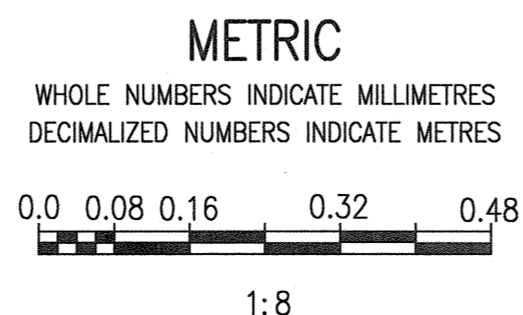


**MCC-M710 LAYOUT**  
 SCALE: 1 : 8

EQUIPMENT ID:		VOLTAGE:	RATING:	PHASE:	WIRE:	MAIN BREAKER:	MAIN BREAKER SETTINGS							
<b>MCC-M710</b>		600V	600A	3 P	3 W	600A	LTPU:	INST. GFD:						
DESCRIPTION:		LOCATION:					STPU:		GFD:					
NON-ESSENTIAL MCC		MAIN BUILDING ELECTRICAL ROOM					STD:							
UNIT LOC'N	ID	DESCRIPTION	LOAD					STARTER			CIRCUIT PROTECTION		NOTES	
			MOTOR			NON-MOTOR		NEMA SIZE	TYPE	OIL	RATING	TYPE		
HP	KW	FLA	KW	KVA										
5A	MCC-M710.TVSS	TVSS FEEDER BREAKER										60A	TM, 3P	
5C	MCC-M710.TVSS	TRANSIENT VOLTAGE SURGE PROTECTION DEVICE												
5E	ESL-M7101	VOLTAGE MONITORING RELAY												
5I	MCC-M710.PM	POWER METER												
5M	MCC-M710.MCB	MCC MAIN BREAKER										600A	LSI, 3P	
6A	MCC-M710.PS	POWER SUPPLY ETHERNET											TM, 3P	
6E	MCC-M710.NSW	ETHERNET SWITCH											TM, 3P	
6I	CRANE	PUMP HOUSE CRANE			37							50A	TM, 3P	
6K	MCC-R1	MCC RESERVOIR VALVE HOUSE										100A	TM, 3P	
6M	DP-B701	COLLECTION BUILDING MAIN DISTRIBUTION										200A	TM, 3P	
6O	P-M641	CHILLED WATER PUMP	15	11.19	17.0		1					15A	TM, 3P	
6S	P-M642	CHILLED WATER PUMP	15	11.19	17.0		1					15A	TM, 3P	
6W	T3	TRANSFORMER FOR PANEL LP-A						45.0				60A	TM, 3P	3-PHASE XFMR (120/208V)
7A	FN3	PUMP HOUSE SUPPLY FAN	15	11.19	16				SS			25A	TM, 3P	SOFT STARTER
7K	DP-M640, CHLR-M640, CDR-M640	PUMP HOUSE CHILLER AND CONDENSER			183							350A	TM, 3P	3 COMP, 12 FANS
7U	MCC-M730E	BACKUP FEEDER										250A	TM, 3P	
8A	PFC-M713	POWER FACTOR CORRECTION										250A	TM, 3P	
8G	SPACE													
8O	SPACE													
TOTAL CONNECTED LOAD:		DEMAND LOAD - SUMMER:		DEMAND LOAD - WINTER:		LEGEND:								
533 KVA		301 KVA		158 KVA		FVNR FULL VOLTAGE NON-REVERSING		MCP MOTOR CIRCUIT PROTECTOR						
						TM THERMAL MAGNETIC		3P 3 POLE						
						MMC MOTOR MANAGEMENT CONTROLLER (TESYS T)		MCS MOLDED CASE SWITCH						
								SS SOFT STARTER						

**MCC-M710 SCHEDULE**  
 SCALE: NTS

1-0640M-A0077	LOOP DIAGRAM, MCC-M710 VOLTAGE PRESENT
1-0640M-E0032	ELECTRICAL SINGLE LINE DIAGRAM, MCC-M710
DRAWING NUMBER	REFERENCE DRAWINGS



DESIGNED BY:	S. BOGHOSIAN	CHECKED BY:	K. SAPIAK
DRAWN BY:	S. BOGHOSIAN	APPROVED BY:	D. BECKER
SCALE:	AS SHOWN	ISSUED FOR CONSTRUCTION BY:	A. WEISS
DATE:	2018/12/21	DATE:	2019/10/18
ISSUED FOR TENDER AND CONSTRUCTION	2019/10/18	SB	KS
NO. REVISIONS	DATE	DESIGN	CHECK

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

ENGINEER'S SEAL  
  
 K. SAPIAK  
 Member 34636  
 REGISTERED PROFESSIONAL ENGINEER

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

MCPHILLIPS PUMPING STATION  
 ELECTRICAL AND HVAC UPGRADES, MCC REPLACEMENT  
 ELECTRICAL PANEL LAYOUT  
 PUMPHOUSE  
 MCC-M710 LAYOUT AND SCHEDULE

CITY DRAWING NUMBER: 1-0640M-E0033  
 SHEET: 001  
 REV: 00  
 SIZE: A1