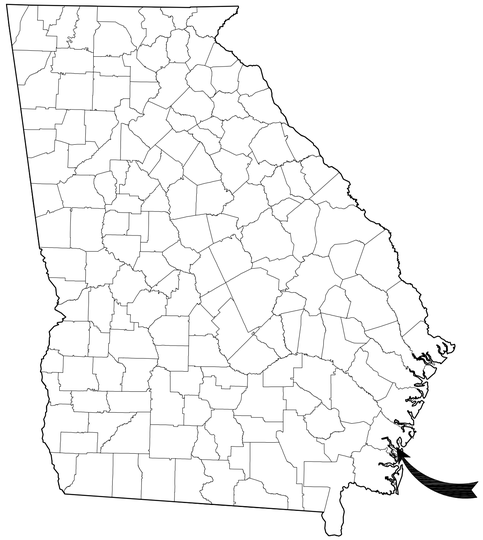
NOTES:
CONTRACTOR SHALL NOTIFY BGJWSC PLANNING AND CONSTRUCTION DIVISION 48 HOURS BEFORE STARTING WORK ON THIS PROJECT.

PUMP STATION UPGRADES
PS3101

BRUNSWICK-GLYNN JOINT WATER & SEWER COMMISSION

BGJWSC PROJECT #22-014
RE-BID



MARCH 2023

DRAWING INDEX

COMMISSION MEMBERS:

MR. BEN TURNIPSEED PE, CHAIRMAN
MR. BOB DUNCAN, VICE CHAIRMAN
MR. CHARLES COOK
MR. WAYNE NEAL
MS. KENDRA ROLLE
MR. TRIPP STEPHENS
MR. CHAD STRICKLAND

EXECUTIVE DIRECTOR:

MR. ANDREW BURROUGHS, PE

PROJECT OWNER AND CONSULTANTS

OWNER/APPLICANT:
BRUNSWICK-GLYNN JOINT WATER & SEWER COMMISSION
1703 GLOUCESTER STREET
BRUNSWICK, GA 31520
PHONE: (912) 261-7100

SURVEYOR:
EMC ENGINEERING SERVICES, INC.
504 GLOUCESTER STREET
BRUNSWICK, GA 31520
(912) 265-7636

CIVIL/MECHANICAL ENGINEERING CONSULTANT:
KIMLEY-HORN AND ASSOCIATES, INC.
12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
(904) 828-3900

ELECTRICAL/STRUCTURAL ENGINEERING CONSULTANT:
ENGINEERING DESIGN TECHNOLOGIES, INC.
1705 ENTERPRISE WAY, UNIT 200
MARIETTA, GA 30067
(770)988-0400

ARCHITECTURAL CONSULTANT:
ENGINEERING DESIGN TECHNOLOGIES-THORINGTON HINES ARCHITECTS, INC.
218 RANDOLPH AVENUE, SUITE A
HUNTSVILLE, AL 35801
(256) 883-8496

LOCATION MAP

PUMP STATION ADDRESSES:
PS 3101: 293 SOUTH PORT PARKWAY, BRUNSWICK, GA 31523

N

N.T.S.

STATE OF GEORGIA
JENNIFER THORINGTON-HINES
CERTIFICATE NO. RA013882
REGISTERED ARCHITECT

CALL 2 BUSINESS DAYS BEFORE YOU DIG
IT'S THE LAW!
DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

EDT-THA ARCHITECTURE

No.	REVISIONS	DATE	BY
1		–	–

Kimley»Horn

LICENSED PROFESSIONAL
JENNIFER THORINGTON-HINES
GEORGIA LICENSE NUMBER RA013882
DATE:

KHA PROJECT 045709000
DATE MARCH 2023
SCALE NTS
DESIGNED BY DRM
DRAWN BY DRM
CHECKED BY MB/BB

COVER SHEET

ENGINEERRING SERVICES FOR PUMP STATION UPGRADES FOR PS3101 PREPARED FOR BGJWSC

SHEET NUMBER
101

GENERAL NOTES:

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH ALL RELATIVE BRUNSWICK-GLYNN JOINT WATER & SEWER COMMISSION GUIDELINES, STANDARDS AND THE ENVIRONMENTAL PROTECTION DIVISION OF GEORGIA REGULATIONS, EXCEPT AS MODIFIED HEREIN.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND INSURANCE REQUIRED FOR THE WORK.

3. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION OF THE SITE PRIOR TO THE BEGINNING OF THE WORK. CONTRACTOR SHALL INFORM THE OWNER AT LEAST 48 HOURS PRIOR TO THE SCHEDULED INSPECTION.

4. THE LOCATION OF UTILITIES SHOWN ON THE DRAWINGS ARE FROM THE SURVEYS PROVIDED BY EMC ENGINEERING SERVICES, INC. DATED MAY 12, 2022 AND MAY 18, 2022. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM, IN THE FIELD, THE LOCATION AND ELEVATION OF ALL UTILITIES WITHIN PROJECT LIMITS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. SHOULD CONDITIONS VARY FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD PRIOR TO CONTINUING CONSTRUCTION

5. CONTRACTOR SHALL LOCATE, VERIFY AND IDENTIFY ALL EXISTING UNDERGROUND UTILITIES SHOWN, OR NOT SHOWN, ON THE PLANS PRIOR TO ANY EXCAVATING ACTIVITIES.

6. CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT EXISTING AND NEWLY CONSTRUCTED UTILITIES DURING THE CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER.

7. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY THEIR OPERATIONS.

8. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION WITH OTHER WORK WHICH MAY BE ONGOING ADJACENT TO, OR AFFECTING, THIS CONSTRUCTION. CONTRACTOR SHALL COOPERATE WITH OTHER CONTRACTORS AND ALL AFFECTED UTILITY COMPANIES.

9. CONTRACTOR SHALL NOTIFY ALL APPLICABLE UTILITY COMPANIES, THE COMPANY REPRESENTATIVE 48 HOURS PRIOR TO THE INITIATING OF ANY EXCAVATION ACTIVITIES, OR AS SPECIFIED BY THE UTILITY COMPANY AND ANY PERMITS REQUIRED FOR THE WORK.

10. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL/DISPOSAL OF ANY UNSUITABLE MATERIAL FROM THE CONSTRUCTION OPERATION, FURNISHING AND COMPACTING SUITABLE REPLACEMENT BACKFILL MATERIAL. DISPOSAL OF UNSUITABLE MATERIAL SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

11. THE EXISTING STORMWATER DRAINAGE SYSTEM SHALL REMAIN FUNCTIONAL AND BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE EROSION AND SEDIMENT CONTROL AND SHALL SUBMIT THE EROSION AND SEDIMENT CONTROL PLAN TO THE ENGINEER.

12. CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE EROSION AND TURBIDITY CONTROLS IN ACCORDANCE WITH GEORGIA ENVIRONMENTAL PROTECTION DIVISION DURING AND FOLLOWING CONSTRUCTION, UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED TO AVOID ADVERSE ENVIRONMENTAL IMPACTS TO OFF-SITE PROPERTY AND DRAINAGE SYSTEMS.

13. CONSTRUCTION WARNING SIGNS SHALL BE MOUNTED AND ERECTED BEFORE CONSTRUCTION CAN COMMENCE. THESE, AND ALL TRAFFIC CONTROL DEVICES, SHALL FOLLOW THE STANDARDS SET FORTH BY THE MANUAL OF UNIFORM TRAFFIC DEVICES AND GEORGIA DEPARTMENT OF TRANSPORTATION (GDOT) STANDARD INDEX.

14. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARLY IDENTIFYING THE AREA OF CONSTRUCTION AND SAFELY ROUTING ALL VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE CONSTRUCTION AREA. THE CONSTRUCTION AREA SHALL BE CLEARLY MARKED AT ALL TIMES.

15. CONTRACTOR SHALL SEED AND MULCH ALL AREAS DISTURBED BY THE CONSTRUCTION ACCORDING TO LOCAL REGULATIONS. USE SOD ON ANY AREAS WITH SLOPES GREATER THAN 6:1.

16. CONTRACTOR SHALL MAINTAIN "AS-BUILT" INFORMATION ON A REGULAR BASIS. CONTRACTOR SHALL EMPLOY THE SERVICES OF A SURVEYOR REGISTERED IN THE STATE OF GEORGIA TO DETERMINE ALL "AS-BUILT" INFORMATION. WITHIN 14 DAYS OF THE COMPLETION OF THE WORK, CONTRACTOR SHALL PROVIDE SIGNED AND SEALED COPIES AND THE DIGITAL CAD FILE OF THE "AS-BUILT" DRAWINGS AND SUPPORTING SURVEY RECORDS TO THE COMPANY REPRESENTATIVE. CAD FILES SHALL BE IN THE AUTOCAD FORMAT.

17. CONTRACTOR SHALL HAVE RED LINED AS-BUILT PLANS AND SPECIFICATIONS AVAILABLE ON SITE DURING CONSTRUCTION. RED LINE DRAWINGS SHALL BE UPDATED DAILY.

18. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRODUCE, SUBMIT, AND OBTAIN APPROVAL OF THE REPRODUCIBLE AS-BUILT DRAWINGS FOR ANY JURISDICTIONAL AGENCIES AS MAY BE REQUIRED.

19. CONTRACTOR SHALL GIVE THE ENGINEER A MINIMUM OF 48 HOURS NOTICE OF ALL MEETINGS OR TESTING MEASURES REQUIRED TO BE WITNESSED BY THE ENGINEER ACTIVITIES RELATED TO THE WORK.

20. CONTRACTOR SHALL GIVE THE ENGINEER A MINIMUM OF THREE (3) BUSINESS DAYS NOTICE FOR ANY FINAL INSPECTION. THE ENGINEER WILL SCHEDULE INSPECTIONS FOR SUBSTANTIAL AND FINAL COMPLETION.

21. A BUILDING PERMIT MUST BE OBTAINED FROM THE GLYNN COUNTY BUILDING DEPARTMENT PRIOR TO COMMENCEMENT OF ANY WORK AT PS3101.

22. A RIGHT OF WAY PERMIT MUST BE OBTAINED FROM GLYNN COUNTY PRIOR TO COMMENCEMENT OF ANY WORK WITHIN GLYNN COUNTY RIGHT OF WAY.

23. ALL CONSTRUCTION WORK WITHIN GLYNN COUNTY SHALL BE IN ACCORDANCE WITH ORDINANCE CHAPTER 2-9 ARTICLE 2 NOISE CONTROL SECTION 16-57.

24. A BUILDING PERMIT MUST BE OBTAINED FROM THE CITY OF BRUNSWICK PLANNING, DEVELOPMENT AND CODES DEPARTMENT PRIOR TO COMMENCEMENT OF ANY WORK AT PS3101.

25. A RIGHT OF WAY PERMIT MUST BE OBTAINED FROM THE CITY OF BRUNSWICK PRIOR TO COMMENCEMENT OF ANY WORK WITHIN CITY OF BRUNSWICK RIGHT OF WAY.

26. ALL CONSTRUCTION WORK WITHIN THE CITY OF BRUNSWICK SHALL BE IN ACCORDANCE WITH ORDINANCE DIVISION 3 NOISE CONTROL SECTION 16-57.

27. CONTRACTOR RESPONSIBLE TO SECURE ACCESS TO AREAS OUTSIDE OF BGJWSC EASEMENTS AS REQUIRED FOR STAGING AND STORAGE.

28. ALL PROPOSED BELOW GRADE PIPING TO BE RESTRAINED JOINT. FOR SPECIFIC RESTRAINED JOINT REQUIREMENTS AND DETAILS SEE BGJWSC "STANDARDS FOR WATER AND SEWER DESIGN AND CONSTRUCTION."

JWSC WATER & SEWER NOTES:

1. ALL WATER AND SEWER CONSTRUCTION SHALL CONFORM WITH THE REQUIREMENTS OF THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE BRUNSWICK-GLYNN JOINT WATER & SEWER COMMISSION. IN THE EVENT OF A DISCREPANCY BETWEEN THESE CONSTRUCTION PLANS AND THE AFOREMENTIONED STANDARDS AND SPECIFICATIONS, THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS SHALL TAKE PRECEDENCE UNLESS THE DIVISION HAS BEEN APPROVED IN WRITING BY THE JWSC.

2. THE MINIMUM HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER LINES, SEWER LINES, AND STORM DRAINS SHALL CONFORM TO THE LATEST GEORGIA EPD REQUIREMENTS.

3. A MINIMUM DISTANCE OF 20' OR TWO TIMES THE DEPTH OF THE MAIN, WHICHEVER IS GREATER, SHALL BE MAINTAINED FROM ALL BUILDINGS, FOUNDATIONS AND THE TOP OF BANK OF ALL PONDS, ANY DEVIATION FROM THIS REQUIREMENT MUST BE APPROVED IN WRITING BY THE JWSC.

4. PRESSURE AND LEAKAGE TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE JWSC.

5. AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF THE WORK, THE CONTRACTOR SHALL NOTIFY THE UTILITIES PROTECTION CENTER (UPC) AT 1-800-282-7411 TO REQUEST UNDERGROUND UTILITY LOCATE SERVICE.

6. ALL GRAVITY SEWERS SHALL BE LOW PRESSURE AIR TESTED IN ACCORDANCE WITH JWSC STANDARDS 3.6.9.

7. ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH JWSC STANDARDS 3.6.9.3.

8. ALL PORTIONS OF NEW SEWAGE FORCE MAIN SHALL UNDERGO A HYDROSTATIC TEST PER JWSC STANDARDS 4.7.7.

9. SEE JWSC STANDARD 2.5.3.3 FOR MINIMUM PIPE COVER REQUIREMENTS.

10. RECORD DRAWINGS MUST BE PROVIDED TO JWSC FOR ALL WATER AND SEWER INFRASTRUCTURE IN ACCORDANCE WITH JWSC RECORD DRAWINGS STANDARDS.

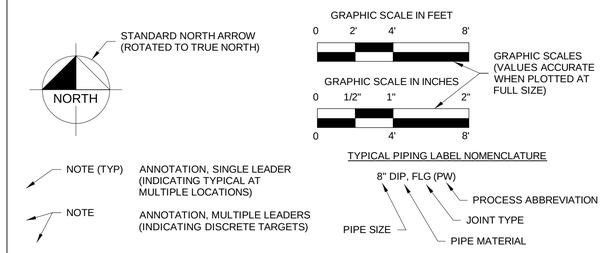
11. THE CONTRACTOR SHALL IMMEDIATELY REPAIR EXISTING WATER & SEWER SERVICES DAMAGED DURING CONSTRUCTION AT THE CONTRACTORS EXPENSE.

12. BYPASS PUMPING UNIT SHALL BE PRESENT AND READY TO OPERATE ON-SITE AT ALL TIMES WHILE IMPROVEMENT WORK IS IN PROGRESS. ALL TEMPORARY BYPASS PUMPING REQUIRED FOR REHAB WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR THESE PUMPING REQUIREMENTS. ALL LABOR, DESIGN, EQUIPMENT, MATERIALS, RENTAL FEES, TEMPORARY PIPING AND INCIDENTALS SHALL BE CONSIDERED A SUBSIDIARY OBLIGATION TO THE CONTRACT.

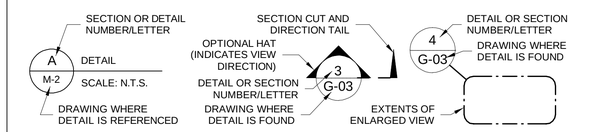
13. THE BGJWSC RESERVES FIRST RIGHT OF SALVAGE FOR ALL EQUIPMENT REMOVAL.

14. CONTRACTOR MUST SUBMIT INDIVIDUAL BYPASS PLANS FOR EACH PUMP STATION (PS3101) TO BGJWSC FOR REVIEW AND APPROVAL.

DRAFTING LEGEND



DETAIL/SECTION REFERENCES



PROCESS PIPING LEGEND (DOUBLE-LINE OR 3D)

- MECHANICAL JOINT FITTINGS
- FLANGED FITTINGS
- SOLVENT WELD FITTINGS
- BALL VALVE (SOLVENT WELD SHOWN)
- GATE VALVE (FLANGED SHOWN)
- PLUG VALVE (FLANGED SHOWN)
- SWING CHECK VALVE (FLANGED SHOWN)
- PIPE COUPLING
- EXPANSION JOINT (FLANGED SHOWN)
- MAGNETIC FLOW METER
- SOLID LINE PIPING INDICATES ABOVE GRADE PIPING UNLESS OTHERWISE NOTED
- DASHED LINE PIPING INDICATES BELOW GRADE PIPING UNLESS OTHERWISE NOTED

SURVEY LEGEND

1/2" IRON REBAR FOUND	1/2" RBF	PROPERTY BOUNDARY	
CONCRETE MONUMENT FOUND	CMF	EASEMENT LINE	
5/8" IRON REBAR SET W/CAP	RBS	ADJACENT PROPERTY LINE	
MAG NAIL WITH WASHER FOUND	MNWF	METES AND BOUNDS	N 47°45'54" E - 497.06'
OVERHEAD ELECTRIC	E	PROPERTY ID NUMBER	PIN
POWER POLE	PP	NOW OR FORMERLY	N/F
LIGHT POLE	LP	RIGHT OF WAY	R/W
LIGHT / POWER POLE COMBINATION	PP-LP	SANITARY SEWER MANHOLE	SSMH
ELECTRIC CONTROL BOX	EB	SANITARY SEWER LINE	SS
ELECTRIC TRANSFORMER	ETR	FORCE MAIN LINE	FM
ELECTRIC SERVICE METER	EM	GAS LINE	G
GUYWIRE	GWA	CHAIN LINK FENCE	O
OVERHEAD TELEPHONE	T	SHRUB LINE	
UNGROUND TELEPHONE	T	BUILDING	
WATER VALVE	WV	OVERHANGING STRUCTURE	
FIRE HYDRANT		CABLE TELEVISION PEDESTAL	TVP
BACK-FLOW PREVENTER	BFP	TELECOMMUNICATION PEDESTAL	TP
WATER METER	WM	CHAIN LINK GATE	
WATER LINE	W	HOSE BIBB / WATER SPIGOT	HB
BOLLARD	BLR	POLY(VINYL CHLORIDE) PIPE	PVC
SPOT ELEVATION	x142	CURB INLET	
1/2" OPEN TOP PIPE FOUND	1/2 OIPF	ASPHALT SURFACE	
"X" SCRIBE SET	XS	CONCRETE SURFACE	
MAG NAIL WITH WASHER SET	MNWS	GRAVEL SURFACE	
SOLID METAL LID			
METAL GRATE			

GEORGIA REGISTERED No. PE036753 PROFESSIONAL ENGINEER JOSHUA PETERSEN
06/30/2023

BID DOCUMENTS

GEORGIA811. Utilities Protection Center, Inc. Know what's below. Call before you dig.

No.	REVISIONS	DATE	BY
1		–	–
2		–	–

Kimley»Horn

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

LICENSED PROFESSIONAL
JOSHUA S PETERSON, P.E.
GEORGIA LICENSE NUMBER 036753
DATE:

KHA PROJECT 045709000
DATE MAY 2023
SCALE AS SHOWN
DESIGNED BY JSP
DRAWN BY ACE
CHECKED BY KBS

GENERAL NOTES

PUMP STATION UPGRADES PS3101
PREPARED FOR BGJWSC

SHEET NUMBER
102

GENERAL

1. THE STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE 2018 EDITION
2. ALL REFERENCES AND ASTM SPECIFICATIONS NOTED ON THESE DRAWINGS PERTAIN TO THE LATEST EDITIONS.
3. THE STRUCTURAL DRAWINGS ARE NOT STAND ALONE DOCUMENTS. THEY SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS.
4. THE CONTRACTOR SHALL COORDINATE THE SIZES AND LOCATIONS OF ALL PENETRATIONS WITH THE ARCHITECTURAL, MECHANICAL, AND PLUMBING DRAWINGS.
5. THE CONTRACT STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE A METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEANS NECESSARY TO PROTECT THE STRUCTURE AND PERSONNEL DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT LIMITED TO TEMPORARY BRACING, SHORING, FORMING, SCAFFOLDING, PLANKING, AND SAFETY NETS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
6. DRAWINGS SHALL NOT BE SCALED.
7. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO PROCEEDING WITH WORK.CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO FABRICATION/CONSTRUCTION. CONTRACTOR SHALL NOTIFY STRUCTURAL ENGINEER AND ARCHITECT BY THE RFI SYSTEM OF ANY DISCREPANCIES PRIOR TO FABRICATION/CONSTRUCTION, ALONG WITH A RECOMMENDED SOLUTION.
8. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. WHERE A SECTION OR DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY TO ALL LIKE AND SIMILAR CONDITIONS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND DETAIL OF SIMPLE (SHEAR ONLY CONNECTIONS AND MOMENT CONNECTIONS NOT SHOWN ON THE DRAWINGS.
11. CONTRACTOR SHALL ENSURE THAT STRUCTURAL MEMBERS ARE NOT LOADED IN EXCESS OF DESIGN LIVE LOADS DURING CONSTRUCTION. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT WHEN PLACED ON FLOOR AND ROOF FRAMING.
12. WHEN DIGGING ADJACENT TO EXISTING BUILDING CONTRACTOR SHALL MAKE SURE TO NOT LOAD EXISTING BUILDING BELOW GROUND WALLS WITH HEAVY EQUIPMENT. PLEASE PLACE THE EQUIPMENT AT 45 DEGREES AWAY FROM THE BOTTOM OF THE FOOTING TO MAKE SURE THE LOAD IS NOT DIRECTLY TRANSFERRED. SMALLER OR MANUAL EQUIPMENT SHALL BE USED TO BACKFILL AND COMPACT THE SOIL AFTER THE WORK IS PERFORMED.

DESIGN LOADS

DEAD LOAD

THE WEIGHT OF THE STRUCTURAL MEMBERS THEMSELVES AND ALL PERMANENT CONSTRUCTION INCLUDING WALLS, FLOORS, CEILINGS, ROOF CLADDING AND FIXED EQUIPMENT.

LIVE LOAD ROOF LIVE LOAD REDUCTION WAS NOT USED

ROOF.....20 PSF

SNOW LOAD

GROUND SNOW LOAD (Pg).....5 PSF

WIND LOAD

ULTIMATE DESIGN WIND SPEED (V ULT)..... 120 MPH
NOMINAL DESIGN WIND SPEED (V ASD)..... 92 MPH
RISK CATEGORY.....IV
WIND EXPOSURE.....C
INTERNAL PRESSURE COEFFICIENT.....+/-0.18
COMPONENTS AND CLADDING
ZONE - EFFECTIVE WIND AREA
ZONE 4 - 10SF.....-33 PSF
ZONE 4 - 20SF.....-28 PSF
ZONE 4 - 50SF.....-25 PSF
ZONE 5 - 10SF.....-40 PSF
ZONE 5 - 20SF.....-31 PSF
ZONE 5 - 50SF.....-25 PSF
BUILDING CLASSIFICATION.....ENCLOSED

SEISMIC LOAD

RISK CATEGORY..... II
SEISMIC IMPORTANCE FACTOR.....1.5
Ss.....0.183
S1 .....0.089
SITE CLASS.....C
SDS 0.196
SD1 .....0.143
SEISMIC DESIGN CATEGORY.....D
BASIC SEISMIC FORCE-RESISTING SYSTEM....ORDINARY REINFORCED MASONRY SHEAR WALL
DESIGN BASE SHEAR.....30KIPS
SEISMIC RESPONSE COEFFICIENT,Cs.....0.1095
RESPONSE MODIFICATION COEFFICIENT(S), R.....2
ANALYSIS PROCEDURE USED.....EQUIVALENT STATIC ANALYSIS

FOUNDATIONS

1. THE FOUNDATION AND SLAB ON GRADE DESIGNS SHALL BE ASSUMPTIONS.
2. THE SHALLOW FOUNDATIONS ARE DESIGNED WITH A MINIMUM SOIL BEARING CAPACITY OF 1500 PSF. THE MINIMUM BEARING CAPACITY SHALL BE VERIFIED ON SITE BY A GEOTECHNICAL ENGINEER PRIOR TO FOUNDATION CONSTRUCTION.
3. FOOTINGS SHALL BEAR ON SUITABLE RESIDUAL SOIL A MINIMUM OF 16" BELOW ADJACENT FINISHED EXTERIOR GRADES
4. FOUNDATION SIDES MAY BE EARTH FORMED IF APPROVED BY A GEOTECHNICAL ENGINEER.
5. THE SUBGRADE PREPARATION SHALL BE IN ACCORDANCE WITH THOSE MEASURES OUTLINED IN THE GEOTECHNICAL REPORT AS WELL AS THE CIVIL DRAWINGS AND SPECIFICATIONS.
6. CONTROL (SAW CUT) JOINTS SHALL BE PLACED IN THE SLAB ON GRADE AT EACH COLUMN LINE AND AT INTERMEDIATE LOCATIONS. SPACING OF TRANSVERSE CONTROL JOINTS SHALL NOT EXCEED 12'X12'.

CONCRETE (CAST-IN-PLACE)

1. DESIGN OF CONCRETE IS BASED ON ACI 318. CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301.
2. CONCRETE SHALL BE NORMAL WEIGHT AND SHALL DEVELOP A MINIMUM 28 DAY COMPRESSIVE STRENGTH AS FOLLOWS:
   SLAB ON GRADE.....3500 PSI
   SPREAD FOOTINGS.....3500 PSI
   GROUT IN MASONRY WALL .....4000 PSI
   NON-SHRINK GROUT AT BASE PLATES.....4000 PSI
3. ALL TENSION SPLICES INCLUDING THOSE BARS NOTED AS CONTINUOUS SHALL BE CLASS B IN ACCORDANCE WITH ACI 318. SPLICES SHALL BE STAGGERED WHERE POSSIBLE.
4. CONCRETE REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 315 AND ACI 318. REINFORCING SHALL CONFORM AS FOLLOWS:
   REINFORCING STEEL.....ASTM A615 GRADE 60
   WELDED WIRE REINFORCING (WWR).....ASTM A185
   DOWELS.....ASTM A615 GRADE 60
   DOWELS.....ASTM A663 GRADE 60
5. WELDED WIRE REINFORCING SHALL BE PROVIDED IN FLAT SHEETS AND LAPPED A MINIMUM OF TWO FULL PANELS AND TIED ON EACH SIDE.
6. UNLESS INDICATED OTHERWISE, CONCRETE COVER OVER REINFORCEMENT SHALL BE AS FOLLOWS:
   - CONCRETE NOT EXPOSED TO EARTH OR WEATHER
     FOR #11 BARS OR SMALLER (SLABS, WALLS, JOISTS).....3/4"
     BEAMS AND COLUMNS.....1 1/2"
   -CONCRETE EXPOSED TO EARTH OR WEATHER
     FOR #5 BARS OR SMALLER (INCLUDING WWR).....1 1/2"
     FOR #6 BARS OR LARGER.....2"
     CONCRETE CAST DIRECTLY AGAINST EARTH.....3"
7. ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND OTHER INSERTS AND EMBEDS SHALL BE SECURED IN POSITION, INSPECTED AND APPROVED PRIOR TO PLACING CONCRETE. REINFORCEMENT IN SLABS AND SLAB ON GRADE SHALL BE PLACED ON CHAIRS AT 36" MAX IN EACH DIRECTION. DOWELS SHALL NOT BE INSERTED INTO FRESHLY PLACED CONCRETE.
8. REINFORCING BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH ANY PIPE, PIPE FLANGE OR METAL PARTS EMBEDDED IN CONCRETE, A MINIMUM OF 2 INCHES CLEARANCE SHALL BE PROVIDED
9. ADDITIONAL REINFORCING (SEE TYPICAL DETAILS) SHALL BE PROVIDED AT THE FOLLOWING:
   GRADE BEAM CORNERS AND INTERSECTIONS
   REENTRANT CORNERS
   PENETRATIONS
10. ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4"
11. CONCRETE REINFORCEMENT SHALL NOT BE WELDED UNLESS APPROVED BY THE ENGINEER OF RECORD.

GROUT :

1. GROUT UNDER BEARING PLATES SHALL BE NON-SHRINK GROUT-60,000 PSI MINIMUM COMPRESSIVE STRENGTH. MIXING AND PLACEMENT SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. ANCHORING CEMENT FOR RAILINGS: MIX PREPARED ANCHORING CEMENT PRODUCT WITH WATER AS DIRECTED BY MANUFACTURER'S PRODUCT DATE FOR IMMEDIATE USE.

METAL ROOF DECK

1. CONFORM TO STEEL DECK INSTITUTE DESIGN MANUAL, LATEST EDITION.
2. UNLESS NOTED OTHERWISE, ROOF DECK SHALL BE WIDE-RIB (GALVANIZED - ASTM-A653-94, G60). MINIMUM YIELD STRENGTH SHALL BE 33000 PSI.
3. ROOF DECK SHALL BE ATTACHED AS FOLLOWS:
   1. AT SUPPORTS: #12 TEK SCREWS (AT STEEL)
   2. AT SIDELAPS: #10 TEK SCREWS
4. DECK WILL BE PLACED AT THE PERIMETER WITH A COMPLETE RIB BEARING ON THE STEEL SUPPORT. DECK SHALL BE SUPPORTED BY A MINIMUM OF FOUR SUPPORT LOCATIONS (THREE SPAN CONDITION).

STRUCTURAL STEEL

1. DESIGN OF STRUCTURAL STEEL IS BASED ON THE AISC STEEL CONSTRUCTION MANUAL INCLUDING AISC-360.
   MATERIALS:
   WIDE FLANGE SECTIONS..... ASTM A992 FY50KSI
   RECT. STRUCTURAL TUBING..... ASTM A500 GR B FY46KSI
   CHANNELS AND ANGLES..... ASTM A36 FY36KSI
   PLATES..... ASTM A36 FY36KSI
   HIGH STRENGTH BOLTS..... ASTMA325
   ANCHOR BOLTS..... ASTM F1554GR36
2. STRUCTURAL STEEL SHALL BE NEW DOMESTIC STEEL WITH ALL DETAILING, FABRICATION AND ERECTION CONFORMING TO ALL APPLICABLE PROVISIONS SPECIFIED BY AISC.
3. THE DESIGN OF CONNECTIONS FOR ANY PORTION OF THE STRUCTURE NOT INDICATED ON THE DRAWINGS SHALL BE DESIGNED BY THE FABRICATOR AS FOLLOWS:
   3/4" ASTM A325 (GROUP A) HIGH STRENGTH BOLTS SHALL BE USED IN SIMPLE SHEAR BEARING TYPE CONNECTIONS WHERE POSSIBLE. SLIP CRITICAL CONNECTIONS SHALL BE USED FOR MOMENT CONNECTIONS.

   SHOP CONNECTIONS SHALL BE WELDED OR BOLTED. FIELD CONNECTIONS SHALL BE BOLTED WHERE POSSIBLE.

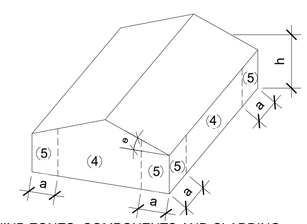
   FOR BEAMS: PROVIDE THE MINIMUM NUMBER OF BOLTS REQUIRED TO DEVELOP THE BEAM SHEAR "V" AND MOMENT "M" (IF APPLICABLE) NOTED ON THE CONTRACT DRAWINGS. IF THE BEAM SHEAR IS NOT NOTED, THE CONNECTION SHALL DEVELOP THE BEAM V = W/2 WHERE W IS THE MAXIMUM TOTAL UNIFORM LOAD BASED ON LATERALLY SUPPORTED SIMPLE SPAN AS SHOWN IN TABLES 3-6 THROUGH 3-9 IN THE AISC STEEL CONSTRUCTION MANUAL.
4. ALL FIELD WELDING SHALL BE DONE WITH E70XX ELECTRODES.
5. ALL WELDING SHALL BE DONE BY QUALIFIED WELDERS AND CONFORM TO THE AMERICAN WELDING SOCIETY ANSI/AWS D1.1.
6. THE MINIMUM WELD SIZE SHALL BE 3/16" U.N.O.
7. EXPOSED WELDED CONNECTIONS SHALL BE GROUND SMOOTH.
8. THE FABRICATOR SHALL PREPARE AND SUBMIT FOR REVIEW DRAWINGS SHOWING SHOP FABRICATION DETAILS, FIELD ASSEMBLY DETAILS, AND ERECTION DIAGRAMS. FABRICATION SHALL NOT BEGIN UNTIL STEEL SHOP DRAWINGS HAVE BEEN COMPLETED AND REVIEWED BY THE ENGINEER OF RECORD.
9. STRUCTURAL STEEL SHALL BE SHOP PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. DO NOT PAINT MEMBERS THAT ARE TO RECEIVE SPRAY ON FIRE PROOFING, SLIP CRITICAL CONNECTIONS, SURFACES TO BE FIELD WELDED, OR THE TOP FLANGE OF COMPOSITE BEAMS TO RECEIVE HEADED STUDS.
10. INSTALL STRUCTURAL STEEL BEAMS WITH NATURAL CAMBER UP.
11. STRUCTURAL STEEL SHALL NOT BE CUT IN THE FIELD FOR WORK OF OTHER TRADES WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD.
12. ALL STEEL EXPOSED TO WEATHER INCLUDING LINTELS SHALL BE HOT DIPPED GALVANIZED.
13. PACK NON SHRINK HIGH STRENGTH (MIN 6000 PSI) GROUT UNDER ALL COLUMN BASE PLATES AFTER SETTING AND LEVELING BEFORE ADDING ANY LOAD. BASE PLATES SHALL BE LEVELED WITH DOUBLE NUTS.
14. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STEEL FRAME IN PROPER ALIGNMENT UNTIL ALL FLOOR AND ROOF DECK, DIAGONAL BRACING, FLOOR SLABS, WELDED CONNECTIONS, ETC. HAVE BEEN INSTALLED AND THE CONCRETE HAS DEVELOPED A STRENGTH OF 3000 PSI.

DESIGN CRITERIA – CODES AND SPECIFICATIONS

1. INTERNATIONAL BUILDING CODE 2018.
2. ACI318-14-BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
3. ACI301-10–SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
4. ANSI/AISC 360-10–SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS.
5. ASCE/SEI 7-10–MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
6. SDI DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS, AND ROOF DECKS–NO31
7. SDI DIAPHRAGM DESIGN MANUAL THIRD EDITION.
8. SJI STANDARD SPECIFICATIONS, LOAD TABLES AND WEIGHT TABLES FOR STEEL JOISTS AND JOISTS GIRDERS 42ND EDITION 2005.
9. ACI 530-11 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES.

CONCRETE MASONRY :

1. ALL MASONRY DESIGN AND CONSTRUCTION SHALL CONFORM TO ACI 530, ASCE 5, TMS 402, ASCE 6 AMD TMS 602.
2. CONCRETE MASONRY UNITS SHALL BE LIGHT WEIGHT AND CONFORM TO ASTM C 90. LAY IN RUNNING BOND UNLESS NOTED. F'm SHALL BE 2000 PSI
3. JOINT REINFORCING - TRUSS TYPE, 9 GAUGE OR W1.7 SPACED VERTICALLY AT 16" UNLESS NOTED OTHERWISE AND CONFORM TO ASTM A82.
4. VERTICAL REINFORCING IN CONCRETE MASONRY (AS REQUIRED) SHALL BE DOWELED INTO THE FOUNDATION AND EXTEND INTO THE BOND BEAM AT THE ROOF. PROVIDE MIN. 4" x 4" OPENING AT U BLOCK FOR VERTICAL BAR.
5. PROVIDE REINFORCING IN CONCRETE MASONRY GROUTED CELLS AT EACH SIDE OF OPENING, EQUAL TO THE REINFORCING DISPLACED.
6. PROVIDE JOINT REINFORCING AT 8" AT MASONRY BELOW GRADE. 2 ROWS AT 8" AT TOP AND BOTTOM OF OPENINGS, (EXTEND 24" EACH SIDE) AND 2 ROWS AT 8" AT BOND BEAMS.
7. CONCRETE MASONRY UNITS SHALL BE CUT BELOW BOND BEAMS AS REQUIRED IN ORDER TO GET BOND BEAMS AT THE PROPER ELEVATION.
8. ALL CELLS BELOW GRADE AND SLAB ON GRADE SHALL BE GROUTED SOLID.
9. HORIZONTAL BEAMS, BOND BEAMS AND REINFORCING SHALL BE DISCONTINUOUS AT CONTROL JOINTS AT CONTRACTOR OPTION.
10. 16" DEEP BOND BEAMS MAY BE CONSTRUCTED OF 8" U BLOCK BELOW AND 8" STANDARD BLOCK ABOVE WITH BREAK AWAY TOP PART OF WEB.
11. SEE ARCHITECTURAL DRAWINGS FOR LAYING MASONRY AND LOCATION OF OPENINGS.



WIND ZONES. COMPONENTS AND CLADDING.

GEORGIA REGISTERED No. PE042400 PROFESSIONAL ENGINEER BALA MALLESWARA RAO GULLIPALLI
03/06/2023

BID DOCUMENTS

EDT-THA ARCHITECTURE

No.	REVISIONS	DATE	BY

Kimley»Horn

12740 GRAN BAY PARKWAY WEST, SUITE 2350
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LICENSED PROFESSIONAL:
BALA GULLIPALLI, P.E.
GEORGIA LICENSE NUMBER 042400
DATE:

KHA PROJECT 045709000
DATE MARCH 2023
SCALE: AS SHOWN
DESIGNED BY: BG
DRAWN BY: AT
CHECKED BY: BG

STRUCTURAL GENERAL NOTES

ENGINEERRING SERVICES FOR PUMP STATION UPGRADES FOR PS3101 PREPARED FOR BGJWSC

SHEET NUMBER
103

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ACI 530 - TABLE 3.1.2
MASONRY LEVEL B QUALITY ASSURANCE

MINIMUM TESTS

VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.5 B.1.b.3 FOR SELF-CONSOLIDATING GROUT

VERIFICATION OF f'_m AND f'_{AAC} IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.4 B PRIOR TO CONSTRUCTION, EXCEPT WHERE SPECIFICALLY EXEMPTED BY THIS CODE

MINIMUM SPECIAL INSPECTION

INSPECTION TASK	FREQUENCY (a)		REFERENCE FOR CRITERIA	
	CONTINUOUS	PERIODIC	TMS 402/ ACI 530/ ASCE 5	TMS 602/ ACI 530.1/ ASCE 6
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS		X		ART. 1.5
2. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
a. PROPORTIONS OF SITE-PREPARED MORTAR		X		ART. 2.1 , 2.6 A
b. CONSTRUCTION OF MORTAR JOINTS		X		ART. 3.3 B
c. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES		–		ART. 2.4 B , 2.4 H
d. LOCATION OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 3.4 , 3.6 A
e. PRESTRESSING TECHNIQUE		–		ART. 3.6 B
f. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	(b) –	(c) –		ART. 2.1 C
3. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
a. GROUT SPACE		X		ART. 3.2 D , 3.2 F
b. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES		X	SEC. 6.1	ART. 2.4 , 3.4
c. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES		X	SEC. 6.1, 6.2 , 6.2.6 , 6.2.7	ART. 3.2 E , 3.4 , 3.6 A
d. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS		X		ART. 2.6 B, 2.4 G.1b
e. CONSTRUCTION OF MORTAR JOINTS		X		ART. 3.3 B
4. VERIFY DURING CONSTRUCTION:				
a. SIZE AND LOCATION OF STRUCTURAL ELEMENTS		X		ART. 3.3 F
b. TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION		X	SEC. 1.2.1 (e) , 6.1.4.3 , 6.2.1	
c. WELDING OF REINFORCEMENT	–		SEC. 8.1.6.7.2 , 9.3.3.4 (c) , 11.3.3.4 (b)	
d. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40F (4.4C)) OR HOT WEATHER (TEMPERATURE ABOVE 90F (32.2C))		X		ART. 1.8 C , 1.8 D
e. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	–			ART. 3.6 B
f. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE	–			ART. 3.5 , 3.6 C
g. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	(b) –	(c) –		ART. 3.3 B.9 , 3.3 F.1.b
5. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		X		ART. 1.4 B.2.a.3 , 1.4 B.2.b.3 , 1.4 B.2.c.3 , 1.4 B.3 , 1.4 B.4

(a) FREQUENCY REFERS TO THE FREQUENCY OF SPECIAL INSPECTION, WHICH MAY BE CONTINUOUS DURING THE TASK LISTED OR PERIODIC DURING THE LISTED TASK, AS DEFINED IN THE TABLE.
(b) REQUIRED FOR THE FIRST 5000 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY.
(c) REQUIRED AFTER THE FIRST 5000 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY.

IBC - TABLE 1705.3
REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION (IBC 2018)

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCE STANDARD	IBC REFERENCE
1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT.	----	X	ACI 318: 3.5, 7.1-7.7	1910.4
2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1705.2.2, ITEM 2B.	----	----	AWS D1.4 ACI 318: 3.5.2	----
3. INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED.	----	----	ACI 318: 8.1.3,21.1.8	1908.5, 1909.1
4. INSPECTION OF ANCHORS POST INSTALLED IN HARDENED CONCRETE MEMBERS.	----	X	ACI 318: 3.8.6,8.1.3,21.1.8	1909.1
5. VERIFYING USE OF REQUIRED DESIGN MIX.	----	X	ACI 318: CH. 4, 5.2-5.4	1904.2,1910.2, 1910.3
6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	----	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	1910.10
7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	----	ACI 318: 5.9, 5.10	1910.6, 1910.7, 1910.8
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	----	X	ACI 318: 5.11-5.13	1910.9
9. INSPECTION OF PRESTRESSED CONCRETE: a. APPLICATION OF PRESTRESSING FORCES. b. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC-FORCE-RESISTING SYSTEM.	 ---- ----	----	ACI 318: 18.20 ACI 318: 18.18.4	----
10. ERECTION OF PRECAST CONCRETE MEMBERS.	----	----	ACI 318: CH. 16	----
11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	----	----	ACI 318: 6.2	----
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	----	----	ACI 318: 6.1.1	----

NOTES:
FOR SI: 1 INCH = 25.4 MM.
A. SEE SPECIAL INSPECTION NOTES ON GENERAL NOTE SHEET FOR ADDITIONAL INFORMATION.
B. WHERE APPLICABLE, SEE ALSO SECTION 1705.11, SPECIAL INSPECTION FOR SEISMIC RESISTANCE.

IBC - TABLE 1705.2.2
REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL (IBC 2018)

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCE STANDARD
1. MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK:			
a. IDENTIFICATION MARKINGS TO CONFIRM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	----	X	APPLICABLE ASTM MATERIAL STANDARDS
b. MANUFACTURER'S CERTIFICATE TEST REPORTS.	----	X	
2. INSPECTION OF WELDING:			
a . COLD-FORMED STEEL DECK:			
1) FLOOR AND ROOF DECK WELDS.	----	----	AWS D1.4 ACI 318: SECTION 3.5.2
b . REINFORCING STEEL:			
1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.	----	----	
2) REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL WALLS OF CONCRETE AND SHEAR REINFORCEMENT.	----	----	
3) SHEAR REINFORCEMENT.		----	
4) OTHER REINFORCING STEEL.	----	----	
3. COLD-FORMED STEEL TRUSSES SPANNING 60 FEET OR GREATER.			
a . VERIFY TEMPORARY AND PERMANENT RESTRAINT/BRACING ARE INSTALLED IN ACCORDANCE WITH THE APPROVED TRUSS SUBMITTAL PACKAGE.	----	----	

EDT-THA ARCHITECTURE

IBC 2018 - TABLE 1705.6
REQUIRED SPECIAL INSPECTION AND TESTS OF SOILS

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	—	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	—	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	—	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	—
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	—	X

GEORGIA REGISTERED No. PE042400 PROFESSIONAL ENGINEER BALA MALLESWARA RAO GULLIPALLI
03/06/2023

BID DOCUMENTS

No.	REVISIONS	DATE	BY

Kimley»Horn

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WWW.KIMLEY-HORN.COM REGISTRY NO. 696

LICENSED PROFESSIONAL:
BALA GULLIPALLI, P.E.
GEORGIA LICENSE NUMBER 042400
DATE:

KHA PROJECT 045709000
DATE MARCH 2023
SCALE: AS SHOWN
DESIGNED BY: BG
DRAWN BY: AT
CHECKED BY: BG

STRUCTURAL SPECIAL INSTRUCTIONS

ENGINEERRING SERVICES FOR PUMP STATION UPGRADES FOR PS3101 PREPARED FOR BGJWSC

SHEET NUMBER
104

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LEGEND:

- HOME RUN
- EQUIPMENT AS NOTED
- CIRCUIT BREAKER
- 20A — DUPLEX RECEPTACLE, NEMA 5-20R, TYPE WP, CR
- WP: WEATHERPROOF, CR:CORROSION RESISTANT
- GROUND TO GROUND ROD SYSTEM
- GF — GROUND FAULT CIRCUIT INTERRUPTER PROTECTION
- AIC — INTERRUPTING CAPACITY IN AMPS
- CONDUIT SYSTEM CONCEALED BELOW GRADE
- EXPOSED CONDUIT
- 10 — PUMP MOTOR. HORSEPOWER INDICATED
- N.T.S. — NOT TO SCALE
- SP — SURGE PROTECTION DEVICE
- DRIVEN GROUND ROD LOCATION
- $ — SWITCH, 48" AFF
- $3 — THREE WAY SWITCH, 48" AFF
- $WP — 20A 120/277V, 3-WAY TOGGLE SWITCH WITH PILOT LIGHT, 48" AFF
- NEMA 4X STAINLESS STEEL DISCONNECT SWITCH. RATINGS AS NOTED ON ONE-LINE.
- A — ALARM HORN. MOUNT 12' AFF ON BUILDING - NOTE G6,G7
- RED ALARM LIGHT. MOUNT 12' AFF ON BUILDING - NOTE G6
- MULTI-COLOR ALARM LIGHT ON BUILDING - NOTE G6.
- PC — PHOTO CELL: TORK MODEL 2107: 120/277V, 2000W/1800W/600W TUNGSTON/BALLAST/LED RATED
- WALL MOUNTED LED EMERGENCY BATTERY PACK
- WALL MOUNTED LED EMERGENCY EXIT LIGHT WITH TWO HEADS
- EXP — EXPLOSION PROOF: CLASS 1, DIV. 1
- GENERATOR RECEPTACLE - SEE 2/209, 2/308, AND 2/425

GENERAL NOTES: (APPLICABLE TO ALL DRAWINGS)

G1. FIELD COORDINATE THE ELECTRICAL SERVICE WITH GREG MCCRANIE, GEORGIA POWER DISTRIBUTION ENGINEER, 912-267-5127.

G2. INSTALL GROUNDING DELTA AS SHOWN ON ELECTRICAL SITE PLANS. REFER TO SECONDARY GROUNDING DETAIL, 3/425, FOR INSTALLATION REQUIREMENTS.

G3. PROVIDE A TRANS-SOCKET METER. EQUIPMENT SHALL COMPLY WITH THE REQUIREMENTS OF THE GEORGIA POWER BLUE BOOK, 2017 EDITION.

G4. ALL CONDUIT TERMINATIONS TO ELECTRICAL ENCLOSURES SHALL UTILIZE THREADED HUBS; LOCK NUTS AND BUSHINGS ARE NOT ACCEPTABLE. SEE SPECIFICATIONS FOR CONDUIT REQUIREMENTS.

G5. EXTEND UNSWITCHED AND ENERGIZED CONDUCTOR TO ALL EXIT SIGNS AND EMERGENCY BATTERY PACKS.

G6. PROVIDE MULTI-COLOR ALARM LIGHT AND RED LIGHT ON OUTSIDE OF EACH STATION. REFER TO SCADA SPEC ON SHEET 5/425. PROVIDE PLASTIC ENGRAVED SIGN WITH 1-1/2" LETTERING ADJACENT TO FRONT DOOR IDENTIFYING LIGHT STATUS.

G7. IF EITHER ALARM OCCURS, HORN TO SOUND UNTIL SILENCE SWITCH IS PUSHED.

G8. THE CONTRACTOR SHALL FURNISH AND INSTALL ONE 4" SCH. 40 PVC CONDUIT FROM THE RELOCATED TRANSFORMER POLE TO THE UTILITY METER ON THE BUILDING. COORDINATE WITH EXISTING UNDERGROUND UTILITIES, THE OWNER AND GEORGIA POWER. THE CONDUIT SHALL BE INSTALLED 36" BELOW GRADE, MINIMUM. PROVIDE A DETECTABLE WARNING TAPE 12" ABOVE THE CONDUIT. THE CONDUIT SHALL TURN UP TO ABOVE GRADE AT THE BASE OF THE TRANSFORMER POLE.

G9. CONNECT AIR FLOW FAN MONITORING SYSTEM, PROVIDED BY DIV. 15, AS REQUIRED. ONE PRESSURE SENSOR SHALL BE INSTALLED IN THE EXHAUST FAN DUCT, THE OTHER SENSOR SHALL BE INSTALLED ADJACENT TO THE MONITOR PANEL. EXTEND ALARM CONDUCTORS TO SCADA PANEL. LIKEWISE, ONE SENSOR FOR THE SUPPLY FAN SHALL BE INSTALLED IN THE DUCT AND THE OTHER ADJACENT TO THE MONITOR PANEL.

G10. EXTEND THROUGH 3-POSITION SWITCH ADJACENT TO MAIN DOOR.

G11. EXTEND PHOTO CONTROL TO 3-POSITION SWITCH. CONNECT TO UP/PHOTO POSITION.

G12. 3-POSITION, MAINTAINED CONTACT, 20A/277V. HUBBELL CAT. NO. HBL1385. LABEL SWITCH POSITIONS: UP-PHOTO, CENTER-OFF, DOWN-MANUAL/ON.

DEMOLITION NOTES:

D1. THE EXISTING DISTRIBUTION PANEL, TRANSFER SWITCH, LIGHTING SYSTEM, RECEPTACLES, VFDS, AND OTHER ELECTRICAL EQUIPMENT INCLUDING ALL CONDUITS AND CONDUCTORS SHALL BE DEMOLISHED AND REMOVED FROM THE PROJECT SITE AS PART OF THIS CONTRACT. THE CONTRACTOR SHALL DISPOSE OF THE MATERIAL OFF-SITE AS PART OF THE CONTRACT. COORDINATE WITH OWNER FOR ANY MATERIALS TO BE RETAINED BY THE OWNER.

D2. THE CONTRACTOR SHALL COORDINATE WITH GEORGIA POWER FOR MODIFICATIONS AND/OR REMOVAL OF THE EXISTING SERVICES TO THE EXISTING PUMP STATION BUILDING.

GEORGIA811 Utilities Protection Center, Inc. Know what's below. Call before you dig.

BID DOCUMENTS

EDT-THA ARCHITECTURE

GEORGIA REGISTERED No. 021296 PROFESSIONAL ENGINEER KHOSROW R. ABDI

03/06/2023

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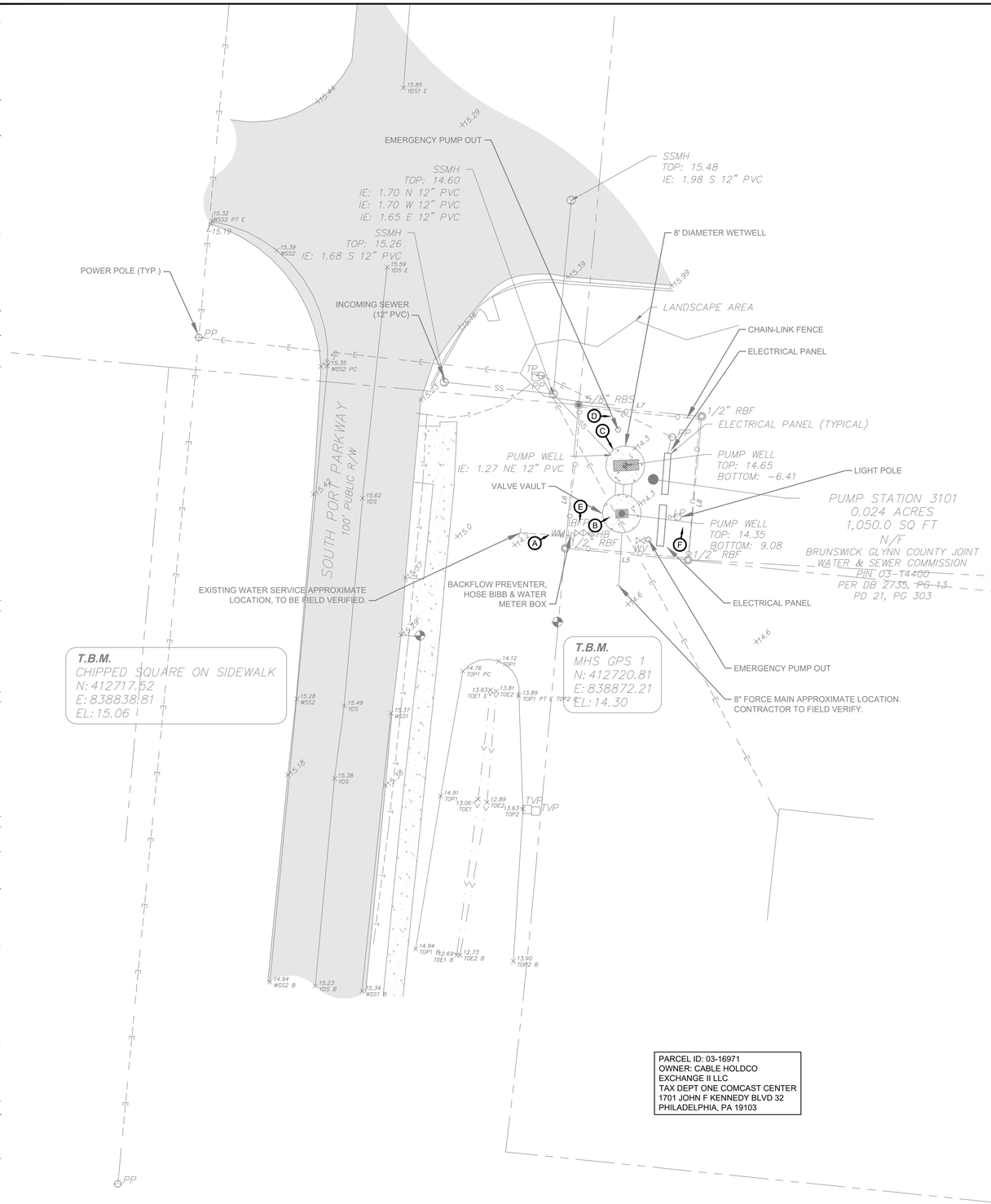
GEORGIA LICENSE NUMBER 021296
DATE:

KHA PROJECT 045709000
DATE MARCH 2023
SCALE: AS SHOWN
DESIGNED BY: KA
DRAWN BY: TF
CHECKED BY: KA

ELECTRICAL SYMBOLS LEGEND, ABBREVIATIONS AND SCHEDULES

ENGINEERRING SERVICES FOR PUMP STATION UPGRADES FOR PS3101 PREPARED FOR BGJWSC

SHEET NUMBER
105



PS3101 EXISTING SITE PLAN

A

B

C

D

E

F

PS3101 EXISTING CONDITION

NOTES:

1) LIFT STATION IS LOCATED AT 293 SOUTH PORT PARKWAY, BRUNSWICK, GEORGIA 31523.
2) SURVEY PROVIDED BY EMC ENGINEERING SERVICES, INC. DATED MAY 18, 2022. HORIZONTAL DATUM IS GEORGIA STATE PLANE COORDINATE SYSTEM OF 1985, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD83). VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3) ALL DIMENSIONS ARE APPROXIMATE AND TO BE FIELD VERIFIED.
4) EXISTING WATER SERVICE SIZE, LOCATION, AND MATERIAL TO BE FIELD VERIFIED.
5) EXISTING FORCE MAIN SIZE, LOCATION, AND MATERIAL TO BE FIELD VERIFIED.
6) CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION AND ORDERING EQUIPMENT. CONTRACTOR SHALL NOTIFY ENGINEER OF DISCREPANCIES.
7) CONTRACTOR SHALL SUBMIT A CONSTRUCTION SEQUENCE SCHEDULE AS PART OF HIS SUBMITTALS FOR REVIEW AND APPROVAL FROM OWNER/ENGINEER TO MINIMIZE FLOW INTERRUPTIONS.
8) THE EXISTING STORMWATER DRAINAGE SYSTEM SHALL REMAIN FUNCTIONAL AND BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION.
9) GEORGIA 811 DESIGN TICKET #220624-003735 RESPONDENT CONTACT INFORMATION IS LISTED BELOW.

UTILITY CONTACT LISTING

ELECTRIC & NATURAL GAS:
ATLANTA GAS LIGHT
10 PEACHTREE PL NE
ATLANTA, GA 30309
PHONE: (800) 427-5463

MUNICIPAL UTILITIES:
BRUNSWICK GLYNN COUNTY JOINT WATER & SEWER
1703 GLOUCESTER ST
BRUNSWICK, GA 31520
PHONE: (912) 261-7100

MUNICIPAL UTILITIES:
GLYNN COUNTY BOARD OF EDUCATION
1313 EGMONT ST
BRUNSWICK, GA 31520
PHONE: (912) 267-4100

TELECOMMUNICATIONS:
ALMA TELEPHONE COMPANY
405 W 11TH ST
ALMA, GA 31510
PHONE: (912) 632-8603

WATER:
WATER UTILITY MANAGEMENT
28 ABERCORN ST,
SAVANNAH, GA 31401
PHONE: (912) 352-9339

ELECTRIC & NATURAL GAS:
GEORGIA POWER COMPANY
800 GLOUCESTER ST
BRUNSWICK, GA 31520
PHONE: (888) 891-0938

TELECOMMUNICATIONS:
AT&T
1100 GLYNN ISLE
BRUNSWICK, GA 31525
(912) 324-2298

MUNICIPAL UTILITIES:
GLYNN COUNTY PUBLIC WORKS
4145 NORWICH ST, EXT
BRUNSWICK, GA 31520
(912) 554-7111

EXISTING CONDITIONS TABLE	
WET WELL DIAMETER	8 FT
PUMPS (QUANTITY)	2 EXISTING, 1 FUTURE NOT INSTALLED
PUMP MANUFACTURER/MODEL	FLYGT/CP3152.181, 20 H.P. (454 IMPELLER)
BASIS OF DESIGN CAPACITY	809 GPM @ 64 TDH
PUMP DISCHARGE ASSEMBLY (QUANTITY)	3

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. PE036753 JOSHUA PETERSEN
05/30/2023

BID DOCUMENTS

GEORGIA811. Utilities Protection Center, Inc. Know what's below. Call before you dig.

No.	REVISIONS	DATE	BY

Kimley»Horn
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JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

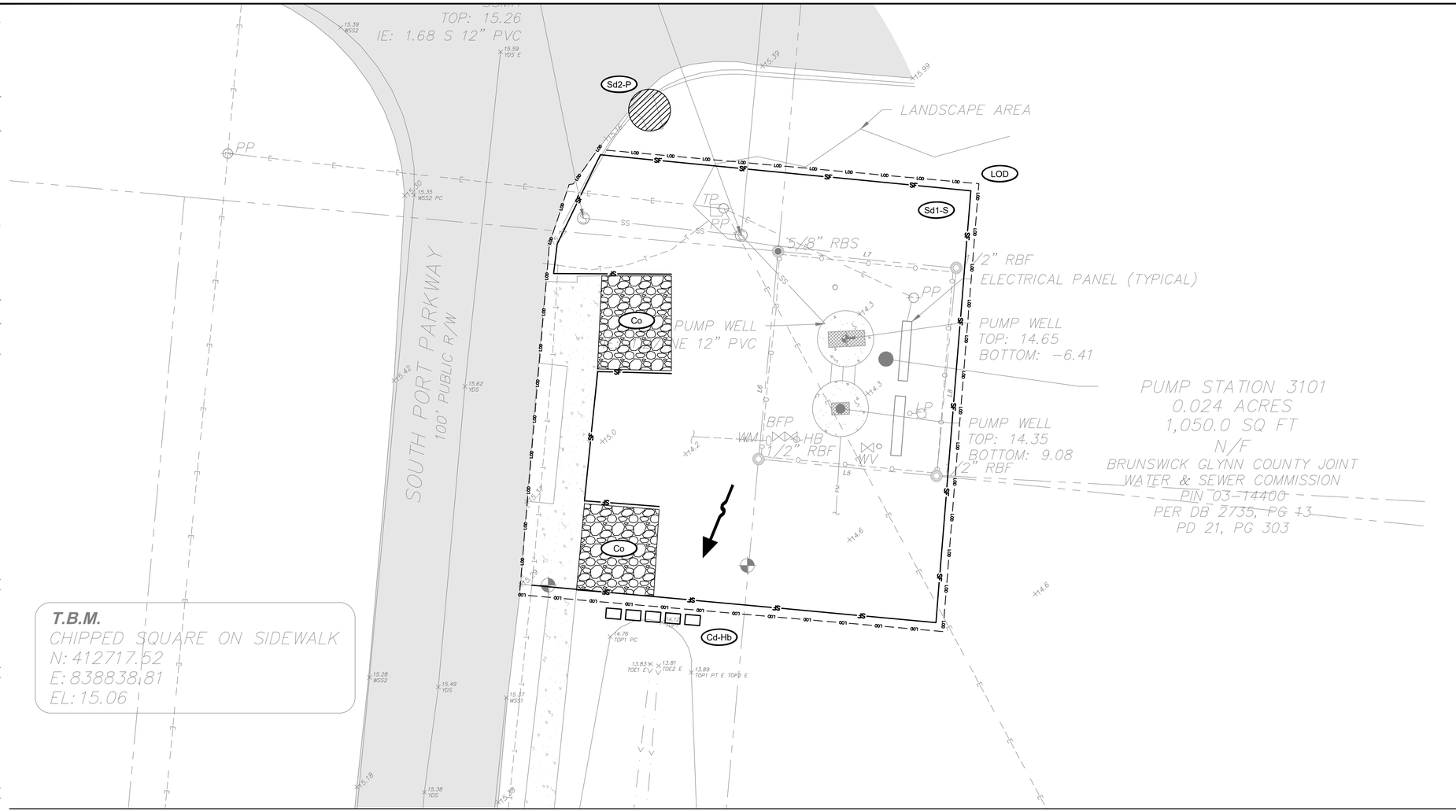
LICENSED PROFESSIONAL
JOSHUA S PETERSON, P.E.
GEORGIA LICENSE NUMBER
036753
DATE:

KHA PROJECT 045709000
DATE MAY 2023
SCALE AS SHOWN
DESIGNED BY JSP
DRAWN BY ACE
CHECKED BY KBS

PS3101 EXISTING SITE PLAN

PUMP STATION
UPGRADES PS3101
PREPARED FOR
BGJWSC

SHEET NUMBER
201



NORTH

GRAPHIC SCALE IN FEET
0 2.5 5 10

EROSION CONTROL NOTES:

1. CONTRACTOR IS TO ADHERE TO THE GLYNN COUNTY STORMWATER MANAGEMENT MANUAL (GSMM), COASTAL STORMWATER SUPPLEMENT (CSS), AND THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" REQUIREMENTS.
2. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.
3. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
4. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
5. ALL OPEN DRAINAGE SWALES SHALL BE GRASSED AND RIPRAP SHALL BE PLACED AS REQUIRED TO CONTROL EROSION.
6. THE CONTRACTOR SHALL INSTALL AND MAINTAIN SILT BARRIERS AROUND ALL DRAINAGE STRUCTURES UNTIL ALL CONSTRUCTION HAS BEEN COMPLETED.
7. SILT FENCES SHALL BE LOCATED ON SITE TO PREVENT SEDIMENT AND EROSION FROM LEAVING THE PROPERTY LIMITS.
8. SILT FENCE SHALL MEET THE REQUIREMENTS OF SECTION 171-TEMPORARY SILT FENCE, OF THE GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, CURRENT EDITION AND BE WIRE REINFORCED.
9. THERE ARE NO CURRENT APPARENT EROSION CONTROL PROBLEMS ON SITE. CONTRACTOR SHALL TAKE PROCEDURES AS NECESSARY TO PREVENT EROSION AND SEDIMENT TRANSPORT DURING CONSTRUCTION.
10. MAXIMUM EMBANKMENT SLOPES ARE TO BE AS FOLLOWS: CUT AREAS - 2:1, FILL AREAS - 2:1.
11. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE CLEANED AND MAINTAINED PER THE SPECIFICATIONS.
12. ALL CUT AND FILL SLOPES MUST BE SURFACE ROUGHENED AND VEGETATED WITHIN SEVEN (7) DAYS OF THEIR CONSTRUCTION.
13. THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. THE CONTRACTOR MUST CLEAN ALL SEDIMENT TRAPS AS REQUIRED BY THE OWNER'S REPRESENTATIVE OR LOCAL & STATE REQUIREMENTS.
14. FAILURE TO INSTALL, OPERATE AND MAINTAIN ALL EROSION CONTROL MEASURES, AS SHOWN ON THE APPROVED PLANS OR AS DIRECTED BY THE OWNER/PROJECT REPRESENTATIVE AND/OR LOCAL MUNICIPALITY AND STATE MAY RESULT IN ALL WORK ON THE CONSTRUCTION SITE BEING STOPPED UNTIL PROPER CORRECTIVE MEASURES HAVE BEEN MET, AS REQUIRED AND/OR DIRECTED.
15. THE CONTRACTOR SHALL KEEP AND MAINTAIN ONSITE A LOG NOTING THE DATE OF ALL RAINFALL EVENTS, THE AMOUNT OF RAINFALL RECEIVED, DURATION OF RAINFALL EVENT, INSPECTION NOTES, AND ANY REPAIRS OR CLEANING OF EROSION CONTROL DEVICES.
16. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) DAYS AND AFTER ANY RAINFALL EVENT.

EROSION CONTROL NOTES (CONT.):

17. ALL SLOPES 2:1 AND SEDIMENT BASINS SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS NORTH AMERICAN GREEN SC150 OR EQUIVALENT. IN ADDITION TO GRASSING/HYDROSEEDING.
18. SEE DETAILS FOR Ds2 AND Ds3 SEEDING AND MULCHING REQUIREMENTS.
19. STORM DRAINAGE SYSTEM SHALL BE INSTALLED AS SOON AS POSSIBLE DURING THE CONSTRUCTION PROCESS, AND ALL RUNOFF SHALL BE DIRECTED TO THE DRAINAGE SYSTEM.
20. PRIOR TO STORM DRAINAGE SYSTEM INSTALLATION ALL RUNOFF LEAVING THE SITE SHALL BE FILTERED THROUGH SILT FENCES AND FILTERS PRIOR TO DISCHARGE OFFSITE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THIS REQUIREMENT ONSITE DURING ALL PHASES OF CONSTRUCTION.
21. THIS PROJECT DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE AS DEFINED BY THE F.E.M.A. "FLOOD INSURANCE RATE MAP" NUMBER 13127CC214H, DATED 01/05/2018.
22. WETLANDS DO NOT NOT EXIST ON SITE.
23. SITE DOES NOT LIE WITHIN 200 FEET OF A JURISDICTIONAL STREAM.
24. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
25. AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.
26. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IN DEEMED NECESSARY BY ON-SITE INSPECTION.
27. THE RECEIVING WATER FOR THE PROJECT IS AN UNNAMED TRIBUTARY OF THE LITTLE SATILLA RIVER. THE PROJECT IS NOT WITHIN ONE LINEAR MILE FROM AN IMPAIRED STREAM SEGMENT.
28. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25 FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
29. EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES TO BE INSPECTED DAILY.
30. WEEKLY EROSION AND SEDIMENT CONTROL REPORTS SHALL BE SUBMITTED TO THE DEVELOPMENT DEPARTMENT STARTING WITH THE ISSUANCE OF THE DEVELOPMENT PERMIT AND ENDING WHEN THE PROJECT IS RELEASED BY THE INSPECTOR.
31. INSPECTIONS BY QUALIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE AND THE ASSOCIATED RECORDS SHALL BE KEPT ON SITE IN COMPLIANCE WITH GAR. 100001.
32. NO ALTERNATE BMPs WERE USED IN THIS PROJECT.
33. SEE SHEETS 501 AND 502 FOR EROSION CONTROL DETAILS.

EROSION CONTROL LEGEND:

Sd1-S	SILT FENCE – TYPE S
Co	CONSTRUCTION EXIT
Sd2-P	INLET SEDIMENT TRAP: CURB INLET PROTECTION
Du	DUST CONTROL
Ds1	DISTURBED AREA STABILIZATION
Ds2	DISTURBED AREA STABILIZATION
LOD	LIMITS OF DISTURBANCE
Cd-Hb	STRAW – BALE CHECK DAM
	SOIL TYPE: PELHAM LOAMY (Pe)
Fr	FILTER RING

SITE AREA SUMMARY:

TOTAL SITE AREA = 0.024 ACRES
TOTAL DISTURBED AREA = 0.12 ACRES

24-HOUR CONTACT:

NAME: TODD KLINE
COMPANY: BGJWSC
NUMBER: 912-261-7122

BID DOCUMENTS

GEORGIA REGISTERED No. PE036753 PROFESSIONAL ENGINEER JOSHUA S PETERSEN
05/30/2023

GEORGIA811. Utilities Protection Center, Inc. Know what's below. Call before you dig.

No.	REVISIONS	DATE	BY

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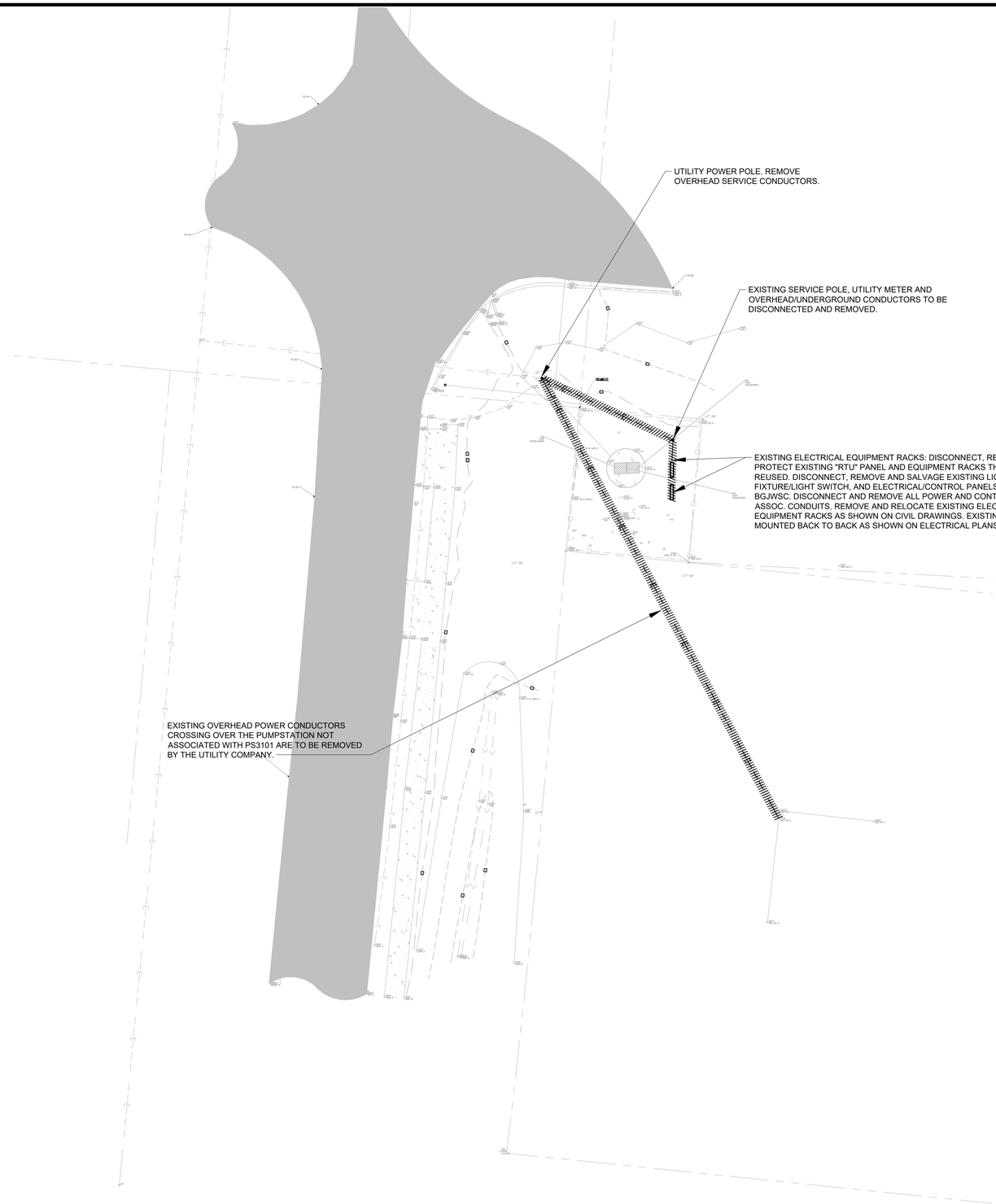
LICENSED PROFESSIONAL: JOSHUA S PETERSON, P.E.
GEORGIA LICENSE NUMBER 036753
DATE:

KHA PROJECT 045709000
DATE MAY 2023
SCALE AS SHOWN
DESIGNED BY JSP
DRAWN BY ACE
CHECKED BY KBS

PS3101 EROSION CONTROL & SEDIMENT PLAN

PUMP STATION UPGRADES PS3101
PREPARED FOR BGJWSC

SHEET NUMBER
202



SYMBOL LEGEND:

EXISTING ELECTRICAL TO BE DEMOLISHED

EDT-THA ARCHITECTURE

GEORGIA REGISTERED No. 021296 PROFESSIONAL ENGINEER KHOSROW R. ABDI

03/06/2023

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

GEORGIA811 Utilities Protection Center, Inc. Know what's below. Call before you dig.

NORTH

1 / 206 PS3101 ELECTRICAL DEMOLITION SITE PLAN

SCALE: 1" = 10'

GRAPHIC SCALE IN FEET 0 7.5 15 30

BID DOCUMENTS

No.	REVISIONS	DATE	BY

Kimley»Horn

12740 GRAN BAY PARKWAY WEST, SUITE 2350 JACKSONVILLE, FLORIDA 32258 PHONE: 904-828-3900

WWW.KIMLEY-HORN.COM REGISTRY NO. 696

LICENSED PROFESSIONAL:

KHOSROW ABDI, P.E.

GEORGIA LICENSE NUMBER 021296

DATE:

KHA PROJECT 045709000

DATE MARCH 2023

SCALE: AS SHOWN

DESIGNED BY: KA

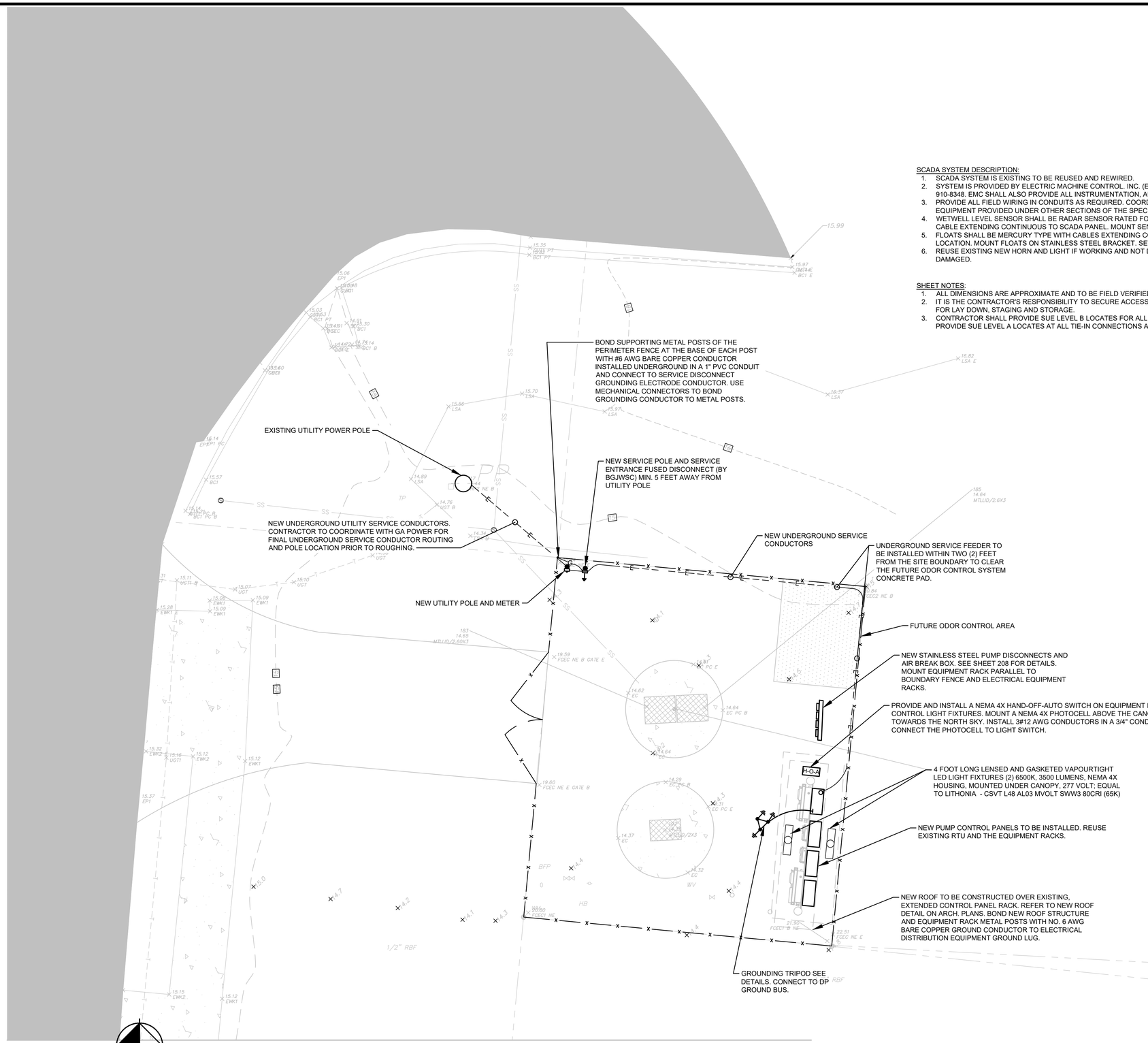
DRAWN BY: TF

CHECKED BY: KA

PS3101 ELECTRICAL DEMOLITION PLAN

ENGINEERRING SERVICES FOR PUMP STATION UPGRADES FOR PS3101 PREPARED FOR BGJWSC

SHEET NUMBER 206



1 / 207 PS3101 ELECTRICAL SITE PLAN

SCALE: 1" = 10'

GRAPHIC SCALE IN FEET
0 2.5 5 10

SCADA SYSTEM DESCRIPTION:

1. SCADA SYSTEM IS EXISTING TO BE REUSED AND REWIRED.
2. SYSTEM IS PROVIDED BY ELECTRIC MACHINE CONTROL, INC. (EMC). CONTACT JAMES DENTON (205) 661-3998, CELL (205) 910-8348. EMC SHALL ALSO PROVIDE ALL INSTRUMENTATION, AUTOMATIC TRANSFER SWITCH, AND VFDs.
3. PROVIDE ALL FIELD WIRING IN CONDUITS AS REQUIRED. COORDINATE ALL CONNECTIONS, ALARMS AND CONTROL WITH EQUIPMENT PROVIDED UNDER OTHER SECTIONS OF THE SPECIFICATIONS.
4. WETWELL LEVEL SENSOR SHALL BE RADAR SENSOR RATED FOR CLASS I, DIV I, LOCATION MODEL C21 VEGA WITH SENSOR CABLE EXTENDING CONTINUOUS TO SCADA PANEL. MOUNT SENSOR ON STAINLESS STEEL BRACKET. CALIBRATE IN FIELD.
5. FLOATS SHALL BE MERCURY TYPE WITH CABLES EXTENDING CONTINUOUS TO FIELD JUNCTION BOX, RATED CLASS I, DIV I, LOCATION. MOUNT FLOATS ON STAINLESS STEEL BRACKET. SET ELEVATION IN FIELD.
6. REUSE EXISTING NEW HORN AND LIGHT IF WORKING AND NOT DAMAGED. REPLACE WITH NEW TO MATCH EXISTING IF DAMAGED.

SHEET NOTES:

1. ALL DIMENSIONS ARE APPROXIMATE AND TO BE FIELD VERIFIED.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ACCESS TO AREAS OUTSIDE OF BGJWSC EASEMENTS, AS REQUIRED, FOR LAY DOWN, STAGING AND STORAGE.
3. CONTRACTOR SHALL PROVIDE SUE LEVEL B LOCATES FOR ALL UTILITIES WITHIN PUMP STATION SITE. CONTRACTOR SHALL PROVIDE SUE LEVEL A LOCATES AT ALL TIE-IN CONNECTIONS AND AT ANY POTENTIAL CONFLICT LOCATIONS.

EDT-THA ARCHITECTURE

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 021296 KHOSROW R. ABDI

03/21/2023

No.	REVISIONS	DATE	BY

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LICENSED PROFESSIONAL:
KHOSROW ABDI, P.E.
GEORGIA LICENSE NUMBER 021296
DATE:

KHA PROJECT 045709000
DATE MARCH 2023
SCALE: AS SHOWN
DESIGNED BY: KA
DRAWN BY: TF
CHECKED BY: KA

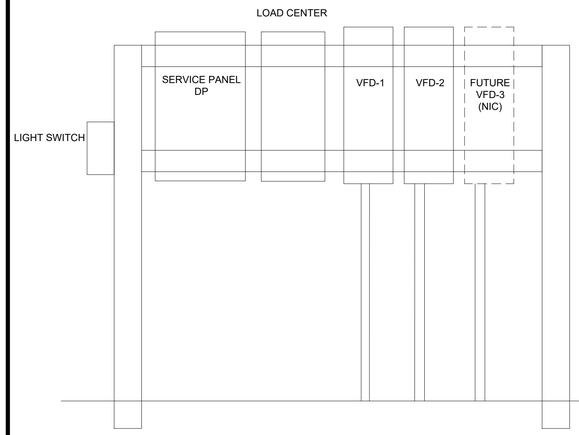
PS3101 ELECTRICAL SITE PLAN

ENGINEERRING SERVICES FOR PUMP STATION UPGRADES FOR PS3101 PREPARED FOR BGJWSC

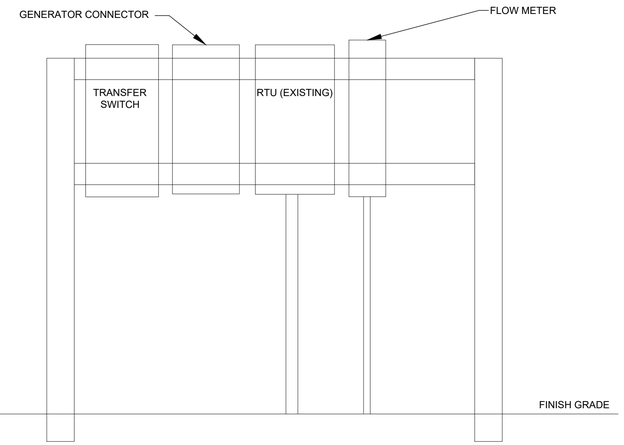
GEORGIA811 Utilities Protection Center, Inc.
Know what's below. Call before you dig.

BID DOCUMENTS

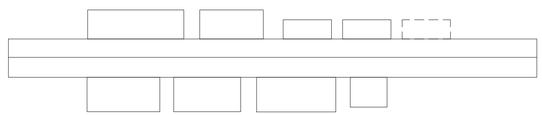
SHEET NUMBER
207



EQUIPMENT RACK - FRONT ELEVATION



EQUIPMENT RACK - BACK ELEVATION

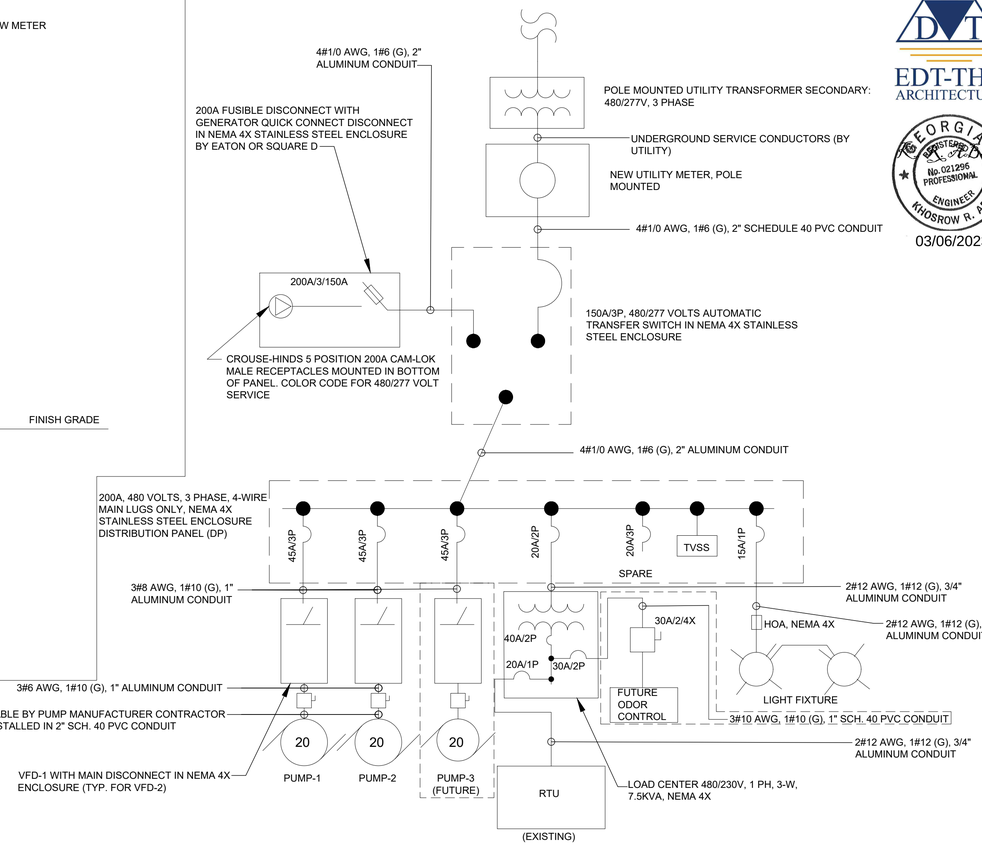


EQUIPMENT RACK - TOP PLAN

1 / 208 PUMP STATION PS3101 - ELECTRICAL EQUIPMENT RACK ELEVATION

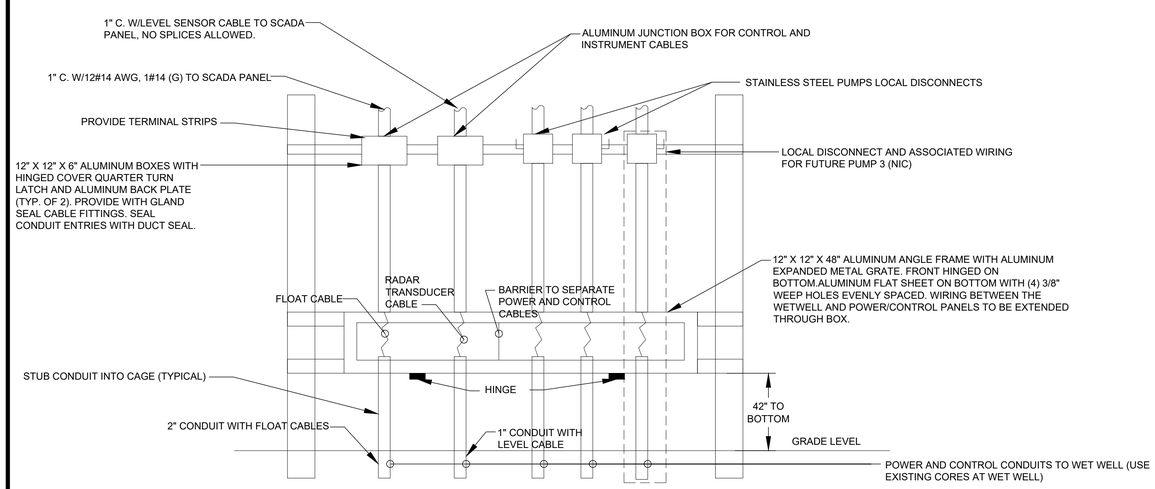
SCALE: N.T.S.

NOTES:
EXISTING EQUIPMENT RACK TO BE REMOVED AND RELOCATED WHERE SHOWN ON CIVIL SITE PLAN.



2 / 208 PUMP STATION PS3101 - SINGLE LINE DIAGRAM

SCALE: N.T.S.



PUMP STATION PS3101 - RACK MOUNTED AIR BREAK BOX FOR LOCAL PUMPS DISCONNECTS AND JUNCTION BOXES FOR FLOAT SWITCHES AND RADAR LEVEL TRANSDUCER

3 / 208

SCALE: N.T.S.

GEORGIA811 Utilities Protection Center, Inc.
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EDT-THA ARCHITECTURE

GEORGIA REGISTERED No. 021296 PROFESSIONAL ENGINEER KHOSROW R. ABDI
03/06/2023

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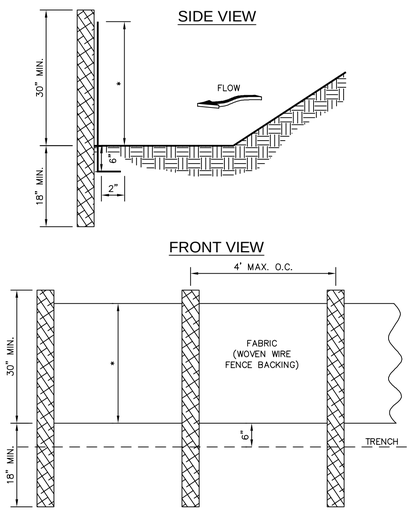
DATE MARCH 2023
SCALE: AS SHOWN
DESIGNED BY: KA
DRAWN BY: TF
CHECKED BY: KA

PS3101 ELECTRICAL DIAGRAMS AND DETAILS

ENGINEERING SERVICES FOR PUMP STATION UPGRADES FOR PS3101 PREPARED FOR BGJWSC

SHEET NUMBER
208

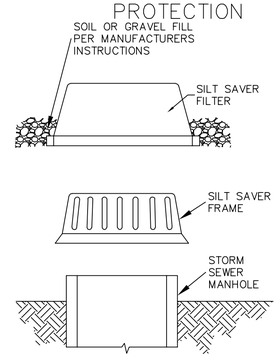
Sd1-S SILT FENCE - TYPE SENSITIVE



NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

SILT FENCE - TYPE SENSITIVE (Sd1-S)

Sd2-SS INLET SEDIMENT TRAP: SILT SAVER DROP INLET PROTECTION



1. EXCAVATE APPROXIMATELY 4" TO 6" BELOW. THE TOP OF THE INLET STRUCTURE.
2. PLACE THE FRAME ONTO THE INLET STRUCTURE, ENSURING PROPER SEATING OF FRAME TO STRUCTURE.
3. SLIDE THE FILTER OVER THE FRAME.
4. FILL THE FILTER POCKETS WITH SOIL, #57 GRAVEL OR EQUIVALENT. THE FILTERPOCKETS SHOULD BE COMPLETELY FILLED TO ENSURE A GOOD SEAL BETWEEN THE GROUND AND INLET STRUCTURE.
5. BACKFILL AROUND THE FRAME AND FILTER ASSEMBLY IS NOT REQUIRED TO COMPLETE INSTALLATION; HOWEVER, BACKFILLING MAY BE NECESSARY TO COMPLETE EXCAVATION REQUIREMENTS FOR THE SITE.
6. THE TRAP SHALL BE INSPECTED DAILY AND AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE HEIGHT OF THE TRAP.

INLET SEDIMENT TRAP - SILT SAVER (Sd2-SS)

TEMPORARY METHODS:
MULCHES - REFER TO Ds1 (DISTURBED AREA STABILIZATION)

VEGETATIVE COVER - REFER TO Ds2 (DISTURBED AREA STABILIZATION WITH TEMPORARY SEEDING)

TILLAGE - ROUGHEN AND BRING CLODS TO THE SURFACE BY USE OF CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART

IRRIGATION - SITE SPRINKLED WITH WATER UNTIL WET. REPEAT AS NEEDED

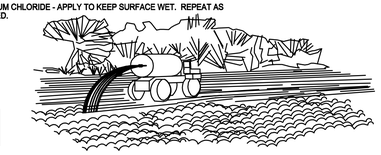
BARRIERS - FENCES, HAY BALES, AND CRATE WALLS PLACED AT INTERVALS 15 TIMES THEIR HEIGHT AND PERPENDICULAR TO AIR CURRENTS

CALCIUM CHLORIDE - APPLY TO KEEP SURFACE WET. REPEAT AS NEEDED.

PERMANENT METHODS:
PERMANENT VEGETATION - REFER TO Ds3 (DISTURBED AREA STABILIZATION WITH PERMANENT VEGETATION)

TOPSOILING - COVERING THE SURFACE WITH A LESS EROSIVE SOIL MATERIAL

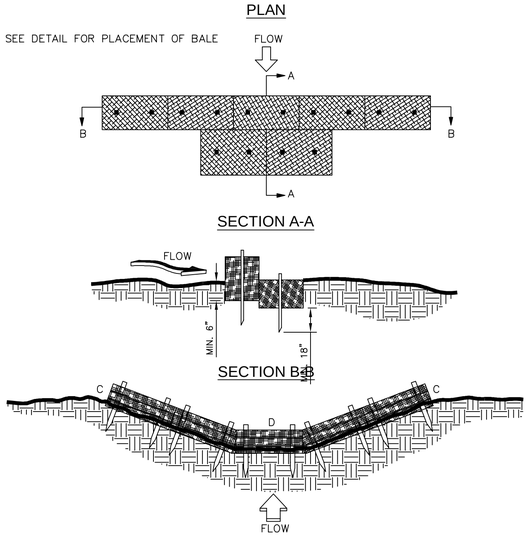
STONE - SURFACE WITH CRUSHED STONE OR COARSE GRAVEL (SEE Cr - CONSTRUCTION ROAD STABILIZATION)



Du

DUST CONTROL ON DISTURBED AREAS (Du)

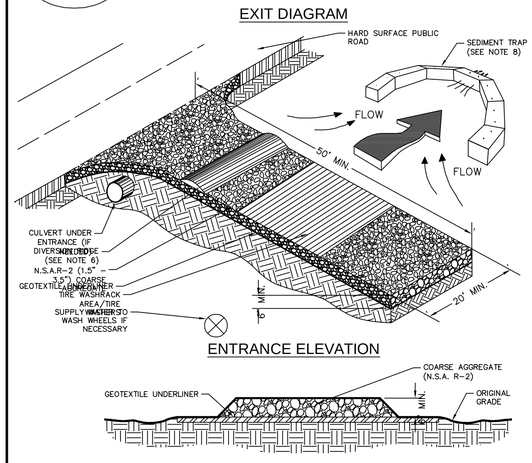
Cd-Hb CHECK DAM: STRAW-BALE



NOTES:
1. BALES SHOULD BE BOUND WITH WIRE OR NYLON STRING AND SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. REMOVE #4 REBAR AFTER STRAW BALES ARE NO LONGER IN PLACE.
3. POINT C OF SECTION B-B SHOULD ALWAYS BE HIGHER THAN POINT D.

CHECK DAM: STRAW-BALE (Cd-Hb)

Co CRUSHED STONE CONSTRUCTION EXIT



NOTES:
1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

CONSTRUCTION EXIT (Co)

BID DOCUMENTS

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. PE036753 JOSH PETERSEN 06/30/2023

GEORGIA811. Utilities Protection Center, Inc. Know what's below. Call before you dig.

No.	REVISIONS	DATE	BY
1		-	-

Kimley»Horn

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KHA PROJECT 045709000
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EROSION CONTROL & SEDIMENT PLAN DETAILS

PUMP STATION UPGRADES PS3101
PREPARED FOR BGJWSC

SHEET NUMBER
501

MATERIAL	DEPTH
DRY STRAW OR HAY	2" TO 4"
WOOD WASTE (SAWDUST, BARK, CHIPS)	2" TO 3"
CUTBACK ASPHALT (SLOW CURING)	1200 GAL. / ACRE (1/4 GAL. / SQ.YD.)
BLACK POLYETHYLENE FILM	COMPLETELY COVER AREA; HOLD IN PLACE WITH SOIL ON OUTER EDGE

Ds1 MULCHING

FERTILIZER REQUIREMENTS FOR PERMANENT VEGETATION

TYPES OF SPECIES	PLANTING YEAR	FERTILIZER (N-P-K)	RATE (LBS./ACRE)	N TOP DRESSING RATE (LBS./ACRE)
COOL SEASON GRASSES	FIRST	6-12-12	1500	50-100
	SECOND	6-12-12	1000	-
	MAINTENANCE	10-10-10	400	30
COOL SEASON GRASSES & LEGUMES	FIRST	6-12-12	1500	0-50
	SECOND	0-10-10	1000	-
	MAINTENANCE	0-10-10	400	-
GROUND COVERS	FIRST	10-10-10	1300	-
	SECOND	10-10-10	1300	-
	MAINTENANCE	10-10-10	1100	-
PINE SEEDLINGS	FIRST	20-10-5	ONE 21-GRAM PELLET PER SEEDLING PLACED IN THE CLOSING HOLE	-
SHRUB LESPEDEZA	FIRST	0-10-10	700	-
	MAINTENANCE	0-10-10	700	-
TEMPORARY GROUND COVER CROPS SEEDED ALONE	FIRST	10-10-10	500	30
WARM SEASON GRASSES	FIRST	6-12-12	1500	50-100
	SECOND	6-12-12	800	50-100
	MAINTENANCE	10-10-10	400	30
WARM SEASON GRASSES & LEGUMES	FIRST	6-12-12	1500	50
	SECOND	0-10-10	1000	-
	MAINTENANCE	0-10-10	400	-

Ds3 PERMANENT SEEDING

APPLY AGRICULTURAL LIME AS PRESCRIBED BY SOIL TESTS OR AT A RATE OF 1-2 TONS PER ACRE

PLANTS, PLANTING RATES, AND PLANTING DATES FOR TEMPORARY COVER OR COMPANION CROPS

SPECIES	RATES PER 1,000 SQ. FT.	RATES PER ACRE	PLANTING DATES BY REGION M-L	P	C
BARLEY	3.3 LBS.	3 BU.	9/1-10/31	9/15-11/15	10/1-12/31
OATS	2.9 LBS.	4 BU.	9/15-11/15	9/15-11/15	9/15-11/15
TRITCALE	3.3 LBS.	3 BU.	-	-	10/15-12/15
RYEGRASS, ANNUAL	0.9 LBS.	40 LBS.	8/15-11/15	9/1-12/15	9/15-12/31
RYE LESPEDEZA,	0.6 LBS.	0.5 BU.	8/15-10/31	9/15-11/30	10/1-12/31
ANNUAL	0.9 LBS.	40 LBS.	3/1-3/31	3/1-3/31	2/1-2/28
WEEPING LOVEGRASS	0.1 LBS.	4 LBS.	4/1-5/31	4/1-5/31	3/1-5/31
SUDANGRASS	1.4 LBS.	60 LBS.	4/1-8/31	4/1-8/31	3/1-7/31
MILLET, BROWNTOP	0.9 LBS.	40 LBS.	4/15-6/15	4/15-6/30	4/15-6/30
MILLET, PEARL	1.1 LBS.	50 LBS.	5/15-7/15	5/1-7/31	4/15-8/15
WHEAT	4.1 LBS.	3 BU.	9/15-11/30	10/1-12/15	10/15-12/31

1. TEMPORARY COVER CROPS ARE VERY COMPETITIVE AND WILL CROWN OUT PERENNIALS IF PLANTED TOO HEAVILY.

2. REDUCE SEEDING RATES BY 50% WHEN DRILLED.

3. UNUSUAL SITE CONDITIONS MAY REQUIRE HEAVIER SEEDING RATES.

4. SEEDING RATES MAY NEED TO BE ALTERED TO FIT TEMPERATURE VARIATIONS AND LOCAL CONDITIONS.

M-L REPRESENTS THE MOUNTAIN, BLUE RIDGE, AND RIDGES & VALLEYS MLRAS.

P REPRESENTS THE SOUTHERN PIEDMONT REGION MLRA.

C REPRESENTS THE SOUTHERN COASTAL PLAIN, SAND HILLS, BLACK LANDS, AND ATLANTIC COAST FLATWOODS MLRAS.

FERTILIZER REQUIREMENTS FOR TEMPORARY VEGETATION

TYPES OF SPECIES	PLANTING YEAR	FERTILIZER (N-P-K)	RATE (LBS./ACRE)	N TOP DRESSING RATE (LBS./ACRE)
COOL SEASON GRASSES	FIRST	6-12-12	1500	50-100
	SECOND	6-12-12	100	-
	MAINTENANCE	10-10-10	400	30
COOL SEASON GRASSES & LEGUMES	FIRST	6-12-12	1500	0-50
	SECOND	0-10-10	1000	-
	MAINTENANCE	0-10-10	400	-
TEMPORARY COVER CROPS	FIRST	10-10-10	500	30
SEEDED ALONE	FIRST	6-12-12	1500	50-100
WARM SEASON	SECOND	6-12-12	800	50-100
GRASSES	MAINTENANCE	10-10-10	400	30

Ds2 TEMPORARY SEEDING

PLANTS, PLANTING RATES, AND PLANTING DATES FOR PERMANENT COVER

TYPES OF SPECIES	RATES PER ACRE	RATES PER 1,000 SF	PLANTING DATES BY REGION M-L	P	C	REMARKS
BAHIA, PENSACOLA ALONE OR WITH TEMPORARY COVER WITH PERENNIALS	60 LBS. 30 LBS.	1.4 LBS. 0.7 LBS.	-	4/1-5/31	3/1-5/31	LOW GROWING AND SOD FORMING. ALLOW TO ESTABLISH. WILL SPREAD INTO BERMUDA LAWNS.
BAHIA, WILMINGTON ALONE OR WITH TEMPORARY COVER WITH PERENNIALS	60 LBS. 30 LBS.	1.4 LBS. 0.7 LBS.	3/15-5/31	3/1-5/31	-	LOW GROWING AND SOD FORMING. ALLOW TO ESTABLISH. WILL SPREAD INTO BERMUDA LAWNS.
BERMUDA, COMMON (HULLED SEED) ALONE OR WITH TEMPORARY COVER WITH PERENNIALS	10 LBS. 6 LBS.	0.2 LBS. 0.1 LBS.	-	4/1-5/31	3/15-5/31	QUICK COVER, LOW GROWING AND SOD FORMING. NEEDS FULL SUN
BERMUDA, COMMON (UNHULLED SEED) ALONE OR WITH TEMPORARY COVER WITH PERENNIALS	10 LBS. 6 LBS.	0.2 LBS. 0.1 LBS.	-	10/1-2/28	11/1-1/31	PLANT WITH WINTER ANNUALS PLANT WITH TALL FESCUE
BERMUDA SPRIGS TEMPORARY COVER	40 CF SOD PLUGS 3' X 3'	0.9 CF	4/15-6/15	4/1-6/15	4/1-5/31	1 CF = 650 SPRIGS 1 BU. = 1.25 CF OR 800 SPRIGS.
CENTIPEDE	BLOCK SOD ONLY		-	11/1-5/31	11/1-5/31	DROUGHT TOLERANT; FULL SUN OR PARTIAL SHADE; EFFECTIVE ADJACENT TO CONCRETE AND IN CONCENTRATED FLOW AREAS; IRRIGATION NEEDED UNTIL FULLY ESTABLISHED; DO NOT PLANT NEAR PASTURES
CROWN VETCH WITH WINTER ANNUALS OR COOL WINTER GRASSES	15 LBS.	0.3 LBS	9/1-10/15	9/1-10/10	-	MIX WITH 30 LBS. TALL FESCUE OF 15 LBS. RYE; INNOCULATE SEED; ONLY NORTH OF ATLANTA, DENSE GROWTH; DROUGHT TOLERANT AND FIRE RESISTENT
FESCUE, TALL ALONE WITH OTHER PERENNIALS	50 LBS. 30 LBS.	1.1 LBS 0.7 LBS	3/1-4/1 - OR - 8/15-10/15	9/1-10/15 - OR - 2/15-4/15	-	NOT FOR DROUGHTY SOILS. MIX WITH PERENNIAL LESPEDEZAS OR CROWNVETCH. APPLY TOPDRESSING IN SPRING FOLLOWING FALL PLANTINGS. NOT FOR HEAVY USE AREAS OR ATHLETIC FIELDS. 227,000 SEED PER POUND.
LESPEDEZA, SERICEA SCARIFIED UNSCARIFIED SEED-BEARING HAY	60 LBS.	1.4 LBS	4/1-5/31	3/15-5/31	3/1-5/15	WIDELY ADAPTED AND LOW MAINTENANCE. TAKES 2-3 YEARS TO ESTABLISH. EXCELLENT ON ROADBANKS. INOCULATE SEED WITH EL INOCULANT. MIX WITH WEEPING LOVEGRASS, COMMON BERMUDA, HAHIA, OR TALL FESCUE.
	75 LBS.	1.7 LBS	9/1-2/28	9/1-2/28	9/1-2/28	MIX WITH TALL FESCUE OR WINTER ANNUALS.
	3 TONS	138 LBS.	10/1-2/28	10/1-1/31	9/15-1/15	CUT WHEN SEED IS MATURE, BUT BEFORE IT SHATTERS. ADD TALL FESCUE OR WINTER ANNUALS.
LESPEDEZA, AMBRO VIRGETA OR APPALOW SCARIFIED UNSCARIFIED	60 LBS. 75 LBS.	1.4 LBS 1.7 LBS	4/1-5/31 9/1-2/28	3/15-5/31 9/1-2/28	3/15-5/15 9/1-2/28	SPREADING GROWTH WITH HEIGHT OF 18"-24". GOOD IN URBAN AREAS. MIX WITH WEEPING LOVEGRASS, COMMON BERMUDA, BAHIA, TALL FESCUE, OR WINTER ANNUALS. DO NOT MIX WITH SERICEA LESPEDEZA. SLOW TO DEVELOP SOLID STANDS. INOCULATE SEED WITH EL INOCULANT.
LESPEDEZA, SHRUB (LESPEDEZA BICOLOR OR LESPEDEZA THUMBERGIL) PLANTS	3' X 3' SPACING		10/1-3/31	11/1-3/15	11/15-2/28	PLANT IN SMALL CLUMPS FOR WILDLIFE FOOD AND COVER.
LOVEGRASS, WEEPING ALONE WITH OTHER PERENNIALS	4 LBS. 2 LBS.	0.1 LBS 0.05 LBS	4/1-5/31	3/15-5/31	3/1-5/31	QUICK COVER. DROUGHT TOLERANT. GROWS WELL WITH SERICEA LESPEDEZA ON ROADBANKS.
MAIDENCANE SPRIGS	2' X 3' SPACING		2/1-3/31	2/1-3/31	2/1-3/31	FOR VERY WET SITES SUCH AS RIVERBANKS AND SHORELINES. DIG SPRIGS LOCALLY. MAY CLOG CHANNELS.
PANICGRASS, ATLANTIC COASTAL	20 LBS.	0.5 LBS	-	3/1-4/30	3/1-4/30	GROWS WELL ON COASTAL SAND DUNES, BORROW AREAS, AND GRAVEL PITS. PROVIDES WINTER COVER FOR WILDLIFE. MIX WITH SERICEA LESPEDEZA EXCEPT ON SAND DUNES.
REED CANARY GRASS ALONE WITH OTHER PERENNIALS	50 LBS. 30 LBS.	1.1 LBS 0.7 LBS	6/15-10/15	9/1-10/15	-	GROWS SIMILAR TO TALL FESCUE
SUNFLOWER, 'AZTEC' MAXIMILLIAN	10 LBS.	0.2 LBS	4/15-5/31	4/15-5/31	4/1-5/31	MIX WITH WEEPING LOVEGRASS, LEGUMES, OR OTHER LOW GROWING GRASSES.

Ds3 PERMANENT GRASSING

DISTURBED AREA STABILIZATION

BID DOCUMENTS

GEORGIA REGISTERED No. PE036753 PROFESSIONAL ENGINEER JOSHUA PETERSEN 06/30/2023

GEORGIA811. Utilities Protection Center, Inc. Know what's below. Call before you dig.

No.	REVISIONS	DATE	BY
1		-	-

Kimley»Horn

12740 GRAN BAY PARKWAY WEST, SUITE 2350
JACKSONVILLE, FLORIDA 32258
PHONE: 904-828-3900
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

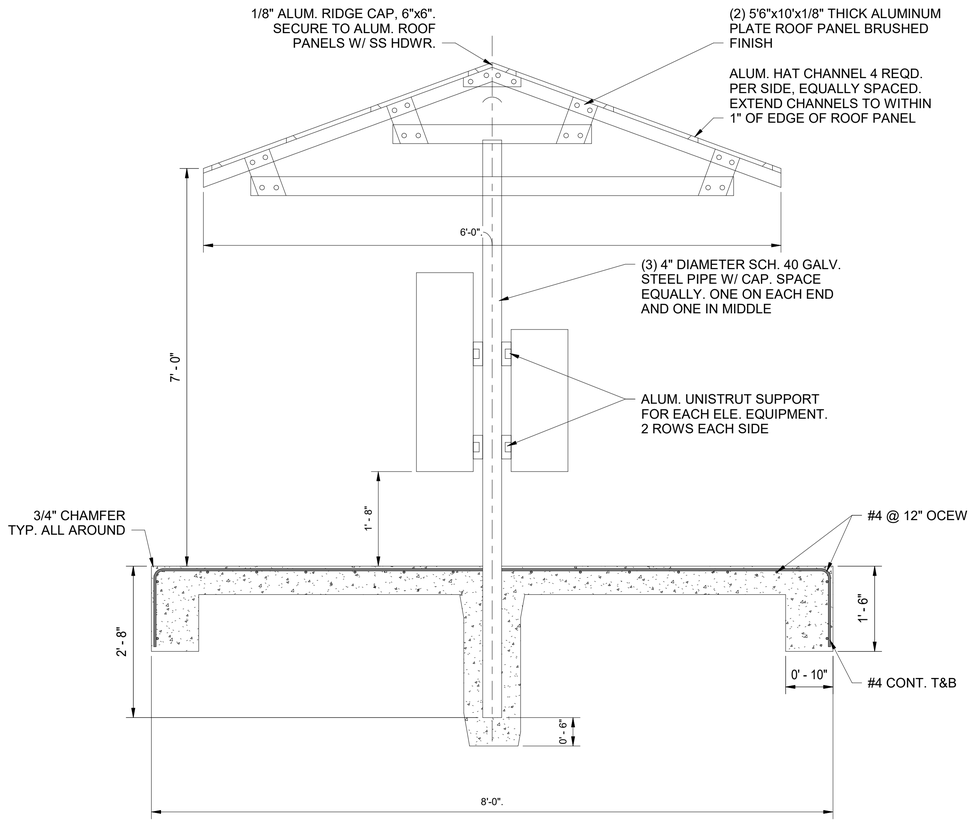
LICENSED PROFESSIONAL
JOSHUA S PETERSON, P.E.
GEORGIA LICENSE NUMBER 036753
DATE:

KHA PROJECT 045709000
DATE MAY 2023
SCALE AS SHOWN
DESIGNED BY JSP
DRAWN BY ACE
CHECKED BY KBS

EROSION CONTROL & SEDIMENT PLAN DETAILS

PUMP STATION UPGRADES PS3101
PREPARED FOR BGJWSC

SHEET NUMBER
502

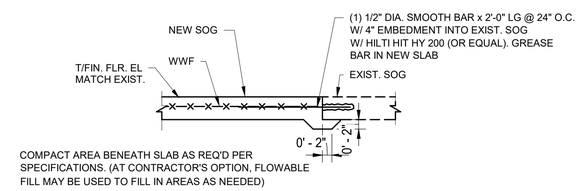


NOTE:
1. ALL ATTACHMENT HARDWARE SHALL BE 316 STAINLESS STEEL. FASTERNERS SHALL BE GASKETED TYPE. ROOF TO BE WELDED ON TO ALUM. HAT CHANNEL.
2. FOOTING SHALL BE 18FT LONG AND 8FT WIDE. TURNDOWN SHALL BE ALL AROUND.
3. PROVIDE 6" GRAVEL BELOW THE SLAB.
4. FOR JUNCTION AND AIR BREAK BOX POSTS PROVIDE 24" DIAMETER AND 3FT DEEP FOOTING WITH (6) #5 VERTICALS AND #3 TIES AT 6" O.C. EMBED POST MINIMUM 2FT INTO THE FOOTING. FOOTING SHALL BE CHAMPHERED ON TOP.
5. PROVIDE SIMILAR CANOPY FOR BOTH PS3101 AND PS401 LOCATIONS.

1 / 507 CANOPY DETAIL

3/4" = 1'-0"

GRAPHIC SCALE IN INCHES
0 1' 2'
0 3/4" 1-1/2"



NOTES:
1. SEE ARCH & STRUCTURAL PLANS FOR SLAB REPLACEMENT LOCATIONS
2. PROVIDE WWM 4x4xW2.9xW2.9 IN THE SLAB 2" FROM THE TOP.
3. CONTRACTOR TO MATCH THICKNESS OF NEW CONCRETE TO EXISTING.

4 / 507 SLAB-ON-GRADE REPAIR DETAIL

3/4" = 1'-0"

GRAPHIC SCALE IN INCHES
0 1' 2'
0 3/4" 1-1/2"

GEORGIA REGISTERED No. PE042400 PROFESSIONAL ENGINEER BALA MALLESWARA RAO GULIPALLI
03/06/2023

BID DOCUMENTS

EDT-THA ARCHITECTURE

No.	REVISIONS	DATE	BY

Kimley»Horn

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LICENSED PROFESSIONAL:
BALA GULLIPALLI, P.E.
GEORGIA LICENSE NUMBER 042400
DATE:

KHA PROJECT 045709000
DATE MARCH 2023
SCALE: AS SHOWN
DESIGNED BY: BG
DRAWN BY: AT
CHECKED BY: BG

MISC. TYP. STRUCTURAL DETAILS AND SECTIONS

ENGINEERRING SERVICES FOR PUMP STATION UPGRADES FOR PS3101 PREPARED FOR BGJWSC

SHEET NUMBER
507

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