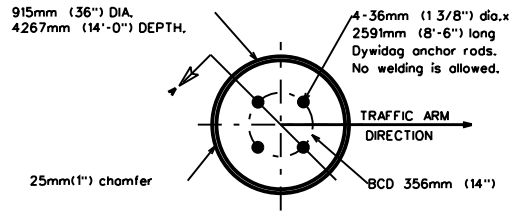
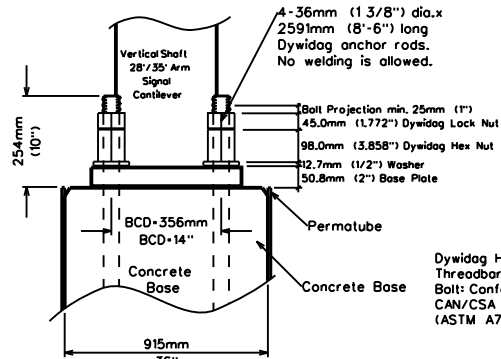


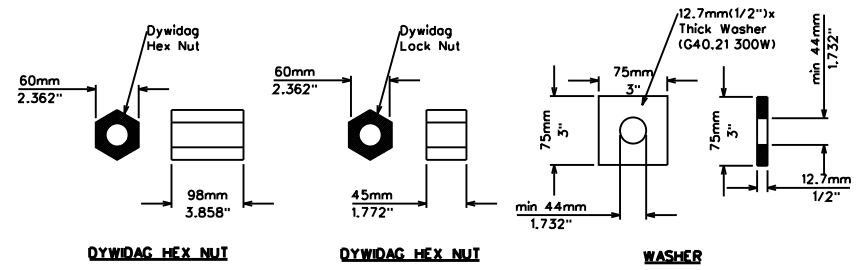
915mm (36") DIA.
4267mm (14'-0") DEPTH.



CONCRETE BASE-TOP VIEW

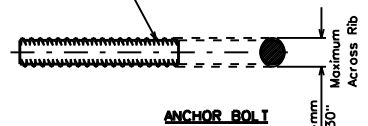


DETAILS 'X'

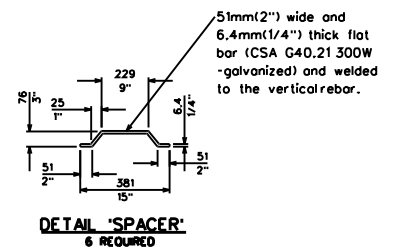


DYWIDAG HEX NUT **DYWIDAG HEX NUT** **WASHER**

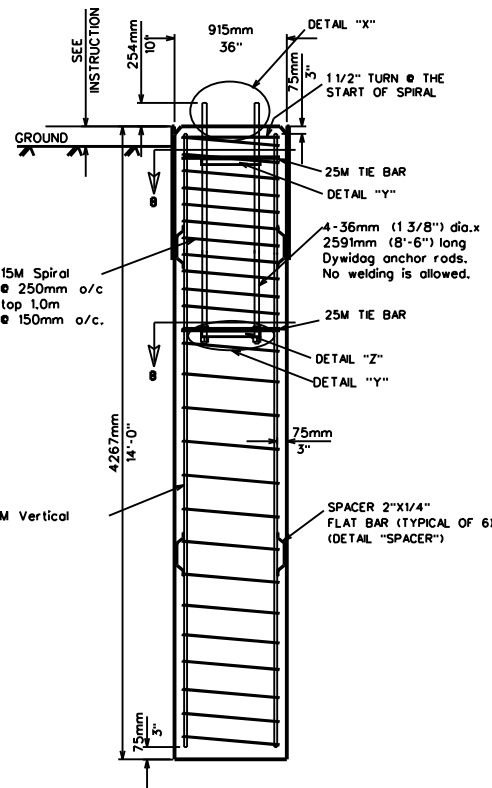
Dywidog Hot Rolled Threadbar Anchor
Bolt: Conforming to CAN/CSA G279-M1982 (ASTM A722)



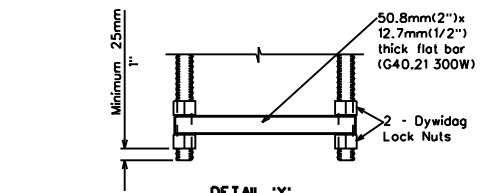
ANCHOR BOLT



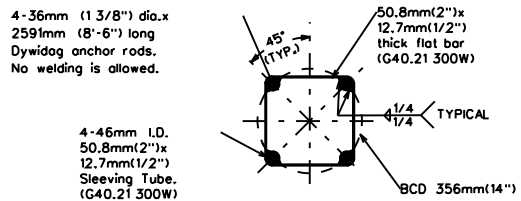
DETAIL 'SPACER'
6 REQUIRED



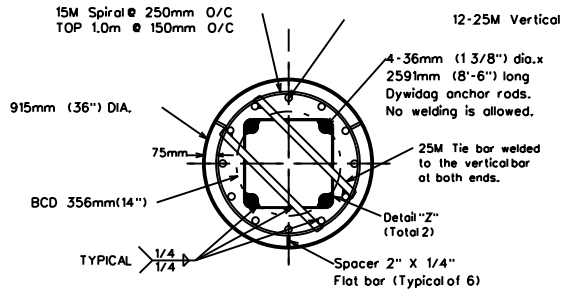
SEC A-A



DETAIL 'Y'



DETAIL 'Z'



SEC B-B

REBAR:

1. Reinforcing rebars to grad. 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:

- 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"
- All concrete works in/c placing, consolidation & winter protection shall be done in accordance with the latest version of CSA, CAN3-A25.1. 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 Dywidog Hot Rolled Threadbar, steel grade 830/1035 MPa conforming to CSA G279-M82 (ASTM A 722). Each Dywidog bolt c/w 1-Dywidog hex nut and 3-Dywidog locked nut, 1-12.7mm (1/2") thick washers (G 40,21 300W-Galvanized).

SOIL:

- Soil is assumed to be homogeneous firm clay. Top 1.0m has been neglected in the design. If unsuitable soils 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.
- 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.
- For pile on sloped ground steeper than 1 vertical to 4 horizontal contact designer for a deeper pile.

DESIGN LOAD:

- Base Reactions as per steel structure manufacturer's drawings.
8.53m(28') Arm Signal Cantilever-Valmont - # 9034-48-010-01 dt, Nov 6, 2008
10.67m(35') Arm Signal Cantilever-Valmont - # 9034-48-011-01 dt, Nov 6, 2008

UNFACTORED

F _x (kN)	F _y (kN)	F _z (kN)	M _x (kNm)	M _y (kNm)	M _z (kNm)
2.9	14.5	12.8	105.6	45.7	60.3

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

	TRANSPORTATION SERVICES TRAFFIC OPERATIONS BRANCH
	TRAFFIC SIGNALS
	8.53m(28') OR 10.67m(35') ARM CANTILEVER STRUCTURE CONCRETE BASE 356mm(14") BCD
NOT TO SCALE	DWG. NO. 14161