

**SECTION 270543 - UNDERGROUND DUCTS AND RACEWAYS FOR COMMUNICATIONS SYSTEMS**

**PART 1 - GENERAL**

**1.1 SUMMARY**

A. Section Includes:

1. Type OFR and Type CR communications raceways and fittings.
2. Cable supports and positioning devices.

**1.2 RELATED REQUIREMENTS**

- A. Section 013100 "Project Management and Coordination" for preinstallation conference procedures.
- B. Section 260011 "Facility Performance Requirements for Electrical" for seismic-load, wind-load, acoustic, and other field conditions applicable to Work specified in this Section.
- C. Section 270010 "Supplemental Requirements for Communications" for additional abbreviations, definitions, submittals, qualifications, testing agencies, and other Project requirements applicable to Work specified in this Section.

**1.3 PREINSTALLATION MEETINGS**

- A. Preinstallation Conference: Conduct conference at Project site.
- B. Preinstallation Coordination Meeting(s): For underground ducts and raceways. Conduct meeting(s) at Project site before construction activity.
- C. **SELECTION OF UNDERGROUND DUCTS AND ACCESSORIES FOR COMMUNICATIONS**
- D. Direct Buried: PVC-80.
- E. Raceway Fittings: Select fittings in accordance with NEMA FB 2.10 guidelines.
- F. ERMC and IMC: Provide threaded-type fittings unless otherwise indicated.
- G. Underground Ducts Crossing Paved Paths Walks and Driveways: PVC-80, direct buried .
- H. Underground Ducts Crossing Roadways: PVC-80, encased in reinforced concrete.

- I. Stub-ups: Concrete encased, ERMC-S.
- J. Communication Innerducts: ABF Tubes.
- K. Underground-Line Warning Tape: In accordance with Section 270553 "Identification for Communications Systems."
- L. Concrete Warning Planks: In accordance with Section 260543 "Underground Ducts and Raceways for Electrical Systems," except mark each plank with "COMM".

1.4 SELECTION OF HANHOLES AND BOXES FOR COMMUNICATIONS

- A. SELECTION OF HANHOLES AND BOXES FOR COMMUNICATIONS
- B. Provide handholes and boxes in accordance with Section 260543 "Underground Ducts and Raceways for Electrical Systems," except for the following:
  - C. Cover Legend: "COMM".
  - D. Color: Gray.

1.5 SELECTION OF UNDERGROUND STRUCTURES AND ACCESSORIES FOR COMMUNICATIONS

- A. Provide underground structures and accessories in accordance with requirements specified in Section 260543 "Underground Ducts and Raceways for Electrical Systems," except for the following:
  - B. Cover Legend: "COMM".

1.6 INSTALLATION

- A. Earthwork: Comply with Section 260543 "Underground Ducts and Raceways for Electrical Systems."
- B. Installation of Ducts and Duct Banks: Comply with Section 260533.13 "Conduits for Electrical Systems" and Section 260543 "Underground Ducts and Raceways for Electrical Systems."
- C. Installation of Structures: Comply with Section 260543 "Underground Ducts and Raceways for Electrical Systems."

1.7 FIELD QUALITY CONTROL

- A. Comply with Section 260543 "Underground Ducts and Raceways for Electrical Systems."

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END OF SECTION 270543

UNDERGROUND DUCTS AND  
RACEWAYS FOR COMMUNICATIONS  
SYSTEMS

270543 - 3