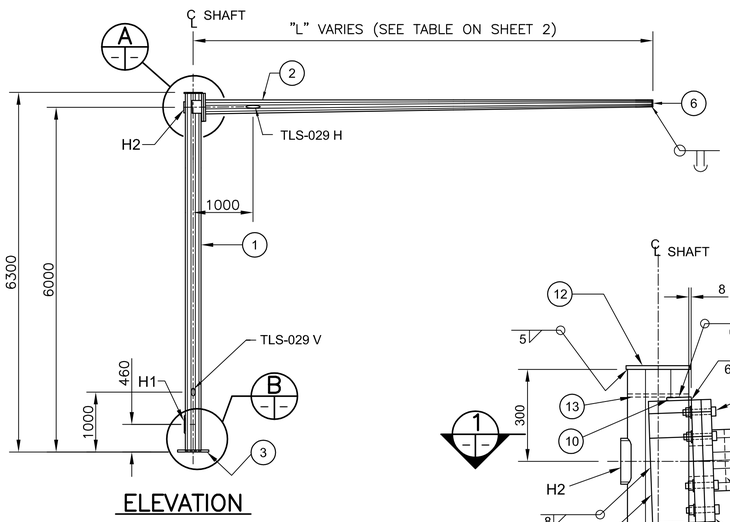
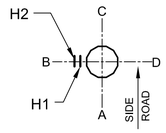
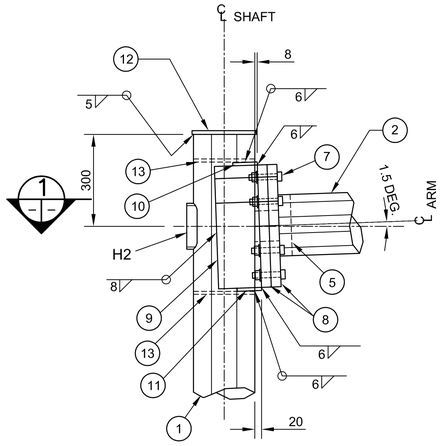


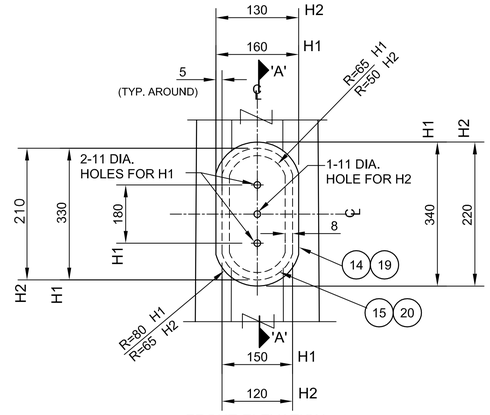
ELEVATION



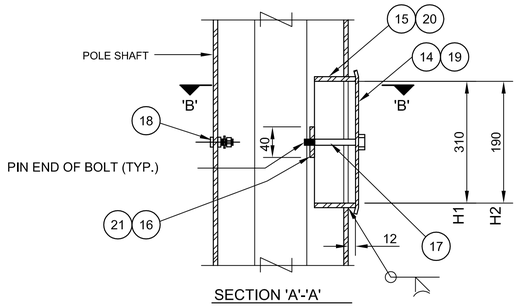
ORIENTATION



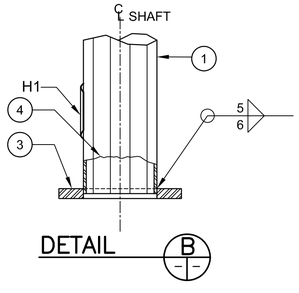
DETAIL A



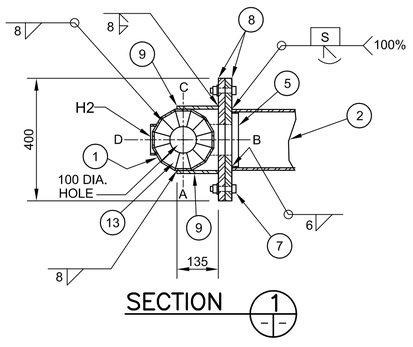
FRONT-ELEVATION



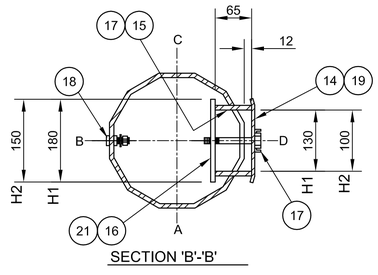
SECTION 'A'-'A'



DETAIL B

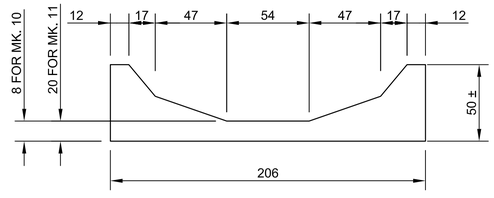


SECTION 1

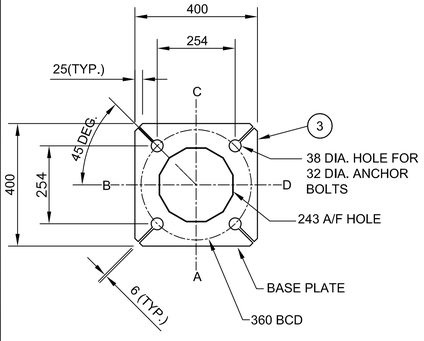


SECTION 'B'-'B'

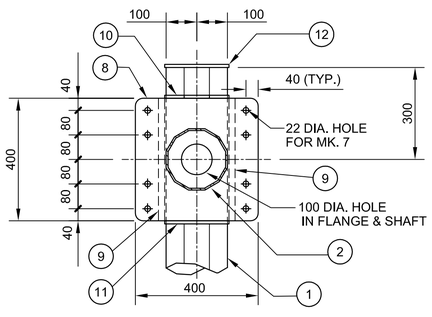
HANDHOLE-MARK H1 & H2



GUSSET PLATE
MARK 10 & 11



BASE PLATE DETAIL

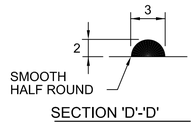


FLANGE PLATE DETAIL

NOTES

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

TYPICAL STRUCTURE IDENTIFICATION NUMBER SIZE
(TLS-029 TO TLS-077)



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^2
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. GROUT PAD NOT REQUIRED FOR STRUCTURES WITH BREAKAWAY BASES.
7. SIGN PLATE
   MAXIMUM SIZE 900 x 1500 mm. SUPPLIED AND INSTALLED BY THE CITY OF WINNIPEG TRAFFIC SERVICES BRANCH.

150 WM	WATERMAIN	150 WM	HYDRO	HYDRO	HYDRO	150 mm W.M.	WATERMAIN	150 mm W.M.
⊹	HYDRANT	●	MTS	M.T.S.	MTS	┼	HYDRANT	+
⊗	VALVE	⊗		CONCRETE		┼	VALVE	×
300 LDS	LAND DRAINAGE SEWER	300 LDS		ASPHALT	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		PLANING	250 mm W.W.S.	250 mm W.W.S.	WASTE WATER SEWER	250 mm W.W.S.
○	MANHOLE	●		SIDEWALK		℄	PROFILE	
□	CATCH BASIN	■		PAVING STONES			NORTH/WEST GUTTER	
▽	CURB INLET	▼		PARTIAL DEPTH REPAIR			SOUTH/EAST GUTTER	
	JUNCTIONS			PROPERTY LINE			NORTH/WEST T/LANE	
	CULVERT		⊕	SURVEY BAR			SOUTH/EAST T/LANE	
100 GAS	GAS	100 GAS		PARAPLEGIC RAMP				
EXISTING	LEGEND—PLAN	PROPOSED	EXISTING	LEGEND—PLAN	PROPOSED	EXISTING	LEGEND—PROFILE	PROPOSED

UNDERGROUND STRUCTURES

SUPV. 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.

NO.	REVISIONS	DATE	BY
	B.M. ELEV.		
2	ISSUED FOR TENDER	06/19/09	TJH
1	ISSUED FOR REVIEW	06/04/09	TJH

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

DILLON CONSULTING

RELEASED FOR CONSTRUCTION
DATE

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

CONSULTANT PROJECT NUMBER
09-1545

Winnipeg

THE CITY OF WINNIPEG
TRANSIT DEPARTMENT

ON STREET TRANSIT PRIORITY IMPROVEMENTS - PHASE 3

STRUCTURAL DETAILS (2 OF 2)

CITY DRAWING NUMBER
TLS-09-19

SHEET 19 OF 23

CONSULTANT DRAWING NUMBER

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