

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 UTILITIES BELONG TO EITHER THE CITY OF DUNN, SADLER OIL, OR HARNETT REGIONAL WATER (HRW). THE SEWER FORCE MAIN ON SHEET UC-4B BELONGS TO DUNN, AND THE SEWER FORCE MAIN ON SHEETS UC-5B AND UC-13 BELONGS TO SADLER OIL. ALL WATER LINES BELONG TO HRW.
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 ENVIRONMENT QUALITY, DIVISION OF WATER RESOURCES, WATER QUALITY SECTION. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.
4. THE UTILITY OWNERS OWN 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 OWNERS ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNERS 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 OWNERS' REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNERS 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. LINE STOPS AND INSERT VAVLES WILL BE REQUIRED WHERE INDICATED ON THE PLANS, WHERE THE UTILITY OWNER CANNOT ISOLATE THE EXISTING LINES WITHOUT MAJOR DISRUPTION OF SERVICE TO MANY USERS.
9. ALL UTILITY MATERIALS SHALL BE APPROVED BY HRW OR THE CITY OF DUNN AND THE NCDOT 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 PVC C900, DR 18, FUSIBLE PVC C900, DR18, DUCTILE IRON, PC 350, OR RESTRAINED JOINT WHERE INDICATED ON PROFILES. SEWER FORCE MAINS SMALLER THAN 4" SHALL BE SDR 21. HRW DOES NOT APPROVE EBAA IRON "MEGALUG" TYPE RESTRAINED RETAINER GLANDS. HRW PREFERENCES ROMAC "GRIP RINGS" OR APPROVED EQUAL. WATER SERVICE LINES LESS THAN 2" SHALL BE PE, SDR 9. WATER SERVICE LINES 2" OR GREATER SHALL BE SDR 21.
2. FUSIBLE PVC SHALL BE EXTRUDED WITH LAIN ENDS. THE ENDS SHALL BE SQUARE TO THE PIPE AND FREE OF ANY BEVEL OR CHAMFER. THERE WILL BE NO BELL OR GASKET OF ANY KIND INCORPORATED INTO THE PIPE. THE PIPE SHALL BE MANUFACTURED IN STANDARD 40' NOMINAL LENGTHS OR CUSTOM LENGTHS AS SPECIFIED, AND SHALL BE COLORED BLUE FOR WATER. FUSIBLE PVC SHALL BE BUTT-FUSED BY QUALIFIED, CERTIFIED, AND LICENSED TECHNICIANS. A DATA LOGGER SHALL BE AFFIXED TO THE FUSION MACHINE AND ALL PRESSURE/TIME DATA COLLECTED FOR USE BY THE ENGINEER. THE FUSIBLE PVC WILL BE INSTALLED IN A MANNER SO AS TO NOT EXCEED THE RECOMMENDED BENDING RADIUS AS SHOWN ON THE PLANS, AND THE RECOMMENDED SAFE PULLING FORCE ESTABLISHED BY THE PIPE MANUFACTURER SHALL NOT BE EXCEEDED. CONNECTIONS TO OTHER MATERIALS SHALL BE AS SHOWN ON THE PLANS. PVC PIPE ENDS SHALL NOT BE BENT INTO POSITION WITH HEAVY EQUIPMENT BUT INSTEAD SHALL BE ACCOMPLISHED WITH FUSIBLE FITTINGS.
3. DUCTILE IRON PIPE WITH FLUOROELASTOMER OR NITRILE GASKETS AND POLYWRAP SHALL BE INSTALLED IN ALL AREAS WITH HAZARDOUS SOILS AS SHOWN ON THE PLAN PROFILES. ALL UNSUITABLE SOILS SHALL BE REMOVED AND DISPOSED OF.
4. DIP AND FITTINGS ON SEWER FORCE MAIN SHALL BE INTERIOR LINED WITH CERAMIC EPOXY LINING.
5. WATER LINE VALVES SHALL BE RESILIENT-SEAT GATE VALVES CONFORMING TO ANSI/AWWA C509, RATED FOR 200 PSI MINIMUM WORKING PRESSURE. HRW VALVES SHALL BE MUELLER, FLOW CONTROL, WATEROUS, M&H, KENNEDY, OR APPROVED EQUAL.
6. FIRE HYDRANTS SHALL MEET NCDOT STANDARD SPECS. HRW SHALL BE MUELLER A-423, AMERICAN DARLING MARK B-84-B, WATEROUS PACER B-67-250, OR APPROVED EQUAL.

7. CONTRACTOR'S ATTENTION IS DIRECTED TO SECTIONS 102, 107, AND 1550 OF THE STANDARD SPECIFICATIONS CONCERNING TRENCHLESS INSTALLATION. IT IS CONTRACTOR'S RESPONSIBILITY TO HAVE BORE DESIGNED AND SEALED BY A LICENSED NORTH CAROLINA PROFESSIONAL ENGINEER. NO DAMAGE IS ALLOWED TO RIVER, WETLANDS, OR BUFFER ZONES.
8. CONTRACTOR SHALL COORDINATE WITH THE RESPECTIVE UTILITY OWNER CONCERNING THE TIMING AND SCHEDULE OF REQUIRED SHUT-DOWNS OF ANY EXISTING WATER OR SEWER MAINS. THE CONTRACTOR MAY HAVE TO PROVIDE TEMPORARY WATER SERVICE TO CUSTOMERS WHEN EXISTING WATER MAINS HAVE TO BE SHUT DOWN FOR AN EXTENDED PERIOD OF TIME.
9. ALL ITEMS ON THIS SHEET SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS.

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| PROJECT REFERENCE NO. | SHEET NO. |
| I-5883 | UC-3 |
| DESIGNED BY: DMP | |
| DRAWN BY: DMP | |
| CHECKED BY: DMP | |
| APPROVED BY: | |
| REVISED: | |
| NORTH CAROLINA DEPARTMENT OF TRANSPORTATION | UTILITY CONSTRUCTION PLANS ONLY |
| UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151 | |

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