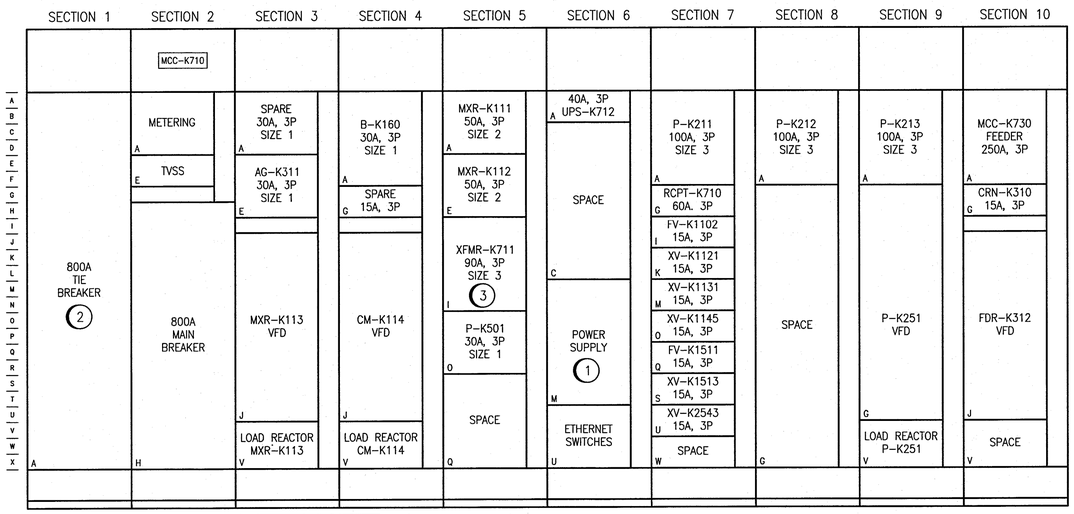
A1 SIZE – 594mm x 841mm

600 VOLT MOTOR CONTROL CENTRE – MCC–K710

MCC NUMBER	EQUIP. NUMBER	LOAD		MOTOR			STARTER			CIRCUIT PROTECTION		
		DESCRIPTION	LOCATION	HP	kW	FULL LOAD AMPS	NEMA SIZE	TYPE	OVERLOAD	CONT. RATING (AMPS)	FRAME TYPE	REMARKS
1A		800A TIE BREAKER								800		
2A		METERING										PM5500
2E		TVSS SURGE PROTECTION DEVICE								60		
2H		800A MAIN BREAKER								800		
3A		SPARE					SIZE 1		MMC	30		SPARE STARTER
3E	AG–K311	BIN AGITATOR		0.75	0.56		SIZE 1		MMC	30		
3J	MXR–K113	HRC 1 MATURATION TANK		20	14.9	19.3		VFD		35		
3V		MXR–K113 LOAD REACTOR										
4A	B–K160	AIR SCOUR BLOWER, C/W SINGLE PHASE STARTER FOR EF–K160		7.5	5.6		SIZE 1		MMC	30		
4G		SPARE								15		SPARE BRANCH FEEDER
4J	CM–K114	HRC 1 DECANTATION TANK		2	1.5	2.5		VFD		6		
4V		CM–K114 LOAD REACTOR										
5A	MXR–K111	HRC 1 COAGULATION MIXER		20	14.9	19.3	SIZE 2		MMC	50		
5E	MXR–K112	HRC 1 INJECTION MIXER		20	14.9	19.3	SIZE 2		MMC	50		
5I	XFMR–K711	XFMR–K711 AND PNL–K711 FEEDER					SIZE 3			90		NORMALLY OPEN CONTACT (3)
5O	P–K501	SUMP PUMP		2	1.5		SIZE 1		MMC	30		
5Q		SPACE										
6A		UPS–K712 FEEDER								40		
6C		SPACE										
6M		POWER SUPPLY FOR ETHERNET SWITCHES										
6U		3x 16 PORT ETHERNET SWITCHES										PRODUCT NO. TCSESM163F23F0 (4)
7A	P–K211	HRC 1 MICROSAND RECYCLE PUMP 1		40	30	38.6	SIZE 3		MMC	100		
7G	RCPT–K710	WELDING RECEPTACLE								60		
7I	FV–K1102	HRC TRAIN 2 INLET FLOW CONTROL VALVE		1	0.75					15		
7K	XV–K1121	SAND SLURRY TO HRC TRAIN 1 INJECTION ZONE INLET VALVE			0.43					15		
7M	XV–K1131	HRC TRAIN 1 MATURATION TANK DRAIN		1	0.75					15		
7O	XV–K1145	HRC TRAIN 1 LAMELLA DRAIN		1	0.75					15		
7Q	FV–K1511	HRC EFFLUENT FLOW CONTROL VALVE		1	0.75					15		
7S	XV–K1513	HRC EFFLUENT ISOLATION VALVE		1	0.75					15		
7U	XV–K2543	PRIMARY INFLUENT CHANNEL INLET VALVE		1	0.75					15		
7W		SPACE										
8A	P–K212	HRC 1 MICROSAND RECYCLE PUMP 2		40	30	38.6	SIZE 3		MMC	100		
8G		SPACE										
9A	P–K213	HRC 1 MICROSAND RECYCLE PUMP 3		40	30	38.6	SIZE 3		MMC	100		
9G	P–K251	WASTE SLUDGE PUMP 1		30	22.6			VFD		50		
9V		P–K251 LOAD REACTOR										
10A		MCC–K730 FEEDER								250		
10G	CRN–K310	MICROSAND DOSING SYSTEM HOIST/TROLLEY		5	10 MCA					15		EXTERNAL CONTROL PANEL
10J	FDR–K312	VOLUMETRIC DOSING SCREW		0.5	0.38			VFD		6		
10V		SPACE										



SPECIFIC NOTES

1. MCC–K710 TO BE FABRICATED COMPLETE WITH DUAL (REDUNDANT) POWER SUPPLIES FOR ETHERNET SWITCHES. REFER TO SPECIFICATIONS. PROVIDE UPS POWER TO ETHERNET SWITCHES FROM PNL–K713U, CCT. 7.
2. MCC VENDOR TO MAKE TIE BREAKER CONNECTION BETWEEN MCC–K710 AND MCC–K720 INTERNAL TO THE MCCs.
3. PROVIDE CONTACTOR IN BREAKER COMPARTMENT FOR PLC AND MANUAL CONTROL OF THE LOAD.
4. DESIGNATE ONE 16 PORT ETHERNET SWITCH IN MCC–K710 AS A SPARE.

REFERENCE DRAWINGS	DESCRIPTION
1–0102–ESLD–K001	SINGLE LINE DRAWING, MCC–K710

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

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR CONSTRUCTION – 976–2016	2017/04/05	VVE	DEB

CH2MHILL. SNC·LAVALIN KGS GROUP

DESIGNED BY: V. ELIMBAN	CHECKED BY: E. RYCZKOWSKI
DRAWN BY: MJ. PERSSON	APPROVED BY: D. BECKER
SCALE: NTS	ISSUED FOR CONSTRUCTION BY: J. SHUMKA
DATE: 2014/12/12	DATE: 2017/04/05
CONSULTANT NO.: 474248	

ENGINEER'S SEAL
PROVINCE OF MANITOBA — D.E. BECKER — Member 23646 — REGISTERED PROFESSIONAL ENGINEER
April 5 2017

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE
SEWPCC UPGRADING/EXPANSION PROJECT
ELECTRICAL – MCC/CABINETS DRAWING
HIGH RATE CLARIFICATION BUILDING
MCC–K710 LAYOUT AND SCHEDULE

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1–0102–ECBD–K001	001	00	A1

PLOT DATE: Mar 24, 2017 – 9:39am
FILE NAME:1–0102–ECBD–K001.dwg
LAST SAVE: 2017/03/24 – 9:39am
PATH: C:\DWG\1–0102–ECBD–K001.dwg