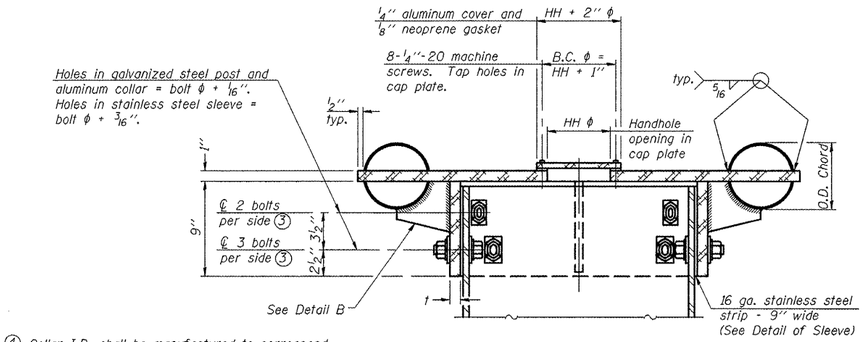
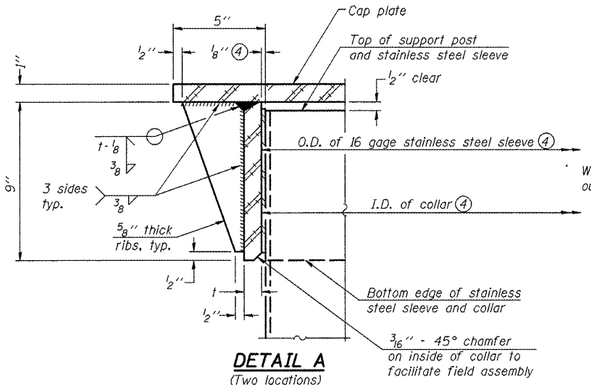


SECTION B-B

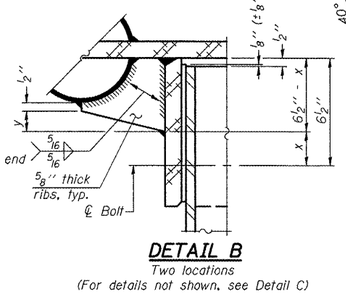
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.

(4) Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 1/8" (±1/16"). Maximum gap between post and collar at any location equals 1/8" before tightening bolts.



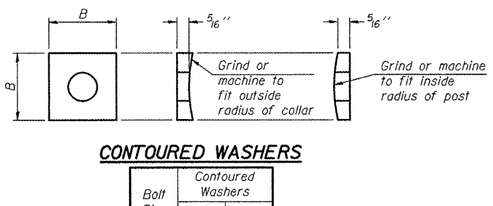
DETAIL A

(Two locations)



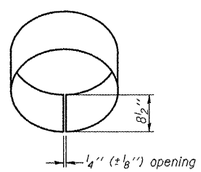
DETAIL B

Two locations
(For details not shown, see Detail C)



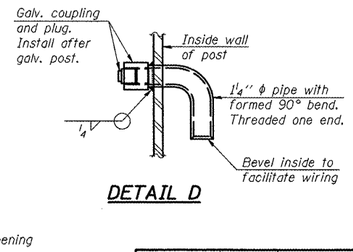
CONTOURED WASHERS

Bolt Size	Contoured Washers	
	Hole Dia.	B
7/8"	1"	2 1/2"
1"	1 1/8"	3"
1 1/4"	1 3/8"	3 1/4"

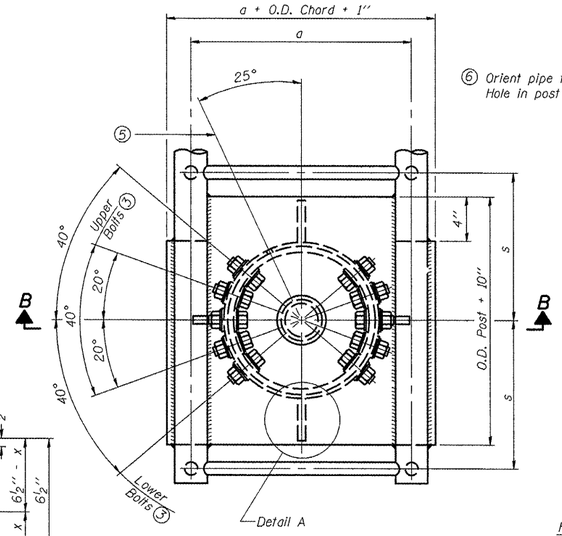


DETAIL OF STAINLESS STEEL SLEEVE

Weld to post after galvanizing.
(Prepare post surface to insure tight, uniform fit and allow welding.)
Welds to be 1 1/2" long at 6" cts. along top edge and at 1/4" opening.



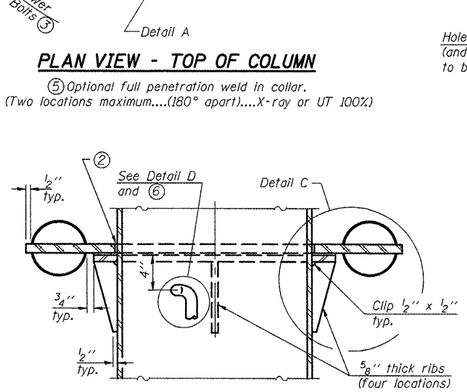
DETAIL D



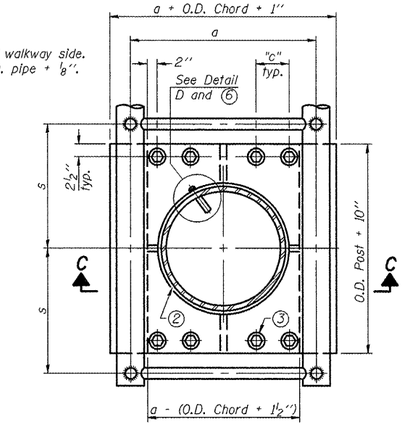
PLAN VIEW - TOP OF COLUMN

(5) Optional full penetration weld in collar.
(Two locations maximum....(180° apart)....X-ray or UT 100%)

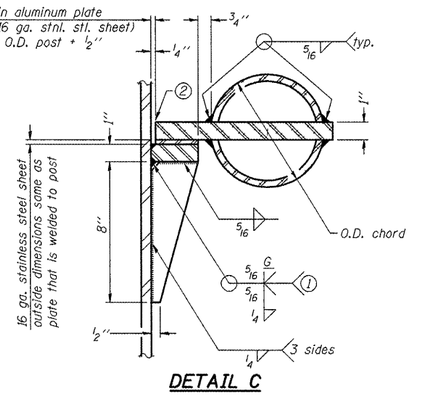
(6) Orient pipe toward walkway side.
Hole in post = O.D. pipe + 1/8".



SECTION C-C



SECTION THRU POST ABOVE LOWER CHORDS



DETAIL C

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter (3)	Lower Juncture Bolt Spacing Dimension "c" (3)	Opening in Cap Plate "HH"	Collar Thickness (1)	Side Ribs	
						x	y
I-C-A	16" ϕ (83#/')	7/8"	3 1/4"	8"	5/8"	1 3/4"	2 1/4"
II-C-A	24" ϕ (125#/')	1"	3 1/2"	12"	7/8"	2"	1 1/4"
III-C-A (35' max.)	24" ϕ (125#/')	1 1/4"	3 1/2"	12"	7/8"	2"	1"
III-C-A (>35' to 40')	24" ϕ (171#/')	1 1/4"	3 1/2"	12"	7/8"	2"	1"

(1) Grind top if required to fully seat aluminum plate and stainless steel sheet.

(2) After tightening lower connection bolts, fill gap with non-hardening, silicone caulk suitable for exterior exposure and acceptable to the Engineer. Cost is included in Overhead Sign Structure Cantilever.

(3) Upper and lower connection bolts in collar and bolts at lower chord connection shall be high strength with matching locknuts. Connection bolts shall have 2 stainless steel flat washers each.

OSC-A-3 9-15-11

•VARIOUS COUNTIES
••D-5 OVD SIN STR REPL 2012-06

FILE NAME = c:\pw_work\pwidot\cearlock.jd\d0266557\D046179-sht-details.dgn	USER NAME = cearlock.jd	DESIGNED - JAL	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 10/7/2011	DATE - 04/26/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES – JUNCTURE DETAILS
ALUMINUM TRUSS & STEEL POST

SCALE: | SHEET NO. 5 OF 10 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	••	Various	178	51
		CONTRACT NO. 46179		
		ILLINOIS FED. AID PROJECT		