

CITY OF GEORGETOWN

SOUTH CAROLINA

MARYVILLE SCHOOL LIFT STATION REPLACEMENT

PROJECT #1815

R.I.A. GRANT #S-21-1287

JUNE 30, 2021

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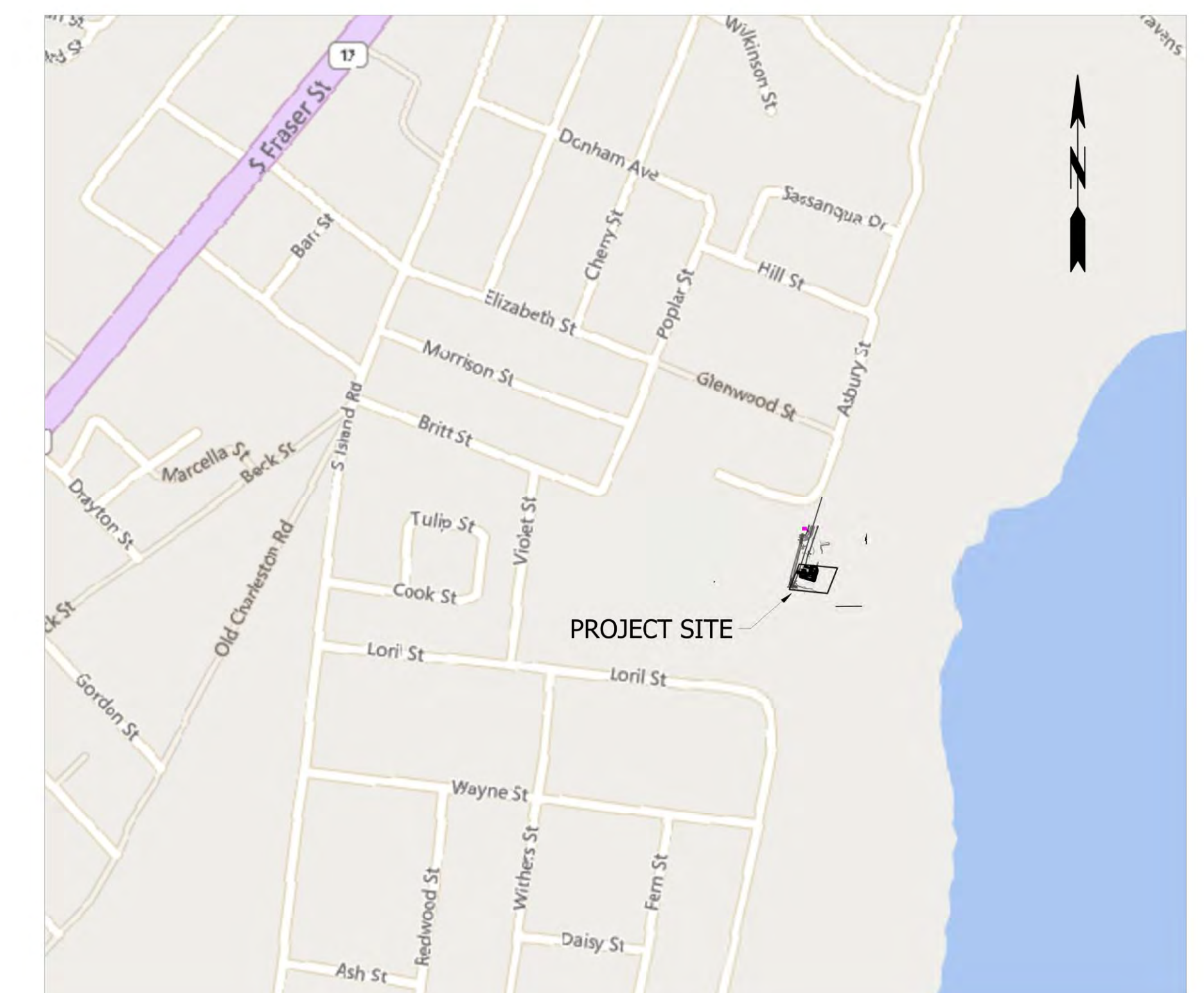
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BID SET



VICINITY MAP
NOT TO SCALE



PROJECT AREA MAP
NOT TO SCALE

ABBREVIATIONS:

Table with 4 columns: Abbreviation, Description, Abbreviation, Description. Includes categories like AREA, ABANDONED, AGGREGATE BASE COURSE, etc.

GENERAL NOTES:

- 1. ALL PROPOSED UTILITIES TO BE BUILT TO CITY OF GEORGETOWN STANDARDS AND THE PROJECT SPECIFICATIONS. IF THERE ARE ANY DISCREPANCIES, THE MORE STRINGENT OF THE TWO SHALL BE ADHERED TO.
2. EXISTING UTILITIES ARE LOCATED APPROXIMATELY ON THE DRAWINGS. CONTRACTOR SHALL CONTACT UTILITY LOCATE TO CONFIRM THE LOCATIONS OF ALL EXISTING TELEPHONE, ELECTRICAL AND TV CABLES, GAS LINES AND OTHER UTILITIES AT LEAST 48 HOURS PRIOR TO COMMENCING WORK.

EROSION CONTROL NOTES:

- 1. INSTALL SILT FENCE OVER AND AROUND TOP OF EXISTING PIPE AND INLETS AT DISTURBED AREAS.
2. INSTALL SILT FENCE AROUND SPOIL PILES.
3. PROVIDE EROSION CONTROL MEASURES AROUND STOCK/WASTE PILES AND STAGING AREAS AS APPROVED BY ENGINEER.

EROSION CONTROL SEQUENCE:

- 1. CLEAR SITE ONLY AS NECESSARY TO INSTALL EROSION CONTROL DEVICES AS INDICATED ON THE DRAWINGS.
2. NOTIFY OWNER PRIOR TO COMMENCING MAIN CONSTRUCTION OPERATIONS.
3. ONCE EROSION CONTROL DEVICES ARE APPROVED, BEGIN CONSTRUCTION OPERATION.

CONSTRUCTION SEQUENCE:

- 1. INSTALL ALL EROSION AND SEDIMENT CONTROL ITEMS.
2. CLEARING AND GRUBBING.
3. REMOVE CHAIN LINK FENCE.
4. INSTALL TEMPORARY 6' MINIMUM CONSTRUCTION FENCING. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING JOB SITE SECURITY.

LEGEND

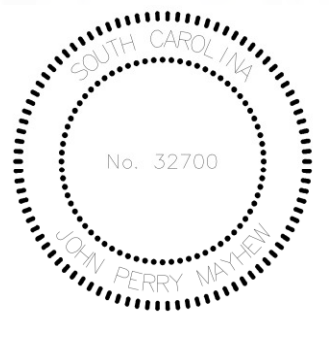
Legend section containing symbols and codes for SURVEY, UTILITIES, SITE, VEGETATION, WATER, SEWER, and STORM DRAINAGE. Includes sub-sections like EASEMENTS, EROSION CONTROL, and CONSTRUCTION SEQUENCE.

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REVISIONS



CITY OF GEORGETOWN SOUTH CAROLINA
MARYVILLE SCHOOL LIFT STATION REPLACEMENT
LEGEND, ABBREVIATIONS AND GENERAL NOTES



DESIGNED BY: JPM

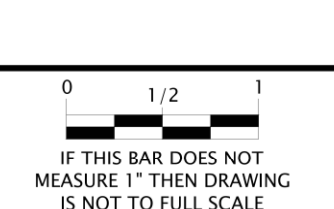
DRAWN BY: BGF

CHECKED BY: JPM

PROJECT NO.: 3383 - A

DATE: JUNE 30, 2021

SCALE: HORZ.: 1" = 10'

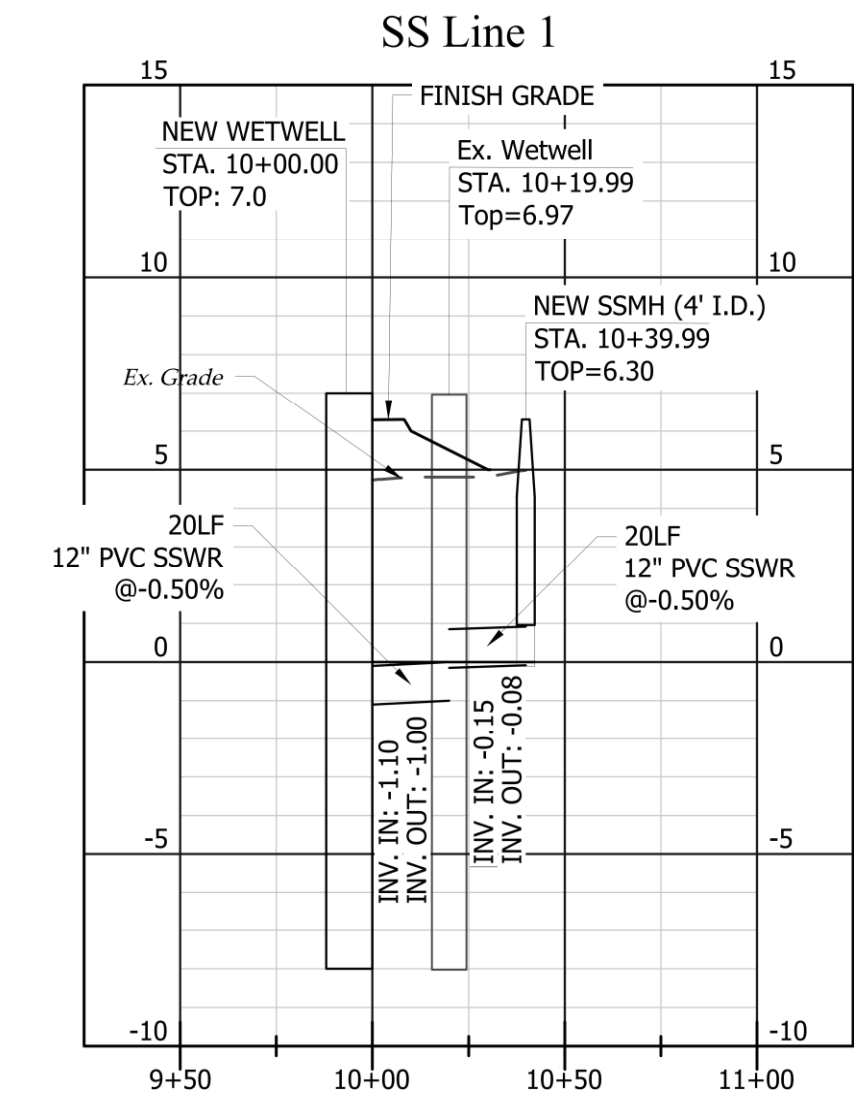
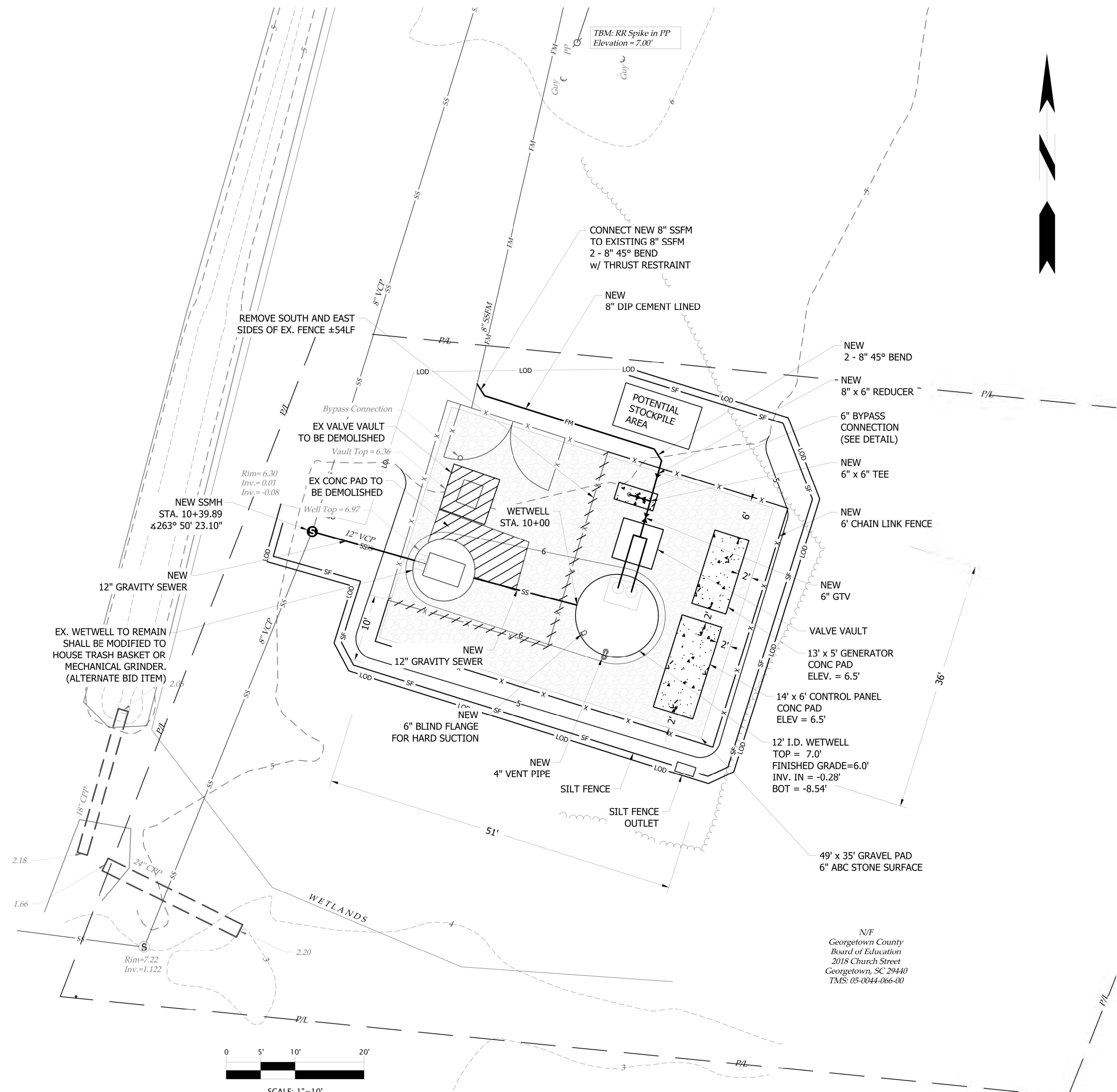
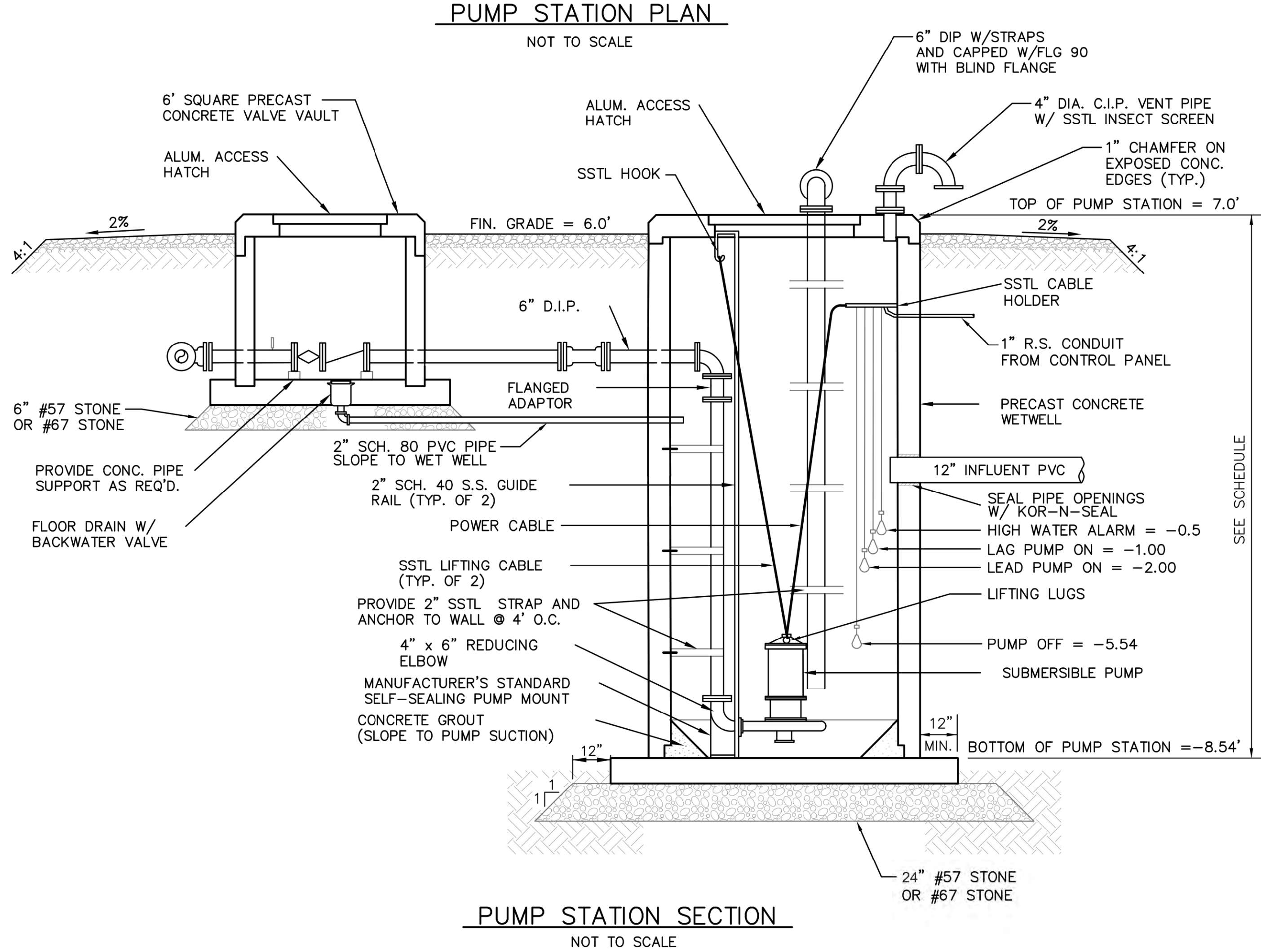
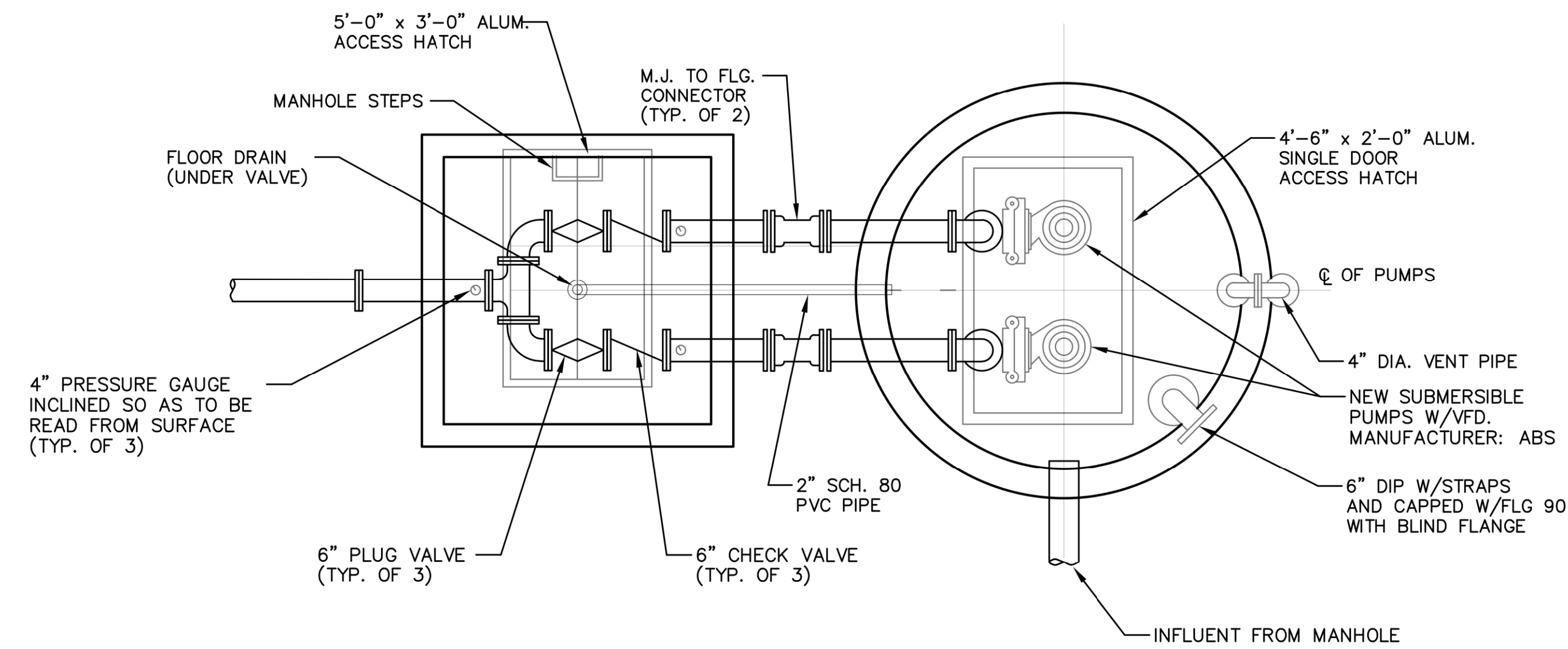


IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE



PUMP STATION SCHEDULE

WET WELL DIAMETER (FT)	CAPACITY (GPM)	T.D.H. (FT)	MOTOR (HP)	TOP OF STATION ELEV (FT)	BOTTOM OF STATION ELEV (FT)	FINISHED GRADE (FT)	PUMP OFF ELEVATION (FT)	LEAD PUMP ON ELEV (FT)	LAG PUMP ON ELEV (FT)	HIGH WATER ALARM ELEV (FT)	12" INV IN ELEVATION (FT)
12	780	126	58	7	-8.54	6.0	-5.54	-2	-1	-0.5	-1.10



- NOTES:
1. INFORMATION SHOWN COLLECTED THRU SURVEY DATA AND PREVIOUS PLANS. CONTRACTOR SHALL FIELD VERIFY ALL INFORMATION REQUIRED TO CONSTRUCT PROJECT.
 2. CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL ITEMS PRIOR TO COMMENCING CONSTRUCTION OR EARTH DISTURBING ACTIVITIES, AND MAINTAIN IN WORKING ORDER FOR THE DURATION OF THE PROJECT.
 3. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SHEET PILE DESIGN, SHORE AND BRACE SYSTEM DESIGN.
 4. CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING SYSTEM.
 5. CONTRACTOR IS RESPONSIBLE FOR INSPECTIONS AND TESTING.

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REVISIONS

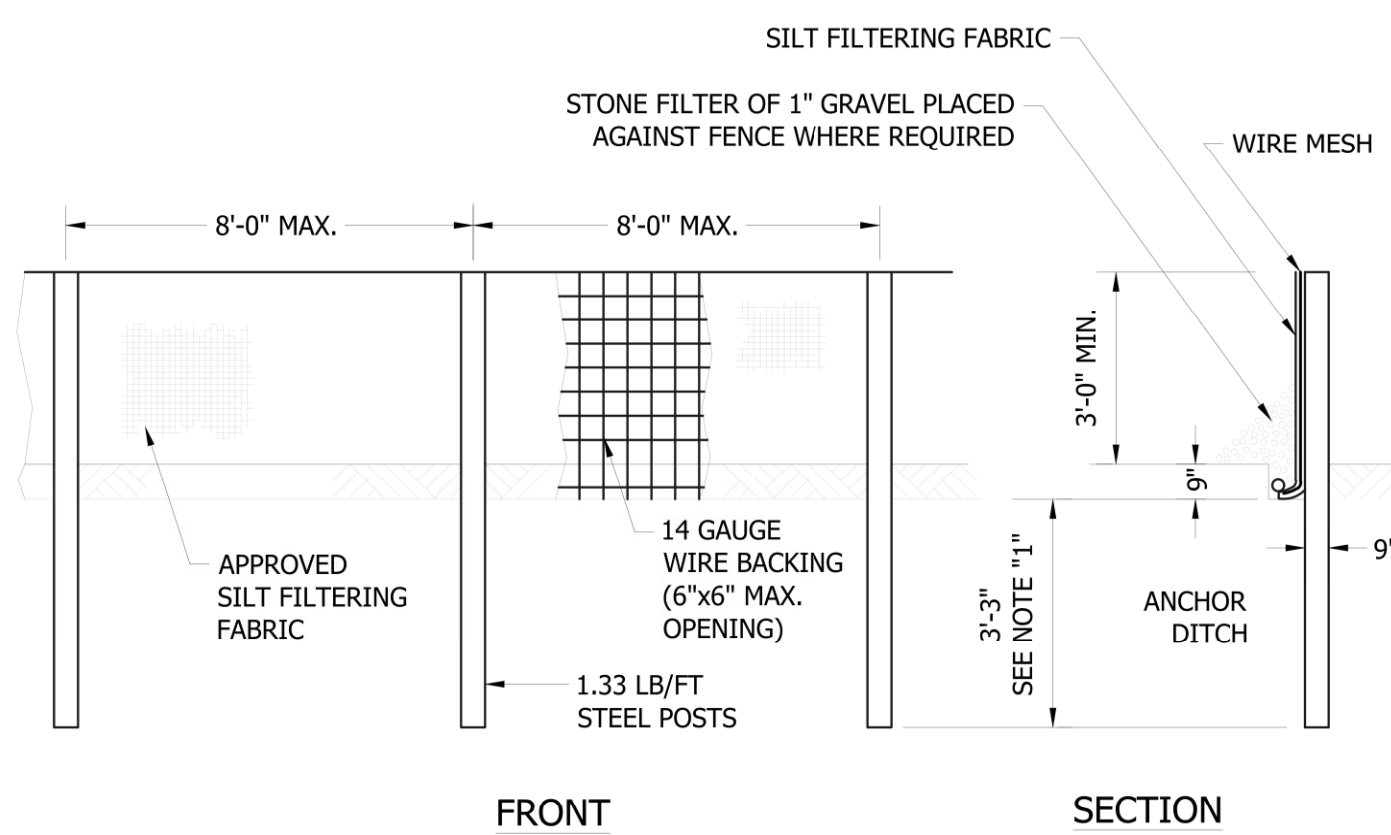
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SOUTH CAROLINA
CITY OF GEORGETOWN
MARYVILLE SCHOOL LIFT STATION REPLACEMENT
LIFT STATION

DESIGNED BY: JPM
DRAWN BY: BGF
CHECKED BY: JPM
PROJECT NO.: 3383 - A
DATE: JUNE 30, 2021
SCALE: HORZ.: 1" = 10'

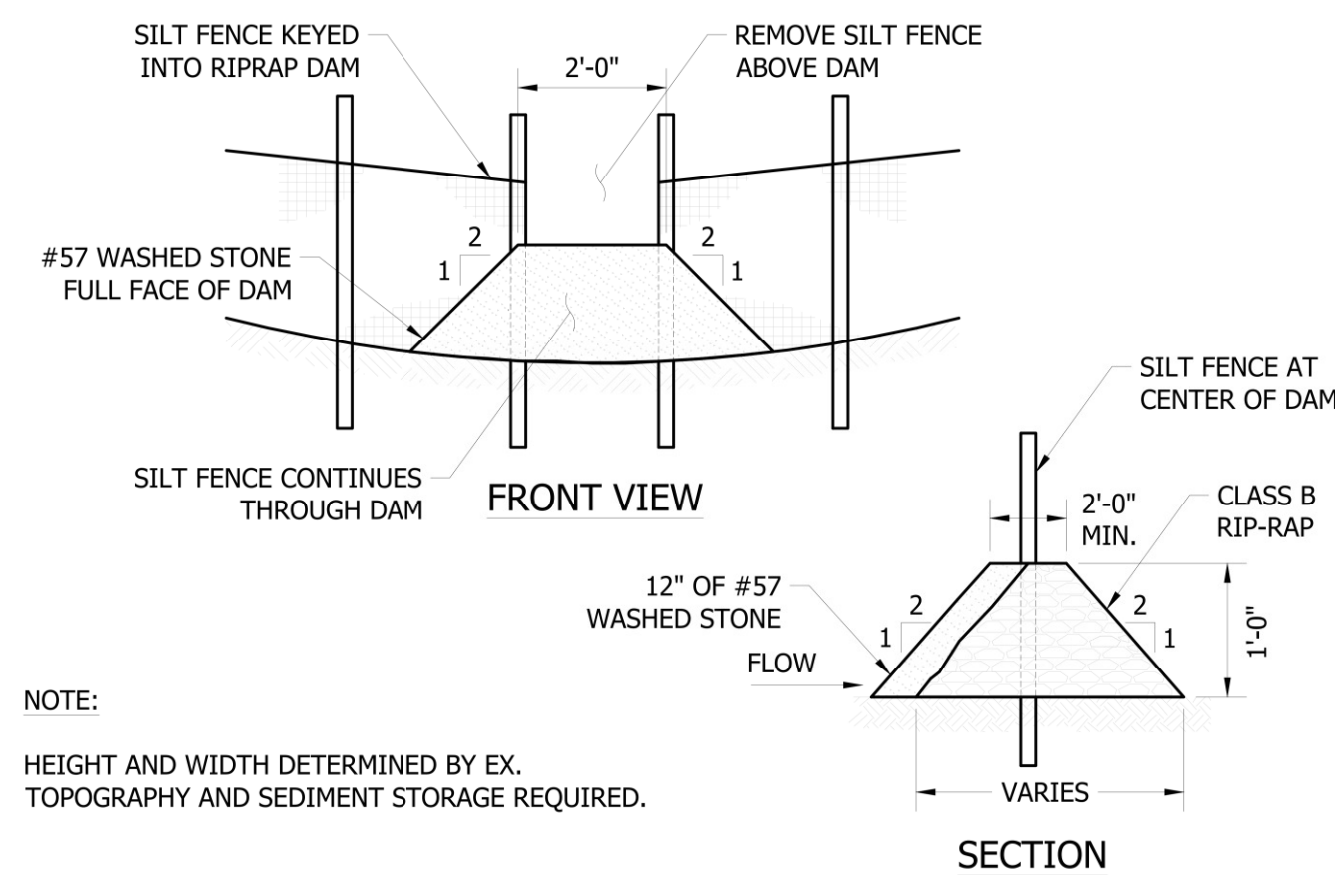
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO FULL SCALE

T:\Projects\Georgetown-3383-A-MaryvilleSchool_LiftStation\CADD\3383-A_SHTS.C-01.dwg BFAULK 6/14/2021 1:48 PM



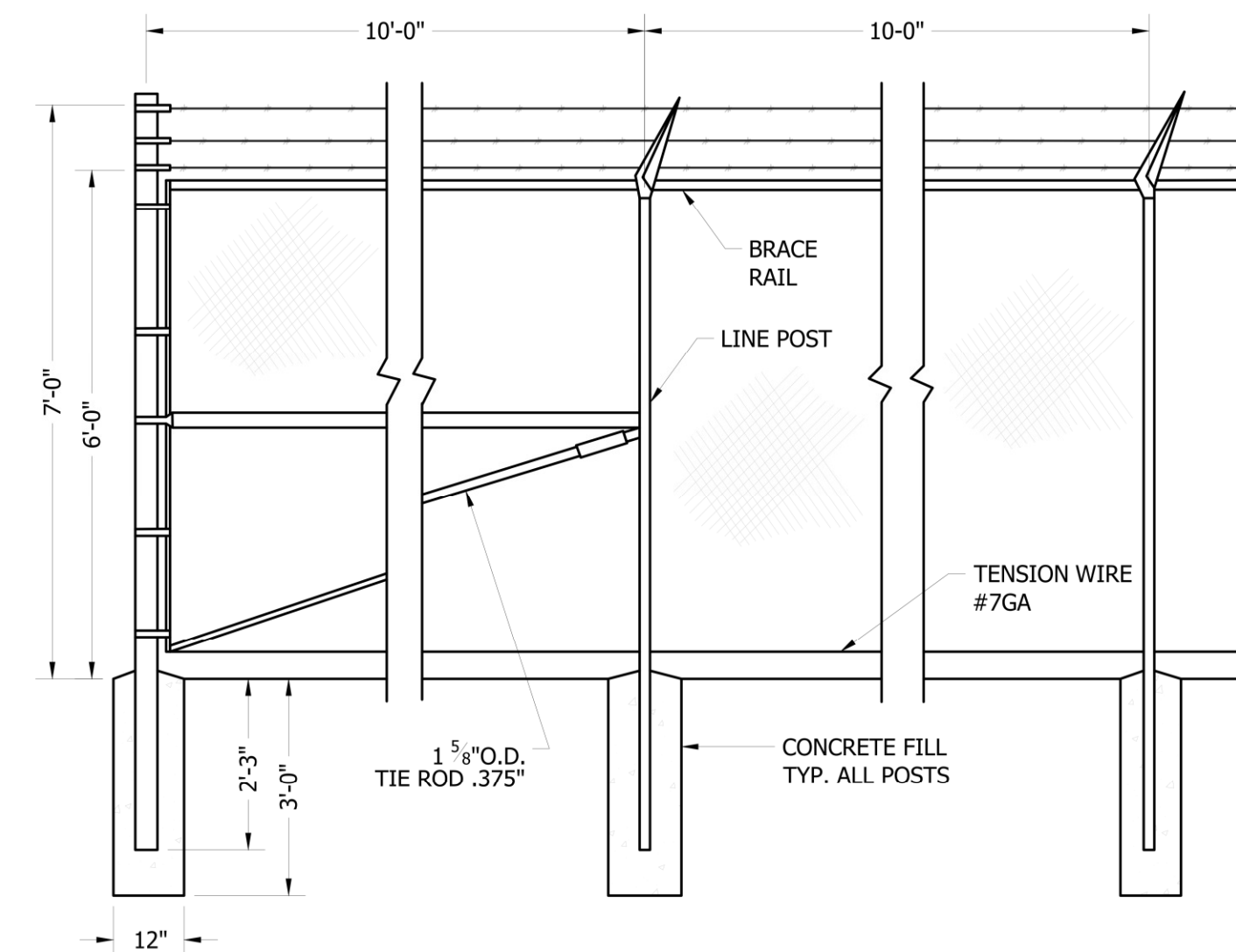
- NOTES:
- POSTS SET AT DEPTHS OF 4' FOR EARTH BACKFILL. ANCHOR DITCH IS 9" x 9" AND FILL IS TO BE COMPACTED.
 - PROVIDE ADEQUATE EXCAVATION AHEAD OF SILT FENCE TO ACT AS A VELOCITY BREAK AND SILT TRAP.
 - CONTRACTOR MAY USE ALTERNATE MATERIAL OR METHOD UPON APPROVAL FROM ENGINEER.

1 SILT FENCE
C-04 NOT TO SCALE

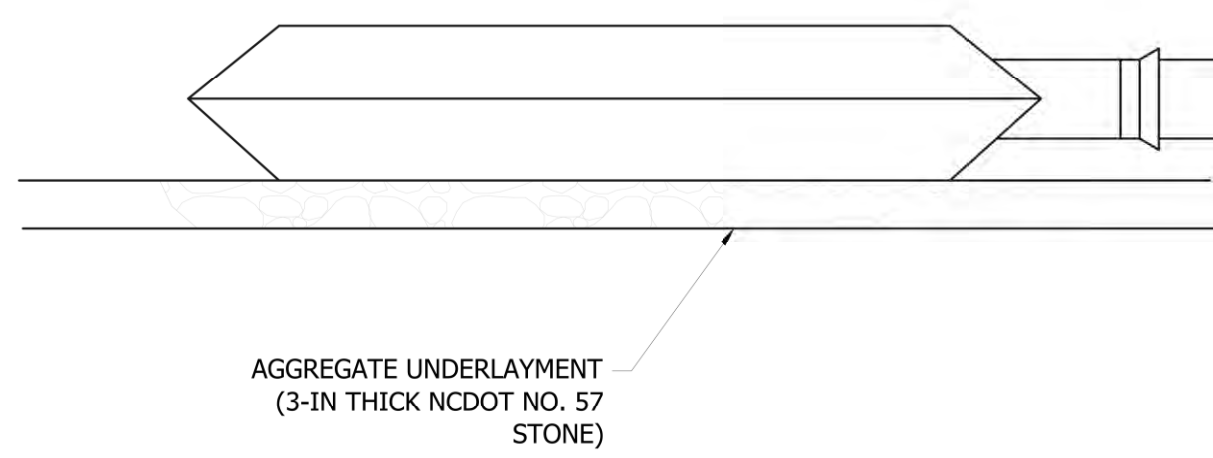
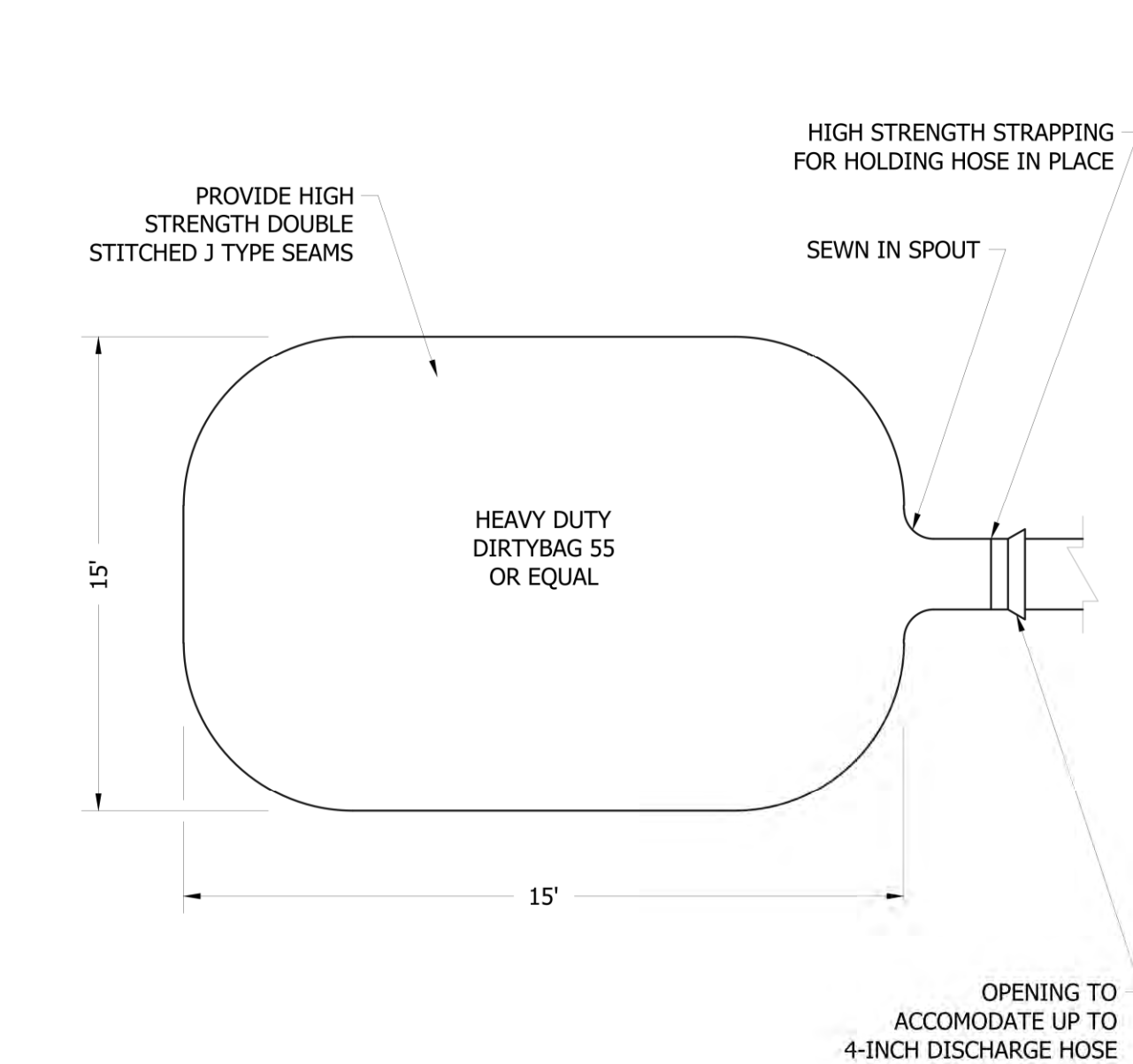


- NOTE:
HEIGHT AND WIDTH DETERMINED BY EX. TOPOGRAPHY AND SEDIMENT STORAGE REQUIRED.
- MAINTENANCE:
- INSPECT STONE OUTLETS AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. CHECK THE STRUCTURE FOR EROSION, PIPING, AND ROCK DISPLACEMENT. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
 - REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN.
 - REMOVE STONE OUTLET AND UNSTABLE SEDIMENT DEPOSITS AND BRING AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

2 STONE OUTLET
C-04 NOT TO SCALE

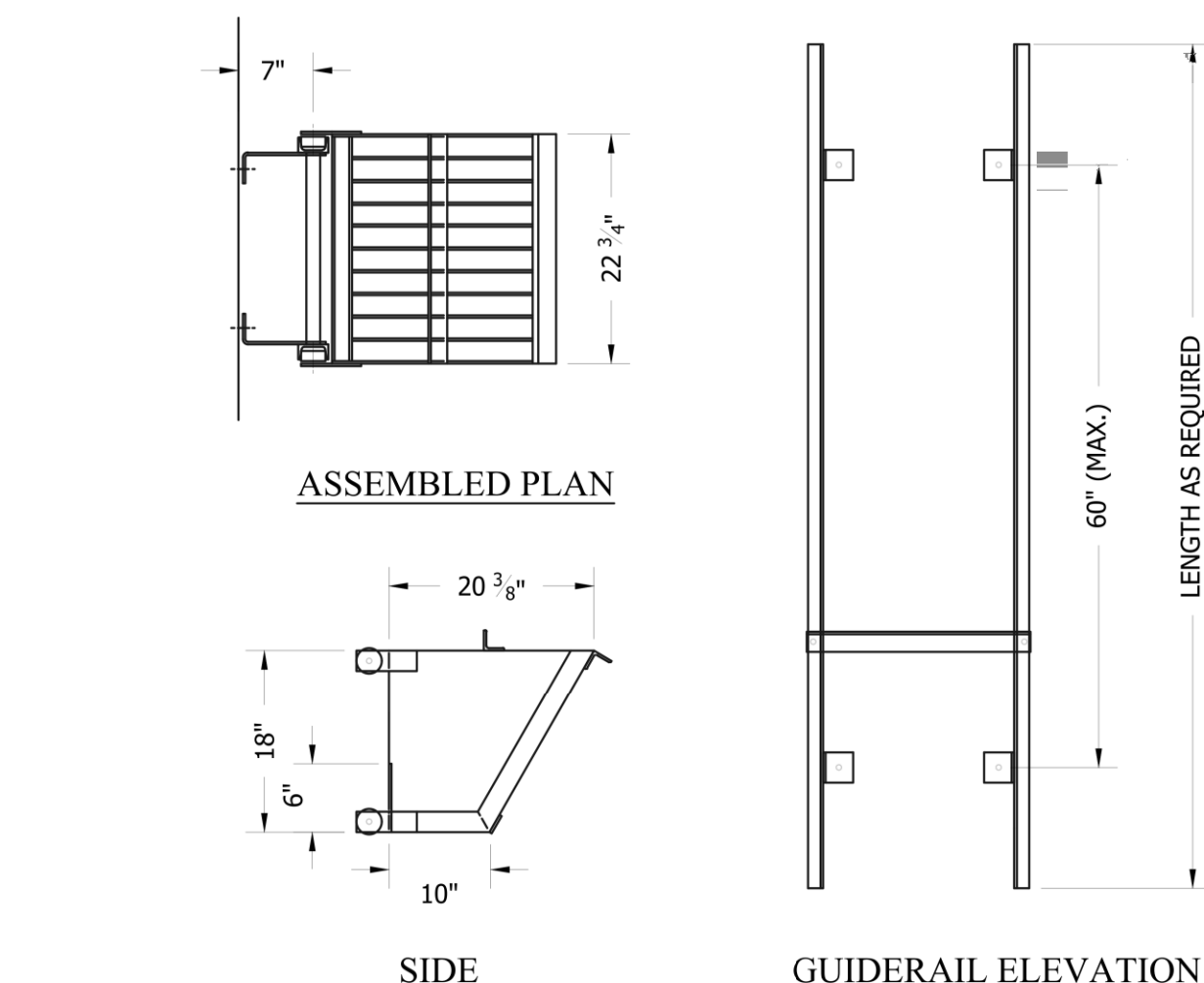


3 TYPICAL CHAIN LINK FENCE
C-04 NOT TO SCALE



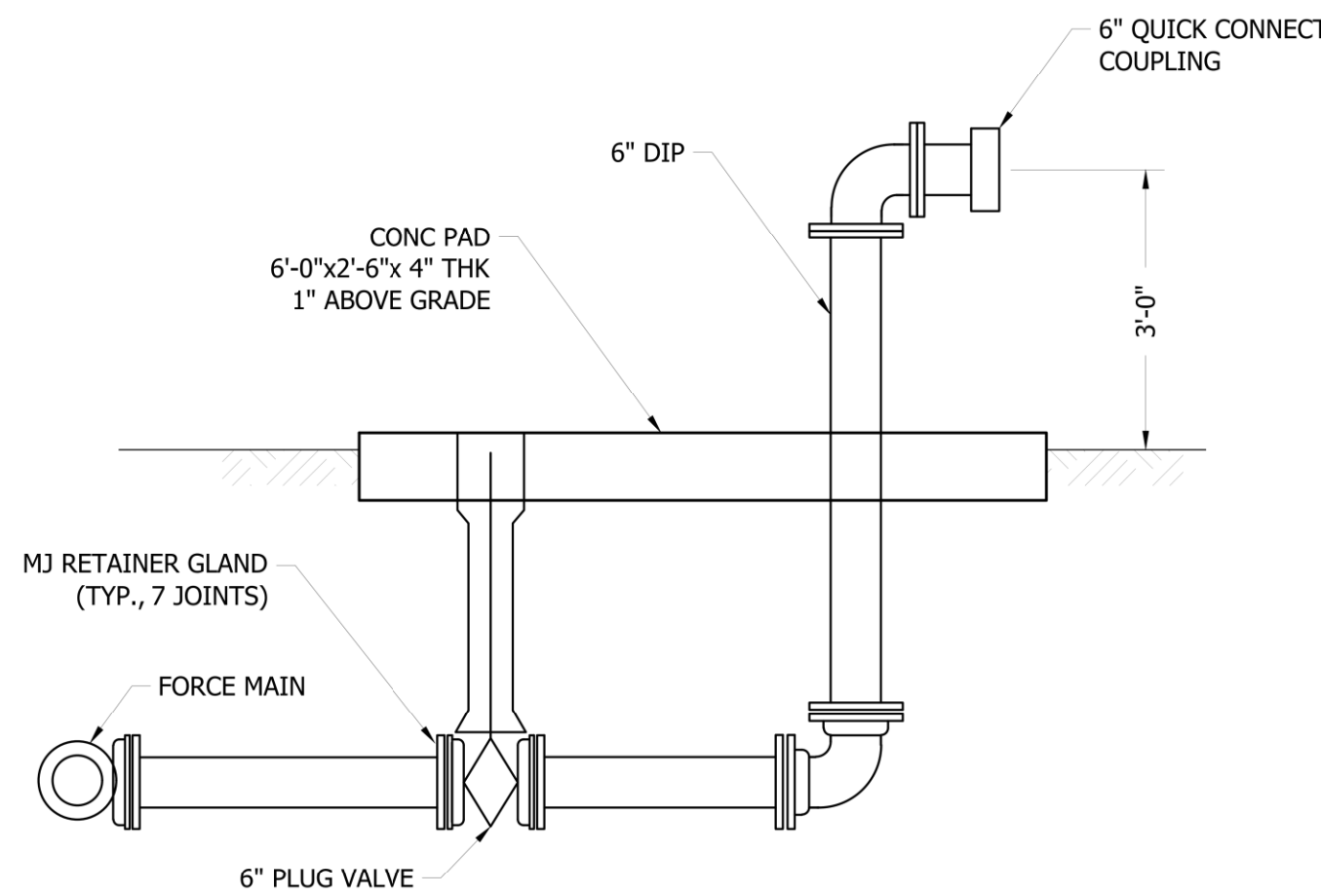
- NOTES:
- THE DEWATERING BAG SHALL BE MADE OF NON-WOVEN GEOTEXTILE WITH A MIN. SURFACE AREA OF 223 SQUARE FEET PER SIDE.
 - ALL STRUCTURAL SEAMS SHALL BE SEWN WITH A DOUBLE STITCH USING A DOUBLE NEEDLE MACHINE WITH HIGH STRENGTH THREAD.
 - THE SEAM STRENGTH SHALL WITHSTAND 100 LB/IN USING ASTM D-4848 TEST METHOD.
 - THE GEOTEXTILE FABRIC SHALL BE A 10 OZ NON-WOVEN FABRIC.
 - DISCHARGE FROM THE DEWATERING BAG SHALL BE DIRECTED SUCH THAT PRE-DISTURBANCE HYDROLOGY IS NOT CHANGED.

8 DEWATERING BAG
C-04 NOT TO SCALE

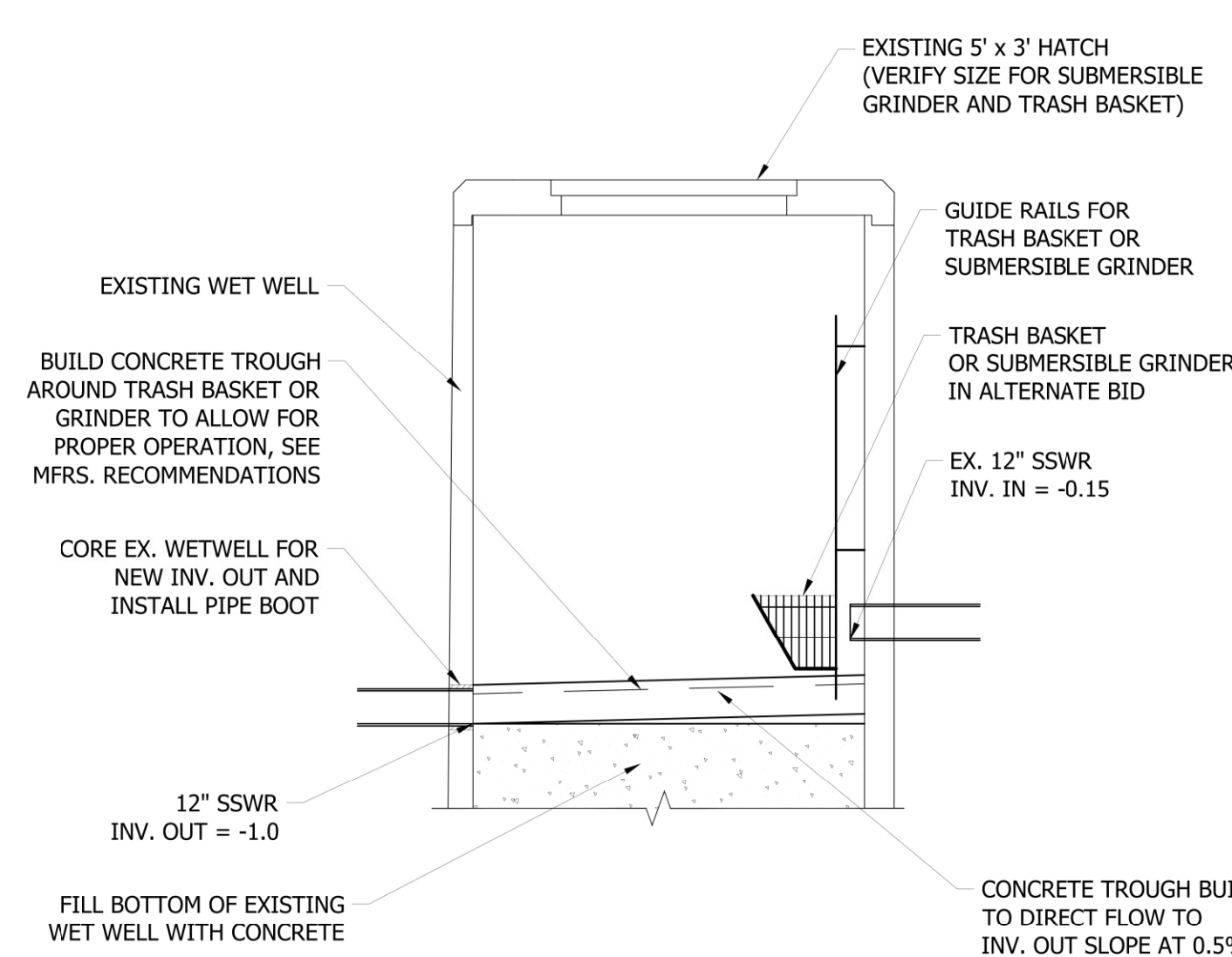


- NOTES:
- BAR SCREEN STYLE BASKET SHALL HAVE 2" CLEAR OPENING BETWEEN 1/2" THICK BARS AND SOLID SIDES.
 - HEAVY DUTY LADDER/GUIDE RAIL SYSTEM SHALL BE OF 3" STRUCTURAL ALUMINUM CHANNEL AND INCORPORATE 1-3/8" DIA. SLIP RESISTANT ALUMINUM RUNGS 12" O.C.
 - BASKET TO HAVE (4) 2.5" SOLID ALUMINUM WHEELS W/ 1/2" STAINLESS STEEL AXLES AND ALUMINUM BASKET STOP

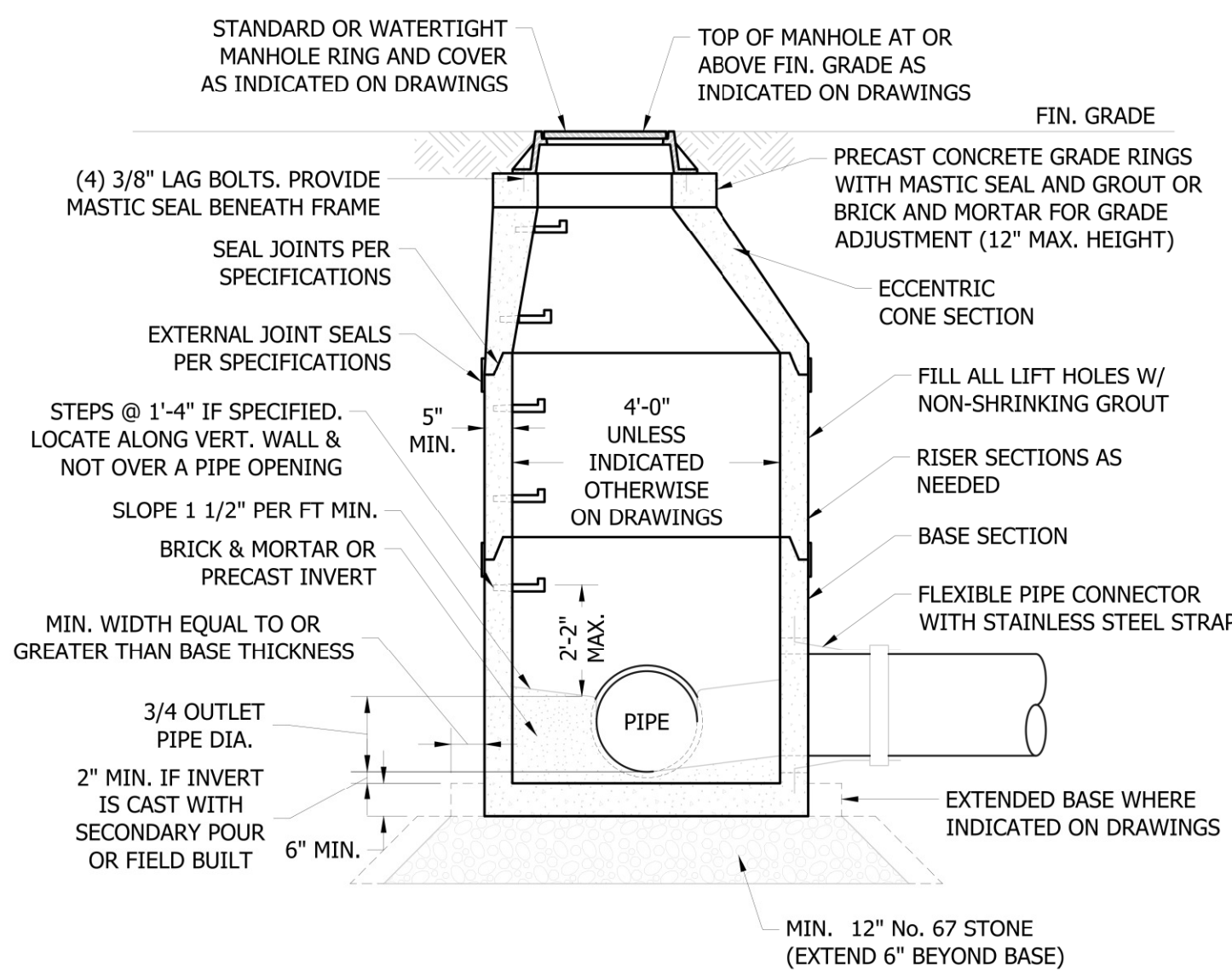
5 TRASH BASKET DETAIL
C-1.01 NOT TO SCALE



6 BYPASS PUMPING CONNECTION
C-1.01 NOT TO SCALE



7 EXISTING WET WELL MODIFICATIONS
C-04 NOT TO SCALE



9 STANDARD PRECAST CONCRETE MANHOLE
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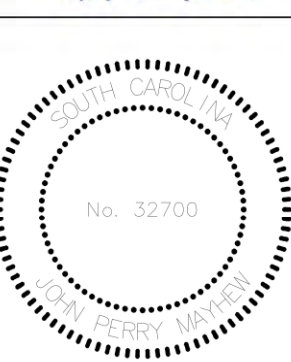
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CITY OF GEORGETOWN

GEORGETOWN

MARYVILLE SCHOOL LIFT STATION REPLACEMENT

LIFT STATION



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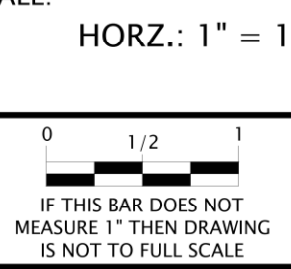
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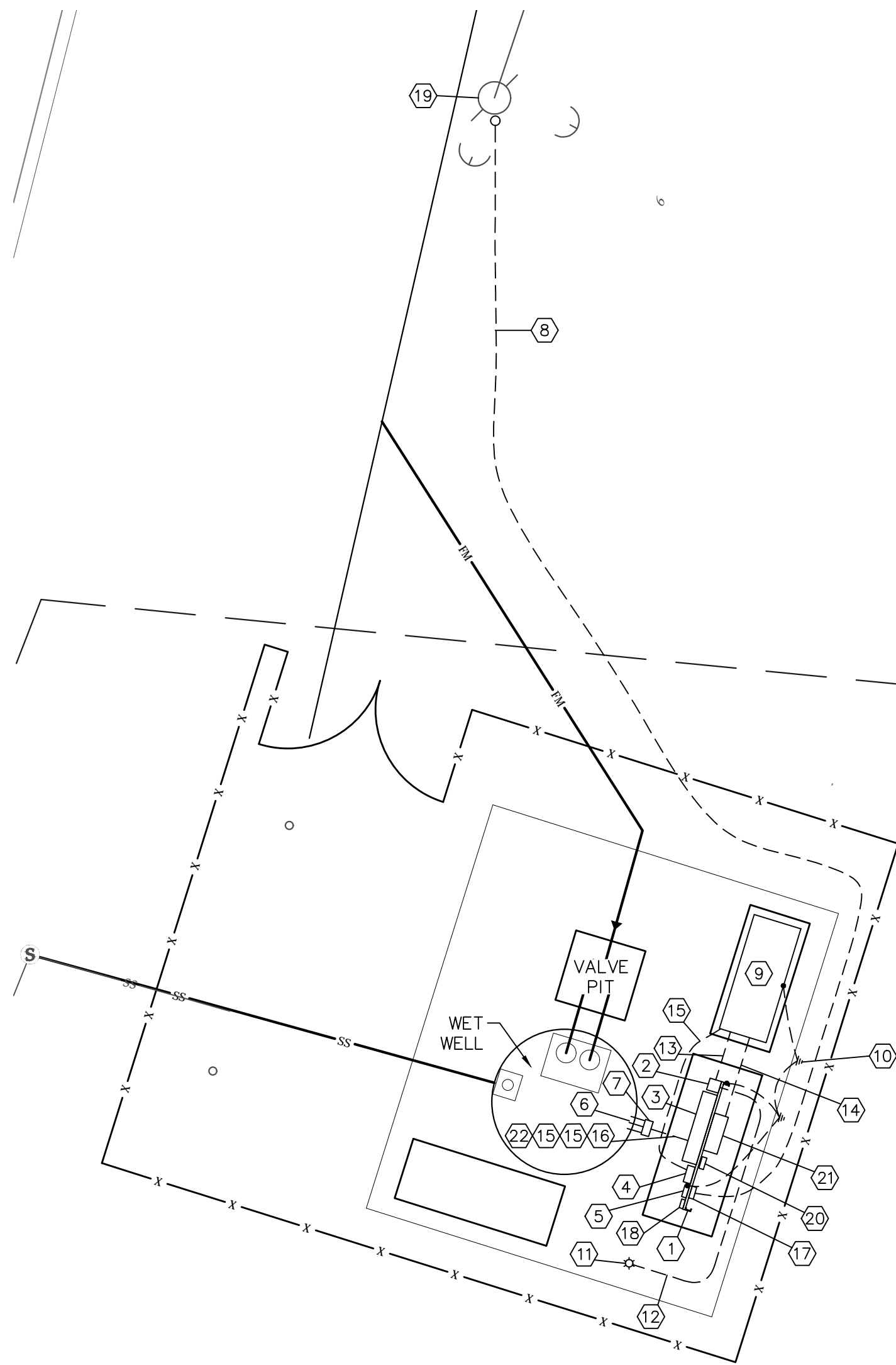
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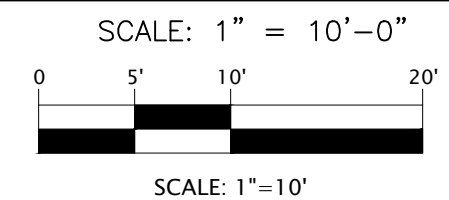


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C-04

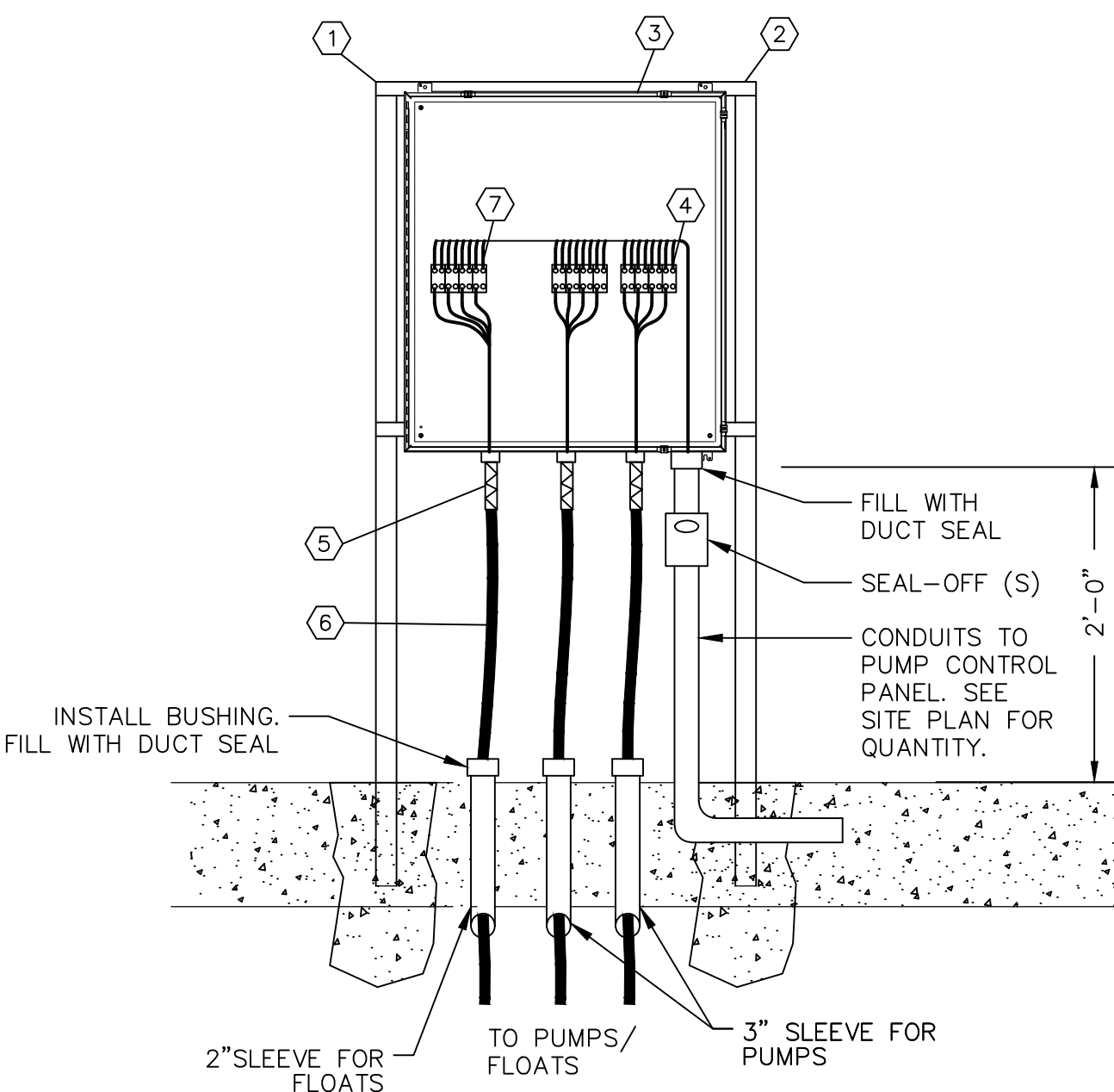


ELECTRICAL SITE PLAN



ELECTRICAL SITE PLAN NOTES:

- NEW ELECTRICAL EQUIPMENT RACK. SEE ONE-LINE AND RACK DETAIL.
- MPZ. SEE SCHEDULE.
- PUMP CONTROL PANEL
- AUTOMATIC TRANSFER SWITCH
- MAIN CIRCUIT BREAKER
- STUB CONDUITS INTO WETWELL AND INSTALL BUSHING.
- WETWELL JUNCTION BOX. SEE DETAIL THIS SHEET.
- SECONDARY SERVICE. SEE ONE-LINE DIAGRAM.
- GENERATOR. CONNECT TO OUTPUT BREAKER, BATTERY CHARGER, BLOCK HEATER AND FOR CONTROL STATUS AND ALARM. VERIFY CONNECTIONS FROM SUPPLIER'S SHOP DRAWINGS. INSTALL ON REINFORCED CONCRETE PAD.
- BOND TO 2-3/4" X 10" COPPERCLAD GROUND RODS SPACED 10' APART AND WATERLINE (#2 BARE CU. GROUNDING ELECTRODE CONDUCTOR).
- LED WIDE AREA FLOOD ON 20' TREATED POLE. CREE #E-HL7F07C22. PROVIDE MOUNTING BOX.
- 2#12, 1#12G.-3/4"C.
- 2#10, 1#10G.-3/4"C. (SHORE POWER. VERIFY REQUIREMENTS)
- 4#14, 1#14G.-3/4"C. (GENERATOR STATUS, ALARM)
- 480V WIRING. SEE ONE-LINE DIAGRAM.
- 8#14, 1#14G.-1"C.
- METER ON BACK OF RACK.
- SURGE PROTECTIVE DEVICE.
- EXISTING TRANSFORMER POLE. EXTEND CONDUIT UP POLE TO HEIGHT AS DIRECTED BY UTILITY. INSTALL WEATHERHEAD AND LEAVE 5' OF CABLE FOR CONNECTION BY UTILITY. COORDINATE TIME OF TRANSFORMER CONNECTION WITH UTILITY.
- FIBER INTERCONNECT BOX BY OWNER.
- EXISTING RTU TO BE RE-USED. SEE RISER DIAGRAM.
- 2/C SH, 1#14G.-3/4"C.

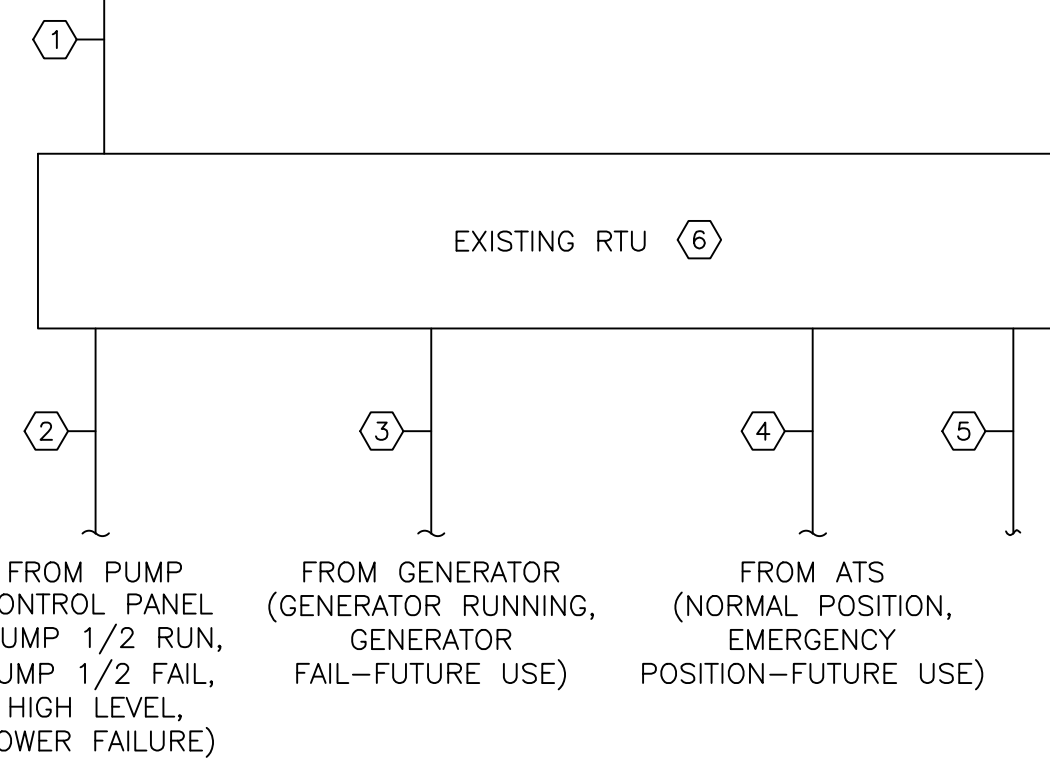


JUNCTION BOX DETAIL

NO SCALE

JUNCTION BOX DETAIL NOTES:

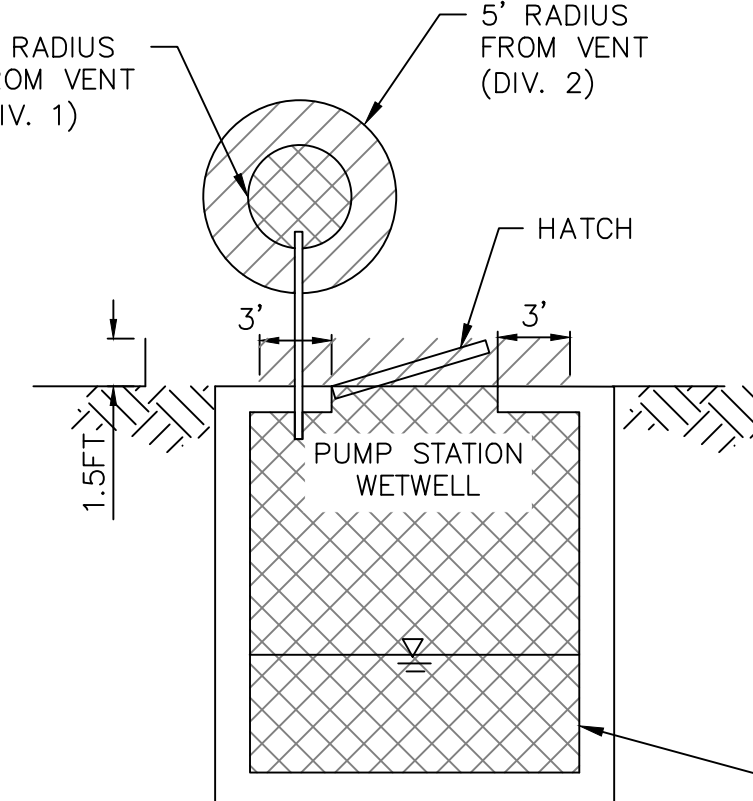
- 3" X 2" 316 STAINLESS STEEL TUBING. COAT PORTIONS OF RACK IN CONTACT WITH CONCRETE WITH TWO COATS OF BITUMASTIC.
- 1 1/2" X 1 1/2" STAINLESS STEEL CROSS MEMBERS & SS HARDWARE.
- PUMP CABLE JUNCTION BOX. 24" X 24" X 8" DEEP NEMA 4X 316 STAINLESS STEEL ENCLOSURE WITH STAINLESS STEEL INNER PANEL.
- POWER DISTRIBUTION BLOCKS WITH COVERS FOR PUMP CABLES. VERIFY SIZE TO ACCOMMODATE CABLE.
- CORD CONNECTOR W/STAINLESS STEEL STRAIN RELIEF GRIP (TYPICAL EACH CABLE). PROVIDE ADDITIONAL GRIPS WHERE MOTOR MONITORING LEADS ARE FURNISHED IN SEPARATE CABLE.
- CABLE FURNISHED WITH EQUIPMENT. (TYPICAL)
- TERMINAL BLOCKS FOR FLOATS. PROVIDE 6 SPARE TERMINALS. PROVIDE 6" SEPARATION BETWEEN POWER AND FLOAT CABLES.



RTU RISER DIAGRAM

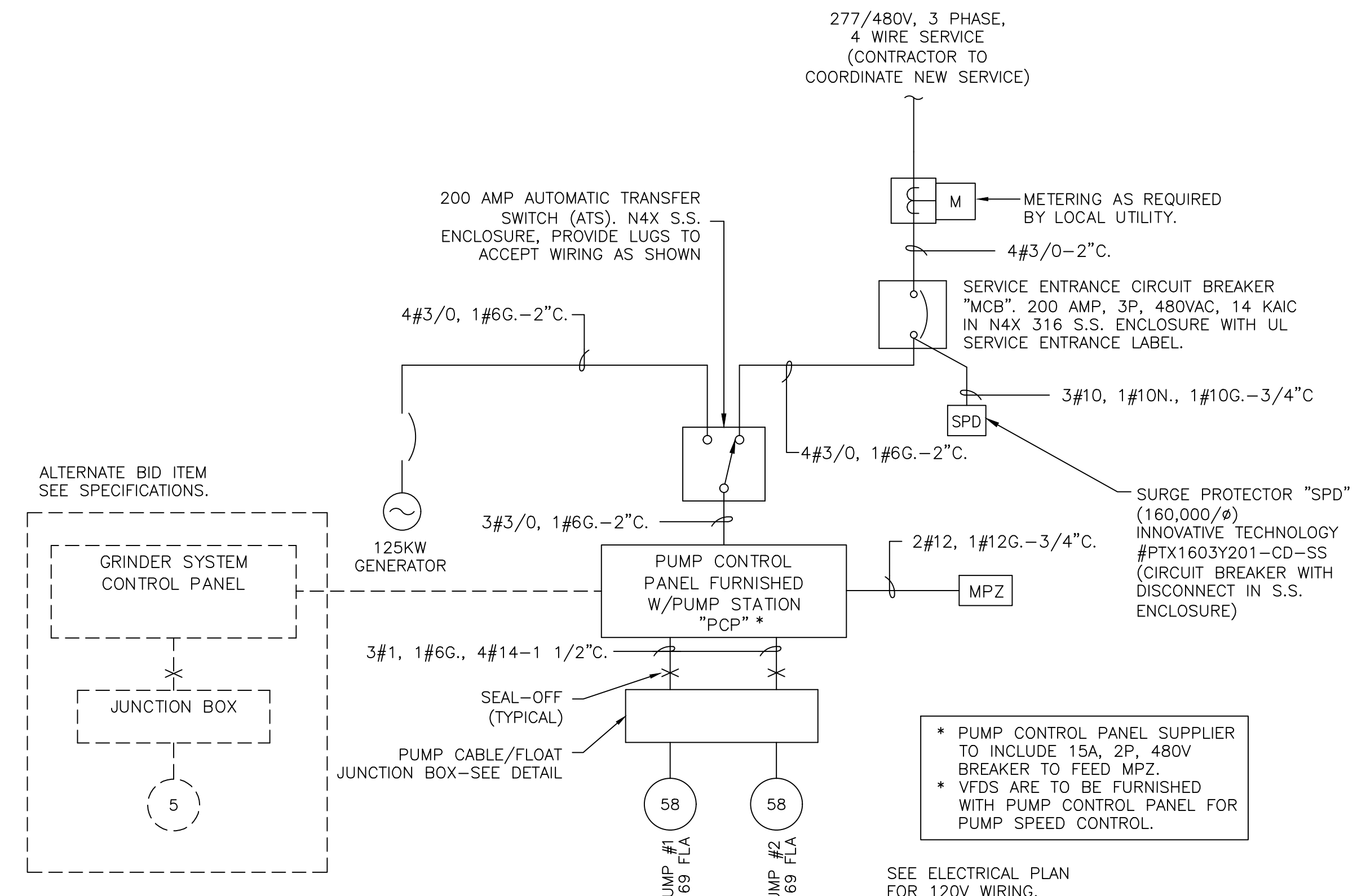
RTU RISER DIAGRAM NOTES:

- 2#12, 1#12G.(120VAC FROM MPZ)
- 10#14, 1#14G.-1"C.
- 6#14, 1#14G.-3/4"C.
- 6#14, 1#14G.-3/4"C.
- 3/4" CONDUIT FOR F/O CABLE FROM FIBER INTERCONNECT BOX. FIBER BY OWNER.
- CONFIRM INPUTS FROM OWNER. TAPE AND TAG INPUTS NOT USED FOR FUTURE USE.



AREA CLASSIFICATIONS

- CLASS 1, DIVISION 1
 - CLASS 1, DIVISION 2
 - UNCLASSIFIED
- ELECTRICAL CLASSIFICATION PER TABLE 4.2.2, ROW 14g OF NFPA 820



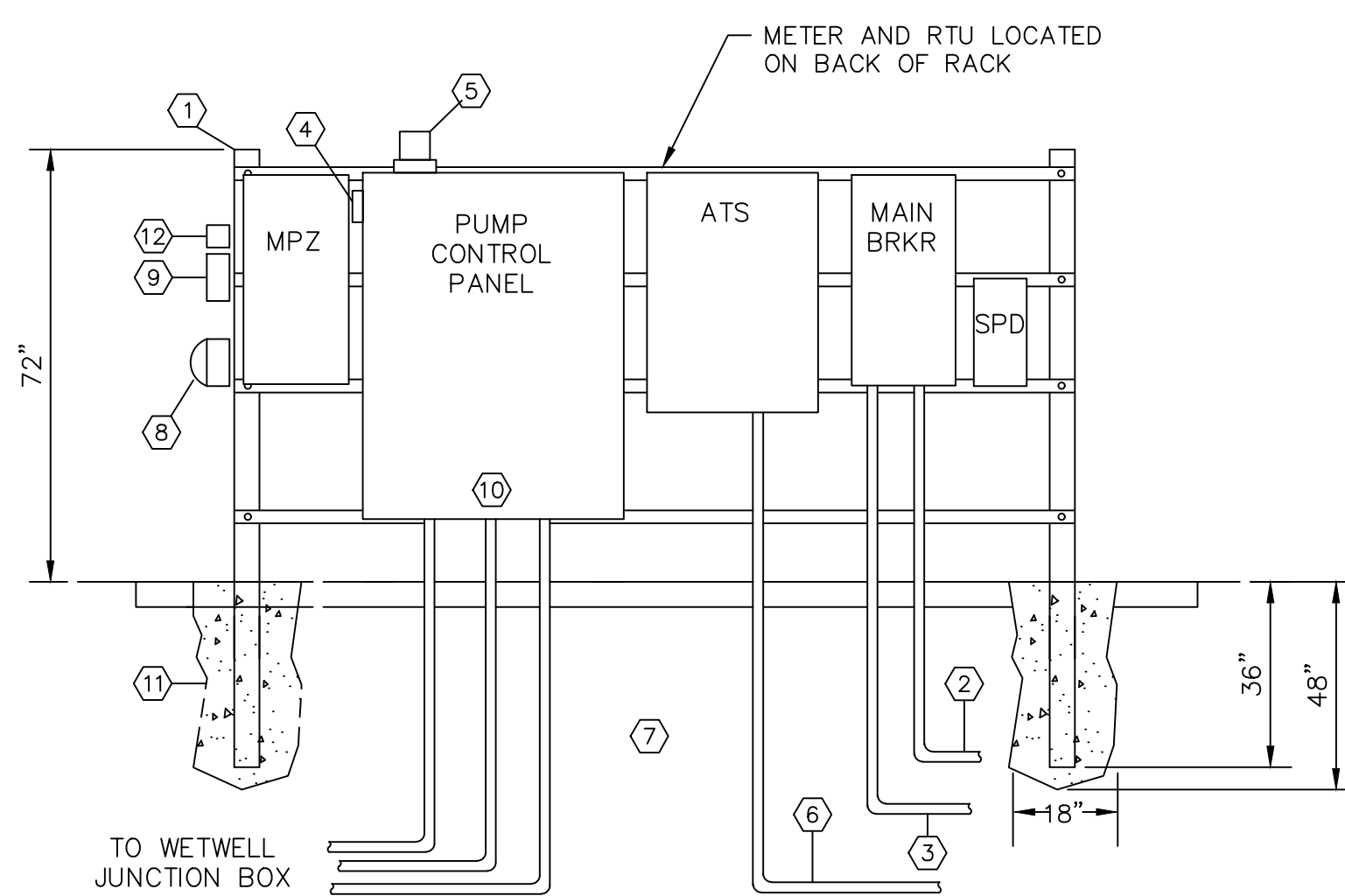
ONE LINE DIAGRAM

NO SCALE

PHASE	MINI POWER ZONE: "MPZ"	BUS: COPPER	5 KVA, 10 TRANSFORMER	PHASE
"L1"	"L2"	RATING: N3R, STAINLESS	LOCATION: EQUIPMENT RACK	"L1"
V.A	V.A	STEEL		V.A
2400	300	LOAD	LOAD	180
		BLOCK HEATER/ BATTERY CHARGER	RECEPTACLE	
		LIGHT	RTU	1200
		SPARE	SPARE	
		SPARE	SPARE	
		SPARE	SPARE	
2400		TOTAL "L1"	TOTAL "L1"	180
300		TOTAL "L2"	TOTAL "L2"	1200
		TOTAL LOAD =		

EQUIPMENT RACK DETAIL NOTES:

- 4"x4"x1/4" 316 STAINLESS STEEL TUBING WITH END CAP AND 1 1/2" X 1 1/2" S.S. CROSS MEMBERS. COAT PORTIONS IN CONTACT WITH CONCRETE WITH 2 COATS OF BITUMASTIC.
- 1" SCH. 80 PVC WITH #2 BARE COPPER GROUNDING ELECTRODE CONDUCTOR TO GROUNDING ELECTRODES.
- UNDERGROUND SERVICE FROM METER POLE.
- ALARM HORN FURNISHED WITH CONTROL PANEL.
- ALARM LIGHT FURNISHED WITH CONTROL PANEL.
- TO GENERATOR.
- SEE ONE-LINE FOR ADDITIONAL REQUIREMENTS.
- 20A WEATHERPROOF "WHILE IN USE" GFI RECEPTACLE.
- 20A WEATHERPROOF LIGHT SWITCH.
- SEAL CONDUITS FROM WETWELL WITH DUCT SEAL.
- ENCASE IN CONCRETE.
- DUSK TO DAWN PHOTOCELL, DIE-CAST TORK #2115 OR EQUAL.



EQUIPMENT RACK DETAIL

NO SCALE

REVISIONS

THE WOOTEN COMPANY
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SOUTH CAROLINA

CITY OF GEORGETOWN

GEORGETOWN

HOWARD ENGINEERING
No. 001366
SOUTH CAROLINA
REGISTERED PROFESSIONAL ENGINEER
No. 16565

DESIGNED BY: STS
DRAWN BY: HWH
CHECKED BY: ATH
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