

GENERAL NOTES

- Shop Drawings: This Index is considered fully detailed, only submit shop drawings for minor modifications not detailed in the Plans.
- Prior to Fabrication: Verify the installed foundation elevation will result in the required signal elevation and adjust the Pole height as needed.
- Details for Signal and Sign locations, Signal Head attachment, Sign attachment, Pedestrian Head attachment, and Foundation Conduit are not shown for simplicity.
- Materials: Split-lock washers and self-locking nuts are not permitted
 - Poles, Mast Arms and Backing Rings:
 - Less than 3/16": ASTM A1011 Grade 50, 55, 60 or 65
 - Greater than or equal to 3/16": ASTM A572 Grade 50, 55, 60 or 65
 - ASTM A595 Grade A (55 ksi yield) or Grade B (60 ksi yield)
 - Steel Plates: ASTM A36
 - Weld Metal: E70XX
 - Bolts, Nuts and Washers:
 - High Strength Bolts: ASTM A325 Type 1
 - Nuts: ASTM A563 DH Heavy-Hex
 - Washers: ASTM F436 Type 1, one under turned element
 - Anchor Bolts, Nuts and Washers:
 - Anchor Bolts: ASTM F1554 Grade 55
 - Nuts: ASTM A563 Grade A Heavy-Hex (5 per anchor bolt)
 - Plate Washers: ASTM A36 (2 per bolt)
 - Threaded Bars/Studs: ASTM A36 or ASTM A307
 - Handhole Frame: ASTM A709 or ASTM A36, Grade 36
 - Handhole Cover: ASTM A1011 Grade 50, 55, 60 or 65
 - Aluminum Pole Caps and Nut Covers: ASTM B26 (319-F)
 - Stainless Steel Screws: AISI Type 316
 - Concrete: Class IV (Drilled Shaft) for all environmental classifications.
 - Reinforcing Steel: Specification Section 415
- Fabrication:
 - Pole and Mast Arm Taper: Change diameter at a rate of 0.14 inches per foot.
 - Upright splices are not allowed. Transverse welds are only permitted at the base.
 - First and Second arm camber angle = 2°
 - Provide bolt hole diameters as follows:
 - Bolts (except Anchor Bolts): Bolt diameter plus 1/16", prior to galvanizing.
 - Anchor Bolts: Bolt diameter plus 1/2" (Max.)
 - Locate handhole 90° from arm on single arm poles or 90° from first arm of double arm poles facing away from traffic or see special instructions on the Mast Arm Tabulation Sheet.
 - Provide a 'J' or 'C' hook at the top of the pole for signal wiring support (See Sheet 6).
 - Perform all welding in accordance with Specification Section 460-6.4.
 - Hot Dip Galvanize after Fabrication.
- Coatings:
 - All Nuts, Bolts, Washers and Threaded Bars/Studs: ASTM F2329
 - All other steel items ASTM A123
- Construction:
 - Foundation: Specification Section 455 Drilled Shaft, except that payment is included in the cost of the Mast Arm.
 - Install Pole vertically.
 - Place structural grout pad with drain between top of foundation and bottom of baseplate in accordance with Specification Section 649-7.
 - Attach Sign Panels and Signals centered on the elevation of the Mast Arm.
 - Wire Access holes are 1 1/2" or less in diameter.

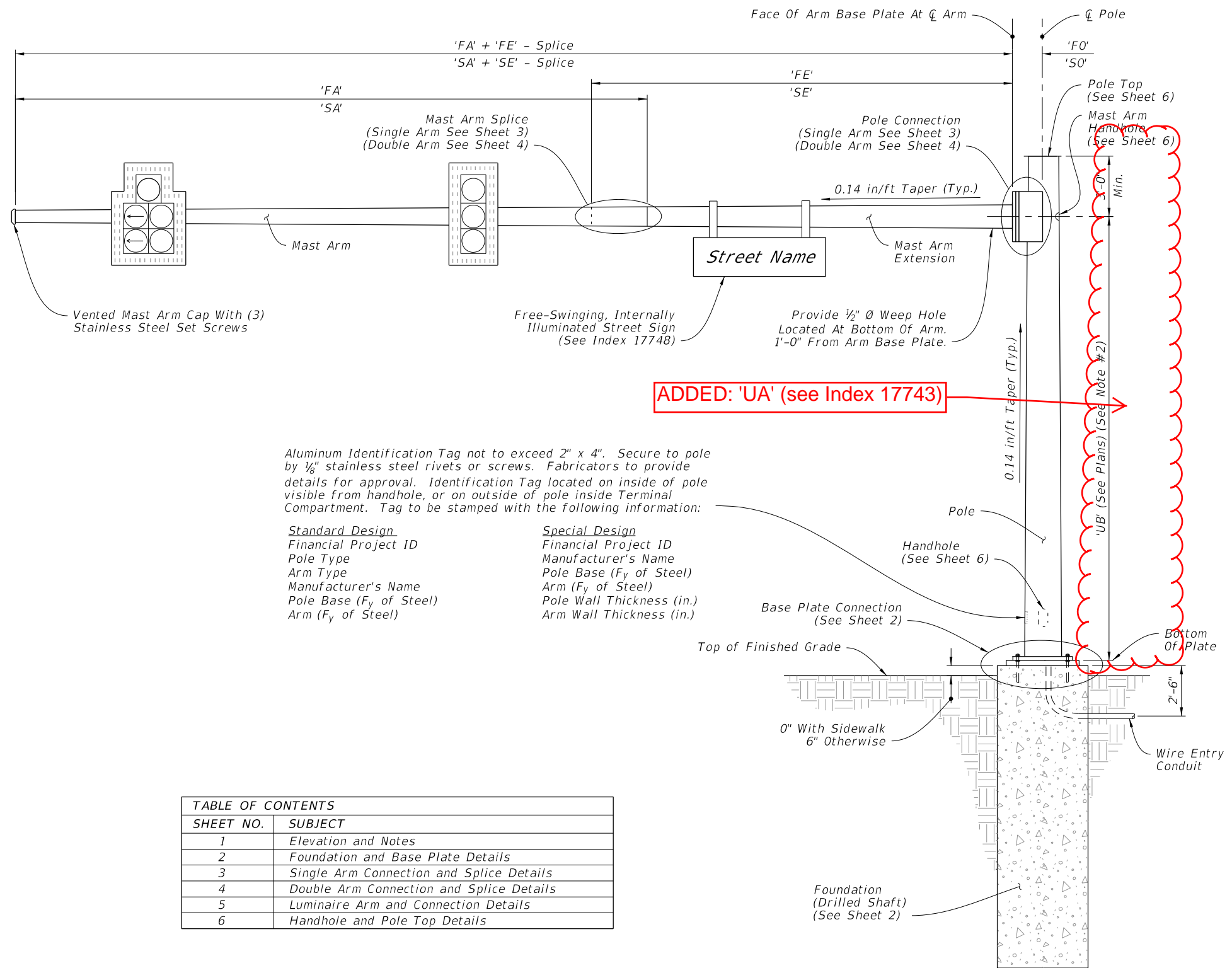


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1	Elevation and Notes
2	Foundation and Base Plate Details
3	Single Arm Connection and Splice Details
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5	Luminaire Arm and Connection Details
6	Handhole and Pole Top Details

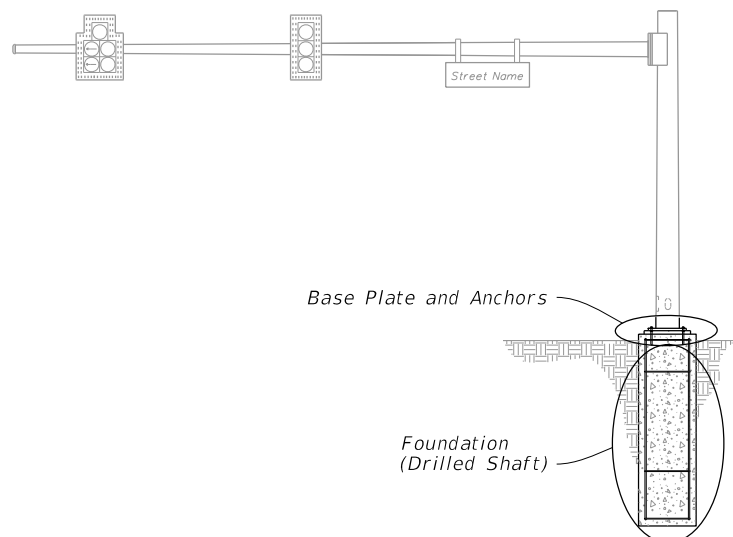
Single Arm Shown, Double Arm Similar (Luminaire Arm Not Shown)

MAST ARM ASSEMBLY

ELEVATION AND NOTES

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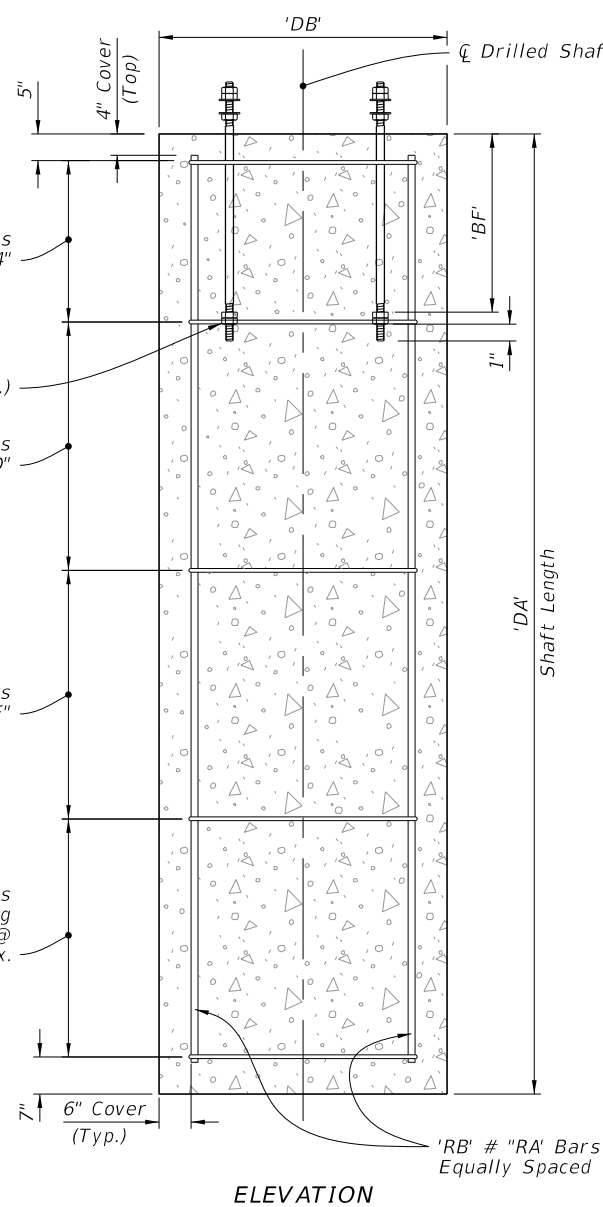
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MAST ARM ASSEMBLY

NOTES:

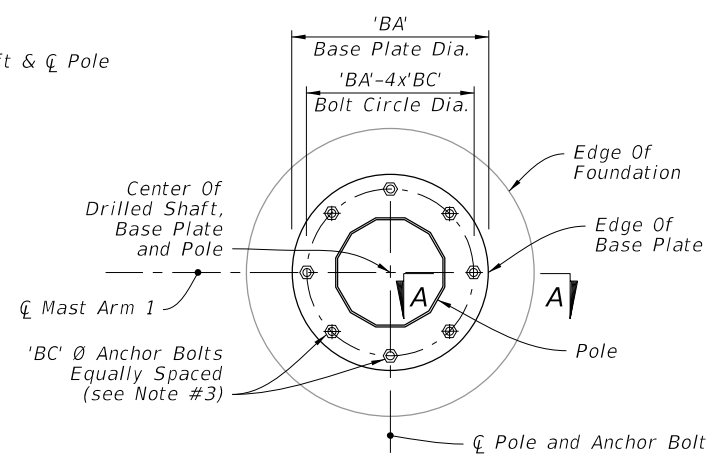
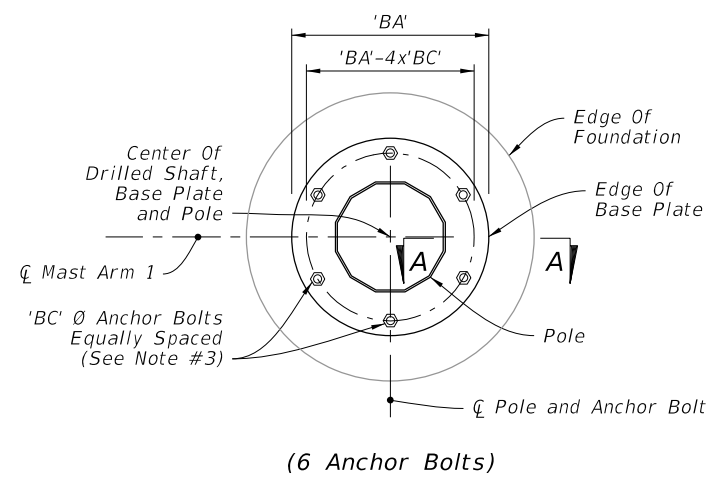
1. The Structural Grout Pad diameter may be reduced where the footprint of the Grout Pad does not provide adequate clearance for the sidewalk and/or accessibility considerations.
2. See Index No. 17743 and the plans for actual quantity of bolts.
3. The top hex nut may be substituted by a $\frac{1}{2}$ " half-height 'jam' nut. Provide individual nut covers (not shown) for each bolt.



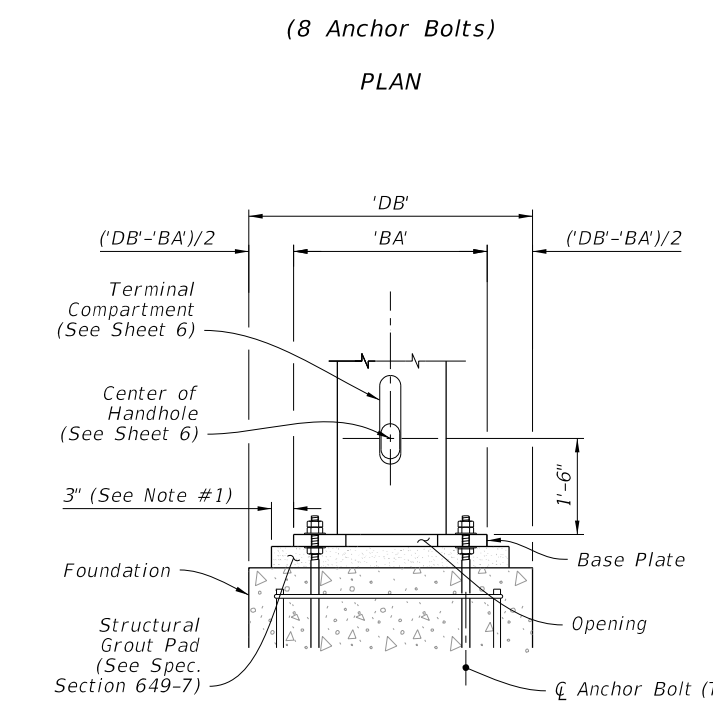
PLAN

ELEVATION

FOUNDATION

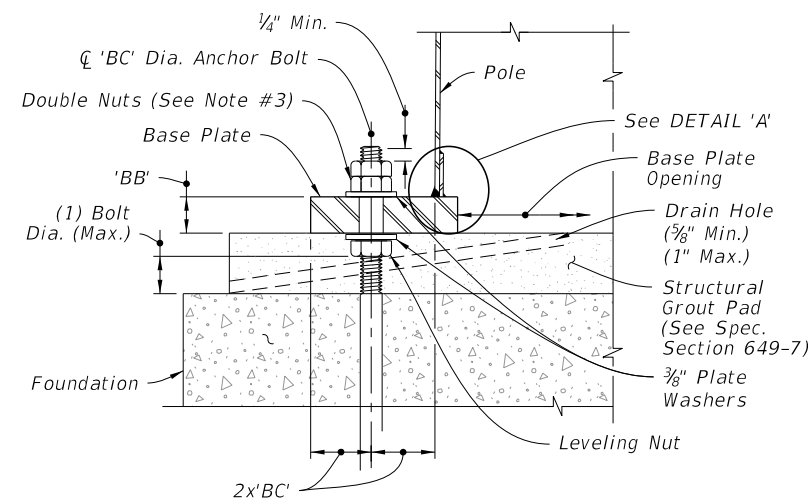


PLAN

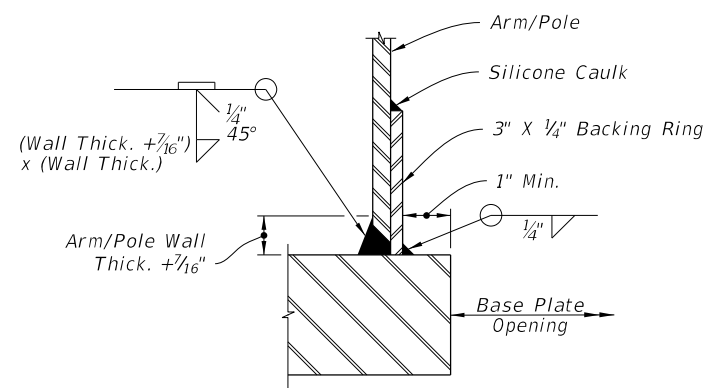


ELEVATION (Back Face Shown)

BASE PLATE CONNECTION



SECTION A-A



JOINT WELD DETAIL

DETAIL 'A'

FOUNDATION AND BASE PLATE DETAILS

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01/01/16	



MAST ARM ASSEMBLIES

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17745	2 of 6