

AUD SEWER NOTES

1. THE CONTRACTOR IS TO VERIFY THE INVERT ELEVATIONS (I.E.) OF EXISTING PIPES PRIOR TO BEGINNING CONSTRUCTION.
2. SEWER FORCE MAIN SHALL BE PVC DR-18 C-900 OR C-905 AS APPLICABLE, OR DIP CLASS 350, EPOXY LINED.
3. IF THE MAIN IS PVC OR HDPE, THEN 12 GAUGE COATED SINGLE STRAND WIRE SHALL BE ATTACHED ALONG THE TOP OF THE MAIN TO RUN UP THE SEWER MANHOLE FOR TRACING PURPOSES.
4. DETECTOR TAPE SHALL BE 4 INCHES AND PLACED 2 FEET ABOVE PIPE ADD SIMILAR DEVICE TO CONDUIT PER AUD DETAIL 4.3.
5. ALL TIE-INS TO EXISTING MANHOLES SHALL BE CORED.
6. ALL MANHOLES REQUIRE "K OR N SEAL" OR EQUAL, RUBBER BOOTS.
7. NO PROPOSED SEWER LINE OR MANHOLE WILL BE APPROVED BY AUD'S ENGINEERING DIVISION UNTIL THE AUD CONSTRUCTION AND MAINTENANCE DIVISION COMPLETES THE REQUIRED CCTV INSPECTION REPORT PER AUD'S WATER & SANITARY SEWER SYSTEMS-DESIGN STANDARDS, CONSTRUCTION SPECIFICATIONS AND DETAILS.
8. NO CONNECTION SHALL BE MADE TO EXISTING WASTEWATER LINES UNTIL THE PROPOSED LINE IS INSPECTED AND APPROVED BY AUD'S

ENGINEERING DIVISION

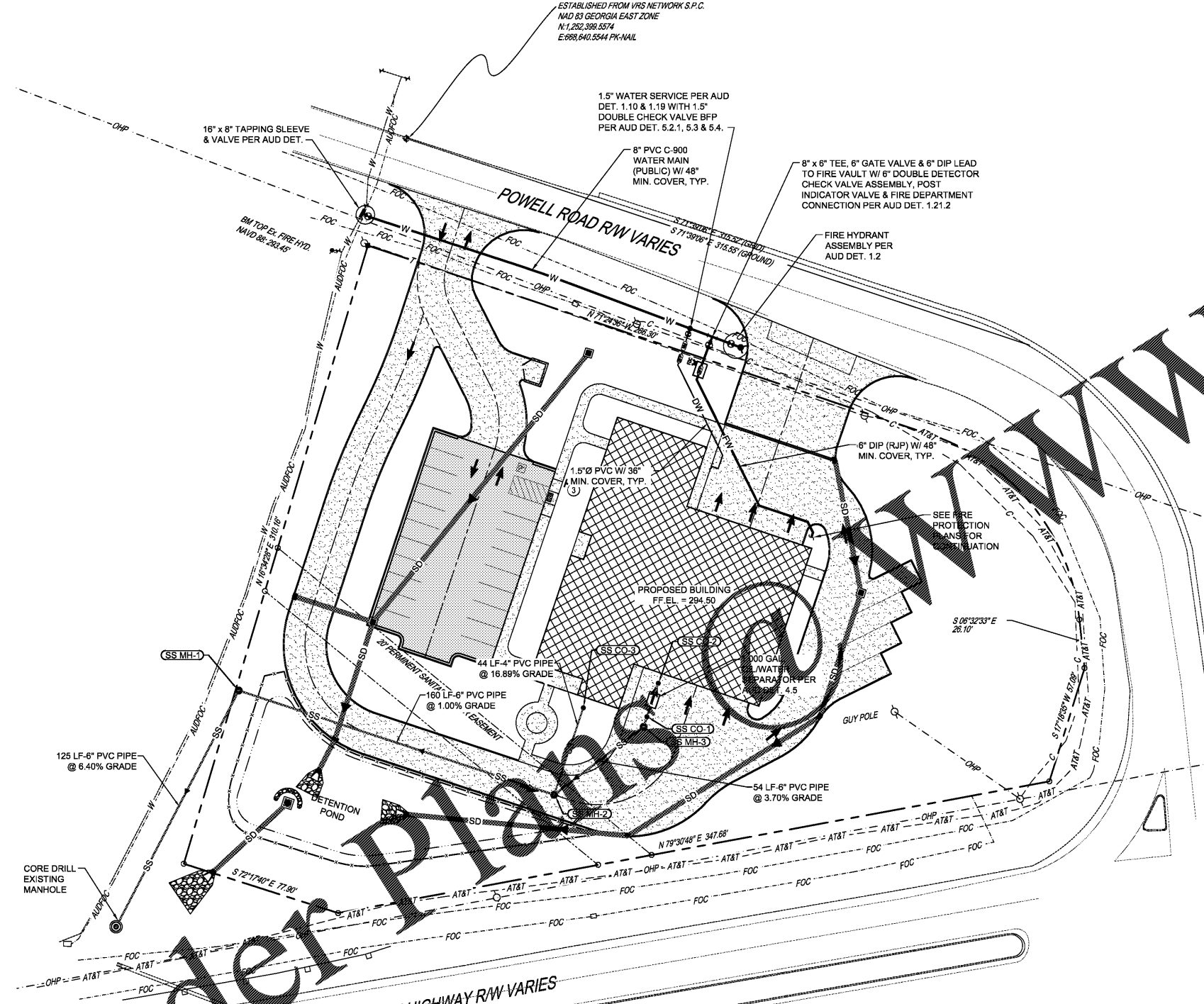
9. ALL WASTEWATER MANHOLES SHALL HAVE AN ELEVATION DROP OF 0.2 FOOT ACROSS THE INLET AND OUTLET INVERTS.
10. WASTEWATER CLEAN-OUTS SHALL BE INSTALLED AT ALL INDIVIDUAL SERVICES AS SHOWN IN AUD-DETAIL 2.8, AND SHALL NOT BE INSTALLED UNDER DRIVEWAYS OR ANY PAVED AREAS WITHOUT PRIOR APPROVAL FROM AUD.
11. SERVICE LINES TO SANITARY SEWER MAIN SHALL BE BEDDED PER THESE AUD SPECIFICATIONS AND AUD DETAIL 2.1.
12. MAXIMUM SANITARY SEWER INFILTRATION SHALL NOT EXCEED 100 GPD/INCH OF PIPE DIAMETER PER MILE.
13. THE CONTRACTOR SHALL LOCATE SANITARY SEWER SERVICES BY ETCHING AN "S" IN THE CURB, OR IN THE PAVEMENT IF NO CURB IS AVAILABLE, AND HIGHLIGHT THE ETCHING WITH GREEN PAINT PER THE APWA UNIFORM COLOR CODE (APWA, 2000).
14. FINISHED FLOOR ELEVATIONS OF ALL PROPOSED BUILDINGS SHALL BE A MINIMUM OF FIVE (5) FEET ABOVE THE INVERT ELEVATION OF THE WASTEWATER MAIN OR MANHOLE AT THE POINT OF TIE-IN. IN INSTANCES WHERE THIS IS NOT POSSIBLE, A BACKWATER VALVE SHALL BE INSTALLED IN THE SEWER SERVICE.

AUD WATER NOTES

1. AN AUD INSPECTOR SHALL BE PRESENT WHEN A TAP OR TIE-IN OCCURS.
2. ALL PVC WATER LINES SHALL BE DR-18 PVC MEETING AWWA C-900 AND/OR C-905, UNLESS OTHERWISE SHOWN OR SPECIFIED.
3. ALL DIP WATER LINES SHALL BE CLASS 350 FOR LINES 16" DIAMETER AND SMALLER, AND CLASS 300 FOR LINES 18" DIAMETER THROUGH 24" DIAMETER, UNLESS OTHERWISE SPECIFIED OR SHOWN.
4. ALL WATER LINES SHALL BE TESTED, CHLORINATED, AND CHECKED FOR BACTERIA PER AUD'S WATER & SANITARY SEWER SYSTEMS-DESIGN STANDARDS, CONSTRUCTION SPECIFICATIONS AND DETAILS.
5. COPPER WIRE (12-GAUGE, INSULATED, SINGLE STRAND) SHALL BE ATTACHED ALONG TOP OF ALL BURIED PVC WATER LINES, WRAPPED AROUND SERVICE CORPORATIONS AND BROUGHT UP ON THE OUTSIDE OF ALL VALVE BOXES, STUBBING OUT AT THE TOP FOR LOCATING PURPOSES. THIS WIRE SHALL BE PROPERLY SPLICED WITH A WATER PROOF CONNECTOR FOR ELECTRICAL CONNECTIVITY, AND THEN INSULATED TO PROTECT AGAINST CORROSION. (REFERENCE AUD DETAIL 1.1 WHEN APPLICABLE)
6. DETECTOR TAPE SHALL BE 4 INCHES AND PLACED 2 FEET ABOVE PIPE ADD SIMILAR DEVICE TO CONDUIT PER AUD DETAIL 4.3.
7. ALL WATER VALVES ON THE MAIN LINES, INCLUDING HYDRANT LATERALS SHALL BE OPEN-RIGHT. SITE LOCATED NORTH OF GORDON HIGHWAY.
8. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN A METER BOX AT THE TERMINATION POINT OF ALL WATER SERVICES. METER BOXES WILL IN NO WAY BE PLACED UNDER DRIVEWAYS. METER BOXES WILL PREFERABLY BE LOCATED IN THE CENTER OF THE LOT AND WITHIN THE RW, AND MAINTAINED BY THE CONTRACTOR UNTIL SUCH TIME THE METER IS INSTALLED.
9. WATER SERVICES SHALL HAVE MINIMUM DIAMETER 1/2 INCH.
10. ANY EXISTING WATER SERVICE LINES WHICH ARE EXPOSED OFF AN EXISTING WATER MAIN TO BE AGAINST DISCOVERY DURING CONSTRUCTION SHALL BE REPLACED WITH NEW SERVICE LINES ARE TO TIE INTO THE NEW WATER MAIN AND BE RECONNECTED TO THE EXISTING WATER METER.
11. ALL EXISTING WATER SERVICES TO BE EXTENDED AND METER BOXES RELOCATED AS REQUIRED, AND THE COSTS OF CONSTRUCTION SERVICES SHALL BE CONNECTED TO THE NEW WATER MAIN. FOR SAID MAIN HAS BEEN STEPPED, PRESSURE TESTED AND PUT INTO SERVICE IN THE EVENT THAT THE SERVICE LINE IS INACTIVE, A NEW WATER SERVICE WILL BE REQUIRED TO BE CONSTRUCTED.
12. WATER METERS SHALL BE PURCHASED FROM AUD.
13. DEVELOPER/CONTRACTOR SHALL LOCATE WATER SERVICES AND VALVES BY ETCHING A "W" FOR THE WATER SERVICE AND A "V" FOR VALVE IN THE CURB OR IN THE PAVEMENT IF NO CURB IS AVAILABLE, AND HIGHLIGHT THE ETCHING WITH BLUE PAINT PER THE APWA UNIFORM COLOR CODE. IN THE EVENT THAT THE VALVE IS LOCATED BEHIND THE CURB OR PAVEMENT, INVERT THE "V" MARKING AND TIE IT POINTS TO THE VALVE OUTSIDE THE ROADWAY.
14. ALL FIRE HYDRANTS SHALL REQUIRE A SECURITY CHECK VALVE TO BE LOCATED AT THE SHOULDER OF THE HYDRANT AT THE TIME OF INSTALLATION, PRIVATE OR NON-PRIVATE.
15. FIRE HYDRANTS ARE TO BE LOCATED A MINIMUM OF ONE FOOT INSIDE EXISTING RIGHT-OF-WAY WITH A 3 FOOT RADIUS CLEARANCE.
16. EXISTING FIRE HYDRANTS AND METERS THAT ARE REMOVED SHALL BE TURNED OVER TO AUD.
17. PER AUD'S WATER & SANITARY SEWER SYSTEMS-DESIGN STANDARDS, CONSTRUCTION SPECIFICATIONS AND DETAILS: FOR BACKFLOW INSTALLATIONS FOR NON-RESIDENTIAL DEVELOPMENT, A MINIMUM "DOUBLE-CHECK" BACKFLOW-PREVENTION DEVICE SHALL BE INSTALLED ON THE CUSTOMER'S SIDE OF ALL SERVICES.
18. PER AUD'S WATER & SANITARY SEWER SYSTEMS-DESIGN STANDARDS, CONSTRUCTION SPECIFICATIONS AND DETAILS: FIRE LINES REQUIRE A "DOUBLE DETECTOR" BACKFLOW DEVICE.
19. PER AUD'S WATER & SANITARY SEWER SYSTEMS-DESIGN STANDARDS, CONSTRUCTION SPECIFICATIONS AND DETAILS: FOR BACKFLOW INSTALLATIONS FOR RESIDENTIAL DEVELOPMENTS, A "DUAL CHECK" BACKFLOW DEVICE SHALL BE INSTALLED ON THE CUSTOMER'S SIDE OF THE SERVICE LINE AT THE POINT OF TIE-IN TO THE WATER METER.
20. PER AUD'S WATER & SANITARY SEWER SYSTEMS-DESIGN STANDARDS, CONSTRUCTION SPECIFICATIONS AND DETAILS: FOR HIGH HAZARD LOCATIONS, A REDUCED PRESSURE ZONE (RPZ) BACKFLOW DEVICE WILL BE REQUIRED.
21. A WRITTEN REQUEST SHALL BE SUBMITTED TO AUD FOR THE REQUIRED BACKFLOW PREVENTION DEVICE FOR A SPECIFIC SITE, CONTACT THE AUGUSTA UTILITIES SYSTEMS PROTECTION MANAGER AT 706-312-4145.
22. BACKFLOW DEVICES SHALL BE TESTED BY A CERTIFIED PERSON WITHIN FIVE (5) WORKING DAYS OF INSTALLATION AND THE RESULTS FURNISHED TO THE AUD SYSTEM PROTECTION MANAGER WITHIN 10 WORKING DAYS OF INSTALLATION PRIOR TO ANY WATER USE. AUD SHALL BE NOTIFIED PRIOR TO TESTING CONTACT THE AUGUSTA UTILITIES SYSTEMS PROTECTION MANAGER AT 706-312-4145.

GENERAL AUD NOTES

1. ALL CONSTRUCTION OF WATER DISTRIBUTION SYSTEMS AND WASTEWATER COLLECTION SYSTEM LINES SHALL BE IN ACCORDANCE WITH AUD'S WATER & SANITARY SEWER SYSTEMS-DESIGN STANDARDS, CONSTRUCTION SPECIFICATIONS AND DETAILS (LATEST PUBLICATION).
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE EXACT LOCATION, SIZE AND MATERIAL OF ANY EXISTING WATER OR SANITARY SEWER FACILITY PROPOSED FOR CONNECTION OR USE BY THIS PROJECT.
3. CONTRACTOR SHALL CONTACT THE UTILITIES PROTECTION INC. "CALL BEFORE YOU DIG" SERVICE (811) IN ORDER TO LOCATE UTILITIES PRIOR TO STARTING ANY EXCAVATION OR CONSTRUCTION. THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AS DETERMINED FROM EXISTING RECORDS.
4. THE CONTRACTOR SHALL COORDINATE THE WORK OF THE UTILITY COMPANIES.
5. THE CITY OF AUGUSTA ENGINEERING DIVISION SHALL BE NOTIFIED AT LEAST 48 HOURS (TWO WORKING DAYS) IN ADVANCE DURING REGULAR WORKING HOURS (8:30AM TO 5:00PM, MONDAY-FRIDAY, EXCLUDING AUGUSTA, GEORGIA HOLIDAYS) PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY WITHIN AUGUSTA GEORGIA RIGHT-OF-WAY. CONTACT THE CITY OF AUGUSTA ENGINEERING DIVISION AT (706) 321-1111.
6. THE CITY OF AUGUSTA ENGINEERING DIVISION SHALL BE NOTIFIED AT LEAST 48 HOURS (TWO WORKING DAYS) IN ADVANCE DURING REGULAR WORKING HOURS (8:30 AM TO 5:00 PM, MONDAY-FRIDAY, EXCLUDING AUGUSTA, GEORGIA HOLIDAYS) PRIOR TO ANY CONSTRUCTION, TIE-INS, OR TESTING OF WATER OR WASTEWATER LINES. NO WORK SHALL COMMENCE UNTIL CONTACT IS MADE WITH AN AUD REPRESENTATIVE. CONTACT THE AUGUSTA UTILITIES SYSTEMS PROTECTION MANAGER AT (706) 312-4141.
7. DISTURBANCE OF ANY SURVEY MARKERS OR MONUMENTS REQUIRES RE-ESTABLISHMENT BY A REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
8. ANY DISCREPANCIES, ERRORS, OR OMISSIONS DISCOVERED ON PLANS OR IN THE SPECIFICATIONS SHOULD BE NOTED ON THE CONTRACT PROPOSAL AND DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO CORRECT THE SAME.
9. ALL CONCRETE SHALL HAVE MINIMUM 28-DAY STRENGTH OF 3,000 PSI.
10. IF A CONFLICT ARISES BETWEEN THE NEW WORK AND THE EXISTING WATER AND SEWER FACILITIES DURING THE COURSE OF CONSTRUCTION, IT WILL BE THE RESPONSIBILITY OF THE OWNER/DEVELOPER/CONTRACTOR, AT HIS EXPENSE, AND NOT AUD'S TO CORRECT THE DISCREPANCY AS DIRECTED BY A REPRESENTATIVE OF AUD.
11. ALL EXISTING AUGUSTA-RICHMOND COUNTY ROAD STRUCTURES SUCH AS STORM MANHOLES, INLET BOXES, ETC. SHALL BE MAINTAINED AND OR ADJUSTED AS IS APPROPRIATE TO ENSURE PROPER UTILIZATION.
12. ALL MATERIALS DEEMED SALVAGEABLE BY AUD ARE THE PROPERTY OF AUGUSTA, GEORGIA AND WILL BE REMOVED AND STORED ON SITE IN A SECURED AREA DETERMINED DURING CONSTRUCTION BY THE CONTRACTOR, AND AUGUSTA UTILITIES DEPARTMENT.
13. FOR PRIVATE DEVELOPMENTS, AUD SHALL NOT BE RESPONSIBLE FOR PAYMENT PATCHING AND/OR REPLACEMENT AND THE SITE RESTORATION WHENEVER AUD PERFORMS REPAIR, REPLACEMENT OR INSTALLATION WORK.
14. IF AUD MUST REPAIR OR REPLACE UTILITIES ON THE PROPERTY, THEN THE DEVELOPER SHALL ARRANGE FOR ACCESS BY AUD AS REQUIRED TO REPAIR OR REPLACE THE UTILITY.
15. A MINIMUM 15' UTILITY EASEMENT CENTERED OVER ALL WATER LINES AND A MINIMUM 20' UTILITY EASEMENT CENTERED OVER ALL WASTEWATER LINES SHALL BE DEEDED TO AUGUSTA, GEORGIA AT COMPLETION AND ACCEPTANCE OF SAID LINES. EASEMENTS CONTAINING BOTH WATER AND SEWER SHALL TOTAL 30' IN WIDTH, WHILE MAINTAINING MINIMUM SEPARATION REQUIREMENTS AS LISTED IN AUD'S WATER & SANITARY SEWER SYSTEMS-DESIGN STANDARDS, CONSTRUCTION SPECIFICATIONS AND DETAILS.
16. A RIGHT-OF-WAY ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT PRIOR TO COMMENCING ANY WORK WITHIN AN AUGUSTA, GEORGIA RIGHT-OF-WAY. "A GEORGIA DOT RIGHT-OF-WAY ENCROACHMENT PERMIT MAY BE REQUIRED FOR WORK ON TEMPORARY OR PERMANENT STATE ROUTES. CONTACT AUGUSTA UTILITIES ENGINEERING DIVISION TO DETERMINE IF A PERMIT IS REQUIRED. THE UTILITIES ENCROACHMENT PERMIT MUST BE APPLIED FOR THROUGH AUGUSTA UTILITIES DEPARTMENT. CONDITIONS OF THE PERMIT MUST BE COMPLIED WITH FULLY. THE PERMIT MUST BE IN HAND A MINIMUM 24 HOURS NOTICE GIVEN TO GDOT PRIOR TO BEGINNING ANY WORK IN THE GDOT RIGHT-OF-WAY."
17. THE CONTRACTOR AND UTILITY DEPARTMENT REPRESENTATIVE SHALL HAVE A COPY OF THE AUGUSTA-RICHMOND COUNTY GEORGIA-RIGHTS OF WAY ENCROACHMENT GUIDELINES DEVELOPMENT DOCUMENT #15, ADOPTED JUNE 1999, AMENDED AUGUST 2000. THE REQUIREMENTS SET FORTH IN THIS DOCUMENT SHALL BE ADHERED TO AT ALL TIMES.
18. TRAFFIC CONTROL DEVICES SHALL MEET AND BE INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. ALSO, A TRAFFIC CONTROL/DETOUR PLAN SHALL BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL AS NOTED IN THE AUGUSTA-RICHMOND COUNTY GEORGIA-RIGHTS OF WAY ENCROACHMENT GUIDELINES.
19. ALL ROAD CUTS SHALL BE OVERLAID, ASPHALT OVERLAY SHALL BE A MINIMUM OF 1 1/2" THICK COMPACTED TYPE "F" ASPHALT AS SPECIFIED IN THE AUGUSTA-RICHMOND COUNTY, GEORGIA-RIGHTS OF WAY ENCROACHMENT GUIDELINES.
20. CLEARING AND GRUBBING SHALL BE AT THE CONTRACTOR'S DISCRETION, SUBJECT TO AUD APPROVAL, TO FACILITATE CONSTRUCTION.
21. THE IMPLEMENTATION OF BEST MANAGEMENT PRACTICES (BMP'S) FOR EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA SHALL BE INSTALLED AND MAINTAINED AT ALL TIMES.



ESTABLISHED FROM IHS NETWORK S.P.C.
 NAD 83 GEORGIA EAST ZONE
 N: 1,292,390.1574
 E: 698,640.5544 FK-NAIL

1.5" WATER SERVICE PER AUD
 DET. 1.10 & 1.19 WITH 1.5"
 DOUBLE CHECK VALVE BFP
 PER AUD DET. 5.2.1, 5.3 & 5.4.

8" PVC C-900
 WATER MAIN
 (PUBLIC) W/ 48"
 MIN. COVER, TYP.

8" x 6" TEE, 6" GATE VALVE & 6" DIP LEAD
 TO FIRE VAULT W/ 6" DOUBLE DETECTOR
 CHECK VALVE ASSEMBLY, POST
 INDICATOR VALVE & FIRE DEPARTMENT
 CONNECTION PER AUD DET. 1.21.2

FIRE HYDRANT
 ASSEMBLY PER
 AUD DET. 1.2

1.5" x 0.75" PVC W/ 36"
 R MIN. COVER, TYP.

6" DIP (RJP) W/ 48"
 MIN. COVER, TYP.

SEE FIRE
 PROTECTION
 MANUAL FOR
 INSTALLATION

44 LF-4" PVC PIPE
 @ 16.89% GRADE

160 LF-6" PVC PIPE
 @ 1.00% GRADE

54 LF-6" PVC PIPE
 @ 3.70% GRADE

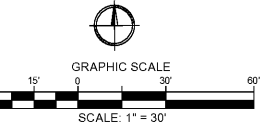
125 LF-6" PVC PIPE
 @ 6.40% GRADE

CORE DRILL
 EXISTING
 MANHOLE

UTILITY WARNING:
 Underground utilities shown have been located from field survey
 information and existing drawings. The engineer makes no guarantee
 that the underground utilities shown comprise all such utilities in the
 area. Utilities in service or abandoned. The engineer further does not
 warrant that the underground utilities shown are in the exact location
 indicated although he does certify that they are located as accurately
 as possible from information available. The engineer has not physically
 located the underground utilities.

UTILITIES PROTECTION CENTER
GEORGIA811
 Utilities Protection Center, Inc.
 Know what's below.
 Call before you dig.
 THREE WORKING DAYS BEFORE YOU DIG
 (GEORGIA - 1-800-282-7411)

A1
 C-301
UTILITY PLAN



1980
JOHNSON, LASCHOBER & ASSOCIATES, P.C.
 ARCHITECTS ENGINEERS & PLANNERS
 1000 W. GORDON HWY. • MT. PLEASANT, SC
 TEL: (706) 724-5756 • TEL: (843) 619-4566
 FAX: (706) 724-3955
 WWW.THEJLAGROUP.COM

AUGUSTA, GA
 535 TELFAIR STREET, AUGUSTA, GA 30901
FIRE STATION #3
 PROJECT LOCATION:
 2649 GORDON HWY., AUGUSTA, GA 30909

REV	DATE	BY	ISSUED FOR	DESCRIPTION
0	12/27/18	WTB	BY	

PROJECT NO. 3042.1604
 DRAWN BY: DRWN
 CHECKED BY: CHK
 DATE: 10/18/17
 SHEET TITLE:
UTILITY PLAN
 SCALE: 1" = 30'
 DRAWING NO. **C-301** REV. 0

This document is the property of Johnson, Laschobar & Associates, P.C. The unauthorized reproduction, copying or otherwise use of this document is strictly prohibited and any infringement thereupon may be subject to legal action.