

NOTES:

- WHERE MANUFACTURER AND MODEL ARE SPECIFIED, SUBSTITUTIONS MUST BE APPROVED.
- ALL 120VAC POWER WIRING TO BE TEW/MTW 600V, 105°C INSULATION, STRANDED COPPER, 14 AWG OR LARGER WHERE CURRENT REQUIREMENTS DICTATE AS PER CEC REQUIREMENTS.
- ALL 24VDC POWER WIRING TO BE TEW/MTW 600V, 105°C INSULATION, STRANDED COPPER, 12 AWG OR LARGER WHERE CURRENT REQUIREMENTS DICTATE AS PER CEC REQUIREMENTS.
- ALL CONTROL WIRING TO BE TEW/MTW 300V, 105°C INSULATION, STRANDED COPPER, 16 AWG.
- ALL ANALOG TWISTED PAIR WIRING TO BE 18 AWG SHIELDED, WITH INSULATION RATED AT 300V.
- EXTERNAL COMPONENTS ARE TO BE LABELLED AS SHOWN ON THE DRAWINGS.
- ALL FUSES ARE TO BE PROVIDED. IN ADDITION, TWO SPARES OF EACH FUSE SIZE ARE TO BE PROVIDED.
- TEST ALL WIRING AND COMPONENTS FOR FUNCTIONAL OPERATION, CORRECT CONNECTION, CONTINUITY AND INSULATION INTEGRITY. THREE COPIES OF CERTIFIED TEST DOCUMENTATION ARE TO BE PROVIDED.
- ALL MAJOR COMPONENTS INSIDE THE PANEL ARE TO BE LABELED WITH LAMACOIDS IN ACCORDANCE WITH MAJOR DESCRIPTIONS ON THE DRAWINGS.
- PROVIDE WIRE BARREL FERULES FOR ALL WIRING, EXCEPT ON THE SIGNAL ISOLATORS WHERE TWO WIRES ARE REQUIRED ON ONE SIGNAL ISOLATOR TERMINAL.
- ALL TERMINAL BLOCKS SHALL BE NUMBERED AS SHOWN IN THE DRAWINGS, COMPLETE WITH GROUP LABELING.
- CLEARLY LABEL DEVICE IDENTIFIERS ON THE DOOR INTERIOR USING COMPUTER-GENERATED ADHESIVE LABELS OR LAMACOIDS.

BILL OF MATERIAL

ITEM	QTY	DESCRIPTION	MANUFACTURER	CATALOG NUMBER
1	1	SINGLE-DOOR TYPE 12 & 13 WALL-MOUNTED ENCLOSURE	HOFFMAN	A423610LP
2	1	BACKPAN	HOFFMAN	A42P36
3	2	PROCESS METER	PRECISION DIGITAL	PD6000-7R4
4	1	SURGE ARRESTER MODULE, 120V	PHOENIX CONTACT	PT 2-PE/S-120AC-ST (2839334)
5	1	SURGE ARRESTER BASE	PHOENIX CONTACT	PT-BE/FM (2839282)
6	1	24VDC POWER SUPPLY/UPS	PHOENIX CONTACT	TRIO-UPS/1AC/24DC/5 (2866611)
7	1	RECHARGEABLE BATTERY MODULE, 3.4Ah	PHOENIX CONTACT	QUINT-BAT/24DC/3.4Ah (2866349)
8	1	SCADAPACK 357E RTU	SCHNEIDER ELECTRIC	TBUP357-EA55-AB20
9	1	DISCRETE INPUT MODULE, 32 POINT, 24V	SCHNEIDER ELECTRIC	5405-24
10	1	RECEPTACLE, 125V, 15A, DIN RAIL MOUNTED	PHOENIX CONTACT	SD-US/SC/LA/GY (2963860)
11	7	SIGNAL ISOLATOR, 4-20mA INPUT, 4-20mA OUTPUT, 4 CHANNEL	MOORE INDUSTRIES	MIX/4X4-20mA/4X4-20mA/12-42DC/DIN
12	AS REQ'D	35mm DIN RAIL	PHOENIX CONTACT	0801733
13	AS REQ'D	NARROW SLOT WIRING DUCT, 2.25" x 3.12", GREY	PANDUIT	-
14	AS REQ'D	NARROW SLOT WIRING DUCT, 3.25" x 3.12", GREY	PANDUIT	-
15	AS REQ'D	FEED-THROUGH TERMINAL	PHOENIX CONTACT	3046184
16	AS REQ'D	FUSED TERMINAL	PHOENIX CONTACT	3046142
17	AS REQ'D	FUSE CONNECTOR	PHOENIX CONTACT	3036806
18	AS REQ'D	KNIFE-DISCONNECT TERMINAL	PHOENIX CONTACT	3046139
19	AS REQ'D	POTENTIAL-EARTH TERMINAL	PHOENIX CONTACT	3046207
20	AS REQ'D	TERMINAL END PLATE	PHOENIX CONTACT	3047141
21	AS REQ'D	TERMINAL END CLAMP	PHOENIX CONTACT	1201442
22	AS REQ'D	DOUBLE LEVEL FUSED TERMINAL	PHOENIX CONTACT	3044720
23	AS REQ'D	DOUBLE LEVEL TERMINAL END PLATE	PHOENIX CONTACT	3047293
24	AS REQ'D	PLUG-IN BRIDGE	PHOENIX CONTACT	3030365
25	AS REQ'D	LAMACOID, WHITE WITH BLACK TEXT	-	-
26	6	GROUND BAR, 14 TAPS	ILSCO	D167-14
27	1	DISCRETE INPUT MODULE, 16 POINT, 24V	SCHNEIDER ELECTRIC	5414-24
28	1	CELLULAR MODEM (SUPPLIED BY CITY)	SIXNET	BT-6801
29	1	PSTN MODEM	PHOENIX CONTACT	PSI-DATA/BASIC-MODEM/RS232 (2313067)
30	1	ANNUNCIATOR LIGHT PANEL	IDEC	SLC30N0310-DD2FB-A(2)G(4)R(13)S(1)
31	1	PUSHBUTTON, 22mm, 1 N.O., RED	SCHNEIDER ELECTRIC	ZB4BA4
			SCHNEIDER ELECTRIC	ZB4BZ009
			SCHNEIDER ELECTRIC	ZBE101
32	1	PUSHBUTTON, 22mm, 1 N.O., BLUE	SCHNEIDER ELECTRIC	XB4BA61
			SCHNEIDER ELECTRIC	ZB4BA5
			SCHNEIDER ELECTRIC	ZB4BZ009
			SCHNEIDER ELECTRIC	ZBE102
33	1	PUSHBUTTON, 22mm, 1 N.C., YELLOW	SCHNEIDER ELECTRIC	XB4BA5
			SCHNEIDER ELECTRIC	ZB4BZ009
			SCHNEIDER ELECTRIC	ZBE102
34	1	SELECTOR SWITCH, 2 POS'N, MAINTAINED, 1 N.O., 1 N.C.	SCHNEIDER ELECTRIC	XB4BD25
35	1	RELAY, 24VDC, 4PDT, LED	OMRON	LY4N-DC24
36	1	RELAY BASE, 4PDT	OMRON	PTF14A
37	1	RELAY, 120VAC, SPDT, LED, DIODE	OMRON	G2R-1-SND-AC120(S)
38	4	RELAY BASE, SPDT	OMRON	P2RF-05
39	1	MOULDED CASE CIRCUIT BREAKER, 10 AMP, DIN RAIL MOUNTED	PHOENIX CONTACT	TMC 1 F1 100 10,0A (0914167)
40	1	MOULDED CASE CIRCUIT BREAKER, 5 AMP, DIN RAIL MOUNTED	PHOENIX CONTACT	TMC 1 F1 100 5,0A (0914138)
41	1	SELECTOR SWITCH, 2 POS'N, MAINTAINED, 3 N.O., 2 N.C.	SCHNEIDER ELECTRIC	XB4BD25
			SCHNEIDER ELECTRIC	ZBE203
			SCHNEIDER ELECTRIC	ZBE102
42	3	RELAY, 24VDC, SPDT, LED, DIODE	OMRON	G2R-1-SND-DC24(S)
43	1	ANNUNCIATOR LIGHT PANEL	IDEC	SLC30N0310-DD2FB-G(3)R(17)S(1)
44	1	SELECTOR SWITCH, 2 POS'N, MAINTAINED, 2 N.O., 1 N.C.	SCHNEIDER ELECTRIC	XB4BD25
			SCHNEIDER ELECTRIC	ZBE101
45	3	TIMING RELAY, 24VDC,	OMRON	H3DS-AL
46	1	ANALOG INPUT MODULE, 8 CHANNEL	SCHNEIDER ELECTRIC	5506

1-0127A-A0016	ANNUNCIATOR PANEL LAMP LAYOUTS
DRAWING NUMBER	REFERENCE DRAWINGS

00	ISSUED FOR TENDER, BID OP. 331-2016	2016/05/05	BJC	FA
NO.	REVISIONS	DATE	DESIGN	CHECK

SNC-LAVALIN INC.
 148 Nature Park Way
 Winnipeg, MB, Canada R3P 0X7
 204-786-8080

DESIGNED BY: B. CLEVEN
 CHECKED BY: F. ATAEI
 DRAWN BY: Y. KONIG
 APPROVED BY: I. PARKINSON
 SCALE: NTS
 ISSUED FOR CONSTRUCTION BY: K. ZUREK
 DATE: 2016/02/03
 DATE: 2016/05/06

CONSULTANT NO.:

ENGINEER'S SEAL

ORIGINAL DRAWING
 SEALED BY:
 B. CLEVEN
 SNC-LAVALIN
 MEMBER #31479
 2016/05/06
 REV. 00

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

COCKBURN FLOOD AND WASTEWATER PUMPING STATION
 2016 UPGRADES
 PANEL LAYOUT
 CONTROL PANEL CP-AB1

CITY DRAWING NUMBER: 1-0127A-A0001
 SHEET: 002
 REV: 00
 SIZE: A1