GENERAL NOTES:

1. Meet the requirements of Specification 700.

2. Shop Drawings:
   This Index is considered fully detailed. Submit Shop Drawings only for minor modifications not detailed in the Plans.

3. BREAKAWAY SUPPORTS REQUIREMENTS: Install non-frangible aluminum column (post) (larger than 3½") with breakaway supports as shown on Sheet 4. Signs shielded by barrier wall or guardrail do not require breakaway support.

4. Aluminum Sign, Wind Beams and Column (Post) Materials:
   A. Aluminum Plates: ASTM B209, Alloy 6061-T6
   B. Aluminum Bars and Extruded Shapes: ASTM B221, Alloy 6061-T6
   C. Aluminum Structural Shapes: ASTM B221 Alloy 6061-T6
   D. Cast Aluminum: ASTM B26 Alloy A356-T6

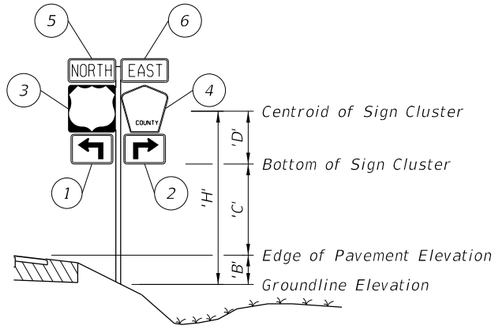
5. Galvanized Steel Slip Base Stub Materials:
   A. Steel Plate and Structural Shapes: ASTM A36 or ASTM A709, Grade 36

6. Sign Mounting Bolts, Nuts and Washers:
   A. Aluminum Button Head and Flat Head Bolts: ASTM F468 Alloy 2024-T4
   B. Aluminum Hex Nuts: ASTM F467 Alloy 6061-T6 or 6262-T9
   C. Aluminum Washers: ASTM B221, Alloy 7075-T6

7. Stainless Steel Bolts, Nuts and Washers may be used in lieu of the Aluminum button head and flat head bolts as follows:
   A. Stainless Steel Bolts: ASTM Ft 593 Alloy Group 2, Condition A, CW1 or SH1
   B. Stainless Steel Nuts: ASTM F594

8. Sign Column (Post) Bolts, Nuts and Washers:
   A. Galvanized U-Bolt (Column): ASTM A449 or ASTM A193 B7 according to ASTM F2329 with double nuts (nut and lock washer optional).
   B .Aluminum Bolts (Sleeve): ASTM F468, Alloy 6061-T6 or 2024-T4 with Hex Nuts F467 6061-T6 or 6262-T9 and Washers B221, Al clad 2024-T4
   C. Galvanized High Strength Hex Head Bolts (BaseBolts): ASTM F3125, Grade A325, Type 1
   D. Galvanized Hex Nuts: ASTM A563 Grade D
   E. Galvanized Washers: ASTM F436
   F. Galvanized Bolts (Sleeve): ASTM A307 with Galvanized Hex Nuts and Washers

STEP 1: Calculate the area and the centroid for an individual sign or a sign cluster. Note that the centroid and areas have been calculated for frequently used sign clusters. These are shown on Sheets 7, 8, and 9.



	Size a x h	Centroid: Local $'Y'_n$	Centroid: Global $'X'_n$	Centroid: Global $'Y'_n$	$'A'_n$	$'X'_n$ x $'A'_n$	$'Y'_n$ x $'A'_n$
	(in. x in.)	(in.)	(in.)		(in.²)	(in.³)	(in.³)
1	21 x 15	7.5	-10.5-1.5-1.5 = -13.5	7.5	315	-4,252.5	2,362.5
2	21 x 15	7.5	10.5+1.5+1.5 = 13.5	7.5	315	+4,252.5	2,362.5
3	24 x 24	12	-12-1.5 = -13.5	15+1+12 = 28	576	-7,776	16,128
4	24 x 24	12	12+1.5 = 13.5	15+1+12 = 28	436	5,886	12,208
5	24 x 12	6	-12-1.5 = -13.5	15+1+24+1+6 = 47	288	-3,888	13,536
6	24 x 12	6	12+1.5 = 13.5	15+1+24+1+6 = 47	288	3,888	13,536
				TOTALS	2,218	-1,890	60,133

$\Sigma\ ('A'_n) = 2{,}218\ in.^2 = 15.4\ ft.^2$ $\quad \Sigma\ ('X'_n \times 'A'_n) = -1{,}890\ in.^3 = -1.09\ ft.^3$ $\quad \Sigma\ ('Y'_n \times 'A'_n) = 60{,}133\ in.^3 = 34.8\ ft.^3$

$$'X'_c = \frac{\Sigma\ ('X'_n \times 'A'_n)}{\Sigma\ 'A'_n} = -0.1\ ft. \qquad 'Y'_c = \frac{\Sigma\ ('Y'_n \times 'A'_n)}{\Sigma\ 'A'_n} = 2.26\ ft.$$

STEP 2: Determine the height 'H' from groundline to the centroid of the individual sign or sign cluster.

Assume: 'B' = 1 ft., 'C' = 7 ft.

Calculated: $X'_c = -0.1$ ft., $'Y'_c =$ 'D' 2.26 ft.

'H' = 'B' + 'C' + 'D' = 10.26 ft. ==> USE 11 ft. $\quad \Sigma\ ('A'_n) = 15.4\ ft.^2$ ==> USE 16 ft.²

STEP 3: Refer to the Aluminum Column (Post) Selection Tables and find the intersection point. See Sheet 3.

ALUMINUM COLUMN (POST) SELECTION TABLE

TOTAL PANEL AREA (SF)	'H' (FT) 8 ft	9 ft	10 ft	11 ft	12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft
3 sf	2	2.5	2.5	2.5	3	3	3	3	3.5	3.5	3.5	3.5	3.5
4 sf	2.5	2.5	3	3	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5
5 sf	2.5	3	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4	4
6 sf	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4
7 sf	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4
8 sf	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4	4
9 sf	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4	4	4
10 sf	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4	4	4.5	4.5
11 sf	3.5	3.5	3.5	3.5	4	4	4	4	4	4	4.5	4.5	4.5
12 sf	3.5	3.5	3.5	4	4	4	4	4	4	4	4.5	4.5	4.5
13 sf	3.5	3.5	4	4	4	4	4	4	4	4.5	4.5	4.5	5
14 sf	3.5	3.5	4	4	4	4	4	4	4.5	4.5	4.5	5	5
15 sf	3.5	4	4	4	4	4	4	4.5	4.5	4.5	5	5	5
16 sf	3.5	4	4	4	4	4	4	4.5	4.5	5	5	5	6
17 sf	4	4	4	4	4	4	4.5	4.5	4.5	5	5	6	6
18 sf	4	4	4	4	4	4.5	4.5	4.5	5	5	5	6	6
19 sf	4	4	4	4	4	4.5	4.5	4.5	5	5	6	6	6
20 sf	4	4	4	4	4.5	4.5	4.5	5	5	5	6	6	6
21 sf	4	4	4	4	4.5	4.5	5	5	5	6	6	6	6
22 sf	4	4	4	4.5	4.5	4.5	5	5	6	6	6	6	6
23 sf	4	4	4	4.5	4.5	5	5	5	6	6	6	6	6
24 sf	4	4	4.5	4.5	4.5	5	5	6	6	6	6	6	6
25 sf	4	4	4.5	4.5	5	5	5	6	6	6	6	6	8
26 sf	4	4.5	4.5	4.5	5	5	5	6	6	6	6	8	8
27 sf	4	4.5	4.5	4.5	5	5	6	6	6	6	6	8	8
28 sf	4	4.5	4.5	5	5	5	6	6	6	6	6	8	8
29 sf	4.5	4.5	4.5	5	5	5	6	6	6	6	8	8	8
30 sf	4.5	4.5	5	5	5	6	6	6	6	6	8	8	8

For 'H' = 11 ft., Area = 16 ft.²

- Refer to the Aluminum Column (Post) Selection Table, from Sheet 3 and shown here for reference.
- To determine the required post size, find the intersection of the row labeled "16 SF" and the column labeled "11 FT". For the example the intersection value is "4" (4" OD).
- In the Column (Post) and Foundation Table, the value "4" shows the design requires a 4.0" diameter and ¼" thick Aluminum Column (Post) and a 2.0' diameter and 3.5' deep Concrete Foundation and 3.0' Stub.

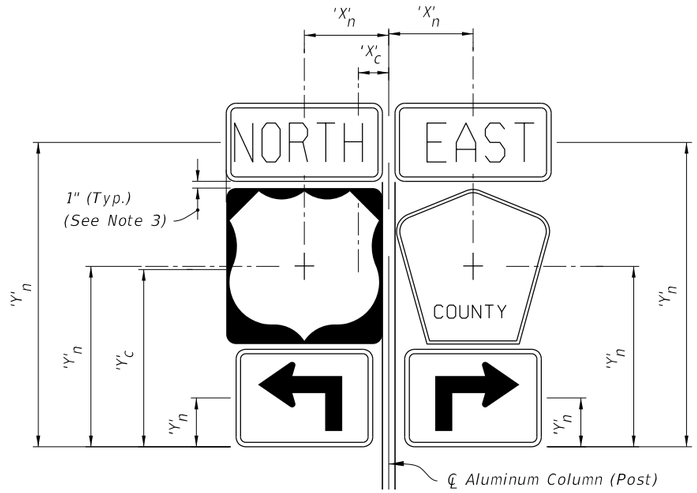
STEP 4: For sign assemblies with signs oriented in two directions, only the sign with the largest area should be analyzed to determine the Column (Post) requirements.

GUIDE TO USE THIS INDEX

GENERAL NOTES AND DESIGN EXAMPLE

5/13/2024 10:47:37 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	SINGLE COLUMN GROUND SIGNS	INDEX	SHEET
11/01/22						700-010	1 of 11



SIGN CLUSTER

$$'X'_c = \frac{\Sigma\,('X'_n \times 'A'_n)}{\Sigma\,'A'_n} \qquad 'C' = 'Y'_c = \frac{\Sigma\,('Y'_n \times 'A'_n)}{\Sigma\,'A'_n}$$

'A'n = Area of individual sign

'B' = Height of the edge of pavement from the mounting elevation

'C' = Height of the the bottom of the sign or cluster from the edge of pavement elevation

'D' = Height of the centroid of the sign or cluster from the bottom of the sign or cluster

h = Individual sign height

'H' = Height of sign or cluster centroid from groundline

a = Individual sign width

'X'c = Centroid horizontal location of sign or cluster from ℄ Aluminum Column (Post)

'Y'c = Centroid height of sign or cluster from bottom of sign cluster

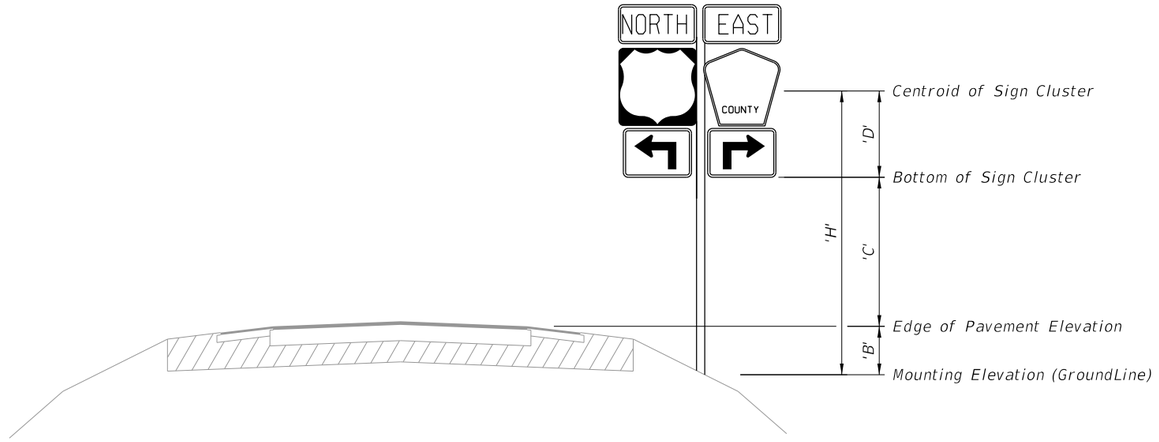
'X'n = Individual sign centroid horizontal location from ℄ Aluminum Column (Post)

'Y'n = Individual Sign centroid height from bottom of sign cluster

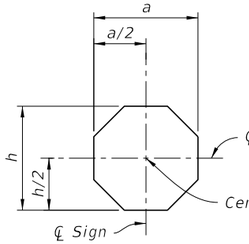
NOTES:

1. For 'B' & 'C' see Index 700-101 and Roadway Plans.
2. Do not exceed an area of 30 SF or a width of 60 inches for a sign or a sign cluster, including rotated sign panels.
3. Vertical sign spacing (1" shown on Sign Cluster detail) also applies to rotated signs.

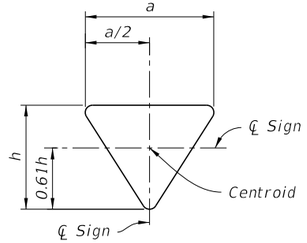
CALCULATION OF SIGN CLUSTER CENTROID



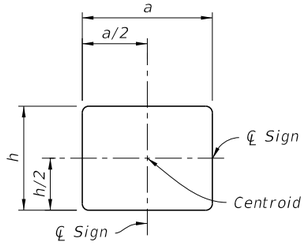
TYPICAL SECTION



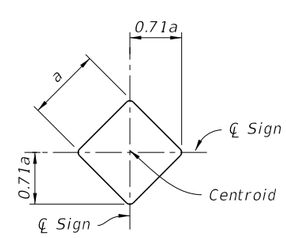
STOP



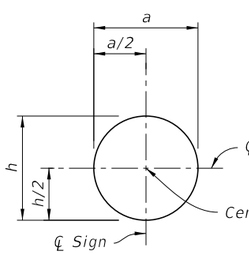
YIELD



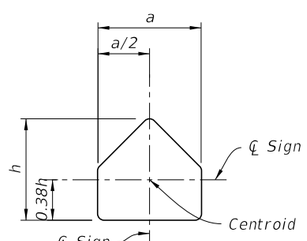
RECTANGLE



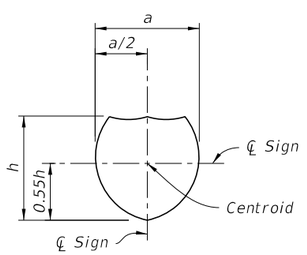
DIAMOND



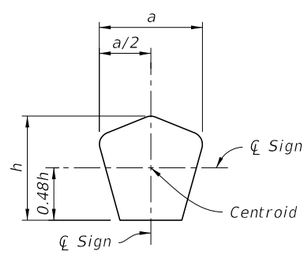
RAILROAD



SCHOOL



SHIELD



COUNTY

DESIGN EXAMPLE - CENTROID

10/20/2022 8:55:59 AM

LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FY 2023-24 STANDARD PLANS	SINGLE COLUMN GROUND SIGNS	INDEX 700-010	SHEET 2 of 11

ALUMINUM COLUMN (POST) SELECTION TABLE (O.D. in.)

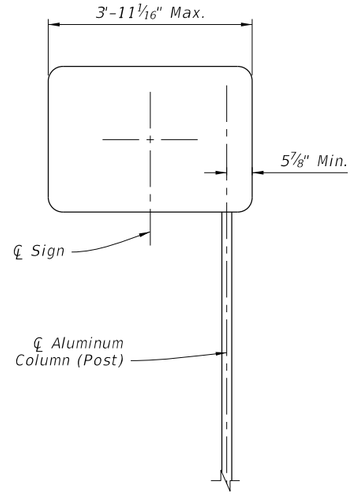
TOTAL PANEL AREA (SF)	'H' (FT)	8 ft	9 ft	10 ft	11 ft	12 ft	13 ft	14 ft	15 ft	16 ft	17 ft	18 ft	19 ft	20 ft
	3 sf	2	2.5	2.5	2.5	3	3	3	3	3.5	3.5	3.5	3.5	3.5
	4 sf	2.5	2.5	3	3	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	5 sf	2.5	3	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4	4
	6 sf	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4
	7 sf	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4
	8 sf	3.5	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4	4
	9 sf	3.5	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4	4	4
	10 sf	3.5	3.5	3.5	3.5	3.5	4	4	4	4	4	4	4.5	4.5
	11 sf	3.5	3.5	3.5	3.5	4	4	4	4	4	4	4.5	4.5	4.5
	12 sf	3.5	3.5	3.5	4	4	4	4	4	4	4	4.5	4.5	4.5
	13 sf	3.5	3.5	4	4	4	4	4	4	4	4.5	4.5	4.5	5
	14 sf	3.5	3.5	4	4	4	4	4	4	4.5	4.5	4.5	5	5
	15 sf	3.5	4	4	4	4	4	4	4.5	4.5	4.5	5	5	5
	16 sf	3.5	4	4	4	4	4	4	4.5	4.5	5	5	5	6
	17 sf	4	4	4	4	4	4	4.5	4.5	4.5	5	5	6	6
	18 sf	4	4	4	4	4	4.5	4.5	4.5	5	5	5	6	6
	19 sf	4	4	4	4	4	4.5	4.5	4.5	5	5	6	6	6
	20 sf	4	4	4	4	4.5	4.5	4.5	5	5	5	6	6	6
	21 sf	4	4	4	4	4.5	4.5	5	5	5	6	6	6	6
	22 sf	4	4	4	4.5	4.5	4.5	5	5	6	6	6	6	6
	23 sf	4	4	4	4.5	4.5	5	5	5	6	6	6	6	6
	24 sf	4	4	4.5	4.5	4.5	5	5	6	6	6	6	6	6
	25 sf	4	4	4.5	4.5	5	5	5	6	6	6	6	6	8
	26 sf	4	4.5	4.5	4.5	5	5	5	6	6	6	6	8	8
	27 sf	4	4.5	4.5	4.5	5	5	6	6	6	6	6	8	8
	28 sf	4	4.5	4.5	5	5	5	6	6	6	6	6	8	8
	29 sf	4.5	4.5	4.5	5	5	6	6	6	6	6	8	8	8
	30 sf	4.5	4.5	5	5	5	6	6	6	6	6	8	8	8

FOUNDATION TABLE

Column (Post) Size		Foundation Alternatives				
		Driven Post *		Concrete (Class II)		
Outside Diameter (in)	Wall Thk. (in)	Embedment Depth (ft)		Diameter (ft)	Embedment Depth (ft)	Stub Length (ft)
		without Soil Plate	with Soil Plate			
2.0	1/8	4.5	2.5	---	---	---
2.5	1/8	5.0	3.0	---	---	---
3.0	1/8	5.0	3.5	---	---	---
3.5	3/16	6.0	4.5	---	---	---
4.0	1/4	---	---	2.0	3.5	3.0
4.5	1/4	---	---	2.0	4.0	3.0
5.0	1/4	---	---	2.0	4.5	3.0
6.0	1/4	---	---	2.0	5.0	3.0
8.0	1/4	---	---	2.0	5.5	3.0

* *INSTALLING FRANGIBLE COLUMN SUPPORTS:*

Columns (posts) 3½" O.D. and less are considered frangible and may be installed either by driving the post or setting the posts in preformed holes. Backfill preformed holes with suitable material tamped in layers not thicker than 6" (to provide adequate compaction) or filled with flowable fill or bagged concrete.



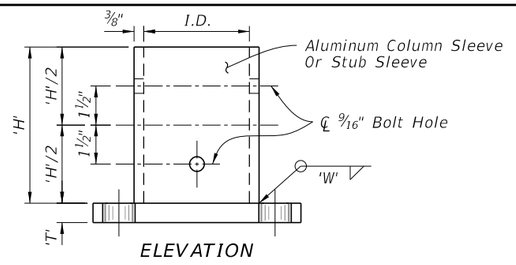
OFFSET SIGN

NOTES:

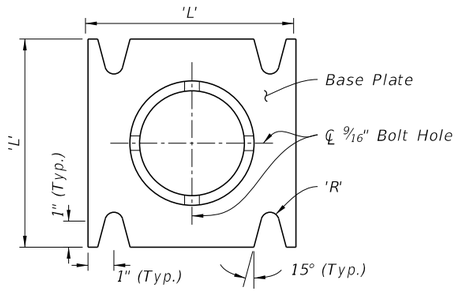
1. For offset sign placement see Index 700-101.
2. For signs with widths greater than 4' see Index 700-011.
3. Offset signs with driven posts require a soil plate.

10/20/2022 8:56:27 AM

COLUMN AND FOUNDATION TABLES



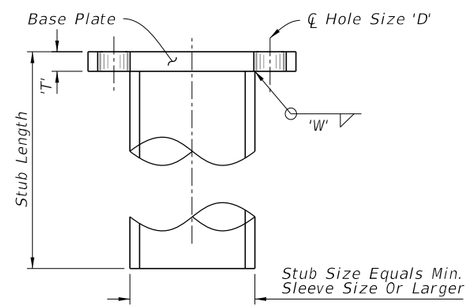
ELEVATION



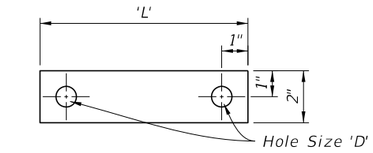
PLAN

(Welded Or Sandcast)

STUB/SLEEVE & BASE PLATE DETAILS

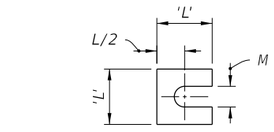


(Welded)



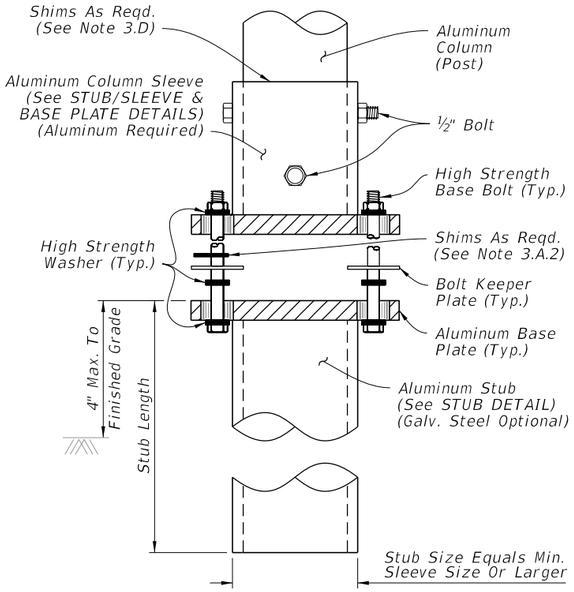
28 Ga. Thick Aluminum Strip
2 Reqd. Per Base

BOLT KEEPER PLATE DETAIL

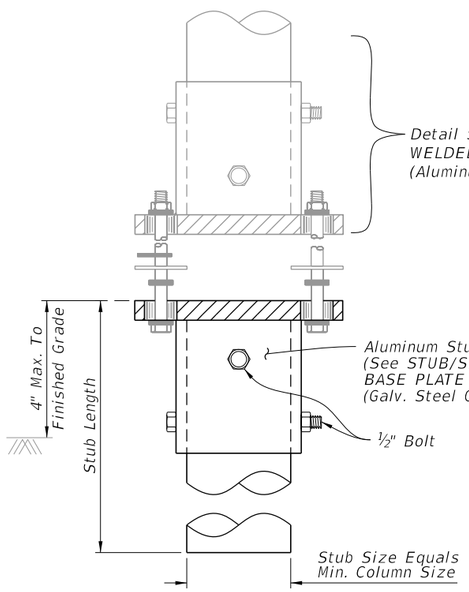


Provide 2~0.0149" Thick (28 gauge)
and 2~0.0329" Thick (21 gauge)
Brass Shims Per Post

SHIM DETAIL



WELDED STUB BASE



BOLTED STUB/SLEEVE BASE

Direction of Traffic

NOTES:

1. Foundation Notes for Slip Base:

   A. See FOUNDATION TABLE on Sheet 3 for foundation embedment depth and stub length.

2. Slip Base Fabrication Notes:

   A. The difference between the O.D. of the post and I.D. of the Sleeve must be 1/16" or less.

   B. The WELDED STUB BASE and lower STUB/SLEEVE BASE PLATE may be fabricated using galvanized steel as an option to aluminum. The upper portion of the SLIP BASE must be aluminum.

   C. Either a Welded Stub Base or Bolted Stub/Sleeve Base may be used in Slip Base.

   D. For cast base plates bolted to foundation stubs, use a foundation stub the same size as the sign column (Post).

3. Slip-Base Assembly Instructions:

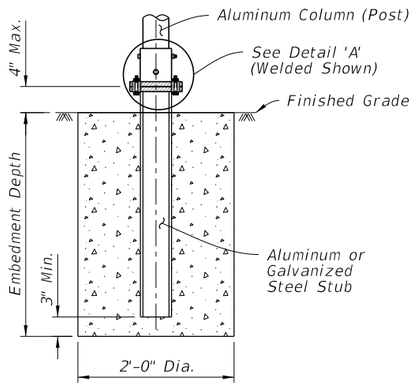
   A. Assemble the Slip Base as follows:
      1. Insert Post into Sleeve and connect using 2 ~ ½" diameter Sleeve Bolts.
      2. Assemble top base plate to bottom Base Plate using Base Bolts (High strength) with 3 washers per bolt. (See Detail 'A'):
         a. Place one washer on each Base Bolt between the bottom Base Plate and the Base Bolt head.
         b. Place the next washer between the Bottom Base Plate and the Bolt Keeper Plate.
         c. Use brass or galvanized steel shims to plumb the post.
         d. Add the top base plate section.
         e. Place the third washer between the Top Base Plate and the Nut.

   B. Orient the Bolt Keeper Plates in the Direction of Traffic.

   C. Tighten Base Bolts as follows:
      1. Tighten Base Bolts to the maximum possible with a 12" to 15" wrench (this will bed the washers and shims and clear the bolt threads).
      2. Loosen each Base Bolt one turn.
      3. Under the supervision of the Engineer, use a calibrated wrench to tighten bolts to the torque prescribed in the SLIP BASE DETAILS Table. Over tightened Base Bolts are not permitted.
      4. Distort bolt threads at the junction with nuts to prevent loosening. Repair damaged galvanizing.

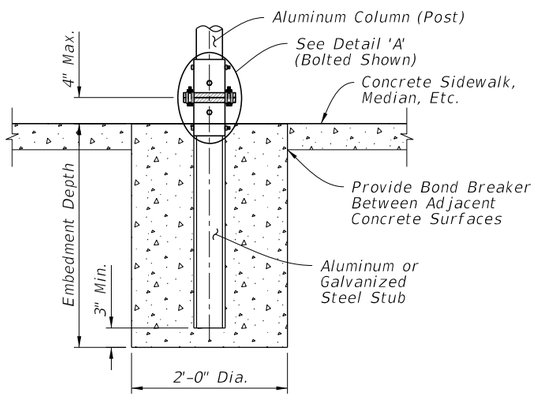
   D. Obtain a tight sleeve connection by placing 4 galvanized steel shims between the column (post) and sleeve. Space the shims evenly around the perimeter of the column (1 between each bolt hole, 4 total). Use shims that are 1" shorter than the height of the sleeve.

STUB DETAIL



SLIP BASE AND FOUNDATION DETAIL
(Non-Frangible Column, Typ.)

DETAIL 'A'



SLIP BASE AND FOUNDATION DETAIL IN CONCRETE
(Non-Frangible Column In Crossovers, Medians & Sidewalks)

Column (Post) Size	SLIP BASE DETAILS													
Outside Dia.	Wall Thickness	Sleeve I.D. (Max.)	Sleeve Height 'H'	Weld 'W'	Base Plate 'L'	Base Plate 'T'	Radius 'R'	Base Bolt Size	Base Bolt Length	Base Plate Torque ft-lbs	Base Plate Torque in.-lbs	Hole Size 'D'	SHIM L	SHIM M
4"	1/4"	4 1/16"	6"	1/4"	8"	3/4"	11/32"	5/8"	3"	29	345	11/16"	1 3/8"	1 1/16"
4½"	1/4"	4 9/16"	6"	1/4"	8"	7/8"	11/32"	5/8"	3 1/4"	29	345	11/16"	1 3/8"	1 1/16"
5"	1/4"	5 1/16"	7"	1/4"	8"	7/8"	11/32"	5/8"	3 1/4"	29	345	11/16"	1 3/8"	1 1/16"
6"	1/4"	6 1/16"	8"	1/4"	9"	1"	13/32"	3/4"	3 1/2"	46	554	13/16"	1 3/4"	1 3/16"
8"	1/4"	8 1/16"	10"	1/4"	11"	1"	15/32"	7/8"	3 3/4"	53	640	15/16"	2 3/8"	1 1/16"

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SLIP BASE AND FOUNDATION DETAILS

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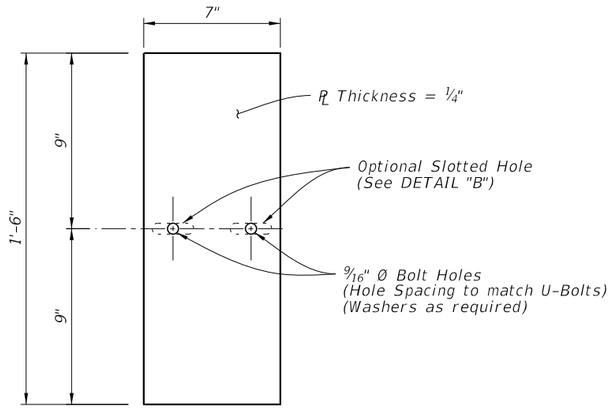
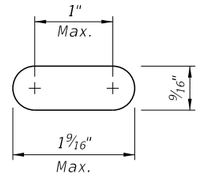
11/01/22			FY 2023-24 STANDARD PLANS	SINGLE COLUMN GROUND SIGNS	INDEX 700-010 / SHEET 4 of 11

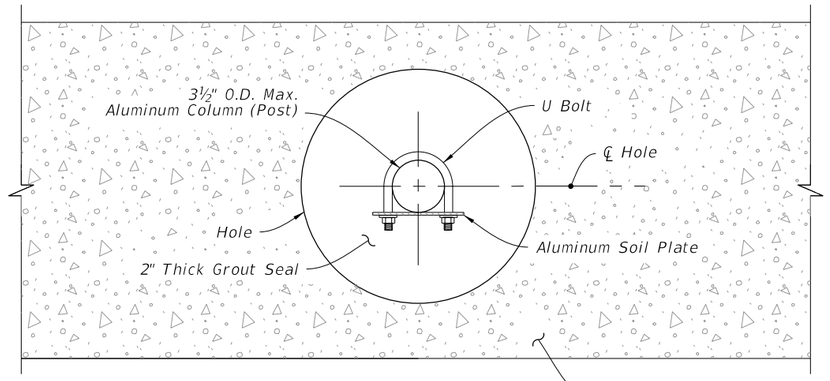


ALUMINUM SOIL PLATE DETAIL

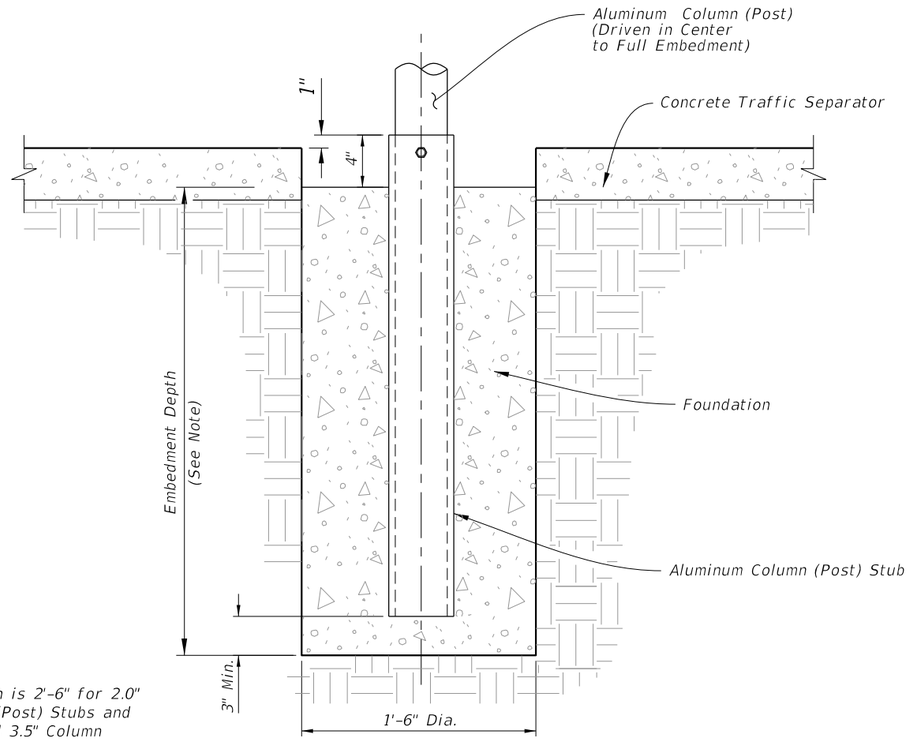


Optional Slotted Holes

DETAIL "B"



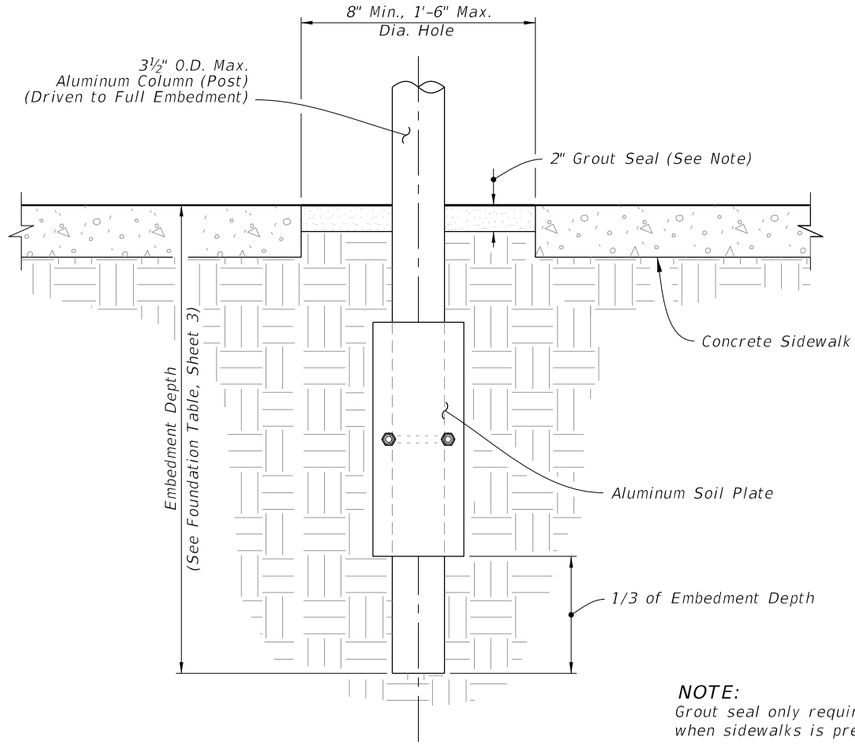
PLAN



NOTE:
Embedment Depth is 2'-6" for 2.0" and 2.5" Column (Post) Stubs and 3'-6" for 3.0" and 3.5" Column (Post) Stubs.

ELEVATION

CONCRETE/STUB DETAIL
(Traffic Separator)



NOTE:
Grout seal only required when sidewalks is present.

ELEVATION

DRIVEN POST DETAIL
(Frangible Post In Through Sidewalk Shown
Installations without Sidewalk Similar)

DRIVEN POST, CONCRETE/STUB, AND SOIL PLATE DETAILS

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LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	SINGLE COLUMN GROUND SIGNS	INDEX	SHEET
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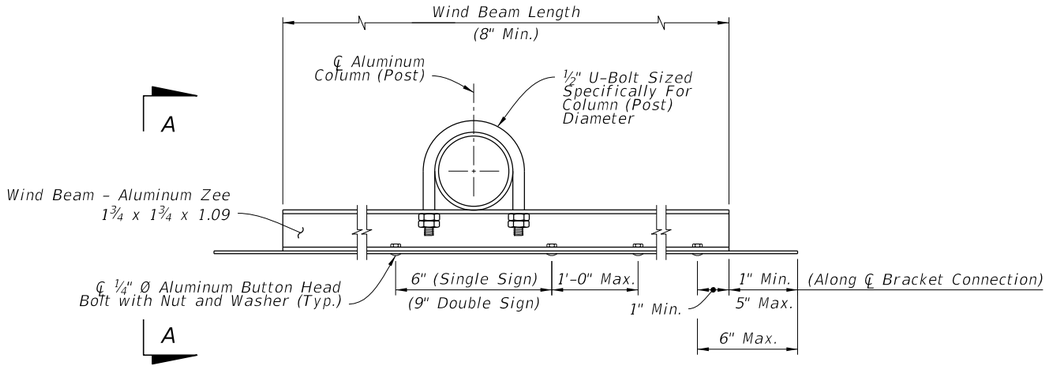
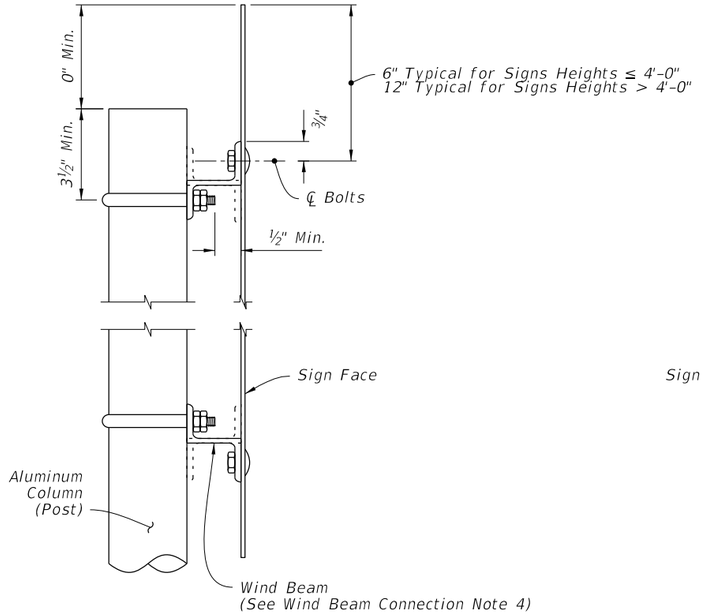


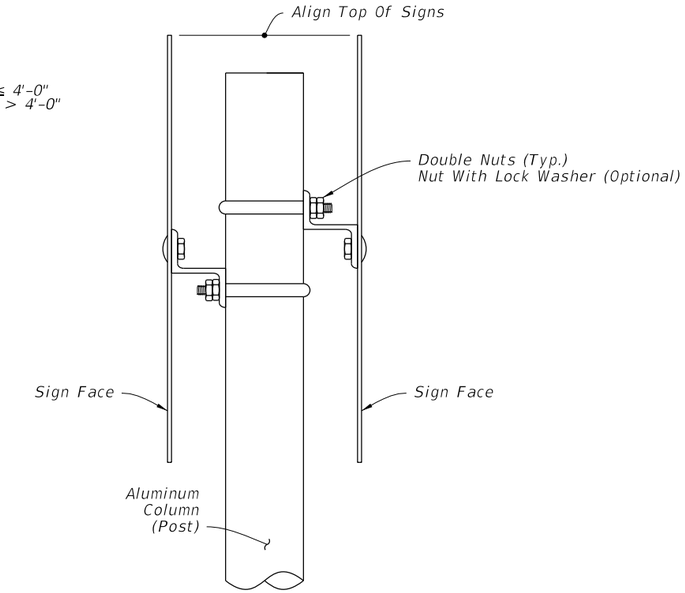
NOTES:

1. 5/16" Ø stainless steel hex head bolts with nylon washer under head and washer under nut may be used in lieu of ¼" Ø aluminum button or flat head bolts.
2. Use nylon washers (provided by the sheeting supplier) under the bolt heads to protect sign sheeting.
3. Slots up to 2" long are allowed in wind beams to accommodate U-Bolts for varying Column (Post) diameters.
4. Wind beams may be oriented in either direction.
5. For signs greater than 66" in height, install a third wind beam evenly spaced between the top and bottom wind beams. For signs up to 12" in height, use only one wind beam at ℄ Sign. Install two wind beams on signs with heights greater than 12" and less than or equal to 66".

WIND BEAM CONNECTIONS DETAILS



SINGLE SIGN DETAIL



NOTE: Use the area and the centroid location of the largest sign to determine aluminum column (post) size.

BACK-TO-BACK SIGN DETAIL

VIEW A-A

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WIND BEAM CONNECTION

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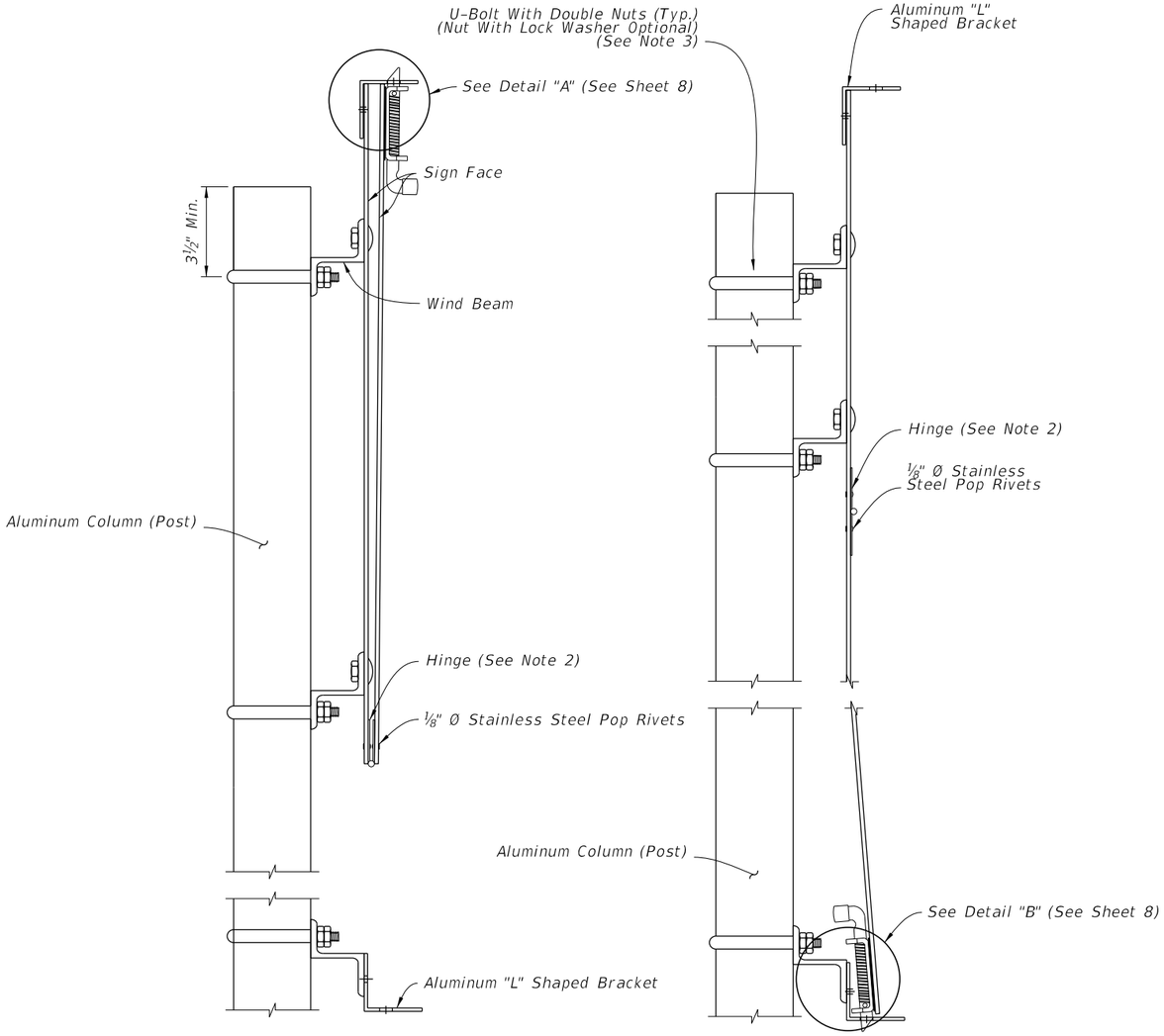
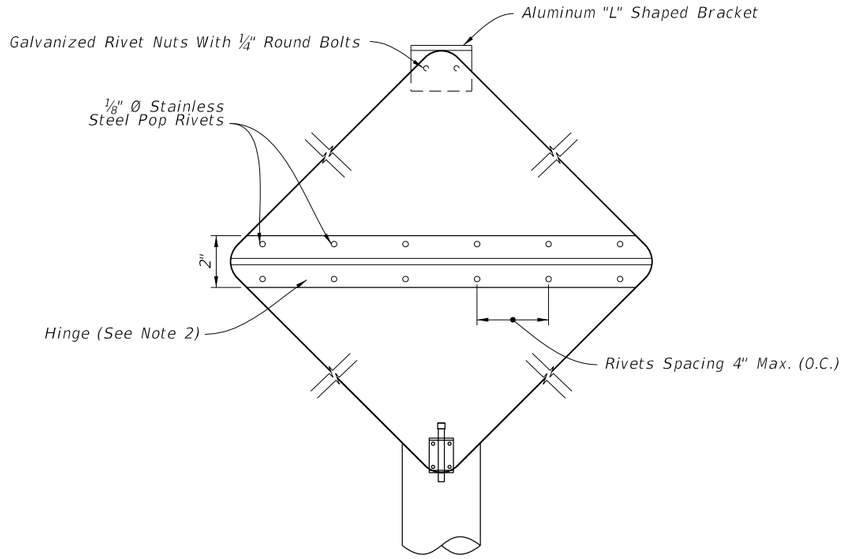
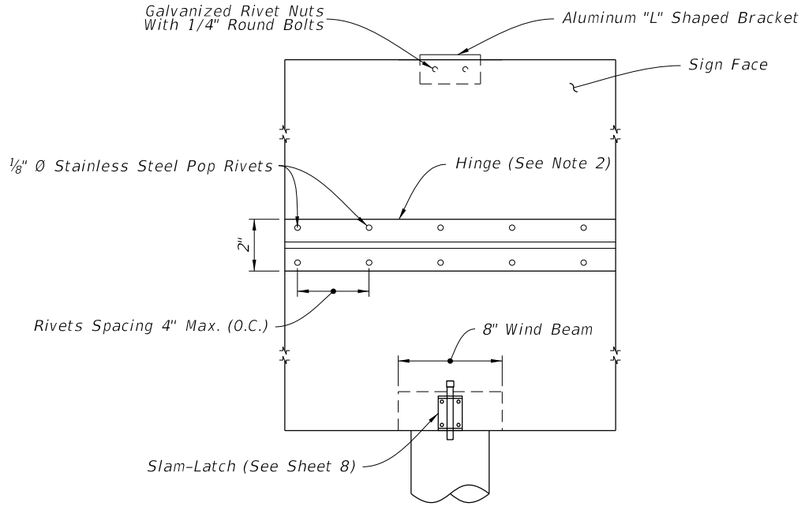


UNDEPLOYED SIGN DETAIL

DEPLOYED SIGN DETAIL

SIGN PANEL SIDE VIEW



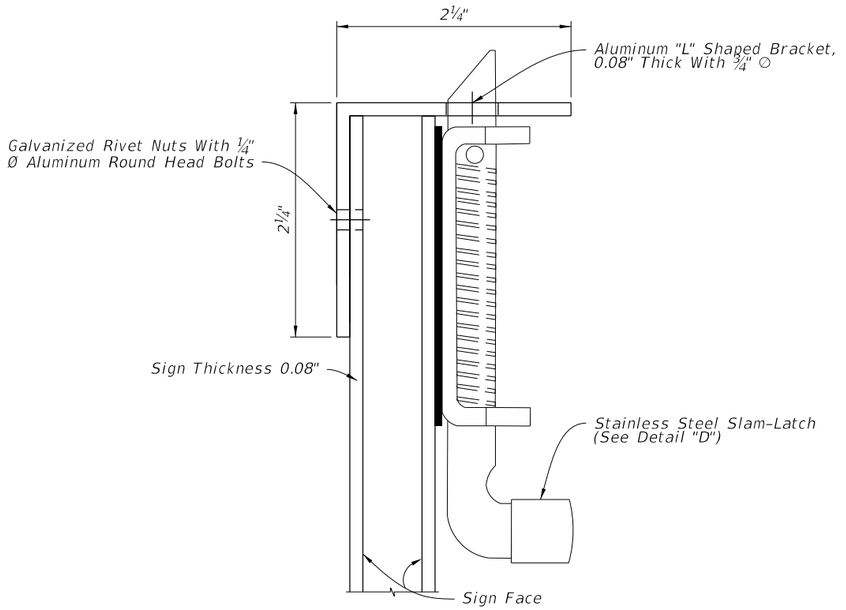


SIGN PANEL FRONT VIEW

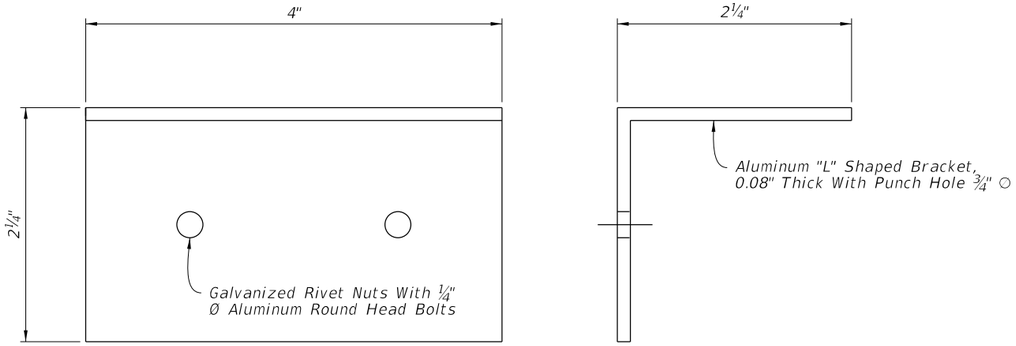
NOTES:

1. Install sign in the undeployed (up) position.
2. Provide a continuous stainless steel hinge with minimum 0.060" leaf thickness, 2" open width and 0.120" pin diameter. Stake the hinge at both ends to prevent pin movement.
3. Install Stainless Steel Spring Loaded Slam-Latch with cover to bottom face of flip sign per manufacturer's recommendations.
4. Punch or drill a 3/4" diameter hole in the "L" shaped bracket on site to match location of 1/2" wide slam-latch pin. Remove any burs or sharp edges.

WIND BEAM CONNECTION FOR FLIP DOWN SIGN

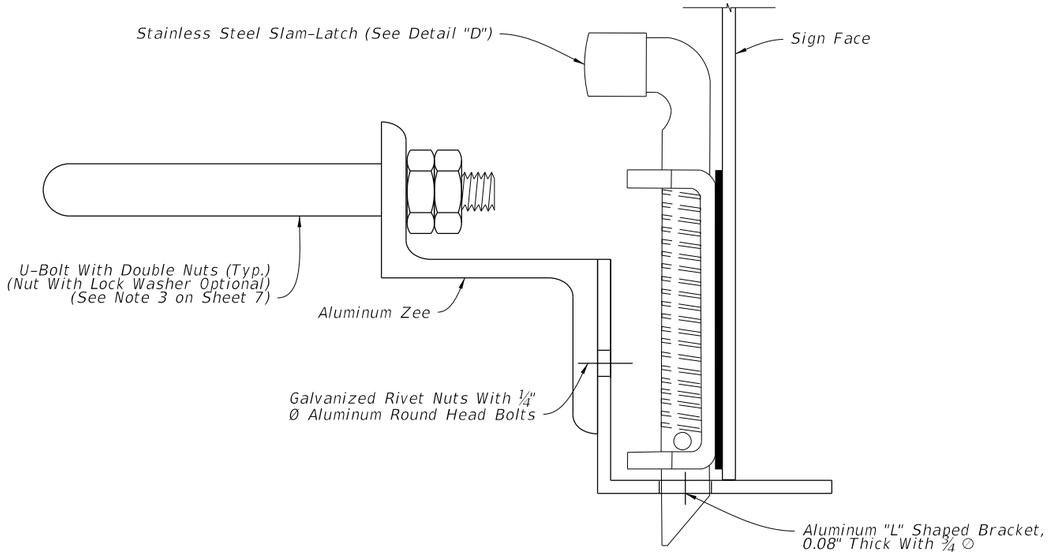


DETAIL "A"

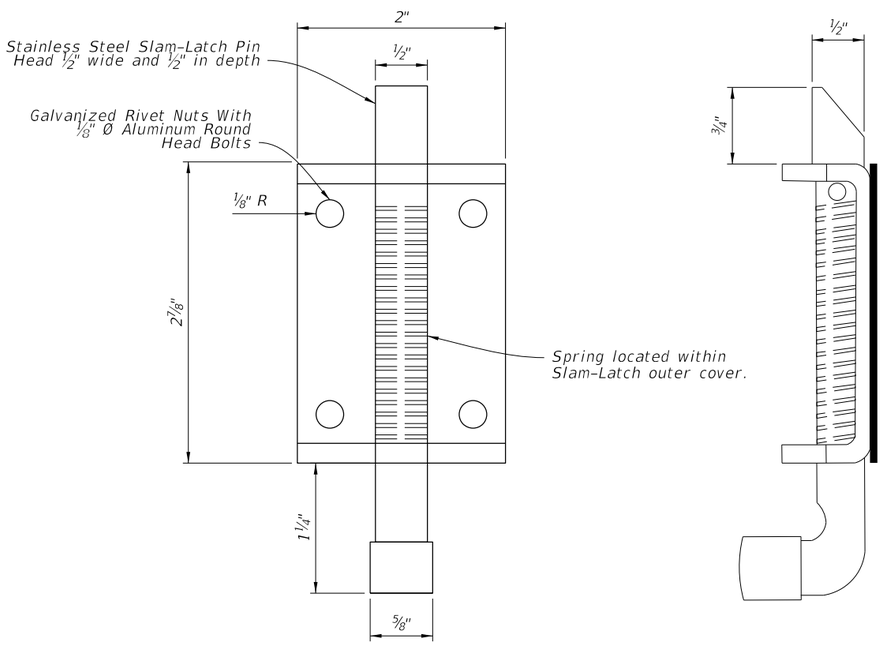


"L" Shaped Bracket

DETAIL "C"



DETAIL "B"



Stainless Steel Slam-Latch

DETAIL "D"

SLAM-LATCH DETAIL

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LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
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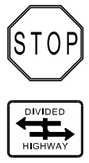
Size	Area	Total Area	Centroid
36x12	3.00 SF	6.31 SF	1.75 Ft.
24x24	3.31 SF		

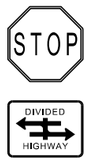
Size	Area	Total Area	Centroid
36x12	3.00 SF	8.18 SF	1.92 Ft.
30x30	5.18 SF		

Size	Area	Total Area	Centroid
36x12	3.00 SF	10.46 SF	2.10 Ft.
36x36	7.46 SF		

Size	Area	Total Area	Centroid
36x12	3.00 SF	16.25 SF	2.48 Ft.
48x48	13.25 SF		

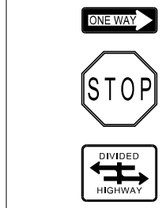


Size	Area	Total Area	Centroid
24x24	3.31 SF	6.31 SF	1.71 Ft.
24x18	3.00 SF		

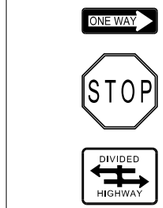


Size	Area	Total Area	Centroid
30x30	5.18 SF	10.18 SF	2.19 Ft.
30x24	5.00 SF		

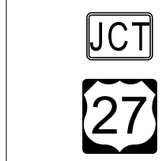
Size	Area	Total Area	Centroid
36x36	7.46 SF	12.46 SF	2.55 Ft.
30x24	5.00 SF		



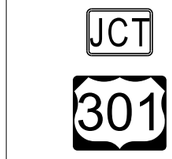
Size	Area	Total Area	Centroid
36x12	3.00 SF	13.18 SF	2.87 Ft.
30x30	5.18 SF		
30x24	5.00 SF		



Size	Area	Total Area	Centroid
36x12	3.00 SF	15.46 SF	3.15 Ft.
36x36	7.46 SF		
30x24	5.00 SF		

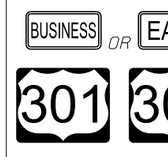


Size	Area	Total Area	Centroid
21x15	2.19 SF	6.19 SF	1.60 Ft.
24x24	4.00 SF		

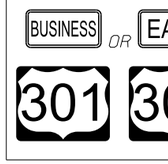


Size	Area	Total Area	Centroid
21x15	2.19 SF	7.19 SF	1.52 Ft.
30x24	5.00 SF		

Size	Area	Total Area	Centroid
24x12	2.00 SF	6.00 SF	1.53 Ft.
24x24	4.00 SF		

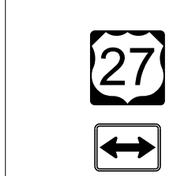


Size	Area	Total Area	Centroid
24x12	2.00 SF	7.00 SF	1.45 Ft.
30x24	5.00 SF		

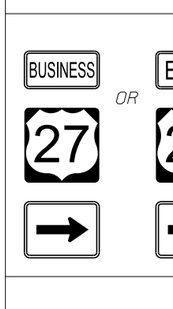


Size	Area	Total Area	Centroid
30x15	3.13 SF	8.13 SF	1.66 Ft.
30x24	5.00 SF		

Size	Area	Total Area	Centroid
24x24	4.00 SF	6.19 SF	1.73 Ft.
21x15	2.19 SF		

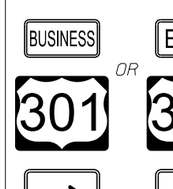


Size	Area	Total Area	Centroid
30x24	5.00 SF	7.19 SF	1.81 Ft.
21x15	2.19 SF		

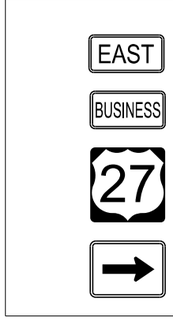


Size	Area	Total Area	Centroid
24x12	2.00 SF	8.19 SF	2.26 Ft.
24x24	4.00 SF		
21x15	2.19 SF		

Size	Area	Total Area	Centroid
24x12	2.00 SF	9.19 SF	2.27 Ft.
30x24	5.00 SF		
21x15	2.19 SF		



Size	Area	Total Area	Centroid
30x15	3.13 SF	10.32 SF	2.49 Ft.
30x24	5.00 SF		
21x15	2.19 SF		



Size	Area	Total Area	Centroid
24x12	2.00 SF	10.19 SF	2.80 Ft.
24x12	2.00 SF		
24x24	4.00 SF		
21x15	2.19 SF		

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	Size	Area	Total Area	Centroid
EAST	24x12	2.00 SF	11.19 SF	2.76 Ft.
BUSINESS	24x12	2.00 SF		
301	30x24	5.00 SF		
→	21x15	2.19 SF		

	Size	Area	Total Area	Centroid
EAST	30x15	3.13 SF	13.45 SF	3.16 Ft.
BUSINESS	30x15	3.13 SF		
301	30x24	5.00 SF		
→	21x15	2.19 SF		

	Size	Area	Total Area	Centroid
JCT	21x15	2.19 SF	3.90 SF	1.57 Ft.
LEON 56 COUNTY	18x18	1.71 SF		

	Size	Area	Total Area	Centroid
JCT	21x15	2.19 SF	5.22 SF	1.72 Ft.
LEON 56 COUNTY	24x24	3.03 SF		

	Size	Area	Total Area	Centroid
JCT	21x15	2.19 SF	6.95 SF	1.87 Ft.
LEON 56 COUNTY	30x30	4.76 SF		

	Size	Area	Total Area	Centroid
LEON 56 COUNTY	18x18	1.71 SF	3.90 SF	1.26 Ft.
→	21x15	2.19 SF		

	Size	Area	Total Area	Centroid
LEON 56 COUNTY	24x24	3.03 SF	5.22 SF	1.62 Ft.
→	21x15	2.19 SF		

	Size	Area	Total Area	Centroid
LEON 56 COUNTY	30x30	4.76 SF	6.95 SF	1.97 Ft.
→	21x15	2.19 SF		

	Size	Area	Total Area	Centroid
TO	24x12	2.00 SF	9.39 SF	2.87 Ft.
EAST	24x12	2.00 SF		
INTERSTATE 75	24x24	3.20 SF		
→	21x15	2.19 SF		

	Size	Area	Total Area	Centroid
TO	24x12	2.00 SF	10.18 SF	2.84 Ft.
EAST	24x12	2.00 SF		
INTERSTATE 295	30x24	3.99 SF		
→	21x15	2.19 SF		

	Size	Area	Total Area	Centroid
TO	30x15	3.13 SF	12.44 SF	3.26 Ft.
EAST	30x15	3.13 SF		
INTERSTATE 295	30x24	3.99 SF		
→	21x15	2.19 SF		

	Size	Area	Total Area	Centroid
JCT	21x15	2.19 SF	5.39 SF	1.75 Ft.
INTERSTATE 75	24x24	3.20 SF		

	Size	Area	Total Area	Centroid
JCT	21x15	2.19 SF	6.18 SF	1.67 Ft.
INTERSTATE 295	30x24	3.99 SF		

	Size	Area	Total Area	Centroid
EAST TO OR	24x12	2.00 SF	5.20 SF	1.67 Ft.
INTERSTATE 75 INTERSTATE 75	24x24	3.20 SF		

	Size	Area	Total Area	Centroid
EAST TO OR	24x12	2.00 SF	5.99 SF	1.60 Ft.
INTERSTATE 295 INTERSTATE 295	30x24	3.99 SF		

	Size	Area	Total Area	Centroid
EAST TO OR	30x15	3.13 SF	7.12 SF	1.81 Ft.
INTERSTATE 295 INTERSTATE 295	30x24	3.99 SF		

	Size	Area	Total Area	Centroid
EAST TO OR	30x15	3.13 SF	10.33 SF	2.27 Ft.
INTERSTATE 75 INTERSTATE 75	36x36	7.20 SF		

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LAST REVISION	REVISION	DESCRIPTION:				
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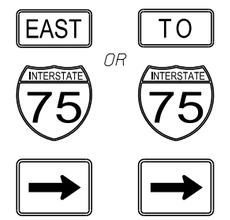
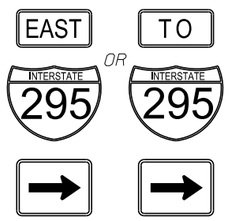
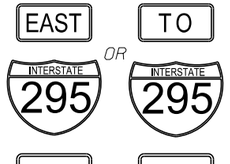
Size	Area	Total Area	Centroid
30x15	3.13 SF	12.12 SF	2.18 Ft.
45x36	8.99 SF		



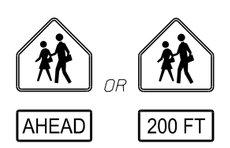
Size	Area	Total Area	Centroid
24x12	2.00 SF	7.39 SF	2.30 Ft.
24x24	3.20 SF		
21x15	2.19 SF		



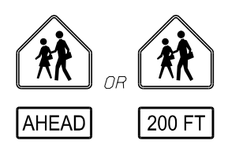
Size	Area	Total Area	Centroid
24x12	2.00 SF	8.18 SF	2.31 Ft.
30x24	3.99 SF		
21x15	2.19 SF		



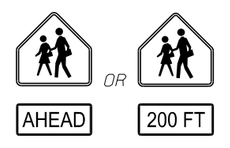
Size	Area	Total Area	Centroid
30x15	3.13 SF	9.31 SF	2.55 Ft.
30x24	3.99 SF		
21x15	2.19 SF		



Size	Area	Total Area	Centroid
30x30	4.69 SF	6.69 SF	1.61 Ft.
24x12	2.00 SF		



Size	Area	Total Area	Centroid
30x30	4.69 SF	8.44 SF	1.77 Ft.
30x18	3.75 SF		



Size	Area	Total Area	Centroid
36x36	6.75 SF	10.50 SF	2.06 Ft.
30x18	3.75 SF		

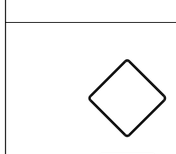
Size	Area	Total Area	Centroid
30X30	4.69 SF	6.69 SF	1.61 Ft.
24X12	2.00 SF		

Size	Area	Total Area	Centroid
30X30	4.69 SF	8.44 SF	1.77 Ft.
30X18	3.75 SF		

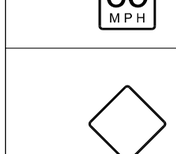
Size	Area	Total Area	Centroid
36X36	6.75 SF	10.50 SF	2.06 Ft.
30X18	3.75 SF		

Size	Area	Total Area	Centroid
30X30	6.25 SF	8.25 SF	2.28 Ft.
24X12	2.00 SF		

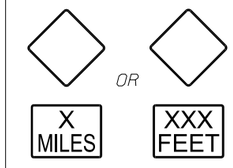
Size	Area	Total Area	Centroid
36X36	9.00 SF	12.75 SF	2.84 Ft.
30X18	3.75 SF		



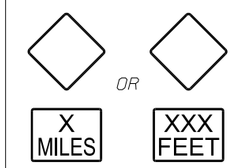
Size	Area	Total Area	Centroid
30X30	6.25 SF	10.25 SF	2.74 Ft.
24X24	4.00 SF		



Size	Area	Total Area	Centroid
36X36	9.00 SF	15.25 SF	3.29 Ft.
30X30	6.25 SF		



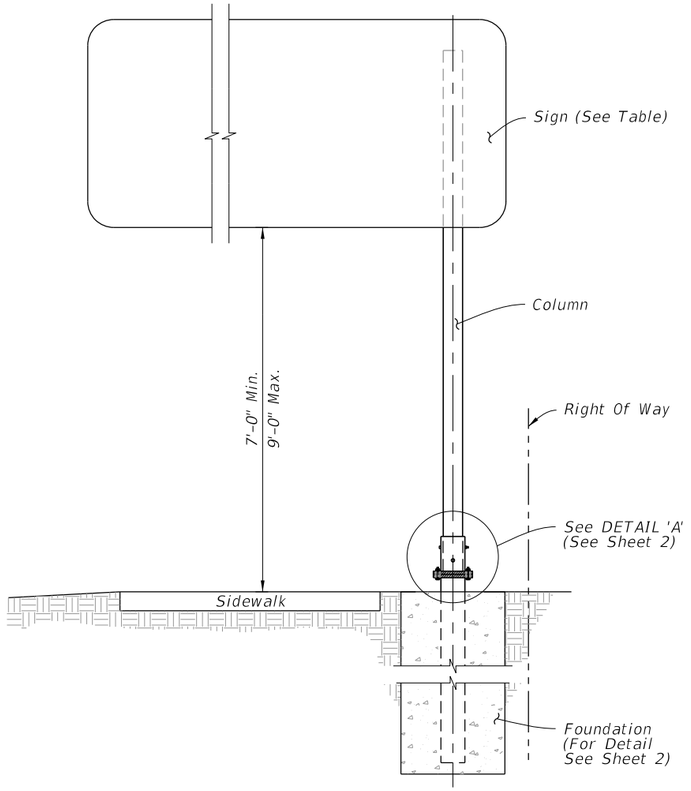
Size	Area	Total Area	Centroid
30X30	6.25 SF	9.25 SF	2.51 Ft.
24X18	3.00 SF		



Size	Area	Total Area	Centroid
36X36	9.00 SF	14.00 SF	3.06 Ft.
30X24	5.00 SF		

10/20/2022 8:56:35 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	SINGLE COLUMN GROUND SIGNS	INDEX	SHEET
11/01/22						700-010	11 of 11

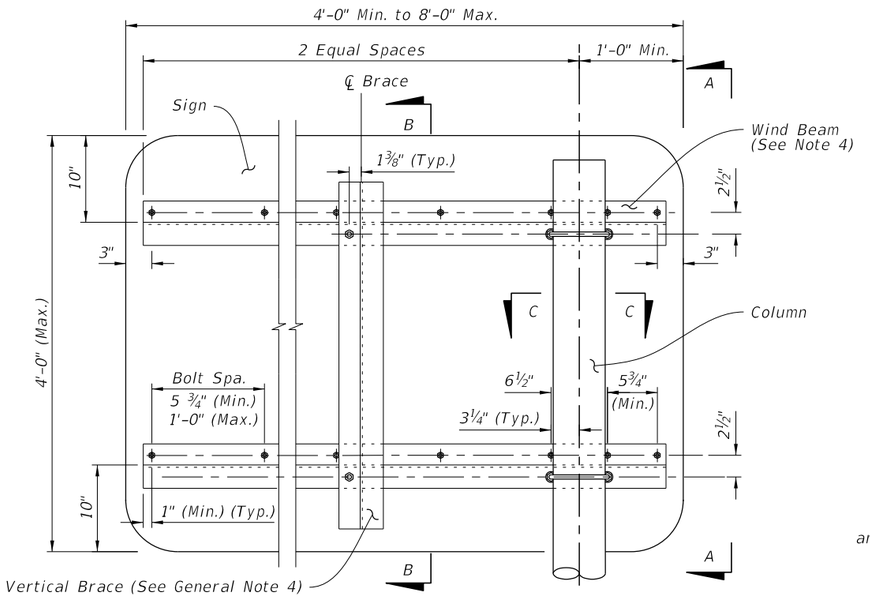


TYPICAL SECTION

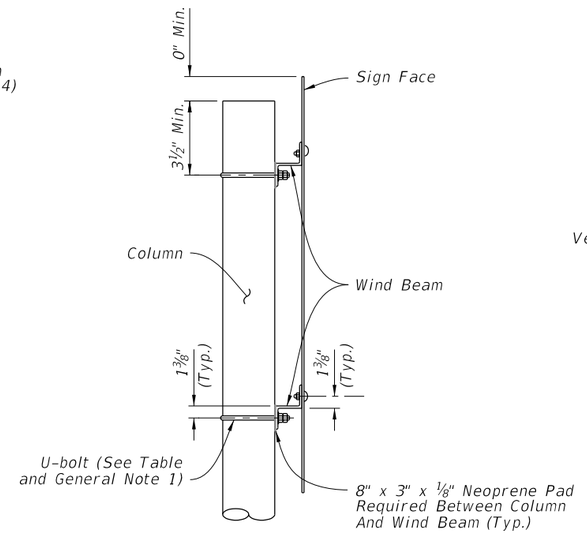
GENERAL NOTES:

1. Work with Index 700-010 for additional notes and the assembly of base connection.
2. Meet the requirements of Specification 700.
3. Place galvanized steel shims between the Sleeve and Post to obtain a tight fit between the Post and Sleeve.
4. Wind Beam and Vertical Brace: Aluminum Z 3 x $2^{1}1/_{16}$ x 3.38. Install Vertical Brace on 7'-0" to 8'-0" signs only.
5. Use Brass shims to plumb the post.
6. Use nylon washers under the button bolt heads to protect sign sheeting. Use aluminum washers under nut.
7. Aluminum Columns: ASTM B429 Alloy 6061-T6.

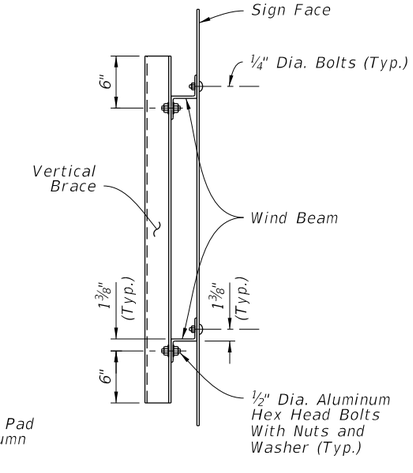
COLUMN SELECTION AND FOOTING SIZE TABLE							
Sign Size Height x Length	Column Size Diameter x Thickness	Sleeve Size Diameter x Thickness	U-bolt Diameter	Base Bolt Diameter x Length	Torque lbs./in	Base Plate Thickness	
4'-0" x 5'-0"	4 NPS Schedule 80 (4.5" x 0.337")	5 NPS Schedule 120 (5.563" x 0.5")	½"	⅝" x 3½"	270 +/- 45		6'-0"
4'-0" x 6'-0"							
4'-0" x 7'-0"	5 NPS Schedule 80 (5.563" x 0.375")	6 NPS Schedule 80 (6.625" x 0.432")	⅝"	¾" x 4"	445 +/- 75	1⅛"	6'-6"
4'-0" x 8'-0"							7'-0"



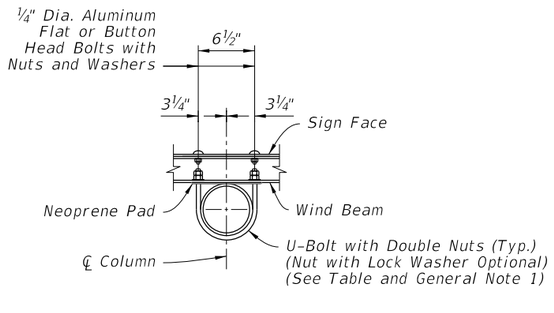
SIGN DETAIL



VIEW A-A



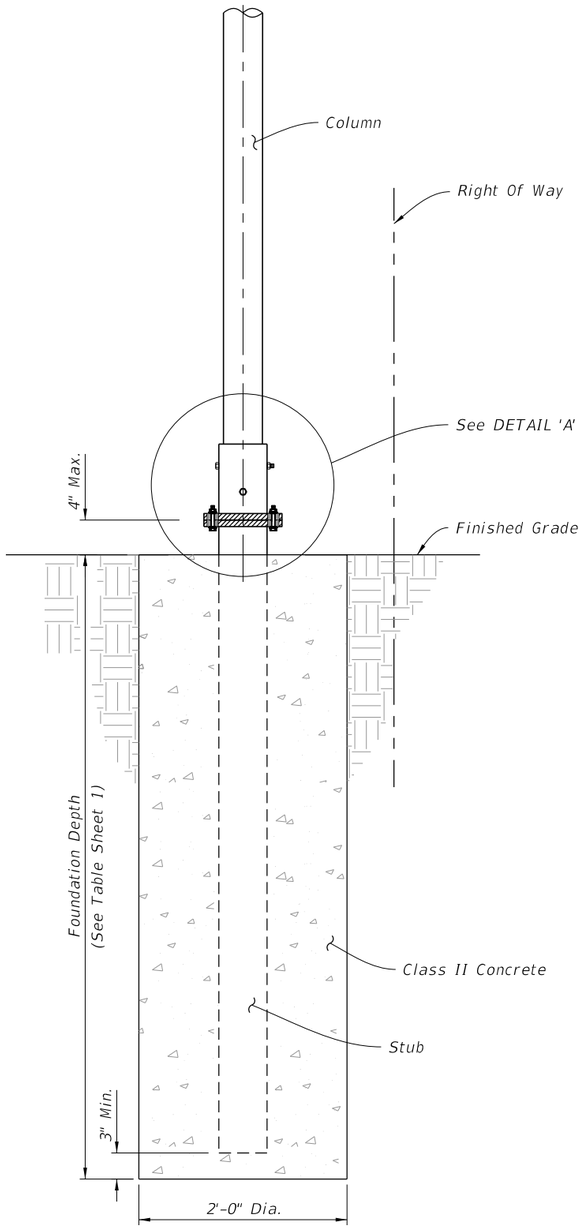
SECTION B-B



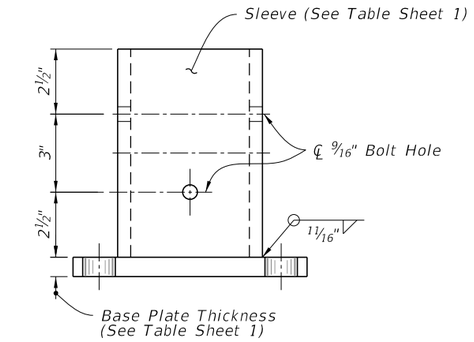
SECTION C-C

5/14/2024 11:20:20 AM

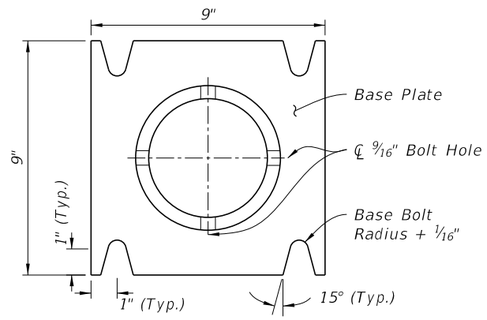
LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FY 2023-24 STANDARD PLANS	SINGLE COLUMN CANTILEVER GROUND MOUNTED SIGN	INDEX 700-011	SHEET 1 of 2



BASE AND FOUNDATION DETAIL

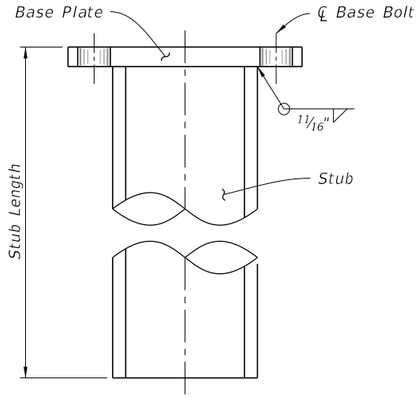


ELEVATION



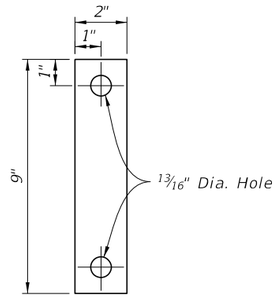
PLAN

SLEEVE & BASE PLATE DETAILS



Stub Size Equals
Min. Sleeve Size

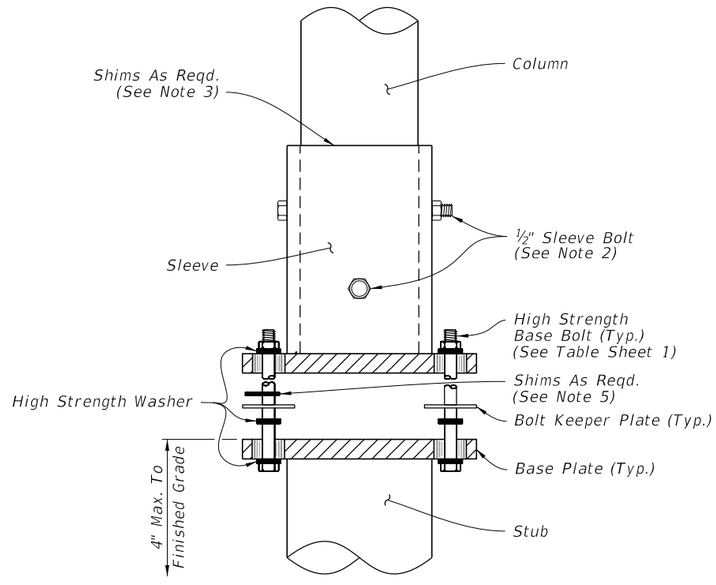
STUB DETAIL



28 Ga. Thick Aluminum Strip
2 Required Per Base

BOLT KEEPER PLATE DETAIL

Direction of Traffic



DETAIL 'A'

10/20/2022 8:56:37 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/21			FY 2023-24 STANDARD PLANS	SINGLE COLUMN CANTILEVER GROUND MOUNTED SIGN	700-011	2 of 2

GENERAL NOTES:

1. Meet the requirements of Specification 700.

2. Work with Index 700-010.

3. Shop Drawings: Not required.

4. Construction:

   A. Locate Sign Support a minimum of 5 feet from an open joint or transition (sign stationing may be adjusted to accommodate this requirement.
   B. Base plate must be flush with back of Traffic Railing
   C. Anchors in Traffic Railings:
      a. Install Adhesive Anchors in accordance with Specification 416 except perform field test on one anchor per sign support location.
      b. Use templates and tie anchors as necessary to maintain correct placement of C-I-P Embedded Anchors
      c. Do not drill into existing conduit
   D. Temporary Signs on Permanent Traffic Railings: Same as Permanent except Field testing of anchors is not required

5. Removal of Temporary Signs on Permanent Traffic Railings:

   A. Cut anchor rods flush with the top of the traffic railing
   B. Coat anchors with Type F-1 epoxy to prevent corrosion
      a. Extend coating 2 inches beyond edge of cut anchor rods
      b. Epoxy coating 1/16" thick minimum

6. Bridge deck shown. Approach slabs, junction slabs, and miscellaneous structures are similar.

7. Traffic railings are shown. Concrete barriers and parapets are similar.

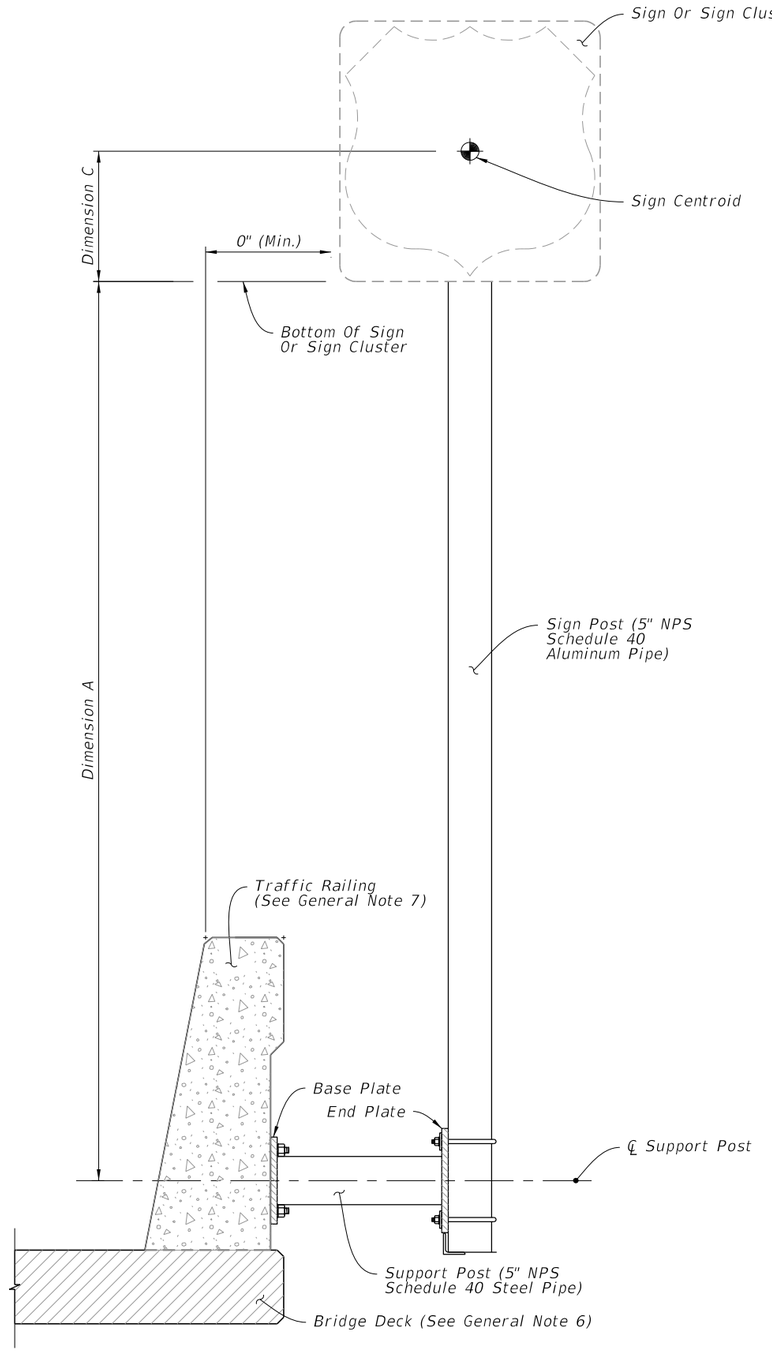
8. Materials:

   A. Steel Plate: ASTM A36 or ASTM A709 Grade 36
   B. Steel Pipe (Support Post): ASTM A501 Schedule 40
   C. Aluminum Pipe: ASTM B429 Alloy 6061-T6
   D. Galvanized U-Bolts, Nuts and Plate Washer
      a. U-Bolts: ASTM A449
      b. Hex Nuts: ASTM A 563 Lock Nuts
      c. Plate Washer: ASTM A 36 or ASTM A709 Grade 36 or 50
   E. Galvanized Anchor bolts, Nuts and Washers:
      a. Anchor Rod: ASTM F1554 Grade 55 fully threaded (for Adhesive Anchors)
      b. Anchor Bolts: ASTM F1554 Grade 55 Grade A Hex
      c. Nuts: ASTM A563 Heavy Hex Locking
      d. Washers: ASTM F436

SIGN LIMITATIONS TABLE	
MAX. SIGN AREA (SF)	MAX. SIGN CENTROID HEIGHT (DIM. A + DIM. C)
25	9'-7"

Dimension A = Distance from centerline of the Support Post to the bottom of the sign or sign cluster.

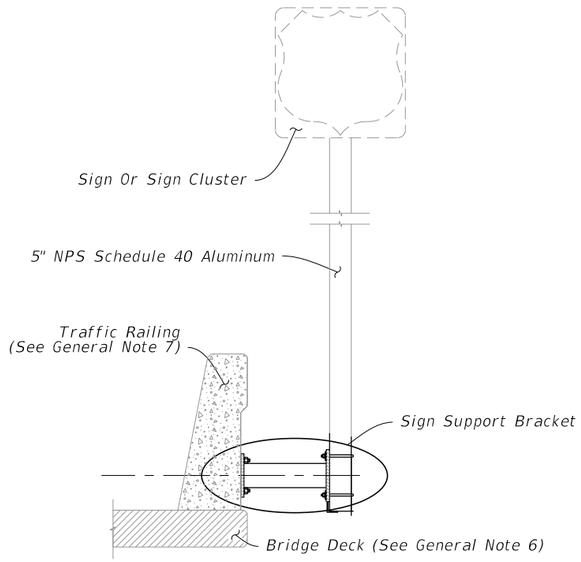
Dimension C = Vertical distance from the bottom of the sign or sign cluster to the Centroid of the sign or sign cluster.



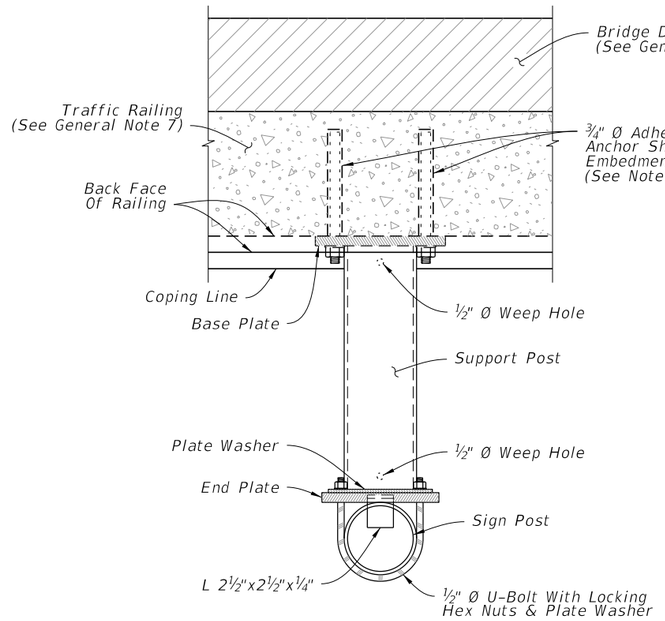
SIGN SUPPORT ASSEMBLY

5/14/2024 11:39:29 AM

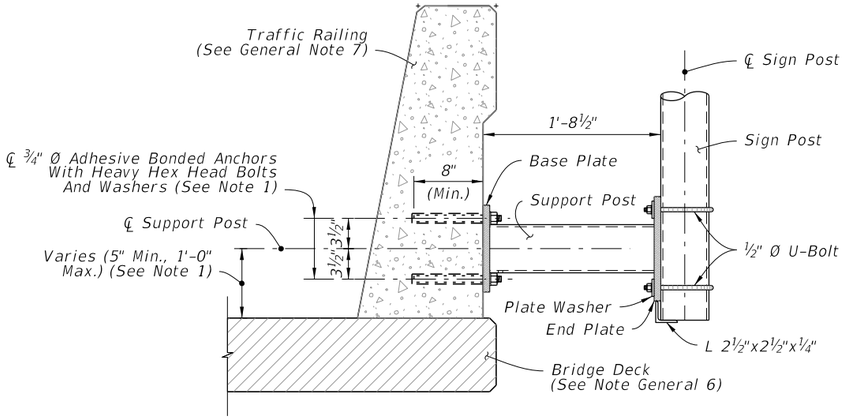
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/22			FDOT FY 2023-24 STANDARD PLANS	SINGLE POST SIGN SUPPORT BARRIER SIDE-MOUNTED	700-012	1 of 3



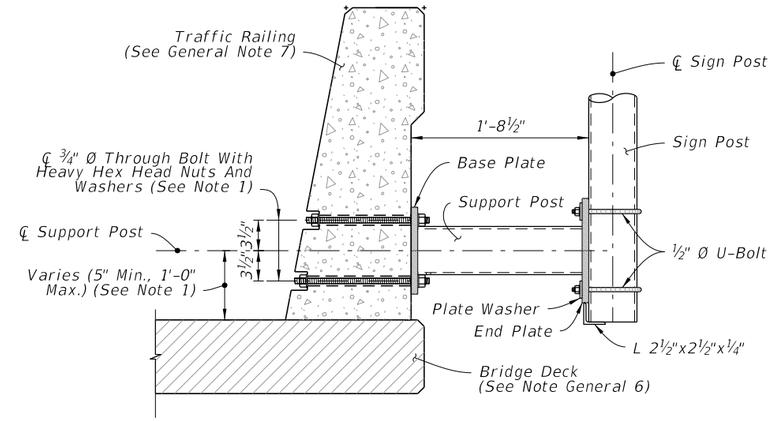
SIGN SUPPORT ASSEMBLY



PLAN

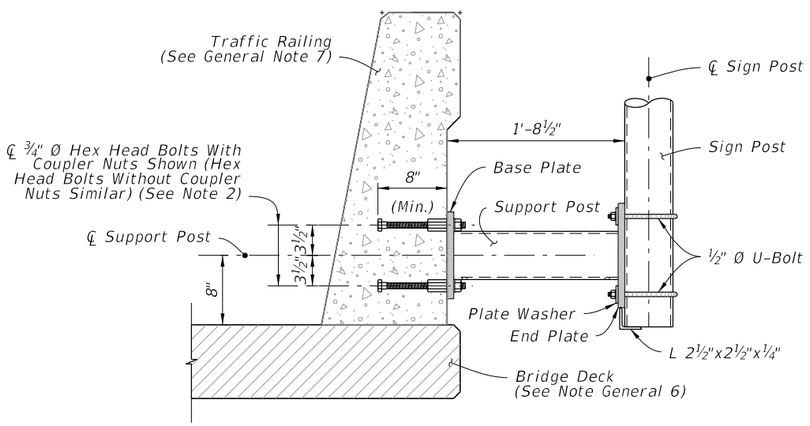


ADHESIVE BOND

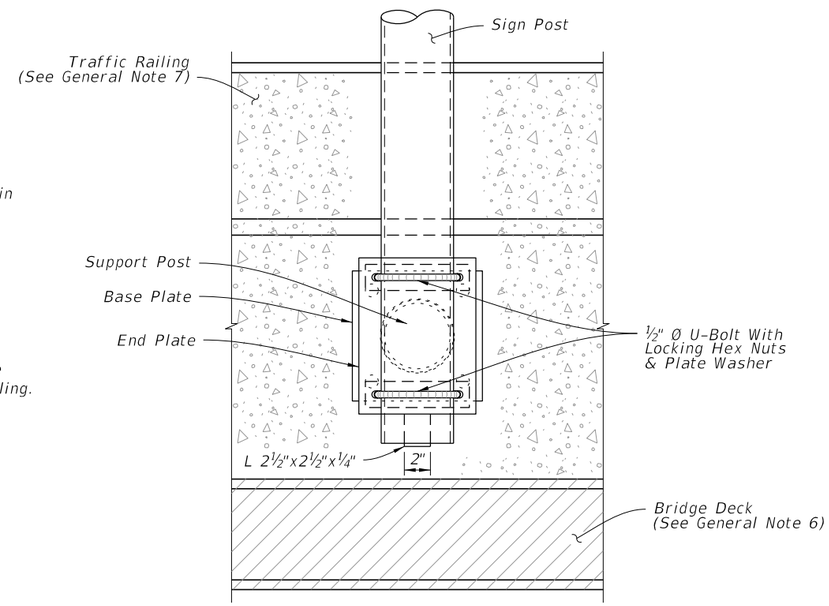


THROUGH BOLTING

TYPICAL SECTION - EXISTING RAILING



TYPICAL SECTION - NEW CONSTRUCTION



ELEVATION

SIGN SUPPORT BRACKET

NOTES:

1. Existing Traffic Railings:

   A. Locate existing conduit prior to drilling and adjust placement of base plate as necessary to avoid damaging existing conduit. Base plate must be flush with back of traffic railing. Maintain a minimum cover 2" from face of traffic railing to tip of Adhesive Anchor.

   B. For concrete parapets less than 10" thick, through bolt ¾" Ø Heavy Hex Head Bolts with Nuts and Washers in lieu of Adhesive Bonded Anchors. Bolt heads shall not protrude more than 1½" beyond traffic face of railing.

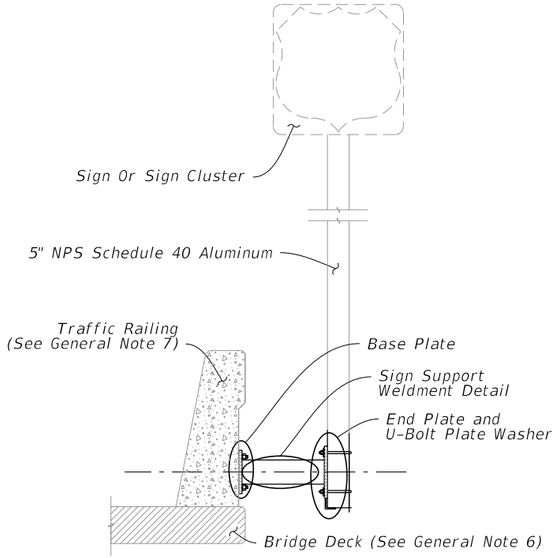
   C. For through bolting, countersink the nut and washer so that the bolt and nut does not extend beyond the face of the traffic railing. Do not exceed a countersink depth and diameter of 2½".

2. New Traffic Railings:

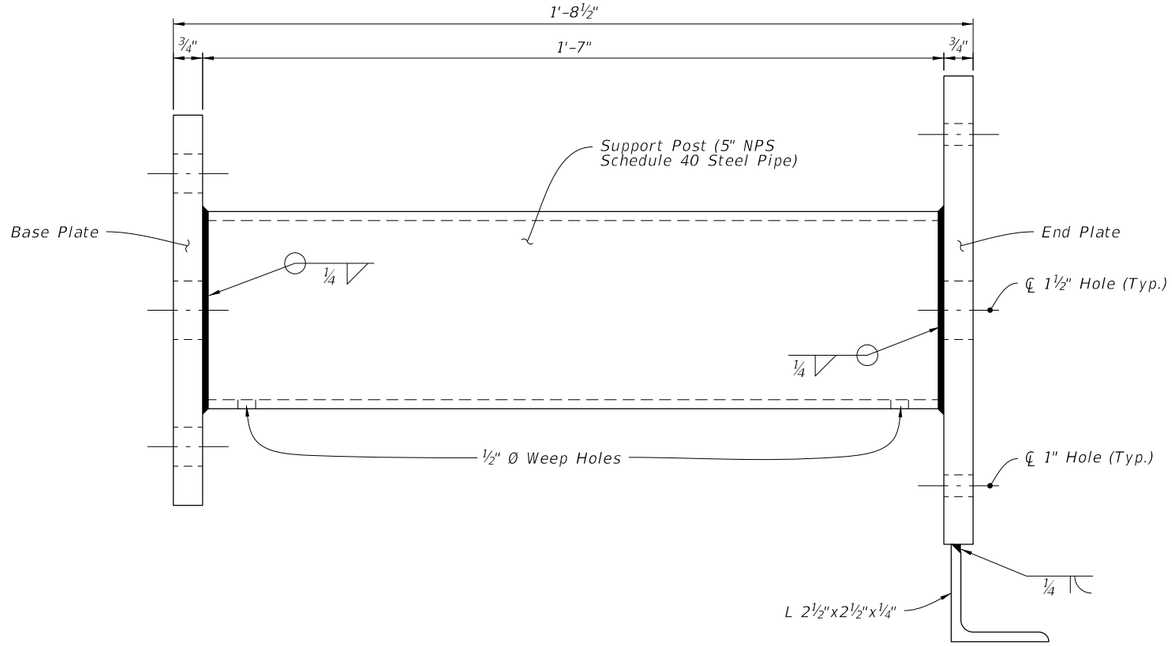
   A. Optional Couplers are shown for slipforming; keep Anchor Bolt coupler threads free of concrete.

10/20/2022 8:56:38 AM

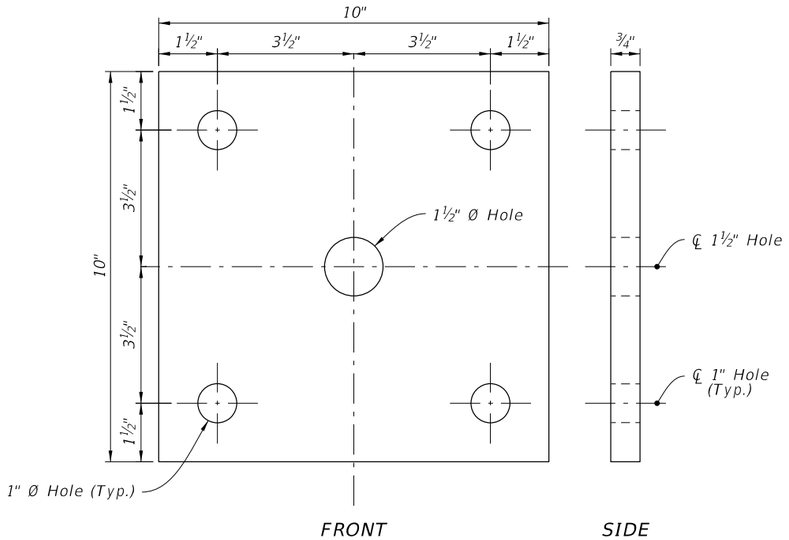
LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	SINGLE POST SIGN SUPPORT BARRIER SIDE-MOUNTED	INDEX	SHEET
11/01/22					700-012	2 of 3



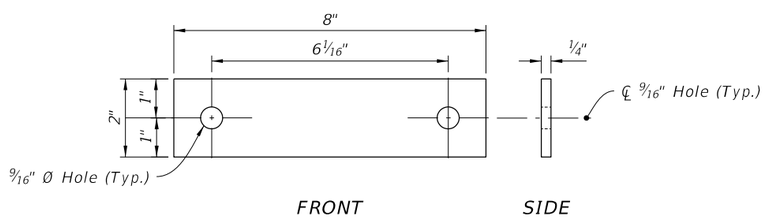
SIGN SUPPORT ASSEMBLY



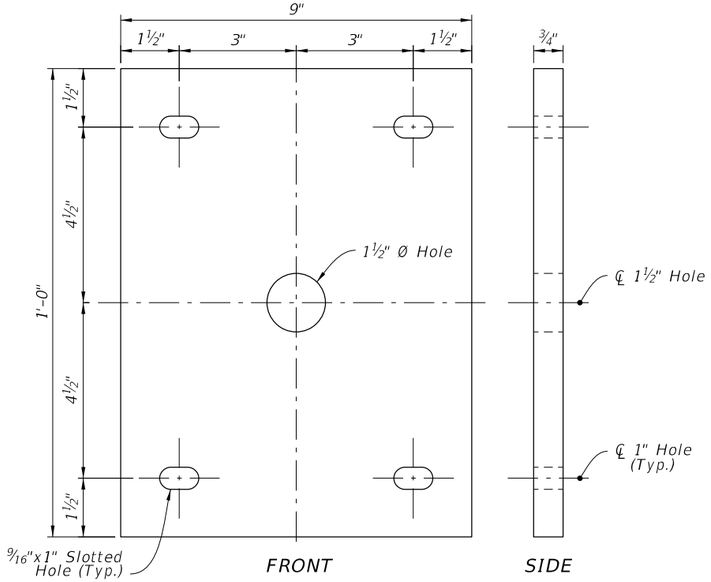
SIGN SUPPORT WELDMENT DETAIL



BASE PLATE



U-BOLT PLATE WASHER



END PLATE

10/20/2022 8:56:39 AM

LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FY 2023-24 STANDARD PLANS	SINGLE POST SIGN SUPPORT BARRIER SIDE-MOUNTED	INDEX 700-012	SHEET 3 of 3

GENERAL NOTES:

1. Meet the requirements of Specification 700.

2. Work with Index 700-010.

3. Shop Drawings: Not required.

4. Construction:

   A. Locate Sign Support a minimum of 5 feet from an open joint or transition (sign stationing may be adjusted to accommodate this requirement
   B. Base plate must be flush with top of Railing
   C. Anchors in Traffic Railings:
      a. Install Adhesive Anchors in accordance with Specification 416 except perform field test on one anchor per sign support location
      b. Use template and tie anchors as necessary to maintain correct placement of C-I-P Embedded Anchors
      c. Do not drill into existing reinforcing
   D. Temporary Signs on Permanent Traffic Railings, Same as Permanent except field testing of anchors is not required
   E. Temporary Signs on Temporary Railings/Barriers:
      a. Install Sign Supports at the midpoint along the length of a single segment
      b. Avoid drilling through existing reinforcement; use of metal detector not required.
      c. Field testing of anchors is not required

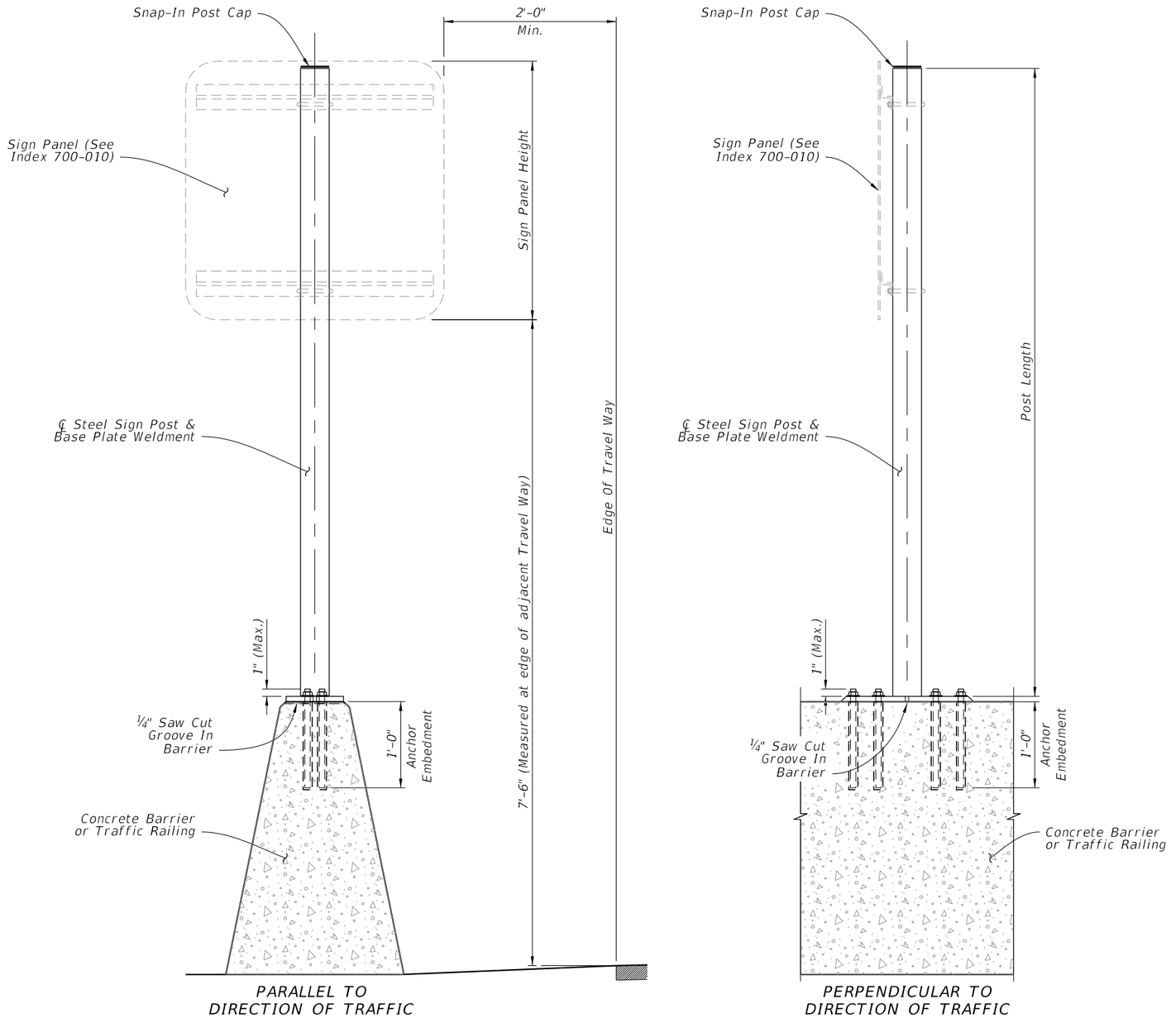
5. Removal of Temporary Signs on Permanent Traffic Railings:

   A. Cut anchor rods flush with the top of the railing
   B. Coat anchors with Type F-1 epoxy to prevent corrosion
      a. Extend coating 2 inches beyond edge of cut anchor rods
      b. Epoxy coating 1/16" thick minimum

6. Materials:

   A. Steel Plate: ASTM A36 or ASTM A709 Grade 36
   B. Steel Pipe (Support Post): ASTM A53 Grade B Schedule 40
   C. Galvanized U-Bolts, Nuts and Plate Washer
      a. U-Bolts: ASTM A449
      b. Hex Nuts: ASTM A 563 Lock Nuts
      c. Plate Washer: ASTM A 36 or ASTM A709 Grade 36 or 50
   D. Galvanized Anchor Bolts, Nuts and Washers:
      a. Anchor Rod: ASTM F1554 Grade 55 fully threaded (for Adhesive Anchors)
      b. Anchor Bolts: ASTM F1554 Grade 55 Grade A Hex
      c. Nuts: ASTM A563 Heavy Hex Locking
      d. Washers: ASTM F436

TABLE 1 - SIGN PANEL AND POST SIZING		
	Max. Sign Area (SF)	Post (NPS)
Temporary Signs	≤ 24	3.0
Permanent Signs	< 13.5	3.0
	13.5 < Sign < 20	3.5

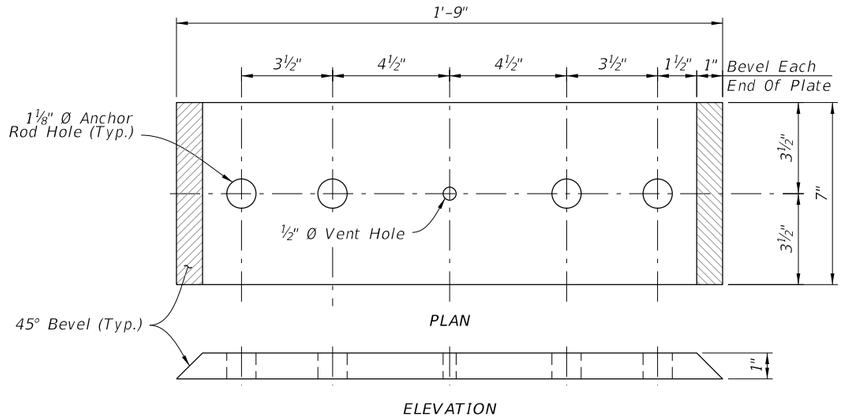


(Index 521-001 Median Barrier shown; others similar)

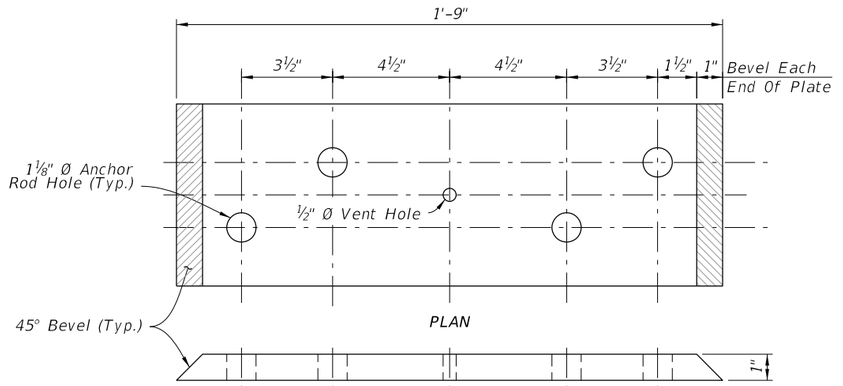
ELEVATION

5/13/2024 2:15:47 PM

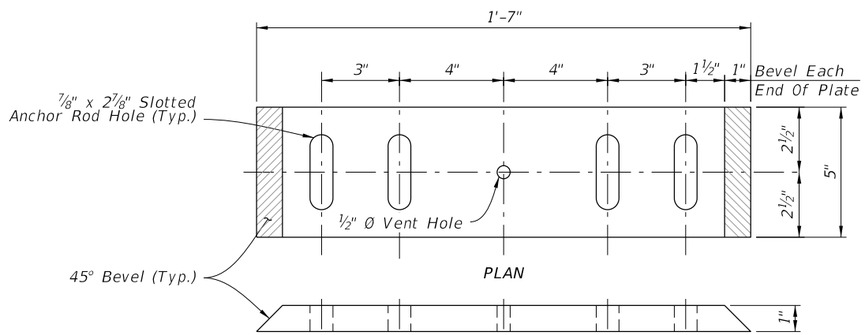
LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FDOT	FY 2023-24 STANDARD PLANS	SINGLE POST SIGN SUPPORT BARRIER TOP-MOUNTED	INDEX 700-013 / SHEET 1 of 2



BASE PLATE TYPE A
(Linear Anchor Rod Pattern)



BASE PLATE TYPE B
(Staggered Anchor Rod Pattern)



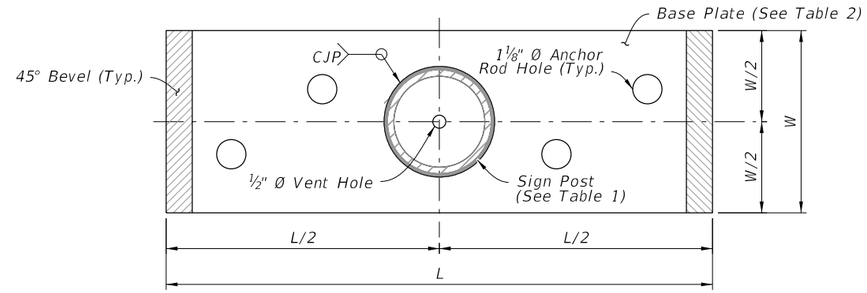
BASE PLATE TYPE C

NOTES:

1. Place anchor rods in a staggered or linear pattern as necessary to avoid reinforcing.
2. Use a staggered pattern for all temporary barriers.

TABLE 2 - BASE PLATE TYPE AND ANCHOR ROD SIZING

Index	Type/Application	Base Plate Type	Anchor Rod Ø
521-001	Full Wall	B	1"
521-001	Cantilever or L-Wall	A	
All listed above Plus 102-110 & 102-100	Temporary Signs	C	¾"



SIGN SUPPORT WELDMENT DETAIL
(Staggered Anchor Rod Pattern shown)

10/20/2022 8:56:41 AM

LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FY 2023-24 STANDARD PLANS	SINGLE POST SIGN SUPPORT BARRIER TOP-MOUNTED	INDEX 700-013	SHEET 2 of 2

GENERAL NOTES:

1. Meet the requirements of Specification 700.

2. Verify Column lengths in the field prior to fabrication.

3. Shop drawings:

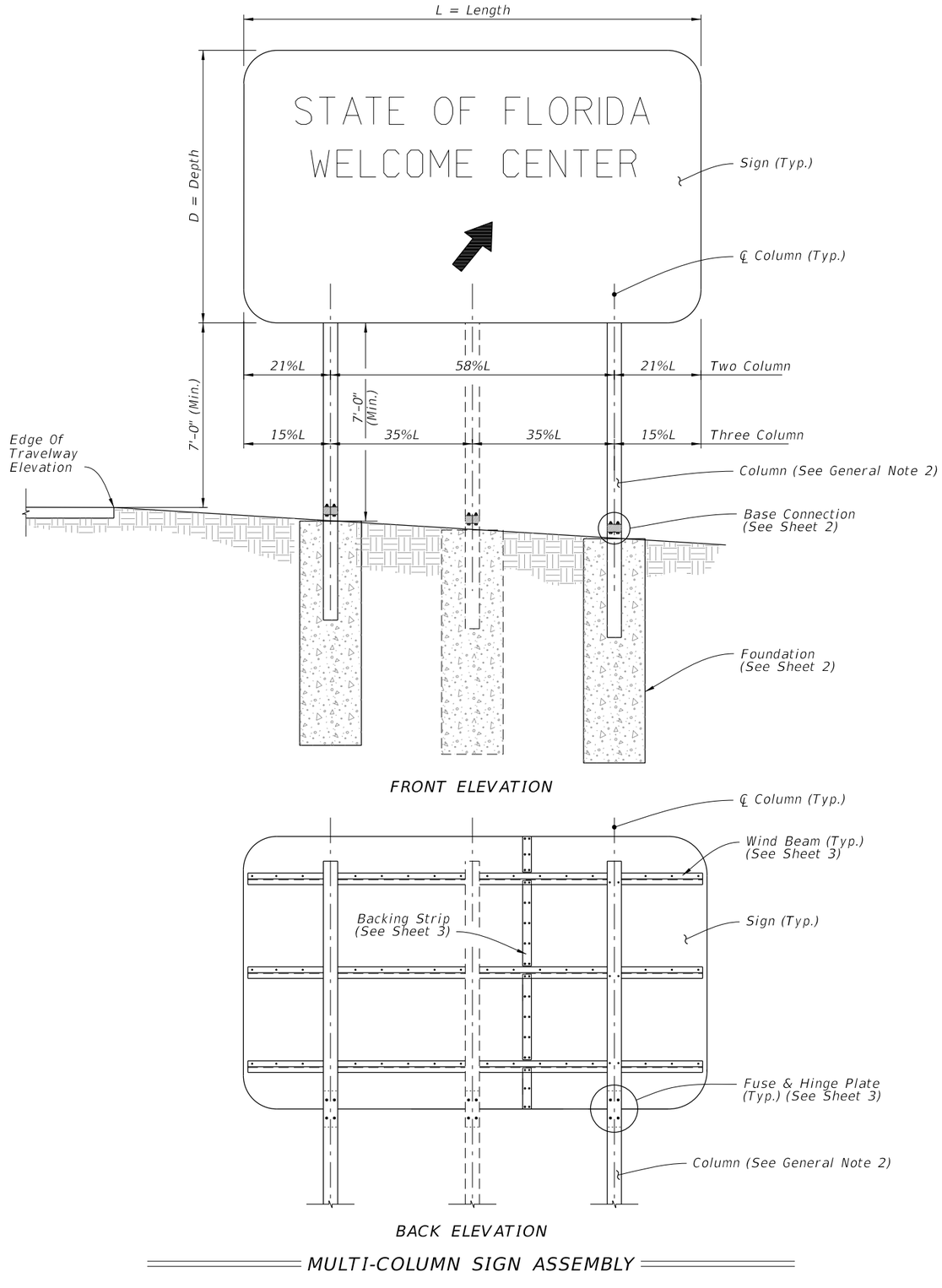
   A. Sign Support Shop drawings are not required when fabricated in accordance with this Index and support columns do not exceed the length shown in the plans by more than 2'-0".

   B. Sign Panels: Horizontal panel splices are allowed at interior wind beams for sign panels with a depth ("D") greater than 10 feet. Shop drawings required for horizontal panel splice details.

   C. When shop drawings are required, obtain approval prior to fabrication.

4. Materials:

   A. Sign Panel Mounting Materials:
      a. Aluminum Bars, and Extruded Shapes: ASTM B221, Alloy 6061-T6 or Alloy 6351-T5
      b. Aluminum Structural Shapes: ASTM B221, Alloy 6061-T6
   B. Sign Support Structure Materials:
      a. Steel Plates and Structural Shapes: ASTM A36 or ASTM A709, Grade 36
      b. Steel Weld Metal: E70XX
      c. Shims: Brass ASTM B36 or Galvanized Steel
   C. Aluminum Bolts, Nuts and Washers:
      a. Flat Head and Button Head Bolts: ASTM F 468, Alloy 2024-T4
      b. Hex Nuts: ASTM F467, 2024-T4
      c. Washers: ASTM B221, Alloy 2024-T4
   D. Stainless Steel Bolts, Nuts and Washers Alloy Group 2, Condition A, may be substituted for the Aluminum bolts as follows:
      a. Bolts: ASTM F593, CW1 or SH1
      b. Nuts: ASTM F594,
   E. High Strength (H.S.) Steel Bolts, Nuts and Washers:
      a. Galvanized Hex Head Bolts: ASTM F3125, Grade A325, Type 1
      b. Galvanized Nuts: ASTM A563 Hex, Grade DH
      c. Galvanized Washers: ASTM F436
   F. Concrete: Class II.



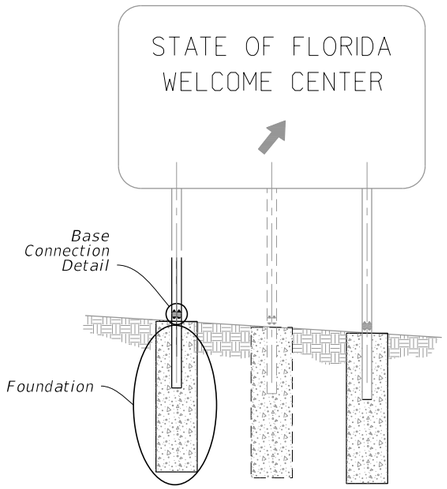
FRONT ELEVATION

BACK ELEVATION

MULTI-COLUMN SIGN ASSEMBLY

5/14/2024 1:46:39 PM

LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FDOT FY 2024-25 STANDARD PLANS	MULTI-COLUMN GROUND SIGN	INDEX 700-020	SHEET 1 of 3



MULTI-COLUMN SIGN ASSEMBLY

FOUNDATION NOTES:

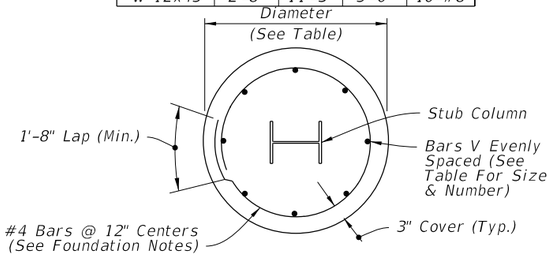
The Contractor may use Welded Wire Reinforcement (WWR) for foundation reinforcing.

At the Contractors option, the #4 tie bars at 12" o.c. may be replaced by D10 Spiral Wire @ 6" pitch, with three flat turns at the top and one flat turn at the bottom in accordance with Specification 415.

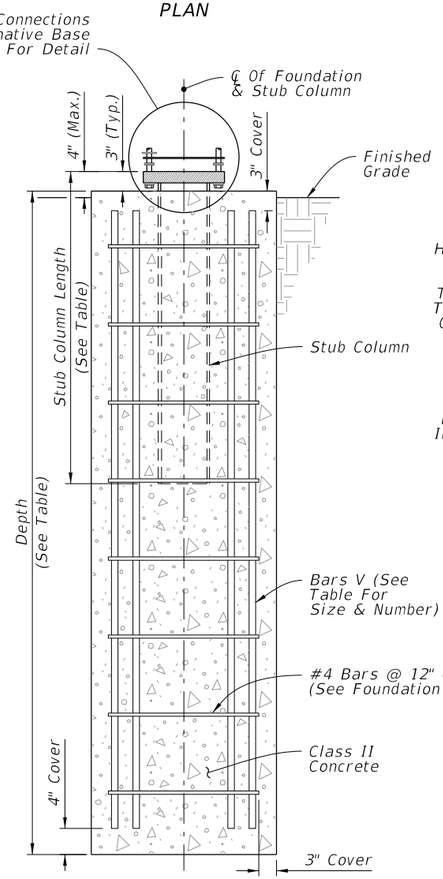
BASE CONNECTION NOTES:

1. Assembly of Base Instructions:
   - A. Place one washer on each Base Bolt between the Bottom Base Plate and the head of high strength Base Bolt; place the next washer between the Bottom Base Plate and the Bolt Keeper Plate; add the Top Base Plate section and place the third washer between the Top Base Plate and the Nut.
   - B. Shim as required to plumb column. Provide 2-0.0149" thick (28 gauge) and 2-0.0329" thick (21 gauge) shims per column.
2. H.S. Base Bolt L Tightening Instructions:
   - A. Tighten Base Bolts to the maximum possible with a 12" to 15" wrench (this will bed the washers and shims and clear the bolt threads).
   - B. Loosen each Base Bolt one turn.
   - C. Under the supervision of the Engineer, use a calibrated wrench to tighten bolts to the torque prescribed in the Table. Over tightened Base Bolts will not be permitted.
   - D. Burr threads at junction with nut to prevent nut loosening. Treat damaged galvanizing.
3. Assemble Post to Stub with Base Bolts and three flat washers per bolt (See Base Connection Details). Tighten Base Bolts in accordance with Instructions with Note 2.
4. Weld Base Plate to Post & Stub or if using the Alternate Connection Detail weld Base Plate and Stiffeners to Post and Stub.
5. Orient Stub Post according to direction of traffic.

FOUNDATION DATA				
Steel Post & Stub Section*	Dia.	Depth	Stub Column Length	Reinf. Bars V
S 3x5.7	2'-0"	4'-0"	3'-0"	10-#6
W 6x12	2'-0"	6'-0"	3'-0"	10-#6
W 8x18	2'-4"	7'-6"	4'-0"	8-#8
W 8x24	2'-4"	8'-6"	4'-0"	8-#8
W 10x33	2'-4"	10'-3"	4'-0"	8-#8
W 12x45	2'-8"	11'-3"	5'-0"	10-#8

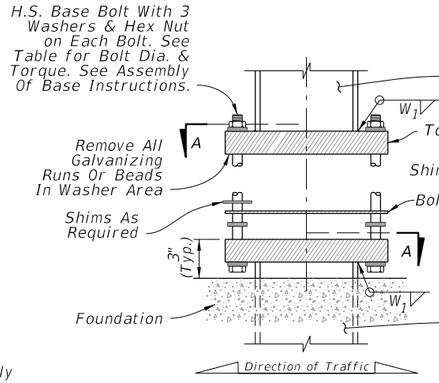


PLAN

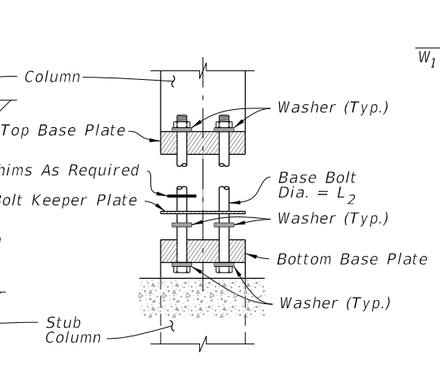


ELEVATION

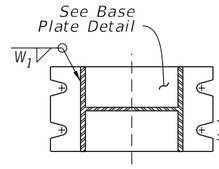
FOUNDATION



SIDE ELEVATION



FRONT ELEVATION



SECTION A-A

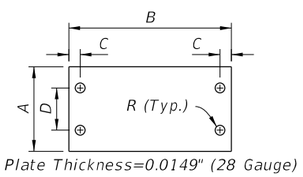
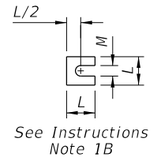
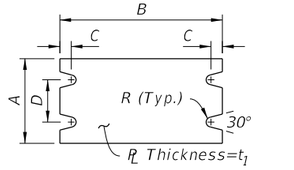


Plate Thickness=0.0149" (28 Gauge)

BOLT KEEPER PLATE DETAIL



SHIM DETAIL

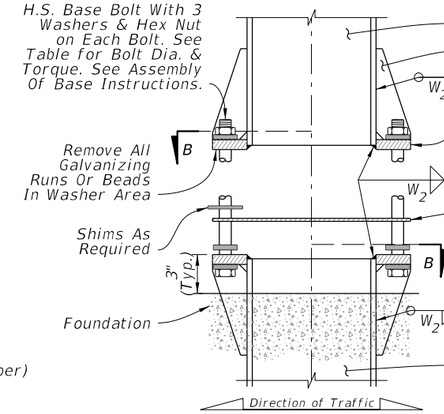


BASE PLATE DETAIL

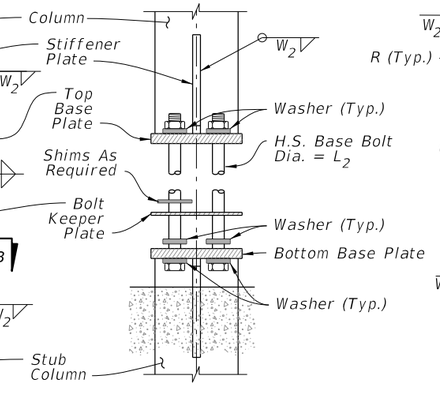
BASE CONNECTION DATA										SHIM	
Steel Post & Stub Section*	A	B	C	D	R	t_1	L_2	W_1	Torque (lbf*in)	L	M
S 3x5.7	4"	7"	3/4"	2"	5/16"	1"	1/2"	1/4"	90 ± 20	1-1/4"	9/16"
W 6x12	4"	10"	3/4"	2"	3/8"	1-5/8"	5/8"	1/4"	270 ± 45	1-3/8"	11/16"
W 8x18	5-1/4"	12-1/2"	7/8"	2-3/4"	7/16"	1-3/4"	3/4"	3/8"	445 ± 75	1-3/4"	13/16"
W 8x24	6-1/2"	12-1/2"	7/8"	3-1/4"	7/16"	1-3/4"	3/4"	3/8"	445 ± 75	2-1/8"	13/16"
W 10x33	8"	16"	1-1/4"	4-3/4"	9/16"	2"	1"	1/2"	580 ± 90	2-3/8"	1-1/16"
W 12x45	10"	18"	1-1/4"	6"	9/16"	2"	1"	1/2"	580 ± 90	2-3/4"	1-1/16"

* Designations: (Nominal Depth in inches) x (weight in pounds per linear foot).

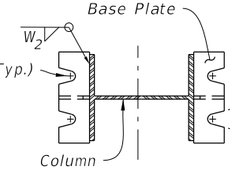
BASE CONNECTION



SIDE ELEVATION



FRONT ELEVATION



SECTION B-B

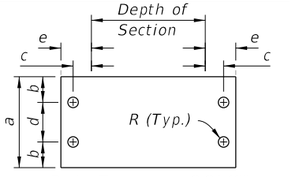
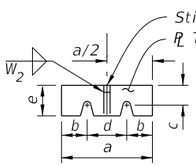
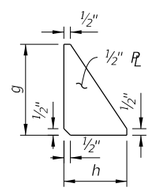


Plate Thickness=0.0149" (28 Gauge)

BOLT KEEPER PLATE DETAIL



BASE PLATE DETAIL



STIFFENER PLATE DETAIL

ALTERNATIVE BASE CONNECTION DATA												
Steel Section*	a	b	c	d	e	t_2	L_2	R	Torque (lbf*in)	g	h	W_2
W 6x12	4-3/4"	1-1/8"	1-3/16"	2-1/2"	2"	1/2"	5/8"	3/8"	270±45	5-1/8"	2"	1/4"
W 8x18	5-3/4"	1-1/2"	1-3/8"	2-3/4"	2-3/16"	5/8"	3/4"	7/16"	445±75	6-1/4"	2-3/16"	1/4"
W 8x24	7"	1-3/4"	1-3/8"	3-1/2"	2-3/8"	3/4"	3/4"	7/16"	445±75	8"	2-3/8"	5/16"
W 10x33	8"	2"	1-9/16"	4"	2-3/4"	3/4"	1"	9/16"	580±90	8"	2-3/4"	5/16"
W 12x45	8"	2"	1-9/16"	4"	3"	3/4"	1"	9/16"	580±90	8"	3"	5/16"

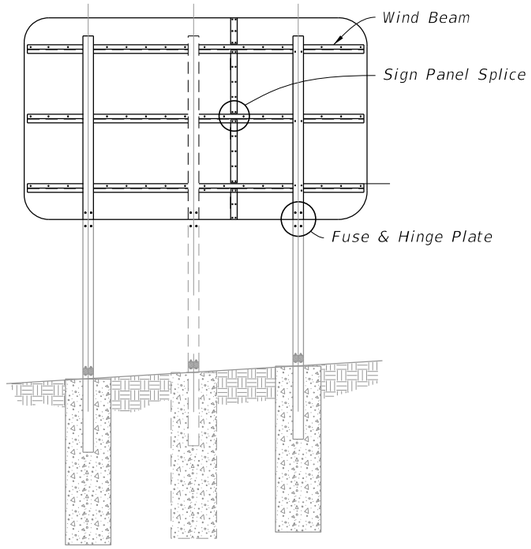
* Designations: (Nominal Depth in inches) x (weight in pounds per linear foot).

ALTERNATIVE BASE CONNECTION

FOUNDATION AND BASE CONNECTION DETAILS

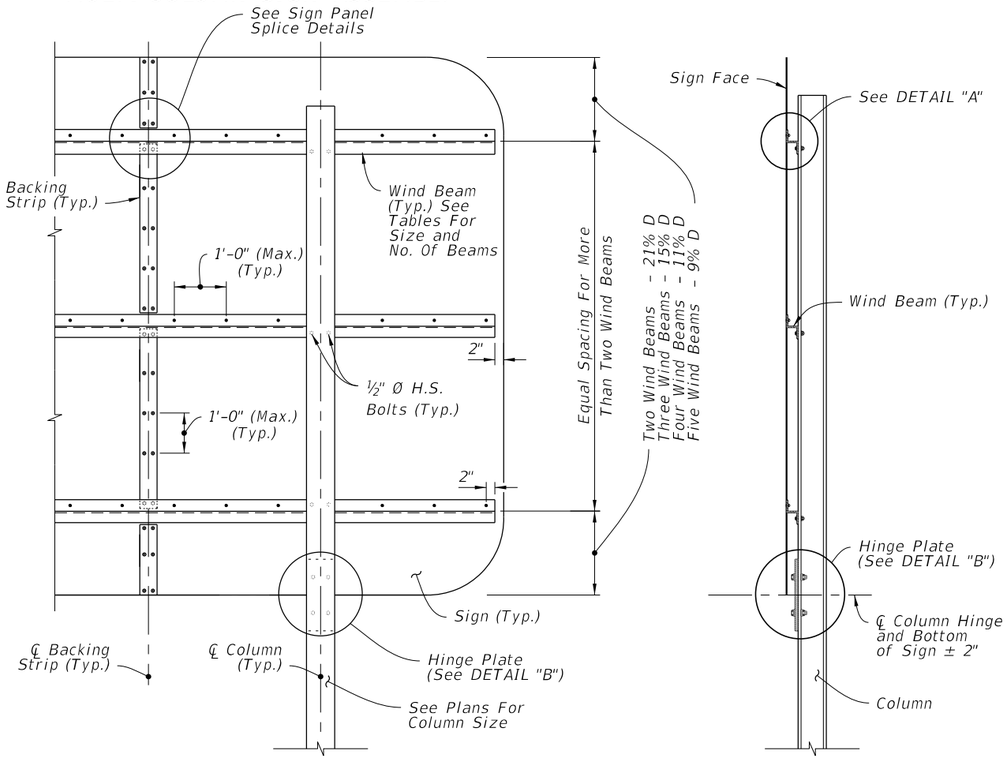
10/20/2022 8:56:42 AM

LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FY 2023-24 STANDARD PLANS	MULTI-COLUMN GROUND SIGN	INDEX 700-020	SHEET 2 of 3



BACK ELEVATION

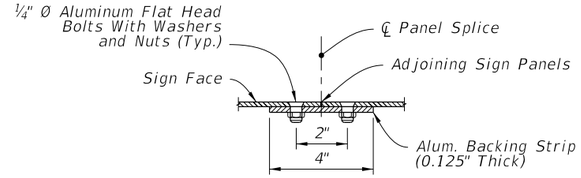
MULTI-COLUMN SIGN ASSEMBLY



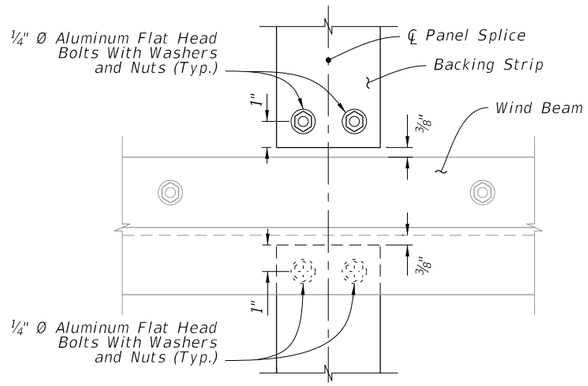
BACK ELEVATION

SIDE ELEVATION

MULTI-COLUMN SIGN BACK PANEL



PLAN VIEW



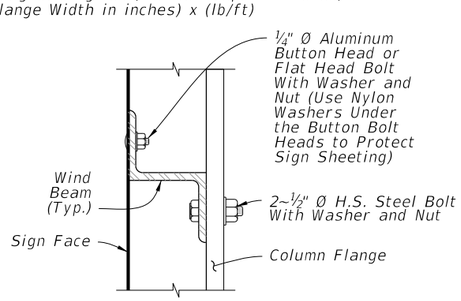
ELEVATION

SIGN PANEL SPLICE

NUMBER OF WIND BEAMS BASED ON SIGN DEPTH (D)			
2 Beams	3 Beams	4 Beams	5 Beams
D ≤ 8'	8' < D ≤ 12'	12' < D ≤ 16'	16' < D ≤ 20'

WIND BEAM SIZE BASED ON SIGN LENGTH (L)		
2 Columns	3 Columns	Aluminum Beam Size **
L ≤ 12'	L ≤ 18'	Z 1-¾ x 1-¾ x 1.09
12' < L ≤ 20'	18' < L ≤ 30'	Z 3 x 2-$^{11}/_{16}$ x 2.33
20' < L ≤ 25'	30' < L ≤ 39'	Z 4-$^{1}/_{16}$ x 3-⅛ x 3.57

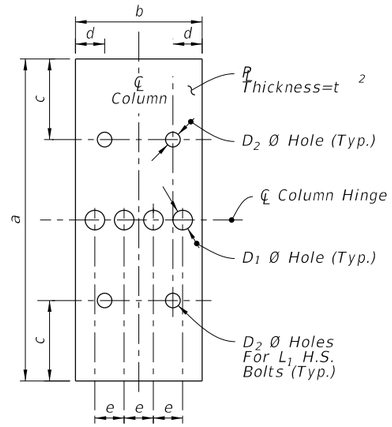
**Designation gives (Member Depth in inches) x (Flange Width in inches) x (lb/ft)



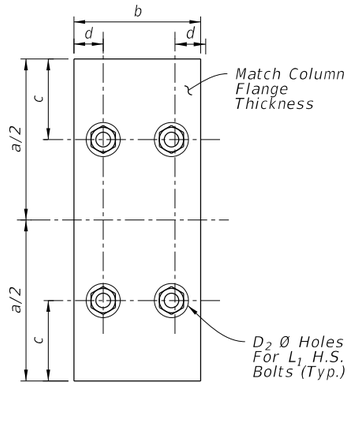
DETAIL "A"

FUSE (HINGE) PLATE DATA									
Steel Section*	a	b	c	d	e	t_2	D_1	D_2	L_1
S 3x5.7	7-1/4"	2-3/8"	1-1/4"	1/2"	9/16"	3/8"	7/16"	9/16"	1/2"
W 6x12	7-1/4"	4"	1-1/4"	7/8"	15/16"	3/8"	13/16"	11/16"	5/8"
W 8x18	8-1/4"	5-1/4"	1-3/8"	1-1/8"	1-1/4"	3/8"	1"	13/16"	3/4"
W 8x24	8-1/4"	6-1/2"	1-3/8"	1-1/2"	1-1/2"	1/2"	1"	13/16"	3/4"
W 10x33	9-1/4"	8"	2"	1-3/4"	1-3/4"	5/8"	1-1/8"	1-1/16"	1"
W 12x45	11"	8"	2"	1-3/4"	1-3/4"	3/4"	1-5/16"	1-1/16"	1"

* Designations: (Nominal Depth in inches) x (Weight in Pounds Per Linear Foot)

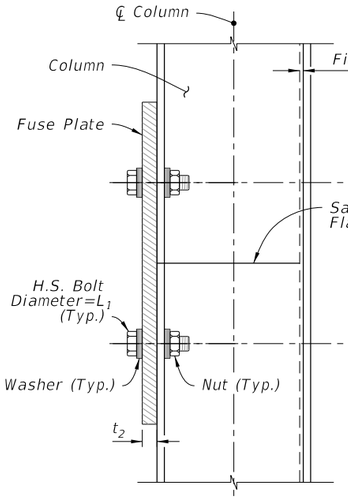


FUSE PLATE



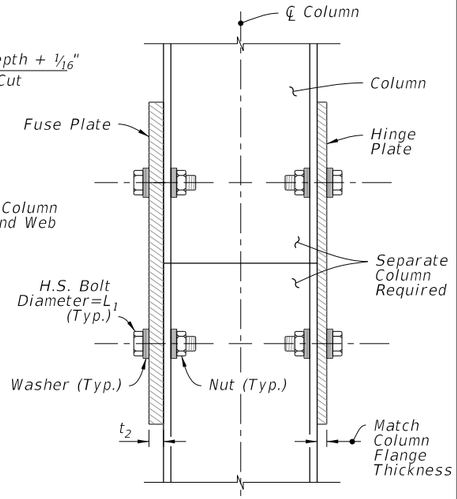
HINGE PLATE

FUSE & HINGE PLATE



Side Elevation

TYPICAL HINGE



Side Elevation

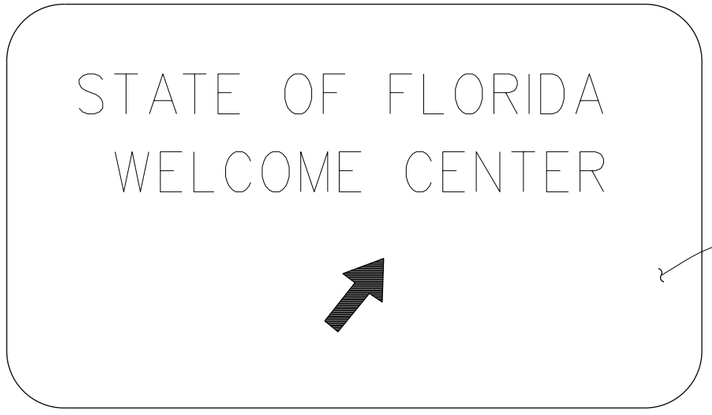
OPTIONAL HINGE

DETAIL "B"

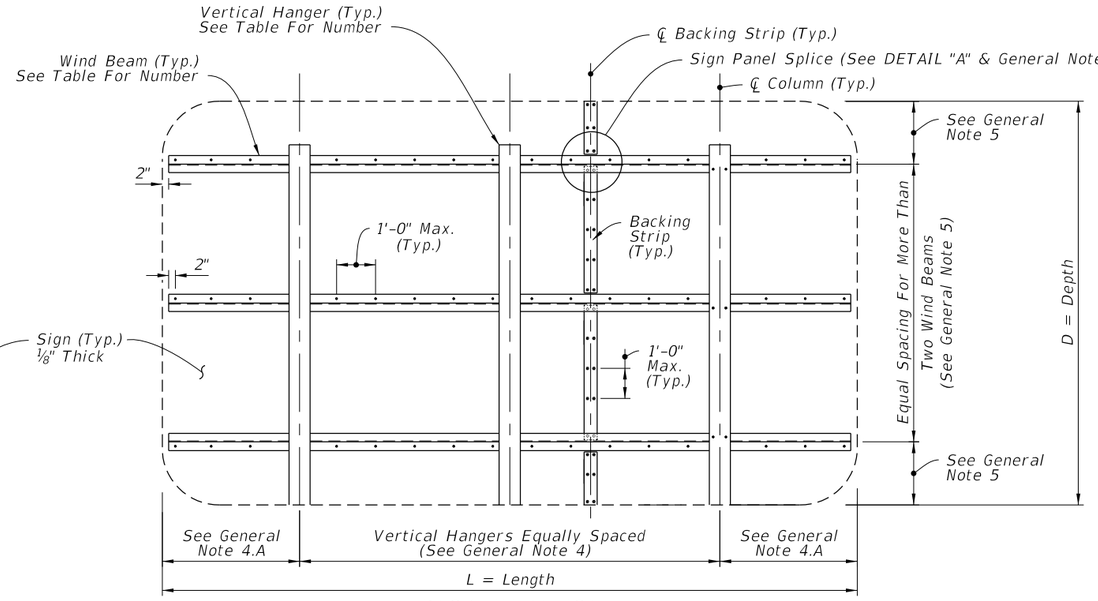
WIND BEAM, BACKING STRIP & FUSE/HINGE PLATE DETAILS

LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	MULTI-COLUMN GROUND SIGN	INDEX	SHEET
11/01/22					700-020	3 of 3

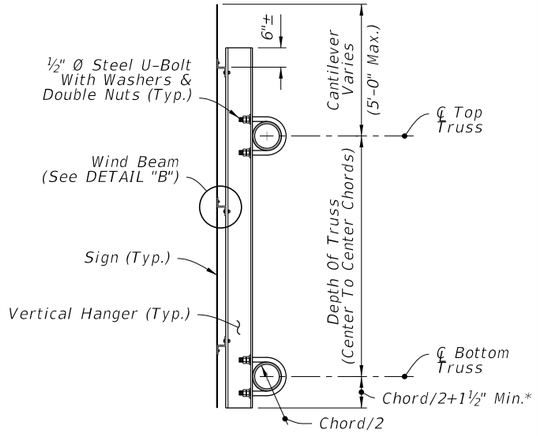
5/13/2024 11:11:26 AM



FRONT ELEVATION



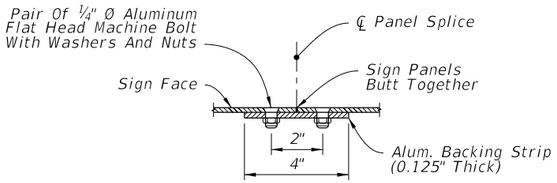
BACK ELEVATION



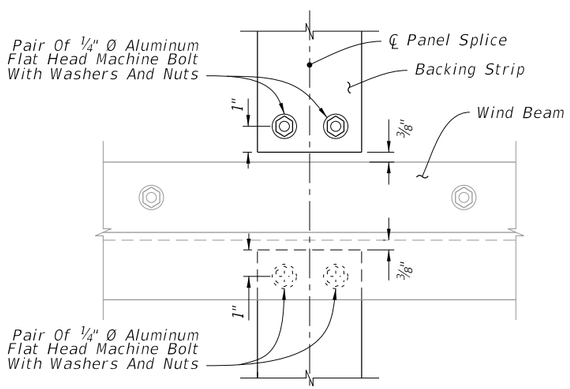
*Bottom Justified Shown, Center Justified Similar.

SIDE ELEVATION

TYPICAL SIGN FOR OVERHEAD TRUSS



PLAN VIEW



ELEVATION

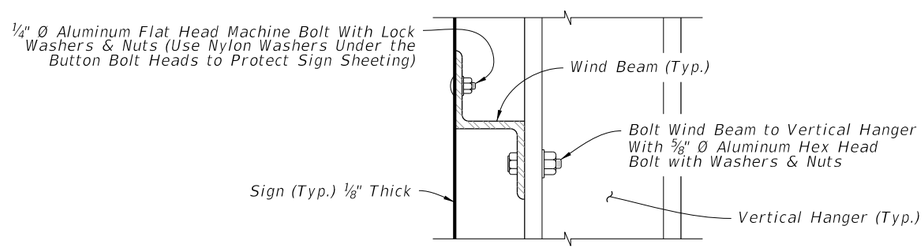
SIGN PANEL SPLICE

DETAIL "A"

WIND BEAM TABLE (Z 3 x 2 11/16 x 2.33)				
Number of Horizontal Wind Beams Based on Sign Depth (D)				
2 Beams	3 Beams	4 Beams	5 Beams	6 Beams
D ≤ 5'	5' < D ≤ 9'	9' < D ≤ 12'	12' < D ≤ 15'	15' < D ≤ 18'

HANGER TABLE (I 6 X 4 x 4.69 or Z 5 x 3¼ x 4.01)					
Number of Vertical Hanger Beams Based on Wind Speed and Sign Length (L)					
	2 Hangers	3 Hangers	4 Hangers	5 Hangers	6 Hangers
130 mph	L ≤ 20'	20' < L ≤ 30'	30' < L ≤ 40'	40' < L ≤ 50'	--
150 mph	L ≤ 18'	18' < L ≤ 27'	27' < L ≤ 35'	35' < L ≤ 45'	45' < L ≤ 50'
170 mph	L ≤ 15'	15' < L ≤ 20'	20' < L ≤ 28'	28' < L ≤ 35'	35' < L ≤ 43'

NOTE: For Monroe County designs, use 170 mph values but with Z 5 x 3-¼ x 6.19 vertical hanger beams only.



DETAIL "B"

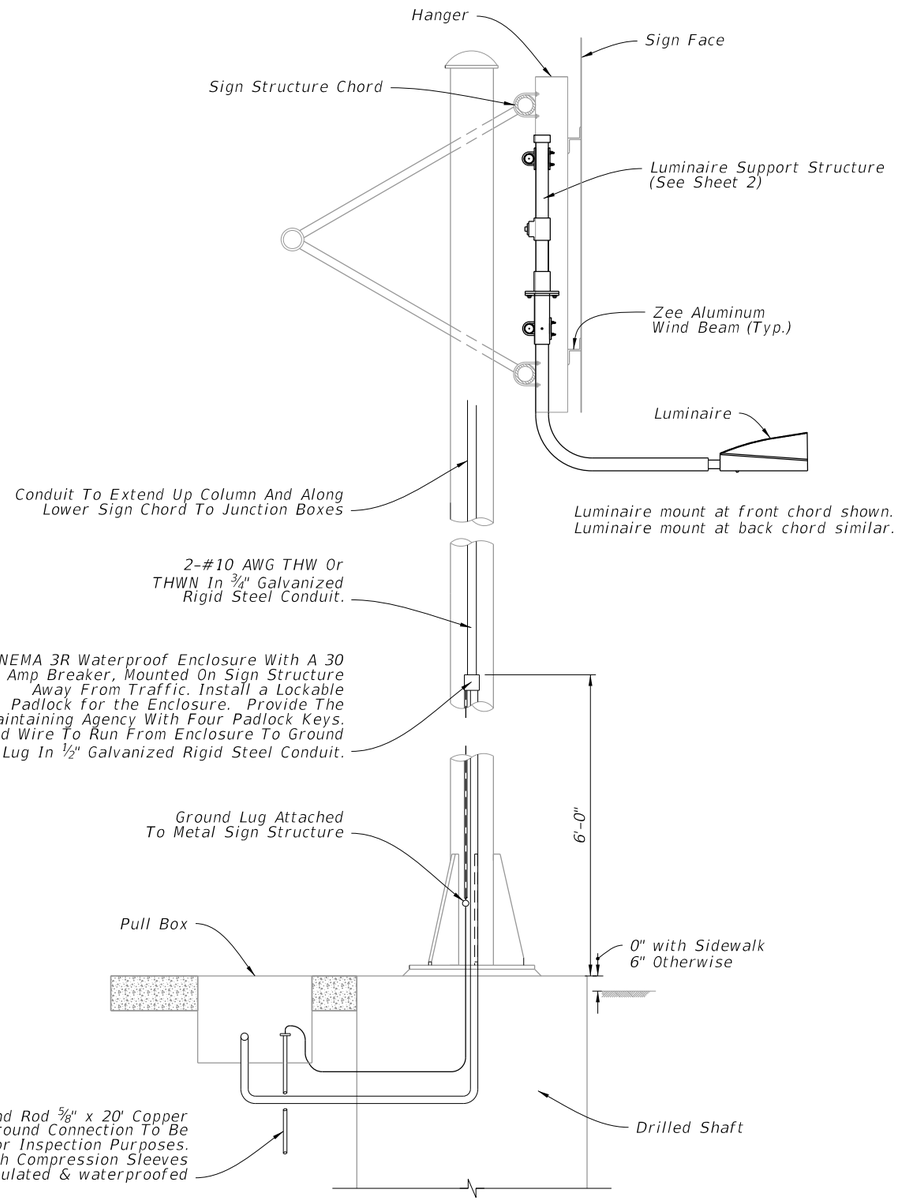
GENERAL NOTES

1. Meet the requirements of Specification 700.
2. Work this Index with Index 700-040 and 700-041.
3. The number and location of the Panel Splices are determined by the Sign Face supplier.
4. Spacing of Vertical Hangers:
   - A. Two Vertical Hanger = 21.0% L
     Three Vertical Hanger = 15.0% L
     Four Vertical Hanger = 11.0% L
     Five Vertical Hanger = 9.0% L
     Six Vertical Hanger = 7.0% L
   - B. Spacing of vertical hangers may be varied slightly as necessary to clear the truss struts and diagonals at panel points
5. Spacing of Wind Beams:

   Two Wind Beams = 21.0% D
   Three Wind Beams = 15.0% D
   Four Wind Beams = 11.0% D
   Five Wind Beams = 9.0% D
   Six Wind Beams = 7.0% D
6. Shop Drawings:
   - A. Required for Sign Panels deeper than 10'-0" with a horizontal panel splice.
   - B. Splice must be located in between interior Zee Supports and only allowed on signs greater than 10'-0".
7. Wind Speed by county: see Index 715-010.
8. Materials:
   - A. Aluminum:
     a. Bars, and Extruded Shapes: ASTM B221, Alloy 6061-T6 or Alloy 6351-T5
     b. Structural Shapes: ASTM B221, Alloy 6061-T6
     c. Flat Head and Hex Head Machine Bolts: ASTM F468, Alloy 2024-T4
     d. Hex Nuts: ASTM F467, Alloy 6061-T6 or Alloy 6262-T9
     e. Washers: ASTM B221, Alclad 2024-T4
   - B. Steel:
     a. U-Bolts: ASTM A449 or ASTM A193 B7
     b. Nuts: ASTM A563, 2 per leg
     c. Washers: ASTM F436, (Flat Washers)

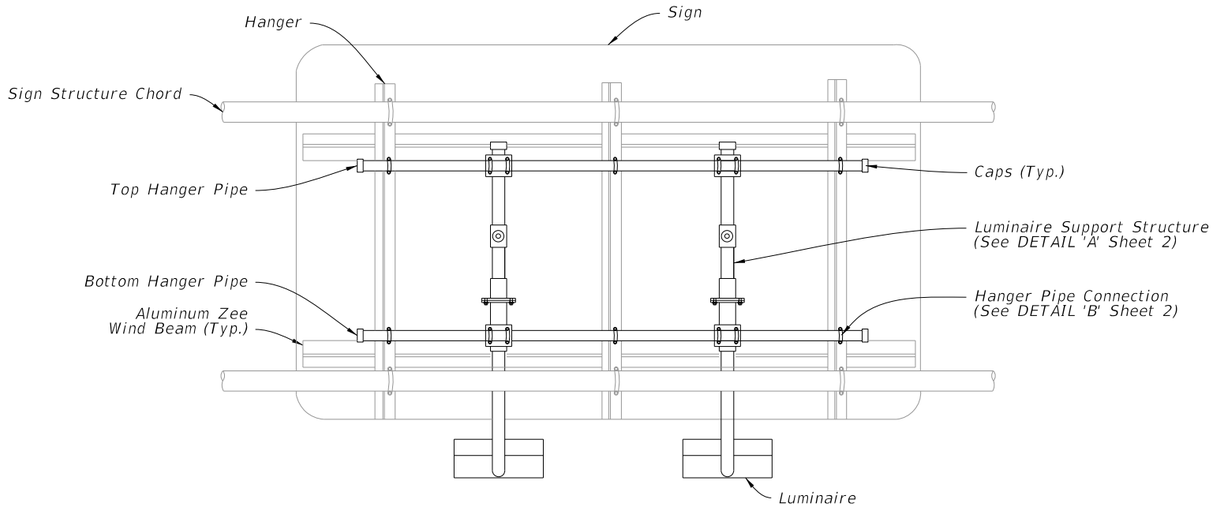
5/13/2024 11:18:49 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/22			FY 2023-24 STANDARD PLANS	WIND AND HANGER BEAMS FOR OVERHEAD SIGNS	700-030	1 of 1



Luminaire mount at front chord shown.
Luminaire mount at back chord similar.

SIDE VIEW



BACK VIEW

PLACEMENT OF SIGN LIGHTS

1. This Index details a bottom luminaire support structure. For signs requiring top luminaire support structures, the detail can be reversed.
2. Luminaire spacing and arm length is shown on Guide Sign Worksheet.
3. The Guide Sign Worksheet indicates the sign luminaire used for basis of design. The contractor may propose a different luminaire by submitting photometric calculations for each lighted sign for review by the Engineer.

SIGN LIGHTING INSTALLATION

Roadway Lighting included in contract:

1. Power for the sign lighting provided from the roadway lighting circuit.
2. Indicate sign location and a pull box location for connection to the sign lights in the lighting plans.
3. Lighting contractor installs pull box and loop 2' of lighting circuit conductors in the pull box for connection by the signing contractor.
4. Signing contractor furnishes and installs the Luminaires, NEMA 3R enclosure, 30 amp breaker, conduit, conductors and all other electrical equipment necessary for connection to the lighting circuit.

Roadway Lighting not included in contract:

1. Signing plans include the pay item numbers to furnish and install conduit, conductors, ground rods, pull boxes and service point equipment.
2. Signing plans indicate the location of the service point equipment and circuit runs.
3. Signing contractor provides all electrical equipment necessary for connection of the sign lights.

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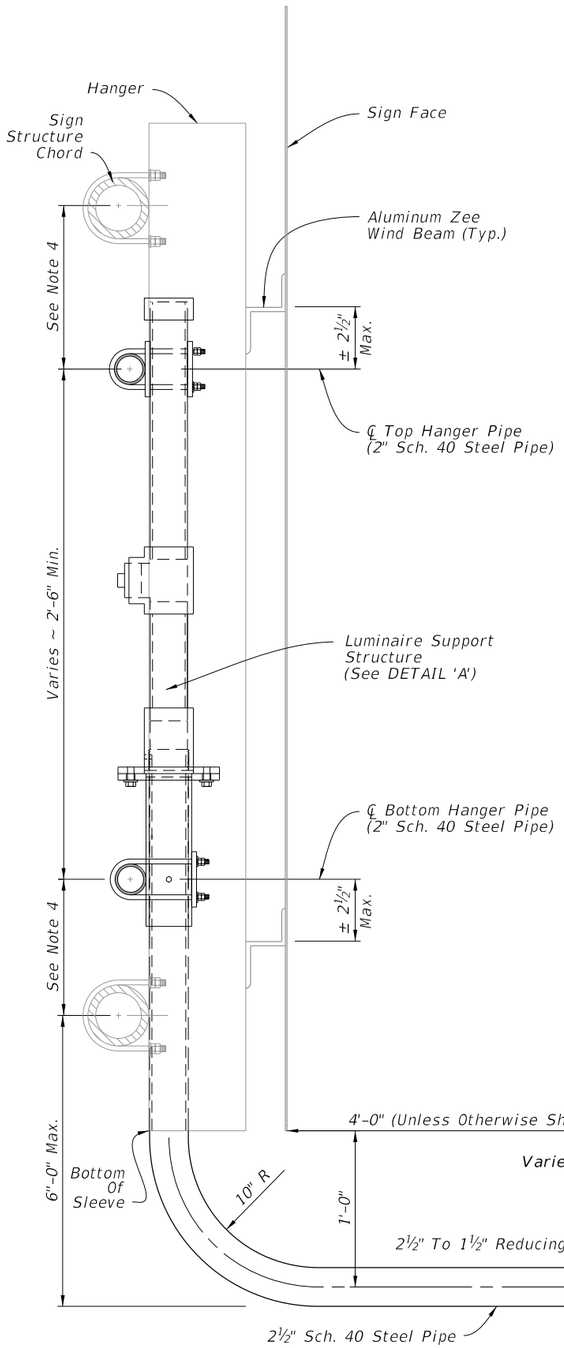


LUMINAIRE SUPPORT STRUCTURE

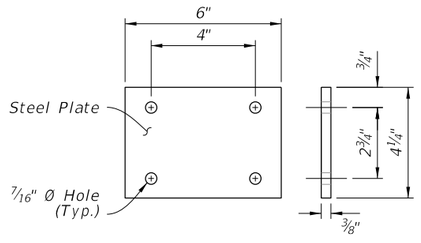
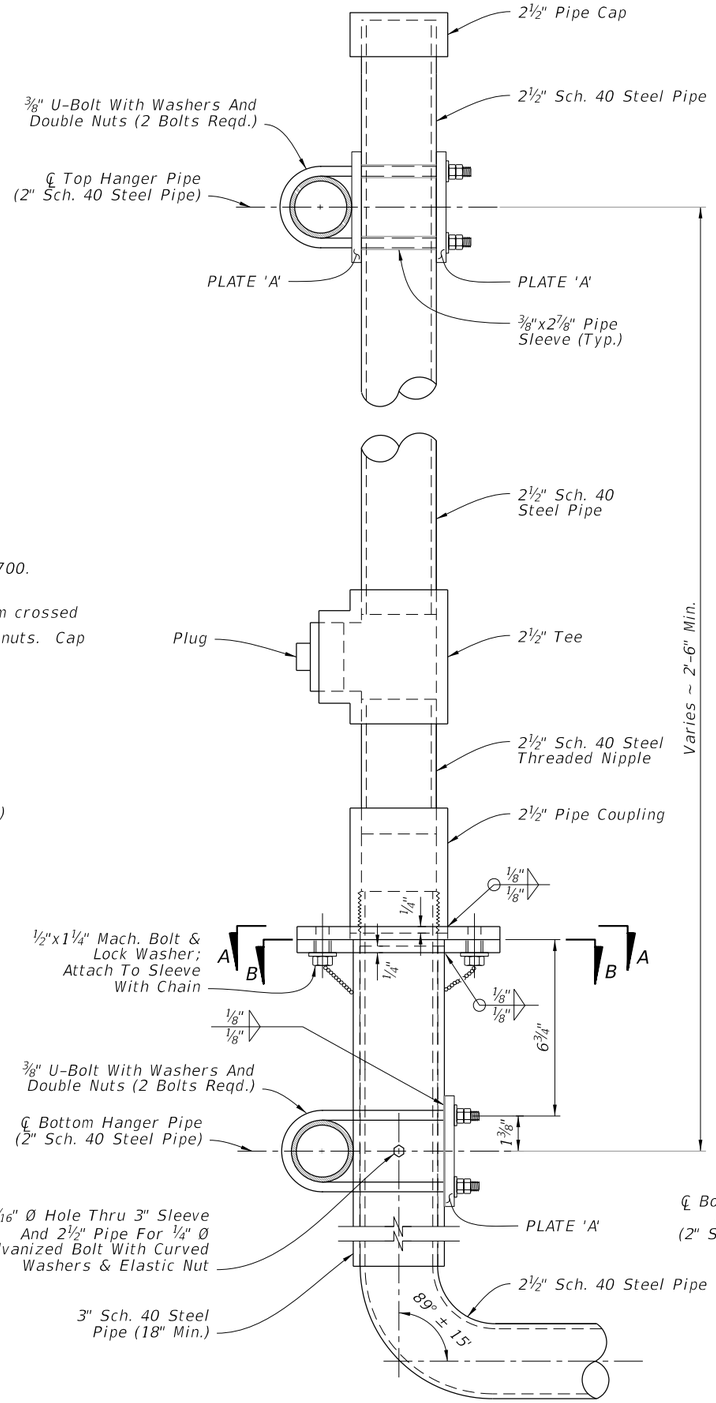


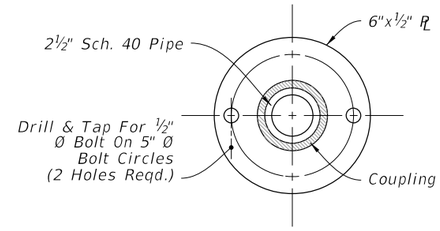
PLATE 'A'

NOTES:

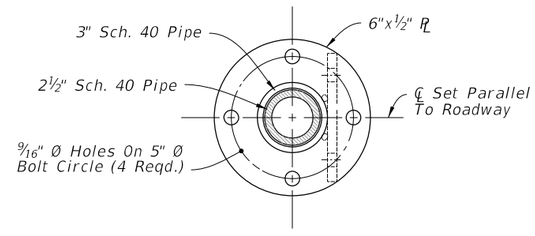
1. Meet the requirements of Specification 700.
2. Install hanger pipe to each vertical beam crossed with a ⅜" U-Bolt, lock washers and hex nuts. Cap both ends of the horizontal pipe.
3. All pipe dimensions are NPS.
4. $\frac{\text{Chord O.D.}}{2}$ + 5" (Min.)
5. Materials;
   - A. Steel Pipe: ASTM A53 (Grade A or B)
   - B. Steel Plate: ASTM A36
   - C. Bolts: ASTM A307
   - D. Hex Nuts: ASTM A563
   - E. Washers: ASTM F436



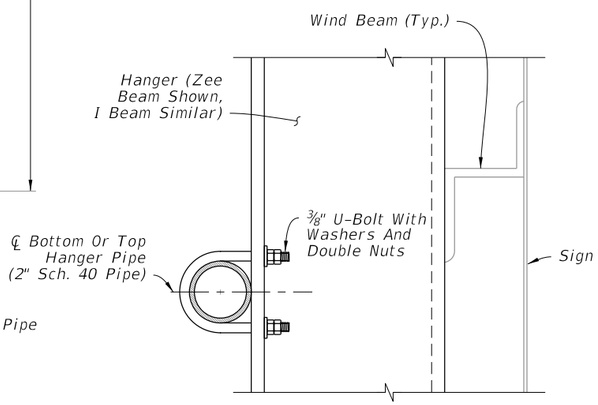
DETAIL 'A'
(Luminaire Support Structure)



SECTION A-A



SECTION B-B



DETAIL 'B'
(Hanger Pipe Connection)

5/13/2024 11:25:09 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/22			FY 2023-24 STANDARD PLANS	EXTERNAL LIGHTING FOR SIGNS	700-031	2 of 2

GENERAL NOTES:

1. Meet the requirements of Specification 700.

2. Work this Index in conjunction with CANTILEVER SIGN STRUCTURE DATA TABLES in the Plans and Index 700-030.

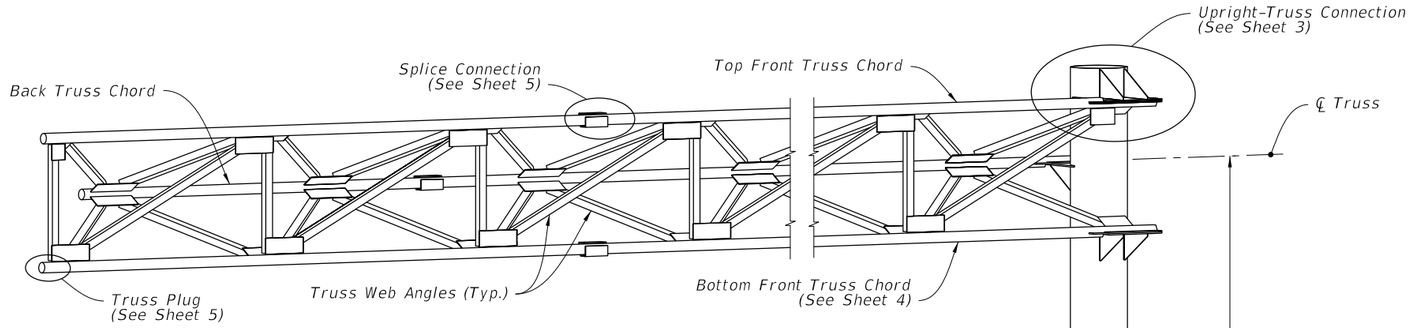
3. Handholes are required at pole base for DMS Structures. Refer to Index 700-090 for Handhole Details.

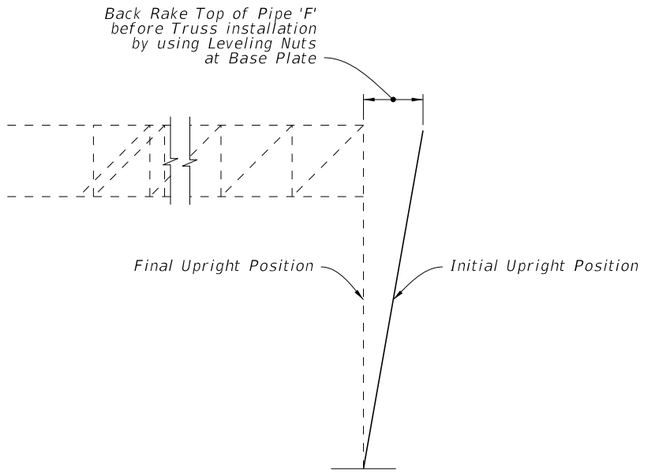
4. Shop Drawings are required.

   Obtain Shop Drawing approval prior to fabrication. Include the following:
   A. Upright Pipe height ('A') and Foundation elevations: Verify dimension in the field prior to submittal to ensure minimum vertical clearances of the sign panel over the roadway.
   B. Height of the foundation above adjacent ground.
   C. Anchor bolt orientation with respect to centerline of truss and the direction of traffic.
   D. Chord Splices
   E. Handholes at pole base (when required).

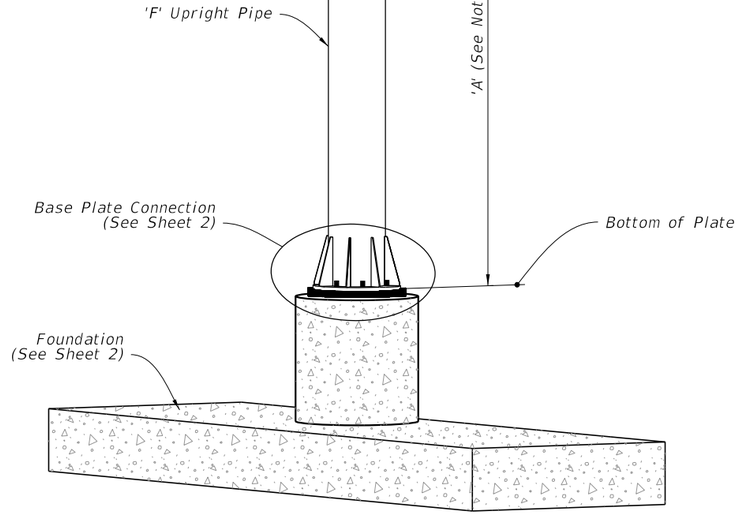
5. Materials:

   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 Structural Plates and Bars: ASTM A709 Grade 36
   B. Bolts, Nuts and Washers:
      a. High Strength Bolts: ASTM F3125, Grade A325 Type 1
      b. Nuts: ASTM A563 Grade DH Heavy-Hex
      c. Washers: ASTM F436 Type 1, one under turned element
   C. Anchor Bolts, Nuts and Washers
      a. Anchor Bolts: ASTM F1554 Grade 55
      b. Nuts: ASTM A563 Grade A Heavy-Hex (5 per bolt)
      c. Plate Washers: ASTM A36 (2 per bolt)





CAMBER DIAGRAM

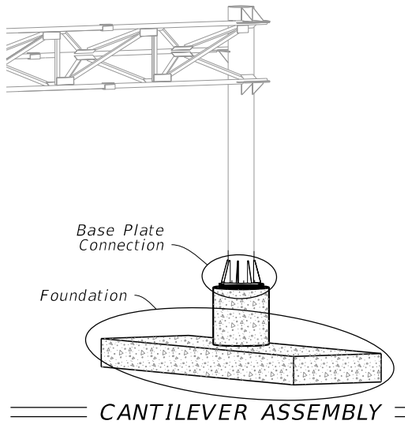


ISOMETRIC VIEW

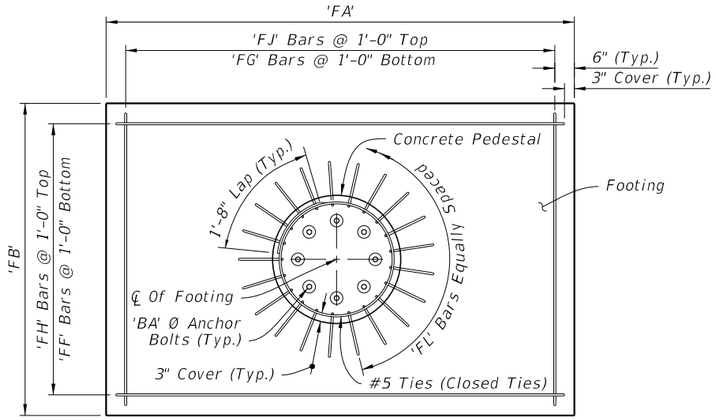
CANTILEVER SIGN ASSEMBLY

5/13/2024 11:29:58 AM

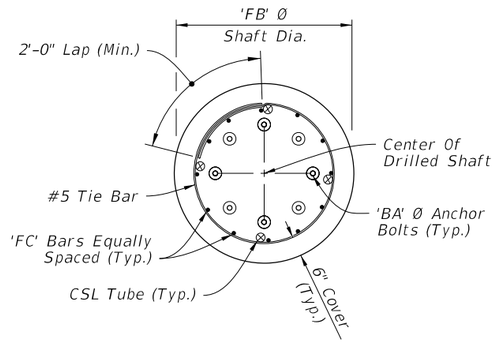
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/22			FY 2023-24 STANDARD PLANS	CANTILEVER SIGN STRUCTURE	700-040	1 of 5



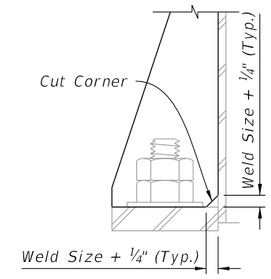
CANTILEVER ASSEMBLY



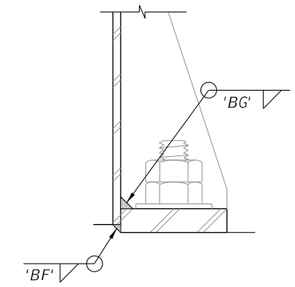
PLAN



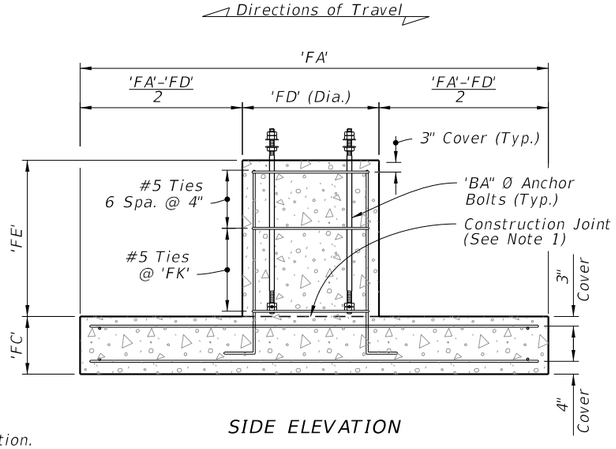
PLAN



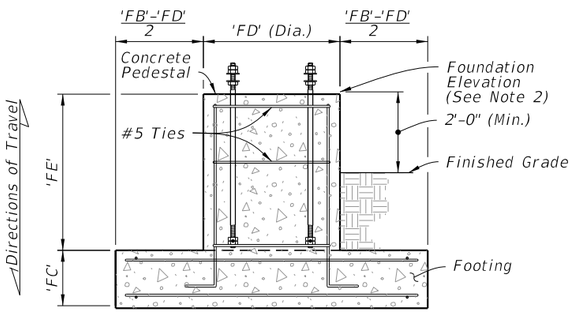
DETAIL 'A'



DETAIL 'B'

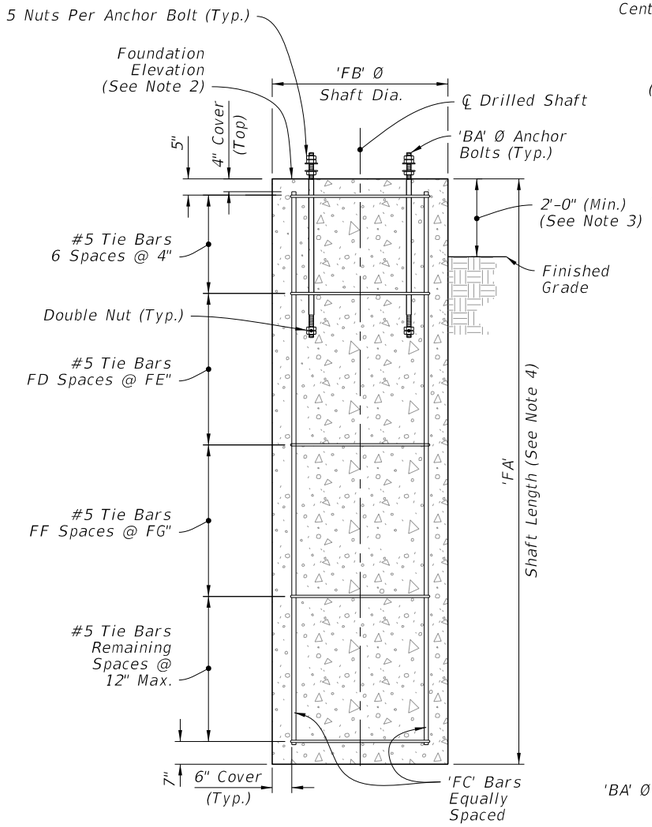


SIDE ELEVATION



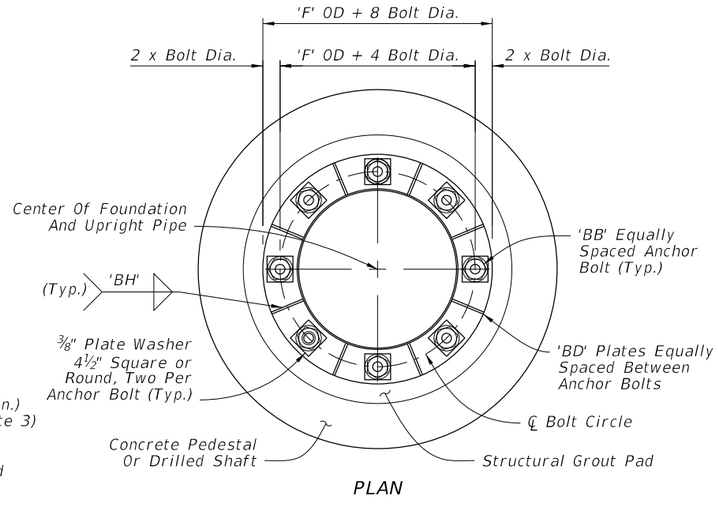
FRONT ELEVATION

FOOTING AND PEDESTAL

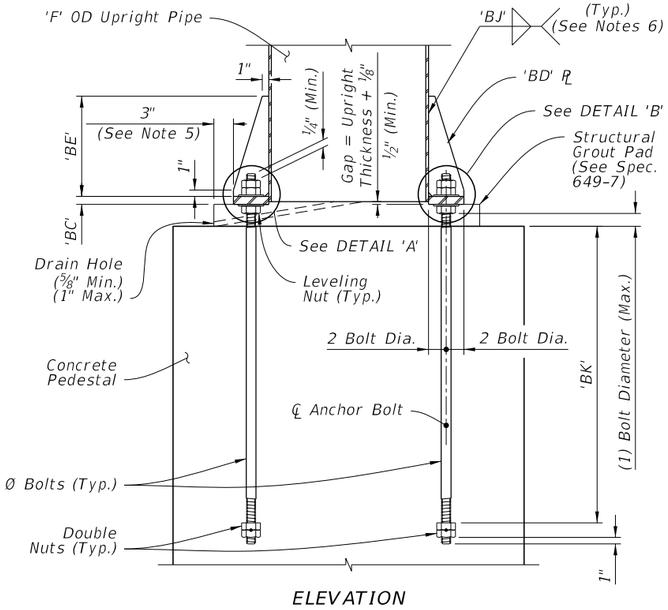


ELEVATION

DRILLED SHAFT
(Alternate Foundation)



PLAN



ELEVATION

BASE PLATE CONNECTION

NOTES:

1. Construction joint allowed, roughen surface to ¼" minimum amplitude prior to pour.
2. See Traffic Plans for elevation at top of Foundation.
3. Install Drilled Shaft with a 2'-0" minimum from top elevation of the drilled shaft to the finished grade, unless specified otherwise in the plans.
4. The shaft length is based on 2'-0" height above finished grade.
5. Structural Grout Pad dimension may be modified to be less than 3" where the footprint of the Structural Grout Pad does not provide adequate clearance for accessibility considerations.
6. Wrap fillet weld around the stiffener termination on the tube wall.
7. Weld plates 'BD' in a star pattern. A star pattern is one in which the plates on opposite and near opposite sides of the pole circle are successively welded in a pattern resembling a star. For an 8 plate circle with plates sequentially numbered 1 to 8, weld the plates in the following order: (1, 5, 7, 3, 8, 4, 6, 2).

FOUNDATION

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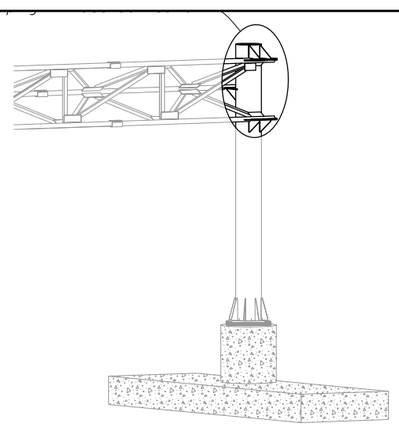
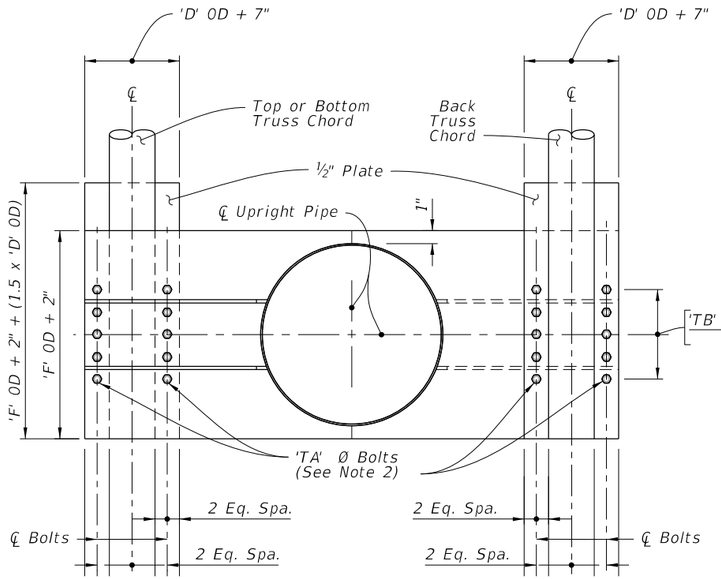
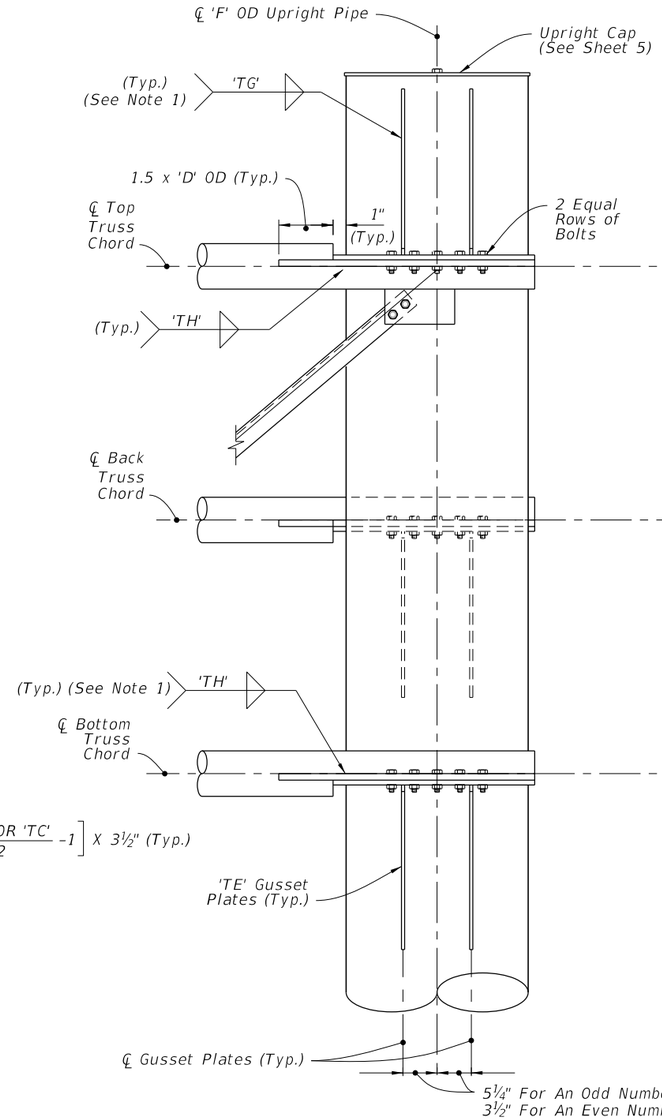


CANTILEVER ASSEMBLY

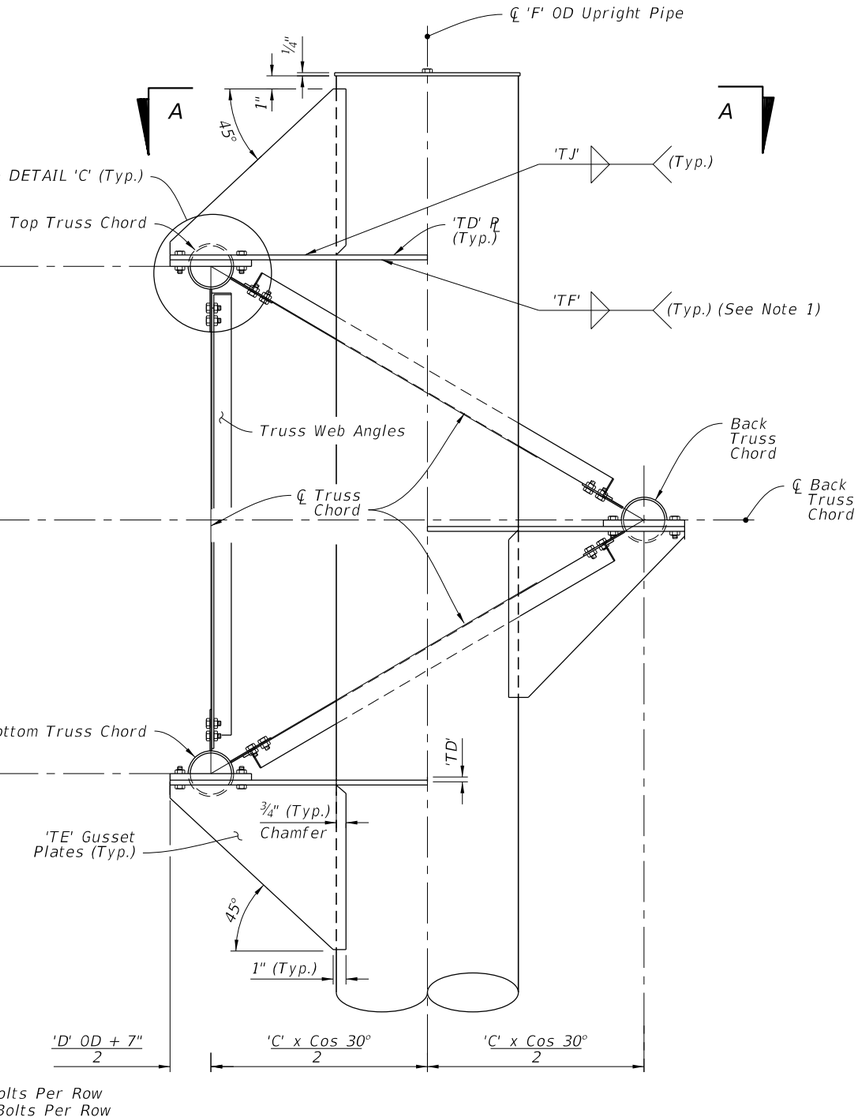


SECTION A-A

(With Gusset Plates And Web Angles Omitted For Clarity)



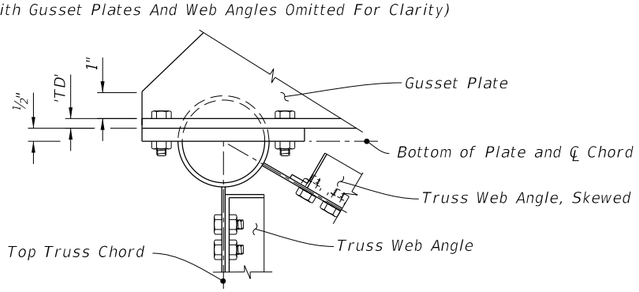
FRONT ELEVATION



SIDE ELEVATION

UPRIGHT-TRUSS CONNECTION DETAIL

(Web Members From Back Truss Chord Omitted For Clarity)



DETAIL 'C'

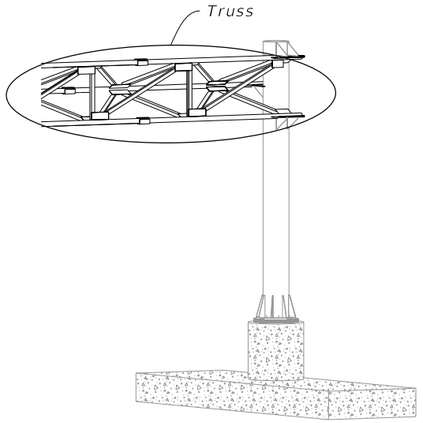
NOTES:

1. Wrap fillet weld around the stiffener termination on the tube wall.

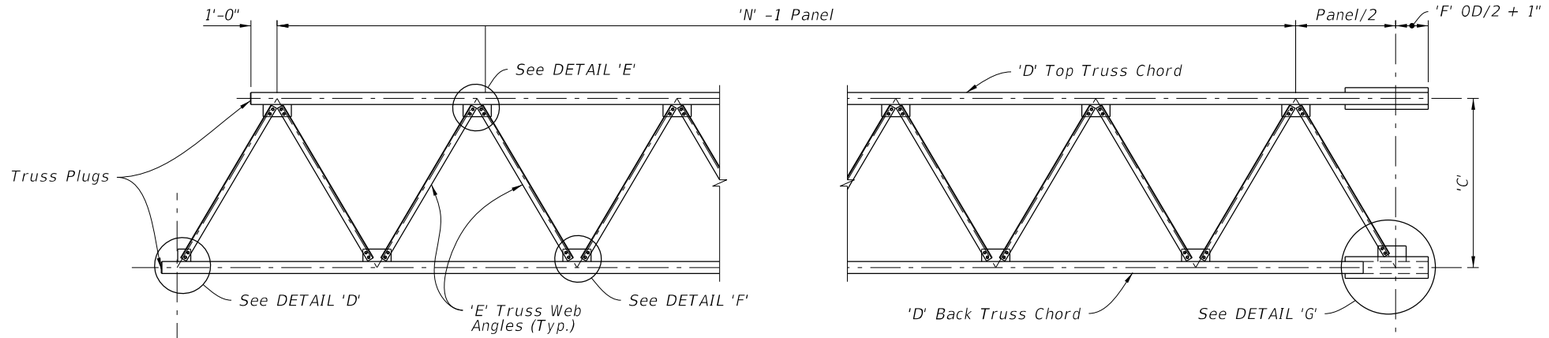
2. Truss Chord Bolts:
   A. Top and Bottom: Install 'TC' hex head bolts.
   B. Back: Install 'TB' hex head bolts.

10/20/2022 8:56:50 AM

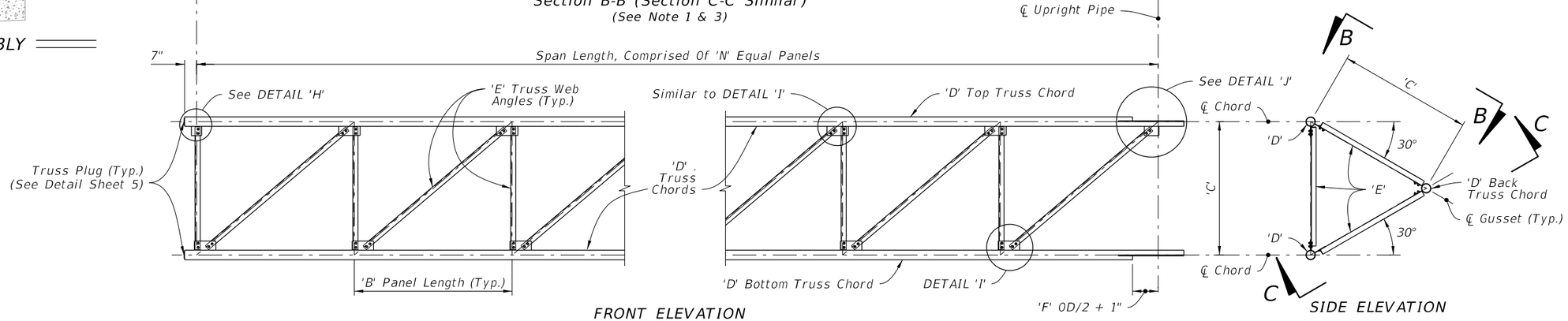
LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FY 2023-24 STANDARD PLANS	CANTILEVER SIGN STRUCTURE	INDEX 700-040	SHEET 3 of 5



CANTILEVER ASSEMBLY



Section B-B (Section C-C Similar)
(See Note 1 & 3)



FRONT ELEVATION
(See Note 1 & 3)

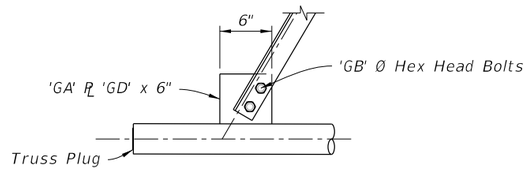
SIDE ELEVATION

TRUSS NOTES:

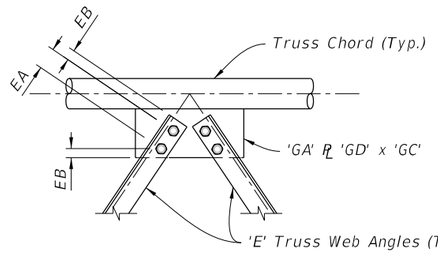
1. Out-of-plane members are not shown for clarity.
2. Wrap fillet weld around plate termination on the tube wall.
3. Chord Splices not shown.

Bolt Size	Distance	
	EA	EB
1¼" Ø	4⅜"	2¼"
1" Ø	3½"	1¾"
⅞" Ø	3"	1½"
¾" Ø	2½"	1¼"
⅝" Ø	2¼"	1⅛"

TRUSS



DETAIL 'D'



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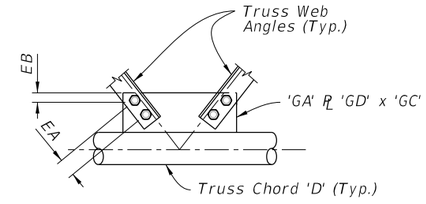

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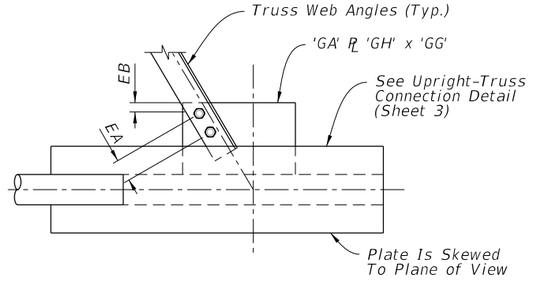

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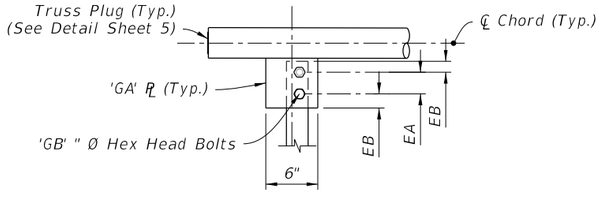
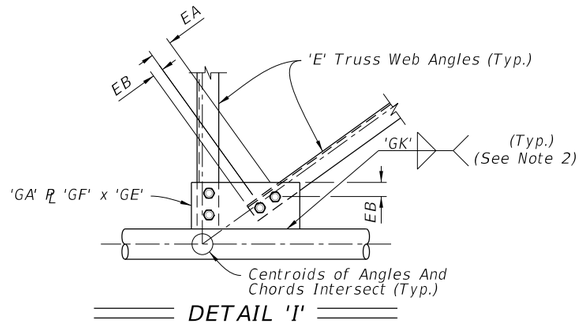
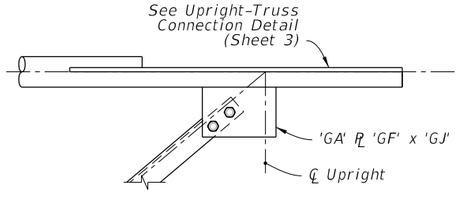


DETAIL 'H'



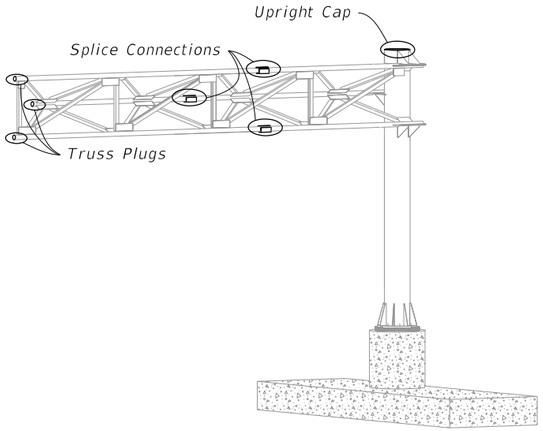
DETAIL 'I'



DETAIL 'J'

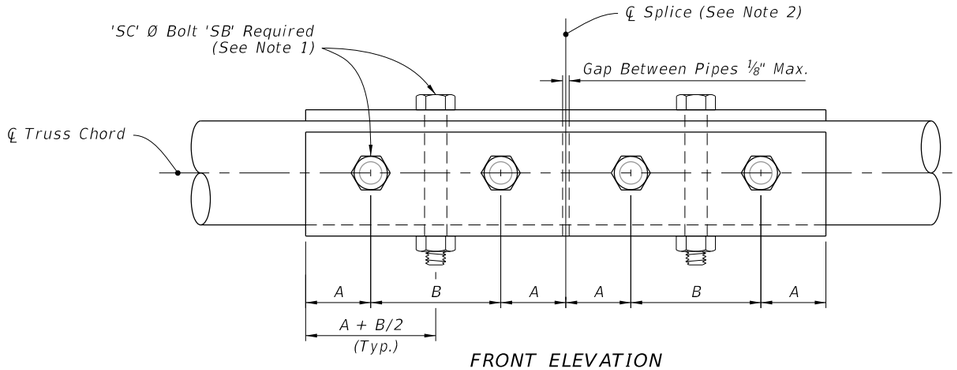
10/20/2022 8:56:51 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	CANTILEVER SIGN STRUCTURE	INDEX	SHEET
11/01/22					700-040	4 of 5

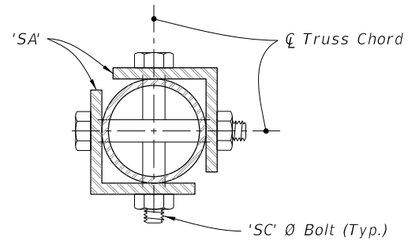


CANTILEVER ASSEMBLY

Bolt Size	Distance	
	A	B
1" Ø	1¾"	3½"
⅞" Ø	1½"	3"
¾" Ø	1¼"	2½"



FRONT ELEVATION

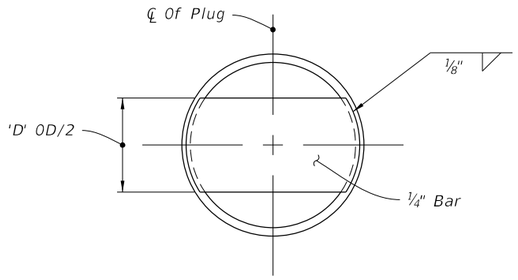


SIDE ELEVATION

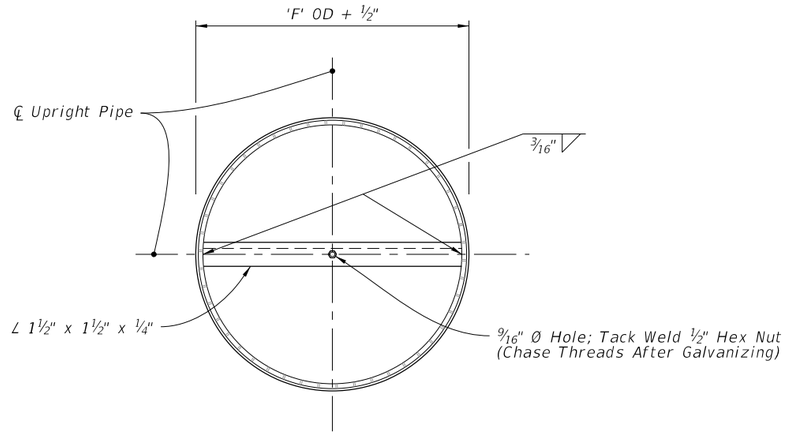
SPLICE CONNECTION DETAIL

SPLICE CONNECTION NOTES:

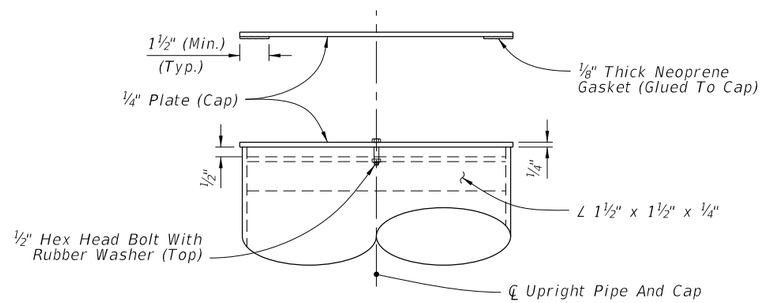
1. Only 6 bolts are shown in detail for clarity. (One Half Each Side Of Splice)
2. Splices are not permitted for trusses less than or equal to 40', Splice optional for trusses greater than 40'.
3. Chord Splices: "SD" Panel from upright is the closest panel in which a chord splice may be used. See Plans for CANTILEVER SIGN STRUCTURE DATA TABLE. Minimum splice spacing is two truss panel lengths apart.



TRUSS PLUG DETAIL



PLAN



ELEVATION

UPRIGHT CAP DETAIL

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LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FDOT FY 2023-24 STANDARD PLANS	CANTILEVER SIGN STRUCTURE	INDEX 700-040	SHEET 5 of 5

GENERAL NOTES:

1. Meet the requirements of Specification 700.

2. Work this Index in conjunction with SPAN SIGN STRUCTURE DATA TABLES in the Plans and Index 700-030.

3. Handholes at the pole base are required for DMS Structures. Refer to Index 700-090 for Handhole Details.

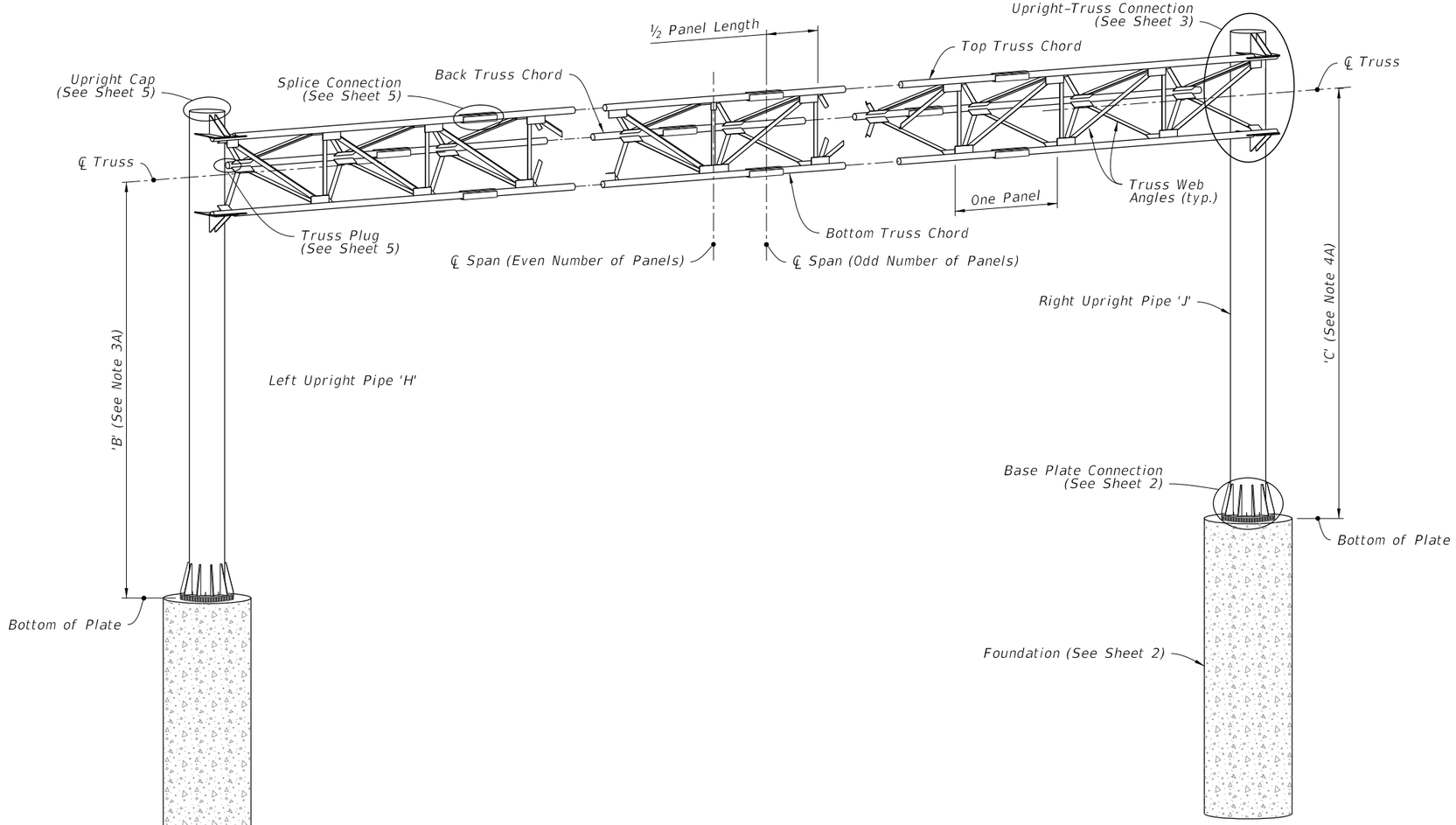
4. Shop Drawings are required.

   Obtain Shop Drawing approval prior to fabrication. Include the following:
   A. Upright Pipe height ('C' & 'B') and foundation elevations: Verify dimensions in the field prior to submittal to ensure minimum vertical clearances of the sign panel over the roadway.
   B. Height of the foundation above adjacent ground.
   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).

5. Provide a parabolic camber with the required upward deflection as shown on the Camber Diagram.

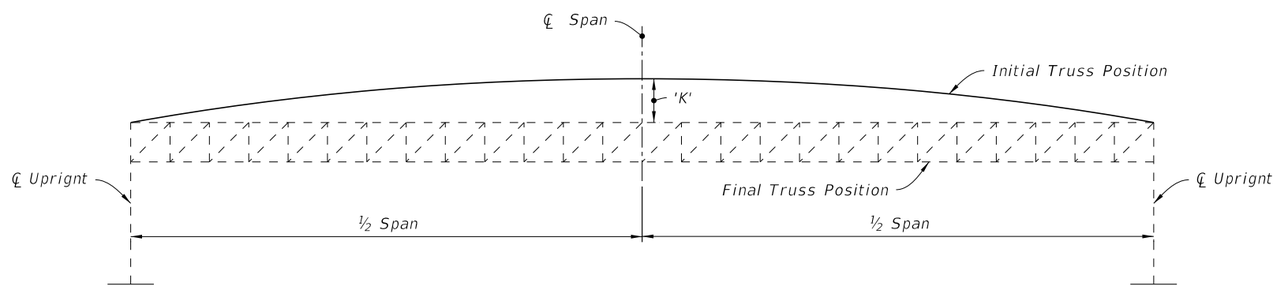
6. Materials:

   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
   B. Bolts, Nuts and Washers:
      a. High Strength Bolts: ASTM F3125, Grade A325, Type 1
      b. Nuts: ASTM A563, Grade DH Heavy-Hex
      c. Washers: ASTM F436, Type 1, one under turned element
   C. Anchor Bolts, Nuts and Washers
      a. Anchor Bolts: ASTM F1554 Grade 55
      b. Nuts: ASTM A563 Grade A Heavy-Hex (5 per bolt)
      c. Plate Washers: ASTM A36 (2 per bolt)



ISOMETRIC VIEW

SPAN SIGN ASSEMBLY



CAMBER DIAGRAM

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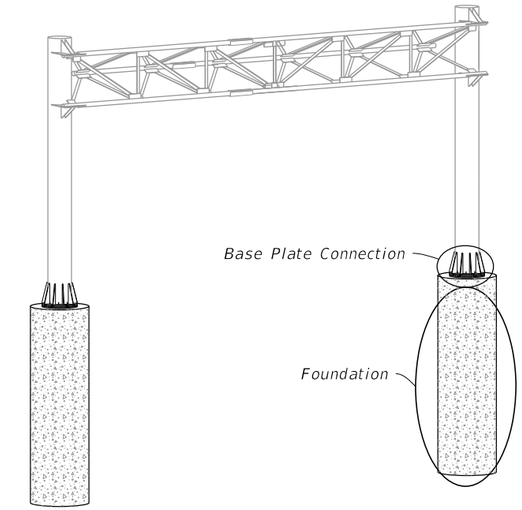
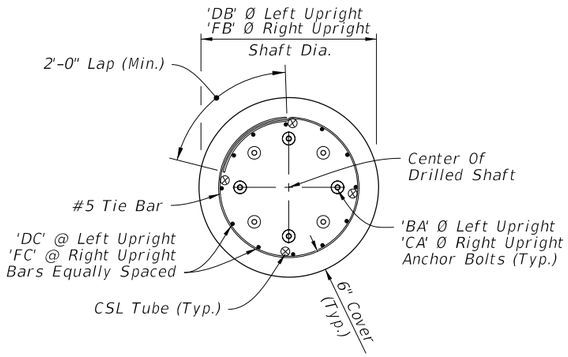
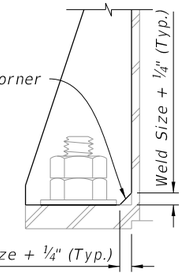
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/22			FY 2023-24 STANDARD PLANS	SPAN SIGN STRUCTURE	700-041	1 of 5



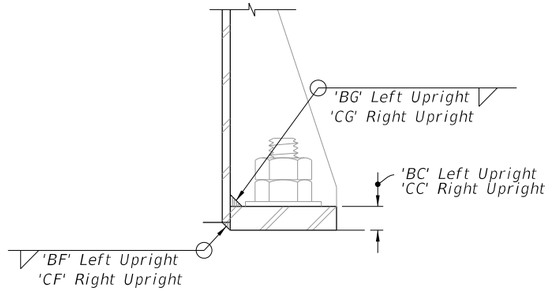
SPAN SIGN ASSEMBLY



PLAN



DETAIL "A"



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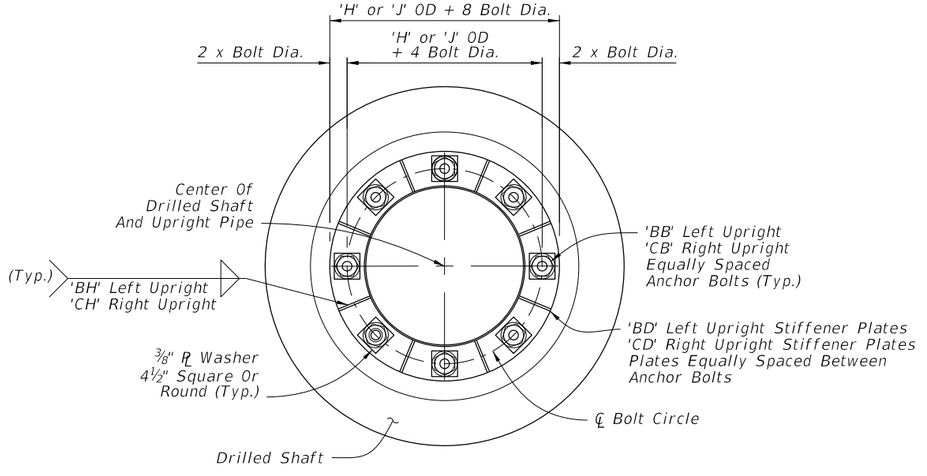
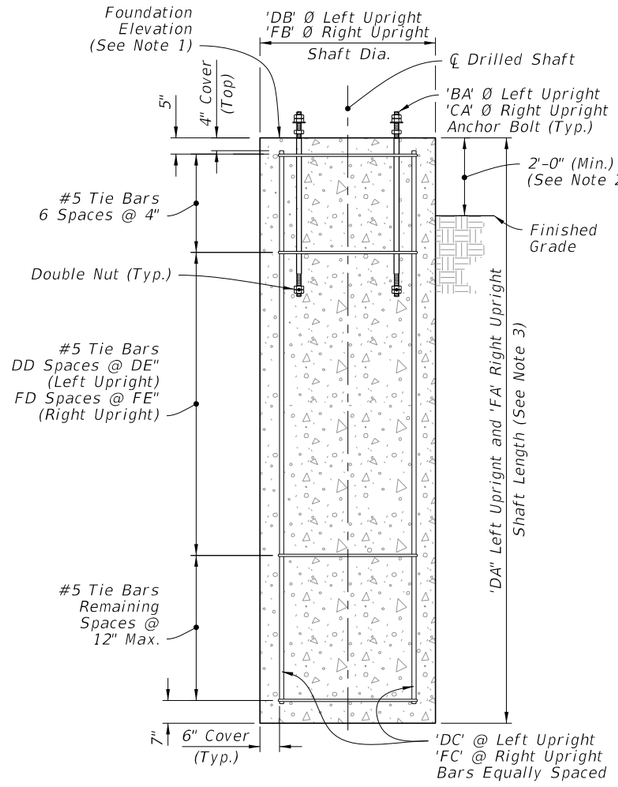


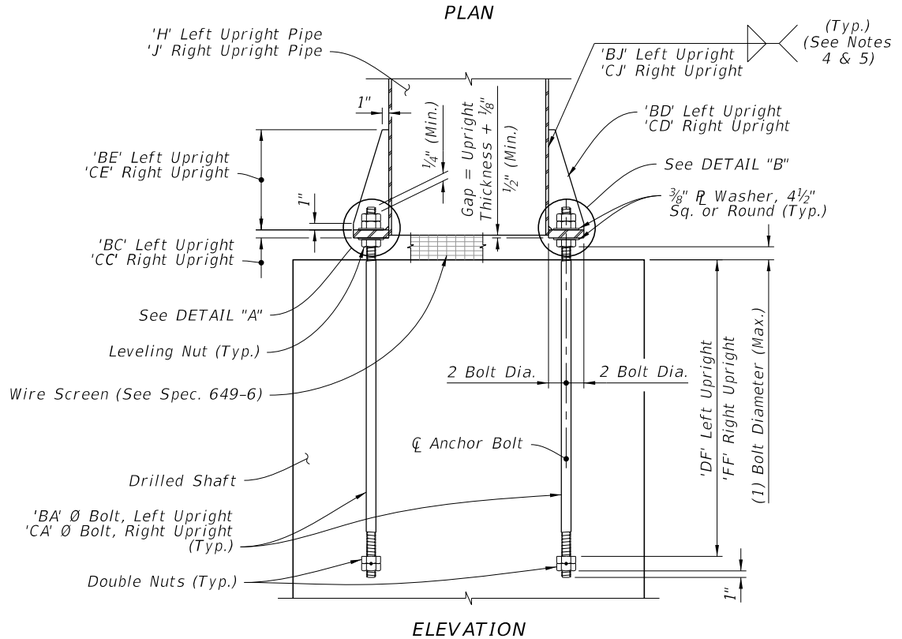
PLAN



ELEVATION

DRILLED SHAFT

FOUNDATION



ELEVATION

BASE PLATE CONNECTION

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).
5. After galvanizing, provide magnetic particle testing on 100% of upright fillet welds.
6. Weld plates 'BD' and 'CD' in a star pattern. A star pattern is one in which the plates on opposite and near opposite sides of the pole circle are successively welded in a pattern resembling a star. For an 8 plate circle with plates sequentially numbered 1 to 8, weld the plates in the following order: (1, 5, 7, 3, 8, 4, 6, 2).

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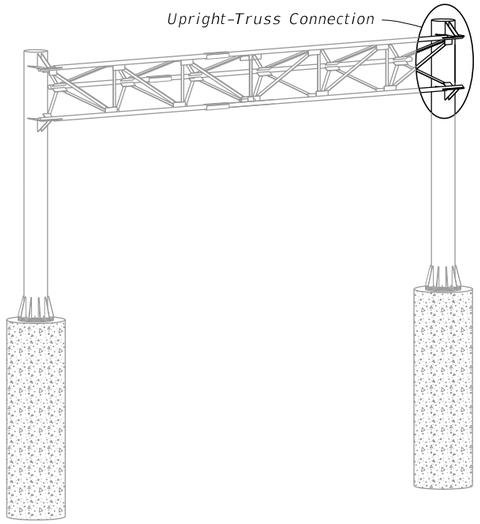
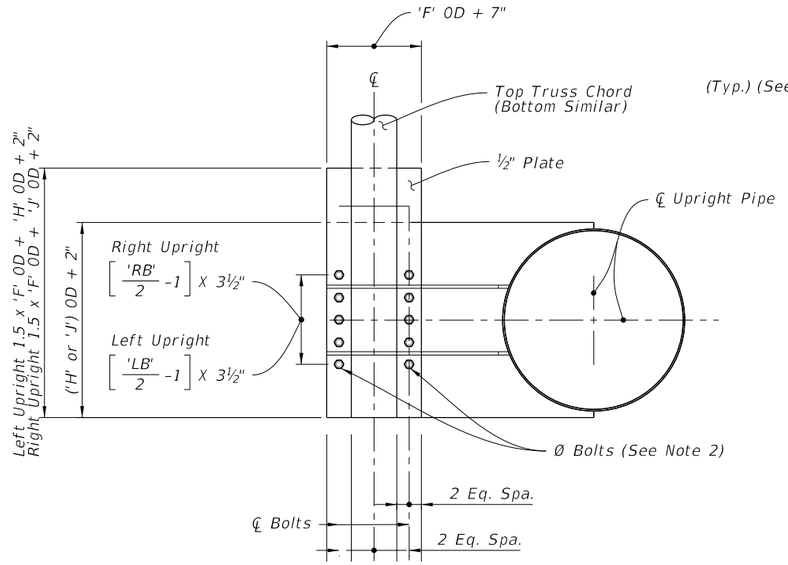
LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	SPAN SIGN STRUCTURE	INDEX	SHEET
11/01/22						700-041	2 of 5

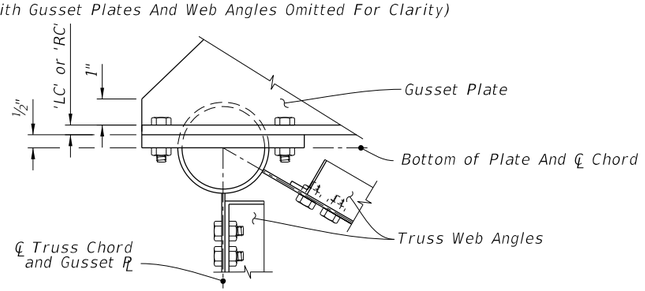


SPAN SIGN ASSEMBLY



SECTION A-A

(With Gusset Plates And Web Angles Omitted For Clarity)



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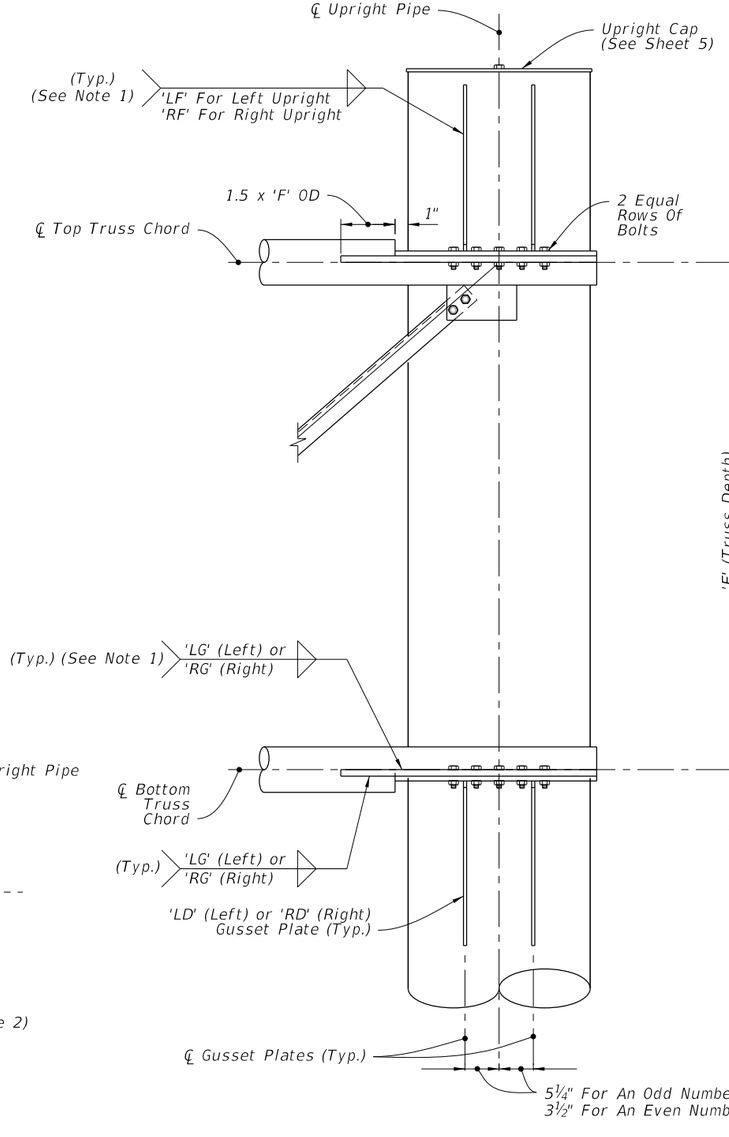
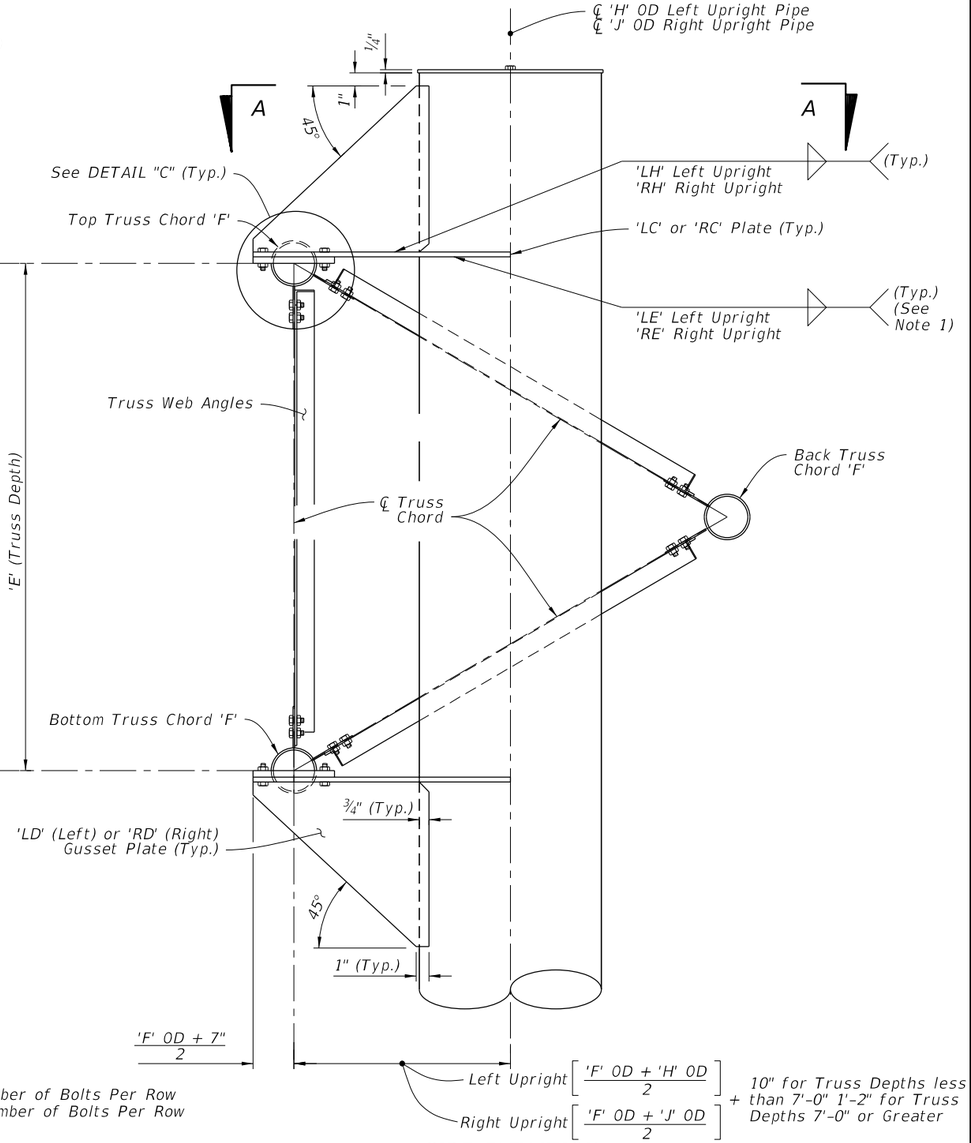


FRONT ELEVATION



SIDE ELEVATION

UPRIGHT-TRUSS CONNECTION DETAIL

(Web Members From Back Truss Chord Omitted For Clarity, See Note 3)

NOTES:

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.

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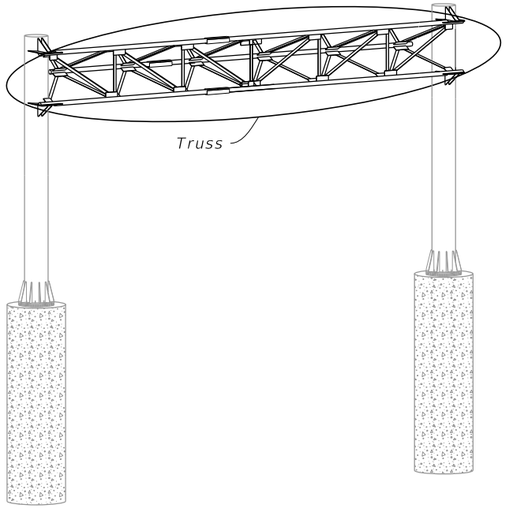
LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FDOT FY 2023-24 STANDARD PLANS	SPAN SIGN STRUCTURE	INDEX 700-041	SHEET 3 of 5

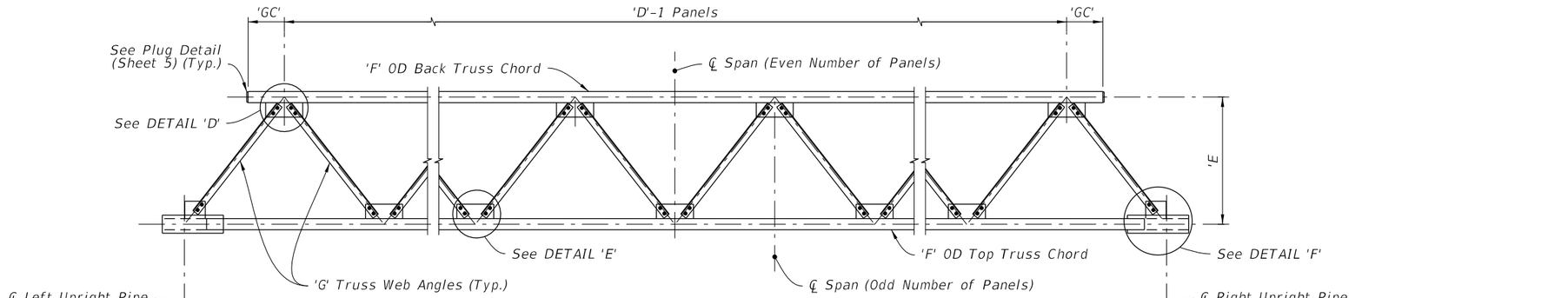


SPAN SIGN ASSEMBLY

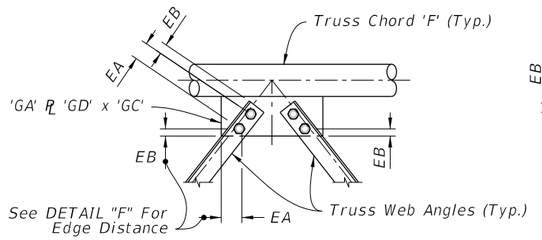
NOTES:

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.

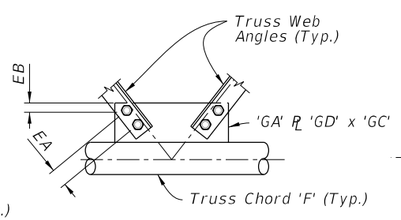
Bolt Diameter (in.)	Distance (in.)	
	EA	EB
1¼	4⅜	2¼"
1	3½	1¾
⅞	3	1½
¾	2½	1¼
⅝	2¼	1⅛



TRUSS



DETAIL 'D'



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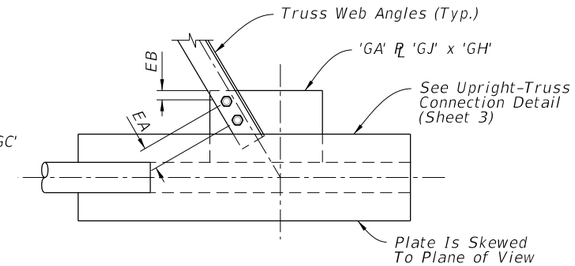

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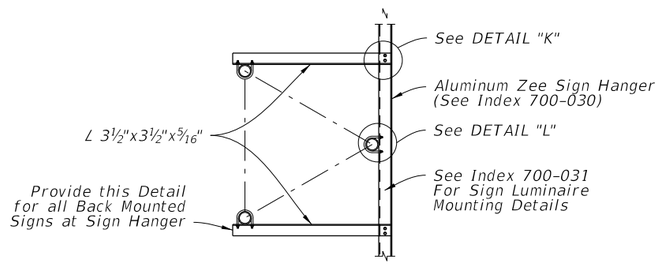
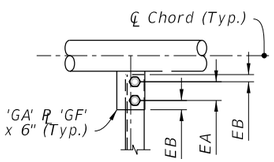


BACK-SIDE SIGN MOUNTING



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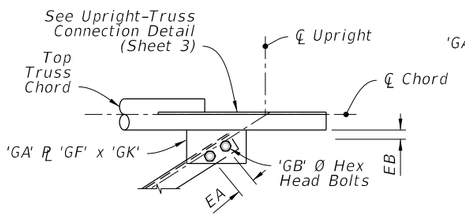

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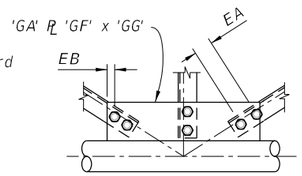
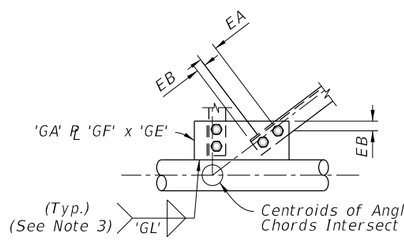
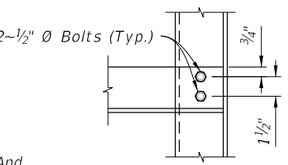


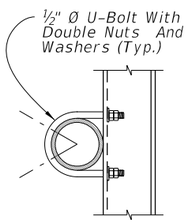
DETAIL 'I'



DETAIL 'J'



DETAIL 'K'



DETAIL 'L'

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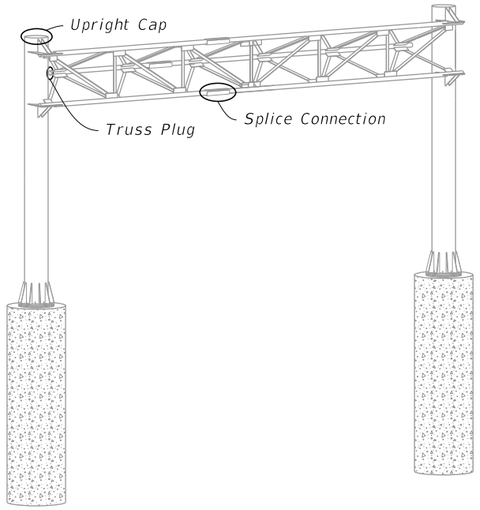
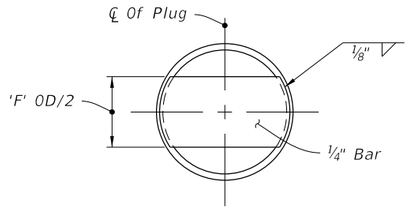
LAST REVISION	REVISION	DESCRIPTION:			
11/01/22			FY 2023-24 STANDARD PLANS	SPAN SIGN STRUCTURE	INDEX 700-041 / SHEET 4 of 5

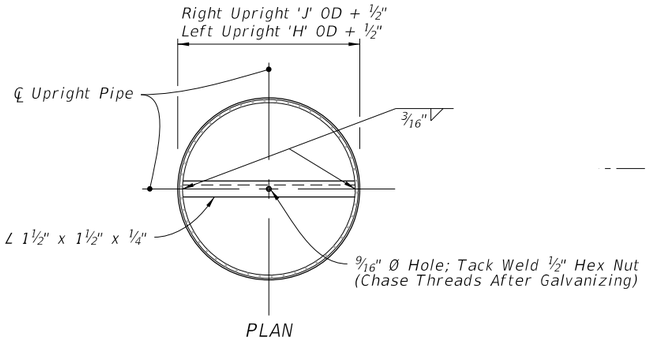


SPAN SIGN ASSEMBLY

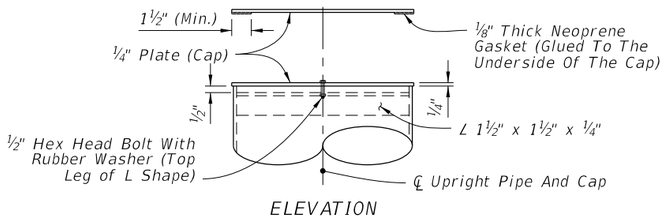


(Each End Of Back Truss Chord)

TRUSS PLUG DETAIL



PLAN



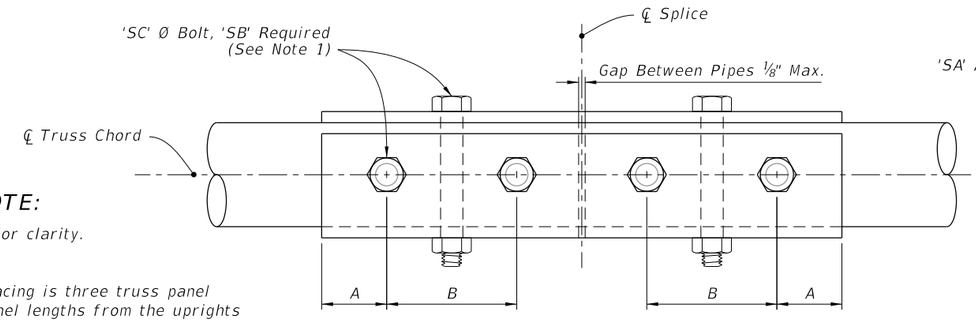
ELEVATION

UPRIGHT CAP DETAIL

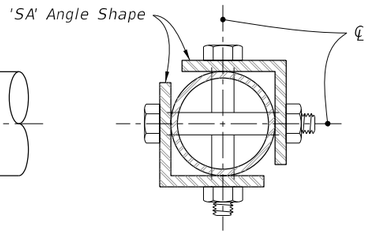
Bolt Diameter (in.)	Distance (in.)	
	A	B
1	1 3/4	3 1/2
7/8	1 1/2	3
3/4	1 1/4	2 1/2

SPLICE CONNECTION NOTE:

1. Only 6 bolts are shown in detail for clarity. (One Half Each End Of Splice)
2. Chord Splices: Minimum splice spacing is three truss panel lengths apart and three truss panel lengths from the uprights when panel lengths are 10'-0" or less. Chord Splices may be either the Standard Splice or the Alternate Splice, but not both on the same structure.
3. Upright splice: Not allowed unless the upright exceeds available mill lengths (35' – 40').

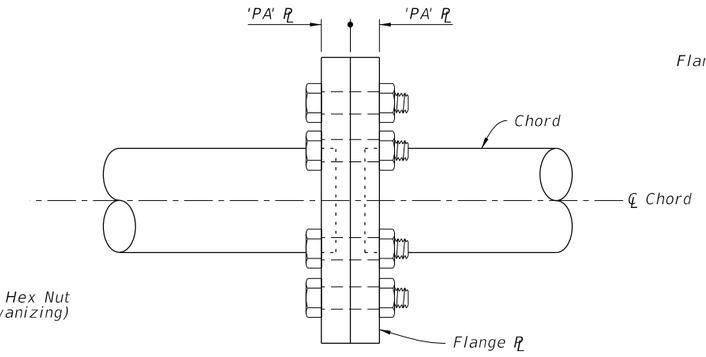


FRONT ELEVATION

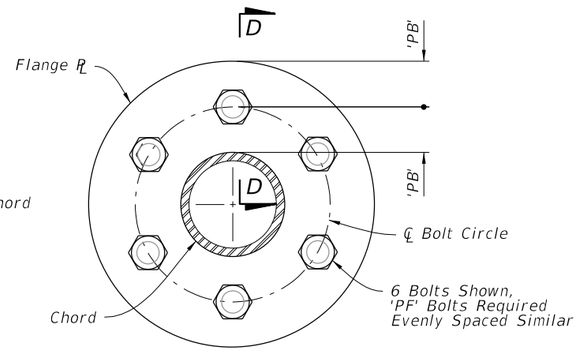


SIDE ELEVATION

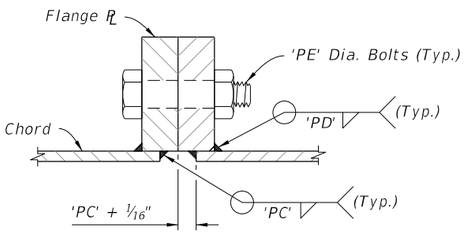
SPLICE CONNECTION DETAIL



FRONT ELEVATION



SIDE ELEVATION

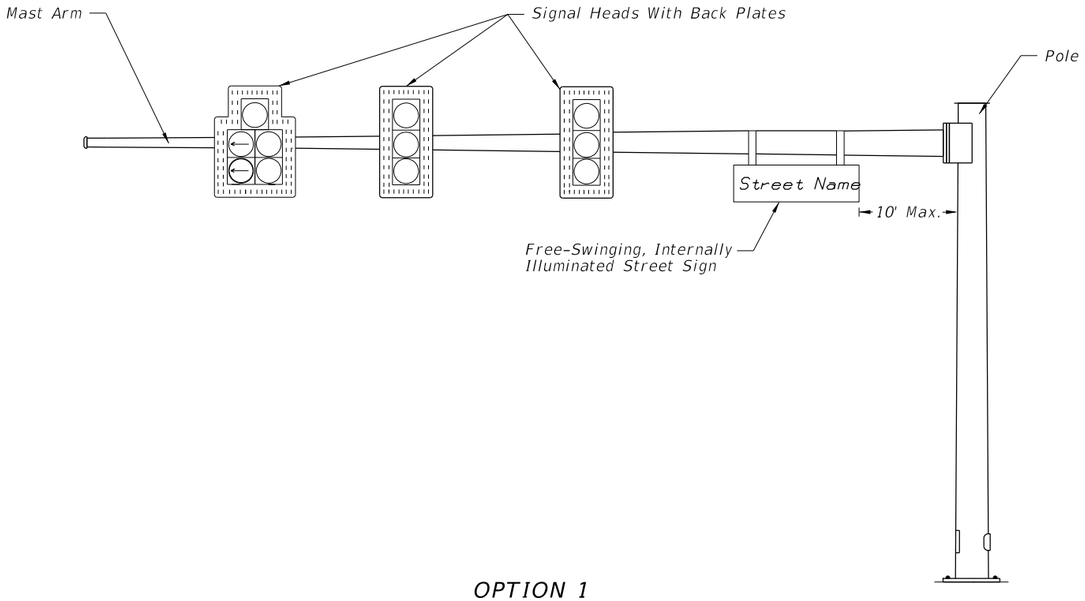


SECTION D-D

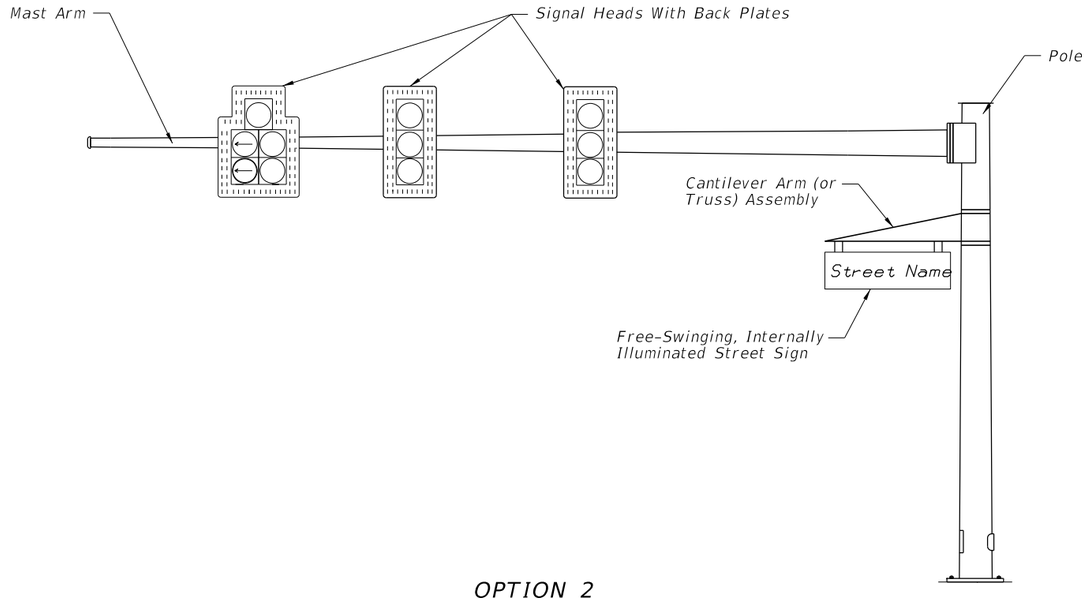
ALTERNATE SPLICE CONNECTION DETAIL

10/20/2022 8:56:57 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/22			FY 2023-24 STANDARD PLANS	SPAN SIGN STRUCTURE	700-041	5 of 5

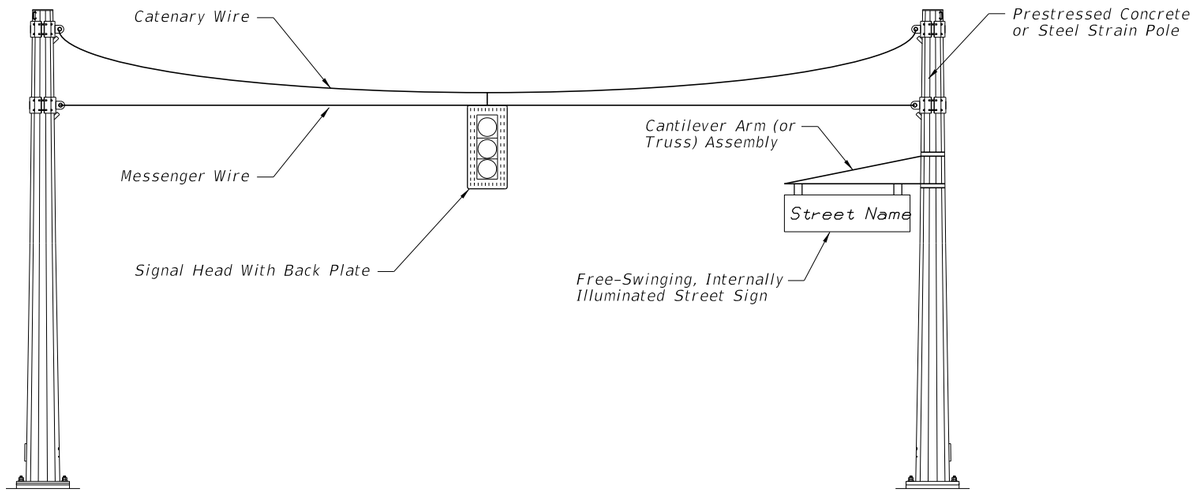


OPTION 1



OPTION 2

MAST ARM ASSEMBLY



SPAN WIRE ASSEMBLY

NOTES:

1. Free-swinging, internally-illuminated street signs shall only be installed on the signal pole for span wire assemblies. For mast arm assemblies the street sign may be installed on the arm or pole.

2. Free-swinging, internally-illuminated street signs meet the requirements of Specification 700.

3. Pole attachments and cantilever arm (or truss) assemblies may be accepted by Contractor certification provided the signs being supported meet the weight and area limitations included in Specification 700 for "Acceptance by Certification".

4. Pole attachments and cantilever arm (or truss) assemblies supporting signs not meeting the weight or area limitations included in Specification 700 for "Acceptance by Certification" require the submittal of structural calculations and Shop Drawings that have been prepared by and sealed by the Specialty Engineer.

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LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	FREE-SWINGING, INTERNALLY-ILLUMINATED STREET SIGN ASSEMBLIES	INDEX	SHEET
11/01/17					700-050	1 of 1

GENERAL NOTES:

1. Meet the requirements of Specification 700.

2. Furnish and install the Dynamic Message Sign (DMS), sign structure in accordance with Index 700-040 or 700-041. Locate foundations at locations shown in the Plans.

3. Shop Drawings are required:

   A. Include the DMS connection
   B. Do not start fabrication until the shop drawings are approved

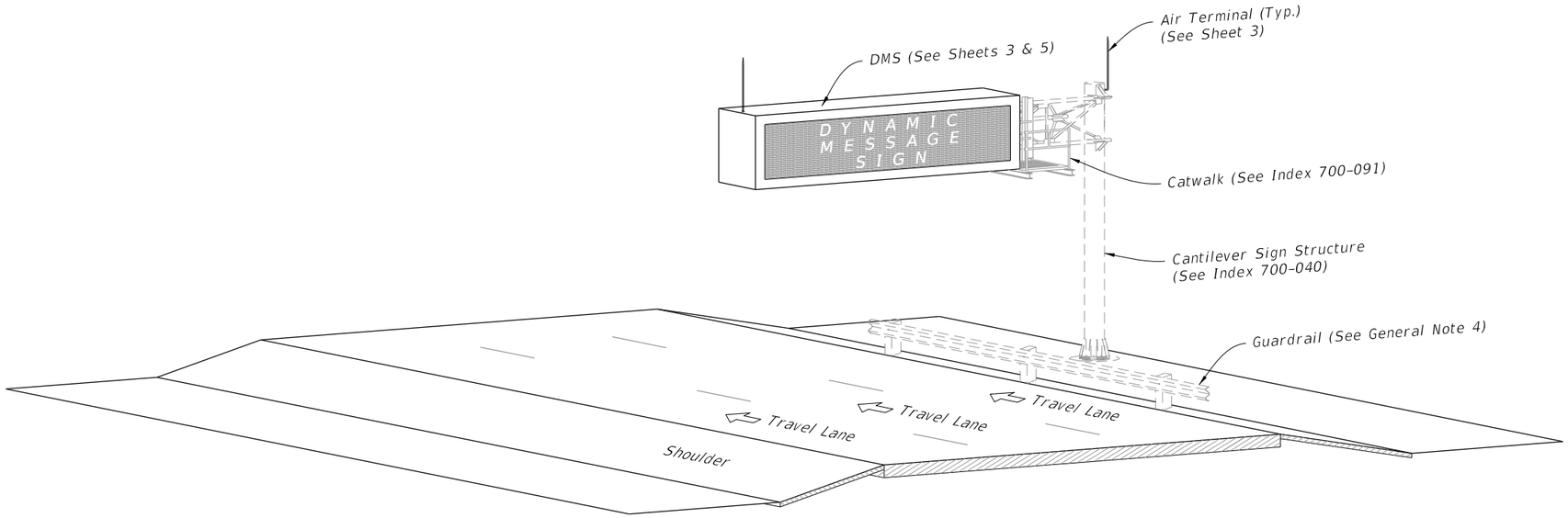
4. If required, install guardrail at location show in the Plans and in accordance with Index 536-001.

5. Installation:

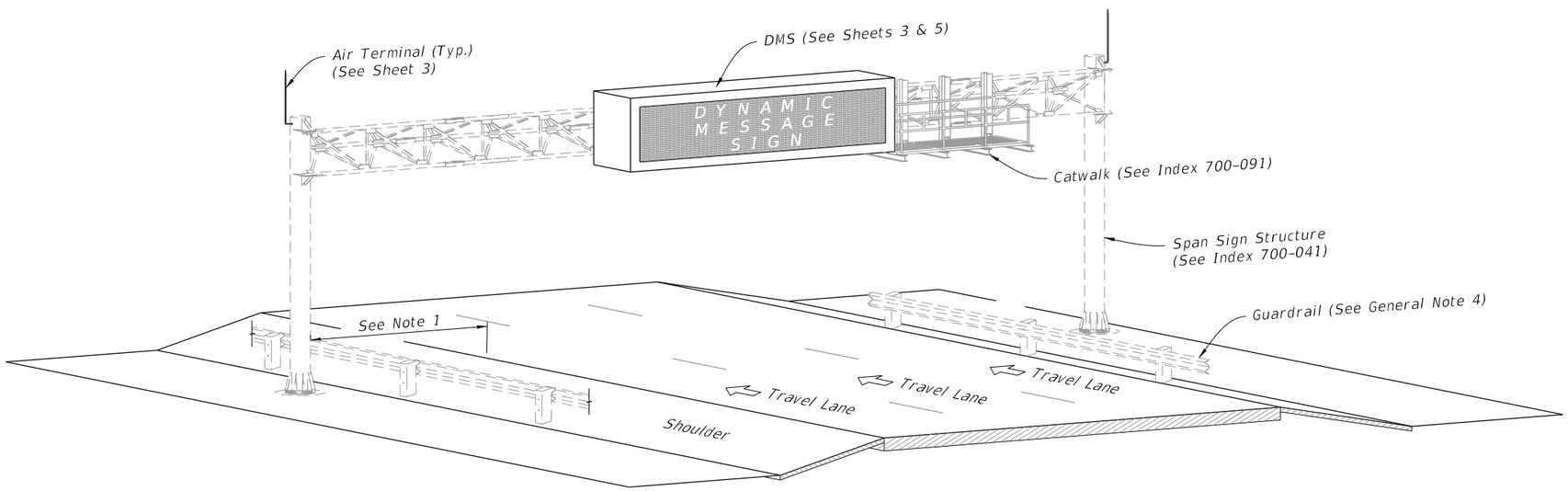
   A. See project requirements for location of DMS Cabinet.
   B. Field Adjust pole-mounted DMS cabinet height to achieve best access for maintenance personnel given site condition as directed by the Engineer. Avoid conflicts with stiffeners, handhole and maintenance of anchor bolts.
   C. Locate the sign horizontal on the structure as shown in the Plans. Vertically center the sign enclosure with the centerline of the truss.
   D. Before erection, field drill the bolt holes in the vertical hangers and horizontal mounting member attached to the sign enclosure. Field locate holes to allow vertical hanger placement as shown on the Plans with no conflicts with gusset or splice plates.
   E. Locate threaded couplings on sign side of upright above the sign truss
   F. Connect grounding conductors to the steel framework that has been cleaned to base metal by use of bonding plates having contact area of not less than 8 square inches or by welding or brazing. Drilling and tapping the steel structure to accept a threaded connector is also an acceptable method
   G. If steel framework is to be drilled and tapped to accept threaded connector, the threaded connector shall be galvanized and have at least 5 threads fully engaged and secured with a jam nut to the steel framework.
   H. Bends in the conduit must be greater than the minimum bending radius for the cable contained in the conduit.
   I. Completely encase all data, fiber optic and power cables for the DMS within the sign structure or in conduit.
   J. Permanently stamp/mark foundation to indicate conduit locations.
   K. Transition conduit in foundation to indicate underground conduit with appropriate reducer outside the limits of the foundation.

6. Materials (Sign Mounting Components):

   A. Aluminum Structural Shapes: ASTM B221, Alloy 6061-T6
   B. Vertical Hangers: ASTM A709, Grade 36
   C. U-Bolts: ASTM A449 or A193 B7
   D. Steel Bolts, Nuts, and Washers:
      1. High Strength Bolts: ASTM F3125, Grade A325, Type 1
      2. Nuts: ASTM F563
      3. Washers: ASTM F463 (Flat Washer)



CANTILEVER ISOMETRIC VIEW



SPAN ISOMETRIC VIEW

DYNAMIC MESSAGE SIGN ASSEMBLY

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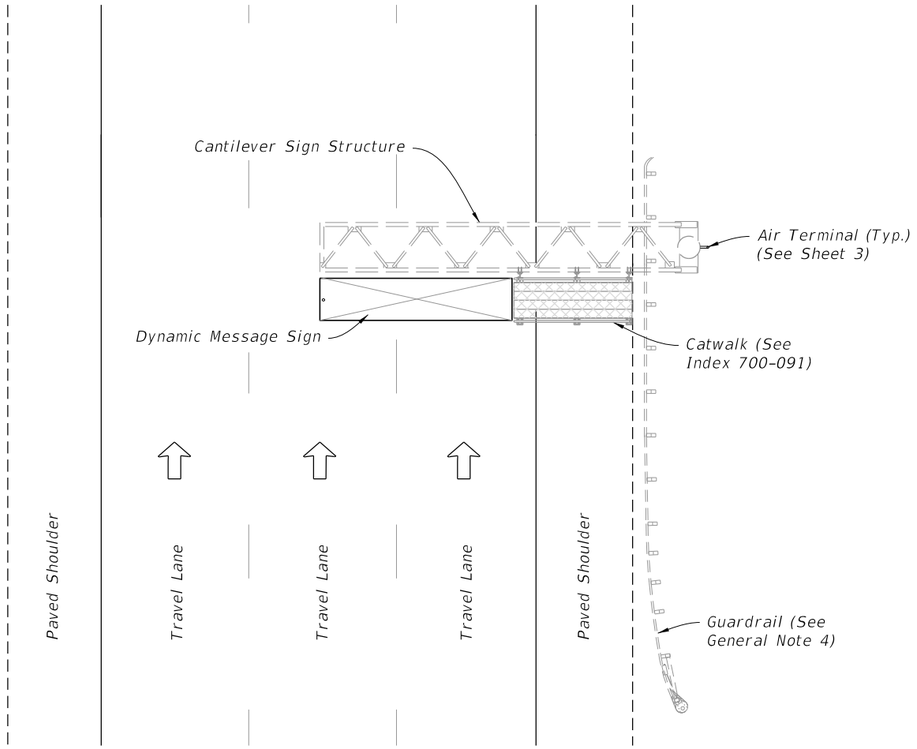
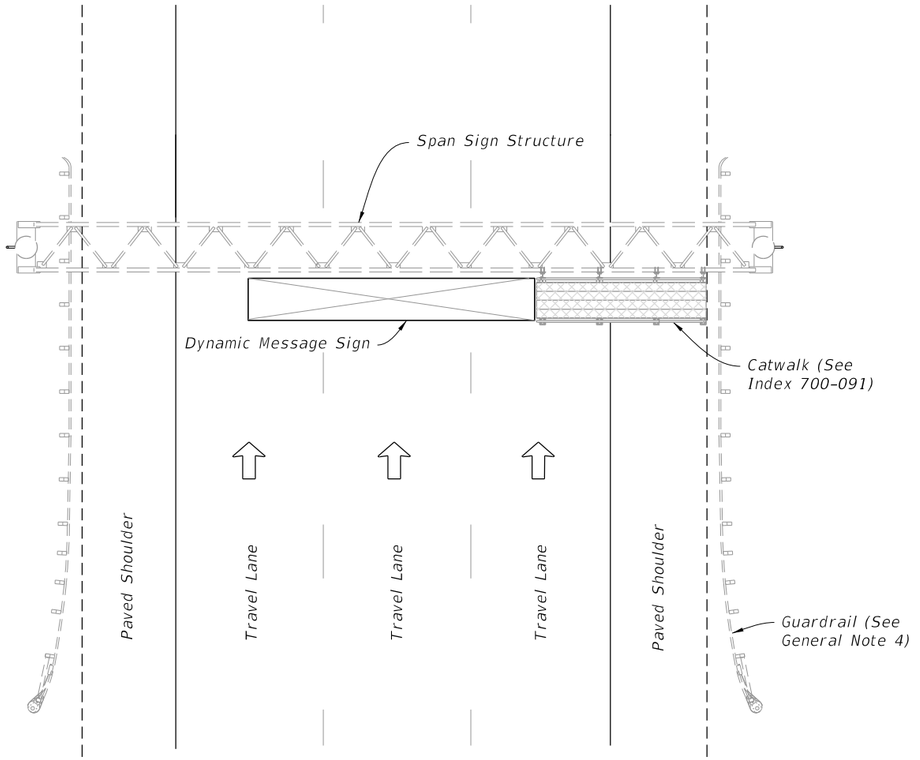
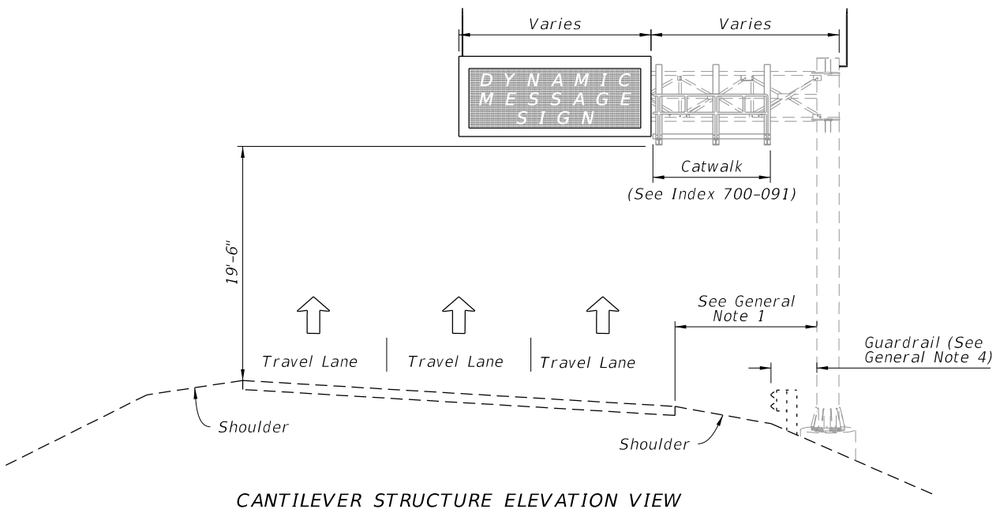
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/22			FY 2023-24 STANDARD PLANS	DYNAMIC MESSAGE SIGN WALK-IN	700-090	1 of 5



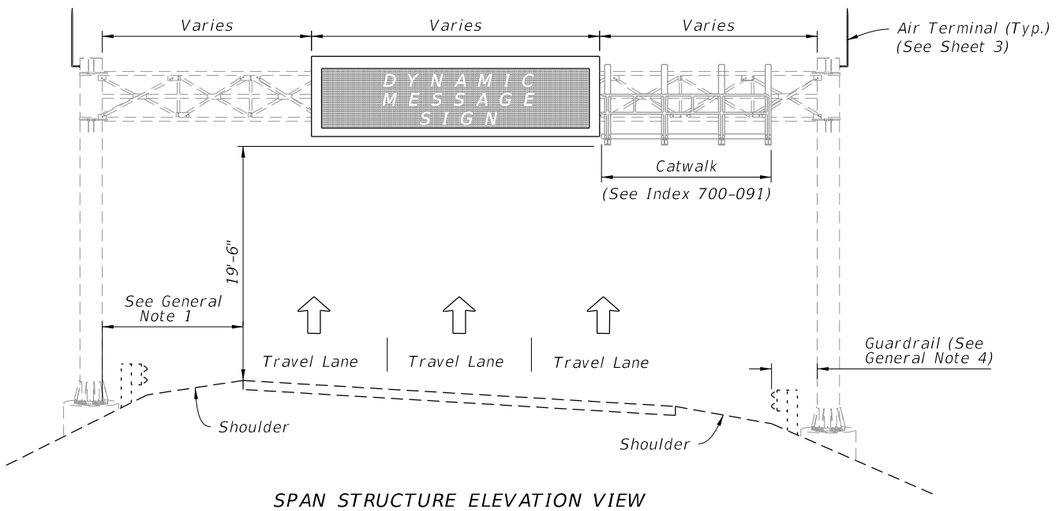
CANTILEVER STRUCTURE PLAN VIEW



SPAN STRUCTURE PLAN VIEW



CANTILEVER STRUCTURE ELEVATION VIEW



SPAN STRUCTURE ELEVATION VIEW

DYNAMIC MESSAGE SIGN GENERAL LAYOUT

NOTE: Actual number and direction of travel lanes varies.

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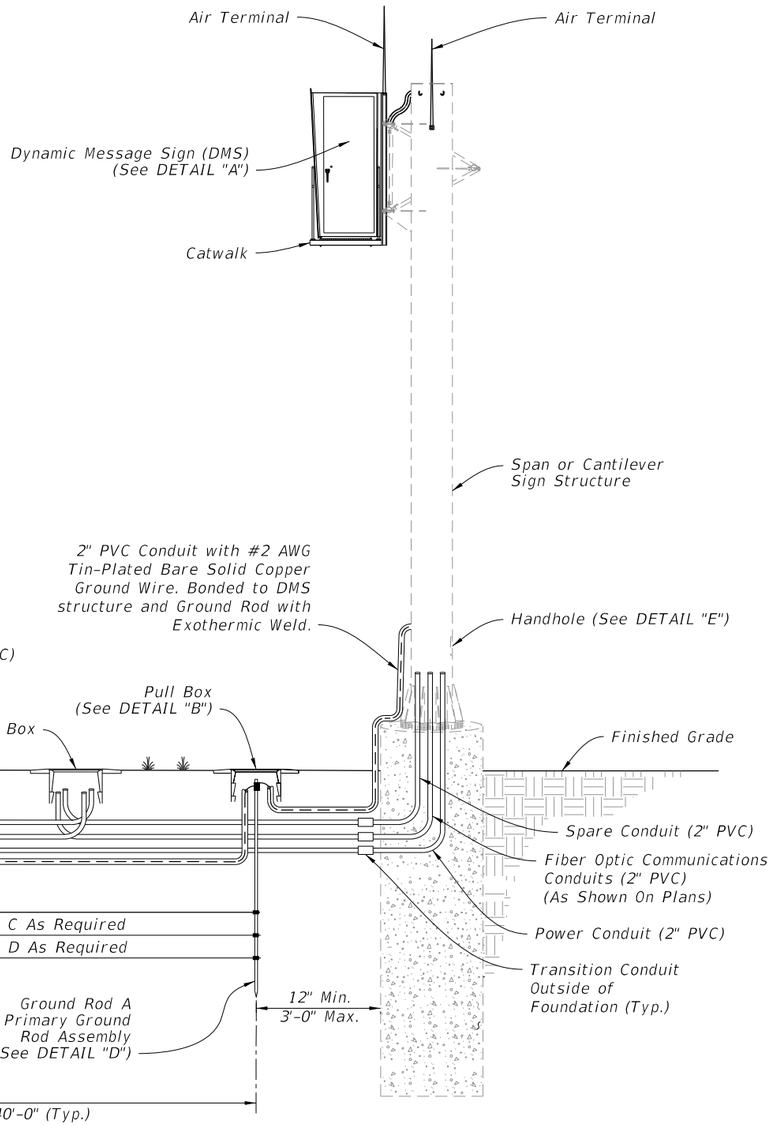
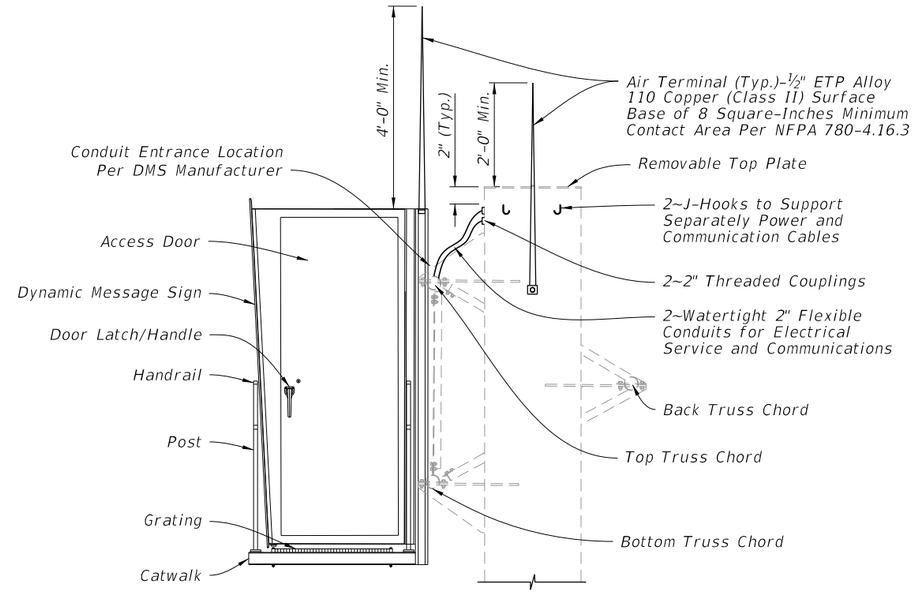
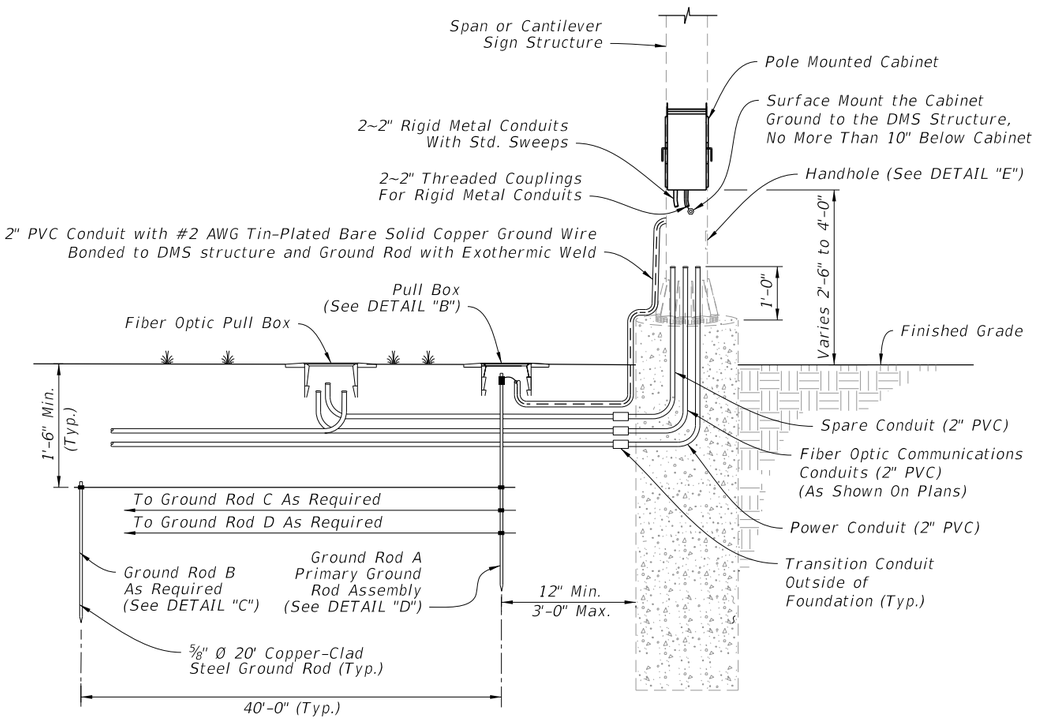
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/19			FY 2023-24 STANDARD PLANS	DYNAMIC MESSAGE SIGN WALK-IN	700-090	2 of 5



GROUND MOUNTED CABINET



DETAIL "A"



POLE MOUNTED CABINET

DYNAMIC MESSAGE SIGN GROUNDING AND CONDUIT DETAIL

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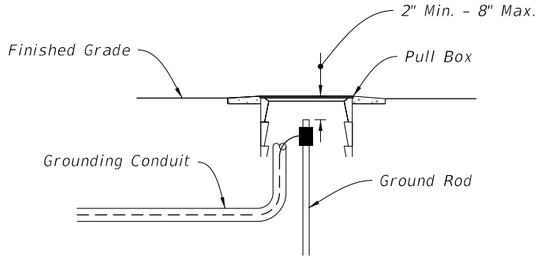
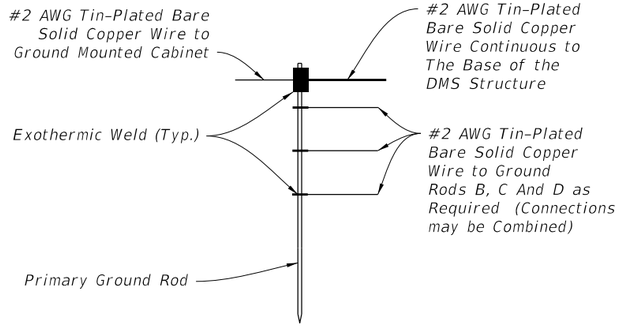
LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	DYNAMIC MESSAGE SIGN WALK-IN	INDEX	SHEET
11/01/17						700-090	3 of 5

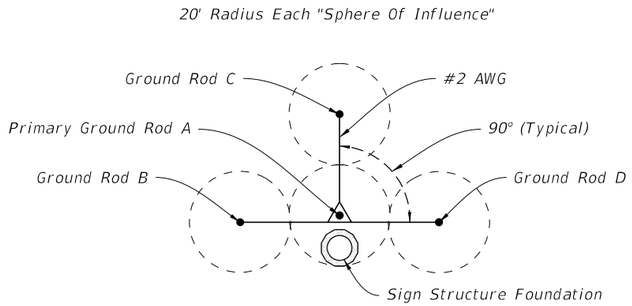


(Pole Mounted Cabinet Configuration Shown)

DETAIL "B"



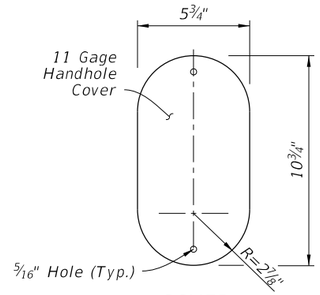
DETAIL "C"



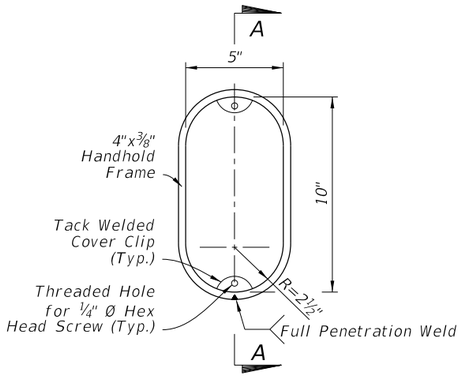
TYPICAL
(20' Rods, 40' Spacing)

GROUND ROD ARRAY DETAIL

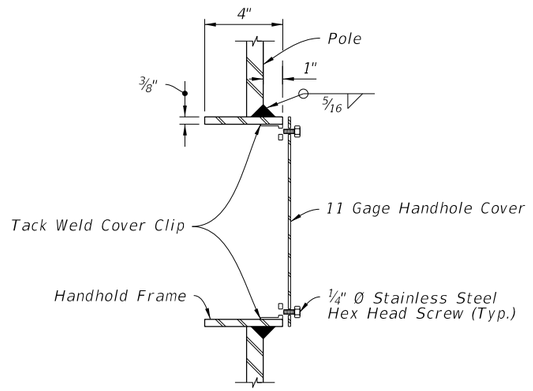
DETAIL "D"



COVER



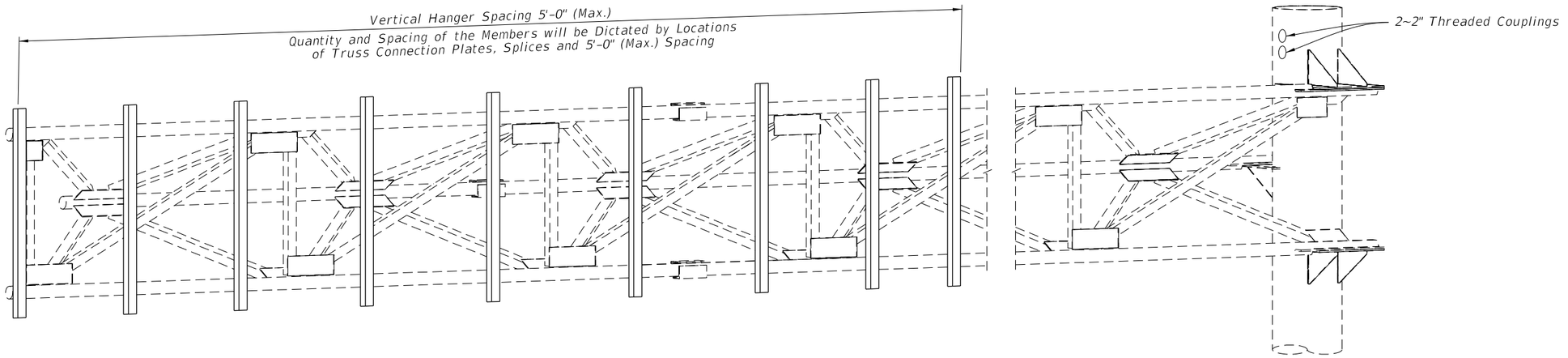
FRAME



(Thru Handhole)

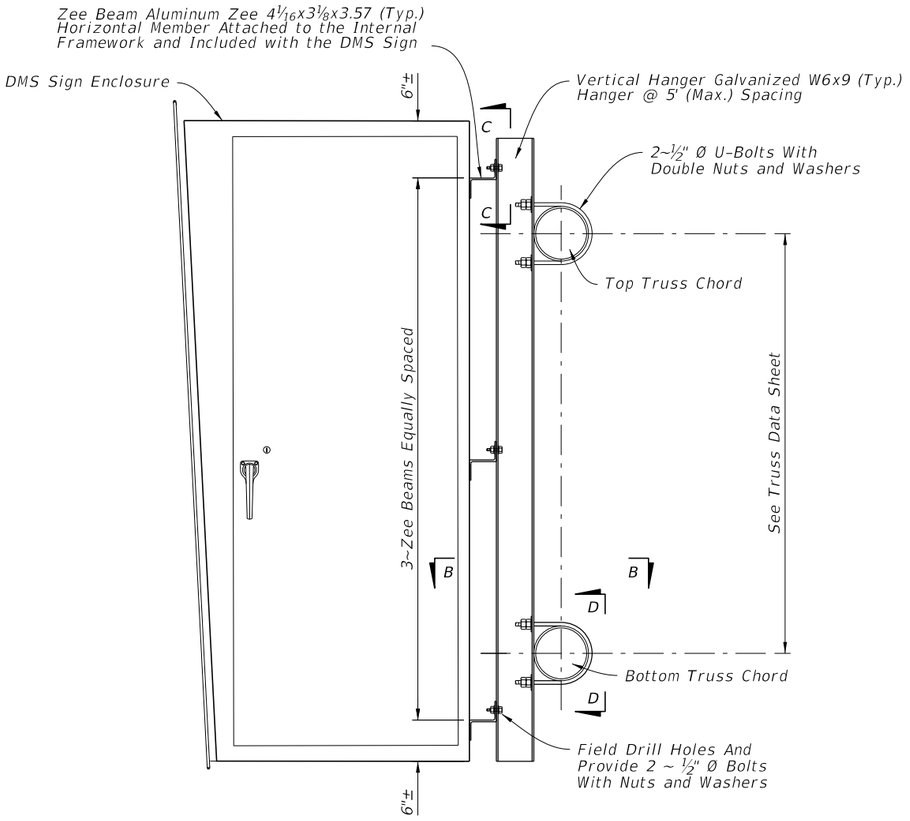
SECTION A-A

DETAIL "E"

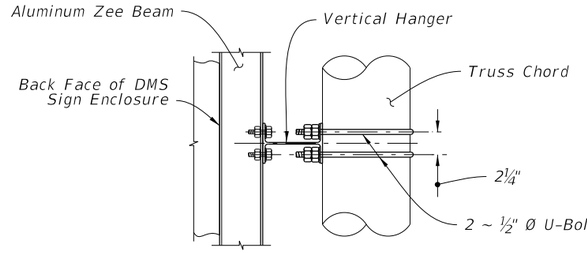


(Cantilever Sign Structure Shown, Span Sign Structure Similar)

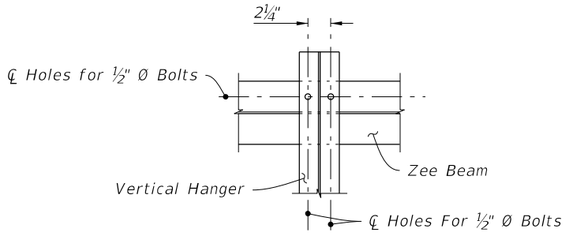
HANGER LOCATION DETAIL



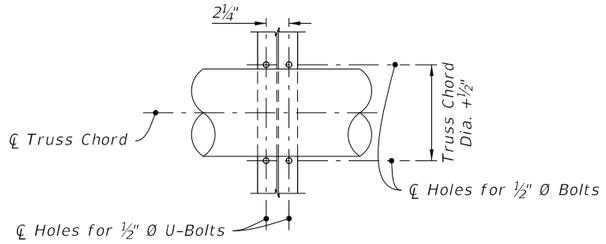
DYNAMIC MESSAGE SIGN END VIEW



SECTION B-B



SECTION C-C



SECTION D-D

12/13/2022 8:39:13 AM

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GENERAL NOTES:

1. Meet the requirements of Specification 700.

2. Shop Drawings are required:

   A. Provide length as shown in the Plans
   B. Design in accordance with AISC, AASHTO, and OSHA requirements
   B. Do not start fabrication until the shop drawings are approved

3. Catwalk hangers must be positioned to avoid conflicts with the sign structure truss and gusset plates. Place walkway close to the sign with a maximum open distance from walkway grate to DMS sign of ½".

4. Maximum spacing of Catwalk hanger supports is 5'-0". Cantilever ends of grating is 8".

5. Galvanized steel catwalk grating meeting the requirements of Specification 504-2.3. Must Support a 90 psf load and have a 3½" minimum toe kick. Attach grating in accordance with the manufacturer's instructions using stainless steel or galvanized fasteners.

6. Supply and install an OSHA 1910 compliant, self closing, hot dip galvanized safety gate. Install per manufactures instructions.

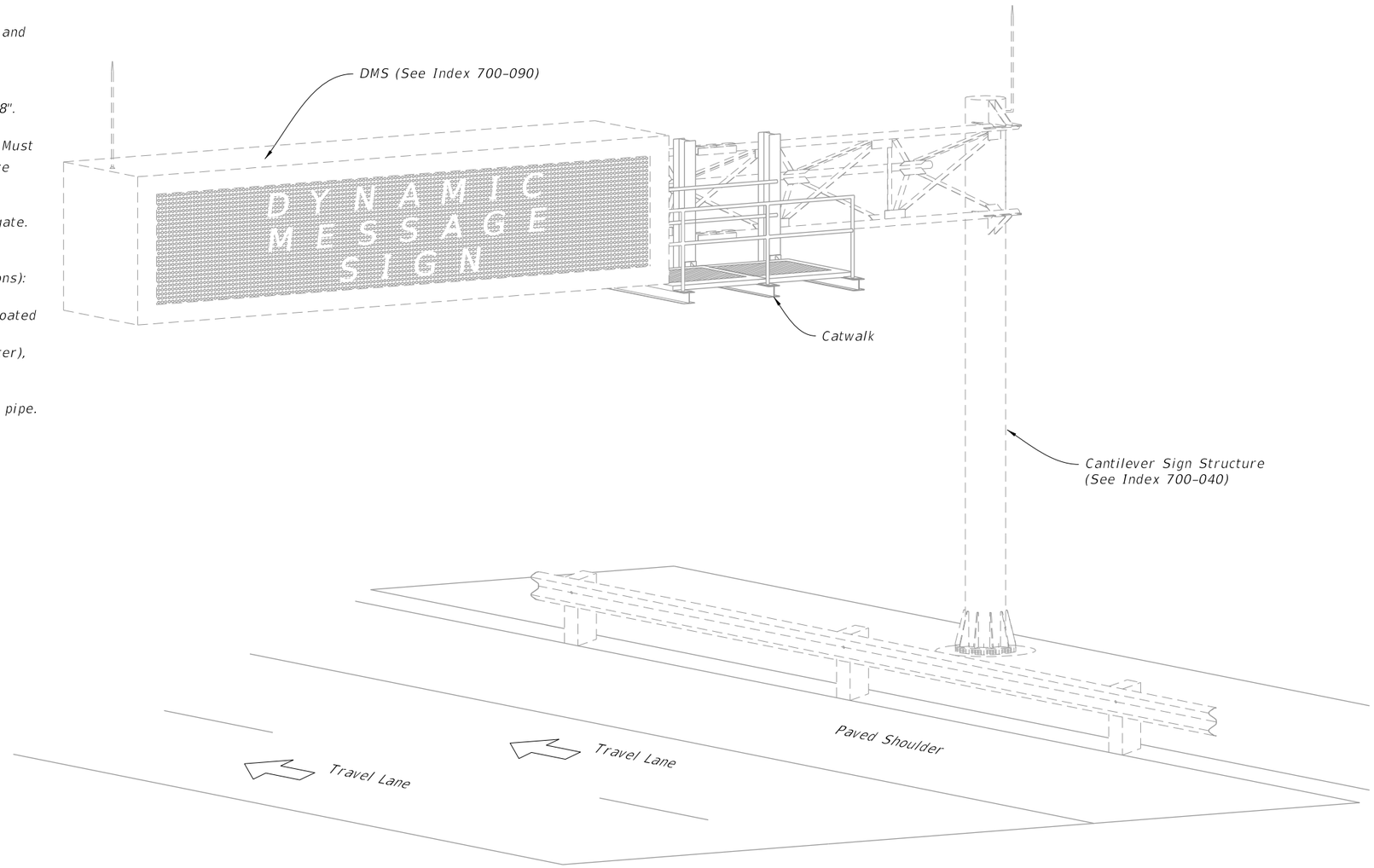
7. Chain link fabric options (2" mesh with knuckled selvage top and bottom for all options):

   A. AASHTO M181 Type I – Zinc Coated Steel, No. 9 gage (coated wire diameter), coated at the rate of 1.8 oz/ft². (M181 Class D 2.0 oz./ft². modified to 1.8 oz./ft².).
   B. AASHTO M181 Type II – Aluminum Coated Steel, No. 9 gage (coated wire diameter), coated at the rate of 0.40 oz./ft².

8. Install 2" NPS (Sch. 40) guiderail and posts: ASTM A53 Grade B for standard weight pipe.

9. Materials:

   A. Steel plates ASTM A 36 or A709 Grade 36.
   B. W-Sections: ASTM A572 Grade 36 or 50.



CATWALK ASSEMBLY
(Cantilever Shown, Span Similar)

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LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	CATWALK DETAILS	INDEX	SHEET
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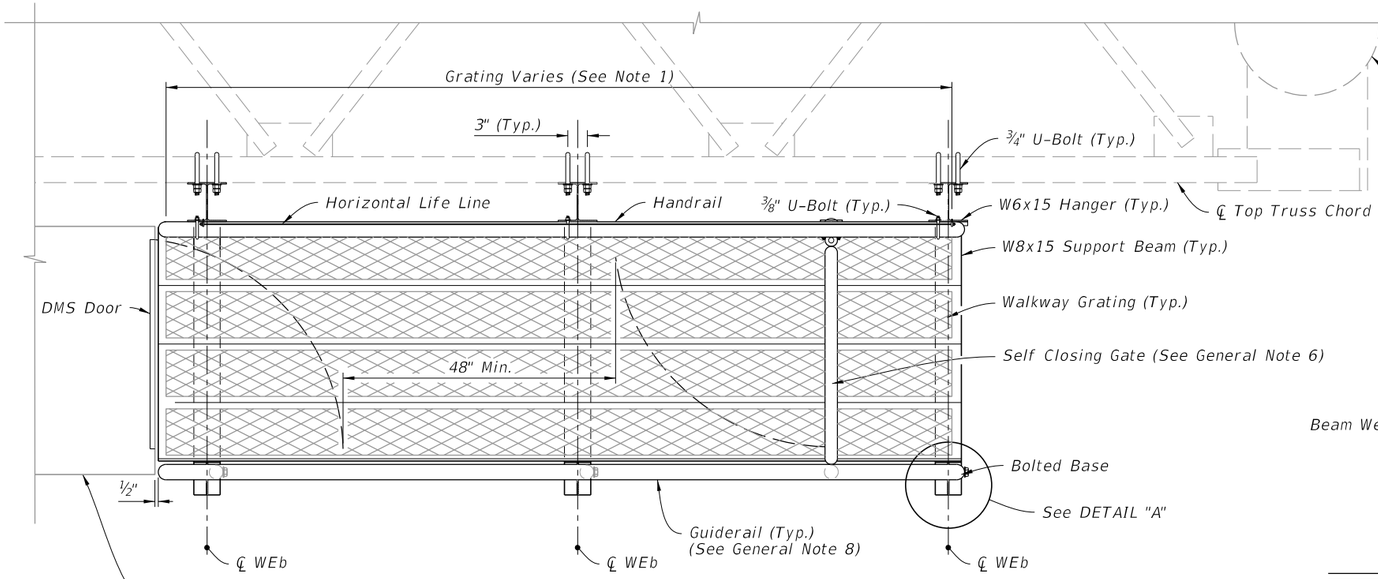
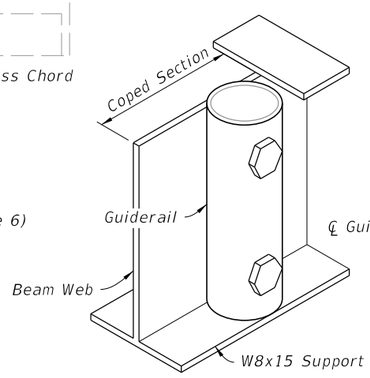
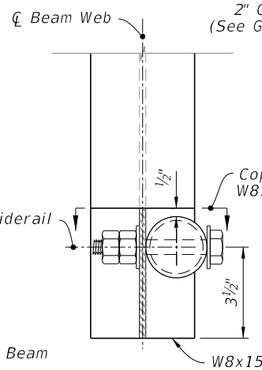


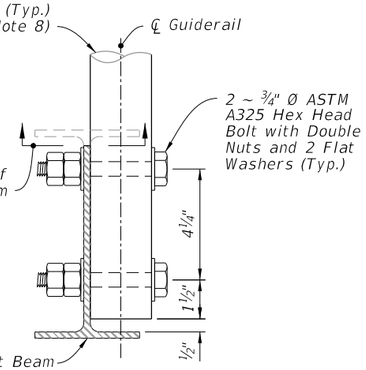
PLAN



ISOMETRIC VIEW

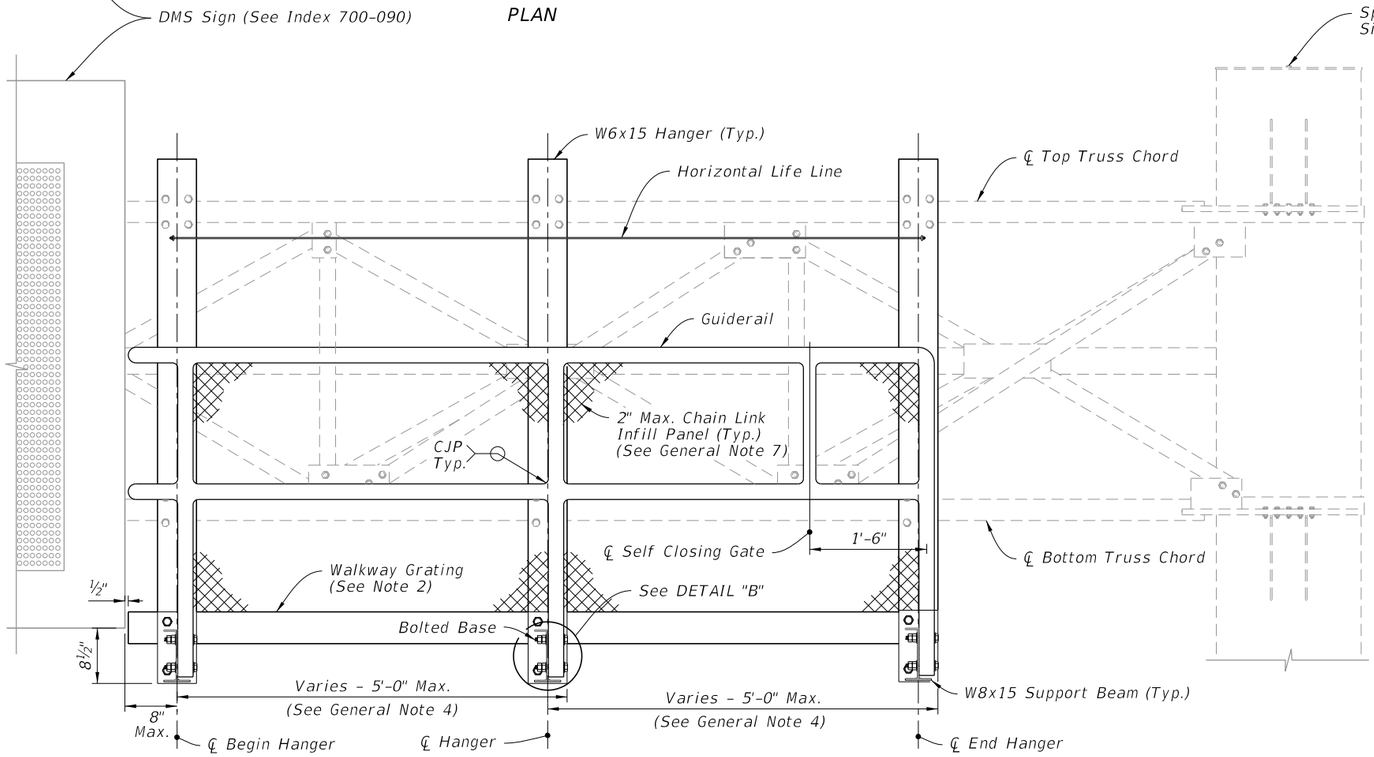


DETAIL "A"

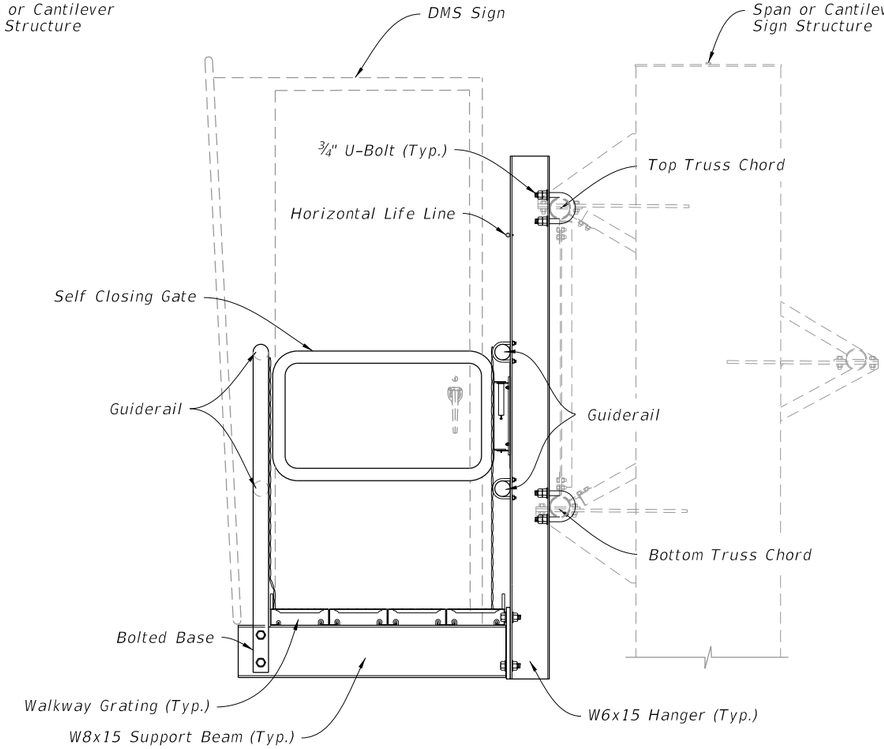


DETAIL "B"

BOLTED BASE DETAILS



FRONT ELEVATION



SIDE ELEVATION

GENERAL ASSEMBLY

NOTES:

1. See manufacturer details for walkway planks and bolting criteria.
2. Fasten securely. See grating manufactures details.

GENERAL ASSEMBLY AND FIXED BASE DETAILS

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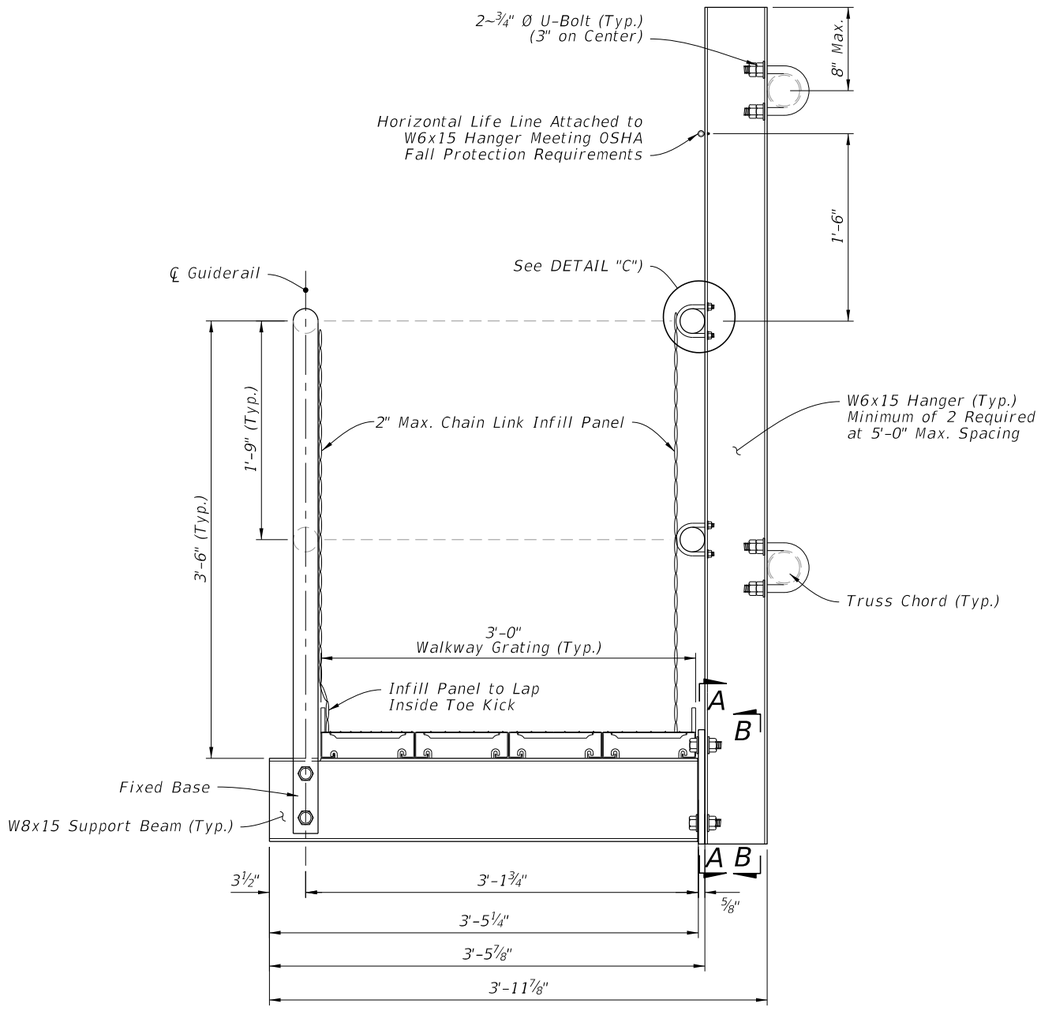
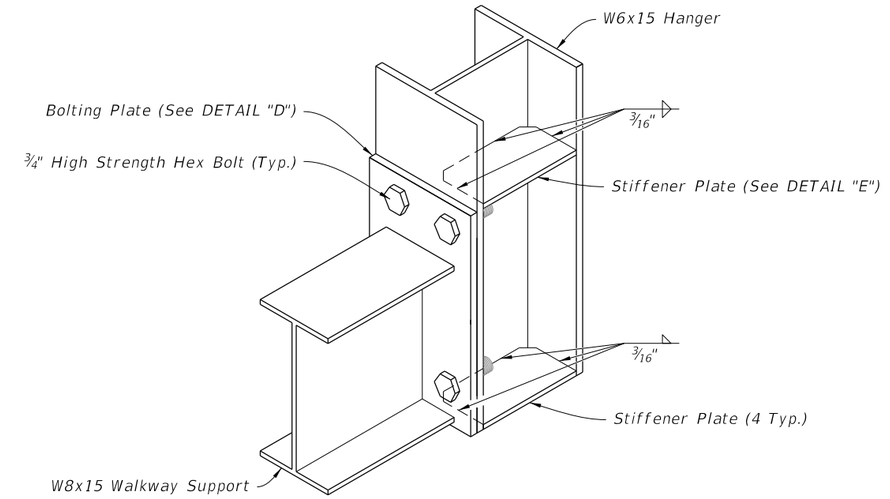
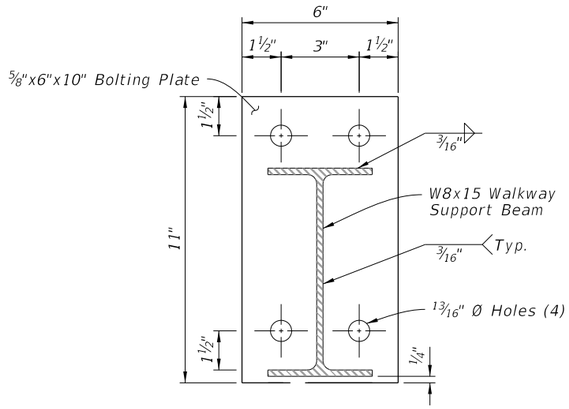


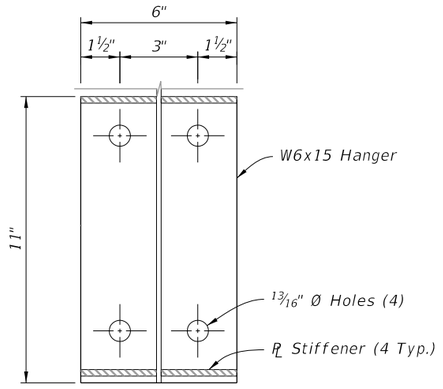
WALKWAY SUPPORT DETAILS



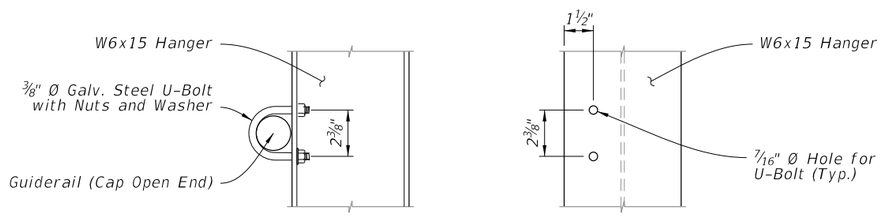
ISOMETRIC VIEW



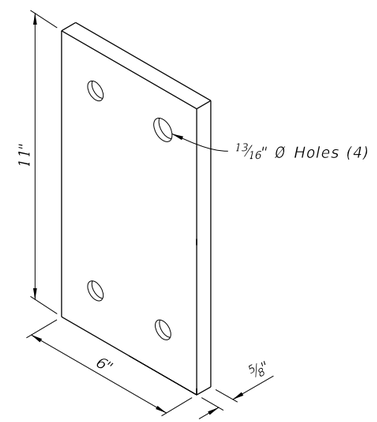
SECTION A-A



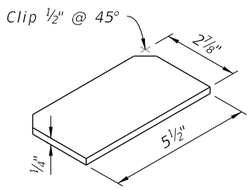
SECTION B-B



DETAIL "C"
(Guiderail Attachment)



DETAIL "D"
(Bolting Plate)



DETAIL "E"
(Stiffener Plate)

WALKWAY SUPPORT DETAILS

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LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
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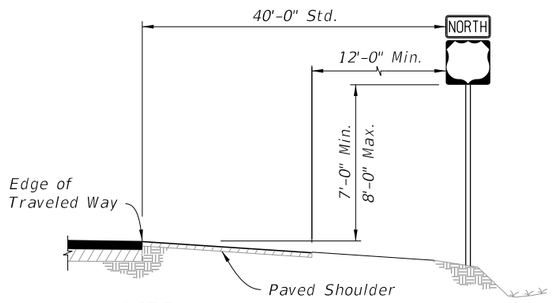
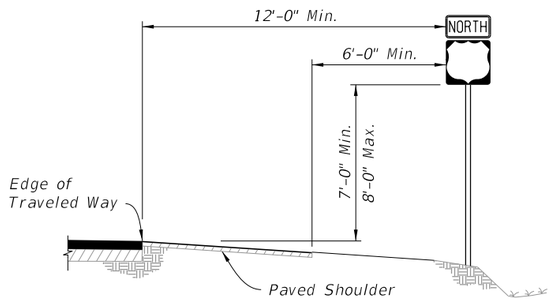


NOTE:
If median width does not allow standard offset from both roadway, center sign in median.

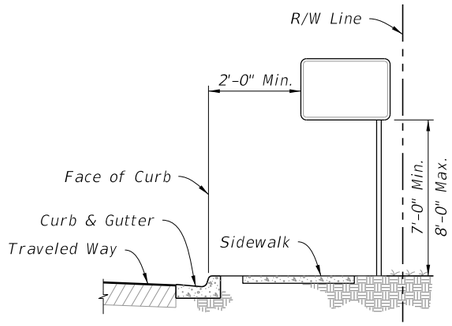
CASE I

Use on Limited Access Roadways



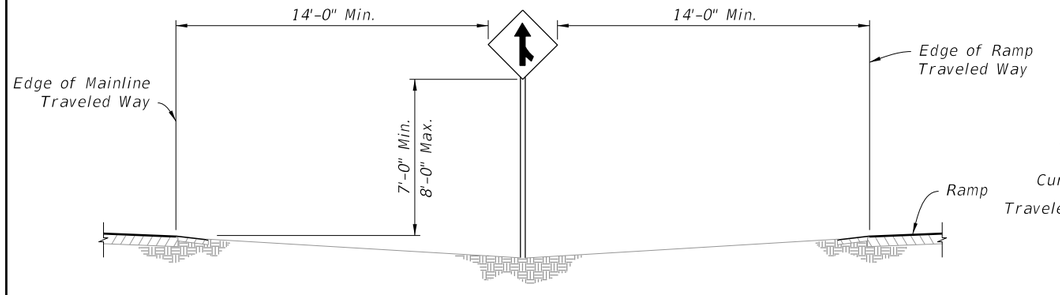
CASE II

Use on Arterial and Collector Roadways, and Limited Access Ramps



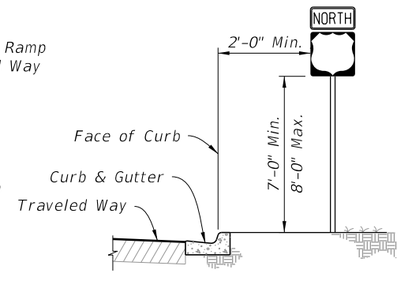
CASE III

Use on Arterial and Collector Roadways



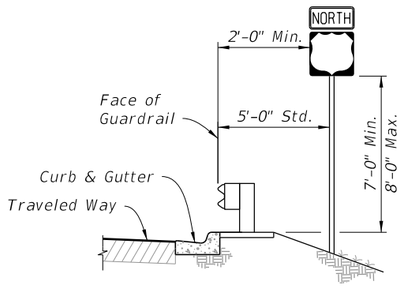
CASE IV

Use on Limited Access Roadways



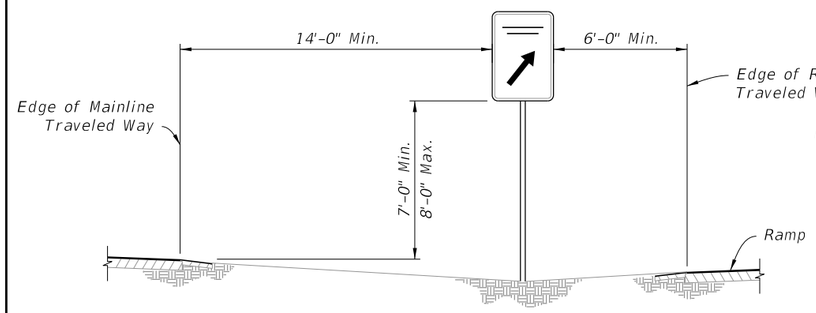
CASE V

Use in Business or Residential Areas Only



CASE VI

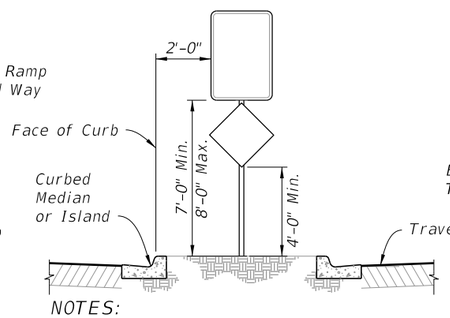
Use on Roadways With Signs Behind Guardrail



CASE VII

REST AREA AND EXIT GORE SIGNS

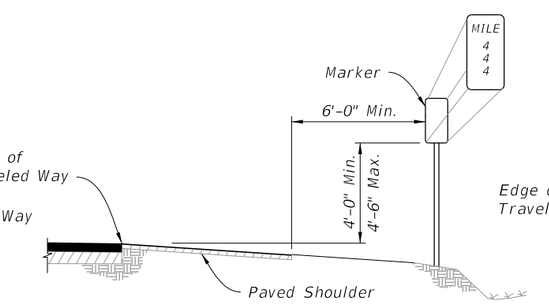
Use on Limited Access Roadways



NOTES:
1. For separators <6'-0", center the sign within the separator, center sign column on island.
2. Offset 6'-0" Std. (2'-0" Min.) from Median or Island Nose.

CASE VIII

Use on Island or Curbed Median

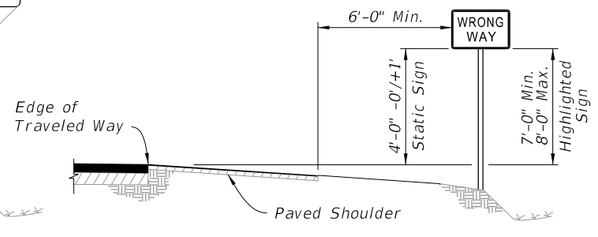


NOTE:
For more information refer to Section 2H of the MUTCD.

CASE IX

MILE POST MARKER

Use on Limited Access Roadways



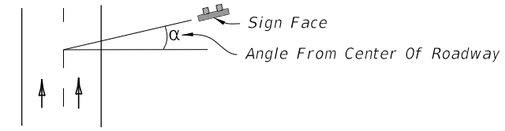
CASE X

WRONG WAY SIGNS

(See Note 8)

GENERAL NOTES:

1. Single-Column Signs Shown, Multi-Column Signs similar. These typical sections serve as a guide for locating the traffic signs required under various roadside conditions. For size and details of sign construction and footing, refer to the appropriate Index and Plans.
2. Verify the length of sign supports in the field prior to fabrication.
3. Install ground signs at an angle of 1 to 4 degrees away from the traffic flow (see illustration). Install shoulder mounted signs rotated counterclockwise and median mounted signs rotated clockwise. Install signs on a curve as noted above from the perpendicular to the motorist line of sight.



4. The setback for Stop and Yield signs may be reduced to 3' minimum from the Edge of Traveled Way if required for visibility in business or residential sections with no curb and speeds of 30 MPH or less.
5. The mounting heights are measured from the bottom of the sign panel to a horizontal line extended from the Edge of Traveled Way or from the ground surface at the back of curb. If the standard heights cannot be met, the minimum heights are as follows:

   Limited Access Roadways – 7'

   Arterial and Collector Roadways:
   5' – Rural
   7' – Urban (including residential with parking and/or pedestrian activity)

   Limited Access Roadways:
   If a secondary sign is mounted below the major sign, mount the major sign so that the bottom of the sign is at least 8' above the edge of the traveled way and the secondary sign at least 5' above the edge of the traveled way.

   Arterial and Collector Roadways:
   Rural, mount the secondary sign at least 5' above the edge of the traveled way.
   Urban, mount the secondary sign at least 7' above the edge of the traveled way.
6. Do not install sign supports in the bottom of ditches.
7. Install sign supports so they do not reduce the accessible Width of Sidewalks or Shared Use Paths to less than 4' min. clear width.
8. CASE X sign placement is for Interstate Exit Ramps only. Use CASE I through Case VIII as appropriate for all other Wrong Way signs.

10/20/2022 8:57:06 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	TYPICAL SECTIONS FOR PLACEMENT OF SINGLE AND MULTI-COLUMN SIGNS	INDEX	SHEET
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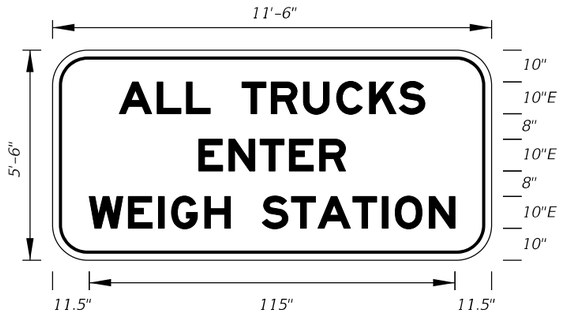
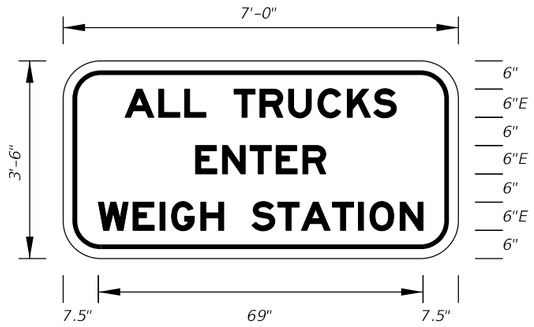
FREEWAY USE



FTP-1-06
11'-6" X 5'-6"
9" Radii 2" Border

10" Series E Legend
White Background
Black Legend and Border

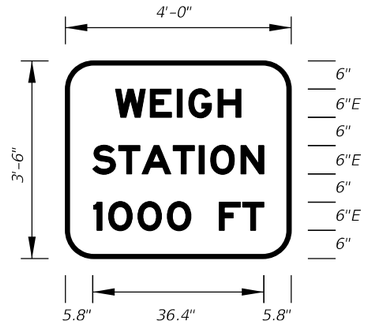
OTHER THAN FREEWAY USE



FTP-2-06
7' X 3'-6"
6" Radii 2" Border

6" Series E Legend
White Background
Black Legend and Border

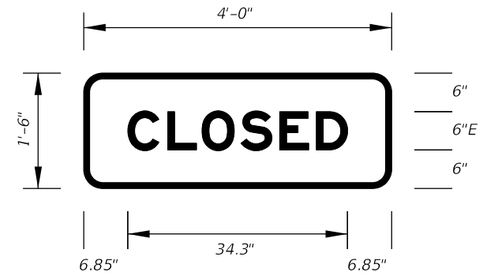
OTHER THAN FREEWAY USE



FTP-3-06
4' X 3'-6"
6" Radii 2" Border

6" Series E Legend
Green Background
White Legend and Border

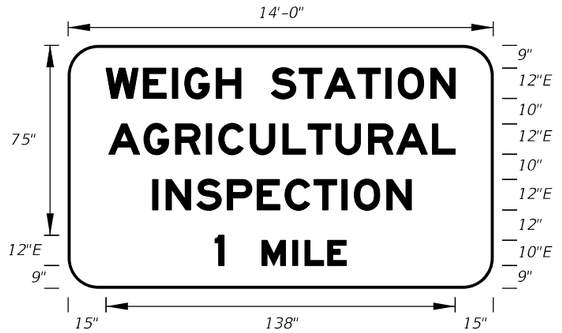
OTHER THAN FREEWAY USE



FTP-4-06
4' X 1'-6"
3" Radii 2" Border

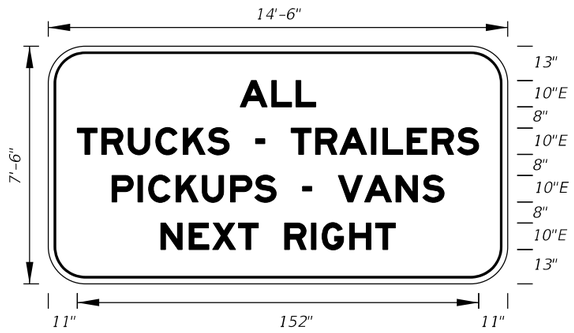
6" Series E Legend
Green Background
White Legend and Border

Note:
FTP-4-06 to be
used with FTP-3-06



FTP-5-06
14' X 8'
12" Radii 2" Border

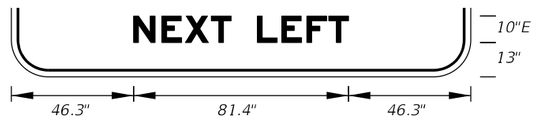
12" and 10" Series E Legend
Green Background
White Legend and Border



FTP-6A-06
14'-6" X 7'-6"
12" Radii 2" Border

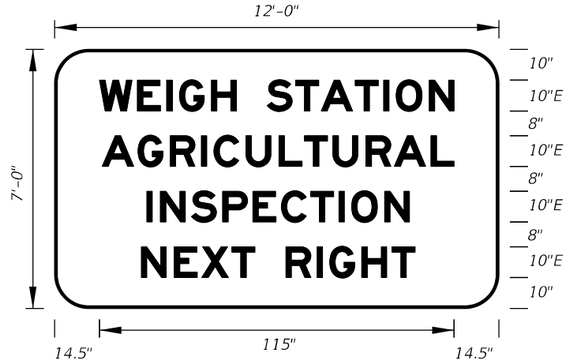
10" Series E Legend
White Background
Black Legend and Border

On Interstate Station
Delete Pickups-Vans,
and reduce Sign height
accordingly.



FTP-6B-06
14'-6" X 7'-6"
12" Radii 2" Border

10" Series E Legend
White Background
Black Legend and Border

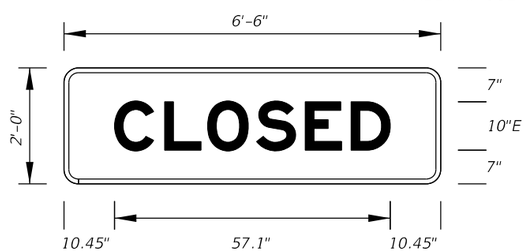


FTP-7A-06
12' X 7'
11" Radii 2" Border

10" Series E Legend
Green Background
White Legend and Border

FTP-7B-06
12' X 7'
11" Radii 2" Border
10" Series E Legend
Green Background
White Legend and Border

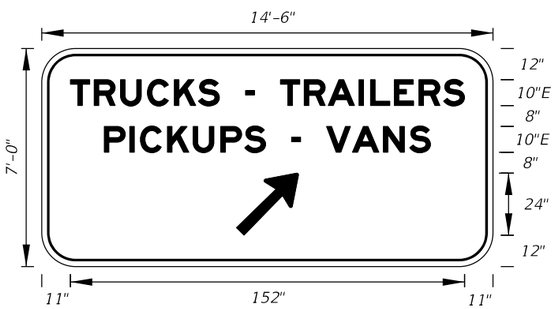
FREEWAY USE



FTP-8-06
6'-6"X 2'
3" Radii 2" Border
10" Series E Legend
Green Background
White Legend and Border

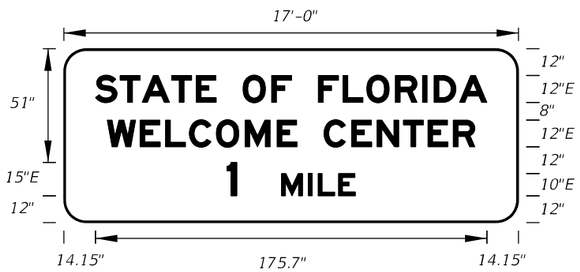
Note:
FTP-8-06 to be
used with FTP-7A-06
& FTP-7B-06.

FTP-9B-06-LEFT ARROW



FTP-9A-06
14'-6" X 7'
11" Radii 2" Border

10" Series E Legend
Green Background
White Legend and Border



FTP-10-06
17' X 6'-6"
10" Radii 2" Border

12", 10" and 15" Series E Legend
Blue Background
White Legend and Border

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LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	SPECIAL SIGN DETAILS	INDEX	SHEET
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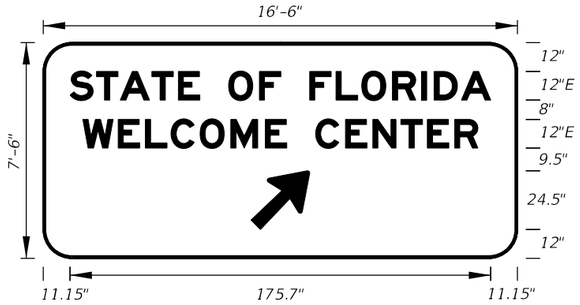
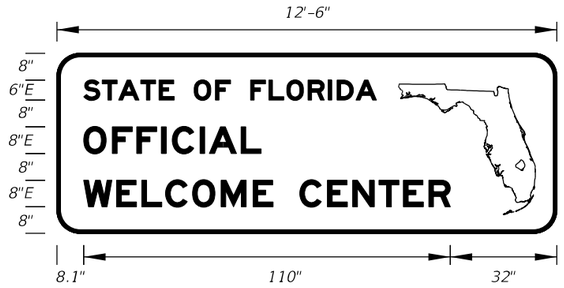
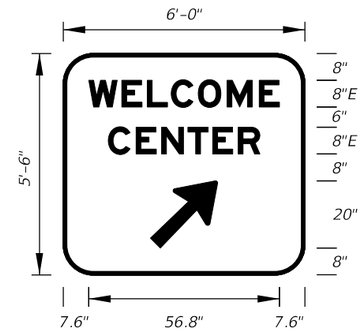


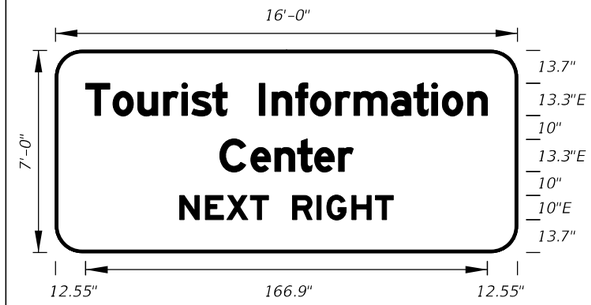
FTP-11-06
16'-6" X 7'-6"
12" Radii 2" Border
12" Series E Legend
Blue Background
White Legend and Border



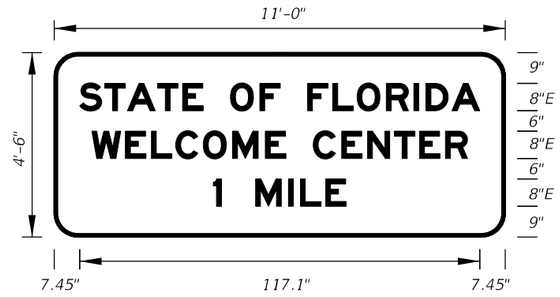
FTP-12-06
12'-6" X 4'-6"
7" Radii 2" Border
6" and 8" Series E Legend
Blue Background
White Legend and Border



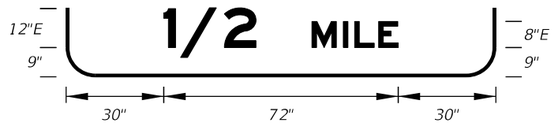
FTP-13-06
6' 0" X 5'-6"
9" Radii 2" Border
8" Series E Legend
Blue Background
White Legend and Border



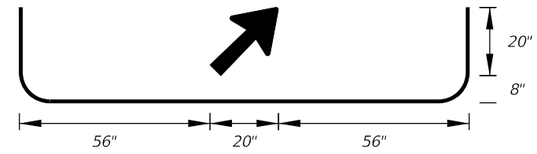
FTP-14-06
16'-0" X 7'-0"
11" Radii 2" Border
13.3 and 10" Series E Legend
Blue Background
White Legend and Border



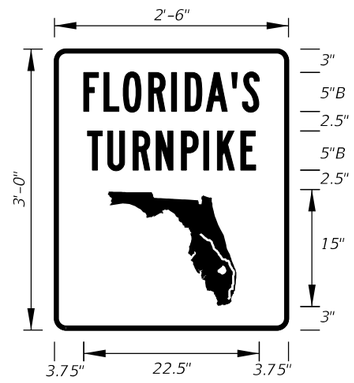
FTP-15A-06
11'-0" X 4'-6"
7" Radii 2" Border
8" Series E Legend
Blue Background
White Legend and Border



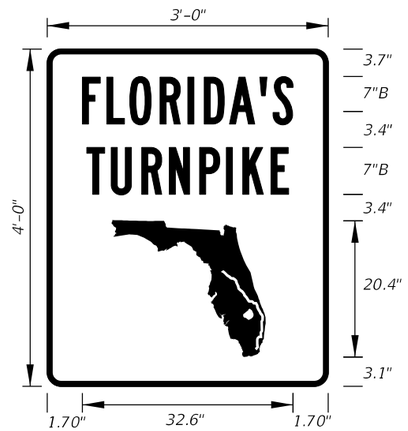
FTP-15B-06
11'-0" X 5'-0"
8" Radii 2" Border
8" and 12" Series E Legend
Blue Background
White Legend and Border



FTP-15C-06
11'-0" X 5'-6"
9" Radii 2" Border
8" Series E Legend
Blue Background
White Legend and Border



FTP-16-10
2'-6" X 3'-0"
1.5" Radii 3/4" Border
5" Series B Legend
Green Background
White Legend, Border,
and Florida Symbol



FTP-17-10
3'-0" X 4'-0"
1.5" Radii 3/4" Border
7" Series B Legend
Green Background
White Legend, Border,
and Florida Symbol

FTP-18-10
4'-0" X 5'-0"
3" Radii 1 1/4" Border
8" Series B Legend
Green Background
White Legend, Border,
and Florida Symbol

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LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	SPECIAL SIGN DETAILS	INDEX	SHEET
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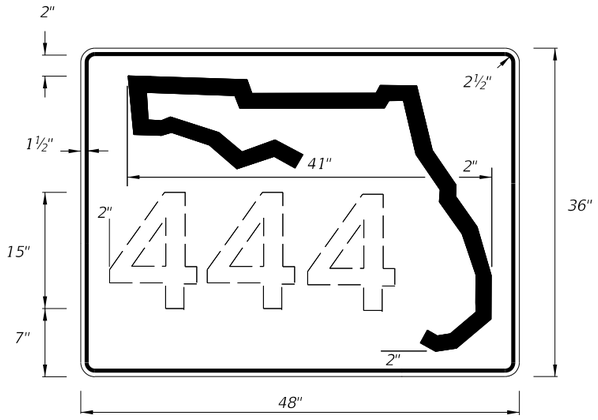
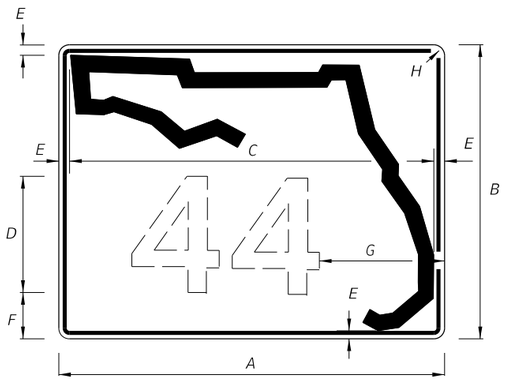


DIGITS	NUMERAL SIZE	SERIES LEGEND	PANEL SIZE
1–3	15"	C	48" x 36"
4	12"	C	48" x 36"

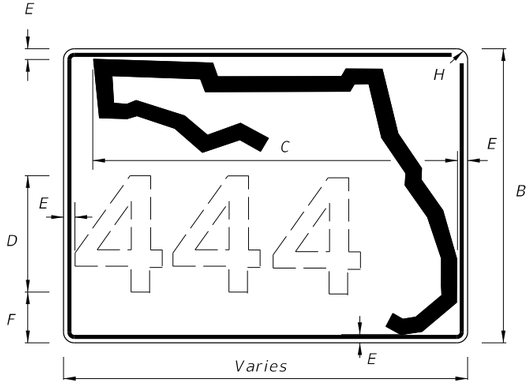
NOTES:

1. Stroke width of State Outline shall be 1".
2. 2½" Radii

INDEPENDENT USE FOR FREEWAY



1 OR 2 DIGITS



3 OR MORE DIGITS

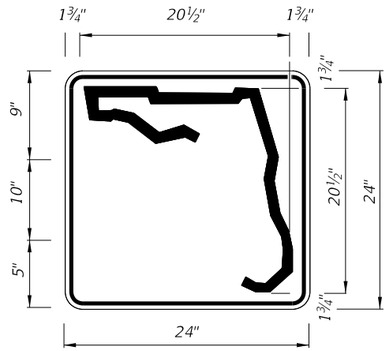
NOTES:

1. Florida marker shall have Black Legend with White Background.
2. Stroke width of State outline shall be 1¾" for Guide Sign.
3. Series D Legend.
4. ⅝" Border

A	B	C	D	E	F	G	H
30"	24"	26"	12"	1¼"	2¾"	8¼"	1¼"
36"	30"	32"	15"	1¼"	3¼"	8¾"	1¼"
42"	36"	38"	15"	1¼"	6¼"	11"	1¼"

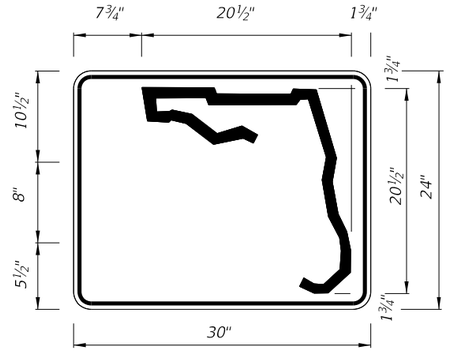
GUIDE SIGN USE

FTP-17-06 - FLORIDA ROUTE MARKER



1 or 2 DIGITS

DIGITS	NUMERAL SIZE	SERIES LEGEND	PANEL SIZE
1–2	10"	D	24" x 24"



3 or 4 DIGITS

DIGITS	NUMERAL SIZE	SERIES LEGEND	PANEL SIZE
3	8"	D	30" x 24"
4	8"	C	30" x 24"

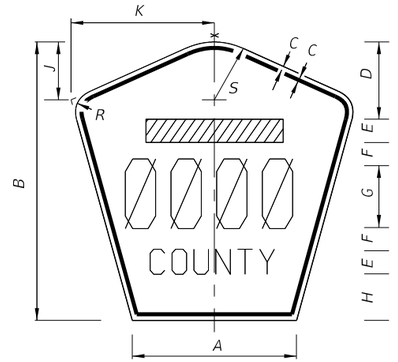
NOTES:

1. Stroke width of State Outline shall be 1".
2. The 24" X 24" panel shall only be used for a 3 digit route when the panel is to be used on a sign cluster with other 24" X 24" panels.
3. 1½" Radii

INDEPENDENT USE OTHER THAN FREEWAY

NOTES:

1. Series D Legend.
2. Color: Yellow Legend and Border on Blue Background.
3. When used on a guide sign, marker must be overlaid on a rectangular Yellow Background as shown in chart.
4. When two or more County Route Markers are mounted together, use the dimensions of the largest marker for all other markers.



SIGN	DIMENSIONS												Rectangular Yellow Background Dimensions (See Note 3)
	A	B	C	D	E	F	G	H	J	K	R	S	
4 DIGIT POST MOUNTED	25⅛"	42"	¾"	10"	4"	4"	8"	8"	8⅜"	22"	5"	8¾"	42"x 42"
2 DIGIT OVERHEAD	21½"	36"	½"	7½"	3"	3"	12"	4½"	7⅛"	18⅞"	4¼"	7½"	42"x 42"
3 DIGIT OVERHEAD	25⅛"	42"	¾"	8"	4"	4"	12"	6"	8⅜"	22"	5"	8¾"	48"x 48"
4 DIGIT OVERHEAD	29⅞"	48"	¾"	8"	5"	5"	12"	8"	9¾"	25⅝"	5¾"	10¼"	52"x 52"

FTP-18-06 - COUNTY ROUTE MARKER (M1-6)

10/20/2022 8:57:09 AM

LAST REVISION	REVISION	DESCRIPTION:				
11/01/20			FY 2023-24 STANDARD PLANS	SPECIAL SIGN DETAILS	INDEX 700-102	SHEET 3 of 12

FTP-19-06

1' X 1'-6"
4" Radii 3/8" Border
Top 4" Series D
Bottom 2" Series C
White Background
Green Legend and Border

All Letters

1" Series C
1" Spacing
Between Lines
of Text

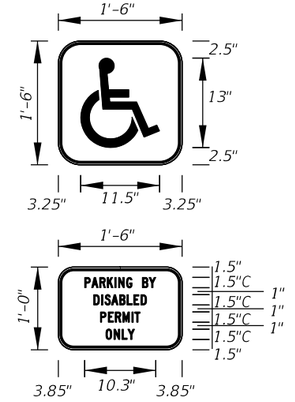
FTP-20-06

1' X 1'-6"
2" Radii 3/8" Border
1" Series C Legend
Color
Background
Legend and Border

Top	Bottom
Blue	White
White	Black

All Letters

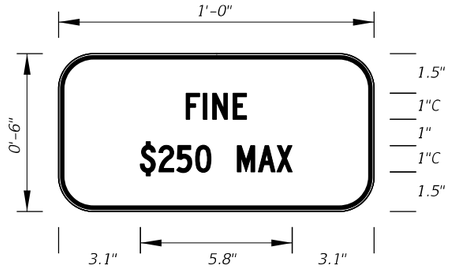
1.5" Series C
1" Spacing
Between Lines
of Text



FTP-21-06

1'-6" X 2'-6"
2" Radii 3/8" Border
1.5" Series C Legend
Color
Background
Legend and Border

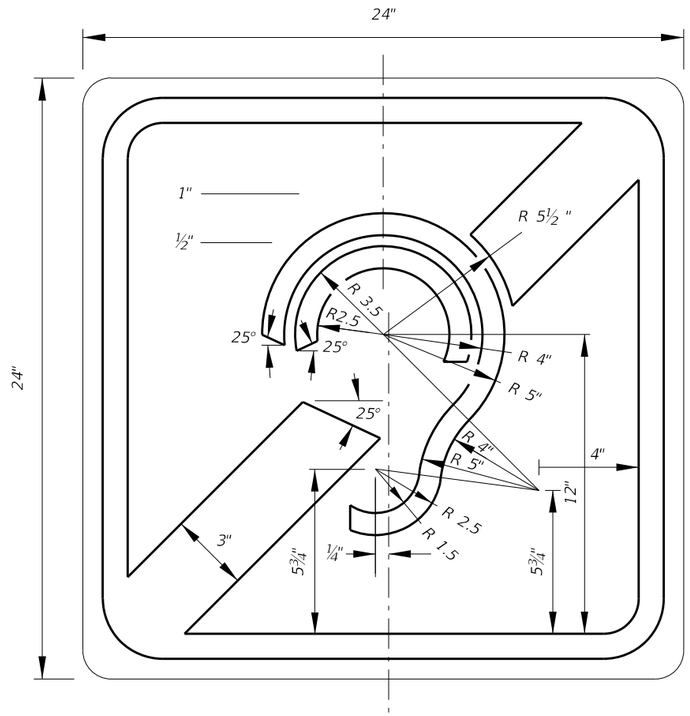
Top	Bottom
Blue	White
White	Black



FTP-22-06

1' X 6"
1" Radii 3/8" Border
1" Series C Legend
White Background
Black Legend and Border

Supplemental Panel
for the FTP-20-06
and FTP-21-06 signs



FTP-23-06

2' X 2'
1.5" Radii 5/8" Border
Blue Background
White Legend and Border

INTERNATIONAL SYMBOL OF
ACCESS FOR HEARING LOSS

FTP-24-06

2' X 2'
1.5" Radii 5/8" Border
Blue Background
White Legend and Border

INTERNATIONAL TDD SYMBOL

10/20/2022 8:57:10 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	SPECIAL SIGN DETAILS	INDEX	SHEET
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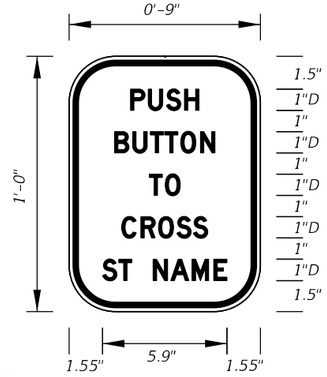
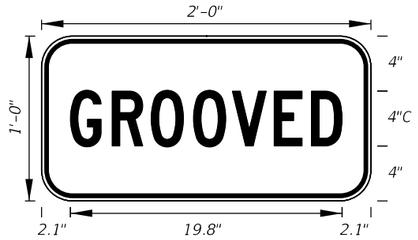
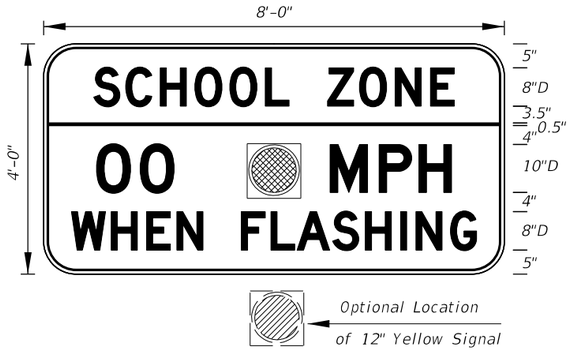


FTP-25-06
9" X 1'-0"
2" Radii 3/8" Border
1" Series D Legend
White Background
Black Legend and Border

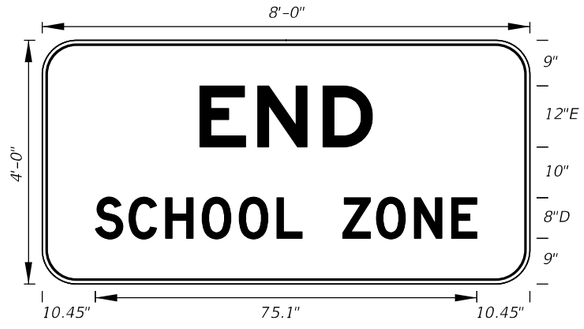


FTP-29-06
2'-0" X 1'-0"
2" Radii 5/8" Border
4" Series C Legend
Yellow Background
Black Legend and Border



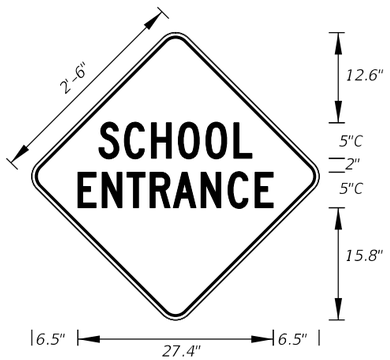
FTP-31-06
8' X 4'
6" Radii 3/4" Border
Series D Legend

Fluorescent Yellow-Green Background Top
White Background Bottom
Black Legend and Border



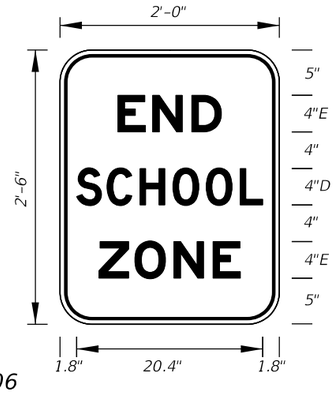
FTP-32-06
8' X 4'
6" Radii 3/4" Border

12" Series E and 8" Series D Legend
White Background
Black Legend and Border

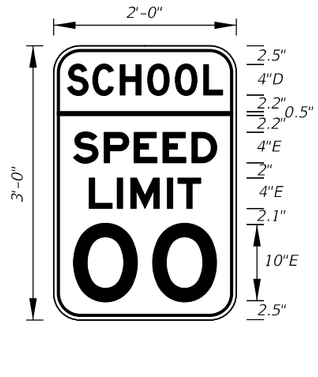


FTP-33-06
2'-6" X 2'-6"
2" Radii 3/4" Border

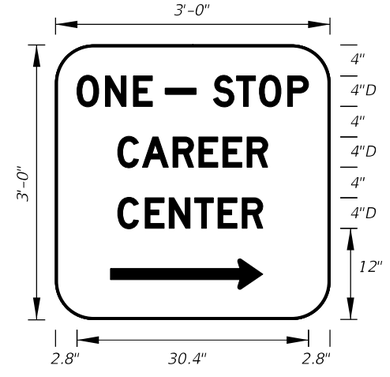
5" Series C Legend
Fluorescent Yellow-Green Background
Black Legend and Border



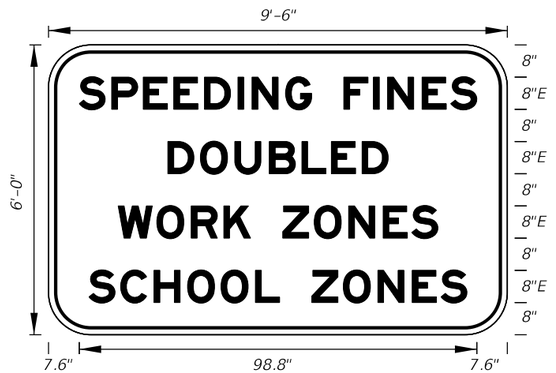
FTP-34-06
2' X 2'-6"
3" Radii 5/8" Border
4"Series D and E Legend
White Background
Black Legend and Border



FTP-35-06
2' X 3'
3" Radii 5/8" Border
Top 4" Series D Legend
Bottom 4" and 10" Series E Legend
Fluorescent Yellow-Green Background Top
White Background Bottom
Black Legend and Border

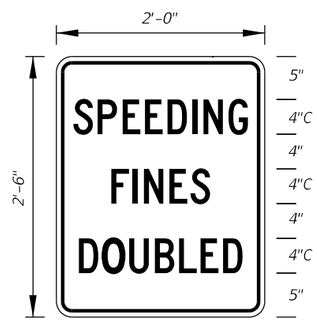


FTP-36-06
3' X 3'
5" Radii
4" Series D Legend
Green Background
White Legend and Border

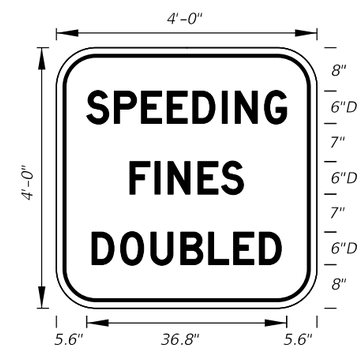


FTP-37-06
9'-6"X 6'
9" Radii 2" Border
8" Series E Legend
White Background
Black Legend and Border

State Line Sign



FTP-38-22
2' X 2'-6"
1.5" Radii 1/2" Border
4" Series C Legend 80% Spacing
White Background
Black Legend and Border



FTP-39-06
4' X 4'
6" Radii 3/4" Border
6" Series D Legend
White Background
Black Legend and Border

Freeway Sign

FTP-40-21
3'-6" X 4'
6" Radii 3/4" Border

3" and 6" Series C Legend
White Background
Black Legend and Border

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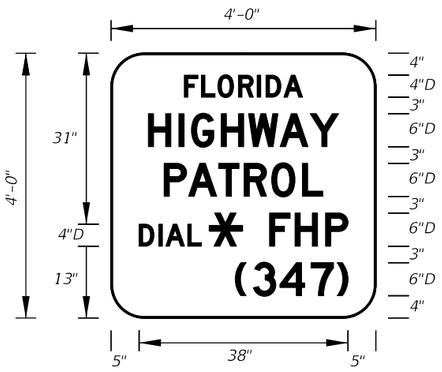
FTP-41-21
2'-6"X 3'
4" Radii ¾" Border

2" and 4" Series C Legend
White Background
Black Legend and Border

FTP-42-06
4'X 2'-6"
3" Radii
Top 4" Series C Legend

Bottom 2" Series EM Legend
White Background
Blue Legend and Border



FTP-43-06
4' X 4'
6" Radii 1" Border
Top 4" Series D Legend

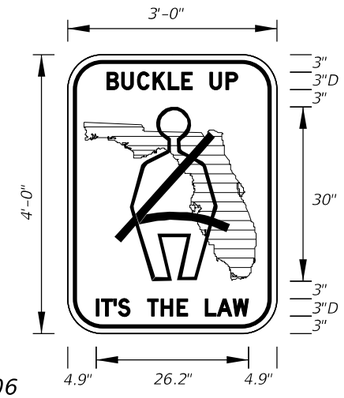
Bottom 6" Series D Legend
Blue Background
White Legend and Border

FTP-44-06
9' X 6'
9" Radii ¾" Border

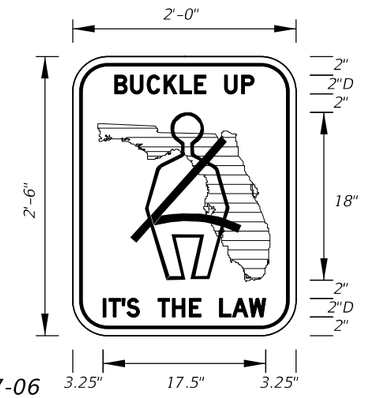
8" Series D Legend
White Background
Black Legend and Border

FTP-45-06
4' X 3'
5" Radii ¾" Border

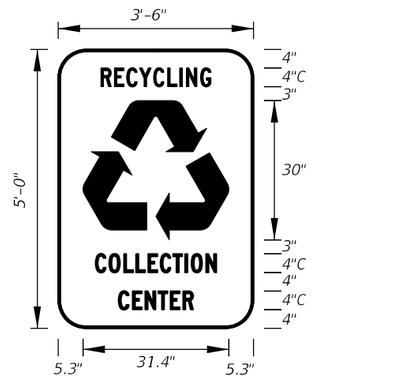
4" Series C Legend
White Background
Black Legend and Border



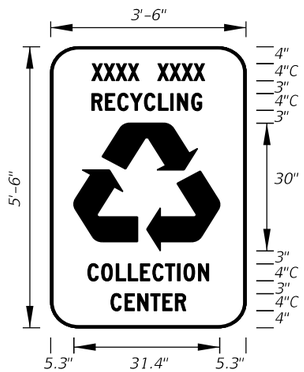
FTP-46-06
3' X 4'
5" Radii ¾" Border
3" Series D Legend
White Background Green Florida Symbol
Black Legend, Border and Man Belt Symbol



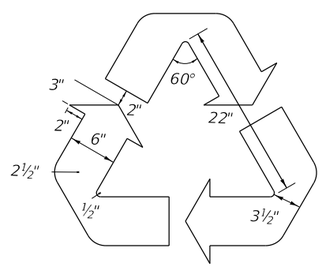
FTP-47-06
2' X 2'-6"
3" Radii ⅝" Border
2" Series D Legend
White Background Green Florida Symbol
Black Legend, Border and Man Belt Symbol



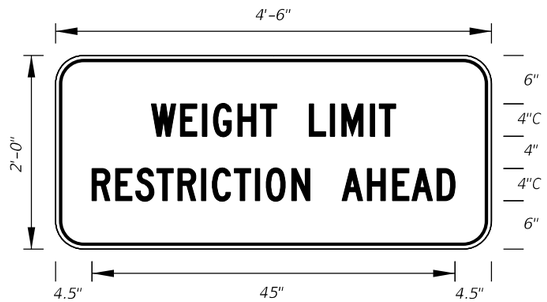
FTP-48-06
3'-6" X 5'
6" Radii
4" Series C Legend
Green Background
White Legend, Border and Symbol



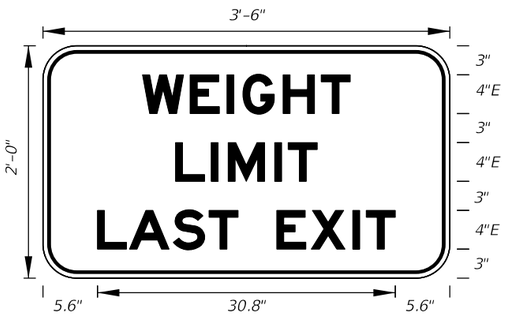
FTP-49-06
3'-6" X 5'-6"
6" Radii
4" Series C Legend
Green Background Municipality Name Optional
White Legend, Border and Symbol



Detail for **FTP-48-06** and **FTP-49-06**



FTP-50-06
4'-6" X 2'
3" Radii ¾" Border
4" Series C Legend
Yellow Background
Black Legend and Border



FTP-51-06
3' X 2'
3" Radii ¾" Border

4" Series E Legend
White Background
Black Legend and Border

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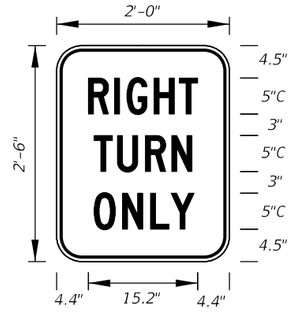
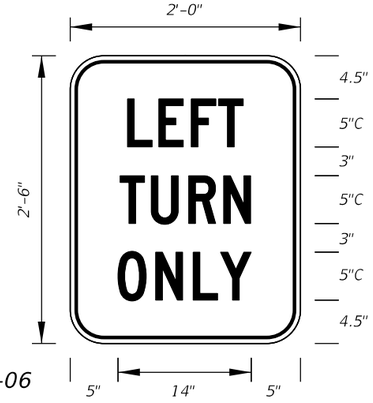
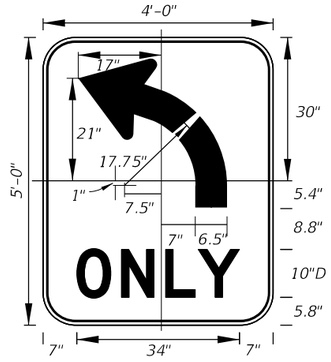


FTP-52-06
2' X 2'-6"
3" Radii 5/8" Border

5" Series C Legend
White Background
Black Legend and Border

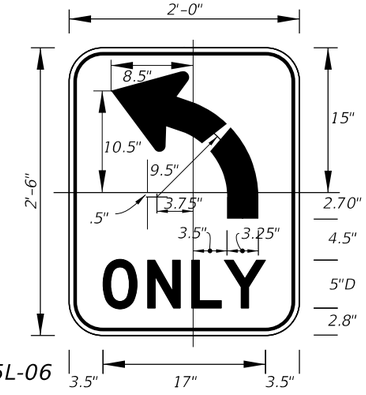


FTP-53-06
2' X 2'-6"
3" Radii 5/8" Border
5" Series C Legend
White Background
Black Legend and Border



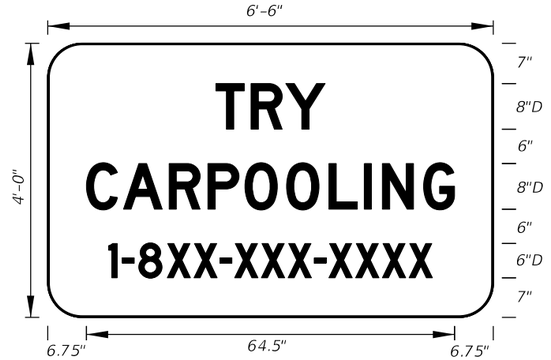
FTP-54L-06
4' X 5'
6" Radii 3/4" Border
10" Series D Legend
White Background
Black Legend and Border

FTP-54R-06 for
(Right Turn Arrow)



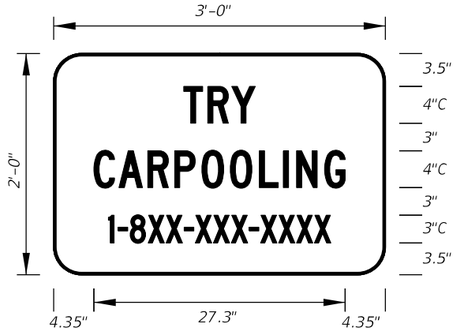
FTP-55L-06
2' X 2'-6"
3" Radii 3/8" Border
5" Series D Legend
White Background
Black Legend and Border

FTP-55R-06 for
(Right Turn Arrow)



FTP-56-06
6'-6"X 4'
6" Radii 3/4" Border
8" and 6" Series D Legend
Blue Background
White Legend and Border

Design Project Manager
or Transit Administrator
will supply correct 1-8XX
number.

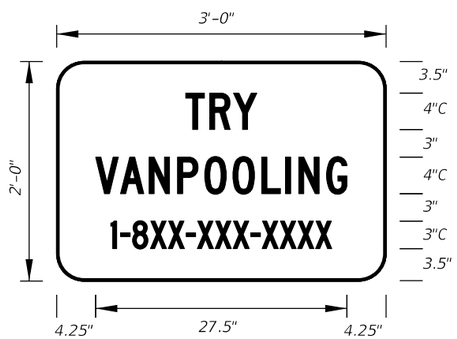


FTP-56A-06
3' X 2'
3" Radii
4" and 3" Series C Legend
Blue Background
White Legend and Border

Design Project Manager
or Transit Administrator
will supply correct 1-8XX
number.

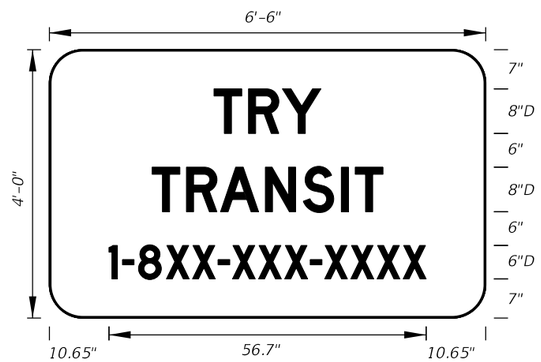
FTP-57-06
6'-6" X 4'
6" Radii
8"and 6" Series D Legend
Blue Background
White Legend and Border

Design Project Manager
or Transit Administrator
will supply correct 1-8XX
number.



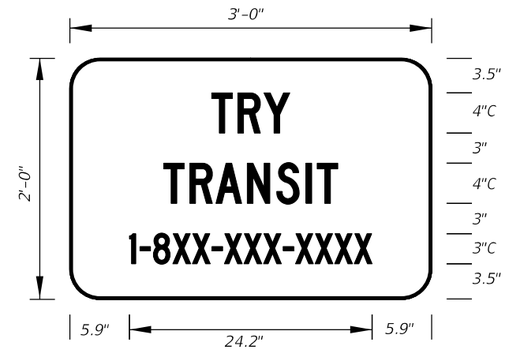
FTP-58-06
3' X 2'
3" Radii
4" and 3" Series C Legend
Blue Background
White Legend and Border

Design Project Manager
or Transit Administrator
will supply correct 1-8XX
number.



FTP-59-06
6'-6" X 4'
6" Radii
8" and 6" Series D Legend
Blue Background
White Legend and Border

Design Project Manager
or Transit Administrator
will supply correct 1-8XX
number.



FTP-60-06
3' X 2'
3" Radii
4"and 3" Series C Legend
Blue Background
White Legend and Border

Design Project Manager
or Transit Administrator
will supply correct 1-8XX
number.

FTP-61-06
3' X 2'
3" Radii 3/4" Border
4" and 3" Series C Legend
Yellow Background
Black Legend and Border

FTP-62-06
3' X 3'
2" Radii 3/4" Border 4"and 5" Series C Legend
Yellow Background Black Legend and Border

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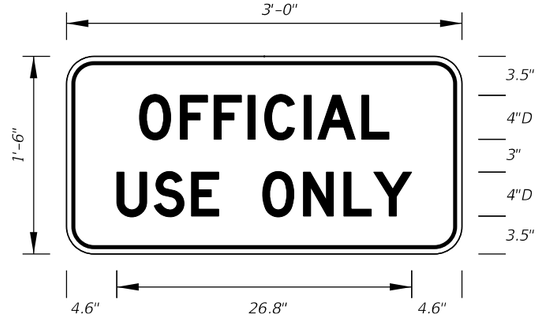


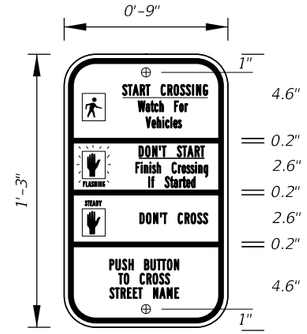
FTP-65-06
3' X 1'-6"
2" Radii ¾" Border
4" Series D Legend
White Background
Black Legend and Border

FTP-66-21
4'X5'
3" Radii 1" Border
6" Series D Legend
Blue Background
White Legend and Border

FTP-67-21
5.5' X 6'
3" Radii 1" Border
8" Series D Legend
Blue Background
White Legend and Border

DETAIL for **FTP-66** AND **FTP-67**

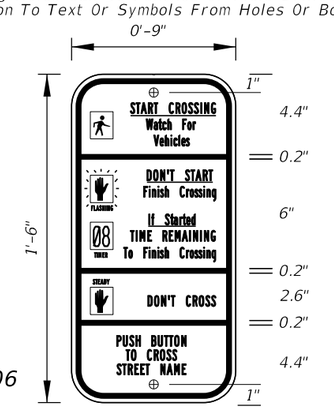
Sign Mounting Holes Can Be Punched Or Field Drilled With No Obstruction To Text Or Symbols From Holes Or Bolts.



FTP-68A-06
9" X 1'-3"
1.5" Radii ¾" Border
Series B Legend
White Background
Black Legend and Border

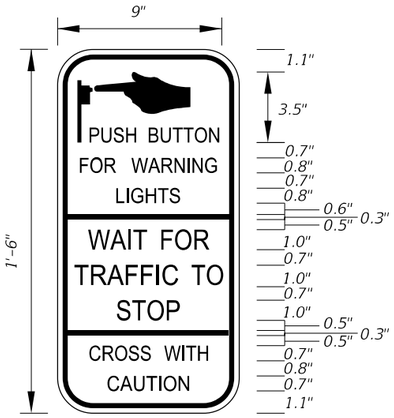
See Standard Highway Signs Manual, Sign R10-3b For Letter Size Spacing And Symbol Sizes.

Sign Mounting Holes Can Be Punched Or Field Drilled With No Obstruction To Text Or Symbols From Holes Or Bolts.



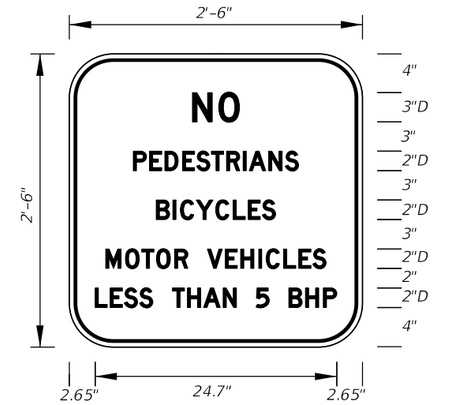
FTP-68B-06
9" X 1'-6"
1.5" Radii ¾" Border
Series B Legend
White Background
Black Legend and Border

See Standard Highway Signs Manual, Sign R10-3b For Letter Size Spacing And Symbol Sizes.



FTP-68C-21
9" X 1'-6"
1.5" Radii ¼" Border

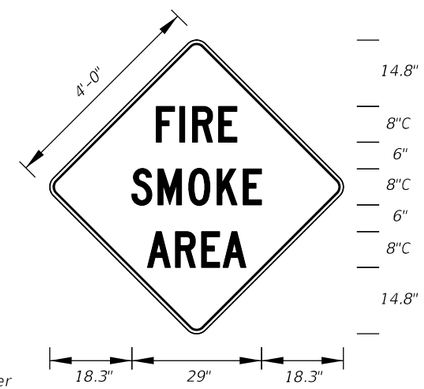
Series D Legend
White Background
Black Legend and Border



FTP-69-06
2'-6" X 2'-6"
4" Radii ¾" Border

2" and 3" Series D Legend
White Background
Black Legend and Border

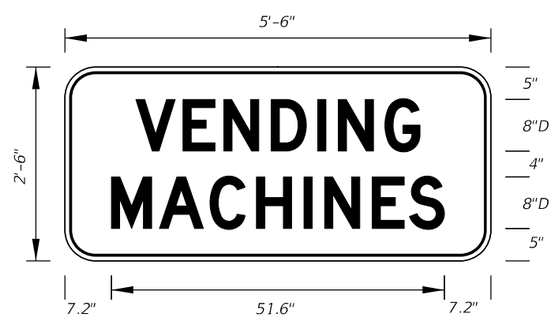
FTP-70-06
3'-6" X 2'-6"
2.25" Radii ¾" Border
5" Series C and 7" Series C Legend
Blue Background
White Legend and Border



FTP-71-06
4' X 4'
2" Radii ¾" Border
8" Series C Legend
Yellow Background
Black Legend and Border

FTP-72-06
3' X 3'
2" Radii ¾" Border

6" Series C Legend
Yellow Background
Black Legend and Border



FTP-73-06
5'-6" X 2'-6"
4" Radii ¾" Border

8" Series D Legend
Blue Background
White Legend and Border

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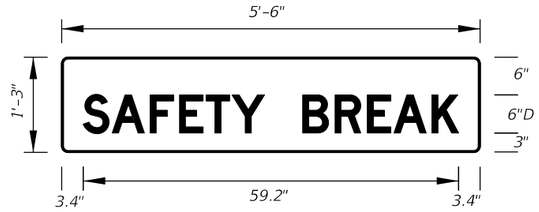
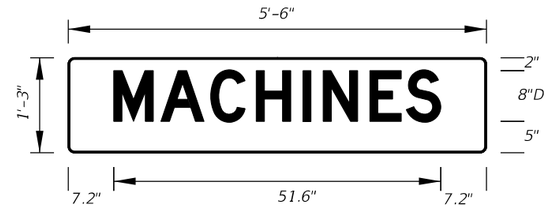
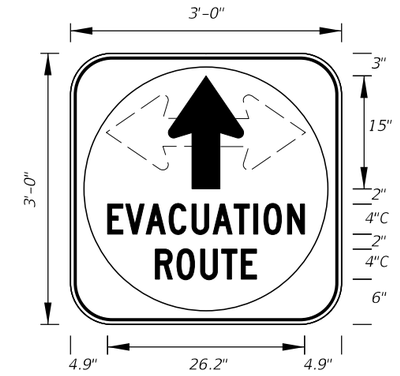
FTP-74-06
5'-6" X 2'-6"
4" Radii ¾" Border
6" Series D Legend
Blue Background
White Legend and Border



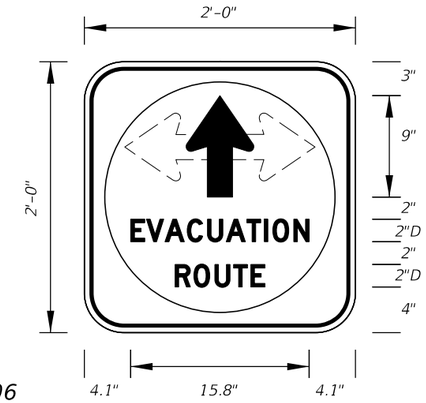
FTP-75-06
5'-6" X 1'-3"
1" Radii
6" Series D Legend
Blue Background
White Legend



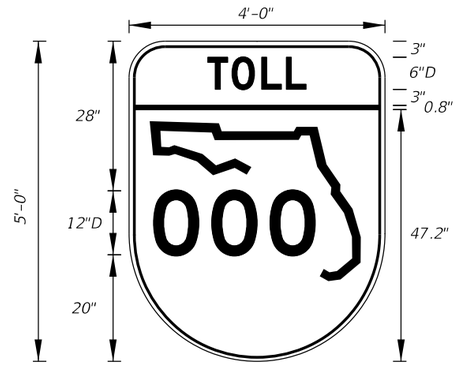
FTP-76-06
5'-6" X 1'-3"
1" Radii
8" Series D Legend
Blue Background
White Legend



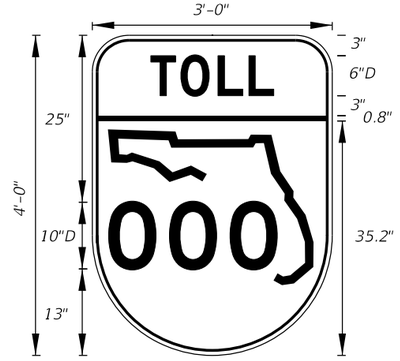
FTP-77-06
3' X 3'
5" Radii ¾" Border
4" Series C Legend
White Background with Blue Circle Background
White Legend and Black Border



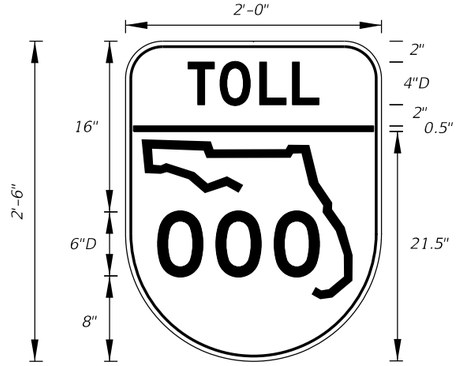
FTP-78-06
2' X 2'
3" Radii ¾" Border
2" Series D Legend
White Background with Blue Circle Background
White Legend and Black Border



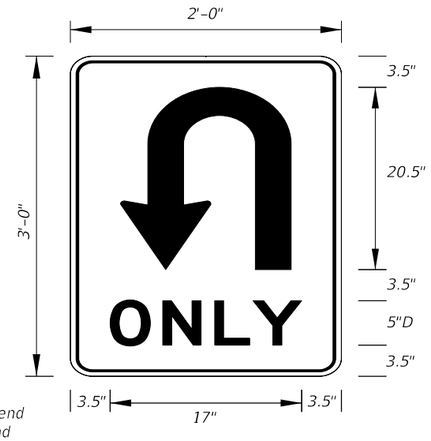
FTP-79-06
4' X 5'
6" Radii ¾" Border
6" and 12" Series D Legend
Top Yellow Background with Black Legend and Black Border
Bottom White Background with Black Legend and Border



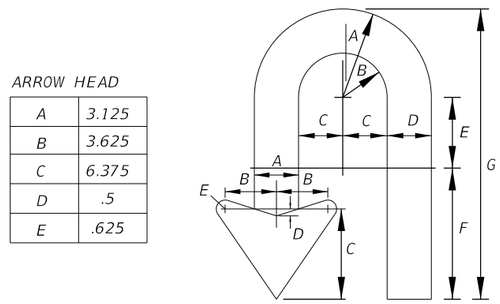
FTP-80-06
3' X 4'
5" Radii ¾" Border
6"and 10" Series D Legend
Top Yellow Background with Black Legend and Black Border
Bottom White Background with Black Legend and Border



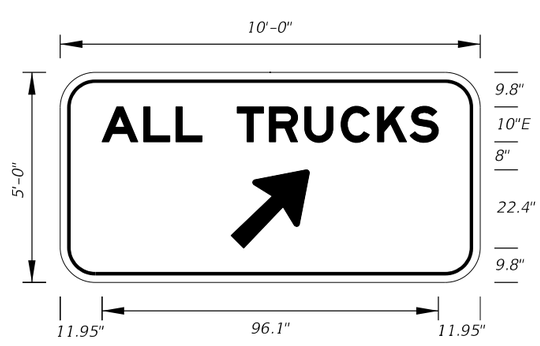
FTP-81-06
2' X 2'-6"
3" Radii ¾" Border
4" and 6" Series D Legend
Top Yellow Background with Black Legend and Black Border
Bottom White Background with Black Legend and Border



FTP-82-08
2' X 3'
1.5" Radii
5" Series D Legend
White Background
Black Legend and Border

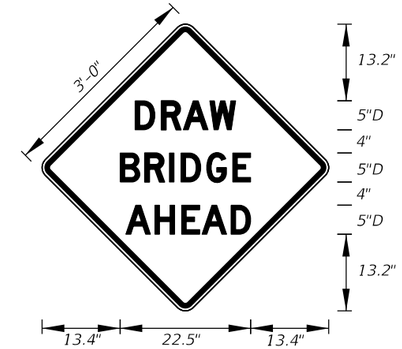


FTP-82-08
Details



FTP-83-08
10'-0" X 5'-0"
8" Radii

10" Series E Legend
Green Background
White Legend



FTP-84-09
3' X 3'
1.5" Radii

5" Series D Legend
Yellow Background
Black Legend and Border

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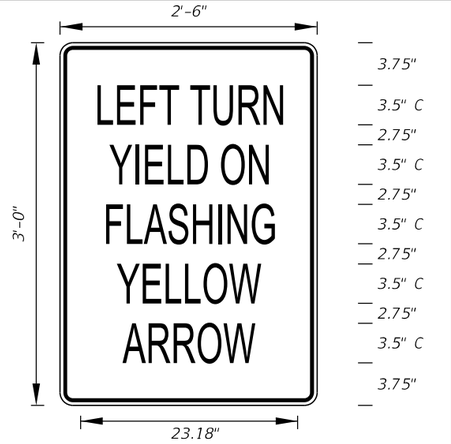
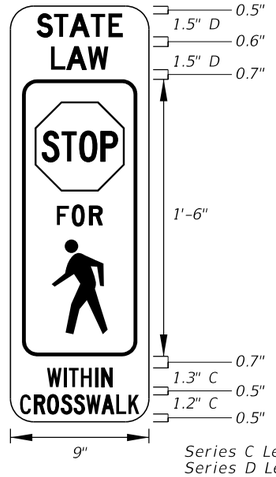


FTP-85-13
2'-6" X 3'
1.875" Radii ¾" Border

3.5" Series C Legend
White Background
Black Legend and Border

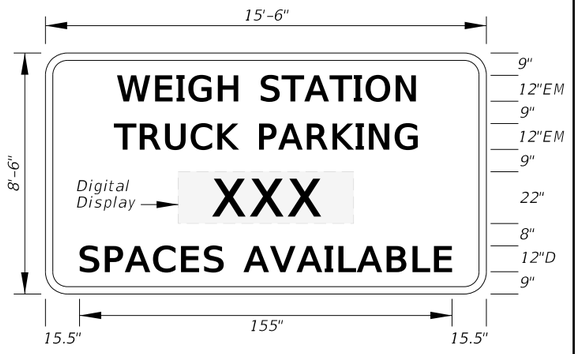


FTP-86-21
9" X 2'-3"
1.5" Radii No Border

Series C Legend and
Series D Legend
White on Yellow
Black Legend and Border

FTP-87-21
15'-6" X 8'-6"
12" Radii 2" Border

Series D Legend
Series EM Legend
Blue Background
White Legend and Border

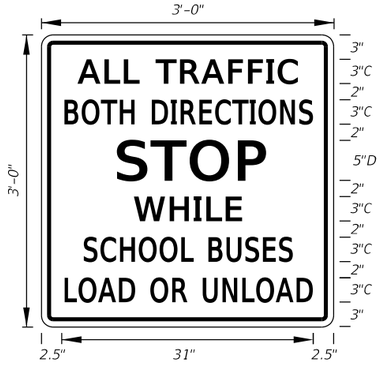


FTP-88-21
15'-6" X 8'-6"
12" Radii 2" Border

Series D Legend
Series EM Legend
Blue Background
White Legend and Border

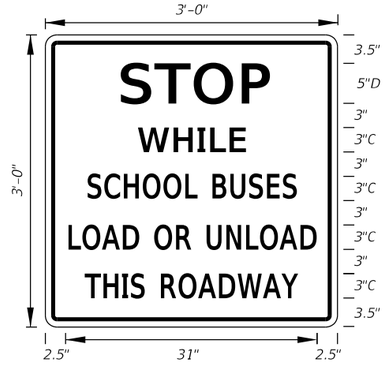
FTP-89-21
16'-6" X 8'-6"
12" Radii 2" Border

Series D Legend
Series EM Legend
Blue Background
White Legend and Border



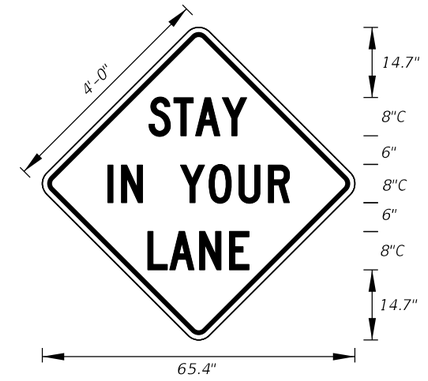
FTP-90-22
3'-0" X 3'-0"
1.5" Radii ¾" Border

3" Series C Legend and
5" Series D Legend
White Background
Black Legend and Border



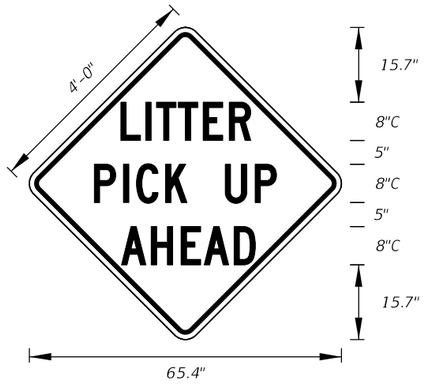
FTP-91-22
3'-0" X 3'-0"
1.5" Radii ¾" Border

3" Series C Legend and
5" Series D Legend
White Background
Black Legend and Border



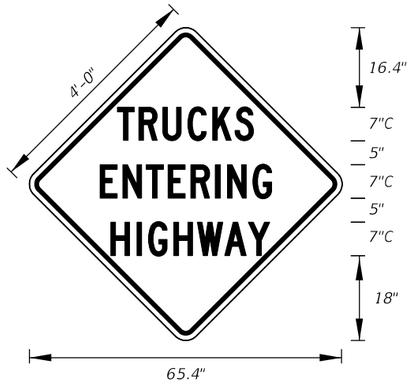
MOT-1-22
4' X 4'
3" Radii ¾" Border

8" Series C Legend
Orange Background
Black Legend and Border



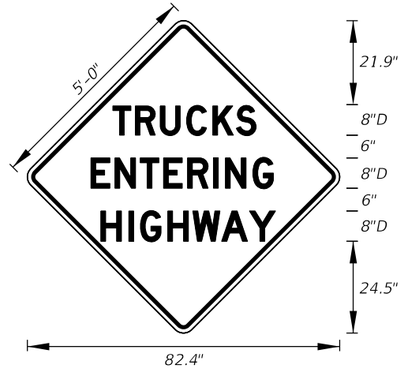
MOT-4-22
4' X 4'
3" Radii ¾" Border

8" Series C Legend
Orange Background
Black Legend and Border



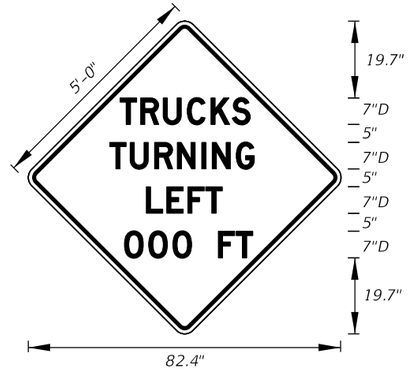
MOT-5-22
4' X 4'
3" Radii ¾" Border

7" Series C Legend
Orange Background
Black Legend and Border



MOT-6-22
5' X 5'
3" Radii ¾" Border

8" Series D Legend
Orange Background
Black Legend and Border



MOT-7-22
5' X 5'
3" Radii ¾" Border

7" Series D Legend
Orange Background
Black Legend and Border

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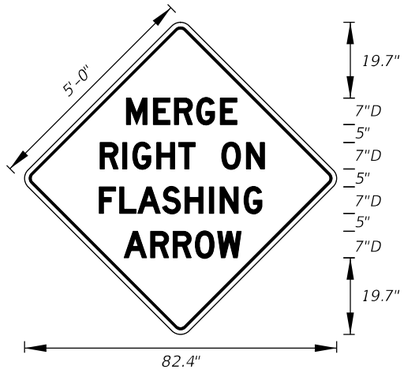
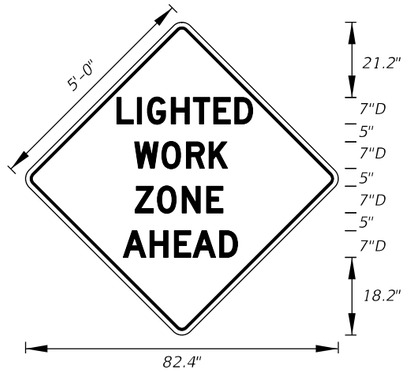


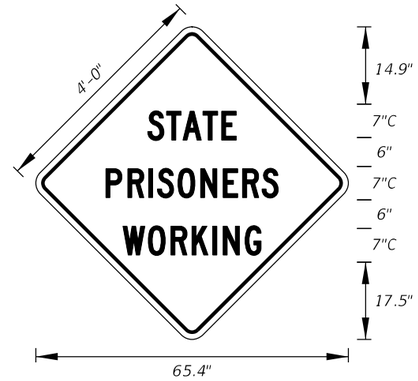
MOT-8-22
5' X 5'
3" Radii ¾" Border

7" Series D Legend
Orange Background
Black Legend and Border



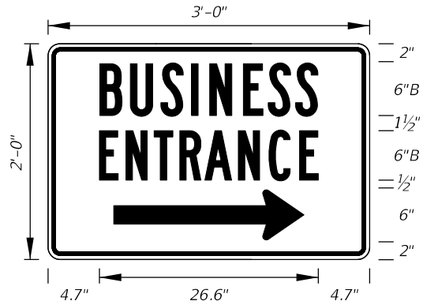
MOT-9-22
5' X 5'
3" Radii ¾" Border

7" Series D Legend
Orange Background
Black Legend and Border



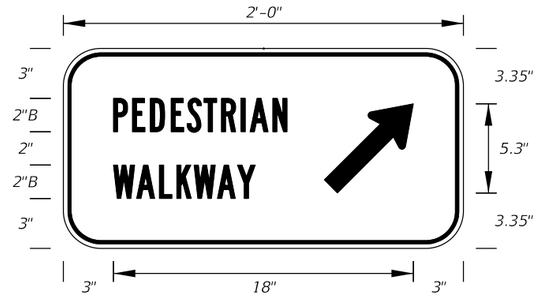
MOT-10-22
4' X 4'
3" Radii ¾" Border

7" Series C Legend
Orange Background
Black Legend and Border



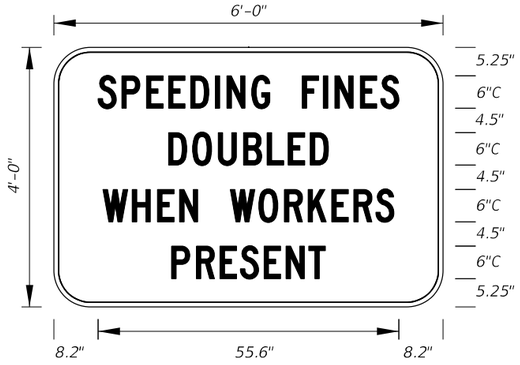
MOT-11-06
3' X 2'
2" Radii ¾" Border

6" Series B Legend
Blue Background
White Legend and Border



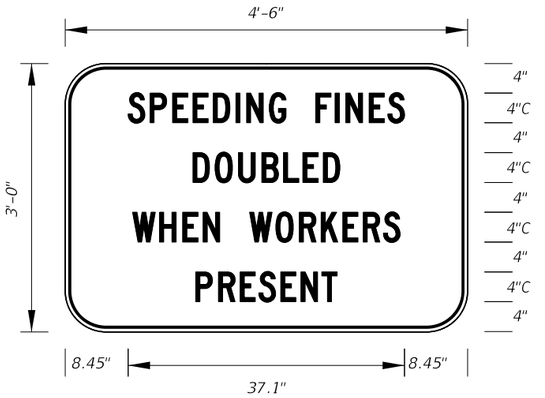
MOT-12R-06
2' X 1'
2" Radii ¾" Border
2" Series B Legend
White Background
Black Legend and Border

MOT-12L-06
For Diversion
to the left



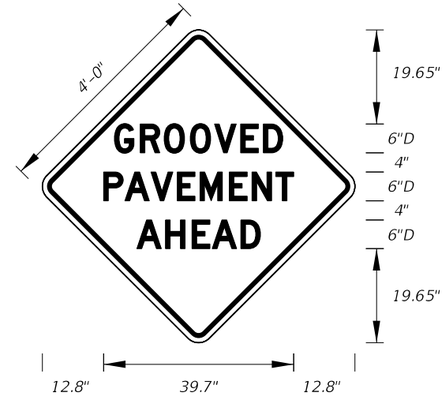
MOT-13-06
Freeway Sign
6' X 4'
6" Radii ¾" Border

6" Series C Legend
White Background
Black Legend and Border



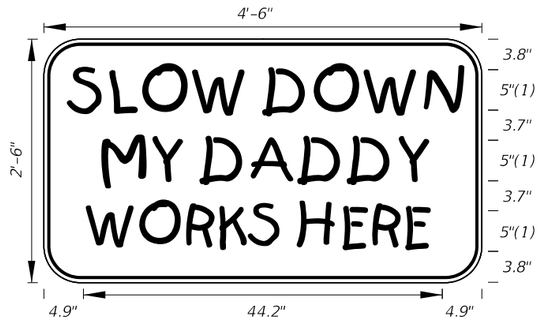
MOT-14-06
Arterial Sign
4'-6" X 3'
5" Radii ¾" Border

4" Series C Legend
White Background
Black Legend and Border



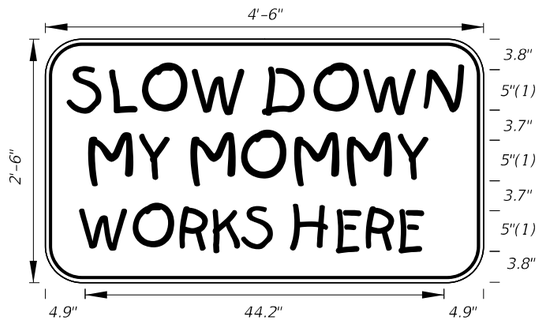
MOT-15-06
4' X 4'
2" Radii ¾" Border

6" Series D Legend
Orange Background
Black Legend and Border



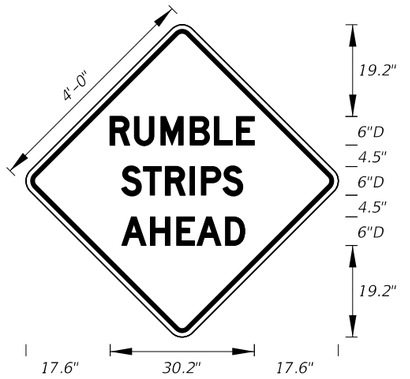
MOT-16-06
4'-6" X 2'-6"
4" Radii ¾" Border

5" Kids Series Legend
Orange Background
Black Legend and Border



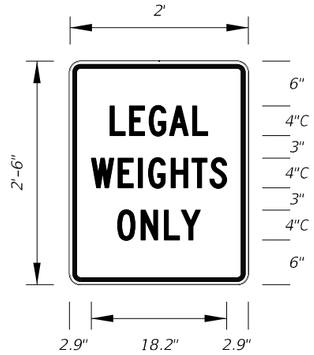
MOT-17-06
4'-6" X 2'-6"
4" Radii ¾" Border

5" Kids Series Legend
Orange Background
Black Legend and Border



MOT-18-10
4' X 4'
2" Radii ¾" Border

6" Series D Legend
Orange Background
Black Legend and Border



MOT-19-11
2' X 2'-6"
1.13" Radii ¾" Border

4" Series C Legend
White Background
Red Legend and Border

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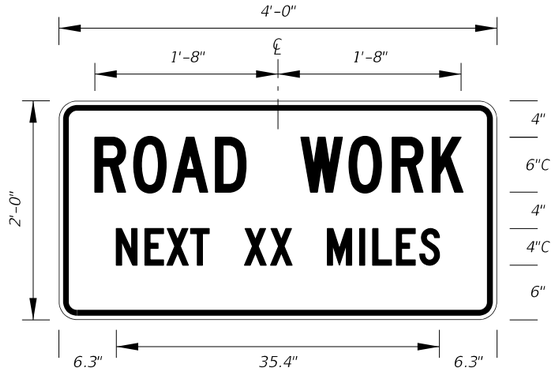
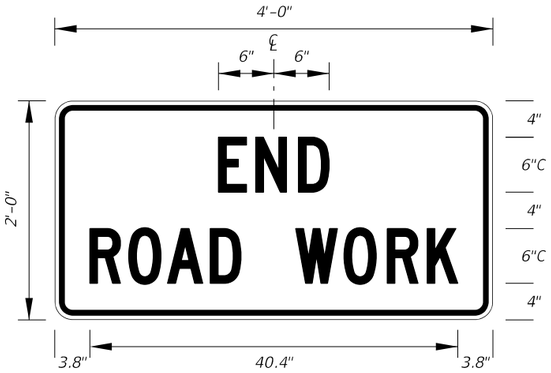


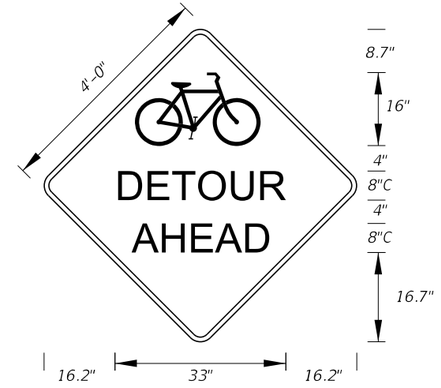
G20-1
2' X 4'
1.5" Radii ¾" Border

Orange Background
Black Legend and Border



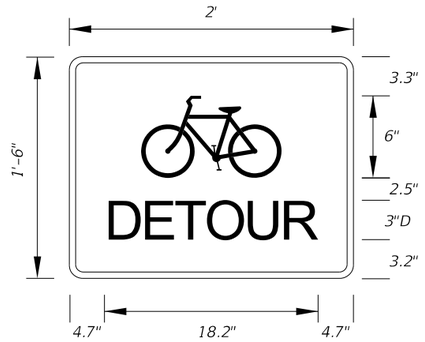
G20-2
2' X 4'
1.5" Radii ¾" Border

Orange Background
Black Legend and Border



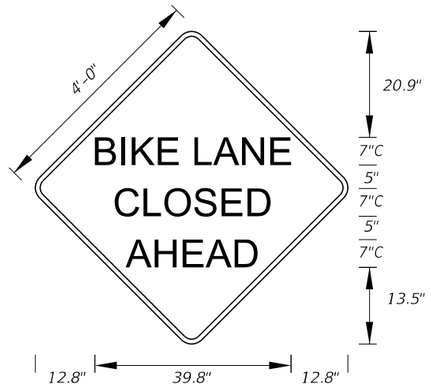
MOT-20-21
4' X 4'
3" Radii ¾" Border

8" Series C Legend
Orange Background
Black Legend and Border



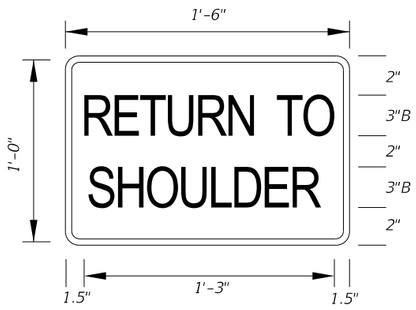
MOT-21-21
2' X 1'-6"
1.5" Radii ½" Border

3" Series D Legend
Orange Background
Black Legend and Border



MOT-22-21
4' X 4'
3" Radii ¾" Border

7" Series C Legend
Orange Background
Black Legend and Border



MOT-23-21
1'-6" X 1'-0"
1.5" Radii ¼" Border

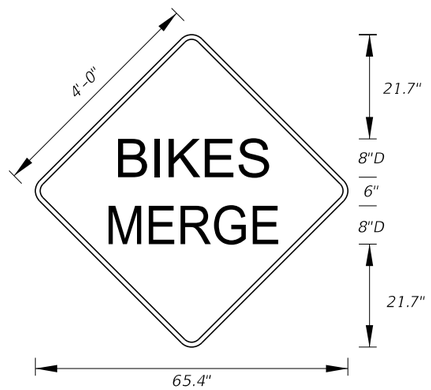
3" Series B Legend
Orange Background
Black Legend and Border

MOT-24-21
2'-6" X 1'-6"
1.5" Radii ½" Border

4" Series C Legend
White Background
Black Legend and Border

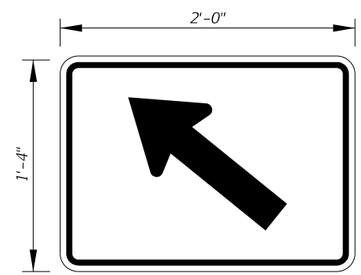
MOT-25-21
2'-0" X 1'-6"
1.5" Radii ½" Border

4" Series B Legend
White Background
Black Legend and Border



MOT-26A-22
4' X 4'
3" Radii ¾" Border

8" Series D Legend
Orange Background
Black Legend and Border



MOT-26B-22
2'-0" X 1'-4"
1.5" Radii ⅝" Border

Orange Background
Black Legend and Border

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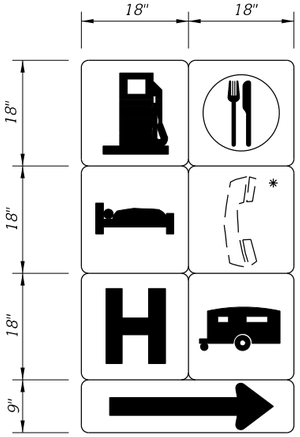
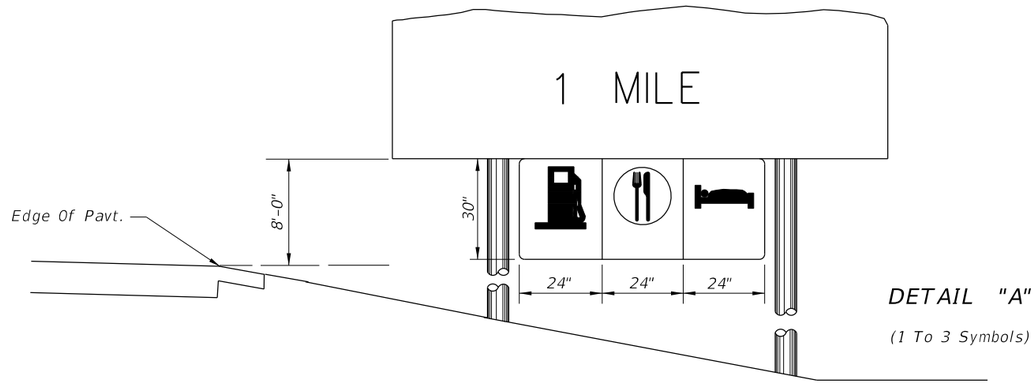
** Note:

Two assemblies are required; one for each side of the ramp, showing those services in each particular direction from the ramp terminal.

Ramp mounted signs shall be installed to avoid conflict with existing signs and in no case should they be placed within 100' of another sign.

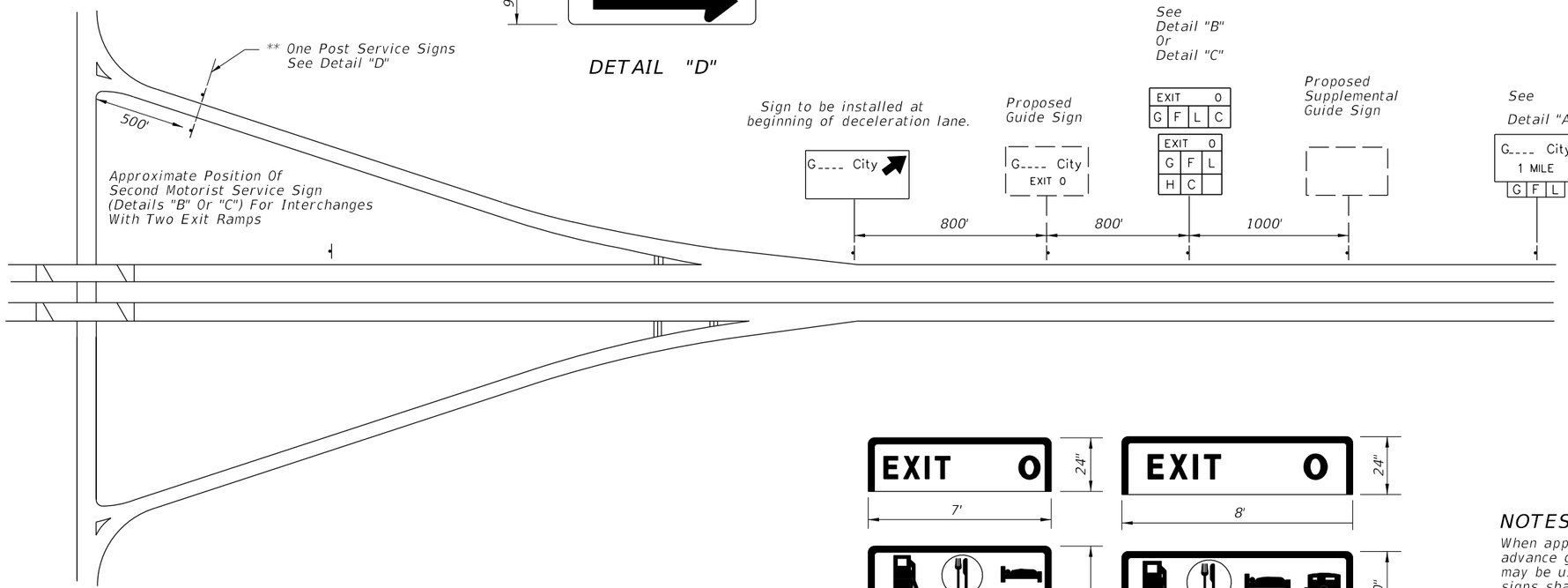


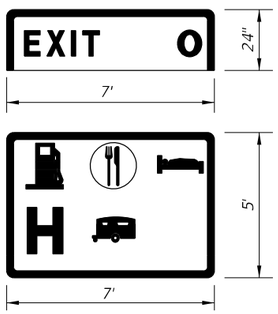
DETAIL "D"



DETAIL "A"

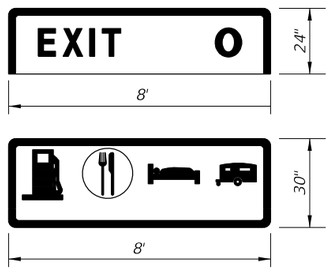
(1 To 3 Symbols)





DETAIL "B"

(4 To 6 Symbols)



DETAIL "C"

(4 Symbols)

GENERAL NOTES:

1. Only those services meeting criteria established by the Department and approved by the State Traffic Operations Engineer for each interchange shall be shown. Symbol signs for motorist services shall always appear in the following order reading from left to right and top to bottom: Gas, Food, Lodging, Phone * , Hospital, Camping.

   * The phone symbol shall not be shown whenever any Gas, Food, Lodging or Camping symbol appears.

2. Symbols shall appear consecutively on the sign with no positions left blank or reserved for intermediate symbols not currently approved for a particular interchange.

3. All motorist service signs to have White Legend and Border with Blue Background.

4. For mounting details see Index 700-010 for Single-column Ground Signs or Index 700-020 for Multi-column Ground Signs.

NOTES:

When approved for attachment to the advance guide signs, up to 3 services may be used for an exit. The symbol signs shall be suspended from the guide sign panel or existing wind beams. Symbol signs are not to be connected to existing sign posts.

The mounting height of the advance guide sign shall be increased, where necessary, to provide 8' between the level of the pavement edge and the bottom of the guide sign, prior to mounting the supplementary panel.

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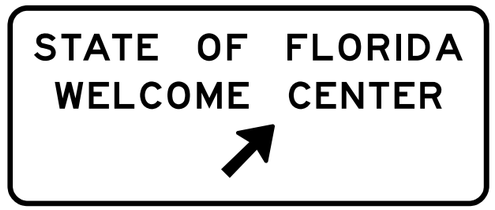
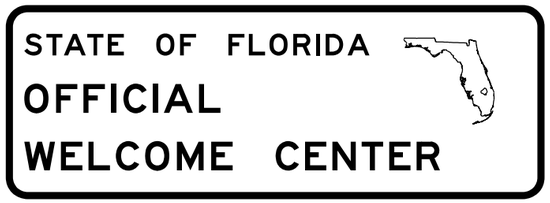
Sign FTP-10-06

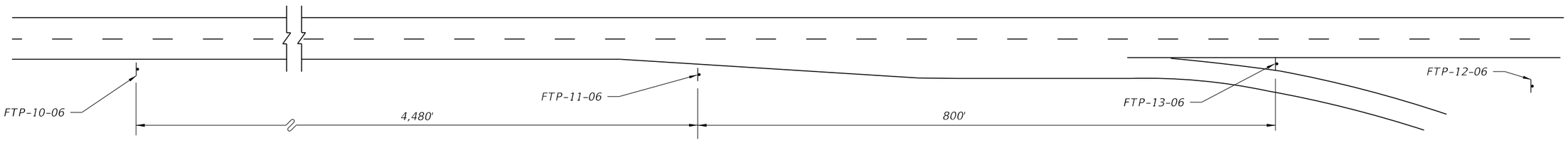


Sign FTP-11-06



Sign FTP-12-06

Sign FTP-13-06



Note: Roadway not drawn to scale
Distances shown are adequate for driver communication but may be altered slightly if conditions require.

Sign FTP-14-06

Note: Sign FTP-14-06 shall be used as a supplemental guide sign at interchanges which have a Tourist Information Center approved for such signing (locate half-way between normal guide signs)

Notes:

1. Signs and sign structures shall be erected in accordance with the details shown on Index 700-020.
2. Sign FTP-12-06 shall be located on the Welcome Center grounds in proximity to the building and as far from the main line roadway as possible (2 signs back to back).
3. Sign FTP-10-06, 11-06, 12-06 shall be located as limited access highways only.
4. All legend to be Series E.
5. See Index 700-102 for sign details.

FOR LIMITED ACCESS HIGHWAYS

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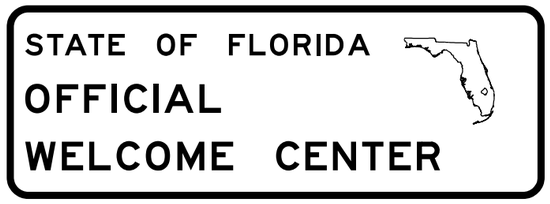
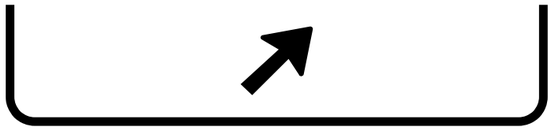
SIGN FTP-15A-06

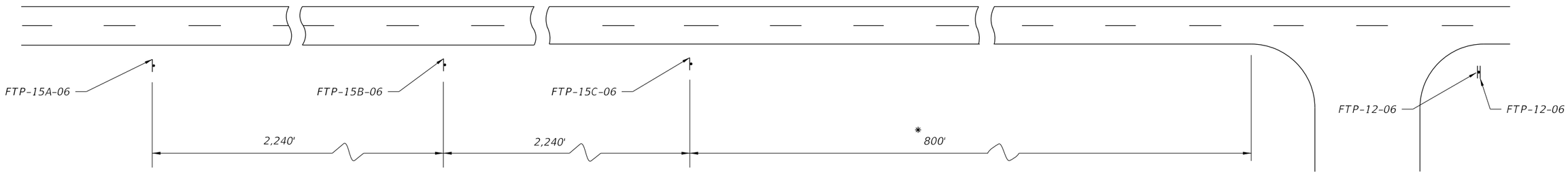


SIGN FTP-12-06

SIGN FTP-15B-06



SIGN FTP-15C-06



* 800' Maximum For Rural Conditions
50' Minimum For Rural Conditions

NOTES:

1. Signs and sign structures shall be erected in accordance with the details shown on Index 700-020.
2. Sign FTP-12-06 shall be located on the Welcome Center grounds in proximity to the building and as far from the Main Line Roadway as possible (2 signs back to back).
3. All legend to be Series E.
4. One sign FTP-15A-06 or 15B-06 should be used depending on speed, roadside development & geometric conditions.

FOR PRIMARY HIGHWAYS

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LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	WELCOME CENTER SIGNING	INDEX	SHEET
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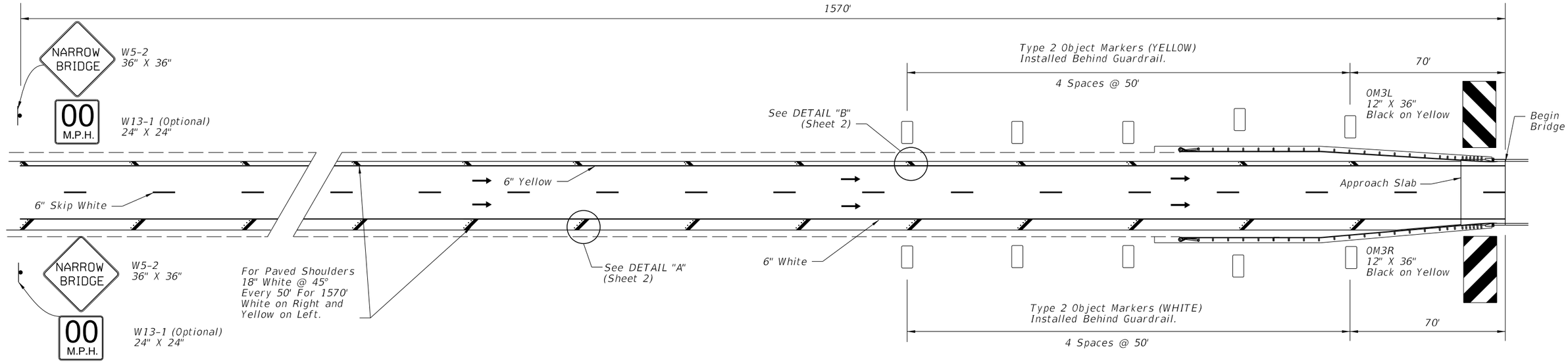
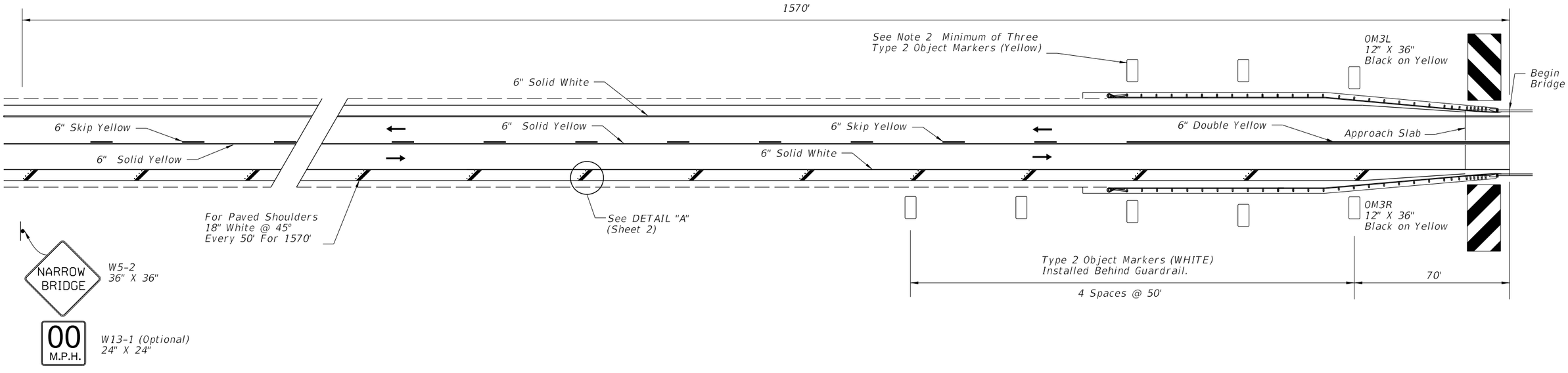


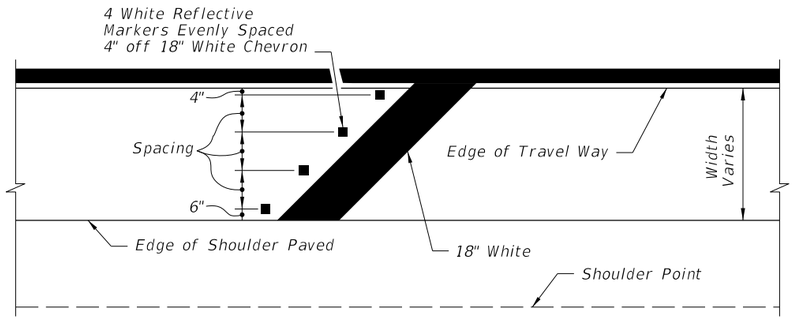
ONE-WAY TRAFFIC



2-WAY TRAFFIC

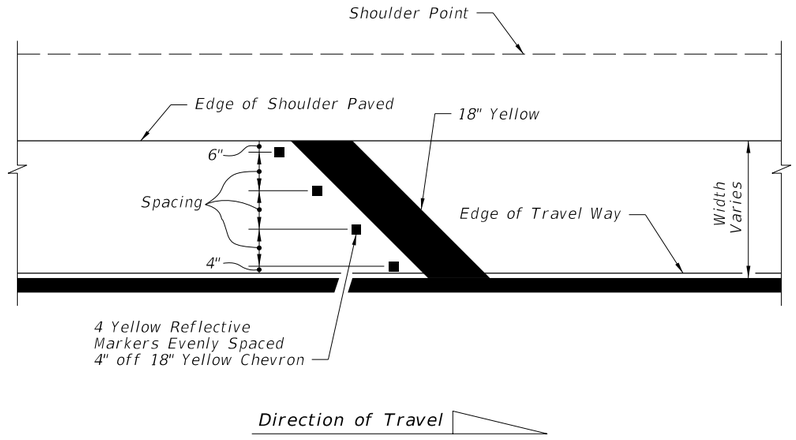
10/20/2022 8:57:22 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/20			FY 2023-24 STANDARD PLANS	RURAL NARROW BRIDGE TREATMENT	700-106	1 of 2



Outside Shoulder

DETAIL "A"



Median Shoulder

DEATIL "B"

NOTES:

1. Roadways with Two-Way Traffic:
   No passing zone should be extended 1570' in advance of narrow bridge.

2. If the bridge or the approach is on a curve, delineators shall be installed for a distance of 1570' in advance of narrow bridge on the outside portion of the roadway. Spacing shall be 100' between delineators. Delineators are to be placed not less than 2' or not more than 8' outside the outer edge of pavement.

3. Object markers and delineators on both sides of roadway shall face traffic approaching bridge

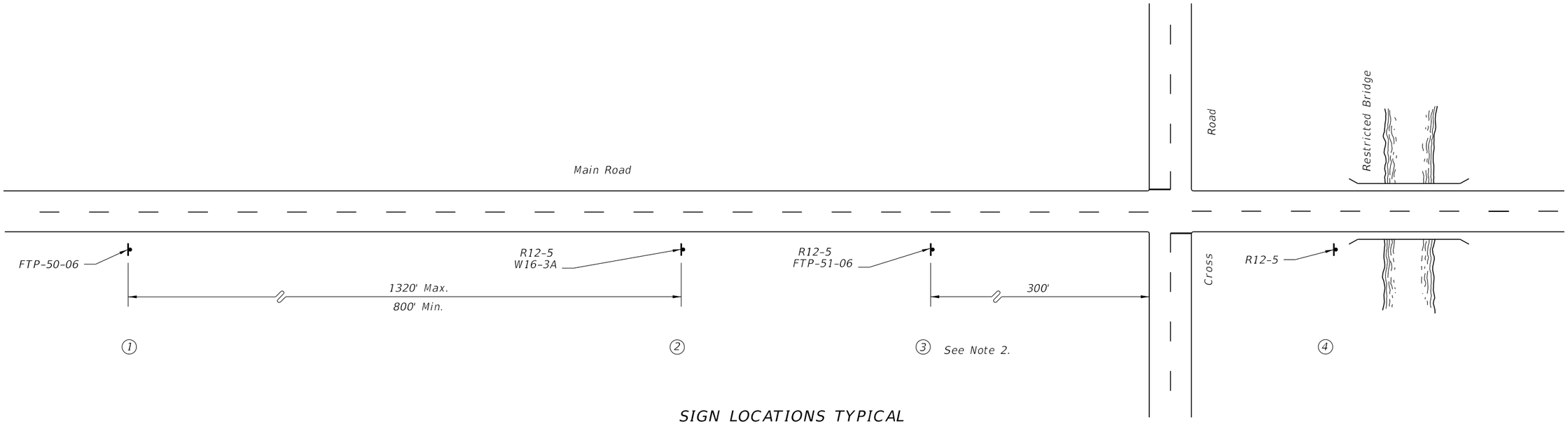
4. The OM-3R & OM-3L object markers shall be installed 4' above the roadway edge. The panels may be post mounted at the bridges.

5. Install Audible and Vibratory treatments (e.g., ground-in rumble strips or profiled thermoplastic) in accordance with the Plans.

Shoulder Width	No. of RPM's	Spacing
2'	2	14"
3'	3	13"
4'	3	19"
5'	4	16.67"

10/20/2022 8:57:23 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/20			FDOT FY 2023-24 STANDARD PLANS	RURAL NARROW BRIDGE TREATMENT	700-106	2 of 2



SIGN LOCATIONS TYPICAL

① WEIGHT LIMIT RESTRICTION AHEAD

FTP-50-06

② WEIGHT LIMIT 8T 12T 16T

R12-5 (24" X 36")

X MILES

W 16-3A

③ WEIGHT LIMIT 8T 12T 16T

R12-5 (24" X 36")

WEIGHT LIMIT LAST EXIT

FTP-51-06

④ WEIGHT LIMIT 8T 12T 16T

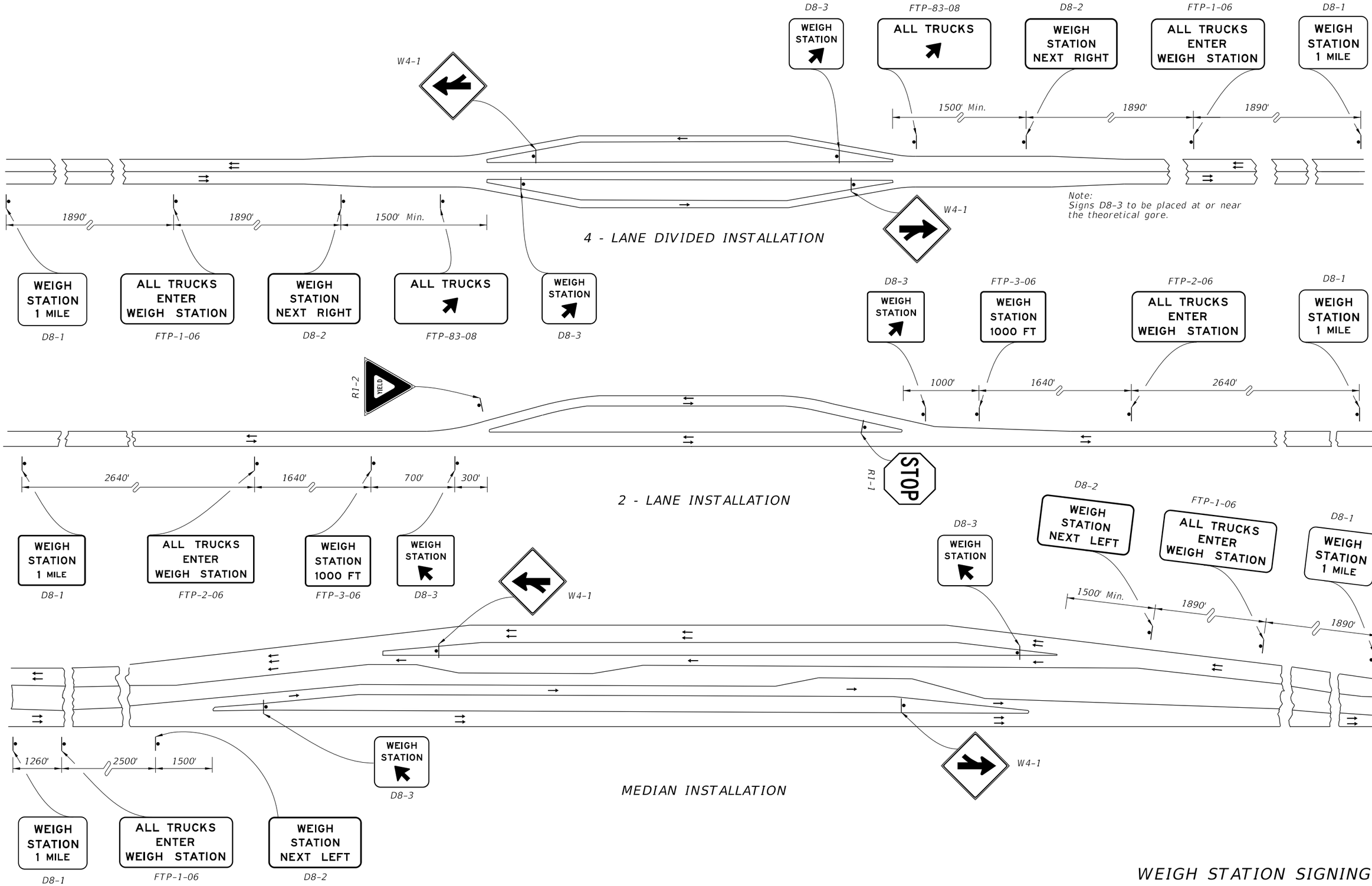
R12-5 (24" X 36")

NOTES:

1. See Standard Highway Signs for sign R12-5 and W16-3 details.
2. Location of Sign 3 may require some field adjustment.
3. The Cross Road is the last detour to route around the restricted bridge.
4. Location of Sign 2 should be established from the Cross Road the following approximate distances; Interstate-1 Mile Non- Interstate-1/2 Mile.
5. See Index 700-102 for sign details.

10/20/2022 8:57:24 AM

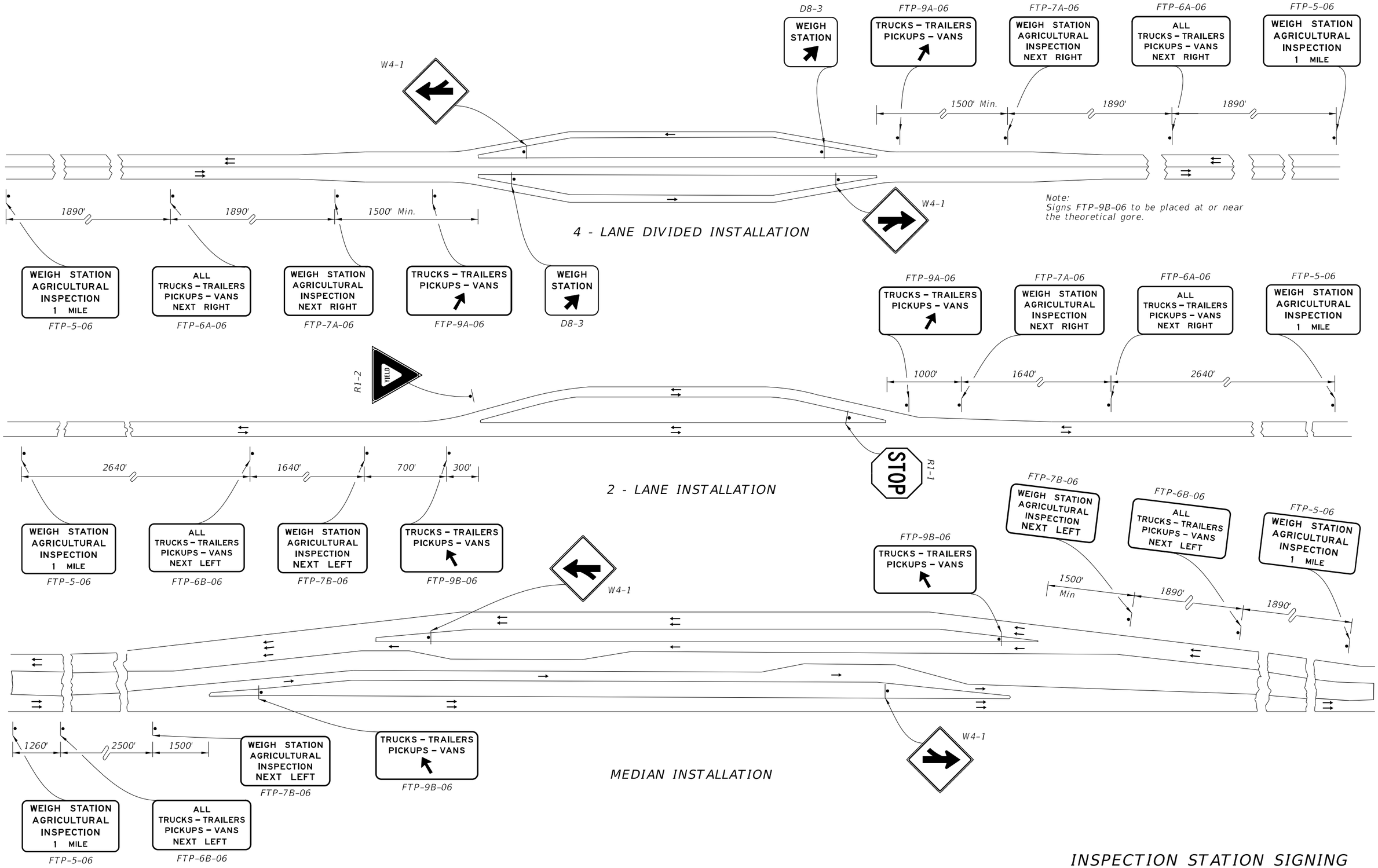
LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	BRIDGE WEIGHT RESTRICTIONS	INDEX	SHEET
11/01/17					700-107	1 of 1



WEIGH STATION SIGNING

10/20/2022 8:57:25 AM

LAST REVISION	REVISION	DESCRIPTION:				
11/01/17			FY 2023-24 STANDARD PLANS	TYPICAL SIGNING FOR TRUCK WEIGH AND INSPECTION STATIONS	INDEX 700-108	SHEET 1 of 2



INSPECTION STATION SIGNING

10/20/2022 8:57:25 AM

LAST REVISION	REVISION	DESCRIPTION:				
11/01/17			FDOT FY 2023-24 STANDARD PLANS	TYPICAL SIGNING FOR TRUCK WEIGH AND INSPECTION STATIONS	INDEX 700-108	SHEET 2 of 2

GENERAL NOTES:

1. Meet the requirements of Specification 700.

2. Work with Indexes 700-020 and 700-030.

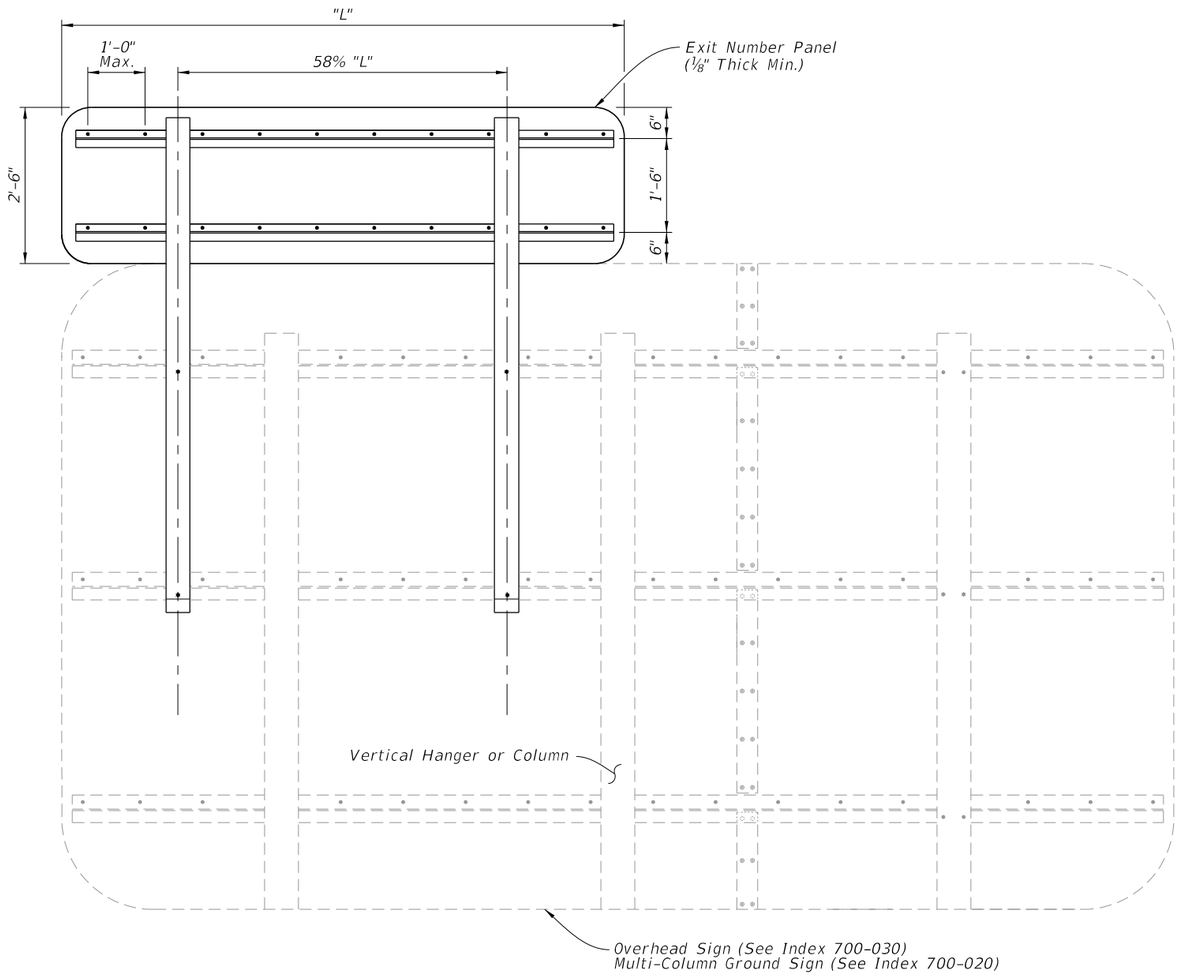
3. Fabrication:
   See sign layout sheet for dimension "L" and sign face details in the Plans.

4. For right exits, install the Exit Numbering Panel to the top right side of the Highway Sign.

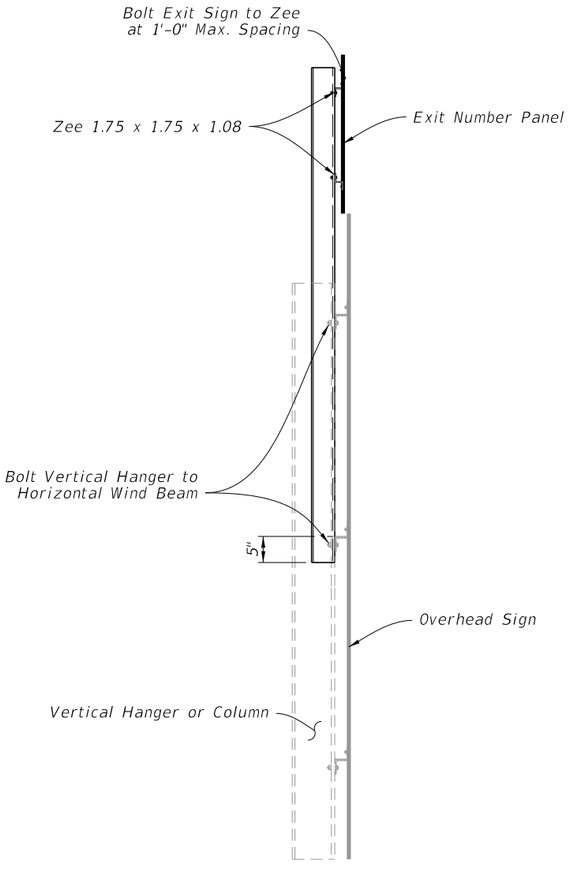
5. For left exits, install the Exit Numbering Panel to the top left side of the Highway Sign.

6. Materials (Aluminum):

   A Sheets and Plates: ASTM B209 Alloy 6061-T6
   B. Extruded and Standard Structural Shapes: ASTM B221 Alloy 6061-T6
   C. For Bolts, Nuts, and Washers requirements see Index 700-020 or 700-030.



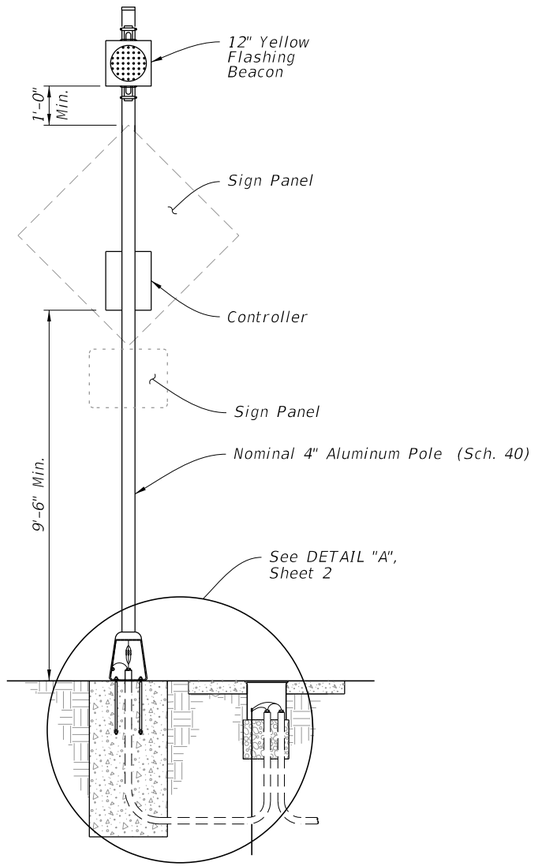
BACK ELEVATION



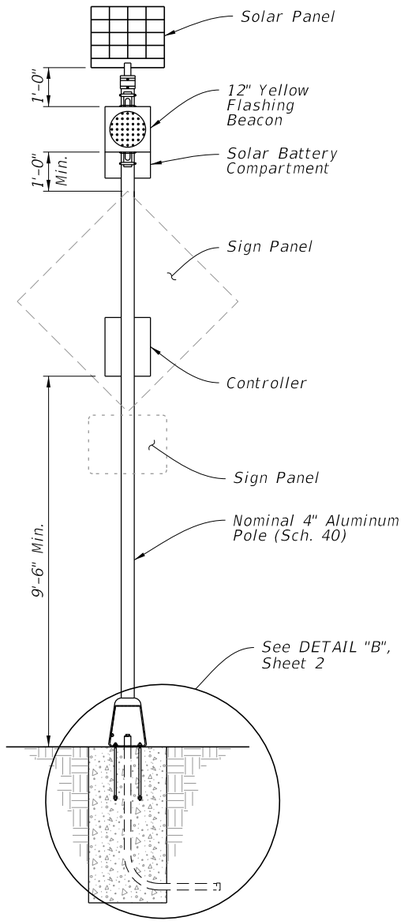
SIDE ELEVATION

5/13/2024 1:46:13 PM

LAST REVISION	REVISION	DESCRIPTION:				
11/01/22			FDOT FY 2023-24 STANDARD PLANS	MOUNTING EXIT NUMBER PANELS TO SIGNS	INDEX 700-110	SHEET 1 of 1

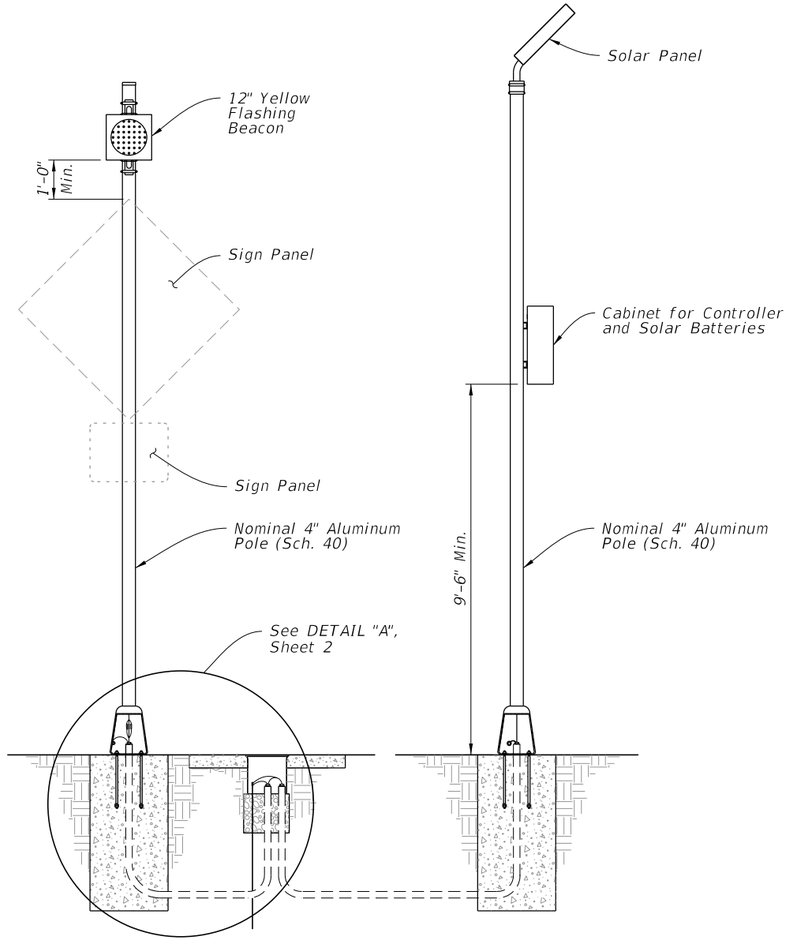


FRONT ELEVATION



FRONT ELEVATION

WITHOUT AUXILIARY POLE



SIGN ASSEMBLY FRONT ELEVATION

AUXILIARY POLE ELEVATION

WITH AUXILIARY POLE

POWER CONFIGURATION 'A' CONVENTIONALLY POWERED

(Type A1 Shown)

GENERAL NOTES:

1. Meet the reqirements of Specifications 646 and 700.
2. Engage all threads on the transformer base and post unless the aluminum post is fully seated into base.
3. Install a concrete slab around all roadside assemblies on slopes 6:1 or greater. The minimum slab dimension is 6" by 4'-0" by 5'-0".
4. When wire entry holes are drilled in the sign column, use a bushing or rubber grommet to protect conductors.

POWER CONFIGURATION 'B' SOLAR POWERED

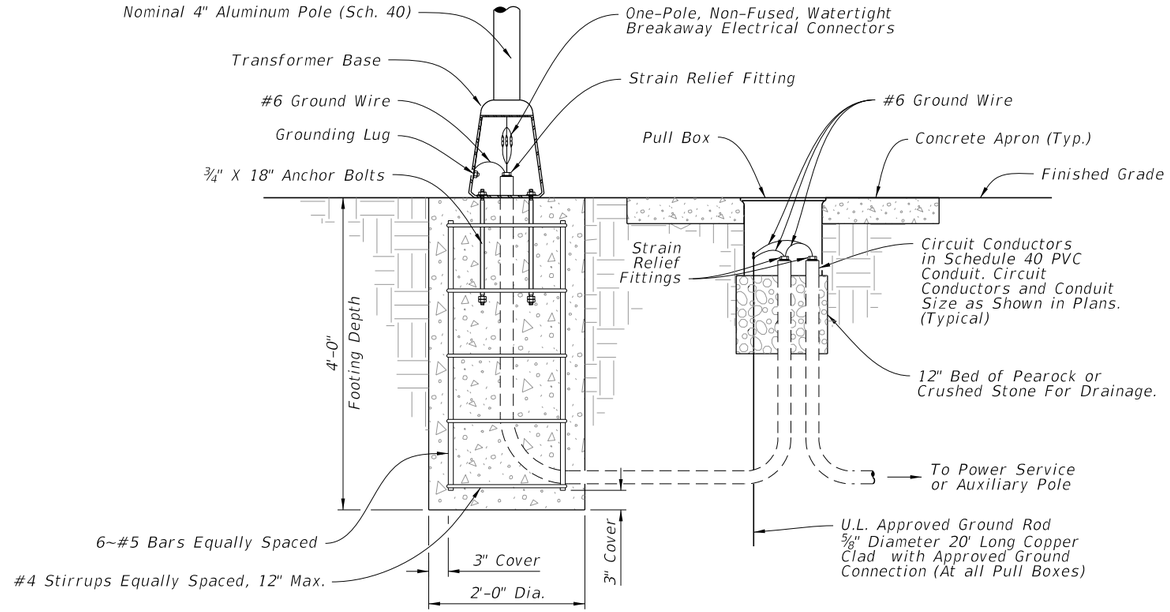
(Type B1 Shown)

POWER CONFIGURATION 'B' NOTES:

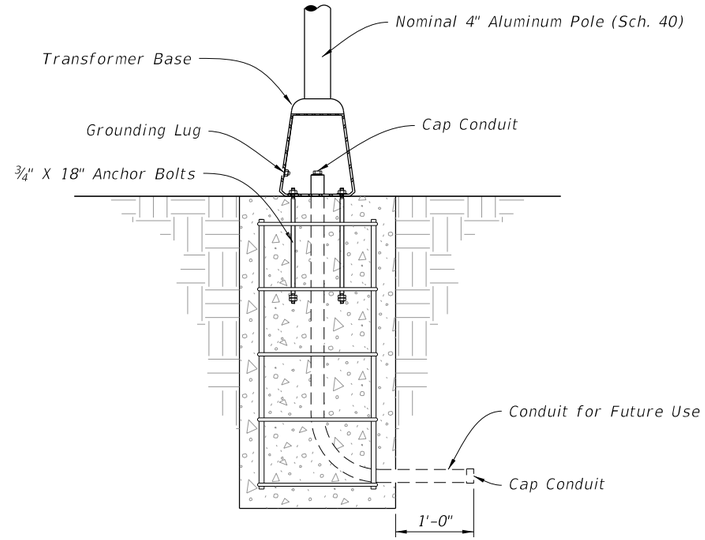
1. Install a separate pole for mounting the solar panel, controller and batteries for all roadside assemblies with solar panels, controllers and batteries weighing more than 170 lbs.
2. Install the auxiliary pole as close to the right of way boundary as possible.
3. Install the auxiliary pole so that the height is the same as the column for the roadside assembly.
4. Orient solar panel to face South for optimal exposure to sunlight.
5. The controller and the solar batteries may be located in the same compartment.

TABLE OF CONTENTS:

10/20/2022 8:57:27 AM



DETAIL "A"

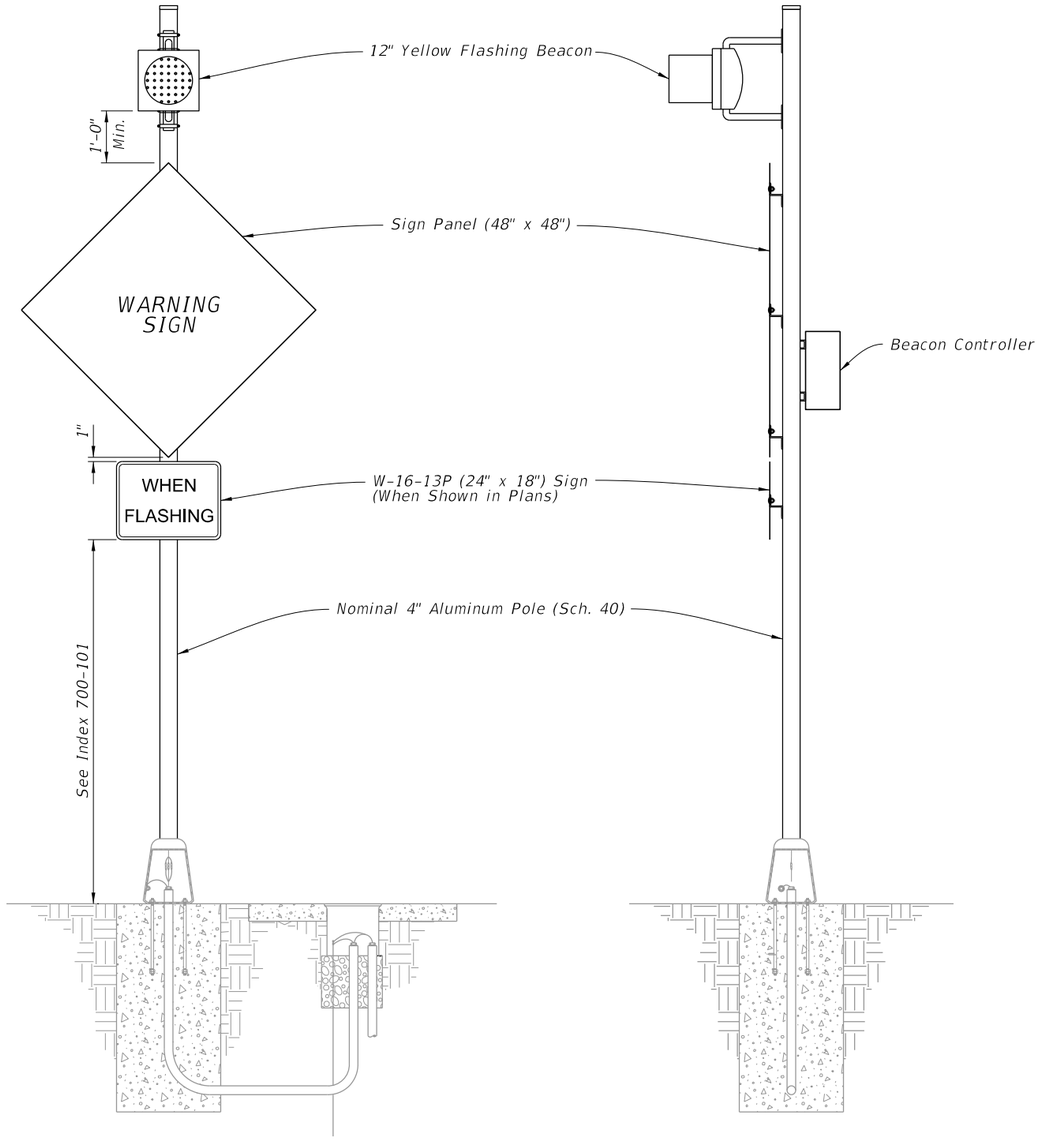


DETAIL "B"

10/20/2022 8:57:28 AM

CONDUIT, WIRING, AND FOUNDATION DETAILS

LAST REVISION 11/01/21	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	INDEX 700-120	SHEET 2 of 11



FRONT ELEVATION

SIDE ELEVATION

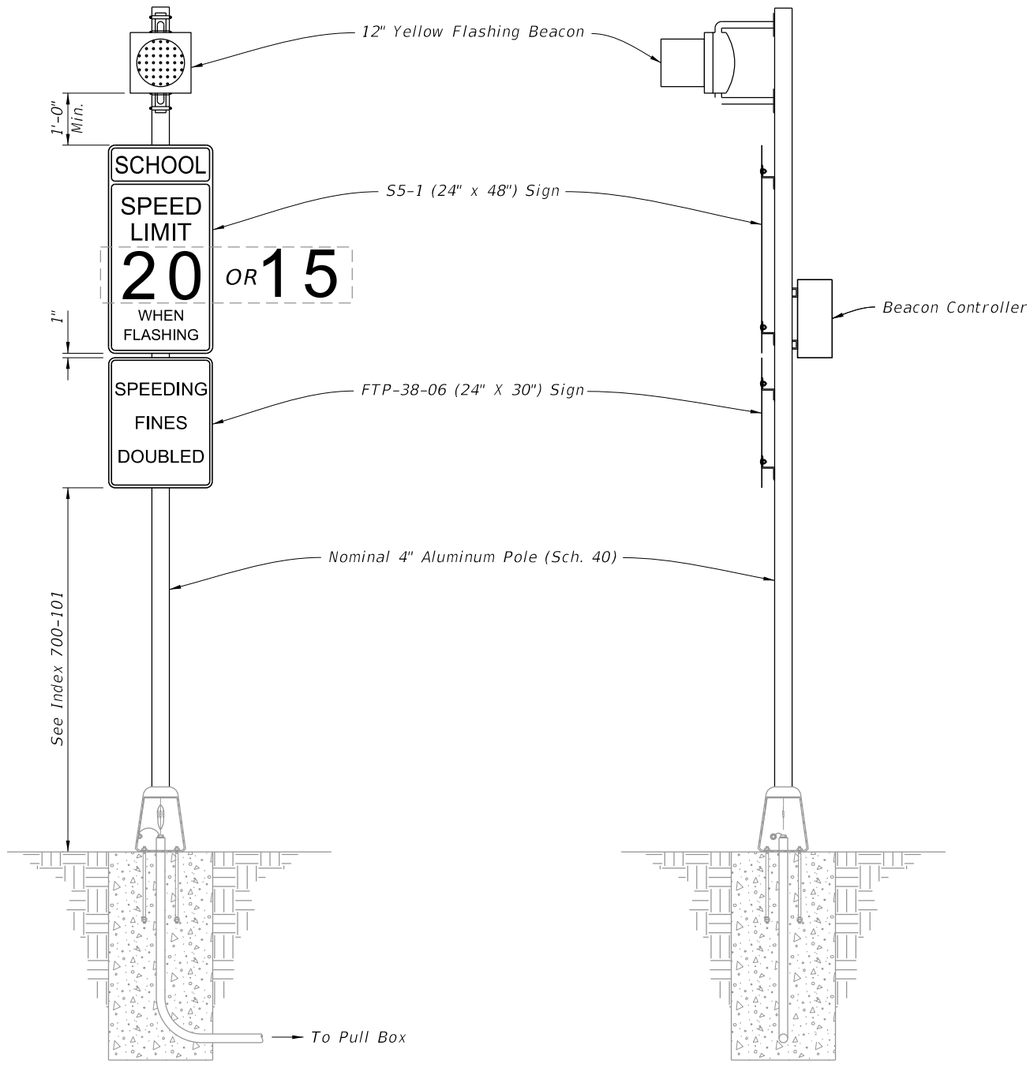
NOTES:

1. Type A1 Assembly (conventionally powered) is shown. Type B1 Assemblies (solar powered) similar.

2. Foundation reinforcement not shown.

10/20/2022 8:57:29 AM

ROADSIDE SIGN ASSEMBLY-1



FRONT ELEVATION

SIDE ELEVATION

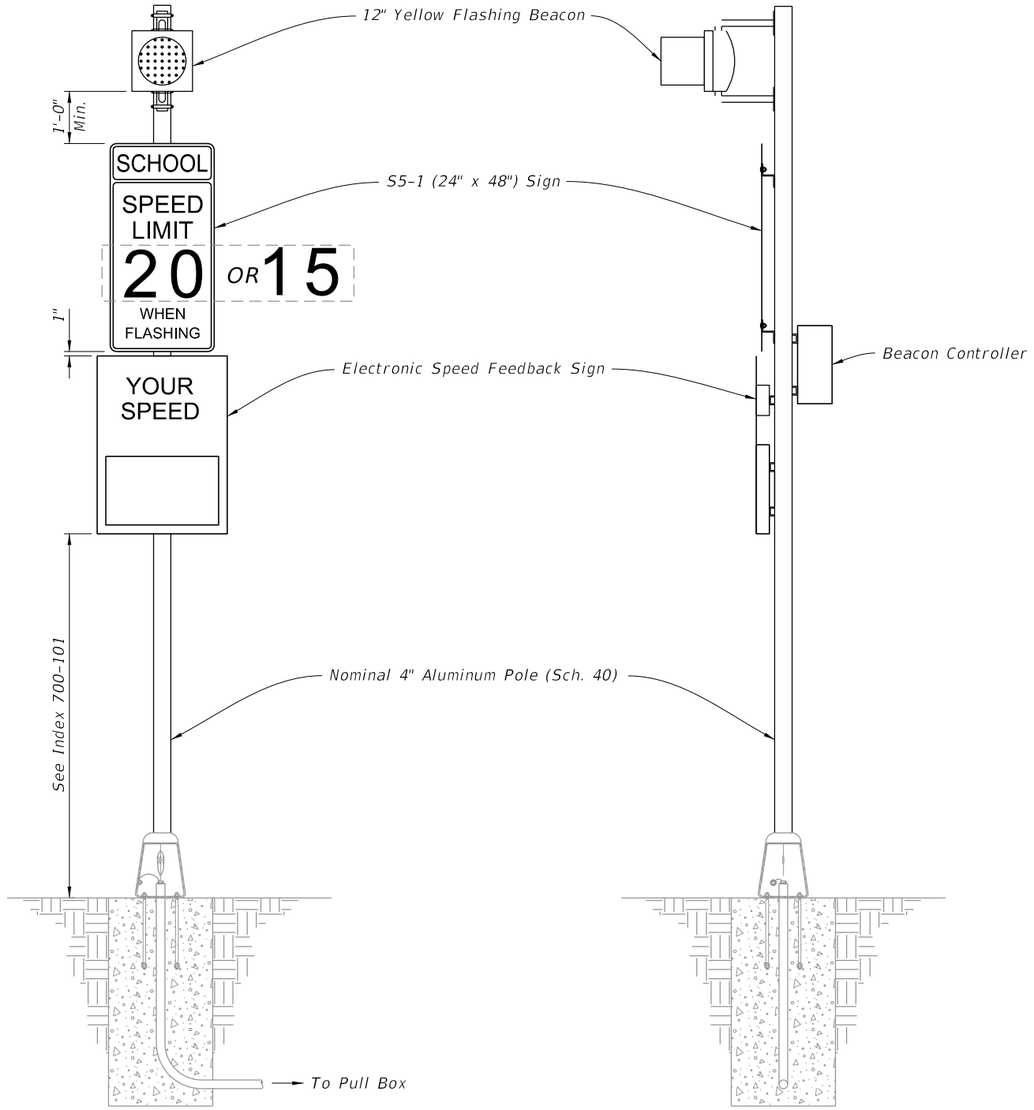
NOTES:

1. Type A2 Assembly (conventionally powered) is shown. Type B2 Assemblies (solar powered) similar.
2. Foundation reinforcement not shown.

ROADSIDE SIGN ASSEMBLY-2

LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	INDEX	SHEET
11/01/21					700-120	4 of 11

10/20/2022 8:57:30 AM



FRONT ELEVATION

SIDE ELEVATION

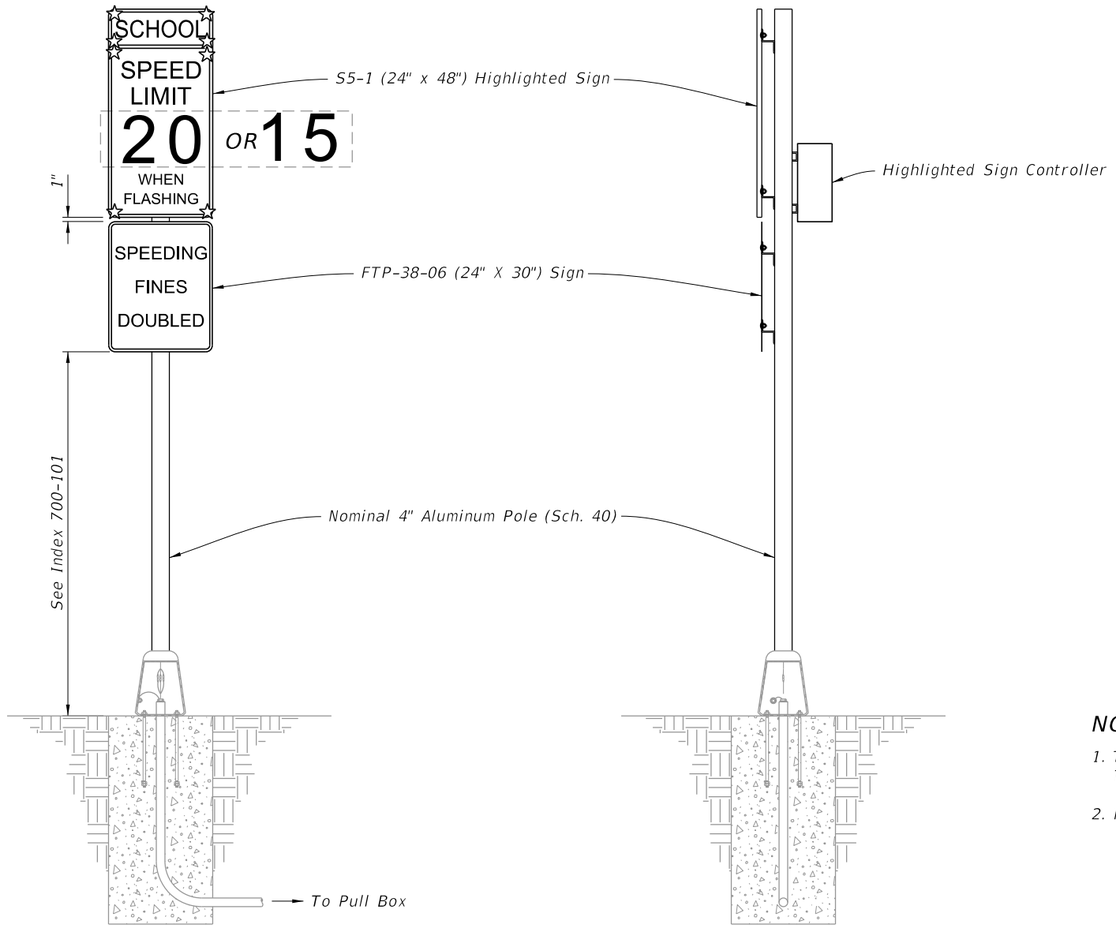
NOTES:

1. Type A3 Assembly (conventionally powered) is shown. Type B3 Assemblies (solar powered) similar.
2. Use electronic speed feedback sign with 15" high numerals for posted speed of 45 mph or less, and 18" high numerals for posted speeds greater than 45 mph.
3. Foundation reinforcement not shown.

10/20/2022 8:57:31 AM

ROADSIDE SIGN ASSEMBLY-3

LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	INDEX	SHEET
11/01/21					700-120	5 of 11



FRONT ELEVATION

SIDE ELEVATION

NOTES:

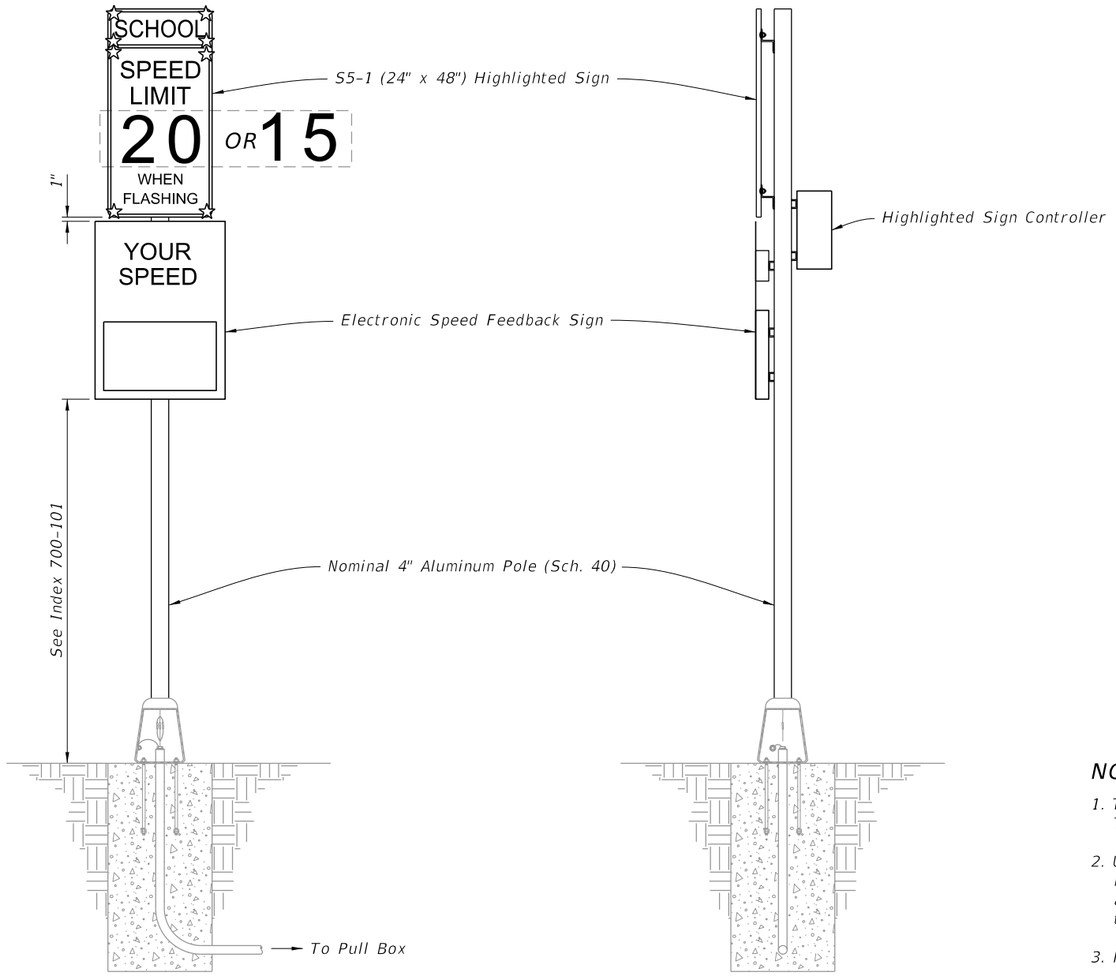
1. Type A4 Assembly (conventionally powered) is shown. Type B4 Assemblies (solar powered) similar.

2. Foundation reinforcement not shown.

10/20/2022 8:57:31 AM

ROADSIDE SIGN ASSEMBLY-4

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	INDEX	SHEET
11/01/21						700-120	6 of 11



FRONT ELEVATION

SIDE ELEVATION

NOTES:

1. Type A5 Assembly (conventionally powered) is shown. Type B5 Assemblies (solar powered) similar.
2. Use electronic speed feedback sign with 15" high numerals for posted speed of 45 mph or less, and 18" high numerals for posted speeds greater than 45 mph.
3. Foundation reinforcement not shown.

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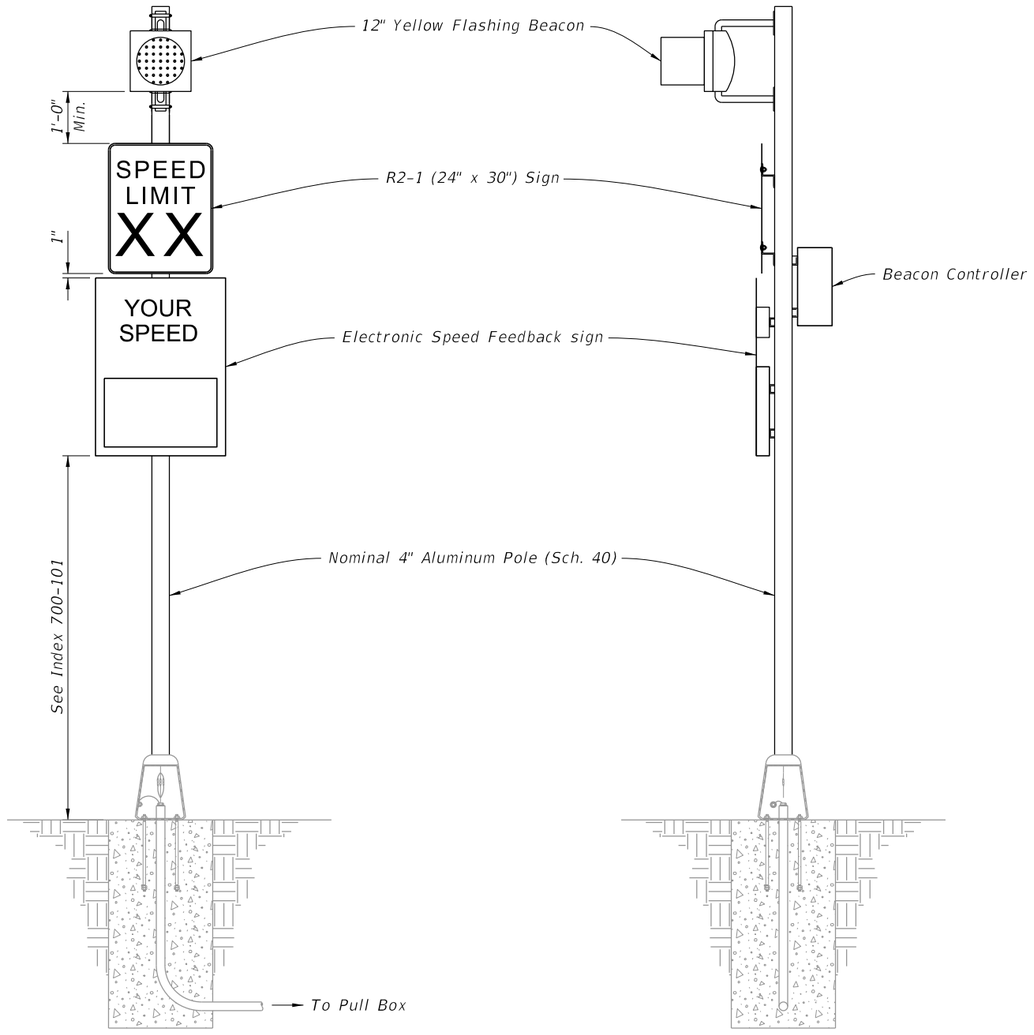
ROADSIDE SIGN ASSEMBLY-5

LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	INDEX	SHEET
11/01/21					700-120	7 of 11



FRONT ELEVATION

SIDE ELEVATION

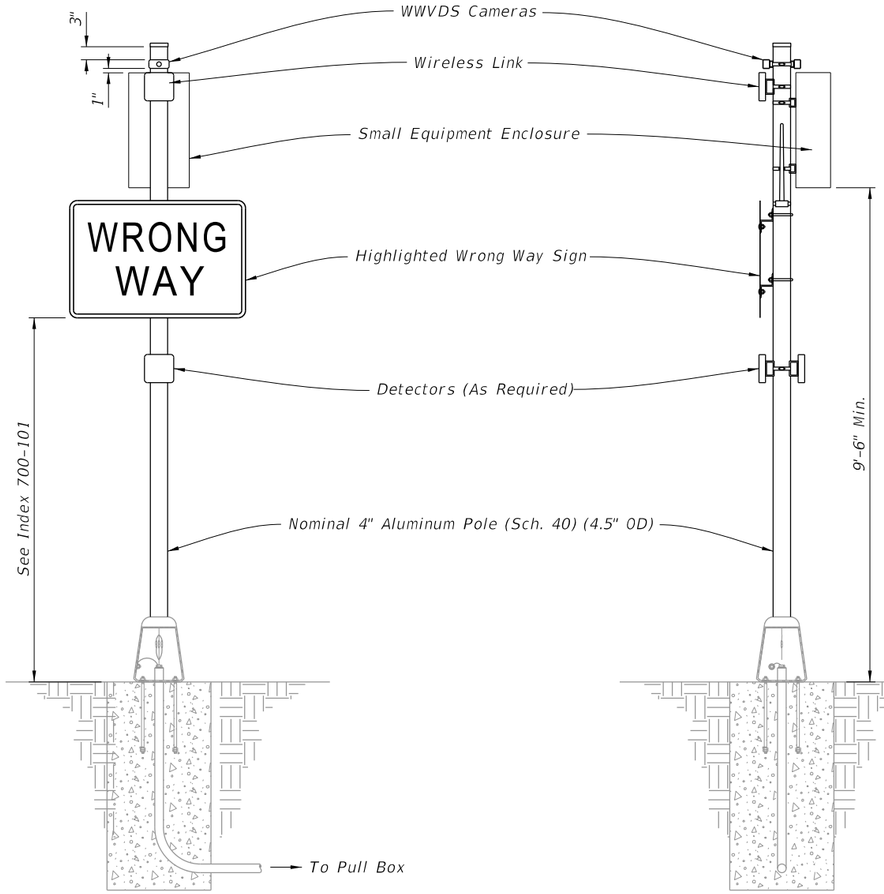
NOTES:

1. Type A6 Assembly (conventionally powered) is shown. Type B6 Assemblies (solar powered) similar.
2. Use electronic speed feedback sign with 15" high numerals for posted speed of 45 mph or less, and 18" high numerals for posted speeds greater than 45 mph.
3. Foundation reinforcement not shown.

10/20/2022 8:57:33 AM

ROADSIDE SIGN ASSEMBLY-6

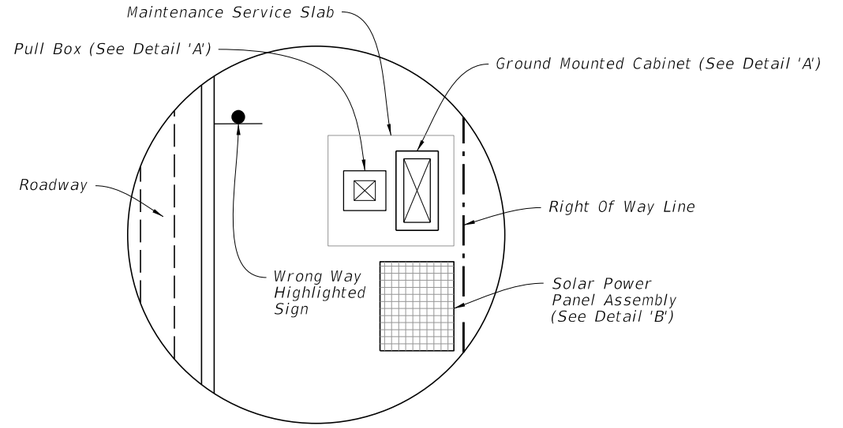
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/21			FDOT FY 2023-24 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	700-120	8 of 11



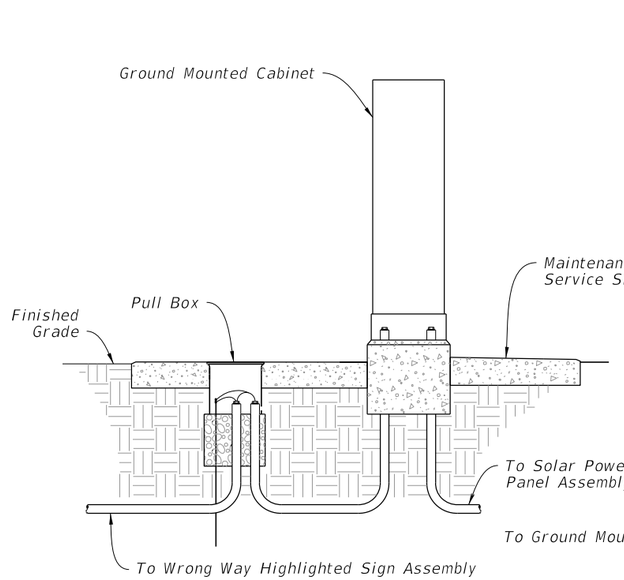
FRONT ELEVATION

SIDE ELEVATION

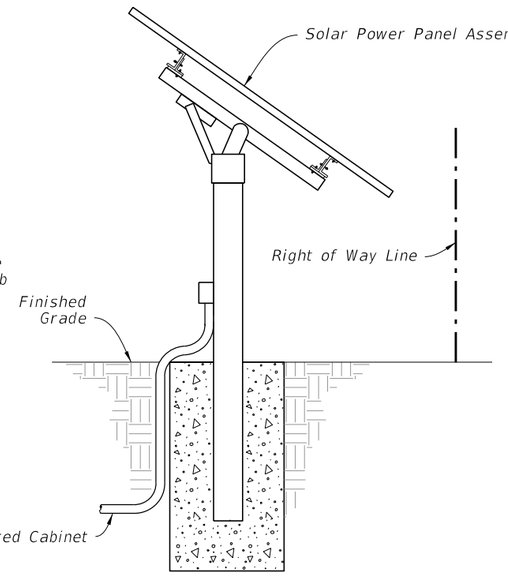
WRONG WAY HIGHLIGHTED SIGN ASSEMBLY



PLAN VIEW



DETAIL 'A'



DETAIL 'B'

SOLAR POWER ASSEMBLY

NOTES:

1. Install Wrong Way Vehicle Detection System (WWVDS) devices including cameras, detectors, wireless links, antennas, enclosures, and electronics in accordance with the manufacturer's instructions.

2. When a solar powered configuration (Type B7) is called for in the Plans, install a ground mounted cabinet and solar power panel assembly. Install the solar charge controller and batteries in the same ground mounted cabinet. Provide a separate pole for mounting the solar panel (DETAIL 'B' shown for illustration purposes only) and install in accordance with manufacturer's instructions. Locate the Solar Power Assembly as close to the right of way as possible. Orient the solar panel to face South.

3. Foundation reinforcement not shown.

4. Install cabinets in accordance with Index 676-010.

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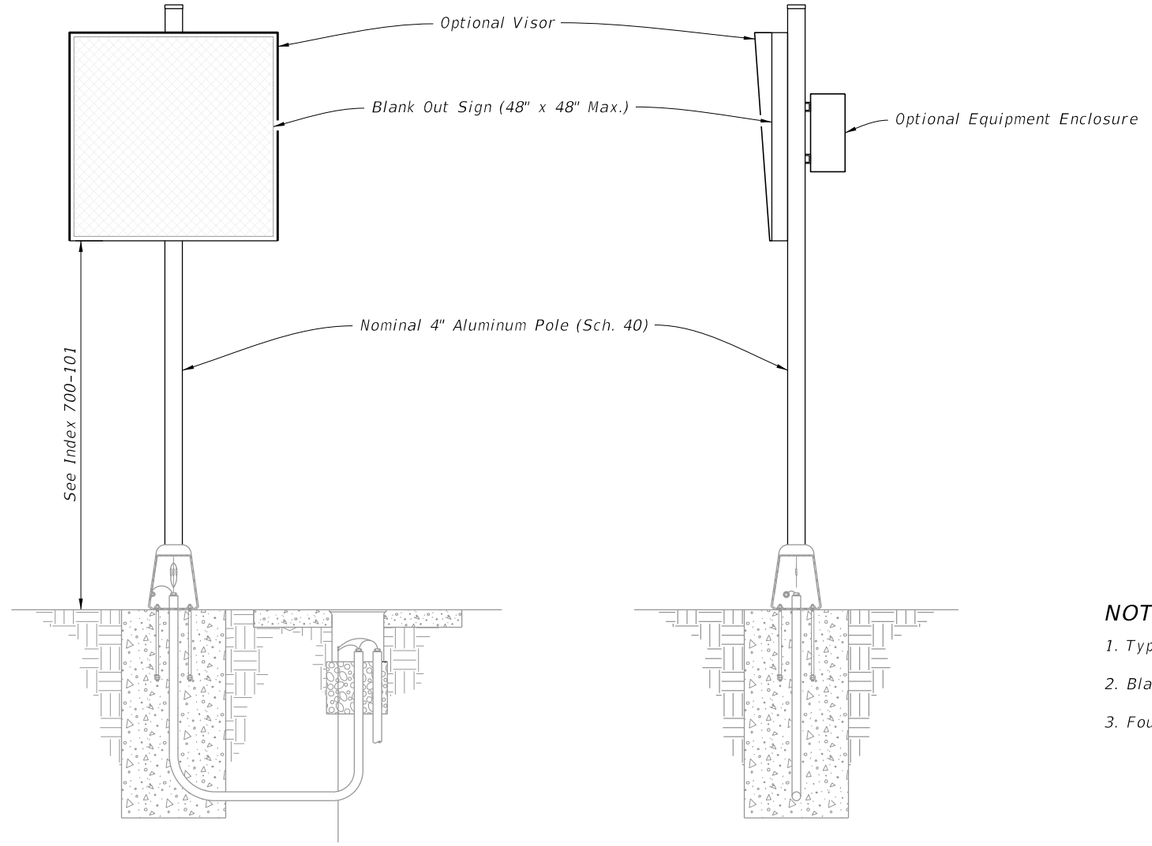
LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	INDEX	SHEET
11/01/22					700-120	9 of 11



FRONT ELEVATION

SIDE ELEVATION

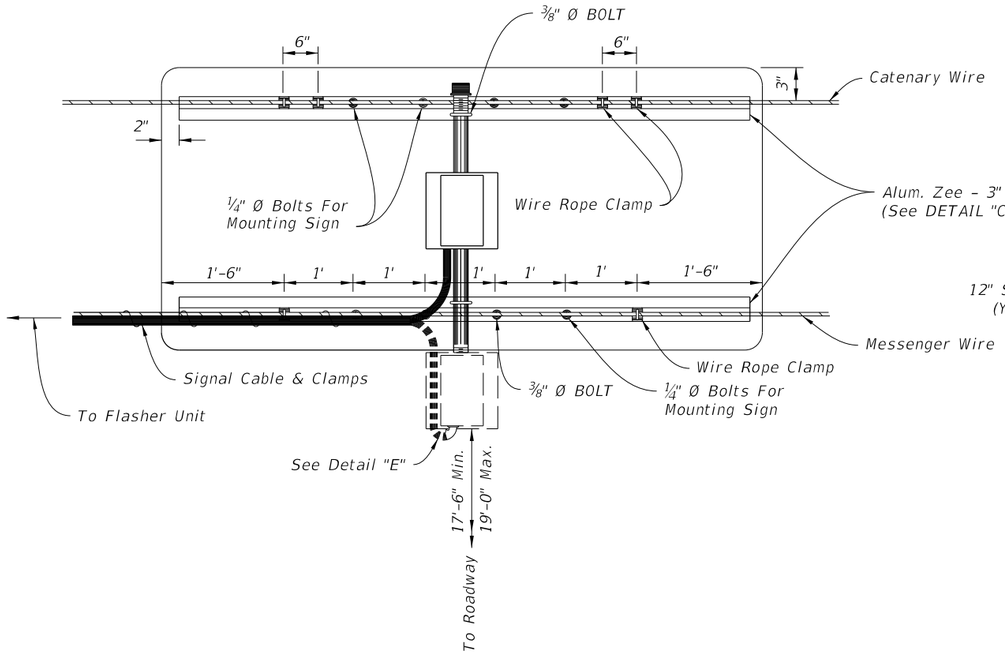
NOTES:

1. Type A1 Assembly (conventionally powered) is shown.
2. Blank Out Sign visors are optional.
3. Foundation reinforcement not shown.

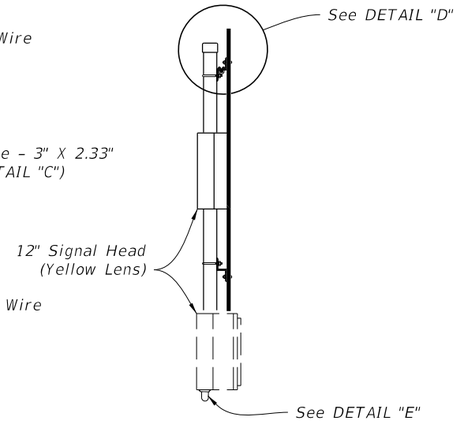
10/20/2022 8:57:35 AM

ROADSIDE SIGN ASSEMBLY-8

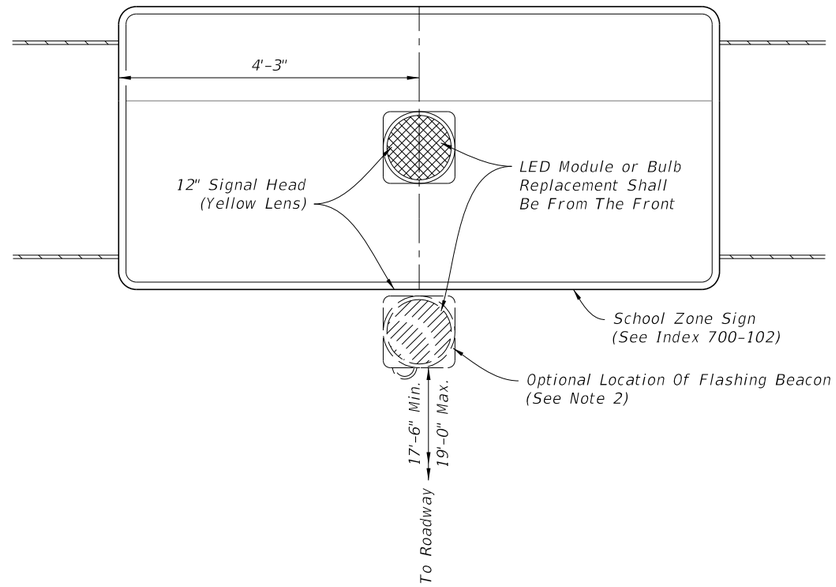
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/21			FDOT FY 2023-24 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	700-120	10 of 11



REAR VIEW

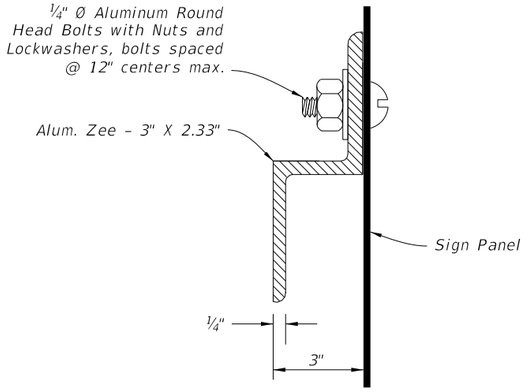


SIDE VIEW



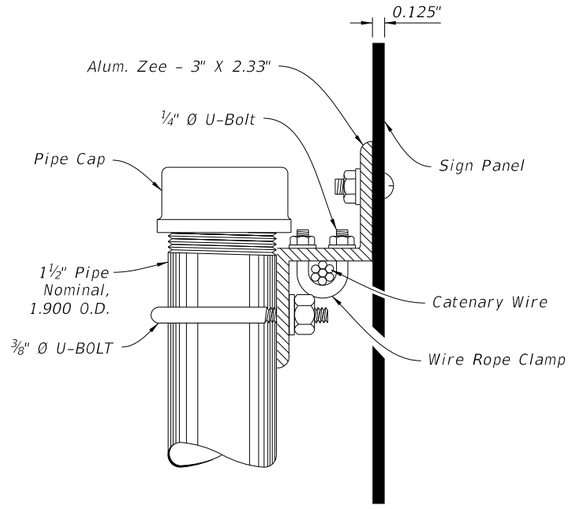
FRONT VIEW

OVERHEAD SCHOOL SIGN ASSEMBLY



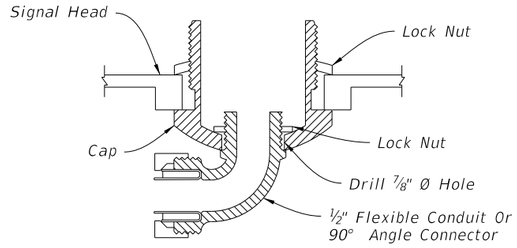
ZEE SECTION DETAIL

DETAIL "C"



MOUNTING DETAIL

DETAIL "D"



CABLE ENTRY DETAIL

DETAIL "E"

NOTES:

1. Flasher unit and cabinet to be placed on the strain pole supporting overhead sign assembly or on service pole. The flasher unit not to overhang private property or sidewalk.
2. Optional flashing beacon will be called for in the Plans. They may be placed within or below the panel, or face to the rear.

OVERHEAD SIGN ASSEMBLY

8:57:35 AM

10/20/2022

LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	ENHANCED HIGHWAY SIGNING ASSEMBLIES	INDEX	SHEET
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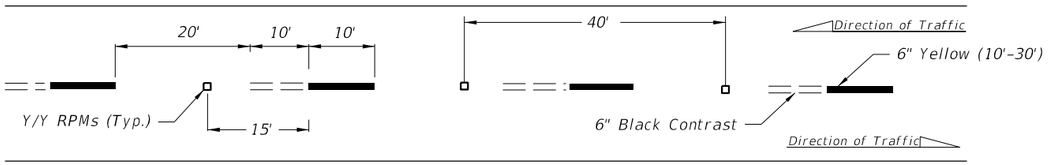
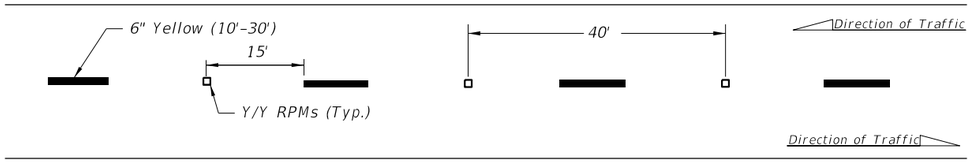
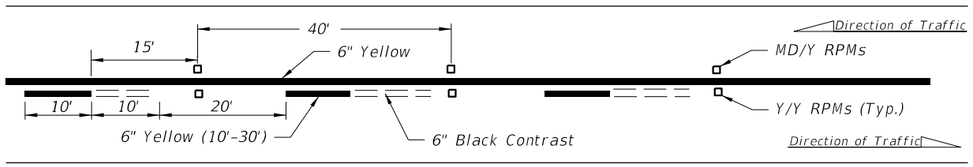


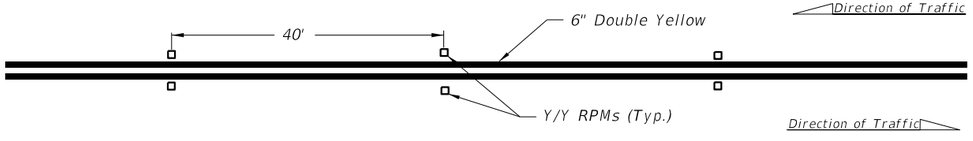
ALTERNATING SKIP LINE



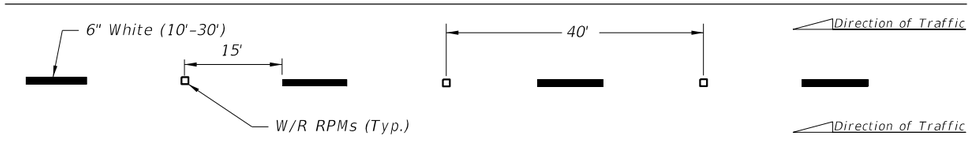
SKIP LINE



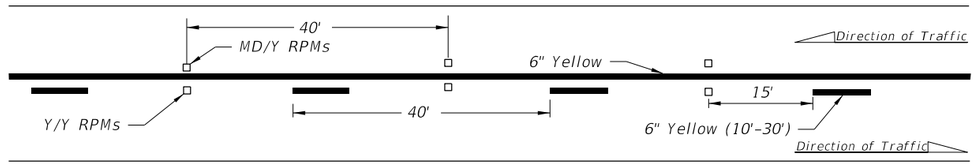
SOLID LINE WITH ALTERNATING SKIP



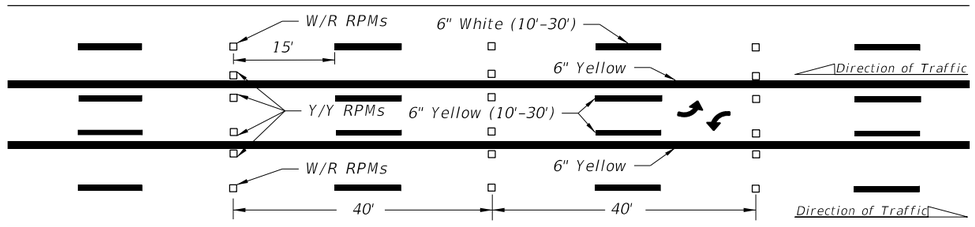
DOUBLE SOLID LINE



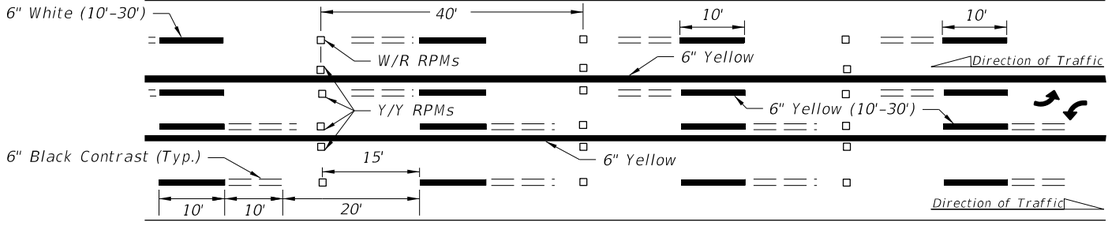
MULTILANE



SOLID LINE WITH SKIP



SKIP LINE WITH TWO-WAY LEFT TURN LANE



ALTERNATING SKIP LINE WITH TWO-WAY LEFT TURN LANE

NOTES:

1. Offset all RPMs 1" from solid longitudinal lines unless otherwise noted or shown.
2. Spacing may be reduced for sharp curves if required.
3. For placement of RPMs on ramps, see Index 711-003.
4. Make the traffic face of the RPM the same color as the pavement marking that it is supplementing.

LEGEND:

B/C = BACK OF CURB

EOP = EDGE OF PAVEMENT

RPM = RAISED PAVEMENT MARKER

W/R = WHITE/RED RPM

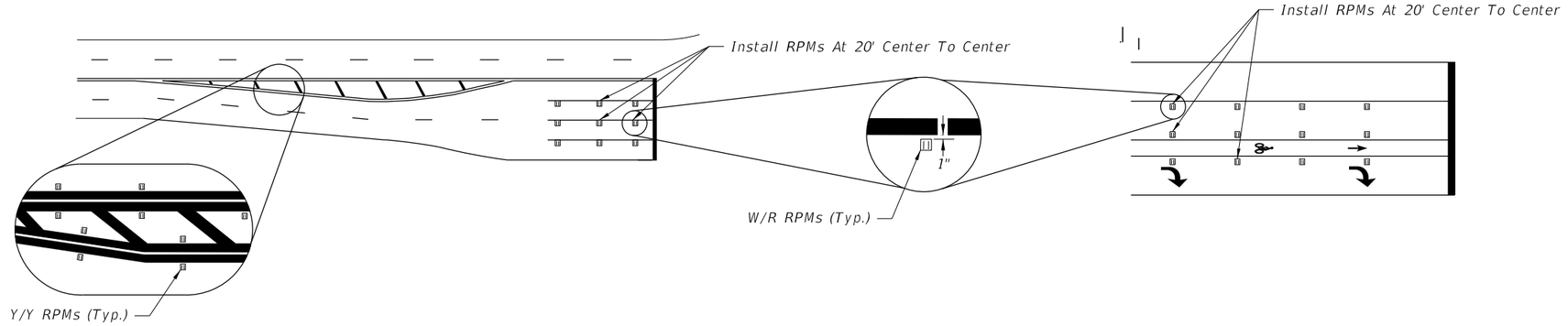
Y/Y = YELLOW/YELLOW RPM

Y/R = YELLOW/RED RPM

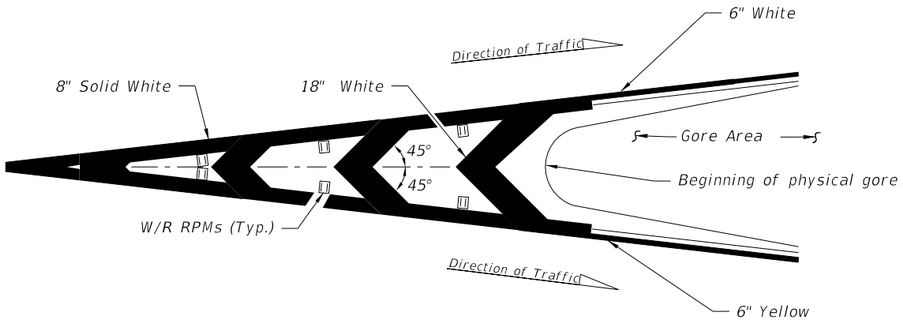
MD/Y = MONO-DIRECTIONAL YELLOW RPM

10/20/2022 8:57:36 AM

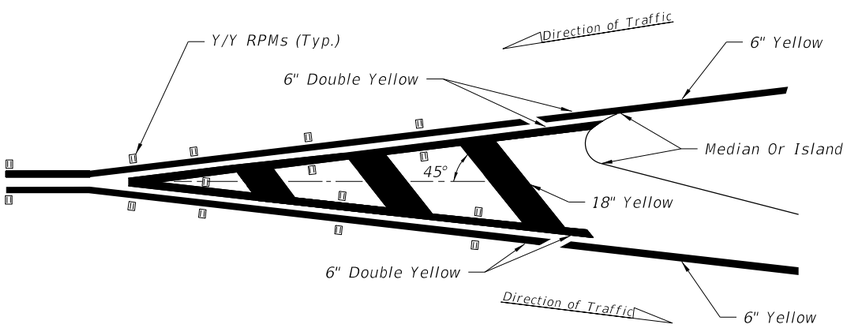
LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	TYPICAL PLACEMENT OF RAISED PAVEMENT MARKERS	INDEX	SHEET
11/01/18					706-001	1 of 6



RPM PLACEMENT AT INTERSECTIONS



RPM PLACEMENT AT TRAFFIC CHANNELIZATION AT GORE
(Traffic Flows In Same Direction)



RPM PLACEMENT AT TRAFFIC SEPARATION
(Traffic Flows In Opposite Direction)

NOTE:

Center the Raised Pavement Markers between chevrons and crosshatching.

LEGEND:

B/C = BACK OF CURB

EOP = EDGE OF PAVEMENT

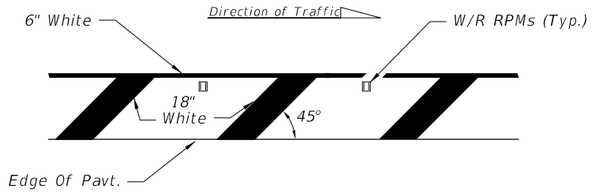
RPM = RAISED PAVEMENT MARKER

W/R = WHITE/RED RPM

Y/Y = YELLOW/YELLOW RPM

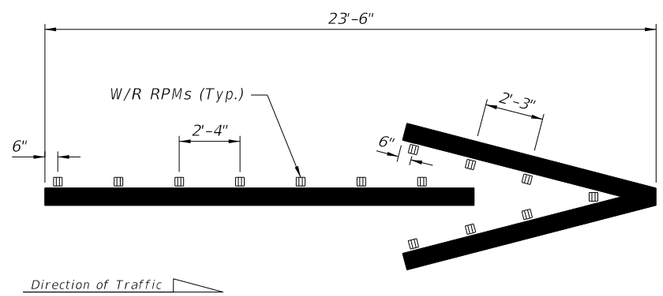
Y/R = YELLOW/RED RPM

MD/Y = MONO-DIRECTIONAL YELLOW RPM



Right side of the roadway shown. For the left side of roadway, the pavement marking is yellow and oriented opposite hand.

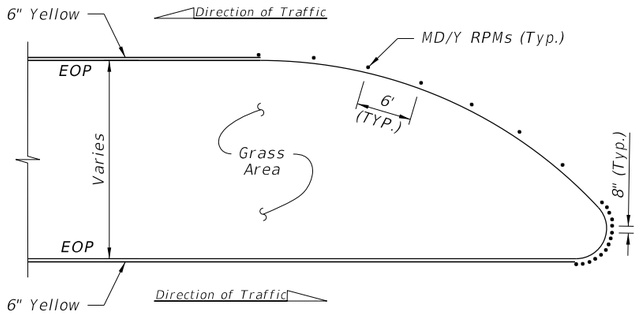
RPM PLACEMENT AT ROADSIDE CROSSHATCHING



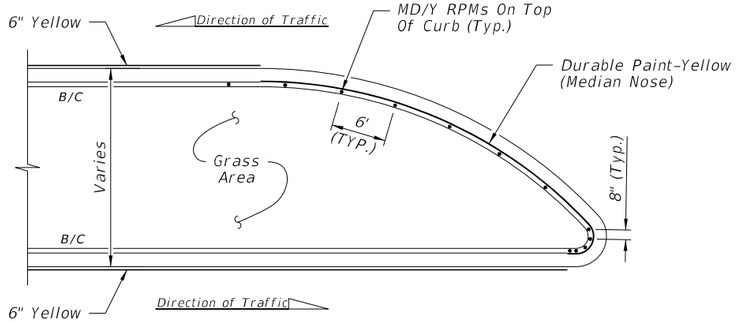
WRONG-WAY ARROW

6/8/2023 7:25:06 AM

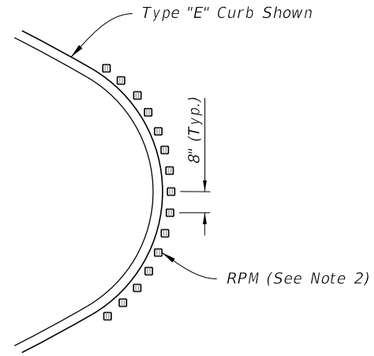
LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	TYPICAL PLACEMENT OF RAISED PAVEMENT MARKERS	INDEX	SHEET
11/01/21					706-001	2 of 6



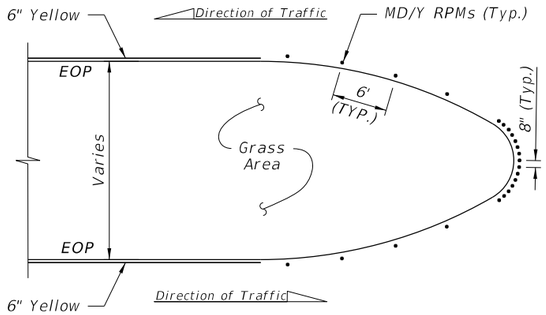
DETAIL "A"



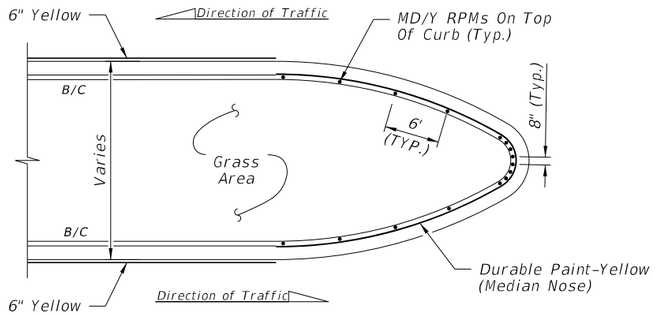
DETAIL "D"



RPM ORIENTATION DETAIL



DETAIL "B'



DETAIL "E"

POSTED SPEED LIMIT MPH	"Y" FEET
30 OR LESS	10
35	20
40	20
45	30
50 OR MORE	40

LEGEND:

B/C = BACK OF CURB

EOP = EDGE OF PAVEMENT

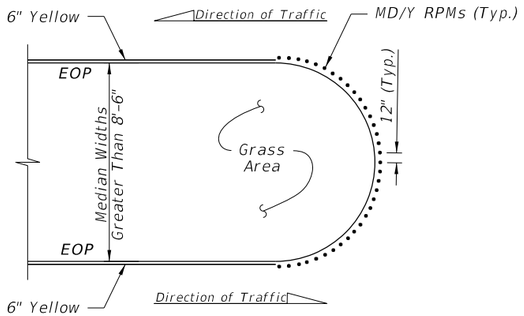
RPM = RAISED PAVEMENT MARKER

W/R = WHITE/RED RPM

Y/Y = YELLOW/YELLOW RPM

Y/R = YELLOW/RED RPM

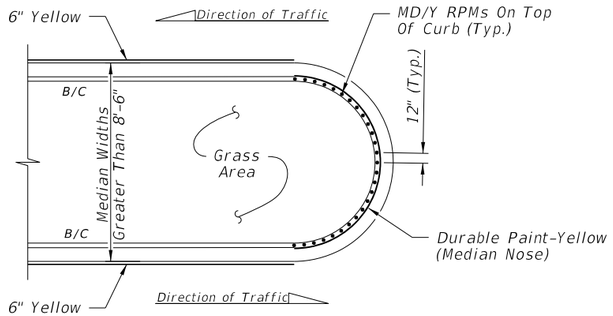
MD/Y = MONO-DIRECTIONAL YELLOW RPM



DETAIL "C"

FLUSH MEDIAN OPENINGS

(Type "E" Curb Similar. See Note 1)



DETAIL "F"

TYPE "D" OR "F" CURB

NOTES:

1. For Type "E" Curb, install RPMs along the pavement edge marking using the same spacing shown.
2. Orient traffic faces of RPMs in curb median radii to be parallel to direction of travel lanes.
3. Use epoxy adhesive to install RPMs on concrete median nose curbs.
4. Install RPMs on clean, unpainted surface. Do not paint curb surface where RPMs will be placed.

RPM PLACEMENT AT MEDIAN OPENINGS

(When called for in the Plans)

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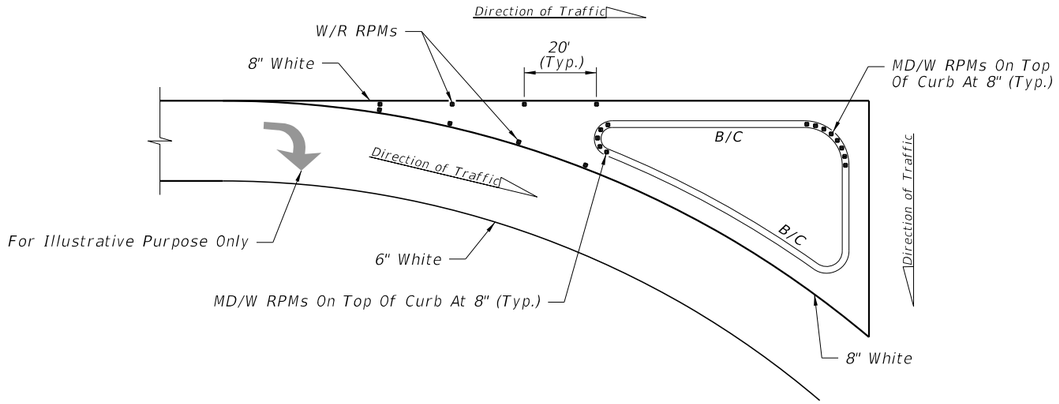
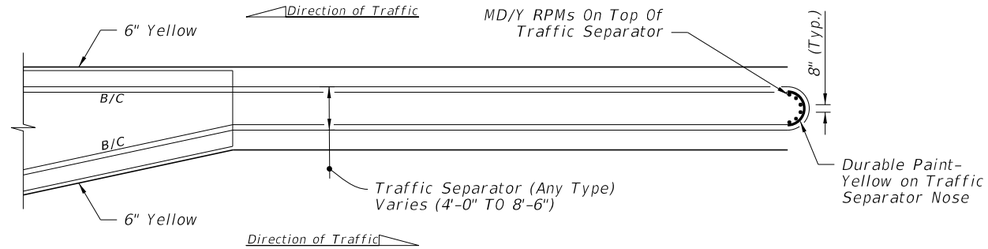
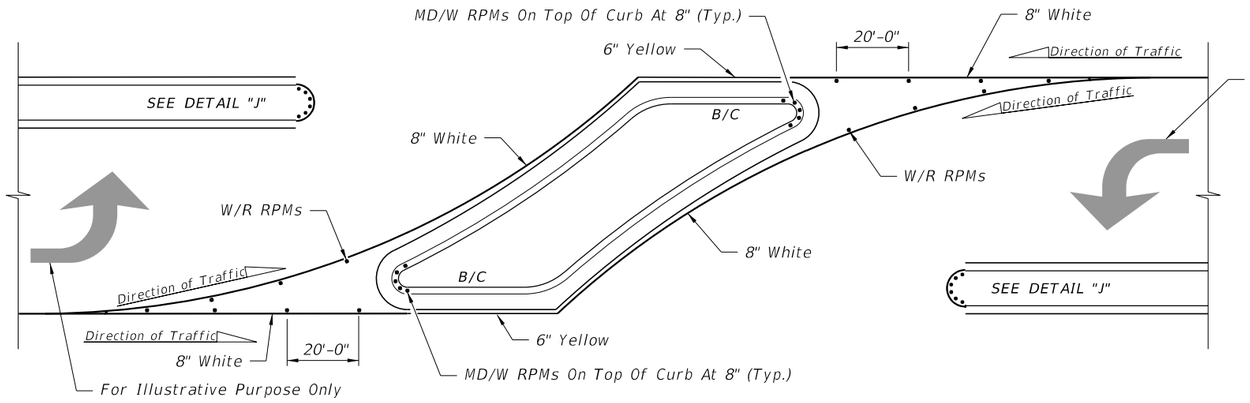


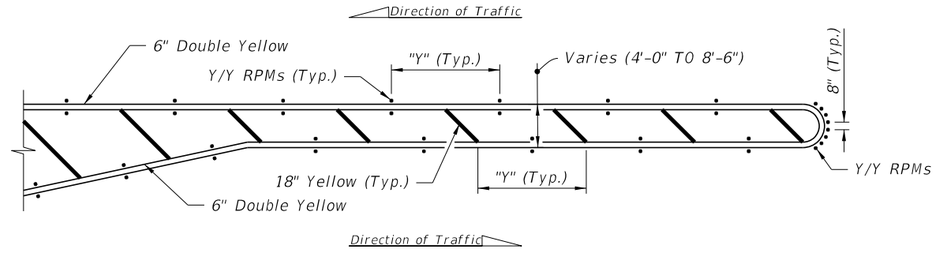
DETAIL "G"



DETAIL "J"



DETAIL "H"



DETAIL "K"

RPM PLACEMENT AT ISLANDS
(When called for in the Plans)

POSTED SPEED LIMIT MPH	"Y" FEET
30 OR LESS	10
35	20
40	20
45	30
50 OR MORE	40

RPM PLACEMENT AT TRAFFIC SEPARATORS
(When called for in the Plans)

NOTES:
1. For Type "E" Curb install RPMs along the pavement edge marking using the same spacing shown.
2. Orient traffic faces of RPMs in median radii to be parallel to direction of travel lanes.

LEGEND:
B/C = BACK OF CURB

EOP = EDGE OF PAVEMENT

RPM = RAISED PAVEMENT MARKER

W/R = WHITE/RED RPM

Y/Y = YELLOW/YELLOW RPM

Y/R = YELLOW/RED RPM

MD/Y = MONO-DIRECTIONAL YELLOW RPM

MD/W = MONO-DIRECTIONAL WHITE RPM

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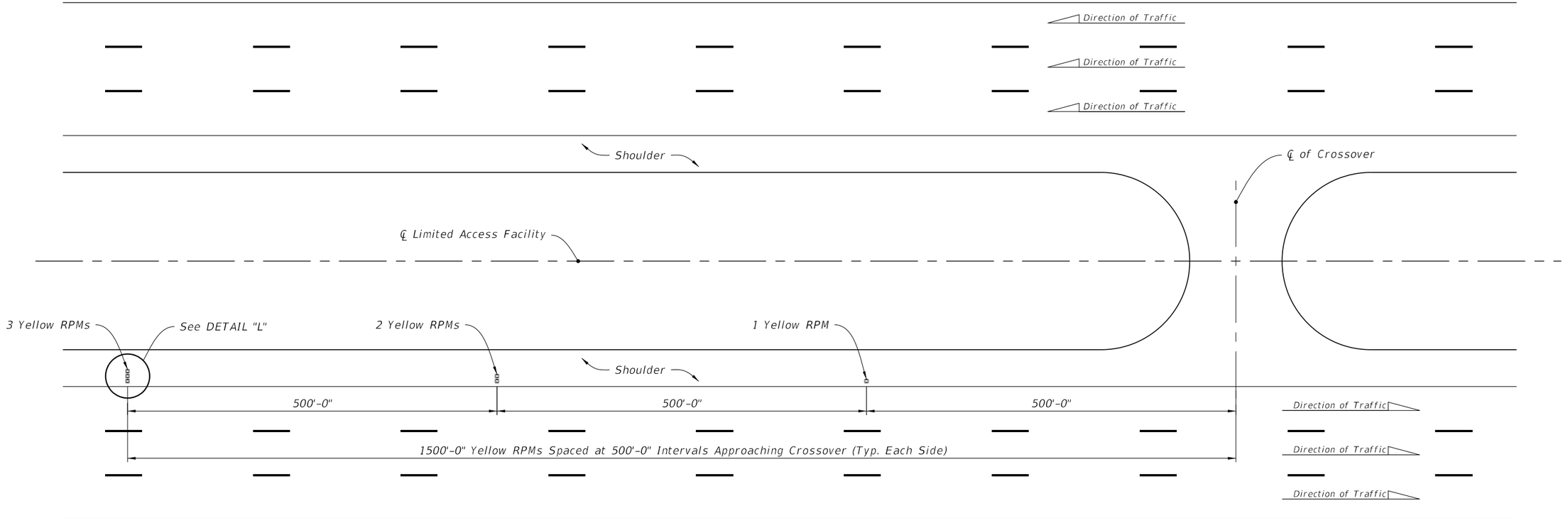
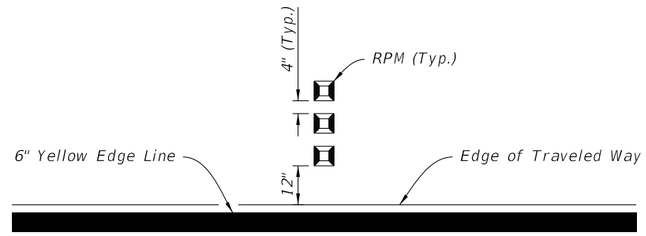
LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	TYPICAL PLACEMENT OF RAISED PAVEMENT MARKERS	INDEX	SHEET
11/01/21					706-001	4 of 6



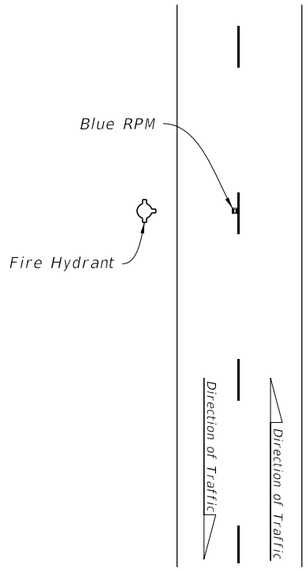
RPM PLACEMENT FOR CROSSOVERS ON LIMITED ACCESS ROADWAYS



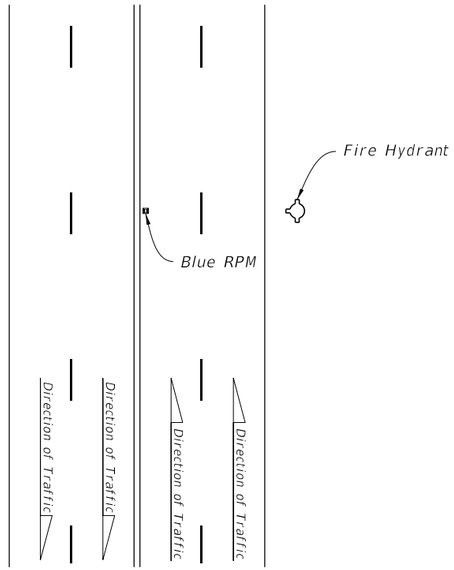
DETAIL "L"

10/20/2022 8:57:40 AM

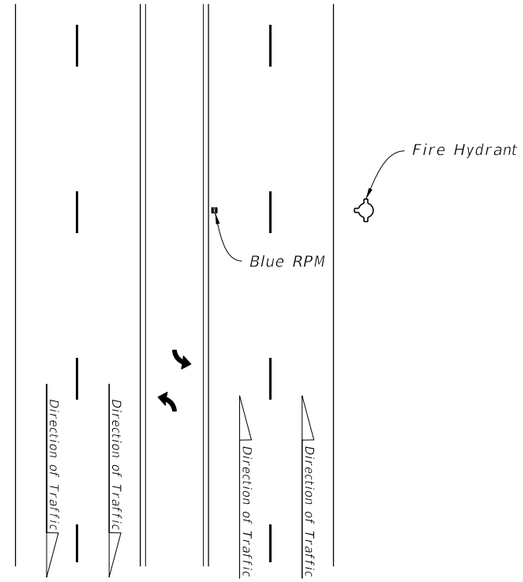
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/18			FY 2023-24 STANDARD PLANS	TYPICAL PLACEMENT OF RAISED PAVEMENT MARKERS	706-001	5 of 6



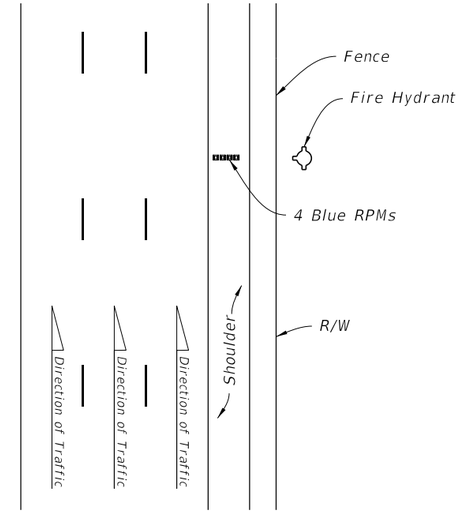
TWO-LANE ROADWAY



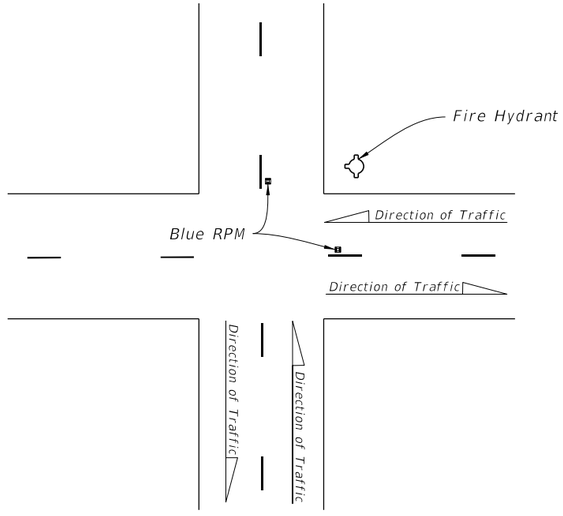
MULTILANE ROADWAY



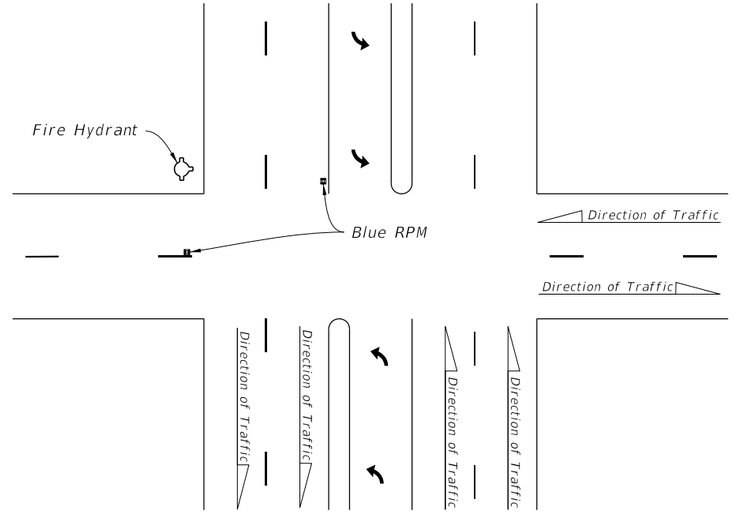
MULTILANE ROADWAY
WITH TURN LANE



LIMITED ACCESS ROADWAY



TWO-LANE ROADWAY
AT INTERSECTION



MULTILANE ROADWAY AT INTERSECTION

BLUE RPM PLACEMENT

10/20/2022 8:57:40 AM

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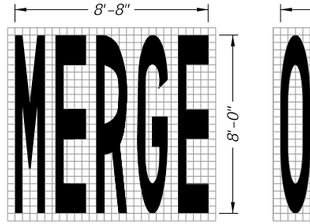
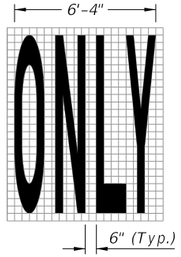
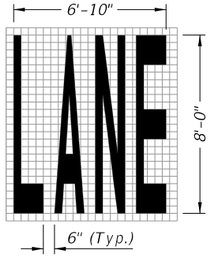
11/01/18			FDOT FY 2023-24 STANDARD PLANS	TYPICAL PLACEMENT OF RAISED PAVEMENT MARKERS	706-001	6 of 6



34 S.F.



22 S.F.



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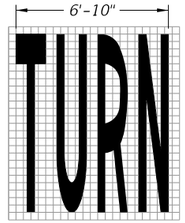

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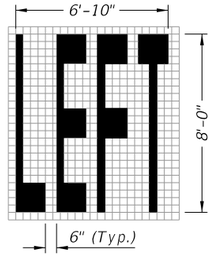

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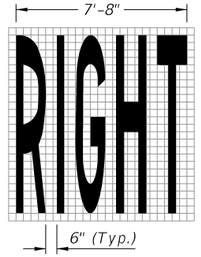
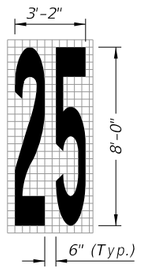


26 S.F.



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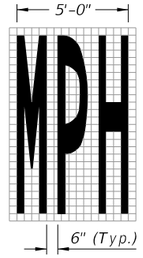

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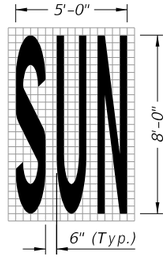

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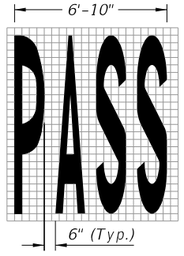

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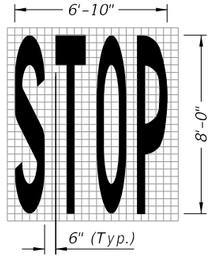
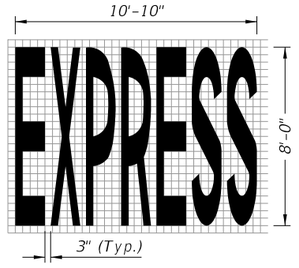
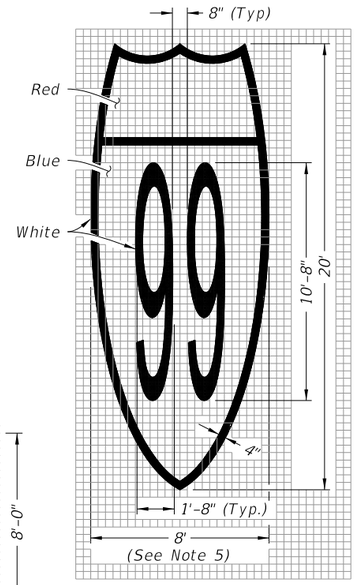


22 S.F.

20 S.F.

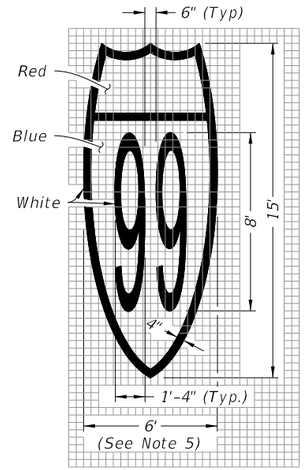


43 S.F.



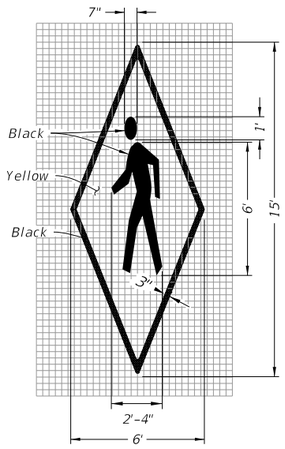
Route Shield for Limited Access Roadways (Interstate Route Shield Shown; U.S. and State Route Shield Similar)

128 S.F.



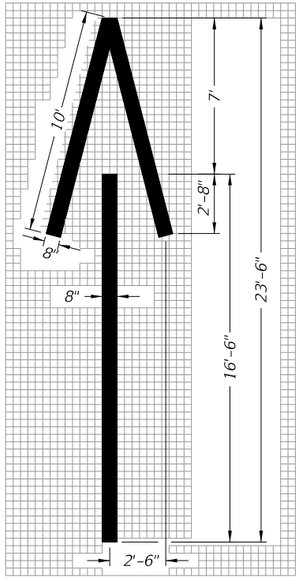
Route Shield for Arterials and Collectors (Interstate Route Shield Shown; U.S. and State Route Shield Similar)

72 S.F.



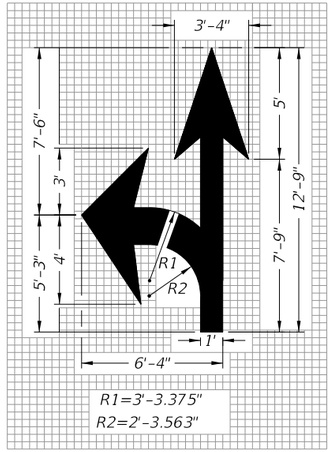
In Pavement Warning Marking

45 S.F.



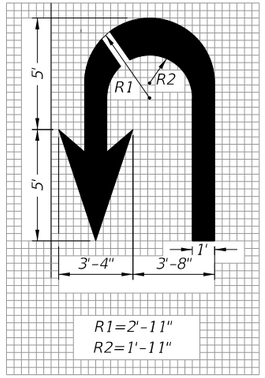
Wrong-Way Arrow

24 S.F.



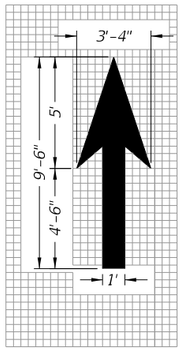
Turn and Through Lane-Use Arrow

29 S.F.



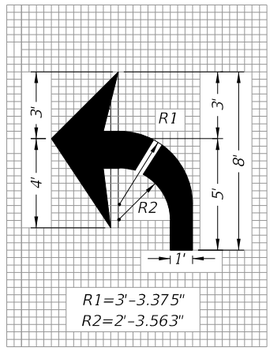
U Turn Lane-Use Arrow

27 S.F.



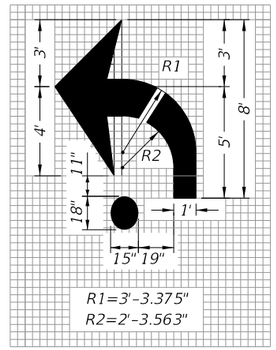
Through Lane-Use Arrow

12 S.F.



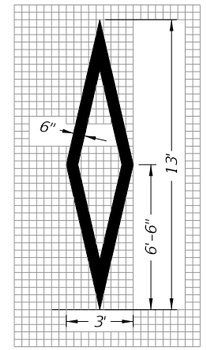
Turn Lane-Use Arrow (Left Turn Shown – Right Turn Similar)

17 S.F.



Roundabout Approach Arrow

19 S.F.



Preferential Lane Symbol

11 S.F.

PAVEMENT MESSAGES NOTES:

1. Place all pavement messages 25' back from the stop line.
2. Dimensions are within 1" ±.
3. All grids are 4" x 4".
4. All pavement messages must be white except Route Shields and In Pavement Warning Markings.
5. Increase width of route shield for routes with three digits.

PAVEMENT MESSAGE AND ARROW DETAILS

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LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
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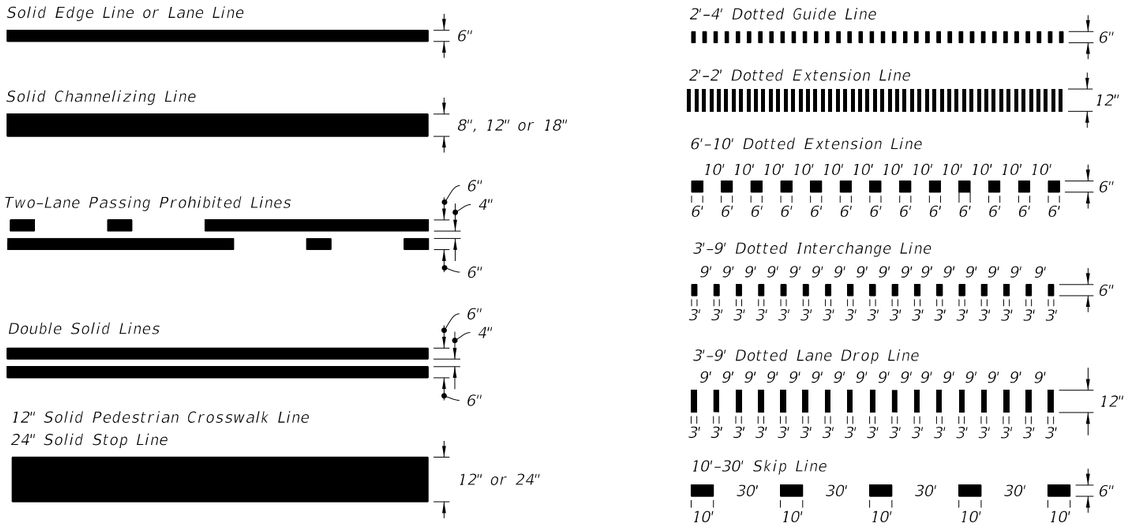
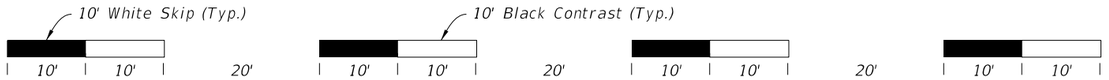
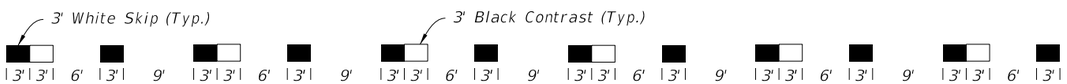


PAVEMENT MARKING LINES

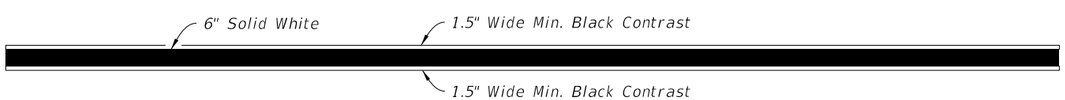


10'-30' SKIP LINE WITH CONTRAST MARKINGS



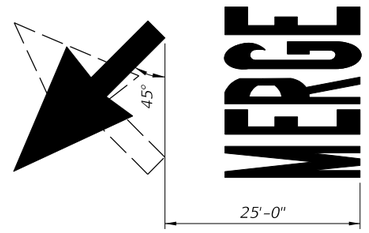
DOTTED LINE WITH ALTERNATING CONTRAST MARKINGS

(3'-9' Dotted Line Shown, Other Dotted Lines Similar)

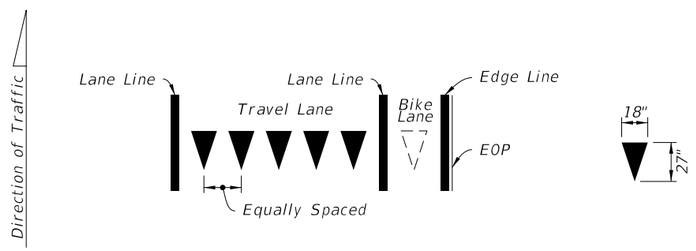


LONGITUDINAL SOLID LANE LINE WITH CONTRAST MARKINGS

(Not For Use On Edge Lines)



MARKINGS FOR MERGE



Yield Lines consist of five – 18" X 27" white triangles which face traffic. Equally space triangles within traffic lane. When a bike lane is present, add one additional triangle in the center of the bike lane.

YIELD LINES

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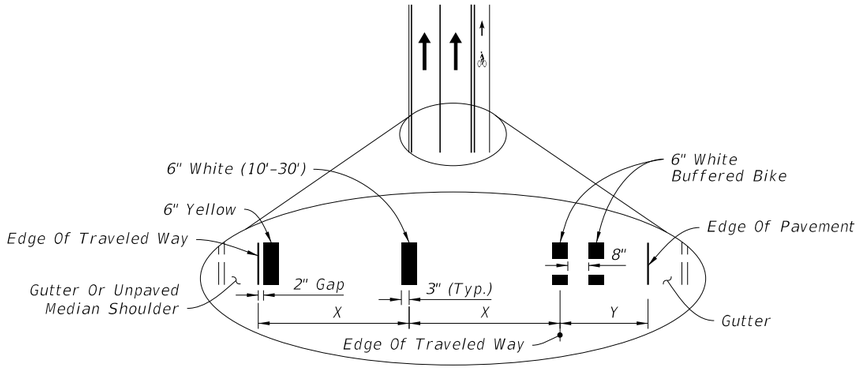
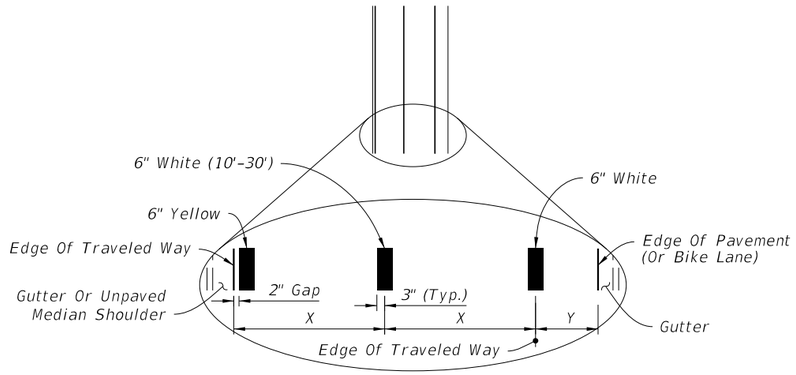
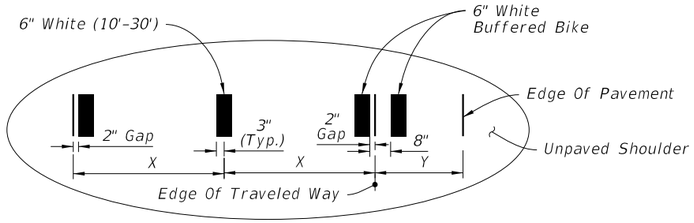


CURB AND GUTTER



CURB AND GUTTER

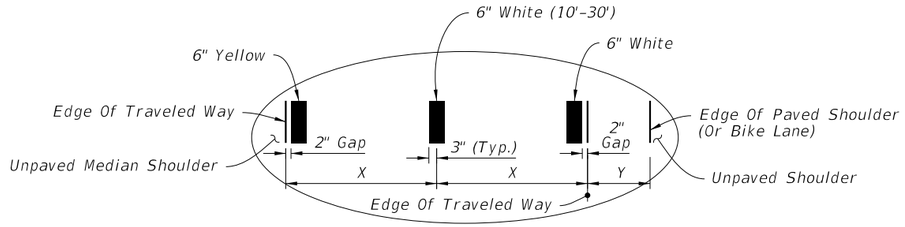


FLUSH SHOULDER

X = LANE WIDTH (FT.)

Y = BUFFERED BIKE LANE WIDTH (FT.)

STRIPING FOR BUFFERED BIKE LANE

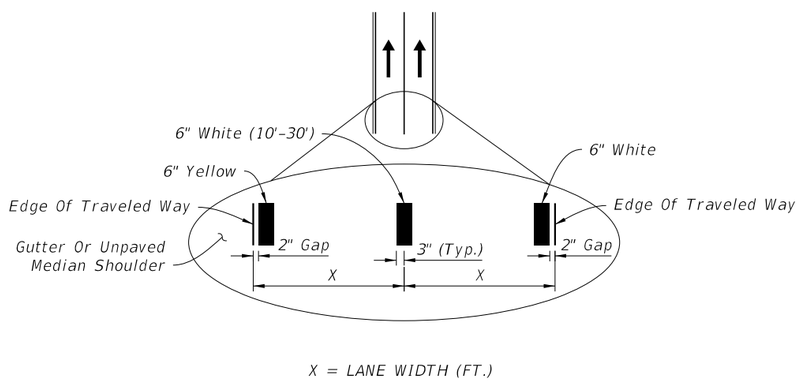


FLUSH SHOULDER

X = LANE WIDTH (FT.)

Y = PAVED SHOULDER / BIKE LANE

STRIPING WITH SHOULDER OR NON-BUFFERED BIKE LANE



X = LANE WIDTH (FT.)

STRIPING WITH NO SHOULDER OR BIKE LANE

NOTES:

1. Lane widths (X) may not be same for each lane in the section.
2. For placement of RPMs, see Index 706-001.

PLACEMENT OF LONGITUDINAL PAVEMENT MARKINGS

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LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	PAVEMENT MARKINGS	INDEX	SHEET
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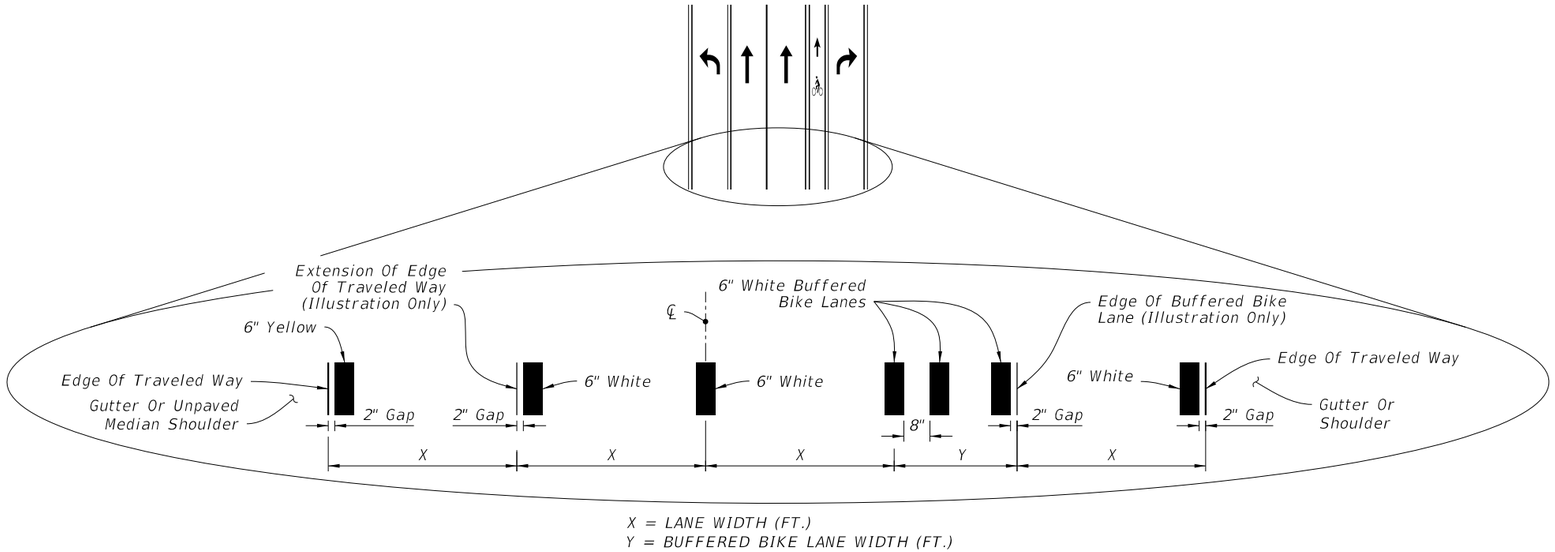
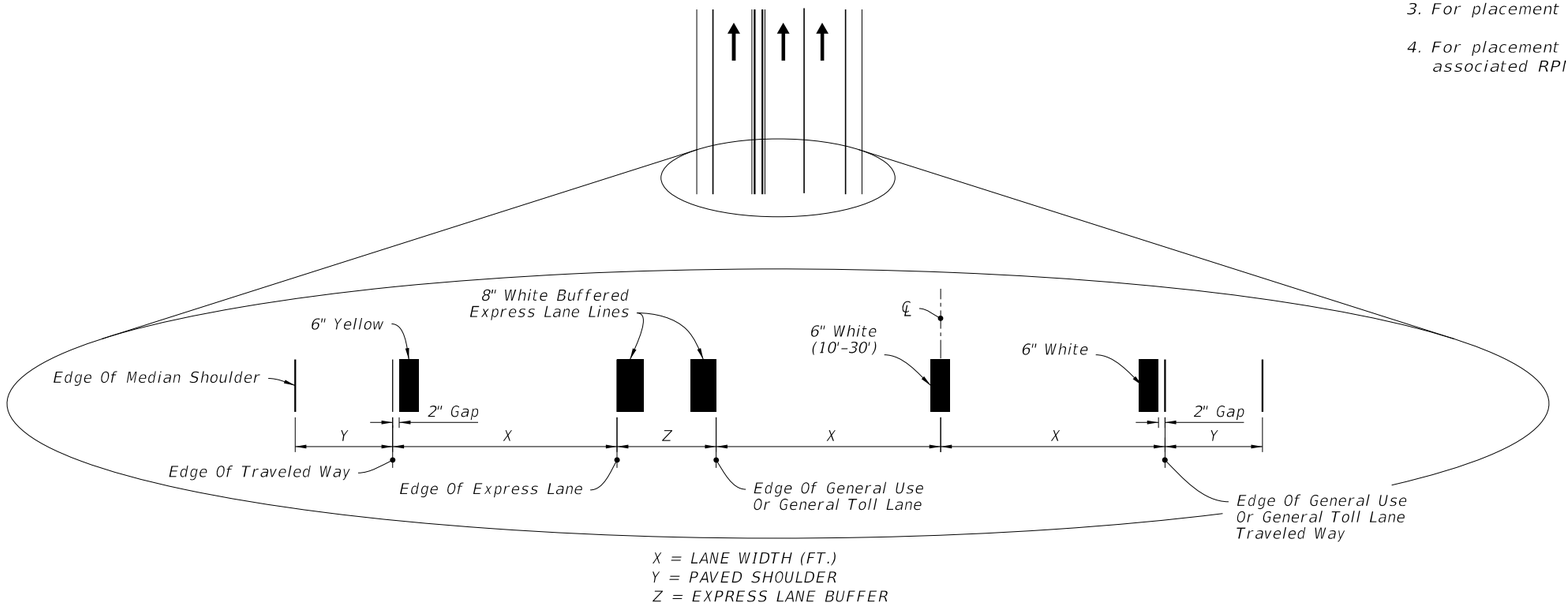


X = LANE WIDTH (FT.)
Y = BUFFERED BIKE LANE WIDTH (FT.)

INTERSECTION APPROACH STRIPING WITH TURN LANES AND BUFFERED BIKE LANE KEY HOLE



X = LANE WIDTH (FT.)
Y = PAVED SHOULDER
Z = EXPRESS LANE BUFFER

BUFFERED EXPRESS LANE STRIPING

NOTES:

1. Lane widths (X) may not be same for each lane in the section.
3. For placement of RPMs, see Index 706-001.
4. For placement of Express Lane markers and associated RPMs, see the Plans.

PLACEMENT OF LONGITUDINAL PAVEMENT MARKINGS

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LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	PAVEMENT MARKINGS	INDEX	SHEET
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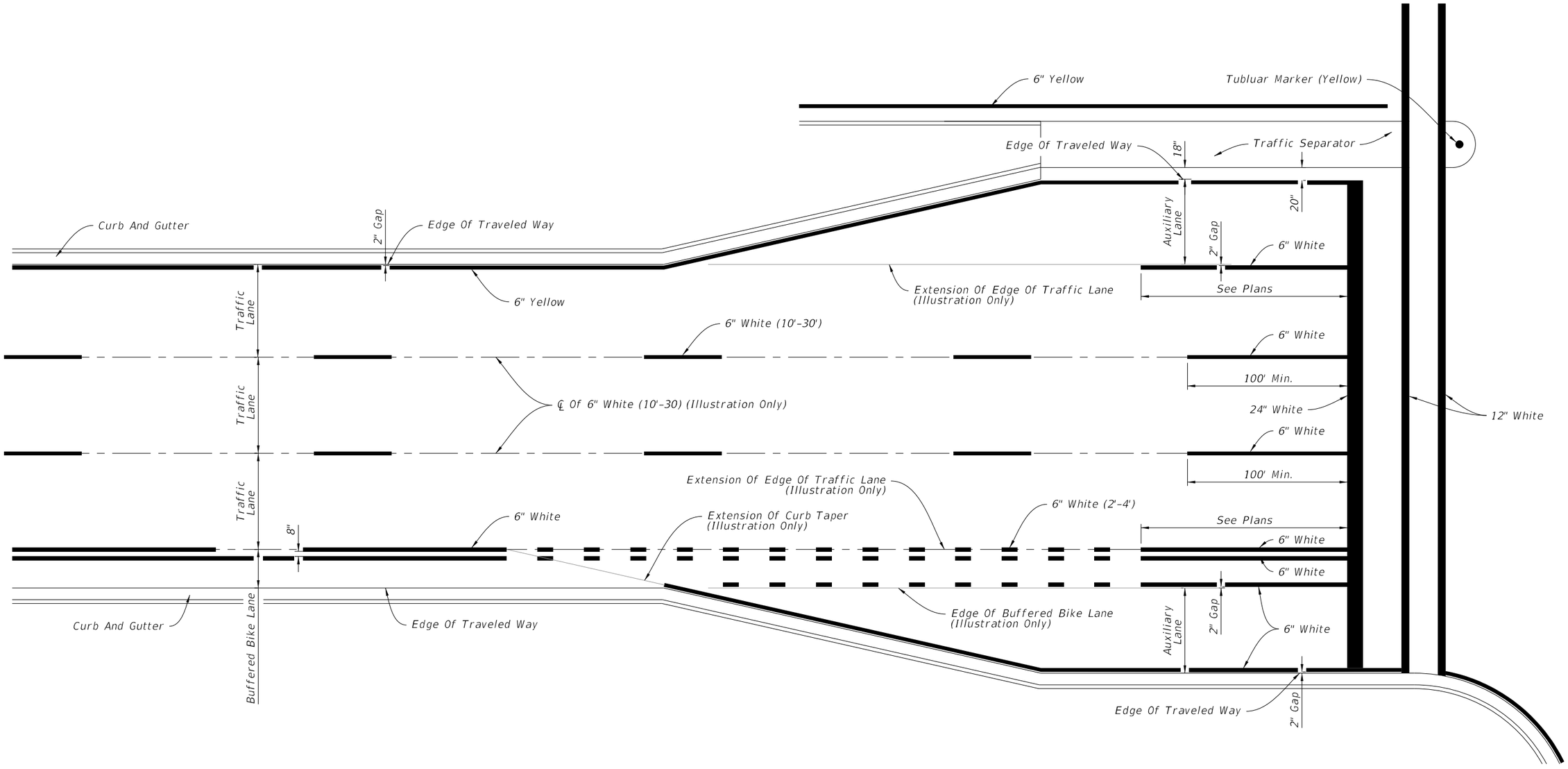

CURB AND GUTTER SHOWN

PLACEMENT OF LONGITUDINAL PAVEMENT MARKINGS

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
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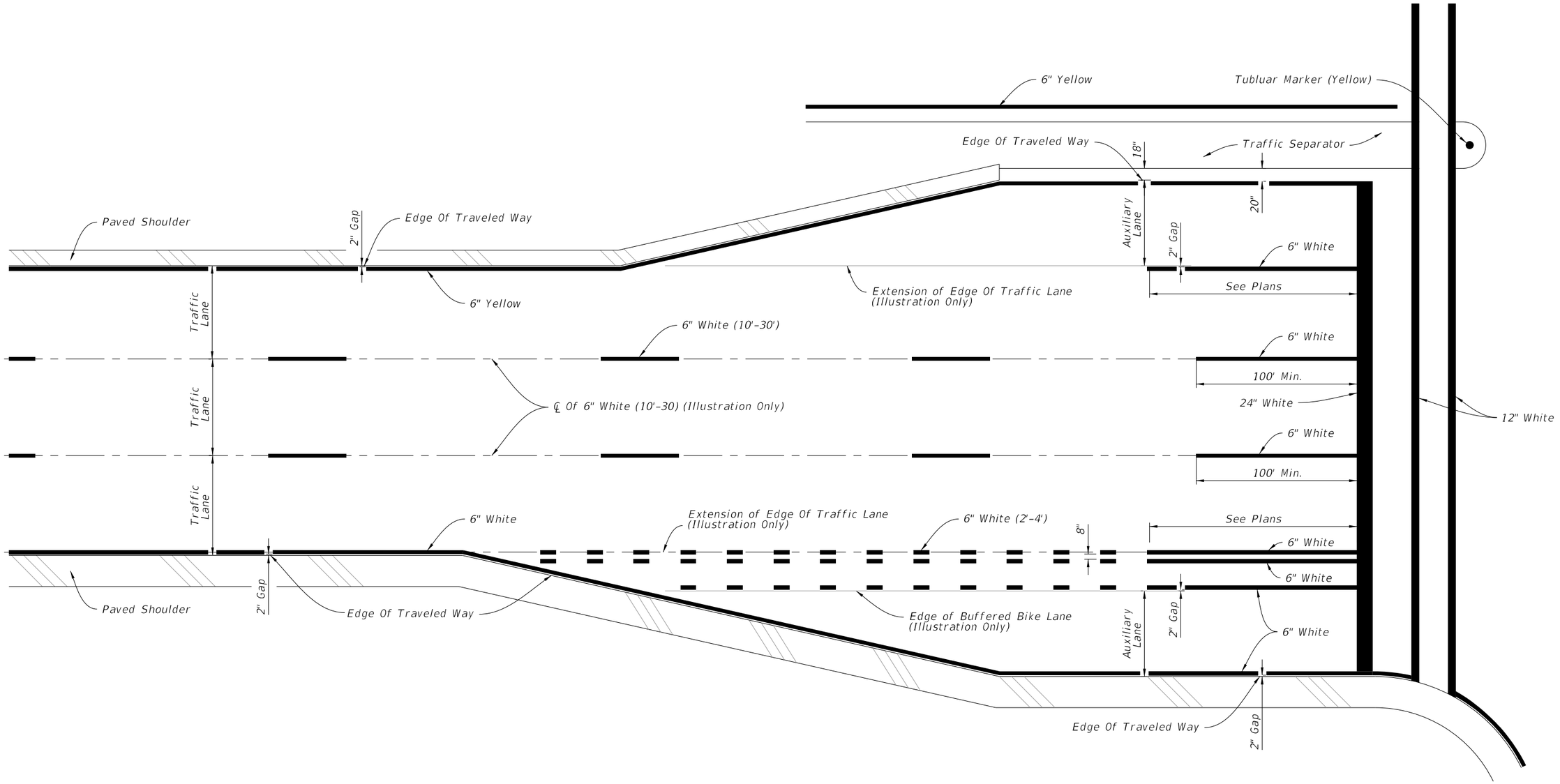

FLUSH SHOULDER SHOWN

PLACEMENT OF LONGITUDINAL PAVEMENT MARKINGS

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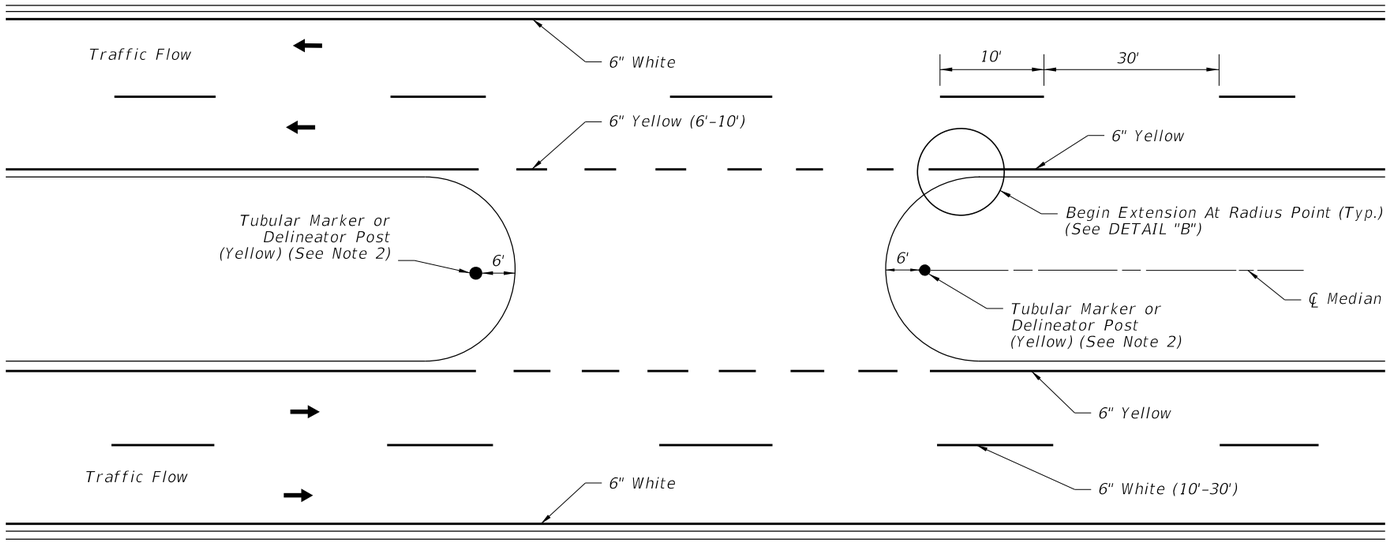
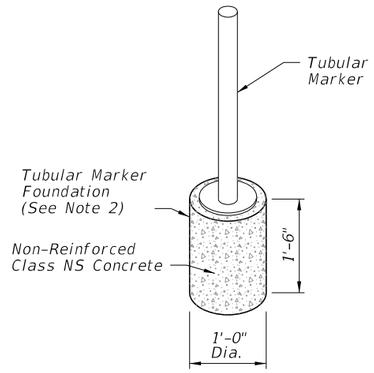
LAST REVISION	REVISION	DESCRIPTION:				
11/01/21			FY 2023-24 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 6 of 13

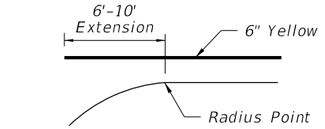


PAVEMENT MARKINGS AND DELINEATORS FOR MEDIAN CROSSOVER

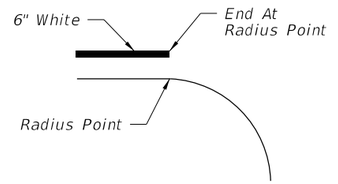


Non-Paved
Surface Foundation

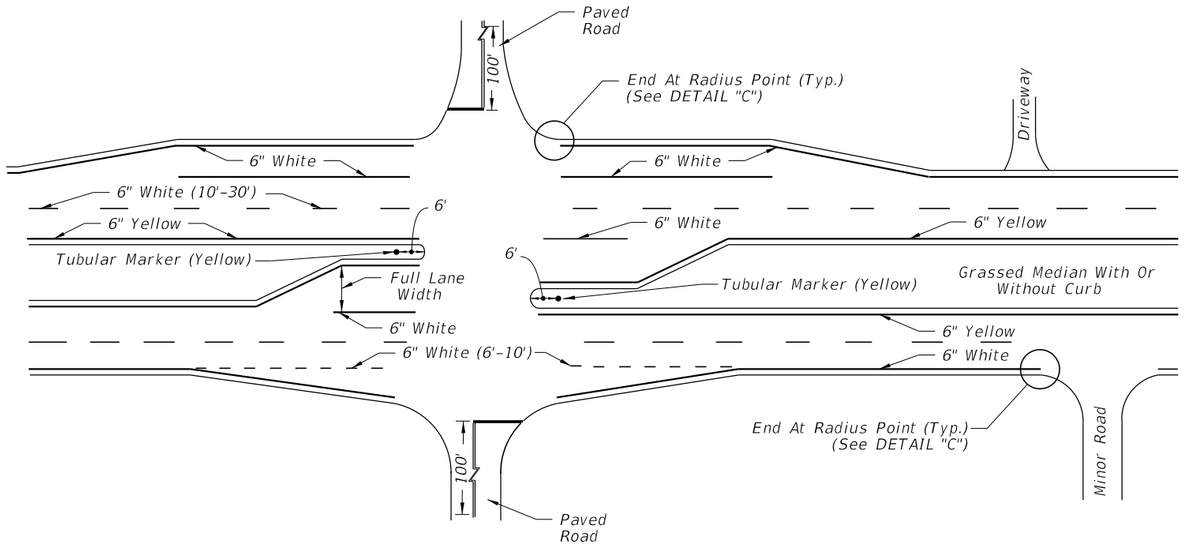
DETAIL "A"

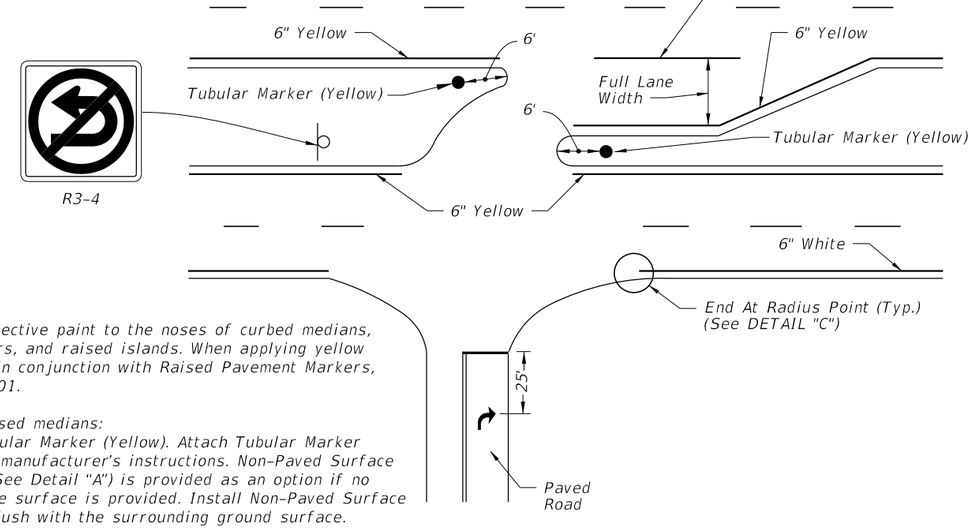


DETAIL "B"



DETAIL "C"





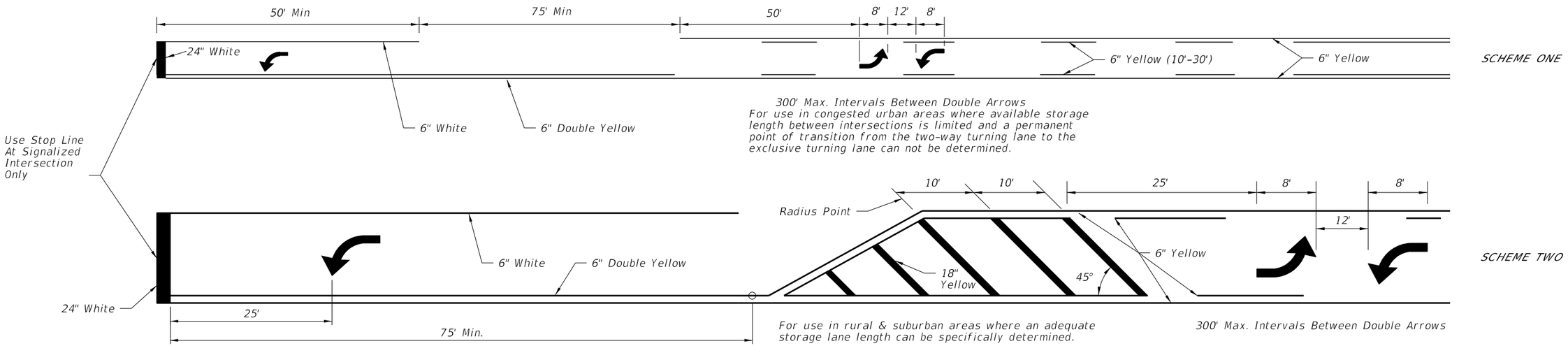
NOTES:

1. Apply yellow reflective paint to the noses of curbed medians, traffic separators, and raised islands. When applying yellow reflective paint in conjunction with Raised Pavement Markers, see Index 706-001.

2. Options for grassed medians:
   A. Option 1: Tubular Marker (Yellow). Attach Tubular Marker according to manufacturer's instructions. Non-Paved Surface Foundation (See Detail "A") is provided as an option if no other suitable surface is provided. Install Non-Paved Surface Foundation flush with the surrounding ground surface.
   B. Option 2: Delineator Post. Use yellow retro-reflective sheeting on both sides of the delineator. Install the post so that the top is 4'-0"above the grade at the edge of the pavement.

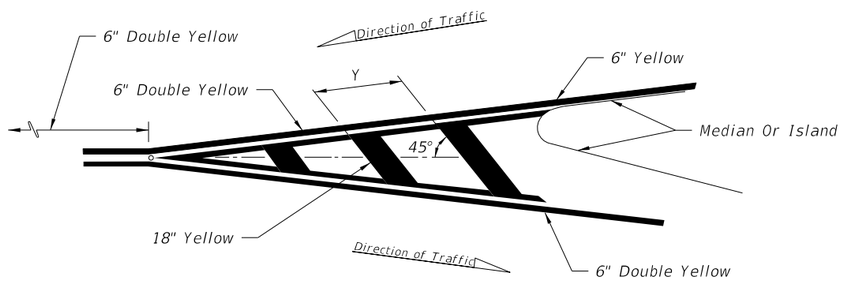
3. Extend double yellow centerlines 100' back from intersection on all approaches or 50' for unmarked cross roads.

PAVEMENT MARKINGS FOR INTERSECTIONS WITH MAJOR AND MINOR ROADS

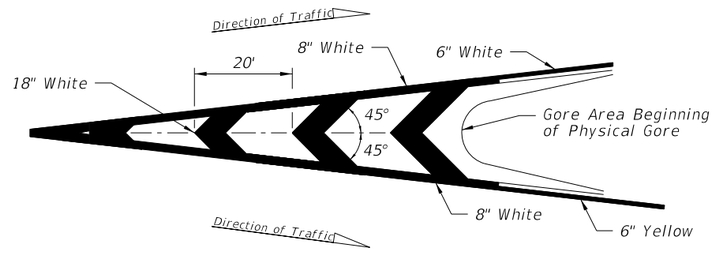


TWO WAY LEFT TURN LANE
(With Single Lane Left Turn Channelization)

POSTED SPEED LIMIT MPH	"Y" (FT.)
30 OR LESS	10
35	20
40	20
45	30
50 OR MORE	40



MARKINGS FOR TRAFFIC SEPARATION



TRAFFIC CHANNELIZATION AT GORE

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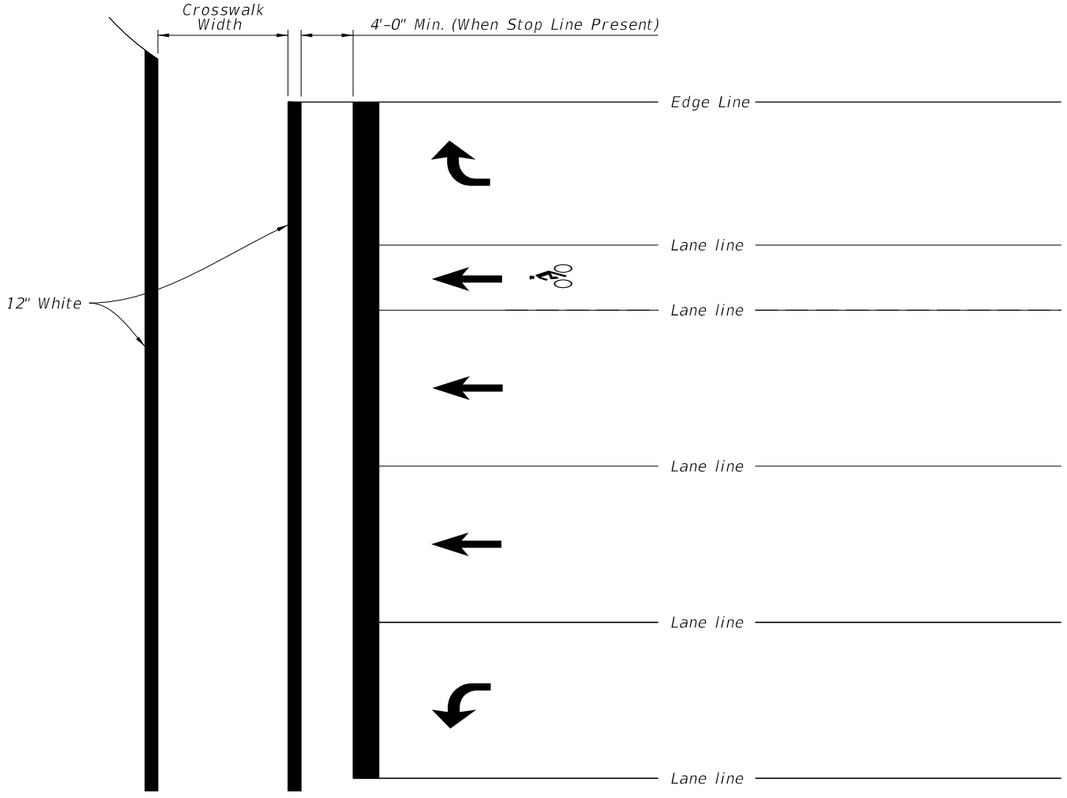
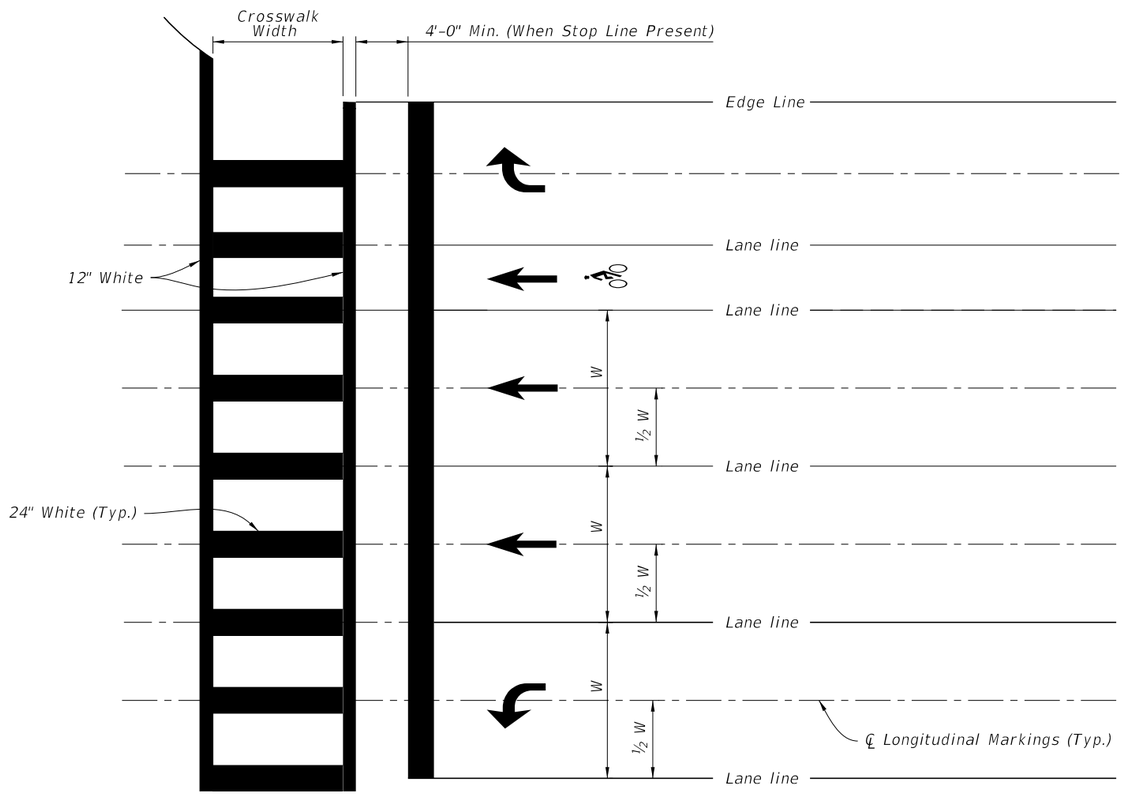


STANDARD CROSSWALK DETAILS



SPECIAL EMPHASIS CROSSWALK DETAILS

NOTES:

1. For crosswalk width, exceed width of the adjacent sidewalk, but do not make width less than 6' for intersection crosswalks and 10' for midblock crosswalks. Measure width from the inside of the transverse crosswalk markings.

2. When the Special Emphasis Crosswalk is not perpendicular to the lane lines, make the longitudinal markings parallel to the lane lines.

3. Refer to Index 522-002 when Curb Ramps are present.

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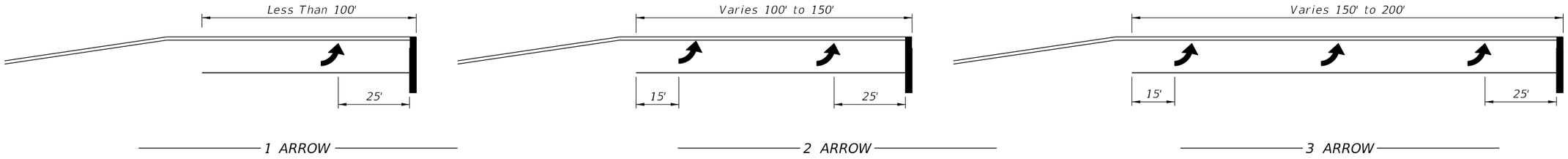
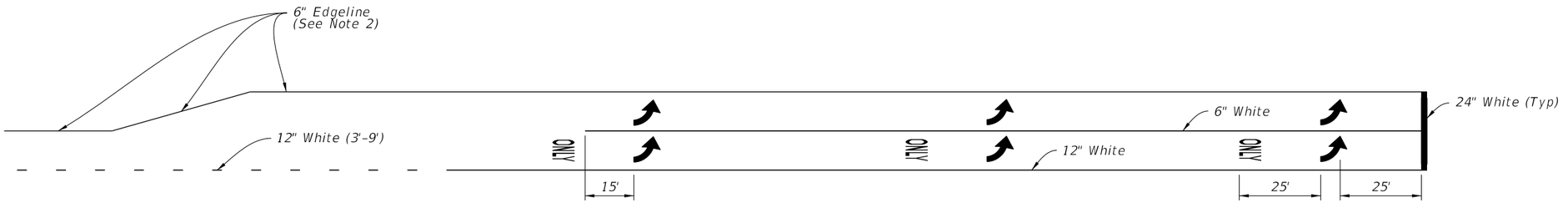


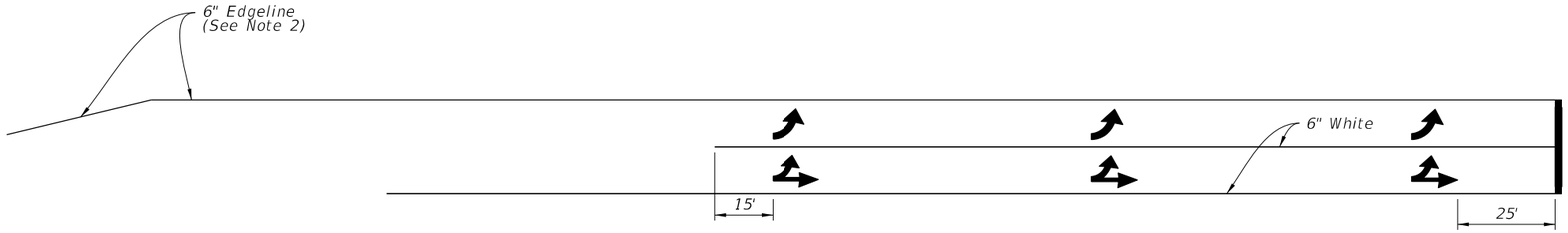
1 ARROW — 2 ARROW — 3 ARROW

Arrow should be evenly spaced between first and last arrow. Turn lanes longer than 200' add one arrow for each 100' additional length.

ARROW SPACING



Through Lane Becomes Exclusive Left Turn (Drop Lane)



Through Lane Becomes Optional Left Turn

TURNS LANE MARKINGS

NOTES:

1. This Index also applies to right turn lanes.
2. Make Edgeline pavement markings yellow for left-turn lanes and white for right-turn lanes.

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ARROW SPACING AND TURN LANE MARKINGS

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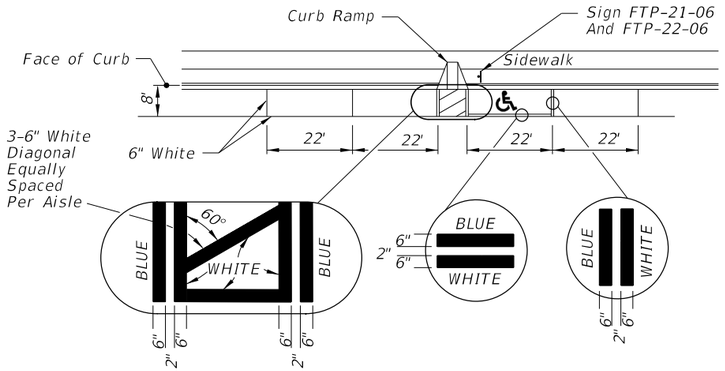
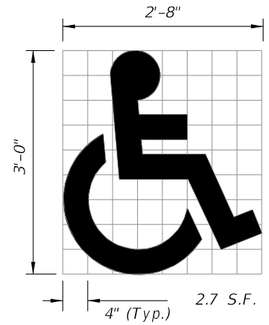
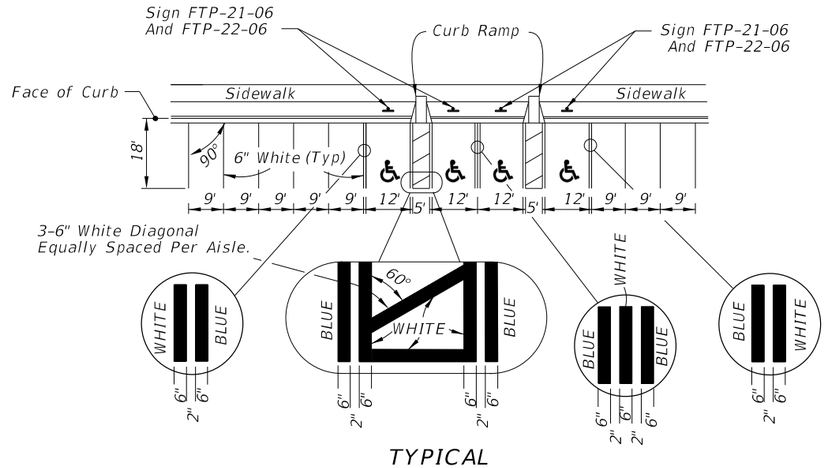
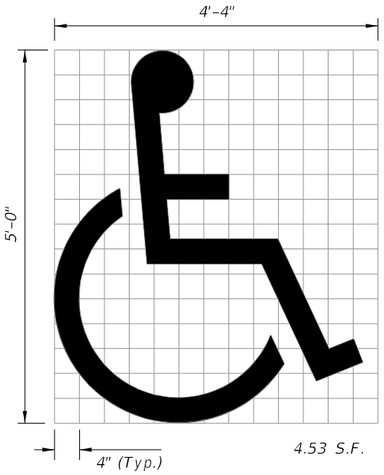




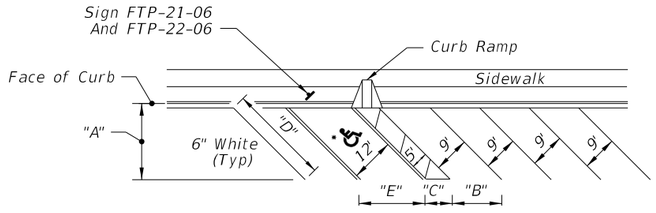


TYPICAL

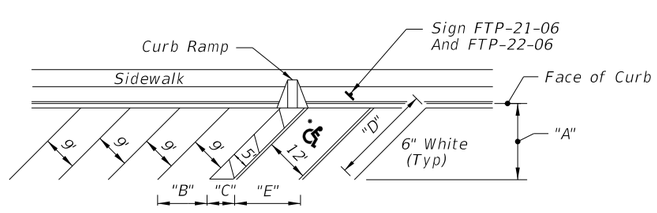


(See Note 5)

UNIVERSAL SYMBOL OF ACCESSIBILITY



FORWARD-IN PARKING



REVERSE-IN PARKING

*FOR ACCESSIBLE MARKINGS - SEE ABOVE

DIMENSIONS					
∠ θ	"A"	"B"	"C"	"D"	"E"
45°	17'-0"	12'-9"	7'-0"	24'-0"	17'-0"

PAVEMENT MARKING FOR PARKING

NOTES:

1. Dimensions are to the centerline of markings.
2. An Access Aisle is required for each accessible space when angle parking is used.
3. Criteria for pavement markings only, not public sidewalk curb ramp locations. For ramp locations refer to plans.
4. Mount FTP-22-06 sign below the FTP-21-06 sign.
5. Use of the pavement symbol in accessible parking spaces is optional. When pavement symbol is used, the symbol is either 3'-0" or 5'-0" high and white in color.

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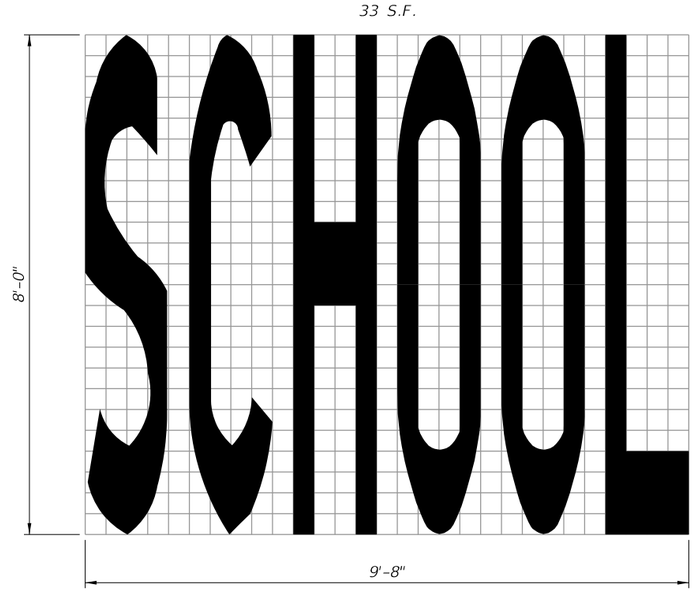
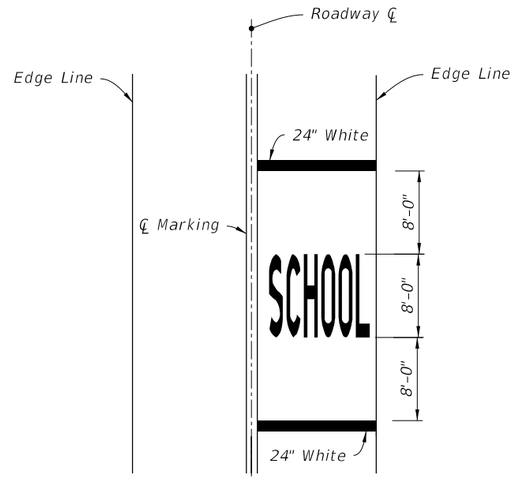


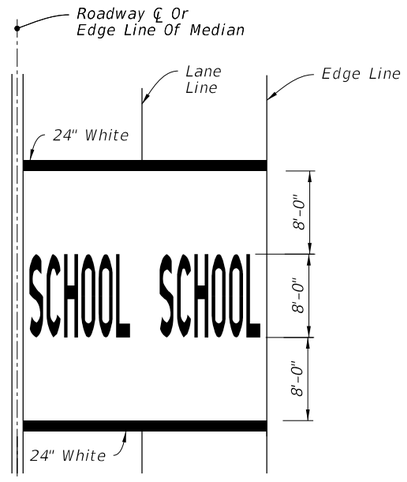
SCHOOL PAVEMENT MARKING

NOTES:

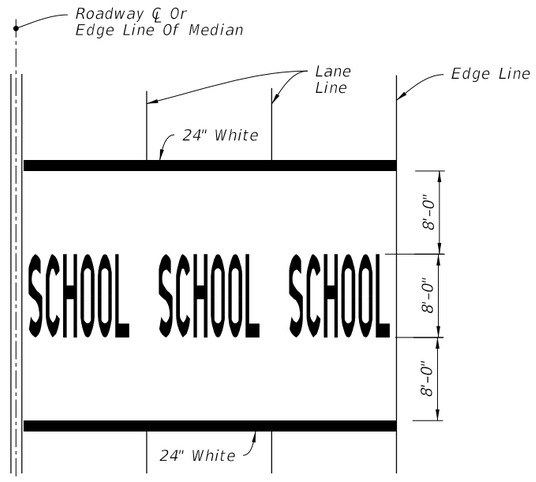
1. All grids are 4" x 4".
2. Pavement Marking Should Not Extend Into Opposing Lane.
3. Center School Pavement Marking in lane.



SINGLE-LANE APPROACH



TWO-LANE APPROACH



MULTI-LANE APPROACH
(Three or More)

MARKINGS FOR SCHOOL ZONES

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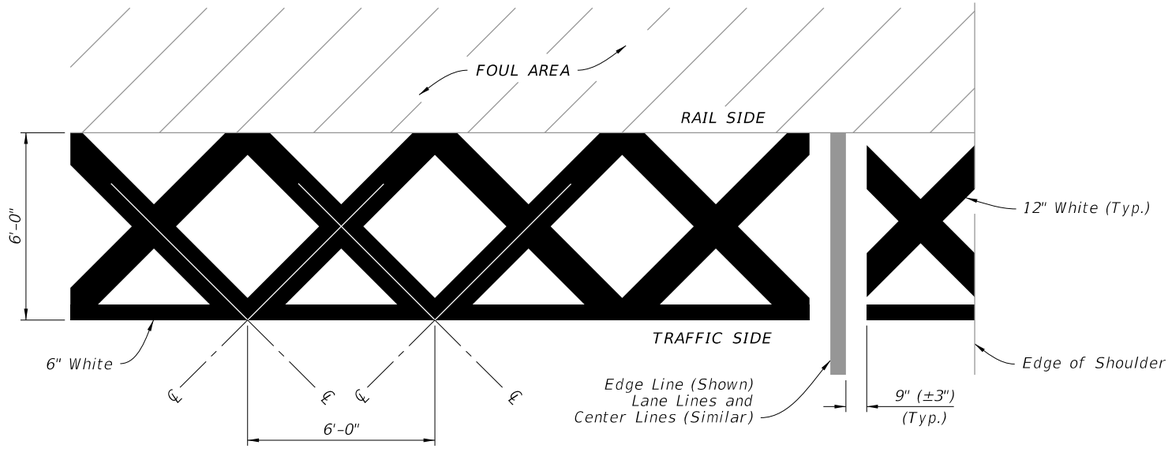
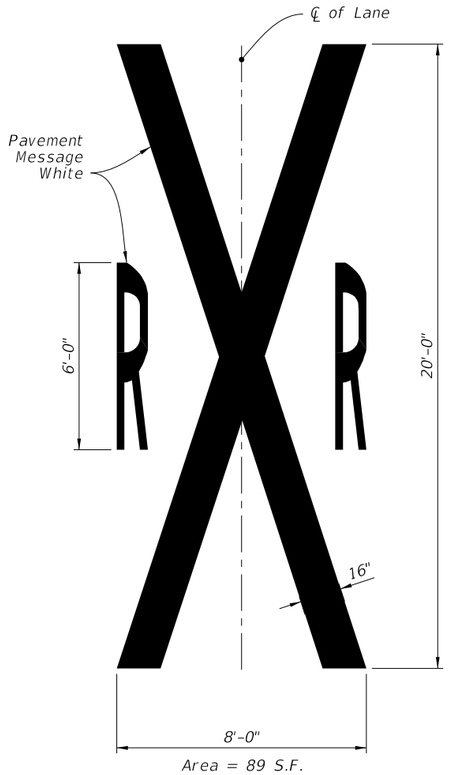
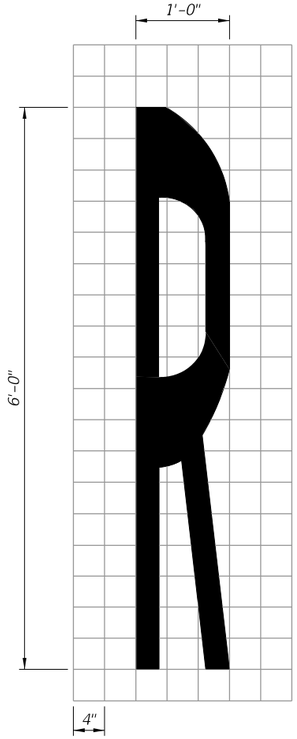
NOTE:

Orient Railroad Dynamic Envelope Marking as shown in the Plans.



RAILROAD DYNAMIC ENVELOPE (RDE) PAVEMENT MARKING DETAIL



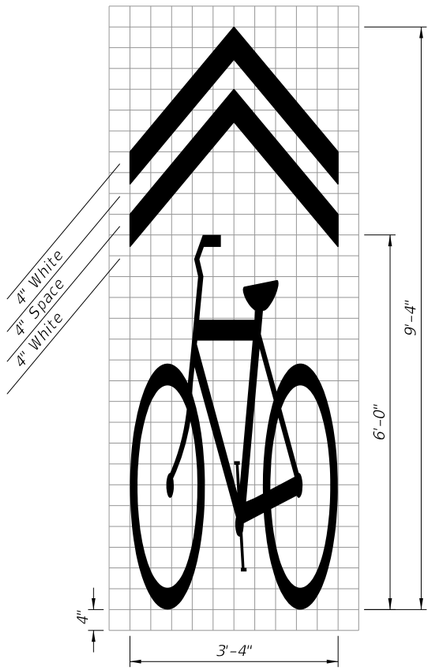


RAILROAD CROSSING PAVEMENT MESSAGE

10/20/2022 8:57:51 AM

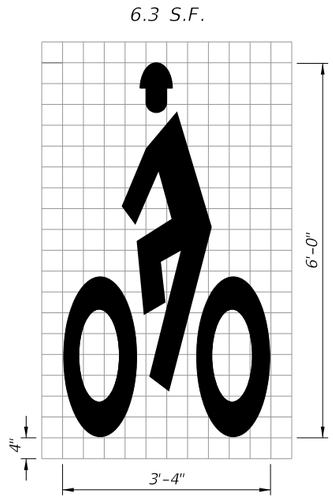
LAST REVISION	REVISION	DESCRIPTION:				
11/01/21			FDOT FY 2023-24 STANDARD PLANS	PAVEMENT MARKINGS	INDEX 711-001	SHEET 13 of 13

8.1 S.F.



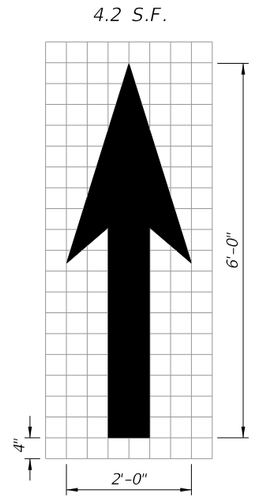
SHARED LANE MARKING (SLM)

6.3 S.F.



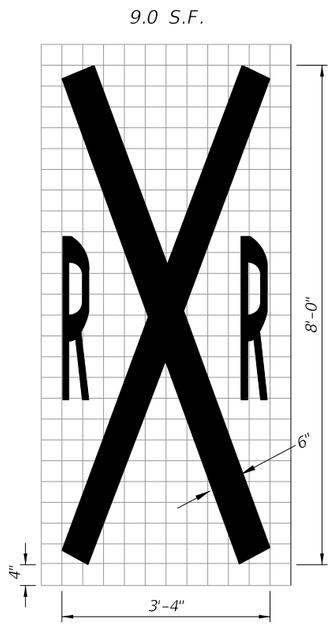
HELMETED BICYCLIST SYMBOL

4.2 S.F.



BIKE LANE ARROW

9.0 S.F.



RAILROAD CROSSING

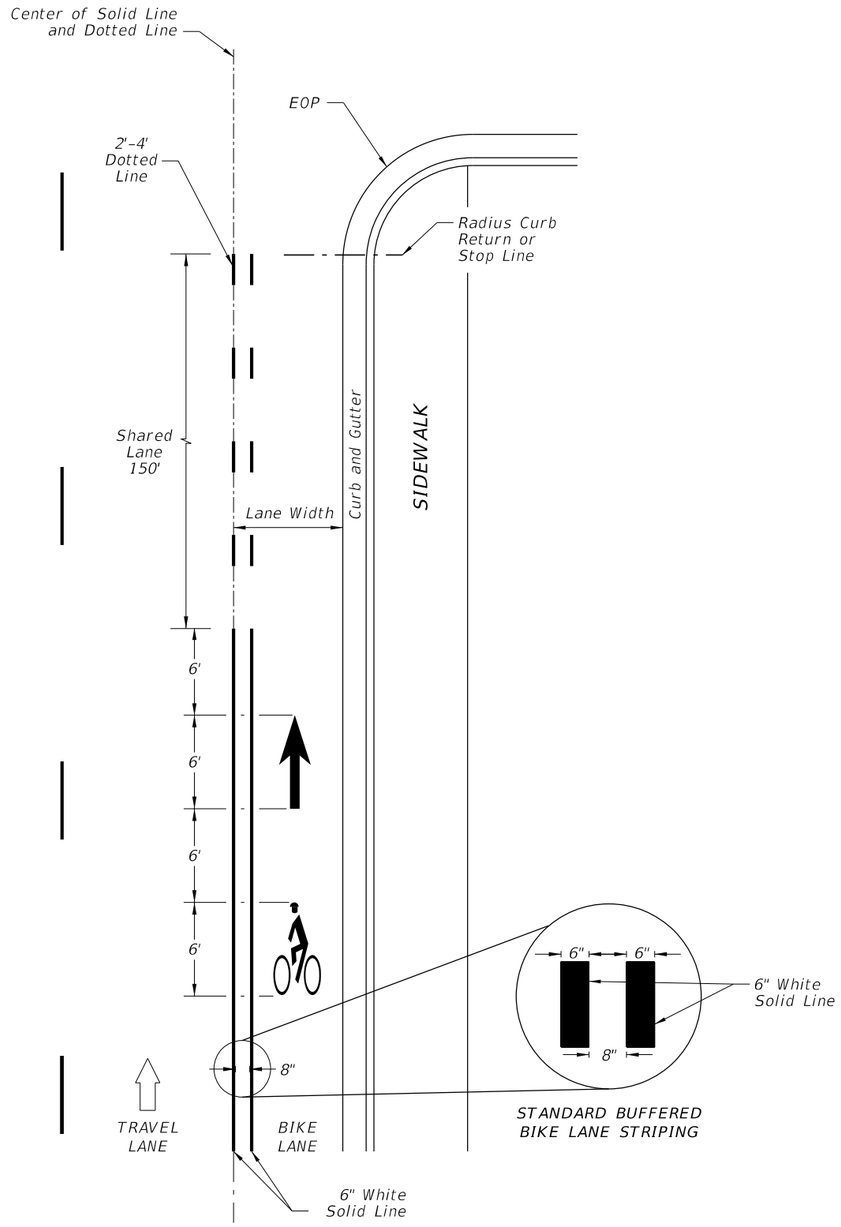
NOTES:

1. All bicycle markings and pavement messages shall be White.
2. All bicycle markings shall be preformed thermoplastic.
3. All grids are 4" x 4".

STANDARD PAVEMENT MARKING MESSAGE LAYOUTS

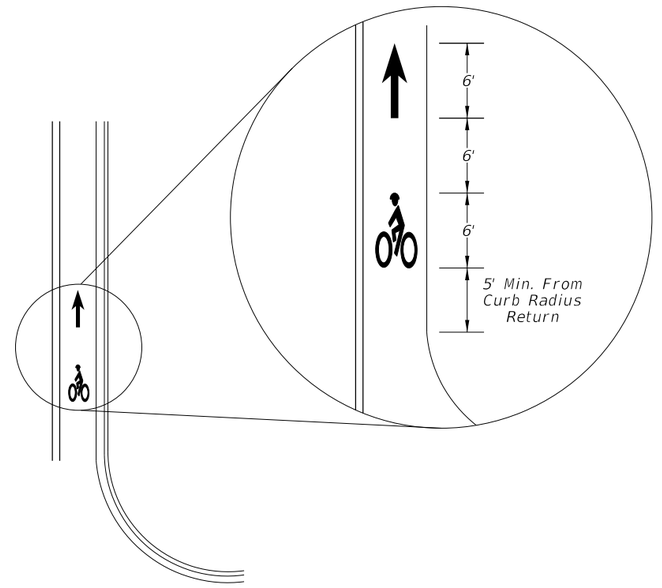
2/14/2023 8:01:56 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	BICYCLE MARKINGS	INDEX	SHEET
11/01/17						711-002	1 of 2



STANDARD BUFFERED BIKE LANE STRIPING

APPROACH TO INTERSECTIONS DETAILS

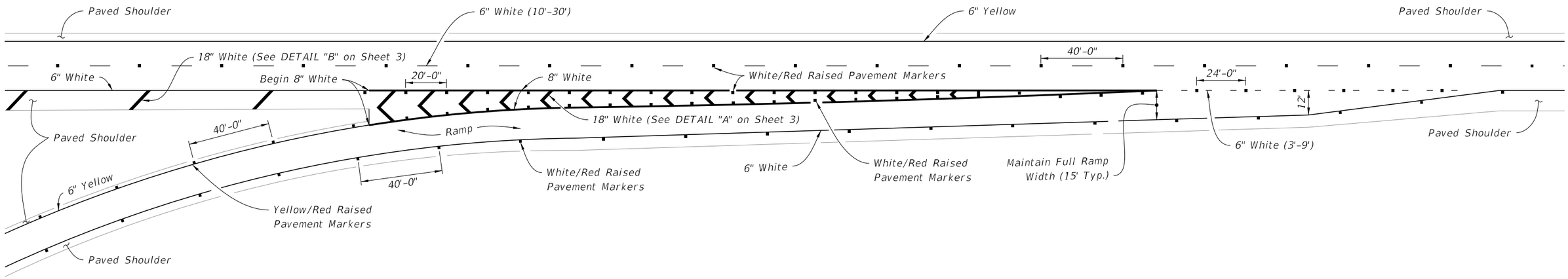


FAR SIDE OF INTERSECTION DETAIL

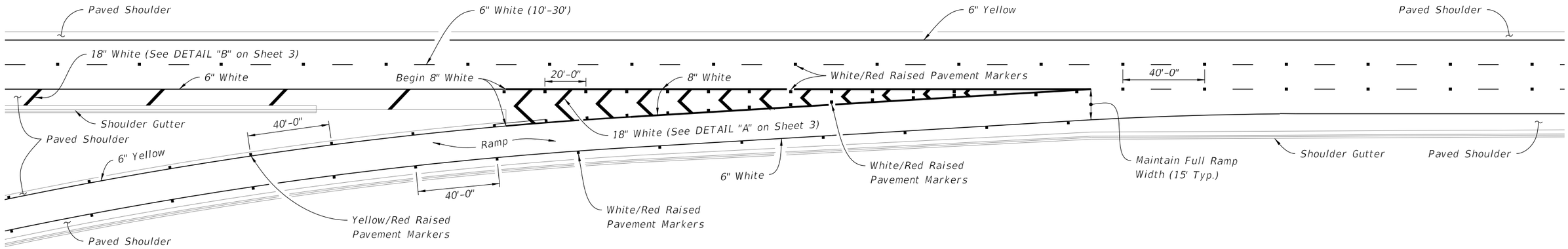
BUFFERED BIKE LANES

2/14/2023 8:01:57 AM

LAST REVISION	REVISION	DESCRIPTION:				
11/01/17			FY 2023-24 STANDARD PLANS	BICYCLE MARKINGS	INDEX 711-002	SHEET 2 of 2



TAPER - TYPE ENTRANCE



PARALLEL - TYPE ENTRANCE

GENERAL NOTES:

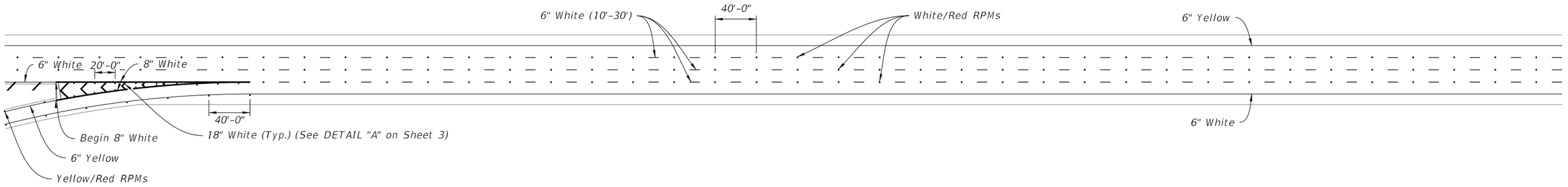
1. Make the traffic face of the raised pavement marker (RPM) the same color as the pavement marking that it is supplementing.

2. See Index 706-001 for additional Raised Pavement Markers (RPM) requirements.

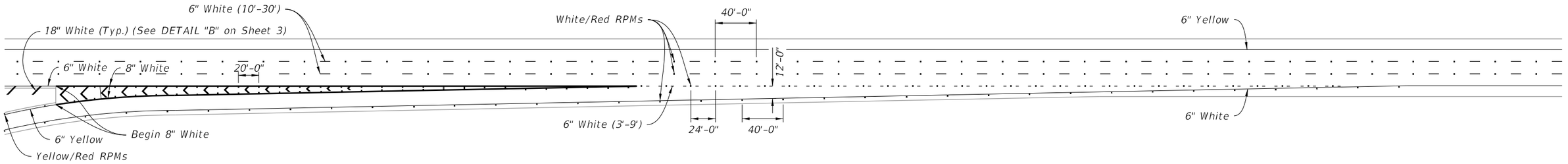
12/13/2022 8:41:01 AM

SINGLE LANE RAMPS - ENTRANCE TERMINALS

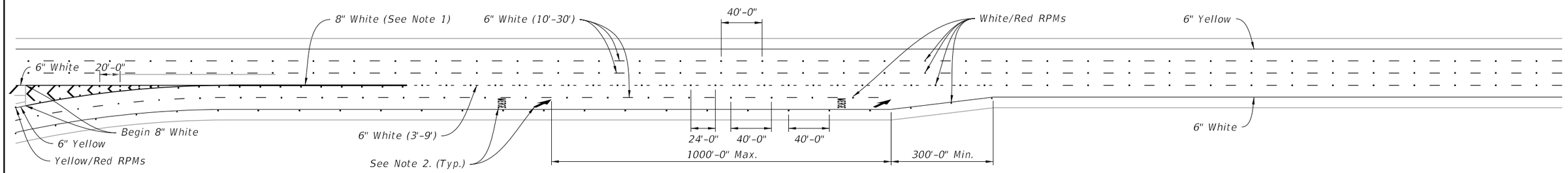
LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	INTERCHANGE MARKINGS	INDEX	SHEET
11/01/21					711-003	1 of 8



PARALLEL-TYPE ENTRANCE WITH ADDED LANE



TAPER-TYPE ENTRANCE



TWO-LANE PARALLEL-TYPE ENTRANCE WITH ADDED LANE
(Single-Lane Parallel-Type Entrance Without Added Lane Similar, See Note 3)

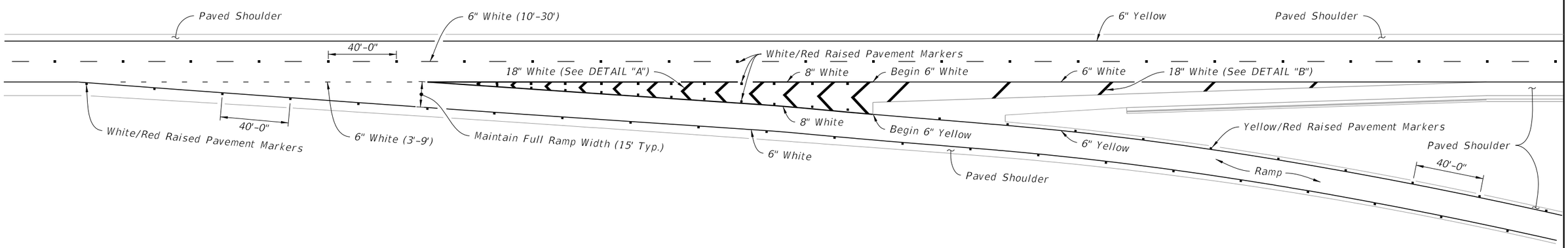
NOTES:

1. Extend this 8" white Pavement Marker one-fourth the length of the acceleration lane from the gore markings.

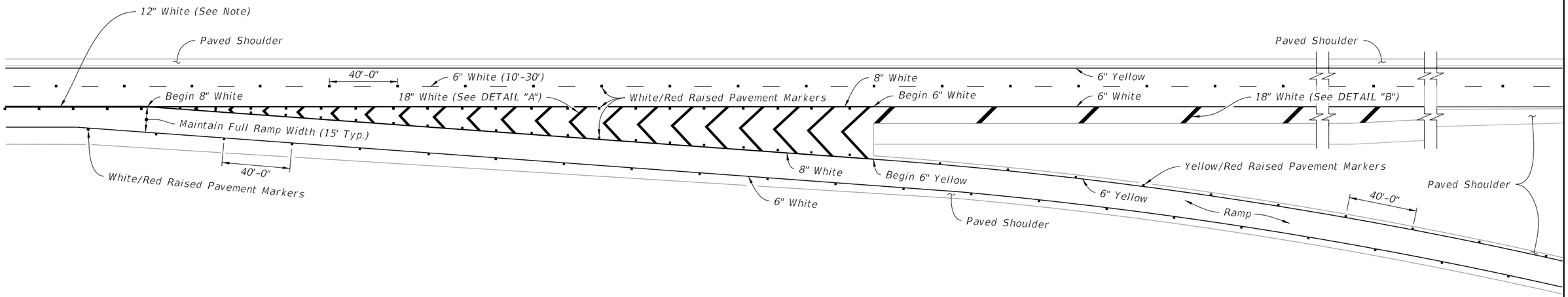
2. See Index 711-001 for pavement message dimensions and details.

3. Discontinue the 6" White (3'–9') Dotted Interchange Line where the merging taper begins for a Single-Lane Parallel-Type Entrance Without Added Lane. Merge Pavement Message and Arrow only used for Two-Lane Entrances.

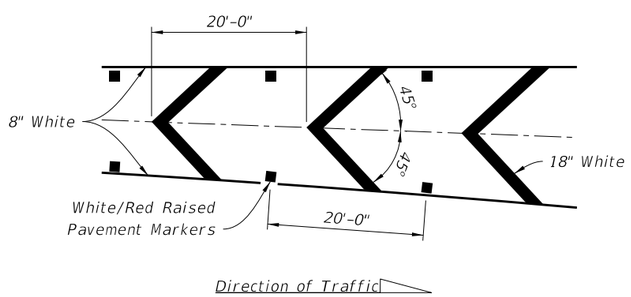
TYPICAL PAVEMENT MARKINGS AT ENTRANCE RAMPS



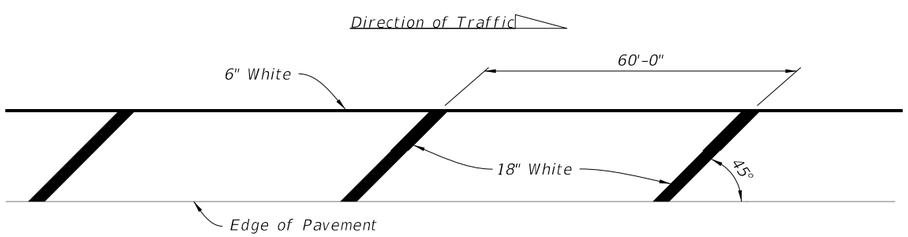
TWO THRU LANES



THREE APPROACH LANES - TWO THRU LANES



DETAIL "A"



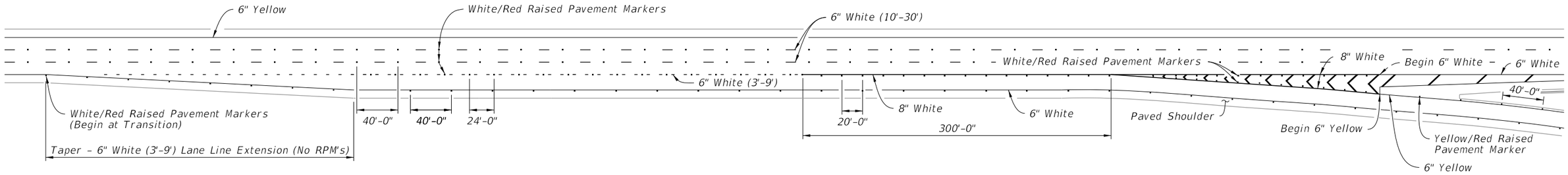
DETAIL "B"

NOTE:
Extend 12" White 300' from the gore markings.

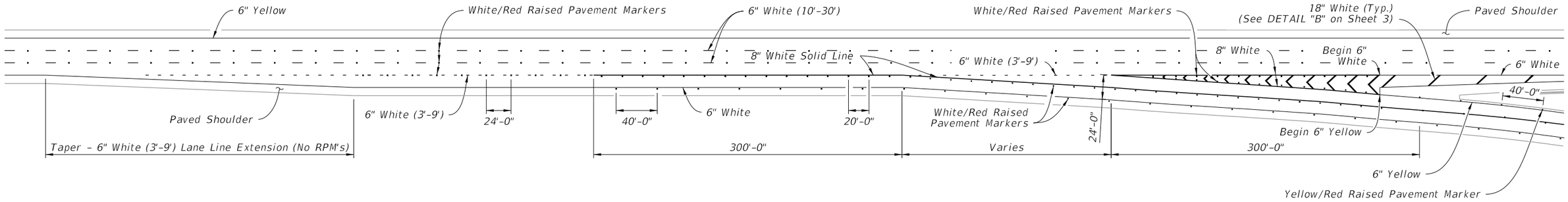
SINGLE LANE RAMPS - EXIT TERMINALS

10/20/2022 8:57:55 AM

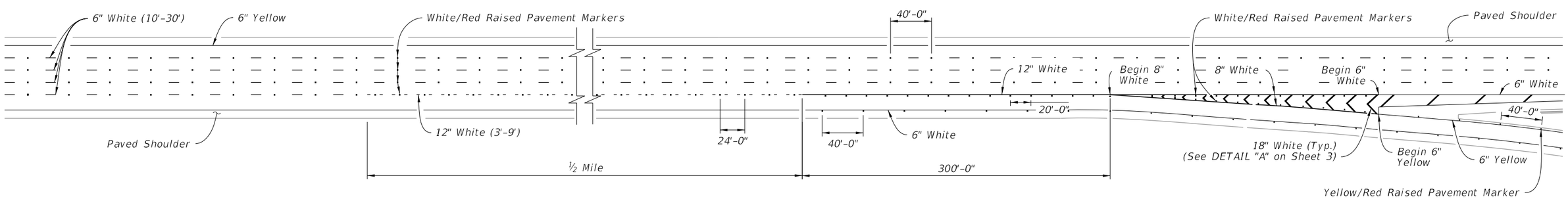
LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	INTERCHANGE MARKINGS	INDEX	SHEET
11/01/21						711-003	3 of 8



PARALLEL DECELERATION LANE



MARKINGS AT DUAL LANE EXITS

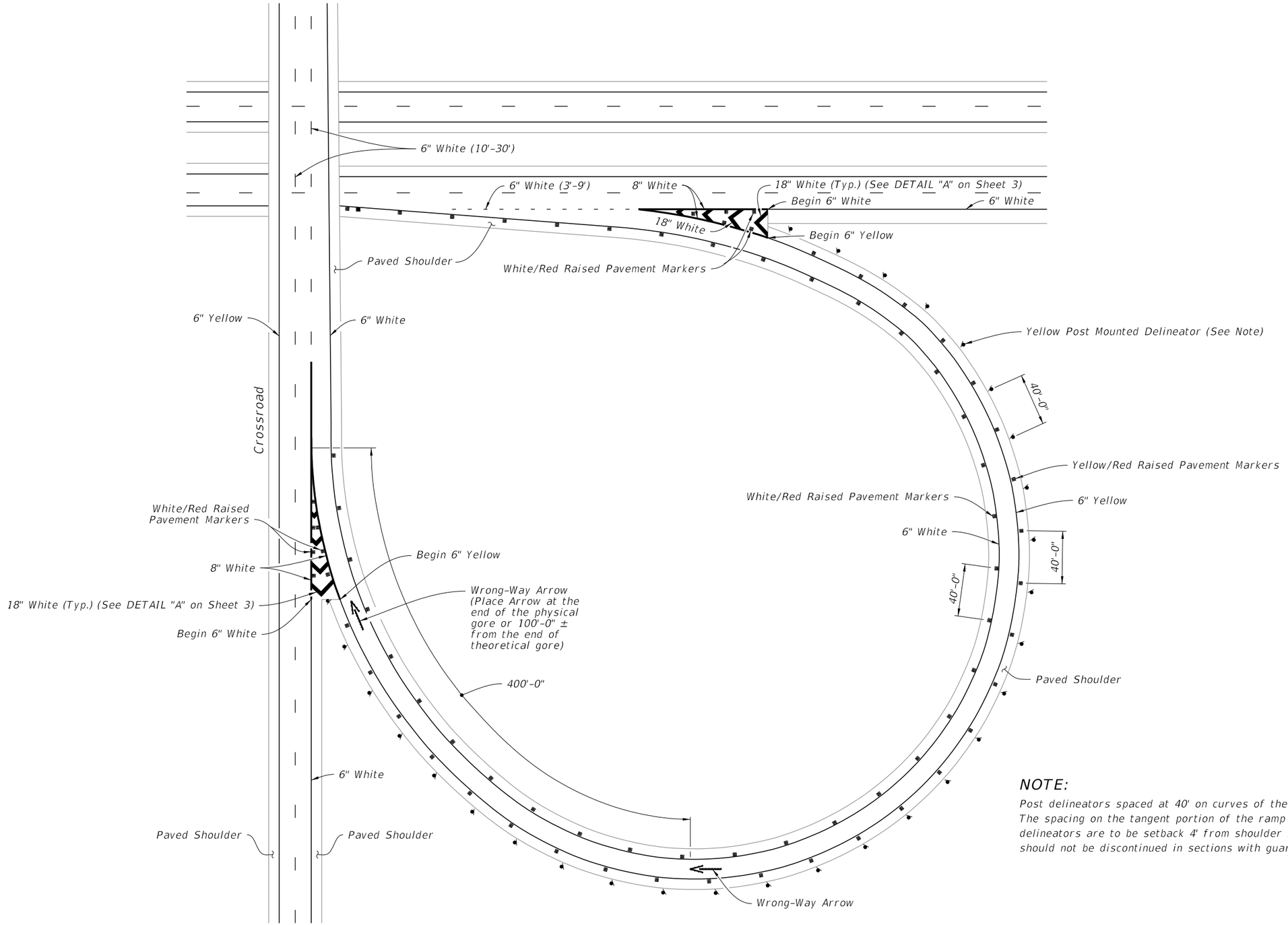


LANE DROP MARKINGS AT EXIT RAMPS

10/20/2022 8:57:56 AM

TYPICAL PAVEMENT MARKINGS AT EXIT RAMPS

LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	INTERCHANGE MARKINGS	INDEX	SHEET
11/01/21					711-003	4 of 8



NOTE:

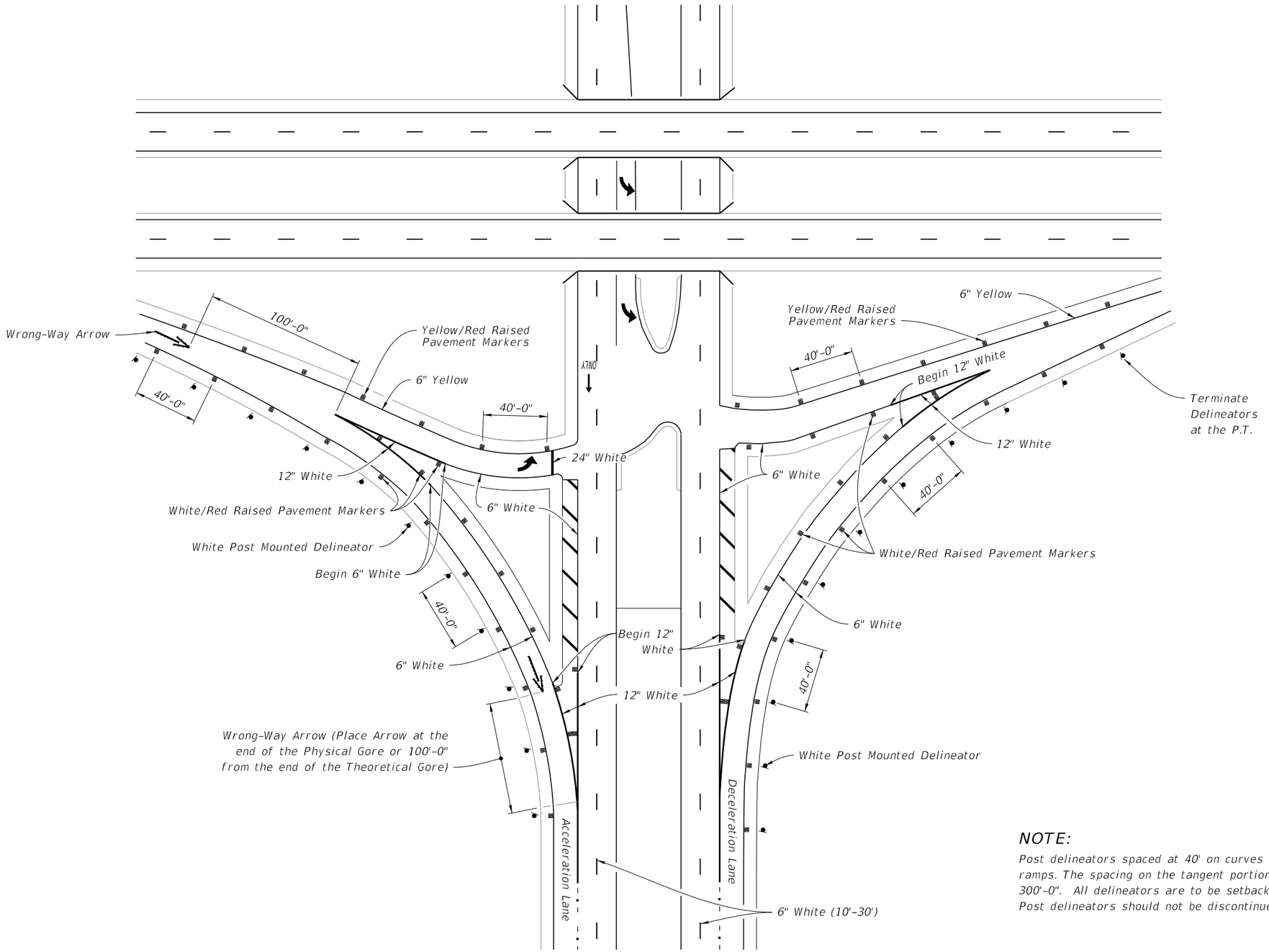
Post delineators spaced at 40' on curves of the entrance and exit of ramps. The spacing on the tangent portion of the ramp section is 300'-0". All delineators are to be setback 4' from shoulder break. Post delineators should not be discontinued in sections with guardrail.

TYPICAL CURVED EXIT RAMP

TYPICAL CURVED EXIT RAMP

10/20/2022 8:57:57 AM

LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	INTERCHANGE MARKINGS	INDEX	SHEET
11/01/21					711-003	5 of 8



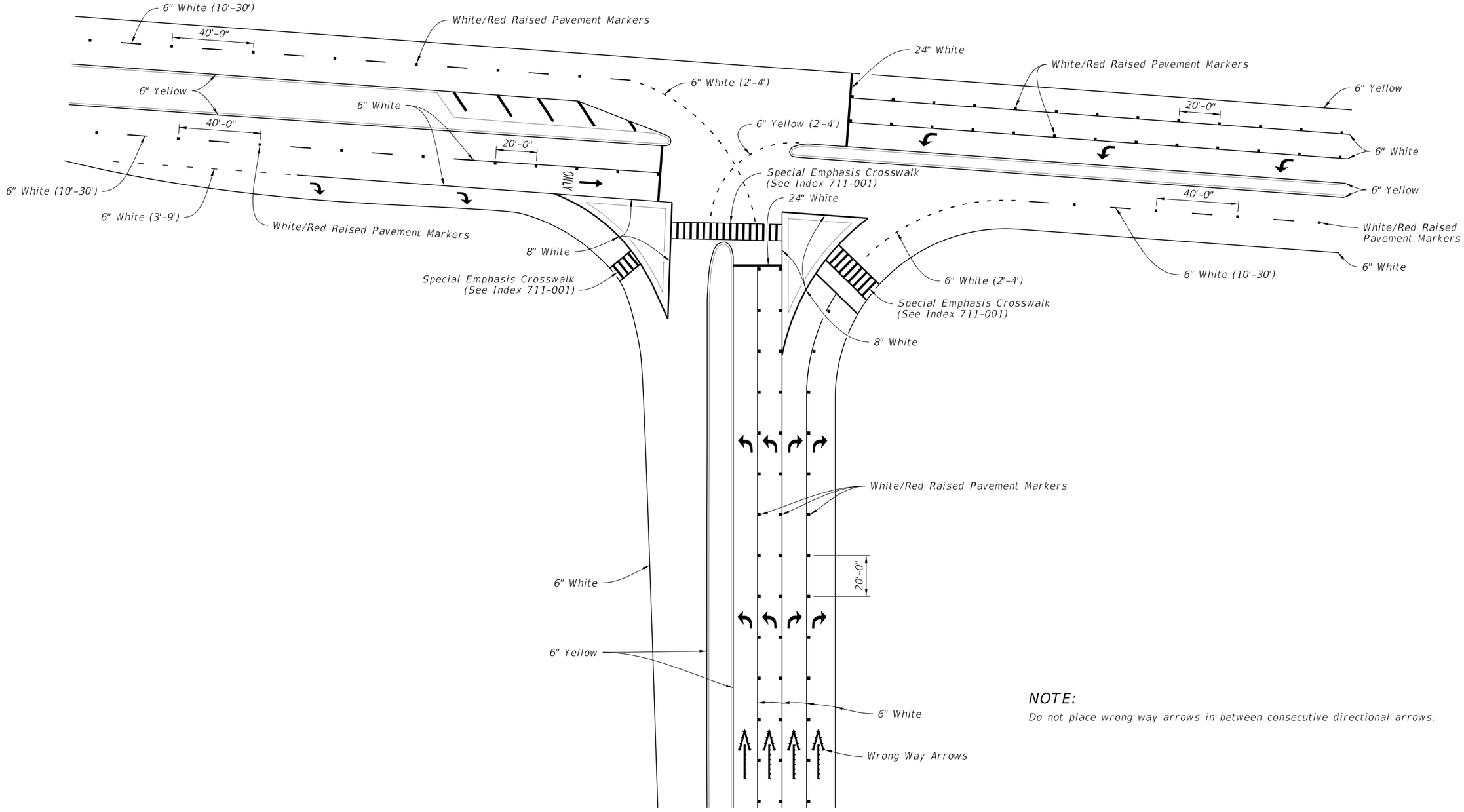
NOTE:

Post delineators spaced at 40' on curves of the entrance and exit of ramps. The spacing on the tangent portion of the ramp section is 300'-0". All delineators are to be setback 4' from shoulder break. Post delineators should not be discontinued in sections with guardrail.

TYPICAL INTERSECTION

10/20/2022 8:58:27 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	INTERCHANGE MARKINGS	INDEX	SHEET
11/01/21					711-003	6 of 8



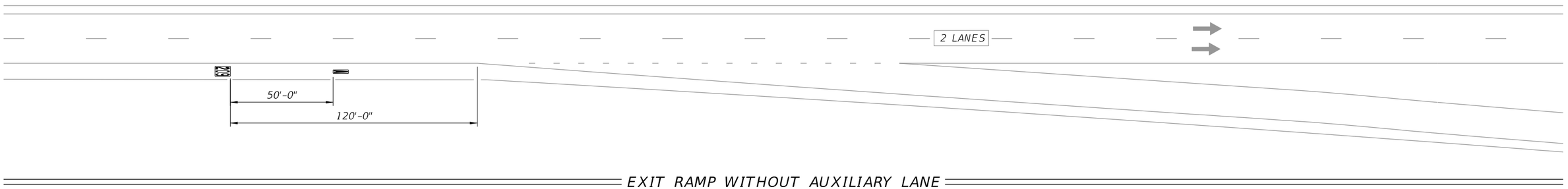
NOTE:

Do not place wrong way arrows in between consecutive directional arrows.

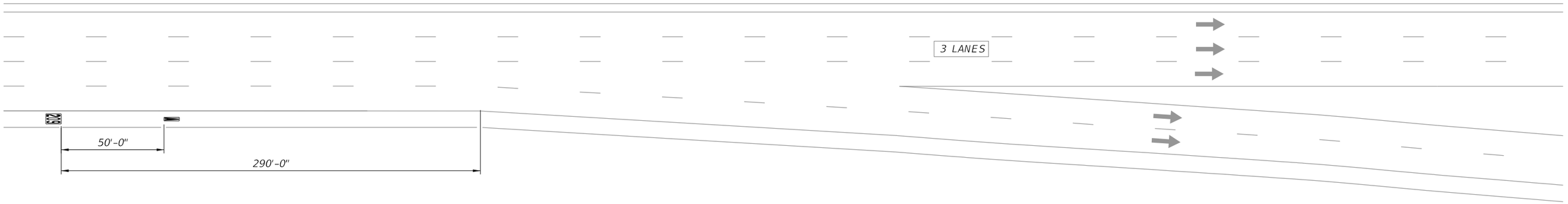
TYPICAL PARTIAL CLOVERLEAF/TRUMPET EXIT RAMP

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2023-24 STANDARD PLANS	INTERCHANGE MARKINGS	INDEX	SHEET
11/01/21						711-003	7 of 8

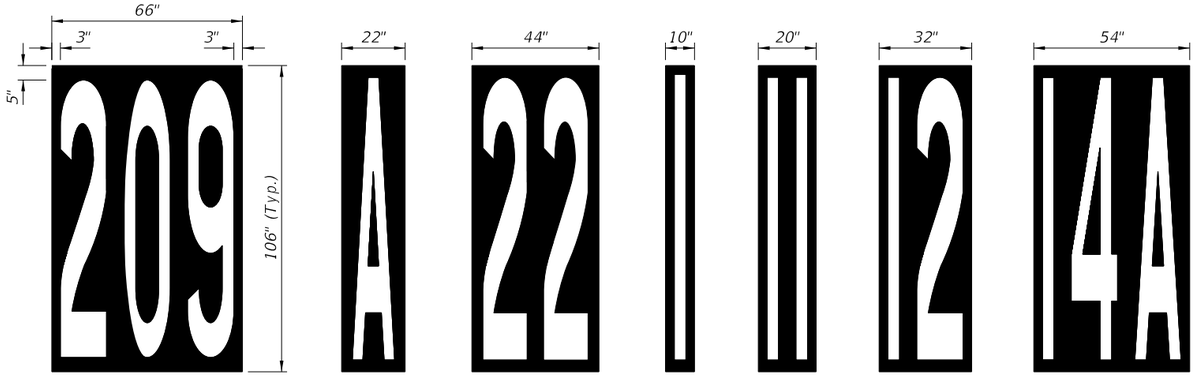
10/20/2022 8:58:28 AM



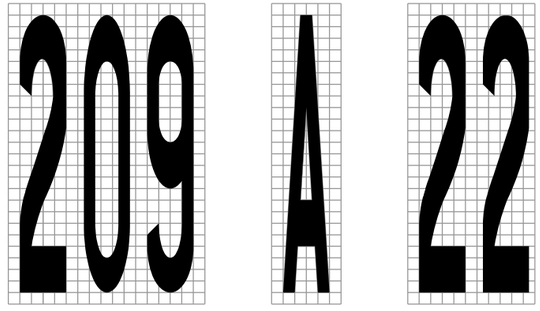
EXIT RAMP WITHOUT AUXILIARY LANE



EXIT RAMP WITH AUXILIARY LANE



MAT DIMENSIONS



MESSAGE SIZE AND SPACING

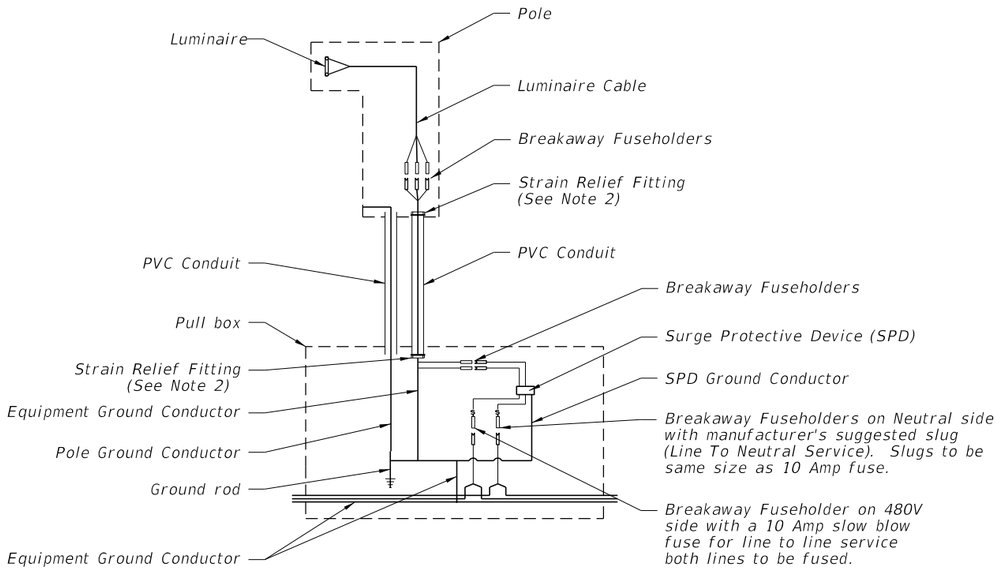
NOTES:

1. This Index shows layouts for 1, 2, and 3 digit numbers and letters.
2. The message consist of white letters and numbers with black contrasting material.
3. The "EXIT NUMBER" position remains the same distance from the beginning of taper regardless of the number of lines of information.
4. All Grids are 4" x4".

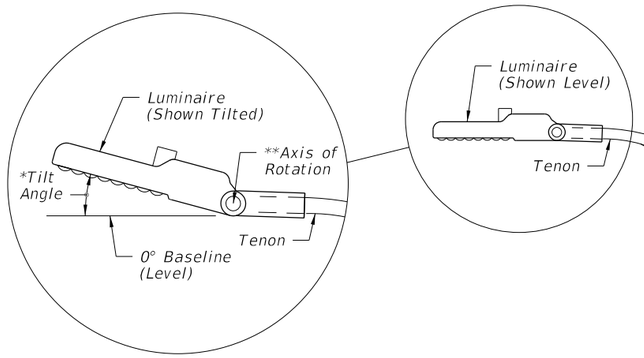
EXIT RAMP MESSAGING

10/20/2022 8:58:28 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/21			FY 2023-24 STANDARD PLANS	INTERCHANGE MARKINGS	711-003	8 of 8

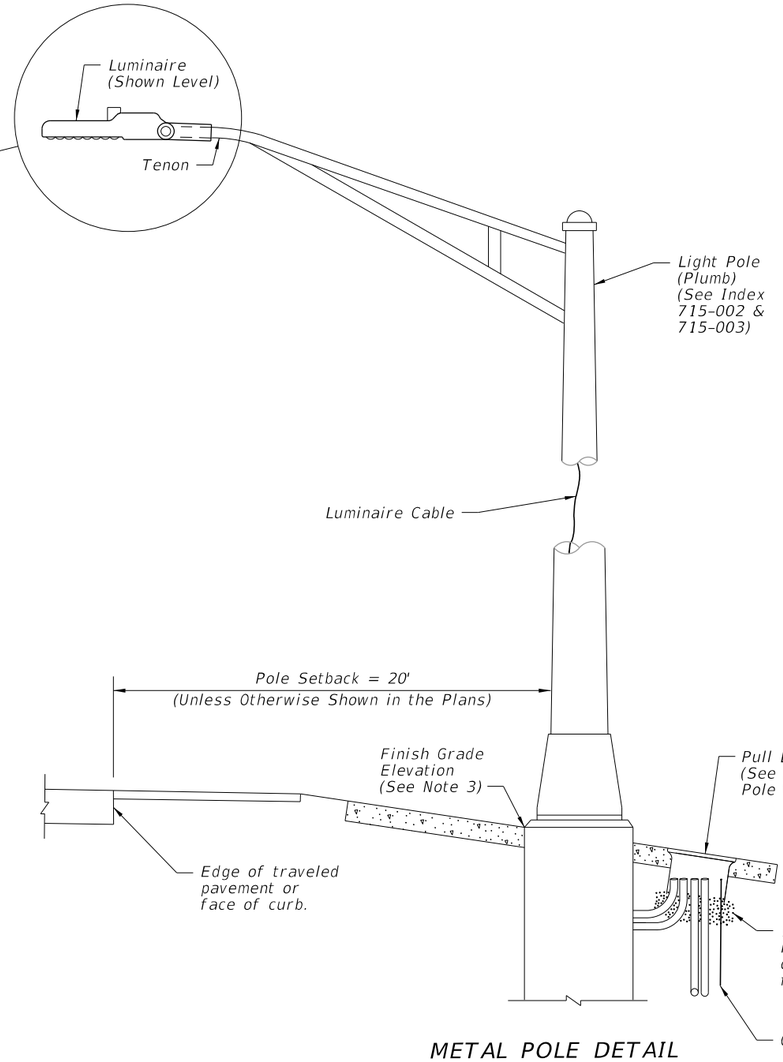


WIRING DIAGRAM

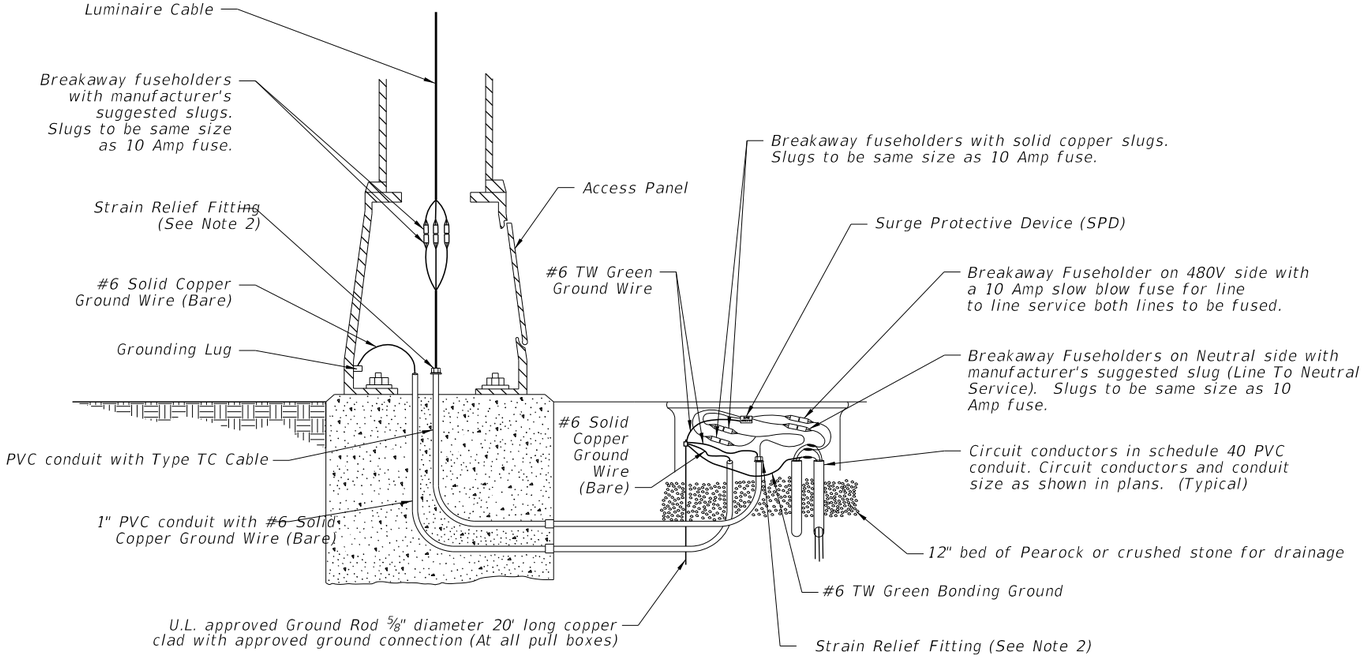


LUMINAIRE TILT DETAIL (Side View)

*Tilt angle is 0° (level) unless otherwise shown in the Plans
**Axis of rotation is level and perpendicular to the tenon. The location shown is approximate and may be either a hinge or a tenon connection adjustment.



METAL POLE DETAIL



METAL POLE WIRING DETAIL

NOTES:

1. Concrete Barrier and Bridge Mounted Poles: Place wiring system following conduit layouts and requirements of Index 715-002. Follow additional requirements of Specification 992. For wiring and devices shown inside of pull boxes on this sheet, place inside of embedded junction boxes instead. Place the vertical breakaway fuseholders inside the pole, at the handhole location.

2. Provide enough cable length to allow for removal of fuseholders from the transformer base, pole base, or pullbox for maintenance. Remove slack from the luminaire cable to provide tension on the fuseholders in breakaway pole designs. Pull excess cable into pull box tighten strain relief fittings or cable clamps at both ends of conduit to prevent cable from slipping.

3. Align the top, outside edge of the concrete foundation with the finish grade elevation on the side nearest the traffic lane. Relative to the finish grade elevation, this foundation alignment has a vertical tolerance of plus 2 inches to minus 0 inches.

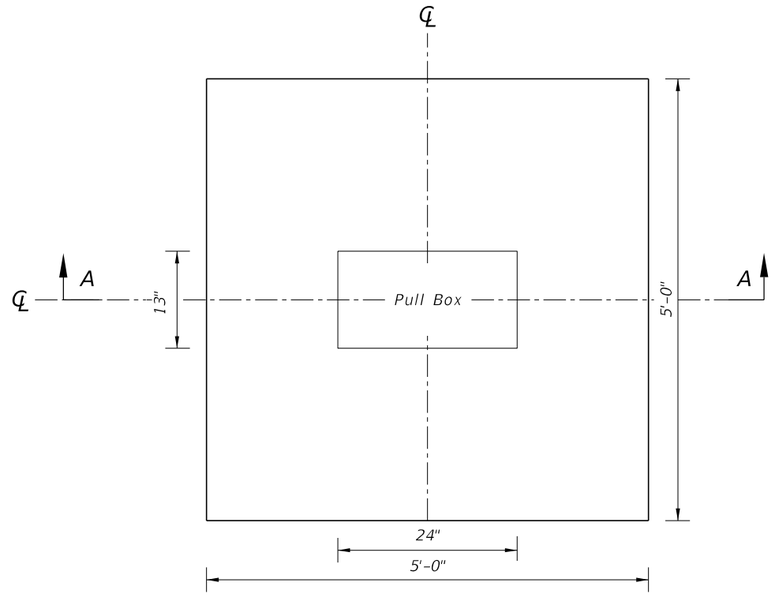
WIRING AND INSTALLATION DETAILS

10/20/2022 8:58:29 AM

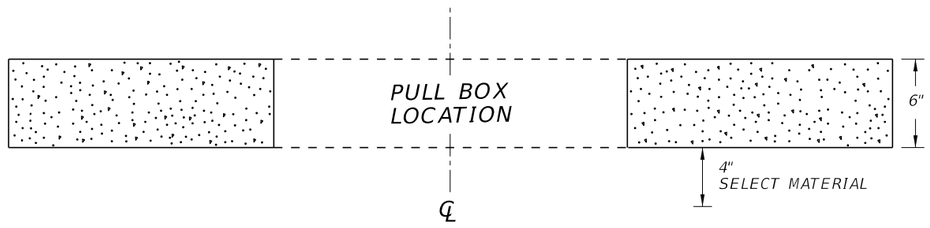
LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	CONVENTIONAL LIGHTING	INDEX	SHEET
11/01/22					715-001	1 of 3

NOTES:

1. Use compacted select material in accordance with Index 120-001.
2. Concrete shall be Class NS with a minimum strength at 28 days of f'c=2.5 ksi.
3. Outside edge of slab shall be cast against formwork.
4. The pull box shown is 13" x 24"; others approved under Specification 635 may be used.
5. Slabs to be placed around all Poles and Pull Boxes in rural locations. In urban areas or where space is limited slab dimensions may be adjusted as shown in the plans.
6. Concrete for slabs around pull boxes shall be included in the price of pull box.



SLAB DIMENSIONS



SECTION A-A

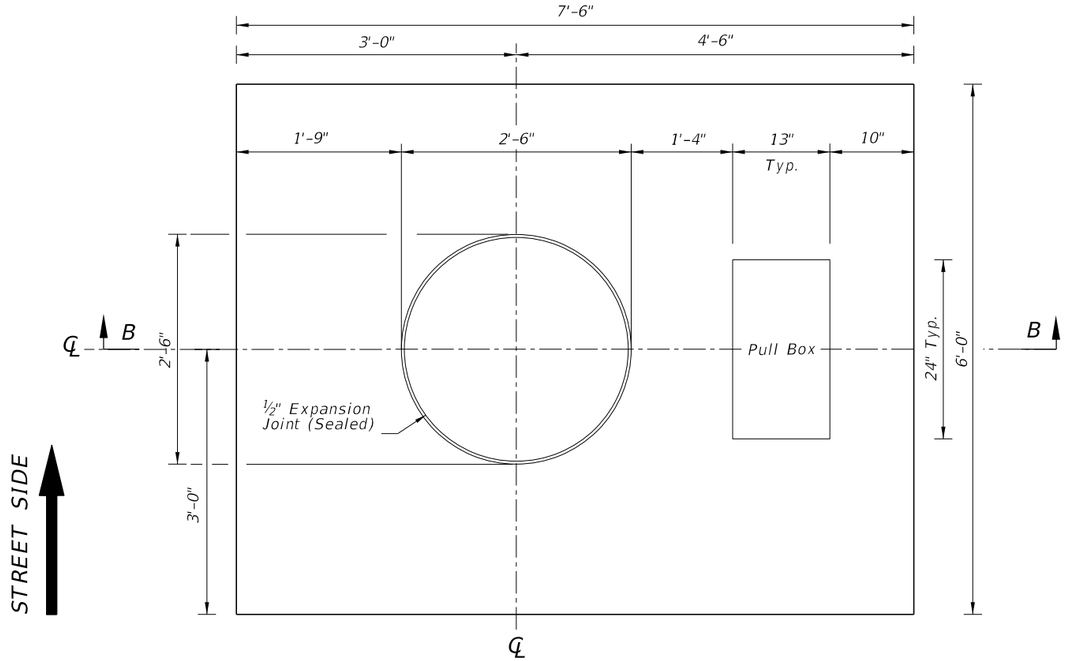
SLAB DETAILS FOR INTERMEDIATE PULLBOX LOCATIONS

10/20/2022 8:58:30 AM

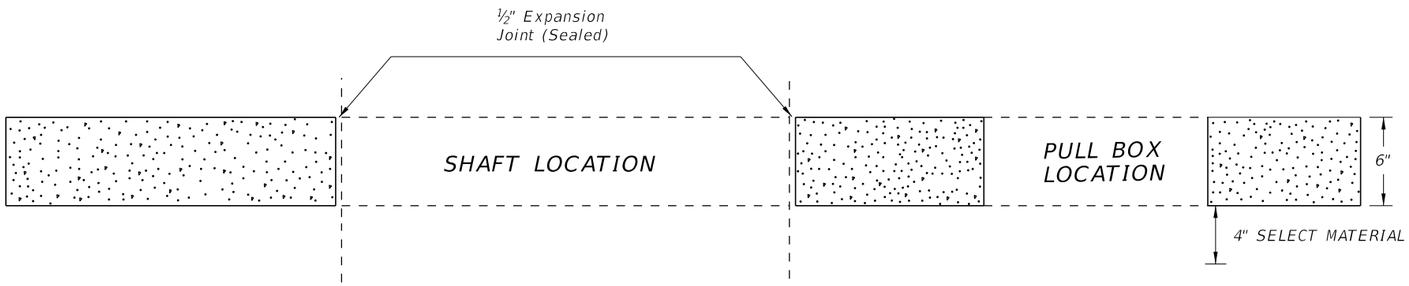
LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	CONVENTIONAL LIGHTING	INDEX	SHEET
11/01/17					715-001	2 of 3

NOTES:

1. Use compacted select material in accordance with Index 120-001.
2. Concrete shall be Class NS with a minimum strength at 28 days of f'c=2.5 ksi.
3. Outside edge of slab shall be cast against formwork.
4. The pull box shown is 13" x 24"; others approved under Specification 635 may be used.
5. Slabs to be placed around all Poles and Pull Boxes. In urban areas or where space is limited slab dimensions may be adjusted as shown in the plans.
6. Concrete for slabs around poles and pull boxes shall be included in the price of pole or pull box.
7. The expansion joint shall consist of ½" of closed-cell polyethylene foam expansion material. The top ½" of expansion material shall be removed after pouring the slab and sealed with an APL approved Type A sealant meeting the requirements of Specification 932.



SLAB DIMENSIONS



SECTION B-B

SLAB DETAILS FOR POLE AND PULL BOX LOCATIONS

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/17			FY 2023-24 STANDARD PLANS	CONVENTIONAL LIGHTING	715-001	3 of 3

10/20/2022 8:58:30 AM

GENERAL NOTES:

1. Poles are designed to support the following:
   A. Luminaire Effective Projected Area (EPA): 1.55 SF
   B. Weight: 75 lb.

2. Shop Drawings: This Index is considered fully detailed, only submit shop drawings for minor modifications not included in the Plans.

3. Materials:
   A. Pole, Pole Connection Extrusions and Arm Extrusions: ASTM B221, Alloy 6063-T6 or Alloy 6061-T6
   B. Bars, Plates, Stiffeners and Backer Ring: ASTM B221, Alloy 6063-T6
   C. Caps and Covers: ASTM B-26, Alloy 319-F
   D. Steel Bearing Plate: ASTM A709 or ASTM A36 Grade 36
   E. Aluminum Weld Material: ER 4043
   F. Transformer and Frangible Base Materials: ASTM B26 or ASTM B108, Alloy 356-T6
   G. Bolts, Nuts and Washers:
      a. Shoe Base Bolts: ASTM F3125, Grade A325, Type 1
      b. Nuts: ASTM A563 Grade DH Heavy-Hex
      c. Washer: ASTM F436 Type 1
   H. Anchor Bolts, Nuts, and Washers:
      a. Anchor Bolts: ASTM F1554 Grade 55
      b. Nuts: ASTM A563 Grade A Heavy-Hex
      c. Plate Washer: ASTM A36
   I. Stainless Steel Fasteners: ASTM F593 Alloy Group 2, Condition A, CW1 or SH1
   J. Nut Covers: ASTM B26 (319-F)
   K. Concrete: Class II
   L. Reinforcing Steel: Specification 415

4. Fabrication:
   A. Weld Arm and Pole (Alloy 6063) in the T4 temper using 4043 filler. Age the Arm and Pole artificially to the T6 temper after welding.
   B. Transverse welds are only allowed at the base.
   C. Roadway Light Pole Taper: Taper as required to provide a round top O.D. of 6" and a base O.D. of 8" for 20' and 25' mounting heights and 10" O.D. for poles with 30' to 50' mounting heights. Portions of the pole near the base shoe and at the arm connections may be held constant to simplify fabrication.
   D. Median Barrier Mounted Light Pole Taper: Taper as required to provide a 6" O.D. round top with an 11" x 7" O.D. oblong base. Portions of the pole near the base and at the arm connections may be held constant at 11"x 7" oblong and 6" round respectively to simplify fabrication.
   E. Provide 'J', 'S' or 'C' hook at top of pole for electrical wires.
   F. Equip poles located on bridges, walls and concrete median barriers/Traffic Railings with a vibration damper.
   G. Perform all welding in accordance with AWS D1.2.
   H. Embedded Junction Box (EJB):
      a. Weld all seams continuously and grind smooth.
      b. Hot Dip Galvanize after Fabrication.
      c. Provide a watertight cover with neoprene gasket and secure cover with galvanized screws.
   I. For Median Barrier Mounted Aluminum Light Poles, the fabricator must demonstrate the ability to produce a crack free pole. The fabricator's Department-approved QC Plan must contain the following information prior to fabrication:
      a. Tests demonstrating a pole with a $\frac{1}{4}$" wall thickness achieves and ultimate moment capacity of 36 kip*ft in the strong axis and 30 kip*ft in the weak axis.
      b. Tests demonstrating a pole with a $\frac{15}{16}$" wall thickness achieves an ultimate moment capacity of 44 kip*ft in the strong axis and 37 kip*ft in the weak axis.
      c. Test results showing the pole does not buckle at the shape transition area under the ultimate moment capacity loads.
      d. Complete details and calculations for the reinforced 4"x 6" (Min.) handhole located 1'-6" above the base plate.
   J. Identification Tag: (Submit details for approval.)
      a. 2" x 4" (Max.) aluminum identification tag.
      b. Locate on the inside of the transformer base and visible from the door opening.
      c. Secure to transformer base with $\frac{1}{8}$" diameter stainless steel rivets or screws.
      d. Include the following information on the ID Tag:
         1. Financial Project ID
         2. Pole Height
         3. Manufacturer's Name

5. Coatings/Finish:
   A. Pole and Arm Finish: 50 grit satin rubbed.
   B. Galvanize Steel Bolts, Screws, Nuts and Washers: ASTM F2329
   C. Hot Dip Galvanize EJB and other steel items including poles and plate washers: ASTM A123

6. Construction:
   A. Foundation: Specification 455, except payment for the foundation is included in the cost of the pole.
   B. Frangible Base, Base Shoe, and Clamp:
      a. Certify that the Clamp, Frangible Transformer Base, and Base Shoe Design are capable of providing the required capacity.
      b. Certify the Base conforms to the current FHWA required AASHTO Frangibility Requirements, tested under NCHRP Report 350 Guidelines (e.g. Akron Foundry TB1-17).
      c. Do not erect pole without Luminaire attached.

7. Embedded Junction Box (EJB): Install EJBs per Note 4 and in accordance with Specification 635, as shown on the following Sheets.

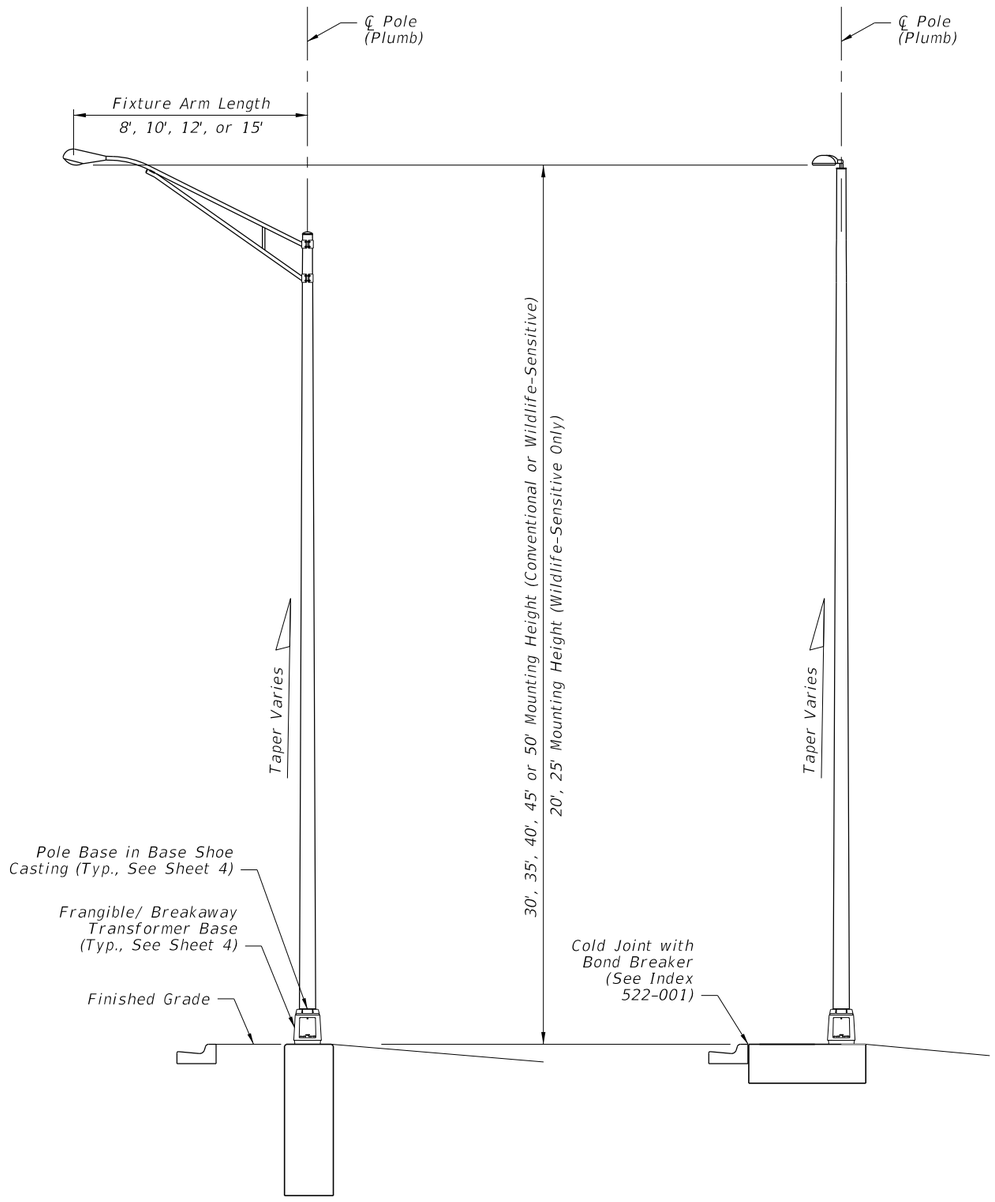
8. Wind Speed by County:

   120 MPH
   Alachua, Baker, Bradford, Calhoun, Clay, Columbia, Dixie, Duval, Gadsden, Gilchrist, Hamilton, Jackson, Jefferson, Lafayette, Leon, Liberty, Nassau, Madison, Putnam, Suwannee, Taylor, Union and Wakulla Counties.

   140 MPH
   Bay, Citrus, De Soto, Flagler, Franklin, Glades, Gulf, Hardee, Hendry, Hernando, Highlands, Hillsborough, Holmes, Lake, Levy, Manatee, Marion, Okaloosa, Okeechobee, Orange, Osceola, Pasco, Pinellas, Polk, Santa Rosa, Seminole, St. Johns, Sumter, Volusia, Walton and Washington Counties.

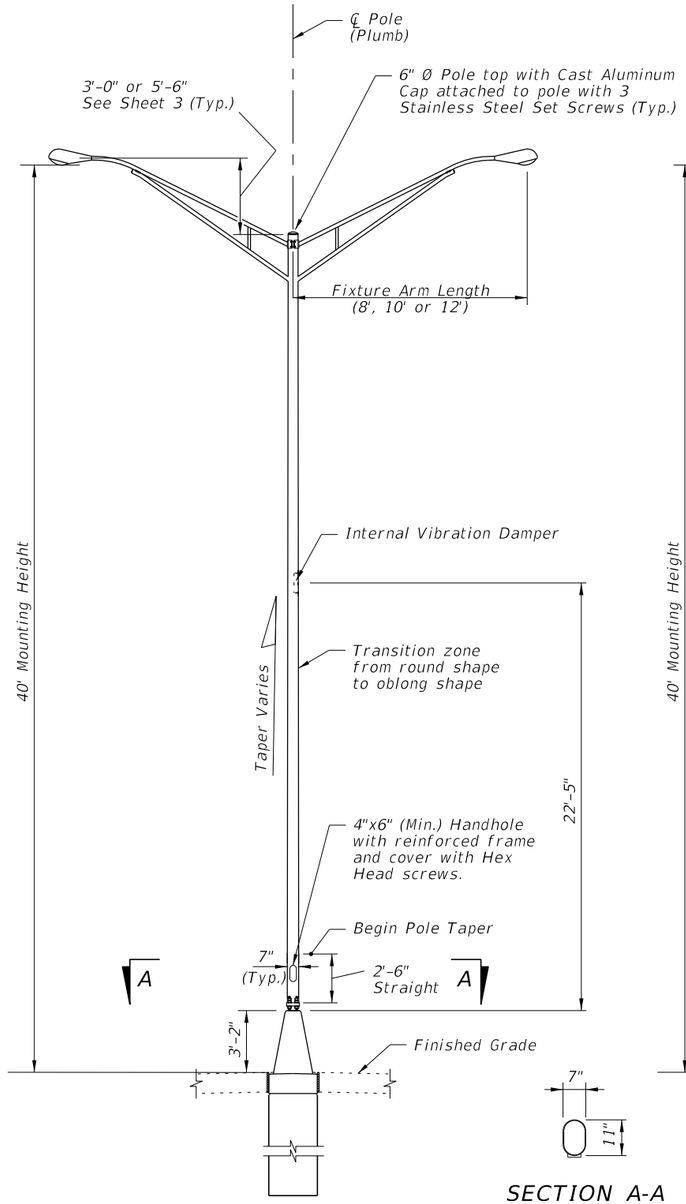
   160 MPH
   Brevard, Broward, Charlotte, Collier, Escambia, Indian River, Lee, Martin, Miami-Dade, Monroe, Palm Beach, Sarasota and St. Lucie Counties.

10/20/2022 8:58:31 AM



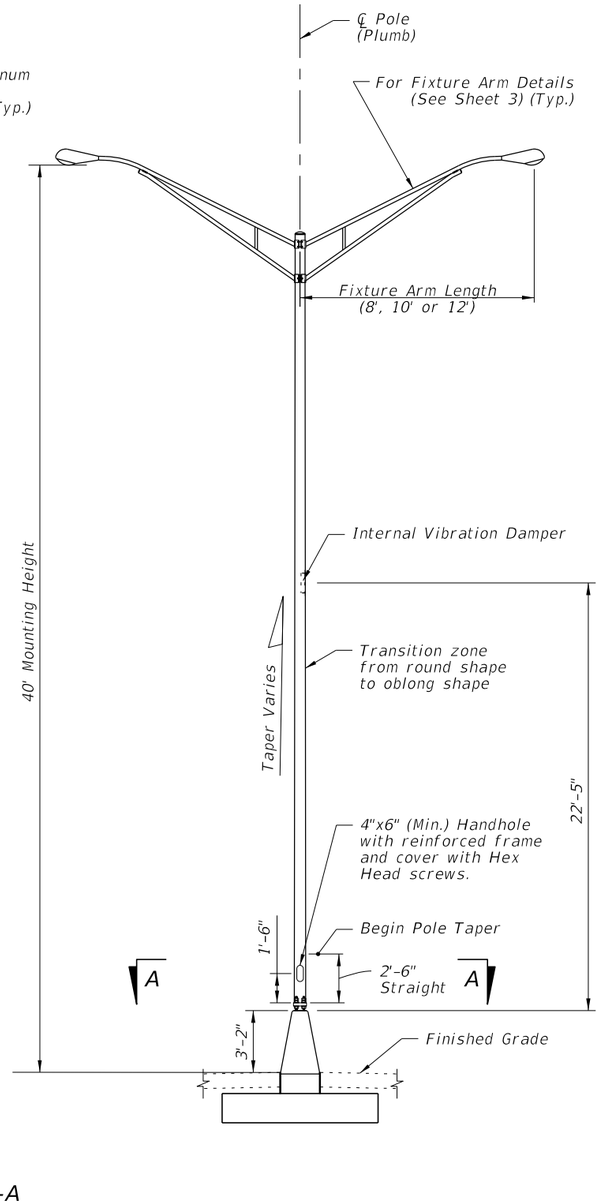
STANDARD ROADWAY
ALUMINUM LIGHT POLE W/ARM
(Shaft Foundation Option Shown,
Spread Footing Option Similar)

STANDARD ROADWAY
ALUMINUM LIGHT POLE W/TOP MOUNT
(Spread Footing Option Shown,
Shaft Foundation Option Similar)



SECTION A-A

MEDIAN BARRIER MOUNTED
ALUMINUM LIGHT POLE
ON CYLINDRICAL FOUNDATION

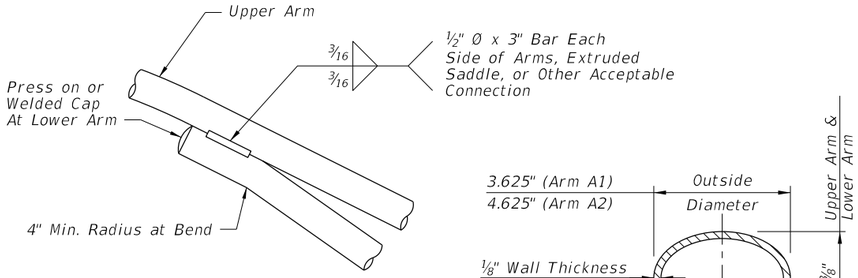


MEDIAN BARRIER MOUNTED
ALUMINUM LIGHT POLE
ON SPREAD FOOTING FOUNDATION

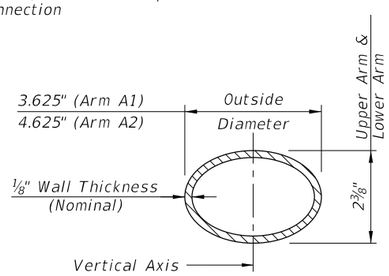
ELEVATIONS

10/20/2022 8:58:32 AM

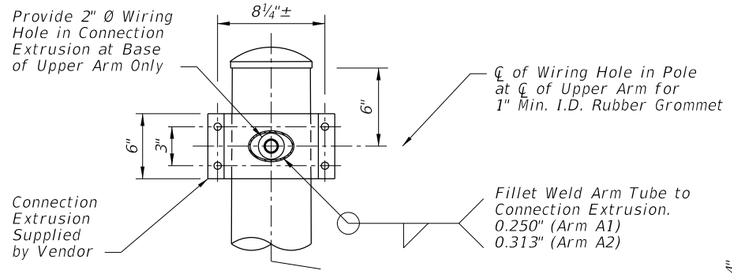
LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	STANDARD ALUMINUM LIGHTING	INDEX	SHEET
11/01/22					715-002	2 of 9



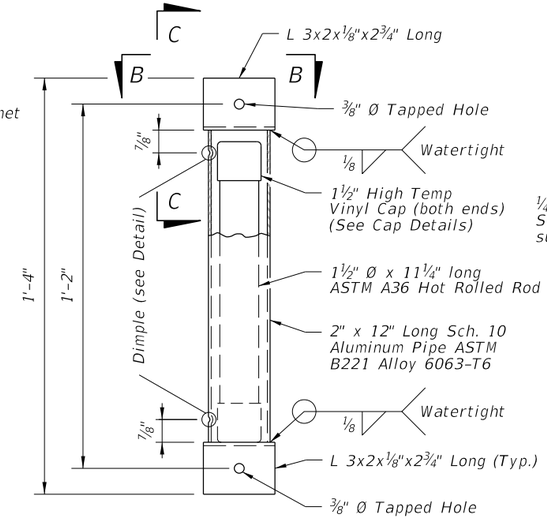
ARM CONNECTION DETAIL



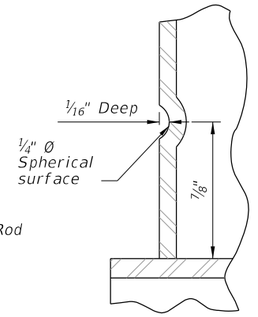
ARM SECTION



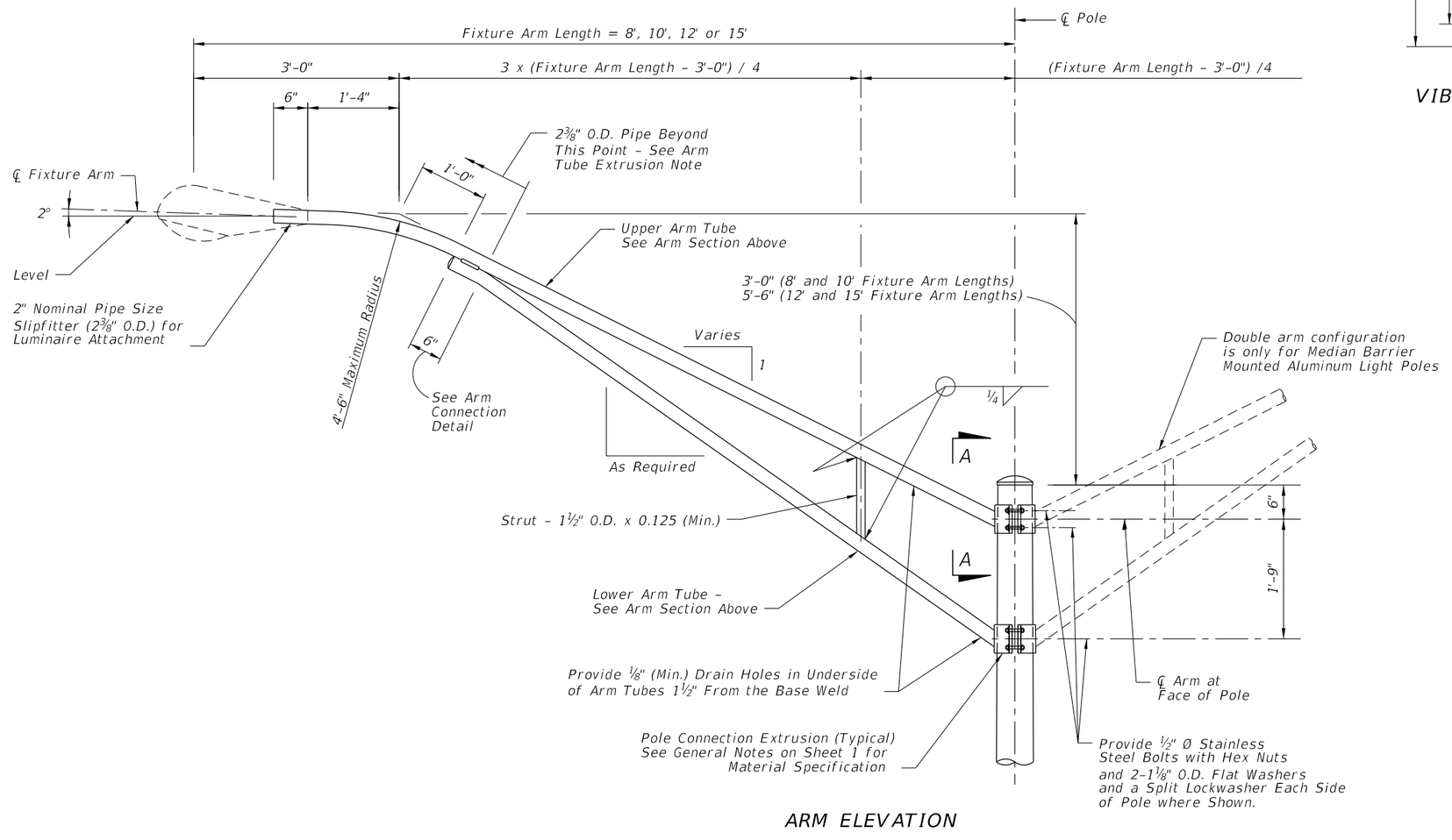
VIEW A-A
(Connection At Lower Arm Similar)



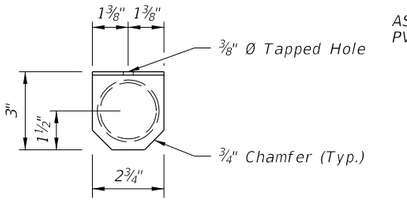
VIBRATION DAMPER ELEVATION



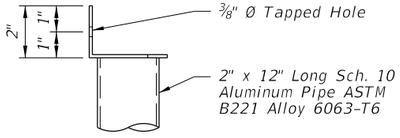
DIMPLE DETAIL



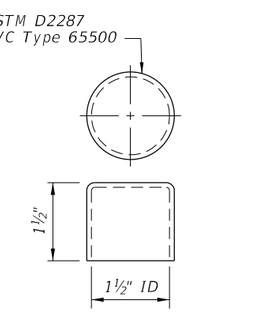
ARM ELEVATION



VIEW B-B



VIEW C-C



HIGH TEMP VINYL CAP DETAIL

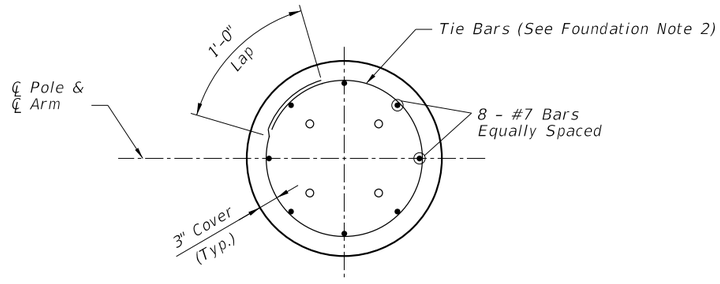
ARM TUBE EXTRUSIONS NOTES:

At the pole connections, provide arm tube extrusions with dimensions as shown. Uniformly transition elliptical section to a cylindrical section at the arm connection.

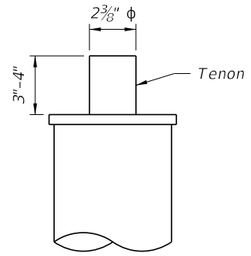
The fabricator may substitute elliptical cross sections other than those tabulated, provided the section properties about the vertical axis and the area of the section equal or exceed that of the required section, and provide minimum wall thickness of ⅛" nominal and within the Aluminum Association Tolerances.

The outside diameter about the minor axis should be held at 2⅜" at the upper and lower arms.

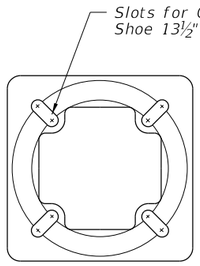
ARM & DAMPER DETAILS



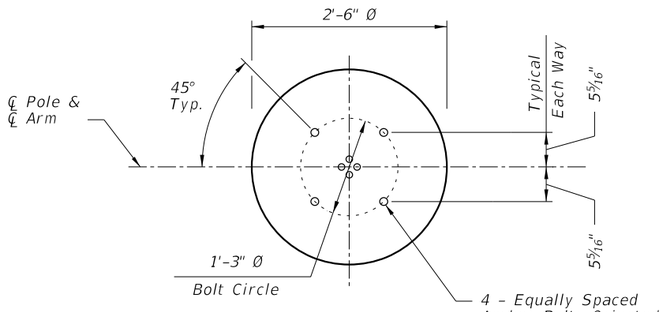
SECTION C-C



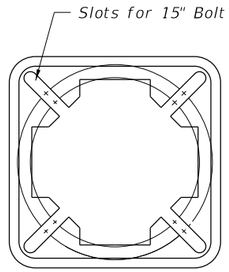
TOP MOUNT TENON



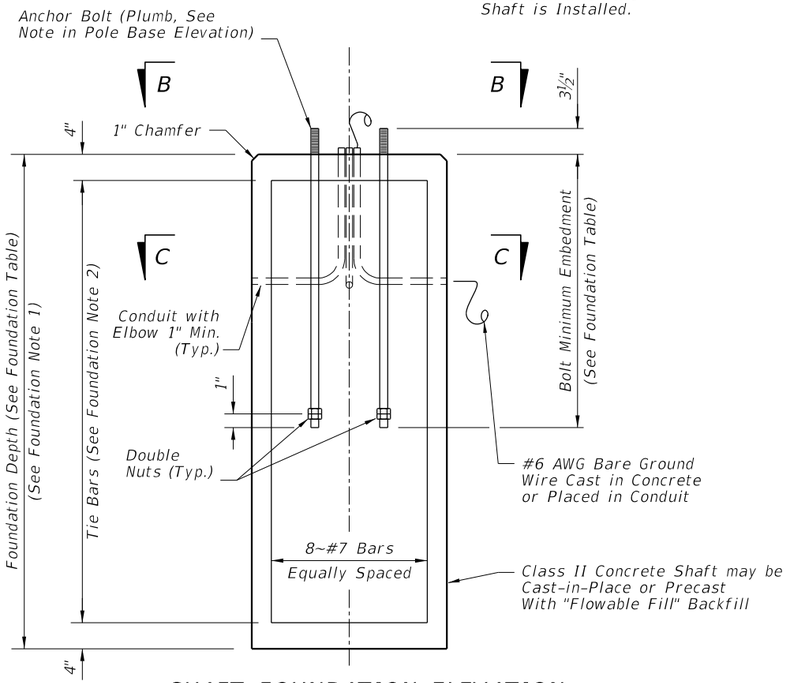
TOP VIEW
TRANSFORMER BASE



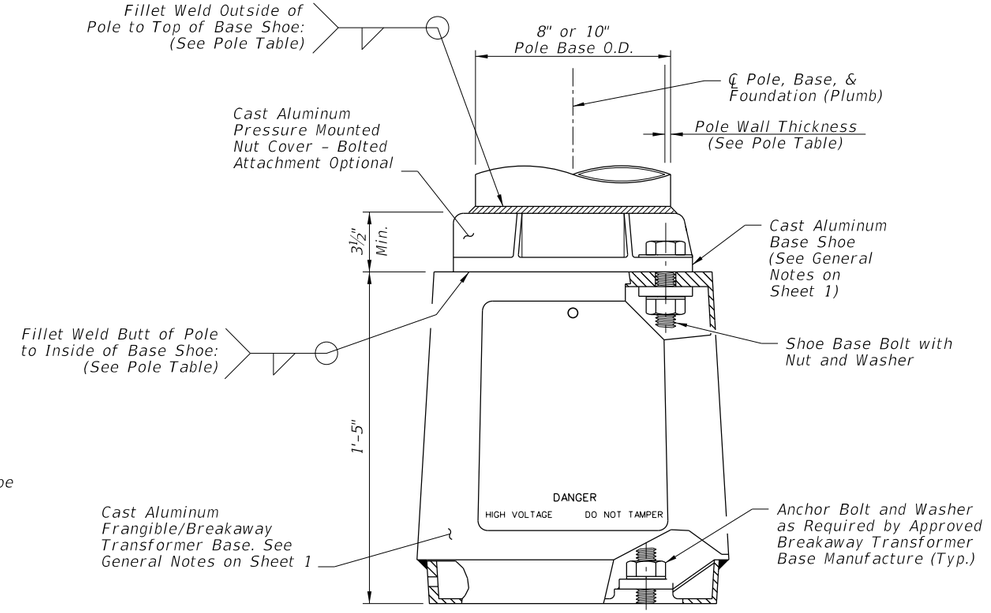
VIEW B-B



BOTTOM VIEW
TRANSFORMER BASE



SHAFT FOUNDATION ELEVATION



POLE BASE ELEVATION

SHAFT FOUNDATION NOTES:

1. Depths shown are for slopes equal to or flatter than 1:4. For slopes steeper than 1:4 and equal to or flatter than 1:2 add 2'-6" to foundation depths shown.
2. Foundation Tie Bars: #4 Tie Bars @ 12" centers (max.) or D10 (or W10) spiral @ 6" pitch, 3 flat turns top and 1 flat turn bottom.

ARM-POLE TABLE

FOR STANDARD ALUMINUM LIGHT POLES WITH ARM

Mounting Height (Ft.)	Wind Speed and Arm Lengths (Ft.)				
	120 mph	140 mph		160 mph	
	8, 10, 12, 15	8, 10, 12	15	8, 10	12, 15
30	A1-P1	A1-P1	A2-P1	A1-P1	A2-P1
35					
40				A1-P2	A2-P2
45	A1-P2	A1-P2	A2-P2		
50				A1-P3	A2-P3

ARM POLE NOTES:

1. See ARM SECTION detail on Sheet 3 for all A1 and A2 Values.
2. See Pole Table for all P1, P2, and P3 values.
3. For Median Barrier Mounted Pole, Use Arm A1.
4. For 20' and 25' assembly heights use only 8' or 10' arm A1 with P0.

POLE TABLE

Pole	Pole Wall Thickness	Top of Base Shoe Weld	Inside of Base Shoe Weld
P0	0.156	3/16"	5/32"
P1	0.156	3/16"	5/32"
P2	0.250	1/4"	1/4"
P3	0.313	5/16"	5/16"

POLE NOTES:

1. Pole wall thicknesses shown are nominal and must be within the Aluminum Association tolerances.
2. Thicker walls are permitted and tapered walls may be used in accordance with the minimum Aluminum Association thicknesses.

TOP MOUNT POLE TABLE

FOR STANDARD ALUMINUM LIGHT POLES WITH TOP MOUNT

Mounting Height (Ft.)	Wind Speed and Arm Lengths (Ft.)		
	120 mph	140 mph	160 mph
20	Pole P0	Pole P0	Pole P0
25			
30	Pole P1	Pole P1	Pole P1
35			
40			Pole P2
45	Pole P2	Pole P2	
50			

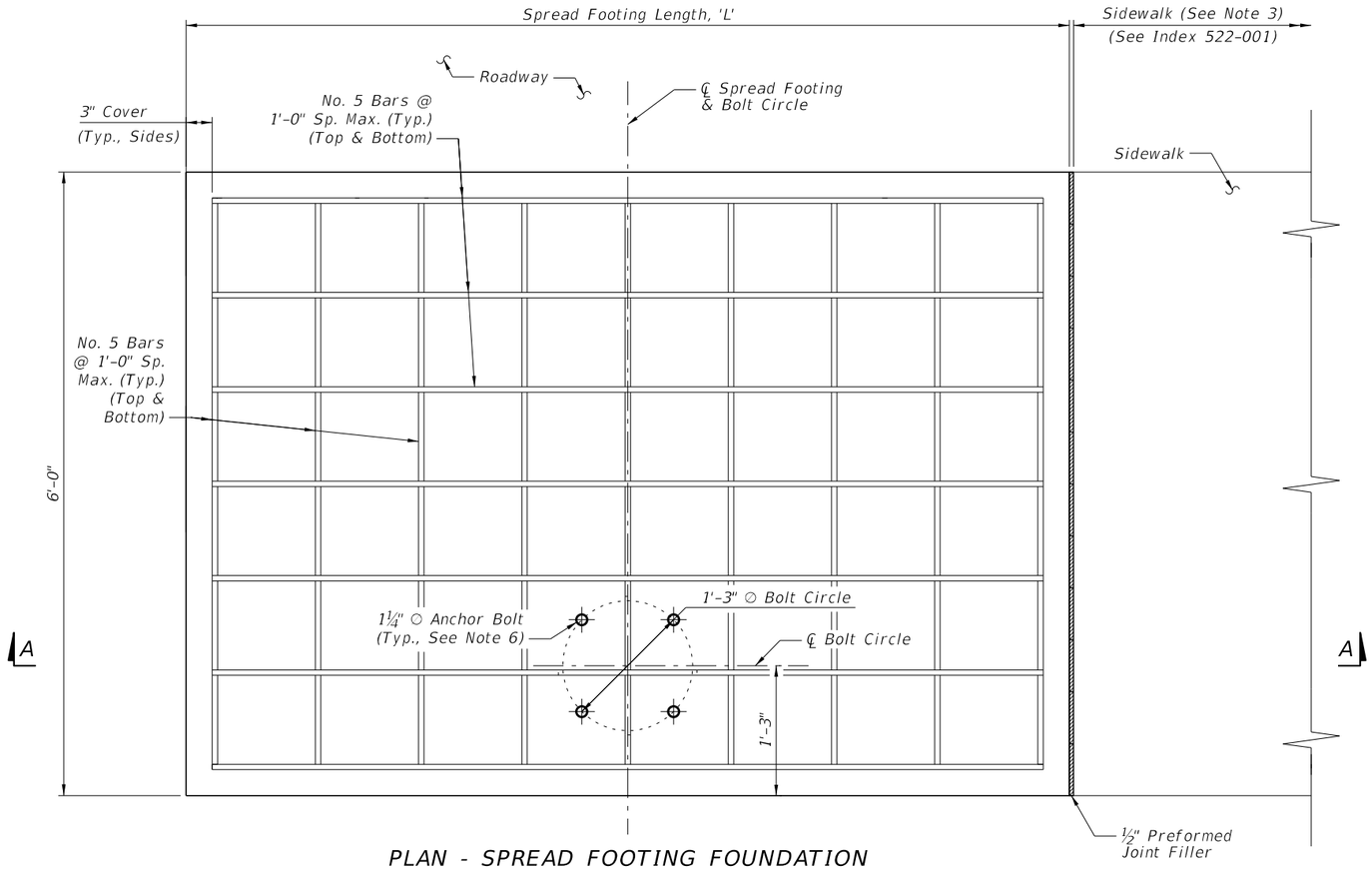
SHAFT FOUNDATION TABLE

Pole	P0	P1	P2	P3
Depth	6'-0"	7'-0"	8'-0"	8'-0"
Bolt Min. Embedment	2'-6"	3'-6"	3'-6"	3'-6"

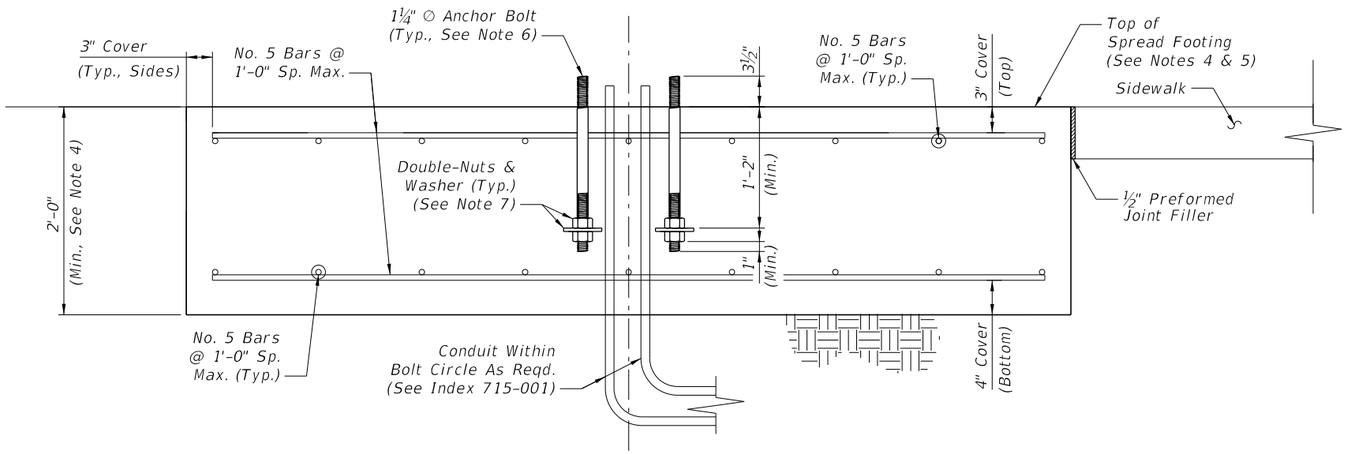
SHAFT FOUNDATION OPTION WITH LIGHT POLE & BASE DETAILS

10/20/2022 8:58:34 AM

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/22			FY 2023-24 STANDARD PLANS	STANDARD ALUMINUM LIGHTING	715-002	4 of 9



PLAN - SPREAD FOOTING FOUNDATION



SECTION A-A - SPREAD FOOTING FOUNDATION ELEVATION

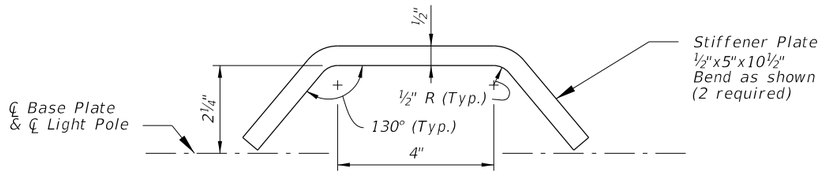
SPREAD FOOTING LENGTH, 'L'			
Mounting Height (Ft.)	Wind Speed (All Arm Lengths)		
	120 mph	140 mph	160 mph
20	4'-6"	5'-0"	6'-0"
25	4'-6"	5'-0"	6'-0"
30	7'-0"	7'-0"	7'-0"
35	7'-0"	7'-0"	7'-0"
40	7'-0"	7'-0"	10'-0"
45	8'-6"	10'-0"	10'-0"
50	8'-6"	10'-0"	11'-6"

NOTES:

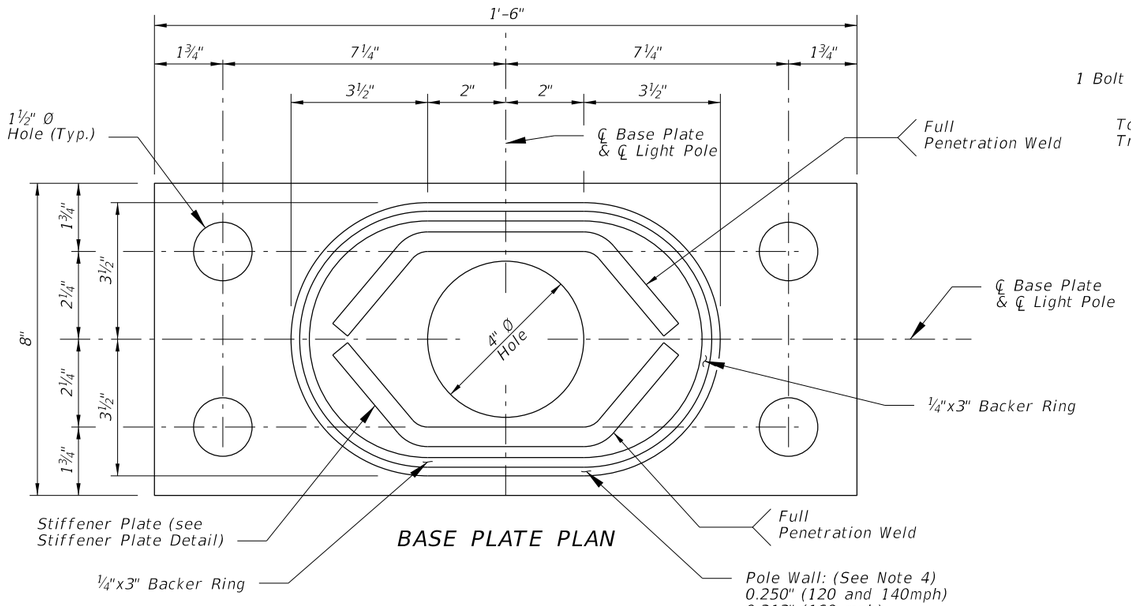
1. Install the Spread Footing Foundation Option only where called for in the Plans.
2. The Spread Footing Foundation Option is only permitted for use with single arm or top mount light poles. Where applicable, the pole arm must be oriented towards the roadway side of the footing as shown. Double arm configurations are not permitted.
3. Sidewalk placed on the other side or both sides of the spread footing is permitted where shown in the Plans. The sidewalk connection to spread footing requires the ½" expansion joint shown regardless of the side.
4. The top of the spread footing must match the cross slope of the adjacent sidewalk where applicable per the Plans. The nominal bottom of the spread footing must remain level.
5. Apply concrete surface finish to the top of the spread footing in accordance with Specification 522-7.
6. Mount the anchor bolts plumb. For the corresponding pole base details, see Sheet 4.
7. Place zinc-plated steel washers with 1 5/16" or 1 3/8" I.D. and a minimum thickness of ¼". Use either 4" ∅ fender washers or 3"x3" square washers.
8. Where raised curb is called for in the Plans, provide a tooled cold joint with bond breaker between the foundation and back of raised curb. See Sheet 2 and the connection between concrete sidewalk and raised curb per Index 522-001.

SPREAD FOOTING FOUNDATION OPTION

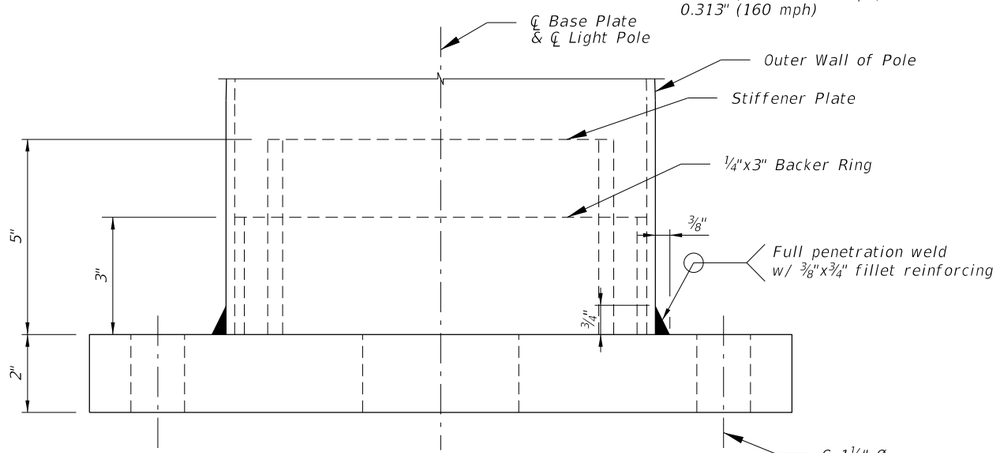
10/20/2022 8:58:35 AM



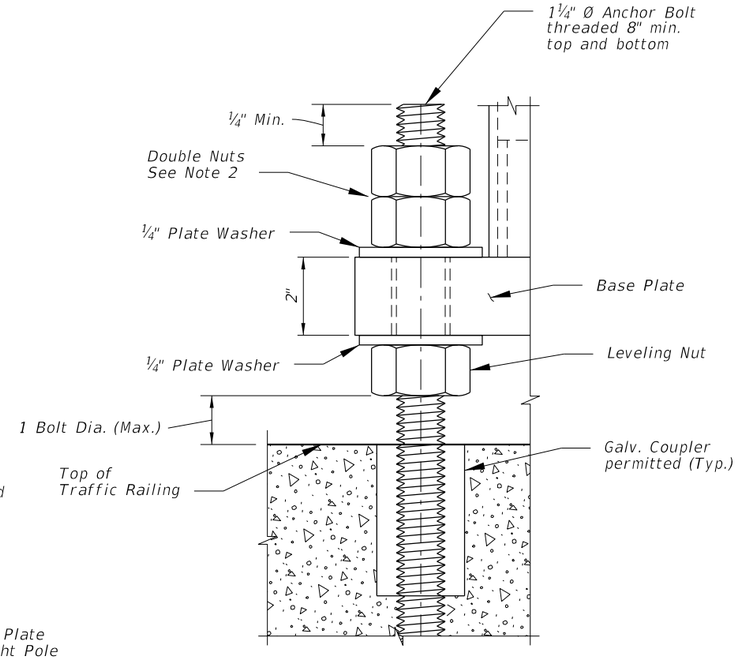
STIFFENER PLATE DETAIL



BASE PLATE PLAN



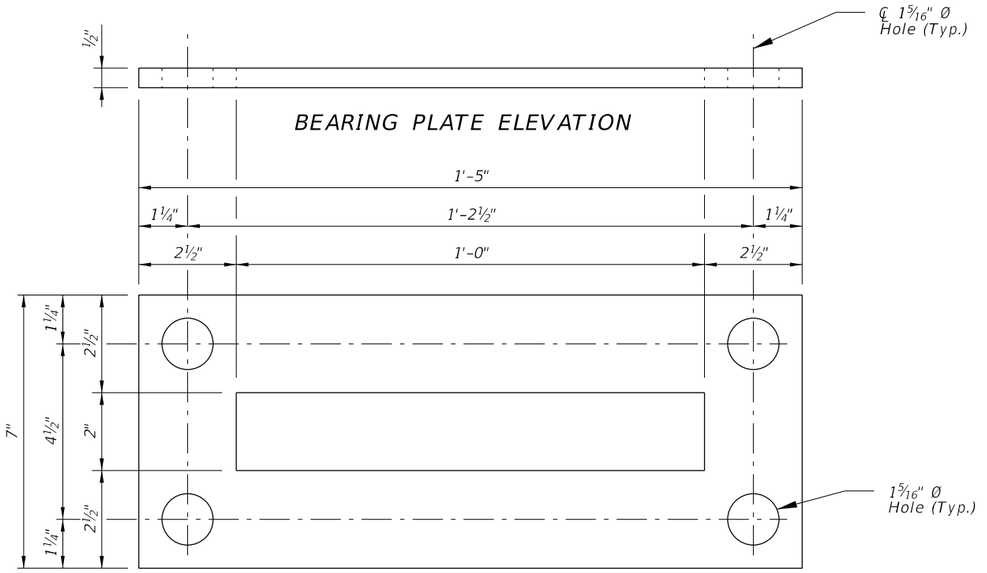
BASE PLATE ELEVATION



DETAIL 'A'

NOTES:

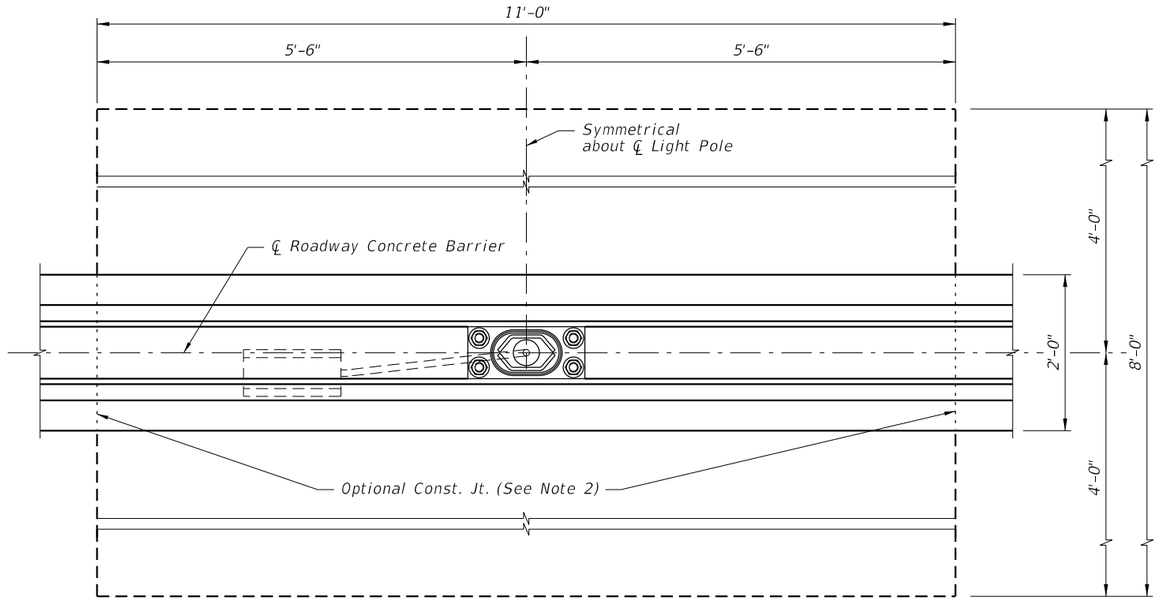
1. For locations of Bearing Plates, Base Plates and Detail 'A' see Sheets 7 thru 9.
2. Double Nuts: The bottom hex nut may be substituted by a half-height 'jam' nut.
3. Provide individual nut covers (not shown) for each bolt.
4. Pole wall thicknesses shown are nominal and shall be within the Aluminum Association Tolerances. Thicker walls are permitted and tapered walls may be used in accordance with the minimum Aluminum Association thicknesses.



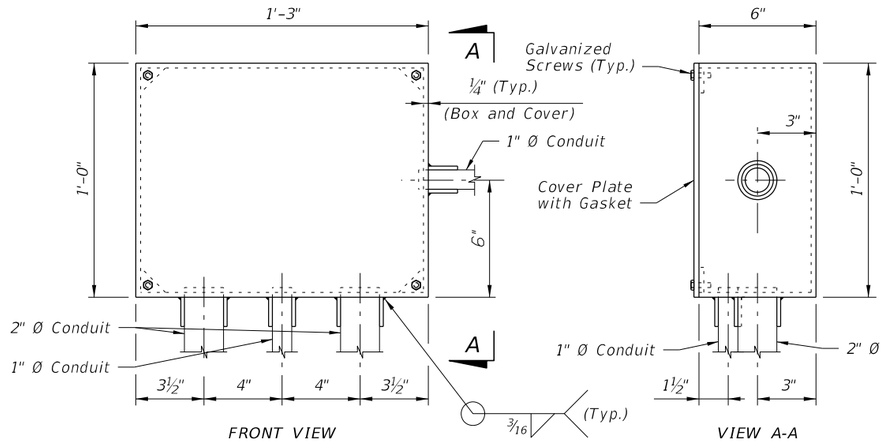
BEARING PLATE ELEVATION

BEARING PLATE PLAN

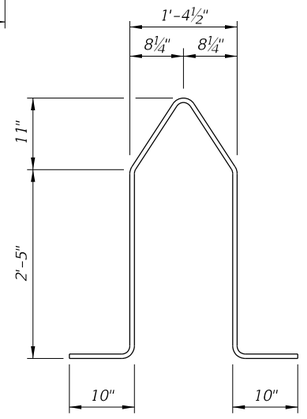
BASE PLATE DETAILS FOR MEDIAN BARRIER MOUNTED ALUMINUM LIGHT POLE



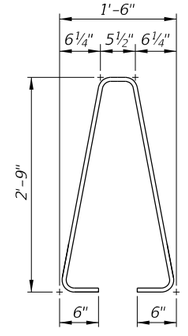
PLAN
(Reinforcing steel not shown)



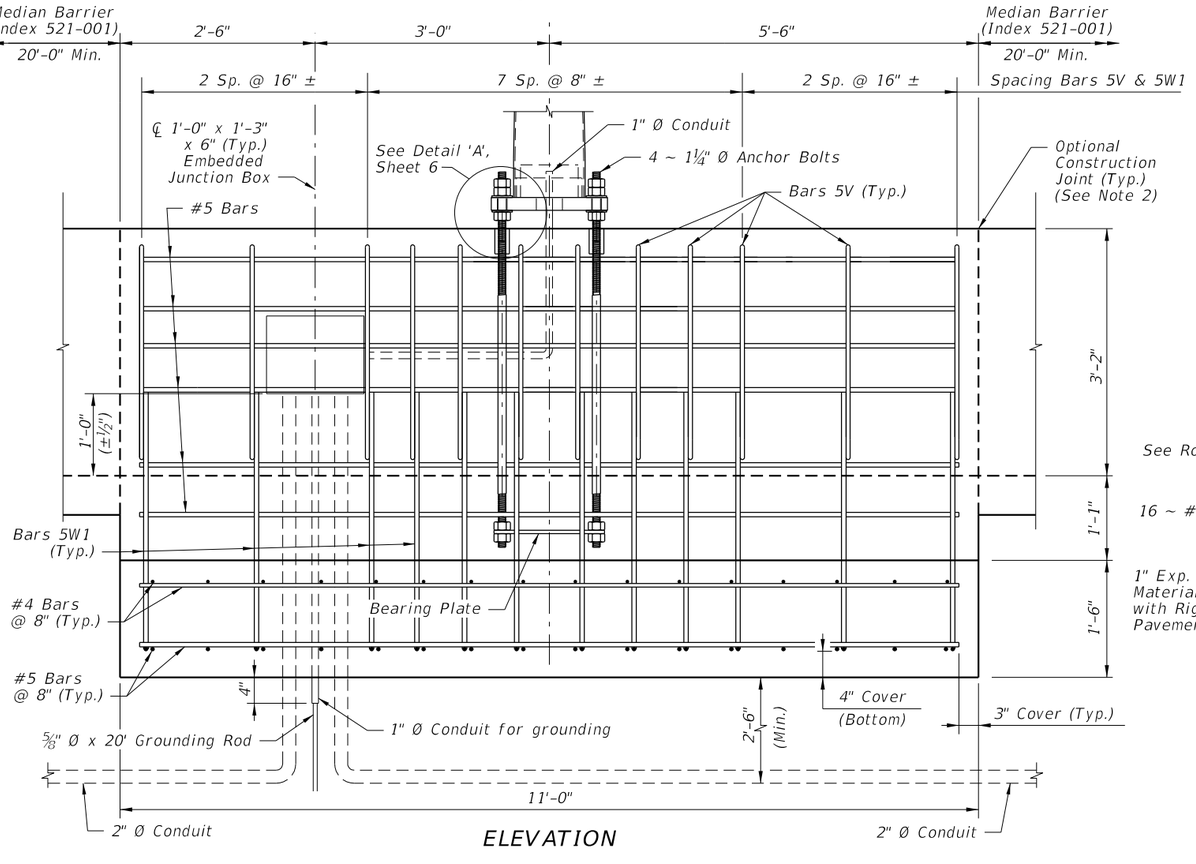
EMBEDDED JUNCTION BOX DETAILS



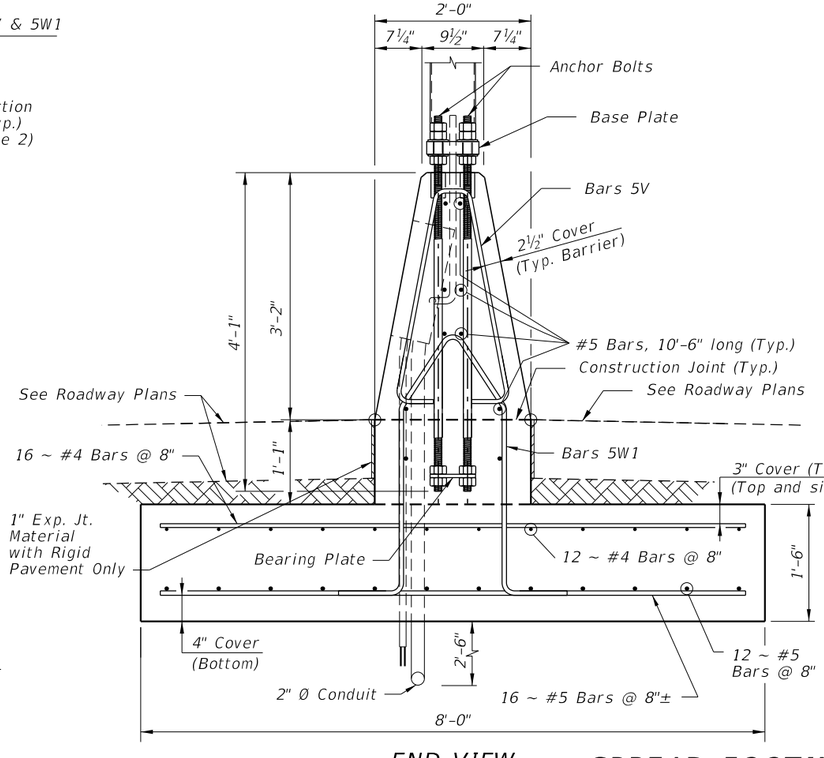
BAR 5W1



BAR 5V



ELEVATION



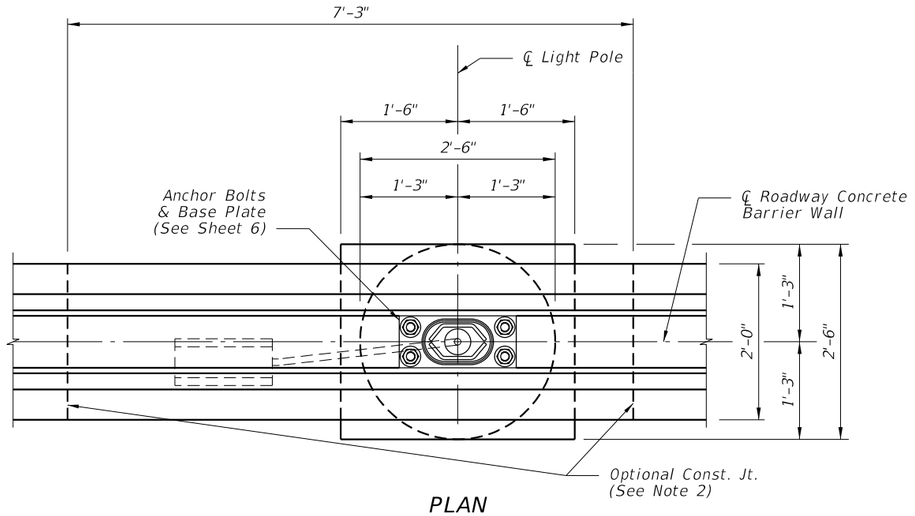
END VIEW

NOTES:

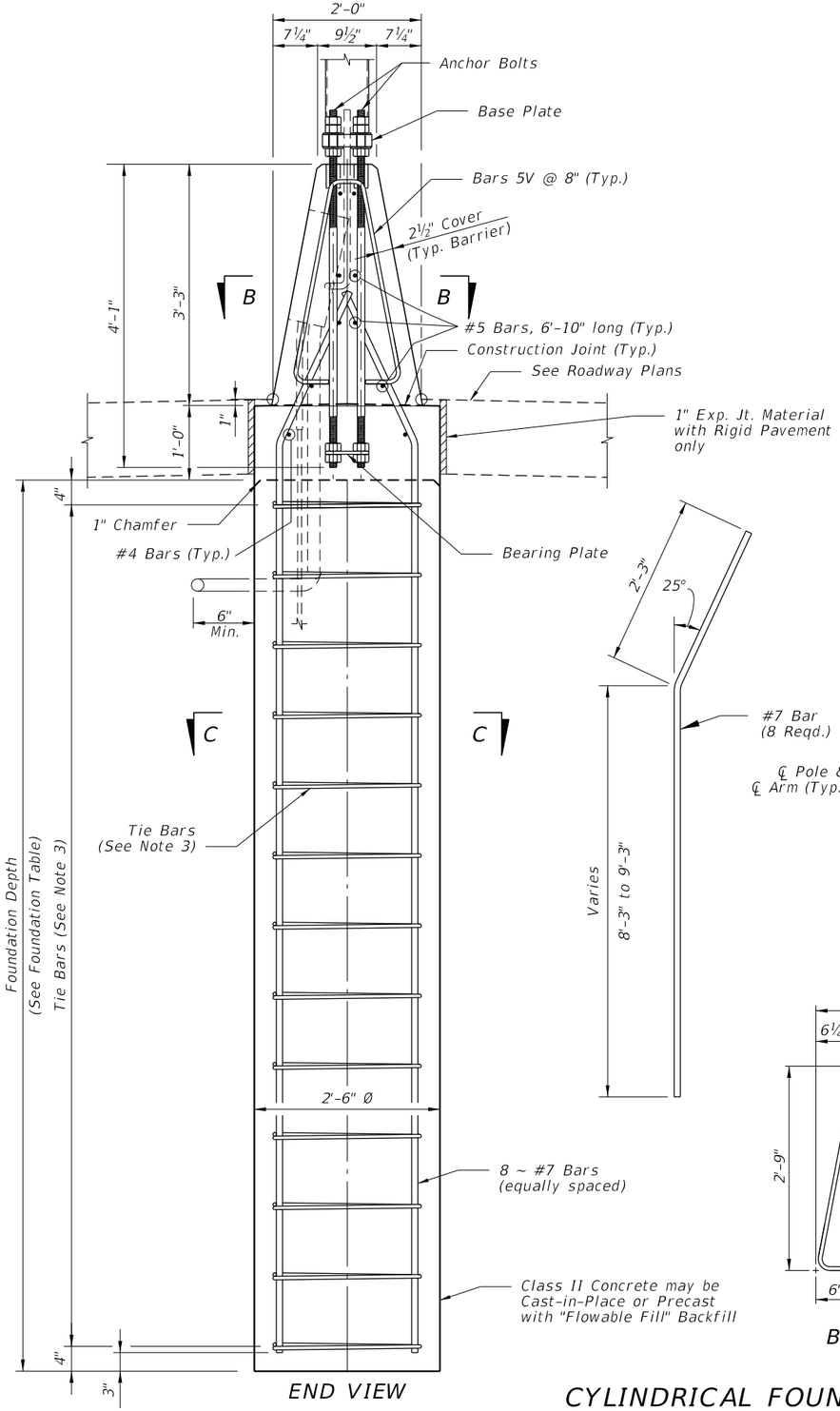
1. For Bearing Plate and Base Plate Details, see Sheet 6.
2. For connections to adjacent Median Barrier, use the Doweled Joint detail per Index 521-001. Alternatively, a continuous concrete pour or a construction joint may be substituted; these alternatives require the Median Barrier's longitudinal steel to lap a minimum of 2'-0" with the longitudinal steel shown herein.

SPREAD FOOTING DETAILS FOR MEDIAN BARRIER MOUNTED ALUMINUM LIGHT POLE

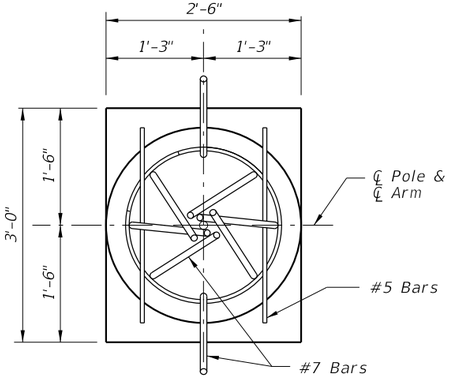
FOUNDATION TABLE		
WIND SPEED (MPH)	DESIGN MOUNTING HEIGHT (FT)	FOUNDATION DEPTH (FT)
120	40	8
140	40	9
160	40	9



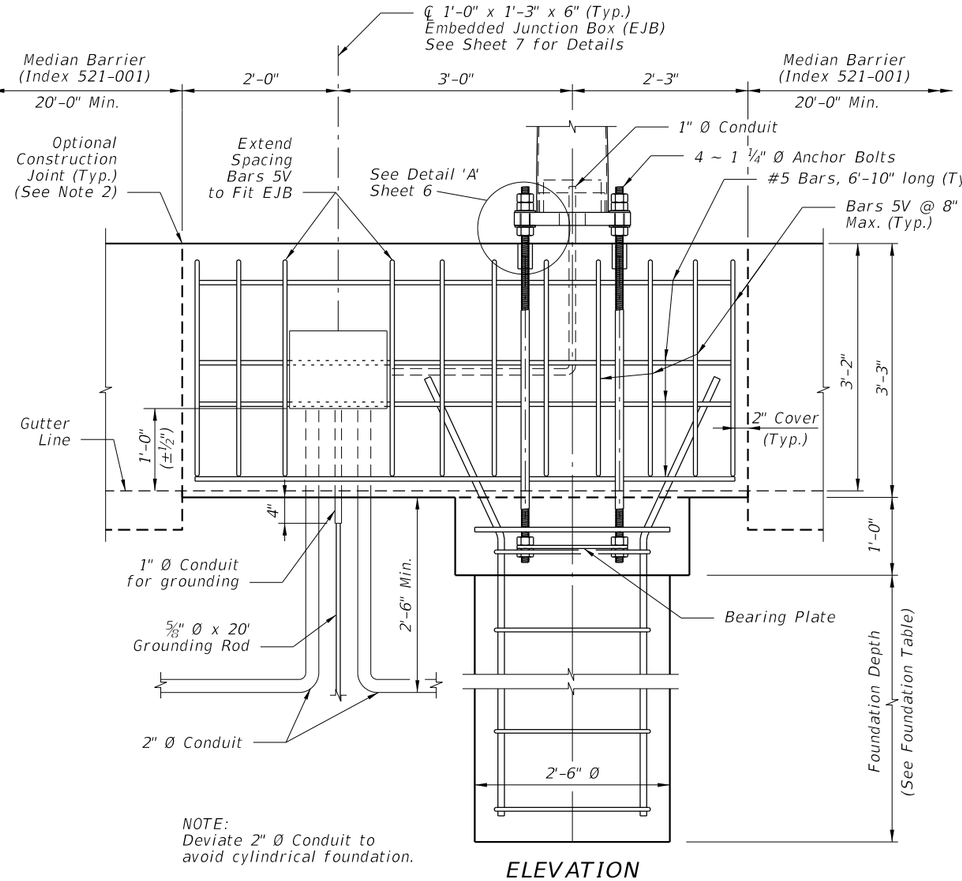
PLAN
(Reinforcing steel not shown)
Provide dowel bars @ construction joint



END VIEW

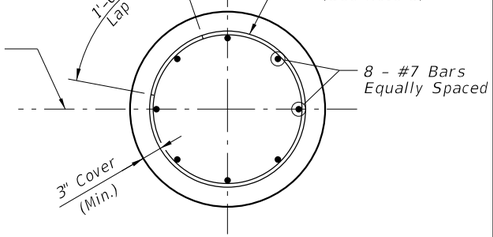


VIEW B-B
(Anchor Bolts and Barrier Longitudinal Steel & Stirrups Not Shown)

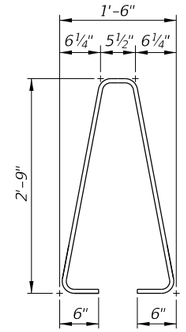


NOTE:
Deviate 2" Ø Conduit to avoid cylindrical foundation.

ELEVATION



SECTION C-C



BAR 5V

NOTES:

1. For Bearing Plate and Base Plate Details, see Sheet 6.
2. For connections to adjacent Median Barrier, use the Doweled Joint detail per Index 521-001. Alternatively, a continuous concrete pour or a construction joint may be substituted; these alternatives require the Median Barrier's longitudinal steel to lap a minimum of 2'-0" with the longitudinal steel shown herein.
3. #4 Tie Bars @ 12" centers (max.) or D10 (or W10) spiral @ 6" pitch, 3 flat turns top and 1 flat turn bottom.

CYLINDRICAL FOUNDATION DETAILS FOR MEDIAN BARRIER MOUNTED ALUMINUM LIGHT POLE

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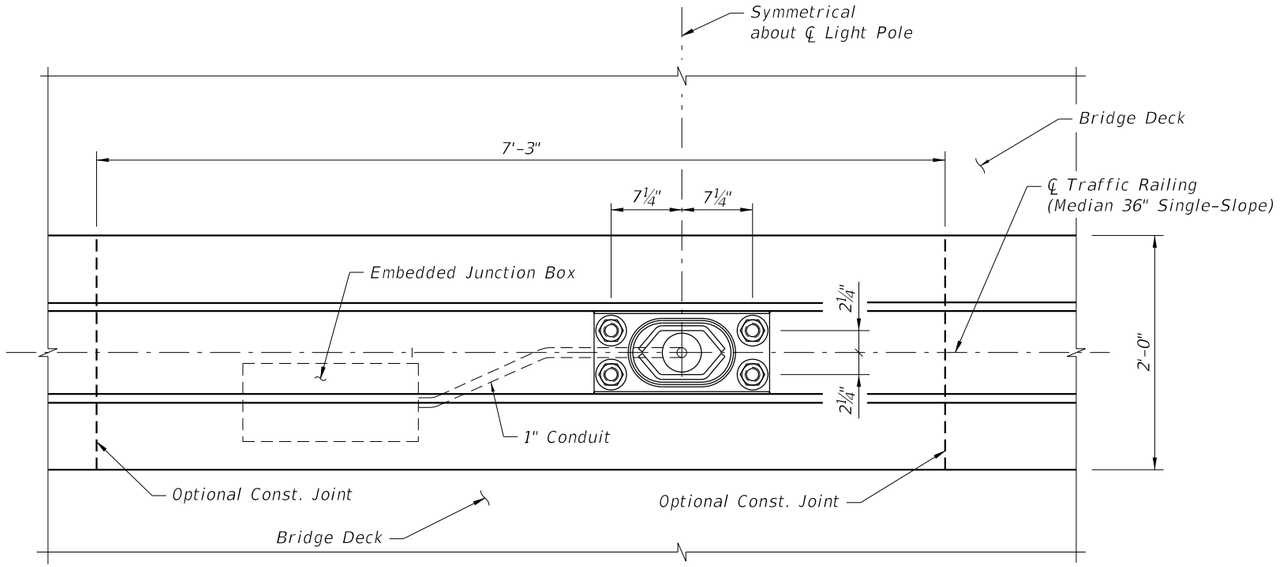
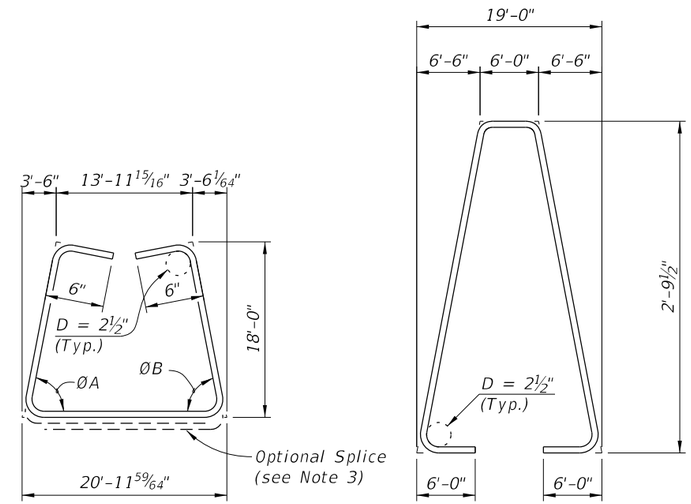
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/22			FY 2023-24 STANDARD PLANS	STANDARD ALUMINUM LIGHTING	715-002	8 of 9

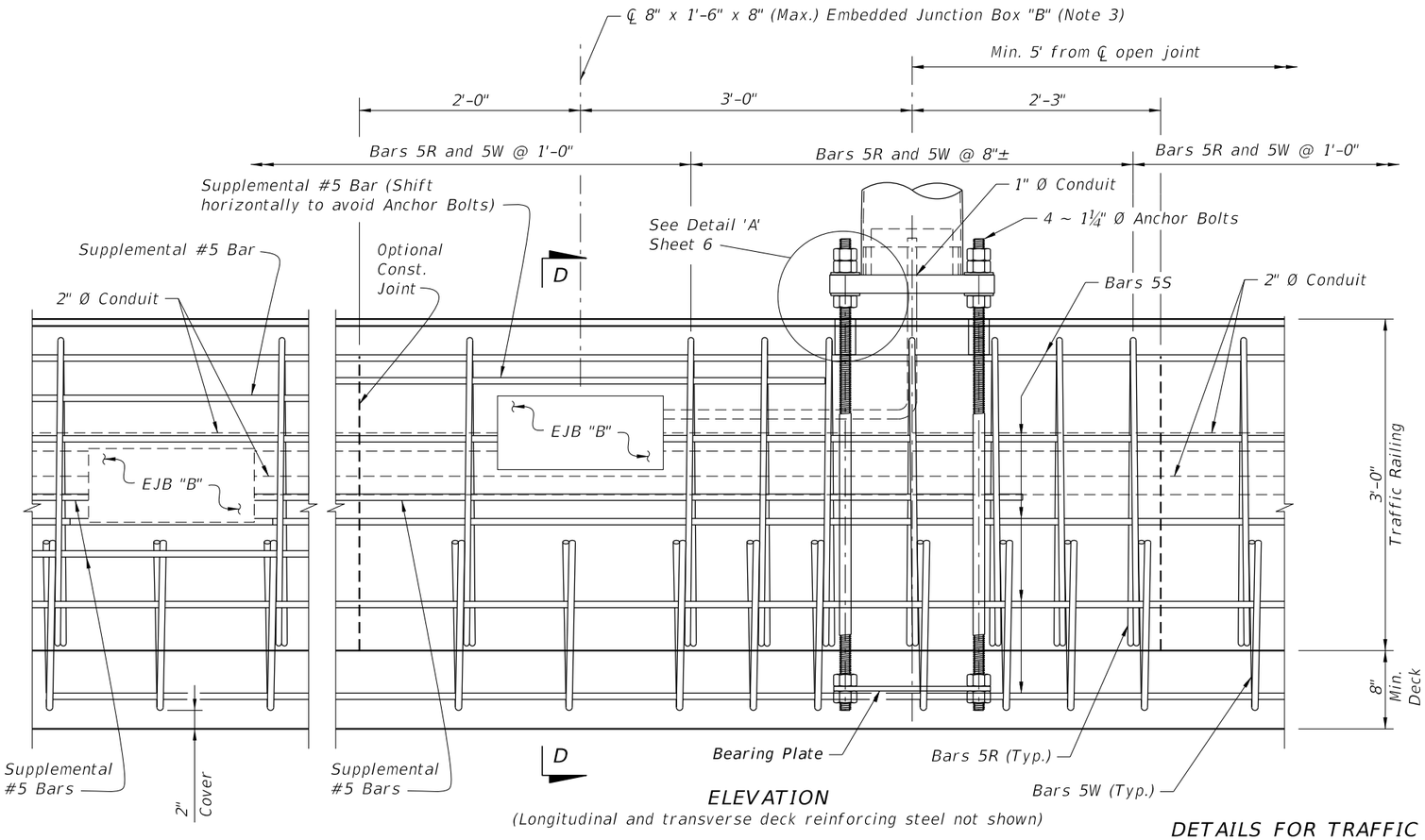


PLAN
(Reinforcing steel and 2" Ø Conduit not shown)

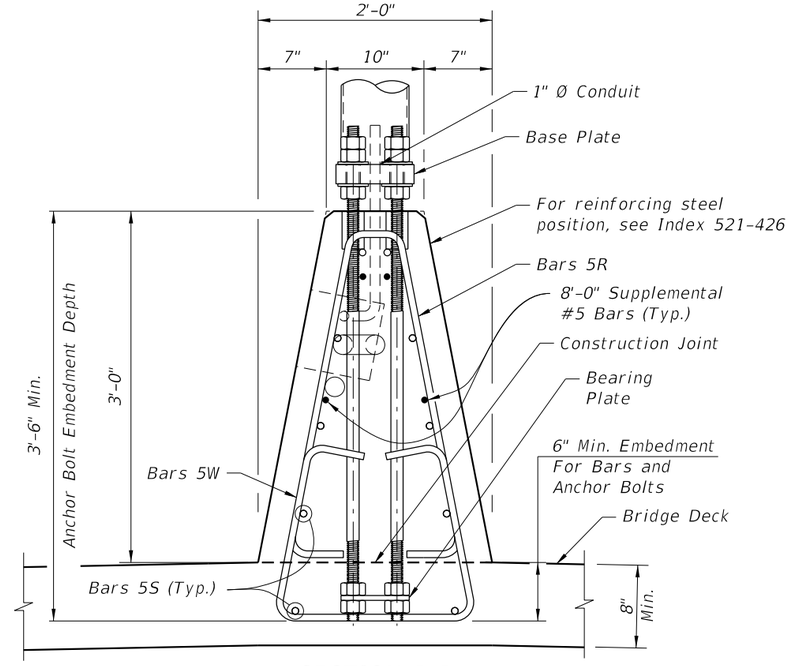


BAR 5W
(See Note 4)

BAR 5R



ELEVATION
(Longitudinal and transverse deck reinforcing steel not shown)



SECTION D-D
(Longitudinal and transverse deck reinforcing steel not shown)

NOTES:

1. For Base Plate Details, Bearing Plate Details, and Detail 'A', see Sheet 6.
2. See Index 521-426 for details of adjacent Traffic Railing (Median 36" Single-Slope) and for angles ∅A and ∅B.
3. See Index 630-010 for Conduit, EJB and supplemental reinforcing details.
4. At the Contractor's option, Bars 5W may be fabricated as a two piece bar with a 1'-2" lap splice at the bottom legs.

DETAILS FOR TRAFFIC RAILING (MEDIAN 36" SINGLE-SLOPE) MOUNTED ALUMINUM LIGHT POLE

GENERAL NOTES:

1. LUMINAIRE LOAD: Poles are designed to support the following:
   A. Luminaire Effective Projected Area (EPA): 1.55 SF
   B. Luminaire Weight: 75 lb.

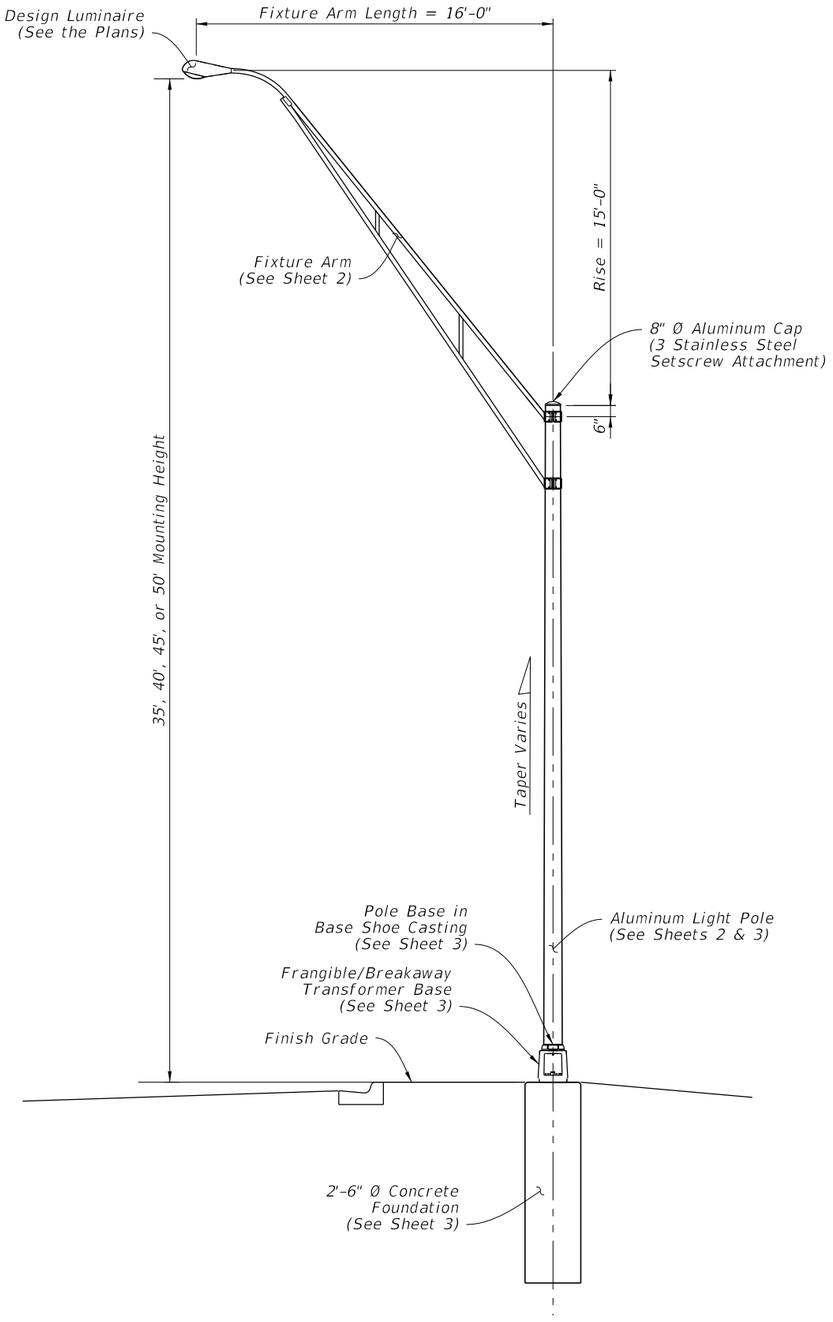
2. SHOP DRAWINGS: This Index is considered fully detailed; only submit shop drawings for minor modifications not included in the Plans.

3. MATERIALS:
   A. Pole, Arm Tubes, Strut Tubes, Bars, Plates, Stiffeners: ASTM B221, Alloy 6063-T6 or Alloy 6061-T6
   B. Pole Connection Extrusion Clamp: ASTM B221, Alloy 6061-T6
   C. Caps and Covers: ASTM B-26, Alloy 319-F
   D. Aluminum Weld Material: ER 4043
   E. Transformer and Frangible Base Materials: ASTM B26 or ASTM B108, Alloy 356-T6
   F. Base Bolts, Nuts and Washers:
      a. Shoe Base Bolts: ASTM F3125, Grade A325, Type 1
      b. Nuts: ASTM A563 Grade DH Heavy-Hex
      c. Washer: ASTM F436 Type 1
   G. Anchor Bolts, Nuts, and Washers:
      a. Anchor Bolts: ASTM F1554 Grade 55
      b. Nuts: ASTM A563 Grade A Heavy-Hex
   H. Clamp Hardware: See Sheet 2
   I. Stainless Steel Cap Fasteners: ASTM F593 Alloy Group 2, Condition A, CW1 or SH1
   J. Nut Covers: ASTM B26 (319-F)
   K. Concrete: Class II
   L. Reinforcing Steel: Specification 415

4. FABRICATION:
   A. Weld Arm and Pole Alloy in the T4 temper using 4043 filler. Age the Arm and Pole artificially to the T6 temper after welding.
   B. Transverse welds are only allowed at the base.
   C. Light Pole Properties: Taper as required to provide a round top O.D. of 8" and a base O.D. of 10" for all pole heights. Portions of the pole near the base shoe and at the arm connections may be held constant to simplify fabrication. Maintain pole wall thickness of 0.313" Min.
   D. Fixture Arm Tube Properties: See Sheet 2.
   E. Provide 'J', 'S' or 'C' hook at top of pole for electrical wires.
   F. Perform all welding in accordance with AWS D1.2.
   G. Identification Tag: (Submit details for approval.)
      a. 2" x 4" (Max.) aluminum identification tag.
      b. Locate on the inside of the transformer base and visible from the door opening.
      c. Secure to transformer base with ⅛" diameter stainless steel rivets or screws.
      d. Include the following information on the ID Tag:
         1. Financial Project ID
         2. Pole Height
         3. Manufacturer's Name

5. COATINGS/FINISH:
   A. Pole and Arm Finish: 50 grit satin rubbed.
   B. Galvanize Steel Bolts, Screws, Nuts and Washers: ASTM F2329
   C. Hot Dip Galvanize miscellaneous steel items: ASTM A123

6. CONSTRUCTION:
   A. Foundation: Specification 455, except payment for the foundation is included in the cost of the pole.
   B. Frangible Base, Base Shoe, and Pole Connection Extrusion Clamp:
      a. Certify that the Pole Connection Extrusion Clamp, Frangible Transformer Base, and Base Shoe Design are capable of providing the required capacity, assuming a design wind speed of 160 MPH.
      b. Certify the Base conforms to the FHWA required AASHTO Frangibility Requirements, tested under NCHRP Report 350 Guidelines (e.g. Akron Foundry TB1-17).
      c. Do not erect pole without Luminaire attached.



LIGHT POLE - ELEVATION

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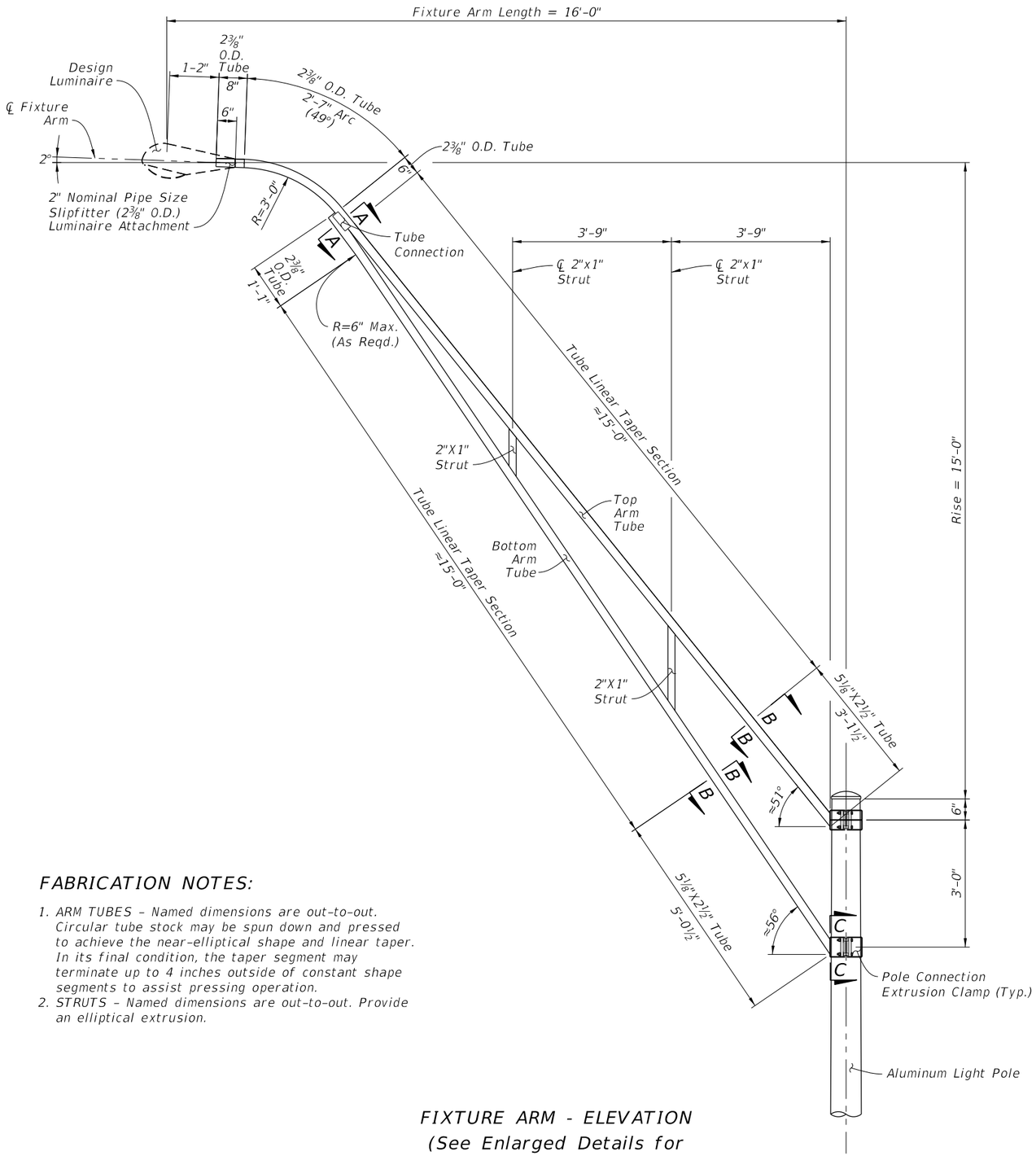
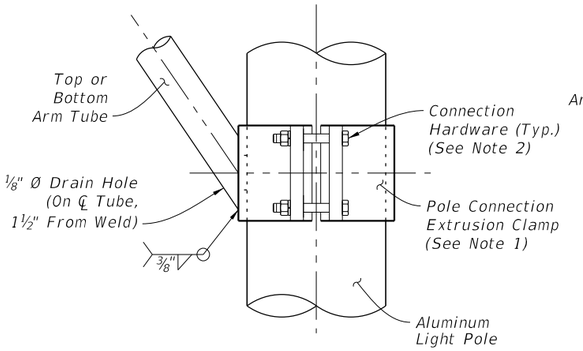
LAST REVISION	REVISION	DESCRIPTION:	FY 2023-24 STANDARD PLANS	UTILITY CONFLICT POLE	INDEX	SHEET
11/01/21					715-003	1 of 3



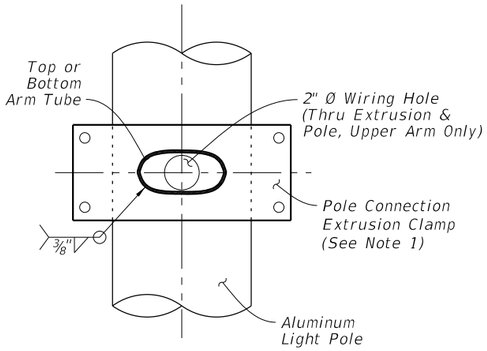
FIXTURE ARM - ELEVATION
(See Enlarged Details for Welding Requirements)

FABRICATION NOTES:

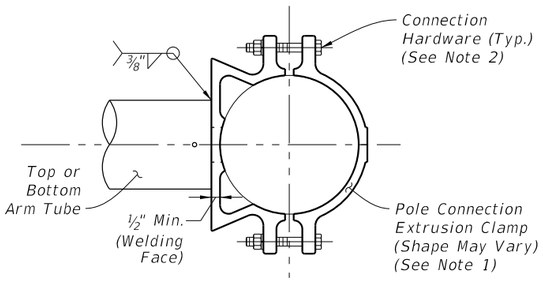
1. ARM TUBES – Named dimensions are out-to-out. Circular tube stock may be spun down and pressed to achieve the near-elliptical shape and linear taper. In its final condition, the taper segment may terminate up to 4 inches outside of constant shape segments to assist pressing operation.
2. STRUTS – Named dimensions are out-to-out. Provide an elliptical extrusion.



ELEVATION



SECTION C-C

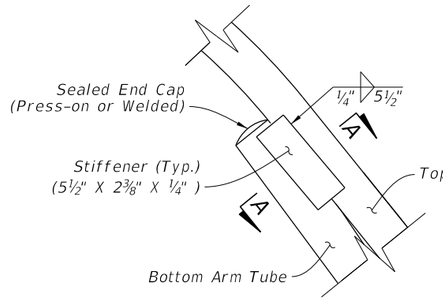


PLAN

POLE CONNECTION NOTES:

1. The Pole Connection Extrusion Clamp shown may vary by manufacturer. Provide a design that meets the requirements of General Note 6.B.a., including the connection hardware sizing.
2. Provide connection hardware with 13NC AISI Grade 316 stainless steel ½" min. bolts, nuts, and spring lock washers. Use flat washers per ASTM F593G & F594G, Alloy Group 2, Condition CW1.

POLE CONNECTION DETAILS



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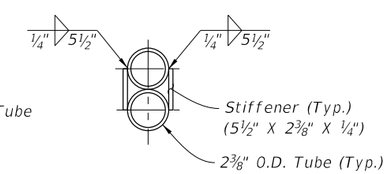
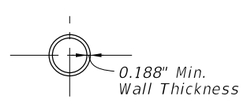
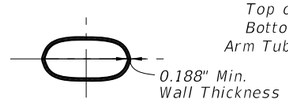


SECTION A-A

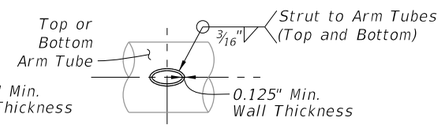
TUBE CONNECTION DETAILS



2⅜" O.D. TUBE



5⅛"X2½" TUBE
SECTION B-B



2"X1" STRUT
PLAN VIEW

TUBE SECTION DETAILS

FIXTURE ARM ASSEMBLY

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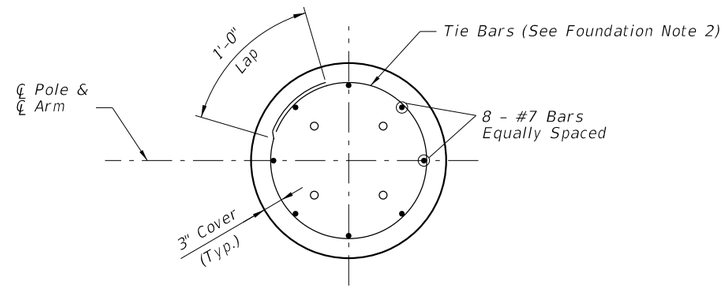
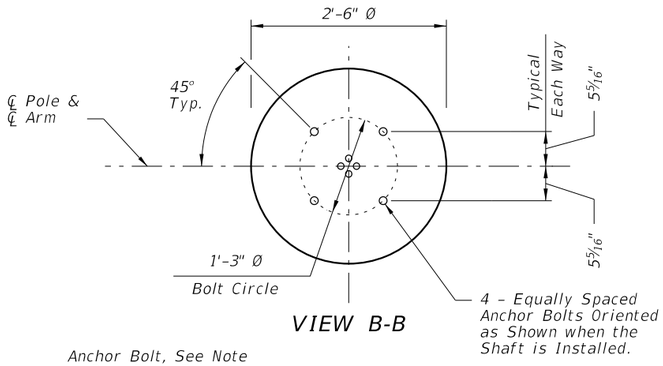
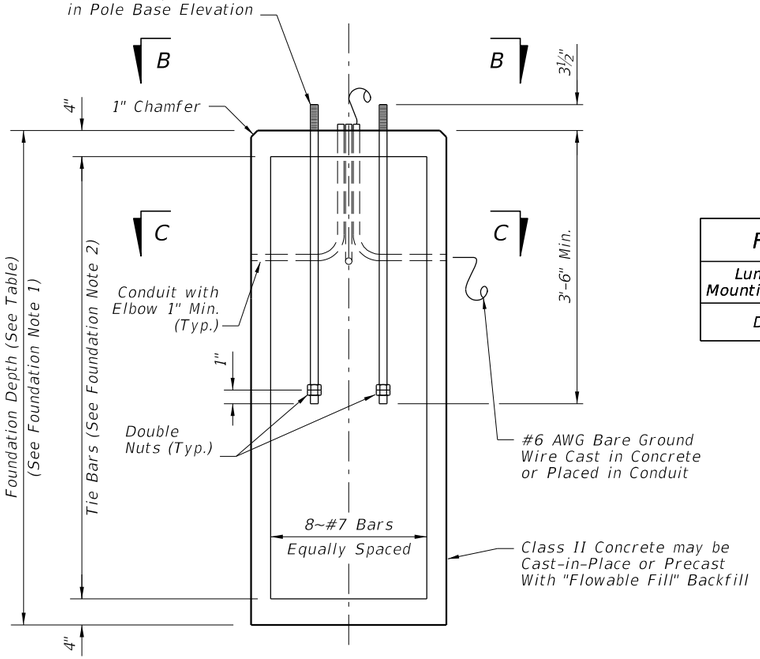
LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	UTILITY CONFLICT POLE	INDEX	SHEET
11/01/21					715-003	2 of 3



SECTION C-C



VIEW B-B

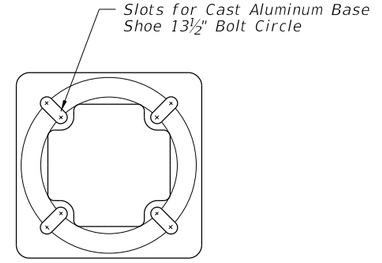


FOUNDATION ELEVATION

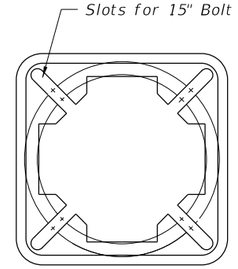
FOUNDATION DEPTHS		
Luminaire Mounting Height	≤ 40 Ft.	45-50 Ft.
Depth	8'-0"	9'-0"

FOUNDATION NOTES:

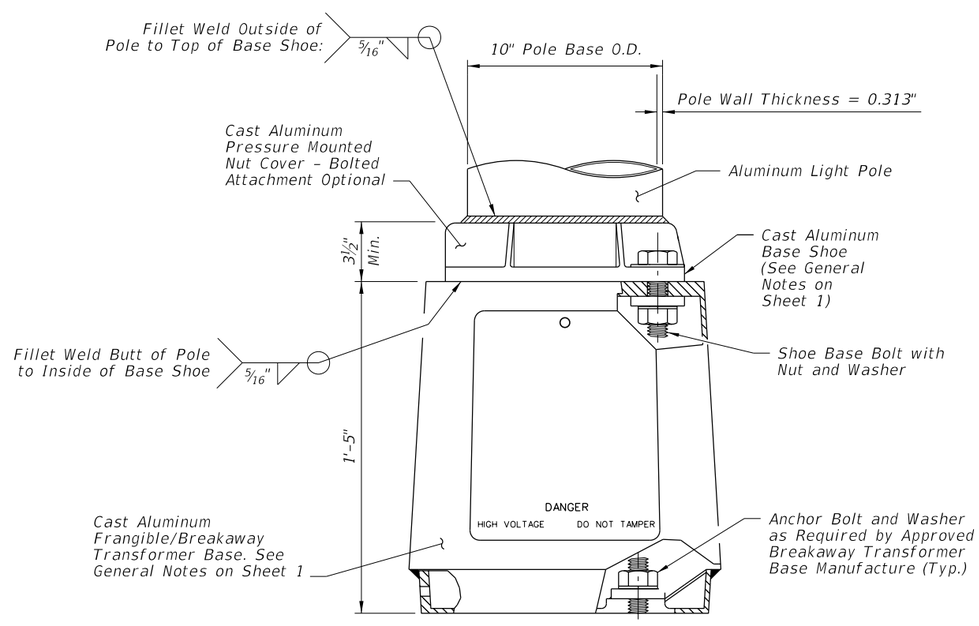
1. Depths shown are for slopes equal to or flatter than 1:4. For slopes steeper than 1:4 and equal to or flatter than 1:2 add 2'-6" to foundation depths shown.
2. Foundation Tie Bars: #4 Tie Bars @ 12" centers (max.) or D10 (or W10) spiral @ 6" pitch, 3 flat turns top and 1 flat turn bottom.



TOP VIEW
TRANSFORMER BASE



BOTTOM VIEW
TRANSFORMER BASE



POLE BASE ELEVATION

FOUNDATION AND BASE DETAILS

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HIGHMAST LIGHTING NOTES:

1. Poles are designed to support the following:
   A. One (1) cylindrical head assembly with a maximum effective projected area of 6 sf and 340 lbs (Max.)
   B. Eight (8) cylindrical luminaires with a maximum effective projected are of 1.5 sf and 77 lbs each.

2. Shop Drawings: This Index is considered fully detailed, only submit shop drawings for minor modifications not detailed in the Plans.

3. High Mast Structure Materials:
   A. Poles and Backing Rings:
      a. Less than 3/16": ASTM A1011 Grade 50, 55, 60 or 65
      b. Greater than or equal to 3/16": ASTM A572 Grade 50, 55, 60 or 65
      c. ASTM A595 Grade A (55 ksi yield) or Grade B (60 ksi yield)
   B. Steel Plates: ASTM A709 or ASTM A36
   C. Pole Caps: ASTM A1011 Grade 50, 55, 60, or 65 or ASTM B209
   D. Weld Metal: E70XX
   E. Stainless Steel Screws: AISI 316
   F. Anchor Bolts, Nuts and Washers:
      a. Anchor Bolts: ASTM F1554 Grade 55
      b. Nuts: ASTM A563 Grade A Heavy-Hex (5 per anchor bolt)
      c. Plate Washer: ASTM A36 (2 per anchor bolt)
   G. Nut Covers: ASTM B26 (319-F)
   H. Concrete: Class IV (Drilled Shaft)
   I. Reinforcing Steel: Specification 415

4. Fabrication:
   A. Welding:
      a. Specification Section 460-6.4 and
      b. AASHTO LRFD Specification for Structural Supports for Highway Signs, Luminaires, and Traffic Signals Section 14.4.4
   B. Poles:
      a. Round or 16-sided (Min.)
      b. Taper pole diameter at 0.14 inches per foot
      c. Pole shaft may be up to three sections (using telescopic field splices)
      d. Circumferentially welded pole shafts and laminated pole shafts are not permitted
      e. Fabricate Pole longitudinal seam welds (2 maximum) with 60 percent minimum penetration or fusion welds except as follows:
         i. Use a full-penetration groove weld within 6 inches of the circumferential tube-to-plate connection and
         ii. Use full-penetration groove welds on the female end section of telescopic (i.e., slip type) field splices for a minimum length of 42 inches.
   C. Identification Tag: (Submit details for approval)
      a. 2"x 4" (Max.) aluminum tag
      b. Locate on the inside of the pole and visible from the handhole
      c. Secure with 1/8" diameter stainless steel rivets or screws.
      d. Include the following information on the ID Tag:
         1. Financial Project ID
         2. Pole Type
         3. Pole Height
         4. Manufacturers' Name
         5. Yield Strength (Fy of Steel)
         6. Base Wall Thickness
   D. Except for Anchor Bolts, bolt hole diameters are bolt diameter plus 1/16" and anchor bolts holes are bolt diameter plus ½" (Max) prior to galvanizing.
   E. Hot Dip Galvanize after fabrication

5. Coating:
   A. Galvanize Anchor Bolts, Nuts and Washers: ASTM F2329
   B. Hot Dip Galvanize all other steel items including plate washers: ASTM A123

6. Construction:
   A. Foundation: Specification 455 Drilled Shaft, except that payment is included in the cost of the Structure.
   B. After Installation: Place wire screen between top of foundation and bottom of baseplate in accordance with Specification 649-6.

7. Wind Speed by County:

130 MPH
Alachua, Baker, Bradford, Calhoun, Clay, Columbia, Dixie, Duval, Gadsden, Gilchrist, Hamilton, Jackson, Jefferson, Lafayette, Leon, Liberty, Nassau, Madison, Putnam, Suwannee, Taylor, Union and Wakulla Counties.

150 MPH
Bay, Citrus, De Soto, Flagler, Franklin, Glades, Gulf, Hardee, Hendry, Hernando, Highlands, Hillsborough, Holmes, Lake, Levy, Manatee, Marion, Okaloosa, Okeechobee, Orange, Osceola, Pasco, Pinellas, Polk, Santa Rosa, Seminole, St. Johns, Sumter, Volusia, Walton and Washington Counties.

170 MPH
Brevard, Broward, Charlotte, Collier, Escambia, Indian River, Lee, Martin, Miami-Dade, Monroe, Palm Beach, Sarasota and St. Lucie Counties.

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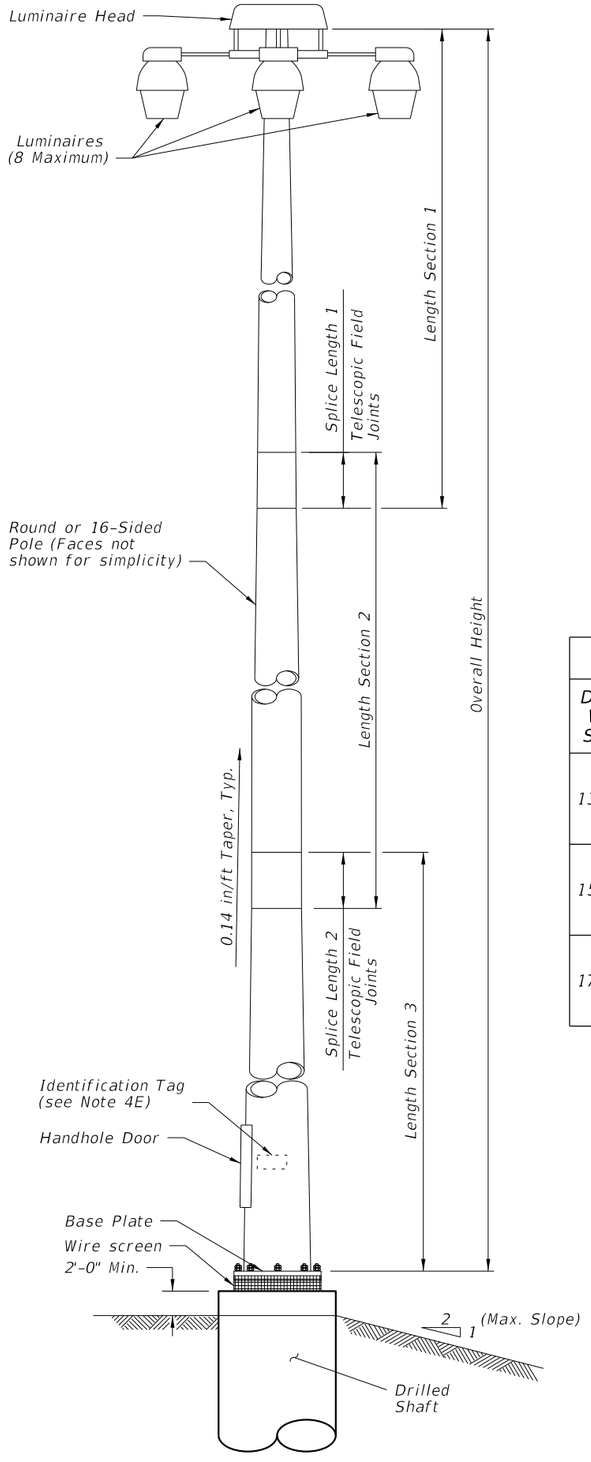
STANDARD POLE DESIGN NOTES



ELEVATION

POLE DESIGN TABLE*												
Design Wind Speed	Pole Overall Height (ft)	SECTION 1 (TOP)				SECTION 2				SECTION 3		
		Length	Wall Thickness (in.)	Minimum Splice Length 1	Base Dia. (in.)	Length	Wall Thickness (in.)	Minimum Splice Length 2	Base Dia. (in.)	Length	Wall Thickness (in.)	Base Dia. (in.)
130 mph	80	41'-0"	0.250	2'-0"	11	42'-0"	0.250	--	16	—	—	—
	100	23'-0"	0.179	2'-0"	10	41'-0"	0.250	2'-6"	15	43'-0"	0.250	20
	120	41'-0"	0.250	2'-0"	12	43'-0"	0.250	2'-9"	17	43'-0"	0.313	22
150 mph	80	41'-0"	0.250	2'-0"	11	42'-0"	0.313	--	16	—	—	—
	100	23'-0"	0.179	2'-0"	10	41'-0"	0.250	2'-6"	15	43'-0"	0.313	20
	120	41'-0"	0.250	2'-6"	16	43'-0"	0.250	3'-0"	21	44'-0"	0.375	26
170 mph	80	40'-0"	0.250	2'-3"	13	43'-0"	0.313	--	18	--	--	—
	100	23'-0"	0.250	2'-0"	11	42'-0"	0.313	2'-6"	16	44'-0"	0.375	21
	120	41'-0"	0.250	3'-0"	18	44'-0"	0.313	3'-6"	23	45'-0"	0.375	28

* Diameter Measured Flat to Flat

BASE PLATE AND BOLTS DESIGN TABLE							
Design Wind Speed	Pole Overall Height (ft)	Base Plate Diameter (in.)	Base Plate Thickness (in.)	Bolt Circle (in.)	No. Bolts	Bolt Diameter (in.)	Bolt Embedment (in.)
130 mph	80	30.0	3.000	23.0	8	1.75	38
	100	34.0	3.000	27.0	8	1.75	42
	120	38.0	3.875	30.0	8	2.00	48
150 mph	80	30.0	3.000	23.0	8	1.75	43
	100	36.0	3.875	28.0	8	2.00	47
	120	44.0	3.875	35.0	8	2.25	52
170 mph	80	32.0	3.000	25.0	8	1.75	47
	100	37.0	3.000	29.0	8	2.00	54
	120	46.0	3.875	37.0	10	2.25	58

SHAFT DESIGN TABLE				
Design Wind Speed	Pole Overall Height (ft)	Shaft Diameter	Shaft Length	Longitudinal Reinforcement
130 mph	80	4'-0"	13'-0"	14- #11
	100	4'-6"	14'-0"	16- #11
	120	4'-6"	16'-0"	16- #11
150 mph	80	4'-0"	14'-0"	14- #11
	100	4'-6"	16'-0"	16- #11
	120	5'-0"	18'-0"	18- #11
170 mph	80	4'-6"	15'-0"	16- #11
	100	4'-6"	17'-0"	16- #11
	120	5'-0"	20'-0"	18- #11

NOTE:
Shaft Design Table Shaft Length is based on level ground (flatter than 1:5). Increase the shaft depth in accordance with the Additional Shaft Depth Due to Ground Slope table for foundations with slopes 1:5 and steeper. Use the higher value for slope or diameter values that fall between those shown on the table.

ADDITIONAL SHAFT DEPTH DUE TO GROUND SLOPE		
Ground Slope	4'-0" Shaft Diameter	5'-0" Shaft Diameter
1:5	3'-0"	4'-0"
1:4	4'-0"	5'-0"
1:3	5'-0"	6'-0"
1:2	7'-0"	9'-0"

POLE DESIGN TABLES

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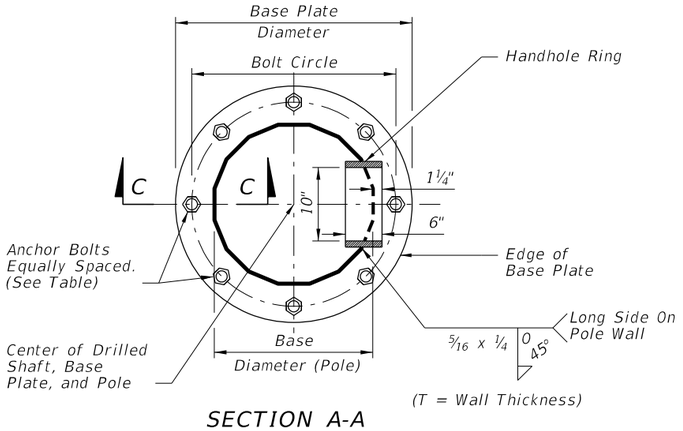
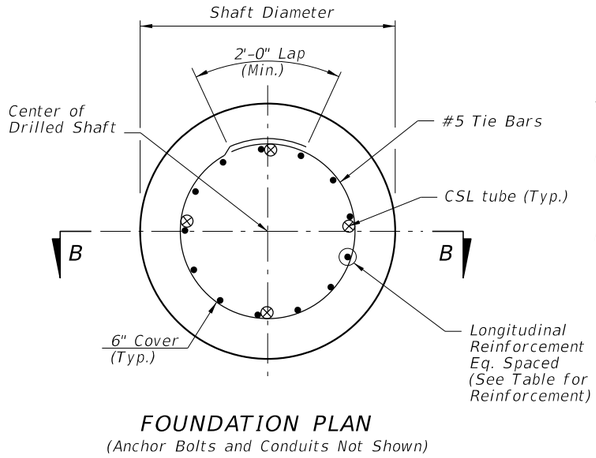
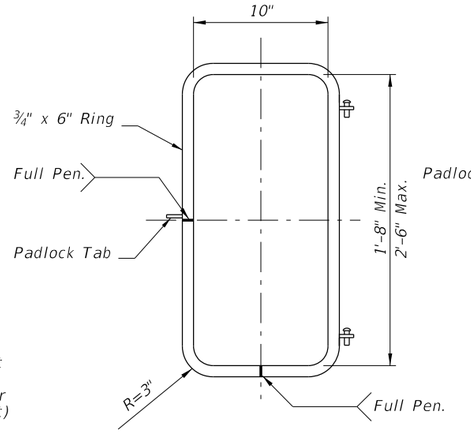


SECTION A-A

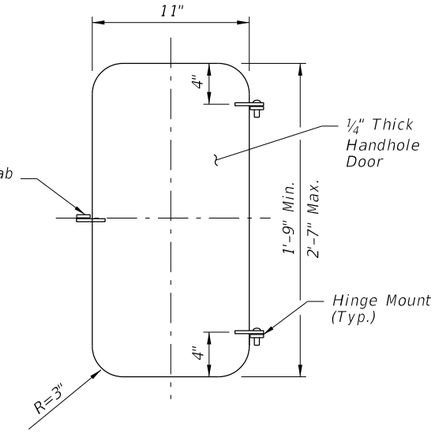


FOUNDATION PLAN

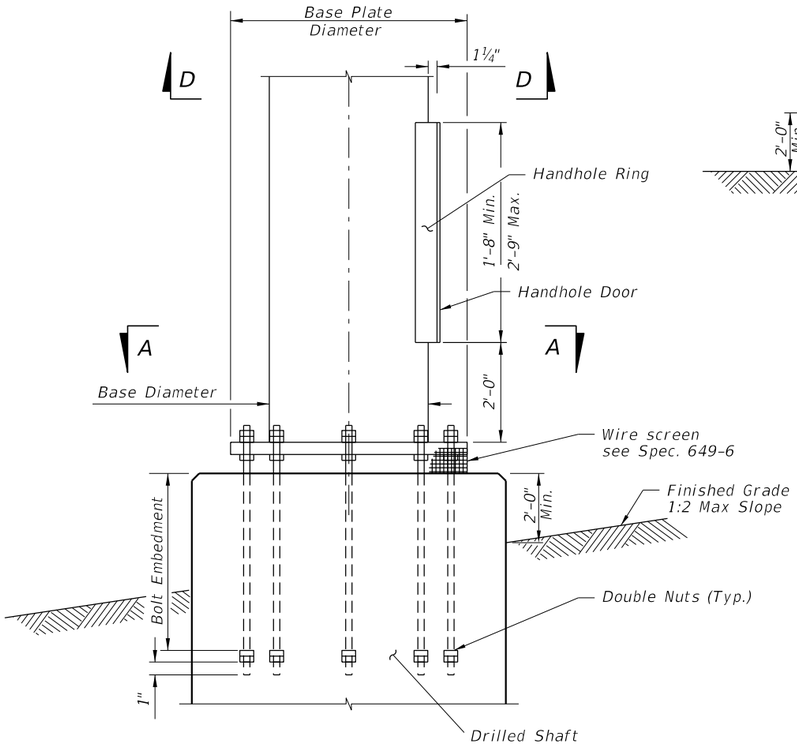
(Anchor Bolts and Conduits Not Shown)



HANDHOLE RING

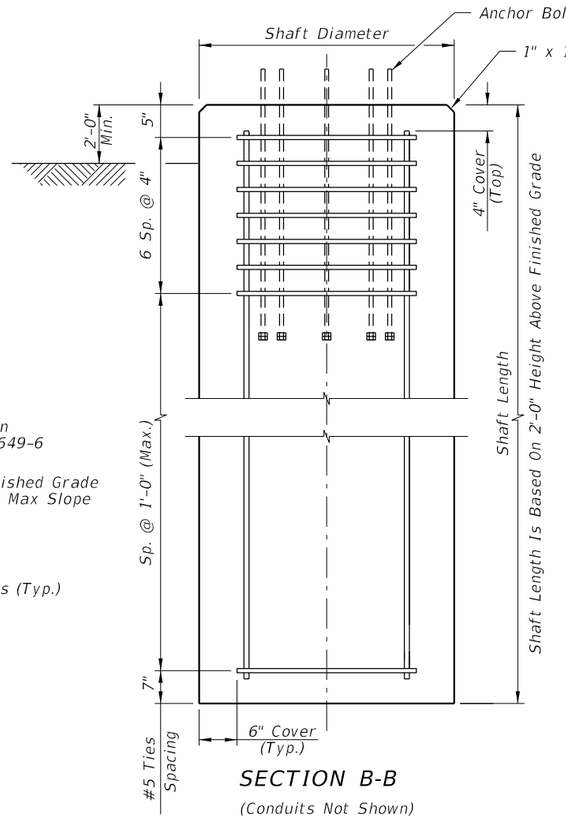


HANDHOLE DOOR



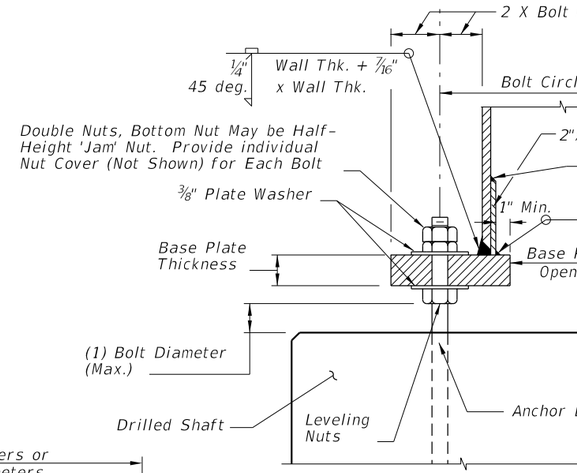
BASE PLATE AND ANCHORAGE ELEVATION

(Conduits Not Shown)

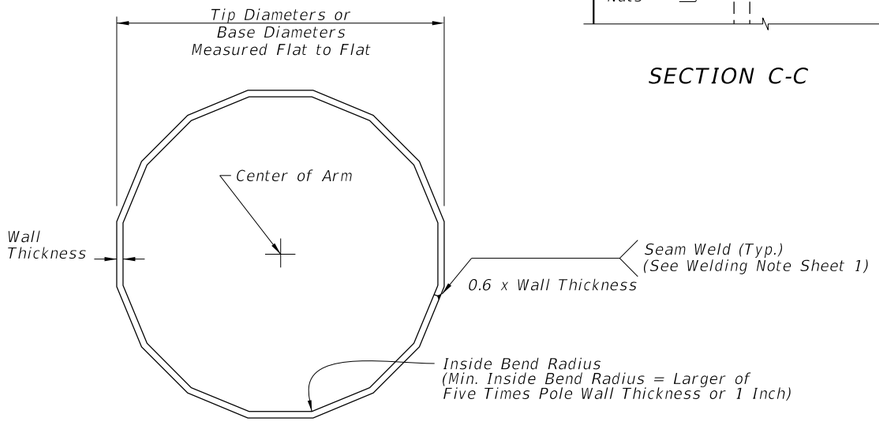


SECTION B-B

(Conduits Not Shown)



SECTION C-C



SECTION D-D

POLE FOUNDATION

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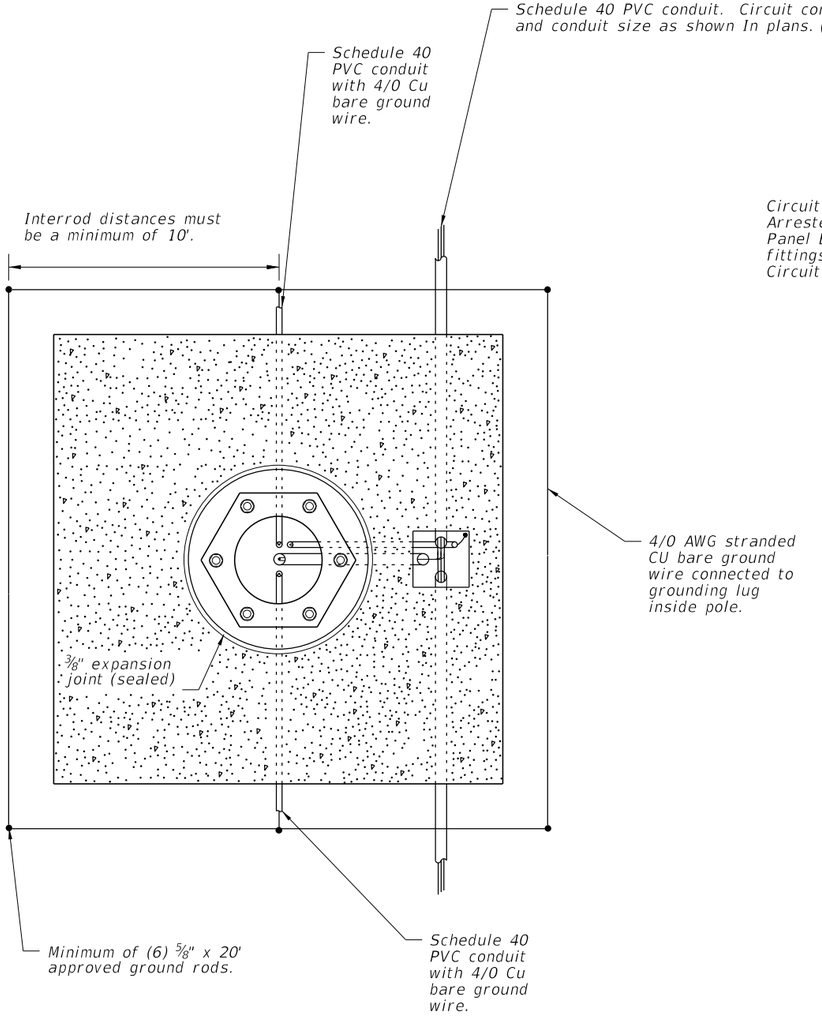
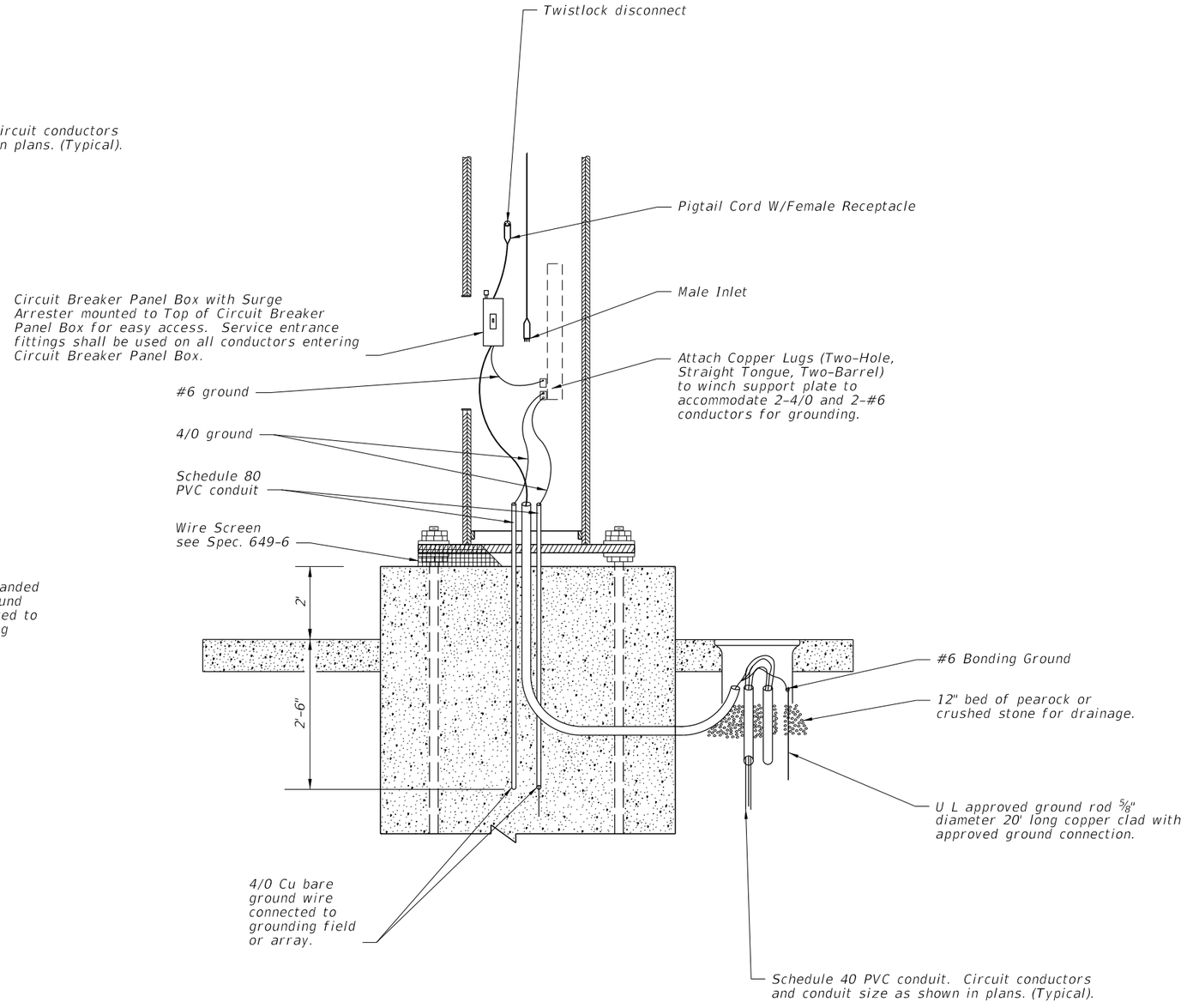




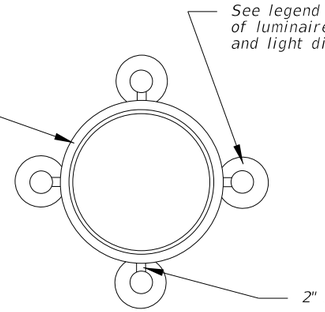
NOTES:

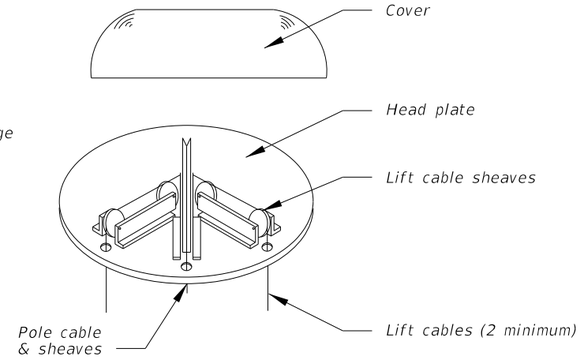
1. At all pull boxes and pole bases, ends of conduit shall be sealed in accordance with Specification 630.
2. Slabs to be placed around all Poles and Pull Boxes.
3. For Pull Boxes between Poles refer to Index 715-001.

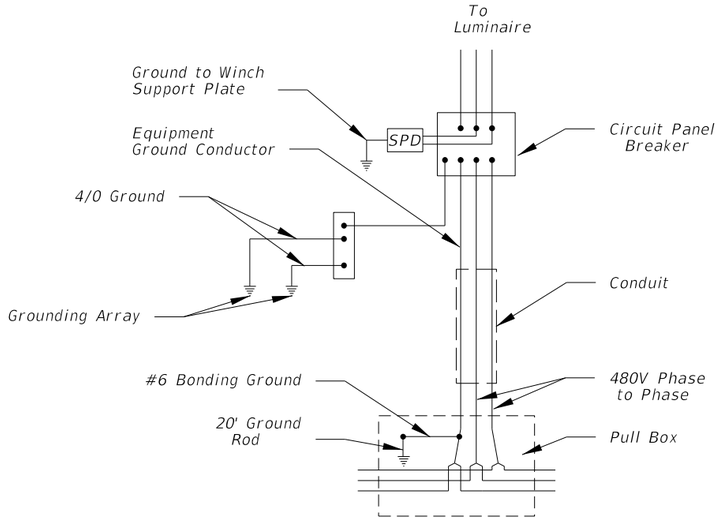
WIRING DETAILS

NOTE:

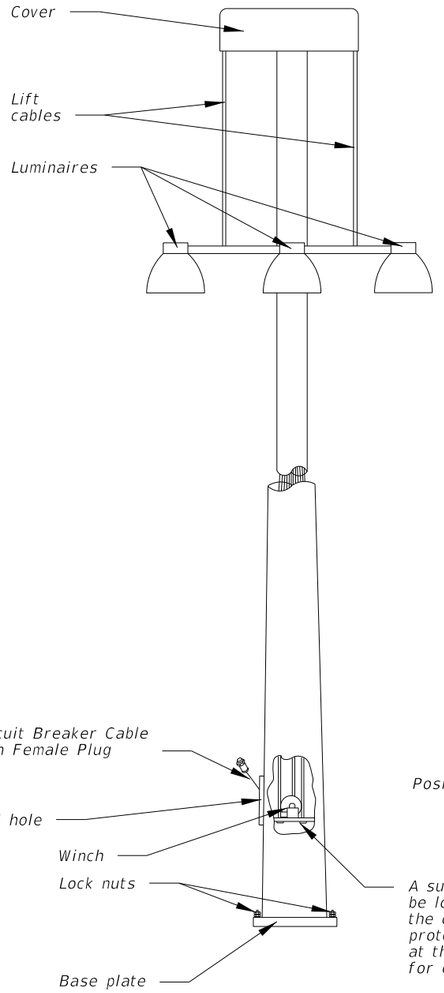
The contractor's attention is directed to those plan sheets detailing the mounting of luminaires at the pole top. Particular attention is directed to alignment of luminaire light distributions. Special attention must be exercised in the physical alignment of these luminaires to ensure that the approved photometric layout is physically produced at each lighting standard in the field. A marking shall be placed on the external face of the refractor to allow visual inspection of alignment. The marking shall correspond to the 0° axis of the refractor.

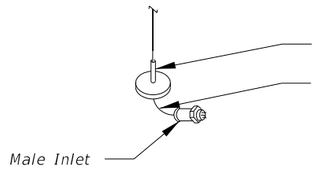


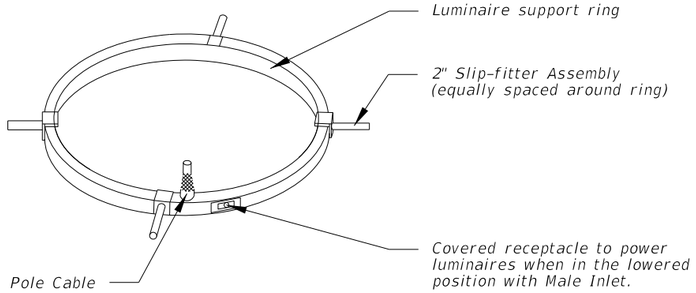


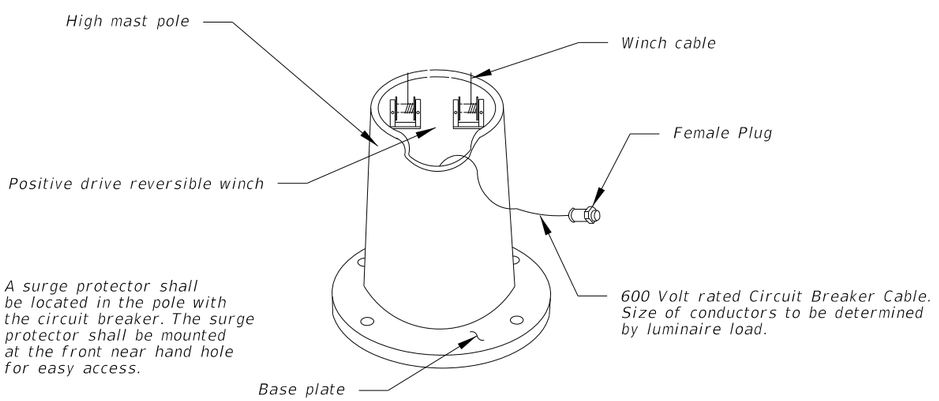


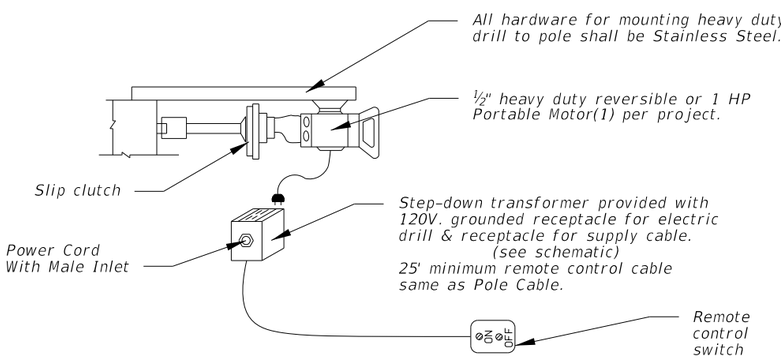
HIGH MAST POLE WIRING DIAGRAM

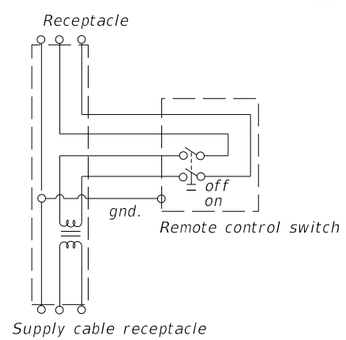












SCHEMATIC OF REMOTE AUXILIARY POWER UNIT

LOWERING DETAILS

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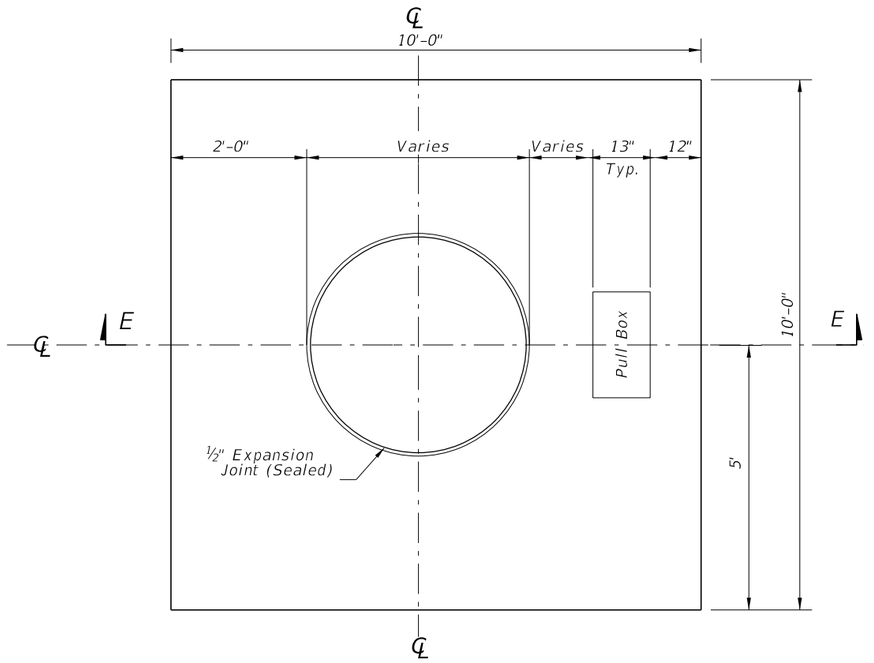
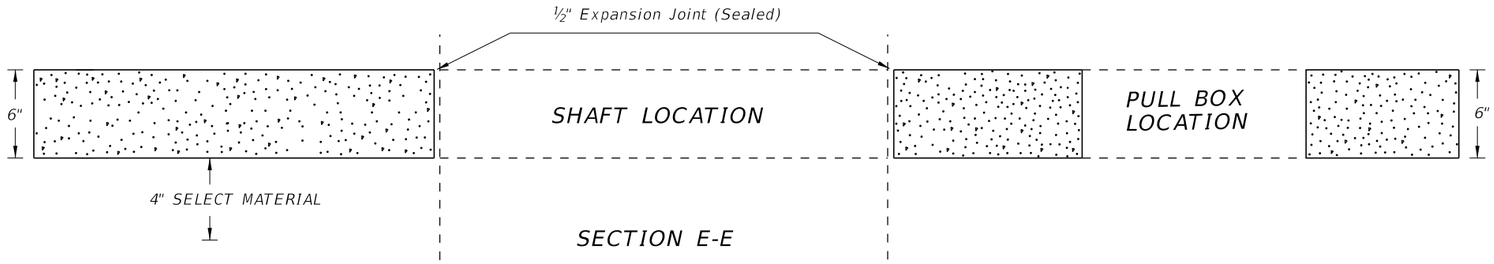
NOTES:

1. Use compacted select material in accordance with Index 120-001.
2. Concrete shall be Class NS with a minimum strength at 28 days of f'c=2.5 ksi.
3. Outside edge of slab shall be cast against formwork.
4. The pull box shown is 13" x 24"; others approved under Specification 635 may be used.
5. Slabs to be placed around all Poles and Pull Boxes. In urban areas or where space is limited slab dimensions may be adjusted as shown in the plans.
6. Concrete for slabs around poles and pull boxes shall be included in the price of pole or pull box.
7. The expansion joint shall consist of ½" of closed-cell polyethylene foam expansion material. The top ½" of expansion material shall be removed after pouring the slab and sealed with an APL approved Type A sealant meeting the requirements of Specification 932.



SLAB DIMENSIONS



SLAB DETAILS

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CROSSING SURFACES	
Type	Definition
C	Concrete
R	Rubber
RA	Rubber/Asphalt
TA	Timber/Asphalt

STOP ZONE FOR RUBBER CROSSING	
Design Speed (mph)	Zone Length (Distance From Stop)
45 Or Less	250'
50 – 55	350'
60 – 65	500'
70	600'

Notes:

1. Type R Crossings are NOT to be used for multiple track crossings within zones for an existing or scheduled future vehicular stop. Zone lengths are charted above.

2. Single track Type R Crossings within the zones on the chart may be used unless engineering or safety considerations dictate otherwise.

GENERAL NOTES:

1. The Railroad Company will furnish and install all track bed (ballast), crossties, rails, crossing surface panels and accessory components. All pavement material, including that through the crossing, will be furnished and installed by the Department or its Contractor, unless negotiated otherwise.

2. When a railroad grade crossing is located within the limits of a highway construction project, a transition pavement will be maintained at the approaches of the crossing to reduce vehicular impacts to the crossing. The transition pavement will be maintained as appropriate to protect the crossing from low clearance vehicles and vehicular impacts until the construction project is completed and the final highway surface is constructed.

3. The Central Rail Office will maintain a list of currently used Railroad Crossing Products and will periodically distribute the current list to the District Offices as the list is updated.

4. The Railroad Company shall submit engineering drawings for the proposed crossing surface type to the Construction Project Engineer and/or the District Rail Office for concurrence along with the List of Railroad Crossing Products. The approved engineering drawings of the crossing surface type shall be made a part of the installation agreement.

5. Sidewalks shall be constructed through the crossing between approach sidewalks of the crossing. Sidewalks shall be constructed with appropriate material to allow unobstructed travel through the crossing in accordance with ADA requirements.

6. Install pavement in accordance with the Specifications.

7. The Department will participate in crossing work, that requires adjustments to rail outside of the crossing, no more than 50 feet from the edge of the travel way.

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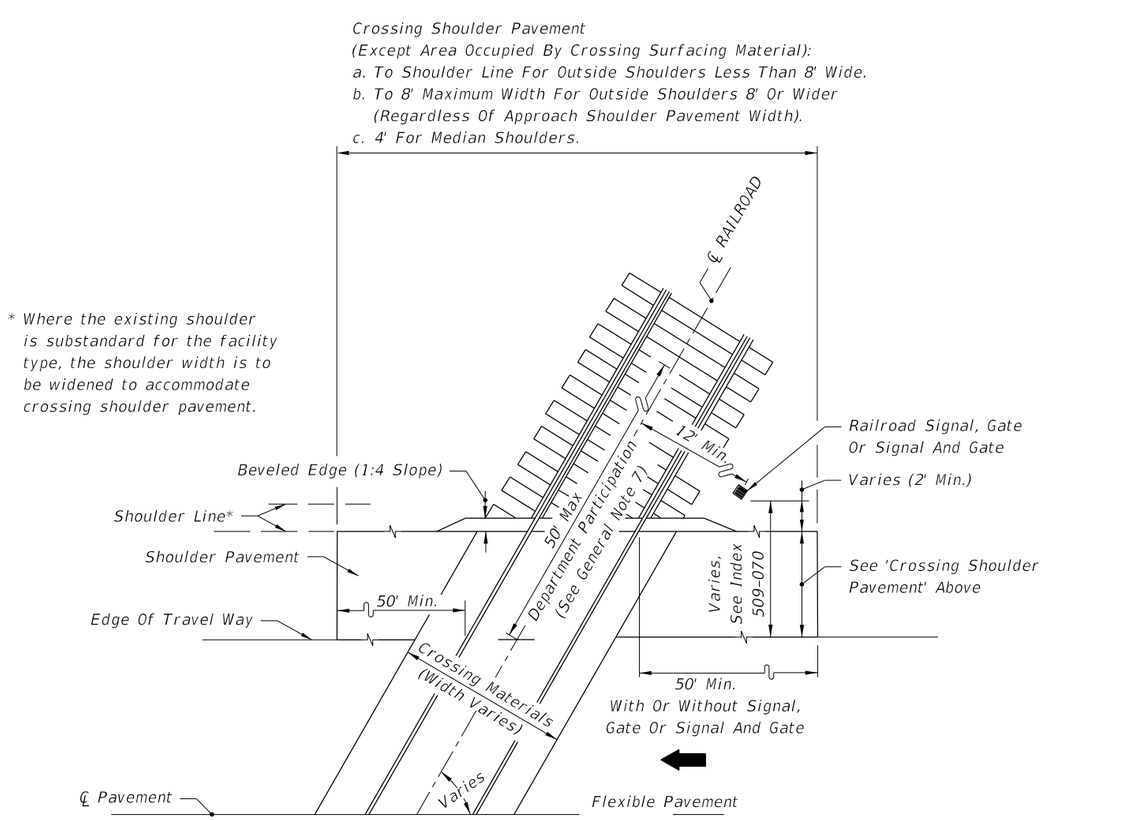
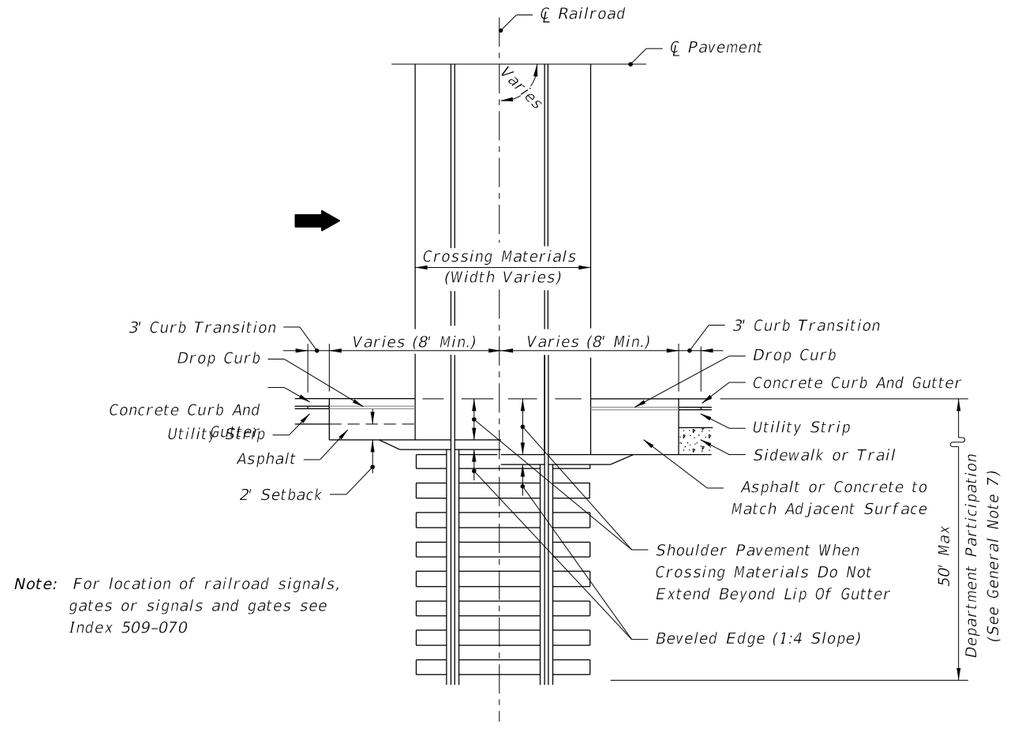


HALF PLAN

ROADWAYS WITH FLUSH SHOULDERS

SECTION VIEW

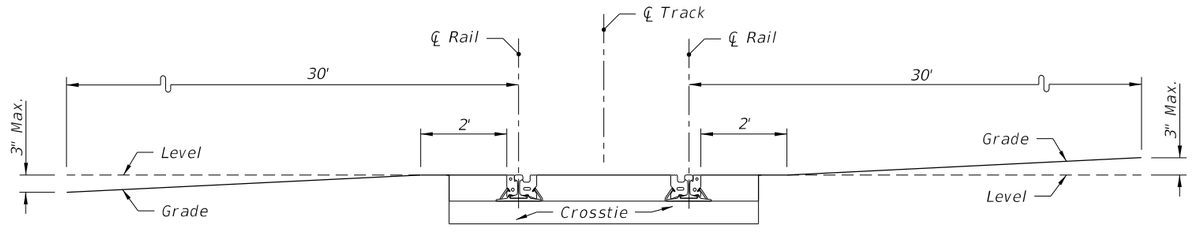
TYPICAL CROSSING MATERIAL REPLACEMENT AT RR CROSSINGS



Note: For location of railroad signals, gates or signals and gates see Index 509-070

HALF PLAN

CURBED ROADWAYS



To prevent low-clearance vehicles from becoming caught on the tracks, the crossing surface should be at the same plane as the top of the rails for a distance of 2 feet outside the rails. The surface of the highway should also not be more than 3 inches higher or lower than the top of the nearest rail at a point 30 feet from the rail unless track superelevation makes a different level appropriate. Vertical curves should be used to traverse from the highway grade to a level plane at the elevation of the rails. Rails that are superelevated, or a roadway approach section that is not level, will necessitate a site specific analysis for rail clearances.

VERTICAL ROADWAY ALIGNMENT THROUGH A RAILROAD CROSSING

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