

GENERAL NOTES:

1. MOTOR CONTROL CENTRE SCHEDULE EXISTING AND NOT VERIFIED FOR ACCURACY BY CONTRACT ADMINISTRATOR.
2. THIS DRAWING SUPERSEDES EXISTING DRAWING NEP-1654.
3. THE ENGINEER'S DESIGN RESPONSIBILITY IS LIMITED TO THE NEW WORK INDICATED BY THE CLOUDED PORTION OF THE DRAWING.

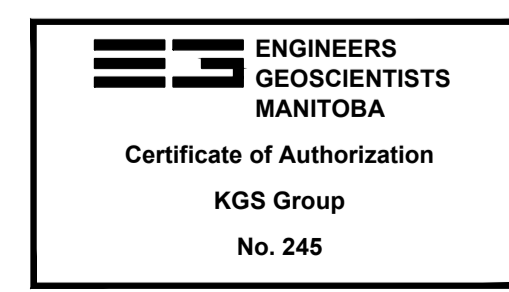
KEYNOTES:

1. EXISTING SLUDGE PUMP #5 STARTER AND CABLING TO BE REUSED AND RECONNECTED TO NEW SLUDGE PUMP SKID. MEGGER TEST CABLES PRIOR TO RECONNECTION.
2. ELECTRICAL SUB CONTRACTOR TO TEST AND ENSURE PROPER OPERATION OF ALL NEW ELECTRICAL PRIOR TO COMMISSIONING.
3. SWASH PLATE (W156-SWP) CABLING TO BE DEMOLISHED BACK TO SOURCE AND MADE SAFE. EXISTING MCC BUCKET TO BE TAGGED AS 'SPARE'.
4. MCC FEEDS FDP-W6 MOTOR SUB PANEL WHICH IN TURN FEEDS MULTIPLE MOTORS. ELECTRICAL SUB CONTRACTOR TO FIELD VERIFY THE EXISTING CABLING BETWEEN FAN PANEL FDP-W6 AND SLUDGE PUMP SKID FAN IS 3C TECK90 CU, MINIMUM #14 AWG 1KV, PRIOR TO RECONNECTION.
5. EXISTING FAN PANEL FOR EVEN-NUMBERED SKIDS, LOCATED IN THE ELECTRICAL ROOM, HAS A DUPLICATE NAME WITH THE EXISTING FAN PANEL FOR ODD-NUMBERED SKIDS, ALSO LOCATED IN THE ELECTRICAL ROOM.

SCHEDULE OF 600 VOLT MOTOR CONTROL CENTER NO. 1W																	
MOTOR							STARTER			FEEDER			CIRC. PROT		CONTROLS		
EQUIP. NO.	DESCRIPTION	LOCATION	FLA	HP	KW	VOLT.	EEMAC SIZE	TYPE	UNIT NO.	CAPACITY IN AMPS	SIZE	TYPE	CONT. RATE	FRAME TYPE	AT MCC	AT MOTOR	REMARKS
W110-SFP	Sludge feed pump No.1	104	15.3	15	11.2	575	-	BREAKER	F3-2B	45	3C#8AWG	TECK	40	FB	RPL	LOS	TO VAR. FREQ. SPEED CONTROL
W112-CE	Centrifuge No.1	204	182	200	150	575	5	CMFVNR	F2-1	235	2-3C#4/0	TECK	400	MCP	RPL	LOS	WYE-DELTA STARTER
W113-BD	Back Drive No.1	204	41	25	20.5	500	-	BREAKER	F3-2A	65	3C#8AWG	TECK	50	FB		LOS	TO CONTROL CABINET & TRANSFORMER
W114-LOP	Lube Oil Pump No.1	204	0.5	0.5	0.37	575	1	CMFVNR	F3-3	20	3C#12AWG	TECK	3	MCP	RPL	MAN DISC	---
W017-CA	Cake Agitator No.1	104	19	15	11.2	575	2	CMFVNR	F3-4	45	3C#8AWG	TECK	50	MCP	RPL	LOS	---
W115-CAP	Cake Pump No.1 Hyd. Power Pack	104	67.2	75	56	575	4	CMFVNR	F3-5	210	3C#3/0AWG	TECK	150	MCP	RPL	LOS	---
W116-SWP	Swash Plate No.1	104	0.2	0.2	0.15	575	1	CMFVNR	F8-1	20	3C#12AWG	TECK	3	MCP	RPL	MAN DISC	REVERSING STARTER
W412-SCA	Sludge Cake Auger 1A	203	7.7	7.5	5.5	575	1	CMFVNR	B1-4	20	3C#12AWG	TECK	15	MCP	RPL	LOS	---
W130-SFP	Sludge feed pump No.3	104	15.3	15	11.2	575	-	BREAKER	F5-2B	45	3C#8AWG	TECK	40	FB	RPL	LOS	TO VAR. FREQ. SPEED CONTROL
W132-CE	Centrifuge No.3	204	182	200	150	575	5	CMFVNR	F4-1	235	2-3C#4/0	TECK	400	MCP	RPL	LOS	WYE-DELTA STARTER
W133-BD	Back Drive No.3	204	41	25	20.5	500	-	BREAKER	F5-2A	65	3C#8AWG	TECK	50	FB		LOS	TO CONTROL CABINET & TRANSFORMER
W134-LOP	Lube Oil Pump No.3	204	0.5	0.5	0.37	575	1	CMFVNR	F5-3	20	3C#12AWG	TECK	3	MCP	RPL	MAN DISC	WYE - DELTA STARTER
W037-CA	Cake Agitator No.3	104	19	15	11.2	575	2	CMFVNR	F5-4	45	3C#8AWG	TECK	50	MCP	RPL	LOS	---
W135-CAP	Cake Pump No.3 Hyd. Power Pack	104	67.2	75	56	575	4	CMFVNR	F5-5	210	3C#3/0AWG	TECK	150	MCP	RPL	LOS	---
W136-SWP	Swash Plate No.3	104	0.2	0.2	0.15	575	1	CMFVNR	F8-2	20	3C#12AWG	TECK	3	MCP	RPL	MAN DISC	REVERSING STARTER
W432-SCA	Sludge Caker Auger 2A	203	8.8	7.5	6.3	575	1	CMFVNR	B2-4	20	3C#12AWG	TECK	15	MCP	RPL	LOS	---
W150-SFP	Sludge feed pump No.5	104	15.3	15	11.2	575	2	BREAKER	F7-2B	45	3C#8AWG	TECK	40	MCP	RPL	LOS	TO VAR. FREQ. SPEED CONTROL
W152-CE	Centrifuge No.5	204	182	200	150	575	5	CMFVNR	F6-1	235	2-3C#4/0	TECK	400	MCP	RPL	LOS	WYE-DELTA STARTER
W153-BD	Back Drive No.5	204	41	25	20.5	575	-	BREAKER	F7-2A	65	3C#8AWG	TECK	50	FB		LOS	TO CONTROL CABINET & TRANSFORMER
W154-LOP	Lube Oil Pump No.5	204	0.5	0.5	0.37	575	1	CMFVNR	F7-3	20	3C#12AWG	TECK	3	MCP	RPL	MAN DISC	---
W057-CA	Cake Agitator No.5	104	19	15	11.2	575	2	CMFVNR	F7-4	45	3C#8AWG	TECK	50	MCP	RPL	LOS	---
HPP-W1550.MTR	HPP-W1550 HYDRAULIC POWERPACK No.5 MAIN DRIVE	104	77	75	TBD	575	4	CMFVNR	F7-5	210	3C#3/0AWG	TECK	150	MCP	RPL	LOS	---
W156-SWP	SWASH PLATE No.5	104	0.2	0.2	0.15	575	1	CMFVNR	F8-3	20	3C#12AWG	TECK	3	MCP	RPL	MAN DISC	REVERSING STARTER
W452-SCA	Sludge Cake Auger 3A	203	7.8	7.5	5.5	575	1	CMFVNR	B3-4	20	3C#12AWG	TECK	15	MCP	RPL	LOS	---
W210-PSF	Polymer Screw Feeder No.1	004	0.86	0.5	0.37	575	1	CMFVNR	B1-1	20	3C#12AWG	TECK	3	MCP	RPL	LOS	---
W212-POB	Polymer Blower No.1	004	5.1	5	3.7	575	1	CMFVNR	B1-2	20	3C#12AWG	TECK	7	MCP	RPL	LOS	---
W230-POM	Polymer age Tank Mixer No.1	106	5.3	5	3.7	575	1	CMFVNR	B1-3	20	3C#12AWG	TECK	15	MCP	RPL	LOS	MIX & AGE TANK W230
W417-SCA	Sludge Cake Auger 1C	203	8.8	7.5	6.3	575	1	CMFVNR	B1-5	20	3C#12AWG	TECK	15	MCP	RPL	LOS	VAR. FREQ. SPEED CONTROLLER
W437-SCA	Sludge Cake Auger 2C	203	8.8	7.5	6.3	575	1	CMFVNR	B2-5	20	3C#12AWG	TECK	15	MCP	RPL	LOS	VAR. FREQ. SPEED CONTROLLER
W457-SCA	Sludge Cake Auger 3C	203	7.8	7.5	5.5	575	1	CMFVNR	B3-5	45	3C#8AWG	TECK	15	MCP	RPL	LOS	VAR. FREQ. SPEED CONTROLLER
W662-GP	Glycol Pump #2	210	16.2	15	11.2	575	2	CMFVNR	B2-1	65	3C#8AWG	TECK	50	MCP	RPL	LOS	---
W661-HWP	Hot water Supply pump #2	003	16.2	15	11.2	575	2	CMFVNR	B2-2	65	3C#8AWG	TECK	50	MCP	RPL	LOS	---
W631-AHU	Centrifuge Building HVAC	305	20	20	15	575	2	CMFVNR	B2-3	65	3C#8AWG	TECK	50	MCP	RPL	LOS	---
W651-FN	Centrifuge Bldg. Exhaust fan	303	14.4	15	11.2	575	2	CMFVNR	B4-2	65	3C#8AWG	TECK	50	MCP	RPL	LOS	---
W611-AHU	Truck Bay Heat & Vent Fan	305	37.2	40	30	575	3	CMFVNR	B7-1	120	3C#2AWG	TECK	100	MCP	RPL	LOS	---
W612-FN	Truck Bay Exhaust High Speed Low Speed	305	74	75	56	575	4	CMFVNR	B7-3	120	3 #2AWG 3 #2AWG 1 #2AWG	RW90	150	MCP	RPL	LOS	2 SPEED
W613-FN	Electrical Rm AHU-W613 Fan Motor	ROOF	3.3	3	2.2	575	1	CMFVNR	B3-2	20	3C#12AWG	TECK	15	MCP	RPL	LOS	---
W691-AC	Air Compressor	210	30	30	22.5	575	3	CMFVNR	B5-1	85	3C#4AWG	TECK	100	MCP	RPL	LOS	---
W530-SMP	Sump Pump No.1	005	1.6	1.5	1.2	575	1	CMFVNR	B4-1	20	3C#12AWG	TECK	7	MCP	RPL	LOS	---
-	Centrifuge Crane Breaker	204	-	20	-	575	-	BREAKER	B4-4A	45	3 #8AWG	RW90	50	FB			TO CRANE DISCONNECT
-	Polymer Crane Breaker	105	-	10	-	575	-	BREAKER	B4-4B	20	3 #12AWG	RW90	30	FB			TO CRANE DISCONNECT
-	Transformer breaker WNN1	206	-	-	-	600	-	BREAKER	B9-2	85	3 #4AWG	RW90	60	FB			---
-	Transformer WNN1	206	-	45KVA	-	600	-		B9-3	85	3C#4AWG	---					600-208/120V 3PH 4W
-	Lighting Panel WNN1	206	-	-	-	208	-		B9-1	155	4C#1/0 AWG	---					208/120V 3PH 4W 42CCT PANEL A
-	Metering Compartment								F1-1								IQ DATA PLUS
W213-POM	Liquid Poly. Storage Tank Mixer	006	5.3	5	3.7	575	1	CMFVNR	B4-3	20	3C#12AWG	TECK	15	MCP	RPL	LOS	
W211-POP	Liquid Polymer Feed Pump	006	0.86	0.5	0.37	575	1	CMFVNR	B3-1	20	3C#12AWG	TECK	3	MCP	RPL	LOS	
-	Spare					575			F3-1				50	FB			100A FRAME ADJUSTABLE TRIP
-	Capacitors W112/132/152-CE				50KVA	575			B5-3								CONTRACTOR SHALL BE PROVIDED FOR CAPACITORS W112/132/152-CE
-	Capacitors W115/135/155-CAP				25KVA	575			B6-4								
-	Capacitor W612-FN				25KVA	575			B7-4								
-	Spare					575			F5-1				50	FB			100A FRAME ADJUSTABLE TRIP
-	Spare					575			F7-1				50	FB			100A FRAME ADJUSTABLE TRIP
WN1	CDP Panel Breaker	206	200	-	-	600		BREAKER	B4-5	210	4 #3/0	RW90	225	FB			
WN2	CDP Panel Breaker	206	200	-	-	600		BREAKER	F8-4	210	4 #3/0	RW90	225	FB			
W614-FN	Pressurization & Recirc Unit	303	2.6	2.5	1.8	575	1	CMFVNR	B6-1	20	3C#12AWG	TECK	7	MCP		LOS	
W615-FN	Pressurization & Recirc Unit	303	2.2	2	1.5	575	1	CMFVNR	B6-2	20	3C#12AWG	TECK	7	MCP		LOS	
FDP-W6	Sludge Cake Pump Auxiliary Cooling Motor Panel #1	206	-	-	-	575		BREAKER	B3-3A	45	3C#8AWG	TECK	30	FB			CONTROLS FOR AUXILIARY COOLING FANS & PUMPS ON MAIN HYDROLIC PUMP UNITS



10	-	-
9	-	-
8	-	-
7	-	-
6	-	-
5	-	-
4	-	-
3	-	-
2	-	-
1	1-0101-ECBD-W001	MCC LAYOUT - MCC-1W-A & B AND DETAILS
NO.	DRAWING NUMBER	REFERENCE DRAWING TITLE
		REFERENCE DRAWINGS



		ENGINEER'S SEAL
DESIGNED BY: M. BERGEN	CHECKED BY: C. ROBINSON	 WATER AND WASTE DEPARTMENT NORTH END SEWAGE TREATMENT PLANT (NEWPCC) SLUDGE CAKE PUMP UPGRADE ELECTRICAL MCC-1W SCHEDULE
DRAWN BY: D. SHABATAEV	APPROVED BY: C. ROBINSON	
SCALE: NTS	ISSUED FOR CONSTRUCTION BY: DATE: 2026-04-02	
DATE: 2026-04-02	DATE:	
CONSULTANT NO.: 25-0107-017_E4		
00 ISSUED FOR CONSTRUCTION	2026-04-02	
NO. REVISIONS	DATE	DESIGN CHECK
CITY DRAWING NUMBER	SHEET	REV. SIZE
1-0101-ESCH-W001	00	A1