600	VOLI	MOTOR CONTROL CENTRE	<u> </u>	-2t	∃ ——										DEMAND KW: 240
		MOTOR				STARTER			FEEDER			CIRCUIT PROTECTION			
ICC MBER	EQUIP. NUMBER	DESCRIPTION	LOCATION	HP	KW	FULL LOAD AMPS	EEMAC SIZE	TYPE	OVERLOAD	CAP IN AMPS	SIZE	TYPE	CONT. RATING (AMPS)	FRAME SIZE	REMARKS
-1	B686-EF	EXHAUST FAN - GRIT TANKS	ROOM B113	7.5	5.6	8.5	1	CMFVNR	FH38 & FH39	20	#12	RW90	15	HMCP	
F-2	B688-EF	EXHAUST FAN - GRIT TANKS	ROOM B113	7.5	5.6	8.5	1	CMFVNR	FH38 & FH39	20	#12	RW90	15	HMCP	
F-3	B699-EF	EMERGENCY EXHAUST FAN - CHLORINE ROOM	ROOM P113	2	1.5	2.7	1	CMFVNR	-	20	#12	RW90	7	HMCP	
1F-4		85 KW GENERATOR TRANSFER SWITCH BREAKER	ROOM B109	-	75	-	-	-	-	210	#1	RW90	150A-3P	HFD	
2F-1		SPARE (WAS B698-EF)		-	_	-	1	CMFVNR	-	-	-	-	3	НМСР	
2F-2	B683-AHU	AIR HANDLING UNIT - SHOP AREA	ROOM B113	5	3.7	5.6	1	CMFVNR	FH35	20	#12	RW90	15	нмср	
2F-3	B684-AHU	AIR HANDLING UNIT - BOILER ROOM	ROOM B113	7.5	5.6	7.6	1	CMFVNR	FH38	20	#12	RW90	15	НМСР	
2F-4	B689-EF	EXHAUST FAN - GALLERY	ROOM B113	0.5	0.4	0.8	1	CMFVNR	FH13	20	#12	RW90	3	нмср	
2F-5	B690-CWP	COOLING WATER PUMP-MOTOR ROOM COOLING	ROOM B103	7.5	5.6	7.5	1	CMFVNR	FH38	20	#12	RW90	15	НМСР	
2F-6	B691-CWP	COOLING WATER PUMP-MOTOR ROOM COOLING	ROOM B103	7.5	5.6	7.5	1	CMFVNR	FH38	20	#12	RW90	15	нмср	
3F-1	B687-EF	EXHAUST FAN - GRIT TANKS	ROOM B113	7.5	5.6	8.5	1	CMFVNR	FH38 & FH39	20	#12	RW90	15	НМСР	
3F-2		SPARE (WAS B677-CP)		_			1	CMFVNR	_		-	_	3	НМСР	
3F-3		SPARE (WAS B678-CP)		_	_	_	1	CMFVNR	_	_	_	_	3	HMCP	
3F-4	B681-AHU		DOOM D117		7.6		1								
		AIR HANDLING UNIT — GALLERY VENTILATION	ROOM B113	7.5	7.5	7.6		CMEVNR	FH39	20	#12	RW90	30	HMCP	-
3F-5	B682-AHU	AIR HANDLING UNIT - CHLORINE ROOM	ROOM B113	0.75	0.56	0.88	1	CMFVNR	FH15	20	#12	RW90	3	HMCP	
4F-1L		WELDING RECEPTACLES	RM. B111/B120	-	60	-	-	-	-	65	#6	RW90	60A-3P	HFD	
4F-1R		WELDING RECEPTACLES	RM B103/B113	-	60	-	-	-	-	65	#6	RW90	60A-3P	HFD	-
4F-2L		45 KVA 600-600/347 V TRANSFORMER "1B"	ROOM B107	-	45KVA	-	-	-	-	65	#6	RW90	60A-3P	HFD	
4F-2R		45 KVA 600-208/120 V TRANSFORMER "3B"	ROOM B107	-	45KVA	-	-	-	-	65	#6	RW90	60A-3P	HFD	
4F-3	B676-HWP	HOT WATER CIRCULATION PUMP - AREA "B"	ROOM B103	1.5	1.1	2.0	1	CMFVNR	FH26	20	#12	RW90	7	HMCP	
4F-4	B675-HWP	HOT WATER CIRCULATION PUMP - AREA "B"	ROOM B103	1.5	1.1	2.2	1	CMFVNR	FH25	20	#12	RW90	7	HMCP	
4F-5	B674-HWP	HOT WATER CIRCULATION PUMP - AREA "P" & "S"	ROOM B103	15	11.2	14.5	2	CMFVNR	FH45	20	#12	RW90	50	HMCP	
4F-6	B673-HWP	HOT WATER CIRCULATION PUMP - AREA "P" & "S"	ROOM B103	15	11.2	14.5	2	CMFVNR	FH45	20	#12	RW90	50	HMCP	
5F-1	B668-CWP	CHILLED WATER PUMP-SERVICE BUILDING COOLING	ROOM B103	7.5	5.6	9.1	_ 1	CMFVNR	l l	20	#12_	RW90	15	HMCP	
5F-2	B580-SMP	BOILER ROOM FLOOD PUMP	ROOM B103	2.5	5.6	4.2	1.1	CMFVNR		20	12 AWG	RW90	15	НМСР	
5F-3		SPARE (WAS B670-CWP)						CMFVNR	سيس				15	НМСР	
5F-4	B671-HWP	HOT WATER CIRCULATION PUMP - AREA "G" & "M"	ROOM B103	5	3.7	5.6	1	CMFVNR	FH35	20	#12	RW90	15	нмср	
5F-5	B672-HWP	HOT WATER CIRCULATION PUMP - AREA "G" & "M"	ROOM B103	5	3.7	5.6	1	CMFVNR	FH35	20	#12	RW90	15	HMCP	
5F-6	B680-FN	COOLING TOWER FAN - MOTOR ROOM COOLING	OUTDOORS	7.5	5.6	7.6	1	CMFVNR	FH38	20	#12	RW90	15	НМСР	
6F-1L	B651-BLR	HOT WATER BOILER #1	ROOM B103	7.5	5.6	9	_	_	_	20	#12	RW90	20A-3P	HFD	
6F-1R	B652-BLR	HOT WATER BOILER #2	ROOM B103	7.5	5.6	9	_	_	_	20	#12	RW90	20A-3P	HFD	
6F-2L	DOOL DEN	SPARE (WAS B653-BLR)		-	_	_	_		_	_	-	_	15A-3P	HFD	
6F-2R		SPARE (WAS B696-EF)		_		_	_		_	_	_	_	15A-3P	HFD	
6F-3	B663-CWP		DOOM DIOZ					CMFVNR		20				HMCP	
		CHILLED WATER PUMP-MOTOR ROOM COOLING	ROOM B103	7.5	5.6	7.5	1		FH38		#12	RW90	15		
6F-4	B667-CWP	CHILLED WATER PUMP-SERVICE BUILDING COOLING	ROOM B103	7.5	5.6	9.1	1	CMFVNR	-	20	#12	RW90	15	HMCP	
6F-5L	B603-UH	CHEM. STORAGE BLDG. UNIT HEATER	CHEM. STORAGE	-	20	20	-	-	-	45	#8	RW90	30A-3P	HFD	PACKAGED AHU C/W CONTROLS
6F-5R		SPARE BREAKER	-	-	-	-	-	_	-	-	-	-	15A-3P	HFD	
6F-6	B662-CWP	CHILLED WATER PUMP-MOTOR ROOM COOLING	ROOM B103	7.5	5.6	7.5	1	CMFVNR	FH38	20	#12	RW90	15	HMCP	
7F-1L		CAPACITOR BREAKER	-	-	-	-	-	1	-	30	#10	RW90	30A-3P	HFD	20KVAR CAPACITOR
7F-1R		SPARE BREAKER	-	-	-	-	-	-	-	-	-	-	15A-3P	HFD	
7F-2L		SPARE (WAS B657-CH)		-	-	-	-	_	-	-	-	-	100-3P	HFD	PACKAGED CHILLER C/W CONTROLS
7F-2R	B679-CH	CHILLER - MOTOR ROOM COOLING	ROOM B103	100	75	120	1	-	-	155	#1/0	RW90	150A-3P	HFD	PACKAGED CHILLER C/W CONTROLS
7F-3		SPARE		-		-	1	CMFVNR	-	-	-	-	30	HMCP	
7F-4	B641-AHU	AIR HANDLING UNIT-SERVICE BLDG. EXTENSION	ROOM B124	.75	0.56	1.2	1	CMFVNR	FH18	20	#12	RW90	3	НМСР	
7F-5	B642-AHU	INSTRUMENT RMS PRESSURIZATION UNIT	ROOM B124	0.75	0.56	3	1	CMFVNR	FH28	20	#12	RW90	7	НМСР	
7F-6		SRARE STARTER	-	-	-	-	2	CMFVNR	-	-	-	-	50	НМСР	
BF-1L		CAPACITOR BREAKER	_	-	-	-	-		_	30	#10	RW90	30A-3P	HFD	20KVAR CAPACITOR
BF-1R		CAPACITOR BREAKER	_	-	-	-	-	-	_	30	#10	RW90	30A-3P	HFD	20KVAR CAPACITOR
BF-2L	B591-MR	MONORAIL	ROOM B111	3	2.2	3.9	_	_	_	20	#12	RW90	15A-3P	HFD	
8F-2R	B594-TD	TRUCK DOOR	ROOM B111	0.5	0.37	0.8	_	_	_	20	#12	RW90	15A-3P	HFD	
8F-3L	B601-AHU	AIR HANDLING UNIT - CHEMICAL STORAGE BUILDING	CHEM. ST. BLDG.	1	0.75	1.3			_	20	#12	RW90	15A-3P	HFD	PACKAGED AHU C/W CONTROLS
8F-3R	DOD I -AND	45 KVA 600-208/120 V TRANSFORMER "78"	ROOM B107	_	45KVA	1.3		-	_		-	RW90/TECK		HFD	,
	-	<u> </u>			_					65	#6		60A-3P		LOCATED IN SERVICE BLDG. ELECT.
8F-4	<del>                                     </del>	SPARE STARTER	-	-	-	-	1	CMFVNR	-	-	-	-	7	HMCP	
		SPARE (WAS B658-FN)	1	I -	I -	_	1	CMFVNR		_	-	-	30	HMCP	1
8F-5 8F-6	B643-AHU	INSTRUMENT ROOMS RECIRCULATION UNIT	ROOM B124	1.5	1.1	1.6	1	CMFVNR	FH21	20	#12	RW90	3	HMCP	

MCC DETAILS:

MANUFACTURER: WESTINGHOUSE
MODEL: FIVE STAR
ORDER NO: 3787140
MAIN BUS AMPACITY: 800A
VOLTAGE: 600V, 39, 3W
MINIMUM INTERRUPTING RATING: 25kA

## MAIN BREAKER:

WESTINGHOUSE RD316TW
RD65K
RS SELECTRONIC TRIP UNIT
CAT16R508T
800A
RS31600T
SHORT TIME PICK UP = 2IN

1F	2F	3F	4F		5F	6F		7F		8F	
B686-EF	SPARE	B687-EF	WELD	WELD	B668-CWP	B651 -BLR		CAP	SPR 15A 3P	CAP	CAP
	1		1L	1R	1	1L	1R	1L	1R	1L	1R
1	B683-AHU	1	XFMR 1B	XFMR 3B	B580-SMP	SPARE 2L	SPR 15A 3P 2R	SPARE	B679 -CH	B591 -MR 2L	B594 -TD
B688-EF	B684-AHU	SPARE		-HWP	SPARE 3			2L	2R	B601 -AHU	XFMR 7B
2	B689-EF	SPARE 3		-HWP	B671-HWP		-CWP	3 8641		SP/ SIZ	ARE.
SPARE 3	B690-CWP	B681-AHU	B674	-HWP	B672-HWP	B603 -UH 5A	SPR. 15A 3P 5R	4 B642-	-AHU	SPA 5	RE
TRANSFER SWITCH	B691-CWP	B682-AHU	B673	-HWP	B680-FN	B662	-CWP	5 SPA SIZE		B643	-AHU
	-	_						6			

MCC-2B - FRONT ELEVATION

NOTE: FOR DETAIL OF MCC 2B SWITCH GEAR SECTION, TO WESTINGHOUSE DRAWING 14B7005 IN O&M MANUAL.

## CONSTRUCTION NOTES:

MODIFY EXISTING SPARE STARTER TO MATCH ELEMENTARY DIAGRAM. INSTALL LAMACOID ON DOOR WITH WORDING: "B580-PU BOILER ROOM FLOOD PUMP."

Certificate of Authorization
SNC-Lavalin Inc.
No. 4489

SERVICE BUILDING EXPANSION-ELECTRICAL

BMC-TI	MALIN	SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, Manitoba Canada R3P 0X7				
DESIGNED: T. CH	URCH	APPROVED: C. REIMER				
CHECKED: C. RE	EIMER	DATE: 2012/10/09				
PROJECT No.	SUBDN.	SL	BJECT	SERIAL	REV.	
112577	0105	47	7 DD	0203	02	

	i.M.			MACLAREN ENGINEERS	INC		-
				WARDROP ENGINEERIN			
				ENGINEERING CONSULTANTS			
				DESIGNED BY B.T.	CHECKED		_
2	ADDED B580-SMP	2012/09/10	TMC	DRAWN BY <b>N.B.</b>	APPROVED BY		
0	AS CONSTRUCTED ISSUED FOR TENDER ISSUED FOR CITY REVIEW	08/93 12/91 05/91	B.T.	HOR. SCALE: VERTICAL:  N.T.S.	RELEASED FOR CONSTRUCTION:	CONSULTANT DRAWING NO.	
NO.	. REVISIONS	DATE	BY	DATE OCTOBER 1990	DATE	870012-01-20-B-E304	



MOTOR CONTROL CENTRE 2B CONSULTANT DRAWING NO.

SEP-908