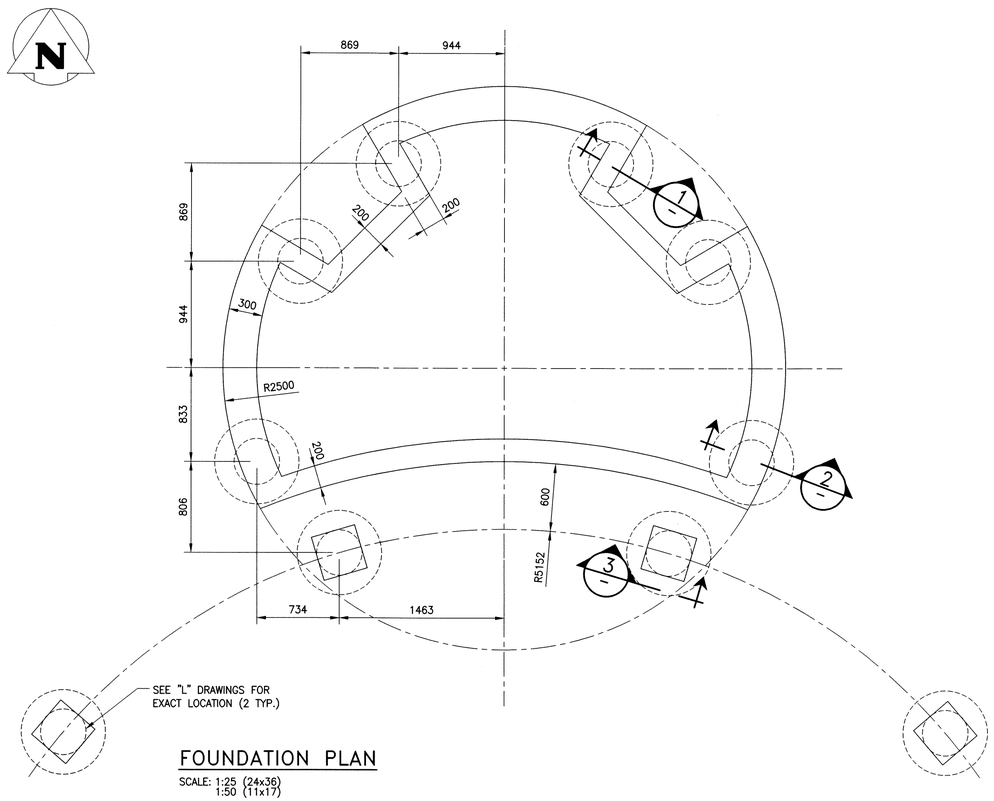
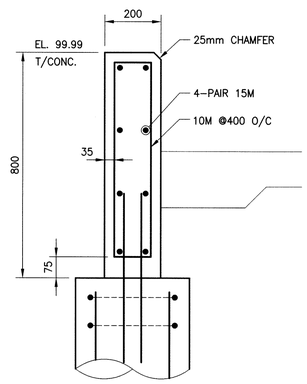


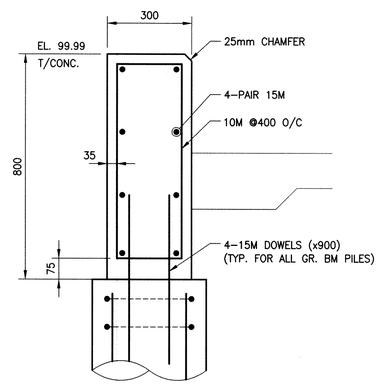
FOUNDATION PLAN

SCALE: 1:25 (24x36)
1:50 (11x17)



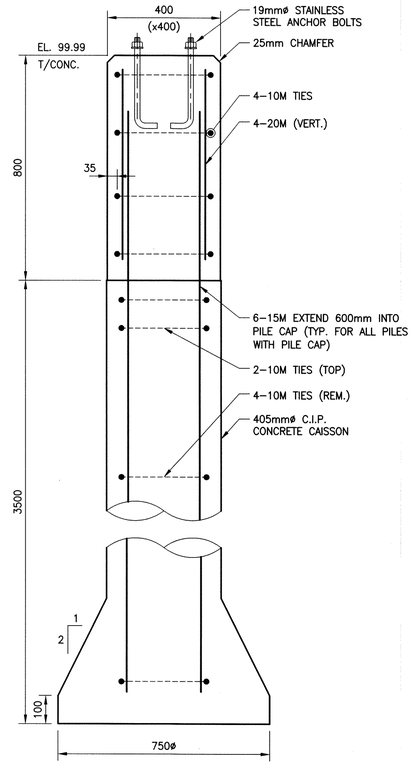
1 SECTION

SCALE: 1:10 (24x36)
1:20 (11x17)



2 SECTION

SCALE: 1:10 (24x36)
1:20 (11x17)



3 SECTION – 10 TYPICAL

SCALE: 1:10 (24x36)
1:20 (11x17)

NOTES:

FOUNDATIONS (C.I.P. CONCRETE BELL PILES)

1. FOUNDATIONS SHALL BE CAST–IN–PLACE CONCRETE BELL PILES AS SHOWN ON DRAWINGS.
2. CONCRETE PILES HAVE BEEN DESIGNED FOR AN AVERAGE ALLOWABLE BEARING OF 120 kPa.
3. THE PILING CONCTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND SERVICES IN PILING AREA WHETHER SHOWN OR NOT. EXPOSE ALL SERVICES CLOSE TO CAISSONS AS REQUIRED.
4. PILES SHALL NOT BE MORE THAN 50mm OUT OF POSITION LATERALLY AT THE TOP AND NOT MORE THAN 2% OUT OF PLUMB.
5. REINFORCE ALL PILES AS DETAILED ON THE DRAWINGS. REFER TO CONCRETE NOTES FOR CONCRETE REQUIREMENTS. INSTALL EACH PILE AS A CONTINUOUS POUR.
6. VIBRATE CONCRETE IN ALL PILES.

REINFORCING STEEL

1. REINFORCING STEEL TO BE NEW DEFORMED BILLET STEEL BARS CONFORMING TO CAN/CSA G30.18–M92. GRADES TO BE: 400 MPa FOR 15M BARS AND LARGER; 300 MPa FOR 10M BARS.
2. SUBMIT SHOP DRAWINGS WHICH CLEARLY INDICATE BAR SIZES, SPACINGS, LOCATIONS & QUANTITIES OF REINFORCING STEEL, BENDING & CUTTING SCHEDULES, SUPPORTING & SPACING DEVICES, ETC. FOR REVIEW PRIOR TO FABRICATION. DETAIL, FABRICATE AND PLACE REINFORCING IN ACCORDANCE CSA A23.1, CSA A23.3 AND ACI 315–80 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" EXCEPT AS NOTED. LAP STEEL 36 BAR DIAMETERS (MINIMUM) UNLESS NOTED OTHERWISE.
3. BEND ALL HORIZONTAL REINFORCING 300mm AROUND CORNERS OR PROVIDE ADDITIONAL 600x600mm ANGLE BARS.
4. REINFORCING STEEL SHALL BE CLEAN, FREE OF RUST, DIRT, LOOSE SCALE, OIL, GREASE OR ANY OTHER MATERIAL WHICH WOULD REDUCE BOND WITH THE CONCRETE.
5. TIE, SUPPORT AND SPACE ALL REINFORCING STEEL WITH PROPER APPROVED DEVICES DESIGNED FOR USE IN REINFORCED CONCRETE, TO PREVENT DISPLACEMENT OF REINFORCING AND ENSURE SPECIFIED CONCRETE COVER.
6. PROVIDE MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS SHOWN ON DRAWINGS

CONCRETE

1. CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CAN/CSA–A23.1/ A23.2 (LATEST). SEE BELOW FOR MIX REQUIREMENTS.
2. CONCRETE MATERIALS, FORMING, PLACING, FORM REMOVAL, REINFORCING, ETC. TO ACI RECOMMENDATIONS AND ACCEPTABLE PRACTICE.
3. MIX WATER SHALL BE POTABLE. CALCIUM CHLORIDE SHALL NOT BE USED.
4. GRANULAR BASE TO BE PLACED ON GRADE COMPACTED TO 98% STD PROCTOR. DO NOT COMPACT FROZEN GRADE OR PLACE GRANULAR BASE ON FROZEN GROUND.
5. PROVIDE ADEQUATE PROTECTION FOR CONCRETE DURING CURING PERIOD.
6. CONCRETE MIX DESIGN SHALL BE PROPORTIONED AS FOLLOWS:

BEAMS & PILES	28 DAY COMP. STRENGTH	32 MPa
	CEMENT	TYPE HS
	W/C RATIO	0.45
	AGGREGATE SIZE (MAX.)	20mm
	ENTRAINED AIR	4%–6%
	SLUMP (MAX.)	90mm (±10mm)

NO.	YY/MM/DD	DESCRIPTION	BY
0	10/04/30	NOT FOR CONSTRUCTION FOR TENDER PURPOSES ONLY	

REVISIONS / ISSUE

CLIENT:
Winnipeg
CITY OF WINNIPEG
PLANNING, PROPERTY and DEVELOPMENT
CIVIC ACCOMODATIONS DIVISION

PROJECT:
SITE WORKS AT
DEER LODGE
COMMUNITY CENTRE

DWG. DESCRIPTION:
STRUCTURAL
PLANTER, BENCH AND SIGN
FOUNDATIONS

KGS GROUP CONSULTING ENGINEERS

DESIGN BY: RJL	DATE (YY/MM/DD): 10/04/12
DESIGN CHECK: JWW	DATE: 10/04/30
DRAWN BY: MBB	DATE: 10/04/12
DWG CHECK:	DATE: 10/04/30

DWG. NO. 10–0109–03 S01 REV: 0

APEGM Certificate of Authorization KGS Group No. 245 Date: 30/04/10

ENG. STAMP: PROVINCE OF MANITOBA R.J. LONG REGISTERED PROFESSIONAL ENGINEER