NOTES:
1. Work this Index in conjunction with SPAN SIGN STRUCTURE DATA TABLES in the Plans and Index 700-020.
2. Handholes at the pole base are required for DMS Structures. Refer to Index 700-090 for Handhole Details.

3. Shop Drawings are required.
   Obtain Shop Drawing approval prior to fabrication. Include the following:
   A. Upright Pipe height ('C' & 'B') and Foundation elevations: Verify these values with the Engineer and/or contractor, to ensure minimum vertical clearances of the sign panel over the roadway.
   B. Height of the foundation above adjacent grade.
   C. Anchor bolt orientation with respect to centerline of truss and the direction of traffic.
   D. Method to be used to provide the required parabolic camber (see Camber Diagram).
   E. Handholes at pole base (when required).

4. Materials:
   A. Sign Structure:
      a. Upright and Chords (Steel Pipe): API 5L X42 PSL2, 42 ksi yield or ASTM A500, Grade B (Min).
      b. Steel Angles and Plates: ASTM A709 grade 36
      c. Weld Material: E70XX
   B. Bolts, Nuts and Washers:
      a. High Strength Bolts: ASTM F3123, Grade A325, Type 1
      b. Nuts: ASTM F3123, Grade A325, Type 1
      c. Washers: ASTM F436, Type 1, one under turned element
      d. Anchor bolts, nuts and washers: ASTM F1554, Grade 55, diameter plus 16
      e. Plate Washers: ASTM A36 (2 per bolt)
      f. Concrete Class IV (Drilled Shaft)
   C. Anchor Bolts, Nuts and Washers
      a. Anchor Bolts: ASTM F1554 Grade 55, threaded full length
      b. Nuts: ASTM A563 Grade A Heavy-Hex (5 per bolt)
      c. Washers: ASTM F436, Type 1, one under turned element
      d. Concrete: Class IV (Drilled Shaft)
   D. Reinforcing Steel: Specification Section 415
   E. Welding: Specification Section 460-6.4
   F. Hot Dip Galvanize after fabrication.

5. Fabrication:
   A. Welding: Specification Section 460-6.4
   B. Chord Splices: Minimum splice spacing is three truss panel lengths apart and three truss panel lengths from the uprights.
   C. Upright Splice: Not allowed
   D. Structural bolt hole diameters: Bolt diameter plus 1/4"
   E. Anchor bolt hole diameters: Bolt diameter plus 1/4"
   F. Hot Dip Galvanize after fabrication.
   G. Shop assembly the entire structure after galvanizing to validate/document alignment and clearance for bolted connections as well as contact between connecting plates. Take remedial action, if necessary, prior to shipment.
   H. Disassemble as necessary and secure components for shipment.

6. Coatings:
   A. Bolts, Nuts and Washers: ASTM A325
   B. All other steel, including Plate Washers, hot dip galvanize: ASTM A500, Grade B (Min)

7. Construction:
   A. Construct foundation in accordance with Specification Section 455
   B. Prior to erection, record the as-built anchor locations and submit to the Engineer.
   C. Provide a parabolic camber with the required upward deflection as shown on the Camber Diagram.
   D. Tighten nuts and bolts in accordance with Specification Section 700.
   E. Install Aluminum Sign Panels as shown on the Elevation drawing per Production Plan.
   F. After installation, place wire screen between top of foundation and bottom of baseplate in accordance with Specification Section 649-6

8. Tables: Refer to Index 700-090 for Handhole Details.

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DESCRIPTION:
FY 2018-19
STANDARD PLANS

REV NO
01/01/17
01/01/17

REV
LAST
REVIEW
11/01/17
01/01/17

REV
INDEX
SHEET
1
5

F DOT
NOTES:
1. See Traffic Plans for elevation at top of Foundation.
2. Install Drilled Shaft with a 2'-0" minimum from top elevation of the drill shaft to the finished grade, unless specified otherwise in the plans.
3. The shaft length is based on 2'-0" height above finished grade.
4. Wrap fillet weld around the stiffener termination on the tube wall (Typ).

- Foundation Elevation
  - (See Note #1)
- Drilled Shaft
  - (Top)
- Shaft Dia.
- 2'-0" (Min.)
- (See Note #2)
- Finished Grade
- #5 Tie Bars
  - 6 Spaces @ 4"
- Double Nut (Typ.)
- Fdr Drilled Shaft
  - (Typ.)
- #5 Tie Bars
  - OD Spaces @ 4" (Left Upright)
  - FD Spaces @ 11" (Right Upright)
- #5 Tie Bars Remaining Spaces @ 12" Max
- #5 Tie Bar
- 2'-0" Lap (Min.)

- Foundation
  - Elevation
- #5 Tie Bars
  - #5 Tie Bar
- Drilled Shaft
  - Center Of Drilled Shaft
- 2'-0" Lap (Min.)
- #5 Tie Bar
- "BE" @ Left Upright
- "CE" @ Right Upright
- Anchor Bolt (Typ.)
- "BE" @ Left Upright
- "CE" @ Right Upright
- Anchor Bolt (Typ.)

- Drilled Shaft
  - Center Of Drilled Shaft And Upright Pipe
  - Weld Size = 3/8" (Typ.)
  - #5 Tie Bar
  - 2 Bolt Dia.
- Foundation Elevation
  - Foundation Elevation (See Note #1)
- Drilled Shaft
  - Drilled Shaft
  - 2 Bolt Dia.

- ELEVATION
- FOUNDATION
- BASE PLATE CONNECTION

- SPAN SIGN ASSEMBLY

- SPAN SIGN STRUCTURE
1. Wrap fillet weld around the stiffener termination on the tube wall.

2. Truss Chord Bolts: 'LB' or 'RB' Hex Head Bolts 'LA' or 'RA' Ø.

3. Right Upright Truss connection shown, Left Upright Truss connection similar.

NOTES:
SPAN SIGN ASSEMBLY

NOTES:
1. Out-of-plane members are not shown for clarity.
2. Back truss chord and attached angles are not shown for clarity.
3. Wrap fillet weld around plate termination on the tube wall.

<table>
<thead>
<tr>
<th>Bolt Diameter (in.)</th>
<th>Distance (in.)</th>
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<th>EB</th>
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<tr>
<td>3/16</td>
<td>1/32</td>
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TRUSS

FRONT ELEVATION

SIDE ELEVATION

BACK-SIDE SIGN MOUNTING

See DETAIL 'H'

Choose this Detail For Sign Luminaire Mounting Details

1/2" Ø U-Bolt With Double Nuts And Washers (Typ.)

Detail 'J'

Detail 'K'

3. Wrap fillet weld around plate termination on the tube wall.

See Upright-Truss Connection Detail (Sheet 5)

For Sign Luminaire Mounting Details

2-5/16" Bolts (Typ.)
**SPAN SIGN ASSEMBLY**

**UPRIGHT CAP DETAIL**

**TRUSS PLUG DETAIL**

**SIDE ELEVATION**

**SPlice CONNECTION NOTE:**
1. Only 6 bolts are shown in detail for clarity.
   (One Half Each End Of Splice)

**UPRIGHT PIPE AND CAP PLAN**

**SPlice CONNECTION DETAIL**

- **FRONT ELEVATION**
- **SIDE ELEVATION**

**PLAN**

- Right Upright 'J' OD = 1/2" Left Upright 'K' OD = 3/4"
- 1/4" Bar
- 1/4" OD Plug

**ELEVATION**

- 3/8" Ø Hole; Tack Weld 1/2" Hex Nut
- (Chase Threads After Galvanizing)
- 1/4" Hex Head Bolt With Rubber Washer (Top Leg of L Shape)
- 1/4" Thick Neoprene Gasket (Glued To The Underside Of The Cap)

**SECTION D-D**

- 6 Bolts Shown.
- 'PF' Bolts Required Evenly Spaced Similar

**ALTERNATE SPlice CONNECTION DETAIL**

**FRONT ELEVATION**

**SIDE ELEVATION**

**Gasket (Glued To The Underside Of The Cap)**

**Rubber Washer (Top Hex Head Bolt With Rubber Washer (Top Leg of L Shape)**

**Bolt Diameter**

<table>
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<tr>
<th>Bolt Diameter</th>
<th>Distance (min)</th>
<th>A</th>
<th>B</th>
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<td>1/4&quot;</td>
<td>3/8&quot;</td>
<td>2/3&quot;</td>
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'5C' Ø Bolt, '5B' Required
(See Note #1)