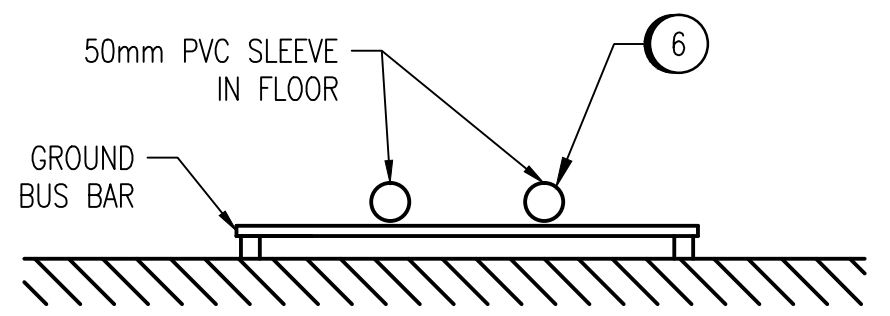
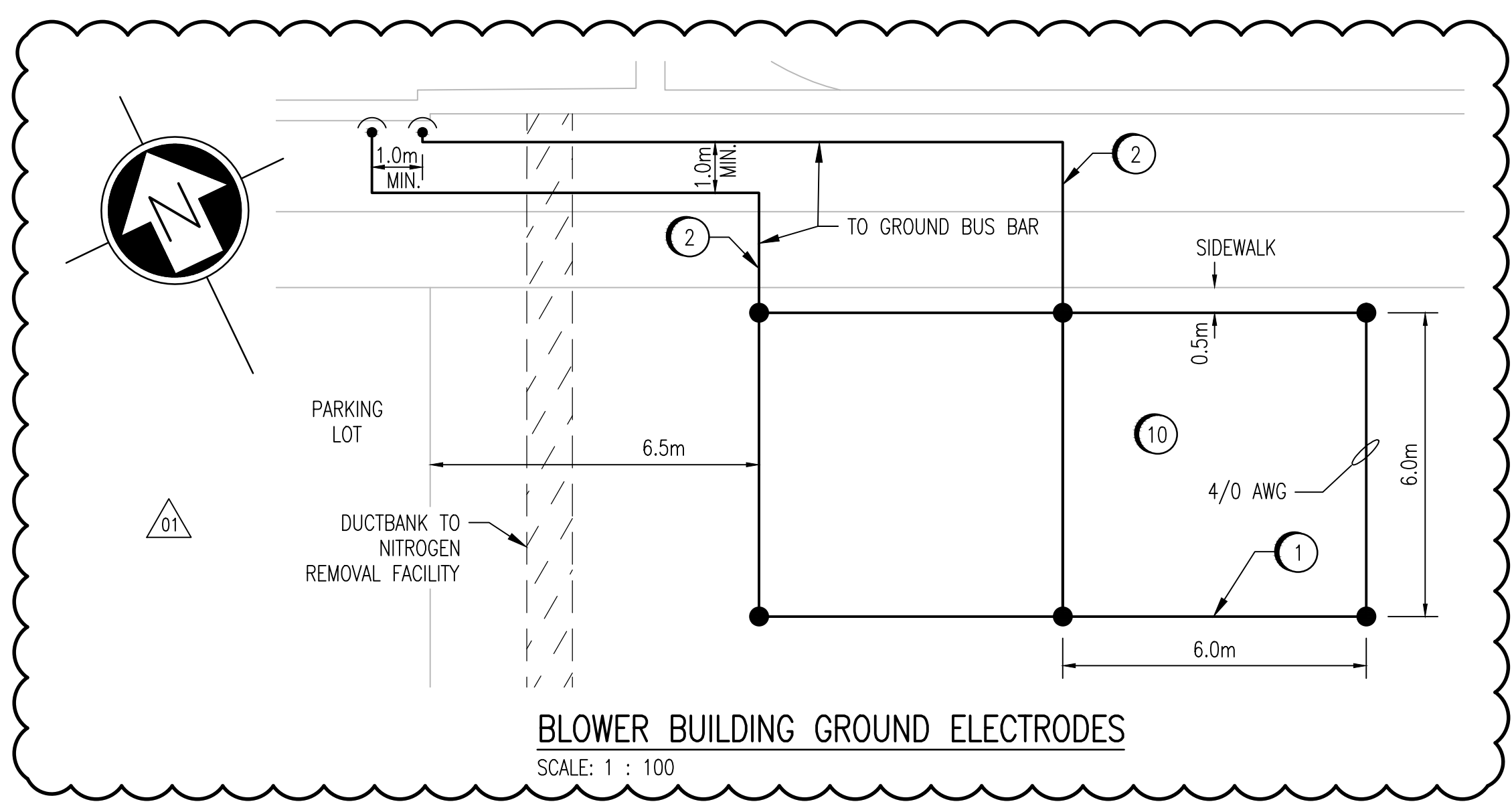


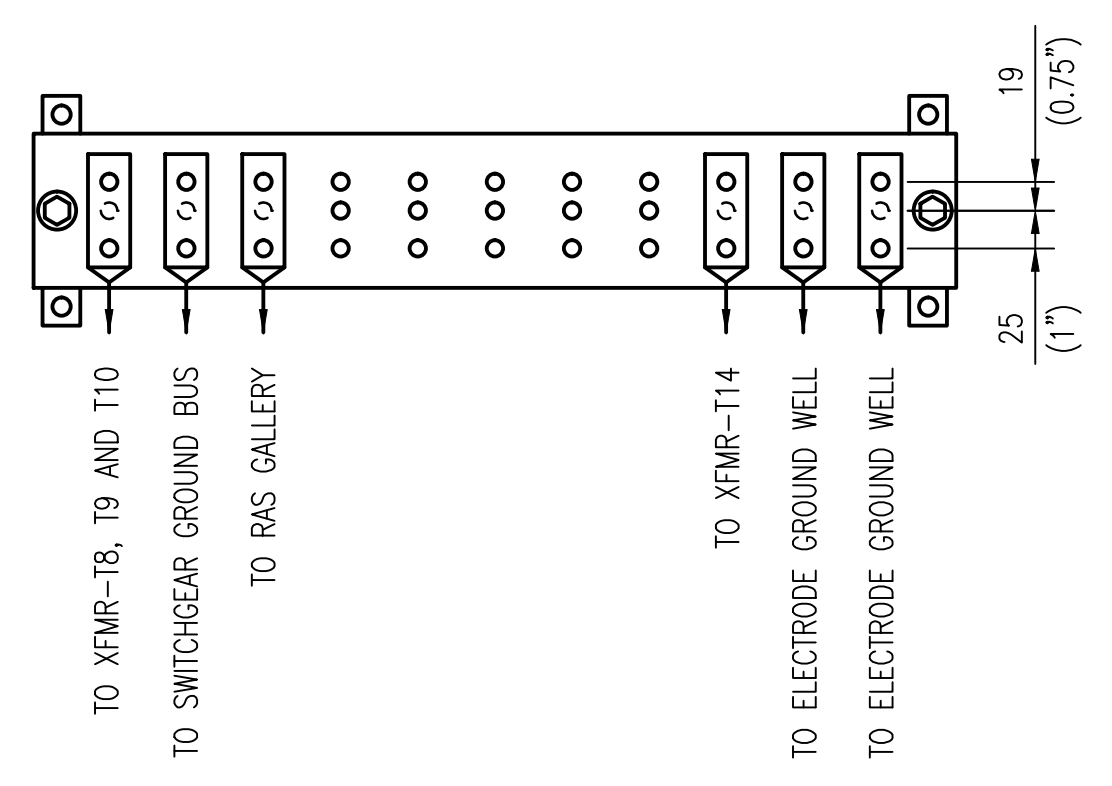
**BLOWER BUILDING - MAIN FLOOR**  
SCALE: 1 : 50



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



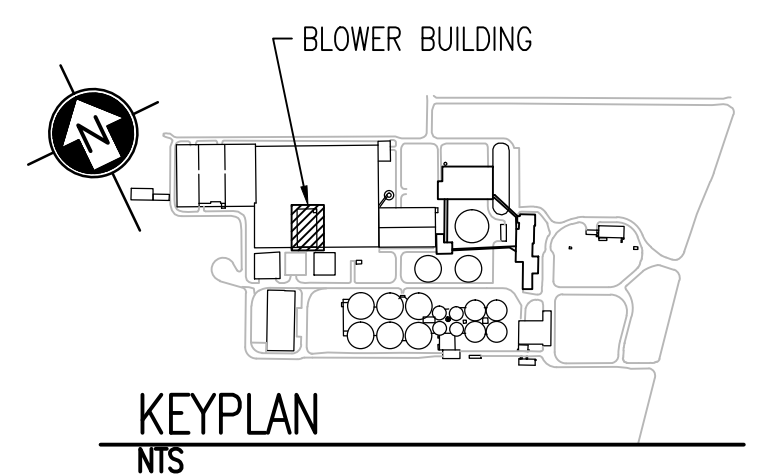
**BLOWER BUILDING GROUND ELECTRODES**  
SCALE: 1 : 100



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

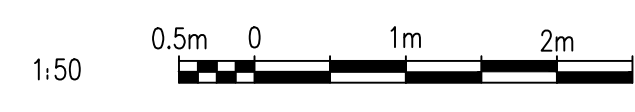
- CONSTRUCTION NOTES:**
- 1 PROVIDE SIX ROD GROUND ELECTRODE AS SHOWN. LOCATE ALL EXISTING UNDERGROUND SERVICES IN AREA PRIOR TO INSTALLATION OF ELECTRODE. SEE DRAWING 1-0101A-E0010 FOR DETAILS. PROVIDE A GROUND WELL AT EACH ROD LOCATION.
  - 2 PROVIDE 4/0 AWG CONDUCTOR FROM GROUND ELECTRODE TO GROUND 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.

- LEGEND:**
- EXISTING BURIED SERVICE
  - EXISTING CONDUCTOR
  - NEW CONDUCTOR
  - CONDUCTOR BELOW ELEVATION SHOWN
  - GROUND ROD
  - CONNECTION
  - ELEVATION CHANGE



**KEYPLAN**  
NTS

- 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.



NO.	REVISIONS	DATE	DESIGN	CHECK
01	MODIFIED ELECTRODE LOCATION	2012/11/21	TMC	CJR
00	ISSUED FOR TENDER, BID OPP. 845-2012	2012/10/30	TMC	CJR

		SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080	
DESIGNED BY:	T. 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  
 ORIGINAL DRAWING  
 SEALED BY:  
 T. M. CHURCH  
 SNC-LAVALIN  
 MEMBER #32682  
 2012/10/31  
 REV. 00

**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: 01  
 SIZE: A1

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