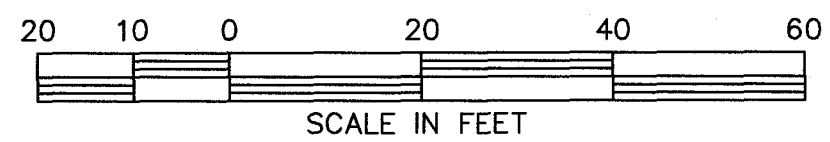


TOPOGRAPHIC SURVEY OF:
**LOT 1, BLOCK A,
RIDGEWOOD PLANTATION**
(WATER STATION: NM101W)
(G.M.D. 1356, GLYNN COUNTY, GEORGIA)
AREA = 24,951 SQ. FT.

- NOTES:**
- BEARINGS AND COORDINATES SHOWN ON THIS SURVEY ARE BASED UPON GEORGIA COORDINATE SYSTEM, EAST ZONE AS ESTABLISHED BY RTK-GPS TECHNOLOGY USING A TRIMBLE 5800 RECEIVER AND EGPS SOLUTIONS.
 - SURVEY REFERENCE:
PLAT BY JOE BILETZKOV, GA. R.L.S. # 1672, TITLED "RIDGEWOOD PLANTATION", DATED 2-15-85, RECORDED IN PD
 - FIELD EQUIPMENT USED FOR THIS PLAT: SOKKIA SET 530R.
 - THIS SURVEY IS BASED ON FIELD WORK COMPLETED ON 12/12/13. SHUPE SURVEYING COMPANY, P.C. IS NOT RESPONSIBLE FOR ANY CHANGES TO THE SITE AFTER THIS DATE.
 - THE FIELD DATA UPON WHICH THIS PLAT WAS BASED HAS A RELATIVE POSITIONAL TOLERANCE OF 0.05 FEET AT THE 95% CONFIDENCE LEVEL AND WAS ADJUSTED USING LEAST SQUARES METHOD.
 - THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN 1" IN 94,648'.
 - THE ADJOINING LAND OWNERS AND CURRENT OWNERSHIP OF THE SUBJECT PROPERTY SHOWN ON THIS SURVEY WERE TAKEN FROM THE GLYNN COUNTY GIS WEBSITE (WWW.GLYNNCOUNTY.GEORGIA.GOV). THE CURRENT OWNER GLYNN COUNTY.
 - ACCORDING TO F.L.R.M. MAP NO. 13127C, PANEL 0207F, DATED 9/6/06, IT IS MY OPINION THAT THE PROPERTY SHOWN ON THIS PLAT LIES WITHIN ZONE 'X' & ZONE 'X'(SHADED), WHICH ARE NOT IN A SPECIAL FLOOD HAZARD AREA.
 - THIS PLAT WAS PRODUCED WITHOUT THE BENEFIT OF A TITLE EXAMINATION.
 - VERTICAL DATUM IS NAVD-88 AND WAS ESTABLISHED BY RTK-GPS TECHNOLOGY USING A TRIMBLE 5800 RECEIVER AND EGPS SOLUTIONS.

- LEGEND:**
- CIRS CAPPED IRON REBAR SET (SSC PC/LSF 317)
 - IPF IRON PIPE FOUND
 - IRF IRON REBAR FOUND
 - CMF CONCRETE MONUMENT FOUND
 - F.F.E. FINISH FLOOR ELEVATION
 - FIRE HYDRANT
 - ⊕ WATER VALVE
 - ⊕ WATER SERVICE
 - ⊕ SEWER VALVE
 - UTILITY POLE
 - 9.3 SPOT ELEVATION
 - CONCRETE
 - BUILDING
 - ASPHALT
 - X FENCE
 - OVERHEAD UTILITIES
 - W WATER LINE
 - SD STORM DRAIN LINE
 - UGC UNDERGROUND CABLE LINE

- TREE LEGEND:**
- INDICATES TREE (DOES NOT REPRESENT DRIP LINE)
 - ELEVATION AT BASE
 - APPROXIMATE CENTER OF TREE
 - TREE NUMBER
 - TREE SIZE & SPECIES
 - PN = PINE TREE
 - OAK = OAK TREE
 - SYC = SYCAMORE TREE



TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS PLAT WAS PREPARED IN CONFORMITY WITH THE TECHNICAL STANDARDS FOR PROPERTY SURVEYS IN GEORGIA AS SET FORTH IN CHAPTER 180-7 OF THE RULES OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN THE GEORGIA PLAT ACT O.C.G.A. 15-6-67

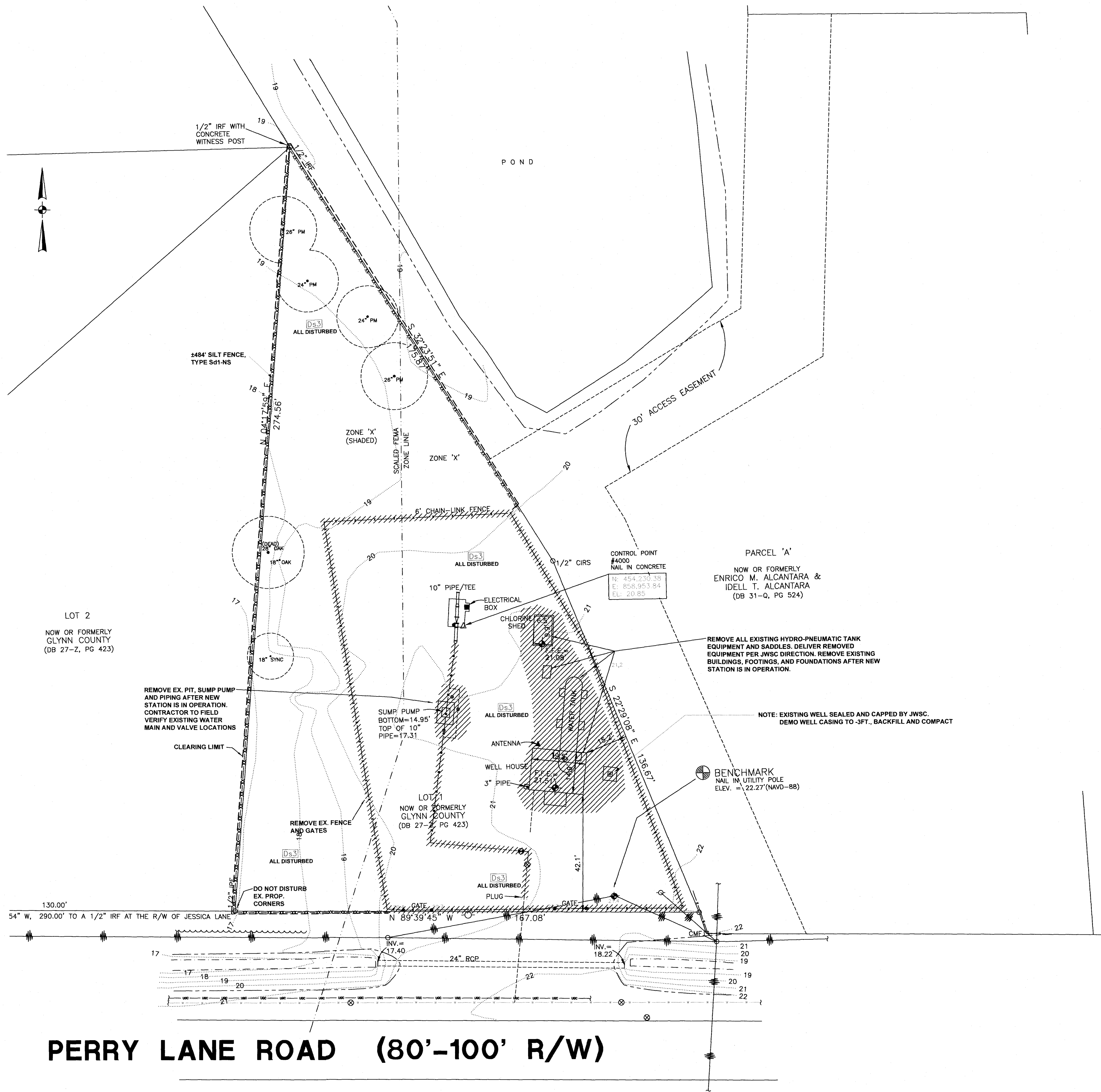


SURVEY FOR: **BRUNSWICK-GLYNN COUNTY JOINT WATER & SEWER COMMISSION**

LOT 1, BLOCK A, RIDGEWOOD PLANTATION

JOB # 13319	DWG # 13319	DWN BY: JCH	SCALE: 1"= 20'
FIELD WORK COMPLETED: 12/12/13		PLAT COMPLETED: 12/17/13	

SHUPE SURVEYING COMPANY, P.C.
3837 DARIEN HWY.
BRUNSWICK, GEORGIA 31525
912-285-0562
CERTIFICATION OF AUTHORIZATION NO. LSF 317



- LEGEND:
- CIRS CAPPED IRON REBAR SET (SSC PG/LSF 317)
 - IPF IRON PIPE FOUND
 - IRF IRON REBAR FOUND
 - CMF CONCRETE MONUMENT FOUND
 - F.F.E. FINISH FLOOR ELEVATION
 - FIRE HYDRANT
 - ⊗ WATER VALVE
 - ⊕ WATER SERVICE
 - ⊙ SEWER VALVE
 - UTILITY POLE
 - 9.3 SPOT ELEVATION
 - ▨ CONCRETE
 - ▩ BUILDING
 - ASPHALT
 - FENCE
 - OVERHEAD UTILITIES
 - WATER LINE
 - STORM DRAIN LINE
 - UNDERGROUND CABLE LINE

- NOTE:
1. REMOVE ALL TREES. CLEAR AND GRUB ALL PROPERTY WITHIN PROPERTY LIMITS.
 2. THE JWSC RESERVES FIRST RIGHT OF SALVAGE FOR ALL EQUIPMENT REMOVAL AT EACH SITE.
 3. THE JWSC WILL RETAIN SALVAGE RIGHTS TO ALL MATERIAL AND EQUIPMENT. ALL MATERIALS AND EQUIPMENT RETAINED BY JWSC SHALL BE DELIVERED TO A PLACE DESIGNATED BY THE JWSC SENIOR INSPECTOR. ANY MATERIALS OR EQUIPMENT NOT RETAINED BY THE JWSC SHALL BE REMOVED FROM THE SITE AND DISPOSED OFF-SITE BY THE CONTRACTOR IN ACCORDANCE WITH THE APPLICABLE REGULATION.



Elmo A. Richardson, Jr., P.E., LLC
4825 RIVERSIDE DRIVE, SUITE 101
MACON, GEORGIA 31210
PHONE: 478.757.1983
FAX: 478.757.1983

CONSULTING ENGINEERS

NO.	DATE	COMMENTS

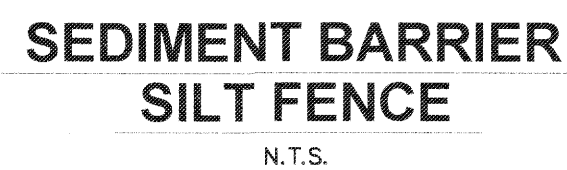
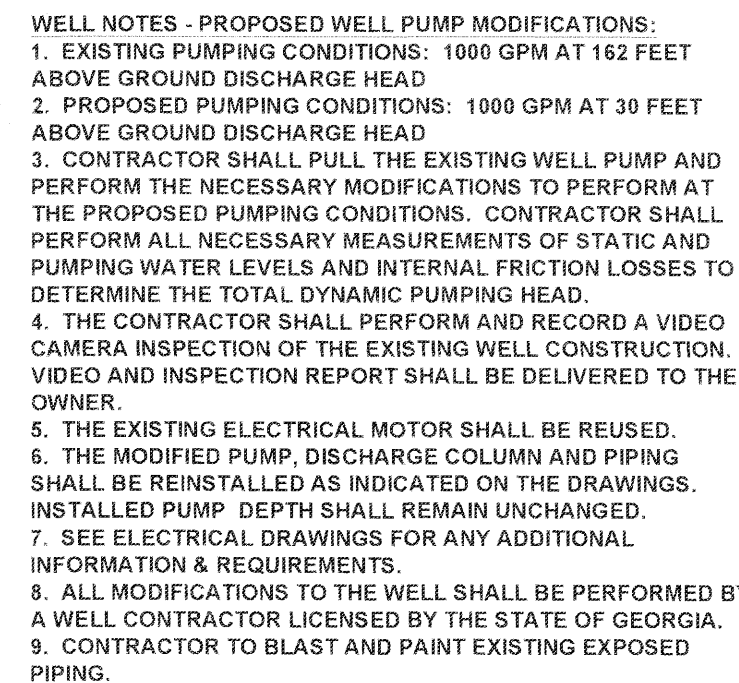
**BRUNSWICK - GLYNN COUNTY
JOINT WATER & SEWER COMMISSION
RIDGEWOOD WATER
PRODUCTION FACILITY
DEMOLITION PLAN**

FILE NO. JWSC PROJECT# 417
DATE SEPTEMBER, 2019
SCALE
DRAWN/CHECKED BY

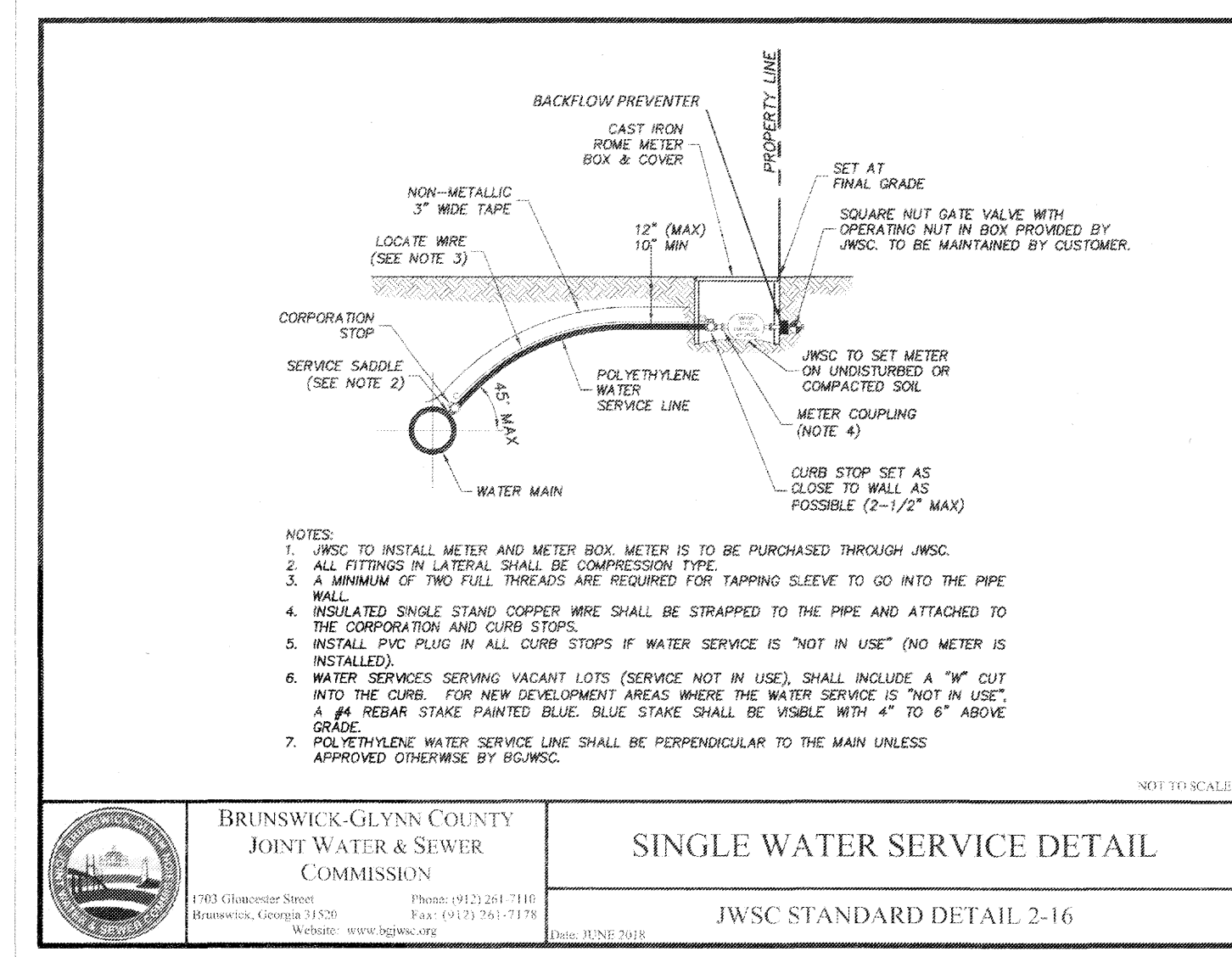
SHEET NO. C-2

OF

CALL BEFORE YOU DIG!
At least 72 hours prior to commencement of the work, the Contractor is responsible for calling the Utilities Protection Center (UPC) at 1-800-282-7411 to request underground utility locate service.

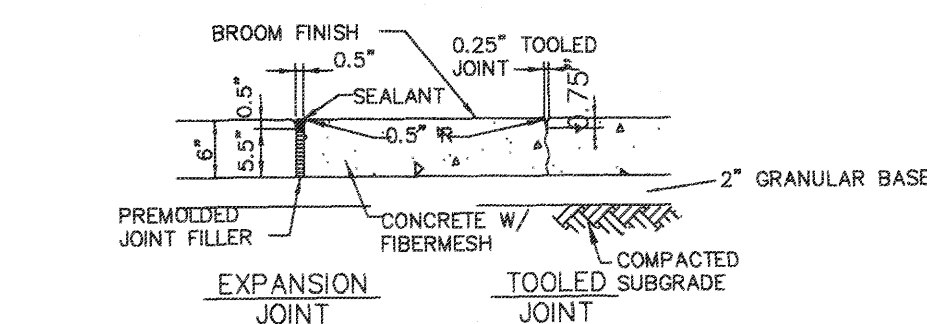


Sd1-NS



2000 PSI TEST BEARING					
BLOCKING DIMENSIONS					
BENGS					
	X"	A	B	C	D
20	24"	2.0"	9.0"	12.4"	5.0"
	20"	1.68"	7.5"	10.4"	5.0"
	16"	1.36"	6.0"	9.4"	4.0"
	12"	1.01"	4.5"	8.0"	3.3"
	10"	1.0"	3.45"	6.0"	2.9"
	8"	0.512"	2.48"	4.0"	2.3"
30	24"	2.0"	9.0"	12.4"	5.0"
	20"	1.68"	7.5"	10.4"	5.0"
	16"	1.36"	6.0"	9.4"	4.0"
	12"	1.01"	4.5"	8.0"	3.3"
	10"	1.0"	3.45"	6.0"	2.9"
	8"	0.512"	2.48"	4.0"	2.3"
40	24"	2.0"	9.0"	12.4"	5.0"
	20"	1.68"	7.5"	10.4"	5.0"
	16"	1.36"	6.0"	9.4"	4.0"
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70	24"	2.0"	9.0"	12.4"	5.0"
	20"	1.68"	7.5"	10.4"	5.0"
	16"	1.36"	6.0"	9.4"	4.0"
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	8"	0.512"	2.48"	4.0"	2.3"
80	24"	2.0"	9.0"	12.4"	5.0"
	20"	1.68"	7.5"	10.4"	5.0"
	16"	1.36"	6.0"	9.4"	4.0"
	12"	1.01"	4.5"	8.0"	3.3"
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90	24"	2.0"	9.0"	12.4"	5.0"
	20"	1.68"	7.5"	10.4"	5.0"
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	10"	1.0"	3.45"	6.0"	2.9"
	8"	0.512"	2.48"	4.0"	2.3"

X* = DIAMETER OF PIPE TO BE BLOCKED
NOTE: WRAP THE FITTINGS BEFORE POURING CONCRETE

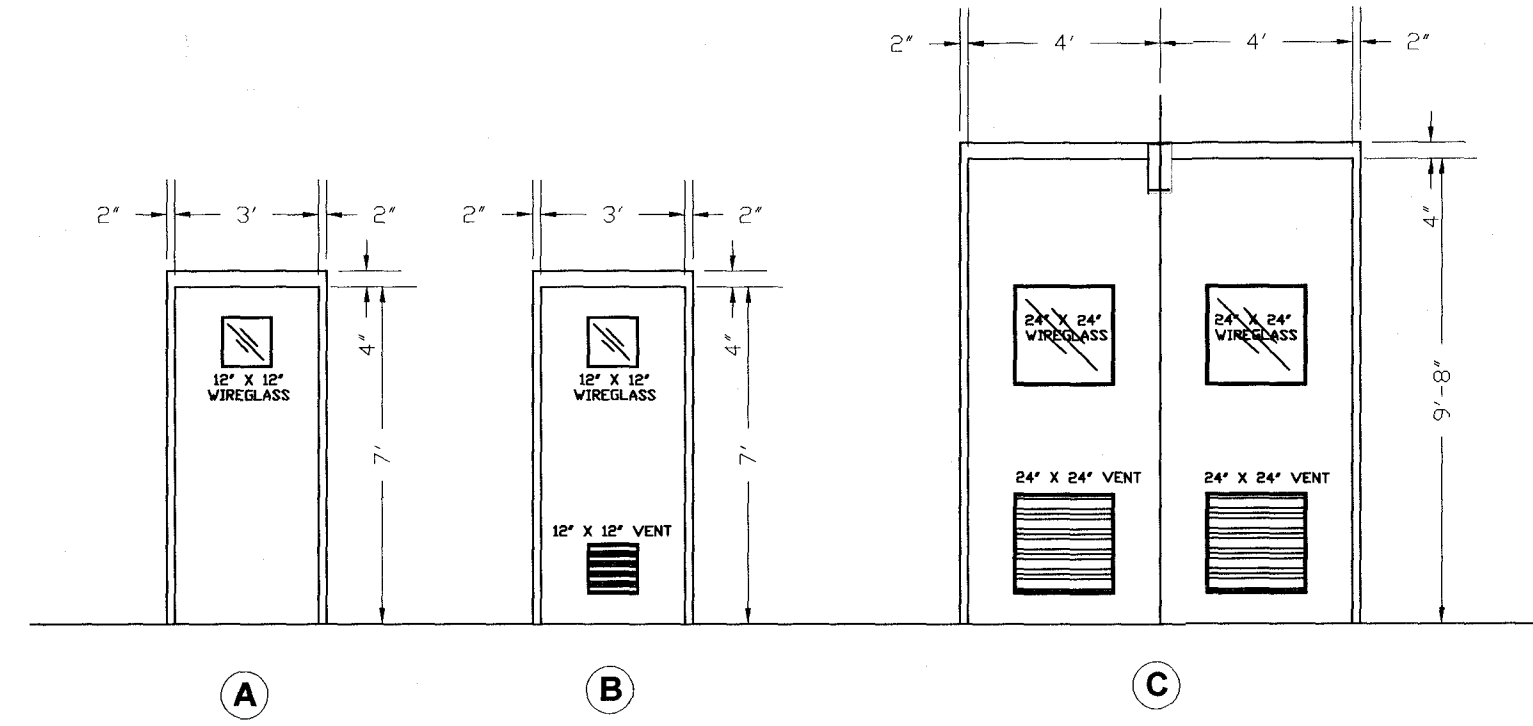


TOOLED JOINTS: 6' OC UNLESS SHOWN OTHERWISE ON PLAN
ALL JOINTS AND EDGES SHALL BE TOOLED TO
HAVE A 1/4 INCH RADIUS

EXPANSION JOINTS: WHERE PAVEMENTS ABUT ANY FIXED OBJECT SUCH AS WALLS, CURB, MANHOLES, ETC. AND AT INTERVALS NOT EXCEEDING 40 FEET

CONCRETE SIDEWALK AND SIDEWALK JOINTING

N.T.S


$$1'' = 1' - 0''$$

DOOR SCHEDULE											
DOOR NO.	DOOR TYPE	DIMENSIONS			DOOR		FRAME		DOOR DETAILS		ACCESSORIES
		WIDTH	HEIGHT	THICKNESS	MATERIAL	FINISH	MATERIAL	FINISH	HEAD	JAMB	
101-01		3'-0"	7'-0"	1 1/2"	FIBERGLASS	PAINTED	FIBERGLASS	PAINTED	H1	J1	CONT. HINGES, LOOKSET, FLOOR STOP, PANG-BAR
101-C1	C	8'-0"	9'-8"	1 1/2"	FIBERGLASS	PAINTED	FIBERGLASS	PAINTED	H1	J1	CONT. HINGES, LOOKSET FLOOR STOP, PANG-BAR
102-01	B	3'-0"	7'-0"	1 1/2"	FIBERGLASS	PAINTED	FIBERGLASS	PAINTED	H1	J1	CONT. HINGES, LOOKSET FLOOR STOP, PANG-BAR
103-01	A	3'-0"	7'-0"	1 1/2"	FIBERGLASS	PAINTED	FIBERGLASS	PAINTED	H1	J1	CONT. HINGES, LOOKSET, FLOOR STOP, PANG-BAR

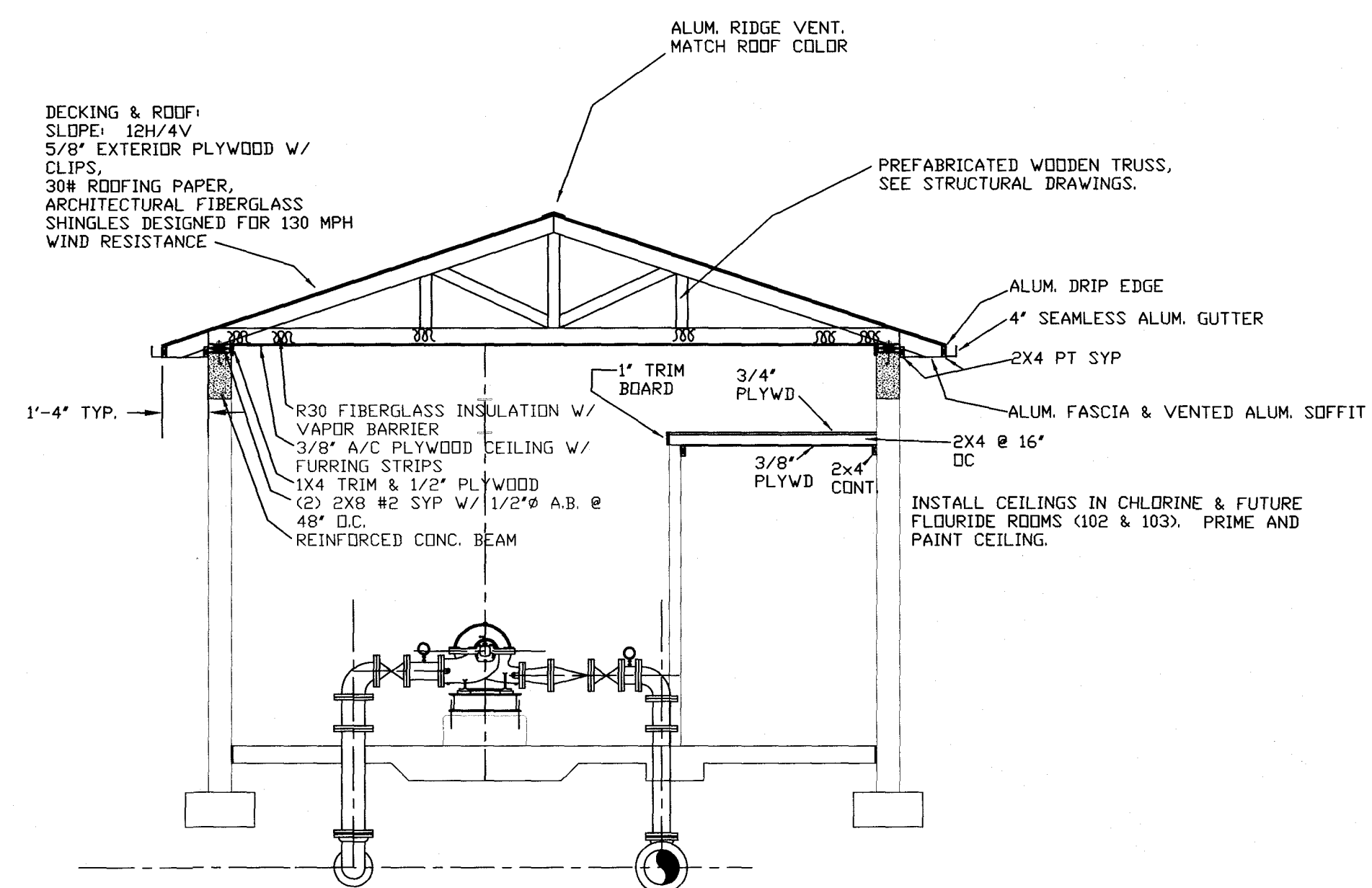
NOTE: 1. ALL DOOR HARDWARE TO BE STAINLESS STEEL. 2. SEE DRAWINGS FOR VIEWING WINDOW & VENT LOUVER DIMENSIONS

ROOM FINISH SCHEDULE								REMARKS
ROOM NAME/NO.	FLOOR		WALLS		CEILING		CEILING HEIGHT	
	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH		
PUMP ROOM / 101	CONCRETE	NOTE 1	CMU	NOTE 1	PLYWOOD	NOTE 3	11'-6"	
CHLORINE / 102	CONCRETE	NOTE 1	CMU	NOTE 2	PLYWOOD	NOTE 3	8'-6"	
FLUORIDE / 103	CONCRETE	NOTE 1	CMU	NOTE 2	PLYWOOD	NOTE 3	8'-6"	
PUMP BUILDING EXTERIOR	N/A		CMU	2 COATS NEMEC SERIES 160 INEME-CRETE, 16-20.0 TOTAL DRY GROSSING	N/A			

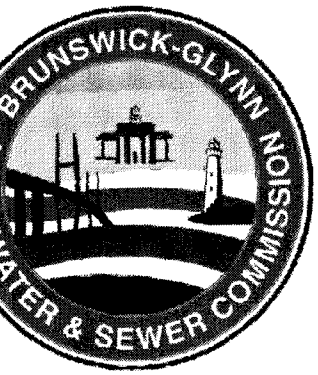
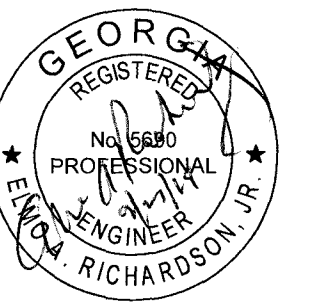
- NOTES:
1. CONCRETE FLOORS SHALL BE SEALED WITH EPOXY PER JWSC.
 2. CMU WALLS SHALL RECEIVE FILLER AND EPOXY PAINT
 3. PLYWOOD CEILING SHALL RECEIVE PRIMER COAT AND 2 COATS LATEX PAINT
 4. ALL COLORS TO BE SELECTED BY THE OWNER.


$$1'' = 1' - 0''$$

Signage					
Contractor to provide and install color fast fiberglass signs (unless otherwise noted) with holes in each corner for use in indoor and outdoor locations. Signs shall be manufactured by WHI. Bently, or approved equal. All signs shall be mounted to their adjacent surfaces using stainless steel hardware. Consult with final sign locations with Engineer and Owner.					
No. Required	Legend	Header	Size (inches)	Color	Location
1	Chain All Cylinders Securely	Notice	10 x 14	Blue / White	Inside Rm. 102
4	No Trespassing	Notice	10 x 14	Blue / White	Perimeter Fence
2	Eyes & Glove Protection Must Be Worn When Handling Chemicals	Caution	10 x 14	Yellow / Black	Inside Rm. 102 & 103
1	High Noise Level Use Ear Protection	Caution	10 x 14	Yellow / Black	Inside Rm. 102 & 103
1	Chlorine Gas		10 x 14	Red, Black, White	Room #10 Outside
1	High Voltage		10 x 14	Red, Black, White	All MCC & S Transformers
1	Fire Extinguisher		14 x 3.5	Red, White	Above each station
1	Eyewash Station		7 x 10	Green, White	Eye Wash Station
Hazardous Material Signs:					
1	Chlorine		7 x 10	Red, White, Black	Room 102
1	Hydrofluoroalkyl Acid		7 x 10	Red, White, Black	Room 103
Full Disclosure Signs:					
1	Chlorine		14 x 14	Red, White, Black	Room 102



SECTION A-A'



Elmo A. Richardson, Jr., P.E., LLC
CONSULTING ENGINEERS
4875 RIVERSIDE DRIVE, SUITE 101
MACON, GEORGIA 31210
PHONE: 478.757.1903
FAX: 478.757.1963

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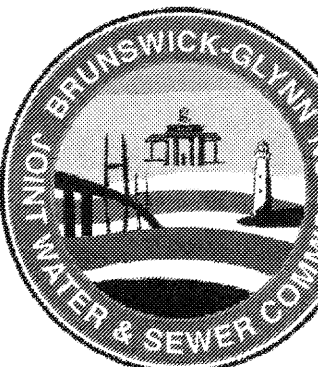
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417

CHICAGO 7/11

**JOINT WATER & SEWER COMMISSION
RIDGEWOOD
WATER PRODUCTION FACILITY
PUMP BUILDING**

417



Elmo A. Richardson, Jr., P.E., LLC
1875 RIVERSIDE DRIVE, SUITE 101
MARIETTA, GEORGIA 30120
CONSULTING ENGINEERS

Elmo A. Richardson, Jr., P.E., LLC
4875 RIVERSIDE DRIVE, SUITE 101
JACON, GEORGIA 31210
PHONE: 478/757-1803
FAX: 478/757-1804
WWW.ELMOA.RICHARDSON.COM

Contractor shall verify flow responsible for all dimensions. DO NOT scale the drawing. Any error or omissions shall be reported in the

REVISIONS

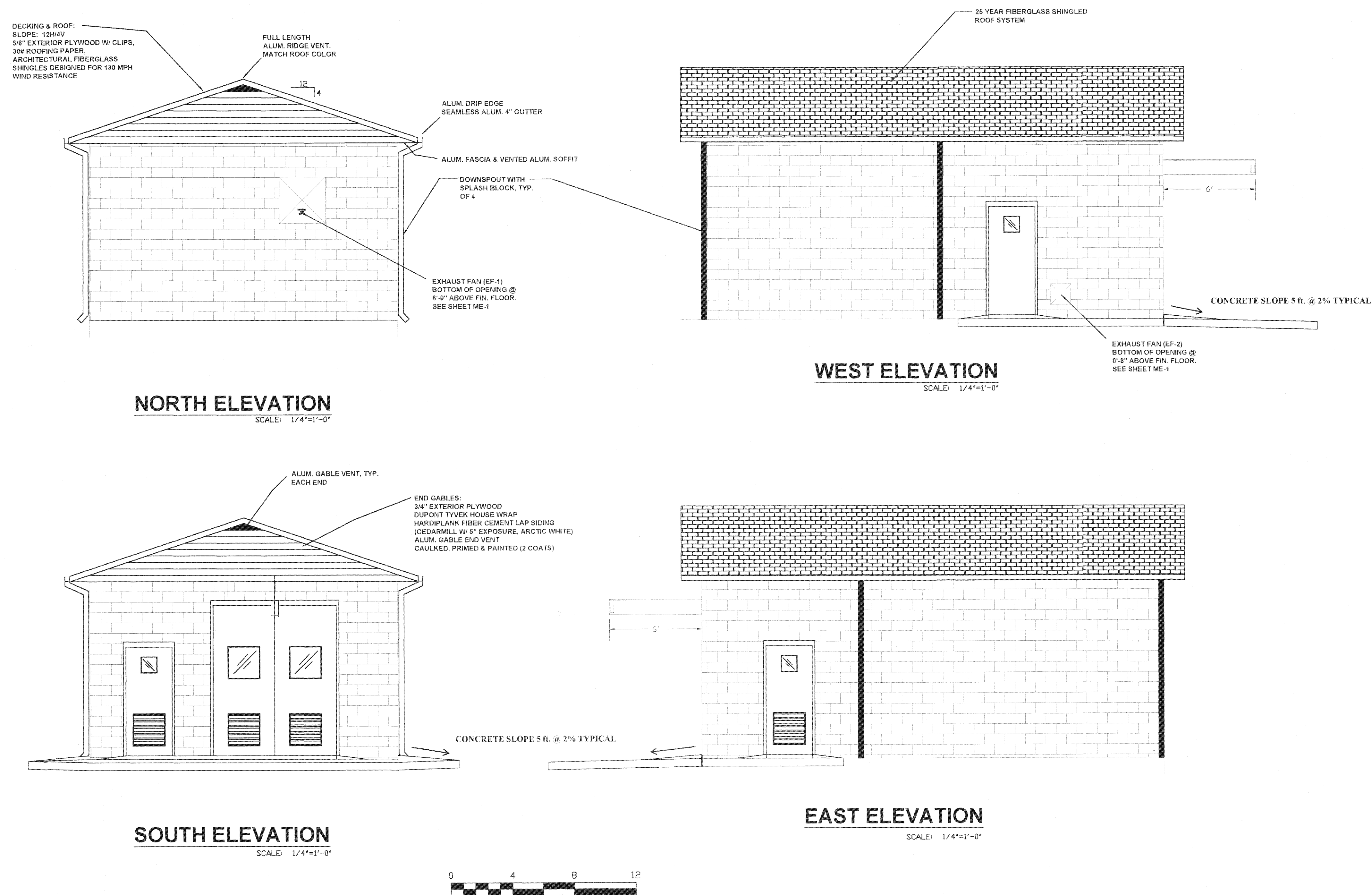
**BRUNSWICK - GLYNN COUNTY
JOINT WATER & SEWER COMMISSION
RIDGEWOOD
WATER PRODUCTION FACILITY
BUILDING ELEVATIONS**

PROJECT NO.: JWSC PROJECT# 417
DATE: SEPTEMBER, 2019

SHEET NO.

A-2

OF



GENERAL NOTES:

- CODES AND STANDARDS:
2012 INTERNATIONAL BUILDING CODE, WITH GA AMENDMENTS.
AISC MANUAL OF STEEL CONSTRUCTION, AISC 360-10
ACI 318-11, BUILDING CODE REQUIREMENTS OF STRUCTURAL CONCRETE
ASCE 7-10, MINIMUM DESIGN LOADS FOR BUILDINGS & OTHER STRUCTURES
- REFERENCE GENERAL NOTES FOR EACH STRUCTURE FOR DESIGN LOADS AND OTHER DATA.
- CONTRACTOR TO PROVIDE ADEQUATE BRACING FOR ALL STRUCTURES TO ENSURE STABILITY DURING ALL STAGES OF CONSTRUCTION. STRUCTURES AND FOUNDATIONS ARE DESIGNED FOR STABILITY IN THE COMPLETED CONDITION ONLY, AND REQUIRE ADDITIONAL SUPPORT TO MAINTAIN STABILITY PRIOR TO COMPLETION. PLACE NON-SHRINK GROUT BELOW ALL COLUMN BASE PLATES PRIOR TO ADDING LOAD TO ANY STRUCTURE.
- CONTRACTOR SHALL OBTAIN THE SERVICES OF AN INDEPENDENT TESTING LABORATORY TO PERFORM ALL INSPECTIONS, TESTS, OR APPROVALS.
- VERIFY ALL DIMENSIONS OF EXISTING CONSTRUCTION WHICH AFFECT NEW CONSTRUCTION PRIOR TO SUBMISSION OF SHOP DRAWINGS.
- WORK STRUCTURAL DRAWINGS WITH DRAWINGS OF OTHER DISCIPLINES AND SHOP/VENDOR DRAWINGS RELATED TO OTHER TRADES. CHECK AND COORDINATE DIMENSIONS, CLEARANCES, AND OTHER REQUIREMENTS WITH WORK OF OTHER TRADES.
- VERIFY DIMENSIONS, ANCHORAGE LAYOUT/DETAILS, AND WEIGHTS OF ALL PURCHASED OR OWNER FURNISHED EQUIPMENT WITH STRUCTURAL DETAILS SHOWN ON THE DRAWINGS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO FABRICATION OR INSTALLATION.
- DO NOT SCALE STRUCTURAL DRAWINGS TO DETERMINE DIMENSIONS OR MATERIAL QUANTITIES.

DESIGN DATA

- LIVE LOADS**
A. ROOF..... 20 PSF
B. FLOOR..... 200 PSF
- WIND LOADS**
A. BASIC WIND SPEED..... 95 MPH
B. WIND IMPORTANCE FACTOR..... I = 1.15
C. INTERNAL PRESSURE COEFFICIENT..... GCp = ±0.18
D. WIND EXPOSURE CATEGORY "C"
- SNOW LOADS**
A. GROUND SNOW LOAD Ps..... 5 PSF
- SEISMIC DESIGN**
A. BUILDING OCCUPANCY CAT. II
B. SITE CLASS "1"
C. SPECTRAL RESPONSE COEFFICIENTS..... Sps = 0.404
..... Sps = 0.272
..... Sps = 0.270
..... Sps = 0.181
D. SEISMIC DESIGN CATEGORY "B"
E. LATERAL FORCE RESISTING SYSTEMS:
"LOAD BEARING MASONRY WALLS."
- SOIL PARAMETERS**
A. THE FOLLOWING SOILS REPORT IS REFERENCED FOR INFORMATION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL EXISTING SITE CONDITIONS THROUGH AN INDEPENDENT SITE INVESTIGATION PRIOR TO PLACING BID.
B. SEE SOILS REPORTS DATED MAY 19, 2014:
ELLIS & ASSOCIATES, INC.
GEOTECHNICAL EXPLORATION
WATER PRODUCTION FACILITIES - JWSC - RIDGEWOOD
(E&A NO. 4338-0001)
C. FOOTINGS HAVE BEEN SIZED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 2500 PSF AT 1'-6" BELOW EXISTING GRADE. IF SITE CONDITIONS DIFFER FROM FROM THOSE ASSUMED DURING THE DESIGN PROCESS, CONTACT ENGINEER IMMEDIATELY.
D. NOTE THAT GEOTECHNICAL RECOMMENDATIONS INDICATE THAT UNDERCUTTING AND PLACEMENT OF STRUCTURAL FILL MAY BE REQUIRED AT THE ABOVE SITE.
ALL RECOMMENDATIONS WITHIN THE ABOVE REFERENCED GEOTECHNICAL REPORTS MUST BE FOLLOWED EXACTLY TO ALLOW THE USE OF SHALLOW FOUNDATIONS AS DESIGNED & DETAILED WITHIN THE ATTACHED DOCUMENTS.

STEEL NOTES:

- STRUCTURAL STEEL**
A. STEEL SHALL CONFORM TO ASTM A36 (36 KSI YIELD STRENGTH), EXCEPTIONS NOTED.
B. ALL WIDE FLANGE SHAPES SHALL CONFORM TO ASTM A992 (50 KSI YIELD STRENGTH).
C. ALL HSS SECTIONS SHALL CONFORM TO ASTM A500 (46 KSI YIELD STRENGTH).
D. ELECTRODES SHALL CONFORM TO E70-XX.
E. ALL BOLTS TO BE A325X, WITH THREADS EXCLUDED FROM THE SHEAR PLANE.
F. ALL ANCHOR RODS SHALL CONFORM TO ASTM F1554 WITH HEAVY HEX NUTS AND STANDARD WASHERS.
- HEADED ANCHORS AND SHEAR CONNECTORS (STUDS)** SHALL CONFORM TO ASTM A108.

REINFORCED CONCRETE NOTES

- INFORMATION PROVIDED ON THIS SHEET IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR AND IS NOT INTENDED TO SUPERCEDE OR NEGATE INFORMATION CONTAINED IN THE PROJECT SPECIFICATIONS. IN THE EVENT OF DISCREPANCIES, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN UNTIL CLARIFICATION FROM THE ENGINEER OF RECORD IS OBTAINED.
- ALL CONCRETE WORK SHALL CONFORM TO ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS". DESIGN IS BASED ON ACI 318-11, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE."
- UNLESS NOTED OTHERWISE, ALL CONCRETE FOR SLABS ON GRADE, FOOTINGS, PIERS & COLUMNS SHALL BE NORMAL WEIGHT AND OBTAIN A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
- SUBMIT CONCRETE MIX DESIGNS FOR REVIEW, IN ACCORDANCE WITH ACI 318-11, TO THE ENGINEER AND TESTING AGENCY.
- THE PROPOSED MATERIALS AND MIX DESIGN SHALL BE FULLY DOCUMENTED AND REVIEWED. RESPONSIBILITY FOR OBTAINING THE REQUIRED DESIGN STRENGTH IS THE CONTRACTOR'S.
- CONTRACTOR SHALL RETAIN AN INDEPENDENT TESTING AGENCY TO PERFORM TESTING AND SUBMIT REPORTS AS OUTLINED BELOW.
- USE OF CALCIUM CHLORIDE, CHLORIDE IONS, OR OTHER SALTS IN CONCRETE IS NOT PERMITTED.
- CEMENT SHALL CONFORM TO ASTM C150, TYPE I OR II.
- AGGREGATES SHALL CONFORM TO ASTM C33.
- CONCRETE SLUMP RANGE: 3" MIN. - 5" MAX.
- THE AIR CONTENT AT THE POINT OF PLACEMENT SHALL BE PER ACI 318 TABLE 4.4.1 FOR F1 MODERATE EXPOSURE.
- THE TESTING AGENCY SHALL SAMPLE AND TEST EACH 100 CU. YARDS OR FRACTION THEREOF OF EACH CLASS OF CONCRETE PLACED EACH DAY. SAMPLE CONCRETE IN ACCORDANCE WITH ASTM C172. PERFORM THE FOLLOWING TESTS IN ACCORDANCE WITH THE INDICATED STANDARD:

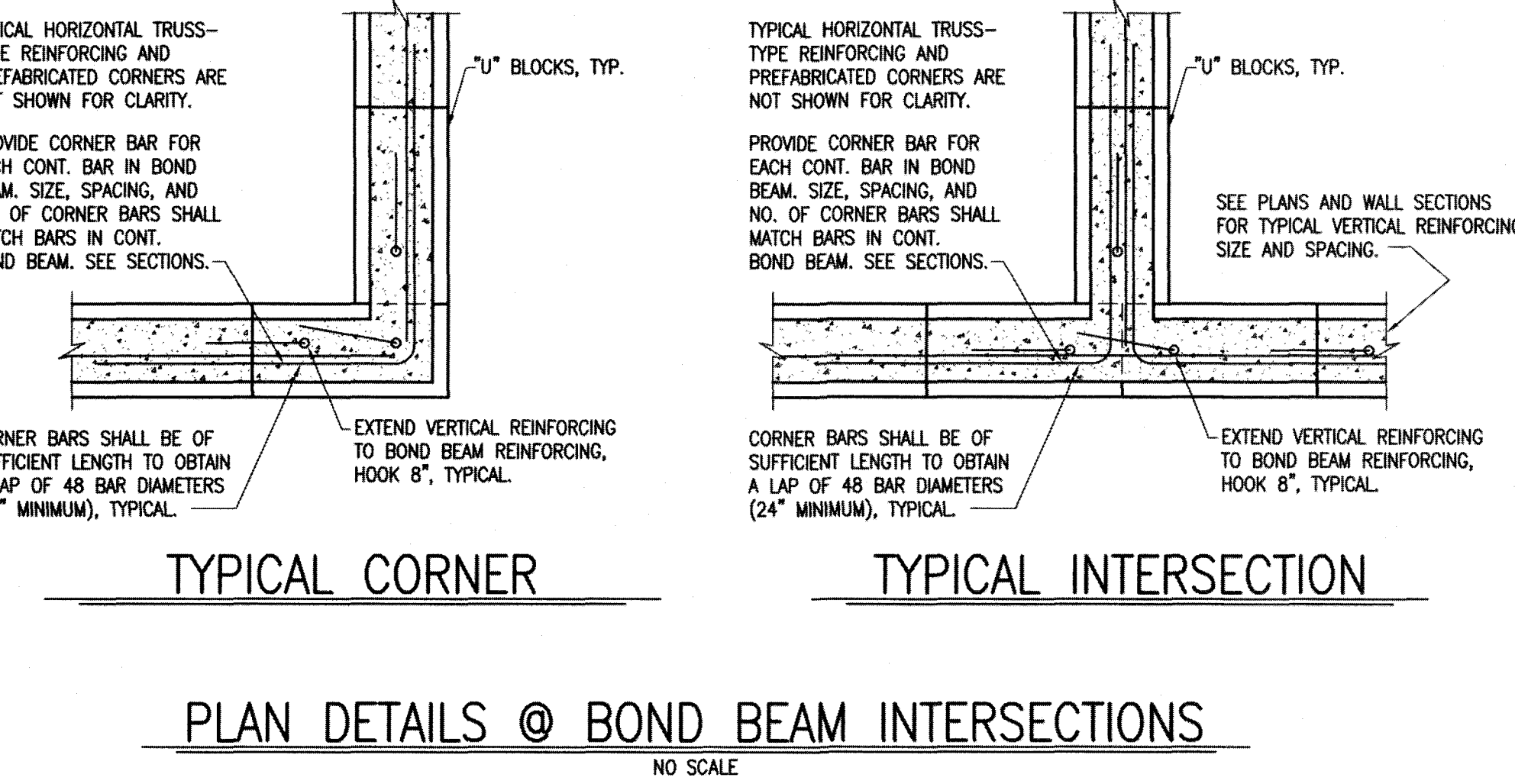
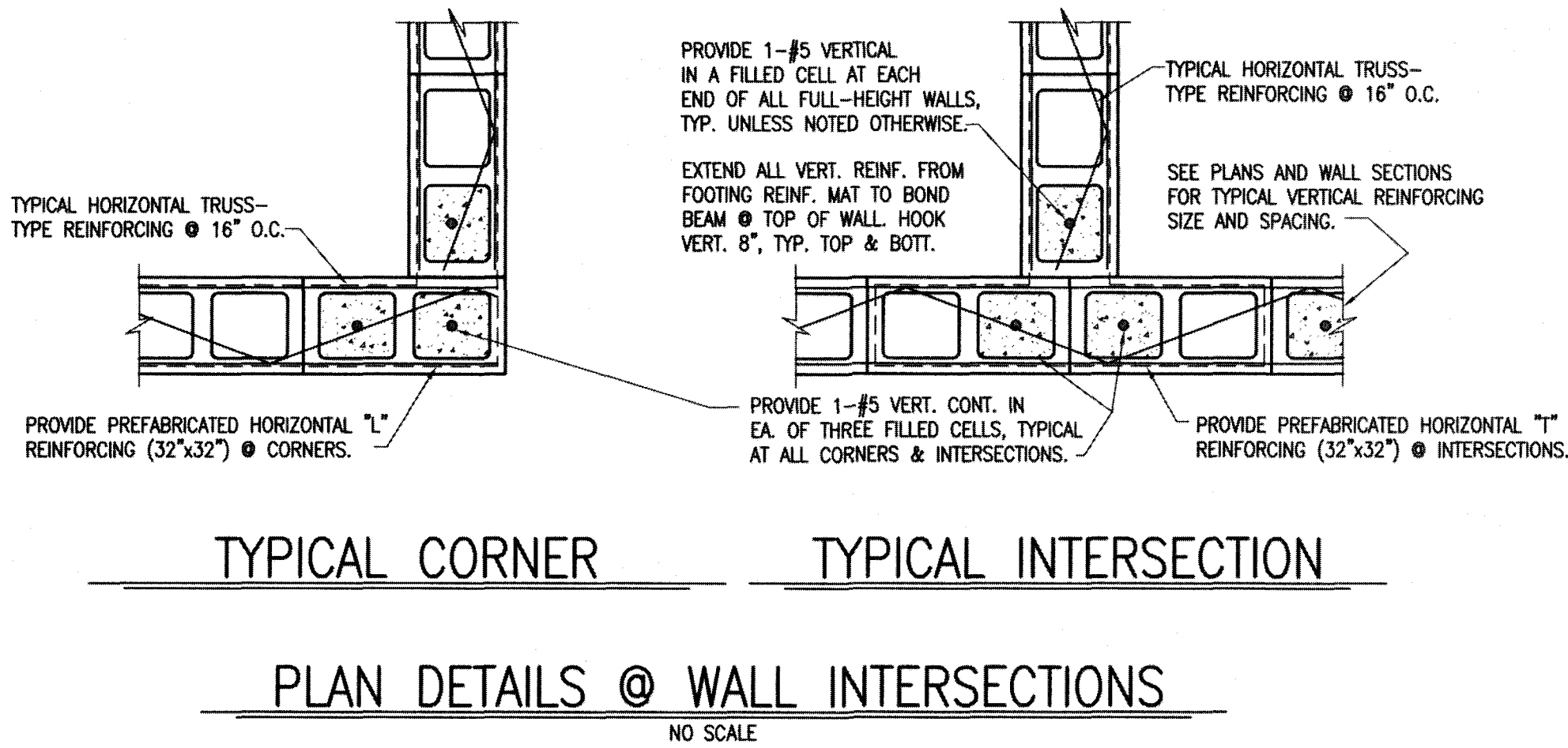
SLUMP:	ASTM C143
AIR CONTENT:	ASTM C231 (NORMAL WEIGHT CONCRETE) ASTM C173 (LIGHT WEIGHT CONCRETE)
COMPRESSIVE STRENGTH:	ASTM C39, WITH ONE CYLINDER AT 7 DAYS, TWO CYLINDERS AT 28 DAYS, AND ONE SPECIMEN HELD IN RESERVE.
CONCRETE TEMPERATURE:	ASTM C1064
UNIT WEIGHT:	ASTM C567
MOIST CURE CONCRETE WITH MOISTURE PROTECTIVE COVER FOR A MINIMUM OF 7 DAYS.	
HORIZONTAL CONSTRUCTION JOINTS ARE PERMITTED ONLY WHERE INDICATED. THE LOCATION OF VERTICAL CONSTRUCTION JOINTS SHALL BE APPROVED BY THE ENGINEER. CONSTRUCTION JOINTS SHALL BE THOROUGHLY ROUGHENED BY MECHANICAL MEANS, CLEANED, AND CAULKED.	
REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE.	
WELDED WIRE FABRIC (MESH) SHALL CONFORM TO ASTM A185 AND SHALL BE PROVIDED IN FLAT SHEETS. LAP MESH 2 SQUARES MINIMUM AT SPLICES.	
TIE ALL REINFORCING STEEL AND EMBEDMENTS SECURELY IN PLACE PRIOR TO PLACING CONCRETE. PROVIDE SUFFICIENT SUPPORTS TO MAINTAIN THE POSITION OF REINFORCEMENT WITHIN SPECIFIED TOLERANCES DURING ALL CONSTRUCTION ACTIVITIES. "STICKING" DOWELS INTO WET CONCRETE IS NOT PERMITTED.	
REINFORCING STEEL SHALL HAVE THE FOLLOWING CONCRETE COVER UNLESS NOTED OTHERWISE:	
CONCRETE CAST AGAINST EARTH (NOT FORMED):	3"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER	
#6 BARS THROUGH #12 BARS	2"
#5 BARS AND SMALLER	1 1/2"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER	
SLABS AND WALLS	1"
DO NOT PLACE PIPES EXCEEDING ONE-THIRD THE SLAB OR WALL THICKNESS WITHIN THE SLAB OR WALL UNLESS SPECIFICALLY SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.	
DO NOT WELD OR TACK WELD REINFORCING STEEL UNLESS APPROVED OR DIRECTED BY THE STRUCTURAL ENGINEER.	
ALL EXPOSED INTERIOR SLABS SHALL RECEIVE SMOOTH TROWEL FINISH. ALL EXPOSED EXTERIOR PAVEMENTS SHALL RECEIVE BROOM FINISH.	
DESIGN OF ADEQUATE SHORING FOR FORMWORK IS THE RESPONSIBILITY OF THE CONTRACTOR.	
LEAVE ALL FORMS & SHORING FOR ELEVATED SLABS IN PLACE A MINIMUM OF 14 DAYS, OR UNTIL TESTING SHOWS CONCRETE HAS REACHED 100% OF DESIGN COMPRESSIVE STRENGTH.	
ADHESIVE ANCHORS SHALL BE INSTALLED ACCORDING TO MANUFACTURER SPECIFICATIONS.	

REINFORCED C.M.U. NOTES

- ALL MASONRY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ASCE 6-08 ("SPECIFICATION FOR MASONRY STRUCTURES"). ALL SUPERVISORY PERSONNEL HAVING ANY CONNECTION WITH THE MASONRY WORK SHALL CERTIFY THAT THEY HAVE FAMILIARIZED THEMSELVES WITH THESE PUBLICATIONS.
- BLOCK SHALL BE LAID IN A RUNNING BOND.
- ALL FACE SHELLS OF BLOCKS SHALL BE COMPLETELY MORTARED IN BED JOINTS; HEAD JOINTS SHALL BE COMPLETELY MORTARED VERTICALLY FOR SAME WIDTH AS BED JOINTS. WHERE CELLS ARE TO BE FILLED WITH GROUT, FACE AND WEB SHELLS SHALL BE COMPLETELY MORTARED EXCEPT WHERE ADJACENT CELLS ARE TO BE FILLED. WHERE ADJACENT CELLS ARE TO BE FILLED, THE WEBS COMMON TO BOTH CELLS NEED NOT BE MORTARED.
- CONCRETE MASONRY UNITS SHALL COMPLY WITH ASTM C 90, LIGHT WEIGHT. UNIT COMPRESSIVE STRENGTH SHALL BE 1900 PSI, MINIMUM. MANUFACTURER SHALL PROVIDE A WRITTEN CERTIFICATION OF THE UNIT COMPRESSIVE STRENGTH WHICH SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH ASTM C140-03.
- ALL BLOCK WORK BELOW THE FINISHED FLOOR ELEVATION SHALL BE LAID USING TYPE M MORTAR. ALL BLOCK WORK ABOVE THE FINISHED FLOOR ELEVATION SHALL BE LAID USING TYPE S OR TYPE M MORTAR. MORTAR SHALL COMPLY WITH ASTM C 270-04.
- ASSUMED Fm FOR EXTERIOR WALLS = 1500 PSI @ 28 DAYS.
- ASSUMED Fm FOR INTERIOR WALLS = 1500 PSI @ 28 DAYS.
- PROVIDE CONT. HORIZONTAL REINFORCING AT 16" MAX. O.C. VERTICALLY. HORIZONTAL REINFORCING SHALL BE W17 (9 GA. x 9 GA.) TRUSS-TYPE JOINT REINFORCING. HORIZONTAL JOINT REINFORCING SHALL COMPLY WITH ASTM A951-02 AND SHALL BE HOT DIP GALVANIZED PER ASTM A153-03. LAP SPLICE ALL JOINT REINFORCING IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS. USE PREFABRICATED SECTIONS AT INTERSECTIONS AND CORNERS. DO NOT CUT OR BEND.
- ALL CELLS AND VOIDS NOTED AS FILLED SHALL BE FILLED SOLID WITH GROUT CONFORMING TO ASTM C476-02 (MINIMUM COMPRESSIVE STRENGTH = 2000 PSI). COARSE AGGREGATE SHALL NOT EXCEED 3/8" IN DIMENSION.
- VERTICAL WALL REINFORCING WILL BE REQUIRED AS SHOWN ON PLANS AND IN DETAILS.
- PROVIDE A CONTINUOUS GROUT FILLED BOND BEAM WITH 2-CONTINUOUS #5'S FOR 7 5/8" C.M.U. AT 8'-0" MAXIMUM ON CENTER VERTICALLY IN ALL REINFORCED MASONRY WALLS.
- PROVIDE A CONTINUOUS CONCRETE BOND BEAM (WITH 4-CONTINUOUS #5'S) AT THE TOPS OF ALL MASONRY WALLS.
- PROVIDE KNOCK-OUT BLOCKS FOR BOND BEAMS WHERE SHOWN OR NOTED. PROVIDE U-BLOCKS FOR BOND BEAMS IN ALL OTHER WALLS.
- PROVIDE A MINIMUM OF 1-#5 IN FULLY GROUTED CELLS EACH SIDE OF ALL OPENINGS IN C.M.U. WALLS. PROVIDE #5 DOWELS WITH 8" HOOKS FROM FOOTINGS. LAP SPLICES TO BE 48 BAR DIAMETERS MINIMUM, TYP. IN INTERIOR AND EXTERIOR C.M.U. WALLS. PROVIDE 1-#5 IN EACH OF 3 FULLY GROUTED CELLS AT ALL CORNERS AND INTERSECTIONS OF MASONRY UNITS.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE SHORING FOR WALLS DURING CONSTRUCTION.

ABBREVIATIONS:

A.B. = ANCHOR BOLT	ISO. = ISOLATION
A.F.F. = ABOVE FINISHED FLOOR	JT. = JOINT
BLDG. = BUILDING	L.P. = LOW POINT
BM. = BEAM	LLV = LONG LEG VERTICAL
BOTT. = BOTTOM	L.W. = LONG WAY
BRG. = BEARING	MAX. = MAXIMUM
CHK'D = CHECKED	MIN. = MINIMUM
Q. = CENTERLINE	M.O. = MASONRY OPENING
CL. = CLEAR	NO. = NUMBER
C.J. = CONSTRUCTION/CONTROL JOINT	N.T.S. = NOT TO SCALE
CMU = CONCRETE MASONRY UNIT	N.S. = NEAR SIDE
COL. = COLUMN	O.C. = ON CENTER
CONC. = CONCRETE	O.H. = OVERHEAD
CONN. = CONNECTION	OPNG. = OPENING
CONT. = CONTINUOUS	OPP. = OPPOSITE
DIA. = DIAMETER	P. = PLATE
DIM. = DIMENSION	PROJ. = PROJECTION
D.O. = DOOR OPENING	REF. = REFERENCE
DN = DOWN	REINF. = REINFORCING
DTL. = DETAIL	REQ'D = REQUIRED
DWG. = DRAWING	SECT. = SECTION
DWL. = DOWEL	SM. = SIMILAR
EACH = EACH	SLV = SHORT LEG VERTICAL
EA. = ELEVATION	SPA. = SPACES
EQ. = EQUAL	S.S. = STAINLESS STEEL
EQUIP. = EQUIPMENT	STD. = STANDARD
EXIST. = EXISTING	STIFF. = STIFFENER
EXPT. = EXPANSION	STL. = STEEL
FDN. = FOUNDATION	S.W. = SHORT WAY
FIN. = FINISH	SYN. = SYMMETRIC
FLR. = FLOOR	T/ = TOP OF
F.S. = FAR SIDE	THK. = THICK
FTG. = FOOTING	TYP. = TYPICAL
GALV. = GALVANIZE	U.N.O. = UNLESS NOTED OTHERWISE
G.L. = GRT LINE	VERT. = VERTICAL
GRG. = GRATING	W/ = WITH
HORIZ. = HORIZONTAL	W.P. = WORK POINT
H.P. = HIGH POINT	W.W.R. = WELDED WIRE REINFORCING
H.R. = HANDRAIL	



PREFABRICATED WOOD TRUSS

GENERAL NOTES

- TRUSS DIAGRAMS AND ROOF FRAMING PLAN ARE TO BE FOLLOWED FOR OVERALL DIMENSIONS AND GENERAL CONFIGURATION. SPECIFICS OF CONFIGURATION AND MEMBER SIZES ARE TO BE DETERMINED BY TRUSS MANUFACTURER'S ENGINEER, WITH MINIMUM SIZES AS SPECIFIED BELOW.
- TRUSS DESIGN SHALL BE PERFORMED BY AN ENGINEER, EMPLOYED BY THE TRUSS MANUFACTURER, LICENSED TO PRACTICE IN THE STATE OF GEORGIA. DESIGN CALCULATIONS AND SHOP DRAWINGS SHALL BEAR SAID ENGINEER'S SEAL, AND SHALL BE SUBMITTED FOR REVIEW.
- CONFORM TO APPLICABLE STANDARDS OF THE INTERNATIONAL BUILDING CODE AND THE TRUSS PLATE INSTITUTE, INCLUDING THE NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION.
- DEAD LOADS, SNOW LOADS, LIVE LOADS, ROOF LIVE LOADS, SEISMIC LOADS AND WIND LOADS (AND THEIR COMBINATIONS) TO BE IN ACCORDANCE WITH THE ABOVE REFERENCED CODE.
- MEMBER SIZES ARE TO BE DETERMINED BY TRUSS ENGINEER'S CALCULATIONS, BUT MINIMUM SIZES FOR TOP AND BOTTOM CHORDS AND SOME OTHER NOTED MEMBERS TO BE 2"x4". ALL MEMBERS FOR ALL TRUSSES TO BE #2 OR BETTER, SOUTHERN YELLOW PINE.
- MINIMUM SIZES SHOWN ABOVE SHALL NOT PRECLUDE A COMPLETE DESIGN AND ANALYSIS OF THE ROOF SYSTEM AND INDIVIDUAL TRUSSES. MEMBER SIZES LARGER THAN THOSE SHOWN ABOVE SHALL BE USED IF INDICATED BY TRUSS ENGINEER'S CALCULATIONS.
- ALL TRUSSES SHALL BE FABRICATED IN THE MANUFACTURER'S SHOP AND DELIVERED ASSEMBLED TO THE JOB SITE. TRUSSES SHALL BE LOADED AND UNLOADED ACCORDING TO LIFTING DIRECTIONS GIVEN BY THE TRUSS ENGINEER. "DUMPING" OF TRUSSES SHALL BE GROUNDS FOR REJECTION, AS WILL ANY OTHER DAMAGE CAUSED BY FABRICATION, TRANSPORTING OR HANDLING OF TRUSSES.
- TRUSSES SHALL BE ERECTED BY THE MANUFACTURER'S REPRESENTATIVE AT THE DIRECTION OF THE TRUSS ENGINEER, EITHER IN PERSON OR BY SPECIFIC DIRECTIONS SHOWN ON SHOP DRAWINGS.
- SHOP DRAWINGS MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF ANY FABRICATION. SHOP DRAWINGS SHALL SHOW ALL DETAILS, DIMENSIONS, SIZES AND DESIGN CALCULATIONS NECESSARY TO FABRICATE AND ERECT TRUSSES AND ALL ASSOCIATED ACCESSORIES.
- ALL TRUSSES SHALL BE ANCHORED TO RESIST UPLIFT AND HORIZONTAL FORCES COMPUTED BY TRUSS ENGINEER AS SHOWN ON SHOP DRAWINGS. ANCHORAGE TO BE FURNISHED & INSTALLED BY TRUSS MANUF.
- TRUSS ENGINEER SHALL SPECIFY, AND TRUSS MANUFACTURER SHALL SUPPLY, ALL NECESSARY ANCHORAGE, BLOCKING, CURBING, MISCELLANEOUS INCIDENTAL FRAMING, AND BRACING.
- BRACING OF TRUSSES DURING INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR. INSTALLATION & BRACING SHALL BE IN ACCORDANCE WITH "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES" BY SBCA & TRUSS PLATE INSTITUTE, 2013 ED.

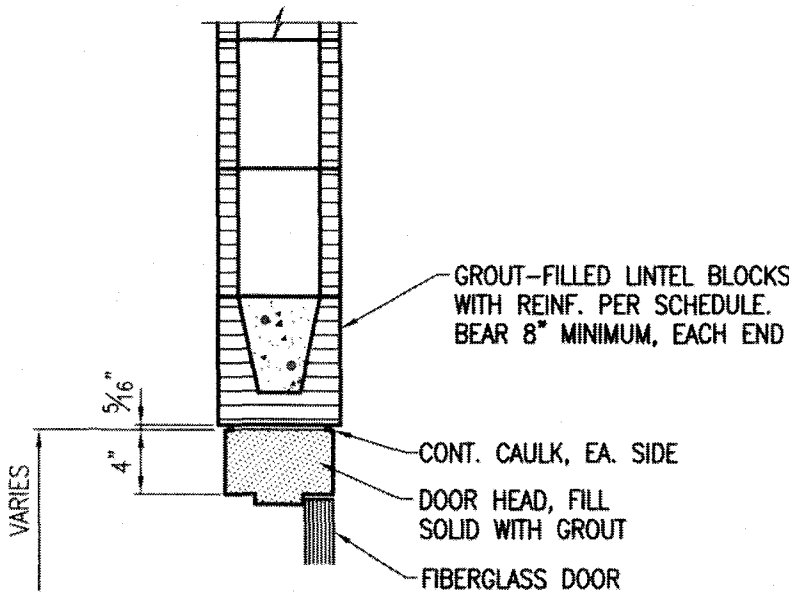
LINTEL SCHEDULE

FOR CONCRETE BLOCK (11 5/8" C.M.U.)

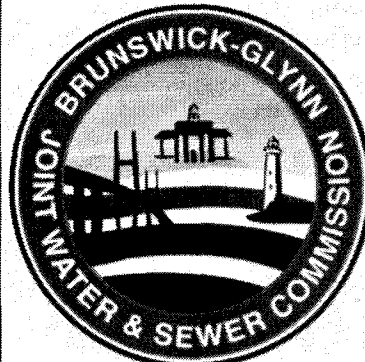
SPAN	LINTEL
LINTEL ONE COURSE DEEP	
0' to 3'-0"	1-#4 T; 1-#5 B
OVER 3'-0" to 5'-0"	1-#5 T; 1-#6 B
LINTEL TWO COURSES DEEP	
OVER 5'-0" to 7'-0"	2-#6 T; 2-#7 B
OVER 7'-0" to 11'-0"	2-#8 T; 2-#9 B
OVER 11'-0" to 14'-0"	2-#9 T; 2-#10 B
	KNOCK-OUT BLOCK TOP COURSE, TYP.
	#3 TIES @ 16" O.C.

NOTES:

- LINTELS SCHEDULED ABOVE SHALL BE USED UNLESS SHOWN OR NOTED OTHERWISE.
- STEEL LINTELS SUPPORTING BRICK SHALL HAVE 1" BEARING, EACH END, FOR EACH 1'-0" OF SPAN, BUT NOT LESS THAN 6" BEARING, EACH END.
- C.M.U. LINTELS AND REINFORCING SHALL EXTEND PAST EACH SIDE OF OPENING 48 BAR DIAMETERS (BASED ON LARGEST BAR) WHERE SPACE PERMITS. WHERE SPACE DOES NOT PERMIT EXTENSION, BEND BARS 90° INTO FULLY GROUTED CELL EACH SIDE OF OPENING.
- CONCRETE BLOCK (C.M.U.) LINTELS SHALL BE MADE WITH FILLED "U" BLOCKS, EXCEPT AS NOTED. FILL SHALL BE COARSE GROUT CONFORMING TO ASTM C476, 3/8" MAXIMUM STONE SIZE. SHORE POURED LINTELS 7 DAYS, MINIMUM.
- WHERE C.M.U. LINTEL SPAN EXCEEDS 6'-0", FILL CELLS OF CONCRETE BLOCK UNDER BEARING FOR 16" LENGTH FROM FOOTING TO TOP OF WALL & PROVIDE 1-#5 VERTICAL BAR IN EACH OF 2 FILLED CELLS, EACH SIDE OF OPENING. AT OTHER LINTELS, PROVIDE 1-#5 VERTICAL BAR, EACH SIDE OF OPENING, IN FILLED CELL. EXTEND ALL VERTICALS FROM FOOTING MAT TO BOND BEAM AT TOP OF WALL.



HEAD DETAIL FOR DOORS A & B



Elmo A. Richardson, Jr., P.E., LLC

CONSULTING ENGINEERS

1000 WILSON DRIVE, SUITE 101
MARIETTA, GEORGIA 30150
PHONE: 478.372.1803
FAX: 478.372.1803

Elmo A. Richardson, Jr., P.E., LLC has been duly licensed by the State of Georgia as a Professional Engineer in the State of Georgia since 1998. He is a member of the Georgia Engineering Council, Inc. and the Georgia Society of Professional Engineers. He is also a member of the American Society of Civil Engineers, Inc. and the American Institute of Professional Surveyors, Inc.

COMMENTS

DATE

NO.

REVISIONS

GENERAL STRUCTURAL NOTES

BRUNSWICK - GLYNN COUNTY
JOINT WATER & SEWER COMMISSION
RIDGEWOOD WATER PRODUCTION FACILITY

PROJECT NO.:
JWSC PROJECT#
4177

DATE:
SEPTEMBER, 2019

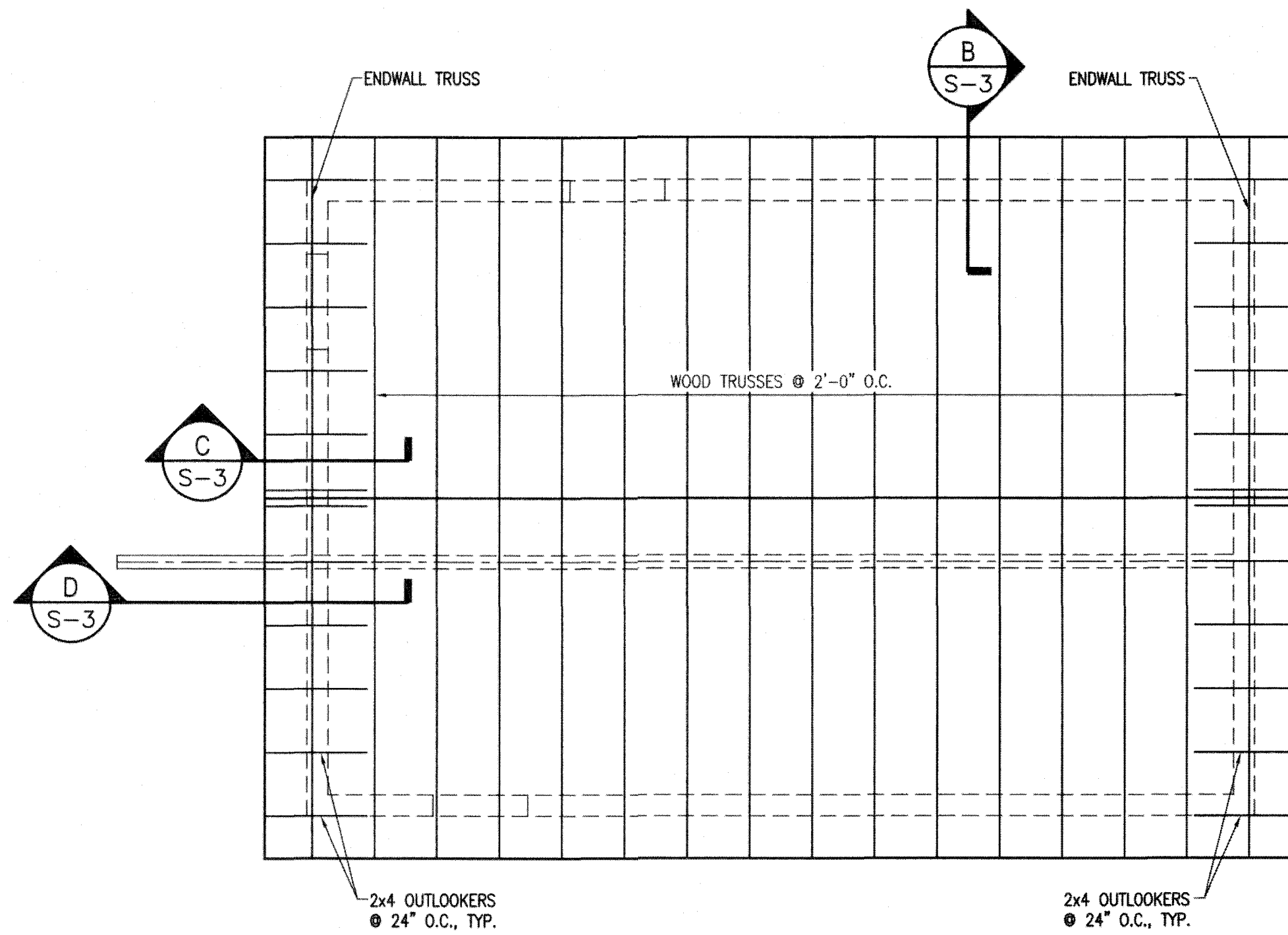
SCALE:
AS NOTED

DRAWN CHECKED BY:
D.ADAMS

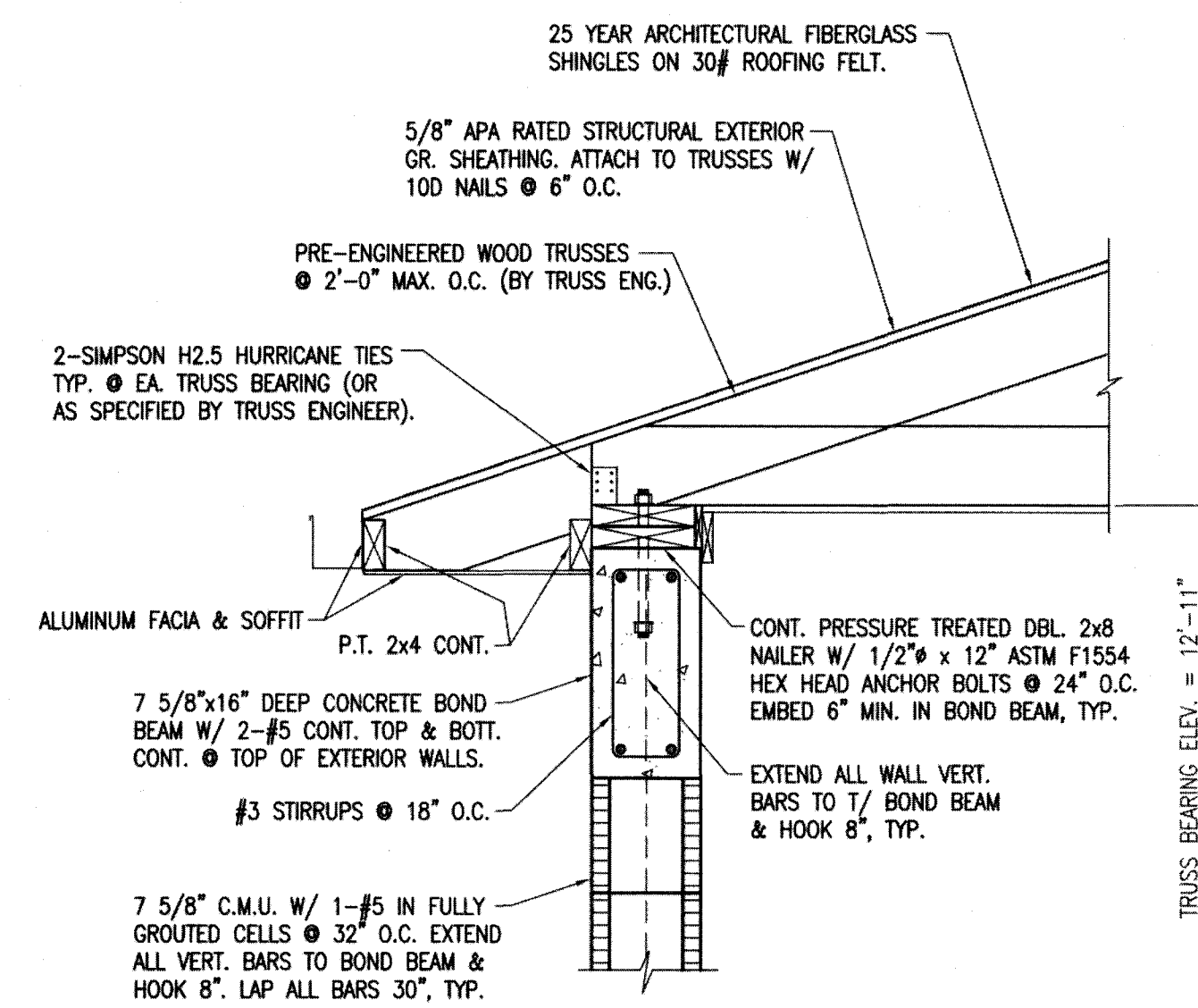
SHEET NO.

9-1

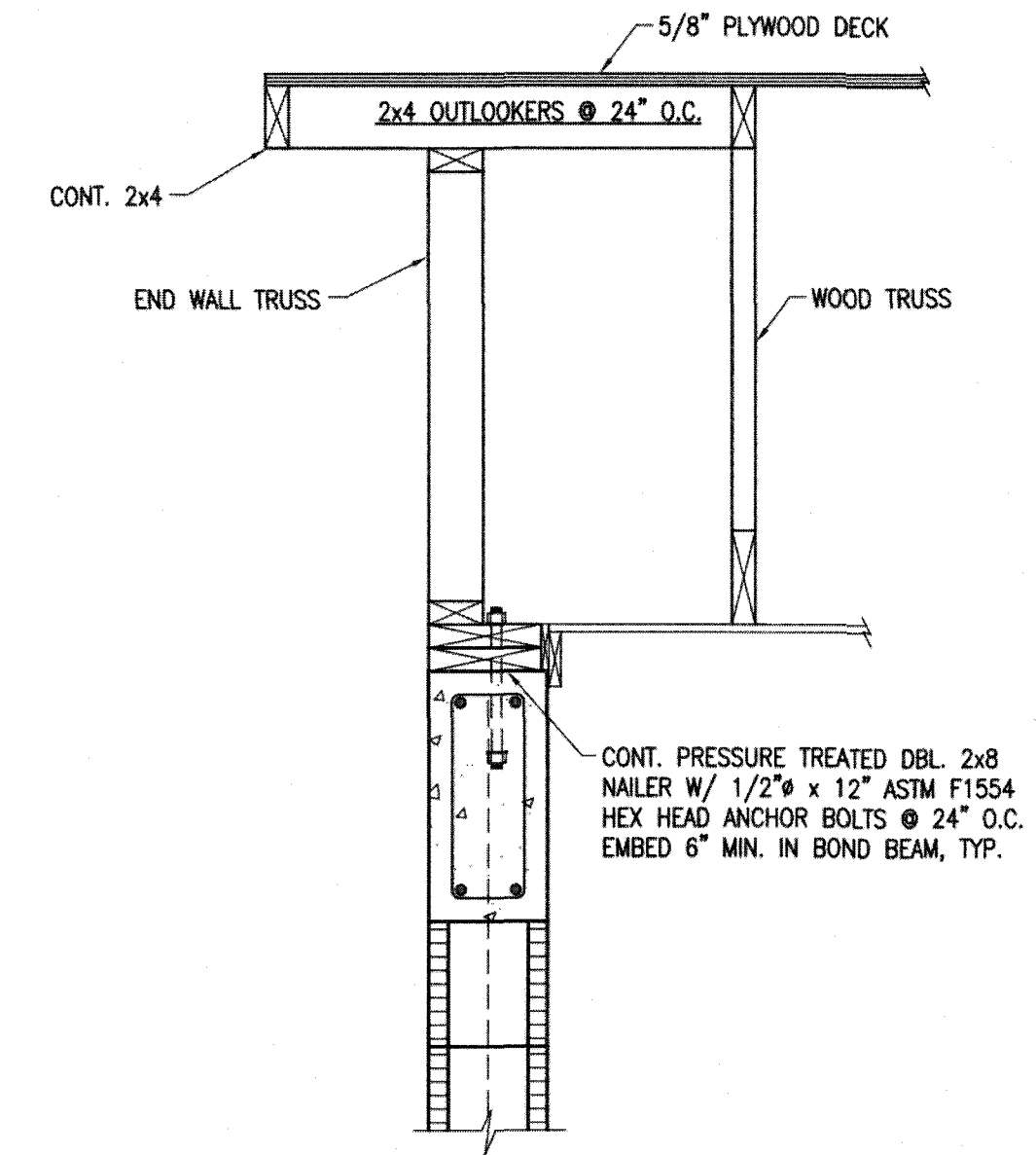
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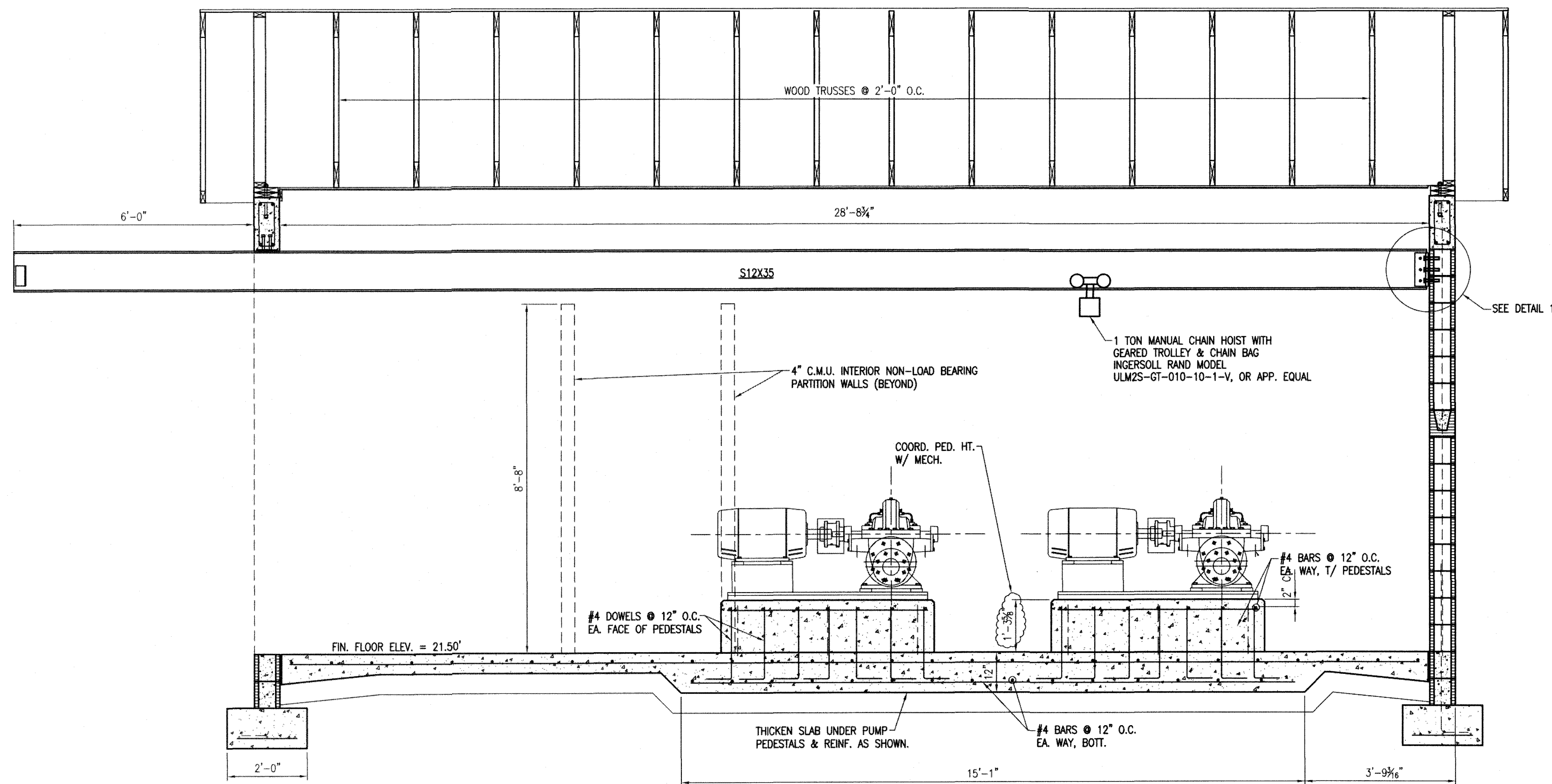
TYPICAL PUMP HOUSE ROOF PLAN
SCALE: 1/4" = 1'-0"



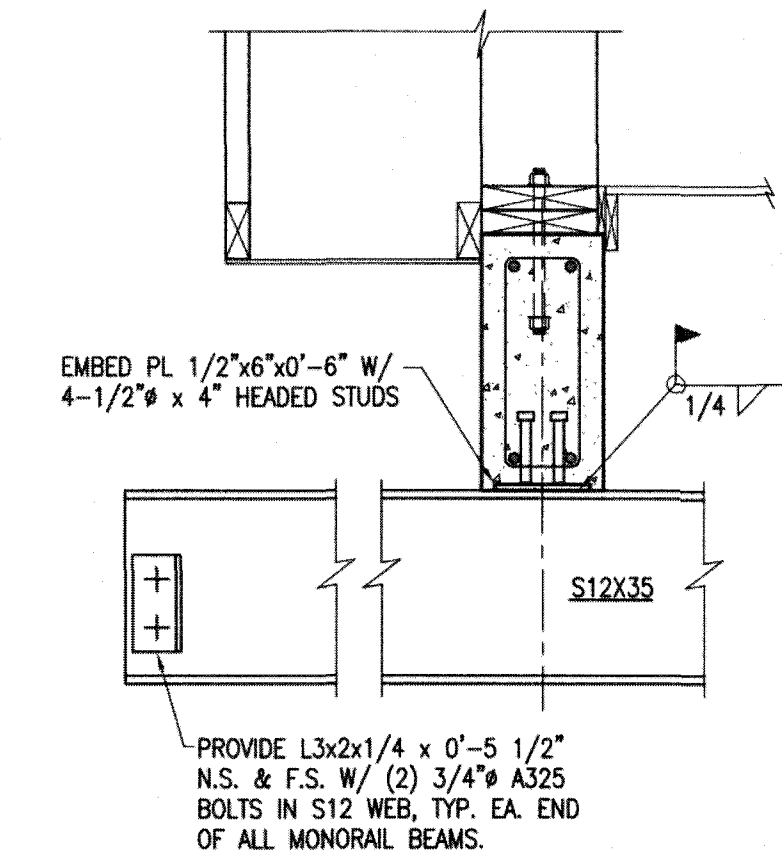
B TYPICAL SECTION TRUSS BEARING
SCALE: 1" = 1'-0"



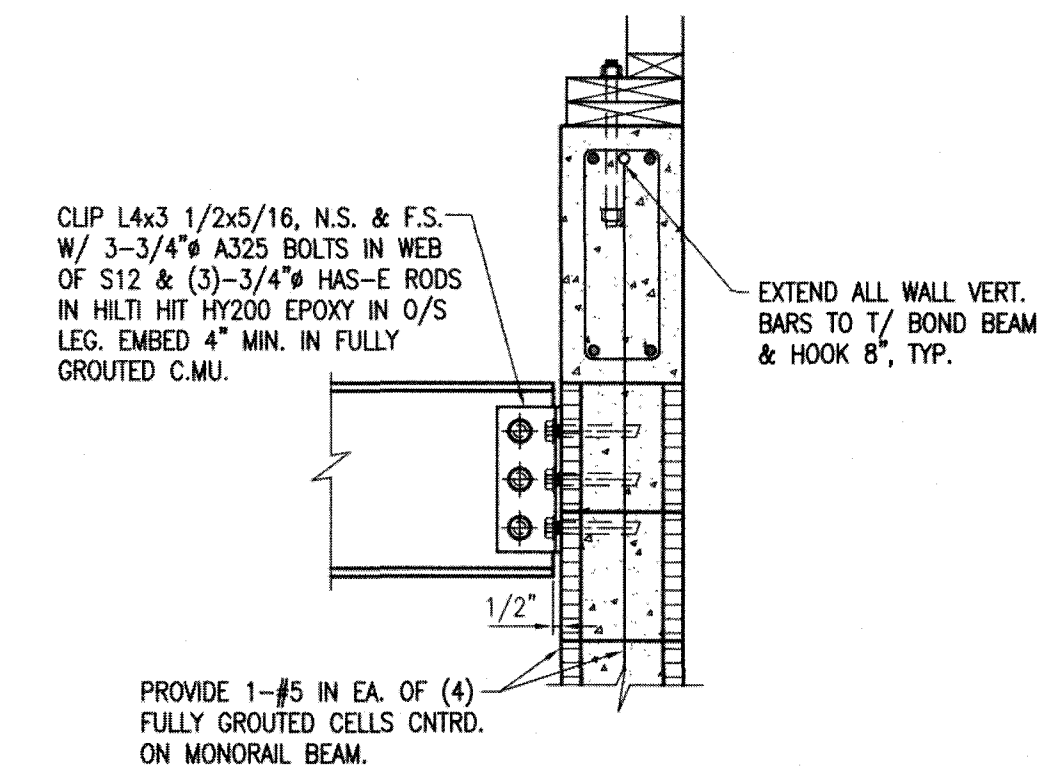
C TYPICAL SECTION TRUSS BEARING
SCALE: 1" = 1'-0"



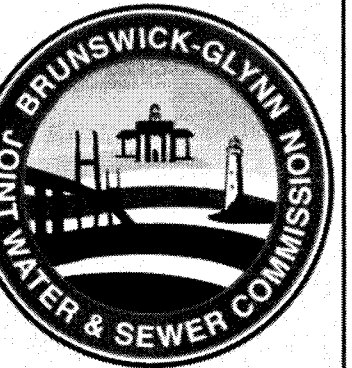
A PUMP HOUSE SECTION
SCALE: 1/2" = 1'-0"



D SECTION AT MONORAIL SUPPORT
SCALE: 1" = 1'-0"



1 MONORAIL BEAM SUPPORT
SCALE: 1" = 1'-0"



Elmo A. Richardson, Jr., P.E., LLC
CONSULTING ENGINEERS
4875 RIVERIDGE DRIVE, SUITE 101
DUBLIN, GA 31006
PHONE: 478.257.1803
FAX: 478.257.1803

NO.	DATE	COMMENTS

REVISIONS

**BRUNSWICK - GLYNN COUNTY
JOINT WATER & SEWER COMMISSION
RIDGEWOOD WATER PRODUCTION FACILITY**

ROOF PLAN & SECTIONS

PROJECT NO. JWSC PROJECT# 417	DATE SEPTEMBER, 2019	DRAWN CHECKED BY: D. ADAMS
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SHEET NO.

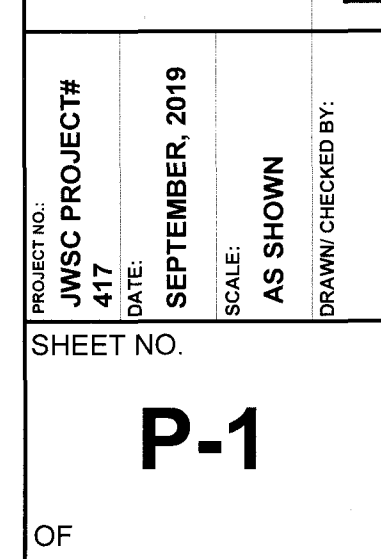
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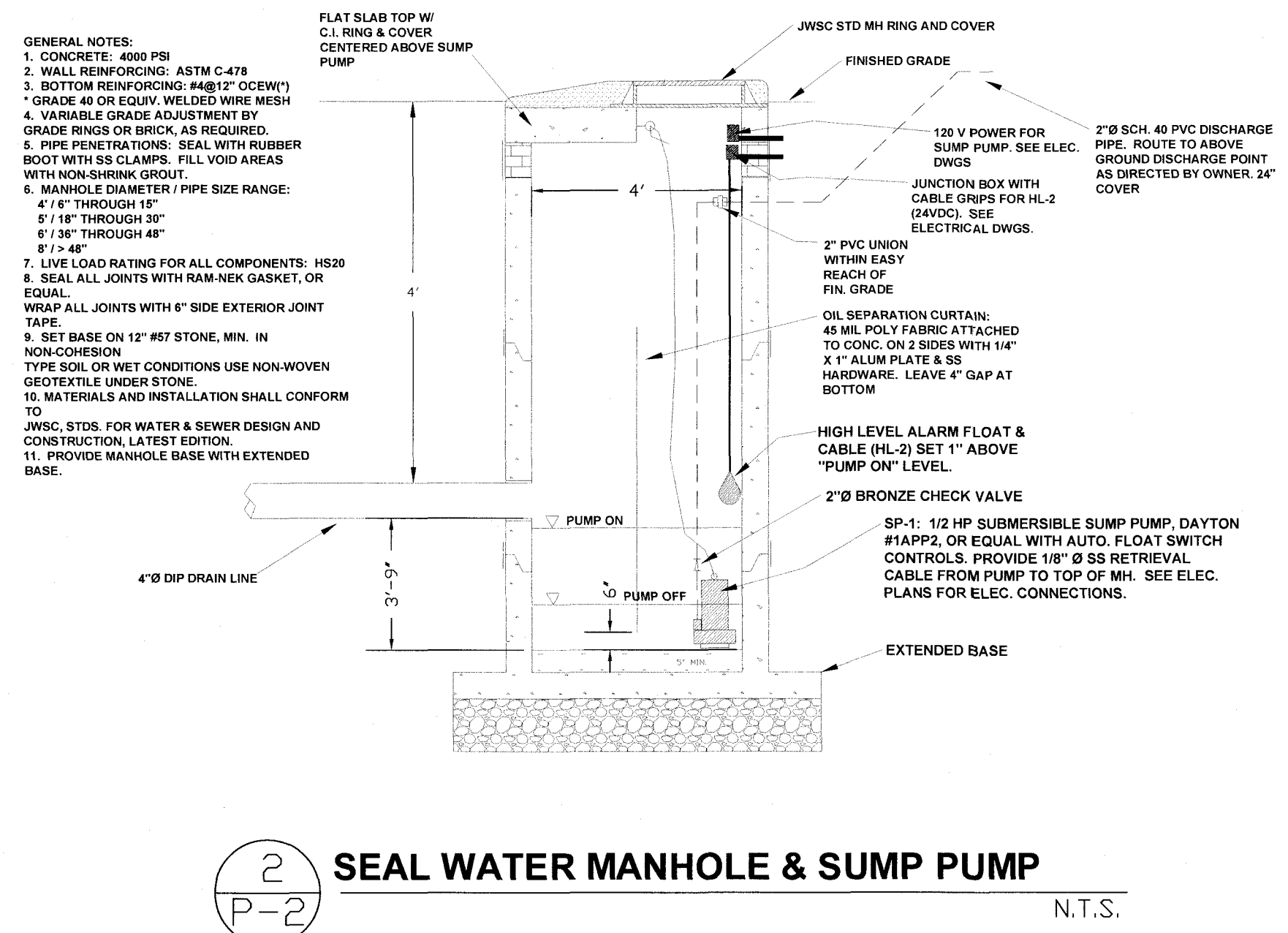
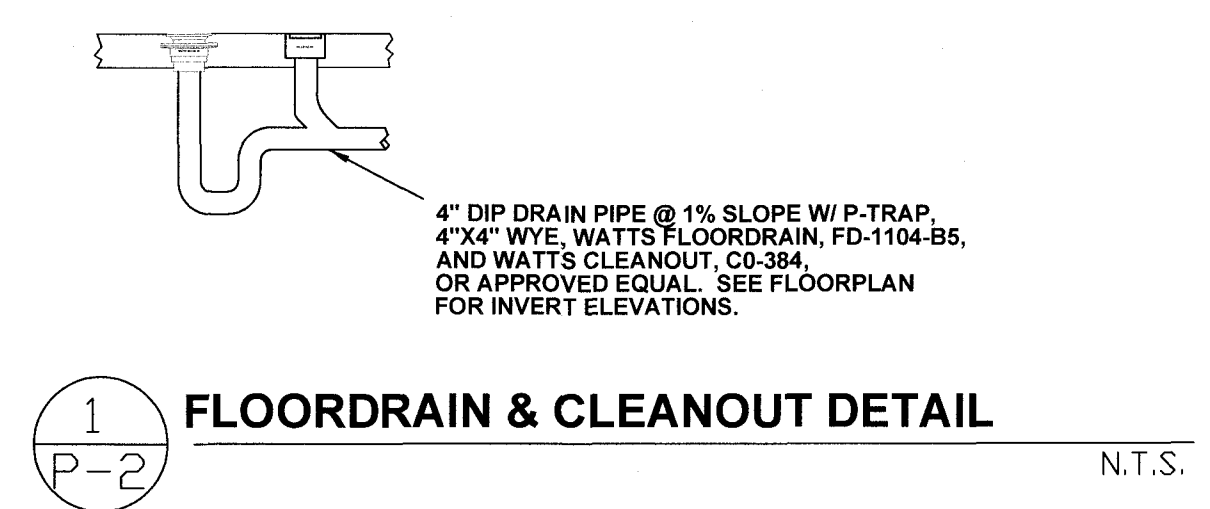
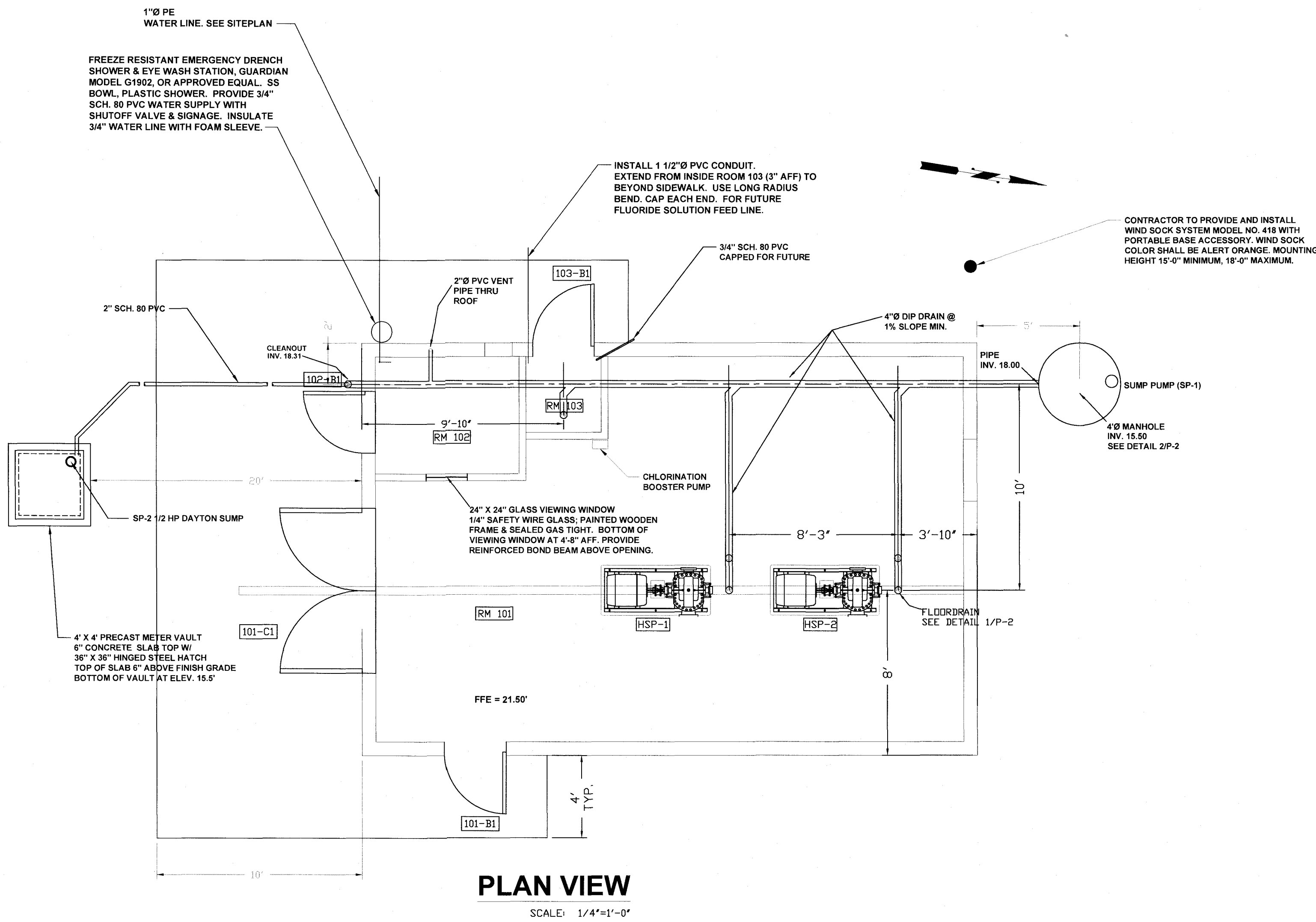
OF



a valve, double check valve and hose bib assembly.
 h fiberglass unistrut & SS hardware. Locate outside of
 .
 Emergency ShutOff System for Dual 150# cylinders, Halogen Model
 Emergency ShutOff System with Emergency Panic Button, connector to CGC-1
 to be activated at the "Alarm Level" setpoint of CGC-1), two
 ctuators, two (2) auxiliary yoke valves for auto-switchover
 ers (Model 2202 00-A)
 4 1 1/4 HP Booster Pump 208/220 Volt.

19
 17 CGC-1
 4
 2
 6
 3
 19
 15
 1
 1
 5
 CS-1
 3
 7
 3
 20
 14
 1"Ø
 8
 9
 10
 11
 12
 13
 9
 SV-2
 TO 12" PUMP SUCTION PIPING
 (PROVIDE ADHESIVE LABEL)
 18
 SV-1
 TO WELL DISCHARGE PIPING
 (PROVIDE ADHESIVE LABEL)
 1"Ø
 PVC
 POTABLE WATER FROM
 DISTRIBUTION SYSTEM
 1
 P-1
CHLORINATION SYSTEM DETAIL
 NTS





GEORGIA REGISTERED PROFESSIONAL ENGINEER
ELMO A. RICHARDSON, JR.

BRUNSWICK-GLYNN COUNTY WATER & SEWER COMMISSION

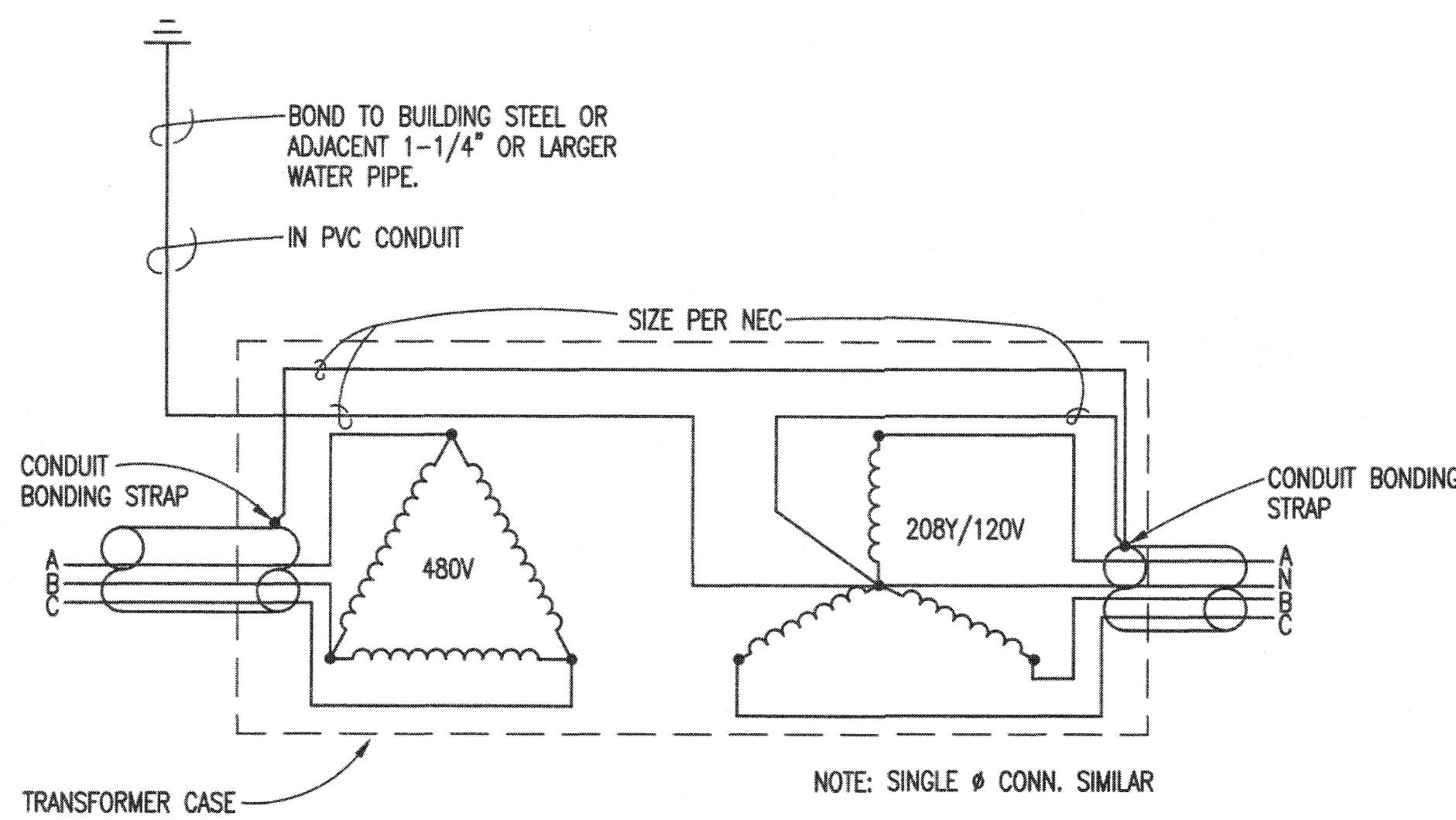
Elmo A. Richardson, Jr., P.E., LLC
CONSULTING ENGINEERS
4055 ANNE ARUNDEL DRIVE, SUITE 101
MARIETTA, GEORGIA 30067
PHONE: 404.257.1303
FAX: 404.257.1303

PROJECT NO.: JWSC PROJECT# 417
DATE: SEPTEMBER, 2019
SCALE: AS SHOWN
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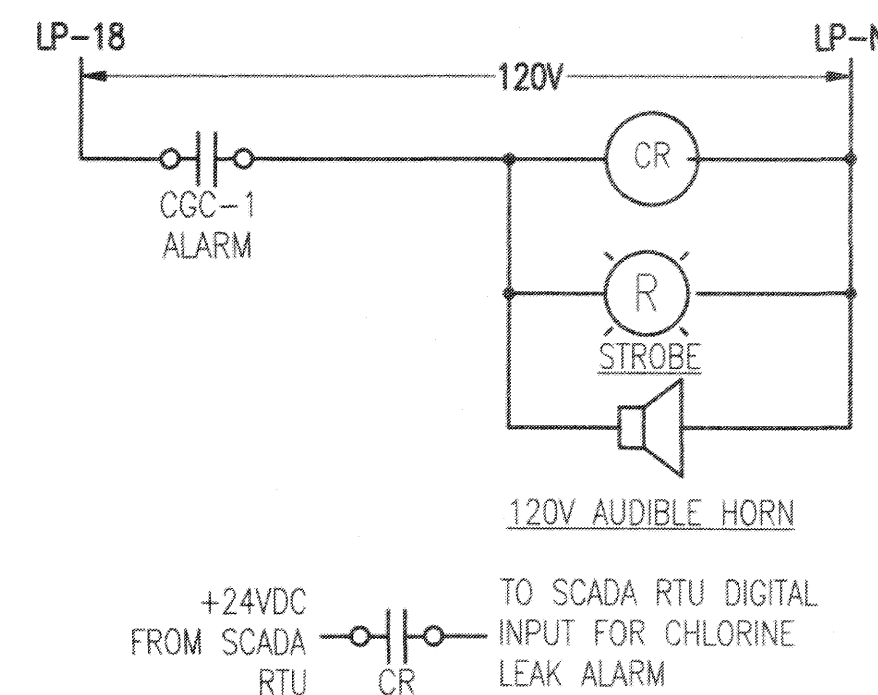
BRUNSWICK - GLYNN COUNTY
JOINT WATER & SEWER COMMISSION
RIDGEWOOD
WATER PRODUCTION FACILITY
PLUMBING PLAN

P-2

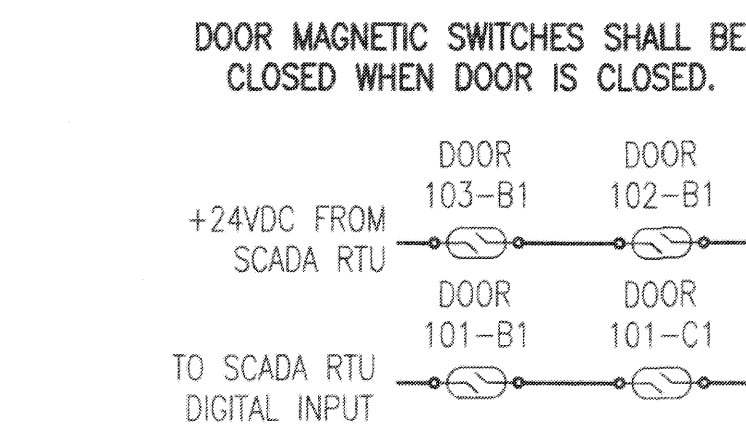
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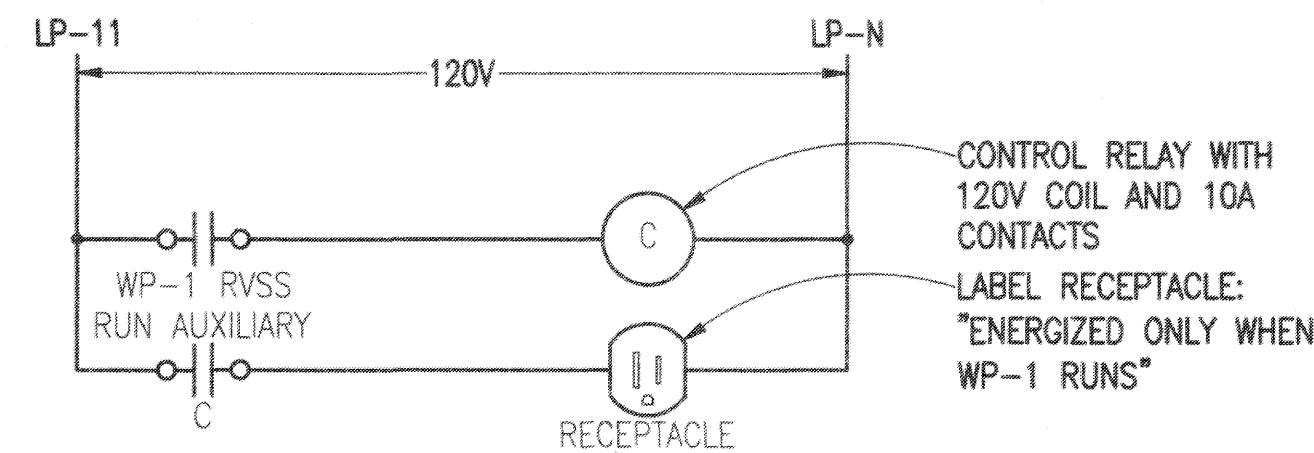
DETAIL OF DRY TYPE TRANSFORMER CONNECTIONS
SCALE: NONE



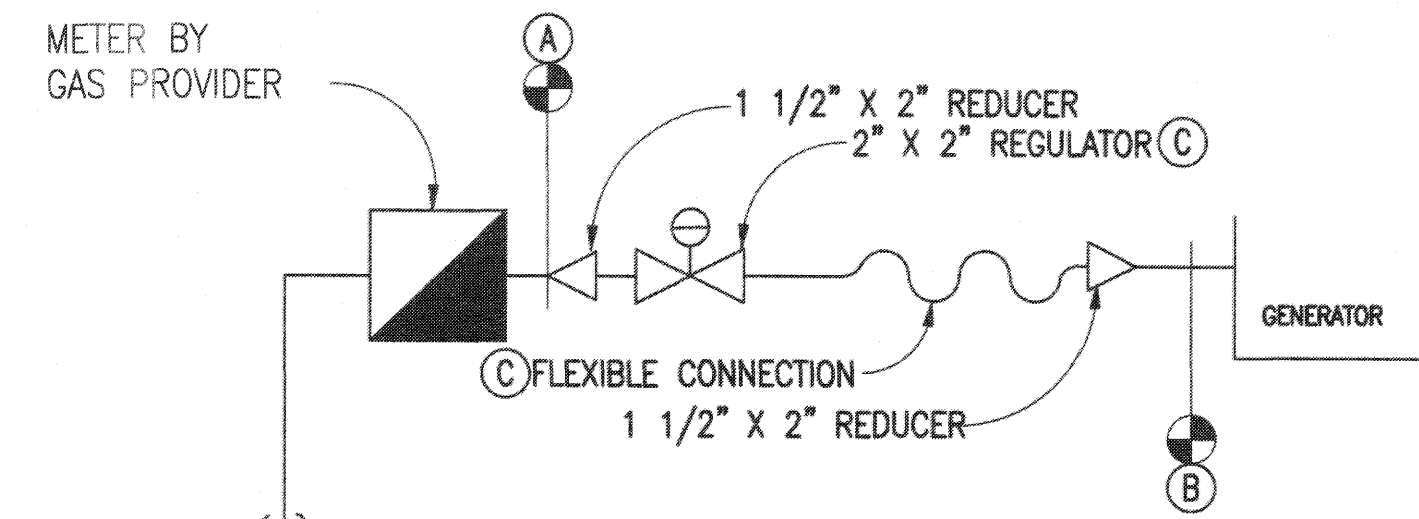
CHLORINE ROOM AUDIBLE ALARM & RED STROBE DETAIL
SCALE: NONE



INTRUSION DETECTION DETAIL
SCALE: NONE



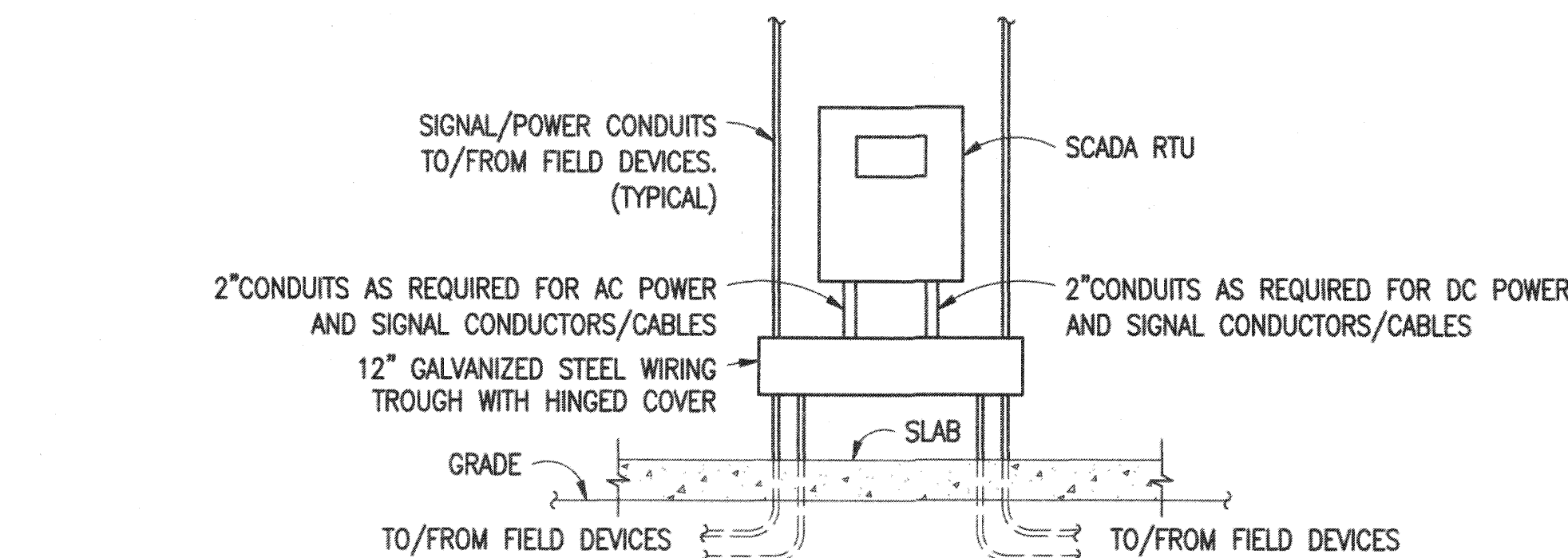
FLUORIDE RECEPTACLE WIRING DETAIL
SCALE: NONE



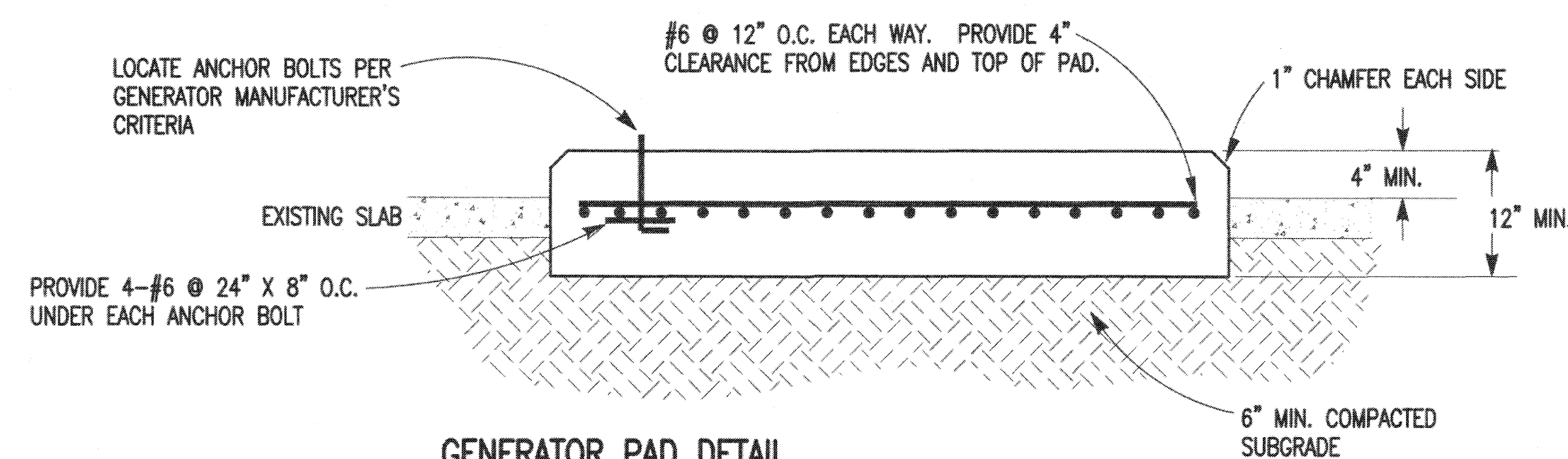
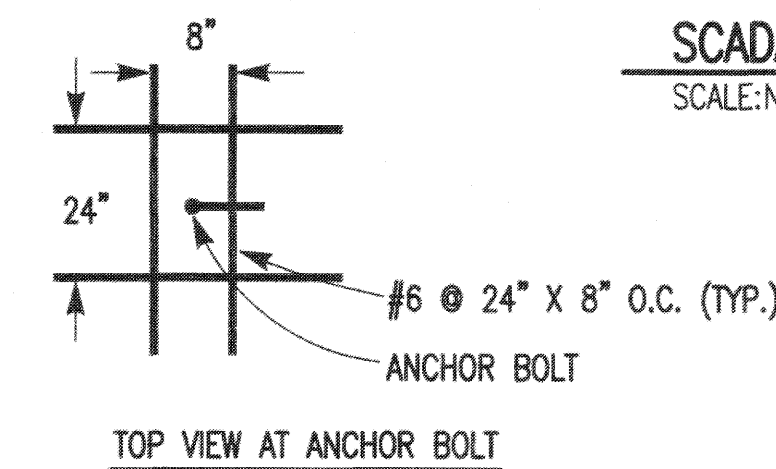
NOTES:
(GAS CONNECTION DETAIL ONLY)

- CONNECT TO METER OUTLET AND INSTALL 2" SCHEDULE 40 GALVANIZED PIPING, FITTINGS, AND CONNECTORS AS INDICATED.
- CONNECT TO 1 1/2" GENERATOR GAS INLET AS INDICATED.
- REFER TO SCHEDULES ON SHEET ME-2.

GENERATOR NATURAL GAS CONNECTION DETAIL
SCALE:



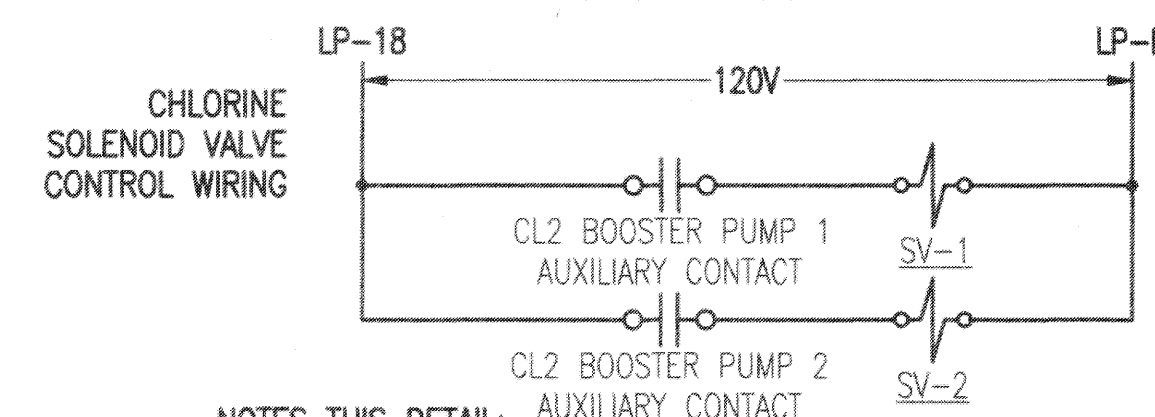
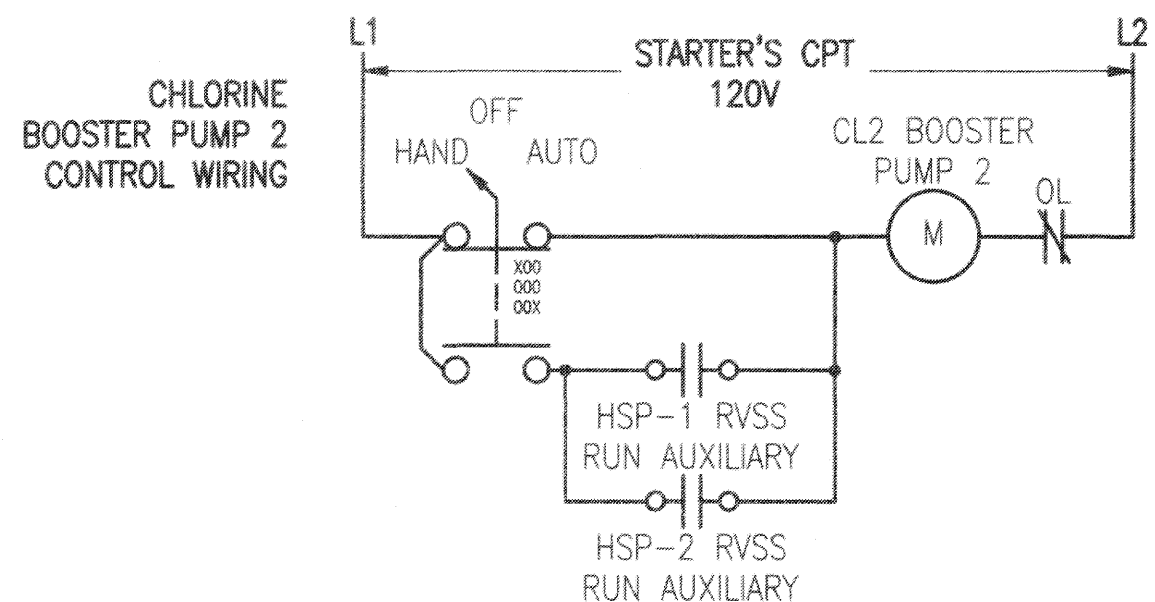
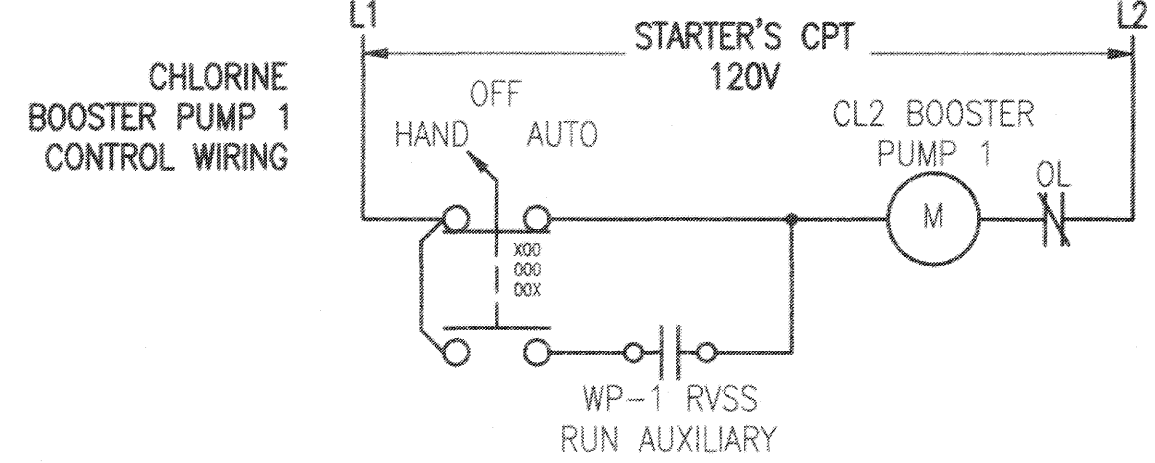
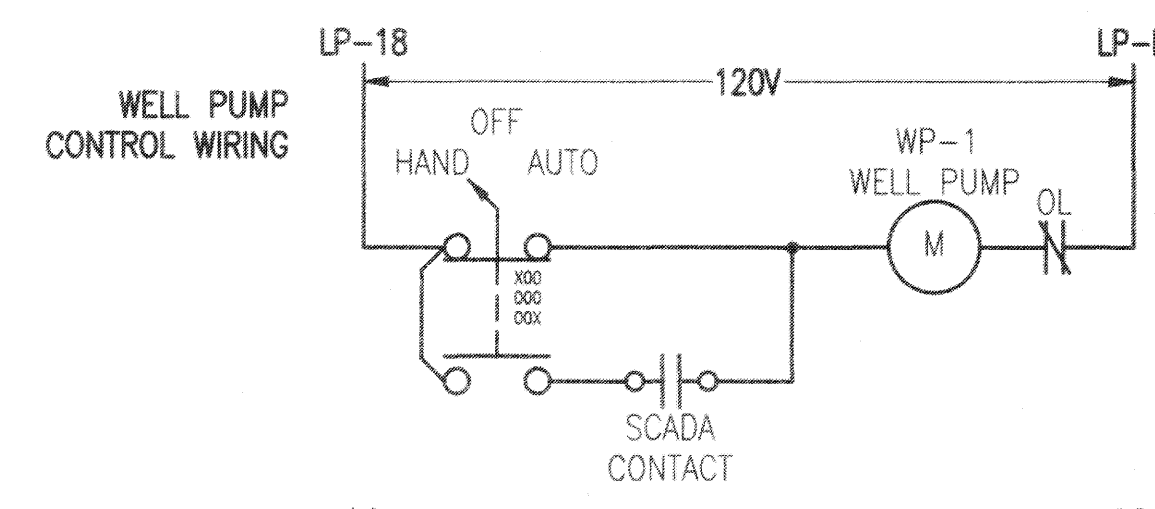
SCADA RTU INSTALLATION DETAIL
SCALE: NONE



GENERATOR PAD DETAIL
SCALE: NONE

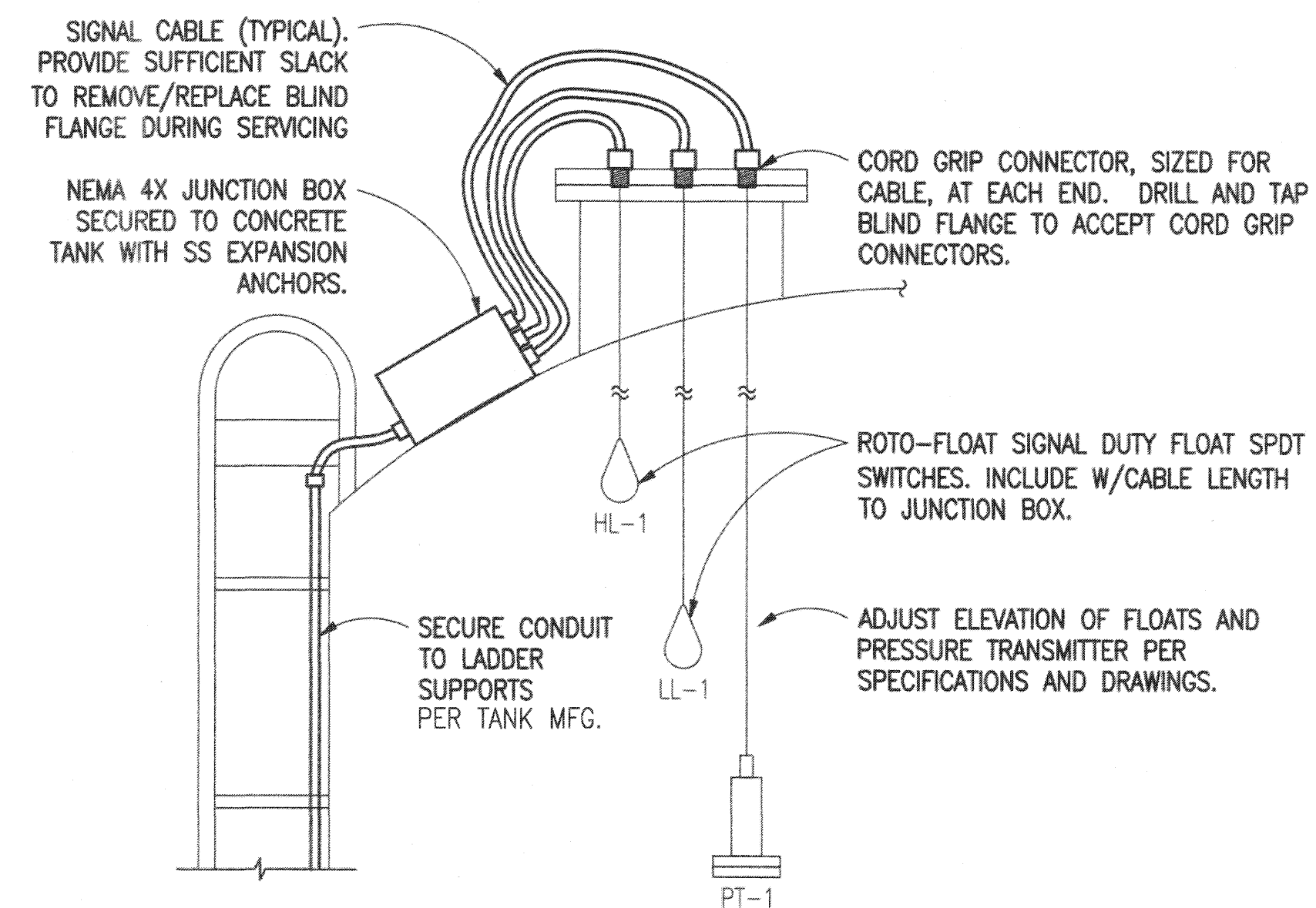
GENERAL NOTES:
(GENERATOR PAD DETAIL ONLY)

- CONCRETE SHALL BE 3000 PSI @ 28 DAYS.
- PAD SHALL EXTEND 6" BEYOND GENERATOR ON ALL SIDES.
- ALL STEEL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.
- COORDINATE WITH GENERATOR VENDOR FOR LOCATION OF CONDUITS.
- CONCRETE PAD DIMENSIONS AND CONSTRUCTION SHALL BE APPROVED BY GENERATOR MANUFACTURER.
- INSTALL PAD TO BE LEVEL. ADD ADDITIONAL CONCRETE AS NECESSARY FOR CONCRETE TO EXTEND 4" (MINIMUM) BELOW GRADE.
- CONTRACTOR TO PROVIDE GENERATOR ACCESS PLATFORM STAIRS PER MANUFACTURERS RECOMMENDATION.

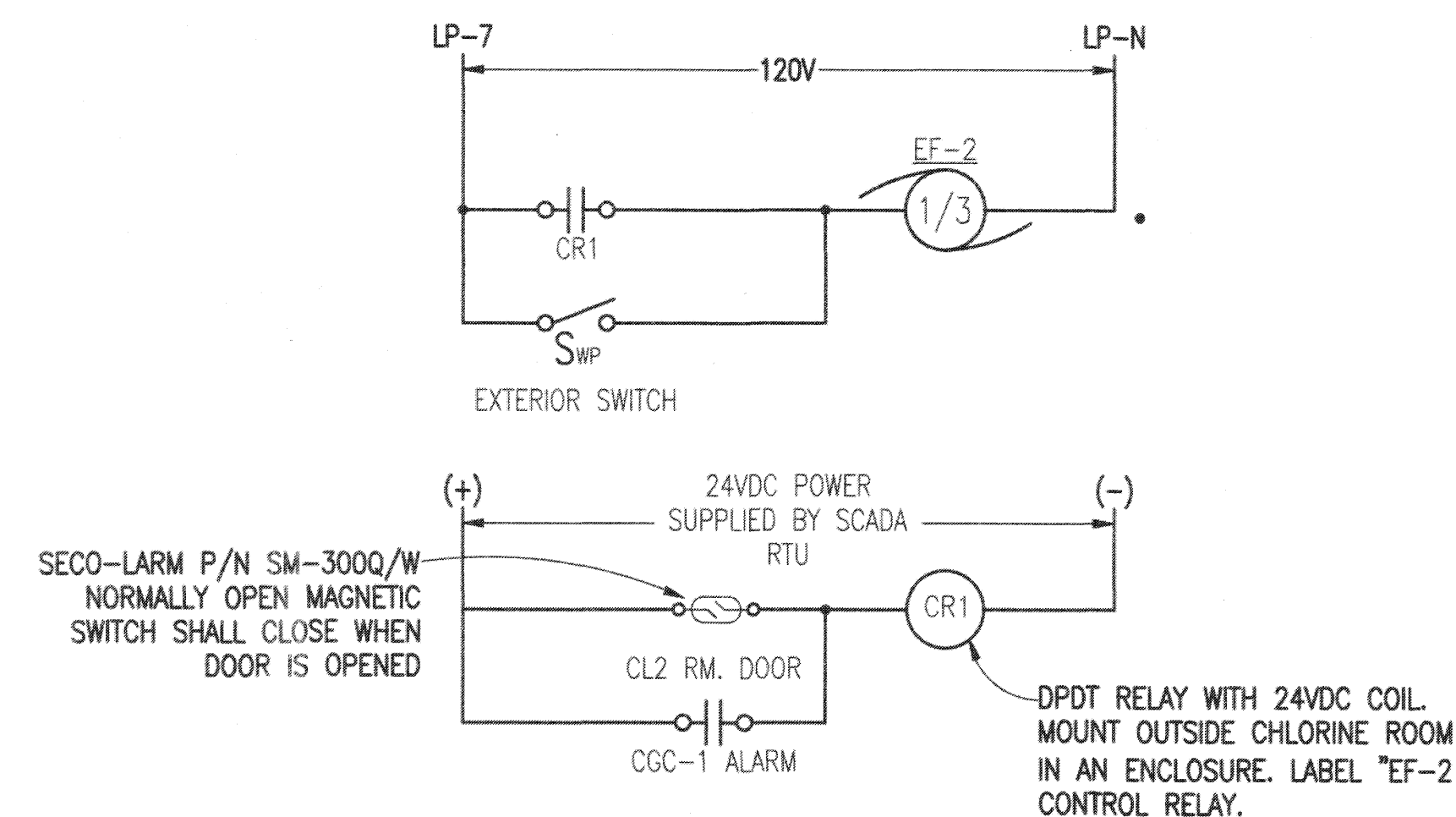


NOTES THIS DETAIL:
INSTALL #14;3/4" C. BETWEEN DEVICES, AND PROVIDE AUXILIARY CONTACTS AND RELAYS/ENCLOSURES AS REQUIRED TO SUPPLY THE CONTROL SCHEME SHOWN.

SV-1 & SV-2 DETAIL
SCALE: NONE



HL-1, LL-1 & PT-1 CONNECTIONS AT TANK DETAIL
SCALE: NONE



CHLORINE ROOM EF-2 CONTROL DETAIL
SCALE: NONE

CLARKNEXSEN

440 Martin Luther King Jr. Blvd
Macon, GA 31201
478.743.8415 Fax: 478.743.8239
www.clarknexsen.com

BRUNSWICK - GLYNN COUNTY JOINT WATER & SEWER COMMISSION

RIDGEWOOD WATER PRODUCTION FACILITY

DETAILS - MECHANICAL & ELECTRICAL

ME-1

PROJECT NO. JWSC PROJECT# 417

DATE: SEPTEMBER, 2019

SCALE: AS SHOWN

DRAWN CHECKED BY: SJB/RBP

SHEET NO.

COMMENTS

REVISIONS

DATE

NO.

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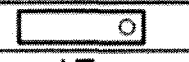






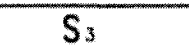
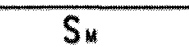











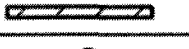







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REVISIONS

FILE NAME: G:\Scully Creek Consulting, LLC\Projects\8512 Elmo Brunswick Ridgewood WPA\Drawings\8512 ME-2.dwg LAYOUT NAME: ME-2 PLOTTED: Monday, August 05, 2019 - 2:10pm

ELECTRICAL LEGEND	
LIGHT FIXTURES - SEE LIGHTING FIXTURE SCHEDULE	
	SURFACE-MOUNTED FLUORESCENT
	WALL-MOUNTED
	CEILING-MOUNTED
	POLE-MOUNTED AREA LIGHT
CONVENIENCE OUTLETS	
	DUPLEX (WP=WEATHERPROOF)(G=GROUND-FAULT CIRCUIT-INTERRUPTING)(C=ISOLATED GROUND)
	JUNCTION BOX WALL, CEILING
SWITCH OUTLETS	
	SPST TOGGLE SWITCH
	THREE WAY TOGGLE SWITCH
	MOTOR-RATED SWITCH
CIRCUITS	
	RACEWAY IN CEILING OR WALL
	RACEWAY UNDERFLOOR, UNDERGROUND
	FLEXIBLE RACEWAY
	HOME RUN (ONE ARROW PER CIRCUIT)
	CONDUIT (UP, DOWN)
	EXPOSED RACEWAY
GENERAL EQUIPMENT	
	DISCONNECT SWITCH (F=FUSED, N=NON-FUSED)
	COMBINATION STARTER/DISCONNECT
	MOTOR (HORSEPOWER, * FRACTIONAL HORSEPOWER)
	208Y/120V, 3ø, 4W ELECTRICAL PANELBOARD (FLUSH MOUNTED, SURFACE)
	480Y/277V, 3ø, 4W ELECTRICAL PANELBOARD (FLUSH MOUNTED, SURFACE)
	WOOD BACKBOARD
	CIRCUIT BREAKER
	TRANSFORMER
	METER
ABBREVIATIONS	
3ø	THREE PHASE
4W	FOUR WIRE
AIC	UL LISTED, INTERRUPTING CAPACITY-RMS SYMMETRICAL AMPERES
A, AMP	AMPERES
A.F.F.	ABOVE FINISHED FLOOR
C, CD.	CONDUIT
HP	HORSEPOWER
KVA	KILOVOLT-AMPERES
KW	KILOWATTS
LED	LIGHT EMITTING DIODE
LTG	LIGHTING
M.B.	MAIN BREAKER
M.L.O.	MAIN LUGS ONLY
RECP.	RECEPTACLE
RVSS	REDUCED VOLTAGE SOLID STATE (SOFT STARTER)
UL	UNDERWRITER'S LABORATORY
LINETYPES	
NEW WORK PLANS	
	NEW WORK AND EQUIPMENT
	EXISTING EQUIPMENT TO REMAIN OR OTHERWISE NOTED
DEMOLITION PLANS	
	EXISTING EQUIPMENT TO BE REMOVED
	EXISTING EQUIPMENT TO REMAIN OR OTHERWISE NOTED

NATURAL GAS REGULATOR SCHEDULE						
SIZE	MAKE	MODEL	LOAD (CFH)	ORIFICE SIZE	PRESSURE IN SET	NOTES
2	SENSUS	243-12-2	1800	1/2"	2 PSI 14" WC	1
NOTES						
1. OTHER MANUFACTURERS REGULATORS ARE ACCEPTABLE IF EQUIVALENT.						

FLEXIBLE GAS CONNECTOR SCHEDULE		
SIZE	MANUF.	MODEL
2"	METRAFLEX	GASCT0200

PANEL <u>MDP</u>										TYPE <u>SURFACE</u>						
VOLTAGE <u>480Y/277V, 3Ø, 4W</u>										MAINS <u>400A MLO</u>						
POLE	TRIP	CONDUCTOR	CONDUIT	DESIGNATION	KVA	NO	PHASE			NO	KVA	DESIGNATION	CONDUIT	CONDUCTOR	TRIP	POLE
							ØA	ØB	ØC							
3	110*	3#1, #6G	1-1/2"	HIGH SERVICE PUMP, HSP-1	21.4	1	42.8			2	21.4	HIGH SERVICE PUMP, HSP-2	1-1/2"	3#1, #6G	110*	3
					21.4	3		42.8		4	21.4					
					21.4	5			42.8	6	21.4					
3	110*	3#1, #6G	2"	WELL PUMP, WP-1	21.4	7	27.2			8	5.8	XLP	3/4"	3#6, #10G	60	3
					21.4	9		27.1		10	5.7					
					21.4	11			27.2	12	5.8					
3	15	2#12, #12G	3/4"	EF-1	0.5	13	4.3			14	3.8	UH-2	3/4"	2#10, #10G	30	2
					0.5	15		4.3		16	3.8					
					0.5	17			0.5	18	-	SPACE	-	-	-	-
3	**	**	**	TVSS	-	19	-			20	-	SPARE	-	-	50	3
					-	21	-			22	-					
					-	23				24	-					
-	-	-	-	-	-	25	-			26	-	SPACE	-	-	-	-
-	-	-	-	-	-	27	-			28	-	SPACE	-	-	-	-
-	-	-	-	-	-	29				30	-	SPACE	-	-	-	-
* PROVIDE BREAKER WITH LOCKING DEVICE																
** PER TVSS MANUFACTURER'S INSTRUCTIONS																
TOTAL:						74.3	74.2	70.5								

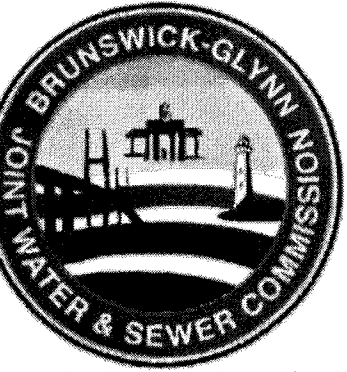
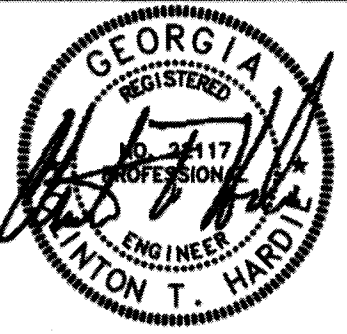
PANEL LP										TYPE SURFACE						
VOLTAGE 208Y/120V, 3ø, 4W										MAINS 100A MB						
POLE	TRIP	CONDUCTOR	CONDUIT	DESIGNATION	KVA	NO	PHASE			NO	KVA	DESIGNATION	CONDUIT	CONDUCTOR	TRIP	POLE
							ØA	ØB	ØC							
1	20	2#12, #12G	3/4"	LIGHTING, INTERIOR	0.8	1	0.9			2	0.1	LIGHTING, EXTERIOR	3/4"	2#12, #12G	20	1
1	20	2#12, #12G	3/4"	RECEPTACLES	1.2	3		1.4		4	0.2	CGC-1 & ESV-1	3/4"	2#12, #12G	20	1
1	20	2#12, #12G	3/4"	SCADA RTU	1.0	5			1.3	6	0.3	AREA LIGHTING: POLE	3/4"	2#12, #12G	20	1
1	20	2#12, #12G	3/4"	EF-2 (1/3 HP)	0.9	7	1.9			8	1.0	UH-1	3/4"	2#12, #12G	20	2
1	20	2#12, #12G	3/4"	RECEPTACLE, SUMP PUMP (1/2HP)	1.2	9		2.2		10	1.0					
1	20	2#12, #12G	3/4"	RECEPTACLE, FP-1	0.2	11			0.3	12	0.1	RECEPTACLE FOR CS-1	3/4"	2#12, #12G	20	1
1	20	2#12, #12G	3/4"	FIT-1, FIT-2 FLOW TRANS.	0.2	13	0.2			14	-	SPARE	-	-	20	1
1	20	2#12, #12G	3/4"	HSP-1 & -2 HEATERS	0.5	15		0.5		16	-	SPARE	-	-	20	1
1	20	-	-	SPARE	1.0	17			1.1	18	0.1	CONTROL POWER	3/4"	2#12, #12G	20	1
1	20	-	-	SPARE	1.0	19	1.2			20	0.2	GEN. BATTERY CHARGER	3/4"	2#12, #12G	20	1
1	20	-	-	SPARE	-	21		0.3		22	0.3	GEN. JACKET HEATER	3/4"	2#12, #12G	20	2
1	20	2#12, #12G	3/4"	RECEPTACLE, SUMP PUMP (1/2HP)	1.2	23			1.5	24	0.3					
3	15	2#12, #12G	3/4"	CL2 BOOSTER PUMP 1	0.8	25	1.6			26	0.8	CL2 BOOSTER PUMP 2	3/4"	2#12, #12G	-	-
					0.8	27		1.6		28	0.8					
					0.8	29			1.6	30	0.8					
TOTAL:						5.8	6.0	5.8								

UNIT HEATER SCHEDULE																	
MARK	C.F.M.	MNF		MODEL NO.	PERFORMANCE			MAX. DIMENSIONS				MOTOR		PIPE SIZE		E.W.T. XXF	
		CHROMALOX	Q MARK		MBH	KW.	P.D. FT. W.G.	LENGTH	WIDTH	HEIGHT	RECESSED DEPTH	H.P.	R.P.M.	3 SPEED	S IN.	R IN.	E.A.T. XXF
																	W.T.D. XXF
UH-1	150	*		AWH-4408		2		16	4	20	3.5	-	-				
UH-2	590	*		HD3D-750		7.5		15	15	26	-	1/15	1050				

FAN SCHEDULE																
MARK	C.F.M.	E.S.P. IN. W.G.	MNF	HARTZELL GREENHECK	MODEL NO.	MAX. HP.	MAX. OPER. WEIGHT (LBS)	MAX. TIP SPEED F.P.M.	MAX. NOISE SONES	DRIVE ACCESSORIES					GENERAL NOTE:	
										DIRECT	BELT	GRAVITY DAMPER	ELECTRIC DAMPER	BIRD SCREEN	ROOF CURB	MARK SF=SUPPLY FAN MARK EF=EXHAUST FAN MARK RF=RETURN FAN
EF-1	7500	0.125	*		SCE	3/4	150	-	-	*	*	*	*	*	*	1;
EF-2	2410	0.25	*		SERIES 59	1/3	40	-	-	*	*	*	*	*	*	2;
NOTES																
1. FAN SHALL BE PROVIDED WITH WALL SLEEVE, RAIN HOOD, BIRDSCREEN, BACKDRAFT DAMPER, AND MOTOR GUARD.																
2. FAN SHALL BE PROVIDED WITH ONE PIECE MOLDED FIBERGLASS HOUSING, MOTOR SUPPORT BASE, STAINLESS STEEL HARDWARE, FRP HOOD WITH BIRDSCREEN, AND FRP BACKDRAFT DAMPER.																

LIGHTING FIXTURE SCHEDULE					
MARK	LAMPS	VOLTAGE	MANUFACTURER AND CATALOG NO.	MOUNTING	NOTES
A	LED	120	LITHONIA# DMW2 3000LM PCL MD 120 40K STSL	SURFACE	1:
B	LED	120	LITHONIA# FMML 7 840	SURFACE	-
C	LED	120	LITHONIA# TWR1 LED 2 50K MVOLT	SURFACE	-
D	LED	120	LITHONIA# DSXF3LED 8 A530/50K 120 YKC62 DDBXD	POLE/YOKE	2:
NOTES:					
1. PROVIDE WITH STAINLESS STEEL LATCHES.					
2. PROVIDE WITH PHOTOCCELL.					

SCADA RTU INPUT/OUTPUT SCHEDULE					
INSTRUMENT NO./ SIGNAL DESIGNATION	DESCRIPTION	DIGITAL INPUT	DIGITAL OUTPUT	ANALOG INPUT	ANALOG OUTPUT
CGC-1	CHLORINE LEAK ALARM	X			
CS-1	CHLORINE TANK SCALE			X	
FE-1	RAW WATER FLOW METER				
FE-2	FINISHED WATER FLOW METER				
FIT-1	RAW WATER FLOW TRANSMITTER			X	
FIT-2	FINISHED WATER FLOW TRANSMITTER			X	
GEN-ALM	GENERATOR GENERAL ALARM	X			
GEN-AUTO	GENERATOR IN AUTOMATIC	X			
ATS-NML	NORMAL POWER IS AVAILABLE	X			
ATS-N POS	ATS IN NORMAL POSITION	X			
ATS-E POS	ATS IN EMERGENCY POSITION	X			
HL-1	STORAGE TANK HIGH LEVEL SWITCH	X			
HSP-1 AMPS	HIGH SERVICE PUMP 1 MOTOR CURRENT			X	
HSP-1 H-O-A	HIGH SERVICE PUMP 1 IN AUTO	X			
HSP-1 RUN	HIGH SERVICE PUMP 1 RUN COMMAND		X		
HSP-1 RUNS	HIGH SERVICE PUMP 1 RUNNING	X			
HSP-1 SPEED	HIGH SERVICE PUMP 1 SPEED COMMAND				X
HSP-2 AMPS	HIGH SERVICE PUMP 2 MOTOR CURRENT			X	
HSP-2 H-O-A	HIGH SERVICE PUMP 2 IN AUTO	X			
HSP-2 RUN	HIGH SERVICE PUMP 2 RUN COMMAND		X		
HSP-2 RUNS	HIGH SERVICE PUMP 2 RUNNING	X			
HSP-2 SPEED	HIGH SERVICE PUMP 2 SPEED COMMAND				X
INTRUSION DETECTION	DOOR SWITCHES CONNECTED IN SERIES	X			
LL-1	STORAGE TANK LOW LEVEL SWITCH	X			
PT-1	STORAGE TANK LEVEL TRANSMITTER			X	
PT-2	FINISHED WATER PRESSURE TRANSMITTER			X	
WP-1 H-O-A	WELL PUMP 1 IN AUTO	X			
WP-1 RUN	WELL PUMP 1 RUN COMMAND		X		
WP-1 RUNS	WELL PUMP 1 RUNNING	X	X		
NOTES:					
1. 24VDC CONTROL POWER SHALL BE PROVIDED FROM THE SCADA RTU					



Elmo A. Richardson, Jr., P.E., LLC
REGISTERED PROFESSIONAL ENGINEER
BRUNSWICK, GEORGIA 31503
PHONE: 478.257.1903
FAX: 478.257.1905
CONSULTING ENGINEERS

BRUNSWICK - GLYNN COUNTY
JOINT WATER & SEWER COMMISSION
RIDGEWOOD
WATER PRODUCTION FACILITY
SCHEDULES - MECHANICAL & ELECTRICAL

PROJECT NO: JWSC PROJECT# 417
DATE: SEPTEMBER, 2019
SCALE: AS SHOWN
DRAWN BY: BRAWN
CHECKED BY: SUB/RBP

COMMENTS

NO.

DATE

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CLARK NEXSEN

440 Martin Luther King Jr. Blvd
Macon, GA 31201
478.743.8415 Fax: 478.743.8239
www.clarknexsen.com

ME-2

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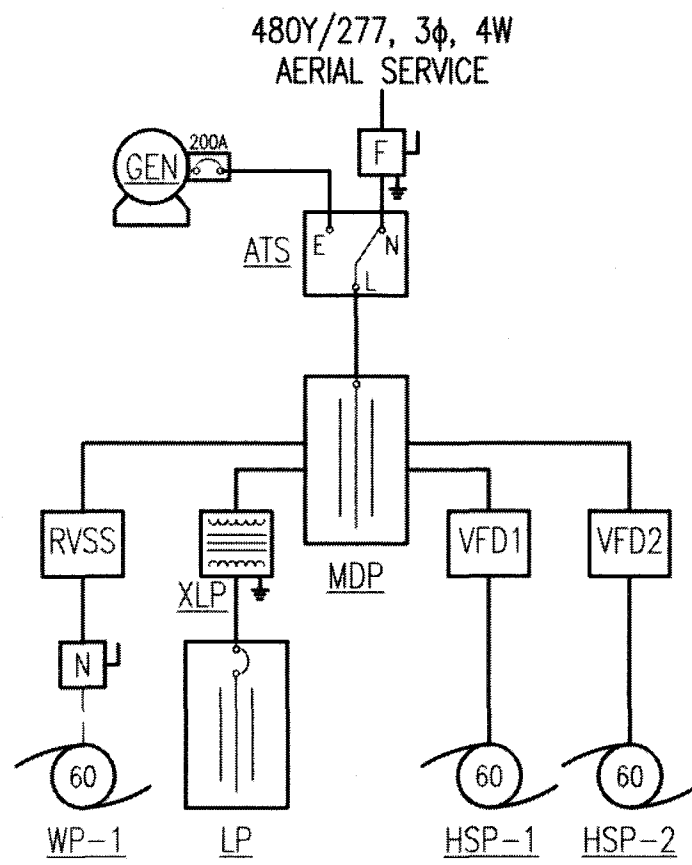
ⓧ MECHANICAL NOTES:
(THIS SHEET ONLY)

- A. EF-2. MOUNT MAXIMUM OF 12" AFF.
- B. INSTALL ELECTRIC WALL HEATER UH-1 ABOVE EXHAUST FAN.
- C. EF-1. PROVIDE WITH COOLING THERMOSTAT FOR CONTROL.
- D. PROVIDE WALL SWITCH FOR CONTROL OF EF-2. ROUTE CONTROL THROUGH CHLORINE GAS SENSOR CONTROLLER. CONTROLLER SHALL OPERATE EXHAUST FAN. WHENEVER CHLORINE IS SENSED ABOVE ALLOWABLE LEVELS.
- E. MOUNTED UH-2 MIN. 7" AFF.
- F. 3/4" SCHEDULE 80 PVC PIPE ROUTED UNDERGROUND, TURNED UP 2" A.F.F., CAPPED AND MARKED "FUTURE."

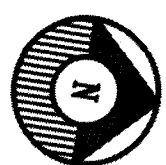
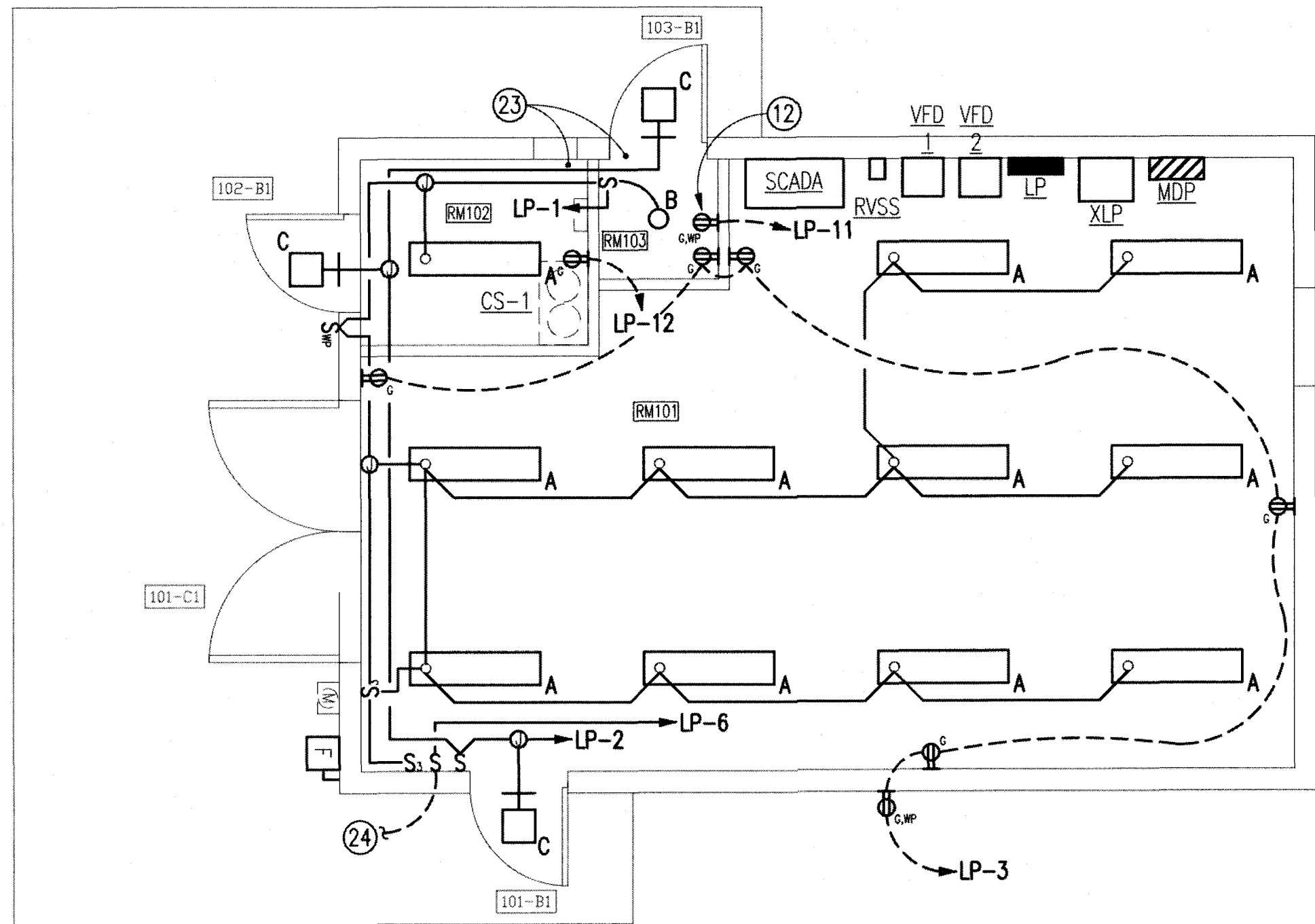
DEDUCTIVE ALTERNATE 1 NOTES:

DEDUCTIVE ALTERNATE 1 CONSISTS OF:

1. GENERATOR.
2. AUTOMATIC TRANSFER SWITCH (ATS).
3. CIRCUITS FOR BATTERY CHARGER.
4. CIRCUITS FOR JACKET HEATER.
5. CIRCUITS FOR GENERATOR/ATS/SCADA CONTROL INTERFACE.
6. ALL NATURAL GAS WORK TO SERVE GENERATOR.
7. START UP AND CHECKOUT SERVICES FOR THE ABOVE.



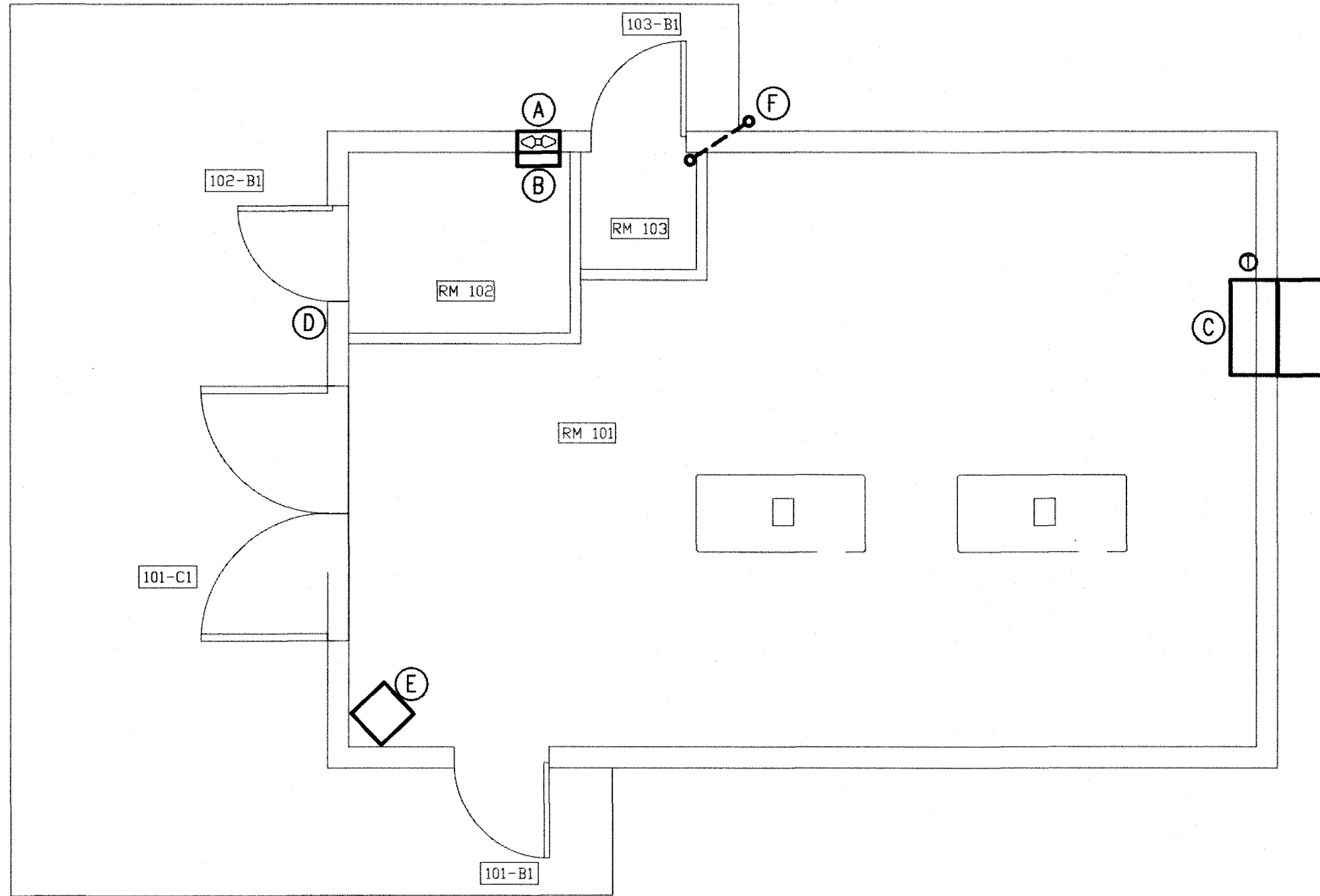
ONE-LINE DIAGRAM - NEW WORK
SCALE: NONE



ELECTRICAL LIGHTING & MISC. POWER
PLAN - NEW WORK

SCALE: 1/4" = 1'-0"

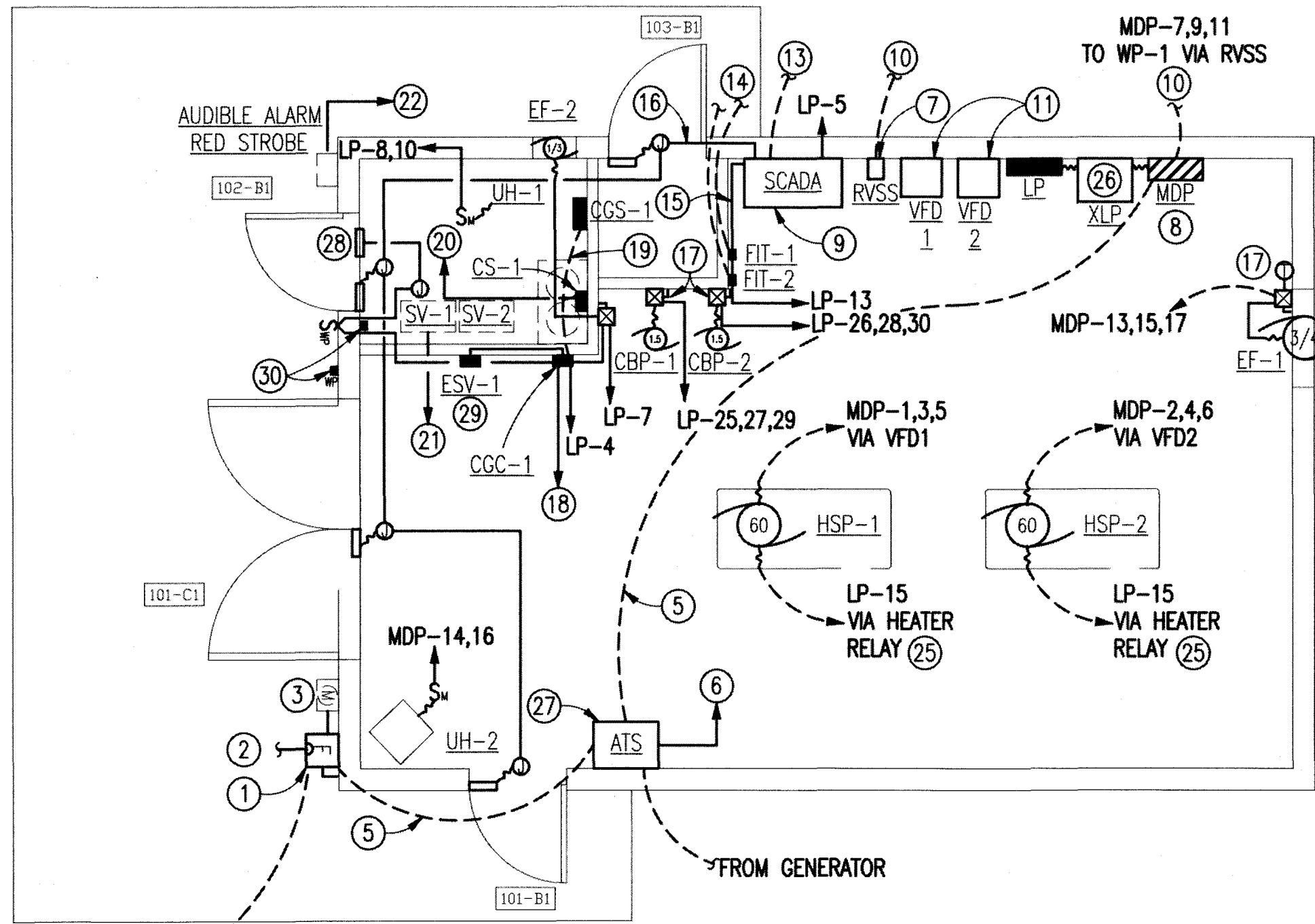
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MECHANICAL FLOOR PLAN - NEW WORK

SCALE: 1/4" = 1'-0"

0 2' 4' 8'



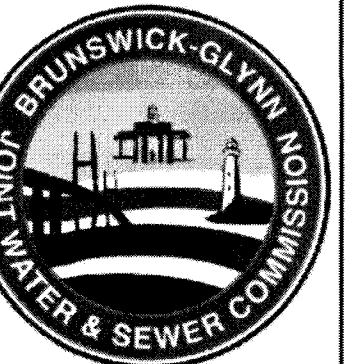
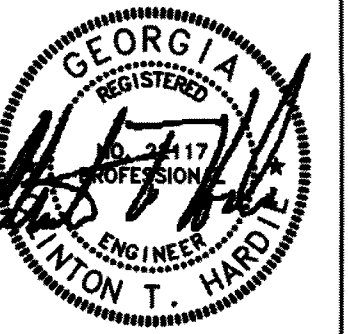
ELECTRICAL POWER & CONTROLS
PLAN - NEW WORK

SCALE: 1/4" = 1'-0"

0 2' 4' 8'

Ⓣ ELECTRICAL NOTES:
(THIS SHEET ONLY)

1. 400A/3P NEMA 3R FUSED SERVICE ENTRANCE RATED DISCONNECT SWITCH FUSED AT 400A. PROVIDE ALL APPURTENANCES REQUIRED FOR SERVICE ENTRANCE RATING.
2. INSTALL 4#500KCMIL;3-1/2°C SERVICE ENTRANCE THROUGH WEATHERHEAD LOCATED 3' ABOVE ROOF. PROVIDE CONDUIT SECURED TO EXTERIOR WALL OF BUILDING AND THROUGH ROOF. PROVIDE CONDUIT FLANGE AT ROOF. PROVIDE 6' OF SLACK CONDUCTORS AT WEATHERHEAD FOR UTILITY CONNECTION. ANY INTERMEDIATE POLE NECESSARY FOR ROUTING OF AERIAL FEEDER SHALL BE PROVIDED BY THE UTILITY COMPANY.
3. METERING CT CABINET. COORDINATE WITH GEORGIA POWER FOR METERING EQUIPMENT. INSTALL CONDUIT, CONDUCTORS, GROUNDING AND METERING EQUIPMENT PER GEORGIA POWER REQUIREMENTS.
4. GROUNDING COUNTERPOISE: THREE GROUND RODS ON 10' MINIMUM SPACING. CONNECTIONS SHALL BE EXOTHERMIC. CONNECT RODS WITH 2/0 AWG BARE COPPER. ROUTE 2/0 AWG TO SERVICE ENTRANCE SWITCH AND BOND PER NEC.
5. 4#500.#2G;3-1/2°C.
6. 6#14;3/4°C. TO SCADA RTU FOR CONTROLS.
7. DANFOSS MCD202-045-T6-60HP RVSS SOFT STARTER IN A NEMA 4X ENCLOSURE.
8. MAIN DISTRIBUTION PANEL "MDP." SEE SCHEDULE, SHEET ME-2.
9. NEW SCADA RTU PER JWSC STANDARDS BY ELECTRIC MACHINE CONTROL, INC. 7015 HALSTEN DRIVE, TRUSSVILLE, AL 35173. CONTACT JAMES DENTON, (205) 661-3998, JDENTON@EMCINC.BIZ. SEE SCADA RTU INSTALLATION DETAIL, SHEET ME-1 AND SCADA I/O LIST, SHEET ME-2.
10. TO EXISTING 60HP WELL PUMP WP-1. SEE PANEL SCHEDULE AND ELECTRICAL SITE PLAN.
11. DANFOSS FC302 60HP VFD IN A NEMA 4X ENCLOSURE. COORDINATE REQUIRED I/O AND CONTROLS WITH SCADA CONTRACTOR.
12. RECEPTACLE FOR FUTURE FLUORIDE METERING PUMP. INSTALL A SUITABLY SIZED WALL-MOUNTED NEMA 4X ENCLOSURE ABOVE RECEPTACLE TO HOUSE THE POWER RELAY TO CONTROL THE RECEPTACLE. SEE FLUORIDE RECEPTACLE WIRING DETAIL, SHEET ME-1
13. 3/4°C. TO ABOVE GROUND TANK WITH 2#14 FOR HL-1, 2#14 FOR LL-1 AND (1) BELDEN 8760 CABLE FOR PT-1. SEE TANK CONNECTIONS DETAIL, SHEET ME-1 AND ELECTRICAL SITE PLAN, SHEET ME-4.
14. ROSEMOUNT SENSOR CABLE;3/4°C. TO FLOW METERS FE-1 AND FE-2. PROVIDE CABLE AND MAKE CONNECTIONS PER EQUIPMENT MANUFACTURER'S INSTRUCTIONS.
15. FLOW TRANSMITTERS FIT-1 AND FIT-2. ROUTE (1) BELDEN 8760 SIGNAL CABLE;1/2°C. FROM EACH TRANSMITTER TO SCADA RTU FOR ANALOG FLOW RATE. MAKE CONNECTIONS PER EQUIPMENT MANUFACTURER'S INSTRUCTIONS.
16. 2#14;1/2°C. TO SCADA RTU FOR 24VDC DIGITAL INTRUSION DETECTION. DOOR SWITCHES SHALL BE SECO-LARM# SM-200Q/W MAGNETIC REED SWITCH CONNECTED IN SERIES. SEE INTRUSION DETECTION DETAIL, SHEET ME-1.
17. NEMA SIZE 1 COMBINATION MOTOR CONTROLLER.
18. 2#14;1/2°C. USE CGC-1 ALARM CONTACTS FOR CHLORINE LEAK ALARM TO SCADA RTU. MAKE CONNECTIONS PER EQUIPMENT MANUFACTURER'S INSTRUCTIONS. SEE CHLORINE ROOM EF-2 CONTROL DETAIL, SHEET ME-1.
19. (1) BELDEN 8760 SIGNAL CABLE;1/2°C. FOR CHLORINE SENSOR. ROUTE TO CGC-1. MAKE CONNECTIONS PER EQUIPMENT MANUFACTURER'S INSTRUCTIONS. TERMINATE CABLE SHIELD ONLY AT CONTROLLER.
20. (1) BELDEN 8760 SIGNAL CABLE;1/2°C. TO SCADA RTU FROM CHLORINE TANK SCALE.
21. ROUTE #14;3/4°C. AS REQUIRED TO MAKE CONNECTIONS PER SV-1 & SV-2 DETAIL, SHEET ME-1.
22. MOUNT AUDIBLE ALARM AND RED STROBE ON EXTERIOR WALL 7" ABOVE FINISHED GRADE. ROUTE #14;3/4°C. AS REQUIRED TO MAKE CONNECTIONS PER CHLORINE ROOM AUDIBLE ALARM & STROBE DETAIL, SHEET ME-1.
23. ALL EXPOSED ELECTRICAL CONDUIT, BOXES, FITTINGS, ETC. IN ROOMS 102 AND 103 SHALL BE CORROSION RESISTANT: PVC WITH STAINLESS STEEL HARDWARE OR APPROVED EQUAL.
24. TO POLE-MOUNTED AREA LIGHTS. SEE PANLEBOARD LE SCHEDULE AND ELECTRICAL SITE PLAN, SHEET ME-4.
25. INSTALL A POWER RELAY ADJACENT HSP'S VFD TO CONTROL PUMP MOTOR 120V ANTI-CONDENSATION HEATER POWER. HEATER SHALL BE ON WHEN MOTOR IS NOT RUNNING. ROUTE TO MOTOR WITH #12;3/4°C.
26. 30KVA 480V-208Y/120V DRY TYPE TRANSFORMER. GROUND PER NEC. ROUTE 4#2.#8G;1°C. TO PANELBOARD LE.
27. 400A/3P AUTOMATIC TRANSFER SWITCH WITH SOLID NEUTRAL.
28. MAGNETIC REED SWITCH TO OPERATE CHLORINE ROOM EXHAUST FAN WHEN DOOR IS OPENED. SEE CHLORINE ROOM EF-2 CONTROL DETAIL, SHEET ME-1.
29. ROUTE INDIVIDUAL RUNS OF 2#14;1/2°C. FROM ESV-1 TO EACH CHLORINE CYLINDER VALVE ACTUATOR, TO TWO EMERGENCY CHLORINE STOP PUSHBUTTONS, AND TO CGC-1. MAKE CONNECTIONS PER MANUFACTURER'S INSTRUCTIONS.
30. INSTALL (2) TWO EMERGENCY CHLORINE STOP PUSHBUTTONS: (1) INSIDE AND (1) OUTSIDE CHLORINE ROOM.



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NO.	DATE	COMMENTS

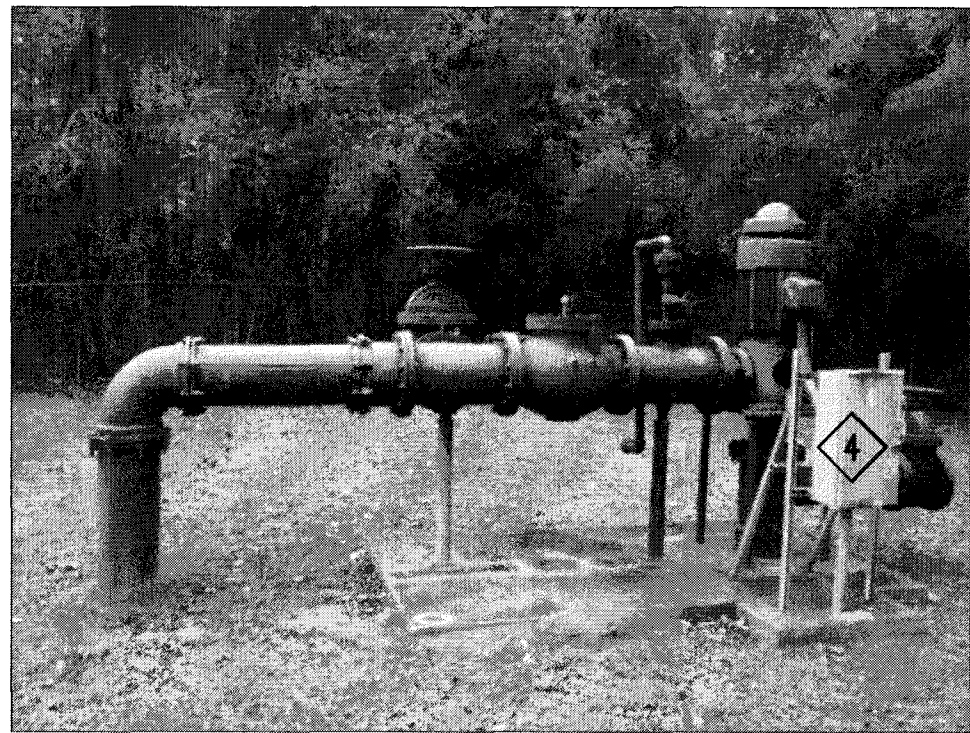
PROJECT NO.	DATE	SCALE	DRAWN BY	CHECKED BY
JWSC PROJECT# 417	SEPTEMBER, 2019	AS SHOWN		

BRUNSWICK - GLYNN COUNTY
JOINT WATER & SEWER COMMISSION
RIDGEWOOD
WATER PRODUCTION FACILITY
PUMP BUILDING - MECHANICAL & ELECTRICAL PLAN

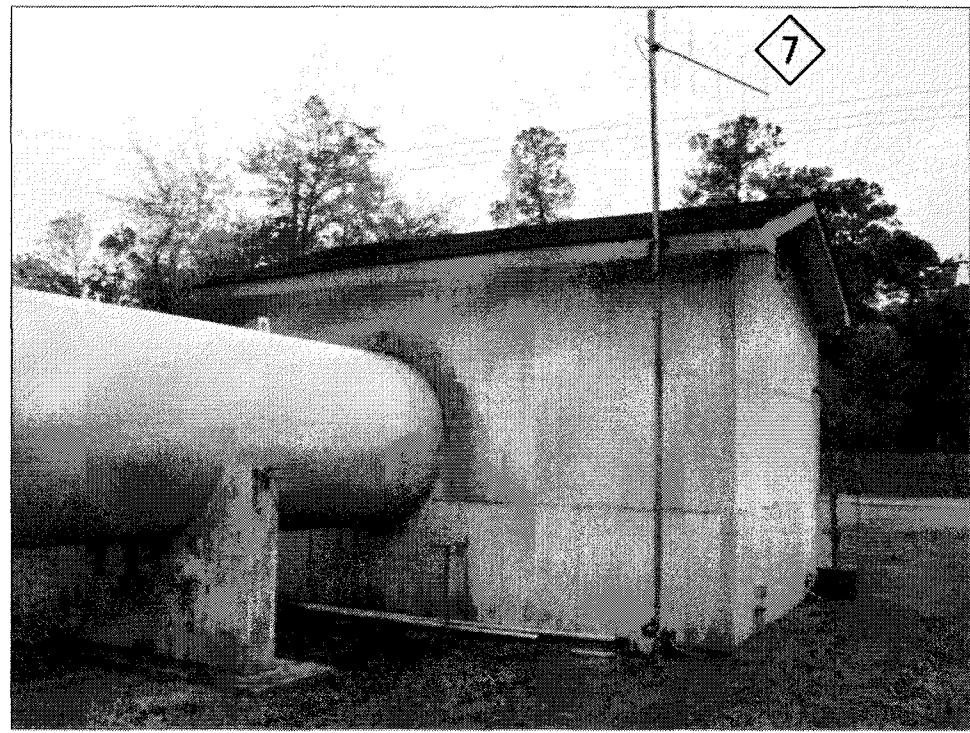
SHEET NO.	OF
ME-3	

CLARK NEXSEN

440 Martin Luther King Jr. Blvd
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478.743.8415 Fax: 478.743.8239
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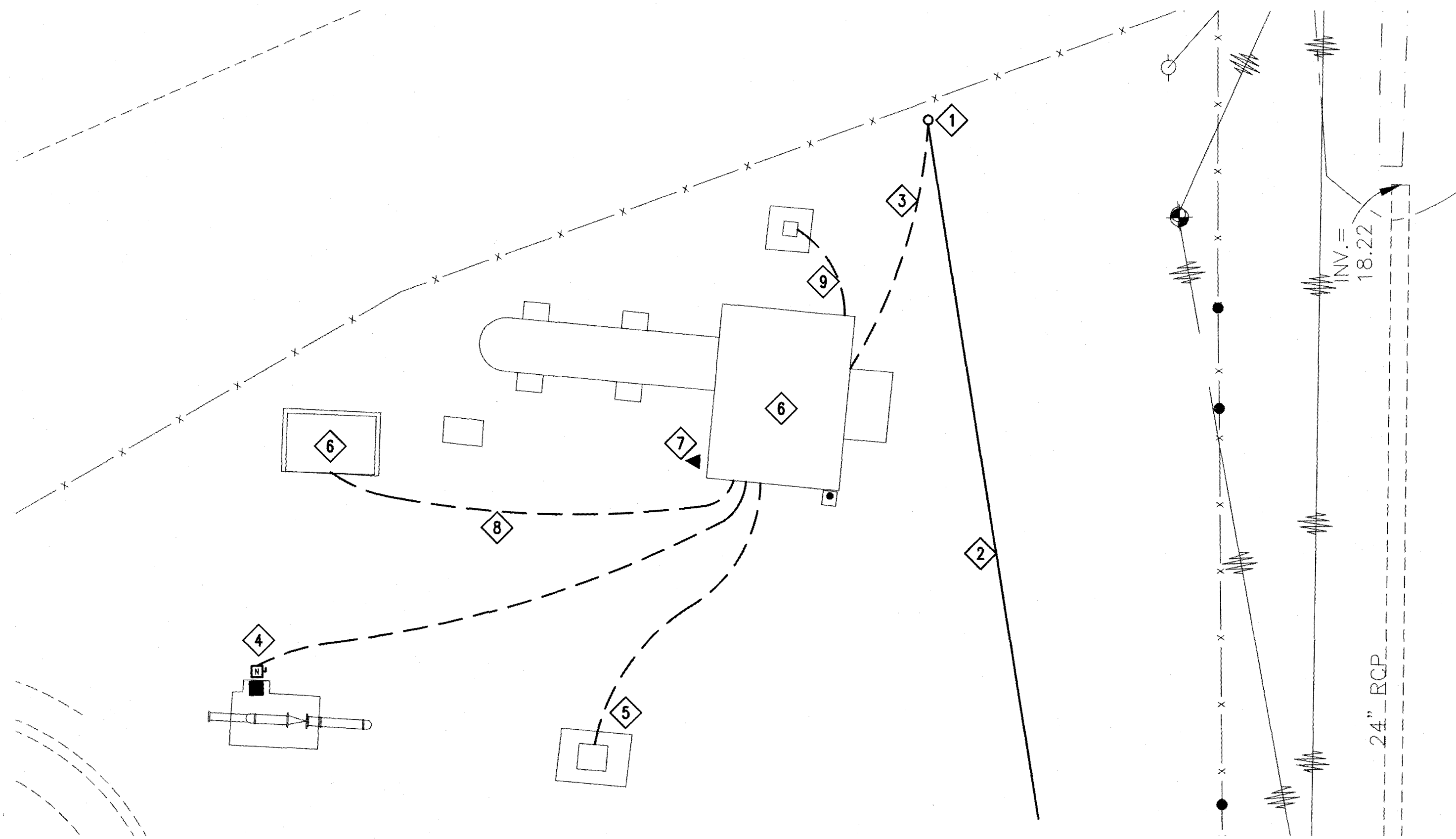
EXISTING WELL PUMP AND DISCONNECT
N.T.S.



EXISTING BUILDING AND SCADA ANTENNA
N.T.S.

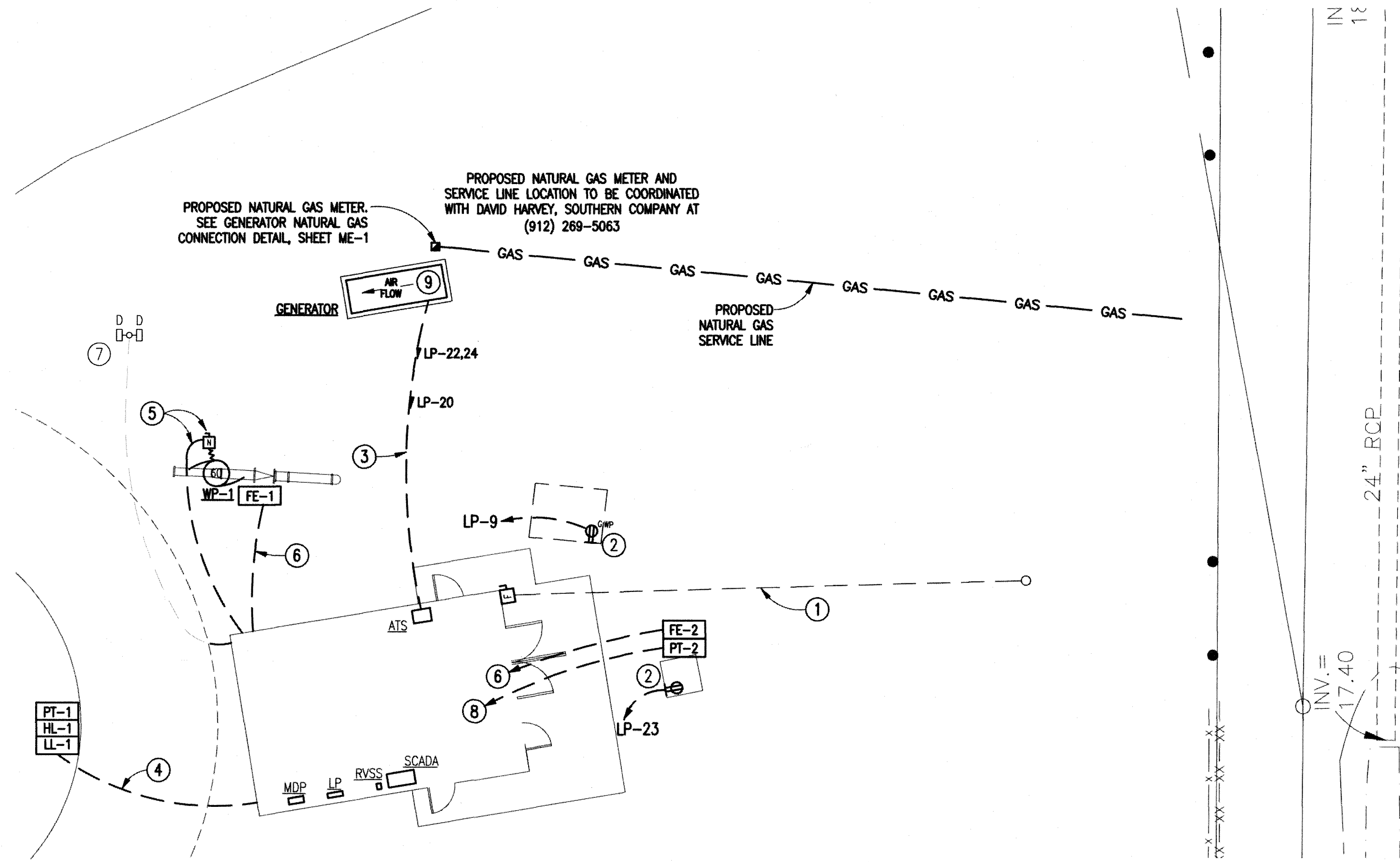


EXISTING GEORGIA POWER TRANSFORMER
N.T.S.



ELECTRICAL SITE PLAN - DEMOLITION

SCALE: 1" = 10'-0"



ELECTRICAL SITE PLAN - NEW WORK

SCALE: 1" = 10'-0"

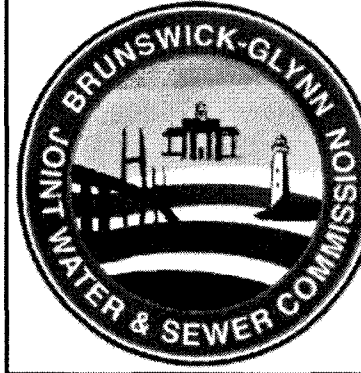
[SEE FLOOR PLAN AND SCHEDULES FOR CIRCUIT SIZES AND ROUTING IN BUILDING]

DEMOLITION NOTES:
(THIS SHEET ONLY)

1. EXISTING UTILITY POLE TO BE REMOVED. COORDINATE WITH GEORGIA POWER COMPANY FOR REMOVAL OF POLE.
2. DEMOLISH EXISTING AERIAL SERVICE.
3. DEMOLISH EXISTING UNDERGROUND SERVICE LATERAL.
4. DEMOLISH WELL PUMP MOTOR CIRCUIT AND DISCONNECT. WELL PUMP TO BE RECONNECTED FOLLOWING OVERHAUL.
5. DEMOLISH RECEPTACLE CIRCUIT AND ANALOG CIRCUIT FROM SCADA RTU TO METER PIT. DELIVER FLOW METER AND ALL APPURTENANCES TO OWNER.
6. DEMOLISH ALL ELECTRICAL IN EXISTING BUILDING TO INCLUDE LIGHTING, RECEPTACLES, MOTOR CONTROL CENTER, AUTOMATIC TRANSFER SWITCH, PANELBOARD AND SCADA RTU. DELIVER SCADA RTU AND ALL PROCESS INSTRUMENTS TO OWNER.
7. DEMOLISH EXISTING SCADA ANTENNA SUPPORT MAST.
8. REMOVE FEEDER SERVING CHLORINE SHED.
9. DEMOLISH WELL PUMP MOTOR CIRCUIT AND DISCONNECT. WELL PUMP TO BE REMOVED.

NEW WORK NOTES:
(THIS SHEET ONLY)

1. NEW AERIAL SERVICE BY UTILITY COMPANY.
2. RECEPTACLE FOR SUMP PUMP IN CONCRETE VAULT. CORE WALL TO ROUTE CONDUIT. MOUNT HIGH ON INTERIOR WALL OF SUMP.
3. GENERATOR POWER OUTPUT, BATTERY CHARGER, JACKET HEATER AND CONTROL CIRCUITS. ROUTE 4#3/0, #6G, 2"C. TO ATS. ROUTE A 2"C. WITH #14 CONDUCTORS AND CABLES PER MANUFACTURER'S INSTRUCTIONS TO ATS FOR CONTROLS. ROUTE A 3/4"C. WITH 2#14 TO SCADA RTU FOR GENERATOR ALARM.
4. LEVEL TRANSMITTER AND LEVEL SWITCH CIRCUITS.
5. NEW CIRCUIT TO EXISTING WELL PUMP. INTERCEPT EXISTING CONDUIT UNDERGROUND. INSTALL NEMA 4X STAINLESS STEEL 200A/3P NON-FUSED DISCONNECT SWITCH.
6. MANUFACTURER'S FLOW METER SIGNAL CABLE; 1"C. TO CORRESPONDING FLOW INDICATING TRANSMITTER (FIT) INSIDE BUILDING, SEE SHEET ME-3.
7. 30' CLASS 5 WOODEN POLE BURIED 5' IN FIRM EARTH. AIM ONE FIXTURE TOWARD STORAGE TANK AND THE OTHER TOWARD WELL PUMP. SEE FLOOR PLAN FOR SWITCH LOCATION.
8. BELDEN 8760 CABLE; 3/4"C. TO SCADA RTU.
9. 150KW 480Y/277V GENERATOR AND PAD. SEE GENERATOR PAD DETAIL, SHEET ME-1.



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COMMENTS		REVISIONS	
NO.	DATE	NO.	DATE

**BRUNSWICK - GLYNN COUNTY
JOINT WATER & SEWER COMMISSION
RIDGEWOOD
WATER PRODUCTION FACILITY**

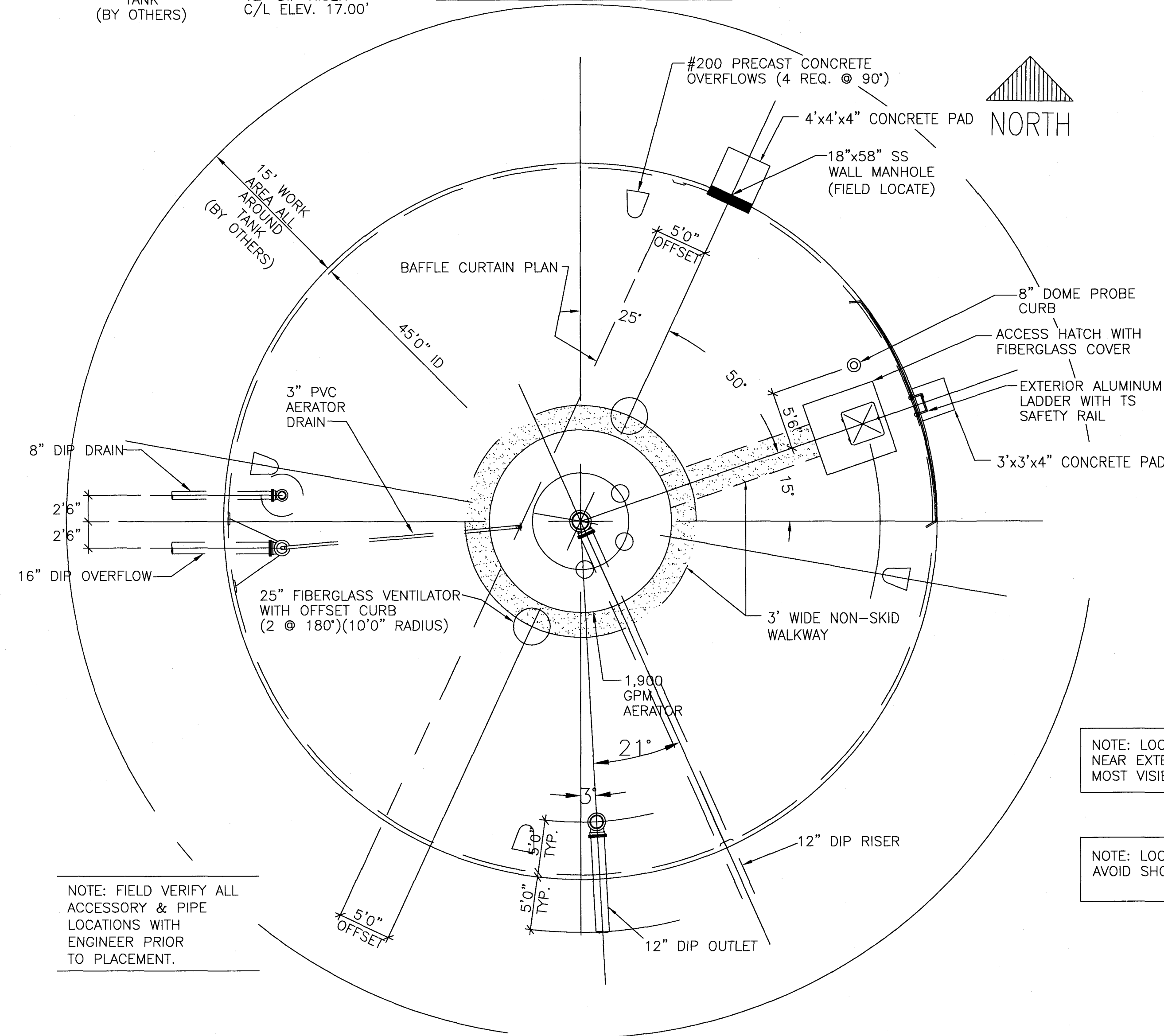
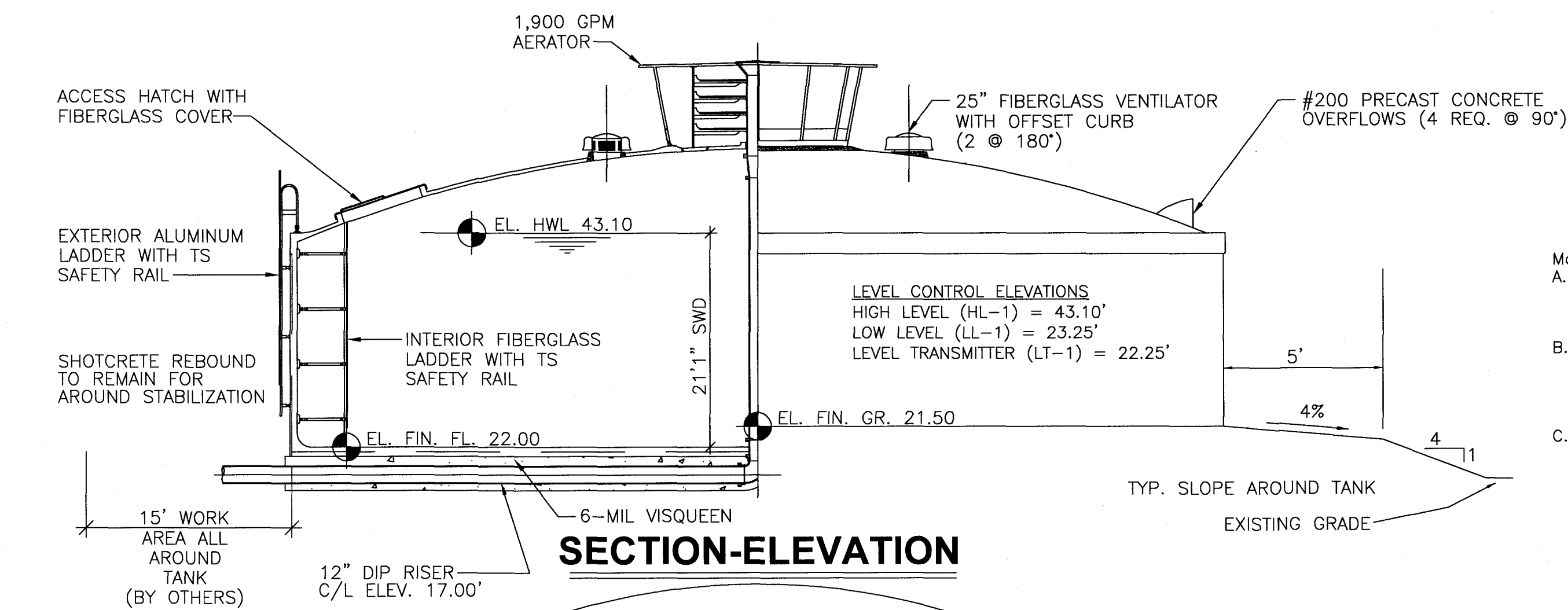
ELECTRICAL SITE PLAN

PROJECT: JWSC PROJECT# 417
DATE: SEPTEMBER, 2019
SCALE: AS SHOWN
DRAWING CHECKED BY: SJB/RBP

SHEET NO. **ME-4**
OF

CLARK NEXSEN

440 Martin Luther King Jr. Blvd
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PLAN - 250,000 GAL. STORAGE TANK

N.T.S.

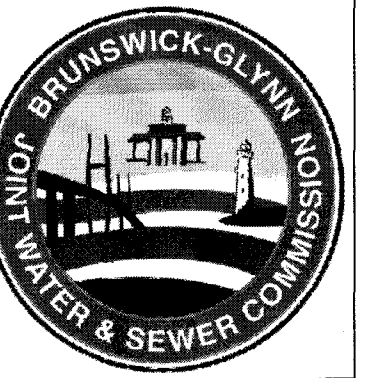
NOTES

- Materials**
- A. Concrete: Use Type I Cement.
- 4000 psi with 3/4" aggregate for floor.
 - 4000 psi with 3/8" aggregate pump mix for dome.
- B. Shotcrete Mixes: Use Type I Cement. $f'g = 4000$ psi $f'ci = 1513$ psi
- Corewall and covercoat: Pump mix with 7 1/2 bags of cement minimum.
- C. Material Testing:
- Concrete: (3 cylinders per set) Test one cylinder at 7 days and at 28 days and hold one.
 - 2 sets for floor.
 - 2 sets for dome.
 - Shotcrete: (3 cylinders per set) Test one cylinder at 7 days and one at 28 days and hold one.
 - 2 sets for outside core wall.
 - 2 sets for inside core wall.
 - 2 sets for covercoat.
- D. Curing:
- Floor and walls to be water-cured during tank construction (minimum 7 days)
 - Dome to be water-cured until prestressing is complete.
- E. Reinforcing Steel:
- ASTM A-615 grade 60, lap 38 diameters.
 - Use 2" slab bolsters with plate to support floor resteel.
- F. Prestressing Wire: Meets ASTM Spec. A821-93 Type B
- Aw : 0.0206 square inch (8 gauge)
 - Dia: 0.1620"
 - Ultimate strength: 231,000 psi
 - Initial stress: 145,600 psi
 - Working stress: wall: 115,000 psi dome ring: 120,000 psi
- G. Paint Schedule:
- Exterior coating shall consist of: Two coats of Tnemec Series 156 Enviro-Crete Modified Waterborne Acrylate.
 - Interior surfaces: Coat underside of the dome and two feet down the tank wall with 12-16 mils DFT of Pota-Pox Series 20 epoxy paint.
- H. Standard Accessories:
- Exterior aluminum ladder with TS safety rail
 - Interior fiberglass ladder with TS safety rail
 - Stainless steel wall manhole w/ sample tap
 - 200 square inch precast overflow, 4 req.
 - 7' square fiberglass access hatch cover
 - 25" fiberglass ventilator with offset curb, 2 req.
 - 24" aluminum handrail at hatch
 - TS rail extension ladders w/ storage box
- I. Special Accessories:
- Stainless steel pipe bracket for 16" DIP overflow
 - 8" dome probe curb
 - 1900 GPM Aerator
 - Baffle curtain
 - 3" PVC aerator drain with stainless steel pipe hangers

NOTE: LOCATE LEVEL INDICATOR NEAR EXTERIOR LADDER SO IT WILL BE MOST VISIBLE FROM ROADWAY.

NOTE: LOCATE BAFFLE CURTAIN TO AVOID SHORT CIRCUITING THE TANK.

NOTE: FIELD VERIFY ALL ACCESSORY & PIPE LOCATIONS WITH ENGINEER PRIOR TO PLACEMENT.



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CONSULTING ENGINEERS

COMMENTS

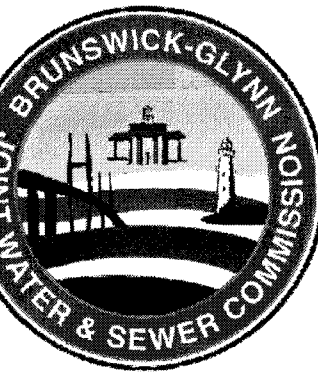
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**BRUNSWICK - GLYNN COUNTY
 JOINT WATER & SEWER COMMISSION
 RIDGEWOOD
 WATER PRODUCTION FACILITY
 GROUND STORAGE TANK - PLAN & ELEV.**

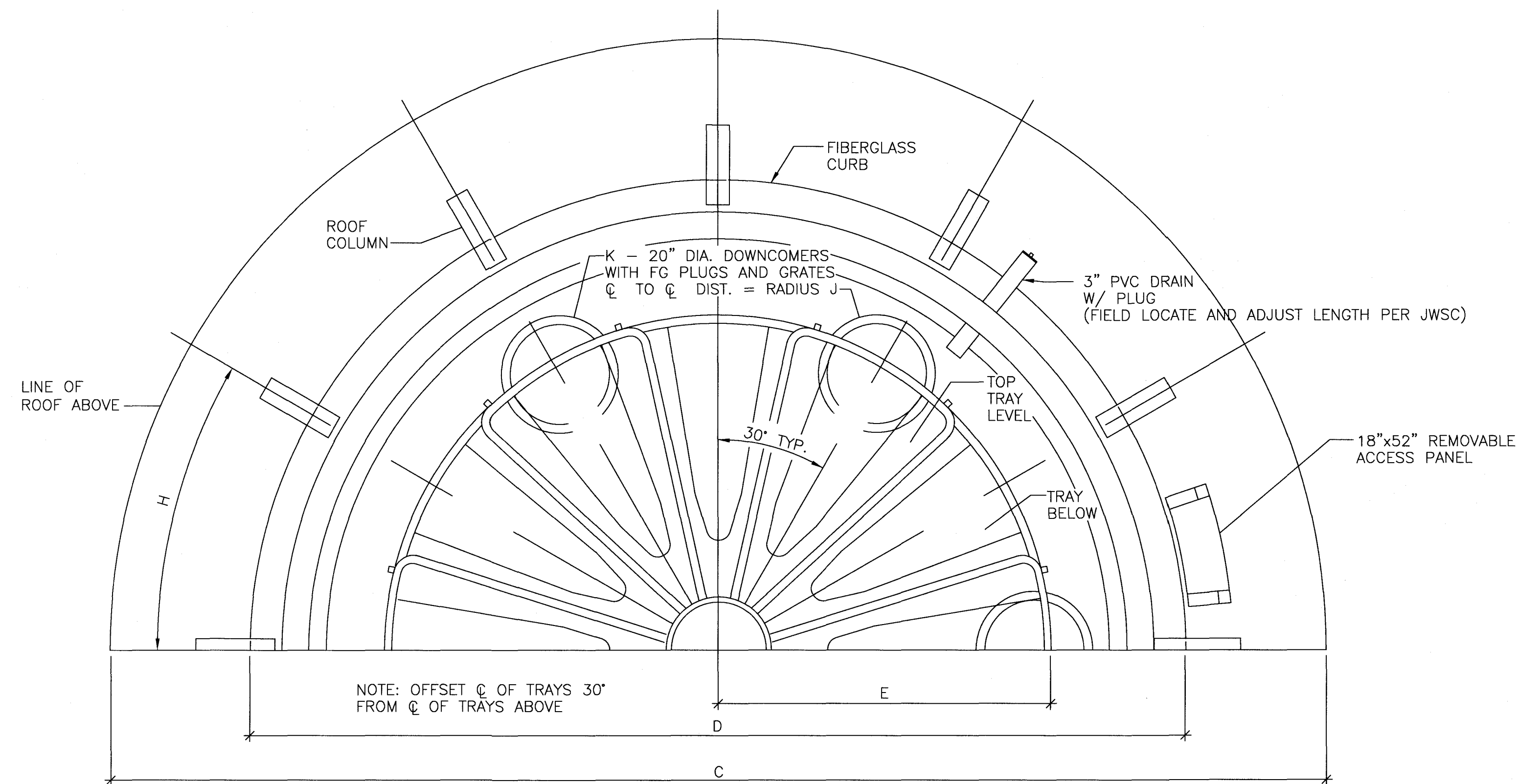
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 DATE: SEPTEMBER, 2019
 SCALE:
 DRAWN/CHECKED BY:

SHEET NO.

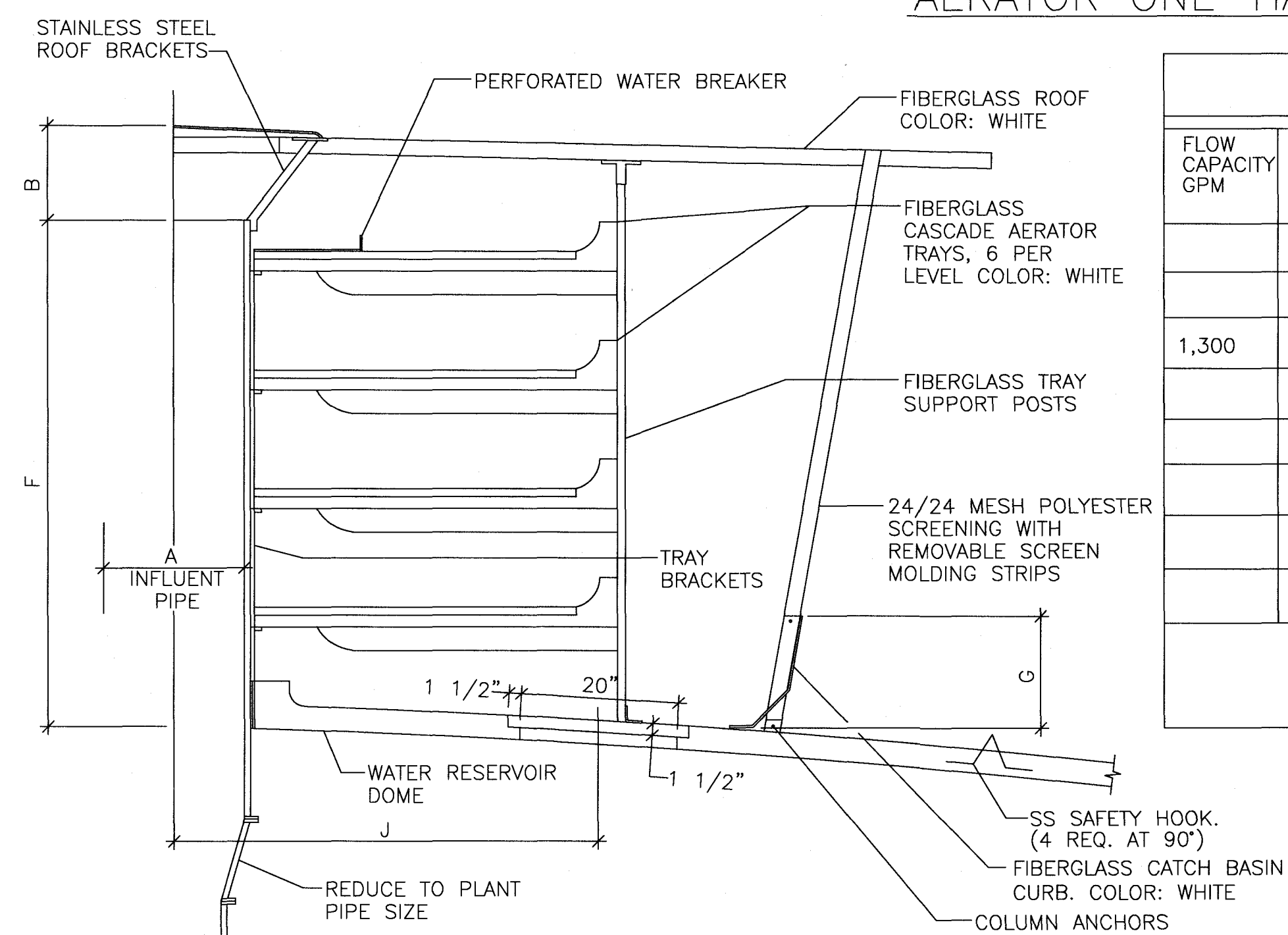
GST-1



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[illegible]

AERATOR ONE-HALF PLAN



ONE-HALF SECTION THRU AERATOR CENTER LINE

FLOW CAPACITY AND DIMENSION TABLE												
FLOW CAPACITY GPM	TOTAL WEIR LENGTH	A PIPE SIZE	B CLEAR	C ROOF DIA.	D CURB DIA.	E TRAY RADIUS	F PIPE HEIGHT	G CURB HEIGHT	H ROOF COLUMN SPACING	I TOTAL TRAYS (LEVELS)	J DOWN- COMERS RADIUS	K NUMBER DOWN- COMER
1,300	141'0"	14"	1'0"	17'4"	13'4"	4'9"	5'4"	1'4"	30"	24 (4)	4'7"	6

CASCADE TRAY NATURAL DRAFT AERATORS

ALL FIBERGLASS CONSTRUCTION WITH STAINLESS STEEL HARDWARE

1,300 GPM AERATOR

COMMENTS

DATE _____

140.

**BRUNSWICK - GLYNN COUNTY
JOINT WATER & SEWER COMMISSION**

WATER PRODUCTION FACILITY

AERATOR DETAILS

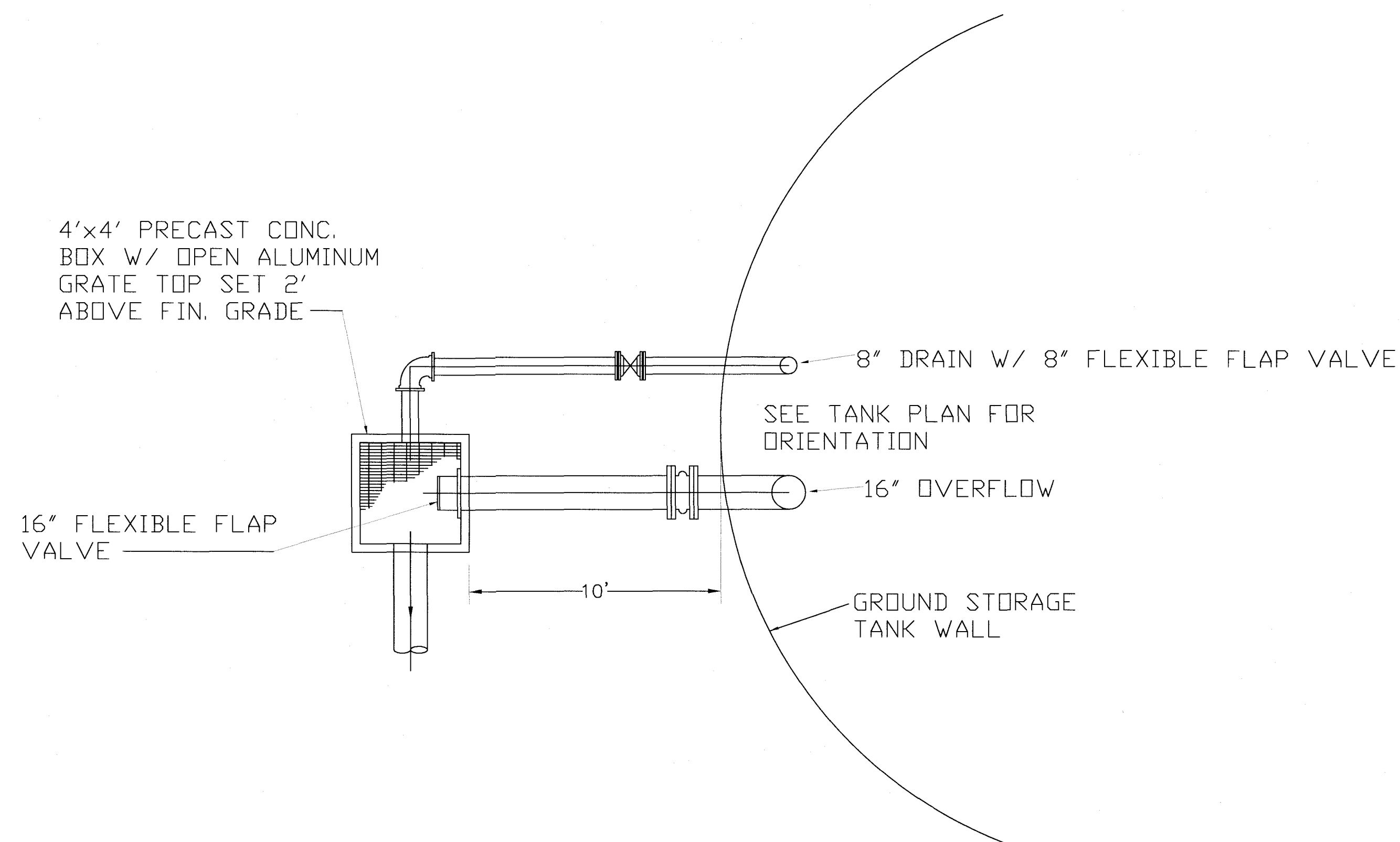
JWSC PROJECT# 447

DATE: 4/17
SEPTEMBER 2018

SCALE: SEPTEMBER, 2019

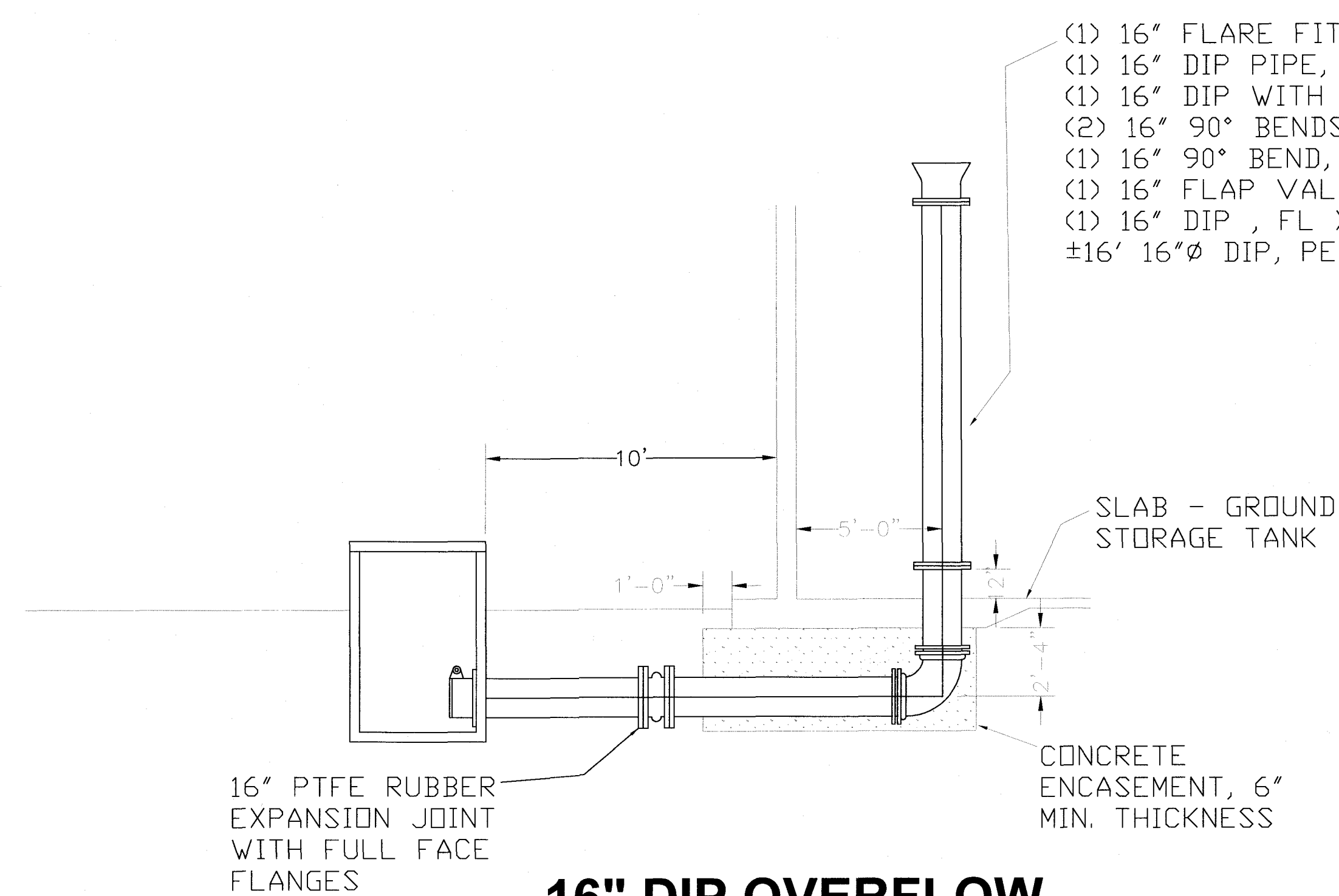
AS SHOWN

GST-2



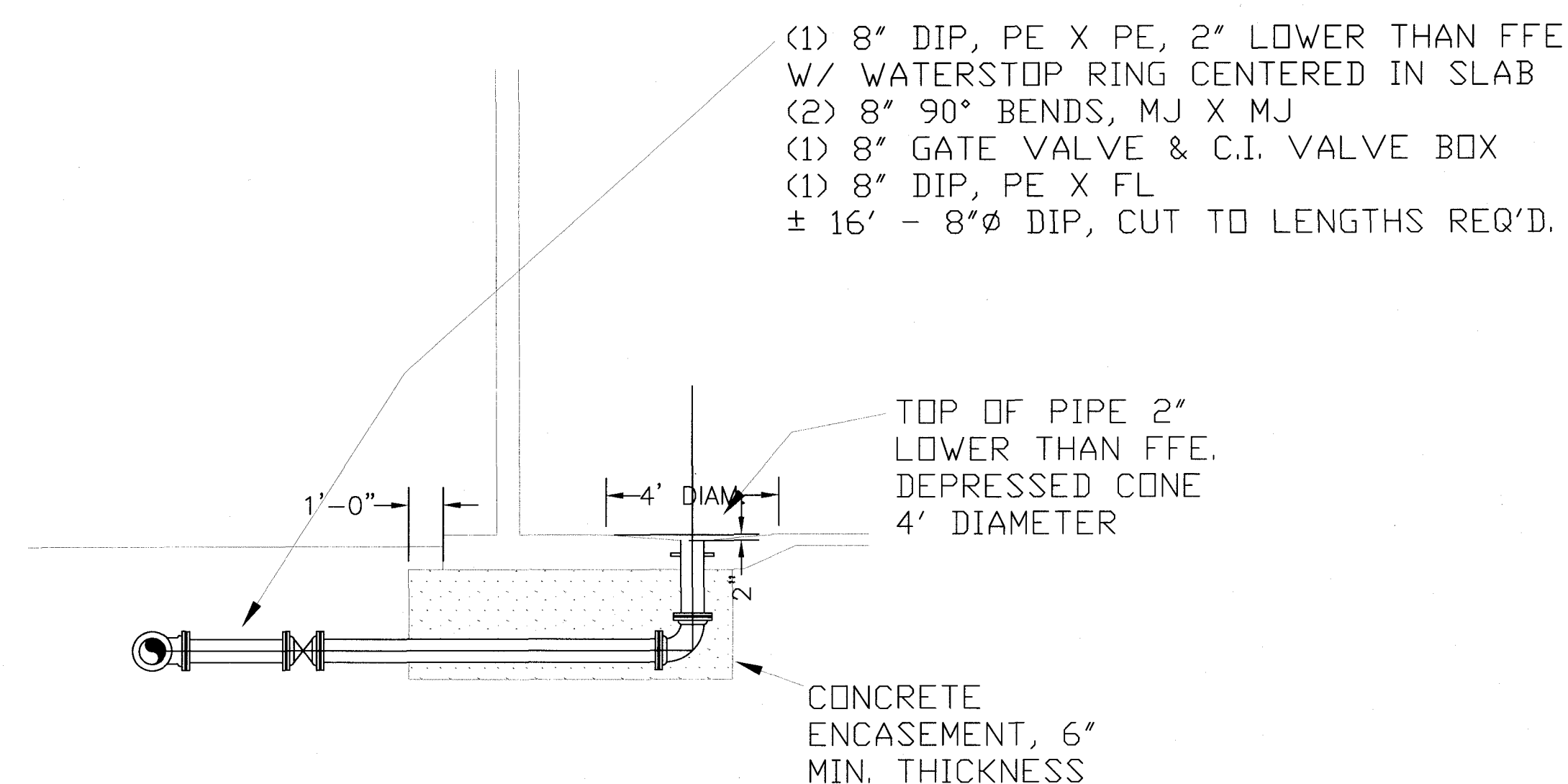
PLAN - DRAIN & OVERFLOW

SCALE: 1/4"=1'-0"



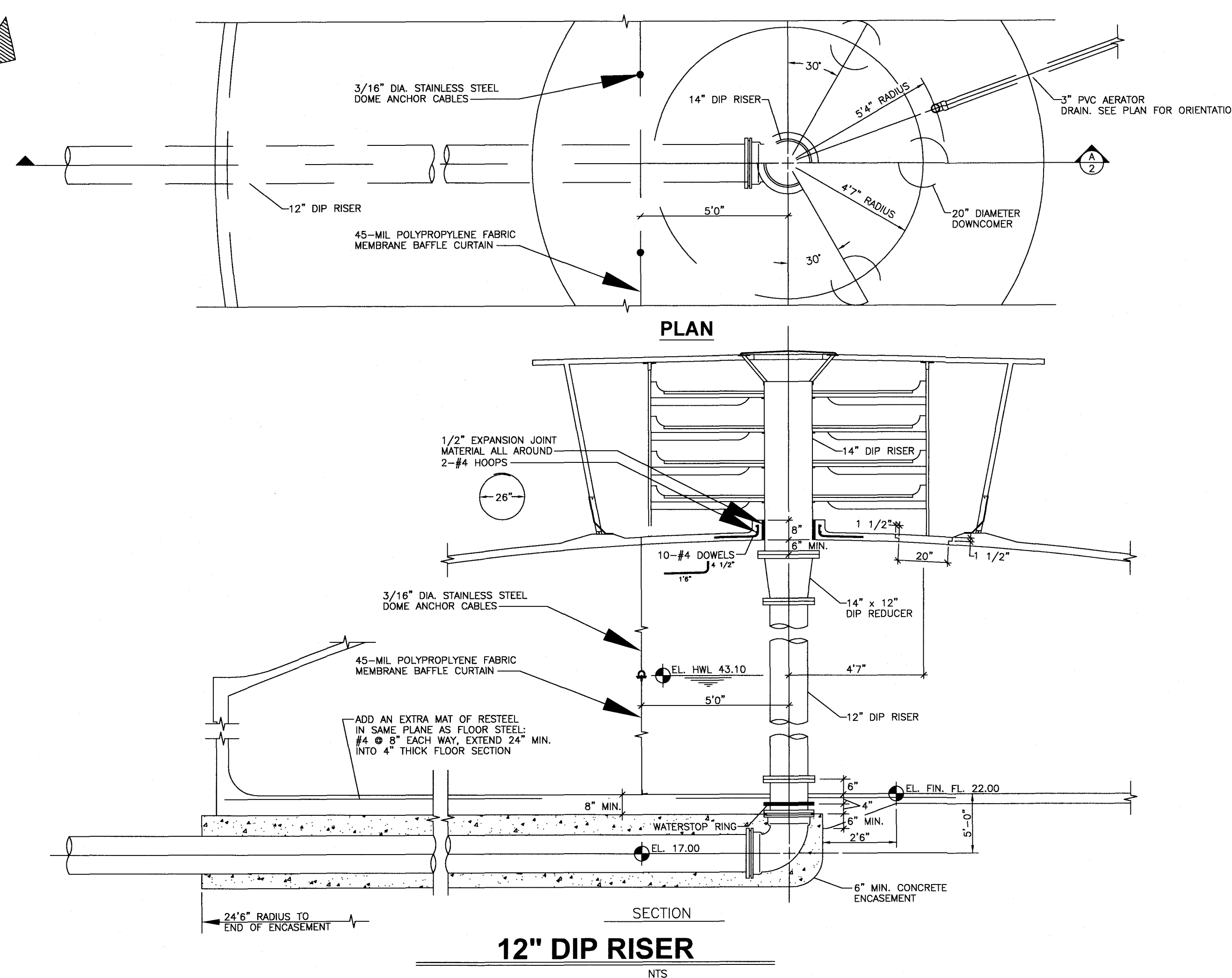
16" DIP OVERFLOW

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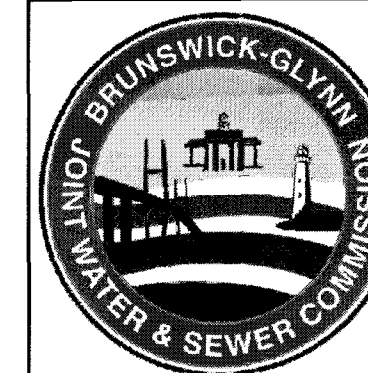
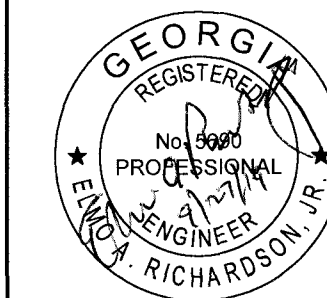


8" DIP DRAIN

SCALE: 1/4"=1'-0"



DETAIL 3: OVERFLOW & DRAIN PIPES



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COMMENTS

DATE

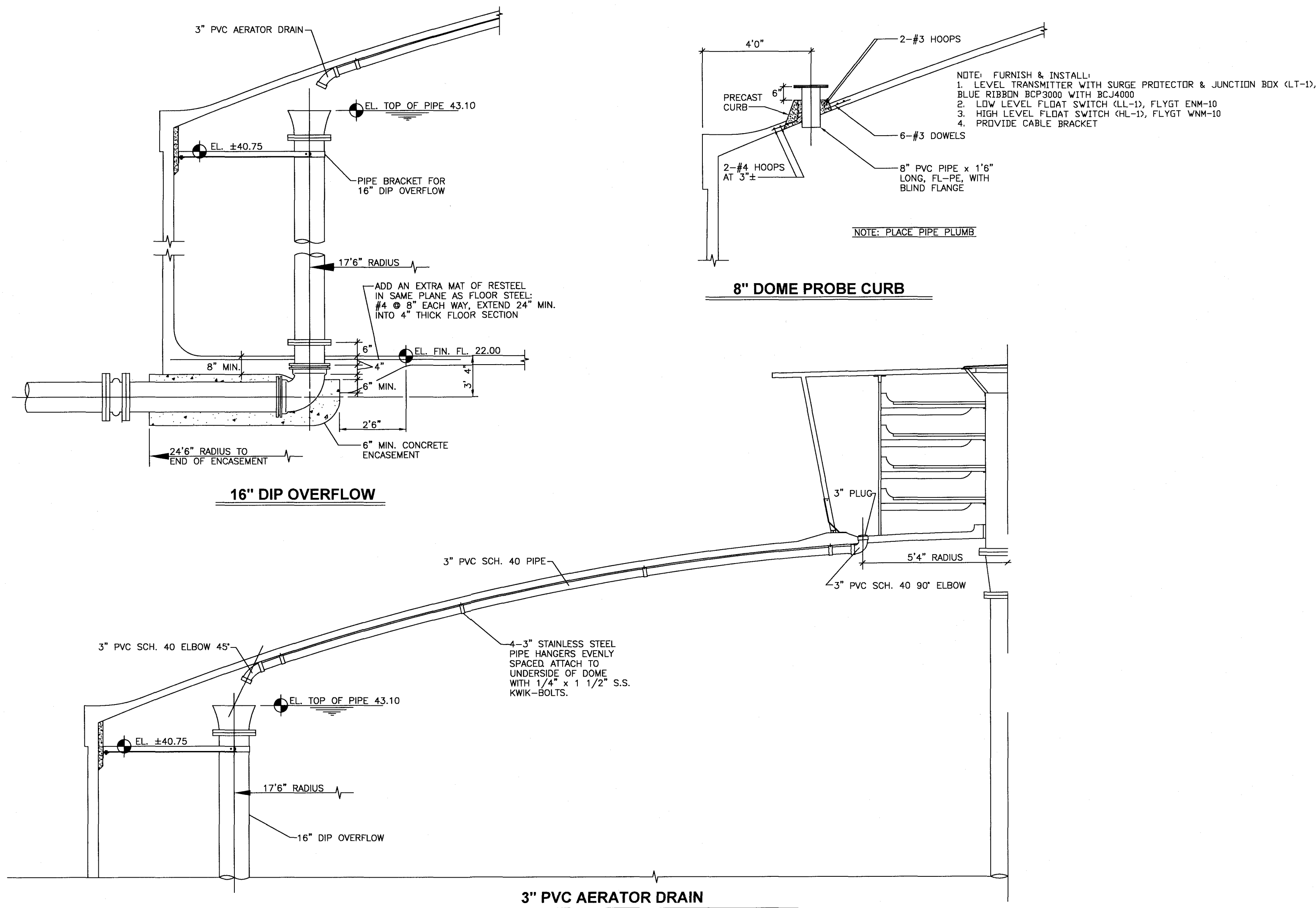
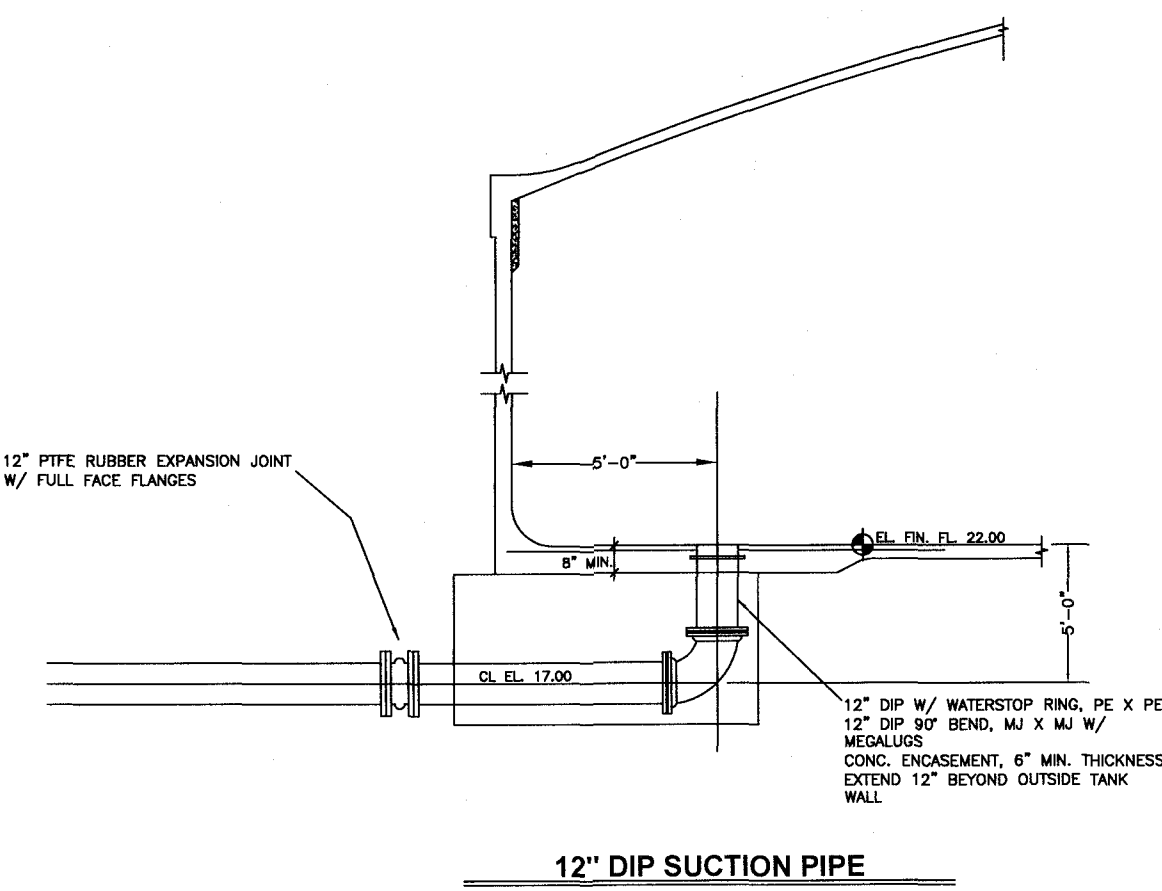
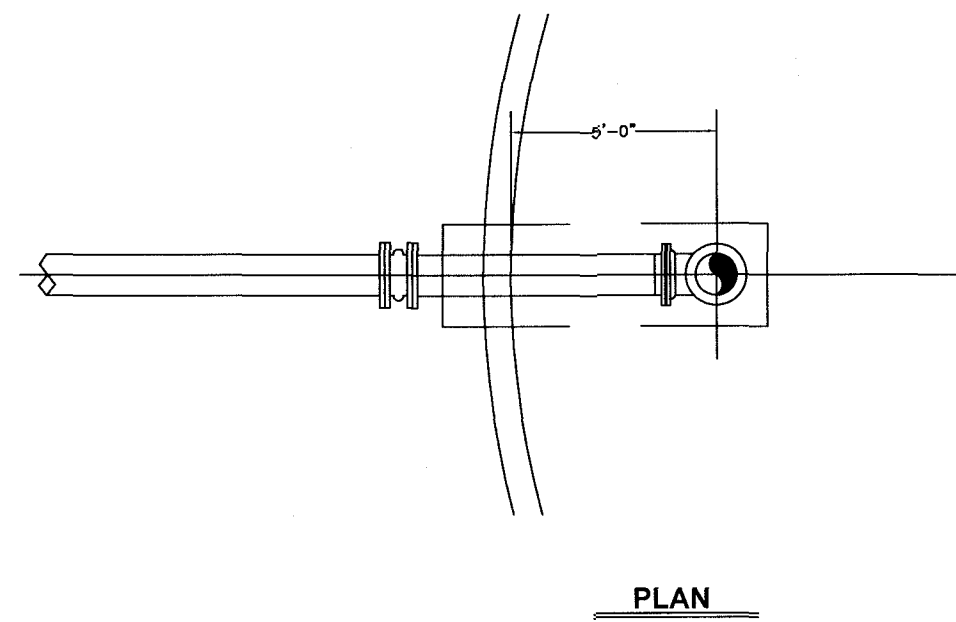
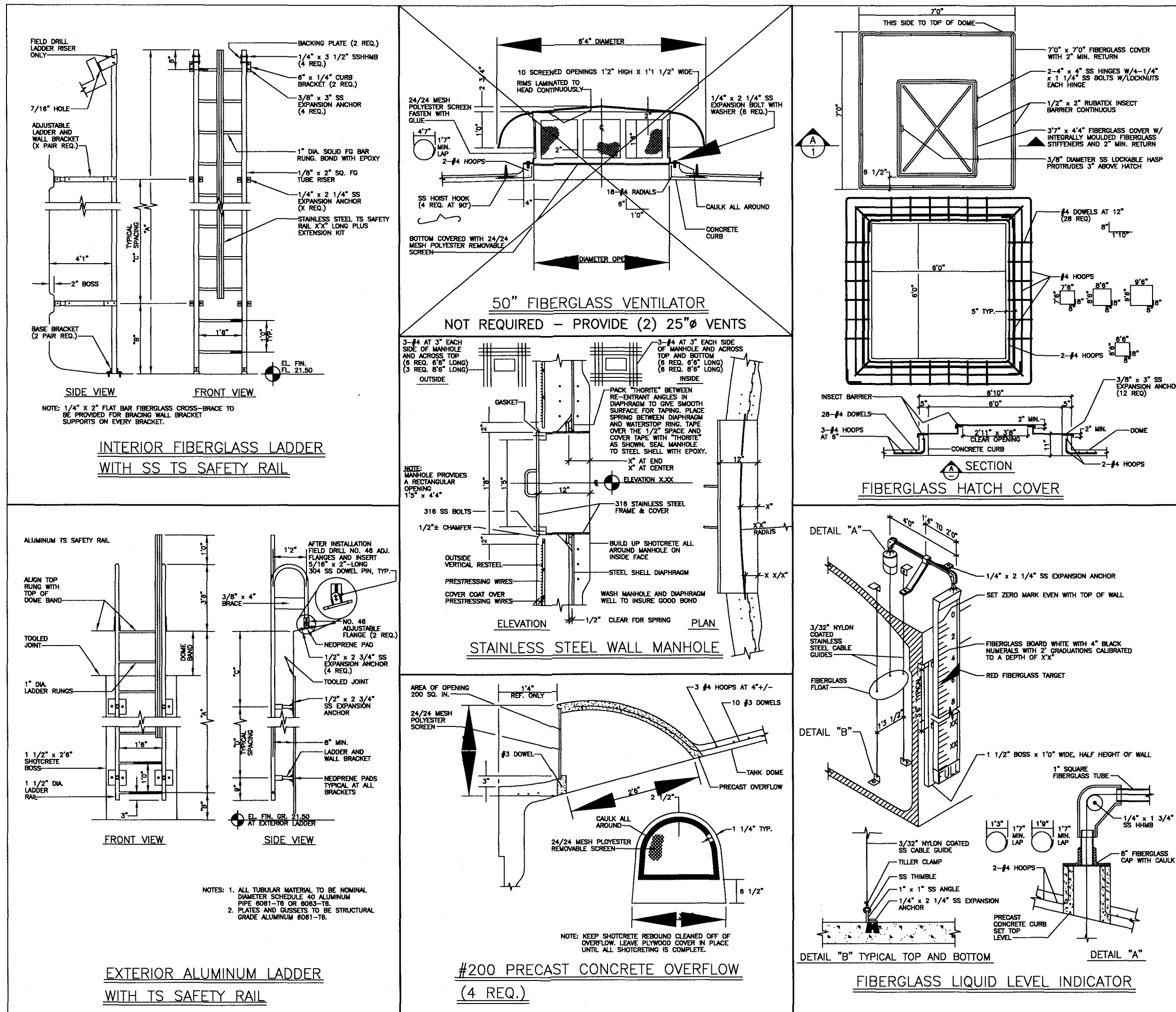
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REVISIONS

**BRUNSWICK - GLYNN COUNTY
JOINT WATER & SEWER COMMISSION
RIDGEWOOD
WATER PRODUCTION FACILITY
TANK PIPING DETAILS**

PROJECT NO.: JWSC PROJECT# 417
DATE: SEPTEMBER, 2019
SCALE: AS SHOWN
DRAWN/CHECKED BY:

GST-3



NOTE: CONTRACTOR TO PROVIDE 1 LARGE AND 1 EXTRA LARGE, BUCKLE TYPE, FULL BODY HARNESS W/ D-RINGS, 2 SHOCK ABSORBING LANYARDS AND 2 SAFETY COLLARS IN 18"x18"x12" WATERTIGHT ALUMINUM BOX.



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NO.	DATE	COMMENTS

**BRUNSWICK - GLYNN COUNTY
JOINT WATER & SEWER COMMISSION
RIDGEWOOD
WATER PRODUCTION FACILITY
MISC. TANK DETAILS**

PROJECT# 417
DATE: SEPTEMBER 2019
SCALE: AS SHOWN
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GST-4