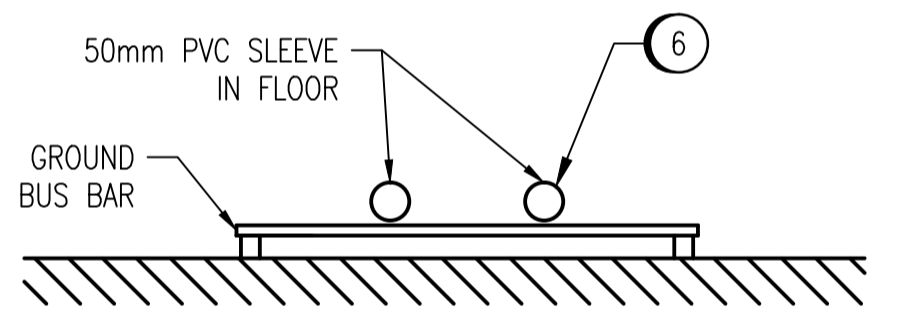


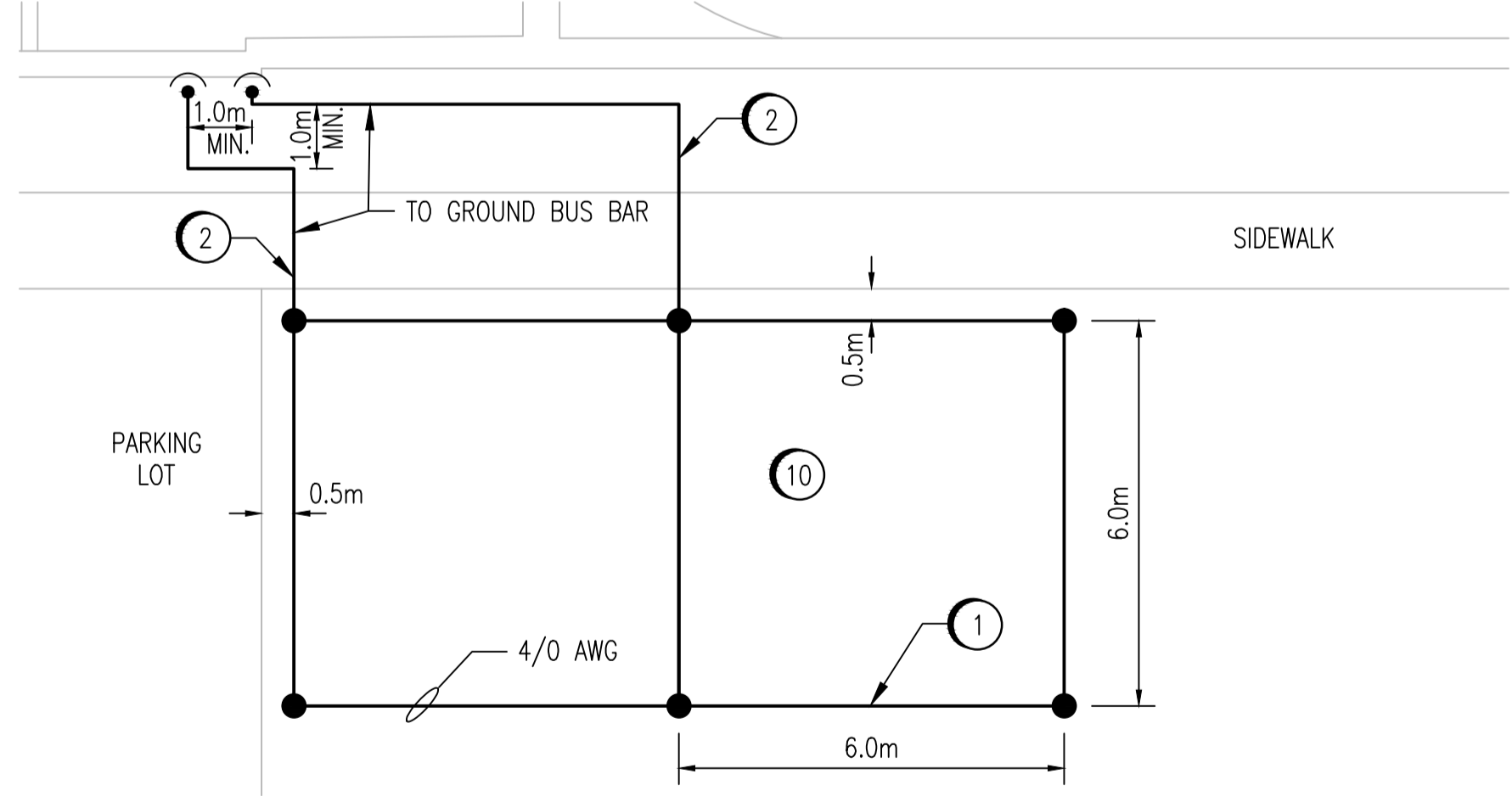
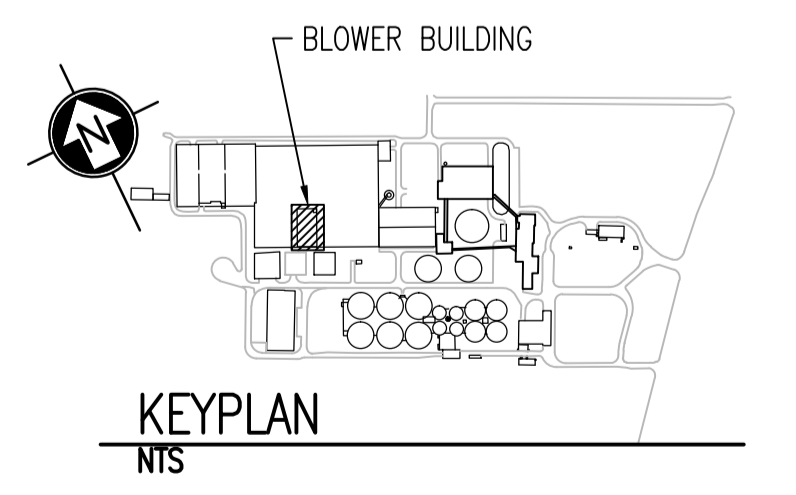
BLOWER BUILDING - MAIN FLOOR
SCALE: 1 : 50



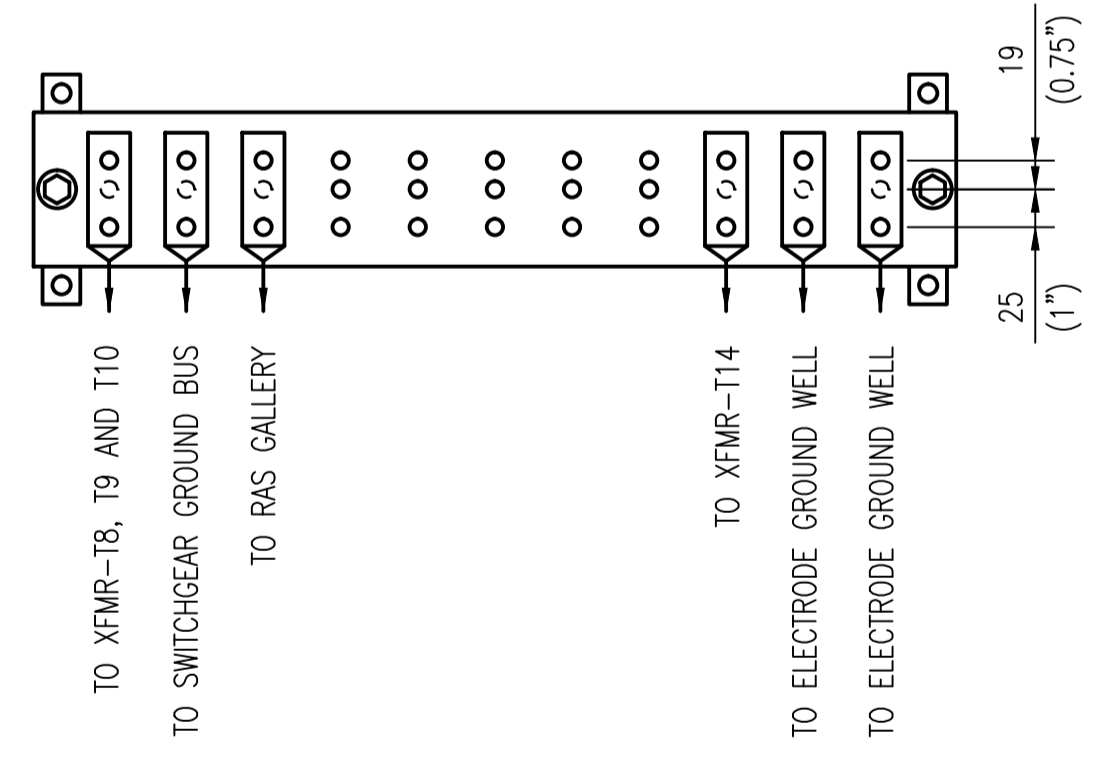
2 -- **DETAIL - BUS BAR PLAN**
SCALE: 1 : 10

LEGEND:

- EXISTING CONDUCTOR
- NEW CONDUCTOR
- - - CONDUCTOR BELOW ELEVATION SHOWN
- GROUND ROD
- CONNECTION
- ELEVATION CHANGE



BLOWER BUILDING GROUND ELECTRODES
SCALE: 1 : 100

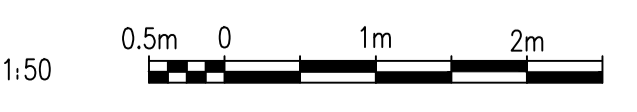


1 -- **DETAIL - BUS BAR**
SCALE: 1 : 5

- CONSTRUCTION NOTES:**
- 1 PROVIDE SIX ROD GROUND ELECTRODE AS SHOWN. LOCATE ALL EXISTING UNDERGROUND SERVICES IN AREA PRIOR TO INSTALLATION OF ELECTRODE. SEE DRAWING 1-0101A-E0010 FOR DETAILS. PROVIDE A GROUND WELL AT EACH ROD LOCATION.
 - 2 PROVIDE 4/0 AWG CONDUCTOR FROM GROUND ELECTRODE TO GROUND BUS BAR. CORE DRILL HOLE THROUGH WALL BELOW GRADE. EXCAVATE UNDER SIDEWALK AS NEEDED.
 - 3 PROVIDE 4/0 AWG INSULATED GROUND CONDUCTOR FROM GROUND BUS BAR TO GROUND CONDUCTOR IN RAS GALLERY.
 - 4 PROVIDE 4/0 AWG GROUND CONDUCTOR FROM TRANSFORMER T14 TO GROUND BUS BAR.
 - 5 PROVIDE 4/0 AWG CONDUCTOR FROM GROUND BUS BAR TO 4160 V SWITCHGEAR GROUND BUS.
 - 6 CORE DRILL THROUGH FLOOR. AVOID EXISTING REBAR. INSTALL 50mm PVC PIPE SLEEVES IN FLOOR. SEAL PENETRATIONS.
 - 7 PROVIDE GROUND BUS BAR AT HEIGHT OF 400mm ABOVE FINISHED FLOOR.
 - 8 LOCATION OF EXISTING GROUND TERMINATION POINTS ARE NOT EXACTLY AS SHOWN. MARK DETAILED TERMINATION POINTS ON AS-BUILT DRAWING.
 - 9 PROVIDE 4/0 AWG GROUND CONDUCTOR TO XFMR-T8, XFMR-T9 AND XFMR-T10 GROUND BUSBARS.
 - 10 RESTORE THE SIDEWALK AND ALL GRASSED AND PAVEMENT SURFACES AS PER THE SPECIFICATIONS.

- NOTES:**
1. THE ELEVATION OF THE GROUNDING CONDUCTORS AND ELECTRODES VARIES AND IS SHOWN ON A SINGLE LEVEL TO EASE THE UNDERSTANDING OF HOW THE GROUNDING SYSTEM IS INTERCONNECTED.
 2. THE LOCATION AND ROUTING OF EXISTING GROUNDING CONDUCTORS IS APPROXIMATE.

1-0101A-E0010	GROUNDING INSTALLATION DETAILS
1-0101A-E0011	SITE PLAN - GROUNDING CONDUCTOR ROUTING
DRAWING NUMBER	REFERENCE DRAWINGS



00	ISSUED FOR TENDER, BID OPP. 845-2012	2012/10/30	TMC	CJR
NO.	REVISIONS	DATE	DESIGN	CHECK

SNC-LAVALIN INC.
148 Nature Park Way
Winnipeg, MB, Canada R3P 0X7
204-786-8080

DESIGNED BY: I. CHURCH
CHECKED BY: C. REIMER
DRAWN BY: S. COATES
APPROVED BY: C. REIMER
SCALE: 1:50
RELEASED FOR CONSTRUCTION BY: B. STATION
DATE: 2009/11/27
DATE: 2012/10/31
CONSULTANT NO.: 113312-0000-47DD-0012

ENGINEER'S SEAL

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

NORTH END WATER POLLUTION CONTROL CENTRE
GROUNDING UPGRADES
PLAN LAYOUT
GROUNDING
BLOWER BUILDING

CITY DRAWING NUMBER: 1-0101S-E0004
SHEET: 001
REV: 00
SIZE: A1