



**PROJECT SPECIAL PROVISIONS**  
Utility Construction

Revise the 2006 *Standard Specifications* as follows:

**Utility Owner's Contact Information:**

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

There are multiple water and sewer lines on this project that belong to different utility companies. They are listed below with their contact person.

1. Durham County maintains the sewer lines. The contact person for the Durham County is Mr. Andy Lambeth, his phone number is 919-560-7993.
2. The City of Durham maintains the water lines. The contact person for the City of Durham is Mr. Lee Murphy, his phone number 919-560-4326.

**Water Main:**

**See Page 10-80, Subarticle 1036-5 Ductile Iron Pipe and Fittings, add:**

All proposed water lines and fittings for the City of Durham shall be Ductile Iron.

**Sewer Main:**

**See Page 10-78, Subarticle 1034-4 (B) Ductile Iron Pipe and Fittings, add:**

All proposed force mains and fittings for Durham County shall be Ductile Iron.

**Thrust Restraint:**

**Page 15-5, Subarticle 1505-3 Construction Requirements, (E) Thrust Restraint, add:**

On pipelines owned by the City of Durham, all fittings shall have concrete thrust blocking in accordance with the City of Durham's "Water and Sewer Construction Specifications", drawing B-14. This blocking does not eliminate the requirement to use restrained joint pipe.

The contractor is prohibited from using MEGALUG brand of mechanical joint restraint.

**As-Built Plans:**

**Page 15-3, Subarticle 1500-7 Submittals and Records, paragraph 3, add:**

The Contractor shall provide As-Built plans, per the City of Durham's Specifications (Section 4.0).

**Pressure Test:**

**Page 15-8, Subarticle 1500-3 Construction Requirements, Testing and Sterilization:**

paragraph 3, change:

Change: "pressurized at  $\pm 200$  for 2 hours"  
To: "pressurized at  $\pm 200$  for 3 hours"

paragraph 5, change:

Change: "visible at  $\pm 200$  for 2 hours"  
To: "visible at  $\pm 200$  for 3 hours"

**1. ROTATE TOP FOR EXISTING MANHOLE:**

Manholes tops shall be removed and rotated. Reconstruction shall include replacing and rotating the top. All work shall meet the approval of the Engineer.

Manholes with concentric top shall be replaced with an eccentric top.

Manhole shall be rotated away from the proposed curb and gutter sections.

Manhole construction shall also conform to the applicable requirements of Section 1525 of the Standard Specifications.

Payment for rotating and replacing manhole top will be based on a unit price for each manhole.

The quantity of existing manhole tops rotated and accepted will be measured and paid for at the contract unit price per each for "Rotate Top for Existing Manhole". Such price and payments will be full compensation for all labor, materials, rotating and replacing manhole top, excavation, backfilling, and incidentals necessary to complete the work as required.

## 2. BREAKDOWN AND REBUILD WATER VALVE VAULT:

The water valve vault shall be broken down and rebuilt to accommodate the proposed curb right of Line -L- at Sta. 26+00.

The water valve vault walls shall be lowered and a new concrete top section installed. The new water vault top shall be cast in place or precast concrete. The cast in place concrete top shall meet the requirements of Sections 825 and 425 of the Standard Specifications. The precast concrete top shall meet the requirements of Section 1077 of the Standard Specifications. The contractor is responsible for properly disposing of the existing vault walls and top removed.

Plans and design calculations for breaking down and rebuilding the water valve vault shall be signed and sealed by a licensed North Carolina Professional Engineer. The broken down and rebuilt vault shall be designed for HS-25 loading. The plans and calculations shall be submitted to the Engineer and the City of Durham.

The proposed top elevation of the vault will be below the finished grade to allow the proposed curb and gutter to be installed; only the proposed manhole access points shall be raised to the finished grade.

Provide two new manhole rings and covers in the proposed vault top to access the actuator nuts for each water valve. One manhole ring and cover shall be offset back of the proposed curb section.

The manhole rings and covers shall be made of cast iron conforming to ASTM A48 Class 35, rated for HS-25 loading. All manhole rings and covers shall be machined at contact points to make an even and smooth surface between the ring and cover. The words "Water" shall be cast on the manhole covers. The manhole rings and covers shall meet the City of Durham's standard design.

The quantity of water valve vaults broken down and rebuilt in accordance with the plans and provisions herein and accepted, will be measured and paid for at the contract unit price per each for "Breakdown and Rebuild Water Valve Vault". Such price and payments will be full compensation for all labor, materials, rotating and replacing manhole top, excavation, backfilling, and incidentals necessary to complete the work as required.

## 3. RAISE MANHOLE RING AND COVER FOR WATER VALVE VAULT:

The manhole access for the water valve vaults shall be raised to finished grade. The method used to raise the manhole access will not require the vault top to be broken down or rebuilt. All work shall meet the approval of the Engineer.

The method used to raise the manhole access shall be rated to handle HS-25 loading. Lateral support to stabilize the raised sections may be required. The method used to raise

the manhole access shall be submitted to the Engineer and the City of Durham for approval.

The quantity of water valve vault manholes rings and covers raised in accordance with the plans and provisions herein and accepted, will be measured and paid for at the contract unit price each for "Raise Manhole Ring and Cover for Water Valve Vault". Such price and payments will be full compensation for all labor, materials, backfilling, and incidentals necessary to complete the work as required.

4. Flowable Fill:

This work shall consist of furnishing and placing ready-mixed or volumetric mixed excavatable flowable fill between the top of existing water lines and the bottom of the proposed drainage pipes as specified in the plans or as directed by the Engineer.

Backfill shall not be placed on the flowable fill prior to final set or hardening as determined by the Engineer. The flowable fill materials shall meet the requirements of Section 340-2.

The quantity of flowable fill placed in accordance with the plans and provisions herein and accepted, will be measured and paid for at the contract unit price per cubic yard for "Flowable Fill." Such price and payments will be full compensation for all labor, materials, backfilling, and incidentals necessary to complete the work as required .

PROJECT: U-3309A  
COUNTY: Durham

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. PSNC
- B. Duke Energy
- C. Time Warner Cablevision
- D. Verizon Communications
- E. AT& T Local
- F. Verizon Business (Internet Long Distance)
- G. DukeNet
- H. Level 3 Communications
- I. BTI / Deltacom
- J. AT & T Metro
- K. Glaxo Smith Kline
- L. MCNC/UNC-TV

The conflicting facilities will be adjusted prior to the date of availability except where 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.

The Contractor's attention is directed to Article 105.8 of the Standard Specifications.

Utilities Requiring Adjustment:

- A. PSNC : All facilities will be moved prior to the date of availability except for the regulator valves at Station 16+22 -L- Left 48'. They will need 2 weeks notice prior to completion of rough grading and placement of the fill and then 2 more weeks to move the regulator valves. Contact Person is Francis Grimsley - Office: (919) 367-2714. See "Utilities by Others Plans" for utility conflicts.
- B. Duke Energy: The aerial 3 phase electrical conductors crossing at UNC-TV will be relocated by the date of availability. Contact persons are Don Daniels - Office: 919-687-3136 / Cell: 919-818-3136, Steve Whitamore - Office: (336) 222-5562 . See "Utilities by Others Plans" for utility conflicts.
- C. Time Warner Cablevision: Time Warner & Resident Engineer will coordinate the relocation of Time Warner underground facilities that are in conflict with the proposed drainage. All work will completed by November 2, 2009. Contact Person is Tony Jordan - Office: (919) 573-7077.

See "Utilities by Others Plans" for utility conflicts.

- D. Verizon Communications: The buried fiber optic and aerial crossing at UNC-TV will be relocated by the date of availability. Contact person is Marcus Dickinson - Office: (919) 560-2917. See "Utilities by Others Plans" for utility conflicts.
- E. AT& T Local: The copper and fiber optic cables in conduits will be lowered at the proposed drainage at Station 39+93 -L- Right 22'. The hand hole at Station 51+71 -L- Right 25' will be raised at the proper stage of construction. AT&T Local will need one week notice and 72 hours to complete the work at each location. All other work will be done before the date of availability. Contact person is Trent Liter - Office: (919) 785-7774.  
See "Utilities by Others Plans" for utility conflicts.
- F. Verizon Business: All work will be done by the date of availability. Contact person is Eric Crane - Office: (919) 326-5604 / Cell Phone: (919)696-6616. See "Utilities by Others Plans" for utility conflicts.
- G. Dukenet: All work will be done by the date of availability. Contact person is Herman Lynch - Office: (704) 373-5781.  
See "Utilities by Others Plans" for utility conflicts.
- H. Level 3 Communications: All work will be done by the date of availability. Contact Person is Mike Weaver - (919) 341-2202.  
See "Utilities by Others Plans" for utility conflicts.
- I. BTI / Deltacom: All work will be done by the date of availability. Contact persons are Brian Whitford - Office: (803) 726-8316, (Templar Inc.) Scott Temple - Office: (919) 291-0813. See "Utilities by Others Plans" for utility conflicts.
- J. AT & T Metro: All work will be done by the date of availability. Contact persons are (AT&T Metro) Steve Pennell - Office: (704) 972-9840, (Templar Inc.) Scott Temple - Office: (919) 291-0813. See "Utilities by Others Plans" for utility conflicts.
- K. Glaxo Smith Kline: All work will be done by the date of availability. Contact Person is Carl Perkins - (919) 483-3804. See "Utilities by Others Plans" for utility conflicts.
- L. MCNC/UNC-TV: The buried and aerial fiber optic lines crossing T. W. Alexander Drive at UNC TV will be adjusted or removed prior to the date of availability. Contact persons are (MCNC) Peter Valentine - Office: (919) 248-1464, (UNC-TV) Carol Woodyard - Office: (919) 549-7076. See "Utilities by Others Plans" for utility conflicts.