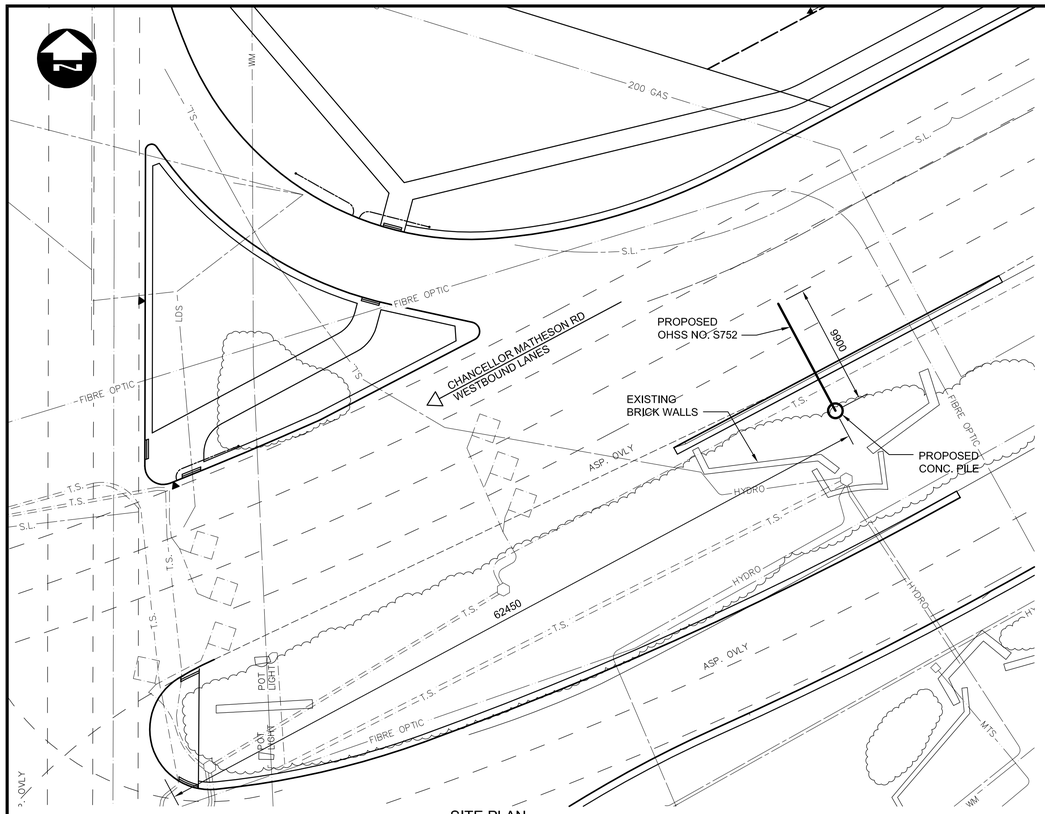
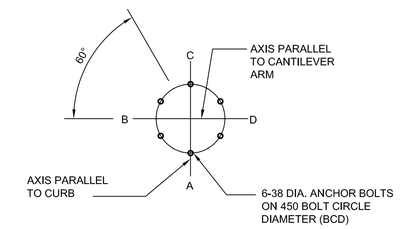
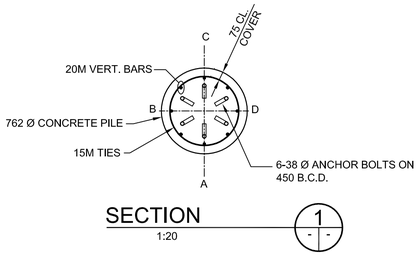


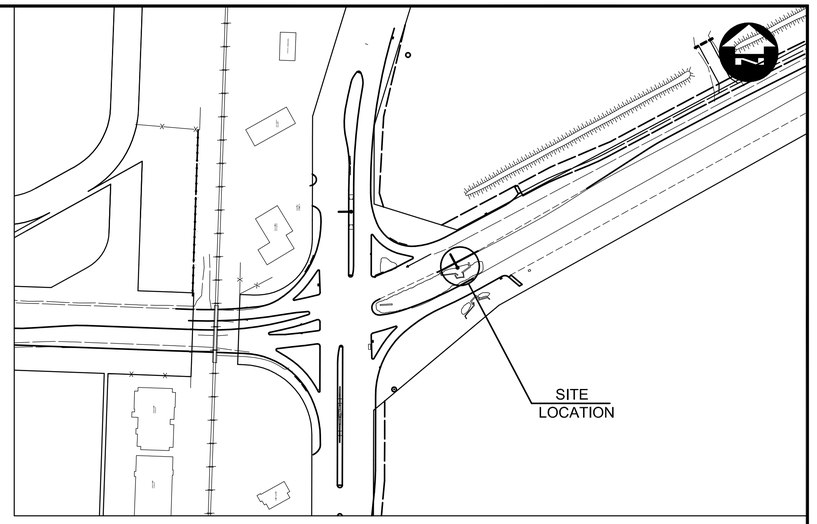
SITE PLAN
1:250



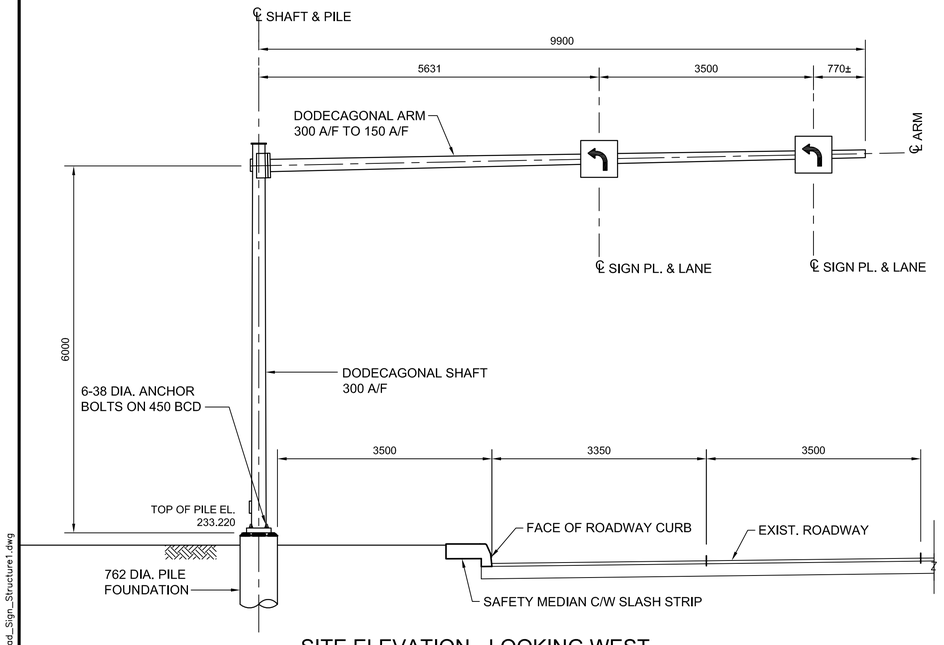
ANCHOR BOLTS LAYOUT



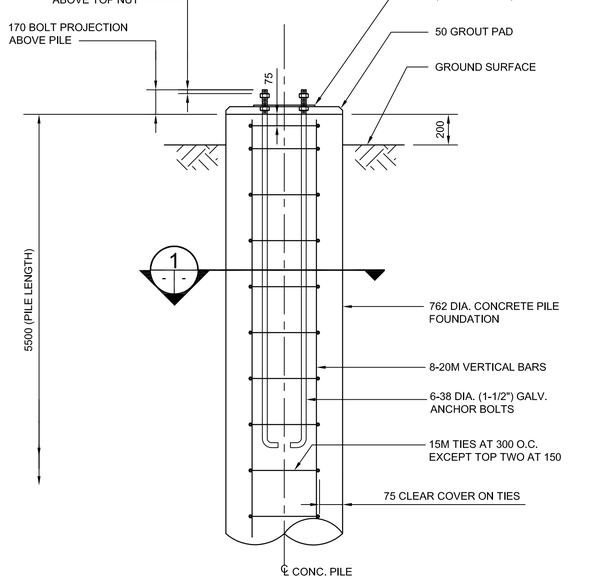
SECTION 1-1
1:20



KEY PLAN



SITE ELEVATION - LOOKING WEST
1: 50 OVERHEAD SIGN SUPPORT STRUCTURE NO. S752



ELEVATION
CONCRETE PILE FOUNDATION DETAIL
1:20

PILE CONSTRUCTION NOTES

1. EXCAVATION
   - CONTRACTOR SHALL EXCAVATE USING HYDRO JET.
   - CONTRACTOR SHALL NOT DAMAGE EXISTING BRICK WALLS AND SHRUBS.
2. REINFORCING STEEL
   - CSA G30.18 GR. 400W
   - VERTICAL BARS FULL LENGTH OF PILE
   - HOT DIP GALVANIZED
3. ANCHOR BOLTS
   - CSA G40.21 GR. 300W
   - 6-38 (1-1/2") DIA. x 1500 LONG + 150 HOOK
   - EACH BOLT C/W 2 NUTS & 2 WASHERS TOP 300 THREADED
   - HOT DIP GALVANIZED FULL LENGTH
   - BCD = BOLT CIRCLE DIAMETER TO CENTRE OF BOLT GROUP
4. ANCHOR BOLTS SHALL BE ALIGNED WITH A TEMPORARY STEEL TEMPLATE. PLACEMENT OF ANCHOR BOLTS AND CONCRETE WITHOUT THE TEMPLATE WILL NOT BE PERMITTED.
5. TOP 1.5 m OF PILE SHALL BE FORMED WITH A TUBULAR FORM (SONOTUBE).
6. CONTRACTOR SHALL REMOVE THE A/BOLT SETTING TEMPLATE, NUTS AND FORM, FOLLOWING A MINIMUM 24 HOUR CONCRETE CURING PERIOD.
7. CONCRETE MIX DESIGN
   PROPORTIONING OF FINE AGGREGATE, COARSE AGGREGATE, CEMENT, WATER, AND AIR ENTRAINING AGENT SHALL BE SUCH AS YIELD CONCRETE HAVING THE REQUIRED STRENGTH AND WORKABILITY AS FOLLOWS:
   i) CLASS OF EXPOSURE: S-1
   ii) MINIMUM COMPRESSIVE STRENGTH AT 56 DAYS = 35 MPa
   iii) MAXIMUM WATER/CEMENT RATIO = 0.40
   iv) AIR CONTENT: CATEGORY 2 PER TABLE 4 OF CSA A23.1-04 (4-7%)
   v) CEMENT - TYPE HS OR HSb, HIGH SULPHATE RESISTANT.

1

METRIC

WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

WARNING

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:

1. NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
2. TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS SEE PROVINCIAL REGULATION 210/72 FOR DETAILS.
3. OBTAIN EXCAVATION PERMITS PRIOR TO CONSTRUCTION.

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.		LAND DRAINAGE SEWER	300 mm L.D.S.
250 WWS	WASTE WATER SEWER	250 WWS		PLANING	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		CURB 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.

B.M. 654271 N 5517192.470 E 632610.651
ELEV. 233.084

NO.	REVISIONS	DATE	BY
2	ISSUED FOR ADDENDUM #1	11/07/04	JNC
1	ISSUED FOR TENDER	11/06/23	JNC

DESIGNED BY CDW
DRAWN BY APH
CHECKED BY SSR
APPROVED BY DPK
HOR. SCALE
VERTICAL
DATE 2011/06/23

DILLON CONSULTING

RELEASED FOR CONSTRUCTION
ORIGINAL SIGNED BY B. KIBBINS
DATE 11/06/23

ENGINEER'S SEAL
PROVINCE OF MANITOBA
ORIGINAL STAMPED BY
S.S. RIHAL
2011/06/22
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT PROJECT NUMBER
11-4587

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT

BISON DRIVE & PEMBINA HIGHWAY
INTERSECTION IMPROVEMENTS

S752 CHANCELLOR MATHESON RD. W.B.
EAST OF PEMBINA HWY

CITY DRAWING NUMBER
P-3327-23
SHEET 23 OF 24
CONSULTANT DRAWING NUMBER

G:\CAD\114587\Contract\Current\Roadway\Overhead_Sign_Structure1.dwg