

	I/O LIST - PLC-U81	Document Code 648185-48EL-0001
		Revision 00
Client City of Winnipeg		
Project Metro Route 20 Underpass Pumping Station - 2018 Upgrades		
Package / Area Metro Route 20 Underpass Pumping Station		

Notes / Comments

Revisions					
Rev	Description	Date	By	Checked	Approved
00	Issued for Tender, Bid Opp. 475-2018	2018-05-09	T. Church	B. Cleven	B. Cleven

Fuse Number	Term Block	Term Number	Wire Tag	Rack	Module	Point	DNP3 Addr.	Tag	Description	Fail Safe (F/S)	0 State/ EU Minimum	1 State/ EU Maximum	I/O Type	Interface
F204A	TB04	1	I1	1	4	0	1	HS-U522	Alarm Test Mode		Normal Mode	Alarm Test Mode	DI - 24VDC Wet	N/A
F204A	TB04	2	I2	1	4	1	2	LSH-U500	Wet Well High Level	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F204A	TB04	3	I3	1	4	2	3	LSHH-U500	Wet Well High High Level	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F204A	TB04	4	I4	1	4	3	4	LSLL-U500	Wet Well Low Low Level	F/S	Normal	Low	DI - 24VDC Wet	N/A
F204A	TB04	5	I5	1	4	4	5	YAF-U500	Level Transmitter Loss of Echo	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F204A	TB04	6	I6	1	4	5	6	TSL-U603	Main Floor Low Temperature	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F204A	TB04	7	I7	1	4	6	7	TSH-U603	Main Floor High Temperature	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F204A	TB04	8	I8	1	4	7	8	ESL-U721	600 VAC Power Fail Alarm	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F204A	TB04	9	I9	1	4	8	9	ESL-U528	120 VAC Power Fail Alarm	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F204A	TB04	10	I10	1	4	9	10	YA-U543	UPS Alarm	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F204A	TB04	11	I11	1	4	10	11	YS-U543-1	UPS On Battery		Normal	On Battery	DI - 24VDC Wet	N/A
F204A	TB04	12	I12	1	4	11	12	YS-U543-2	UPS Battery Charging		Not Charging	Charging	DI - 24VDC Wet	N/A
F204A	TB04	13	I13	1	4	12	13	HS-U508-1	PLC Mode		Off	PLC Mode	DI - 24VDC Wet	N/A
F204A	TB04	14	I14	1	4	13	14	HS-U508-3	PLC Mode Reset		Off	Reset	DI - 24VDC Wet	N/A
F204A	TB04	15	I15	1	4	14	15		Spare				DI - 24VDC Wet	N/A
F204A	TB04	16	I16	1	4	15	16		Spare				DI - 24VDC Wet	N/A
F204B	TB04	17	I17	1	4	16	17	P-U01.Rdy	Pump P-U01 Ready		Not Ready	Ready	DI - 24VDC Wet	N/A
F204B	TB04	18	I18	1	4	17	18	P-U01.Run	Pump P-U01 Running		Not Running	Running	DI - 24VDC Wet	N/A
F204B	TB04	19	I19	1	4	18	19	P-U01.Flt	Pump P-U01 SS Fault		Normal	Fault	DI - 24VDC Wet	N/A
F204B	TB04	20	I20	1	4	19	20	P-U01.Ovrd	Pump P-U01 Overload		Normal	Overload	DI - 24VDC Wet	N/A
F204B	TB04	21	I21	1	4	20	21	P-U01.HS_Auto	Pump P-U01 Auto Mode		Not Auto Mode	Auto Mode	DI - 24VDC Wet	N/A
F204B	TB04	22	I22	1	4	21	22	P-U01.HS_Man	Pump P-U01 Manual Mode		Not Manual Mode	Manual Mode	DI - 24VDC Wet	N/A
F204B	TB04	23	I23	1	4	22	23	P-U01.HS_SS	Pump P-U01 Soft Starter Mode		Not SS Mode	SS Mode	DI - 24VDC Wet	N/A
F204B	TB04	24	I24	1	4	23	24	P-U01.HS_ATL	Pump P-U01 Across The Line Mode		Not ATL Mode	ATL Mode	DI - 24VDC Wet	N/A
F204B	TB04	25	I25	1	4	24	25	LSL-U012	Pump P-U01 Oil Reservoir Low		Normal	Low	DI - 24VDC Wet	N/A
F204B	TB04	26	I26	1	4	25	26		Spare				DI - 24VDC Wet	N/A
F204B	TB04	27	I27	1	4	26	27	HS-U601	Station Occupied		Not Occupied	Occupied	DI - 24VDC Wet	N/A
F204B	TB04	28	I28	1	4	27	28	SF-U61.Run	Main Floor Supply Fan Running		Not Running	Running	DI - 24VDC Wet	N/A
F204B	TB04	29	I29	1	4	28	29	PDSH-U611	Main Floor Supply Fan Air Filter Plugged	F/S	Plugged	Normal	DI - 24VDC Wet	N/A
F204B	TB04	30	I30	1	4	29	30	EF-U64.Run	Main Floor Exhaust Fan Running		Not Running	Running	DI - 24VDC Wet	N/A
F204B	TB04	31	I31	1	4	30	31	YA-U640	Main Floor Exhaust Fan Not Loaded		Underloaded	Normal	DI - 24VDC Wet	N/A
F204B	TB04	32	I32	1	4	31	32		Spare				DI - 24VDC Wet	N/A

Fuse Number	Term Block	Term Number	Wire Tag	Rack	Module	Point	DNP3 Addr.	Tag	Description	Fail Safe (F/S)	0 State/ EU Minimum	1 State/ EU Maximum	I/O Type	Interface
F205A	TB05	33	I33	1	5	0	33	ATS-U72.OnUtility	Transfer Switch on Utility Power		Off	On Utility	DI - 24VDC Wet	N/A
F205A	TB05	34	I34	1	5	1	34	ATS-U72.OnGen	Transfer Switch on Generator Power		Off	On Generator	DI - 24VDC Wet	N/A
F205A	TB05	35	I35	1	5	2	35	ATS-U72.Alm	Transfer Switch Alarm	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F205A	TB05	36	I36	1	5	3	36	GEN-U72.Run	Generator Running		Not Running	Running	DI - 24VDC Wet	N/A
F205A	TB05	37	I37	1	5	4	37	GEN-U72.Alm	Generator Alarm	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F205A	TB05	38	I38	1	5	5	38	XS-U711	MCC-U71 TVSS Status	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F205A	TB05	39	I39	1	5	6	39	XV-U661.ZSO	Combustion Air Damper Open Status		Closed	Opened	DI - 24VDC Wet	N/A
F205A	TB05	40	I40	1	5	7	40		Spare					
F205A	TB05	41	I41	1	5	8	41	AIT-U550.Alm	Gas Detection Alarm	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F205A	TB05	42	I42	1	5	9	42	AIT-U550.Fl1	Gas Detector Fault	F/S	Alarm	Normal	DI - 24VDC Wet	N/A
F205A	TB05	43	I43	1	5	10	43		Spare				DI - 24VDC Wet	N/A
F205A	TB05	44	I44	1	5	11	44		Spare				DI - 24VDC Wet	N/A
F205A	TB05	45	I45	1	5	12	45		Spare				DI - 24VDC Wet	N/A
F205A	TB05	46	I46	1	5	13	46		Spare				DI - 24VDC Wet	N/A
F205A	TB05	47	I47	1	5	14	47		Spare				DI - 24VDC Wet	N/A
F205A	TB05	48	I48	1	5	15	48		Spare				DI - 24VDC Wet	N/A
F205B	TB05	49	I49	1	5	16	49	P-U02.Rdy	Pump P-U02 Ready		Not Ready	Ready	DI - 24VDC Wet	N/A
F205B	TB05	50	I50	1	5	17	50	P-U02.Run	Pump P-U02 Running		Not Running	Running	DI - 24VDC Wet	N/A
F205B	TB05	51	I51	1	5	18	51	P-U02.Fl1	Pump P-U02 SS Fault		Normal	Fault	DI - 24VDC Wet	N/A
F205B	TB05	52	I52	1	5	19	52	P-U02.Ovrl1	Pump P-U02 Overload		Normal	Overload	DI - 24VDC Wet	N/A
F205B	TB05	53	I53	1	5	20	53	P-U02.HS_Auto	Pump P-U02 Auto Mode		Not Auto Mode	Auto Mode	DI - 24VDC Wet	N/A
F205B	TB05	54	I54	1	5	21	54	P-U02.HS_Man	Pump P-U02 Manual Mode		Not Manual Mode	Manual Mode	DI - 24VDC Wet	N/A
F205B	TB05	55	I55	1	5	22	55	P-U02.HS_SS	Pump P-U02 Soft Starter Mode		Not SS Mode	SS Mode	DI - 24VDC Wet	N/A
F205B	TB05	56	I56	1	5	23	56	P-U02.HS_ATL	Pump P-U02 Across The Line Mode		Not ATL Mode	ATL Mode	DI - 24VDC Wet	N/A
F205B	TB05	57	I57	1	5	24	57	LSL-U022	Pump P-U02 Oil Reservoir Low		Normal	Low	DI - 24VDC Wet	N/A
F205B	TB05	58	I58	1	5	25	58		Spare				DI - 24VDC Wet	N/A
F205B	TB05	59	I59	1	5	26	59	HS-U602	Wet Well Occupied		Not Occupied	Occupied	DI - 24VDC Wet	N/A
F205B	TB05	60	I60	1	5	27	60	PDSH-U621	Wet Well Supply Fan Air Filter Plugged	F/S	Plugged	Normal	DI - 24VDC Wet	N/A
F205B	TB05	61	I61	1	5	28	61	YLR-U620	Wet Well Supply Fan Running		Not Running	Running	DI - 24VDC Wet	N/A
F205B	TB05	62	I62	1	5	29	62	YA-U620	Wet Well Exhaust Fan Fault		Normal	Fault	DI - 24VDC Wet	N/A
F205B	TB05	63	I63	1	5	30	63	YLR-U630	Wet Well Exhaust Fan Running		Not Running	Running	DI - 24VDC Wet	N/A
F205B	TB05	64	I64	1	5	31	64	YA-U630	Wet Well Exhaust Fan Fault		Normal	Fault	DI - 24VDC Wet	N/A

Fuse Number	Term Block	Term Number	Wire Tag	Rack	Module	Point	DNP3 Addr.	Tag	Description	Fail Safe (F/S)	0 State/ EU Minimum	1 State/ EU Maximum	I/O Type	Interface
F207	TB07	1	Q1	1	7	0	1	P-U01.CmdRun	P-U01 Run Command		Stop Command	Run Command	DO - 24VDC Wet	24 VDC/ 24 VDC Relay
F207	TB07	2	Q2	1	7	1	2	P-U02.CmdRun	P-U02 Run Command		Stop Command	Run Command	DO - 24VDC Wet	24 VDC/ 24 VDC Relay
F207	TB07	3	Q3	1	7	2	3		Spare				DO - 24VDC Wet	N/A
F207	TB07	4	Q4	1	7	3	4		Spare				DO - 24VDC Wet	N/A
F207	TB07	5	Q5	1	7	4	5		Spare				DO - 24VDC Wet	N/A
F207	TB07	6	Q6	1	7	5	6		Spare				DO - 24VDC Wet	N/A
F207	TB07	7	Q7	1	7	6	7		Spare				DO - 24VDC Wet	N/A
F207	TB07	8	Q8	1	7	7	8		Spare				DO - 24VDC Wet	N/A
F207	TB07	9	Q9	1	7	8	9		Spare				DO - 24VDC Wet	N/A
F207	TB07	10	Q10	1	7	9	10		Spare				DO - 24VDC Wet	N/A
F207	TB07	11	Q11	1	7	10	11		Spare				DO - 24VDC Wet	N/A
F207	TB07	12	Q12	1	7	11	12		Spare				DO - 24VDC Wet	N/A
F207	TB07	13	Q13	1	7	12	13		Spare				DO - 24VDC Wet	N/A
F207	TB07	14	Q14	1	7	13	14		Spare				DO - 24VDC Wet	N/A
F207	TB07	15	Q15	1	7	14	15	YC-U508-1	Local Mode (Future)				DO - 24VDC Wet	24 VDC/ 24 VDC Relay
F207	TB07	16	Q16	1	7	15	16	YC-U508-2	PLC Mode Okay		PLC Mode Not Okay	PLC Mode Okay	DO - 24VDC Wet	24 VDC/ 24 VDC Relay
F208A	TB08	17	Q17	1	8	0	17	ANN01.LT01	Normal Mode		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	18	Q18	1	8	1	18	ANN01.LT02	Spare		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	19	Q19	1	8	2	19	ANN01.LT03	High High Wet Well Level		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	20	Q20	1	8	3	20	ANN01.LT04	Loss of Echo		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	21	Q21	1	8	4	21	ANN01.LT05	600V Power Fail		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	22	Q22	1	8	5	22	ANN01.LT06	120V Power Fail		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	23	Q23	1	8	6	23	ANN01.LT07	UPS Fail		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	24	Q24	1	8	7	24	ANN01.LT08	Pump P-U01 Running		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	25	Q25	1	8	8	25	ANN01.LT09	Pump P-U02 Running		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	26	Q26	1	8	9	26	ANN01.LT10	Generator Alarm		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	27	Q27	1	8	10	27	ANN01.LT11	Alarm Test Mode		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	28	Q28	1	8	11	28	ANN01.LT12	Spare		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	29	Q29	1	8	12	29	ANN01.LT13	High Wet Well Level		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	30	Q30	1	8	13	30	ANN01.LT14	Spare		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	31	Q31	1	8	14	31	ANN01.LT15	Gas Detection Alarm		Off	On	DO - 24VDC Wet	N/A
F208A	TB08	32	Q32	1	8	15	32	ANN01.LT16	Gas Detector Fail		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	33	Q33	1	8	16	33	ANN01.LT17	UPS On Battery		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	34	Q34	1	8	17	34	ANN01.LT18	Pump P-U01 SS Fault		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	35	Q35	1	8	18	35	ANN01.LT19	Pump P-U02 SS Fault		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	36	Q36	1	8	19	36	ANN01.LT20	MCC-U72E TVSS Alarm		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	37	Q37	1	8	20	37	ANN01.LT21	Room High Temperature		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	38	Q38	1	8	21	38	ANN01.LT22	Room Low Temperature		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	39	Q39	1	8	22	39	ANN01.LT23	Air Filter Plugged		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	40	Q40	1	8	23	40	ANN01.LT24	Wet Well Occupied		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	41	Q41	1	8	24	41	ANN01.LT25	Wet Well Air Filter Plugged		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	42	Q42	1	8	25	42	ANN01.LT26	Wet Well Ventilation Failure		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	43	Q43	1	8	26	43	ANN01.LT27	Combustion Air Damper Fail to Open		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	44	Q44	1	8	27	44	ANN01.LT28	Pump P-U01 Overload Trip		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	45	Q45	1	8	28	45	ANN01.LT29	Pump P-U02 Overload Trip		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	46	Q46	1	8	29	46	ANN01.LT30	Spare		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	47	Q47	1	8	30	47	ANN01.LT31	Fail To Local		Off	On	DO - 24VDC Wet	N/A
F208B	TB08	48	Q48	1	8	31	48	ANN01.LT32	PLC Mode		Off	On	DO - 24VDC Wet	N/A

Fuse Number	Term Block	Term Number	Wire Tag	Rack	Module	Point	DNP3 Addr.	Tag	Description	Fail Safe (F/S)	0 State/ EU Minimum	1 State/ EU Maximum	I/O Type	Interface
F209	TB09	1	AI1	1	9	0	1	LIC-U500	Wet Well Level		TBD	TBD	AI - 4-20mA Isol	3 Wire - Non-Isol
F209	TB09	2	AI2	1	9	1	2	P-U01.IT	P-U01 Current		TBD	TBD	AI - 4-20mA Isol	3 Wire - Non-Isol
F209	TB09	3	AI3	1	9	2	3	P-U02.IT	P-U02 Current		TBD	TBD	AI - 4-20mA Isol	3 Wire - Non-Isol
F209	TB09	4	AI4	1	9	3	4		Spare				AI - 4-20mA Isol	3 Wire - Non-Isol
F209	TB09	5	AI5	1	9	4	5		Spare				AI - 4-20mA Isol	3 Wire - Non-Isol
F209	TB09	6	AI6	1	9	5	6		Spare				AI - 4-20mA Isol	3 Wire - Non-Isol
F209	TB09	7	AI7	1	9	6	7		Spare				AI - 4-20mA Isol	3 Wire - Non-Isol
F209	TB09	8	AI8	1	9	7	8		Spare				AI - 4-20mA Isol	3 Wire - Non-Isol