

**PROJECT SPECIAL PROVISIONS**  
**Utility Construction**

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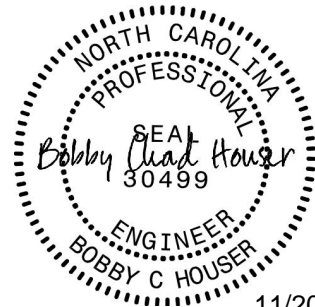
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Utility Owner:

Cleveland County Water

715 Polkville Rd

Shelby, NC 28151



**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

Where brand names and model numbers are specified in these Special Provisions or in the plans, the cited examples are used only to denote the quality standard of product desired and do not restrict bidders to a specific brand, make, or manufacturer. They are provided to set forth the general style, type, character, and quality of the product desired. Equivalent products will be acceptable.

The utility owner is Cleveland County Water. The contact person is Chris Hayes, Project Manager and he can be reached by phone at (704) 477-5669 or email at [chris@clevelandcountywater.com](mailto:chris@clevelandcountywater.com).

**RELATION OF WATER MAINS TO NON POTABLE WATER LINES AND OTHER UTILITIES:**

Lay water mains at least 10 feet laterally from existing or proposed sanitary sewers or reclaimed water distribution lines. If local conditions or barriers prevent a 10-foot separation, lay the water main with at least 18 inches vertical separation above the top of the sanitary sewer or reclaimed water distribution pipe either in a separate trench or in the same trench on a bench of undisturbed earth.

For storm drain pipe or other utilities, lay the water main with at least 12 inches separation from the outside of the water main and the outside of the other facility.

One full length of water pipe at the point of crossing shall be located so that both joints will be as far from the sanitary sewer or reclaimed water distribution pipe as possible. If practicable, the water main shall be located above the sewer or reclaimed water distribution line.

### **TRAFFIC CONTROL AND EROSION CONTROL**

Traffic Control and Erosion Control for this project shall be in accordance with NCDOT specifications and practices.

#### **Payment**

No direct payment will be made for Traffic Control or Erosion Control required by the preceding provision, which are general requirements applying to utility construction, and all the requirements stated will be considered incidental work, paid at the contract unit prices of the various utility items included in this contract.

### **INTERRUPTIONS IN WATER SERVICE**

Interruptions in water service for all distribution mains shall be limited to a maximum of 4 hours unless otherwise specifically approved by the owner. If contractor determines tie-ins cannot be performed in the aforementioned time, the contractor shall use tapping valves and sleeves to reduce interruption time. Interruptions in water service require advanced notice to the owner at least one week prior. Advanced notice will be email and phone call to a utility owner representative.

### **PLACING PIPELINES INTO SERVICE**

The 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.

### **COMMENCEMENT OF WORK**

A pre-construction meeting is required before work may begin. The Utility Owner shall be notified 72 hours prior to project mobilization.

### **MATERIALS APPROVAL**

All utility materials shall be approved by the owner prior to delivery to the project.

### **TESTING AND STERILIZATION**

All waterline testing shall be in accordance with Cleveland County Water Specifications. A designated representative from the Utility Owner shall be notified to witness testing prior to their acceptance.

## **WATER LINES**

### **Ductile Iron Pipe, 4 Inch through 12 Inch**

Ductile Iron pipe shall be utilized for all proposed water lines as shown on the plans.

Pipe: Ductile iron pipe shall be Pressure Class 350 and shall conform to the requirements of AWWA Standard C-151 and shall have a cement-mortar lining of standard thickness in accordance with AWWA C-104. Unless otherwise shown on the construction plans, all ductile iron pipe shall be furnished with push on joints in accordance with AWWA C111.

Fittings: all water line fittings 4 to 16 inches in diameter, shall be Pressure Class 350 Ductile Iron restrained joint in accordance with ANSI A21.10 / AWWA C110 and ANSI A21.4 / AWWA C104.

Joints: AWWA C111 push-on or mechanical for general buried service; AWWA C115 flanged for exposed service unless shown otherwise. Flange material shall match pipe material.

Creek Crossing: Water line utilizing restrained joints shall be used at the creek crossing and shall be approved by the owner.

Linings: AWWA C104 cement lining, standard thickness, bituminous exterior seal coat.

Thrust Restraint: All fittings, bends, tees, crosses, valves shall be adequately restrained. Approved restraint includes retaining glands, field lock gaskets and restraint systems provided by approved pipe manufacturers. The use of poured concrete thrust blocks will be permitted, as depicted in the pertinent Standard Detail, where connections are made to existing waterlines or under other such special conditions where use of mechanical restraint is not feasible. The use of pre-cast concrete thrust blocks shall not be permitted.

### **Payment**

No measurement or payment will be made for this work as the cost of such shall be included in the contract unit price bid per linear foot for “\_” *Water Line*”.

### **WATER VALVES**

All valves 12" and under shall be resilient wedge gate valves, conforming to AWWA C509, latest revision. Sealing mechanism shall provide zero leakage at the water working pressure against the line flow from either direction and be designed such that no exposed metal seams, edges, screws, etc. are within the waterway in the closed position. The gate shall not be wedged into a pocket nor slide across the seating surface to obtain tight closure. All internal and external ferrous surfaces of the valve, including the interior of the gate, shall be coated with a protective coating conforming to AWWA C550, latest revision. Coating shall be applied to castings prior to assembly to assure all exposed areas will be covered. Valves shall be rated at 250 psi working pressure. Unless otherwise noted, underground valves shall have an operating nut and exposed valves shall have a hand wheel operator. Operating nut shall be 2"x2", open left.

#### **Payment**

No measurement or payment will be made for this work as the cost of such shall be included in the contract unit price bid per linear foot for "\_\_\_\_" *Valve*".