

Aluminum Identification Tag Not to Exceed 2" x 4". Secure to Pole by 0.125" Stainless Steelrivets or screws. Fabricators 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 :

Standard Design

Financial Project ID  
Pole Type  
Arm Type  
Manufacturer's Name  
Certification No.  
QPL No.

Special Design

Financial Project ID  
Pole Base Diameter (in.)  
Pole Wall Thickness (in.)  
Arm Diameter at Pole (in.)  
Arm Wall Thickness (in.)  
Manufacturer's Name

**MAST ARM ASSEMBLIES GENERAL NOTES**

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 A595 Grade A (55 ksi yield) or Grade B (60 ksi yield)
- Steel Plates → ASTM A36
- Weld Metal → E70XX
- Bolts (except Anchor Bolts) → ASTM A325 Type 1
- Anchor Bolts → ASTM F1554 Grade 55 ksi
- Nuts for Anchor Bolts → ASTM A563 Grade A Heavy Hex
- Washers for Anchor Bolts → ASTM F436 Type 1
- Handhole Frame → ASTM A709 Grade 36 ksi or ASTM A36
- Handhole Cover → ASTM A1011 Grade 50, 55, 60 or 65 ksi
- Caps → ASTM A1011 Grade 50, 55, 60 or 65 ksi or ASTM B209
- Nut Covers → ASTM B26 (319-F)
- Stainless Steel Screws → AISI Type 316
- Threaded Bars/Studs → ASTM A36 or ASTM A307

9) Sign Panels and Signals attached to the Mast Arm shall be centered in elevation on the arm. Sign Panels shall be aluminum. Wire access holes shall not exceed 1 1/2" in diameter.

10) Mast Arms and Poles shall be tapered with the diameter changing at a rate of 0.14 inch per foot.

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

12) If a Mast Arm damping device is required by the Engineer, it shall be installed within eight feet of the Mast Arm tip.

13) Design according to FDDT Structures Manual (current edition). Alternate Designs for Special Mast Arm Assemblies are not allowed.

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

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

16) Details for the Ground Rod, Signal and Sign Locations, Signal Head attachment, Sign Attachment, Pedestrian Head Attachment, and Foundation Conduit are not shown for clarity.

17) Weld Inspection note (see 17502).

18) Manufacturers seeking approval of a steel mast arm assembly for inclusion on the Qualified Products List must submit a QPL Product Evaluation Application along with design documentation and drawings showing the product meets all specified requirements of this Index and Index 17743.

19) If a grout pad is not installed, vertically place a wire cloth screen between the baseplate and the top of the foundation, wrap horizontally around the baseplate with a 3" min. lap. The wire cloth shall be galvanized steel standard grade plain weave 1/2" x 1/2" mesh 0.063" dia. wire. The screen shall be attached to the baseplate with stainless steel self-tapping 1/4" screws with stainless steel washers spaced at 9" centers.

2) Reinforcing Steel 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.

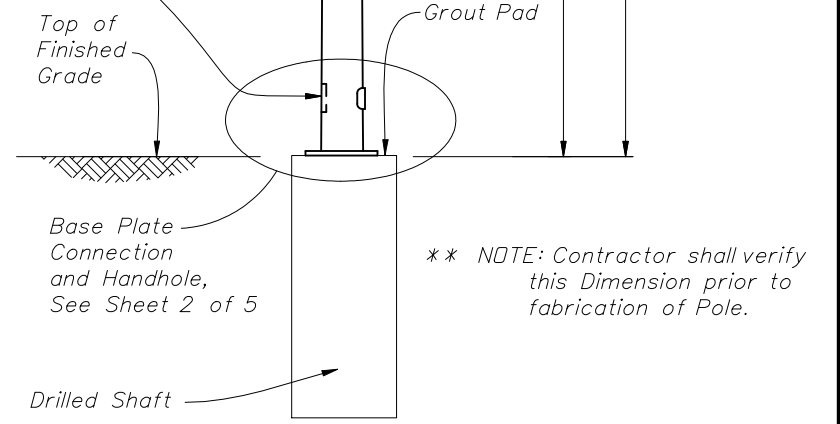
4) Grout shall have a minimum 28-day compressive strength of 5,000 psi and shall meet the requirements of Section 934.

5) All welding shall conform to American Welding Society Structural Welding Code (Steel) ANSI/AWS D1.1 (current edition).

6) All steel items shall be galvanized as follows:  
All Nuts, Bolts, Washers and Threaded Bars/Studs → F2329-05  
All other steel items → ASTM A123 (including Pole & Mast Arm)

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

8) Except for Anchor Bolts, all bolt hole diameters 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 1/2".

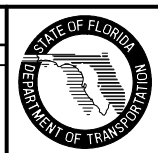


**ELEVATION VIEW**

(Single Arm Shown, Double Arm Similar)  
(Luminaire Arm Not Shown)

**TYPICAL ELEVATION AND NOTES**

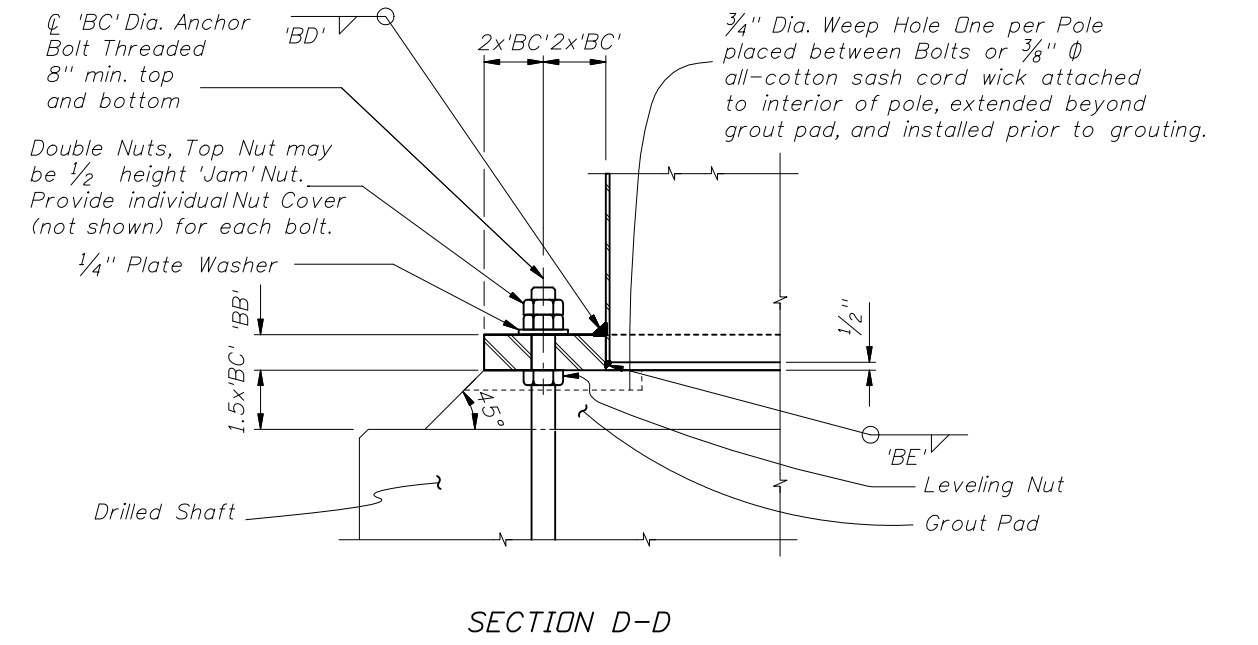
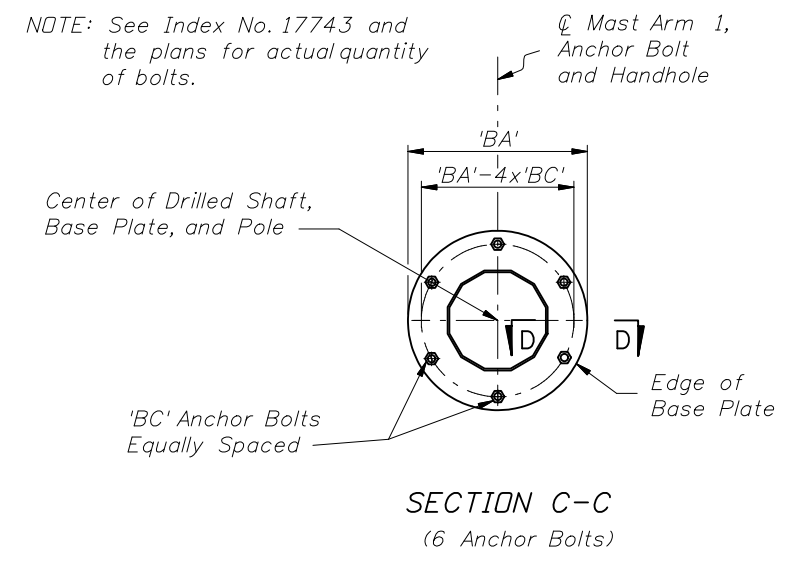
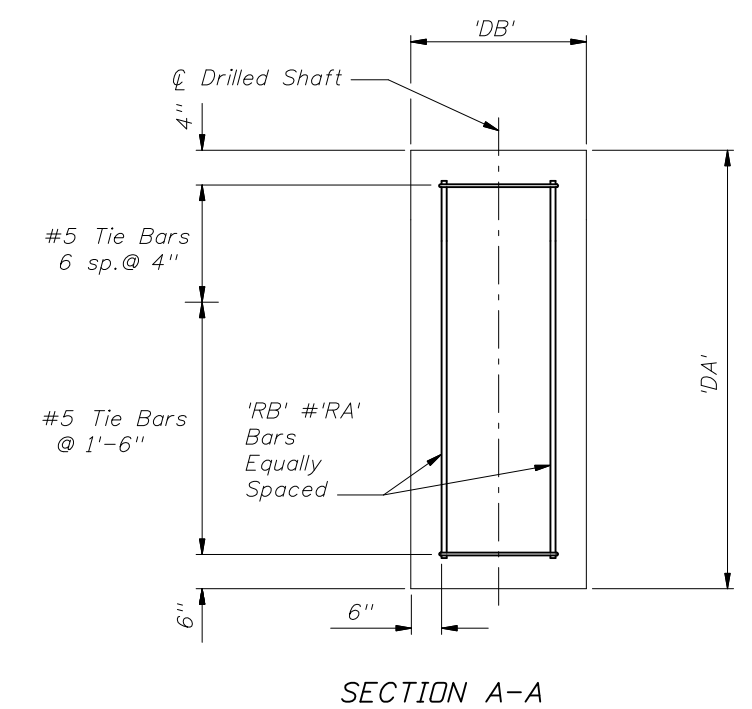
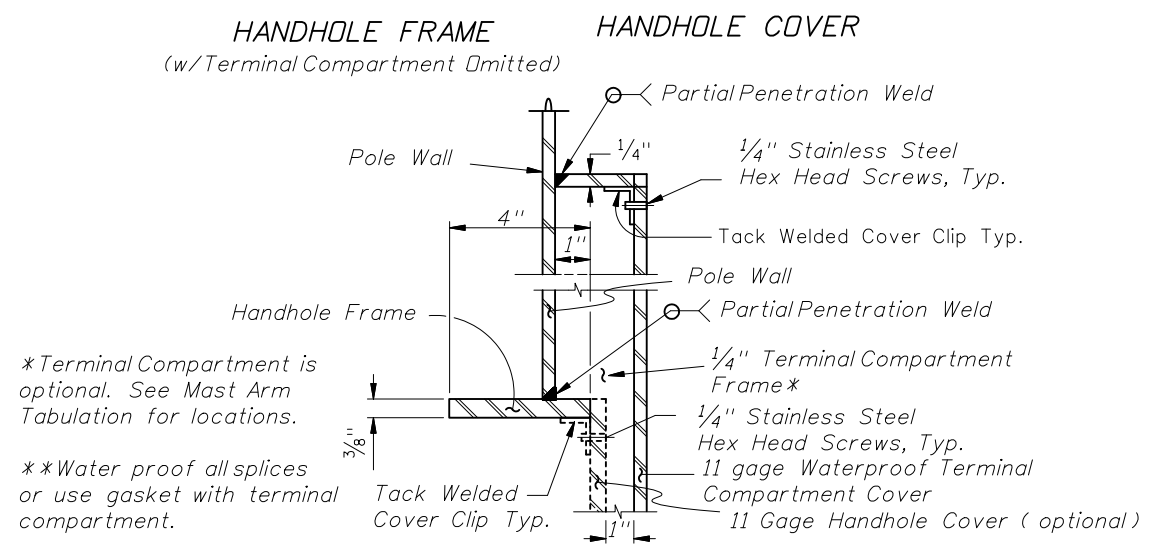
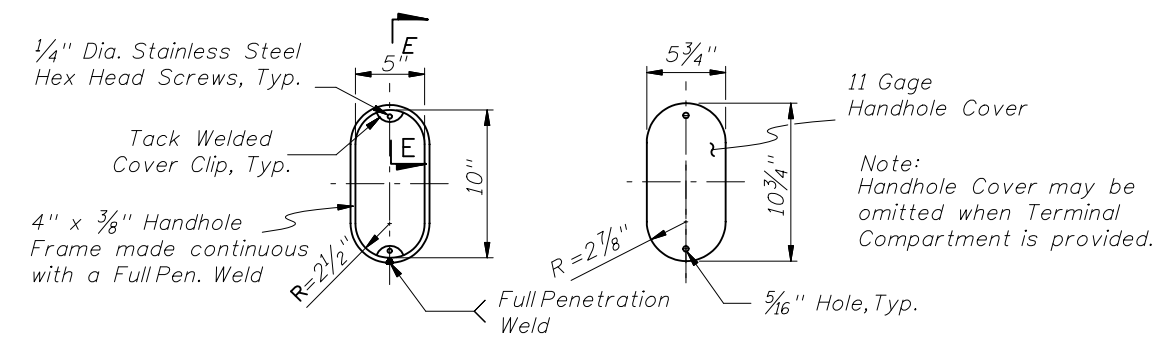
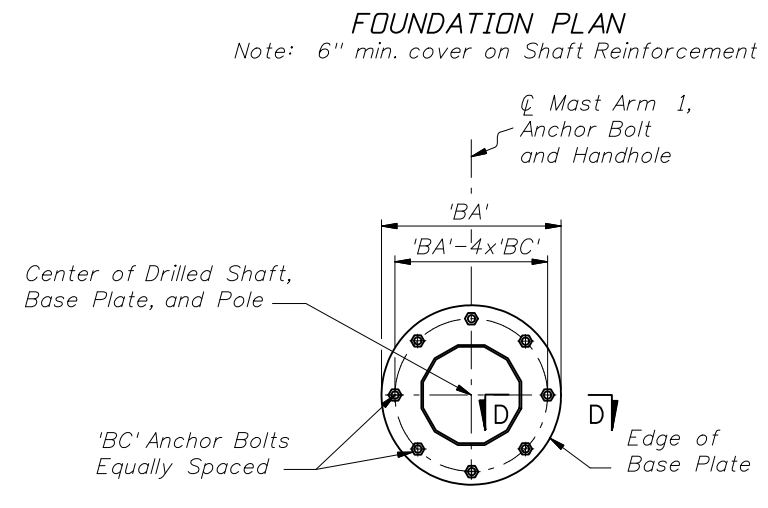
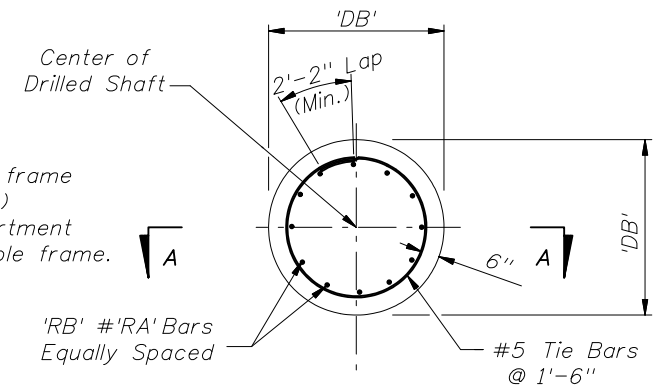
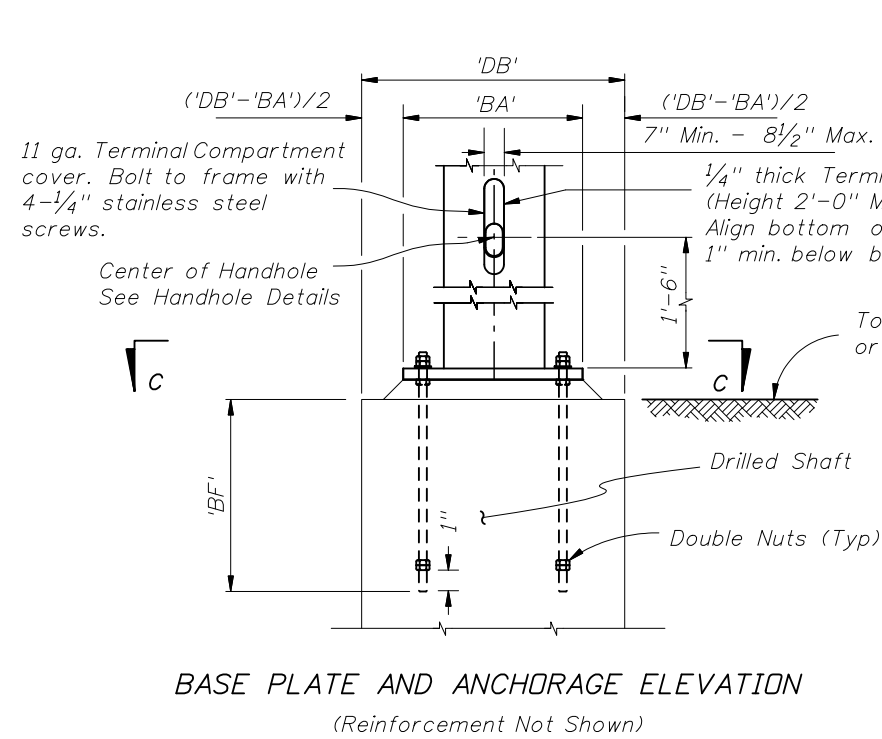
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
11/21/07	L.W.	QPL added to Standard Design List. Note 14 and 19 revised. New Note 17 added. Notes renumbered.			



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**MAST ARM ASSEMBLIES**

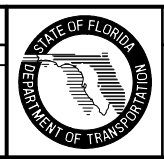
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TYPICAL FOUNDATION AND BASE PLATE DETAILS

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
11/21/07	L.W.	Section A-A detail 3" dimension changed to 4". BASE PLATE AND ANCHORAGE ELEVATION DETAIL DIMENSION 3Xbc CHANGED TO 1". Note added to detail SECTION E-E.			



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