

BILLINGSWOOD DRIVE LIFT STATION
4" SANITARY SEWER FORCE MAIN REPLACEMENT
FOR THE
MACON WATER AUTHORITY



Macon Water Authority

537 HEMLOCK STREET
Macon, GA 31202-0108
(478) 464-5635 * Fax (478) 738-3864

SEPTEMBER 5, 2023



PROJECT LOCATION

PROJECT LOCATION

CONSTRUCTION NOTES

- CONTRACTOR WILL BE WORKING IN TEMPORARY CONSTRUCTION EASEMENTS, PERMANENT EASEMENTS, AND COUNTY RIGHT-OF-WAYS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CLEARING AND GRUBBING OF EASEMENTS AND REMOVAL OF ALL DEBRIS INCLUDING STUMPS, BLAST ROCK, ETC. NO BURIAL OF CLEARED MATERIALS WILL BE ALLOWED.
- CONTRACTOR SHALL REMOVE ALL DEBRIS AND HAVE SOIL EROSION CONTROL MEASURES IN PLACE BEFORE CONSTRUCTIONS BEGINS.
- CONTRACTOR TO NOTIFY UTILITY PROTECTION AGENCY 72 HOURS PRIOR TO START OF WORK. PHONE 811. ALL UTILITY COMPANIES WHICH HAVE FACILITIES IN THE CONSTRUCTION AREA (TELEPHONE, ELECTRIC, ETC.) SHALL BE CONTACTED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ANY DISRUPTIONS OF UTILITY SERVICE. ANY UTILITIES DAMAGED MUST BE REPAIRED THE SAME DAY, UNLESS WRITTEN PERMISSION FROM UTILITY OWNER IS GIVEN.
- EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATION SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION. DAMAGE TO EXISTING UTILITY LINES RESULTING FROM THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. HE SHALL, AT HIS OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO THEIR ORIGINAL CONDITION AND QUALITY, AS APPROVED BY THE CLIENT AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY. SHOULD THE DAMAGED UTILITY LINE REQUIRE REPAIR BY THE RESPECTIVE UTILITY COMPANY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING ALL COSTS ASSOCIATED WITH THE REPAIR INCLUDING FINES AND ASSESSMENTS IMPOSED BY UTILITY COMPANY. CONTRACTOR SHALL NOTIFY ELECTRIC POWER PROVIDER 5 BUSINESS DAYS IN ADVANCE OF WORK ADJACENT TO POWER POLES. COORDINATE WITH UTILITY PROVIDER TO REMOVE OR RELOCATE UTILITY MAINS AND POLES AND PAY ALL ASSOCIATED COSTS.
- WHEN CONSTRUCTION INVOLVES THE REMOVAL OF FENCE, POLES, MAILBOXES, SIGNS, SIDEWALKS, DRIVEWAYS, DRIVEWAY CULVERTS, TEMPORARY OR FIXED STRUCTURES, THE CONTRACTOR, AT HIS EXPENSE, SHALL PROVIDE FOR TEMPORARY ACCESS/SERVICE OR CONTAINMENT TO THE AFFECTED PROPERTY. HE SHALL REPLACE SUCH ITEMS WITH SIMILAR OR BETTER MATERIALS AS SOON AS PRACTICAL, OR AS DIRECTED BY THE ENGINEER AND ALL SIGNAGE, ALL UTILITY COMPANIES WHICH HAVE FACILITIES IN THE CONSTRUCTION AREA (TELEPHONE, ELECTRIC, ETC.) SHALL BE CONTACTED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.
- PEDESTRIAN AND LOCAL VEHICULAR TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. SAFETY DEVICES AND FLAGMEN SHALL BE PROVIDED BY THE CONTRACTOR, AT HIS EXPENSE, IF IT SHOULD BE NECESSARY. WRITTEN PERMISSION TO CLOSE THE CONSTRUCTION AREA TO TRAFFIC MUST BE OBTAINED FROM THE APPROPRIATE GOVERNMENT AGENCY PRIOR TO ANY STREET CLOSING. ALL CONSTRUCTION SIGNAGE, LIGHTED BARRIERS, ETC. SHALL BE INSTALLED PRIOR TO BEGINNING CONSTRUCTION.
- ALL CONSTRUCTION STAKING SHALL BE BY THE CONTRACTOR, AT HIS EXPENSE. STAKING OF EASEMENT AND CLEARING LIMITS AND NEW CONSTRUCTION SHALL BE PERFORMED BY PROFESSIONAL SURVEYOR LICENSED IN GEORGIA.
- ALL PROPERTY LINES ARE BASED ON DATA PROVIDED BY FIELD SURVEY DATA.
- CONTRACTOR SHALL MAINTAIN FIELD "AS-BUILT" DRAWINGS AND SHALL MEASURE AND SHOW LOCATION OF ALL MANHOLES, GRAVITY MAINS, RIM/INVERT ELEVATIONS, ETC.
- CONTRACTOR SHALL MATCH EXISTING LAWN AND GRASS TYPES WHEN REPAIRING DISTURBED AREAS.
- ALL CROSS DRAINS AND DRIVEWAY CULVERTS MUST REMAIN OPEN AT ALL TIMES. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO DRAINS AND CULVERTS.
- CONTRACTOR SHALL PERFORM CONSTRUCTION IN A MANNER THAT WILL ALLOW VEHICULAR ACCESS TO EACH HOME OR BUSINESS DURING CONSTRUCTION.
- ALL EROSION AND SEDIMENTATION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AS INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER.
- A MINIMUM OF 10' OF HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER & SEWER MAINS. A MINIMUM OF 18" VERTICAL SEPARATION SHALL BE MAINTAINED AT ALL CROSSINGS OF WATER & SEWER MAINS.
- THE CONTRACTOR SHALL FURNISH MATERIALS AND MAKE THE CONNECTION TO ALL EXISTING PIPE LINES.
- THE CONTRACTOR SHALL BEAR ALL COST OF WATER USED FOR FLUSHING AND TESTING REQUIRED BY THE SPECIFICATIONS. PROVISIONS TO PURCHASE SAID WATER FROM A SUPPLIER APPROVED OF BY THE ENGINEER.
- ALL REQUIRED FITTINGS ARE NOT NECESSARILY SHOWN ON THESE DRAWINGS. CONTRACTOR SHALL FURNISH AND SUPPLY ALL FITTINGS NECESSARY TO CONSTRUCT GRAVITY SEWER MAIN.
- BEFORE CONSTRUCTION BEGINS, THE CONTRACTOR SHALL PROVIDE THE OWNER AND ENGINEER THE CONTACT INFORMATION OF A PERSON WHO WILL BE AVAILABLE 24 HOURS A DAY TO CONTACT IN CASE OF EMERGENCY.
- CONTRACTOR TO SAW-CUT EXISTING ASPHALT TO PROVIDE NEAT EDGE FOR PATCHING ON ALL STREETS (SEE DETAIL CLASS 'A' UTILITY PATCH DETAIL)
- ALL CONSTRUCTION MATERIALS, METHODS AND INSTALLATION SHALL BE IN ACCORDANCE WITH MACON WATER AUTHORITY STANDARDS AND SPECIFICATIONS.
- CONTRACTOR SHALL NOTIFY MWA CHIEF INSPECTOR, JOEL HERNDON, 478-464-5639, A MINIMUM OF 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.

PROJECT QUANTITIES

4" DIPS HDPE DR 9 FORCE MAIN: 535 L.F.

BENCHMARK INFORMATION

N/A

NOTIFICATION CONTACTS

Owner and 24-Hour Contact
Joel Herndon, Chief Inspector
Macon Water Authority
537 Hemlock Street
Macon, GA 31202
Phone: 478-464-5639
Email: jherndon@maconwater.org

Engineer
Don L. Carter, P.E.
Carter Engineering Group
6310 Peake Road, Suite 200
Macon, GA 31210
Office: 478-219-2600
Email: dcarter@carterenggrp.com

UTILITY CONTACTS

Gas
Cheryl Treadway, Account Executive, New Business Development
AGL Resources (Local Office)
5472 New Forsyth Rd, Macon, GA 31210
Local Office: (478) 476-2230
Cell: 404-391-3142
Email: Cheryl.treadway@aglresources.com

Electricity
Georgia Power
960 Key Street
Macon, GA 31204
Office: 888-655-5888

Telephone/Cable
OSP-Planning & Design Engineering
AT&T
1630 Eisenhower Parkway-Room 260
Macon, GA 31206
Phone: 478-788-1040
Email: mr8876@att.com

Water and Sewer
Joel Herndon, Chief Inspector
Macon Water Authority
537 Hemlock Street
Macon, GA 31202
Phone: 478-464-5639
Email: jherndon@maconwater.org

LEGEND

DESCRIPTION	EXISTING	NEW
PROPERTY LINE	---	---
CONTOUR LINE	---450---	---
POWER POLE	◇	◆
LIGHT POLE	◇	◆
OVERHEAD POWER	—OHP—	—
HIGH VOLTAGE LINE	—HVL—	—
UNDERGROUND ELECTRICAL	—E—	—
UNDERGROUND TELEPHONE	—T—	—
UNDERGROUND FIBER OPTIC	—FOC—	—
GAS LINE	—G—	—
WATER LINE	—W—	—
FIRE PROTECTION MAIN	—	—
DOMESTIC WATER	—DW—	—
IRRIGATION MAIN	—IRR—	—
FIRE HYDRANT	◇	◆
WATER VALVE	◇	◆
SAN. SEWER W/ MANHOLE	—SAN—O—	—
CLEANOUT	◇	◆
DRAIN INLET	◇	◆
CATCH BASIN	◇	◆
D.O.T. STD. 1033D	◇	◆
STORM DRAIN	—	—
SILT FENCE & TYPE	+	+
SPOT ELEVATION	+	+
CONCRETE PAVING	+	+
CONCRETE SIDEWALKS	+	+
PVC IRRIGATION SLEEVE	+	+
SOIL BOUNDARY LINE	+	+
SOIL TYPE	+	+
FENCE	+	+
FENCE W/ 3 STRANDS OF BARBED WIRE	+	+
NOT IN CONTRACT	+	+
TREES TO BE REMOVED	+	+

INDEX TO DRAWINGS

SHEET NO.	TITLE
-	COVER SHEET
C1.1	SANITARY SEWER FORCE MAIN PLAN AND PROFILE
C2.1	SANITARY SEWER DETAILS

PROJECT NARRATIVE

THIS PROJECT CONSISTS OF FURNISHING AND INSTALLING APPROXIMATELY 535 L.F. OF 4" SANITARY SEWER FORCE MAIN AT THE BILLINGSWOOD DRIVE LIFT STATION.



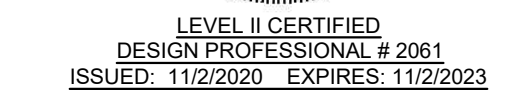
Contact 811 before you dig.





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STAMP:



RELEASE DATES:

[illegible]

REMOVAL AND REPLACEMENT OF ASPHALT ROADWAYS AND DRIVEWAYS, CONCRETE DRIVEWAYS, AND CURBING DISTURBED BY ENTRANCE / EXIT PITS, EXISTING UTILITY INVESTIGATIONS AND TRENCHING WILL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE INCLUDED IN THE LUMP SUM PRICE FOR UTILITY PAVEMENT PATCHING.

CONTRACTOR HAS FULL RESPONSIBILITY FOR EXISTING UTILITY LOCATES AND POTHOLE INVESTIGATIONS FOR SUB-SURFACE FACILITIES INCLUDING BUT NOT LIMITED TO POWER, COMMUNICATIONS, GAS, CABLE, WATER AND SEWER.

NO CHANGE IN CONTRACT UNIT PRICES WILL BE CONSIDERED FOR ADJUSTMENTS TO AVOID EXISTING UTILITIES.

THE EXISTING 4" FORCE MAIN TO BE
ABANDONED SHALL BE FILLED WITH
FLOWABLE FILL TO THE GREATEST
EXTENT PRACTICAL

A TRAFFIC CONTROL PLAN APPROVED BY MACON-BIBB COUNTY IS REQUIRED AS PART OF THE INITIAL SUBMITTAL. NO APPLICATIONS FOR PAYMENT WILL BE PROCESSED UNTIL THE CONTRACTOR HAS PRESENTED AN APPROVED TRAFFIC CONTROL PLAN TO THE MWA.

THE CONTRACTOR SHALL SEND LETTERS NOTIFYING HOMEOWNERS OF PROPOSED PROJECT BEGINNING AND ENDING DATES. LETTER SHALL INCLUDE A POINT OF CONTACT FOR THE CONTRACTOR.

CONTRACTOR TO DISTRIBUTE DOOR
KNOB HANGERS TO AFFECTED HOMES
PRIOR TO CONSTRUCTION.

HORIZONTAL DIRECTIONAL DRILLING IS THE PREFERRED METHOD OF INSTALLATION FOR THE FORCE MAIN. ANY DEVIATION TO HDD INSTALLATION MUST BE APPROVED BY THE MWA PRIOR TO INITIATION.

CLIENT:
MACON
WATER AUTHORITY
MACON, GA

PROJECT:
BILLINGSWOOD DRIVE
FORCE MAIN
REPLACEMENT

MACON, GA 31216

DRAWN BY: CADD	CHECKED BY: DLC
PROJECT NUMBER: M0175.070	DATE: 09/05/2023

GRAPHIC SCALE:
0 30 60
SCALE: 1" = 30'

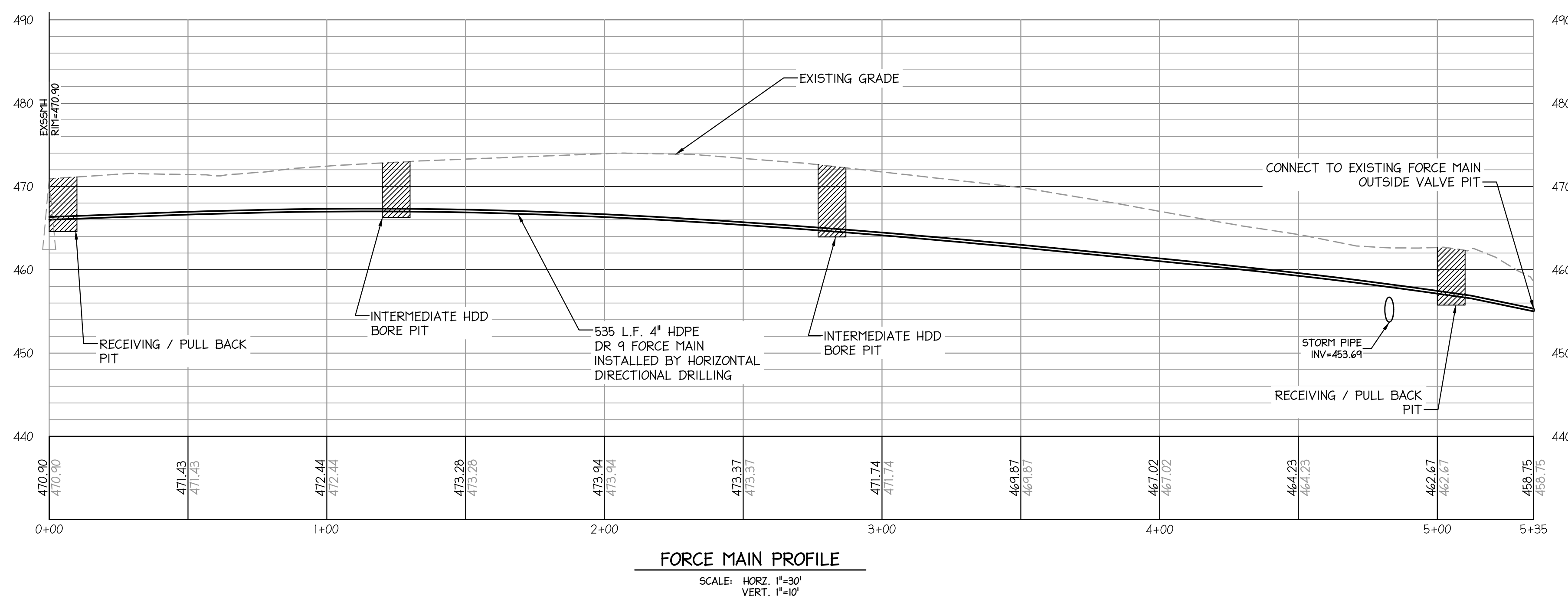
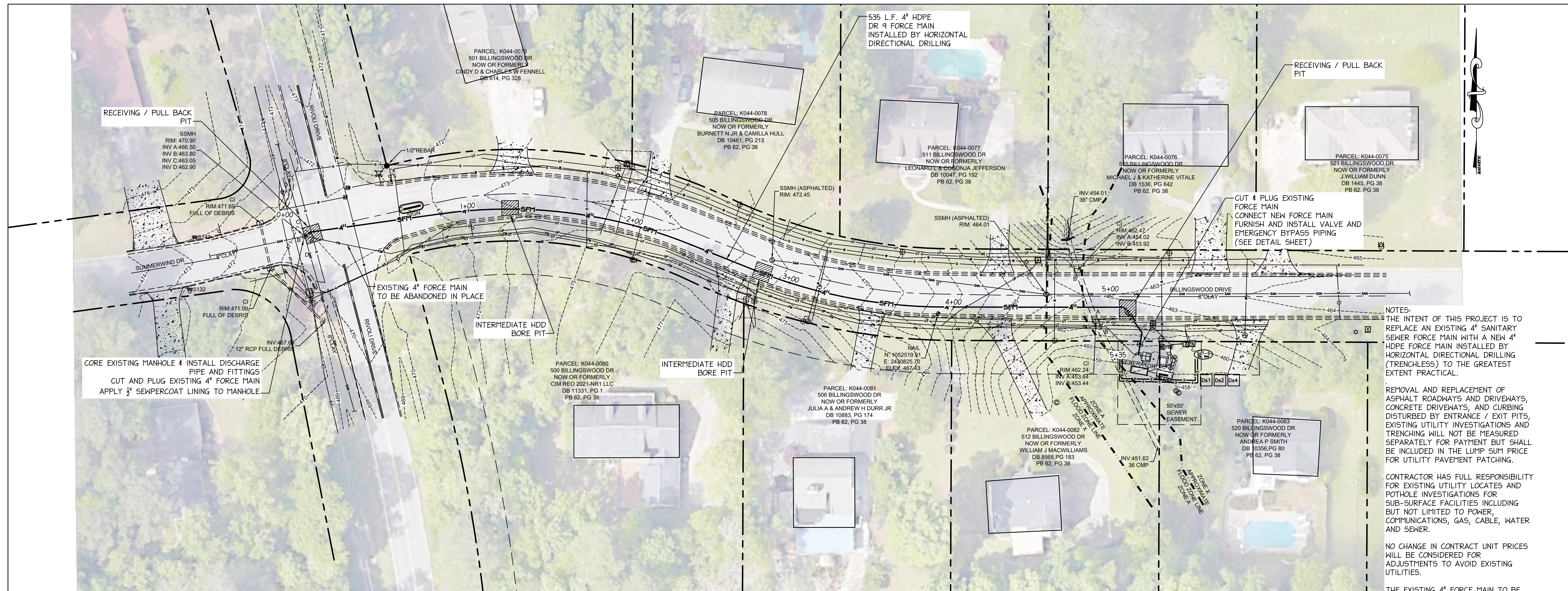
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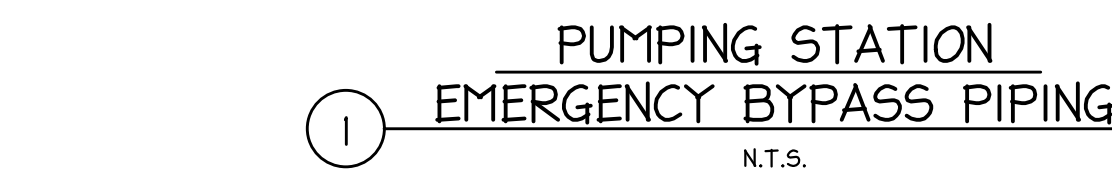
FORCE MAIN PLAN AND PROFILE

DRAWING NUMBER: _____

C1.1

M0175.070 Master.dwg





NOTES:

- USE OF STEEL PLATES TO BE APPROVED BY MACON-BIBB COUNTY ENGINEERING DEPARTMENT FOR ROADWAY EXCAVATIONS LEFT OPEN OVERNIGHT
- PROVIDE STEEL PLATES AND DOWELS CONFORMING TO ASTM A58 STANDARDS.
- ADEQUATELY SHORE THE TRENCH IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS TO SUPPORT THE BRIDGING AND TRAFFIC LOADS.
- SECURE BRIDGING AGAINST DISPLACEMENT BY USING ADJUSTABLE CHAINS, SHIMS, OR OTHER DEVICES.
- USE OF STEEL PLATE BRIDGING IS NOT TO EXCEED FOUR (4) CONSECUTIVE WORKING DAYS IN ANY GIVEN WEEK AND NOT LEFT IN PLACE OVER THE WEEKEND, UNLESS DIRECTED BY THE MWA IN THE FIELD.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF STEEL PLATES, SHORING, ASPHALT CONCRETE AND ENSURING THEY MEET ALL CITY SPECIFICATIONS. DEFORMATIONS OF ANY KIND ARE NOT ACCEPTABLE ON STEEL TIES. EXAMPLES OF DEFORMATIONS COULD, BUT NOT LIMITED TO, ANY OF THE FOLLOWING: FREE FROM ANY CLIPS, CHAINS, ATTACHMENTS, WELDSMENTS, SURFACE IRREGULARITIES, ETC.
- A STRUCTURE DESIGN IS REQUIRED FOR TRENCH WIDTHS GREATER THAN 6'-0". SUBMIT DESIGN TO THE DEPARTMENT FOR APPROVAL.
- INSTALL STEEL PLATE BRIDGING AND SHORING USING THE METHOD BELOW:
METHOD 1: MILL THE PAVEMENT TO A DEPTH EQUAL TO THE THICKNESS OF THE PLATE AND TO A WIDTH AND LENGTH EQUAL TO THE DIMENSION OF THE PLATE. BUTT SUBSEQUENT PLATES TO EACH OTHER. ATTACH THE PLATE TO THE ROADWAY BY A MINIMUM OF TWO DOWELS PRE-DRILLED INTO EACH CORNER OF THE PLATE AND DRILLED 2" INTO THE PAVEMENT AS SHOWN ON THIS DETAIL.
- WHEN THE STEEL PLATES ARE REMOVED, BACKFILL THE DOWEL HOLES IN THE PAVEMENT WITH EITHER GRADED FINES OF ASPHALT CONCRETE MIX, CONCRETE SLURRY, OR EQUIVALENT SLURRY TO THE SATISFACTION OF THE MACON-BIBB COUNTY ENGINEER.
- PROVIDE STEEL PLATES WITH SURFACE THAT IS MANUFACTURED WITH A MINIMUM NOMINAL COEFFICIENT OF FRICTION OF 0.35 AT THE TIME OF PLACEMENT.

