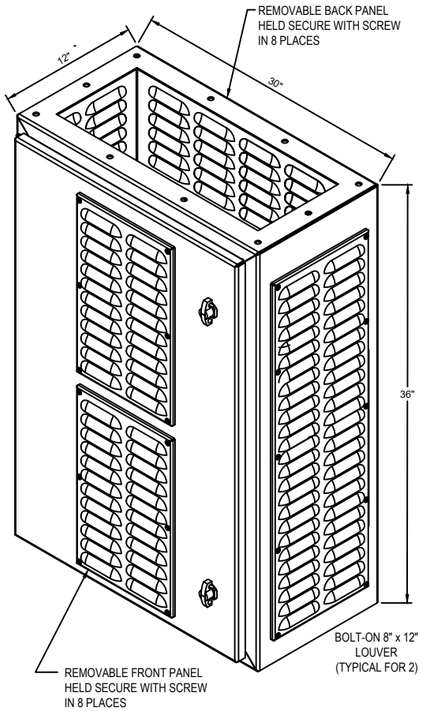
PROJ. NO.
DATE:
SCALE:

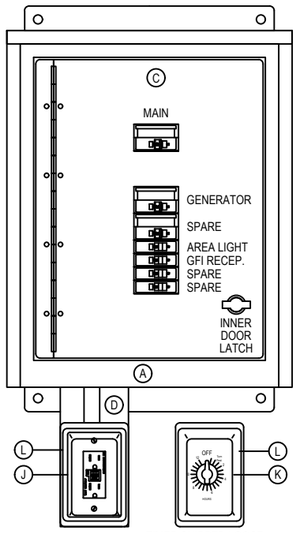
NO. SHEETS
SHEET NO.
DRAWING NO.

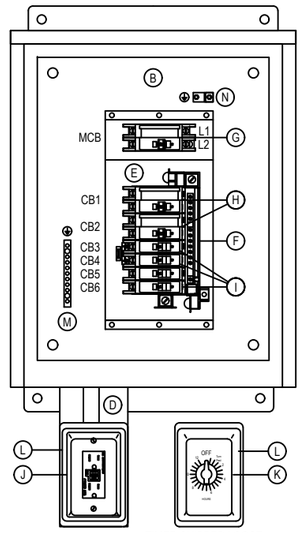
G:\Services\Shared\STANDARD\STANDARDS TEAM\2025 Water Wastewater Standards Manual\2025 Volume 2\PUMP STATION STANDARD DETAILS 2025.dwg Current Layout Tab = ELECTRIC DETAILS Wed Feb 19, 2025 – 14:55

Xrefs Attached=









POWER DISTRIBUTION PANEL (TYPICAL 240VAC - 1 PHASE SHOWN)

ENCLOSURE:
SPLRHCSS6-20168 (20"H x 16"W x 8"D) NEMA 12/3R RATED, FABRICATED FROM TYPE 316 STAINLESS STEEL. OUTER DOOR IS FITTED WITH A PADLOCKABLE 3-POINT LATCH.

BACK PANEL:
SPP-2016 (17"H x 13"W) FABRICATED FROM 14ga. CARBON STEEL WITH WHITE POLYESTER POWDER COAT FINISH.

HINGED INNER DOOR:
FABRICATED FROM .125 ALUMINUM WITH CONTINUOUS HINGE AND TWIST LATCH.

240 VAC DISTRIBUTION PANEL NOTES:

1. POWER DISTRIBUTION PANEL 120/240V 1 PHASE WITH 60A 2-POLE MAIN BREAKER.
2. PANEL OUTER DOOR SHALL BE HINGED AND PADLOCKABLE.
3. ALL LIVE PARTS SHALL BE ENCLOSED FOR PERSONNEL SAFETY AND EQUIPMENT PROTECTION.
4. GROUNDING TERMINAL SHALL BE PROVIDED IN THE ENCLOSURE
5. THE ENCLOSURE SHALL BE NEMA 3R RATED.
6. IF ENCLOSURE IS FABRICATED WITHIN AN AUTHORIZED PANEL SHOP, .125 MARINE GRADE ALUMINUM SHALL BE USED.
7. IF ENCLOSURE IS PURCHASED FROM AN AUTHORIZED DISTRIBUTOR, TYPE 316 STAINLESS STEEL MAY ALSO BE USED.
8. THE LOAD CENTER MOUNTING BASE PLATE SHALL BE UL LISTED, RATED AT 240 VOLTS / 200 AMPS MINIMUM.
9. THE LOAD CENTER BUS MATERIAL SHALL BE ALUMINUM OR TIN-PLATED ALUMINUM.
10. THE LOAD CENTER SHALL HAVE EIGHT SPACES.
11. BREAKERS MAY BE SNAP-IN; JEA DETERMINED LOCATIONS WITH HIGH-VIBRATION REQUIRE BOLT-IN TYPE BREAKERS.
12. PANEL SHALL CONTAIN TWO 2-POLE 30-AMP BREAKERS: (1) GENERATOR USE, (1) SPARE.
13. PANEL SHALL CONTAIN FOUR 1-POLE 15-AMP BREAKERS: (1) LIGHT, (1) GFI, (2) SPARES.
14. PANEL SHALL HAVE A 20-AMP OUTDOOR RATED GFCI RECEPTACLE AND SPRING-WOUND COMMERCIAL RATED LIGHT TIMER.
15. GFCI AND TIMER SHALL BE MOUNTED ACCORDING TO N.E.C. STANDARDS.
16. GFCI AND TIMER SHALL BE RIGIDLY MOUNTED ON THE EXTERIOR OF THE PANEL USING TYPE 316 SS OR ALUMINUM BRACKETS.

480 VAC DISTRIBUTION PANEL NOTES:

1. STANDARD PANEL: 3 KVA TRANSFORMER 480V-120/480V WITH 2-POLE 20-AMP MAIN BREAKER.
2. PANEL WITH ODOR CONTROL: 5 KVA TRANSFORMER 480V-120/480V WITH 2-POLE 30-AMP MAIN BREAKER.
3. PANEL WITH GENERATOR: 10 KVA TRANSFORMER 480V-120/480V WITH 2-POLE 60-AMP MAIN BREAKER.
4. PANEL OUTER DOOR SHALL BE HINGED AND PADLOCKABLE.
5. ALL LIVE PARTS SHALL BE ENCLOSED FOR PERSONNEL SAFETY AND EQUIPMENT PROTECTION.
6. GROUNDING TERMINAL SHALL BE PROVIDED IN THE ENCLOSURE
7. THE ENCLOSURE SHALL BE NEMA 3R RATED.
8. IF ENCLOSURE IS FABRICATED WITHIN AN AUTHORIZED PANEL SHOP, .125 MARINE GRADE ALUMINUM SHALL BE USED.
9. IF ENCLOSURE IS PURCHASED FROM AN AUTHORIZED DISTRIBUTOR, TYPE 316 STAINLESS STEEL MAY ALSO BE USED.
10. THE LOAD CENTER MOUNTING BASE PLATE SHALL BE UL LISTED, RATED AT 240 VOLTS / 200 AMPS MINIMUM.
11. THE LOAD CENTER BUS MATERIAL SHALL BE ALUMINUM OR TIN-PLATED ALUMINUM.
12. THE LOAD CENTER SHALL HAVE EIGHT SPACES.
13. BREAKERS MAY BE SNAP-IN; JEA DETERMINED LOCATIONS WITH HIGH-VIBRATION REQUIRE BOLT-IN TYPE BREAKERS.
14. PANEL SHALL CONTAIN TWO 2-POLE 30-AMP BREAKERS: (1) GENERATOR USE, (1) SPARE.
15. PANEL SHALL CONTAIN FOUR 1-POLE 15-AMP BREAKERS: (1) LIGHT, (1) GFI, (2) SPARES.
16. PANEL SHALL HAVE A 20-AMP OUTDOOR RATED GFCI RECEPTACLE AND SPRING-WOUND COMMERCIAL RATED LIGHT TIMER.
17. GFCI AND TIMER SHALL BE MOUNTED ACCORDING TO N.E.C. STANDARDS.
18. GFCI AND TIMER SHALL BE RIGIDLY MOUNTED ON THE EXTERIOR OF THE PANEL USING TYPE 316 SS OR ALUMINUM BRACKETS.

DEMARCATION BOX and PEDESTAL

ENCLOSURE:
SPN4AL-243012-JEA220 (24"H x 30"W x 12"D) NEMA 4X RATED, FABRICATED FROM .125 MARINE GRADE ALUMINUM. OUTER DOOR IS FITTED WITH A PADLOCKABLE 3-POINT LATCH.

BACK PANEL:
SPP-3030 (27"H x 27"W) FABRICATED FROM 12ga. CARBON STEEL WITH WHITE POLYESTER POWDER COAT FINISH.

PEDESTAL:
SPN12AL-363012-JEA220 (36"H x 30"W x 12"D) NEMA 12 RATED, FABRICATED FROM .125 MARINE GRADE ALUMINUM. OUTER DOOR IS FITTED WITH TWO PADLOCKABLE QUARTER-TURN LATCHES.

NOTE 1: SELECT APPROPRIATELY SIZED TERMINAL BLOCK BASED ON MOTOR LOAD
NOTE 2: INSERTING MULTIPLE CABLES INTO A SINGLE TERMINAL IS PROHIBITED. USE A SECOND BLOCK AND THE ASSOCIATED ADJACENT JUMPER
NOTE 3: USE PRINTED GUIDE ON TERMINAL BLOCKS TO MEASURE CORRECT CABLE STRIP LENGTH
NOTE 4: ENGINEER APPROVED EQUAL COMPONENT MAY BE SUBSTITUTED

BILLS of MATERIAL

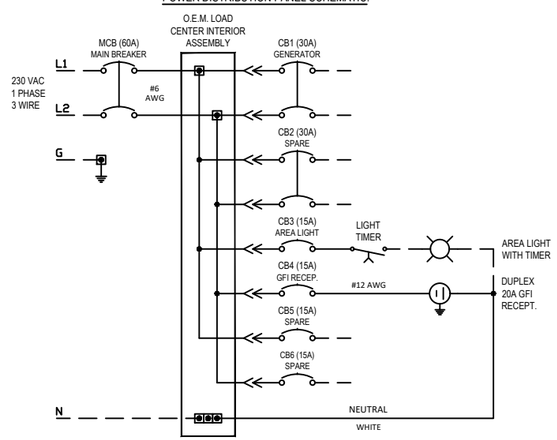
DEMARCATION BOX and PEDESTAL

	QTY	MANUFACTURER	PART NUMBER	DESCRIPTION
A	1	SCHAEFER	SPN4AL-243012	ENCLOSURE, NEMA 4X ALUMINUM, 3-PT.
B	1	SCHAEFER	SPP-2430	MOUNTING PANEL, 12ga. PAINTED STEEL
C	1	SCHAEFER	SPN12AL-363012-215	PEDESTAL, NEMA 12 ALUMINUM, LOUVERS
D	3	PANDUIT	LAMA2-14-QY	GROUND LUG, DUAL-RATED, #2-14 AWG
E	6	WAGO	285-135	TERMINAL BLOCK, 1 POLE, 115A
		WAGO	285-150	TERMINAL BLOCK, 1 POLE, 150A
		WAGO	285-195	TERMINAL BLOCK, 1 POLE, 200A
		WAGO	285-1185	TERMINAL BLOCK, 1 POLE, 310A
F	-	WAGO	285-435	ADJACENT JUMPER, 115A
		WAGO	285-450	ADJACENT JUMPER, 150A
		WAGO	285-495	ADJACENT JUMPER, 200A
		WAGO	285-1171	ADJACENT JUMPER, 310A
G	1	WAGO	210-118	2M CARRIER RAIL, STEEL, UNSLOTTED
H	8	WAGO	249-197	TERMINAL END STOP, GRAY
I	24	WAGO	2002-1401	CONTROL TERMINALS, 24A, 800V, SPRING
J	2	WAGO	2002-1492	TERMINAL END / PARTITION PLATE, ORANGE
K	1	WAGO	210-112	2M DIN RAIL, GALVANIZED, SLOTTED

POWER DISTRIBUTION PANEL (AS SHOWN)

	QTY	MANUFACTURER	PART NUMBER	DESCRIPTION
A	1	SCHAEFER	SPLRHCSS6-20168	ENCLOSURE, NEMA 12/3R, 316 SS, 3-PT.
B	1	SCHAEFER	SPP-2016	MOUNTING PANEL, 14ga. PAINTED STEEL
C	1	OEM	-	HINGED INNER DOOR, .125 ALUMINUM
D	1	OEM	GFI MOUNT	TO RIGIDLY MOUNT EXTERNAL DEVICES
E	1	OEM	BREAKER MOUNT	TO RAISE CBs FLUSH WITH INNER DOOR
F	1	SQUARE D	QON816L100	100 AMP LOAD CENTER INTERIOR ASSY.
G	1	SQUARE D	QOU260	MCB MAIN CIRCUIT BREAKER, 2 POLE, 60A
H	2	SQUARE D	QO230	CB1-CB2 GEN. BREAKER, 2 POLE, 30A
I	4	SQUARE D	QO115	CB3-CB6 CONTROL BREAKER, 1 POLE, 15A
J	1	HUBBELL	GF20WLA	DUPLEX GFCI RECEPTACLE, 20A
K	1	INTERMATIC	FF30MC	SPRING-WOUND TIMER, 30 min. NO HOLD
L	1	INTERMATIC	WP1030C	SINGLE GANG WEATHER-PROOF COVER, CLEAR
M	1	SQUARE D	PK9GTA	EQUIPMENT GROUND BAR, 9-POINT
N	1	PANDUIT	LAMA2-14-QY	GROUND LUG, DUAL-RATED, #2-14 AWG

POWER DISTRIBUTION PANEL SCHEMATIC:



NO.	BY	DATE	REVISIONS
4.			
3.			
2.			
1.			

DESIGN ENGINEER
FLORIDA REGISTRATION NO.

DESIGNED:
DRAWN BY:
DATE:
CHECKED BY:
DATE:

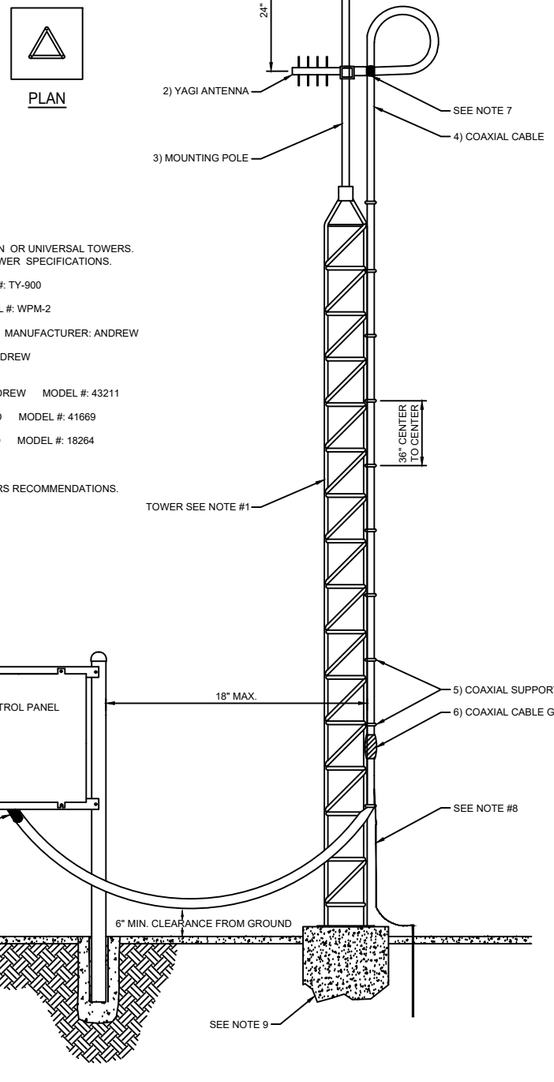
JEA
Building Community sm

JEA STANDARD
PUMP STATION CONSTRUCTION DETAILS
DEMARCATION BOX & POWER DISTRIBUTION PANEL

NO. SHEETS
SHEET NO.
DRAWING NO.
PROJ. NO.
DATE:
SCALE:

G:\Services\Shared\STANDARD\STANDARDS TEAM\2025 Water Wastewater Standards Manual\2025 Volume 2\PUMP STATION STANDARD DETAILS 2025.dwg Current Layout Tab = DEMARCATION BOX & POWER DISTRIBUTION PANEL Wed Feb 19, 2025 - 14:55

Xrefs Attached=

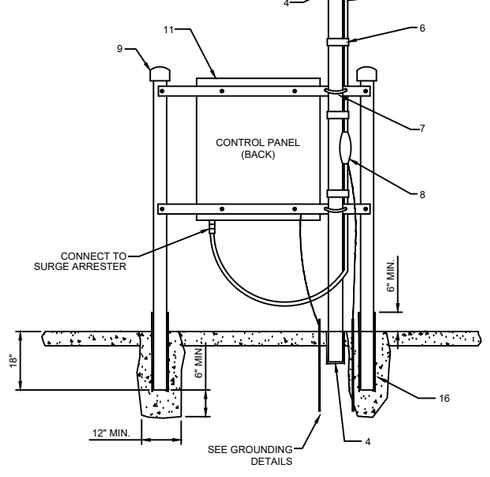


NOTES:

1. ACCEPTABLE MANUFACTURERS OF TOWERS ARE ROHN OR UNIVERSAL TOWERS. SEE PUMP STATION SITE DRAWINGS FOR POLE OR TOWER SPECIFICATIONS.
2. YAGI ANTENNA: MANUFACTURER: SCALA MODEL #: TY-900
3. MOUNTING POLE: MANUFACTURER: SCALA MODEL #: WPM-2
4. COAXIAL CABLE SHALL BE ONE CONTINUOUS CABLE: MANUFACTURER: ANDREW MODEL #: LDF4-50A
   COAXIAL CABLE CONNECTORS: MANUFACTURER: ANDREW MODEL #: L4TNM-PSA
5. COAXIAL SUPPORT HANGERS: MANUFACTURER: ANDREW MODEL #: 43211
6. COAXIAL CABLE GROUND: MANUFACTURER: TESSCO MODEL #: 41669
7. WEATHER PROOFING KIT: MANUFACTURER: TESSCO MODEL #: 18264
8. REFERENCE GROUNDING DETAILS SHEET.
9. TOWER BASE IS TO BE DESIGNED PER MANUFACTURERS RECOMMENDATIONS.

ALTERNATE POLE SCADA INSTALLATION DETAIL

FOR POLE HEIGHTS 20 FEET AND ABOVE
NOT TO SCALE



SCADA INSTALLATION DETAIL

FOR POLE HEIGHTS LESS THAN 20 FEET
NOT TO SCALE

NOTES:

1. SEE PUMP STATION SITE DRAWINGS FOR POLE OR TOWER SPECIFICATIONS.
2. YAGI ANTENNA, COMES W/ MOUNTING HARDWARE(MAST SHALL BE SLEEVED THRU CONCRETE TO ALLOW ROTATION (DO NOT USE WOOD POLE MOUNT)
   MANUFACTURE: SCALA
   MODEL NUMBER: TY-900
3. COAX CONNECTOR
   MANUFACTURE: WIRELESS SOLUTIONS
   MODEL NUMBER: NM50V-1/2
4. 2 3/4" O.D. SCD. 40 ALUMINUM 20' POLE.
   POLE SHALL BE SLEEVED THROUGH CONCRETE TO ALLOW FOR ROTATION
5. COAXIAL CABLE SHALL BE ONE CONTINUOUS CABLE
   MANUFACTURER: ANDREW
   MODEL #: LDF4-50A
6. STAINLESS STEEL STRAPS 3' O/C
   MANUFACTURE: WIRELESS SOLUTIONS
   MODEL NUMBER: RM-A300
7. 316 STAINLESS STEEL U-BOLTS
   MANUFACTURE: ANY DOMESTIC BRAND
   MODEL NUMBER: N/A
8. COAXIAL CABLE GROUND
   MANUFACTURER: TESSCO
   MODEL #: 41669
9. 4" PVC CAPS
10. 4" DIA. ALUMINUM POST
11. 1/2"X3" SOLID ALUMINUM SUPPORT BARS (2 TOTAL) BOLTED TO POST W/ 5/8" S.S. ANCHOR BOLTS. DRILL 2 HOLES (AS DIMENSIONED ON DETAIL) IN TOP & BOTTOM SUPPORTS ONLY
12. BURY ALUMINUM POST IN CONCRETE AS SHOWN ON DRAWING.
13. INSTALL RTU MOUNT SO THAT WHEN CABINET IS ATTACHED DOOR IS FACING NORTH UNLESS DOOR HAS SUN SHIELD. IN ALL INSTANCES JEA PREFERS THE DOOR TO FACE NORTH IF POSSIBLE.
14. CABINET SHALL HAVE CLEARANCE TO OPEN DOOR COMPLETELY.
15. SCADA SYSTEM WOOD POLE ALTERNATE DETAIL TO BE USED ONLY WHEN ADDITIONAL ANTENNA HEIGHT IS REQUIRED, AND APPROVED.
16. MASTIC SEAL ALL POSTS WHICH ARE EMBEDDED IN CONCRETE.
17. ALL MATERIALS MUST MEET OR EXCEED JEA SPECIFICATIONS

REVISIONS

NO.	BY	DATE
4.		
3.		
2.		
1.		

DESIGN ENGINEER
FLORIDA REGISTRATION NO.

DESIGNED:
DRAWN BY:
DATE:
CHECKED BY:
DATE:

JEA Building Community

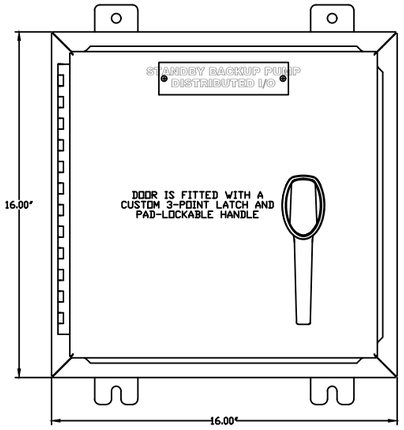
JEA STANDARD
PUMP STATION CONSTRUCTION DETAILS
SCADA INSTALLATION

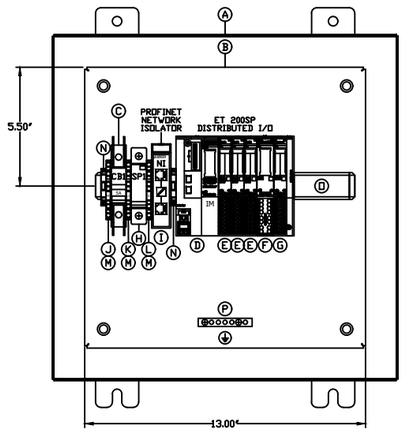
PROJ. NO.
DATE:
SCALE:

NO. SHEETS
SHEET NO.
DRAWING NO.

G:\Services\Shared\STANDARD\STANDARDS TEAM\2025 Water Wastewater Standards Manual\2025 Volume 2\PUMP STATION STANDARD DETAILS 2025.dwg Current Layout Tab = SCADA INSTALLATION Wed Feb 19, 2025 – 14:55

Xrefs Attached=





GENERAL NOTES:
1. THIS DRAWING IS AN EXAMPLE OF HOW OVERALL CABINET IS TO BE DESIGNED
2. REFER TO NOTES AND DETAILS ON ALL DRAWING SHEETS
3. ALL FIELD WIRING SHALL BE #18 AWG STRANDED, TIN-PLATED COPPER
4. ALL FIELD WIRING SHALL CONNECT DIRECTLY TO I/O BASE TERMINALS USING FERRULES WITH END SLEEVES
5. ALL PLC I/O WIRING SHALL BE #18 AWG
6. ALL MOUNTING SCREWS SHALL BE DRILLED AND TAPPED (NO SELF-TAPPING SCREWS ARE ALLOWED)
7. ALL MOUNTING SCREWS SHALL BE STAINLESS STEEL
8. DIN RAIL SHALL BE MODEL 1492-DR9 OR EQUIVALENT

CONTROL TERMINAL COLOR:

ORANGE	+12VDC SUPPLY
BROWN	-12VDC SUPPLY
BLUE	+24VDC CONTROL CIRCUITS
YELLOW	-24VDC CONTROL CIRCUITS
GRAY	REMOTELY POWERED CIRCUITS
GREEN/YELLOW	GROUND

ENCLOSURE:

SPN4AL-16166-W (16"H x 16"W x 6"D) NEMA 4X RATED, FABRICATED FROM .125 MARINE GRADE ALUMINUM WITH WHITE POLYESTER POWDER COAT FINISH INSIDE AND OUT. DOOR IS FITTED WITH A CUSTOM 3-POINT LATCH AND PAD-LOCKABLE HANDLE.

BACK PANEL:

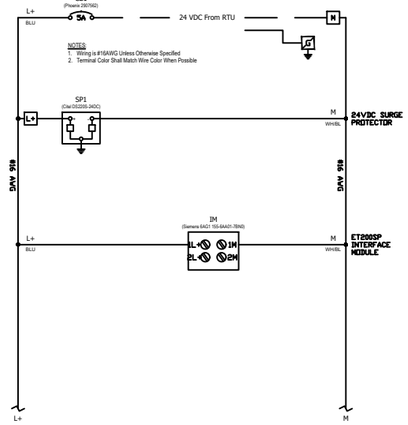
SPP-1616 (13"H x 13"W) FABRICATED FROM 12GA. CARBON STEEL WITH WHITE ENAMEL FINISH.

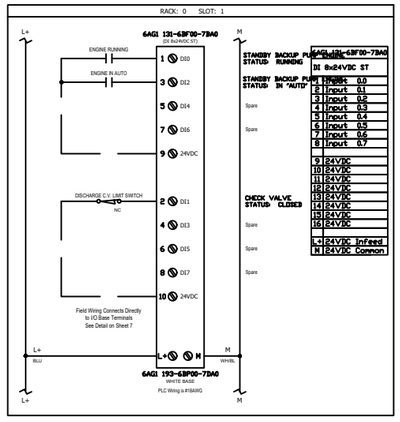
DRAWING LAYER COLOR LEGEND:

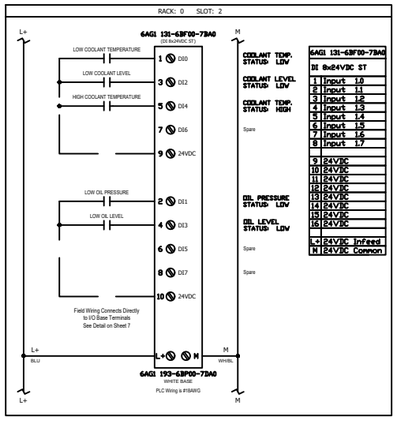
GREY	NOTES
BLACK	ELECTRICAL SCHEMATIC WIRING DIAGRAMS AND DEVICES
BLUE	PART IDENTIFICATION
PURPLE	WIRE NUMBERS
GREEN	FIELD DEVICES AND WIRING OUTSIDE ENCLOSURE (DASHED)
RED	FUTURE / OPTIONAL DEVICES AND WIRING
TEAL	DIMENSIONS

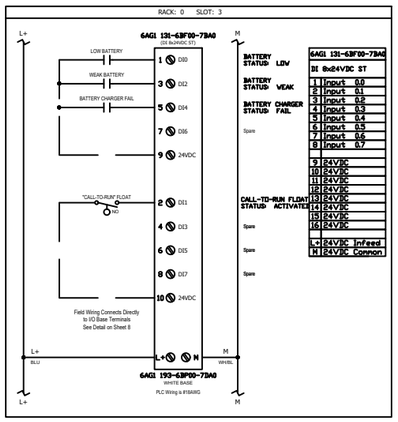
GENERATOR DISTRIBUTED I/O PANEL - BILL of MATERIAL

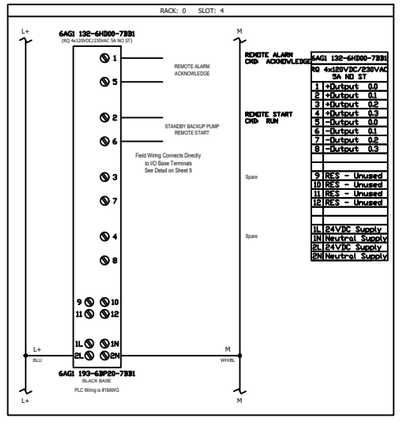
ITEM	TAG	PART No.	DESCRIPTION	MANUFACTURER	QTY.
A		SPN4AL-16166-W	ENCLOSURE, NEMA 4X, ALUMINUM, WHITE PAINTED FINISH, 3-PT. LATCH	SCHAEFER	1
B		SPP-1616	BACK PANEL, 12ga. CARBON STEEL, WHITE ENAMEL FINISH	SCHAEFER	1
C	CB1	2907562	CIRCUIT BREAKER, UL489 BRANCH RATED, C-CURVE, 1-POLE, 5A	PHOENIX CONTACT	1
D	IM	6AG1 155-6AA01-7BN0	INTERFACE MODULE, SIPLUS ET200SP IM155-6PN STANDARD	SIEMENS	1
E		6AG1 131-6BF00-7BA0	DIGITAL INPUT MODULE, SIPLUS ET200SP DI 8x24VDC ST	SIEMENS	3
		6AG1 193-6BP00-7DA0	BASE MODULE, WHITE	SIEMENS	3
F		6AG1 132-6HD00-7BB1	DIGITAL OUTPUT MODULE, SIPLUS ET200SP RQ 4x120VDC/230VAC/5A ST	SIEMENS	1
		6AG1 193-6BP20-7BB1	BASE MODULE, BLACK	SIEMENS	1
G		6AG1 134-6GD00-7BA1	ANALOG INPUT MODULE, SIPLUS ET200SP AI 4x1 2-/ 4-WIRE ST	SIEMENS	1
		6AG1 193-6BP00-7DA0	BASE MODULE, WHITE	SIEMENS	1
H	SP1	DS220S-24DC	SURGE PROTECTOR, 24VDC	CITEL	1
I	NI	2313931	PROFINET NETWORK ISOLATOR	PHOENIX CONTACT	1
J	M	2002-1406	TERMINAL, PUSH-IN, 1-CIRCUIT, YELLOW	WAGO	1
K	L+	2002-1404	TERMINAL, PUSH-IN, 1-CIRCUIT, BLUE	WAGO	1
L	G	2002-1407	TERMINAL, PUSH-IN, 1-CIRCUIT, GREEN/YELLOW, GROUNDING	WAGO	1
M		2002-1492	TERMINAL END PLATE, ORANGE	WAGO	3
N		249-116	END ANCHOR, 6mm, GRAY	WAGO	2
O		210-112	DIN RAIL, GALVANIZED, SLOTTED, 2M	WAGO	1
P		PK5GTA	EQUIPMENT GROUND BAR KIT	SQUARE D	1

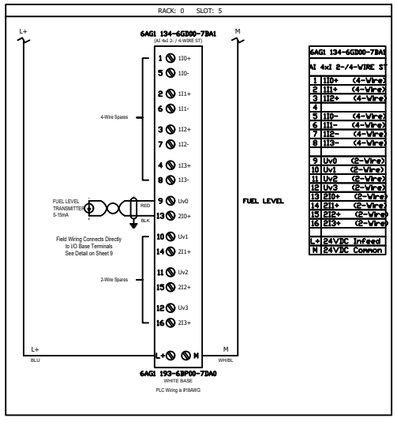


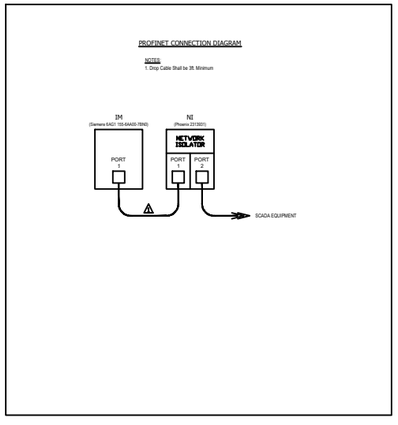




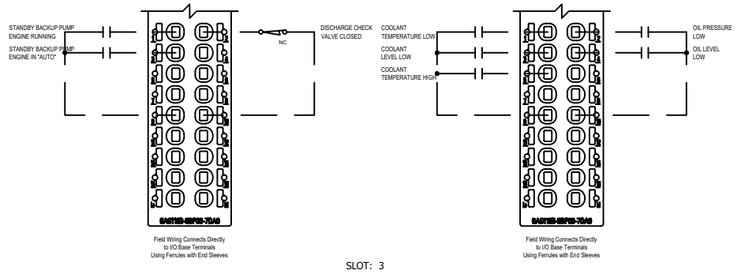


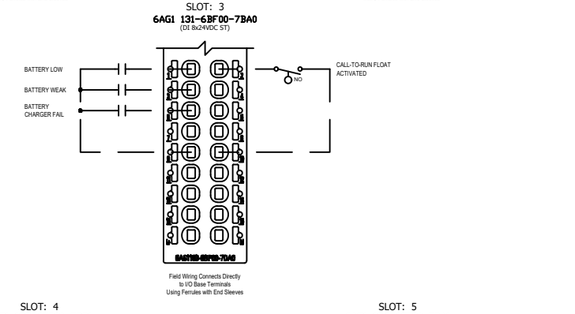






FIELD WIRING CONNECTION DETAILS





NO.	REVISIONS	BY	DATE
4.			
3.			
2.			
1.			

DESIGN ENGINEER | FLORIDA REGISTRATION NO.

DESIGNED:
DRAWN BY:
DATE:
CHECKED BY:
DATE:

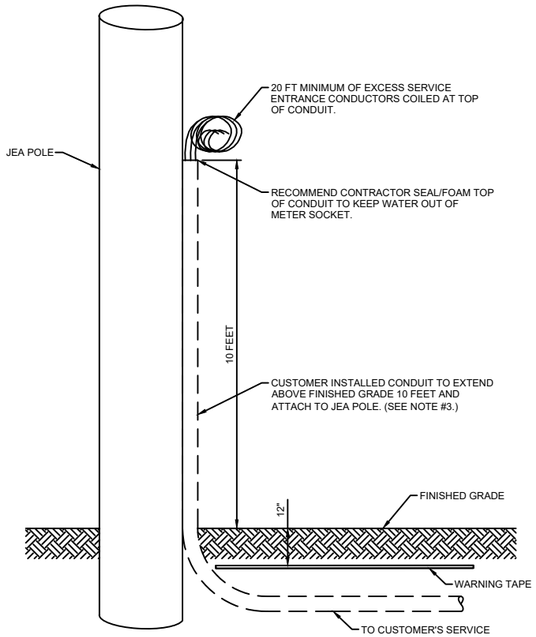
JEA Building Community

JEA STANDARD
PUMP STATION CONSTRUCTION DETAILS
STANDBY BACKUP PUMP DISTRIBUTED I/O PANEL

NO. SHEETS | PROJ. NO. | DATE: | SCALE: | SHEET NO. | DRAWING NO.

G:\Services\Shared\STANDARD\STANDARDS TEAM\2025 Water Wastewater Standards Manual\2025 Volume 2\PUMP STATION STANDARD DETAILS 2025.dwg Current Layout Tab = STANDBY BACKUP PUMP DISTRIBUTED I_O PANEL Wed Feb 19, 2025 - 14:55

Xrefs Attached=

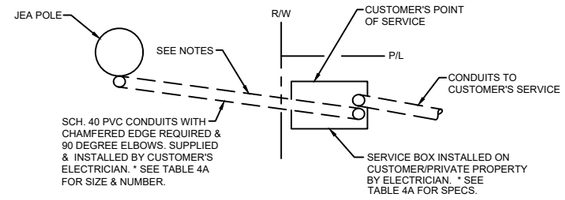


NOTES:

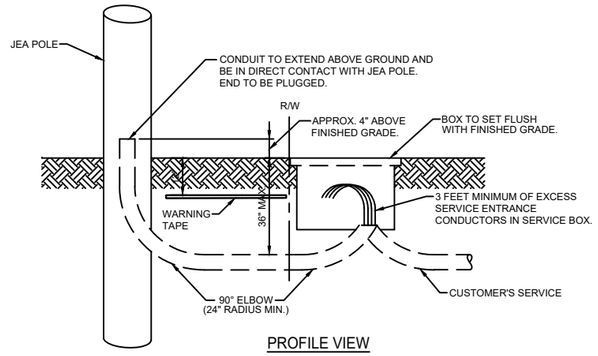
1. 100 AMP MAXIMUM SERVICE SIZE.
2. THE CUSTOMER WILL MAINTAIN THE WARNING TAPE, CONDUIT AND CONDUCTORS SHOWN.
3. THE CUSTOMER MUST PICK A CLEAR SIDE OF THE JEA POLE TO EXTEND UP CONDUIT. CLEAR FROM PHONE OR COMMUNICATION CABLES, OR ANY OTHER EQUIPMENT, FROM FINISHED GRADE TO JEA POINT OF SERVICE. CALL JEA DISTRIBUTION ENGINEER IF LOCATION IS REQUIRED.
4. THE JEA WILL MAKE ALL CONNECTIONS TO CUSTOMER'S SERVICE WIRE ON THE JEA POLE.
5. THE JEA WILL INSTALL CABLE GUARD ON JEA POLE AND COVER CUSTOMER'S SERVICE WIRE AND CONDUIT TO FINISHED GRADE.

COMMERCIAL SERVICE
100AMP MAXIMUM UNDERGROUND
SERVICE FROM AN OVERHEAD POLE

NOT TO SCALE



PLAN VIEW



PROFILE VIEW

NOTES:

1. THE MINIMUM DISTANCE BETWEEN THE SERVICE BOX AND SERVICE POLE IS 4 FEET.
2. THE CUSTOMER MUST PICK A CLEAR SIDE OF THE JEA POLE FOR THE JEA TO EXTEND UP THE POLE RISER. CLEAR FROM PHONE OR COMMUNICATION CABLES, OR ANY OTHER EQUIPMENT, FROM FINISHED GRADE TO CONNECTIONS TO OVERHEAD FACILITIES. CALL JEA DISTRIBUTION ENGINEER IF LOCATION IS REQUIRED.
3. THE JEA WILL MAINTAIN THE POLE RISER AND CONDUCTOR FROM THE OVERHEAD FACILITIES TO A CUSTOMER-PROVIDED SERVICE BOX.
4. THE JEA WILL MAKE ALL CONNECTIONS TO THE CUSTOMER'S SERVICE WIRE IN THE SERVICE BOX. SAID CONNECTIONS WILL BE THE CUSTOMER'S POINT OF SERVICE.

COMMERCIAL SERVICE
ABOVE 100 AMPS AND MULTI-METERED UNDERGROUND
SERVICE FROM AN OVERHEAD POLE

NOT TO SCALE

TABLE 4A

CONDUIT AND SERVICE BOX REQUIREMENTS FOR UNDERGROUND COMMERCIAL SERVICES FROM AN OVERHEAD POLE

SERVICE SIZE	CONDUIT SIZE (From Service Box to JEA Overhead Pole)	SERVICE BOX SIZE
20A - 150A	1-2 in	13" x 24" x 18" d
151A -200A	1-3 in	17" x 30" x 18" d
201A - 399A	1-3 in	24" x 36" x 18" d
400A-800A	400A=1-4 in 401-800A=2-4 in	30" x 48" x 24" d manhole
801A-1400A	801-1000A=2-4 in 1001-1400A=3-4 in	36" x 60" x 36" d manhole

NOTE:

1. ALL CONDUITS TO BE SCHEDULE 40 PVC WITH CHAMFERED EDGES REQUIRED. CONDUIT SIZE AND NUMBER DOES NOT HAVE TO MATCH CUSTOMERS' SERVICE CONDUIT SIZE, TYPE, AND NUMBER.
2. ALL CONDUIT RADIUS TO BE 24 INCH MINIMUM.
3. JEA WILL ALLOW THE OPTION OF PURCHASING THESE BOXES FROM AN ELECTRICAL SUPPLY HOUSE. THESE BOXES MUST MEET THE FOLLOWING SPECIFICATIONS.
4. SERVICE BOX SIZE MAY VARY FOR 3 PHASE APPLICATIONS.
5. CONTACT JEA SERVICE ENGINEER FOR CONDUIT AND BOX LOCATION.

TECHNICAL SPECIFICATIONS

MATERIAL SPECIFICATIONS:

SERVICE BOX

1. TOP: COMPRESSION MOLDED POLYMER CONCRETE WITH MINIMUM THICKNESS OF TWO INCHES.
2. BODY: REINFORCED PLASTIC MORTAR (RPM) CONSISTING OF FIBERGLASS AND ISOPHOLIC RESIN. THE BASE WILL HAVE A FLANGE OF TWO INCHES FROM THE INSIDE WALL.
3. RING: THE RING WILL BE OF POLYMER CONCRETE AND WILL BE PERMANENTLY FUSED TO THE BODY DURING THE CURING PROCESS.

MANHOLE

1. MANHOLE BODY SHALL BE OF ONE PIECE CONSTRUCTION WITH A SOLID COVER.
2. MANHOLE DIMENSIONS SHALL BE 60" L X 36" W X 36"D.

LOAD RATING:

1. LOAD RATING: H-10 (INCIDENTAL TRAFFIC).
2. LOAD RATINGS SHALL BE IN ACCORDANCE WITH ASTM, C-857-87 (STD. PRACTICE FOR MINIMUM STRUCTURAL DESIGN LOADING FOR UG PRECAST CONCRETE UTILITY STRUCTURES) AASHTO AND WESTERN UNDERGROUND COMMITTEE RECOMMENDED GUIDELINES RULE 3.6 DATED 6-15-87.

MISCELLANEOUS REQUIREMENTS:

1. HARDWARE: TWO CAPTIVE STAINLESS PENTA HEAD BOLTS FOR SECURING TOP. BOLT HEADS WILL BE FLUSH WITH TOP OF COVER.
2. IDENTIFICATION: EACH TOP WILL HAVE THE WORD "ELECTRIC" PERMANENTLY MARKED INTO THE TOP.

ELECTRICAL NOTES

1. GROUND WIRE SHALL RUN FROM THE CHASSIS CONTINUOUS THROUGH THE METER CAN TO 2 GROUND RODS SPACED 6 FEET APART AND TERMINATE ON A FENCE POST IN CONCRETE.
2. ELECTRICAL ENCLOSURES SHALL BE ORIENTED SUCH THAT THE FRONT OF THE ENCLOSURE FACES THE INTERIOR OF THE PUMP STATION SITE.
3. QUANTITY AND SIZE OF NEMA 4x 316-STAINLESS STEEL ENCLOSURES AS REQUIRED FOR STATION OPERATION.
4. SERVICE DISCONNECT SHALL BE MANUAL FUSE 3 PHASE-4 WIRE

REVISIONS

NO.	BY	DATE
4.		
3.		
2.		
1.		

DESIGN ENGINEER

FLORIDA REGISTRATION NO.

DESIGNER:
DRAWN BY:
DATE:
CHECKED BY:
DATE:

JEA Building Community sm

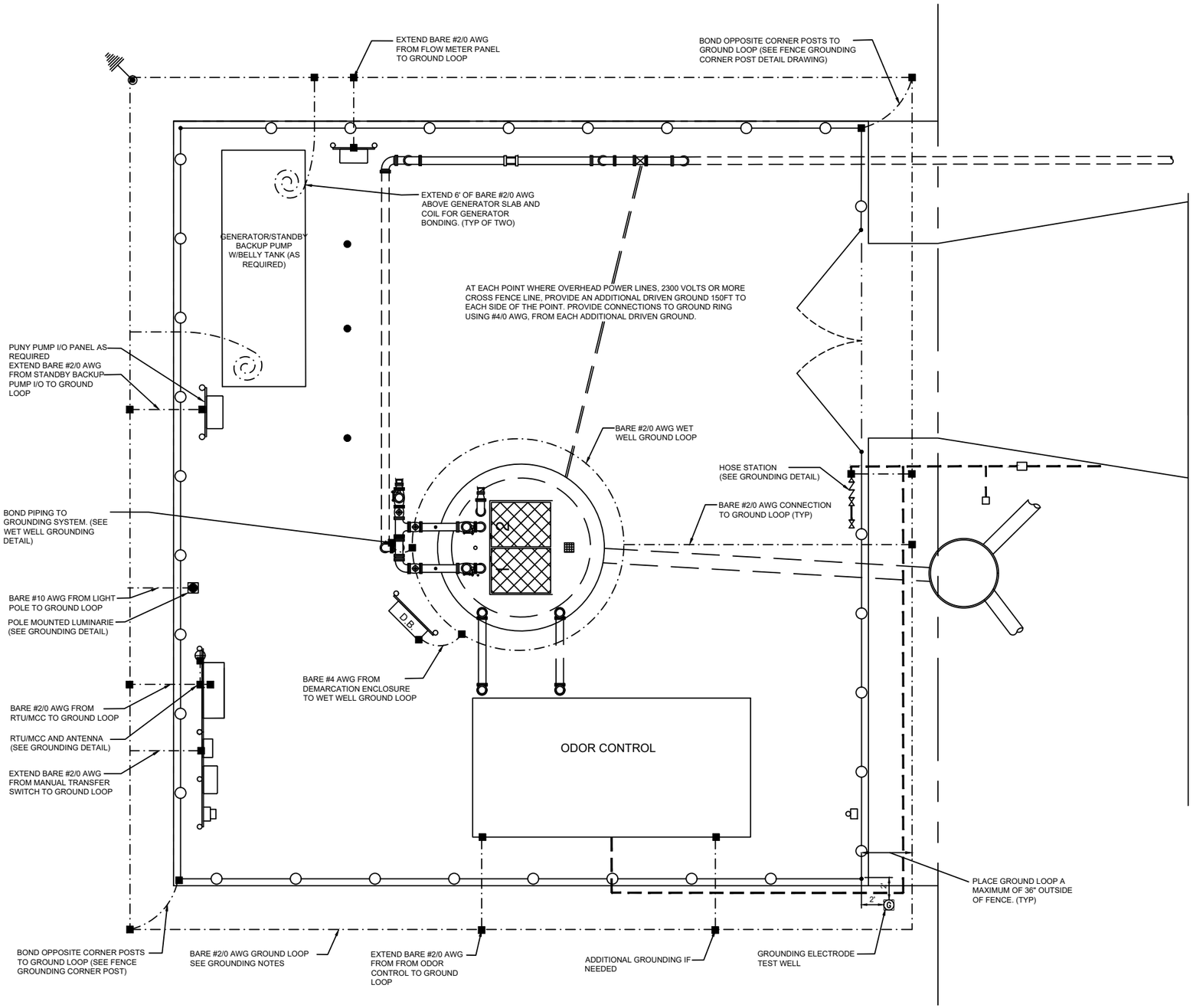
JEA STANDARD
PUMP STATION CONSTRUCTION DETAILS
SERVICE DETAILS

PROJ. NO.
DATE:
SCALE:

NO. SHEETS
SHEET NO.
DRAWING NO.

G:\Services\Shared\STANDARD\STANDARDS TEAM\2025 Water Wastewater Standards Manual\2025 Volume 2\PUMP STATION STANDARD DETAILS 2025.dwg Current Layout Tab = SERVICE DETAILS Wed Feb 19, 2025 - 14:55

Xrefs Attached=



PUMP STATION GROUNDING SITE PLAN

NOT TO SCALE

GROUNDING SYMBOL LEGEND

- GROUND CONDUCTOR (SIZE AS REQUIRED BY NOTES)
- EXOTHERMIC OR COMPRESSION CONNECTION
- GROUND ROD AND CONNECTION
- GROUND TEST WELL WITH GROUND ROD
- GROUND CONDUCTOR COILED ABOVE GRADE OR SLAB FOR FUTURE CONNECTION

GROUNDING NOTES:

1. PROVIDE A COMPLETE ELECTRICAL GROUNDING SYSTEM WITH A MEASURED GROUND RESISTANCE OF 5 OHMS OR LESS.
2. GROUNDING COMPONENTS AND MATERIALS SHALL BE NEW AND UNDAMAGED.
3. INSULATED GROUND CONDUCTORS SHALL BE SOFT-DRAWN, TIN-PLATED, STRANDED COPPER, CONFORMING TO THE REQUIREMENTS OF UL 83. INSULATED GROUND CONDUCTORS SHALL BE TYPE TW OR THW WITH GREEN-COLORED INSULATION. THE MINIMUM SIZE FOR INSULATED GROUND CONDUCTORS, REGARDLESS OF APPLICATION, SHALL BE #12 AWG.
4. BURIED GROUND LOOP CONDUCTORS
   - A. GROUND LOOP CONDUCTORS SHALL BE BARE #2/0 AWG, SOFT-DRAWN, TIN-PLATED, STRANDED COPPER CONDUCTOR UNLESS OTHERWISE NOTED.
   - B. BARE GROUND CONDUCTORS BELOW GRADE SHALL HAVE A MINIMUM OF 18 INCHES AND A MAXIMUM OF 30 INCHES OF EARTH COVER FROM FINISHED GRADE. BARE GROUND CONDUCTORS UNDER FOUNDATIONS OR SLABS SHALL HAVE A MINIMUM OF 6 INCHES OF EARTH COVER BETWEEN THE TOP OF THE CONDUCTOR AND THE FOUNDATION/SLAB.
   - C. BARE GROUND CONDUCTORS THAT PENETRATE UNDERGROUND SLABS OR WET WELL WALLS SHALL DO SO THROUGH A 3/4" X 3 1/2" (MIN.) SCHEDULE 40 PVC SLEEVE WITH GROUND WIRE CENTERED IN THE SLEEVE. FILL THE TOP OF THE SLEEVE WITH APPROVED SEALANT TO A DEPTH AT LEAST TWICE THE OUTSIDE DIAMETER OF THE SLEEVE. ALL WIRES PROTRUDING TO THE SURFACE SHALL BE TIN-PLATED.
   - D. BARE GROUND CONDUCTORS SHALL BE DIRECTLY BURIED IN EARTH TO WITHIN 24 TO 36 INCHES FROM THE BASE OF STRUCTURES OR EQUIPMENT IDENTIFIED FOR GROUNDING.
5. GROUND RODS
   - A. SHALL BE COPPER-CLAD 10 MM (13MM) COLD-DRAWN CARBON STEEL, MANUFACTURED IN ACCORDANCE WITH UL 467, WITH THE COPPER CLADDING BONDED TO THE STEEL ROD BY ELECTROLYTIC OR MOLTEN WELDING PROCESS. GROUND RODS SHALL HAVE A CONICAL POINT FOR PENETRATING THE GROUND. EACH GROUND ROD SHALL BE 10 FEET OR 3/4 INCHES IN DIAMETER, AT A MINIMUM.
   - B. THERE SHALL BE A MINIMUM OF TWO GROUND RODS THAT SHALL BE DRIVEN TO A MINIMUM DEPTH OF 10 FEET EACH. IF GROUND RODS ARE UNABLE TO BE DRIVEN TO A DEPTH OF 5 OHMS OR GREATER, THEN ADDITIONAL GROUND RODS MUST BE DRIVEN UNTIL THIS THRESHOLD IS REACHED. IF AN ADDITIONAL GROUND ROD IS REQUIRED, IT MUST BE DRIVEN IN ACCORDANCE WITH THE DESIGNATIVE ROD CODE.
   - C. GROUND RODS SHALL BE CONNECTED BY COMPRESSION COUPLINGS. SCREW COUPLINGS WILL NOT BE ACCEPTED.
6. GROUNDING SYSTEM HARDWARE
   - A. GROUNDING SYSTEM HARDWARE, INCLUDING CLAMPS, CONNECTORS, BOLTS, WASHERS, AND NUTS, SHALL BE TIN-PLATED COPPER.
   - B. SPLICES, JOINTS, AND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMIC OR IRREVERSIBLE COMPRESSION TYPE. THREADED OR BOLTED COUPLINGS ARE NOT ACCEPTABLE EXCEPT WHERE NOTED IN GROUNDING DETAILS.
   - C. PREPARE CONDUCTORS AND CONNECTORS PER MANUFACTURER'S REQUIREMENTS. REMOVE CONNECTIONS THAT FAIL MANUFACTURER'S RECOMMENDED TESTS.
   - D. GROUNDING CONNECTIONS SHALL ENCOMPASS 100 PERCENT OF THE GROUND CONDUCTOR AND CONDUCTOR ENDS.
   - E. GROUND LUGS SHALL BE SINGLE-HOLE, HEAVY-DUTY, TIN-PLATED COPPER BARS CONFORMING TO THE REQUIREMENTS OF IEEE 837 AND UL 467. HOLE GROUND LUGS SHALL HAVE A MINIMUM CENTERLINE HOLE SPACING. GROUND LUGS USING AN EXOTHERMIC PROCESS SHALL BE SIMILAR TO TYPE LA AS MANUFACTURED BY ERICO.
   - F. MAKE CABLE CONNECTIONS TO BUS BARS USING HIGH-COMPRESSION LUGS. GROUND LUGS USED WITH THE COMPRESSION PROCESS SHALL BE TYPE GYGA AS MANUFACTURED BY BURNDY ELECTRICAL.
7. BOND PIPING TO THE GROUNDING SYSTEM VIA CONNECTION AT THE LAST FLANGE BEFORE PIPES RE-ENTER UNDERGROUND. SEE WET WELL GROUNDING DETAIL.
8. GROUNDING BY USE OF ANCHOR BOLTS, AGAINST GASKETS ON PAINTED OR VARNISHED SURFACES, OR ON BOLTS HOLDING REMOVABLE ACCESS COVERS IS NOT ACCEPTABLE.
9. GROUND RESISTANCE SHALL BE CERTIFIED BY AN INDEPENDENT GROUNDING SYSTEM TESTING ORGANIZATION. TESTING SHALL BE DONE AT EACH TEST SITE USING THE 3-POINT FALL OF POTENTIAL METHOD. THIS DOCUMENT MUST BE SUBMITTED AT THE TIME OF STARTUP FOR FINAL ACCEPTANCE.
10. NO CHEMICALS SHALL BE USED TO REDUCE THE RESISTANCE UNLESS APPROVED BY JEA.
11. A MINIMUM OF 5 OHMS OR SHALL BE GUARANTEED BY THE CONTRACTOR FOR THREE YEARS FROM THE SITE'S ACCEPTANCE. IF THE RESISTANCE FAILS WITHIN THIS TIME, THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDING ADDITIONAL GROUND RODS AT THE CONTRACTOR'S EXPENSE.

REVISIONS

NO.	BY	DATE
4.		
3.		
2.		
1.		

DESIGN ENGINEER

FLORIDA REGISTRATION NO.

DESIGNER:
DRAWN BY:
DATE:
CHECKED BY:
DATE:

JEA Building Community

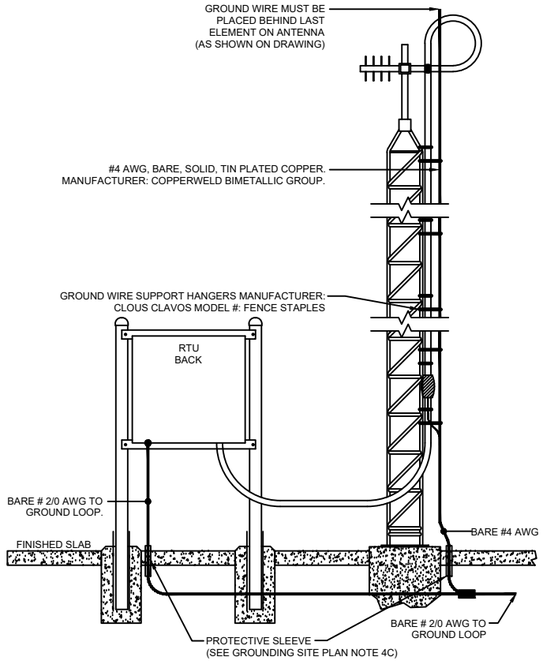
JEA STANDARD
PUMP STATION CONSTRUCTION DETAILS
GROUNDING SITE PLAN

PROJ. NO.
DATE:
SCALE:

NO. SHEETS
SHEET NO.
DRAWING NO.

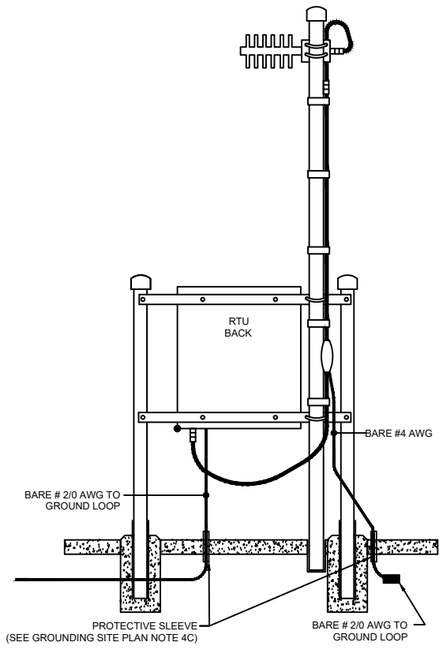
G:\Services\Shared\STANDARD\STANDARDS TEAM\2025 Water Wastewater Standards Manual\2025 Volume 2\PUMP STATION STANDARD DETAILS 2025.dwg Current Layout Tab = GROUNDING SITE PLAN Wed Feb 19, 2025 - 14:55

Xrefs Attached=



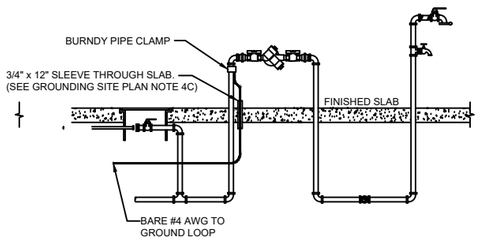
ALTERNATE ANTENNA - GROUNDING DETAIL

FOR POLE HEIGHTS 20 FEET AND ABOVE
NOT TO SCALE



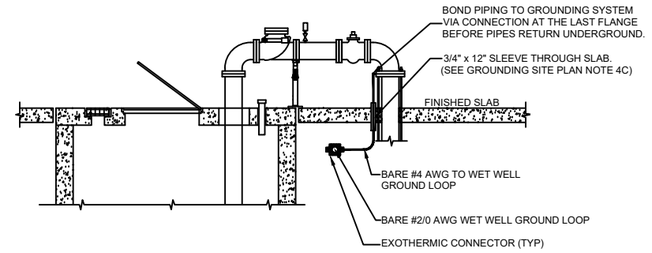
STANDARD ANTENNA - GROUNDING DETAIL

NOT TO SCALE



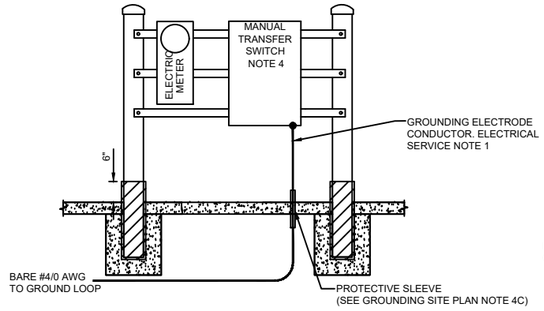
HOSE STATION GROUNDING DETAIL

NOT TO SCALE



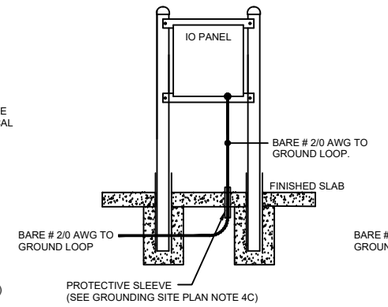
WETWELL GROUNDING DETAIL

NOT TO SCALE



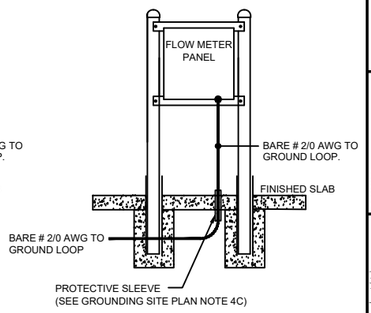
MANUAL TRANSFER SWITCH GROUNDING DETAIL

NOT TO SCALE



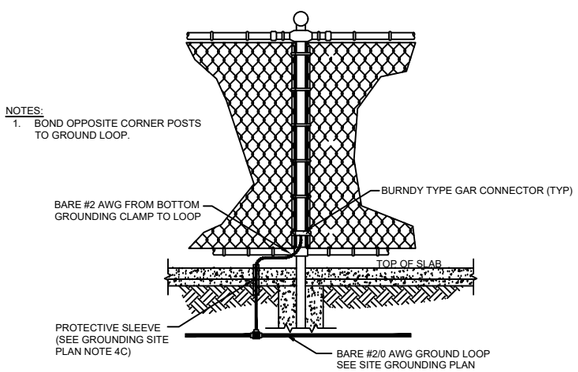
STANDBY BACKUP PUMP I/O GROUNDING DETAIL

NOT TO SCALE



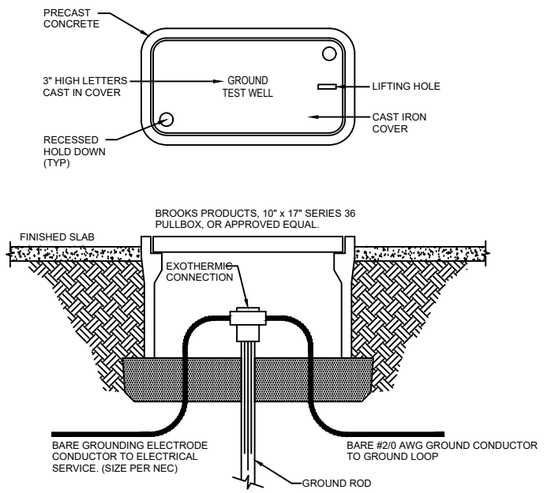
FLOW METER GROUNDING DETAIL

NOT TO SCALE



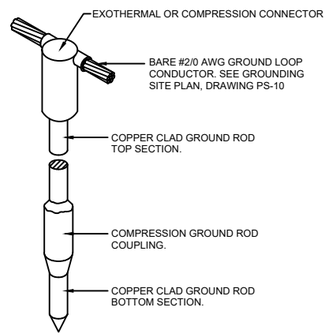
FENCE GROUNDING CORNER POST DETAIL

NOT TO SCALE



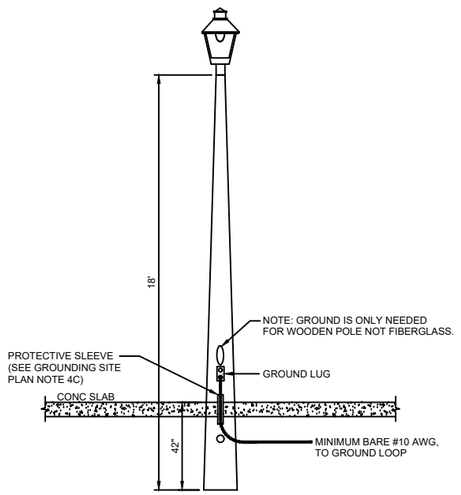
GROUND SYSTEM TEST WELL DETAIL

NOT TO SCALE



TYPICAL GROUND ROD & CONNECTION DETAIL

NOT TO SCALE



SITE LIGHT GROUNDING DETAIL

NOT TO SCALE

NO.	BY	DATE	REVISIONS
4.			
3.			
2.			
1.			

DESIGN ENGINEER
FLORIDA REGISTRATION NO.

DESIGNED:
DRAWN BY:
DATE:
CHECKED BY:
DATE:

JEA
Building Community

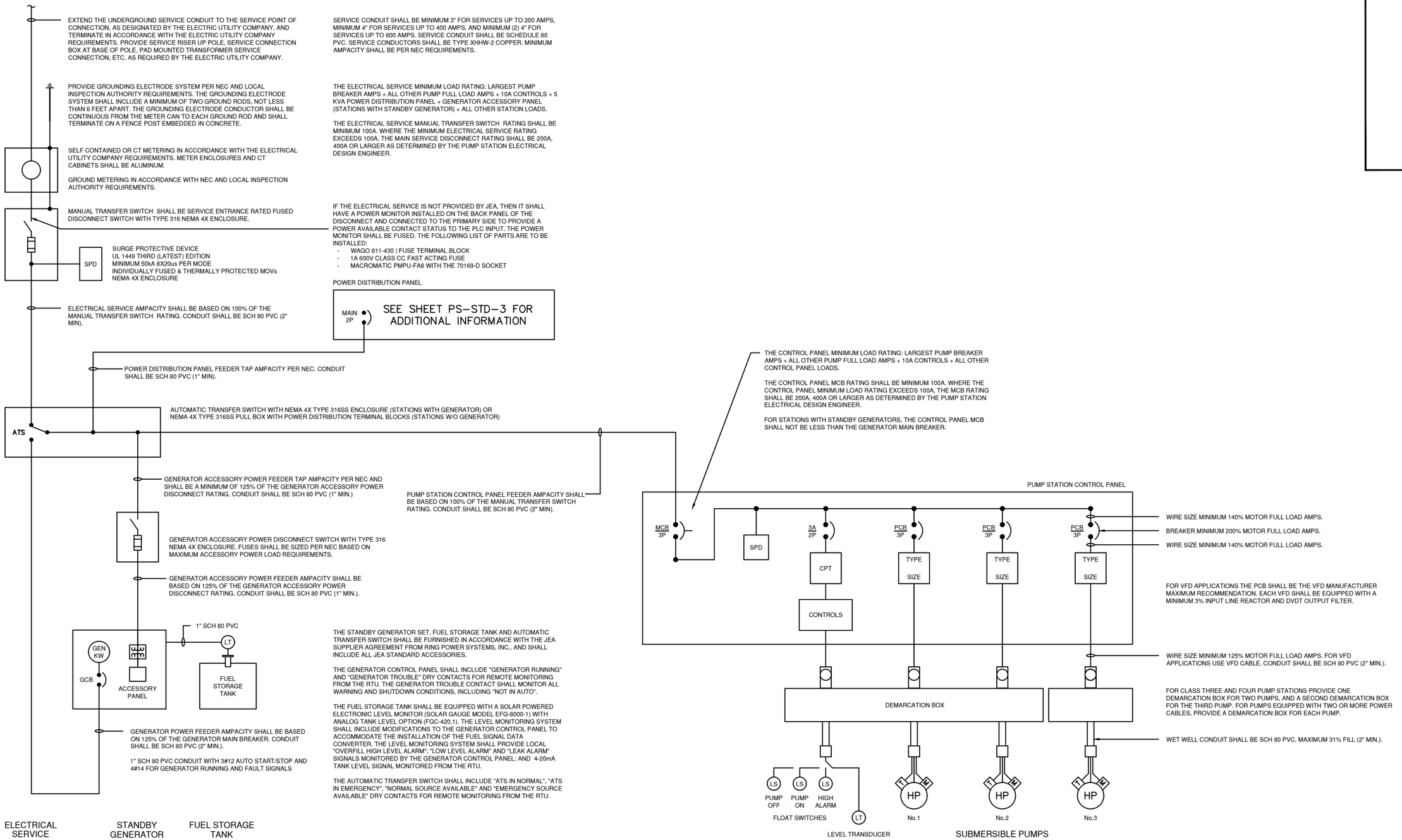
JEA STANDARD
PUMP STATION CONSTRUCTION DETAILS
GROUNDING DETAILS

PROJ. NO.
DATE:
SCALE:

NO. SHEETS
SHEET NO.
DRAWING NO.

G:_Services\Shared\STANDARD\STANDARDS TEAM\2025 Water Wastewater Standards Manual\2025 Volume 2\PUMP STATION STANDARD DETAILS 2025.dwg Current Layout Tab = GROUNDING DETAILS Wed Feb 19, 2025 – 14:55

Xrefs Attached=



ELECTRIC SINGLE LINE DETAIL DIAGRAM

NO.	BY	DATE	REVISIONS
4.			
3.			
2.			
1.			

DESIGN ENGINEER
FLORIDA REGISTRATION NO.

DESIGNER:
DRAWN BY:
DATE:
CHECKED BY:
DATE:

JEA Building Community sm

JEA STANDARD
PUMP STATION CONSTRUCTION DETAILS
ELECTRIC SINGLE LINE DIAGRAM

PROJ. NO.
DATE:
SCALE:

NO. SHEETS
SHEET NO.
DRAWING NO.

G:\Services\Shared\STANDARD\STANDARDS TEAM\2025 Water Wastewater Standards Manual\2025 Volume 2\PUMP STATION STANDARD DETAILS 2025.dwg Current Layout Tab = ELECTRIC SINGLE LINE DIAGRAM Wed Feb 19, 2025 - 14:55

Xrefs Attached=