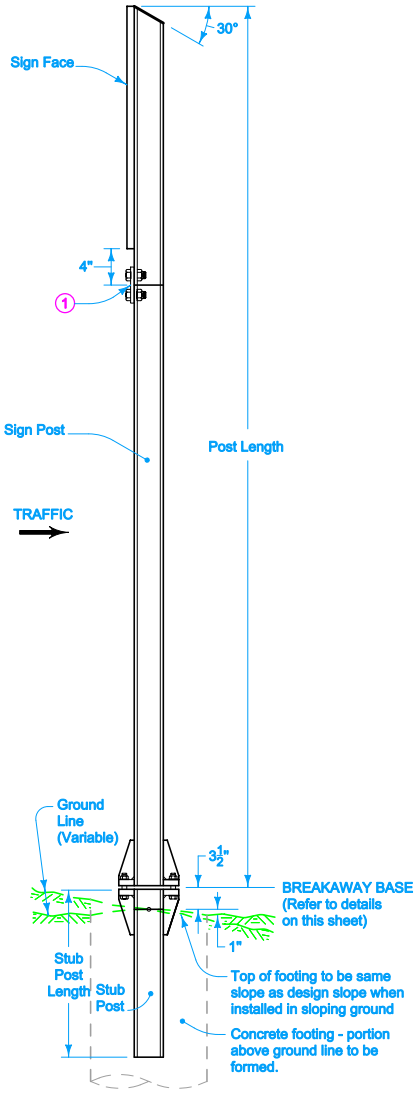
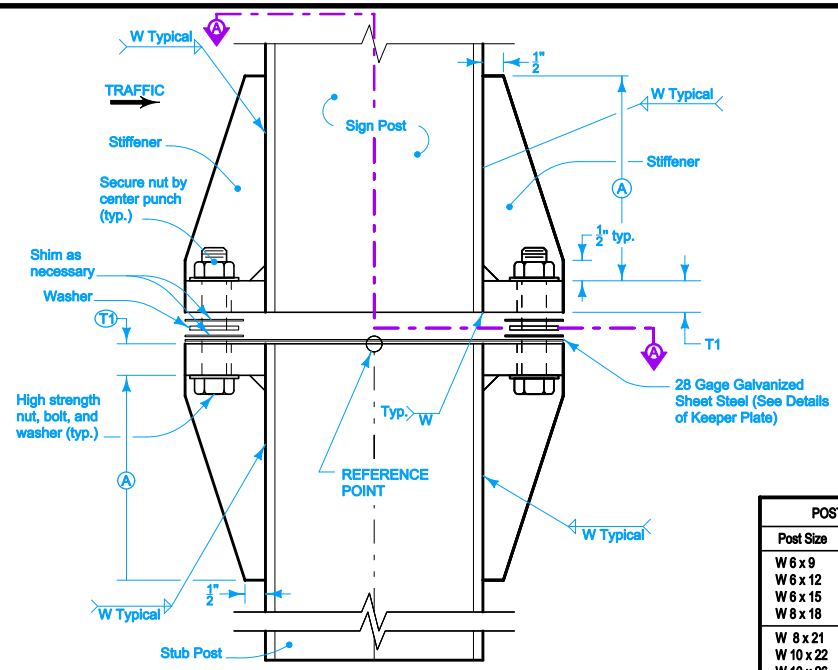
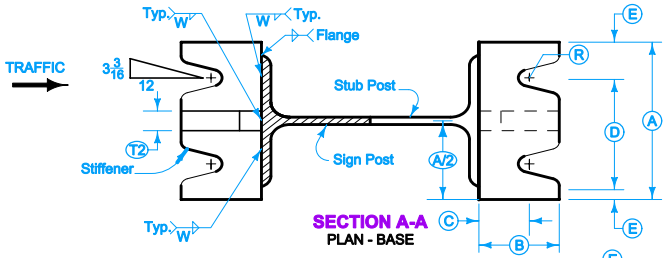


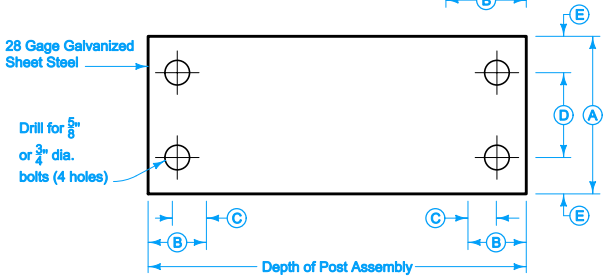
SIGN INSTALLATION
Side View



BREAKAWAY BASE
Side View



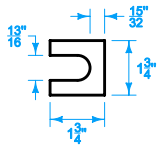
SECTION A-A
PLAN - BASE



KEEPER PLATE

POST DATA	
Post Size	Stub Length
W 6 x 9 W 6 x 12 W 6 x 15 W 8 x 18	2'-6"
W 8 x 21 W 10 x 22 W 10 x 26 W 12 x 26	3'-0"

BREAKAWAY BASE DATA										
Post Size	Bolt Size & Torque	A	B	C	D	E	T1	T2	W	R
W 6 x 9 W 6 x 12 W 6 x 15 W 8 x 18	⅝" dia. x 2¾" Torque = 37.50 ft. lbs.	5"	2"	1¼"	2¾"	1⅛"	¾"	½"	¼"	11/32"
W 8 x 21 W 10 x 22 W 10 x 26 W 12 x 26	¾" dia. x 3½" Torque = 62.50 ft. lbs.	6"	2¼"	1⅜"	3½"	1¼"	1"	¾"	5/16"	13/32"



SHIM

Place signpost by installing shims. Furnish two shims each of 0.012" and 0.032" thickness (total of 4 per post). Shims to be brass stock or strip conforming to ASTM B 36.

Details are shown for signs to be installed to the right of through roadway traffic. All installations will be this, unless specified otherwise. For a left side installation, the notches in the breakaway base plate would be beveled in opposite direction as that shown.

Weld base plates (2 each), to sides of signpost and stub post flanges.

(W) Welds to be continuous fillet welds and of a depth equal to the thickness of the flange for the post unless otherwise specified.

Construct the footing as shown for normal footing in earth. Where solid rock is encountered, the alternate design for footing in solid rock may be used with the approval of the Engineer.

Dispose of all excavation for the footing in the area adjacent to the footing and shape to normal ground contour, unless directed otherwise by the Engineer.

Hold the stub post in proper position by an approved device to ensure that it remains in proper position upon completion of concrete placement.

The contract price for size of footing required to be full compensation of footing as detailed hereon, including all necessary excavation regardless of character.

(1) Not for single post installations.

Possible Contract Item:
Steel Breakaway Sign Post

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REVISIONS: Updated references to renamed standards. Updated notes.

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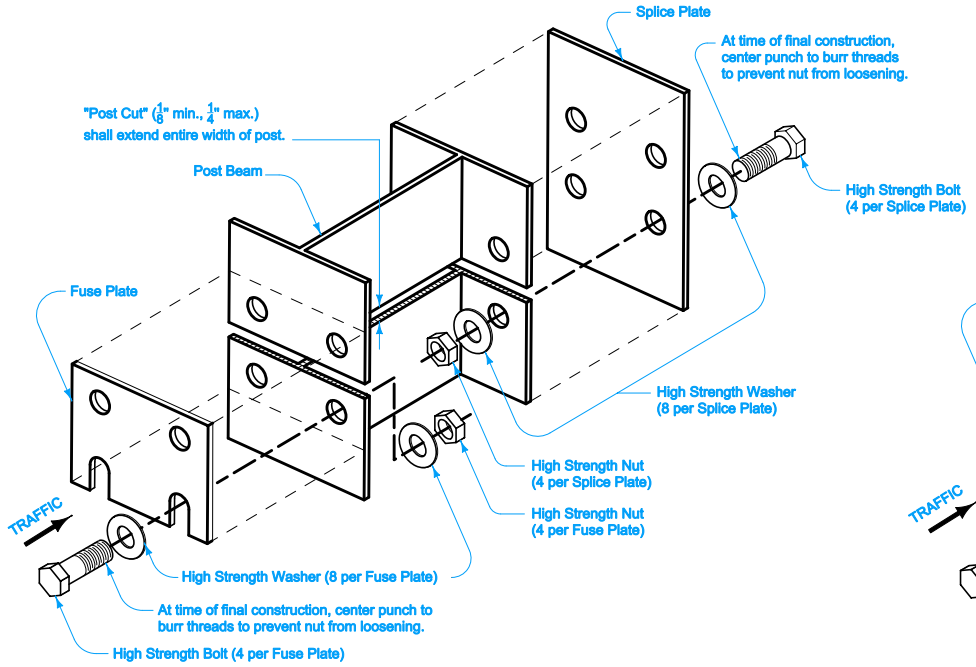
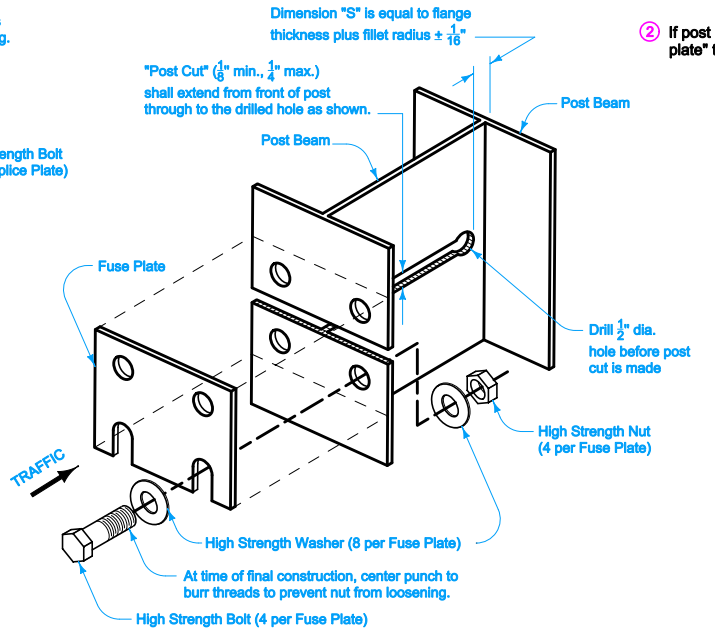
APPROVED BY DESIGN METHODS ENGINEER

SUPPORT STRUCTURES - STEEL BREAKAWAY POSTS



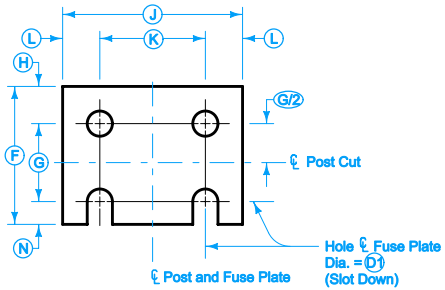
Hinge Alternate 1
(With Splice Plate)



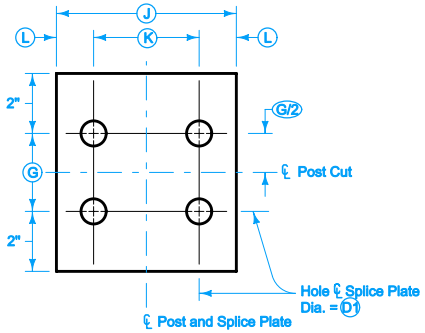
Hinge Alternate 2 (2)
(One-Piece Post)

(2) If post is to be transported after cut is made, bolt a "splice plate" to front of post to prevent damage to the post.

FUSE PLATE ASSEMBLY



FUSE PLATE
(Thickness T3)



SPLICE PLATE
(Thickness T4)

Bolt Size	Torque
1/2"	100 Ft. Lbs.
5/8"	180 Ft. Lbs.
3/4"	320 Ft. Lbs.
7/8"	470 Ft. Lbs.

FUSE AND SPLICE PLATE DATA

Post Size	Bolt Dia.	F	G	H	J	K	L	N	D1	T3	T4
W6x9	1/2"	3 5/8"	2"	1 1/8"	4"	2 1/4"	7/8"	1/2"	9/16"	1/4"	1/4"
W6x12	5/8"	3 3/4"	2"	1 1/8"	4"	2 1/4"	7/8"	5/8"	11/16"	3/8"	1/4"
W6x15	3/4"	4 1/2"	2 1/2"	1 1/4"	6"	3 1/2"	1 1/4"	3/4"	13/16"	1/2"	1/4"
W8x18	3/4"	4 1/2"	2 1/2"	1 1/4"	5 1/4"	2 3/4"	1 1/4"	3/4"	13/16"	1/2"	3/8"
W8x21	7/8"	4 7/8"	2 1/2"	1 1/2"	5 1/4"	2 3/4"	1 1/4"	7/8"	15/16"	5/8"	3/8"
W10x22	7/8"	5 3/8"	3"	1 1/2"	5 3/4"	2 3/4"	1 1/2"	7/8"	15/16"	5/8"	3/8"
W10x26	7/8"	5 3/8"	3"	1 1/2"	5 3/4"	2 3/4"	1 1/2"	7/8"	15/16"	5/8"	3/8"
W12x26	7/8"	5 3/8"	3"	1 1/2"	6 1/2"	3 1/2"	1 1/2"	7/8"	15/16"	5/8"	3/8"

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REVISIONS: Updated references to renamed standards. Updated notes.

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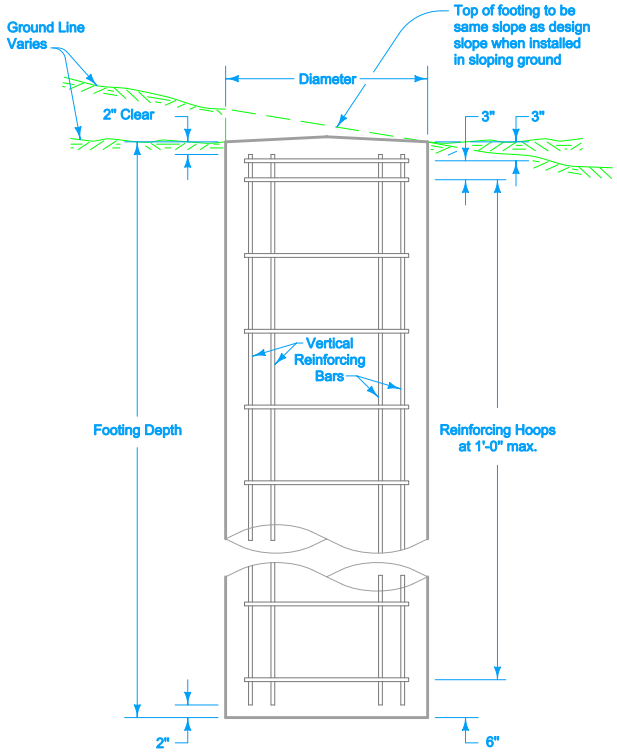
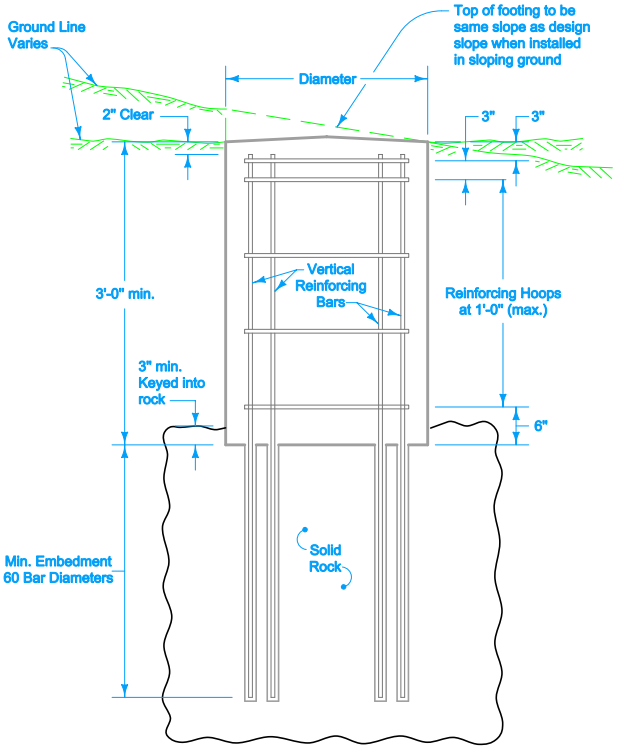
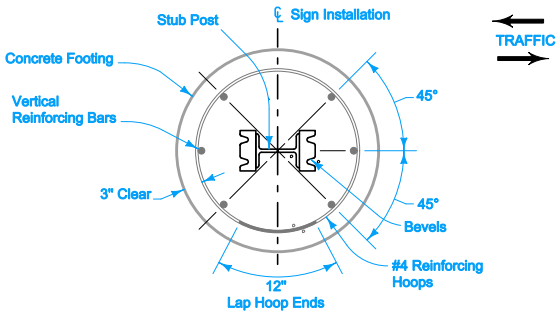
SUPPORT STRUCTURES - STEEL BREAKAWAY POSTS



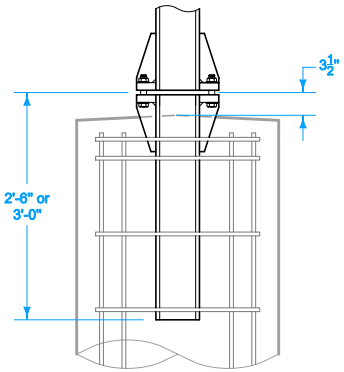
INSTALLATION
NORMAL FOOTING IN EARTH



ALTERNATE DESIGN (4)
FOOTING IN SOLID ROCK



PLAN
(Reinforcing Placement and Sign Orientation)



BREAKAWAY POST INSTALLATION

(3) Lengths are for normal footings. Required length may vary where alternate rock design is used.

(4) Set vertical bars in solid rock as follows:
1. Drill holes twice bar diameter and fill with water.
2. When hole is fully saturated; blow water out and fill two-thirds depth with sand cement mortar.
3. Insert bar and consolidate mortar.
4. Fill hole to top with mortar.

FOOTING REINFORCING DATA					
Post Size	Stub Length	Footing		Vertical Rein. Bar	
		Diameter	Depth	Size	Length (3)
W6x9	2'-6"	2'-0"	6'-0"	No. 6	5'-8"
W6x12	2'-6"	2'-0"	6'-0"	No. 6	5'-8"
W6x15	2'-6"	2'-0"	6'-6"	No. 6	6'-2"
W8x18	2'-6"	2'-0"	7'-0"	No. 6	6'-8"
W8x21	3'-0"	2'-8"	7'-6"	No. 8	7'-2"
W10x22	3'-0"	2'-8"	8'-0"	No. 8	7'-8"
W10x26	3'-0"	2'-8"	8'-6"	No. 8	8'-2"
W12x26	3'-0"	2'-8"	9'-0"	No. 8	8'-8"

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REVISIONS: Updated references to renamed standards. Updated notes.

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SUPPORT STRUCTURES - STEEL BREAKAWAY POSTS