

PANEL ID: PNL-2P		AMPS: 225	VOLTS: 347/600V	PHASE: 3Ø	WIRE: 4	SURF. MOUNT <input checked="" type="checkbox"/>	TOP FED <input type="checkbox"/>								
DESCRIPTION: ESSENTIAL		LOCATION: PRIMARY CLARIFIER ELECTRICAL ROOM		INTERRUPTING RATING: 25 KA											
MFG / MODEL: WESTINGHOUSE NFD		INST. SETTINGS: N/A													
MAIN BREAKER: 100A, HFD SERIES															
CCT.	DESCRIPTION	NOTE	WIRE (AWG)	BRKR AMPS	LOAD (VA)	A	B	C	LOAD (VA)	BRKR AMPS	WIRE (AWG)	NOTE	DESCRIPTION	CCT.	
1	LIGHTING RM P106, P107, P110		15	835	910				800W	15			LIGHTING RM P117, P118, P120	2	
3	LIGHTING RM P112		15	560	800W				800W	15			LIGHTING WALKWAY P130	4	
5	LIGHTING STAIRS P111, P121, P122		15	500W	800W				800W	15			EXIT LIGHTS PRIMARY CLARIFER	6	
7	LIGHTING RM P124, P127		15	900W						15			SPARE	8	
9	LIGHTING STAIRS P105, P116		15	650W	400W				400W	15			EXTERIOR LIGHTING	10	
11	EXIT LIGHTS GALLERY 106 & 110		15	95	300W				300W	15			EXTERIOR LIGHTING	12	
13				6500W						15			SPARE	14	
15	SUMP PUMP 4 PLEX		8	40	6500W				600W	15			LIGHTING STAIRS P128, P133	16	
17					6500W				400W	15			LIGHTING STAIRS P125, P131	18	
19									800W	15			LIGHT P130	20	
21	PNL-2B			40	700W				700W	15			LIGHTING RM P101, P102	22	
23									155	15			EXIT	24	
25									15	15			SPARE	26	
27	PNL-2G			40						15			SPARE	28	
29													SPARE	30	
31	SPACE												SPACE	32	
33	SPACE												SPACE	34	
35	SPACE												SPACE	36	
37	SPACE												SPACE	38	
39	SPACE												SPACE	40	
41	SPACE												SPACE	42	
TOTAL CONNECTED LOAD:			KVA		PHASE A:		KVA		A		NOTE LEGEND:				
			A (AVG)		PHASE B:		KVA		A		AFCI ARC FAULT CIRCUIT INTERRUPTOR				
			A (MAX)		PHASE C:		KVA		A		GFCI GROUND FAULT CIRCUIT INTERRUPTOR				
											LOCK LOCKED BREAKER				
NOTES:															
1. WATT LOADS COPIED FROM EXISTING DRAWINGS EXCEPT FOR THOSE NOTED.															

PANEL ID: PNL-4P		AMPS: 225	VOLTS: 120/208V	PHASE: 3Ø	WIRE: 4	SURF. MOUNT <input checked="" type="checkbox"/>	TOP FED <input type="checkbox"/>								
DESCRIPTION: ESSENTIAL		LOCATION: PRIMARY CLARIFIER ELECTRICAL ROOM		INTERRUPTING RATING: 10 KA											
MFG / MODEL: WESTINGHOUSE NBA		INST. SETTINGS: N/A													
MAIN BREAKER: 200A															
CCT.	DESCRIPTION	NOTE	WIRE (AWG)	BRKR AMPS	LOAD (VA)	A	B	C	LOAD (VA)	BRKR AMPS	WIRE (AWG)	NOTE	DESCRIPTION	CCT.	
1	FACP-1	LOCK	12	15	500				100W	15			P106-STP CONTROL	2	
3	SPARE								100W	15			P116-STP CONTROL	4	
5	SPARE								400W	15			SPARE	6	
7	SPARE								1000W	15			LIGHTING RM P113 & REC. P115	8	
9	SPARE									15			SPARE	10	
11	SPARE									15			SPARE	12	
13														14	
15	SPARE									15			SPARE (WAS PNL-6P)	16	
17														18	
19	SPARE									15			SPARE	20	
21	SPARE									15			SPARE	22	
23	SPARE									15			SPARE	24	
25	SPARE								1000W	15			FIELD DEVICE PANEL	26	
27	SPARE								1000W	15			FIELD DEVICE PANEL	28	
29	SPARE								1000W	15			FIELD DEVICE PANEL	30	
31									100W	15			SAMPLER 536	32	
33	PNL-4B								100W	15			SAMPLER 501	34	
35									100W	15			SAMPLER 502	36	
37									100W	15			SAMPLER 537	38	
39	PNL-4G									15			SPARE	40	
41										15			SPARE	42	
TOTAL CONNECTED LOAD:			KVA		PHASE A:		KVA		A		NOTE LEGEND:				
			A (AVG)		PHASE B:		KVA		A		AFCI ARC FAULT CIRCUIT INTERRUPTOR				
			A (MAX)		PHASE C:		KVA		A		GFCI GROUND FAULT CIRCUIT INTERRUPTOR				
											LOCK LOCKED BREAKER				
NOTES:															
1. WATT LOADS COPIED FROM EXISTING DRAWINGS EXCEPT FOR THOSE NOTED.															

PANEL ID: PNL-5P		AMPS: 100	VOLTS: 120/208V	PHASE: 3Ø	WIRE: 4	SURF. MOUNT <input checked="" type="checkbox"/>	TOP FED <input checked="" type="checkbox"/>								
DESCRIPTION: NON-ESSENTIAL		LOCATION: PRIMARY CLARIFIER ELECTRICAL ROOM		INTERRUPTING RATING: 10 KA											
MFG / MODEL: WESTINGHOUSE PRL1		INST. SETTINGS: N/A													
MAIN BREAKER: N/A															
CCT.	DESCRIPTION	NOTE	WIRE (AWG)	BRKR AMPS	LOAD (VA)	A	B	C	LOAD (VA)	BRKR AMPS	WIRE (AWG)	NOTE	DESCRIPTION	CCT.	
1	PCU SB FEED 2		10	30	900W					15			SPARE	2	
3	PCU SC FEED 2		10	30	900W					15			SPARE	4	
5	PCU SI FEED 2		10	30	900W					15			SPARE	6	
7	SPACE												SPACE	7	
9	SPACE												SPACE	10	
11	SPACE												SPACE	12	
13	SPACE												SPACE	14	
15	SPACE												SPACE	16	
17	SPACE												SPACE	18	
TOTAL CONNECTED LOAD:			KVA		PHASE A:		KVA		A		NOTE LEGEND:				
			A (AVG)		PHASE B:		KVA		A		AFCI ARC FAULT CIRCUIT INTERRUPTOR				
			A (MAX)		PHASE C:		KVA		A		GFCI GROUND FAULT CIRCUIT INTERRUPTOR				
											LOCK LOCKED BREAKER				
NOTES:															
1. WATT LOADS COPIED FROM EXISTING DRAWINGS EXCEPT FOR THOSE NOTED.															

PANEL ID: PNL-6P		AMPS: 100	VOLTS: 120/208V	PHASE: 3Ø	WIRE: 4	SURF. MOUNT <input checked="" type="checkbox"/>	TOP FED <input checked="" type="checkbox"/>								
DESCRIPTION: FED FROM UPS-G1		LOCATION: PRIMARY CLARIFIER ELECTRICAL ROOM		INTERRUPTING RATING: 10 KA											
MFG / MODEL: WESTINGHOUSE PRL1		INST. SETTINGS: N/A													
MAIN BREAKER: N/A															
CCT.	DESCRIPTION	NOTE	WIRE (AWG)	BRKR AMPS	LOAD (VA)	A	B	C	LOAD (VA)	BRKR AMPS	WIRE (AWG)	NOTE	DESCRIPTION	CCT.	
1	PCU SB FEED 1		10	30	1200					15			SPARE	2	
3	PCU SC FEED 1		10	30	1200					15			SPARE	4	
5	PCU SI FEED 1		10	30	1200					15			SPARE	6	
7	SPACE												SPACE	7	
9	SPACE												SPACE	10	
11	SPACE												SPACE	12	
13	SPACE												SPACE	14	
15	SPACE												SPACE	16	
17	SPACE												SPACE	18	
TOTAL CONNECTED LOAD:			3.6 KVA		PHASE A:		1.2 KVA		10 A		NOTE LEGEND:				
			10 A (AVG)		PHASE B:		1.2 KVA		10 A		AFCI ARC FAULT CIRCUIT INTERRUPTOR				
			10 A (MAX)		PHASE C:		1.2 KVA		10 A		GFCI GROUND FAULT CIRCUIT INTERRUPTOR				
											LOCK LOCKED BREAKER				
NOTES:															

NOTES:
1. SUPERCEDES PART OF SEP-580 AND PART OF SEP-281.



NO.		CONSTRUCTION NOTES	
1		REMOVE FEEDER TO PNL-6P FROM PNL-4P.	
2		INSTALL RED BREAKER FOR FIRE ALARM PANEL, LOCKABLE IN THE ON POSITION. AFFIX LABEL STATING "THE FIRE ALARM SYSTEM POWER IS SUPPLIED FROM MORE THAN ONE SOURCE."	
3		CONNECT EXISTING WIRING TO PCU POWER TERMINAL BLOCK IN CABINETS PCU-SB, PCU-SC, AND PCU-SI.	
DESIGNED BY:		SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080	
CHECKED BY:		ENGINEER'S SEAL	
DRAWN BY:		ORIGINAL DRAWING SEALED BY:	
SCALE:		T. M. CHURCH	
DATE:		SNC-LAVALIN	
REVISIONS:		MEMBER #32682	
		2011/03/30	
		REV. 00	
ISSUED FOR TENDER, BID OPP: 209-2011		CITY DRAWING NUMBER	
2011/03/11		1-0102P-E0012	
TMC		SHEET	
CJR		001	
CHECK		REV.	
		00	
		SIZE	
		A1	
CONSULTANT NO.: 112577-0106-47DD-0402		1-0102P-E0012-001-00.dwg	



SOUTH END WATER POLLUTION CONTROL CENTRE
ESSENTIAL SYSTEM UPGRADES
PANEL SCHEDULES
PRIMARY CLARIFIER ELECTRICAL ROOM