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|---|------------------------|-----------|--|-----------------------|
| <br><b>SNC-LAVALIN</b> | <b>INSTRUMENT LIST</b> |           | Document Code  | 112577-0116-48EL-0003 |
|   |                        |           | Revision   | 00                    |
| Client<br>City of Winnipeg  |                        |           |  |                       |
| Project<br>SEWPCC Ventilation and Misc. Upgrades  |                        |           |  |                       |
| Package / Area  |                        |           |  |                       |
| Prepared By   | Name                   | Signature | Date   |                       |
|   | T. Church              |           | 2012-10-15   |                       |
| Checked By  | Name                   | Signature | Date   |                       |
|   | C. Reimer              |           | 2012-10-15   |                       |
| Approved By   | Name                   | Signature | Date   |                       |
|   | C. Reimer              |           | 2012-10-15   |                       |
| Notes / Comments  |                        |           | Seal   |                       |
|   |                        |           | Original Document Sealed By:<br>T. M. Church<br>SNC Lavalin Inc.<br>Member #32682<br>2012-10-15<br>Rev. 00 |                       |

| Revisions |                   |            |           |           |          |
|-----------|-------------------|------------|-----------|-----------|----------|
| Rev       | Description       | Date       | By        | Checked   | Approved |
| 00        | Issued for Tender | 2012-10-15 | T. Church | C. Reimer | C.Reimer |
|           |                   |            |           |           |          |
|           |                   |            |           |           |          |
|           |                   |            |           |           |          |

| Tag       | Description  | P&ID Drawing  | Plan Drawing  | Schem/Loop Drawing | Datasheet             | Installation Detail | Mounting      | Supplied By       | Notes               |
|-----------|--|---------------|---------------|--------------------|-----------------------|---------------------|---------------|-------------------|---------------------|
| B580-LT   | B580-SMP Boiler Room Flood Level Transmitter         | 1-0102B-A0024 | 1-0102B-E0012 | 1-0102B-A0030      |                       | 1-0102B-E0012       | Suspended     | Contractor - I&C  |                     |
| G601-F1   | G601-SF Flow Transmitter                             | 1-0102G-A0094 | 1-0102G-A0097 | 1-0102G-A0114      | 112577-0116-48ED-0001 | 1-0102G-A0128       | Duct          | Contractor - I&C  |                     |
| G601-PDS  | G601-SF Filter Differential Pressure Switch          | 1-0102G-A0094 | 1-0102G-A0097 | 1-0102G-A0118      | 112577-0116-48ED-0003 | 1-0102G-A0128       | Wall          | Contractor - I&C  | with immersion stem |
| G601-TT-1 | G601-SF Outside Air Temperature Transmitter          | 1-0102G-A0094 | 1-0102G-A0097 | 1-0102G-A0114      | 112577-0116-48ED-0003 | 1-0102G-A0128       | Duct          | Contractor - HVAC |                     |
| G601-XV-2 | G601-SF Discharge Damper                             | 1-0102G-A0094 | 1-0102G-A0097 | 1-0102G-E0036      |                       | 1-0102G-A0128       | Damper        | Contractor - HVAC |                     |
| G602-F1   | G602-SF Flow Transmitter                             | 1-0102G-A0095 | 1-0102G-A0097 | 1-0102G-A0115      | 112577-0116-48ED-0002 | 1-0102G-A0128       | Duct          | Contractor - I&C  |                     |
| G602-XV-1 | G602-SF Intake Damper                                | 1-0102G-A0095 | 1-0102G-A0097 | 1-0102G-E0037      |                       | 1-0102G-A0128       | Damper        | Contractor - HVAC |                     |
| G602-XV-2 | G602-SF Discharge Damper                             | 1-0102G-A0095 | 1-0102G-A0097 | 1-0102G-E0037      |                       | 1-0102G-A0128       | Damper        | Contractor - HVAC |                     |
| G603-FSL  | G603-GP Flushing Water Glycol Flow Switch            | 1-0102G-A0094 | 1-0102G-A0097 | 1-0102G-A0118      | 112577-0116-48ED-0004 | 1-0102G-A0128       | Pipe - Inline | Contractor - I&C  | with immersion stem |
| G603-TT-1 | G603-SF Intermediate Air Temperature Transmitter     | 1-0102G-A0094 | 1-0102G-A0097 | 1-0102G-A0116      | 112577-0116-48ED-0004 | 1-0102G-A0128       | Duct          | Contractor - I&C  | with immersion stem |
| G603-TT-2 | G603-HE Flushing Water Inlet Temperature             | 1-0102G-A0094 | 1-0102G-A0097 | 1-0102G-A0116      | 112577-0116-48ED-0005 | 1-0102G-A0128       | Pipe - Inline | Contractor - I&C  | with thermowell     |
| G603-TT-3 | G603-HE Flushing Water Outlet Temperature            | 1-0102G-A0094 | 1-0102G-A0097 | 1-0102G-A0116      | 112577-0116-48ED-0006 | 1-0102G-A0128       | Pipe - Inline | Contractor - HVAC | with thermowell     |
| G603-TV   | G603-HE Flushing Water Valve                         | 1-0102G-A0094 | 1-0102G-A0097 | 1-0102G-A0116      |                       | 1-0102G-A0128       | Pipe - Inline | Contractor - HVAC |                     |
| G605-FSL  | G605-GP Hot Water Heating Glycol Flow Switch         | 1-0102G-A0094 | 1-0102G-A0097 | 1-0102G-A0117      | 112577-0116-48ED-0007 | 1-0102G-A0128       | Duct          | Contractor - I&C  | with immersion stem |
| G605-TT-1 | G601-SF Discharge Air Temperature Transmitter        | 1-0102G-A0094 | 1-0102G-A0097 | 1-0102G-A0117      |                       | 1-0102G-A0128       | Duct          | Contractor - I&C  | with immersion stem |
| G605-TV   | G605-HE Hot Water Valve                              | 1-0102G-A0094 | 1-0102G-A0097 | 1-0102G-A0117      |                       | 1-0102G-A0128       | Pipe - Inline | Contractor - HVAC |                     |
| G606-HS   | Wet Well Entry Station Switch                        | 1-0102G-A0093 | 1-0102G-A0098 | 1-0102G-A0090      |                       |                     | Wall          | N/A               | Existing            |
| G606-YL-1 | "Do Not Enter" Lamp                                  | 1-0102G-A0093 | 1-0102G-A0098 | 1-0102G-A0090      |                       |                     | In Enclosure  | Contractor - I&C  |                     |
| G606-YL-2 | "Enter" Lamp   | 1-0102G-A0093 | 1-0102G-A0098 | 1-0102G-A0090      |                       |                     | In Enclosure  | Contractor - I&C  |                     |
| G608-PDT  | Wet Well Differential Pressure                       | 1-0102G-A0093 | 1-0102G-A0097 | 1-0102G-A0119      |                       |                     | Wall          | Contractor - I&C  |                     |
| G682-FSL  | G682-AHU Supply Air Flow Switch                      | 1-0102G-A0026 | 1-0102G-A0099 | 1-0102G-A0125      |                       |                     | Duct          | Contractor - I&C  |                     |
| G682-PDT  | Electrical Room Differential Pressure                | 1-0102G-A0026 | 1-0102G-E0007 | 1-0102G-A0124      |                       |                     | Wall          | Contractor - I&C  |                     |
| G682-FV-1 | G682-AHU Outside Air Intake Damper                   | 1-0102G-A0026 | 1-0102G-A0099 | 1-0102G-A0121      |                       |                     | Damper        | Contractor - HVAC |                     |
| G682-FV-2 | G682-AHU Return Air Damper                           | 1-0102G-A0026 | 1-0102G-A0099 | 1-0102G-A0121      |                       |                     | Damper        | Contractor - HVAC |                     |
| G682-PV-3 | G682-AHU Outside Air Relief Damper                   | 1-0102G-A0026 | 1-0102G-A0099 | 1-0102G-A0121      |                       |                     | Damper        | Contractor - HVAC |                     |
| G682-TSL  | G682-AHU Low Temperature Switch                      | 1-0102G-A0026 | 1-0102G-A0099 | 1-0102G-E0043      |                       |                     | Duct          | Contractor - I&C  |                     |
| G682-TT-1 | G682-AHU Outside Air Temperature Transmitter         | 1-0102G-A0026 | 1-0102G-A0099 | 1-0102G-A0120      | 112577-0116-48ED-0008 | 1-0102G-A0128       | Duct          | Contractor - I&C  | with immersion stem |
| G682-TT-2 | G682-AHU Discharge Air Temperature Transmitter       | 1-0102G-A0026 | 1-0102G-A0099 | 1-0102G-A0120      | 112577-0116-48ED-0009 | 1-0102G-A0128       | Duct          | Contractor - I&C  | with immersion stem |
| G682-TT-3 | G682-AHU Return Air Temperature Transmitter          | 1-0102G-A0026 | 1-0102G-A0099 | 1-0102G-A0120      | 112577-0116-48ED-0010 | 1-0102G-A0128       | Duct          | Contractor - I&C  | with immersion stem |
| G682-TV-1 | G682-AHU Hot Water Control Valve                     | 1-0102G-A0026 | 1-0102G-A0099 | 1-0102G-A0122      |                       |                     | Pipe - Inline | Contractor - HVAC |                     |
| G682-TV-2 | G682-AHU Chilled Water Control Valve                 | 1-0102G-A0026 | 1-0102G-A0099 | 1-0102G-A0123      |                       |                     | Pipe - Inline | Contractor - HVAC |                     |
| G686-XV   | G686-EF Discharge Damper                             | 1-0102G-A0095 | 1-0102G-A0099 | 1-0102G-E0039      |                       |                     | Damper        | Contractor - HVAC |                     |
| G687-XV   | G687-EF Discharge Damper                             | 1-0102G-A0095 | 1-0102G-A0099 | 1-0102G-E0038      |                       |                     | Damper        | Contractor - HVAC |                     |
| G692-TT   | Electrical Room Temperature Transmitter - Above VFDs | 1-0102G-A0096 | 1-0102G-E0007 | 1-0102G-A0126      |                       |                     | Wall          | Contractor - I&C  |                     |
| G692-XV   | G692-EF Discharge Damper                             | 1-0102G-A0096 | 1-0102G-E0007 | 1-0102G-E0042      |                       |                     | Damper        | Contractor - HVAC |                     |

**Notes:**

1. This instrument list is provided for reference only, and is not necessarily comprehensive.
2. The specific division (Mechanical, HVAC, Electrical, I&C) indicated in the "Supplied By" column is a suggestion only. The Contractor may divide the supply of the instruments between subtrades as required.