

**GENERAL COMMUNICATIONS REQUIREMENTS**

**PART 1 – GENERAL**

**1.1 SECTION INCLUDES**

- A. Furnish all materials, labor, tools, transportation, incidentals, and appurtenances to complete in every detail and leave in working order all items of work called for herein or shown on the accompanying drawings, including work related to:
  - 1. Cable television system, including outlets and wiring.
  - 2. Voice/data network system including wiring, outlets and wiring.
- B. Include any minor items of work necessary to provide a complete and fully operative electrical system.
- C. The Contractor for this work is referred to Bidding Requirements, General Conditions, Special Conditions, Temporary Services and other pertinent Sections of these Specifications.

**1.2 RELATED SECTIONS**

- A. Section 26 05 26 – Grounding.
- B. Section 26 05 33 – Raceway and Boxes for Electrical Systems.

**1.3 REFERENCES**

- A. ANSI/NFPA 70 - National Electrical Code.
- B. OSHA 1910 - Occupational Safety and Health Act.

**1.4 GENERAL REQUIREMENTS**

- A. Contractor shall read the entire specifications covering other branches of work. He is responsible for coordination of his work with work performed by other trades.
- B. Consult all Contract drawings which may affect the location of any equipment or apparatus furnished under this work and make minor adjustments in location as necessary to secure coordination. Contractor shall consult architectural interior elevations for mounting heights of telecommunications outlets.
- C. System layout is schematic and exact locations shall be determined by structural and other conditions. This shall not be construed to mean that the design of the system may be arbitrarily changed. The equipment layout is to fit into the building as constructed and to coordinate with equipment included under other Divisions of work.

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- D. Contractor shall contact the Owner's Representative immediately if he notices any discrepancies or omissions in either the drawings or the specifications, or if there are any questions regarding the meaning or intent thereof.
- E. Submit all changes, other than minor adjustments, to the Architect for approval before proceeding with the work.

### 1.5 SUBMITTALS

- A. Submit under provisions of the following:
- B. Submittal shall include complete Specifications, including type of materials, electrical characteristics, capacities, performance and power requirements to determine compliance with Contract Documents. All data submitted shall be complete and shall apply only to this specific project. All extraneous material shall be deleted or marked out. Items to be supplied shall be specifically indicated using a method that will be visible after photocopying.
- C. Regardless of any information included in the submittal submitted for review, the requirements of the Drawings and Specifications shall not be superseded in any way by the review. Review by the Architect-Engineer does not relieve responsibility for submittal errors or from meeting the requirements of the Contract Documents.
- D. It is intended that Submittal data be complete and accurate at the first submission. If the Submittal is returned marked "Resubmit" only one additional submission will be permitted.
- E. Submit related Submittal at one time. SUBMIT ALL ITEMS IN A SPECIFICATION SECTION AT THE SAME TIME. Incomplete submittal will be held until a complete submittal is accumulated or may be rejected without further review and returned to the applicable parties. Include a copy of the Specification Paragraphs pertaining to the items submitted.
- F. If proposed equipment deviates from the Specifications or Drawings, indicate in writing on Company letterhead those differences and provide sufficient data to justify acceptance. FAILURE TO INDICATE DEVIATIONS OR SUBSTITUTIONS IMPLIES FULL COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS.
- G. The term "by others" or similar wording shall not be used on Submittal. Submittal shall state by whom related items of work are to be provided. Where not indicated, it is implied that the work or item is provided under this Section.
- H. Shop Drawings: Provide shop drawings as required by the individual Specification Sections. Submit shop drawings indicating physical size and arrangement, (plans and elevations) construction details, provisions for conduits, access requirements for installation and maintenance, finishes, and materials used in fabrication for all equipment. Supplement shop drawings with wiring diagrams for all systems with wiring connections for multiple components.

### 1.6 REGULATORY REQUIREMENTS

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- A. Complete installation shall conform with all applicable Federal, State and Local laws, Codes and Ordinances, included but not limited to latest approved editions of the following:
  - 1. State Building Codes.
  - 2. Specific Construction Safety Requirements, State Industrial Commission.
  - 3. National Electrical Code - NFPA 70.
  - 4. Occupational Safety and Health Act (OSHA) of 1971 and all amendments thereto.
  - 5. Maine State Housing Authority
- B. Nothing contained in the drawings and specifications shall be construed to conflict with these laws, codes and ordinances, and they are thereby included in these specifications. All work shall comply with the 2014 edition of NFPA 70, The National Electrical Code. It shall be the Contractor's responsibility to assure that electrical work is in full compliance with the NEC.
- C. The Contractor shall visit the site to become familiar with all existing conditions affecting this work. No claim will be recognized for extra compensation due to failure of contractor to familiarize himself/herself with the conditions and extent of proposed work.
- D. Obtain and pay for all necessary permits. Request inspections from authority having jurisdiction.

### 1.7 RECORD DRAWINGS

- A. Record any changes in location of equipment items, telecommunications outlets, and similar construction items on a set of prints and deliver them to the Owner's Representative upon completion of the work.

### 1.8 PROJECT/SITE CONDITIONS

- A. Install Work in locations shown on Drawings, unless prevented by Project conditions.
- B. Prepare drawings showing proposed rearrangement of Work to meet Project conditions, including changes to Work specified in other Sections. Obtain permission of Architect/Engineer before proceeding.

### 1.9 COORDINATION WITH WORK PROVIDED UNDER DIVISION 26

- A. Telecommunications work shall be coordinated with associated work being provided under Division 26. Work provided under Division 26 shall include the following:
  - 1. Raceway and boxes for wiring.
  - 2. Wiring support means.
  - 3. 120-volt power circuits.

### 1.10 SUBSTANTIAL AND FINAL COMPLETION

- A. Refer to General Conditions and Supplementary Conditions.
- B. Substantial Completion shall not be considered unless all systems are tested and verified for adherence with Contract Documents and any work remaining is less than one percent of the total Contract Value of this Section.

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1. Record Drawings, Acceptance Demonstrations, Owner personnel training, spare parts or extra materials required, test reports, warranties and certifications of installation inspections shall be submitted and accepted prior to Substantial Completion.
- C. Final Completion shall be when all work under this Section is completed as defined by the Contract Documents and accepted by the Architect-Engineer.
- D. When Architect-Engineer determines Work is complete, close out submittals will be considered.

### 1.11 UTILITY SERVICE DESCRIPTION

- A. Telephone Service Description: A new telephone service shall be provided as shown on the Contract Drawings. The contractor shall coordinate with the utility company all the work required to complete this project.
- B. Arrange with *FairPoint* to modify the existing overhead utility line at Federal Street as required. Arrange with *FairPoint* to provide a new underground service from a new riser pole at Federal Street to new service termination equipment within the building.
- C. Work associated with the new telephone service shall be coordinated with: *FairPoint*.
- D. Work by *FairPoint*: The Contractor shall make all necessary arrangements with *FairPoint* to provide the following:
  1. Modification of existing overhead telephone service line at Federal Street as required.
  2. Provide new underground telephone service cable from the new riser pole.
  3. Service entrance connections for individual living units, including wiring termination means, and service cables from wiring terminations within the Electrical Room.
- E. Telephone Work by Contractor: The Contractor shall provide the following:
  1. Arrange with Division 26 to provide underground conduits between the utility pole and the service termination equipment within the building.
- F. Cable Television Service Description: A new cable television service shall be provided as shown on the Contract Drawings. The contractor shall coordinate with the utility company all the work required to complete this project.
- G. Arrange with *Comcast* to modify the existing overhead utility line at Federal Street as required. Arrange with *Comcast* to provide a new underground service from a new riser pole at Federal Street to new service termination equipment within the building.
- H. Work associated with the new cable television service shall be coordinated with: *Comcast*.
- I. Cable Television Work by Contractor: The Contractor shall provide the following:
  1. Arrange with Division 26 to provide underground conduits between a new riser at Federal Street and the service termination equipment within the building.

### 1.12 UTILITY SERVICE QUALITY ASSURANCE

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- A. Conform to the requirements of ANSI/NFPA 70 - National Electrical Code.
- B. Conform to the requirements of:
  - 1. *FairPoint Communications.*
  - 2. *Comcast*

### PART 2 – PRODUCTS

#### 2.1 MATERIALS

- A. Furnish new and undeteriorated materials and of a quality not less than what is specified.
- B. The selection of materials and equipment to be furnished shall be governed by the following:
  - 1. Where single trade name, brand of manufacturer or material is listed in the specification, the exact equipment listed shall be used in the bid.
  - 2. Where more than one name is listed, Contractor may select any one of the several brands specified.
  - 3. Where trade name, brand of manufacturer of equipment or material is listed in the specification followed by the word “or approved equal,” the Contractor may substitute product of equal quality from another manufacturer for consideration by the Engineer.
- C. Conduit shall be as specified under Section 26 05 33.

### PART 3 – EXECUTION

#### 3.1 PROTECTION AND CLEANING

- A. Protect all telecommunications work and products against damage during construction and pay the cost of repair or replacement of telecommunications products made necessary by failure to provide suitable safeguards or protection. After all work has been inspected and approved, thoroughly clean all equipment, provided under this work.

END OF SECTION 27 00 00

