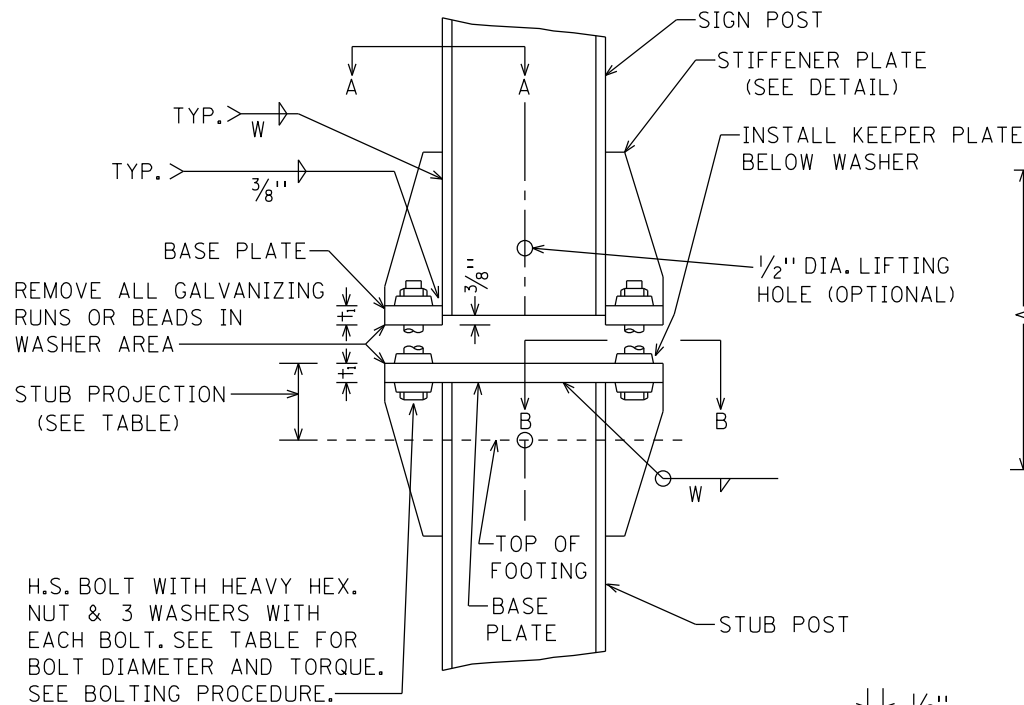
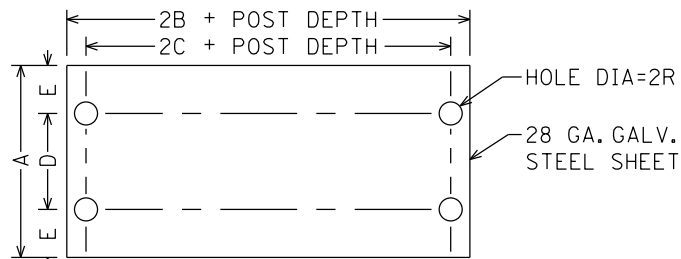


PLOTTED/REVISED: 10/16/2017

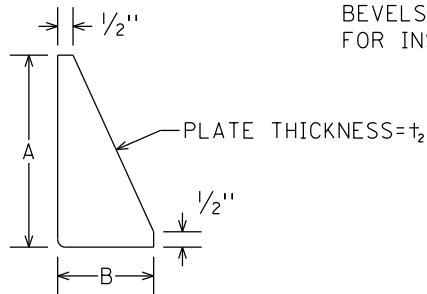
DISTRICT #: METRO
IPLOT NAME: A SIGN-CONCRETE FOOTING-STD
PATH & FILENAME: IP_PWP-d1624788A SIGN-CONCRETE FOOTING-STD.dgn



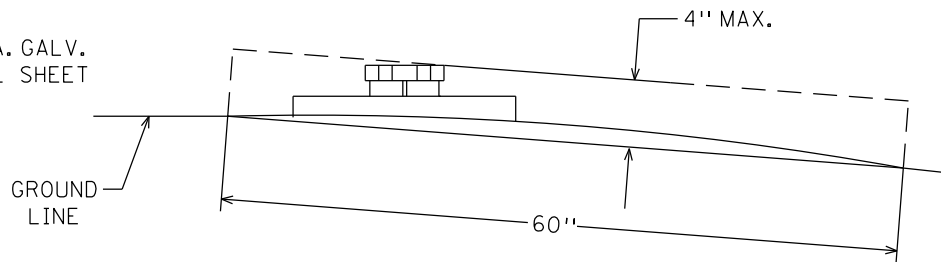
SIGN POST AND STUB POST
ELEVATION



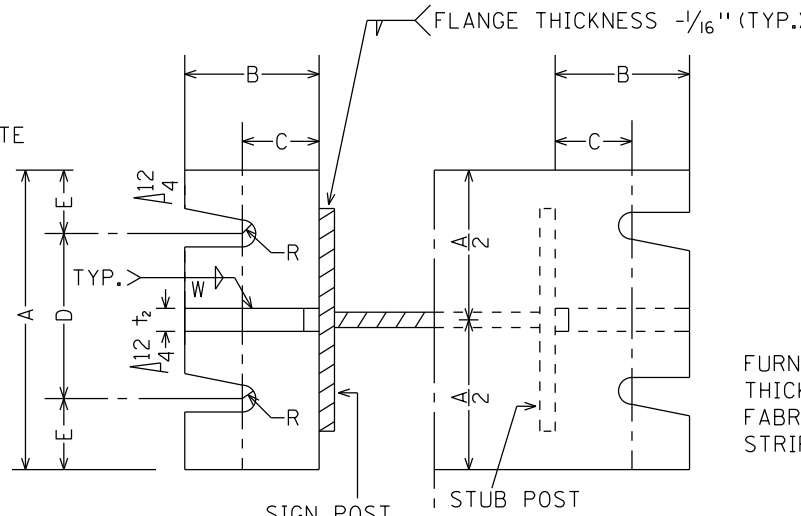
KEEPER PLATE



STIFFENER PLATE DETAIL
(SEE TABLE FOR DIMENSIONS)

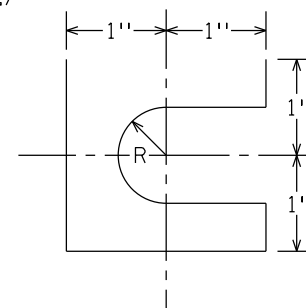


VIEW C-C



SECTION A-A SECTION B-B
(SEE TABLE FOR DIMENSIONS)

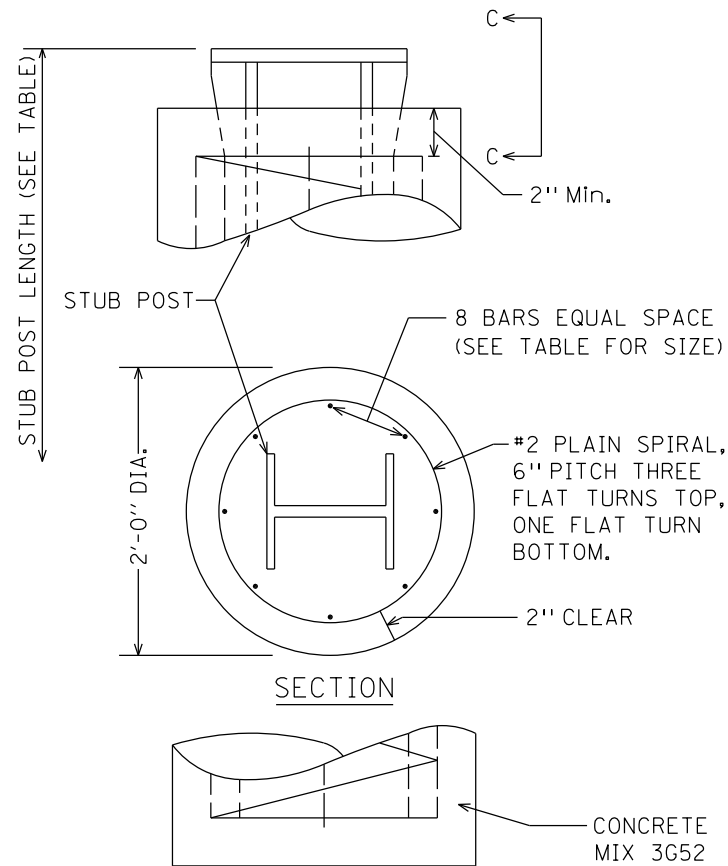
SECTIONS SHOWN ARE FOR INSTALLATIONS ON
RIGHT SHOULDER AND IN GORE. PLATE SLOT
BEVELS ARE OPPOSITE HAND FROM THAT SHOWN
FOR INSTALLATIONS ON LEFT SHOULDER.



SHIM DETAIL

FURNISH TWO-.012\"/>

MAXIMUM PROJECTION OF STUB POST AND FOOTING
SHALL NOT EXTEND BEYOND A LINE, ABOVE AND 4\"/>



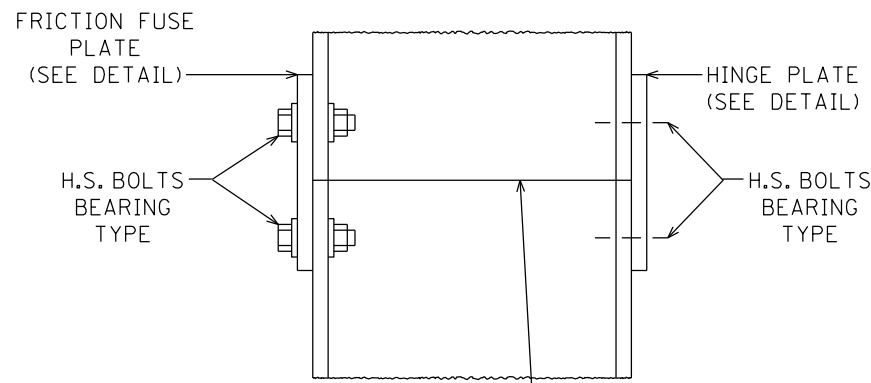
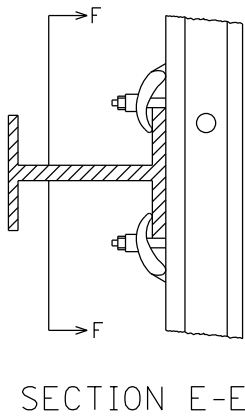
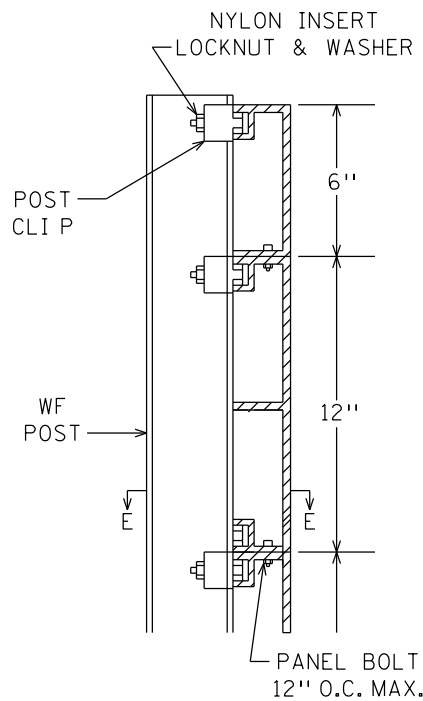
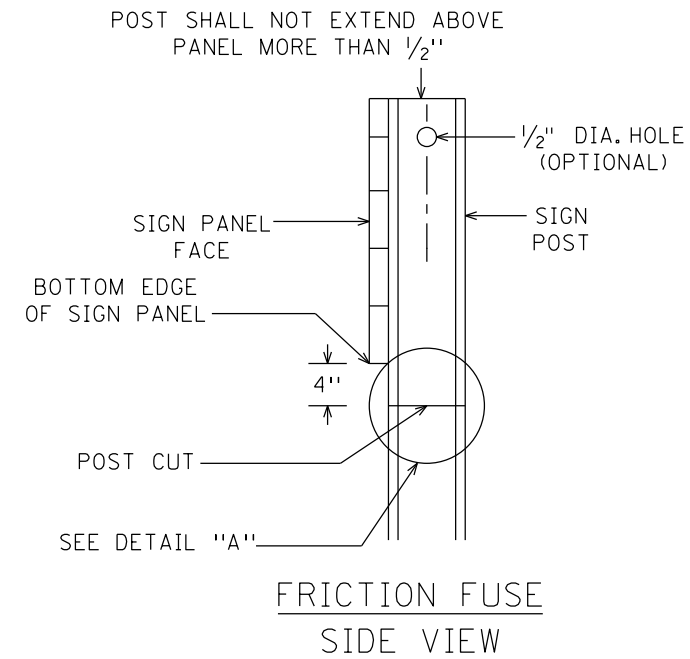
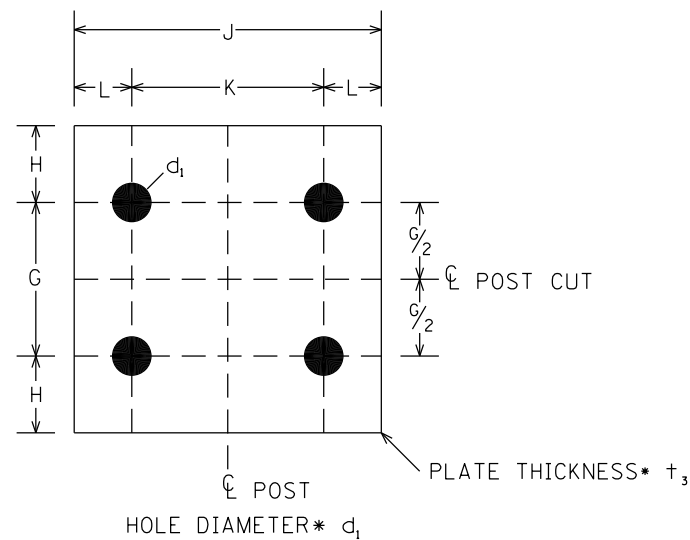
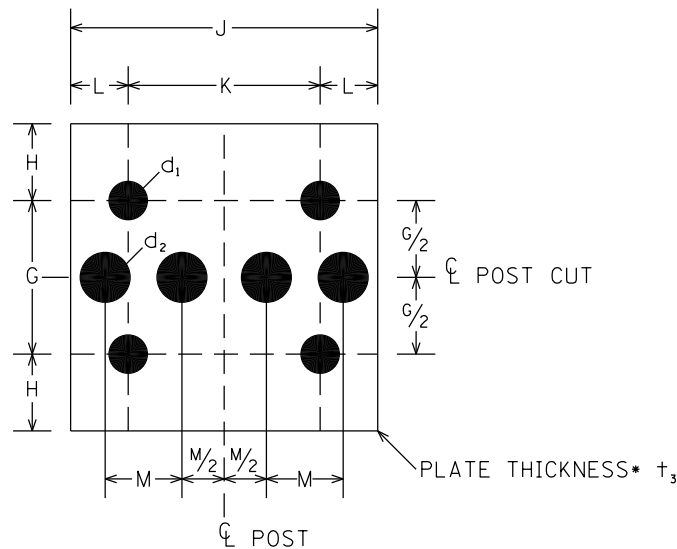
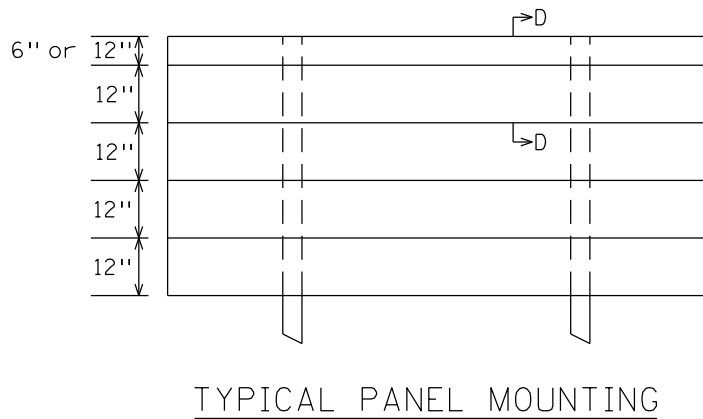
FOOTING DETAIL

- SPECIFIC NOTES:
- ① #11 (10 BARS EQUAL SPACE)
 - ② MEASURED FROM TOP OF BASE PLATE
 - ③ OLD BEAM DEPTH = 10\"/>

TYPE A SIGN STRUCTURAL DETAILS

CONCRETE FOOTING
SHEET 1 OF 2

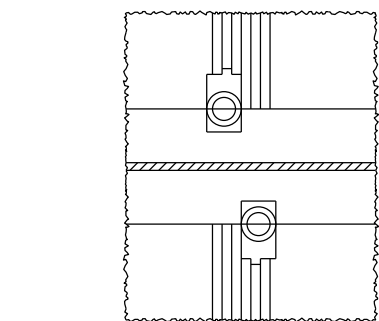
DIMENSION POST SIZE	BASE CONNECTION DATA BOLT SIZE AND TORQUE	BASE CONNECTION DATA										FUSE AND HINGE PLATE DATA										FOOTING DATA		
		A	B	C	D	E	t ₁	t ₂	W	R	G	H	J	K	L	M	d ₁	d ₂	t ₃	BOLT DIA.	BOLT LENGTH	STUB POST LENGTH ②	STUB POST PROJECTION	BAR SIZE
W4X13	3/4" DIA. x 3-1/2" TORQUE=600" #	6"	2 1/2"	1 1/2"	3 1/2"	1 1/4"	1"	1/2"	1/4"	13/32"	2"	1 1/4"	4"	2 1/4"	7/8"	1"	1 1/16"	3/4"	3/8"	5/8"	2"	2'	2"	#5
W5X16											2 1/2"	1 1/4"	5"	2 3/4"	1 1/8"	1 1/8"	1 3/16"	7/8"	3/8"	3/4"	2"	2'	2"	#6
W6X20	7/8" DIA. x 4-1/4" TORQUE=800" #	8"	3"	1 3/4"	4"	2"	1 1/4"	1/2"	1/4"	15/32"	2 1/2"	1 1/4"	6"	3 1/2"	1 1/4"	1 3/8"	1 3/16"	1 1/8"	3/8"	3/4"	2"	2'	2 1/2"	#7
W8X24											2 1/2"	1 1/2"	6 1/2"	3 1/2"	1 1/2"	1 1/2"	1 5/16"	1 1/4"	1/2"	7/8"	2 1/2"	2'	2 1/2"	#9
W8X28	1" DIA. x 5" TORQUE=1000" #	8"	3"	2"	4"	2"	1 1/2"	3/4"	5/16"	1 7/32"	2 1/2"	1 1/2"	6 1/2"	3 1/2"	1 1/2"	1 5/8"	1 1/16"	1 1/8"	1/2"	1"	2 1/2"	2'	3"	#10
W8X31											3"	1 3/4"	8"	5 1/2"	1 1/4"	2"	1 1/16"	1 1/2"	1/2"	1"	2 1/2"	2'	3"	#10
③ W10X39	1-1/8" DIA. x 5" TORQUE=1200" #	9"	3 1/2"	2"	5"	2"	1 1/2"	3/4"	5/16"	1 9/32"	3"	1 3/4"	8"	5 1/2"	1 1/4"	1 7/8"	1 3/16"	1 3/8"	1/2"	1 1/8"	2 3/4"	2'	3"	①



POST SHALL BE SAW CUT BEFORE GALVANIZING.
 USE H.S. BOLTS WITH HEX. HD., HEX. NUT,
 AND TWO FLAT WASHERS.

GENERAL NOTES:

1. STRUCTURAL STEEL SHALL CONFORM TO MNDOT 3308.
 REINFORCING BARS SHALL CONFORM TO MNDOT 3301.
 SPIRALS SHALL CONFORM TO MNDOT 3305-NO SPLICES.
 HIGH STRENGTH BOLTS SHALL CONFORM TO A.S.T.M.-A325.
2. FORMS WILL BE REQUIRED FOR THE EXPOSED VERTICAL SURFACES OF THE FOOTINGS.
3. REFER TO "SIGN DATA" SHEET FOR SPECIFIC DATA ON EACH INDIVIDUAL SIGN INSTALLATION.
4. FRICTION FUSE PLATE SHALL BE INSTALLED ON SIDE OF POST FACING TRAFFIC.
5. ALL POST CUTS SHALL BE SAW CUTS. PLATES MAY BE SHEARED OR FLAME CUT USING A MECHANICALLY GUIDED CUTTING TORCH. EDGE PREPARATION SHALL BE IN ACCORDANCE WITH MNDOT 2471.3.C.4 AND MNDOT 2471.3.D.4.



NOTE: POST CLIPS SHALL BE INSTALLED ON BOTH SIDES OF EACH POST AT EACH PANEL JOINT AS INDICATED.

BOLT SIZE	MIN. RESIDUAL BOLT TENSION
1/2" DIA.	12,050*
5/8" DIA.	19,200*
3/4" DIA.	28,400*
7/8" DIA.	39,250*
1" DIA.	51,500*
1-1/8" DIA.	56,450*

TYPE A SIGN STRUCTURAL DETAILS

SHEET 2 OF 2