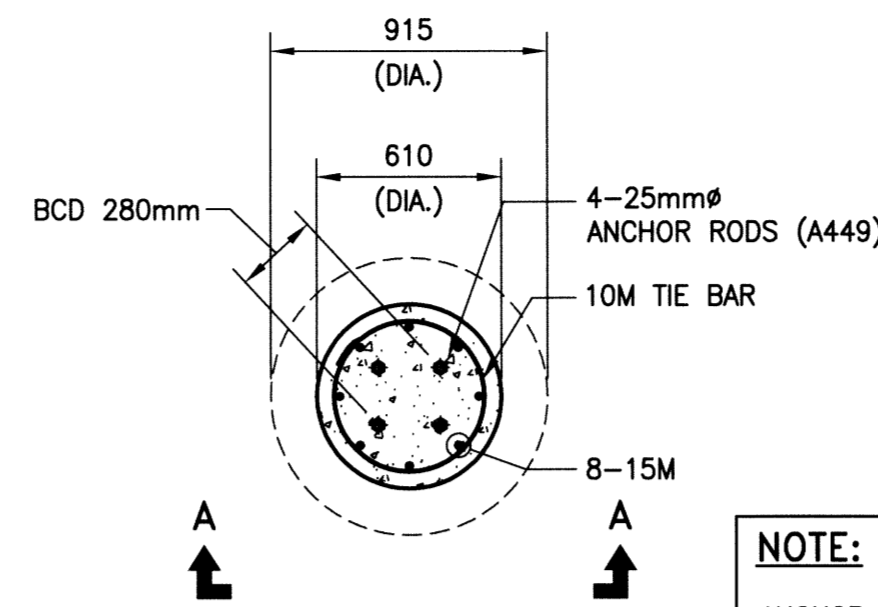


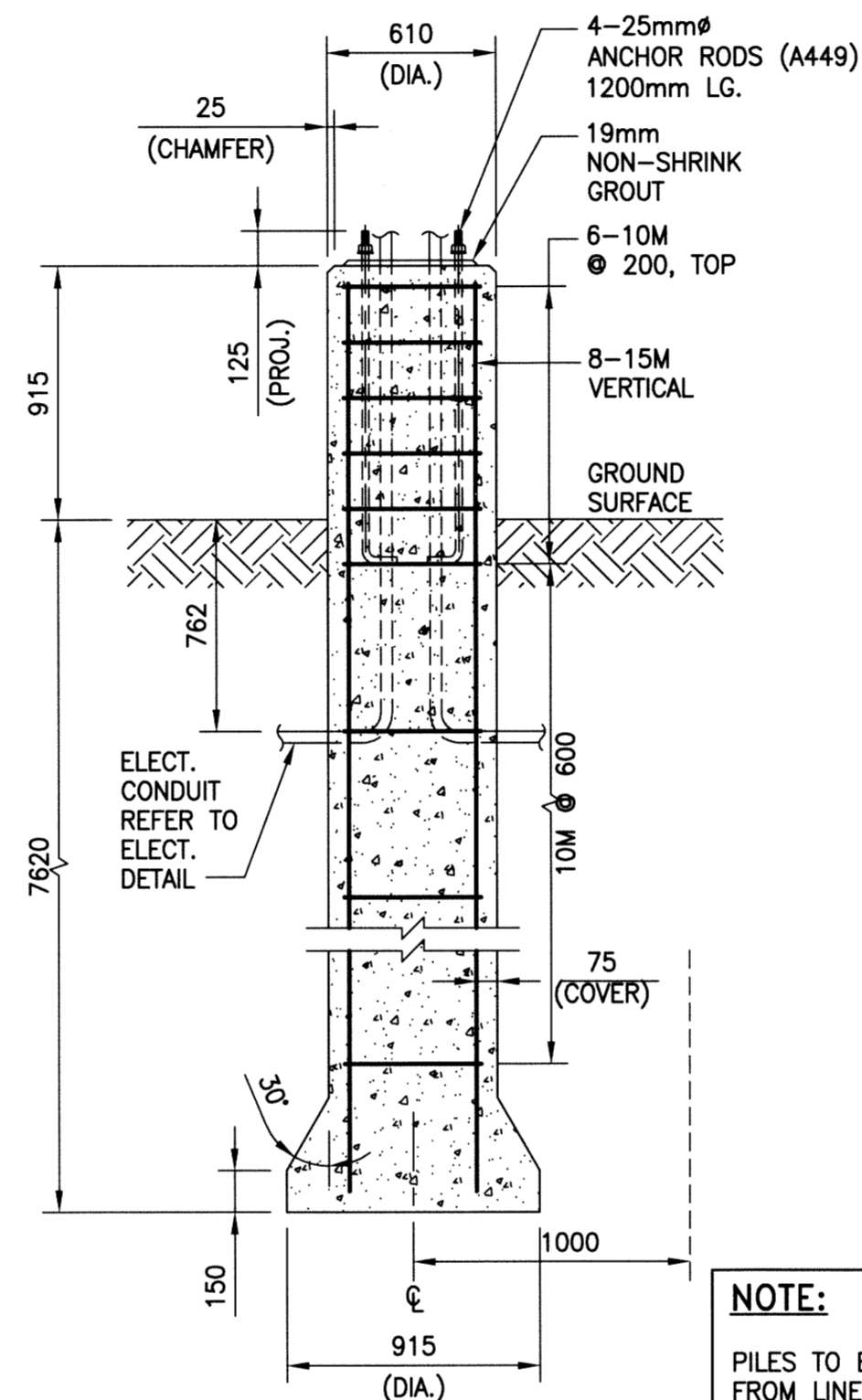
SITE PLAN - PILE LOCATIONS

SCALE: 1:300 METRIC (A1)
1:600 METRIC (A3)



1 **DETAIL - PILE**
SCALE: 1:25 METRIC (A1)
1:50 METRIC (A3)

NOTE:
ANCHOR ROD LOCATION AND PROJECTION TO SUIT LIGHT STANDARD POLE BASEPLATE. CONFIRM DETAILS OF BASEPLATE AND ANCHORS PRIOR TO CONSTRUCTION.



SECTION A-A

SCALE: 1:25 METRIC (A1)
1:50 METRIC (A3)

NOTE:
PILES TO BE LOCATED 1m OFFSET FROM LINE OF RINK BOARDS AND BEYOND GATE OPENINGS.

GENERAL NOTES:

- CONTRACTOR SHALL ENSURE THAT ALL BURIED SERVICES ARE LOCATED AND MARKED PRIOR TO EXCAVATION.
- EXISTING BUILDINGS, EQUIPMENT AND SERVICES SHALL BE PROTECTED FROM ANY DAMAGE THROUGHOUT CONSTRUCTION.
- EXISTING SERVICES AND SUPPORTS WHICH INTERFERE ARE TO BE RELOCATED UPON APPROVAL BY CONTRACT ADMINISTRATOR.
- CONTRACTOR SHALL CONFIRM ALL DIMENSIONS, ELEVATIONS, CONDITIONS AND CLEARANCES ON THE SITE PRIOR TO CONSTRUCTION.
- DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE PROJECT TECHNICAL SPECIFICATIONS.

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

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE CONTRACT DOCUMENTS AND THE PILING SPECIFICATION.
- FOUNDATIONS SHALL BE CAST-IN-PLACE CONCRETE END-BEARING PILES AS SHOWN ON DRAWINGS.
- CONCRETE PILES HAVE BEEN DESIGNED FOR AN AVERAGE ALLOWABLE BEARING PRESSURE VALUE OF 150kPa AS RECOMMENDED BY KGS GROUP IN THEIR REPORT "GEOTECHNICAL ASSESSMENT FOR THE STURGEON HEIGHTS COMMUNITY CENTRE INC.-SITE DEVELOPMENT PROJECT" DATED 2012/11/05.
- INSTALLATION OF ALL CONCRETE PILES SHALL BE INSPECTED AND APPROVED BY THE CONTRACT ADMINISTRATOR, PRIOR TO PLACEMENT OF CONCRETE.
- THE CONTRACTOR 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 PILING AS REQUIRED.
- PILES SHALL NOT BE MORE THAN 50mm OUT OF POSITION Laterally AT THE TOP AND NOT MORE THAN 2% OUT OF PLUMB.
- REINFORCE ALL PILES AS DETAILED ON THE DRAWINGS. REFER TO CONCRETE NOTES FOR CONCRETE REQUIREMENTS. INSTALL EACH PILE AS A CONTINUOUS POUR.
- VIBRATE TOP 4.5m OF CONCRETE IN ALL PILES.
- SLEEVING WHERE REQUIRED SHALL BE INCLUDED IN THE PILING CONTRACT.

REINFORCING STEEL:

- REINFORCING STEEL TO BE NEW DEFORMED BILLET STEEL BARS CONFORMING TO CSA G30.18 (LATEST), GRADE TO BE 400 MPa.
- REINFORCING STEEL SHALL BE CLEAN, FREE OF RUST, DIRT, LOOSE SCALE, OIL, GREASE OR ANY OTHER MATERIAL WHICH WOULD REDUCE BOND WITH THE CONCRETE.
- 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 WITH CSA A23.1 (LATEST), CSA A23.3 (LATEST) AND ACI SP-66 (LATEST) UNLESS NOTED. LAP STEEL 36 BAR DIAMETERS (MINIMUM) UNLESS NOTED.
- 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.
- PROVIDE MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS:

C.I.P. PILES 75mm

CONCRETE:

- CONCRETE MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH CSA A23.1 (LATEST). SEE BELOW FOR MIX REQUIREMENTS.
- ADMIXTURES SHALL NOT BE USED UNLESS SPECIFIED HEREIN OR APPROVED BY THE CONTRACT ADMINISTRATOR. CALCIUM CHLORIDE SHALL NOT BE USED.
- MIX WATER SHALL BE POTABLE.
- DESIGN, FABRICATE AND ERECT FORMWORK/SHORING IN ACCORDANCE WITH CAN/CSA-S269.3 (LATEST). ALLOW SUFFICIENT CONCRETE CURING TIME PRIOR TO REMOVAL.
- CONCRETE FINISHING SHALL MEET THE REQUIREMENTS OF CSA A23.1 (LATEST).
- FORM RELEASE AGENT SHALL BE BIODEGRADABLE, NON-STAINING AND NON-VOLATILE.
- PROVIDE ADEQUATE COLD/HOT WEATHER PROTECTION AS REQUIRED DURING CURING PERIOD.
- PLACE AND SECURE ALL EMBEDDED ANCHORS, WELD PLATES, SLEEVES, BUCKS, DOWELS, INSERTS, WATERSTOPS, ETC., PRIOR TO PLACING CONCRETE. CO-ORDINATE WITH ALL TRADES FOR EMBEDDING OF ALL OTHER, CONDUIT, SERVICES, BLOCKING, ETC.
- ALL EXPOSED CORNERS TO HAVE 25mm CHAMFER FILLET UNLESS NOTED.
- CAST-IN-PLACE ANCHOR BOLTS SHALL MEET REQUIREMENTS OF ASTM A449 (LATEST).
- THE CONCRETE SUPPLIER SHALL BE CERTIFIED TO MEET THE REQUIREMENTS OF CSA A23.1.
- THE CONCRETE SUPPLIER SHALL SUBMIT CONCRETE MIX DATA SUBMISSION FORMS FOR EACH TYPE OF CONCRETE SPECIFIED FOR REVIEW PRIOR TO BATCHING ANY CONCRETE.

CONCRETE MIX DESIGNS:

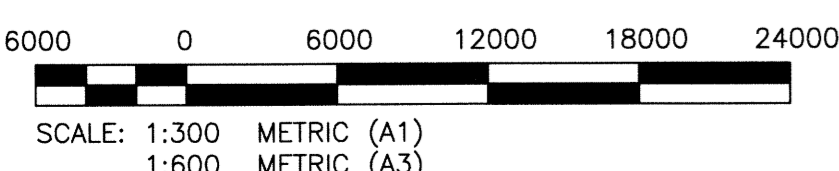
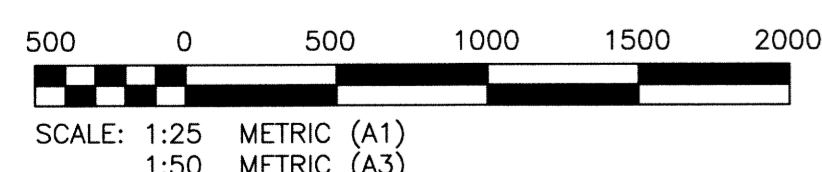
- CONCRETE MIX DESIGN SHALL BE PROPORTIONED TO MEET THE FOLLOWING PERFORMANCE REQUIREMENTS:

C.I.P. PILES, PILE CAPS, FOOTINGS & RAFT SLABS:		
EXPOSURE CLASS	S-2	
MIN. 28 DAY COMP. STRENGTH	32 MPa	
MIN. 56 DAY COMP. STRENGTH	35 MPa	
CEMENT TYPE	HS	
MAX. W/C RATIO	0.45	
MAX. AGGREGATE SIZE	20mm	
ENTRAINED AIR CONTENT	5%-8%	
SLUMP	90±30mm	

LIGHTING POLE:

- FOUNDATION AND ANCHOR BOLTS DESIGNED TO ACCOMMODATE STANDARD OCTAGONAL POLE BY VALMONT WCE:

30' HEIGHT
 TOP TENON 60mm O.D.
 BASE PLATE 295mm SQ.
 BASE PLATE 19mm THK.
 BOLT CIRCLE DIAMETER 280mm



File Name: F:\Projects\2012\12-0107-016\Doc\Control\ToBeIssued\DWG\12-0107-016_S01-Rev 0.dwg - Tab: S01 Plotted By: DDeroche 13/03/27 [Wed 3:23pm] A:1/Plot SCALE: 1=

B.M. ELEV.	XX-XXX 2XX.XXX	DESCRIPTION	
0	ISSUED FOR TENDER	13/03/27	LL
NO.	REVISIONS	DATE	BY
		12/12/07	

		DESIGNED BY	CC	CHECKED	RJL
		DRAWN BY	FBV	APPROVED	RJH
HOR. SCALE: AS NOTED VERTICAL: AS NOTED		RELEASED FOR CONSTRUCTION:			
NO.		DATE	DATE	12/12/07	

ENGINEER'S SEAL

CONSULTANT DRAWING NO. 12-0107-016_S01

THE CITY OF WINNIPEG
 PLANNING, PROPERTY AND DEVELOPMENT

PROJECT TITLE: STURGEON HEIGHTS COMMUNITY CENTRE SITE DEVELOPMENT PROJECT BID OPPORTUNITY 169-2013

SHEET 03 OF 09

COMPUTER FILE NAME: 12-0107-016

CITY DRAWING NUMBER: S01

STRUCTURAL - SITE PLAN AND SECTIONS

APEGM
 Certificate of Authorization
 KGS Group
 No. 245