

2: 20088.0000 (UNDERGROUND) DRAINAGE CONSTRUCTION PLASTIC FORCE MAIN, WETLAND HDD - JAN 16, 2022 - 10:25 AM

EFFINGHAM COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY
 PIN: 032 90 0414

NOTES:
 1. ALL CONNECTIONS TO THE EXISTING WATER AND SEWER SYSTEMS SHALL BE COORDINATED WITH EFFINGHAM COUNTY. CONTRACTOR SHALL CONTACT EFFINGHAM COUNTY WATER AND SEWER DEPARTMENT A MINIMUM OF 72 HOURS PRIOR TO CONNECTION ACTIVITIES.
 2. ALL CONNECTIONS TO EXISTING SANITARY SEWERS, FORCE MAINS, AND WATER MAINS SHALL BE STAGED TO PREVENT INTERRUPTION IN SERVICE.
 3. ANY AND ALL TEMPORARY SEWAGE PUMPING REQUIRED TO MAKE SEWER SYSTEM CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO SEPARATE MEASUREMENT OR PAYMENT SHALL 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.
 4. IF ANY PIPES OR LATERALS ARE LOCATED IN THE FIELD THAT ARE NOT SHOWN ON THE CONSTRUCTION PLANS, CONTRACTOR SHALL NOTIFY EFFINGHAM COUNTY AND THE ENGINEER IMMEDIATELY.
 5. CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES (GEORGIA POWER AND KINDER MORGAN) PRIOR TO BEGINNING OF CONSTRUCTION ACTIVITIES.
 6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING PRIOR TO CONNECTING PROPOSED FORCE MAIN TO THE CITY OF SAVANNAH SYSTEM.

CONTRACTOR TO INSTALL AND MAINTAIN APPROVED BMP'S SUCH AS SEDIMENTATION BARRIER AND/OR HAYBALE ON THE PARAMETER OF LAUNCHING/RECEIVING PIT LOCATIONS.
 CONTRACTOR TO INSTALL AND MAINTAIN APPROVED BMP'S SUCH AS SEDIMENTATION BARRIER AND/OR HAYBALE ON THE PARAMETER OF LAUNCHING/RECEIVING PIT LOCATIONS.
 EXISTING GDOT FENCING. CONTRACTOR SHALL PROTECT FROM DAMAGE. SECTIONS WHICH ARE DAMAGED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
 CONTRACTOR TO INSTALL AND MAINTAIN APPROVED BMP'S SUCH AS SEDIMENTATION BARRIER AND/OR HAYBALE ON THE PARAMETER OF LAUNCHING/RECEIVING PIT LOCATIONS.

JACK & BORE 382 LF OF 36" STEEL CASING (MIN. WALL THICKNESS 0.500-INCH) WITH 394 LF OF 30" # FPVC WATER MAIN (C-900, DR-21)
 JACK & BORE 327 LF OF 24" STEEL CASING (MIN. WALL THICKNESS 0.500-INCH) WITH 337 LF OF 18" # FPVC FORCE MAIN (C-900, DR-18)
 203 LF (FROM MATCHLINE) OF 18" # PVC FORCE MAIN (C-900, DR-18)
 184 LF (TO MATCHLINE) OF 18" # FPVC FORCE MAIN (C-900, DR-18)
 266 LF OF 18" # FPVC FORCE MAIN (C-900, DR-18)
 30" WATER MAIN (BY OTHERS NOT INCLUDED IN THIS CONTRACT)

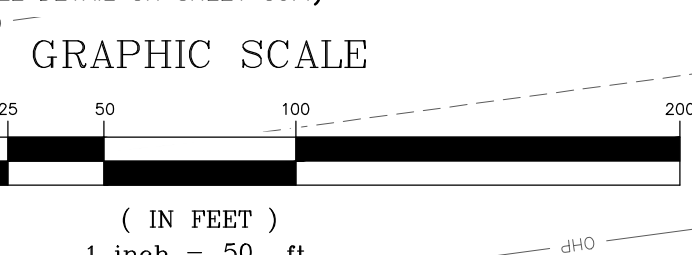
PROPOSED SEWER METERING STATION (SEE C2.1 FOR DETAILS)
 FUTURE WATER METERING STATION
 FUTURE BOOSTER PUMP STATION
 HORIZONTAL DIRECTIONAL DRILL 266 LF OF 18" # FPVC FORCE MAIN (C-900, DR-18)
 30" WATER MAIN (BY OTHERS NOT INCLUDED IN THIS CONTRACT)
 HORIZONTAL DIRECTIONAL DRILL 30" # FPVC WATER MAIN (C-900, DR-21) (BY OTHERS NOT INCLUDED IN THIS CONTRACT)
 15' PROPOSED ALL WEATHER ACCESS ROAD (SEE DETAIL ON SHEET C5.4)

WETLANDS
 N/F SAMUEL EDWARD MORGAN & G PHILL MORGAN
 PIN: 21045 01001
 18" 45° BEND D.I.R.J. (TYP. OF 2)
 N: 769499.8954
 E: 903542.4773
 18" 45° BEND D.I.R.J. (TYP. OF 2)
 N: 769499.8475
 E: 903497.9525
 4" COMBINATION AIR/VACUUM RELEASE VALVE IN MANHOLE
 N: 769487.2798
 E: 903494.2615
 18" PLUG VALVE IN MANHOLE
 N: 769477.0527
 E: 903493.5802

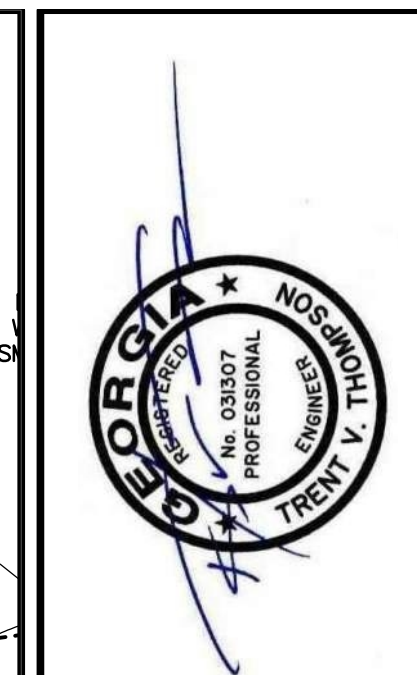
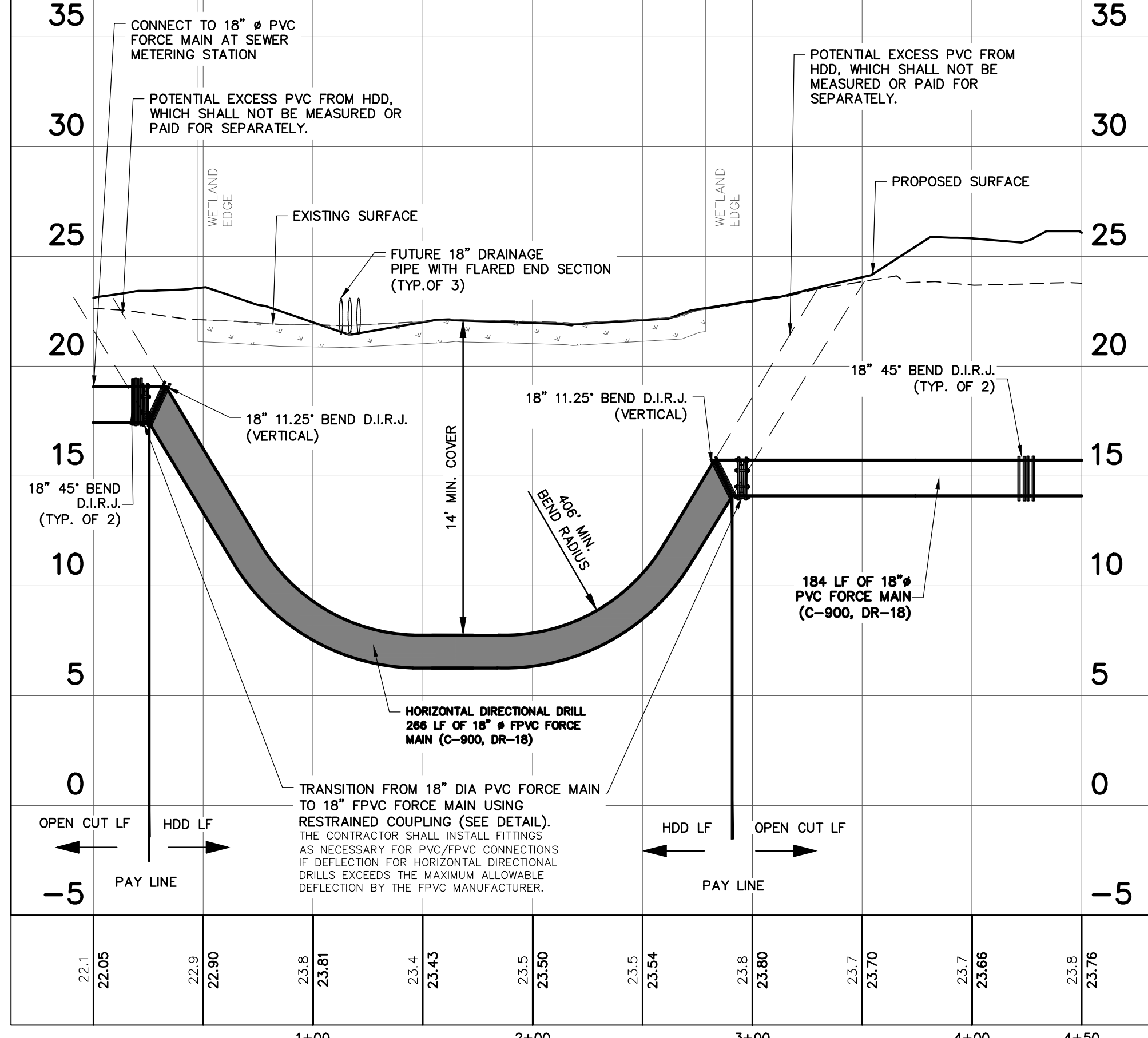
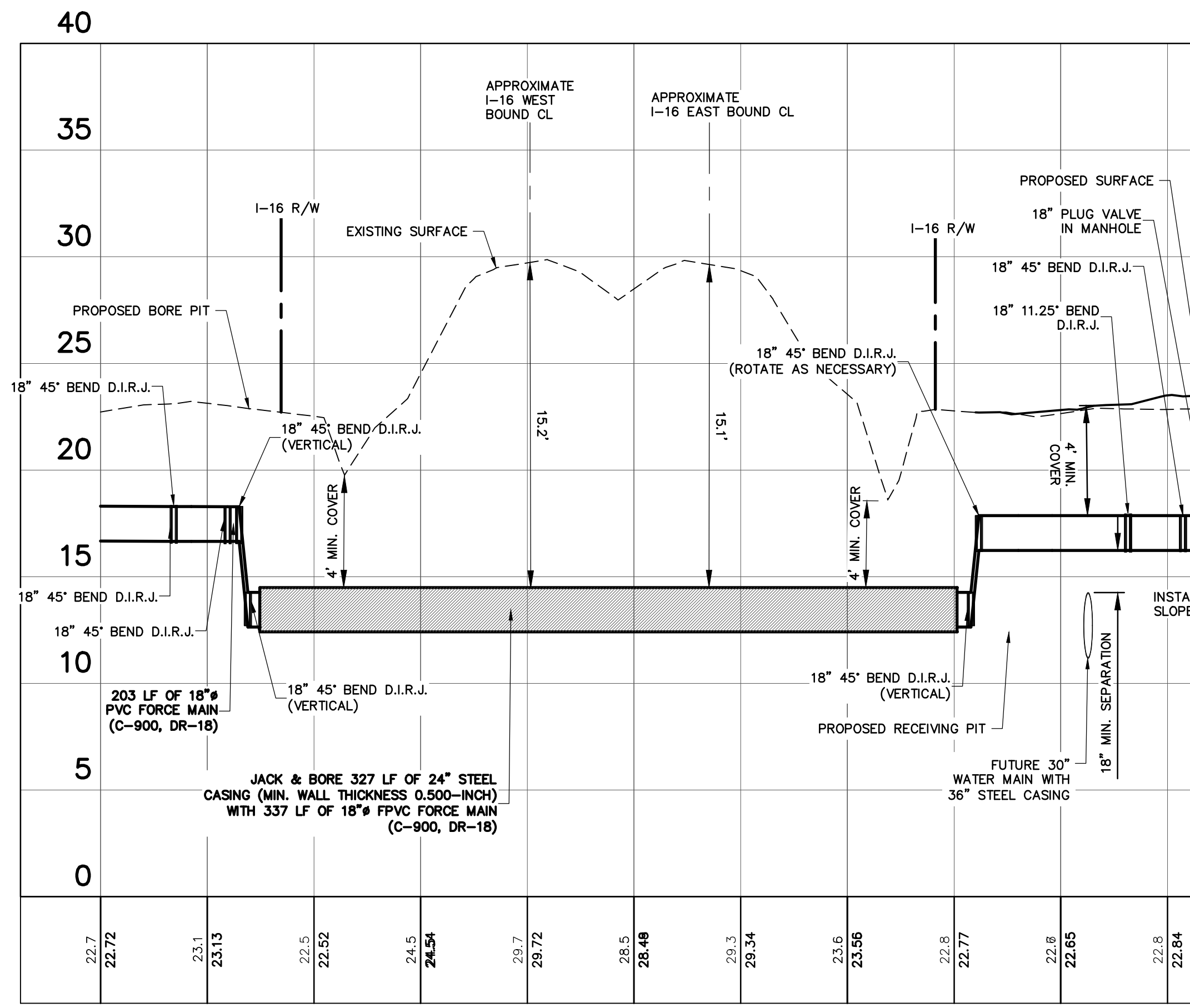
WATER & SEWER NOTES:
 1) ALL CONNECTIONS SHALL BE VIA WET TAPS, UNLESS OTHERWISE SPECIALLY STATED IN PLANS AND STAGED TO PREVENT INTERRUPTION OF SERVICE.
 2) ANY AND ALL TEMPORARY SEWAGE PUMPING REQUIRED TO MAKE SEWER SYSTEM CONNECTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO SEPARATE MEASUREMENT OR PAYMENT SHALL 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.
 3) CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CLEANING, PRESSURE TESTING, AND DISINFECTION OF MAINS PRIOR TO CONNECTION TO THE COUNTY SYSTEM.
 4) ALL DUCTILE IRON WATER MAIN PIPING SHALL INCLUDE POLYETHYLENE WRAP ENCASEMENT IN TUBE FORM IN ACCORDANCE WITH ANSI/AWWA C105/A21.5 LATEST REVISION. THE POLYETHYLENE ENCASEMENT SHALL HAVE A MINIMUM THICKNESS OF 8 MILS.
 5) ANY DUCTILE IRON WATER MAINS AND FORCE MAINS THAT COMES WITHIN 5- FEET OF A GAS LINE SHALL BE WRAPPED WITH V-BIO ENHANCED POLYETHYLENE ENCASEMENT, OR ACCEPTED EQUIVALENT. ENHANCED POLYETHYLENE WRAP SHALL INCLUDE A MIN OF 3 LAYERS OF CO-EXTRUDED LINER LOW-DENSITY POLYETHYLENE (LDPE) FILM FUSED INTO ONE AND INCLUDE ON INSIDE SURFACE INFUSED WITH ANTI-MICROBIAL COMPOUND TO MITIGATE MICROBIOLOGICALLY INFLUENCED CORROSION (MIC) AND VOLATILE CORROSION INHIBITOR (VCI) TO CONTROL GALVANIC CORROSION.
 6) ALL SANITARY SEWER STRUCTURES AND MANHOLES SHALL BE COATED IN INTERIOR AND EXTERIOR PER SPECIFICATION SECTION 02731. THE INTERIOR OF ALL MANHOLES AND STRUCTURES ALONG THE PROPOSED SANITARY SEWER SHALL BE LINED WITH A 100% SOLIDS EPOXY SYSTEM EQUIVALENT TO RAVEN 405 (SEE SPECIFICATION 02731).
 7) ALL KNOWN UTILITY FACILITIES ARE SHOWN SCHEMATICALLY ON PLANS, AND ARE NOT NECESSARILY ACCURATE IN LOCATION AS TO PLAN OR ELEVATION. UTILITIES SUCH AS SERVICE LINES OR UNKNOWN FACILITIES NOT SHOWN ON PLANS WILL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY UNDER THIS REQUIREMENT. "EXISTING UTILITIES" MEANS ANY UTILITY THAT EXISTS ON THE PROJECT IN ITS ORIGINAL, RELOCATED, OR NEWLY INSTALLED POSITION. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGED UNDERGROUND UTILITIES; EVEN WHEN SUCH UTILITIES ARE NOT SHOWN ON THE PLANS, THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES PRIOR TO BEGINNING WORK AND REQUEST AN ACCURATE FIELD LOCATION OF THEIR RESPECTIVE UTILITY LINES.

MATCH LINE - SEE SHEET NO. C1.23

MATCH LINE - SEE SHEET NO. C1.25



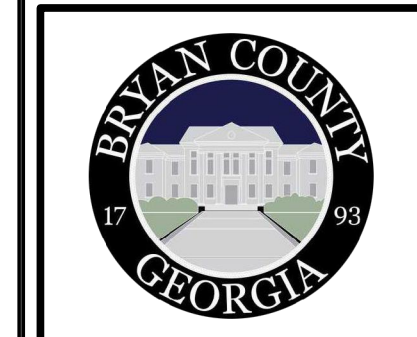
DIRECTIONAL DRILL NOTES:
 1. AT LEAST 30 DAYS PRIOR TO MOBILIZING EQUIPMENT, CONTRACTOR SHALL SUBMIT A DETAILED INSTALLATION PLAN TO ENGINEER. THE PLAN SHALL INCLUDE A DETAILED PLAN AND PROFILE OF BORE AND BE PLOTTED AT A SCALE NO SMALLER THAN 1 INCH EQUALS 50 FEET HORIZONTAL AND 1 INCH EQUALS 5 FEET VERTICAL. SEE SPECIFICATION SECTION 02559 FOR ADDITIONAL DETAILS.
 2. THE CONTRACTOR MAY MAKE CHANGES TO THE PROPOSED VERTICAL AND HORIZONTAL ALIGNMENT OF THE INSTALLATION AND THE LOCATION OF ENTRY AND EXIT POINTS, PROVIDED THESE CHANGES ARE SUBMITTED IN WRITING TO THE ENGINEER, AND ACCEPTED BY THE ENGINEER PRIOR TO CONSTRUCTION.
 3. ALL KNOWN UTILITY FACILITIES ARE SHOWN SCHEMATICALLY ON PLANS, AND ARE NOT NECESSARILY ACCURATE IN LOCATION AS TO PLAN OR ELEVATION. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES PRIOR TO BEGINNING WORK AND REQUEST AN ACCURATE FIELD LOCATION OF THEIR RESPECTIVE UTILITY LINES.



NO.	REVISIONS	DATE	BY
1	ISSUED FOR PERMIT	11/13/2021	SAH

THOMAS & HUTTON
 50 Park of Commerce Way
 Savannah, GA 31405 • 912.234.5300
 www.thomasandhutton.com

BRYAN COUNTY BOARD OF COMMISSIONERS
 BRYAN COUNTY, GEORGIA
 BRYAN COUNTY I-16 REGIONAL WATER & SEWER IMPROVEMENTS
FORCE MAIN PLAN AND PROFILE



JOB NO:	J-29088.0000
DATE:	1/18/2022
DRAWN:	SAH
DESIGNED:	SAH
REVIEWED:	AJB
APPROVED:	TVT
SCALE:	AS NOTED

C1.24

BID SET - NOT FOR CONSTRUCTION