

GENERAL NOTES:

1. THIS DRAWING SHOWS THE LAYOUT OF THE 750kVA TRANSFORMER, TRANSFORMER INCOMING FUSED DISCONNECT, METERING ON PRIMARY SIDE AND CSTE ON SECONDARY SIDE FOR FUTURE OPTIONAL METERING IN ORDER TO ILLUSTRATE THE DESIGN AND LAYOUT INTENT. THIS DRAWING IS NOT AN ACCURATE OR EXACT LAYOUT OF EQUIPMENT SHOWN. MEASUREMENT AND DETAILS OF EQUIPMENT MUST BE TAKEN FROM THE VENDOR SHOP DRAWINGS. DO NOT TAKE EXACT MEASUREMENT FROM THIS DRAWING. COORDINATE EXACT LOCATION OF CONDUIT WITH EQUIPMENT SHOP DRAWINGS PRIOR TO CONCRETE POUR.
2. TRANSFORMER CLEARANCES SHALL BE IN ACCORDANCE WITH CEC RULE 26-242 (28).
3. PERIMETER BURIED GROUND CABLE AND GROUND RODS SHALL BE INSTALLED IN UNDISTURBED NATIVE SOIL (IE. NOT LAYED IN GRAVEL OR SAND OR BUILT-UP AREAS).
4. ALL GROUND CABLES SHALL BE 4/0 AWG, COPPER.
5. ALL SURFACE RUN CABLING SHALL BE PHYSICALLY PROTECTED BY EMBEDDING THE CABLE WITHIN THE CONCRETE SLAB, BY DIRECT BURIAL OR BY SURFACE RUN CONDUIT. EXPOSED GROUND CABLES LAID IN TRAFFIC AREAS SUCH AS WALKWAYS OR LAND ON THE CONCRETE SLAB ARE NOT ACCEPTABLE.

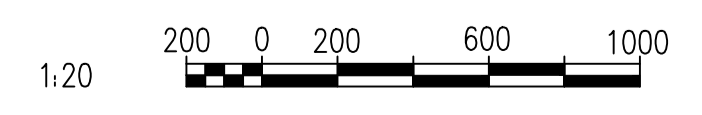
LEGEND:

- GUARD POST 120mmØ x1500mm FILLED WITH CONCRETE AS PER CITY OF WINNIPEG DRAWING SCD-135.
- #4 / 0 COPPER GROUND CABLE
- 6000mm LONG (19mm Ø) COPPER CLAD GROUND ROD WITH GROUND WELL
- CABLE COMPRESSION CONNECTION
- CADWELD OR SERVIT CONNECTION

CONSTRUCTION NOTES:

- 1 PERIMETER GROUND SHALL BE BURIED 300-500 mm BELOW FINISHED GRADE. ALL BELOW GRADE CONNECTIONS SHALL BE COMPRESSION OR CADWELDED.
- 2 CONNECTIONS TO GROUND BUS BAR AND XO TERMINAL OF TRANSFORMER SHALL BE CONTINUOUS FROM GROUND ELECTRODE USING A FEED-THROUGH COMPRESSION CONNECTOR ON GROUND BAR. LOCATION OF EQUIPMENT GROUND BUS AND XO TERMINAL TO BE CONFIRMED.
- 3 PROVIDE GROUND CONNECTION TO SERVICE GROUND. GROUND CABLE SHALL BE BOLTED ON A WELDED STEEL TAB USING 2-HOLE NEMA LONG BARREL COMPRESSION LUGS.
- 4 PROVIDE #4/0 AWG BARE COPPER GROUND RUN IN 53mmØ CONDUIT SLEEVE TO GROUND GRID (TO BE CONFIRMED UPON EQUIPMENT DETAIL INFORMATION).
- 5 PROVIDE 103mmØ CONDUIT EMBEDDED IN CONCRETE SLAB FOR SECONDARY CABLES FROM THE TRANSFORMER TO CSTE CABINET. DETERMINE EXACT LOCATION FROM THE SHOP DRAWINGS OF THE TRANSFORMER AND CSTE. PROVIDE WATERPROOF SEALING OF CABLES AFTER INSTALLATION.
- 6 PROVIDE 103mmØ CONDUIT EMBEDDED IN CONCRETE SLAB FOR PRIMARY CABLE FROM THE 5kV FUSIBLE DISCONNECT TO TRANSFORMER. DETERMINE EXACT LOCATION FROM THE SHOP DRAWINGS OF THE TRANSFORMER AND DISCONNECT. PROVIDE WATERPROOF SEALING OF CABLES AFTER INSTALLATION.
- 7 THE CONDUIT SLEEVES FOR INCOMING AND OUTGOING CABLES SHALL BE EXTENDED 500mm PAST THE EDGE OF THE CONCRETE PAD AND BE SEALED AROUND THE CABLING.
- 8 PROVIDE AND INSTALL OIL CONTAINMENT BARRIER ANGLE. REFER TO DETAIL 'D' ON DRAWING 1-0127A-B0002.

SERVICE EQUIPMENT LAYOUT
SCALE: 1 : 20



NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR TENDER, BID. OP. 331-2016	2016/05/06	BJC	DB

SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080	
DESIGNED BY: B. CLEVEN	CHECKED BY: D. BECKER
DRAWN BY: M.J. PERSSON	APPROVED BY: I. PARKINSON
SCALE: 1:20	ISSUED FOR CONSTRUCTION BY: K. ZUREK DATE: 2016/05/06
DATE: 2016/04/11	DATE: 2016/05/06
CONSULTANT NO.:	

ENGINEER'S SEAL

ORIGINAL DRAWING
SEALED BY:
B. CLEVEN
SNC-LAVALIN
MEMBER #31479
2016/05/06
REV. 00

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

COCKBURN FLOOD AND WASTEWATER PUMPING STATION
2016 UPGRADES
INSTALLATION DETAILS
SERVICE EQUIPMENT

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0127A-E0014	001	00	A1

1-0127A-E0003	ELECTRICAL SITE PLAN
1-0127A-E0002	ELECTRICAL SINGLE LINE
DRAWING NUMBER	REFERENCE DRAWINGS