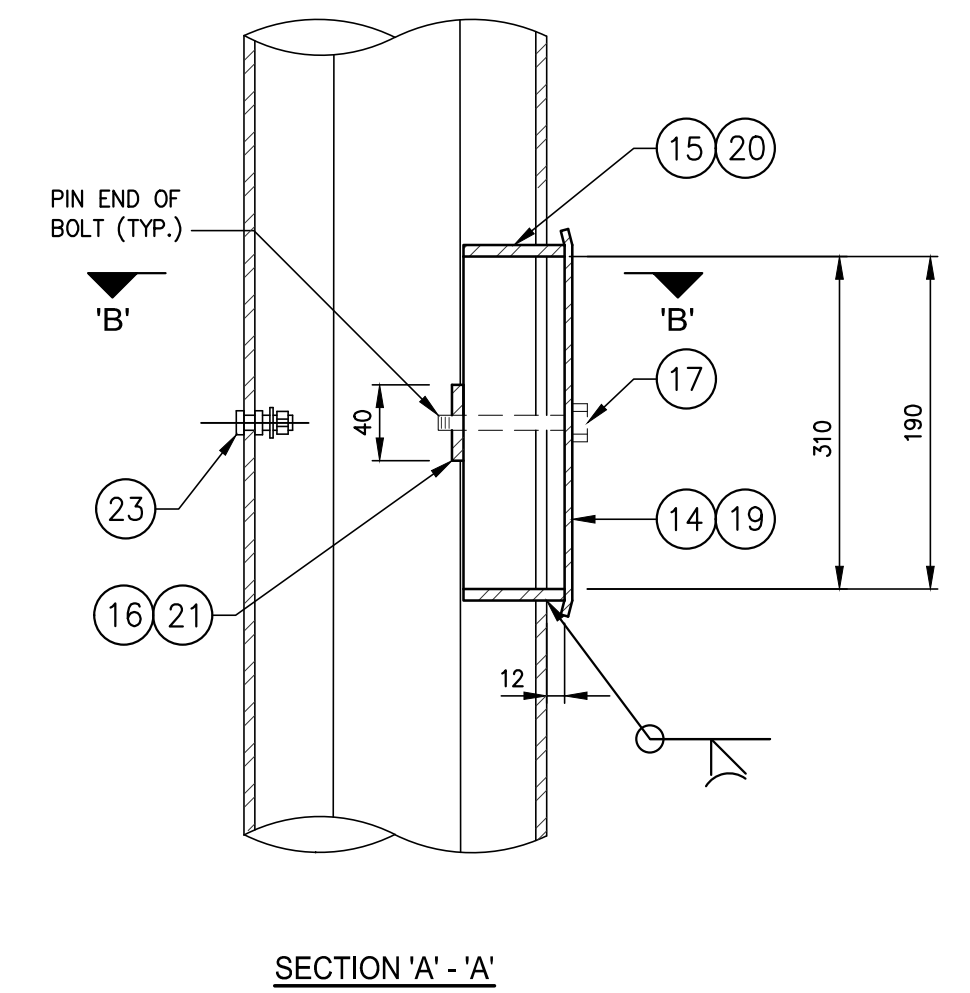
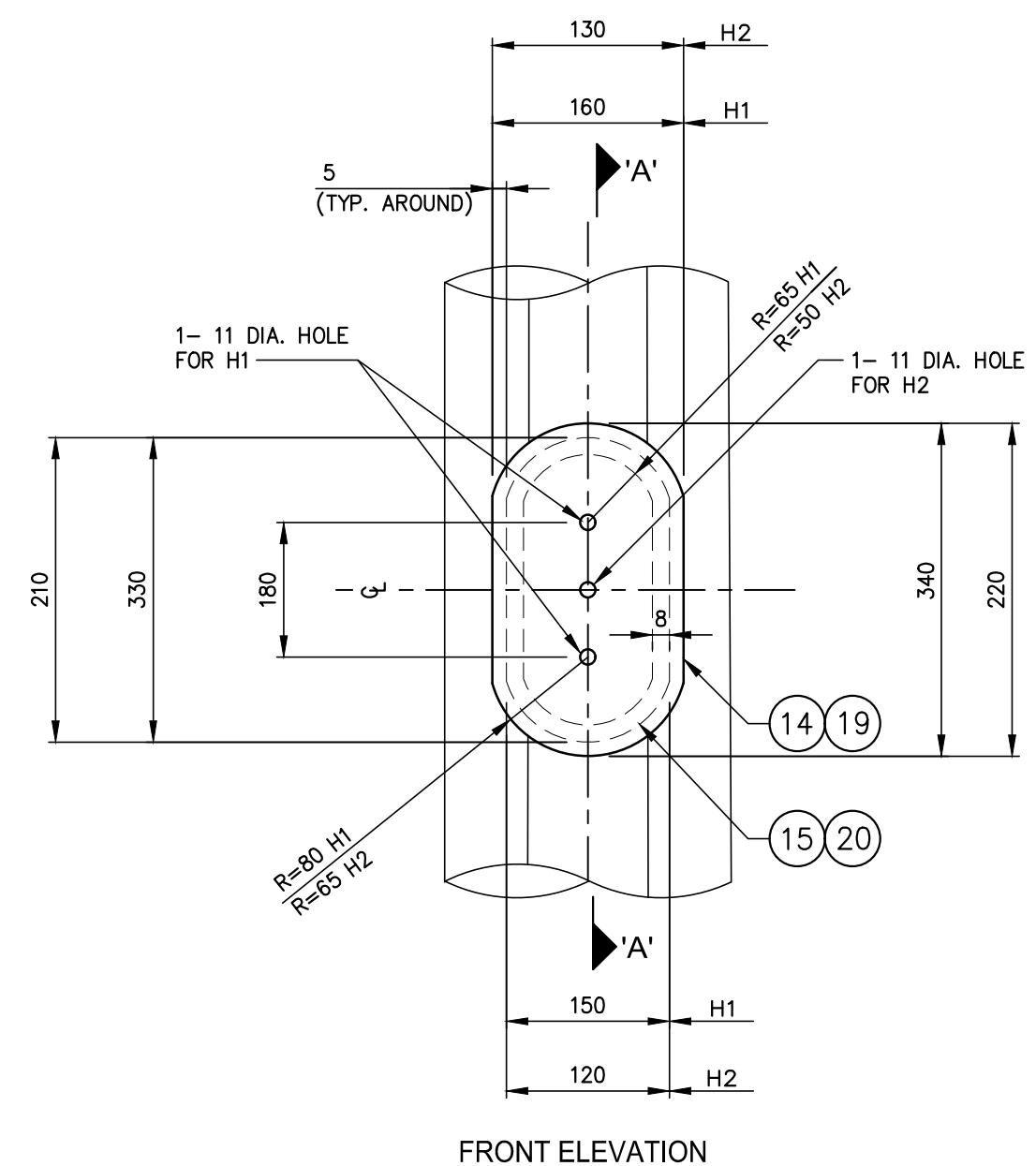
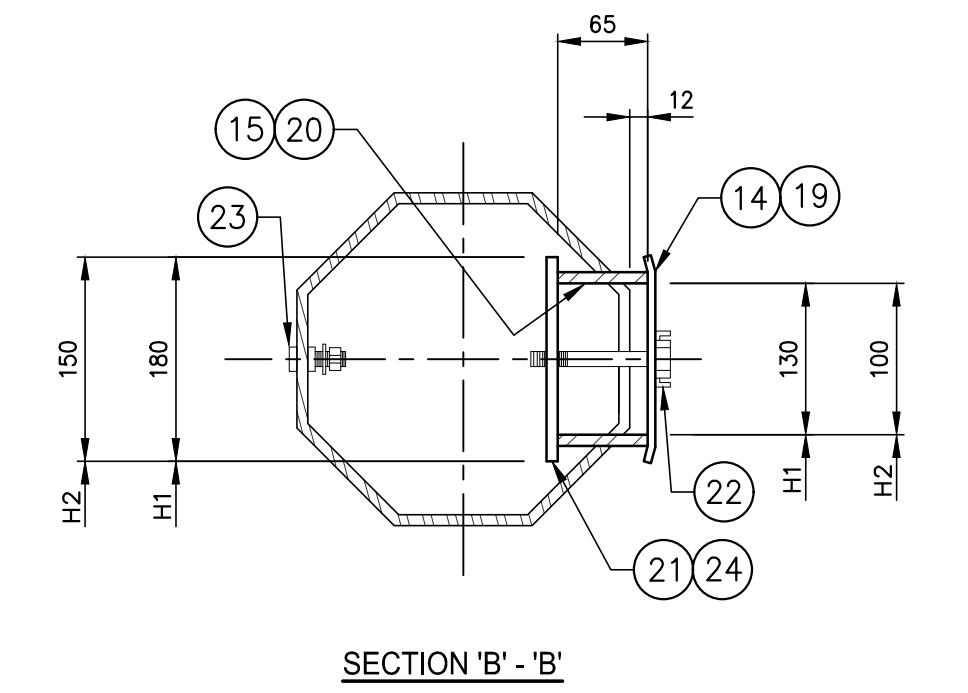
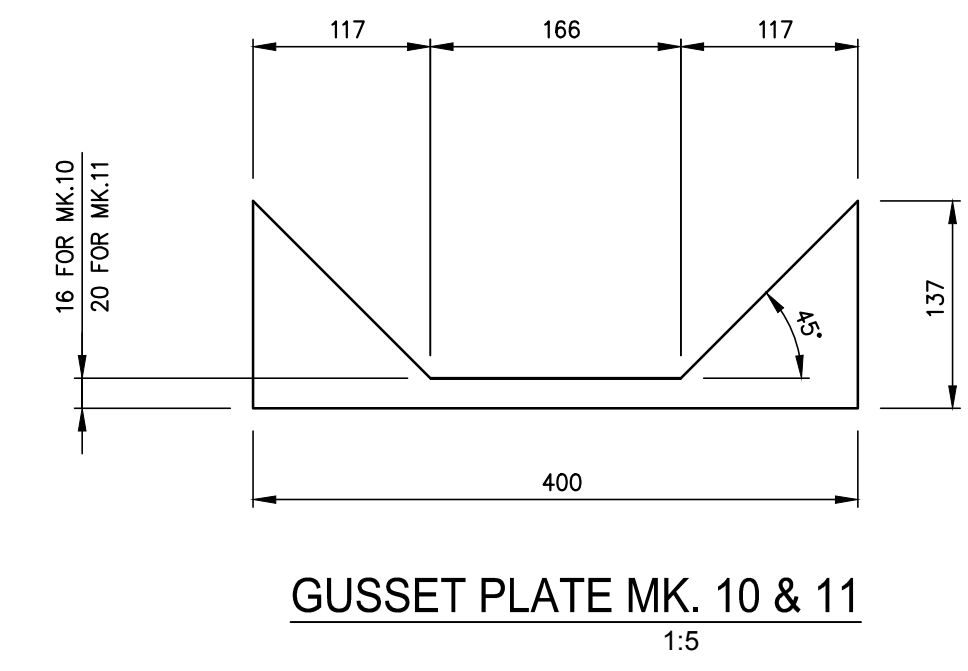
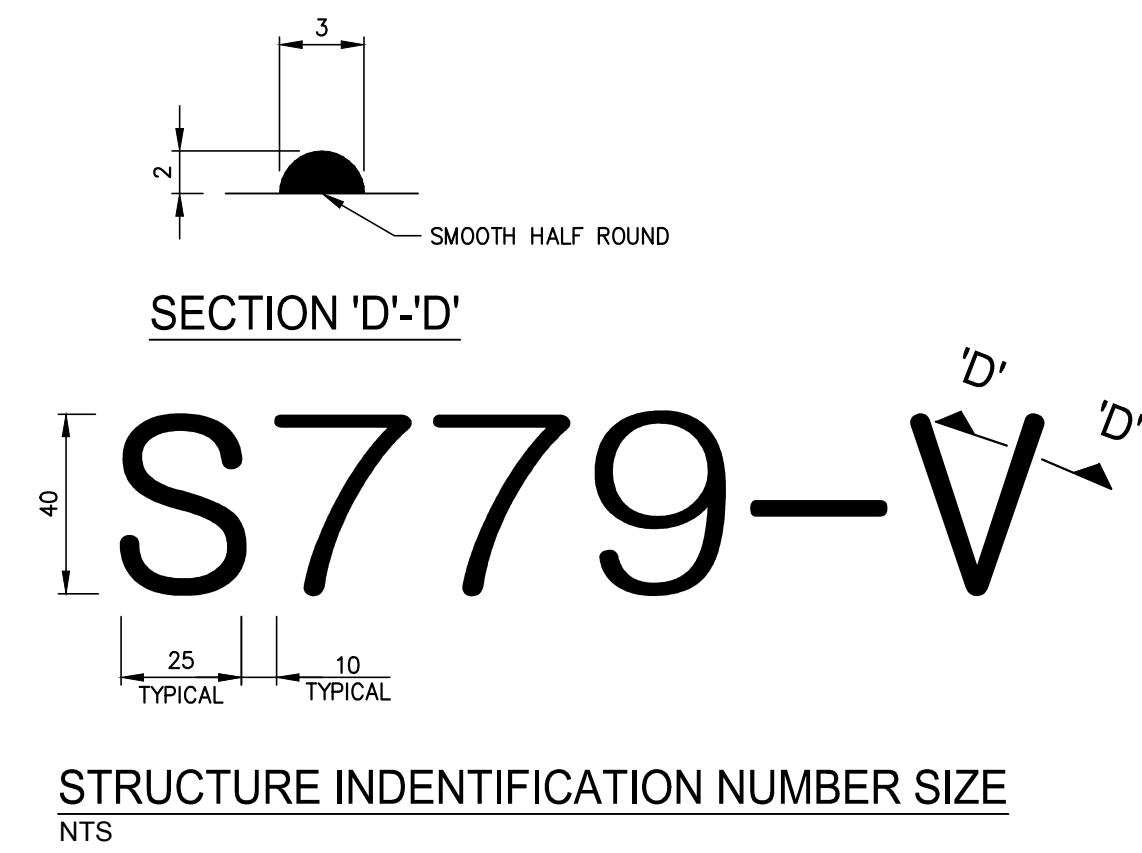


BILL OF MATERIALS		
MK.	QTY.	DESCRIPTION
1	1	OCTAGONAL SHAFT 400 A/F x 9.525
2	1	OCTAGONAL ARM 350 A/F TO 200 A/F x 9.525
3	1	BASE PLATE 50 THICK (GR. 300W)
4	1	BACKUP STRIP 6 x 40 (FOR SHAFT)
5	1	BACKUP STRIP 6 x 40 (FOR ARM)
6	1	END PLATE 250 A/F OCTAGONAL x 6 THICK
7	10	22 DIA. x 100 LG. A325 BOLTS GALV. C/W NUT & WASHER
8	2	FLANGE PLATE 400 x 400 x 38 (GR.300W)
9	2	SIDE GUSSET PLATE 20 x 500 x 300
10	1	TOP GUSSET PLATE 10 THICK
11	16	BOTTOM GUSSET PLATE 10 THICK
12	1	COVER PLATE 420 DIA. x 10 THICK
13	2	OCTAGONAL INTERIOR GUSSET PLATE 8 THICK
HANDHOLE MARK H1 (1 REQUIRED)		
14	1	COVER PLATE 11 GA. x 160 x 340 (ASTM A569)
15	1	REINFORCING RING 8 x 65 x 830
16	2	CLAMP BAR 6 x 40 x 180
17	2	10 DIA. x 140 BOLT S/S (TYPE 316)
18	1	GROUND STUD ASSEMBLY 10 DIA. x 40 (STAINLESS STEEL)
HANDHOLE MARK H2 (1 REQUIRED)		
19	1	COVER PLATE 11 GA. x 130 x 220 (ASTM A569)
20	1	REINFORCING RING 8 x 65 x 555
21	1	CLAMP BAR 6 x 40 x 150
22	2	10 DIA. x 140 BOLT S/S (TYPE 316)
23	1	GROUND STUD ASSEMBLY 10 DIA. x 40 (STAINLESS STEEL)

- NOTES**
- MK. 16 & 21 CLAMP BARS C/W TAPPED HOLE IN CENTRE FOR MK. 17 BOLT. RE-TAP AFTER GALVANIZING.
 - MK. 17 AND 22 BOLTS C/W TAMPER PROOF ALUMINUM CAP WASHER.
 - MK. 18 AND 23 GROUND STUD ASSEMBLY C/W HEW NUT, 2 TERMINAL WASHERS AND 1 LOCK WASHER (ALL STAINLESS STEEL).
- GENERAL NOTES**
- "RAISED" IDENTIFICATION NO. WITH WELDING ELECTRODE PROVIDED FOR THE SIGN STRUCTURE.
 - ALL SHARP POINTS AND EDGES GROUND.



HANDHOLE MK. 'H1' & 'H2'
1:10

May 16, 2016 - 2:50pm
 P:\2516006-5516006- Pembina Hwy Pavement Structures\5516006_Pembina Hwy Ch. Signs_S01-506.dwg - tab.S-06

NOTE:
These design documents are prepared solely for the use by the party with whom the design professional has entered into a contract and there are no representations of any kind made by the design professional to any party with whom the design professional has not entered into a contract.

LOCATIONS APPROVED UNDERGROUND STRUCTURES SIGNED BY: _____ DATE: _____ SUPV UG STRUCTURES _____ DATE: _____ LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING	G.B.M. - ELEV. 232,929 BENCHMARK LOCATION LOCATED ON "O" OF OPEN ON HYDRANT, SOUTHEAST CORNER OF PEMBINA HIGHWAY AND DALY STREET NORTH	 MMM Group Limited Suite 111 - 93 Lombard Ave Winnipeg, MB R3B 3B1 t. 204.943.3178 f. 204.943.4948 www.mmgrouplimited.com	ENGINEER'S SEAL J. P. LUKASHENKO REGISTERED PROFESSIONAL ENGINEER
	DESIGNED BY: MGM CHECKED BY: TR/EH DRAWN BY: KD APPROVED BY: JPL HOR. SCALE: AS NOTED VERTICAL: AS NOTED NO. REVISIONS: _____ DATE: MAY 16 2016		RELEASED FOR CONSTRUCTION DATE: _____

METRIC
 WHOLE NUMBERS INDICATE MILLIMETRES
 DECIMALIZED NUMBERS INDICATE METRES

Certificate of Authorization
 MMM Group Limited
 No. 4531

 THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION	CITY DRAWING NUMBER SHEET 27 OF 27
PEMBINA HIGHWAY FROM CARTER AVENUE TO OSBORNE STREET OVERHEAD SIGN STRUCTURES S779 - FABRICATION DETAILS (2 OF 2)	BID NO. 386-2016