PART 1 GENERAL

1.01 SECTION INCLUDES
   A. Grounding of communications components
   B. Fastening hardware

1.02 RELATED WORK
   A. Section 27 05 43 - Communications Underground Ducts, Structures, and Raceways

1.03 SUBMITALS
   A. All specifications for the grounding and bonding hardware used for the project must be given to the Owner's designated staff at least two weeks prior to the installation of the components.
   B. A single sample of each grounding and bonding component must be given to the Owner's designated staff at least two weeks prior to installation. The owner shall retain all submittals and they shall not be used in the project.

PART 2 PRODUCTS

2.01 MATERIALS
   A. All grounding and bonding components shall meet or exceed the National Electrical Code (NEC®) as well as local codes which specify additional grounding and/or bonding requirements.

PART 3 EXECUTION

3.01 REQUIREMENTS
   A. Communication bonding and grounding shall be in accordance with the National Electrical Code (NEC®) and NFPA.
   B. Metallic panels and raceways shall be bonded to an equipment grounding conductor and these are all bonded to the grounded electrical service.
   C. A communications ground is required and may be typically found in one of the following:
      a. Communications Entrance Facility
      b. Equipment Room
c. Communications Equipment Closet

D. The grounding system shall not rely on plumbing systems.

E. Bonding conductors shall be routed with a minimum number of bends. The bends placed in the conductor shall be sweeping.

F. Make all bonding connections with listed bolts, crimp pressure connectors, clamps or lugs.

G. The locate wire shall be bonded to a ½" x 5' copper bonded pointed ground rod driven 4' into undisturbed earth at each new handhole. The locate shall be wire bonded to the ground rod (inside of the handhole) with a bronze ground rod clamp suitable for direct burial.