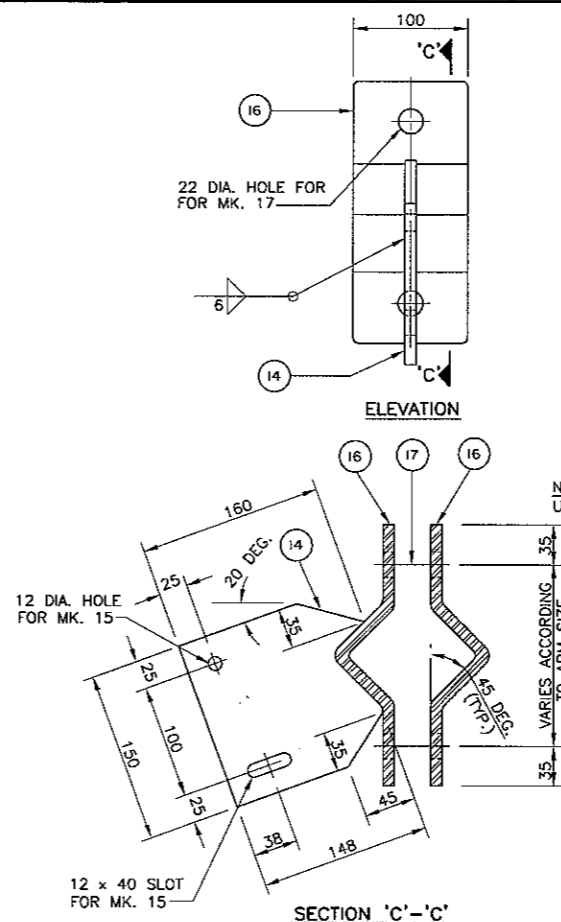
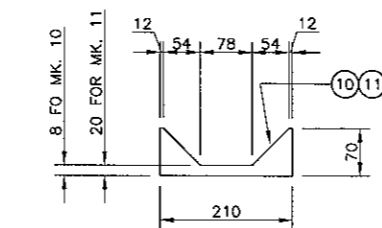


HANDHOLE--MARK H1 & H2



SIGN MOUNTING BRACKET DETAIL FOR SIGN BOXES (NONE REQUIRED)

BILL OF MATERIALS

MK.	QTY.	DESCRIPTION
1	1	OCTAGONAL SHAFT 240 A/F TO 200 A/F x 6.35
2	1	OCTAGONAL ARM 140 A/F TO 130 A/F x 6.35
3	1	BASE PLATE 40 THICK
4		
5	1	BACKUP STRIP 40 x 6
6	1	END PLATE 130 A/F OCTAGONAL 6 THICK
7	8	19 DIA. A325 BOLTS GALVANIZED
8	2	FLANGE PLATE 400 x 400 x 32
9	2	SIDE GUSSET PLATE 20 x 400 x 135
10	1	TOP GUSSET PLATE 10 THICK
11	1	BOTTOM GUSSET PLATE 10 THICK
12	1	COVER PLATE 210 DIA x 10 THICK
13	2	OCTAGONAL INTERIOR GUSSET PLATE 8 THICK
		SIGN MOUNTING BRACKETS (NONE REQ'D.)
14	4	BRACKET PLATE 10 THICK
15	8	10 DIA. BOLTS S/S (TYPE 316)
16	8	CLAMP PLATE 10 THICK
17	8	20 DIA. BOLT S/S (TYPE 316)
		HANDHOLE MARK H1
18	1	COVER PLATE 11 GA. x 160x 340 (A569)
19	1	REINFORCING RING 8 x 65 x 830
20	2	CLAMP BAR 6 x 40 x 180
21	2	10 DIA. x 140 BOLT S/S (TYPE 316)
22	1	GROUND STUD ASSEMBLY 10 DIA. x 40
		HANDHOLE MARK H2
23	1	COVER PLATE 11 GA. x 130 x 220 (A569)
24	1	REINFORCING RING 8 x 65 x 555
25	1	CLAMP BAR 6 x 40 x 150
21	1	10 DIA. x 140 BOLT S/S (TYPE 316)
22	1	GROUND STUD ASSEMBLY 10 DIA. x 40

***NOTES:**

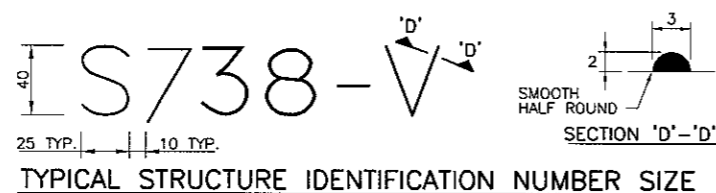
- MARK NO. 15 & 17 C/W NUT AND WASHER.
- MARK NO. 20 & 25 C/W B-DIA. PUNCHED 10 N.C. TAPPED AT THE CENTER OF PLATE.
- MARK NO. 21 C/W CUP WASHER.
- MARK NO. 22 C/W 2-10 DIA. HEX NUT, 2-TERMINAL WASHER. & 1-LOCKWASHER

GENERAL NOTES

- DESIGN DATA**
AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 4TH EDITION, 2001.
DESIGN WIND LOAD = 1.44 kPa (30 PSF)
DESIGN ICE LOAD = 0.15 kPa (3 PSF)
- ALL MATERIALS SHALL BE CSA G40.21 - 350W STRUCTURAL STEEL UNLESS OTHERWISE NOTED.
- ALL MATERIALS EXCEPT STAINLESS STEEL AND ALUMINUM SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH CSA G164 TO A MIN. NET RETENSION OF 600 g/m²
- ALL AREAS OF DAMAGED GALVANIZING SHALL BE REPAIRED WITH SELF-FLUXING LOW TEMPERATURE, ZINC BASED ALLOY ROD OR SPRAY-ON COATING CALLED ZINGA.
- NEW STRUCTURE TO BE INSTALLED ON EXIST. CONCRETE PILE FOUNDATION AND ANCHOR BOLTS.
- NEW 50 mm. MAX. GROUT PAD TO BE PROVIDED AFTER INSTALLING THE STRUCTURE.
- SIGNS**
THREE SIGNS (PLATES)
MAXIMUM SIZE 915 x 915 mm. SUPPLIED AND INSTALLED (C/W BRACKETS) BY THE CITY OF WINNIPEG TRAFFIC SERVICES BRANCH.

NOTES

- PROVIDE "RAISED" IDENTIFICATION NO. WITH WELDING ELECTRODE FOR THE SIGN STRUCTURE.
- GRIND ALL SHARP POINTS AND EDGES.



B.M. ELEV.	DESIGNED BY: S.S.R.
	DRAWN BY: N.B.G.
	CHECKED BY: S.S.R.
	APPROVED BY: <i>[Signature]</i>
	SCALE: HORZ. N.T.S.
	DATE: MAY 2006
	AUTHORIZED BY: <i>[Signature]</i>
1 ISSUED FOR TENDER	5/10/06 SSR
NO. REVISIONS	DATE BY

DILLON CONSULTING

ENGINEER'S SEAL
PROVINCE OF MANITOBA
S.S. RIJAL
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT PROJECT NO. 06-6011-1000

THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT

Winnipeg

OVERHEAD SIGN SUPPORT STRUCTURE MAINTENANCE WORKS 2006 PROGRAM

STRUCTURE NO. S738 FABRICATION DETAILS

CITY DRAWING NUMBER OHSS-06-05 SHEET 5 OF 7