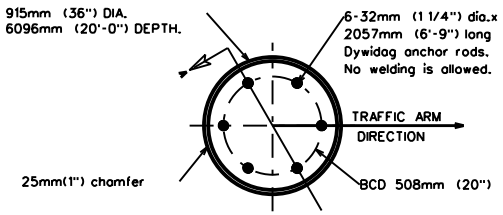
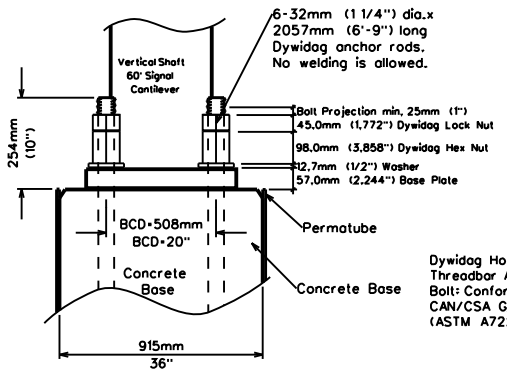
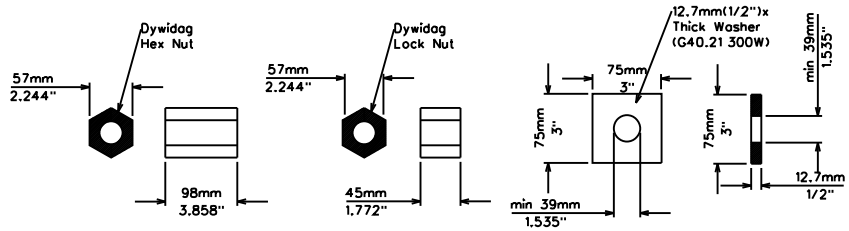


CONCRETE BASE-TOP VIEW



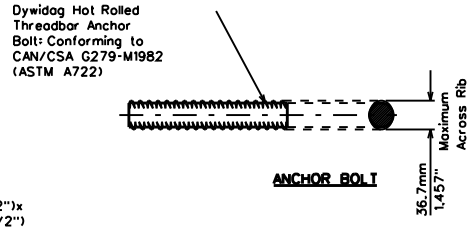
DETAILS 'X'



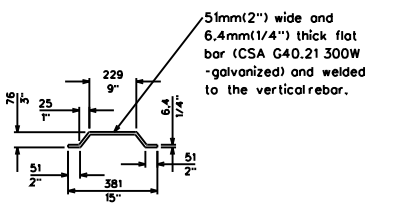
DYWIDAG HEX NUT

DYWIDAG HEX NUT

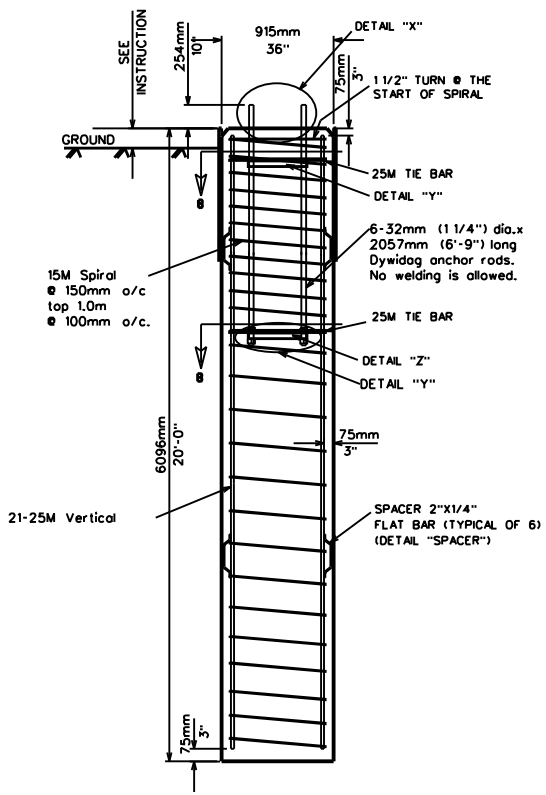
WASHER



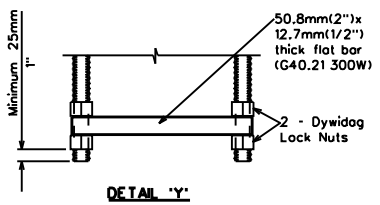
ANCHOR BOLT



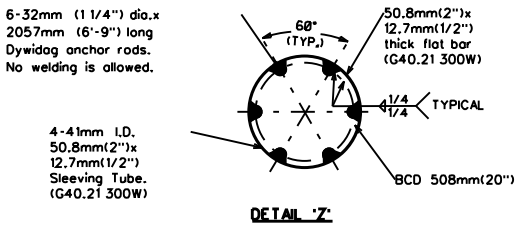
DETAIL 'SPACER'
6 REQUIRED



SEC A-A



DETAIL 'Y'



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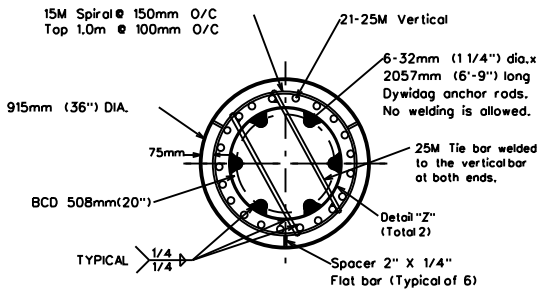

SEC B-B

REBAR:

1. Reinforcing rebars to grd. 400W, CSA-G30.18M. All outer reinforcing steel shall have a minimum of 75mm (3") concrete cover. Welding shall conform to CSA W59, 47.1.

CONCRETE:

2. Concrete: -30 MPa in 7 days
-5% - 8% air
-70mm - 100mm slump
-Type 50 cement
-Other requirements to satisfy the City of Edmonton's "Specification for Structural Footing"

3. All concrete works in/c placing, consolidation & winter protection shall be done in accordance with the latest version of CSA, CAN3-A23.1. When concrete is being placed, it shall not be placed freely from the end of the chute or elephant trunk more than 1.5m. Concrete base can not be placed if the air temperature is at or below 0 C, or when there is a probability of the temperature falling below 0 C within 24 hours of placing concrete

ANCHOR BOLT:

4. All anchor rods to be of Dywidag Hot Rolled Threadbar, steel grade 830/1035 MPa conforming to CSA G279-M82 (ASTM A 722). Each Dywidag bolt c/w 1-Dywidag hex nut and 3-Dywidag locked nut, 1-12.7mm (1/2") thick washers (G 40.21 300W-Galvanized).

SOIL:

5. Soil is assumed to be homogeneous firm clay. Top 1.0m has been neglected in the design. If unsuitable soil is found to be more than 1.0m deep, the pile length must be increased to accommodate such additional depth of unsuitable soil. If site condition does not concur with the firm clay assumption, it must be notified to the Project Engineer immediately.

6. Top of pile to be placed at 0-25mm above the concrete if installed in the sidewalk, 150mm above ground if installed in level ground.

7. For pile on sloped ground steeper than 1 vertical to 4 horizontal contact designer for a deeper pile.

DESIGN LOAD:

8. Base Reactions as per steel structure manufacturer's drawings.
Valmont - # 9034-08-009-01 dt. Nov 6, 2008

UNFACTORED

Fx (kN)	Fy (kN)	Fz (kN)	Mx (kNm)	My (kNm)	Mz (kNm)
3.7	18.6	22.7	131.7	98.8	131.3

Note:
Dimensions are shown in metric unit with imperial. In the event of any discrepancy, the metric unit will prevail.

For easy installation Dywidag hex nut height has been provided 98mm(3.858") instead of 73mm(2.874"-Standard).

CITY OF Edmonton
TRANSPORTATION SERVICES
TRAFFIC OPERATIONS BRANCH

TRAFFIC SIGNALS

18.29m(60') ARM SIGNAL CANTILEVER

STRUCTURE CONCRETE BASE 508mm(20") BCD

NOT TO SCALE | DWG. NO. 14324