15900 - CONTROLS

THE POINTS BELOW DESCRIBE THE CONTROL SEQUENCE OF THE H.V.A.C. EQUIPMENT SPECIFIED IN THE SCHEDULES. ALL CONTROLS TO BE SUPPLIED BY DIV. 15 AND WIRED BY DIV.15. CONTROLS CONTRACTOR SHALL BE A SUBCONTRACTOR OF THE MECHANICAL SUBCONTRACTOR. PROVIDE LOCKABLE COVERS FOR ALL THERMOSTATS, NEW OR EXISTING. ALL CONTROL WIRING SHALL BE PLENUM RATED IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE TO MEET THE DEVELOPED SMOKE/FLAME SPREAD RATINGS OF 25/50.

- 1. WASHROOM EXHAUST FAN/SUPPLY FAN (EF-1, SF-1, EHC-1) CONTROL:
- 1.1. PROVIDE AN ELECTRONIC, PROGRAMMABLE 7 DAY TIME CLOCK TO CONTROL THE OPERATION OF EXHAUST AND SUPPLY FANS ON AN OCCUPIED/OCCUPIED SCHEDULE. LOCATE TIME CLOCK WITHIN UTILITY ROOM. TIME CLOCK C/W LOCKING, TAMPERPROOF COVER.
- 1.2. TIME CLOCK SHALL OPEN INTAKE AND EXHAUST MOTORIZED DAMPERS. UPON DAMPERS BEING PROVEN OPEN, THE EXHAUST AND SUPPLY FANS SHALL ENERGIZE. IF DAMPERS FAIL TO OPEN, AN ALARM SHALL BE SOUNDED IN THE UTILITY ROOM.
- 1.3. ELECTRIC HEATING COIL EHC-1 SHALL MAINTAIN A DISCHARGE TEMPERATURE OF 70°F (USER ADJUSTABLE) BASED ON DUCT DISCHARGE AIR THERMOSTAT.
- 2. CRAWLSPACE HEATING (SF-2, EHC-2) CONTROL:
- 2.1. A WALL MOUNTED THERMOSTAT SHALL ENERGIZE SF-2 AND MODULATE ELECTRIC HEATING COIL EHC-2 AS REQUIRED TO MAINTAIN A CRAWLSPACE TEMPERATURE AT 40°F (USER ADJUSTABLE).

MECHANICAL EQUIPMENT SCHEDULES:

THE VOLTAGES OF ALL MECHANICAL EQUIPMENT SHALL BE COORDINATED WITH DIVISION 16 PRIOR TO ORDERING EQUIPMENT.

1. DIFFUSERS AND GRILLES: (BASED ON PRICE)

TAG TYPE DESCRIPTION

E1 EXHAUST 530/-/L/B12

E2 EXHAUST 80/-/L/B12 S1 SUPPLY 520/-/L/B12

- 2. LOUVRES (BASED ON RUSKIN)
 - L-1 ELR ROUND STATIONARY LOUVER, EXTRUDED ALUMINUM, 12" Ø C/W BIRD SCREEN, GREENHECK MODEL VCDRM-53 INSERT TYPE ROUND MULTI-BLADE MOTORIZED DAMPER, 12" Ø.
- 3. RELIEF VENTILATORS (BASED ON GREENHECK)
 - RV-1 MODEL GRSF SPUN ALUMINUM RELIEF VENTILATOR, 8"Ø, FLASHING FLANGE, INTEGRAL BIRDSCREEN, MOTORIZED DAMPER.
- 4. EXHAUST AND SUPPLY FAN
 - EF-1 COOK GEMINI MODEL GN-542, 320 CFM AT 0.35" E.S.P., C/W MOTORIZED DAMPER, BIRD SCREEN, GIK ISOLATOR KIT.
 - SF-1 COOK GEMINI MODEL GN-542, 300 CFM AT 0.35" E.S.P., C/W MOTORIZED DAMPER, BIRD SCREEN, GIK ISOLATOR KIT.
 - SF-2 COOK GEMINI MODEL GN-622, 400 CFM AT 0.25" E.S.P., GIK ISOLATOR KIT.
- 5. ELECTRIC HEATING COIL
 - EHC-1 THERMOLEC RAPIDEL RFC-4-8X8-240-1-1-D-S2, ROUND TYPE, AIRFLOW PROBING DEVICE, PROTECTIVE SCREENS, SCR CONTROL, SUPPLY AIR DUCT THERMOSTAT TO MAINTAIN MINIMUM 60°F DISCHARGE TEMPERATURE.
 - EHC-2 THERMOLEC RAPIDEL RFC-2-10X10-240-1-1-D-S2, ROUND TYPE, AIRFLOW PROBING DEVICE, PROTECTIVE SCREENS, SCR CONTROL, SPACE THERMOSTAT.

Owner

City of Winnipeg 190 River Road, Winnipeg, MB

No. Date Revision Notes

1 2015.05.08 Issued for Construction





Nova 3 Engineering Ltd.

No.962 Date: 2015/05/07

NOVA 3 ENGINEERING LTD.
CONSULTING ENGINEERS

201-120 FORT STREET TEL.: (204) 943-6142
WINNIPEG, MANITOBA R3C 1C7 FAX.: (204) 942-1276
WWW.NOVA3.CA JN.: 35-055

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Project

St. Vital Washrooms

Drawing

As Shown

MECHANICAL SPECIFICATION

Drawn By Reviewed By PSG PSG Scale Drawing No.

101 0.0

Date Project No. File N Mar. 2015 1445