PROJECT SPECIAL PROVISIONS Conduit and Foundation Installation For Decorative Post Top Lighting System



1.00 DESCRIPTION

The work covered by this section consists of furnishing, installing and connecting a conduit system and installing foundations for a decorative post top lighting system. Post top standards, luminaires and circuitry will be furnished and installed by the City of Elizabeth City at a later date.

All work shall be performed in accordance with these Special Provisions, the Plans, the National Electrical Code, and North Carolina Department of Transportation "Standard Specifications for Roads and Structures" (Standard Specifications)

Install all bore pits outside clear zone as defined in 2002 AASHTO Roadside Design Guide or as directed by the Engineer.

All work shall be in conformance with Division 14 of the Standard Specifications except as modified or added to by these Special Provisions.

2.00 ELECTRICAL JUNCTION BOXES

2.10 DESCRIPTION

Provide junction boxes and cast-metal boxes encased in concrete of the appropriate type at locations noted on the plans, complete with all necessary covers, conduits, duct, and hardware, in accordance with the contract.

2.20 MATERIALS

Use junction boxes (PC) which are stackable, and have bolted covers and are sized as shown in the plans.

Have the junction box meet or exceed the Tier 15 requirements of the ANSI/SCTE 77 specification at the time of letting. Third party certification of ANSI/SCTE 77 shall be provided upon request.

Provide a junction box which is open bottom with a foot unless specifically noted as closed bottom on the plans.

Provide a standard Electric logo on the cover unless specifically noted otherwise on the plans.

Provide a minimum of 2 size 3/8" hex head stainless steel cover bolts and inserts.

Backfill beneath all junction boxes and around the boxes installed in grassy areas a minimum of 12" using #67 washed stone in conformance with Section 1005 and Section 545.

2.30 CONSTRUCTION METHODS

Install conduits and ducts before the junction boxes are set in place. Do not rest the bottom of the box directly on conduits, ducts or cables.

Place the top of the box on the same grade as the surrounding area. For junction boxes installed in grassy areas, perform backfilling with sufficient care so that no part of the junction box, conduit or duct is displaced or moved out of alignment. Place backfill material in 6 inch layers and compact to a density comparable to the adjacent undisturbed material.

Locate junction boxes for best routing of conduit and duct, and to minimize drainage problems. Do not locate boxes in useable shoulders or pavements where they may be subjected to traffic loadings. Several junction boxes on this project will be installed in the sidewalk near the decorative post top pole foundations. For junction boxes installed in the sidewalk, coordinate work with the General Contractor so that junction boxes are set prior to sidewalk concrete pouring.

Stub the ends of conduit and duct up vertical as near the top of the box as practical and seal. Arrange wiring so that it will not lay in the bottom of the box.

Place sealant between the cover and box to prevent surface drainage and debris from entering the top of the box.

2.40 MEASUREMENT AND PAYMENT

Electrical junction boxes ____ will be measured and paid for as the actual number of the appropriate type and size junction boxes that have been installed and accepted. Payment for the conduit and duct will be paid for under other contract items.

Payment will be made under:

Electrical Junction Boxes (Type)..... Each

3.00 POST TOP FOUNDATION

3.10 DESCRIPTION

Same as Section 1405-1.

3.20 MATERIALS

Same as Section 1405-2.

3.30 CONSTRUCTION METHODS

See Geotechnical plans for foundation design. The Engineer will stake each location and determine the top of foundation elevation unless indicated differently elsewhere in the Specifications. Several foundations in the project will be installed in the proposed concrete sidewalk. Coordinate all foundation excavation, drilling and construction operations with sidewalk placement and installation. In areas where foundations are installed in sidewalk, top of foundation should be flush with top of sidewalk.

Contact Mr. Karl Clow with Elizabeth City Power (252-339-3708) for anchor bolt template for post top pole selected for use on the project.

3.40 MEASUREMENT AND PAYMENT

Post top foundation will be measured and paid for as the actual number of foundations, which have been completed and accepted.

Payment will be made under:

Post Top Foundation.....Each

4.00 FEEDER CIRCUIT CONDUIT

4.10 DESCRIPTION

Install conduit, including tools, equipment, trenching and backfilling to provide a means for installing future electrical circuits at the locations shown on the plans. This pay item does not include the conduit itself, only the tools and labor associated with properly installing conduit provided by others.

4.20 MATERIALS

All conduit will be provided by Elizabeth City Power. Contact Mr. Karl Clow with Elizabeth City Power (252-339-3708) to obtain HDPE and rigid galvanized conduit (RGC) conduit to be installed under this contract. Two inch RGC and weather head service entrance cap will be installed on each of the proposed power poles shown on the plans.

4.30 CONSTRUCTION METHODS

Install 2" HDPE and RGC conduit in accordance with Section 1410-3. Feeder circuit conductors will be installed by others at a later date.

4.40 MEASUREMENT AND PAYMENT

Feeder circuit conduit (size and type) will be measured and paid as the actual number of installed linear feet of conduit, measured in place to the nearest whole foot. This pay item is for tool, labor and installation costs only.

Payment will be made under:

Feeder Circuit Conduit (Size, Type).....Linear Foot