

	I/O List		Document Code	113368-0000-48EL-0001
			Revision	0
Client City of Winnipeg				
Project Marion Wastewater Pumping Station				
Package / Area CP-L1 Control Panel				
Prepared By	Name	Signature	Date	
	B. Cleven		2010-10-01	
Checked By	Name	Signature	Date	
	C. Reimer		2010-10-01	
Approved By	Name	Signature	Date	
	C. Reimer		2010-10-01	
Notes / Comments			Seal	
			Original Sealed By: C. J. Reimer 2010-10-01 Rev. 0	

Revisions					
Rev	Description	Date	By	Checked	Approved
0	Issued for Tender	2010-10-01	B. Cleven	C. Reimer	C. Reimer

Discrete Inputs

Rack	Slot	Point	Tag	Description	0 State	1 State	P&ID Dwg	PLC Tag Name
0	1	0	L601-HS-1	Recirculation Dampers Mode Switch	Recirc. Off	Auto	1-0159L-P0002	
0	1	1	L602-HS-1	HCE-L1 Heater Mode	Manual	Auto	1-0159L-P0002	
0	1	2	L105-LSH	Station Flood	Stn Flood	Normal	1-0159L-P0001	
0	1	3	L600-HS-1	Occupied Switch	Unoccupied	Occupied	1-0159L-P0002	
0	1	4	L501-EA	600 VAC Power Failure	Power Fail	Normal		
0	1	5	L502-EA	120 VAC Power Failure	Power Fail	Normal		
0	1	6	L603-UL	SF-L1 Ready	Not Ready	Ready	1-0159L-P0002	
0	1	7	L603-IA	SF-L1 Overload Alarm	Normal	Tripped	1-0159L-P0002	
0	1	8	L603-MM	SF-L1 Running	Stopped	Running	1-0159L-P0002	
0	1	9	L603-FSL	SF-L1 Low Flow Alarm	No Flow	Flow	1-0159L-P0002	
0	1	10	L101-UL	VFD-P-L1 Ready	Not Ready	Ready	1-0159L-P0001	
0	1	11	L101-HS-4	VFD-P-L1 Auto Mode	Not Auto	Auto	1-0159L-P0001	
0	1	12	L101-YL	VFD-P-L1 Bypass Mode	VFD	Bypass	1-0159L-P0001	
0	1	13	L101-MM	VFD-P-L1 Running	Stopped	Running	1-0159L-P0001	
0	1	14	L101-UA	VFD-P-L1 VFD Fault	Normal	Fault	1-0159L-P0001	
0	1	15	L101-IA	VFD-P-L1 Bypass Overload Alarm	Normal	Tripped	1-0159L-P0001	
0	1	16	L503-QA	TVSS Status	Alarm	Normal		
0	1	17	L110-FQ	Flow Meter Pulse Output	-	Pulse	1-0159L-P0001	
0	1	18		Spare				
0	1	19		Spare				
0	1	20		Spare				
0	1	21		Spare				
0	1	22		Spare				
0	1	23		Spare				
0	1	24		Spare				
0	1	25		Spare				
0	1	26		Spare				
0	1	27		Spare				
0	1	28		Spare				
0	1	29		Spare				
0	1	30		Spare				
0	1	31		Spare				

0	2	0	L102-UL	VFD-P-L2 Ready	Not Ready	Ready	1-0159L-P0001	
0	2	1	L102-HS-4	VFD-P-L2 Auto Mode	Not Auto	Auto	1-0159L-P0001	
0	2	2	L102-YL	VFD-P-L2 Bypass Mode	VFD	Bypass	1-0159L-P0001	
0	2	3	L102-MM	VFD-P-L2 Running	Stopped	Running	1-0159L-P0001	
0	2	4	L102-UA	VFD-P-L2 VFD Fault	Normal	Fault	1-0159L-P0001	
0	2	5	L102-IA	VFD-P-L2 Bypass Overload Alarm	Normal	Tripped	1-0159L-P0001	
0	2	6	L103-UL	VFD-P-L3 Ready (Future)	Not Ready	Ready		
0	2	7	L103-HS-4	VFD-P-L3 Auto Mode (Future)	Not Auto	Auto		
0	2	8	L103-YL	VFD-P-L3 Bypass Mode (Future)	VFD	Bypass		
0	2	9	L103-MM	VFD-P-L3 Running (Future)	Stopped	Running		
0	2	10	L103-UA	VFD-P-L3 VFD Fault (Future)	Normal	Fault		
0	2	11	L103-IA	VFD-P-L3 Bypass Overload Alarm (Future)	Normal	Tripped		
0	2	12		Spare				
0	2	13		Spare				
0	2	14	L605-MM	SF-L2 Running	Stopped	Running	1-0159L-P0002	
0	2	15	L605-HS-1	SF-L2 Auto Mode	Hand	Auto	1-0159L-P0002	
0	2	16		Spare				
0	2	17		Spare				
0	2	18		Spare				
0	2	19		Spare				
0	2	20		Spare				
0	2	21		Spare				
0	2	22		Spare				
0	2	23		Spare				
0	2	24		Spare				
0	2	25		Spare				
0	2	26		Spare				
0	2	27		Spare				
0	2	28		Spare				
0	2	29		Spare				
0	2	30		Spare				
0	2	31		Spare				

Discrete Outputs

Rack	Slot	Point	Tag	Description	0 State	1 State	P&ID Dwg	PLC Tag Name
0	3	0	L101-MN	VFD-P-L1 Run Command	Stop	Run	1-0159L-P0001	
0	3	1	L101-YC	VFD-P-L1 Bypass Command	VFD	Bypass	1-0159L-P0001	
0	3	2	L102-MN	VFD-P-L2 Run Command	Stop	Run	1-0159L-P0001	
0	3	3	L102-YC	VFD-P-L2 Bypass Command	VFD	Bypass	1-0159L-P0001	
0	3	4	L103-MN	VFD-P-L3 Run Command (Future)	Stop	Run		
0	3	5	L103-YC	VFD-P-L3 Bypass Command (Future)	VFD	Bypass		
0	3	6	L605-MN	SF-L2 Run Command	Stop	Run	1-0159L-P0002	
0	3	7		Spare				
0	3	8		Spare				
0	3	9		Spare				
0	3	10		Spare				
0	3	11		Spare				
0	3	12		Spare				
0	3	13		Spare				
0	3	14		Spare				
0	3	15		Spare				

Analog Inputs

Rack	Slot	Point	Tag	Description	Type	EU Range	P&ID Dwg	PLC Tag Name
0	4	0	L100-LT-A	Wet Well Level	4-20 mA	0 - 10 m	1-0159L-P0001	
0	4	1	L604-TT	Main Floor Temperature	4-20 mA	-40 - 60°C	1-0159L-P0002	
0	4	2	L602-TT	Supply Air Temperature	4-20 mA	-40 - 60°C	1-0159L-P0002	
0	4	3		Spare	4-20 mA			
0	4	4		Spare	4-20 mA			
0	4	5	L110-FT	Pump Discharge Flow Meter	4-20 mA	0 - 500 L/s	1-0159L-P0001	
0	4	6	L101-ST	VFD-P-L1 Speed	4-20 mA	0 - 60 Hz	1-0159L-P0001	
0	4	7	L101-IT	VFD-P-L1 Motor Current	4-20 mA	0 - 75 A	1-0159L-P0001	
0	5	0	L102-ST	VFD-P-L2 Speed	4-20 mA	0 - 60 Hz	1-0159L-P0001	
0	5	1	L102-IT	VFD-P-L2 Motor Current	4-20 mA	0 - 75 A	1-0159L-P0001	
0	5	2	L103-ST	VFD-P-L3 Speed (Future)	4-20 mA	0 - 60 Hz		
0	5	3	L103-IT	VFD-P-L3 Motor Current (Future)	4-20 mA	0 - 75 A		
0	5	4	L601-ZT-1	Ventilation Intake Air Damper Position	0 - 10 V	0-100%	1-0159L-P0002	
0	5	5	L601-ZT-2	Ventilation Return Air Damper Position	0 - 10 V	0-100%	1-0159L-P0002	
0	5	6	L601-ZT-3	Ventilation Exhaust Air Damper Position	0 - 10 V	0-100%	1-0159L-P0002	
0	5	7	L100-LT-B	Wet Well Level	4-20 mA	0 - 10 m	1-0159L-P0001	

Analog Outputs

Rack	Slot	Point	Tag	Description	Type	EU Range	P&ID Dwg	PLC Tag Name
0	6	0	L101-SC	VFD-P-L1 Speed Command	4-20 mA	0 - 60 Hz	1-0159L-P0001	
0	6	1	L102-SC	VFD-P-L2 Speed Command	4-20 mA	0 - 60 Hz	1-0159L-P0001	
0	6	2	L601-FC	L601-FC Mixed Air Ratio Control	0 - 10 V	0 - 100%	1-0159L-P0002	
0	6	3	L602-TC	HCE-L1 Heater Output Command	0 - 10 V	0 - 100%	1-0159L-P0002	
0	7	0	L103-SC	VFD-P-L3 Speed Command (Future)	4-20 mA	0 - 60 Hz		
0	7	1		Spare	4-20 mA			
0	7	2		Spare	4-20 mA			
0	7	3		Spare	4-20 mA			