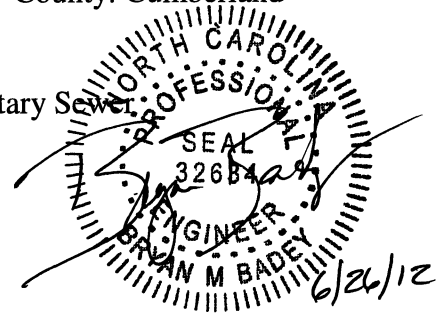


**PROJECT SPECIAL PROVISIONS**Fayetteville Public Works Commission; Water and Sanitary Sewer  
June 26, 2012**GENERAL CONSTRUCTION REQUIREMENTS:****Specifications:**

The proposed utility construction shall meet the applicable requirements of the NC Department of Transportation "Standard Specifications for Roads and Structures" dated January 2012, the Fayetteville Public Works Commission (PWC) "Design Manual" and the provisions outlined below.

Meet the installation standards of the AWWA or ASTM for water line construction.

**Owner and Owner's Requirements:**

The existing water mains and sanitary sewer mains are owned by the Fayetteville Public Works Commission. The primary contact person for PWC is Mr. Joe Glass (910) 223-4740. The contractor shall provide access for the owner's representatives to all phases of construction. The owner shall also be notified two (2) weeks prior to commencement of any work and one (1) week prior to service interruption. Interruption of water service on main lines shall be limited to a maximum of 4 hours during regular working hours unless approved otherwise by PWC.

Only PWC personnel shall operate valves and hydrants except in the case of an emergency. Notify PWC immediately of an emergency requiring valve or hydrant operation.

Any cracked, damaged, or defective pipe, fittings, or other attachments discovered as a result of the pressure test, shall be removed and replaced with sound material. The tests shall be repeated until test results are satisfactory.

**Utility Locations Shown on the Plans:**

The locations, sizes, and type material of the existing utilities shown on the plans are from the best available information. The contractor will be responsible for determining the exact location, size, and type of material of the existing facilities necessary for the construction of the proposed utilities and to avoid damage to existing facilities. All water and sanitary sewer services disturbed during construction shall be reconnected, even if not shown on the plans. Contractor is to make the Engineer aware of any plan discrepancies.

All proposed utility construction shall meet the applicable requirements of the NC Department of Transportation's "Standard Specifications for Roads and Structures" dated January 2012. Division 15 of the Standard Specifications is revised as follows:

Provide access for Department personnel and the owner's representatives to all phases of construction. Notify Department personnel and utility owner two weeks prior to commencement of any work and one week prior to service interruption. Keep utility owner's representatives informed of the work progress and provide opportunity for inspection of construction and testing. The water and sewer lines on this project belong to Fayetteville PWC. The contact person for Fayetteville PWC is Mr. Joe Glass, PE and he can be reached by phone at (910) 223-4740. Any work on these lines must be coordinated through the Engineer and the utility owner before beginning.

Ductile iron water pipe shall be of the thickness and pressure rating class shown on the utility plans and shall conform to ANSI A21.51 (AWWA C151). Pipe shall be either mechanical joint or push-on-joint and installed with rubber gaskets in accordance with ANSI A21.11 (AWWA C111). All water pipe shall be provided and installed in accordance with Articles 1036 and 1510 of the Standard Specifications. All water pipe on this project shall be ductile iron unless otherwise specified on the utility construction plans.

Ductile iron sewer pipe shall meet the requirements of ANSI A21.51/AWWA C151. Nominal pipe laying length shall be 20 feet. Joints shall be mechanical joint or rubber ring gasket slip joint, each conforming to ANSA A21.11/AWWA C111. The pipe and fittings shall have a bituminous exterior coating as specified in AWWA C151. Interior of the pipe joints and fittings shall be cement-mortar lined

Ductile iron pipe fittings shall be installed in accordance with the applicable utility provisions herein, as shown on the utility plans and/or as directed by the Engineer.

Ductile iron bends and tees shall be in accordance with the applicable requirements of ANSI A21.10 (AWWA C110). Joints for such bends and tees shall be in accordance with ANSI A21.11 (AWWA C111) and be cement mortar lined. All ductile iron pipe fittings shall have a minimum working pressure of 250 PSI.

Mechanical restraining systems shall not be used on PVC pipe.

For the purpose of identification of buried plastic or non-metallic pipes during future trenching or location, a continuous "detectable" identification wire shall be installed. The wire shall be a minimum 12 gauge, single strand, coated copper wire that is suitable for underground use. The wire shall be buried continuously along the pipe.

All water services being installed or relocated shall be provided with copper tubing. PE tubing or piping will not be used on this project. Copper water tubing shall be Type K, soft copper manufactured in accordance with ASTM B88. All water services shall be one

continuous run of pipe from the main to the meter with no splices. The minimum pressure rating for the copper water pipe shall be 65 PSI.

Valves on water mains that are being abandoned shall either be removed or closed and the top of the valve box removed and backfilled in accordance with NCDOT standards.

**Material Specifications:**

When brand names of materials have been determined, the Contractor shall obtain approval, through the engineer and the owner prior to their use and/or installation.

Then Contractor shall furnish, but is not limited to furnishing, catalog cuts and/or shop drawings of the materials. Thirty days shall be allowed for the Engineer's review of each submittal. Eight copies of each catalog cut and/or shop drawing (signed and sealed) shall be submitted.

**COMPENSATION:**

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



PROJECT SPECIAL PROVISIONS  
Utility Construction

All proposed utility construction shall meet the applicable requirements of the NC Department of Transportation's Standard Specifications for Roads and Structures dated January 12, 2012.

Revise the *2012 Standard Specifications* as follows:

**Utility Owner's Contact Information:**

**Page 15-1, Subarticle 1500-2 Cooperation with the Utility Owner**, add the following sentences:

All water lines on this project belong to Public Works Commission of Fayetteville.

The Contractor shall provide access for the owner's representatives during construction. A preconstruction meeting shall be held with Public Works Commission of Fayetteville Water, the Utility Contractor and the D.O.T prior to any work beginning. The Contractor shall notify the owner two weeks before commencement of any work and three weeks before service interruption.

The water and sewer lines on this project belong to Fayetteville PWC. The contact person for Fayetteville PWC is Mr. Joe Glass, PE and he can be reached by phone at (910)223-4740. Any work on these lines must be coordinated through the Engineer and the utility owner before beginning.

**Page 15-5, Subarticle 1510-3 Construction Methods**, add the following sentences:

Testing of all water pipe shall be in accordance with Article 1510, with the exception of the amount of allowable leakage. Leakage is not allowed; pressure shall be maintained at 200PSI for the duration of the test. Fayetteville PWC shall be present for all testing of water main.

**Page 15-7, Subarticle 1515-2 Materials**, add the following sentences:

All water pipe shall be provided and installed in accordance with Articles 1036 and 1510 of the Standard Specifications. All water pipe on this project shall be ductile iron unless otherwise specified on the utility construction plans. Pipe shall be either mechanical

joint or push-on-joint and installed with rubber gaskets in accordance with ANSI A21.11 (AWWA C111).

Ductile iron pipe fittings shall be installed in accordance with the applicable utility provisions herein, as shown on the utility plans and/or as directed by the Engineer.

Ductile iron bends and tees shall be in accordance with the applicable requirements of ANSI A21.10 (AWWA C110). All ductile iron pipe fittings shall have a minimum working pressure of 250 PSI.

Restrained Joint Ductile Iron Water Line shall be installed in accordance with the applicable utility provisions herein, as shown on the utility plans and/or as directed by the Engineer.

Restrained Joint Ductile Iron Water Line shall be pressure class as shown on the utility plans and shall conform to ANSI A21.51 (AWWA C151). All joints for such pipe shall be in accordance with ANSI A21.11 (AWWA C111). Pipe thickness shall be in accordance with ANSI A21.50 (AWWA C150) and based on laying conditions and internal pressures stated on the plans. Mega-lugs and field lock gaskets are acceptable means of restraint on water main sizes 12" and smaller.

Cement mortar lining and seal coating for pipe shall be in accordance with ANSI A21.4 (AWWA C104). Bituminous outside coating shall be in accordance with ANSI A21.51 (AWWA C151).

All one-inch water services shall be provided with copper tubing. PE tubing or piping will not be used on this project. Copper water tubing shall be Type K, soft copper manufactured in accordance with ASTM B88. The minimum pressure rating for the copper water pipe shall be 65 PSI.

All water services being installed shall be one continuous run of pipe with no splices from the corporation stop to the meter. The water service does not include the water meter. Water meters shall be furnished and installed by PWC of Fayetteville.

Meter boxes shall be placed with the top of the meter box flush with finished grade of the project.

Relocation of water meters shall be done in accordance with NCDOT Standards and Specifications Section 1515 except that the Contractor shall use type K copper tubing. Relocated services shall be one continuous run of pipe with no splices from the corporation stop to the meter. Existing water meter shall be relocated and connected by Contractor. The Contractor shall also be responsible for re-connecting the meter to the customer's plumbing utilizing brass fittings.

**COMPENSATION:**

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

PROJECT: B-4949  
COUNTY: Cumberland

PROJECT SPECIAL PROVISIONS  
Utility

UTILITIES BY OTHERS:

General:

The following utility company has facilities that may be in conflict with the construction of this project:

- A) Public Works Commission of Fayetteville - Power
- B) CenturyLink - Telephone

The conflicting facilities of these concerns will be adjusted prior to the date of availability, unless otherwise noted, and are therefore listed in these special provisions for the benefit of the Contractor. All utility work listed herein will be done by the utility owners. All utilities are shown on the plans from the best available information. For utility relocations, see the Utilities by others plans.

The Contractor's attention is directed to Article 105-8 of the Standard Specifications.

Utilities Requiring Adjustment:

A) Public Works Commission of Fayetteville (Power)

1. The existing power poles and lines on each side of the L-line will be removed from L-Sta. 16+35 to L-Sta. 24+01 where the poles are near to the roadway. These poles and lines will be reinstalled after the bridge construction is completed. See Utilities By Others Plans for details.

Contact is Jim Cline at (910)-223-4523

B) CenturyLink (Telephone)

1. See Utilities By Others Plans for details.

Contact is Kevin Godwin at (910)-366-2142

**PROJECT SPECIAL PROVISIONS**

## Utility

**UTILITIES BY OTHERS:**

## General:

The following utility companies have facilities that will be in conflict with the construction of this project:

- A) Public Works Commission of Fayetteville - Power
- B) CenturyLink - Telephone

The conflicting facilities of these concerns will be adjusted prior to the date of availability, unless otherwise noted, and are therefore listed in these special provisions for the benefit of the Contractor. All utility work listed herein will be done by the utility owners. All utilities are shown on the plans from the best available information. For utility relocations, see the Utilities By Others Plans.

The Contractor's attention is directed to Article 105-8 of the Standard Specifications.

## Utilities Requiring Adjustment:

## A) Public Works Commission of Fayetteville (Power)

1. See Utilities By Others Plans for details.

Contact is Jim Cline at (910)-223-4523

## B) CenturyLink (Telephone)

1. See Utilities By Others Plans for details.

Contact is Kevin Godwin at (910)-366-2142