

Signal posts and bases shall be steel shafts with octagonal bases.

Signal base foundations shall not obstruct a sidewalk or crosswalk so that passage by physically challenged persons is impaired. If any base foundations are in the sidewalks, they shall be installed so that they are flush with the finish grade.

Signal posts shall be galvanized steel.

Signal post foundations shall be precast concrete foundations.

#### **MAST ARM POLES AND FOUNDATIONS**

Mast arm foundations shall not obstruct a sidewalk or crosswalk so that passage by physically challenged persons is not impaired. If any foundations are in the sidewalks, they shall be installed so that they are flush with the finish grade. **See attached boring logs for mast arm locations.**

Mast arm poles and foundations shall be fabricated and constructed in conformance with the MHD Standard Drawings included in the plans.

All mast arm poles shall be galvanized steel.

All mast arm poles shall be galvanized steel monolevers with shoe bases, unless otherwise directed required. Acceptance of Type II mast arm poles shall be contingent upon review and approval of the shop drawings submitted by the Contractor. Longhand design calculations shall be submitted for all Type II Mast Arms and Span Wire Assemblies.

The standard mast arm pole foundation (SD3.040) shall be modified to a concrete cored foundation as shown on the Standard Drawings for 35-foot Type II Mast Arm Cored Pier Foundations included in the plans. The Contractor shall hire a Professional Civil Engineer in the Commonwealth of Massachusetts to determine the soil type. The design of the foundation shall then be selected from the Foundation Design Chart for the appropriate soil type. The Contractor shall submit the design calculations to the City of New Bedford for review and approval. The boring logs are attached.

Where soil conditions are such that, in the opinion of the City of New Bedford, the typical foundation design is not suitable, the Contractor's Engineer shall provide modified design for the foundation.

Foundations for Signal Posts, Mast Arm Poles, and Controller Cabinets foundations shall be constructed using 4000 psi, ¾ inch, 610 Cement Concrete Masonry conforming to the relevant provisions of Section M4 of the Standard Specifications and the following:

1. Reinforcing steel shall be ASTM A-615, Grade 60.
2. The top forming of cast-in-place units shall extend downward for a minimum of 24 inches on the side of any foundation. The lower portions of all foundations shall be placed directly