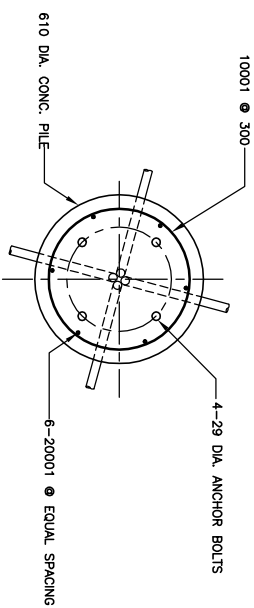
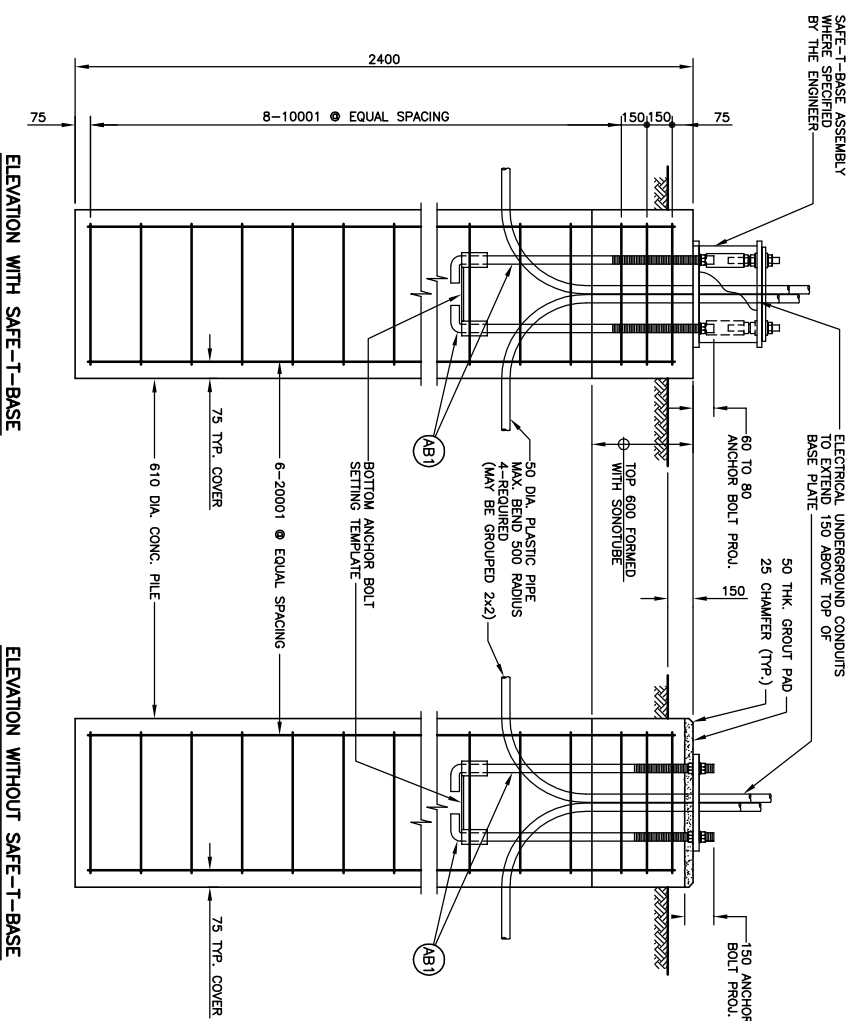


ANCHOR BOLTS LAYOUT



PLAN / CONCRETE SECTION



ELEVATION WITH SAFE-T-BASE

ELEVATION WITHOUT SAFE-T-BASE

FOUNDATION DETAIL

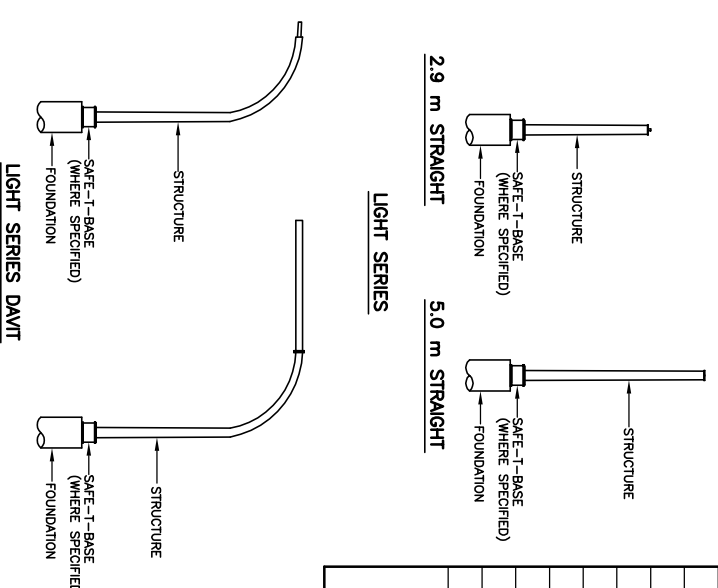
N.T.S.

**GENERAL NOTES:**  
**CONCRETE FOUNDATION PILES**

1. PRIOR TO DRILLING PILES, CONTRACTOR SHALL ENSURE THERE ARE NO CONFLICTING SURFACE OR SUBSURFACE UTILITIES.
2. DRILL PILES TO INDICATED DEPTHS ENSURING THAT SHAFTS ARE DRY AND FREE OF DEBRIS UNTIL CONCRETE IS PLACED.
3. CONCRETE
  - i) CSA A23.1 EXPOSURE CLASS S-1
  - ii) COMPRESSIVE STRENGTH  $\phi$  28 DAYS = 35 MPa
  - iii) AIR CONTENT: CATEGORY 1
4. NOTIFY THE OWNER AND TESTING FIRM A MINIMUM OF TWENTY FOUR HOURS PRIOR TO COMMENCEMENT TO CONCRETE OPERATIONS.
5. REFER TO SPECIFICATIONS FOR CONCRETE TESTING REQUIREMENTS.
6. REINFORCING STEEL TO BE GRADE 400W, DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT CONFORMING TO CSA G30.18.
7. ANCHOR BOLTS, NUTS AND WASHERS WILL BE SUPPLIED BY THE DEPARTMENT AND SET BY THE CONTRACTOR.
8. THE ANCHOR BOLTS SHALL BE ALIGNED WITH TOP AND BOTTOM SETTING TEMPLATES AND THE ANCHOR BOLTS SHALL BE SUPPLIED WITH THE ANCHOR BOLTS WITHOUT THE SETTING TEMPLATES WILL NOT BE PERMITTED.

**TOP SETTING TEMPLATE**

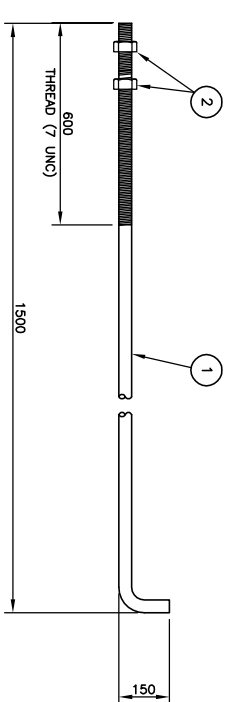
- TEMPORARY STEEL TEMPLATE LOANED TO THE CONTRACTOR BY THE DEPARTMENT.
  - AFTER COMPLETION OF CONCRETE PILE FOUNDATION WORKS, THE CONTRACTOR SHALL CLEAN THE TEMPLATE BY SANDBLASTING AND RETURN IT TO THE DEPARTMENT.
  - IF THE TEMPLATE IS DAMAGED DURING CONSTRUCTION DUE TO NEGLIGENCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING A NEW 10 mm THICK STEEL TEMPLATE TO THE DEPARTMENT AT HIS OWN EXPENSE.
- BOTTOM SETTING TEMPLATE**
- PERMANENT HOT DIP GALVANIZED STEEL ASSEMBLY FABRICATED FROM CSA G40.21 GRADE 300W AND ASTM A53 GR. B, SCH. 40 PIPE MATERIAL.
  - SUPPLIED BY THE DEPARTMENT, SEE DETAIL ON THIS SHEET.
  - 9. SOILS INFORMATION AT SITE IS AVAILABLE FROM THE OWNER.



STRUCTURES FOR LIGHT SERIES FOUNDATION TYPE F1

**BILL OF MISCELLANEOUS METAL**

LINE NO.	QTY.	REQ'D.	SIZE	MATERIAL	REMARKS
1	4		ANCHOR BOLT	G40.21-M-300W GALV. FULL LENGTH	SEE DETAIL BELOW
2	8		HALF NUTS	ASTM A194 GRADE 2H	
3					
4					
5					



ANCHOR BOLT ASSEMBLY MK. AB1  
(STOCK CODE NO. 7558)

**NOTES:**

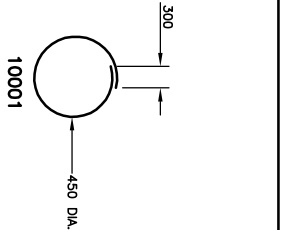
1. ANCHOR BOLTS SHALL BE SOLID ROUNDS G40.21-M-300W.
2. ALL PARTS OF ANCHOR BOLT ASSEMBLY SHALL BE HOT DIP GALVANIZED (FULL LENGTH) IN ACCORDANCE WITH ASTM A123-09 (PLUS LATEST REVISIONS) WITH NET RETENTION OF 610 g/m<sup>2</sup>.
3. ALL NUTS SHALL BE TAPPED OVERSIZE PRIOR TO GALVANIZING.
4. ALL NUTS AND WASHERS SHALL BE ASSEMBLED BY THE SUPPLIER PRIOR TO DELIVERY.

**BILL OF REINFORCING STEEL**

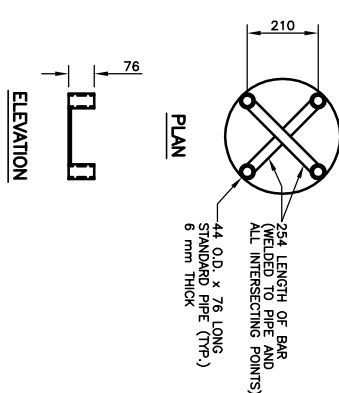
MK. NO.	SIZE	QTY.	LENGTH (mm)	MASS (kg)	LINE NO.
20001	20M	6	2250	32.40	1
10001	10M	10	1715	13.72	2
					3
					4
					5
					6
					7
					8
					9
					10

TOTAL MASS OF REINFORCING STEEL = 46.12 kg  
TOTAL VOLUME OF C.I.P. CONC. PILES = 0.700 m<sup>3</sup>

**BENDING DIAGRAM**



**BOTTOM ANCHOR BOLT SETTING TEMPLATE**



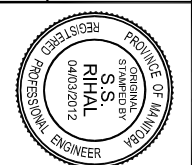
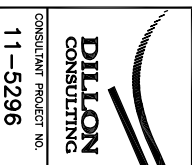
**TRAFFIC SIGNAL AND PEDESTRIAN CORRIDOR STRUCTURES**

**LIGHT SERIES FOUNDATION TYPE F1 ANCHOR BOLTS, CONC. PILE, & PILE REINFORCEMENT**

DATE	BY	DESCRIPTION



REDUCED DRAWING  
N.T.S.



DESIGN	BY: _____	CDM	DIRECTOR	DATE
CHECKED	BY: _____	SSR	TRAFFIC ENGINEERING	COMPONENT No.
SCALE	AS SHOWN			
CHECKED	BY: _____	SSR	RELEASED FOR CONSTRUCTION	SHEET No. <b>F1</b>