# **SECTION 270548**

## TELEPHONE SERVICE, PATHWAYS, AND WIRING

#### PART 1 GENERAL

## 1.1 SECTION INCLUDES

- A. Telephone service entrance raceway.
- B. Equipment and terminal backboards.
- C. Telephone cabinets.
- D. Premises wiring and outlets.

#### 1.2 RELATED SECTIONS

- A. Section 26 05 33 Conduit.
- B. Section 26 05 35 Surface Raceways.
- C. Section 26 05 36 Cable Trays.
- D. Section 26 05 39 Underfloor Ducts.
- E. Section 26 27 26 Wiring Devices: Telephone outlet jacks.
- F. Section 33 71 19 Ductbank.

## 1.3 SYSTEM DESCRIPTION

- A. Telephone Service Entrance Pathway: Nonmetallic conduit from point of telephone utility connection at property line to building service terminal backboard termination cabinet. See Section 26 05 33 for turn up requirements.
- B. Backbone Pathway: Conform to EIA/TIA 569 using conduit as indicated.
- C. Horizontal Pathway: Conform to EIA/TIA 569, using raceway, backboards, and cabinets as indicated.
- D. Premises Wiring: By Owner.
- E. Install a ½ inch conduit with a No. 6 AWG insulated stranded copper ground wire from service TTB to main electrical service grounding electrode.

#### 1.4 PROJECT RECORD DOCUMENTS

A. Record actual locations and sizes of pathways and outlets.

# 1.5 QUALITY ASSURANCE

- A. Telephone Utility: Coordinate with Owner.
- B. Perform Work in accordance with the telephone utility's rules and regulations.

## PART 2 PRODUCTS

#### 2.1 TELEPHONE TERMINATION BACKBOARDS

- A. Material: Plywood.
- B. Size: 4 x 8 feet, 3/4 inch thick.

#### 2.2 TELEPHONE TERMINATION CABINETS

- A. Cabinet Boxes: Galvanized steel with removable endwalls, 24 inches wide, 36 inches high, and 6 inches deep. Provide plywood backboard inside cabinet for mounting telephone termination devices.
- B. Cabinet Fronts: Steel, flush surface type with concealed trim clamps, concealed hinge, and flush lock keyed to match branch circuit panelboard.
- C. Finish: Gray baked enamel.

## 2.3 SURGE SUPPRESSION

A. Provide type required by Section 26 35 53 and regulatory agency.

# 2.4 CONDUIT

- A. One (1) inch minimum size of same stock used generally throughout the building, stubbed above ceiling.
- B. 3-inch conduit from new TTB to existing TTB.

### PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Finish paint termination backboards with durable gray enamel under the provisions of Division 09 prior to installation of telephone equipment.
- B. Support raceways, backboards, and cabinets under the provisions of Section 26 05 29.
- C. Install termination backboards and cabinets plumb and attach securely to building wall at each corner. Install cabinet trim plumb.
- D. Install recessed cabinets flush with wall finishes, and stub 5 empty 1-inch conduits to accessible location above ceiling at each location.
- E. Install polyethylene pulling string in each empty telephone conduit over ten feet in length or containing a bend.
- F. Mark all backboards and cabinets with the legend "TELEPHONE" under the provisions of Section 26 05 53.
- G. Mark all telephone wiring at TTB indicating Room Name and Number at which the cable is terminated.

Identify each conductor at termination point as to location of jack or outlet served. Н. **END OF SECTION**