

	I/O List		Document Code	632354-0000-48EL-0001
			Revision	00
Client City of Winnipeg				
Project Cockburn Flood and Wastewater Pumping Station - 2016 Upgrades				
Package / Area CP-A81 Control Panel				
Prepared By	Name	Signature	Date	
	B. Cleven		5/6/2016	
Checked By	Name	Signature	Date	
Approved By	Name	Signature	Date	
Notes / Comments				

Revisions					
Rev	Description	Date	By	Checked	Approved
00	Issued for Tender, Bid Op. 331-2016	2016-05-09	B. Cleven	F. Ataei	I. Parkinson

Discrete Inputs

Module Address	Hardware Point	Wire Tag	DNP3 Register	Tag	Description	0 State	1 State	P&ID Dwg	PLC Tag Name
0	0	I1	0	YL-A522	Alarm Test	Not Test	Test	-	-
0	1	I2	1	LSH-L500	Sanitary Hi Wetwell	Alarm	Normal	-	-
0	2	I3	2	LSH-L523	Sanitary Station Flood	Alarm	Normal	-	-
0	3	I4	3	PSL-L524	Sanitary Low Instrument Air	Normal	Alarm	-	-
0	4	I5	4	TSL-L525	Sanitary Low Temperature	Normal	Alarm	-	-
0	5	I6	5	PSL-F526	Seal Water Loss	Normal	Alarm	-	-
0	6	I7	6	ESL-A721	600 VAC Power OK	Alarm	Normal	-	-
0	7	I8	7	ESL-A528	120 VAC Power OK	Alarm	Normal	-	-
0	8	I9	8	YA-A543	UPS Alarm or Bat Mode	Normal	Alarm	-	-
0	9	I10	9	YL-A543	UPS Charging	-	Charging	-	-
0	10	I11	10	YL-A508-1	RTU Mode	Not RTU	RTU	-	-
0	11	I12	11	YL-A508-2	Local Mode	Not Local	Local	-	-
0	12	I13	12	HS-A510	Reset	-	Reset	-	-
0	13	I14	13	LSH-F500	Flood Station Hi Wetwell Level	Alarm	Normal	-	-
0	14	I15	14	PSL-F524	Flood Station Low Inst. Air	Normal	Alarm	-	-
0	15	I16	15	LSH-S529	Weir Overflow	Alarm	Normal	-	-
0	16	I17	16	YL-F010	P-F01 Ready	Not Ready	Ready	-	-
0	17	I18	17	YLR-F010	P-F01 Running	Stopped	Running	-	-
0	18	I19	18	YAF-F010	P-F01 Fail	Normal	Fail	-	-
0	19	I20	19	HS-F010-5A	P-F01 Auto Mode	-	Auto	-	-
0	20	I21	20	HS-F010-5M	P-F01 Manual Mode	-	Manual	-	-
0	21	I22	21	YL-F020	P-F02 Ready	Not Ready	Ready	-	-
0	22	I23	22	YLR-F020	P-F02 Running	Stopped	Running	-	-
0	23	I24	23	YAF-F020	P-F02 Fail	Normal	Fail	-	-
0	24	I25	24	HS-F020-5A	P-F02 Auto Mode	-	Auto	-	-
0	25	I26	25	HS-F020-5M	P-F02 Manual Mode	-	Manual	-	-
0	26	I27	26	YL-F030	P-F03 Ready	Not Ready	Ready	-	-
0	27	I28	27	YLR-F030	P-F03 Running	Stopped	Running	-	-
0	28	I29	28	YAF-F030	P-F03 Fail	Normal	Fail	-	-
0	29	I30	29	HS-F030-5A	P-F03 Auto Mode	-	Auto	-	-
0	30	I31	30	HS-F030-5M	P-F03 Manual Mode	-	Manual	-	-
0	31	I32	31	-	Spare	-	-	-	-
-	-	-	32	-	Reserved	-	-	-	-
-	-	-	33	-	Reserved	-	-	-	-
-	-	-	34	-	Reserved	-	-	-	-
-	-	-	35	-	Reserved	-	-	-	-
-	-	-	36	-	Reserved	-	-	-	-
-	-	-	37	-	Reserved	-	-	-	-
-	-	-	38	-	Reserved	-	-	-	-
-	-	-	39	-	Reserved	-	-	-	-
-	-	-	40	-	Reserved	-	-	-	-
-	-	-	41	-	Reserved	-	-	-	-
-	0	I43	42	-	Spare	-	-	-	-
-	1	I44	43	-	Spare	-	-	-	-
-	2	I45	44	-	Spare	-	-	-	-
-	3	I46	45	-	Spare	-	-	-	-
-	4	I47	46	-	Spare	-	-	-	-
-	5	I48	47	-	Spare	-	-	-	-

Module Address	Hardware Point	Wire Tag	DNP3		Description	0 State	1 State	P&ID Dwg	PLC Tag Name
			Register	Tag					
1	0	I49	48	-	Spare	-	-	-	-
1	1	I50	49	TSH-F622	Main Floor Hi Temperature	Normal	Alarm	-	-
1	2	I51	50	TSL-F622	Main Floor Low Temperature	Normal	Alarm	-	-
1	3	I52	51	TSH-A653	Electrical Room Hi Temperature	Normal	Alarm	-	-
1	4	I53	52	TSL-A653	Electrical Room Low Temperature	Normal	Alarm	-	-
1	5	I54	53	YLR-A610	Main Supply Fan Running	Stopped	Running	-	-
1	6	I55	54	IA-A610	Main Supply Fan Fail	Normal	Alarm	-	-
1	7	I56	55	LSH-L481	Comminutor Chamber Flood	Alarm	Normal	-	-
1	8	I57	56	XS-A712	MCC-A71 TVSS Status	Normal	Alarm	-	-
1	9	I58	57	XS-A722	MCC-A72 TVSS Status	Normal	Alarm	-	-
1	10	I59	58	YL-L500	Sanitary Wetwell Level Transmitter "A" Selected	B	A	-	-
1	11	I60	59	PDSH-A610	Supply Fan Air Filter Plugged	Normal	Alarm	-	-
1	12	I61	60	HS-F529	Flood Station Disabled	Enabled	Disabled	-	-
1	13	I62	61	FSL-F011	Flood Pump P-F01 Low Seal Water Flow	Normal	Alarm	-	-
1	14	I63	62	FSL-F021	Flood Pump P-F02 Low Seal Water Flow	Normal	Alarm	-	-
1	15	I64	63	FSL-F031	Flood Pump P-F03 Low Seal Water Flow	Normal	Alarm	-	-
1	16	I65	64	YL-L010	P-L01 Ready	Not Ready	Ready	-	-
1	17	I66	65	YLR-L010	P-L01 Running	Stopped	Running	-	-
1	18	I67	66	YAF-L010	P-L01 Soft Starter Fail	Normal	Fault	-	-
1	19	I68	67	IA-L010	P-L01 Overload Trip	Normal	Fault	-	-
1	20	I69	68	HS-L010-5A	P-L01 Auto Mode	Not Auto	Auto	-	-
1	21	I70	69	HS-L010-5M	P-L01 Manual Mode	Not Manual	Manual	-	-
1	22	I71	70	HS-L010-1S	P-L01 Soft Start Mode	-	SS Mode	-	-
1	23	I72	71	HS-L010-1A	P-L01 ATL Mode	-	ATL Mode	-	-
1	24	I73	72	YL-L020	P-L02 Ready	Not Ready	Ready	-	-
1	25	I74	73	YLR-L020	P-L02 Running	Stopped	Running	-	-
1	26	I75	74	YAF-L020	P-L02 Soft Starter Fail	Normal	Fault	-	-
1	27	I76	75	IA-L020	P-L02 Overload Trip	Normal	Fault	-	-
1	28	I77	76	HS-L020-5A	P-L02 Auto Mode	Not Auto	Auto	-	-
1	29	I78	77	HS-L020-5M	P-L02 Manual Mode	Not Manual	Manual	-	-
1	30	I79	78	HS-L020-1S	P-L02 Soft Start Mode	-	SS Mode	-	-
1	31	I80	79	HS-L020-1A	P-L02 ATL Mode	-	ATL Mode	-	-
2	0	I81	80	YLR-F620	Flood Motor Cooling Fan SF-F62 Running	Stopped	Running	-	-
2	1	I82	81	IA-F620	Flood Motor Cooling Fan SF-F62 O/L Tripped	Normal	Alarm	-	-
2	2	I83	82	TSH-A701	Service Transformer XFMR-A70 High Temperature	Normal	Alarm	-	-
2	3	I84	83	LSL-A702	Service Transformer XFMR-A70 Low Oil Level	Normal	Alarm	-	-
2	4	I85	84	-	Spare	-	-	-	-
2	5	I86	85	-	Spare	-	-	-	-
2	6	I87	86	-	Spare	-	-	-	-
2	7	I88	87	-	Spare	-	-	-	-
2	8	I89	88	-	Spare	-	-	-	-
2	9	I90	89	-	Spare	-	-	-	-
2	10	I91	90	-	Spare	-	-	-	-
2	11	I92	91	-	Spare	-	-	-	-
2	12	I93	92	-	Spare	-	-	-	-
2	13	I94	93	-	Spare	-	-	-	-
2	14	I95	94	-	Spare	-	-	-	-
2	15	I96	95	-	Spare	-	-	-	-

Discrete Outputs

Module Address	Hardware Point	Wire Tag	DNP3 Register	Tag	Description	0 State	1 State	P&ID Dwg	PLC Tag Name
0	0	Q1		YCR-L010	P-L01 Run Command	-	Run	-	-
0	1	Q2		YCR-L020	P-L02 Run Command	-	Run	-	-
0	2	Q3		-	Spare	-	-	-	-
0	3	Q4		-	Spare	-	-	-	-
0	4	Q5		-	Spare	-	-	-	-
0	5	Q6		-	Spare	-	-	-	-
0	6	Q7		-	Spare	-	-	-	-
0	7	Q8		-	Spare	-	-	-	-
0	8	Q9		-	Spare	-	-	-	-
0	9	Q10		-	Spare	-	-	-	-
0	10	Q11		-	Spare	-	-	-	-
0	11	Q12		-	Spare	-	-	-	-
0	12	Q13		-	Spare	-	-	-	-
0	13	Q14		YL-A510	Fail to Local	-	Fail to Local	-	-
0	14	Q15		YC-A508-1	Local Mode	-	Local Mode	-	-
0	15	Q16		YC-A508-2	RTU Mode	-	RTU Mode	-	-

Analog Inputs

Module Address	Hardware Point	Wire Tag	DNP3 Register	Tag	Description	Type	EU Range	P&ID Dwg	PLC Tag Name
0	0	AI1	0	LIT-L500-A	Sanitary Wetwell Level Transmitter "A"	4-20 mA	TBD	-	-
0	1	AI2	1	LIT-L500-B	Sanitary Wetwell Level Transmitter "B" (Future)	4-20 mA	-	-	-
0	2	AI3	2	LT-F500	Flood Station Wetwell Level Transmitter	4-20 mA	TBD	-	-
0	3	AI4	3	-	Spare	4-20 mA	-	-	-
0	4	AI5	4	-	Spare	4-20 mA	-	-	-
0	5	AI6	5	-	Spare	4-20 mA	-	-	-
0	6	AI7	6	-	Spare	4-20 mA	-	-	-
0	7	AI8	7	-	Spare	4-20 mA	-	-	-
-	0	AI9	8	IT-F010	Flood Pump P-F01 Motor Current	4-20 mA	0 - 300 Amps	-	-
-	1	AI10	9	IT-F020	Flood Pump P-F02 Motor Current	4-20 mA	0 - 250 Amps	-	-
-	2	AI11	10	IT-F030	Flood Pump P-F03 Motor Current	4-20 mA	0 - 400 Amps	-	-
-	3	AI12	11	IT-L010	Lift Pump P-L01 Motor Current	4-20 mA	0 - 50 Amps	-	-
-	4	AI13	12	IT-L020	Lift Pump P-L02 Motor Current	4-20 mA	0 - 50 Amps	-	-
-	5	-	-	-	(Not Wired)	0-32.768V	-	-	-
3	0	AI14	13	LIT-F851	CSO - Downstream of Weir Level	4-20 mA	TBD	-	-
3	1	AI15	14	LIT-S951	CSO - Downstream of Flap Gate Level	4-20 mA	TBD	-	-
3	2	AI16	15	ZT-S851	CSO - Flapgate Inclination	4-20 mA	TBD	-	-
3	3	AI17	16	VT-S651	CSO - Incoming Flowmeter - Velocity	4-20 mA	TBD	-	-
3	4	AI18	17	FT-S651	CSO - Incoming Flowmeter - Flow Rate	4-20 mA	TBD	-	-
3	5	AI19	18	LT-S651	CSO - Incoming Flowmeter - Level	4-20 mA	TBD	-	-
3	6	AI20	19	FIT-L101	Sanitary Pumps P-L01 and P-L02 Discharge Flowmeter	4-20 mA	TBD	-	-
3	7	AI21	20	-	Spare	4-20 mA	-	-	-

Analog Ouputs

Module Address	Hardware Point	Wire Tag	DNP3 Register	Tag	Description	Type	EU Range	P&ID Dwg	PLC Tag Name
0	0	AQ1	0	-	Spare	4-20 mA	-	-	-
0	1	AQ2	1	-	Spare	4-20 mA	-	-	-
-	0	AQ3	2	-	Spare	4- 20 mA	-	-	-
-	1	AQ4	3	-	Spare	4-20 mA	-	-	-