

5/14/99

REVISIONS

# UTILITY CONSTRUCTION

## GENERAL NOTES:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2018.

2. THE EXISTING WATER AND SEWER UTILITIES BELONG TO THE CITY OF GREENSBORO, UNLESS OTHERWISE NOTED.

3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, PUBLIC WATER SUPPLY SECTION. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER RESOURCES, WATER QUALITY SECTION. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.

4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT. THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.

5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND ONE WEEK PRIOR TO SERVICE INTERRUPTION. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPORTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.

6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITIONAL COST TO THE DEPARTMENT.

7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.

8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.

9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, " SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

## PROJECT SPECIFIC NOTES:

1. UNLESS OTHERWISE NOTED, FOR PROPOSED WATER MAINS AND SEWER MAINS 4" THRU 12" DIAMETER, PIPE SHALL BE DUCTILE IRON, PC 350. FOR PROPOSED WATER MAINS AND SEWER MAINS 16" THRU 36" DIAMETER, PIPE SHALL BE DUCTILE IRON, PC 250.

2. WATER LINE VALVES SHALL BE RESILIENT-SEAT GATE VALVES CONFORMING TO ANSI/AWWA C509, RATED FOR 200 PSI MINIMUM WORKING PRESSURE.

3. THE INTERIOR OF PROPOSED GRAVITY SEWER LINES SHALL BE LINED WITH CORROSION-RESISTANT CERAMIC EPOXY COATING AS DESCRIBED IN THE UC PROJECT SPECIAL PROVISIONS.

4. FOR PROPOSED SANITARY SEWER MANHOLES ON SEWER LINES 36" AND LARGER, THE MANHOLES SHALL BE MANUFACTURED USING CORROSION-RESISTANT POLYMER CONCRETE, AS DESCRIBED IN THE UC PROJECT SPECIAL PROVISIONS.

5. ON SHEETS UC-5A AND UC-5B, TEMPORARY BYPASS PUMPING OF FLOW IN EXISTING 30" SEWER LINE WILL BE REQUIRED WHEN TYING PROPOSED MH'S INTO THE EXISTING SEWER LINE. SEE DIVISION 15, SECTION 1520-3-A-1 OF THE NCDOT STANDARD SPECIFICATIONS. COST FOR TEMPORARY BYPASS PUMPING SHALL BE INCIDENTAL TO THE CONTRACT.

6. ON SHEET UC-6, A SECTION OF THE PROPOSED 20" WATER LINE, PW300, WILL BE INSTALLED WITHIN AN AREA IDENTIFIED AS HAVING CONTAMINATED SOIL/GROUNDWATER. FROM STA 6+12 TO STA 9+62 ON PW300, THE CONTRACTOR SHALL USE D.I. PIPE WITH EXTERIOR ZINC COATING AND FLUROELASTOMER (FKM) GASKETS. THE GASKETS SHALL BE FURNISHED BY THE D.I. PIPE MANUFACTURER. SEE THE UC PROJECT SPECIAL PROVISIONS FOR FURTHER INFORMATION.

7. ON SHEET UC-6, THE PROPOSED 8" SEWER LINE, PS200, WILL BE INSTALLED WITHIN AN AREA IDENTIFIED AS HAVING CONTAMINATED SOIL/GROUNDWATER. FOR THE ENTIRE LENGTH OF PS200, THE CONTRACTOR SHALL USE D.I. PIPE WITH EXTERIOR ZINC COATING AND INTERIOR CERAMIC EPOXY LINING, AND NITRILE (NBR) GASKETS. THE NITRILE (NBR) GASKETS SHALL BE FURNISHED BY THE D.I. PIPE MANUFACTURER. SEE THE UC PROJECT SPECIAL PROVISIONS FOR FURTHER INFORMATION.

8. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS CONCERNING TRENCHLESS INSTALLATION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE TRENCHLESS INSTALLATIONS DESIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. NO DAMAGE IS ALLOWED TO RIVER, WETLANDS, OR BUFFER ZONES.

9. A BOLLARD SHALL BE PLACED AT EACH END OF INSTALLED ENCASEMENT PIPES, PER THE DETAIL SHOWN ON SHEET UC-3A. THE COST TO FURNISH AND INSTALL THE BOLLARDS SHALL BE INCIDENTAL TO THE CONTRACT.

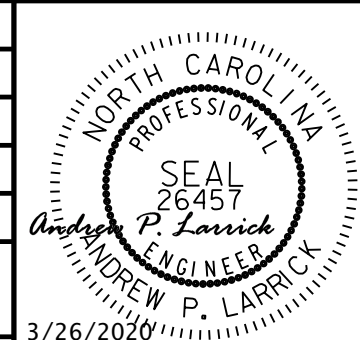
10. THE CONTRACTOR SHALL REPLACE ANY DAMAGED SEWER LATERALS AND/OR CLEANOUTS AS DIRECTED BY THE ENGINEER. THE NECESSARY QUANTITIES HAVE BEEN ADDED TO THE CONTRACT TO FACILITATE THIS PROCEDURE.

11. CONTRACTOR SHALL COORDINATE WITH THE CITY OF GREENSBORO WATER RESOURCES DEPARTMENT CONCERNING THE TIMING AND SCHEDULE OF REQUIRED SHUT-DOWNS OF ANY EXISTING WATER OR SEWER MAINS.

12. SHUT-DOWN OF THE EXISTING 20" WATER MAIN SHOWN ON SHEETS UC-5C, UC-6, AND UC-7 SHALL BE NOT BE ALLOWED BETWEEN APRIL 1 AND OCTOBER 31, DUE TO THIS BEING A CRITICAL WATER TRANSMISSION MAIN FOR THE CITY OF GREENSBORO THAT CANNOT BE OUT OF SERVICE DURING PERIODS OF HIGHER WATER USAGE. THE CONTRACTOR SHALL SCHEDULE THE WORK SO THAT SHUT-DOWNS OF THE 20" WATER MAIN WILL BE PERFORMED BETWEEN NOVEMBER 1 AND MARCH 31, OR AS ALLOWED BY THE CITY OF GREENSBORO.

13. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER SERVICE TO CUSTOMERS WHEN EXISTING WATER MAINS HAVE TO BE SHUT DOWN FOR MORE THAN 8 HOURS, OR AS DIRECTED BY THE ENGINEER.

14. CONTRACTOR SHALL COORDINATE WITH PROCTOR AND GAMBLE ON ANY SHUT-DOWNS OF THE EXISTING PRIVATE 12" WATER LINE THAT SERVES THE PLANT (PARCEL 12). CONTACT PROCTOR AND GAMBLE AT LEAST TWO (2) WEEKS PRIOR TO ANY PLANNED SHUT-DOWNS OF THEIR WATER LINE. WHEN TYING IN THE PROPOSED WATER LINE RELOCATION TO THE EXISTING WATER LINE, LIMIT THE SHUT-DOWN OF THE WATER LINE TO NO LONGER THAN EIGHT (8) HOURS.

PROJECT REFERENCE NO.	SHEET NO.
R-4707	UC-3
DESIGNED BY: APL	
DRAWN BY: RDL	
CHECKED BY: APL	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	3/26/2020
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

## UTILITY CONSTRUCTION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

## LIST OF STANDARD DRAWINGS

- 1515.01 WATER METER
- 1515.02 FIRE HYDRANT
- 1520.01 SEWER CLEAN OUT
- 1525.06 PRECAST CONCRETE SANITARY SEWER MANHOLE WITH CAST-IN-PLACE BOTTOM