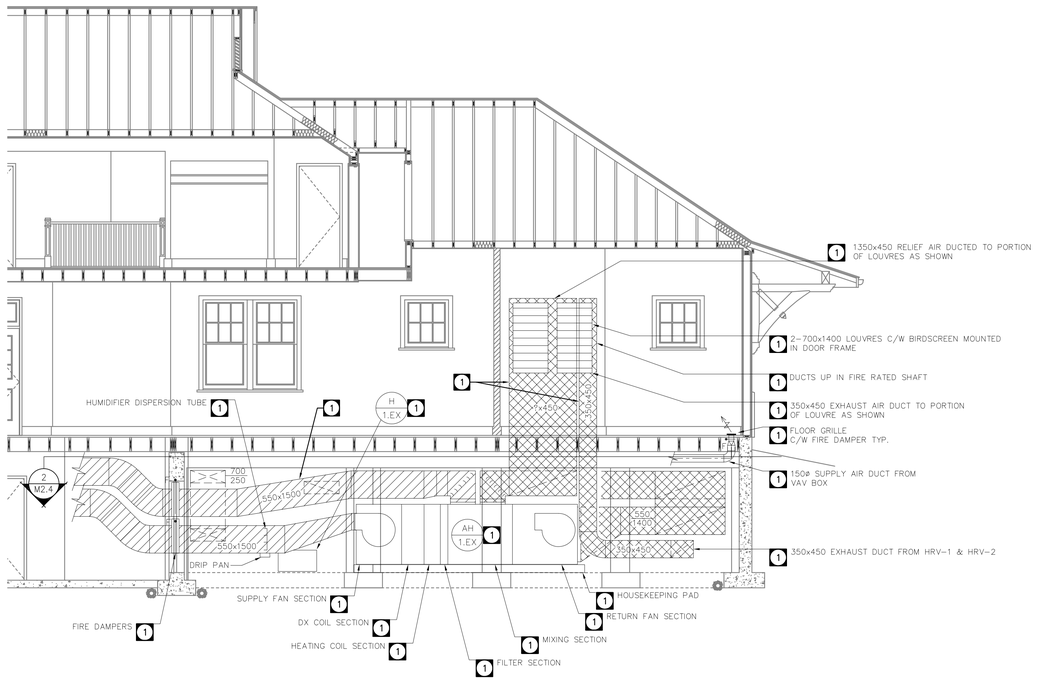
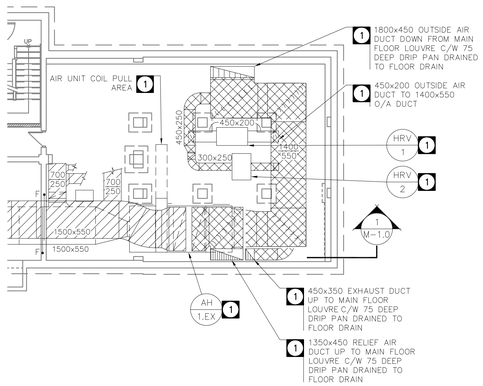


1/M2.4 BASEMENT FLOOR PLAN - SECTION THRU EXISTING AHU & DUCTWORK

SCALE: 1:100



2/M2.4 BASEMENT FLOOR PLAN - EXISTING AHU & DUCTWORK PLAN

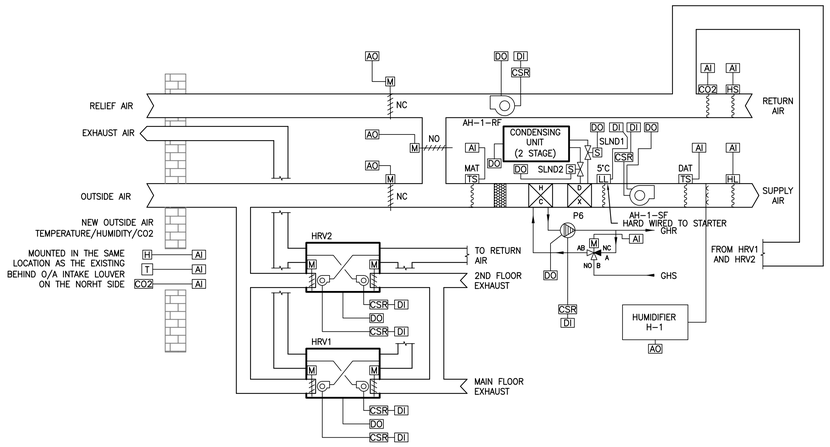
SCALE: 1:100

GENERAL NOTES:

1. EXAMINE THE COMPLETE SET OF CONTRACT DOCUMENTS TO ENSURE THAT THE WORK CAN BE CARRIED OUT WITHOUT SIGNIFICANT CHANGES TO THE INTENT OF THE DOCUMENTS. NO FUTURE ALLOWANCE SHALL BE MADE FOR CHANGES UNLESS THE DEPARTMENTAL REPRESENTATIVE HAS BEEN NOTIFIED IN WRITING OF ANY DISCREPANCIES OR INTERFERENCES, PRIOR TO THE CLOSE OF TENDER. REFER TO SPECIFICATION APPENDIXES FOR ADDITIONAL INFORMATION REGARDING THE CONTROLS.
2. THE CONTRACTOR SHALL VERIFY EXACT LOCATIONS, CONNECTIONS, SIZES, INVERTS, ETC. PRIOR TO COMMENCEMENT OF WORK.
3. AN AABC CERTIFIED (OR EQUIVALENT) BALANCE CONTRACTOR SHALL REBALANCE ALL OF THE AIR AND HYDRONIC SYSTEM FLOWS TO PROVIDE THE REQUIRED AIRFLOWS & FLUID FLOWS. NOTE THAT SOME DIFFUSER/GRILLE/REGISTER AIRFLOWS ARE NOT SHOWN ON THE DRAWINGS BUT ARE SHOWN IN THE ORIGINAL 2002 BALANCE REPORT WHICH IS IN SPECIFICATION APPENDIX 'E'. THE ORIGINAL 2002 BALANCE REPORT ALSO SHOWS FLUID FLOWS. REBALANCE ALL INLETS, OUTLETS, DIFFUSERS, GRILLES, HYDRONIC FLUID FLOWS, ETC. TO THE DESIGN FLOWS SHOWN IN THE ORIGINAL 2002 BALANCE REPORT.
4 NEW THERMOSTATS CONNECTED TO THE BUILDING AUTOMATION SYSTEM SHALL BE PROVIDED WITH USER SETTABLE LOCKOUT CODES (ADJUSTABLE) TO PREVENT TAMPERING BY UNAUTHORIZED PEOPLE.
5. THE CONTRACTOR SHALL EMPLOY SKILLED ARCHITECTURAL SUB-CONTRACTORS FOR ALL CUTTING AND PATCHING.
6. IT IS CRITICAL THAT THE CONTRACTOR MAINTAINS THE EXISTING HEATING AND VENTILATION SYSTEMS OPERATIONAL DURING THE UPGRADE TO THE CONTROL SYSTEMS. REFER TO THE SPECIFICATION FOR PROPOSED PHASING.
7. ALL EXISTING BRANCH TAKEOFFS ON THE EXISTING HEATING PIPING LAYOUT PLAN ARE 19MMø UNLESS NOTED OTHERWISE.
8. NOTE THAT EXISTING EQUIPMENT TO REMAIN AND BE REUSED IS SHOWN WITH A 'LIGHT GRAYSCALE' LINE WHILE NEW AND REFURBISHED EQUIPMENT IS SHOWN WITH A 'NON GRAYSCALE' HEAVY BLACK LINE.
9. NOTE THAT THE EXISTING CEILING SPACES ARE USED AS RETURN AIR PLENUMS AND THE WIRING NEEDS TO BE PLENUM RATED TO THE LATEST EDITION OF THE BUILDING/ELECTRICAL CODES. EXISTING THERMOSTATS ARE INSTALLED WITH CONDUIT IN THE WALLS STUBBED UP/DOWN INTO THE CEILING SPACE AND THEN PLENUM RATED CABLE IS USED TO CONNECT TO THE LOW PRESSURE BY-PASS BOX'S CONTROL PANEL. EXISTING NON COMPLIANT PLENUM WIRING NEEDS TO BE REMOVED. NEW COMPLIANT WIRING IS PERMITTED TO BE INSTALLED IN A SIMILAR FASHION.
10. THE NEW NETWORK COMMUNICATION CABLE SERVING THE NEW CONTROL SYSTEM SHALL BE A DIFFERENT COLOUR (RED) THAN THE EXISTING NETWORK CABLES (BLUE) AND IT SHALL BE LABELED. IT SHALL BE INSTALLED EXPOSED IN THE CEILING SPACE AND PROPERLY SUPPORTED AT REGULAR INTERVALS.
11. NOTE THAT ALL CONDUIT, WIRING, DEVICES, EQUIPMENT AND PIPING THAT IS ABANDONED AS PART OF THIS PROJECT SHALL BE REMOVED.

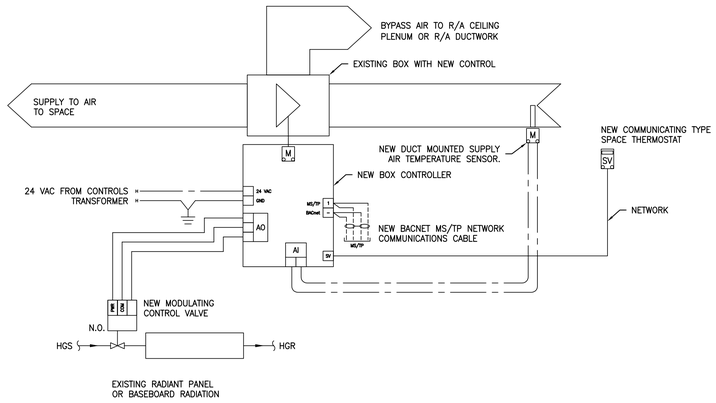
DRAWING NOTES:

1 EXISTING EQUIPMENT (FANS, HEATERS, PIPING, DUCTWORK, ETC.) SHOWN WITH A "LIGHT GRAYSCALE LINE" TO REMAIN. TYPICAL



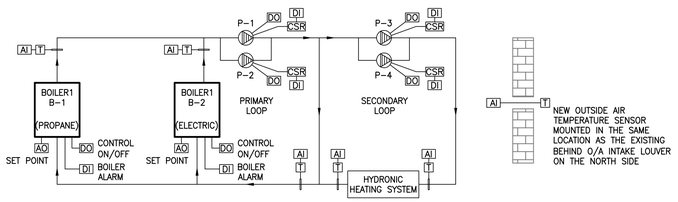
AIR HANDLING SYSTEM AH-1 - NEW CONTROL SYSTEM SCHEMATIC

SCALE: N.T.S.



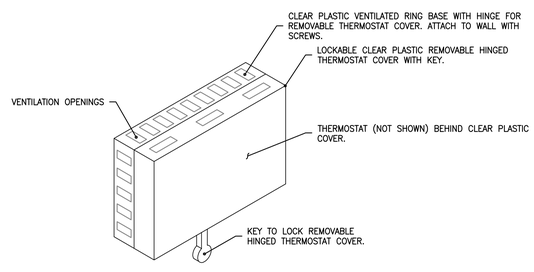
LOW PRESSURE BYPASS VAV BOX WITH HYDRONIC RADIATION/RADIANT CEILING PANEL - NEW CONTROL SYSTEM SCHEMATIC

SCALE: N.T.S.



BOILER PLANT & PUMPS - NEW CONTROL SCHEMATIC

SCALE: N.T.S.



NOTE: SIZE GUARD TO SUIT THERMOSTAT

THERMOSTAT GUARD DETAIL

SCALE: N.T.S.

Public Works and Government Services Canada
Travaux publics et Services gouvernementaux Canada

REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest

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TOWER ENGINEERING GROUP
UNIT 1-1140 WAVERLEY ST. WINNIPEG, MB R3T 0P4
TEL: (204) 925-1150 FAX: (204) 925-1155
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• WINNIPEG • CALGARY

Revision	Description	Date
0	ISSUED FOR TENDER	2018/04/12 YYYY/MM/DD

Client: **Parks Canada**

Project: **Churchill, Manitoba**
1 Mantayo Seepee Meskanow

Visitor Reception Centre
CONTROL SYSTEMS UPGRADES

Designed by / Conçu par: **MAN**
Drawn by / Dessiné par: **JRR**
Approved by / Approuvé par: **MAN**
PWGSC Project Manager / Administrateur de Projets TPSGC: **CHRISTINA KOVACS**

Drawing title / Titre du dessin:
MECHANICAL
DETAILS & CONTROLS SCHEMATICS

Project no./No. du projet	Drawing no./No. du dessin	Revision no.
R.081709.001	M2.4 5 OF 6	0

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