



**EXTERIOR PANEL VIEW**  
SCALE: 1 : 2

**INTERIOR PANEL VIEW**  
SCALE: 1 : 2

BILL OF MATERIALS				
ITEM	QTY	DESCRIPTION	MANUFACTURER	CATALOG NUMBER
1	1	HINGED COVER JUNCTION BOX WITH CLAMPS, TYPE 12	HOFFMAN	A1412CH
2	1	BACKPAN	HOFFMAN	A14P12
3	2	3 POSITION SELECTOR SWITCH, MAINTAINED, 2 N.O./2 N.C.	ALLEN-BRADLEY	800T-J2B
4	2	PILOT LIGHT, RED, LED, 120VAC	ALLEN-BRADLEY	800T-QH2R
5	AS REQ'D	35mm DIN RAIL	PHOENIX CONTACT	0801733
6	16	FEED-THROUGH TERMINAL	PHOENIX CONTACT	3046184
7	2	TERMINAL END PLATE	PHOENIX CONTACT	3047141
8	3	TERMINAL END CLAMP	PHOENIX CONTACT	1201442
9	2	TERMINAL BLOCK MARKER	PHOENIX CONTACT	1004348
10	AS REQ'D	NARROW SLOT WIRING DUCT, 2.25"x3.12"	PANDUIT	-
11	1	GROUND BAR, 6 TAP	ILSCO	D167-6
12	AS REQ'D	LAMACOIDS	-	-

**NOTES:**

- WHERE MANUFACTURER AND MODEL ARE SPECIFIED, SUBSTITUTIONS MUST BE APPROVED.
- ALL CONTROL WIRING TO BE TEW/MTW 300V, 105°C INSULATION, STRANDED COPPER, 16 AWG.
- EXTERNAL COMPONENTS ARE TO BE LABELLED AS SHOWN ON THE DRAWINGS.
- ALL FUSES ARE TO BE PROVIDED. IN ADDITION, TWO SPARES OF EACH FUSE SIZE ARE TO BE PROVIDED.
- TEST ALL WIRING AND COMPONENTS FOR FUNCTIONAL OPERATION, CORRECT CONNECTION, CONTINUITY AND INSULATION INTEGRITY. THREE COPIES OF CERTIFIED TEST DOCUMENTATION ARE TO BE PROVIDED.
- ALL MAJOR COMPONENTS INSIDE THE PANEL ARE TO BE LABELLED WITH LAMACOIDS IN ACCORDANCE WITH MAJOR DESCRIPTIONS ON THE DRAWINGS.
- PROVIDE WIRE BARREL FERULES FOR ALL WIRING.
- ALL TERMINAL BLOCKS SHALL BE NUMBERED AS SHOWN IN THE DRAWINGS, COMPLETE WITH GROUP LABELING.
- ALL WIRES SHALL BE MARKED AS INDICATED ON THE DRAWINGS.
- CLEARLY LABEL DEVICE IDENTIFIERS ON THE DOOR INTERIOR USING PERMANENT MARKER OR LAMACOIDS.

1-0630M-E0059	P-M942 STARTER SCHEMATIC
1-0630M-E0058	P-M941 STARTER SCHEMATIC
DRAWING NUMBER	REFERENCE DRAWINGS



NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR TENDER, BID OPP: 490-2012	2012/07/23	VE	CJR

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

DESIGNED BY: V. ELIMBAN  
DRAWN BY: M.J. PERSSON  
SCALE: 1:2  
DATE: 2012/05/04

CHECKED BY: C. REIMER  
APPROVED BY: C. REIMER  
RELEASED FOR CONSTRUCTION BY:  
DATE:

CONSULTANT NO.: 508955-0000-4800-0041

ENGINEER'S SEAL

**PRELIMINARY**  
NOT TO BE  
USED FOR  
CONSTRUCTION

**THE CITY OF WINNIPEG**  
WATER AND WASTE DEPARTMENT

MACLEAN WATER PUMPING STATION

PANEL LAYOUT  
LCP-M940  
SUMP PUMP CONTROL PANEL

CITY DRAWING NUMBER: 1-0630M-A0041  
SHEET: 001  
REV: 00  
SIZE: A1