



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 2006 and the provisions outlined below.

Owners and Owner's Requirements:

The existing water line and gravity sewer line belongs to the Town of Chadbourn. The contact person for the Town of Chadbourn is Mr. David Bone, Town Manager. Mr. Bone can be reached by telephone at (910) 654-4148. Columbus County owns other water lines shown on the project plans. The contact person for Columbus County is Mr. Billy Joe Farmer, County Administrator. Mr. Farmer can be reached by telephone at (910) 640-6600. The Contractor shall provide access for the owner's representatives to all phases of construction. The owner shall be notified two weeks prior to commencement of any work and one week prior to service interruption. Interruption of water service or force main sewer service on main lines shall be limited to a maximum of 4 hours unless approved by the Engineer.

A final visual inspection of the pipe installation shall be conducted with the Engineer and owner present. The Engineer and owner must be satisfied that the installed pipe and gaskets are watertight and installed on a constant grade matching the existing.

All fittings, couplings, sleeves and other items required to provide a complete installation shall be the responsibility of the Contractor and are considered incidental to the sewer line work.

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

NOTE: The existing 12" sewer line that is being replaced in part at the culvert located at Station 32+29.90 -L- Revised shall be Class 52 ductile iron. The culvert plans show the proposed line being installed through steel pipe sleeves in the sidewall of the culvert barrel. Should the construction methods utilized for construction of the culvert allow for the proposed section of sewer pipe to be cast in place with the barrel, the steel sleeves can be eliminated. The Engineer must approve this change prior to implementation. The Contractor will be responsible

for handling sewage flow through that portion of the sewer system during the time the pipe is being replaced. This will require coordination with the Engineer and the Town of Chadbourn and may be accomplished by pump around, pump trucks or other methods approved by the Engineer. This work shall be considered incidental to the sewer line replacement.

The proposed 12" ductile iron sewer pipe shall be mechanical joint or rubber ring gasket slip joint, each conforming to ANSI A21.11/AWWA C-111. The pipe and fittings shall have an asphaltic exterior coating as specified in AWWA C151. Interior of the pipe joints shall be coated with ceramic epoxy to produce a minimum dry film thickness of 40 mils. Calcium aluminate mortar lining of the ductile iron pipe shall also be acceptable.

#### 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 material of the existing facilities necessary for the construction of the proposed utilities and to avoid damage to existing facilities.

#### 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.

#### 1. BREAK DOWN AND REBUILD EXISTING MANHOLE:

All sewer manholes in the construction area that are to be raised shall be broken down and rebuilt in accordance with the utility construction plans and these provisions, or as directed by the Engineer.

The manholes to be broken down and rebuilt shall have the manhole taper, and frame and cover removed to allow for the addition of wall sections. Once the wall sections are installed and brought to the proper elevation, the taper, manhole ring and cover shall be reinstalled. The Engineer shall approve the final elevation of the manhole top.

The quantity of sewer manholes broken down and rebuilt and accepted will be measured and paid for at the contract unit price each for "Break Down and Rebuild Existing Manhole". Such prices and payments will be full compensation for all materials, labor, breaking down manhole, storing and protecting removed

equipment, rebuilding, excavation, backfilling, and incidentals necessary to complete the work as required.

## 2. DUCTILE IRON SEWER PIPE:

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

Ductile iron sewer pipe shall meet the requirements of the latest edition ANSI A21.51/AWWA C151. Nominal pipe laying length shall be twenty feet. Joints shall be mechanical joint or rubber ring gasket slip joint, each conforming to ANSI A21.11/AWWA C111. The pipe and fittings shall have an asphaltic exterior coating as specified in AWWA C151. Interior of the pipe joints shall be coated with ceramic epoxy to produce a minimum dry film thickness of 40 mils. Calcium aluminate mortar lining of the ductile iron pipe shall also be acceptable.

All ductile iron sewer pipe shall be installed in accordance with laying condition Type 2 as stated in ANSI A21.51/AWWA C151, unless otherwise shown on the plans.

Ductile iron sewer pipe shall be furnished and installed as required and accepted will be measured and paid for at the contract unit price per linear foot for " \_\_\_\_\_ " DI Sewer Pipe, Class 52". Such price and payments will be compensation in full for all materials, labor, equipment and incidentals necessary to complete the work.

END OF SECTION

**UTILITY CONFLICTS**

It shall be the responsibility of the Contractor to contact all affected utility owners and determine the precise locations of all utilities prior to beginning construction. Utility owners shall be contacted a minimum of 48 hours prior to the commencement of operations. Special care shall be used in working around or near existing utilities, protecting them when necessary to provide uninterrupted service. In the event that any utility service is interrupted, the Contractor shall notify the utility owner immediately and shall cooperate with the owner, or his representative, in the restoration of service in the shortest time possible. Existing fire hydrants shall be kept accessible to fire departments at all times.

The Contractor shall adhere to all applicable regulations and follow accepted safety procedures when working in the vicinity of utilities in order to insure the safety of construction personnel and the public. Utility relocation will not be complete prior to the start of construction, therefore, the Contractor will have to coordinate with the utility companies during the relocation.