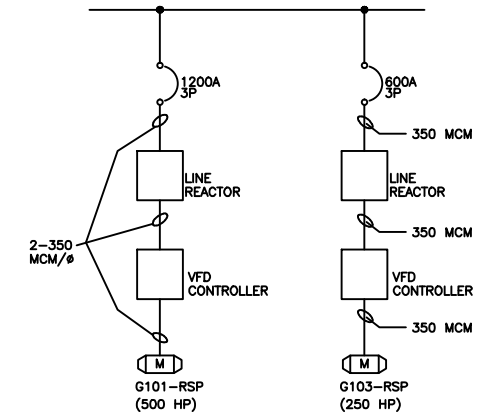


GRIT BLDG. ELECTRICAL ROOM

600 VOLT MOTOR CONTROL CENTRE - MCC-4G

CONNECTED KW: 566
DEMAND KW: 380

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 SIZE	
A	G101-RSP	RAW SEWAGE PUMP #1	ROOM G114	500	373	489	-	-	-	650	2-350MCM/Ø	RW90	1200A-3P	RD	
1F-3	G103-RSP	RAW SEWAGE PUMP #3	ROOM G114	250	187	242	-	-	-	325	350 MCM	RW90	600A-3P	HLD	
1R-1	G256-BS	BAR SCREEN #2	ROOM G127	3	2.2	3.5	1	CMFVR	FH33	20	#12	RW90	7A-3P	HMCP	
1F-2L	-	SPARE (WAS G207-SG)	-	-	-	-	-	-	-	-	-	-	15A-3P	FDC	
1F-2R	-	SPARE (WAS G215-SG)	-	-	-	-	-	-	-	-	-	-	15A-3P	FDC	
1F-5	-	POWER FACTOR CORRECTION CAPACITOR	-	-	10KVAR	-	-	-	-	20	#12	RW90	-	-	CAPACITOR BREAKER IN SECTION 2F-1A
1F-1L	-	CAPACITOR BREAKER	-	-	-	-	-	-	-	20	#12	RW90	15A-3P	FDC	
1F-1R	-	600 VAC RECEPTACLE	-	-	-	-	-	-	-	-	-	-	15A-3P	FDC	PUMP ROOM CRANE LOWER LEVEL

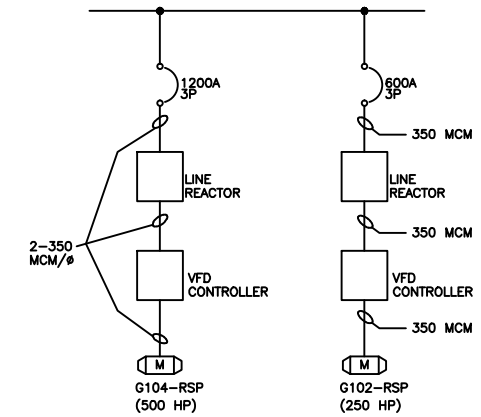


RAW SEWAGE PUMP SCHEMATIC FOR MCC-4G

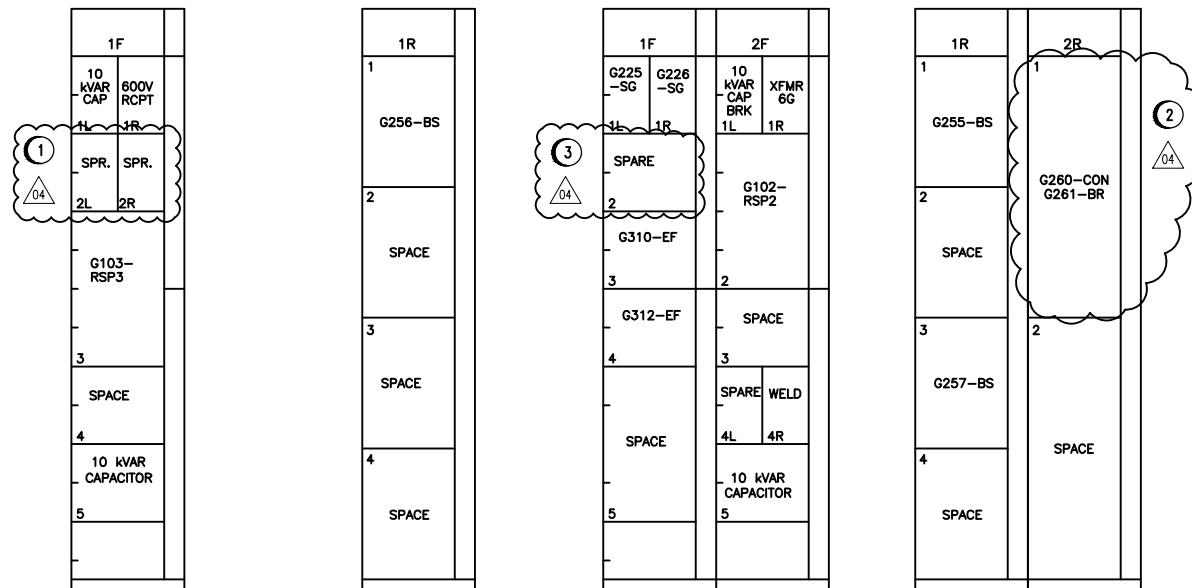
600 VOLT MOTOR CONTROL CENTRE - MCC-3G

CONNECTED KW: 680
DEMAND KW: 450

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 SIZE	
B	G104-RSP	RAW SEWAGE PUMP #4	ROOM G114	500	373	489	-	-	-	650	2-350 MCM/Ø	RW90	1200-3P	RD	
2F-2	G102-RSP	RAW SEWAGE PUMP #2	ROOM G114	250	187	242	-	-	-	325	350 MCM	RW90	600-3P	HLD	
1R-3	G257-BS	BAR SCREEN #3	ROOM G127	3	2.2	3.5	1	CMFVR	FH33	20	#12	RW90	7A-3P	HMCP	
1R-1	G255-BS	BAR SCREEN #1	ROOM G127	3	2.2	3.5	1	CMFVR	FH33	20	#12	RW90	7A-3P	HMCP	
1F-2	-	SPARE (WAS G260-CON)	-	-	-	-	1	CMFVNR	FH30	-	-	-	7A-3P	HMCP	
2F-4L	-	SPARE BREAKER	-	-	-	-	-	-	-	-	-	-	100A-3P	FDC	
1F-3	G310-EF	GENERATOR BLDG. EXHAUST FAN #1	GENERATOR BLDG.	5	3.7	6.1	1	CMFVNR	FH35	20	#12	RW90	15A-3P	HMCP	
1F-4	G312-EF	GENERATOR BLDG. EXHAUST FAN #2	GENERATOR BLDG.	5	3.7	6.1	1	CMFVNR	FH35	20	#12	RW90	15A-3P	HMCP	
2F-5	-	POWER FACTOR CORRECTION CAPACITOR	-	-	10KVAR	-	-	-	-	20	#12	RW90	-	-	CAPACITOR BREAKER IN SECTION 2F-1L
2F-1L	-	CAPACITOR BREAKER	-	-	-	-	-	-	-	20	#6	RW90	15A-3P	FDC	
2F-1R	-	ESSENTIAL 600-208/120V TRANSFORMER	GENERATOR BLDG.	-	45KVA	-	-	-	-	65	#6	RW90	60A-3P	FDC	
2F-4R	-	WELDING RECEPTACLE	GENERATOR BLDG.	-	50	-	-	-	-	65	#6	RW90	60A-3P	FDC	
1F-1L	G225-SG	GRIT TANK #1 SLUICE GATE	ROOM G138	-	-	3.8	-	-	-	20	#12	RW90	15A-3P	FDC	
1F-1R	G226-SG	GRIT TANK #2 SLUICE GATE	ROOM G138	-	-	3.8	-	-	-	20	#12	RW90	15A-3P	FDC	
2R-1	G260-CON	GRIT CONVEYOR	ROOM G127	3	2.2	3.8	2x 9A, AC-3	CMFVNR	ELECTRONIC	20	#12	RW90	7A-3P	HMCP	MOTORS STARTED FROM COMMON SAFETY CONTACTORS
	G261-BR	GRIT CONVEYOR BRUSH	ROOM G127	1	0.75	1.4	-	-	-	20	#12	RW90	-	-	



RAW SEWAGE PUMP SCHEMATIC FOR MCC-3G



MCC-4G FRONT ELEVATION

MCC-4G REAR ELEVATION

MCC-3G FRONT ELEVATION

MCC-3G REAR ELEVATION

SPECIFIC NOTES

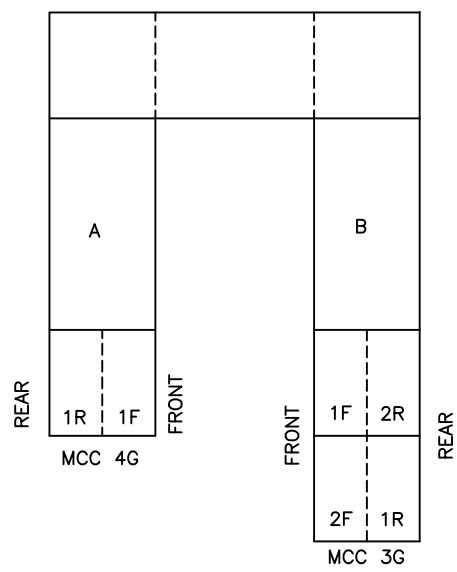
- DISCONNECT WIRES TO G207-SG AND G215-SG. PROVIDE LAMACOID INDICATING BREAKER IS SPARE.
- PROVIDE MCC BUCKET WITH SAFETY RELAY.
- DISCONNECT WIRES TO EXISTING G260-CON. PROVIDE LAMACOID INDICATING STARTER IS SPARE.

APEN
Certificate of Authorization
SNC-Lavalin Inc.
No. 4489

SNC-Lavalin
SNC-LAVALIN INC.
148 Notre Dame St.
Winnipeg, Manitoba
Canada R3P 0X7

DESIGNED BY: T. CHURCH
CHECKED BY: C. REIMER
DATE: 2012/02/27

PROJECT No. 112577 | SUBJ: 0105 | SUBJECT: 47 DD | SERIAL: 0108 | REV: 4



MCC-4G & 3G LAYOUT-PLAN VIEW

B.M. ELEV.	MACLAREN ENGINEERS INC. WARDROP ENGINEERING INC. ENGINEERING CONSULTANTS	DESIGNED BY: B.T. CHECKED BY:	ORIGINAL DRAWING SEALED BY: T. M. CHURCH SNC-LAVALIN MEMBER #32682 2012/02/27 REV. 04 CHANGES ONLY
4 REPLACED G260-CON STARTER 20/02/24 TMC	DRAWN BY: N.B.	APPROVED BY:	CONSULTANT DRAWING NO. 870012-01-20-G-E110
3 REVISED BASED ON INSPECTIONS 10/11 TMC	HOR. SCALE: N.T.S.	RELEASED FOR CONSTRUCTION:	
2 REVISED FOR NEW SCREENS 05/96 B.T.	VERTICAL: N.T.S.	DATE: OCTOBER 1990	
1 AS CONSTRUCTED 08/93 B.T.			
0 ISSUED FOR TENDER 12/91 B.T.			
- ISSUED FOR CITY REVIEW 05/91 B.T.			
NO. REVISIONS	DATE	BY	

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

SOUTH END WATER POLLUTION CONTROL CENTRE CITY DRAWING NUMBER
PUMP & SCREEN BUILDING - ELECTRICAL SHEET OF
MOTOR CONTROL CENTRES 3G & 4G

SEP-831