EXTERIOR
SCALE: 1:5

INTERIOR
SCALE: 1:5

NOTES:

1. ALL FUSES TO BE PROVIDED. TWO SPARE FUSES OF EACH SIZE ARE TO BE PROVIDED.
2. 120VAC POWER WIRING TO BE MINIMUM 12AWG STRANDED COPPER UNLESS OTHERWISE STATED.
3. ANALOG AND CONTROL WIRING TO BE 16AWG STRANDED COPPER UNLESS OTHERWISE STATED.
4. FUNCTIONALITY OF ALL COMPONENTS AND WIRING TO BE TESTED AND DOCUMENTED. CONNECTION DETAILS TO BE VERIFIED AND DOCUMENTED.
5. ALL MAJOR EQUIPMENT TO BE IDENTIFIED WITH LAMACOIDS TO CITY STANDARDS.
6. TERMINAL BLOCK AND WIRE NUMBERING TO BE MARKED AS INDICATED ON DRAWINGS.
7. 24VDC AND 120VAC WIRING TO BE RUN IN SEPARATE PANDUIT.
8. NOT ALL ITEMS IN BILL OF MATERIALS ARE SHOWN ON THE PANEL LAYOUT.

BILL OF MATERIALS

ITEMS	QTY	DESCRIPTION	MANUFACTURER	CATALOG NUMBER
1	1	1524x914x406 WALL MOUNTED TYPE 12 ENCLOSURE	HOFFMAN	CSD603616
2	1	BACK PANEL	HOFFMAN	CP6036
3	1	LOCKABLE HANDLE	HOFFMAN	CWHPTO
4	1	ULTRASONIC LEVEL TRANSMITTER	SIEMENS	MULTIRANGER 100
5	1	TYPE 3 SURGE PROTECTION DEVICE, MODULE AND BASE	PHOENIX CONTACT	2907918
6	AS REQ'D	35MM DIN RAIL	PHOENIX CONTACT	801733
7	AS REQ'D	100MM X 100MM NARROW SLOT WIRING DUCT AND COVER, GRAY	PANDUIT	MC100X100IG2
8	AS REQ'D	FEED THROUGH TERMINAL	PHOENIX CONTACT	3046184
9	AS REQ'D	FUSED TERMINAL	PHOENIX CONTACT	3046142
10	AS REQ'D	FUSE CONNECTOR	PHOENIX CONTACT	3036806
11	AS REQ'D	DISCONNECT TERMINAL	PHOENIX CONTACT	3046139
12	AS REQ'D	GROUND TERMINAL	PHOENIX CONTACT	3046207
13	AS REQ'D	DOUBLE LEVEL FUSED TERMINAL	PHOENIX CONTACT	3044720
14	AS REQ'D	TERMINAL END CLAMP	PHOENIX CONTACT	1201442
15	AS REQ'D	TERMINAL END PLATE	PHOENIX CONTACT	3047141
16	1	DRAWING HOLDER, INSIDE PANEL DOOR	HOFFMAN	ADP1
17	AS REQ'D	PLUG-IN BRIDGE	PHOENIX CONTACT	3030365
18	1	DIN RAIL MOUNTED RECEPTACLE, 120VAC, 15A	PHOENIX CONTACT	5600462
19	1	WIRELESS MODEM – SUPPLIED BY OWNER	SIERRA WIRELESS	RV50X
20	1	PUSHBUTTON, 22MM, NO, RED	SCHNEIDER ELECTRIC	ZB4BA4
21	1	PUSHBUTTON, 22MM, NO, BLUE	SCHNEIDER ELECTRIC	ZB4BA6
22	1	PUSHBUTTON, 22MM, NC, YELLOW	SCHNEIDER ELECTRIC	ZB4BA5
23	2	RELAY AND BASE. 120VAC. SPDT W/ LED AND TEST BUTTON – POWER FAIL RELAY	OMRON	G2R-1-SNI AC120 (S), P2RF-05
24	1	CIRCUIT BREAKER, DIN RAIL MOUNTED, 10A	PHOENIX CONTACT	TMC 81B 10A
25	1	CIRCUIT BREAKER, DIN RAIL MOUNTED, 5A	PHOENIX CONTACT	TMC 81B 05A
26	AS REQ'D	LAMACOID	--	--
27	1	QUINT SERIES BATTERY, 24VDC, 12AH	PHOENIX CONTACT	1274119
28	1	QUINT SERIES UNINTERRUPTIBLE POWER SUPPLY, 24VDC	PHOENIX CONTACT	2320225
29	2	QUINT SERIES POWER SUPPLY, 24VDC, 10A	PHOENIX CONTACT	2866763
30	1	PLC RACK BACK PLANE, 12 SLOT	SCHNEIDER ELECTRIC	BMX XBP 1200
31	1	PLC POWER SUPPLY	SCHNEIDER ELECTRIC	BMX CPS 3020
32	1	M580 LOGIC UNIT	SCHNEIDER ELECTRIC	BME P58 3020
33	2	NOR COMMUNICATION CARD	SCHNEIDER ELECTRIC	BMX NOR 0200H
34	2	PLC DISCRETE INPUT CARD	SCHNEIDER ELECTRIC	BMX DDI 3202K
35	1	PLC DISCRETE OUTPUT CARD	SCHNEIDER ELECTRIC	BMX DDO 1602
36	4	PLC ANALOG INPUT CARD	SCHNEIDER ELECTRIC	BMX AMI 0810
37	1	PANEL MOUNTED RJ45 PORT FOR ETHERNET INTERFACE	SCHNEIDER ELECTRIC	XB5PRJ45
38	AS REQ'D	TERMINAL BLOCK IDENTIFIER	PHOENIX CONTACT	1004348
39	10	RELAY AND BASE. 24VDC, SPDT W/ LED AND DIODE	OMRON	G2R-1-SND DC24 (S), P2RF-05
40	2	RELAY AND BASE. 24VDC, 4PDT W/ LED AND DIODE	OMRON	MY4(Z)IN-D2(S), PYF14A-N
41	AS REQ'D	DOUBLE LEVEL TERMINAL END PLATE	PHOENIX CONTACT	3047293
42	AS REQ'D	SPARE SLOT PROTECTIVE COVER	SCHNEIDER ELECTRIC	BMX XEM 010

NO.	DRAWING NUMBER	REFERENCE DRAWING TITLE
10		
9		
8	1-0240G-A0003-001	POWER DISTRIBUTION WIRING SCHEMATIC
7	1-0240G-A0004-001	NETWORK BLOCK DIAGRAM
6	1-0240G-A0005-001	PLC IO WIRING DIAGRAM - RACK 0, MODULE 4
5	1-0240G-A0006-001	PLC IO WIRING DIAGRAM - RACK 0, MODULE 5
4	1-0240G-A0007-001	PLC IO WIRING DIAGRAM - RACK 0, MODULE 6
3	1-0240G-A0008-001	PLC IO WIRING DIAGRAM - RACK 0, MODULE 7
2	1-0240G-A0009-001	AUTOMATIC PUMP CONTROL WIRING DIAGRAM
1	1-0240G-E0005-001	ELECTRICAL ENCLOSURE LAYOUT

REFERENCE DRAWINGS

0 100 200 300 400 500
SCALE: 1:5

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES
UNLESS OTHERWISE NOTED

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
MPE, A DIVISION OF ENGLOBE CORP.
No. 4968

B.M.
ELEV.

NO.	REVISIONS	DATE	BY
0	ISSUED FOR CONSTRUCTION	2024.03.15	

MPE a division of Englobe

DESIGNED BY J. SWAIN
CHECKED BY R. OFSTIE
DRAWN BY D. MCMILLAN
APPROVED BY R. OFSTIE
SCALE: AS SHOWN
HORIZONTAL
VERTICAL
RELEASED FOR CONSTRUCTION
DATE 2024-03-15
DATE

PROVINCE OF MANITOBA
R.G. OFSTIE
Member 44405
REGISTERED PROFESSIONAL ENGINEER
MARCH 18, 2024
CONSULTANT DRAWING NUMBER

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

RENFREW OUTFALL GATE CHAMBER
2024 UPGRADES
PANEL LAYOUT AND BILL OF MATERIALS
PLC CONTROL PANEL CP-G81

CITY DRAWING NUMBER 1-0240G-A0002-001
SHEET 26 OF 41

PLOT DATE: 2024 03 15
BID OPPORTUNITY: --
FILE PATH: M:\N-Data\84\00 City of Winnipeg\006 - Renfrew Outfall Gate Chamber Upgrades\AutoDesk\ACAD\
FILE NAME: a1.3 panel layout and bill of materials.dwg