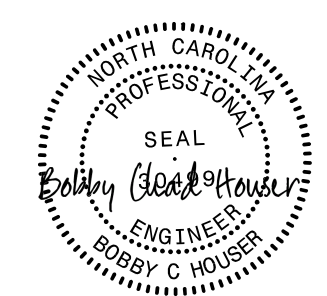


UTILITY CONSTRUCTION

PROJECT REFERENCE NO.	SHEET NO.
B-5869	UC-3
DESIGNED BY: BCH	
DRAWN BY:	
CHECKED BY:	
APPROVED BY:	
REVISED:	
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION	8/3/2022
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151	UTILITY CONSTRUCTION PLANS ONLY

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 THE CITY OF MORGANTON.
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 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. ALL PROPOSED WATER LINE 6 TO 12 INCHES IN DIAMETER, SHALL BE PRESSURE CLASS 350 DUCTILE IRON ZINC COATED PIPE AND UTILIZE FLEXIBLE PUSH-ON JOINTS.
2. ALL WATER LINE FITTINGS 6 TO 12 INCHES IN DIAMETER, SHALL BE MANUFACTURED IN THE U.S.A. AND TESTED ACCORDING TO AWWA STANDARDS. WATER LINE FITTINGS SHALL BE DUCTILE IRON MECHANICAL JOINT AND SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI AND MEET AWWA C-110 AND ANSI 21.11 FOR MECHANICAL JOINT PIPE. COMPACT DUCTILE IRON FITTINGS MAY BE USED IN LIEU OF STANDARD CAST IRON OR DUCTILE IRON FITTINGS. ALL COMPACT FITTINGS SHALL BE MECHANICAL JOINT AND HAVE A MINIMUM WORKING PRESSURE OF 350 PSI AND MEET AWWA C-153 AND ANSI A21-53 AND AWWA C-111 AND ANSI A21.11 FOR MECHANICAL JOINT PIPE.
3. WATER LINE UTILIZING RESTRAINED JOINT FITTINGS SHALL BE TYTON JOINT, HP LOK, AMERICAN "FAST GRIP", US PIPE "FIELD-LOK" OR APPROVED EQUAL.
4. ALL WATERLINE SHALL HAVE 12 AWG SOLID COPPER TRACER WIRE WITH 30 MIL BLUE HDPE INSULATION .
5. ALL VALVES- DUCTILE IRON RESILIENT WEDGE STYLE VERTICAL OR HORIZONTAL GATE VALVES SHALL BE USED FOR ALL MAIN LINE AND HYDRANT BRANCH VALVES IN SIZES FROM 2 INCHES THROUGH 24 INCHES. MANUFACTURERS ACCEPTED ARE AMERICAN, MUELLER, KENNEDY AND CLOW. ALL VALVES MUST MEET OR EXCEED REQUIREMENTS IN ACCORDANCE WITH AWWA C-509, C 515, OR THE APPROPRIATE AWWA STANDARD AS APPLICABLE SHALL BE USED. ALL RESILIENT WEDGE VALVES SHALL HAVE INTERNAL AND EXTERNAL EPOXY COATING, O-RING SEALS AT THE STUFFING BOX AND BONNET TO BODY AND DUAL O-RINGS AT THE STEM SEAL ABOVE THE THRUST COLLAR. GATE VALVES TWELVE INCHES IN DIAMETER AND SMALLER, SHALL BE MECHANICAL JOINT. THEY SHALL HAVE "O" RING SEALS, OPEN COUNTERCLOCKWISE, AND HAVE A NON-RISING STEM. THESE VALVES SHALL BE DESIGNED FOR A MINIMUM OF 175 PSI WORKING PRESSURE AND 300 PSI HYDROSTATIC TEST PRESSURE WITH A TWO (2) INCH OPERATING NUT. SEE CITY OF MORGANTON STANDARD DRAWING 105.
6. VALVE BOXES SHALL BE MANUFACTURED BY SIGMA, ACCUCAST OR APPROVED EQUAL. VALVE BOXES SHALL BE CLASS 30 CAST IRON AND MANUFACTURED IN ACCORDANCE WITH ASTM A48. VALVE BOXES SHALL BE ADJUSTABLE TWO-PIECE, CAST IRON, AND SCREW-TYPE CONSTRUCTION. LIDS SHALL HAVE THE WORD "WATER"CAST INTO THE LID. SEE CITY OF MORGANTON STANDARD DRAWING 105.
7. WATER SERVICE PIPE FOR ¾" TO 2 INCH CONNECTIONS SHALL BE TYPE "K" SOFT COPPER WITH NO JOINTS OR COUPLINGS TO THE WATER METER OR IN THE RIGHT-OF-WAY. ALL WATER SERVICES AND FITTINGS SHALL BE COMPRESSION (GRIP JOINT) TYPE FITTINGS. 1½ INCH AND 2 INCH TAPS MAY ONLY BE MADE WITH USE OF A DOUBLE STRAP SADDLES LISTED IN SECTION 7 ABOVE. SEE CITY OF MORGANTON STANDARD DRAWING 108
8. PROVIDE THRUST RESTRAINT ON THE EXISTING WATER LINE WHERE TIE-INS ARE MADE AS NECESSARY.
9. CONTRACTOR SHALL NOT OPERATE ANY VALVES ON THE EXISTING UTILITY SYSTEMS. CONTRACTOR SHALL CONTACT THE UTILITY OWNER TO CONDUCT STRATEGIC OPERATION OF VALVES FOR SERVICE INTERRUPTION IN ORDER TO PERFORM SPECIFIC WORK.
10. ANY BENDS OF PVC WATER PIPE NOT SPECIFICALLY CALLED OUT WITH A 90, 45, 22.5, OR 11.25 DEGREE BEND FITTING, SHALL BE CONSTRUCTED BY A RADIAL BEND OF THE PIPE AS NOTED ON THE PLANS OR IN ACCORDANCE WITH PIPE MANUFACTURER'S SPECIFICATIONS (WHICHEVER IS MORE STRINGENT) - OR A COMBINATION OF BEND FITTINGS AND A RADIAL BEND OF THE PIPE. DEFLECTION OF THE PIPE JOINTS ON PVC PIPE MATERIAL IS NOT AN ACCEPTABLE METHOD OF PIPE BENDING.
11. ALL MATERIALS, EQUIPMENT, LABOR, AND WORKSMANSHIP SHALL BE IN ACCORDANCE WITH CITY OF MORGANTON SPECIFICATIONS AND NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES. IN THE EVENT OF CONFLICT BETWEEN STANDARDS, THE MORE RESTRICTIVE REQUIREMENTS SHALL APPLY.
12. UTILITY OWNER MUST BE PRESENT FOR ANY TESTING OR CONNECTIONS TO THE EXISTING SYSTEM INCLUDING BUT NOT LIMITED TO ALL TAPS AND TEMPORARY CONSTRUCTION CONNECTIONS. A NOTICE OF 72 HOURS MUST BE PROVIDED.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

UTILITY CONSTRUCTION