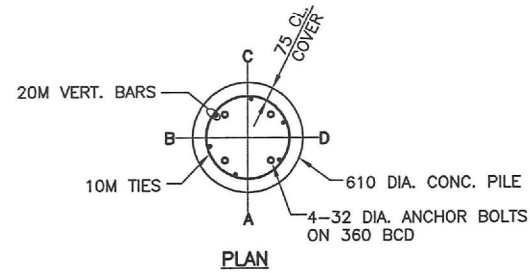
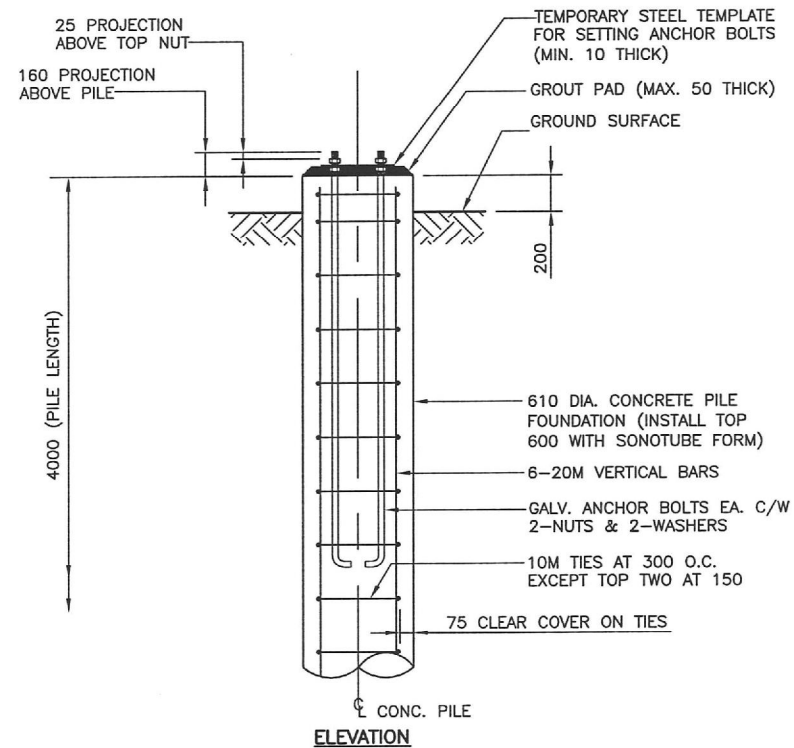


ANCHOR BOLTS LAYOUT



PLAN



ELEVATION

CONCRETE PILE FOUNDATION FOR S758
NTS

PILE CONSTRUCTION NOTES

1. **REINFORCING STEEL**
 - CSA G30.18 400W
 - VERTICAL BARS FULL LENGTH OF PILE
 - HOT DIP GALVANIZED
2. **ANCHORS BOLTS**
 - CSA G40.21 GR. 300W
 - 4-32 DIA. x 1500 LONG + 150 HOOK
 - EACH BOLT C/W 2 NUTS & 2 WASHERS
 - TOP 300 THREADED
 - HOT DIP GALVANIZED FULL LENGTH
3. ANCHOR BOLTS SHALL BE ALIGNED WITH A TEMPORARY STEEL TEMPLATE. PLACEMENT OF ANCHOR BOLTS AND CONCRETE WITHOUT THE TEMPLATE WILL NOT BE PERMITTED.
4. TOP OF PILE SHALL BE FORMED WITH A TABULAR FORM (SONOTUBE) AS FOLLOWS:
 - i) FOR BORED PILES, 1.0 m BELOW FINAL GRADE
 - ii) FOR HYDRO-JET EXCAVATED PILES, 1.5 m BELOW FINAL GRADE
5. CONTRACTOR SHALL REMOVE THE BASE TEMPLATE, NUTS AND FORM, FOLLOWING A MINIMUM 24 HOUR CONCRETE CURING PERIOD.
6. **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) COMPRESSIVE STRENGTH AT 56 DAYS = 35 MPa
 - iii) WATER/CEMENTING MATERIALS RATIO = 0.4
 - iv) AIR CONTENT: CATEGORY 2 PER TABLE 4 OF CSA A23.1-04 (4-7%)
 - v) CEMENT - TYPE HS OR HSb HIGH SULPHATE RESISTENT

B.M. ELEV.						ENGINEER'S SEAL		THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT TRANSPORTATION ENGINEERING DIVISION	
DESIGNED BY		CDW		CHECKED BY		MBL		STRUCTURE NO. S758 FOUNDATION DETAILS	
DRAWN BY		JGW		APPROVED BY					
HOR. SCALE:		AS SHOWN		RELEASED FOR CONSTRUCTION BY:					
VERTICAL:		AS SHOWN		DATE		2012/01/30			
0 ISSUED FOR TENDER		12/01/30		JGW					
NO. REVISIONS		DATE		BY		DATE			