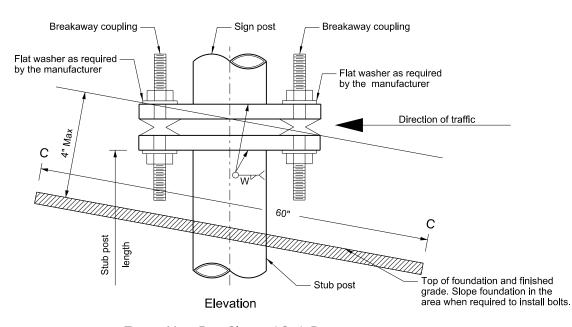
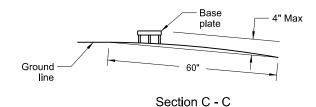
Breakaway Coupler System for Standard Pipe Stub Post



Two or More Post Sign and Stub Post

For two post signs with 8' or more post spacing and all three or more post signs Type C

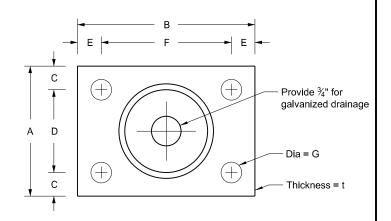


Max. protection of the stub post is 4" above a 60" chord aligned radially to the center line of the highway and connecting any point, within the length of the chord, on the ground surface on one side of the support to a point in the ground surface on the other side.

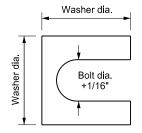
Dimension Base Table Data	Stub Post Length			
3½" ½" x 4½" 5½" 8¾" 1¾6" 3½" 1¾6" 6¾" 946" ¾" ¾				
$3\frac{1}{2}$ " $\frac{1}{2}$ " x $4\frac{1}{2}$ " $5\frac{1}{2}$ " $8\frac{3}{8}$ " $1\frac{1}{16}$ " $3\frac{7}{8}$ " $1\frac{1}{16}$ " $6\frac{3}{4}$ " $\frac{9}{16}$ " $\frac{3}{4}$ " $\frac{3}{8}$ " $\frac{1}{4}$ " $\frac{3}{8}$ " $\frac{1}{4}$ " $\frac{3}{8}$ " $\frac{1}{4}$ " $\frac{3}{4}$ " $\frac{3}{8}$ " $\frac{1}{4}$ " $\frac{3}{4}$	_			
$4"$ $5"$ \times $45"$ $55"$ $83"$ $1"$ $35"$ $1"$ $63"$ $146"$ $3"$ $3"$	' 1'-6"			
_	1'-6"			
5" $\frac{3}{4}$ " x 5 $\frac{5}{4}$ " $\frac{6}{5}$ " $\frac{10}{10}$ " $\frac{1}{4}$ " $\frac{1}{4}$ " $\frac{1}{4}$ " $\frac{1}{4}$ " $\frac{1}{4}$ 6" $\frac{1}{1}$ " $\frac{1}{4}$ 6" $\frac{1}{4}$ 1" $\frac{1}{4}$ 6	" 2'-0"			
6" $1" \times 5''$ $7''$ $11''$ $13''$ $13''$ $4''$ $13''$ $9" 1''6" 1''6" 1''8" 1''6$	" 2'-0"			
8" $1" \times 51''$ $91''$ $131''$ $13''$ $63''$ $13'''$ $101''$ $11''$ $11''$ $11''$				
10" 1" x 5 $\frac{1}{4}$ " 11 $\frac{1}{4}$ " 15 $\frac{1}{4}$ " 1 $\frac{1}{8}$ " 9" 1 $\frac{1}{8}$ " 12 $\frac{1}{2}$ " 1 $\frac{1}{16}$ " 1 $\frac{1}{4}$ " 1 $\frac{1}{2}$ "				
12" 1" x 7" 13 $\frac{3}{4}$ " 18" 1 $\frac{5}{8}$ " 10 $\frac{1}{2}$ " 1 $\frac{5}{8}$ " 14 $\frac{3}{4}$ " 1 $\frac{1}{16}$ " 1 $\frac{1}{2}$ " $\frac{1}{2}$ "	' 3'-0"			
Aluminum				
$3\frac{1}{2}$ " $\frac{1}{2}$ " x $4\frac{1}{2}$ " $\frac{5}{2}$ " $\frac{8}{8}$ " $\frac{1}{3}$ 6" $\frac{3}{8}$ " $\frac{1}{3}$ 6" $\frac{6}{4}$ " $\frac{9}{16}$ " $\frac{3}{4}$ " $\frac{3}{8}$	' 1'-6"			
4" $\frac{5}{8}$ " x $\frac{4}{2}$ " $\frac{5}{2}$ " $\frac{8}{4}$ " 1" $\frac{3}{2}$ " 1" $\frac{6}{4}$ " $\frac{1}{16}$ " 1" $\frac{7}{16}$ "	" 1'-6"			
5"				
6" $1" \times 5''$ $7''$ $11''$ $13''$ $13''$ $4''$ $13''$ $9" 1''6" 1'' 1''$	' 2'-0"			
8" 1" x 5¼" 9½" 13¼" 1¾" 6¾" 1¾" 10½" 1½ ₆ " 1½" ½	' 2'-6"			
10" 1" x 5 $\frac{1}{4}$ " 11 $\frac{3}{4}$ " 15 $\frac{1}{4}$ " 13 $\frac{1}{8}$ " 9" 1 $\frac{3}{8}$ " 12 $\frac{1}{2}$ " 1 $\frac{1}{16}$ " 1 $\frac{1}{2}$ " $\frac{1}{4}$ 6	" 3'-0"			
12" 1" x 7" 13 $\frac{3}{4}$ " 18" 1 $\frac{5}{8}$ " 10 $\frac{1}{4}$ " 1 $\frac{5}{8}$ " 14 $\frac{3}{4}$ " 1 $\frac{1}{16}$ " 1 $\frac{3}{4}$ " 1 $\frac{1}{11}$ "	3'-0"			

Notes:

- In lieu of the breakaway base system on standards D-754-3 and D-754-4, use a breakaway coupler system. Manufacture the breakaway coupler system from material meeting the requirements of ASTM A325 fasteners with the special requirements as specified by DENT BREAKAWAY IND., INC. which meets the requirements of NCHRP Report 350.
- Fuse Joint Cuts For steel posts cut after galvanizing, either galvanize cut after fabrication, or treat cut surface in accordance with ASTM A780. Aluminum posts need no treatment.
- Shim as required to plumb post.
- Tighten all bolts the maximum possible with 12" to 15" wrench.



Plan Base Plate



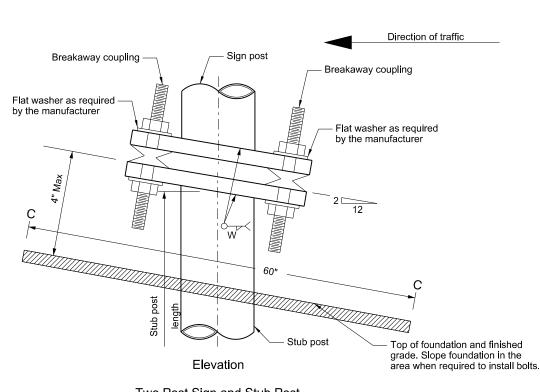
Shim Detail

Furnish 2 - .012"± thick and 2 - .032"± thick shims per post. Fabricate shims from brass shim stock or strip conforming to ASTM B36.

		NORTH DAKOTA			
_		DEPARTI	MENT OF TRANSPORTATION		
	10-3-2013				
		REVISIONS			
		DATE	CHANGE		
			Updated notes to active voice. New Design Engineer PE Stamp.		

issued and sealed by Kirk J Hoff, Registration Number PE-4683, on 8/29/19 and the original document is stored at the North Dakota Department of Transportation

This document was originally



Sign post

Breakaway coupling -

Flat washer as required -

by the manufacturer

Direction of traffic

Breakaway coupling

Flat washer as required

Top of foundation and finished grade. Slope foundation in the area when required to install bolts.

by the manufacturer

Stub post

Elevation

Single Post Sign and Stub Post

Type A

Two Post Sign and Stub Post For signs with less than 8' post spacing Type B