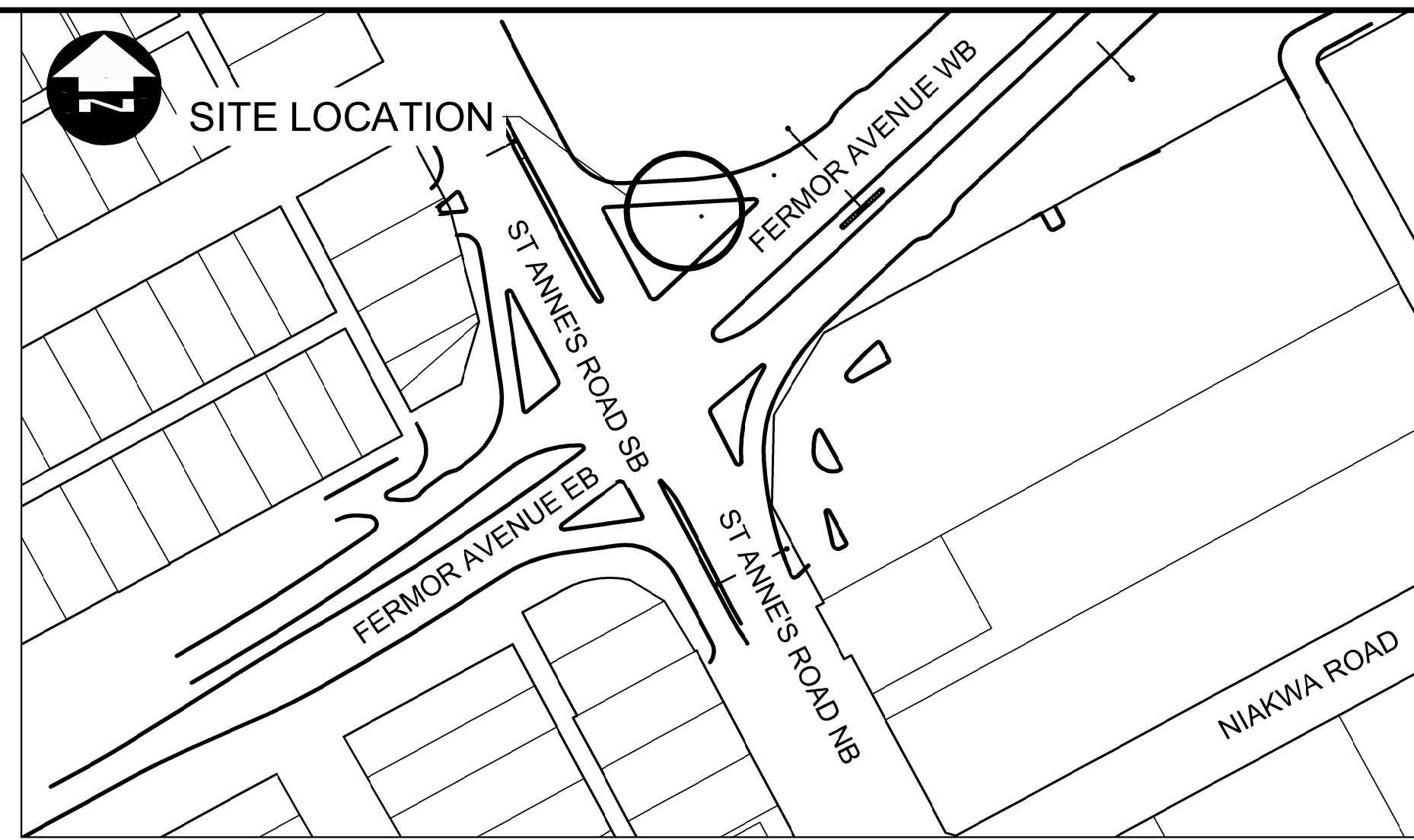
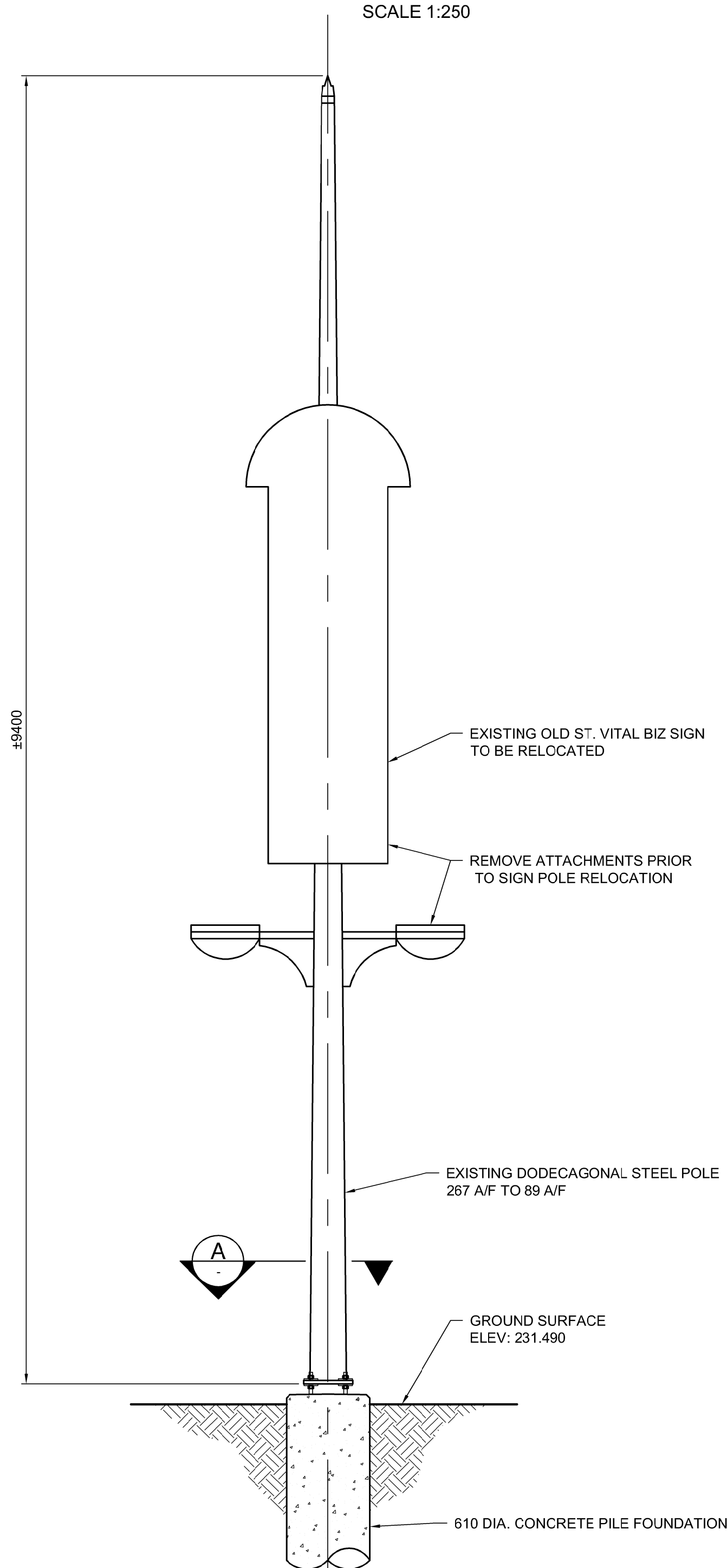


**SITE PLAN**  
SCALE 1:250



**KEY PLAN**  
SCALE 1:1500



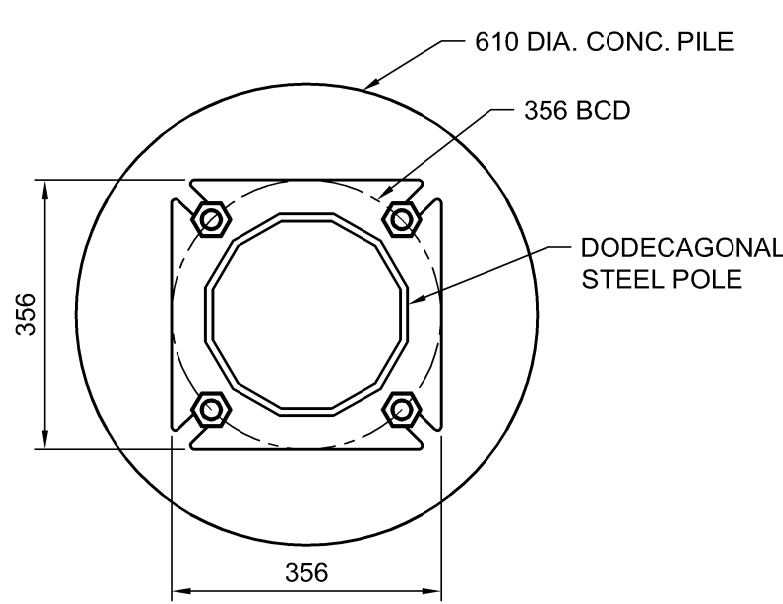
**PROPOSED POLE ELEVATION - LOOKING WEST**  
1:30

#8 - 1/2" LONG SS SELF-TAPPING SCREW  
C/W SS WASHER AT 200 O/C, FULL  
CIRCUMFERENCE OF BASE PLATE

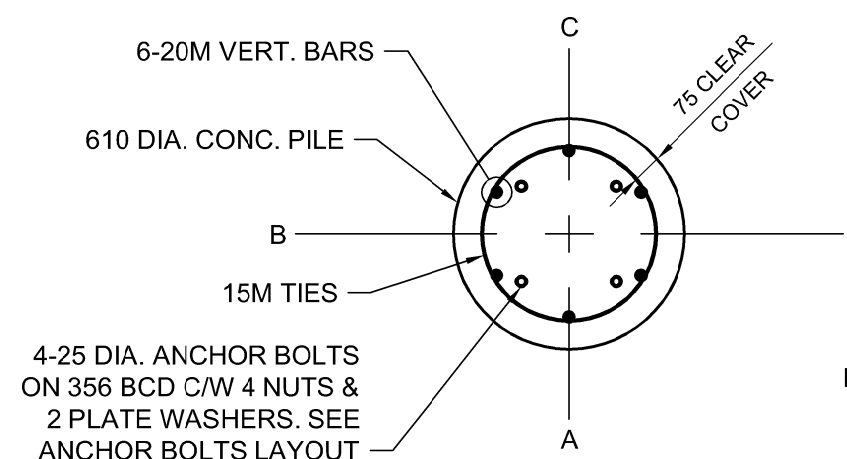
#8 - 3/4" LONG SS SELF-TAPPING SCREW  
C/W SS NUT, 2 FLAT SS WASHERS,  
AND SS LOCK WASHER AT BOTTOM  
OF RODENT SCREEN SPLICE LAP

1/2" - 18F STAINLESS STEEL RODENT SCREEN  
FASTENED WITH SELF-TAPPING SCREWS.  
SEE SPECIFICATIONS FOR DETAILS.

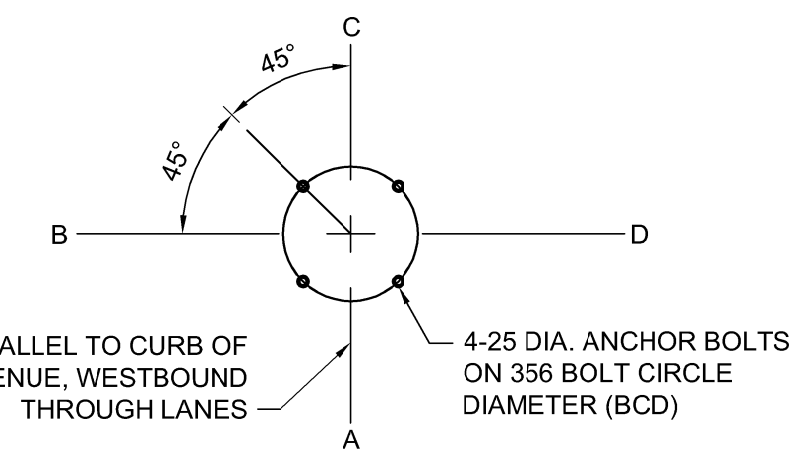
**PILE TOP DETAIL**  
1:10



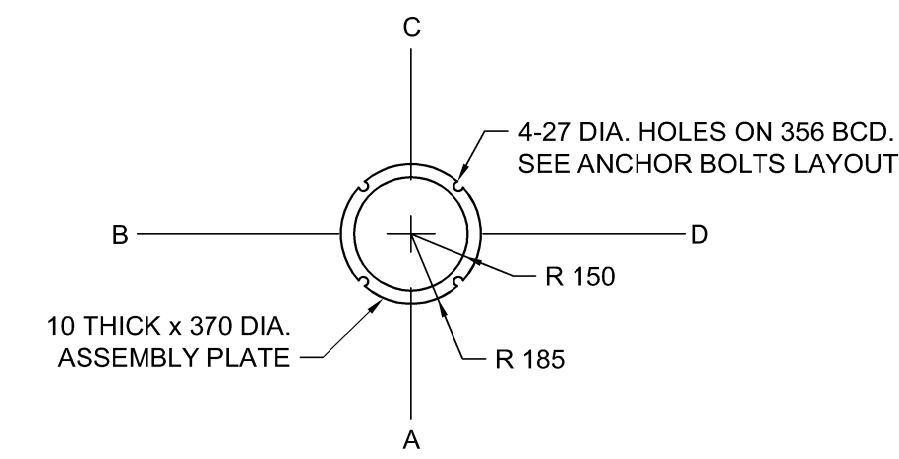
**SECTION A**  
1:20



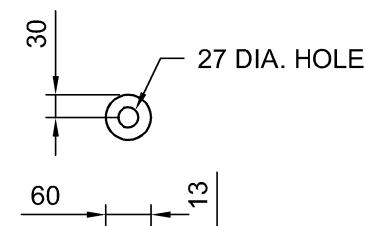
**SECTION B**  
1:20



**ANCHOR BOLTS LAYOUT**  
1:20



**ANCHOR BOLT ASSEMBLY TEMPLATE**  
1:20



**PLATE WASHER DETAIL**  
1:10

**SIGN RELOCATION PROCEDURE:**

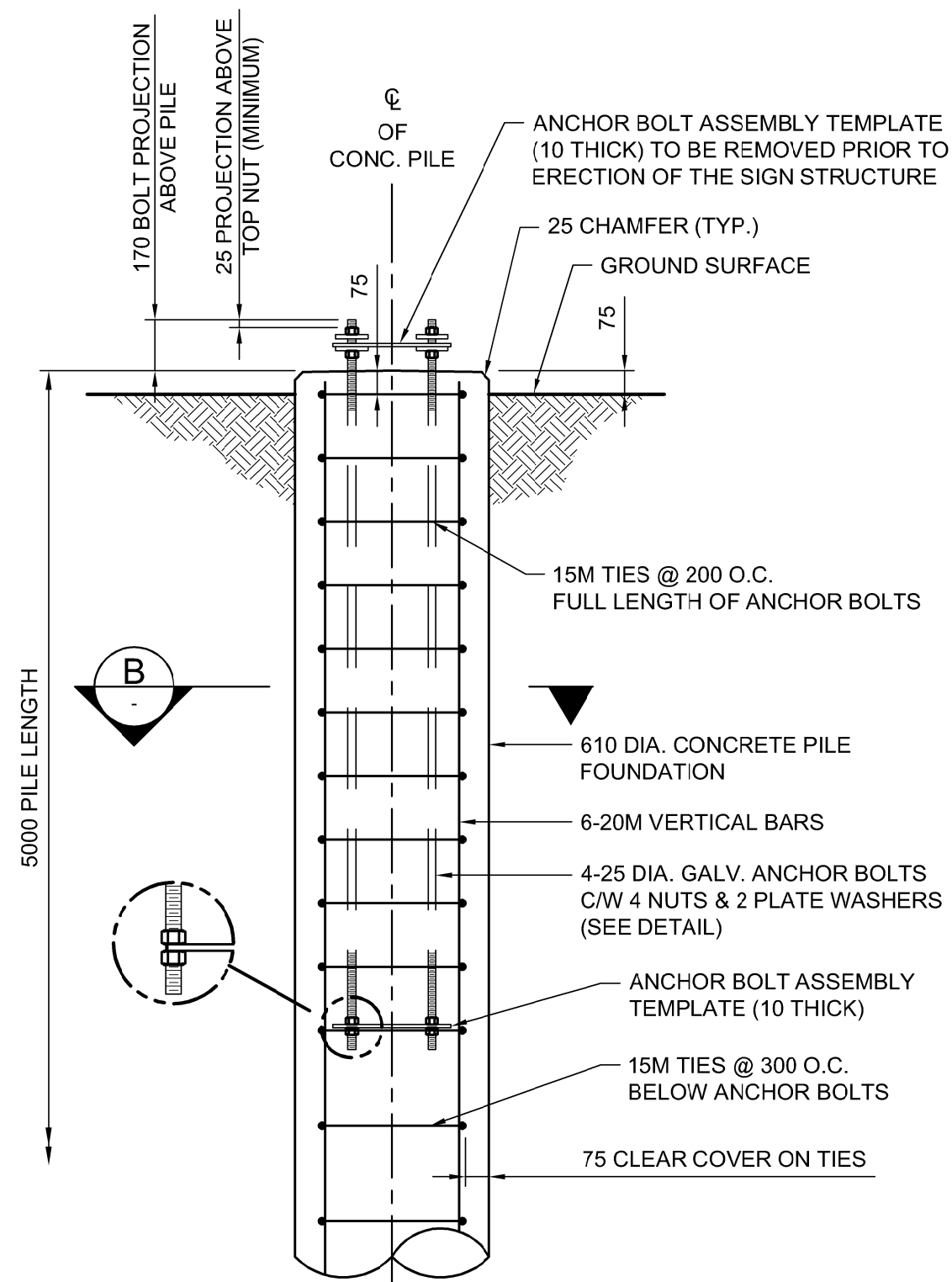
1. REMOVE ALL ATTACHMENTS FROM EXISTING SIGN POLE AND SAFELY STORE THEM.
2. REMOVE EXISTING OLD ST. VITAL BIZ SIGN POLE FROM EXISTING PILE. CARE MUST BE TAKEN TO AVOID DAMAGING EXISTING SIGN POLE.
3. REMOVE EXISTING CONCRETE PILE FOUNDATION AND BACKFILL HOLE.
4. REMOVE BREAKAWAY BASE FROM BASE OF SIGN POLE.
5. CONSTRUCT NEW CONCRETE PILE FOUNDATION. SEE PILE CONSTRUCTION NOTES.
6. INSTALL EXISTING OLD ST. VITAL BIZ SIGN POLE ON NEW CONCRETE PILE FOUNDATION. DO NOT RE-INSTALL BREAKAWAY BASE.
7. REPLACE ALL ATTACHMENTS. ENSURE CONDITION OF SIGN POLE AND ALL ATTACHMENTS ARE SIMILAR TO PRE-EXISTING CONDITION.

**NOTE:**  
ELEVATIONS SHOWN ARE APPROXIMATE.  
CONTRACTOR SHALL VERIFY ALL  
ELEVATIONS PRIOR TO INSTALLATION OF  
CONCRETE PILE FOUNDATION.

**CENTRE OF PILE LAYOUT TABLE**

STRUCTURE	STATION	O/S	NORTHING	EASTING
OLD ST. VITAL BIZ	6+326.480	16.23m NORTH	5524310.171	636308.044
(WESTBOUND FERMOR AVE CONTROL LINE)			(UTM COORDINATES)	

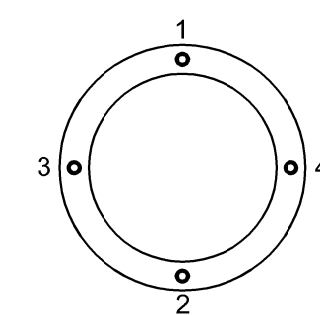
**APEGM**  
Certificate of Authorization  
**Dillon Consulting Limited (MB)**  
No. 1789 Date: 2018/02/09



**CONCRETE PILE FOUNDATION DETAIL**  
1:20

**PILE CONSTRUCTION NOTES**

- 1. REINFORCING STEEL**
  - CSA G30.18 GR. 400W
  - VERTICAL BARS FULL LENGTH OF PILE
  - HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A767
- 2. ANCHOR BOLTS**
  - ASTM F1554 GR. 55 (380 MPa)
  - 4-25 DIA. ANCHOR BOLTS 2.0m LONG
  - EACH BOLT C/W 4 NUTS & 2 PLATE WASHERS (SEE PLATE WASHER DETAIL)
  - TOP 300 THREADED UNC CLASS 2A
  - BOTTOM 100 THREADED UNC CLASS 2A
  - HOT DIP GALVANIZED FULL LENGTH, IN ACCORDANCE WITH ASTM F2329
  - B.C.D. = BOLT CIRCLE DIAMETER TO CENTRE OF BOLT GROUP
  - ANCHOR BOLTS SHALL BE ALIGNED WITH TEMPORARY STEEL TEMPLATES. PLACEMENT OF ANCHOR BOLTS AND CONCRETE WITHOUT THE TEMPLATES WILL NOT BE PERMITTED.
  - CONTRACTOR SHALL REMOVE THE TOP ANCHOR BOLT SETTING TEMPLATE, NUTS AND FORM, FOLLOWING A MINIMUM 24 HOUR CONCRETE CURING PERIOD.
  - FOLLOWING INSTALLATION OF THE STEEL STRUCTURE, TIGHTEN THE LOWER LEVELING NUTS AND UPPER ANCHOR NUTS TO A SNUG-TIGHT CONDITION, FOLLOWED BY 1/3 NUT ROTATION (+20°/-0°) OF THE UPPER ANCHOR NUTS.
  - ANCHOR BOLTS SHALL BE TIGHTENED USING A STAR PATTERN TIGHTENING SEQUENCE.
- 3. FORM TOP OF PILE WITH A TUBULAR FORM (SONOTUBE):**
  - 1m FOR DRILLED SHAFTS
  - 1.5m FOR HYDRO-EXCAVATED SHAFTS
- 4. 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 A23.1-14 (4-7%)  
v) CEMENT IN ACCORDANCE WITH CSA A23.1-14



**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.

NO.	REVISIONS	DATE	BY	DATE
0	ISSUED FOR TENDER	18/02/09	DRA	

<b>DILLON CONSULTING</b>		DESIGNED BY	DRA	CHECKED BY	SSR
		DRAWN BY	MDG	APPROVED BY	MBL
HOR. SCALE		AS SHOWN		RELEASED FOR CONSTRUCTION	
VERTICAL		AS SHOWN		DATE	
		2018/02/09		DATE	

ENGINEER'S SEAL  
PROVINCE OF MANITOBA  
**D.R.C. AMORIM**  
Member  
33215  
REGISTERED PROFESSIONAL ENGINEER  
CONSULTANT PROJECT NUMBER  
**17-5932**

**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT  
**Winnipeg**  
**FERMOR AVENUE BRIDGE OVER SEINE RIVER**  
BRIDGE RE-HABILITATION, PEDESTRIAN-CYCLIST UNDERPASS STRUCTURE AND ROADWORKS FROM ST. ANNE'S ROAD TO ARCHIBALD STREET  
CITY DRAWING NUMBER  
P-3489-2017-CS- 100  
SHEET 100 OF 100  
CONSULTANT DRAWING NUMBER  
CS- 100

G:\CAD\175932\Drawings\Structural\CHSS\175932-CHSS-CO-CO-OLD ST VITAL BIZ POLE.dwg