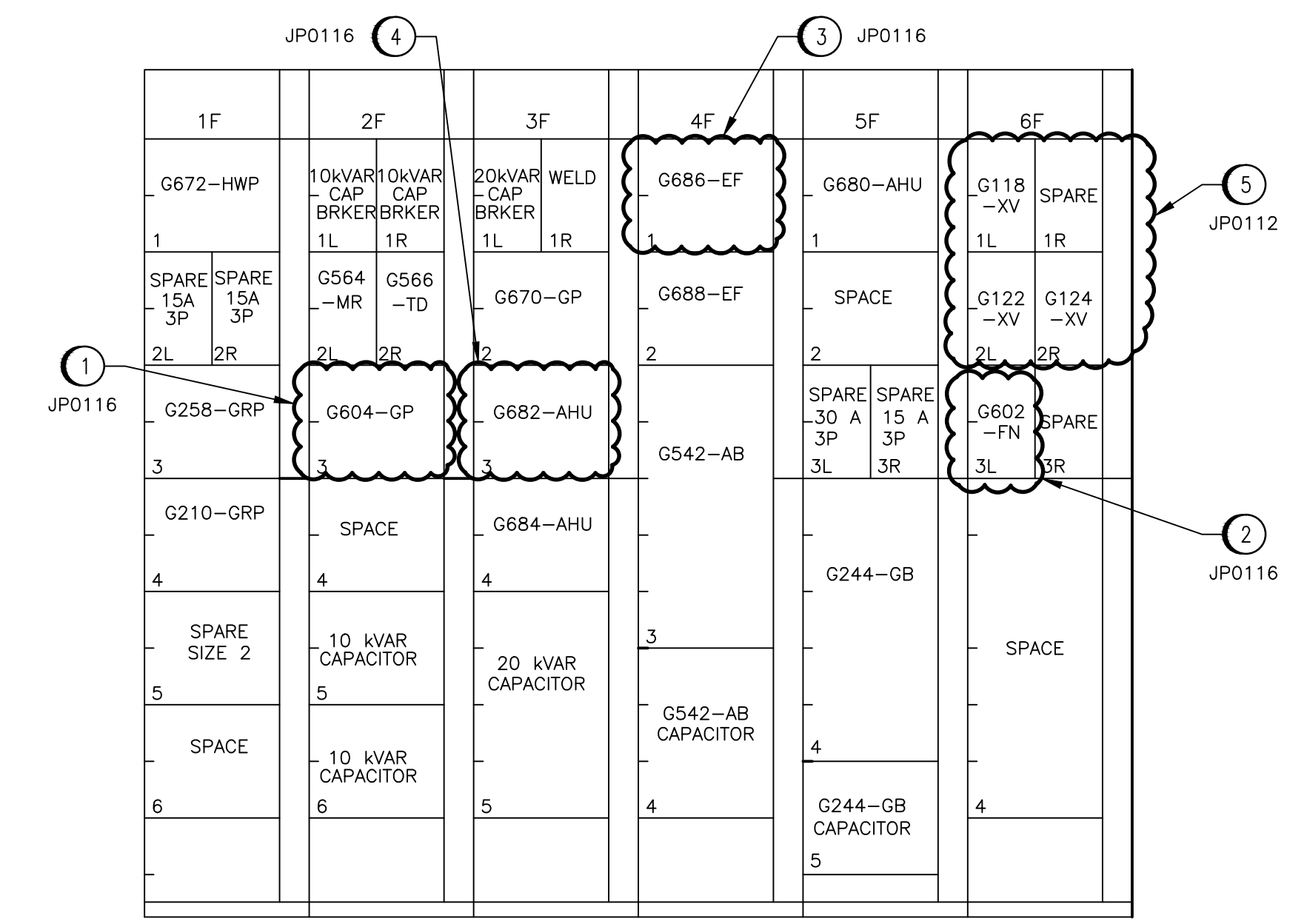


600 VOLT MOTOR CONTROL CENTRE – MCC-2G

CONNECTED KW: 229  
DEMAND KW: 187

MCC DETAILS:  
MANUFACTURER: WESTINGHOUSE  
MODEL: FIVE STAR  
ORDER NO.: 3787137  
MAIN BUS CAPACITY: 800A  
VOLTAGE: 600V, 3Ø, 3W

MCC NUMBER	EQUIP. NUMBER	MOTOR				STARTER			FEEDER			CIRCUIT PROTECTION		REMARKS	
		DESCRIPTION	LOCATION	HP	KW	FULL LOAD AMPS	EEMAC SIZE	TYPE	OVERLOAD	CAP IN AMPS	SIZE	TYPE	CONT. RATING (AMPS)		FRAME TYPE
1F-1	G672-HWP	HOT WATER PUMP	ROOM G130	3	2.2	3.3	1	CMFVNR	FH29	20	#12	RW90	7	HMCP	
1F-3	G258-GRP	GRIT CLASSIFIER	ROOM G127	0.5	0.37	1.0	1	CMFVNR	FH16	20	#12	RW90	3	HMCP	
1F-4	G210-GRP	GRIT PUMP	ROOM G135	15	11.2	15.2	2	CMFVNR	FH46	30	#10	RW90	50	HMCP	
2F-1L		CAPACITOR BREAKER		-	-	-	-	-	-	20	#12	RW90	15A-3P	HFD	
2F-1R		CAPACITOR BREAKER		-	-	-	-	-	-	20	#12	RW90	15A-3P	HFD	
2F-2L	G566-TD	TRUCK DOOR	ROOM G122	1.5	1.1	2.1	-	-	-	20	#12	RW90	15A-3P	HFD	LOCAL PACKAGED CONTROLS
2F-2R	G564-MR	MONORAIL	ROOM G122	15	11.2	17	-	-	-	30	#10	RW90	30A-3P	HFD	LOCAL PACKAGED CONTROLS
2F-5		POWER FACTOR CORRECTION CAPACITOR		-	10KVAR	-	-	-	-	20	#12	RW90	-	-	CAPACITOR BREAKER IN SECTION 2F-1A
2F-6		POWER FACTOR CORRECTION CAPACITOR		-	10KVAR	-	-	-	-	20	#12	RW90	-	-	CAPACITOR BREAKER IN SECTION 2F-2B
3F-1L		CAPACITOR BREAKER		-	-	-	-	-	-	30	#10	RW90	30A-3P	HFD	
3F-1R		WELDING RECEPTACLES	RM G125/126/127	-	60	-	-	-	-	65	#6	RW90	60A-3P	HFD	USED FOR POWER WASHER
3F-2	G670-GP	GLYCOL PUMP	ROOM G130	20	15	22	2	CMFVNR	FH49	30	#10	RW90	50	HMCP	
JP0116	G682-AHU	COOLING AIR HANDLING UNIT – BLOWER ROOM	ROOM G130	3	2.2	3.24	1	CMFVNR	FH29	20	12 AWG	RW90	7	HMCP	
3F-4	G684-AHU	AIR HANDLING UNIT – SCREEN & GRIT	ROOM G130	7.5	5.6	7.6	1	CMFVNR	FH38	20	#12	RW90	15	HMCP	
3F-5		POWER FACTOR CORRECTION CAPACITOR		-	20KVAR	-	-	-	-	30	#10	RW90	-	-	CAPACITOR BREAKER IN SECTION 3F-1A
JP0116	G686-EF	EXHAUST FAN – WET WELL	ROOM G130	5	3.7	5.8	1	CMFVNR	FH35	20	12 AWG	RW90	15	HMCP	
4F-2	G688-EF	EXHAUST FAN – PUMP & SCREEN ROOM	ROOM G137	5	3.7	5.8	1	CMFVNR	FH35	20	#12	RW90	15	HMCP	
4F-3	G542-AB	CHANNEL AERATION BLOWER	ROOM G115	75	56	68	4	CMFVNR	FH85	120	#2	RW90	150	HMCP	UNDERVOLTAGE PROTECTED VIA DCS
4F-4		CAPACITOR FOR MOTOR G542-AB		-	15KVAR	-	-	-	-	20	#12	RW90	20A-3P	HFD	
5F-1	G680-AHU	AIR HANDLING UNIT – MOTOR ROOM	ROOM G130	7.5	5.6	7.6	1	CMFVNR	FH38	20	#12	RW90	15	HMCP	
5F-3R	G568-EL	ELEVATOR	ROOM G131	10	7.5	11	-	-	-	20	#12	RW90	15A-3P	HFD	LOCAL PACKAGED CONTROLS
5F-4	G244-GB	GRIT BLOWER	ROOM G115	50	37.3	47.5	3	CMFVNR	FH81	85	#4	RW90	100	HMCP	UNDERVOLTAGE PROTECTED VIA DCS
5F-5		CAPACITOR FOR MOTOR G244-GB		-	10KVAR	-	-	-	-	20	#12	RW90	15A-3P	HFD	
1F-2L		SPARE BREAKER		-	-	-	-	-	-	-	-	-	15A-3P	HFD	
1F-2R		SPARE BREAKER		-	-	-	-	-	-	-	-	-	15A-3P	HFD	
1F-5		SPARE STARTER		-	-	-	2	CMFVNR	-	-	-	-	50	HMCP	
JP0116	G604-GP	GLYCOL PUMP	ROOM G129	1	0.75	1.4	1	CMFVNR	-	20	2 AWG	TECK 90	7	HMCP	
5F-3L		SPARE BREAKER		-	-	-	-	-	-	-	-	-	30A-3P	HFD	
JP0112	G118-XV	EAST WET WELL INLET CHAMBER ACTUATOR	INLET CHAMBER	-	-	8.9	-	-	-	18	10 AWG	TECK 90	15A-3P	HFD	CABLE DE-RATED 50%
JP0112	G122-XV	RAW SEWAGE PUMP SUCTION VALVE ACTUATOR	ROOM G101	-	-	3.8	-	-	-	10	12 AWG	TECK 90	15A-3P	HFD	CABLE DE-RATED 50%
JP0116	G124-XV	RAW SEWAGE PUMP SUCTION VALVE ACTUATOR	ROOM G101	-	-	3.8	-	-	-	10	12 AWG	TECK 90	15A-3P	HFD	CABLE DE-RATED 50%
JP0116	G602-FN	WET WELL LOWER LEVEL SUPPLY	ROOM G129	-	-	-	-	-	-	-	-	-	6A-3P	FUSE	FEED FOR VFD



MCC-2G – FRONT ELEVATION

**JP0116 CONSTRUCTION NOTES  
NOT IN SCOPE OF HEADWORKS UPGRADES**

- USE EXISTING SPARE MCC BUCKET FOR G604-GP AND REWIRE AS SHOWN ON SCHEMATIC DRAWING.
- INSTALL FUSED DISCONNECT FOR VFD FOR G602-FN.
- REPLACE EXISTING MCC BUCKET FOR G686-EF AND REWIRE AS SHOWN ON SCHEMATIC DRAWING.
- RE-USE EXISTING MCC BUCKET FOR G682-AHU AND REWIRE AS SHOWN ON SCHEMATIC DRAWING.

**JP0112 CONSTRUCTION NOTES**

- INSTALL CIRCUIT BREAKERS FOR VALVE ACTUATORS.

**APEGN**  
Certificate of Authorization  
SNC-Lavalin Inc.  
No. 4489

**SNC-LAVALIN**  
SNC-LAVALIN INC.  
148 Notre Dame Park Way  
Winnipeg, Manitoba  
Canada R3P 0X7

DESIGNED BY: T. CHURCH  
CHECKED BY: C. REIMER  
DATE: 2010/10/01

PROJECT No. 112577  
SUBJ. 0112  
SERIAL 47 DD  
REV. 0002  
REV. 3

B.M. ELEV.

MACLAREN ENGINEERS INC.  
WARDROP ENGINEERING INC.

ENGINEERING CONSULTANTS

DESIGNED BY: B.T.  
CHECKED BY: [ ]  
DRAWN BY: N.B.  
APPROVED BY: [ ]

REVISIONS

3	ADDED BREAKERS FOR ACTUATORS	2010/09/01	TMC
2	ADDED UNDERVOLTAGE PROTECTION TO MCC-2G	12/09	NB
1	AS CONSTRUCTED	08/03	B.T.
0	ISSUED FOR TENDER	12/91	B.T.
-	ISSUED FOR CITY REVIEW	05/91	B.T.

HOR. SCALE: N.T.S.  
VERTICAL: [ ]

RELEASED FOR CONSTRUCTION: [ ]  
DATE: OCTOBER 1990

ORIGINAL DRAWING SEALED BY: T. CHURCH  
SNC-LAVALIN INC.  
2010/10/01  
REV. 03  
CHANGES ONLY

CONSULTANT DRAWING NO. 870012-01-20-G-E109

**THE CITY OF WINNIPEG  
WORKS AND OPERATIONS DIVISION**  
WATERWORKS, WASTE & DISPOSAL DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE  
PUMP & SCREEN BUILDING – ELECTRICAL  
MOTOR CONTROL CENTRE 2G

CITY DRAWING NUMBER [ ]  
SHEET [ ] OF [ ]

SEP-830