10/27/04

SECTION 16421 - UTILITY SERVICE ENTRANCE

GENERAL

1.1 SECTION INCLUDES

- A. Provide new secondary electrical utility services.
- B. Provide new telephone utility services.
- C. Provide new cable television utility services.

1.2 RELATED SECTIONS

- A. Division 3 Concrete.
- B. Section 16111 Conduit.
- C. Section 16123 Building Wire and Cable.
- D. Section 16450 Grounding.

1.3 ELECTRICAL SYSTEM DESCRIPTION

- A. Electrical Service Description: The existing overhead utility company service at Commercial and Fore Streets shall be extended with a new underground service from the *Central Maine Power Company (CMP)*. The existing utility service shall be extended as shown on the Drawings, with a new secondary service to be provided for the following:
 - 1. New Receiving / Terminal Buildings.
 - 2. Existing Paint Building.
- B. Work by *CMP*: The Contractor shall make all necessary arrangements with *CMP* to provide the following:
 - 1. Modifications of the existing overhead, 3-phase primary distribution line.
 - 2. Pad mounted service transformers with 480/277-volt, 3-phase secondaries.
 - 3. Underground and overhead primary service conductors and connections.
 - 4. Secondary service meter and C.T.s.
- C. Work by Contractor: The Contractor shall provide the following:
 - 1. Primary service riser conduits at service riser poles.
 - 2. Underground primary service conduits.
 - 3. Utility manholes for underground service conduits.
 - 4. Concrete pads for the *CMP* service transformers.
 - 5. Underground secondary services including conduit, conductors and terminations, from pad mounted service transformers to the service equipment within the Paint Building and within the Receiving Building.
 - 6. Service meter enclosure/C.T. cabinets.
 - 7. Service grounding system.

D. Mr. Terry Bradish CMP contact:

Central Maine Power Company

162 Canco Road Portland, Maine 04103 Telephone: 207-791-1021

1.4 TELEPHONE SYSTEM DESCRIPTION

- Telephone Service Description: The existing overhead telephone service at Commercial and Fore A. Streets shall modified as required with a new underground service from Verizon. The existing utility service shall be extended as shown on the Drawings, with a new underground service to the existing Paint Building and to the new Receiving Building.
- B. Work by Others (Verizon):
 - 1. Overhead service cable at the existing distribution lines.
 - 2. Underground service cables to building demarcation points.
- C. Work By Contractor: The Contractor shall provide the following:
 - Telephone service riser conduits at service riser poles.
 - 2. Underground telephone service conduits.
 - 3. Utility manholes for underground service conduits.
- D. Verizon contact: Ms. Sue Sarrette

Verizon

5 Davis Farm Road Portland, Maine 04103 Telephone: 207-797-1842

1.5 CABLE TELEVISION SYSTEM DESCRIPTION

- A. Cable TV Service Description The existing overhead cable television service at Commercial and Fore Streets shall be modified as required with a new underground service from *Time Warner* Company. The existing utility service shall be extended as shown on the Drawings, with a new underground service to the existing Paint Building and to the new Receiving Building.
- B. Work by Others (*Time Warner Company*):
 - Overhead service cable at the existing distribution lines.
 - 2. Underground service cables to building demarcation points.
- C. Work by Contractor (The Contractor shall supply the following):
 - Cable television service riser conduits at riser poles. 1.
 - 2. Underground cable television service conduits.

D. Time Warner contact: Mr. Glenn Raymond

Time Warner Company 118 Johnson Road Portland, Maine 04102 Telephone: 207- 253-2325

1.6 QUALITY ASSURANCE

- A. Conform to the requirements of ANSI/NFPA 70 National Electrical Code.
- B. Conform to the requirements of:
 - 1. The Central Maine Power Company.
 - 2. Verizon Telephone Company.
 - 3. Time Warner Company.

PRODUCTS

2.1 <u>UTILITY SERVICES MATERIALS</u>

- Concrete and steel reinforcement for the service transformer pad shall be as specified in Section 03300.
- B. Conduit shall be as specified in Section 16111.
- C. Service conductors shall be as specified in Section 16123.
- D. Service grounding shall be as specified in Section 16450.
- E. Provide a ¾-inch thick by 48-inch high by 96-inch long plywood backboard for telephone and cable television service cable entrance. Paint plywood flat black. Mount plywood off wall with 2 x 4 studs.

EXECUTION

3.1 INSTALLATION

A. Install all service related work in conformance with the standards and requirements of the serving utility.

END OF SECTION