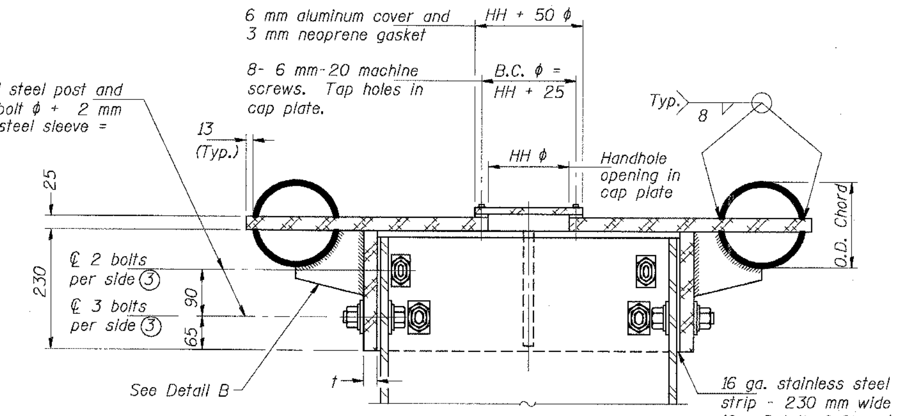
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94	*	COOK	631	330
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

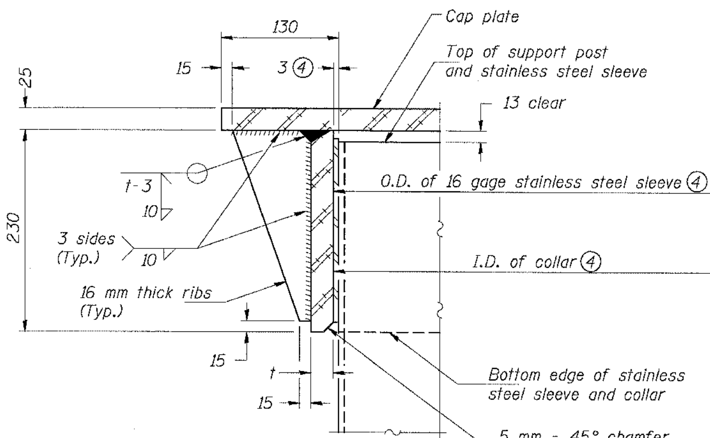
* (2425 & 2626) R-2 CONTRACT NO. 62111



SECTION B-B

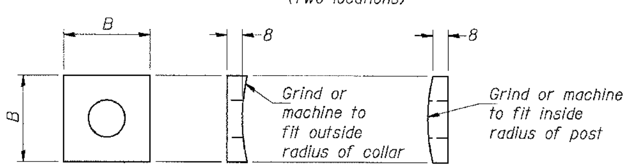
Bolts, washers (including contoured washers), and locknuts shall be stainless steel.

④ Collar I.D. shall be manufactured to correspond to O.D. of actual galvanized post and stainless steel sleeve plus 3 mm (+2 mm). Maximum gap between post and collar at any location equals 3 mm before tightening bolts.



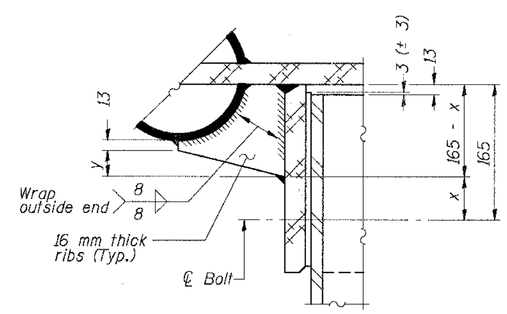
DETAIL A

(Two locations)



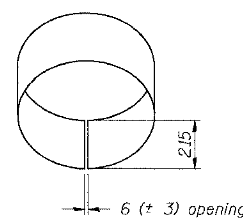
CONTOURED WASHERS

Bolt Dia.	Contoured Washers	
	Hole Dia.	B
22	25	64
25	29	75
32	35	83



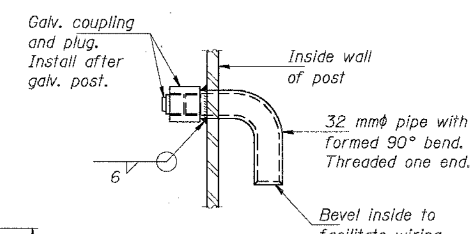
DETAIL B

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

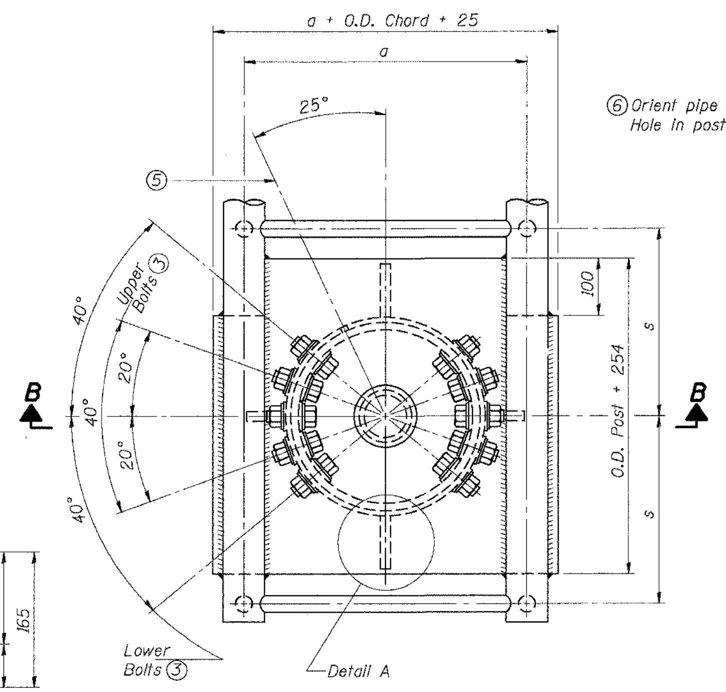


DETAIL OF STAINLESS STEEL SLEEVE

Weld to post after galvanizing.
(Prepare post surface to insure tight, uniform fit and allow welding.)
Welds to be 40 mm long at 150 mm cts. along top edge and at 6 mm opening.



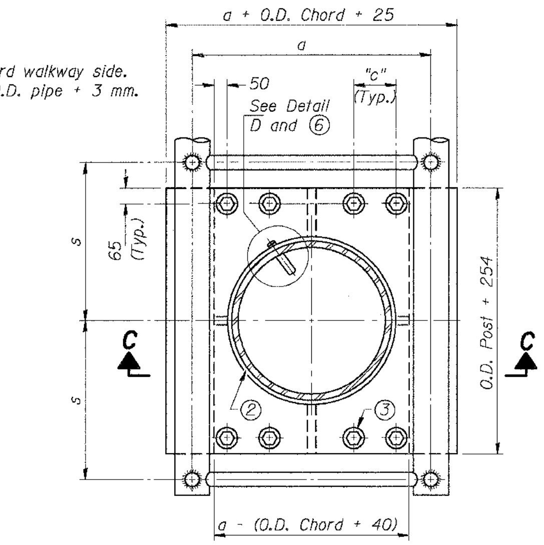
DETAIL D



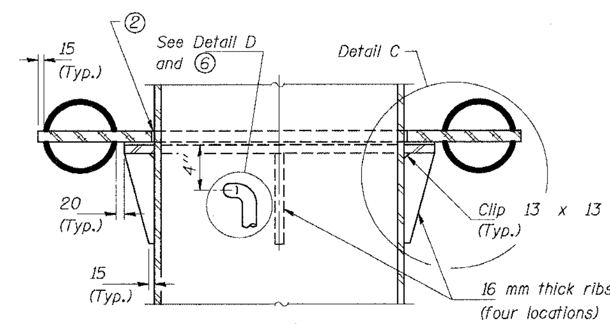
PLAN VIEW - TOP OF COLUMN

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

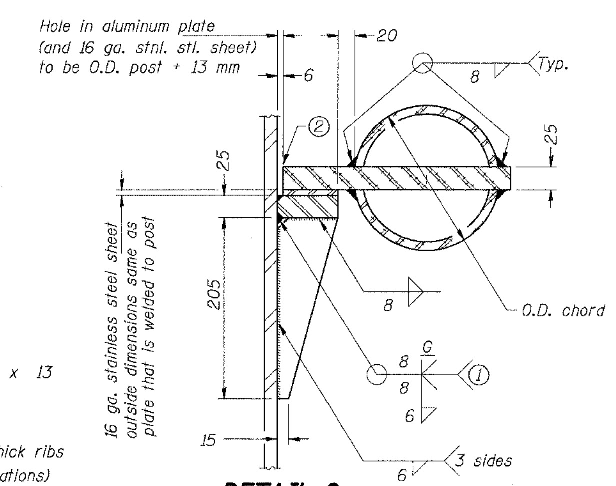
⑥ Orient pipe toward walkway side.
Hole in post = O.D. pipe + 3 mm.



SECTION THRU POST ABOVE LOWER CHORDS



SECTION C-C



DETAIL C

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".

Truss Type	Post Size	Upper & Lower Connection Bolt Diameter ③	Lower Juncture Bolt Spacing Dimension "c" ③	Opening in Cap Plate "HH"	Collar Thickness (t)	Side Ribs	
						x	y
I-C-A	406 ϕ (124 kg/m)	22	85	205	16	45	56
II-C-A	610 ϕ (152 kg/m)	25	90	305	22	50	32
III-C-A (10.7 Max.)	610ϕ (186 kg/m)	32	90	305	22	50	25
III-C-A (>10.7 to 12.2)	610ϕ (254 kg/m)	32	90	305	22	50	25

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

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. ROUTE 80/94 (KINGERY EXPRESSWAY)
EB & WB INSIDE LANES (MAINLINE) CONSTRUCTION
COOK COUNTY

CANTILEVER SIGN STRUCTURES JUNCTURE DETAILS ALUMINUM TRUSS & STEEL POST

SCALE:
DATE: 7/18/2005
DRAWN BY: NK
CHECKED BY: VCP

TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS

OSC-A-3(M) 11/1/2002