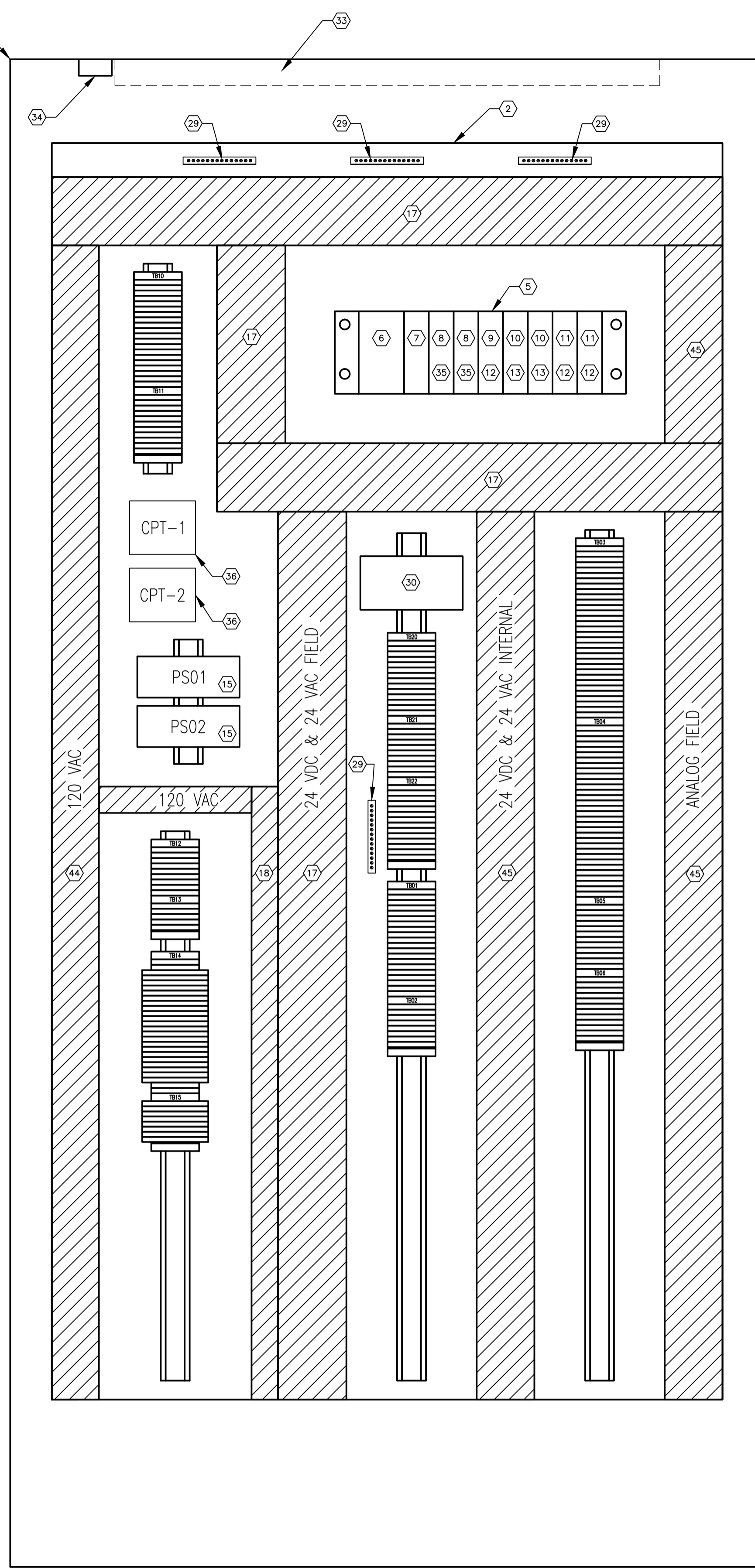


**EXTERIOR PANEL VIEW**  
SCALE: 1 : 4



**INTERIOR PANEL VIEW**  
SCALE: 1 : 4



| BILL OF MATERIAL |          |   |                    |                |
|------------------|----------|---|--------------------|----------------|
| ITEM             | QTY      | DESCRIPTION                                 | MANUFACTURER       | CATALOG NUMBER |
| 1                | 1        | ENCLOSURE, FREE STAND, SINGLE DOOR, NEMA 12 | HOFFMAN            | A723618FS      |
| 2                | 1        | BACKPAN FOR ITEM 1                          | HOFFMAN            | A72P36F1       |
| 3                | -        | NOT USED                                    |                    |                |
| 4                | 1        | FOLDING SHELF                               | HOFFMAN            | AASHLF1818     |
| 5                | 1        | 8 SLOT RACK                                 | SCHNEIDER ELECTRIC | BMX XBP 0800   |
| 6                | 1        | RACK POWER SUPPLY, 17 W                     | SCHNEIDER ELECTRIC | BMX CPS 2010   |
| 7                | 1        | PROCESSOR                                   | SCHNEIDER ELECTRIC | BMX P34 2020   |
| 8                | 1        | 32-POINT DIGITAL INPUT                      | SCHNEIDER ELECTRIC | BMX DDI 3202K  |
| 9                | 1        | 16-POINT DIGITAL OUTPUT                     | SCHNEIDER ELECTRIC | BMX DDO 1602   |
| 10               | 2        | 8-CHANNEL ANALOG INPUT                      | SCHNEIDER ELECTRIC | BMX AMI 0810   |
| 11               | 2        | 4-CHANNEL ANALOG OUTPUT                     | SCHNEIDER ELECTRIC | BMX AMO 0410   |
| 12               | 3        | SCREW CLAMP TERMINAL BLOCK                  | SCHNEIDER ELECTRIC | BMX FTB 2010   |
| 13               | 2        | SCREW CLAMP TERMINAL BLOCK                  | SCHNEIDER ELECTRIC | BMX FTB 2810   |
| 14               | -        | NOT USED                                    |                    |                |
| 15               | 2        | 24 VDC POWER SUPPLY                         | SOLA               | SDN 5-24-100C  |
| 16               | AS REQ'D | 35mm DIN RAIL                               | PHOENIX CONTACT    | 0801733        |
| 17               | AS REQ'D | NARROW SLOT WIRING DUCT, 3.25" x 3.12"      | PANDUIT            |                |
| 18               | AS REQ'D | NARROW SLOT WIRING DUCT, 1.26" x 3.12"      | PANDUIT            |                |
| 19               | AS REQ'D | FEED-THROUGH TERMINAL                       | PHOENIX CONTACT    | 3046184        |
| 20               | AS REQ'D | FUSED TERMINAL                              | PHOENIX CONTACT    | 3046142        |
| 21               | AS REQ'D | FUSE CONNECTOR                              | PHOENIX CONTACT    | 3036806        |
| 22               | AS REQ'D | KNIFE-DISCONNECT TERMINAL                   | PHOENIX CONTACT    | 3046139        |
| 23               | AS REQ'D | POTENTIAL-EARTH TERMINAL                    | PHOENIX CONTACT    | 3046207        |
| 24               | AS REQ'D | TERMINAL END PLATE                          | PHOENIX CONTACT    | 3047141        |
| 25               | AS REQ'D | TERMINAL END CLAMP                          | PHOENIX CONTACT    | 1201442        |
| 26               | AS REQ'D | DOUBLE LEVEL FUSED TERMINAL                 | PHOENIX CONTACT    | 3044720        |
| 27               | AS REQ'D | DOUBLE LEVEL TERMINAL END PLATE             | PHOENIX CONTACT    | 3047293        |
| 28               | AS REQ'D | PLUG-IN BRIDGE                              | PHOENIX CONTACT    | 3030365        |
| 29               | 4        | GROUND BAR, 14 TAPS                         | ILSCO              | -              |
| 30               | 1        | ETHERNET SWITCH 5 PORT                      | MOXA               | EDS-305        |
| 31               | -        | NOT USED                                    |                    |                |
| 32               | 1        | POWER & DATA ACCESS PORT                    | HUBBELL            | P155E          |
| 33               | 1        | PANEL LIGHT                                 | -                  | -              |
| 34               | 1        | DOOR SWITCH, METAL ENCLOSED                 | -                  | -              |
| 35               | 1        | PREFORMED CORDSET                           | SCHNEIDER ELECTRIC | BMX FCW 303    |
| 36               | 2        | 120:24 VAC TRANSFORMER, 100 VA              | -                  | -              |
| 37               | -        | NOT USED                                    |                    |                |
| 38               | -        | NOT USED                                    |                    |                |
| 39               | AS REQ'D | LAMACOIDS, WHITE BACKGROUND, BLACK TEXT     | -                  | -              |
| 40               | 1        | SWITCH, 3 POSITION, MAINTAINED              | ALLEN BRANLEY      | 800T           |
| 41               | AS REQ'D | RELAY TERMINAL BLOCK, 120 VAC               | PHOENIX CONTACT    | 2966197        |
| 42               | AS REQ'D | RELAY TERMINAL BLOCK, 24 VDC                | PHOENIX CONTACT    | 2966171        |
| 43               | 1        | ARC FLASH LAMACOID                          | -                  | -              |
| 44               | AS REQ'D | NARROW SLOT WIRING DUCT, 2.25" x 3.12"      | PANDUIT            | -              |
| 45               | AS REQ'D | NARROW SLOT WIRING DUCT, 2.75" x 3.12"      | PANDUIT            | -              |

**NOTES:**

- ALL 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 WIRING TO BE 18 AWG SHIELDED TWISTED PAIR, WITH INSULATION RATED AT 300V.
- EXTERNAL COMPONENTS ARE TO BE LABELED 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.
- ALL TERMINAL BLOCKS SHALL BE NUMBERED AS SHOWN IN THE DRAWINGS, COMPLETE WITH GROUP LABELING.
- ALL WIRES SHALL BE MARKED AS INDICATED ON THE DRAWINGS.
- ROUTE ALL 24VDC WIRING SEPARATE FROM 120VAC WIRING.
- ALL ETHERNET CABLING IS TO BE ATTACHED TO THE SIDE WALLS OF THE ENCLOSURE AND KEPT AS FAR AS POSSIBLE FROM 120VAC WIRING.
- CLEARLY LABEL DEVICE IDENTIFIERS ON THE DOOR INTERIOR USING LAMACOIDS.
- DOOR CLAMP BLOCKS TO BE REMOVED.
- JUMPER BARS SHALL BE USED INSTEAD OF WIRE JUMPERS WHERE POSSIBLE.

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| <p>SNC-LAVALIN INC.<br/>148 Nature Park Way<br/>Winnipeg, MB, Canada R3P 0X7<br/>204-786-8080</p>  |  | ENGINEER'S SEAL  | <p>THE CITY OF WINNIPEG<br/>WATER AND WASTE DEPARTMENT</p> |
| DESIGNED BY:<br>B. CLEVEN<br>DRAWN BY:<br>M.J. PERSSON<br>SCALE:<br>1:5<br>DATE:<br>2011/11/14<br>CONSULTANT NO.:<br>112577-0116-48DD-0108 | CHECKED BY:<br>C. REIMER<br>APPROVED BY:<br>C. REIMER<br>RELEASED FOR CONSTRUCTION BY:<br>N. HARRINGTON<br>DATE:<br>2012/08/31 | SOUTH END WATER POLLUTION CONTROL CENTRE<br>VENTILATION & MISC. UPGRADES<br>PANEL LAYOUT<br>LCP-G2 |  |
| NO. 00<br>REVISIONS  | DATE 2012/08/31<br>DESIGN TMC<br>CHECK CJR   | CITY DRAWING NUMBER<br>1-0102G-A0107   | SHEET 001<br>REV. 00<br>SIZE A1                            |