Project: B-3865 County: Johnston

# PROJECT SPECIAL PROVISIONS Utility Construction

## GENERAL CONSTRUCTION REQUIREMENTS:

## Specifications:

The proposed utility construction shall meet the applicable requirements of the NC Department of Transportation's "Standard Specifications for Roads and Structures" dated January 2002 and the following provisions.

The Contractor is herein forewarned as to the possibility of having to vary the depth of pipeline installation to achieve minimum clearance of existing or proposed utilities or storm drainage while maintaining minimum cover specified (whether existing or proposed pipelines, conduits, cables, mains, and storm drainage are shown on the plans or not).

On new mains and tie in sections of existing mains, the method of anchoring pipe bends, valves, and related appurtenances will be the responsibility of the Contractor. Tying in to existing mains may alter such lines to the extent that these pipelines with existing pipe bends, valves and related appurtenances may also require reaction backing; this work shall also be the responsibility of the Contractor.

The Contractor shall submit his proposed method of anchoring to the Engineer for review and approval prior to any applicable force main sewer construction. Such approval will not relieve the Contractor of his responsibility of properly anchoring the force main sewers.

## Owner and Owner's Requirements:

The existing sewer lines belong to the Town of Princeton, and the existing water lines belong to Johnston County, Princeton-Kenly Water District. The contact person for the Town of Princeton is Ms. Marla Ashworth. Ms. Ashworth can be reached by telephone at (919) 936-2918. The contact person for the Johnston County Utilities Department is Mr. Tim Broome. Mr. Broome can be reached by telephone at (919) 989-5075. The Contractor shall provide access for the owner's representatives to all phases of construction. The owners shall be notified two weeks prior to commencement of any work and one week prior to service interruption.

After the installed pipe, fittings, valves, hydrants, corporation stops and end plugs are inserted and secured, the pipeline shall be subjected to a hydrostatic pressure of 200 PSI for a period of 2 hours, by pumping the section full of clean

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water using an approved pressure pump. Cross connection for flushing and chlorination shall be made by means of a temporary connection from the supply pipe with an approved backflow prevention device. Cross connection and blowoff piping shall be 2 inches in diameter for mains 8 inches in diameter and smaller, and 4 inches in diameter for mains greater than 8 inches but less than 16 inches in diameter. Taps for the cross connection piping shall be made to the portion of the existing water main that will be removed from service. The proposed water main shall be laid to within one pipe length of the point of final connection prior to flushing and testing. All flushing and chlorination work shall be performed in accordance with AWWA C651-99. All fittings, valves, backflow prevention devices required for chlorination and testing shall be incidental to the cost of the proposed pipe being tested.

Any cracked, damaged, or defective pipe, fittings, valves, hydrants, 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.

After the pressure test is complete, the Contractor shall make a leakage test. Such leakage test shall last at least 2 hours at a pressure of 200 PSI.

The pressure test and leakage test may be performed concurrently.

All valves on the lines being sterilized shall be opened and closed several times during the chlorinating period. The pipeline shall then be flushed with clean water until the residual chlorine is reduced to less than 1.0 ppm or at the same level as in the existing water mains. Samples of water shall be taken at representative points along the pipeline by the Contractor in approved containers and submitted to a certified testing laboratory for bacterial and chlorine content. Test results shall be provided to the Johnston County Utilities Department as soon as they are available.

The owners shall be notified in advance of any interruptions of water service with ample time to make arrangements. Interruption of water service on main lines shall be limited to a maximum of 4 hours unless approved by the Engineer. This requirement applies to all proposed shutdowns.

Utility Locations Shown on the Plans:

The location, size, and type material of the existing utilities shown on the plans is from the best available information. The Contractor will be responsible for determining the exact location, size, and type material of the existing facilities necessary for the construction of the proposed utilities and to avoid damage to existing facilities.

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#### COMPENSATION:

No direct payment will be made for utility 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.

### **BEDDING MATERIAL:**

Bedding material for utility lines shall be installed in accordance with the applicable utility provisions herein, as shown on the utility construction plans, and/or as directed by the Engineer.

Bedding material shall meet the requirements of Article 1016-3 of the Standard Specifications. Bedding material shall be installed in accordance with Articles 300-6 and 300-7 of the Standard Specifications.

Bedding material installed in accordance with the plans and provisions herein and accepted, will be measured and paid for at the contract unit price per ton for "Bedding Material, Utilities Class VI". Such prices and payments shall be full compensation for all materials, labor, equipment, compaction and shaping the bedding material in accordance with Article 300-4 of the Standard Specifications, and incidentals necessary to complete the work as required.

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## 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) Progress Energy Power (Distribution)
- B) Tri-County EMC Power (Distribution)
- C) Sprint Telephone
- D) Adelphia CATV

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 owner. All utilities are shown on the plans from the best available information.

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

**Utilities Requiring Adjustment:** 

- A) Progress Energy Power (Distribution)
  - 1) See Utilities by Others Plans.

NOTE: The Contractor shall give Progress Energy four weeks notice prior to completion of the Proposed Bridge and allow Progress Energy six weeks to complete the relocation of their existing temporary power distribution facilities to the new permanent location. After the relocation has been completed the temporary power pole line will be removed.

- B) Tri-County EMC Power (Distribution)
  - 1) See Utilities by Others Plans.

NOTE: Tri-County EMC will complete the relocation of their power facilities by the date of availability. Tri-County EMC's power facilities begin at Station 25+00

-L- and continue past the end of the project. Tri-County's existing poles will be removed by Adelphia (CATV) at a later date.

## C) Sprint - Telephone

1) See Utilities by Others Plans.

NOTE: The contractor shall notify Sprint 30 days prior to completion of clearing and grubbing on the right side of the project and allow Sprint three weeks to install their temporary telephone facilities as shown on the Utilities by Others Plans.

The Contractor shall give Sprint four weeks notice prior to completion of the Proposed Bridge and allow Sprint six weeks to complete the relocation of their existing temporary telephone facilities to the new permanent buried and arial locations. After the relocation has been completed the temporary telephone pole line will be removed.

## D) Adelphia – CATV

1) See Utilities by Others Plans.

NOTE: The contractor shall notify Adelphia 30 days prior to completion of clearing and grubbing on the right side of the project and allow Adelphia six weeks to install their temporary CATV facilities with Sprint's temporary telephone pole lines and remove Tri-Counties existing poles as shown on the Utilities by Others Plans.

The Contractor shall give Adelphia four weeks notice prior to completion of the Proposed Bridge and allow Adelphia six weeks to complete the relocation of their existing temporary CATV facilities to the new permanent arial and buried locations. After the relocation has been completed the temporary telephone pole line will be removed.

NOTE: All other utilities will remain in place and will be adjusted as necessary.