1) Signal/Structure Materials shall be as follows:

- **Poles & Mast Arms**: ASTM A1011 Grade 50, 55, 60 or 65 (less than 1/4") or ASTM A572 Grade 50, 55, 60 or 65 (1/4" and over) or ASTM A520 Grade A (55 ksi yield) or Grade B (60 ksi yield)

2) Reinforcing Steels shall be ASTM A615 Grade 60 ksi.

3) Concrete shall be Class IV (Drilled Shaft) with a minimum 28-day compressive strength of 4,000 psi for all environmental classifications.

4) All welding shall conform to the American Welding Society Structural Welding Code (Steel ANSI/AWS D1.1 current edition). Filet weld socket connections with unequal leg welds shall be inspected. The long weld leg along the shaft shall be approximately a 30 degree angle.

5) All steel items shall be galvanized as follows:
   - **All Nuts, Bolts, Washers and Threaded Bars/Studs**: ASTM A563 Grade A (55 ksi yield) or Grade B (60 ksi yield)
   - **All other steel items**: ASTM A572 Grade 50, 55, 60 or 65 (1/4" and over) or ASTM B209
   - **Aluminum Identification Tag**: Not to exceed 2" x 4". Secure to pole by 0.125" Stainless Steel Rivets or Screws. Fabricator to provide details for approval. Identification Tag located on inside of pole visible from Handhole, or on outside of pole inside terminal compartment. Tag to be stamped with the following information:

   - **Fabricator Name**
   - **Financial Project ID**
   - **Arm Type**
   - **Pole Type**
   - **Standard Design**

6) Concrete splice plates shall be ASTM A516 Grade 60 or ASTM A537.

7) Except for Anchor Bolts, all bolt holes shall be galvanized. Hole diameters for Anchor Bolts shall not exceed the bolt diameter plus 1/16".

8) Sign Panels and Signs attached to the Mast Arm shall be centered in elevation on the arm. Wire access holes shall not exceed 1 1/8" in diameter.

9) Mast Arms and Poles shall be tapered with the diameter changing at a rate of 0.14 inch per foot. Also, taper, type and offset shall be noted. 7.5% in 10,000 design criteria.

10) The pole shall be installed vertically. Camber shall be accounted for in the Mast Arm connection as detailed.

11) If a Mast Arm is damaged, it shall be installed within eight feet of the Mast Arm tip.


13) Provide "J", "S" or "C" Hook at top of pole for signal cable support.

14) First and Second Arm Camber Angle = 2°.

15) Details for Sign and Signal Locations, Signal Head attachment, Sign Attachment, Pedestrian Head Attachment, and Foundation Conduit are not shown for clarity.

16) All other steel items shall be galvanized as follows:
   - **All Nuts, Bolts, Washers and Threaded Bars/Studs**: F2329
   - **All other steel items**: ASTM A520

8) Locate handhole 180° from arm on single arm poles or 180° from first arm of double arm pole or see special instructions on Mast Arm Fabrication Sheet.

9) Except for Anchor Bolts, all bolt holes shall be equal to the bolt diameter plus 1/16", prior to galvanizing. Hole diameters for Anchor Bolts shall not exceed the bolt diameter plus 1/8".