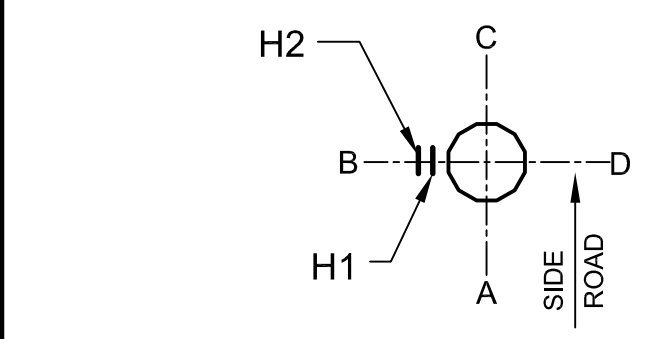
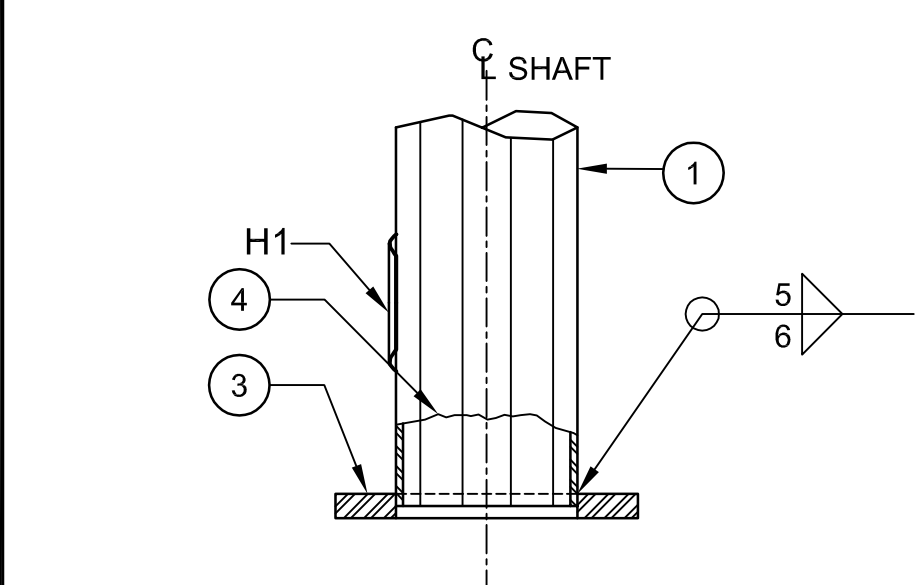


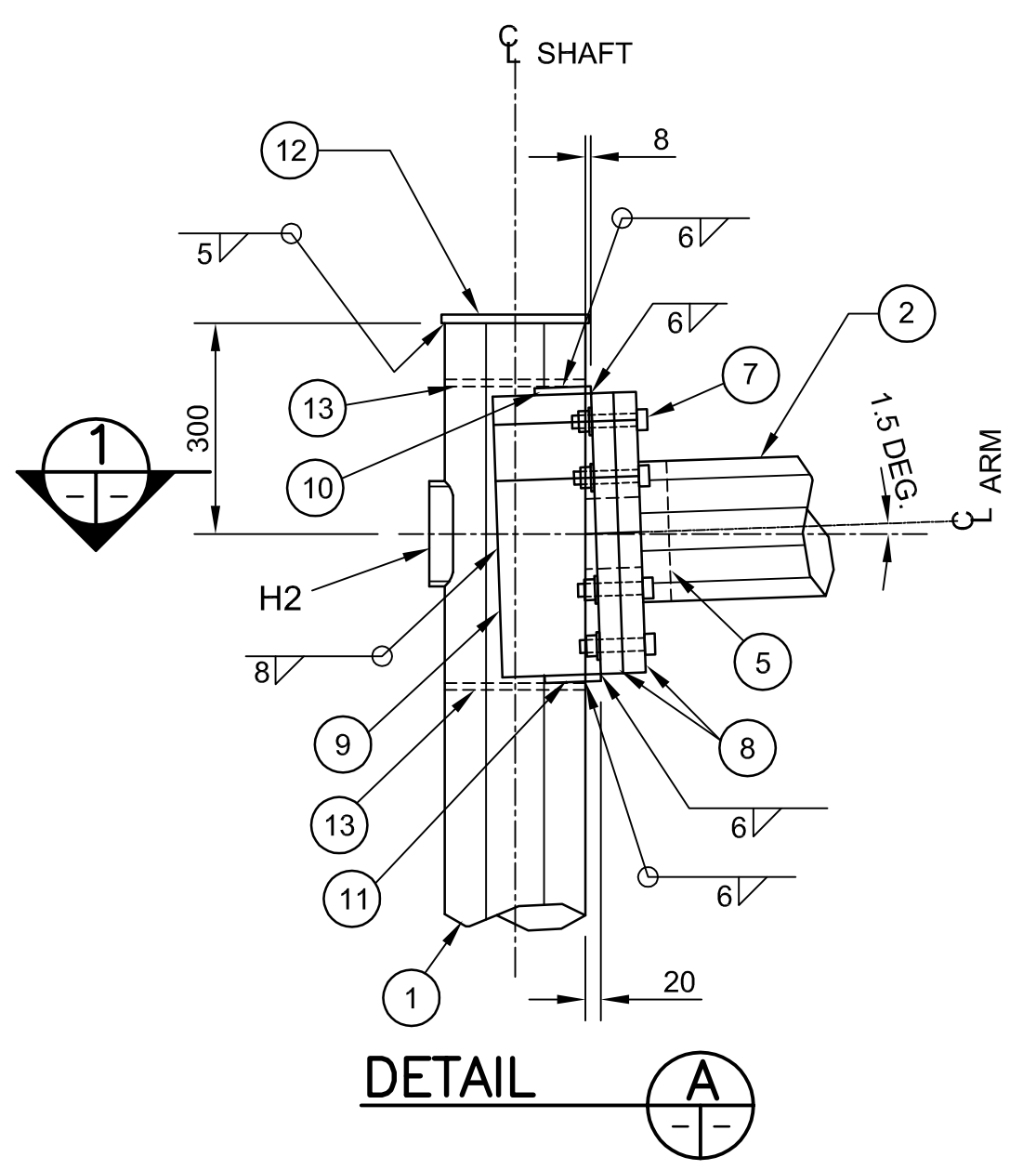
ELEVATION



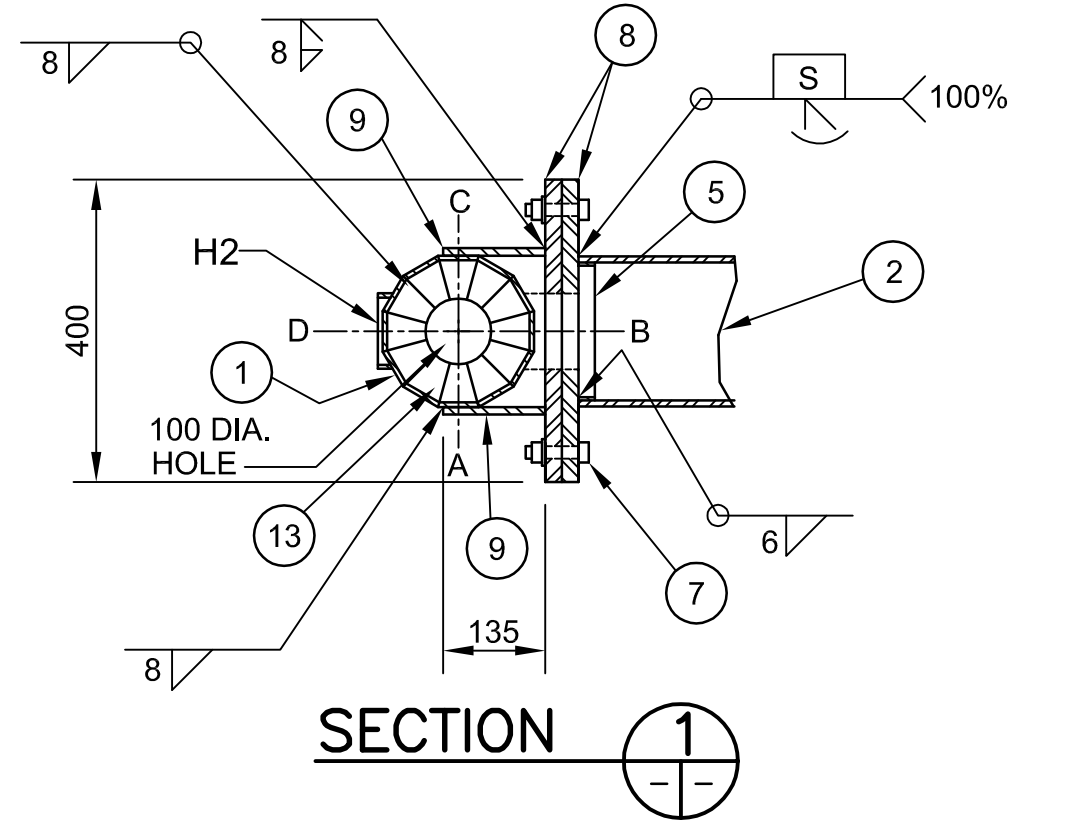
ORIENTATION



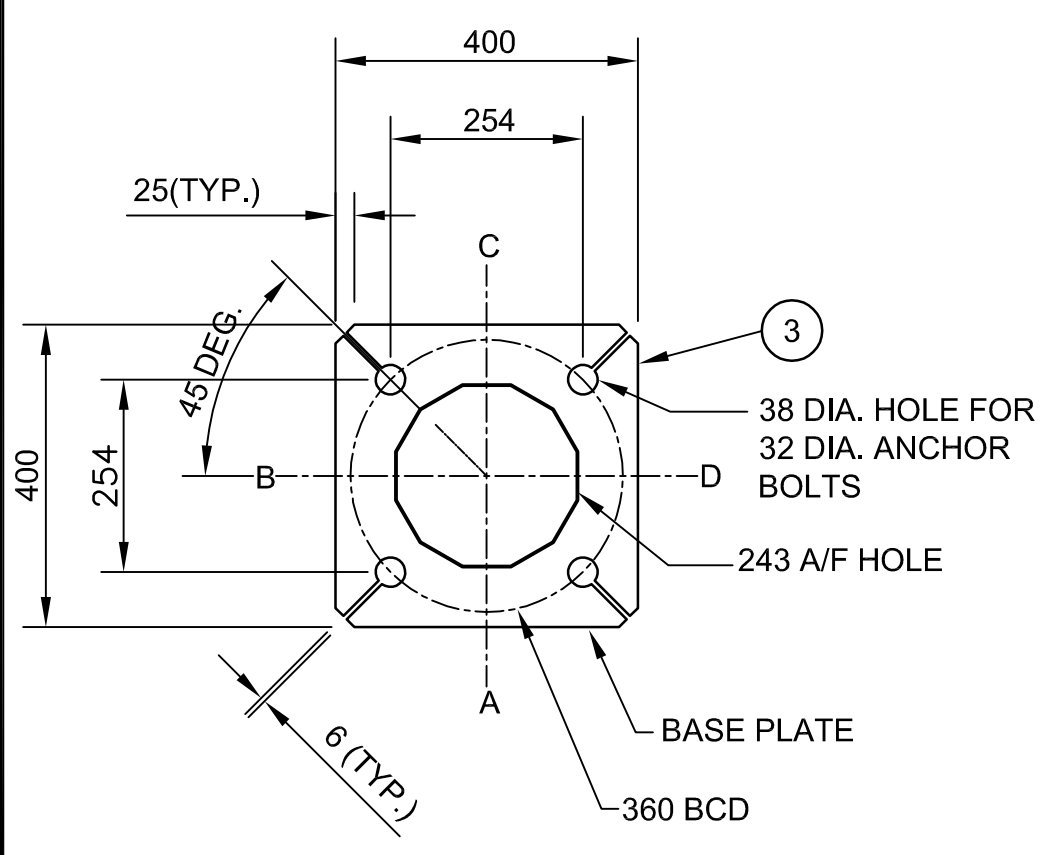
DETAIL B



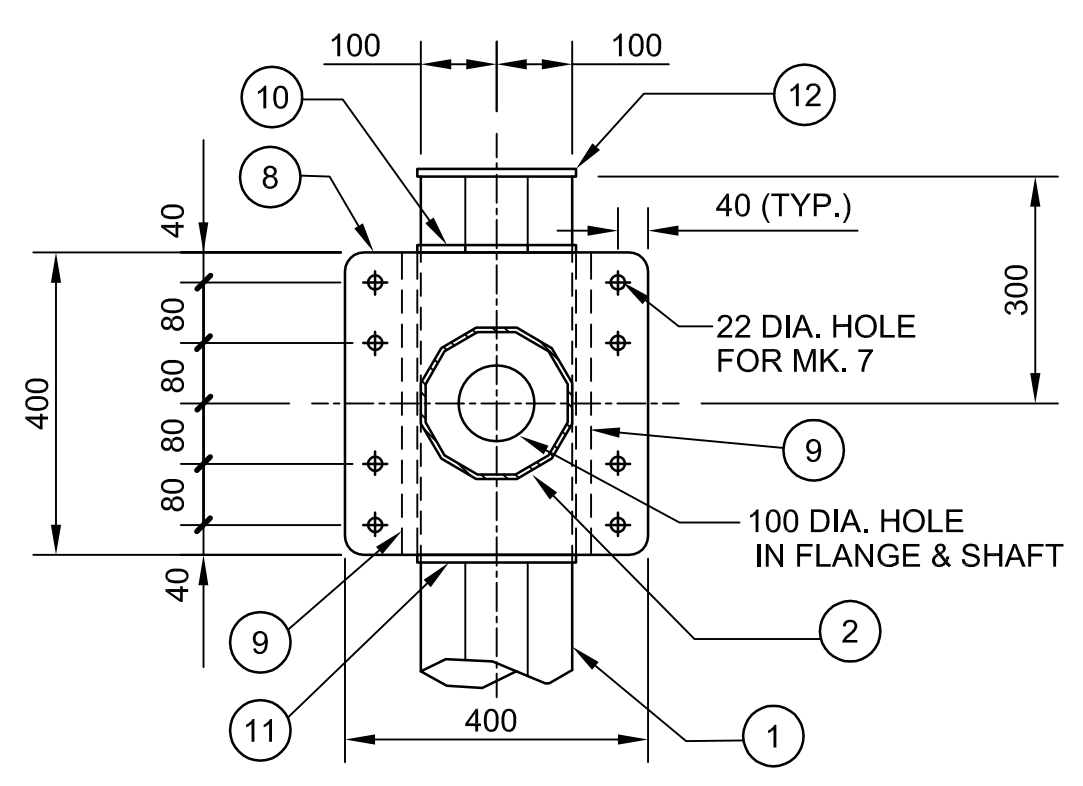
DETAIL A



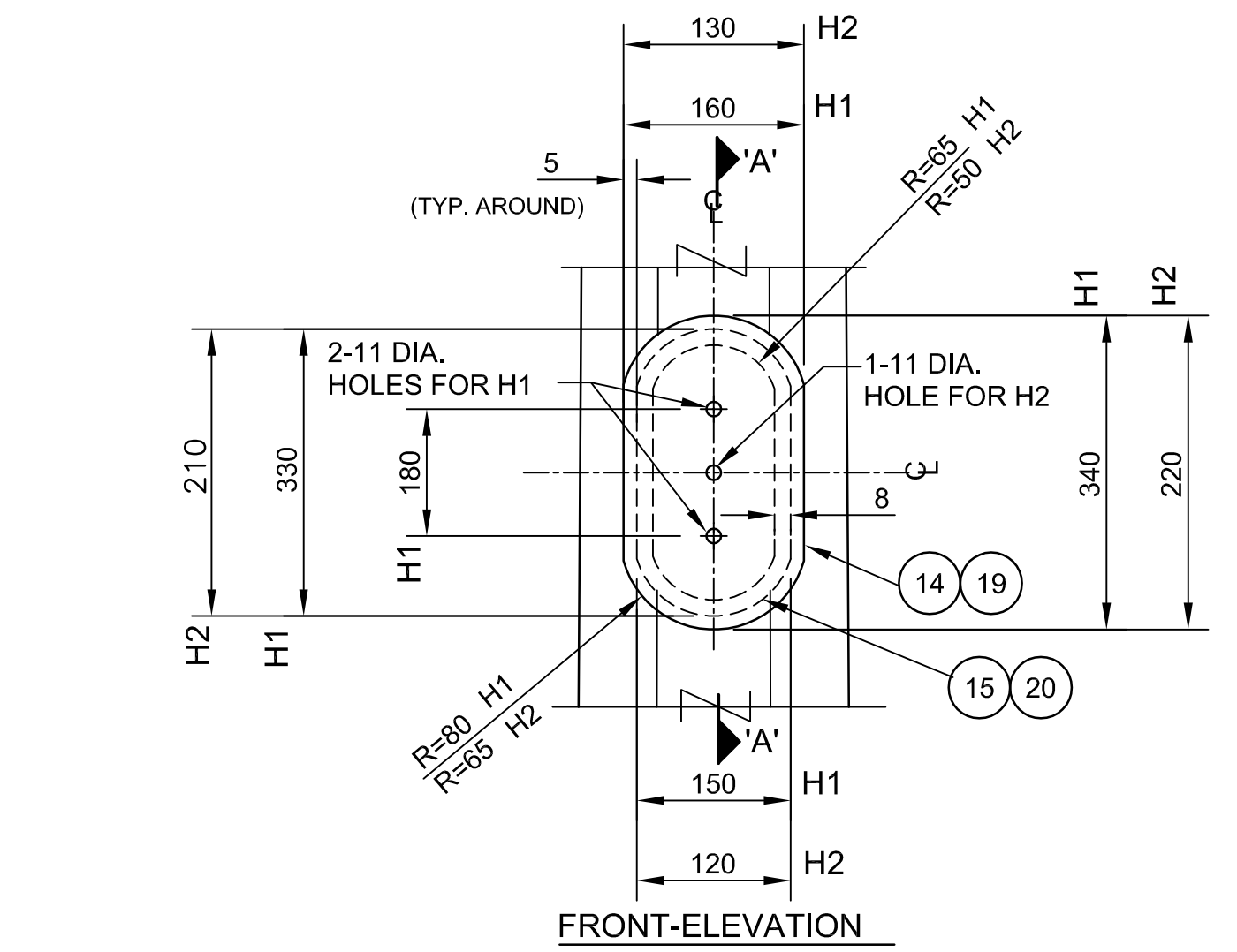
SECTION 1-1



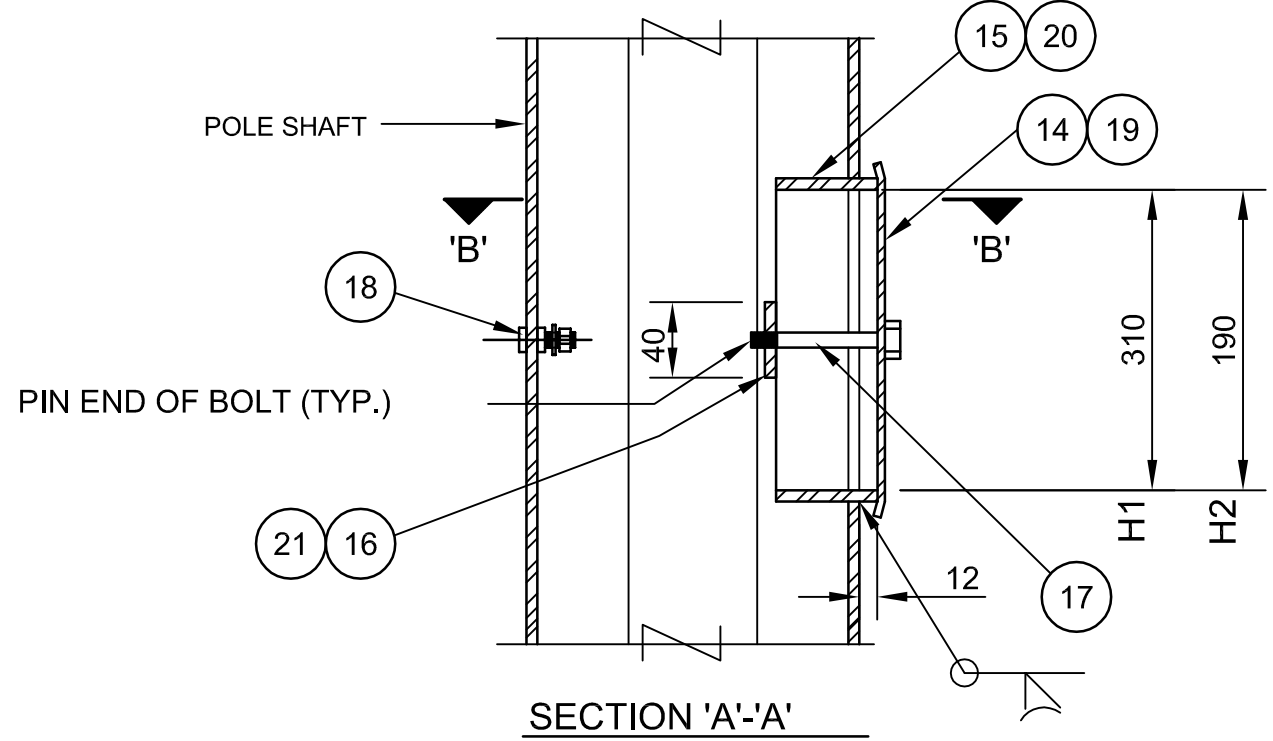
BASE PLATE DETAIL



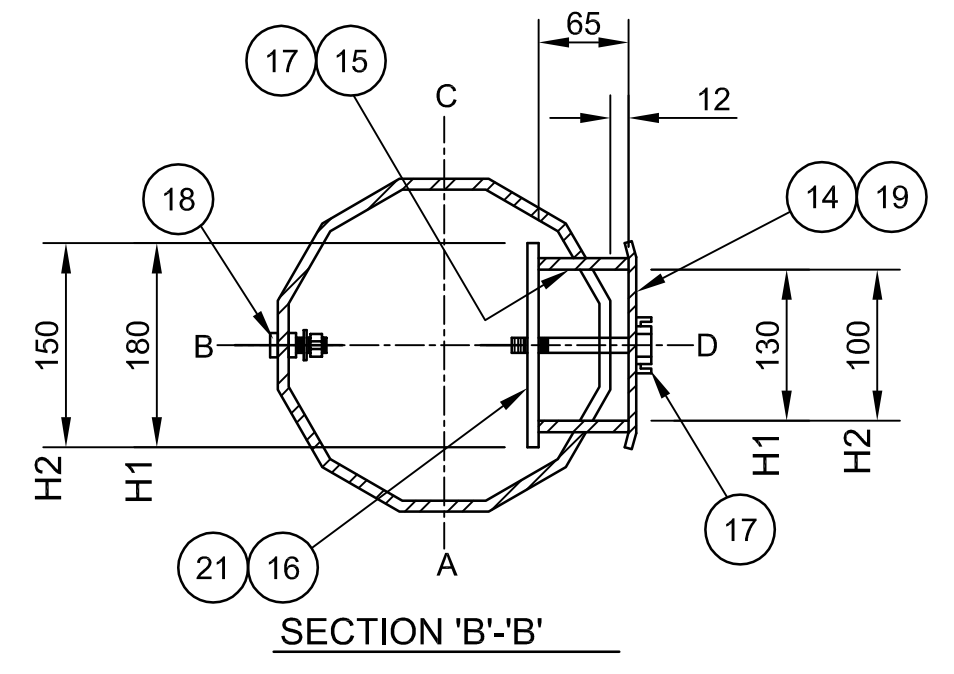
FLANGE PLATE DETAIL



FRONT-ELEVATION

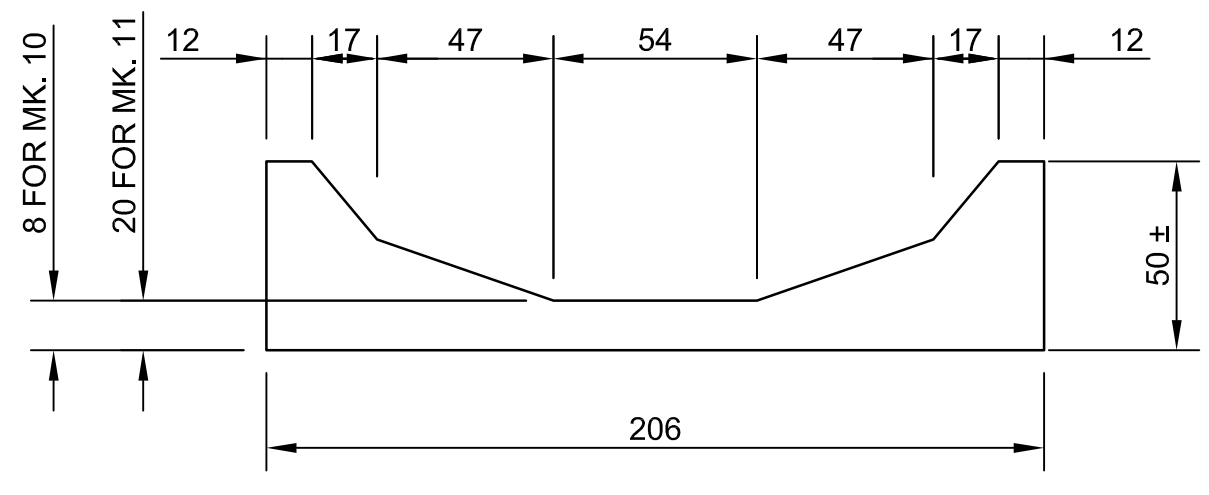


SECTION 'A'-A



SECTION 'B'-B

HANDHOLE-MARK H1 & H2



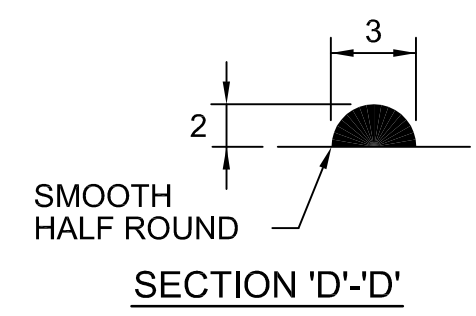
GUSSET PLATE MARK 10 & 11

NOTES

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



STRUCTURE IDENTIFICATION NUMBER SIZE



SECTION 'D'-D

BILL OF MATERIALS

MK.	QTY.	DESCRIPTION
1	1	DODECAGONAL SHAFT 240 A/F TO 200 A/F x 6.35
2	1	DODECAGONAL ARM 200 A/F TO 130 A/F x 6.35
3	1	BASE PLATE 40 THICK
4	1	BACKUP STRIP 40 X 6 (FOR SHAFT)
5	1	BACKUP STRIP 40 X 6 (FOR ARM)
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	DODECAGONAL INTERIOR GUSSET PLATE 8 THICK
HANDHOLE MARK H1		
14	1	COVER PLATE 11 GA. x 160x 340 (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
HANDHOLE MARK H2		
19	1	COVER PLATE 11 GA. x 130 x 220 (A569)
20	1	REINFORCING RING 8 x 65 x 555
21	1	CLAMP BAR 6 x 40 x 150
17	1	10 DIA. x 140 BOLT S/S (TYPE 316)
18	1	GROUND STUD ASSEMBLY 10 DIA. x 40

\* NOTES:

1. MARK NO. 16 & 21 C/W 8-DIA. PUNCHED 10 N.C. TAPPED AT THE CENTER OF PLATE.
2. MARK NO. 17 C/W CUP WASHER.
3. MARK NO. 18 C/W 2-10 DIA. HEX NUT, 2-TERMINAL WASHER, & 1-LOCKWASHER

GENERAL NOTES

1. 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)
2. ALL MATERIALS SHALL BE CSA G40.21 - 350W STRUCTURAL STEEL
3. 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/m<sup>2</sup>
4. ALL AREAS OF DAMAGED GALVANIZING SHALL BE REPAIRED WITH SELF-FLUXING LOW TEMPERATURE, ZINC BASED ALLOY ROD OR SPRAY-ON COATING CALLED "ZINGA".
5. NEW STRUCTURE TO BE INSTALLED ON NEW CONCRETE PILE FOUNDATION AND ANCHOR BOLTS.
6. NEW 50 mm. MAX. GROUT PAD TO BE PROVIDED AFTER INSTALLING THE STRUCTURE.
7. SIGN PLATE  
2 SIGN PLATES, MAXIMUM SIZE 915 x 915 mm EACH. SUPPLIED AND INSTALLED BY THE CITY OF WINNIPEG TRAFFIC SERVICES BRANCH.

G:\CAD\091545\Contract\OHSS\STRUCTURAL-DETAILS-3.dwg

150 WM	WATERMAIN	150 WM	HYDRO	HYDRO	HYDRO	150 mm W.M.	WATERMAIN	150 mm W.M.
⊕	HYDRANT	⊕	MTS	MTS	+	+	HYDRANT	+
⊗	VALVE	⊗			+	+	VALVE	+
300 LDS	LAND DRAINAGE SEWER	300 LDS			300 mm L.D.S.	300 mm L.D.S.	LAND DRAINAGE SEWER	300 mm L.D.S.
250 WWS	WASTE WATER SEWER	250 WWS			250 mm W.W.S.	250 mm W.W.S.	WASTE WATER SEWER	250 mm W.W.S.
○	MANHOLE	●					MANHOLE	
□	CATCH BASIN	■					CATCH BASIN	
▽	CURB INLET	▽					CURB INLET	
+	JUNCTIONS	+					JUNCTIONS	
—	CULVERT	—					CULVERT	
100 GAS	GAS	100 GAS					GAS	
EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PROFILE	PROPOSED

UNDERGROUND STRUCTURES				B.M. ELEV.
SUPY. U/G STRUCTURES COMMITTEE	DATE			
NOTE: 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 WITH CONSTRUCTION.				
2	ISSUED FOR TENDER	06/19/09	TJH	
1	ISSUED FOR REVIEW	06/04/09	TJH	
NO.	REVISIONS	DATE	BY	

DESIGNED BY	SSR
DRAWN BY	TJH
CHECKED BY	NBU
APPROVED BY	
HOR. SCALE	AS NOTED
VERTICAL	
RELEASED FOR CONSTRUCTION	
DATE	

ENGINEER'S SEAL  
PROVINCE OF MANITOBA  
ORIGINAL STAMPED BY  
S.S. RIHAL  
06/19/09  
REGISTERED PROFESSIONAL ENGINEER

**THE CITY OF WINNIPEG**  
TRANSIT DEPARTMENT

ON STREET TRANSIT PRIORITY IMPROVEMENTS - PHASE 3

OHSS NO. S\_744 (2 OF 2) LEVIS ST. EASTBOUND, WEST OF WATT ST.

CITY DRAWING NUMBER: S744-09-02  
SHEET 23 OF 23  
CONSULTANT DRAWING NUMBER

CONSULTANT PROJECT NUMBER: 09-1545