



1. CONTRACTOR TO VERIFY ALL SITE CONDITIONS, LOCATIONS AND DIMENSIONS PRIOR TO COMMENCING WORK. TRACE WORK TO BE DONE TO EXISTING DRAWINGS & SERVICE INTERFERENCES WITH OWNER.

2. PROVIDE ALL MATERIALS & LABOUR REQUIRED TO INSTALL ALL REQUIRED COMPONENTS IN ACCORDANCE WITH APPLICABLE CODES, REGULATIONS & DRAWINGS THAT FORM PART OF THIS DRAWING.

3. DO NOT SCALE FROM DRAWINGS.

4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

5. INSTALLATION OF VRF HEATING/COOLING SYSTEM SHALL BE IN ACCORDANCE WITH SYSTEM TO CONTROL AND INTERFACE WITH SUPPLEMENTAL ELECTRIC HEATERS (HEATERS SUPPLIED AND INSTALLED AS PART OF DIV. 26 SCOPE OF WORK).

6. REFER TO ELECTRICAL DRAWINGS FOR HEATER LOCATION AND EXACT HEATER LOCATIONS.

7. WHERE AN INDOOR UNIT SERVES A ZONE CONTAINING MULTIPLE ELECTRIC HEATERS, THEN THE VRF HEATING HEATERS, THIS MAY REQUIRE ADDITIONAL CONTROL WIRING WHICH IS NOT SHOWN. REFER TO ELECTRICAL DRAWINGS FOR HEATER LOCATION AND COORDINATE WITH DIV. 26.

8. CONTROL WIRING SHOWN ON THIS DRAWING IS FOR INFORMATION ONLY. ACTUAL FIELD WIRING MAY DIFFER FROM THAT SHOWN, AND NOT ALL REQUIRED WIRING MAY BE SHOWN. REFER TO OTHER DRAWINGS AND SPECIFICATIONS FOR COMPLETE AND FUNCTIONAL BUILDING SYSTEMS.

9. REVISIONS TO THIS DRAWING SHALL BE MADE BY THE CONTRACTOR IN ACCORDANCE WITH THE PROJECT MANUAL.

10. THIS DRAWING IS THE PROPERTY OF AMEC FOSTER WHEELER AND SHALL BE KEPT IN CONFIDENCE.

11. THIS DRAWING IS NOT TO BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF AMEC FOSTER WHEELER.

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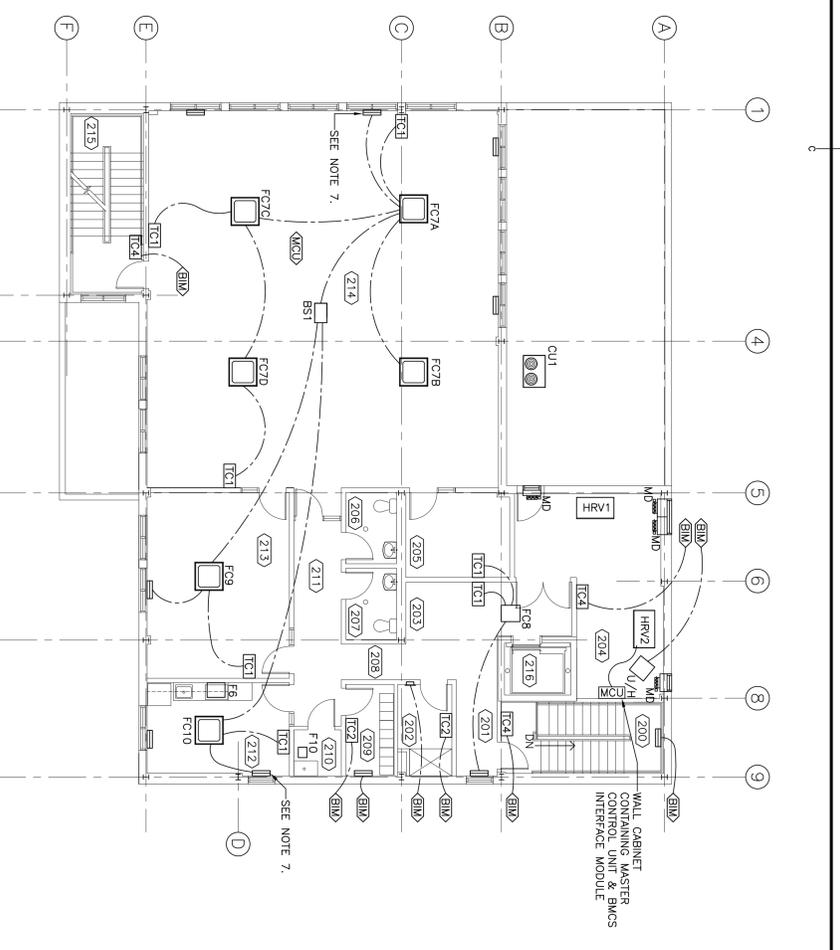
REVISIONS	DATE	BY	DESCRIPTION
A	ISSUED FOR 99% REVIEW	MM/26/17	
B	ISSUED FOR 99% REVIEW	MM/26/17	
C	ISSUED FOR TENDER	MM/26/17	

**MCTS CENTRE AND C&P BUILDING PLACENTA**

**MCTS CENTRE, C&P BUILDING & ITS STORAGE BUILDING CONTROL PLANS**

Project No. 04  
 No. 50 sheets  
**M12**

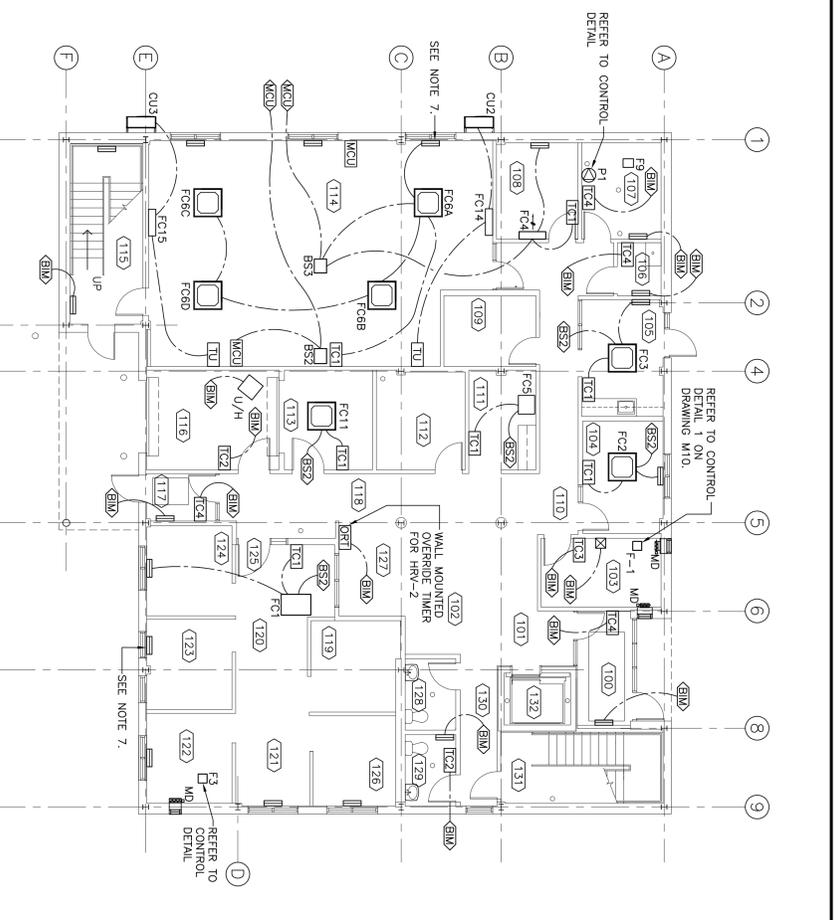
SYMBOL	DESCRIPTION
MCU	MASTER CONTROL UNIT
TC1	TEMPERATURE CONTROLLER TYPE 1 (VRF HEATING/COOLING)
TC2	TEMPERATURE CONTROLLER TYPE 2 (BACKUP HEATING ONLY)
TC3	TEMPERATURE CONTROLLER TYPE 3 (BACKUP HEATING/COOLING)
TC4	TEMPERATURE CONTROLLER TYPE 4 (BACKUP TEMPERATURE SENSING ONLY)
W	CONTROL WIRING SUPPLIED & INSTALLED BY VRF CONTRACTOR. TYPE, SIZE, NUMBER & GAUGE OF WIRE TO BE IN ACCORDANCE WITH SYSTEM MANUFACTURER'S RECOMMENDATION. SEE NOTE 6.
W-I	INDICATES THAT CONTROL WIRING CONNECTS TO BACS INTERFACE MODULE (VIA OUTDOOR UNIT).
W-C	INDICATES THAT CONTROL WIRING CONNECTS TO MASTER CONTROL UNIT (VIA OUTDOOR UNIT).
T	LOW VOLTAGE HEATING THERMOSTAT (SUPPLIED & INSTALLED AS PART OF DIV. 23).
TX	TRANSFORMER (SUPPLIED & INSTALLED AS PART OF DIV. 28).
HDS	HAZARDOUS GAS DETECTION SYSTEM
CO	CARBON DIOXIDE SENSOR
NO	NITROGEN OXIDE SENSOR
MS	MANUAL MOTOR STARTER
MSM	MAGNETIC MOTOR STARTER
MSM	COMBINATION MAGNETIC MOTOR STARTER
DIS	DISCONNECT SWITCH
ORT	OVERRIDE TIMER
A	A - PLAN SECTION, ELEVATION, OR DETAIL NUMBER
B	B - NUMBER OF THE DRAWING WHERE THE ABOVE IS DRAWN



**CONTROLS PLAN - LEVEL 2**

SCALE : 1:100

0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

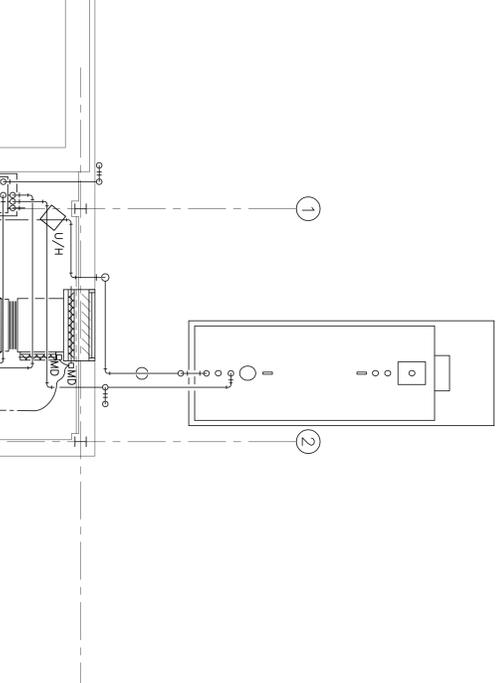


**CONTROLS PLAN - LEVEL 1**

SCALE : 1:100

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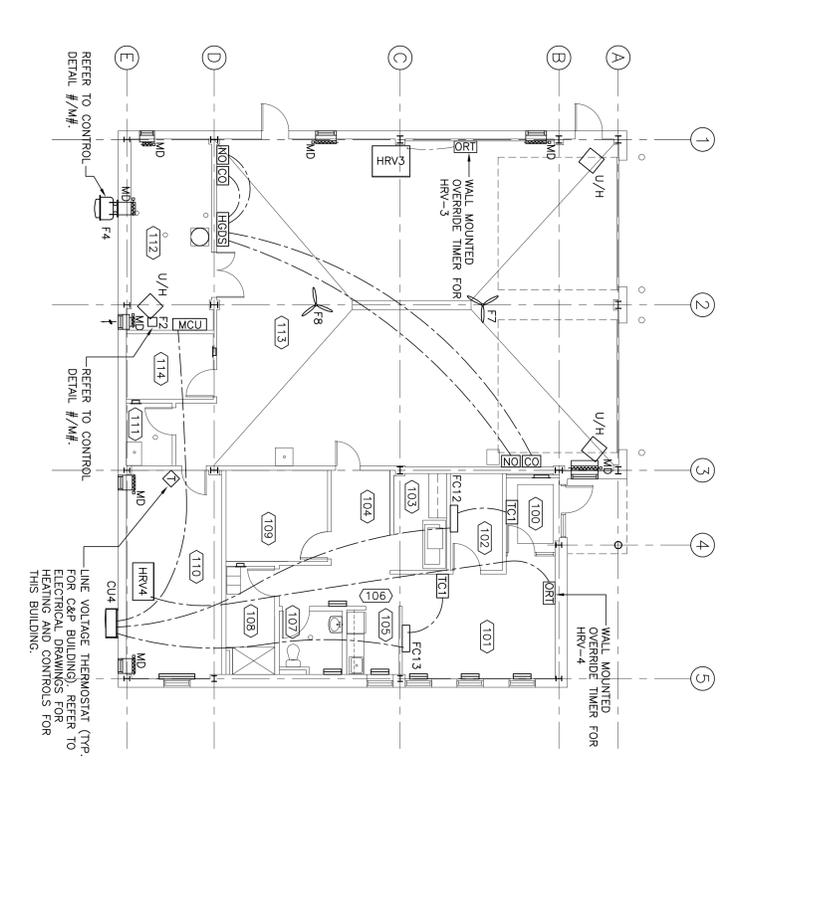
LEVEL	ROOM NAME LIST - MCTS
LEVEL 1	100 VESTIBULE 101 STAIR #1 102 RECEPTION 103 ELECTRICAL 104 MCTS OIC 105 KITCHEN 106 JANITOR 107 WATER ENTRY 108 LAN ROOM 109 RECYCLING 110 SHARED EQUIPMENT (COPIER) 111 CORRIDOR 112 MCTS STORAGE 113 WORKSHOP - DIRTY 114 E&I ELECTRONICS EQUIPMENT ROOM 115 MCTS OPERATIONS ROOM 116 MCTS KITCHEN 117 MCTS OFFICE 118 VESTIBULE 119 PERSONAL STORAGE AREA 120 CORRIDOR 121 FACE SOLDERING STATION 122 WORKSTATION #1 123 WORKSTATION #2 124 WORKSTATION #3 125 INNAV TECH/AUTOCAD 126 LAN ROOM 127 WORKSTATION #4 128 UNIVERSAL WASHROOM 129 UNIVERSAL WASHROOM 130 CORRIDOR 131 CORRIDOR 132 ELEVATOR
LEVEL 2	200 STAIR #1 201 STAIR #2 202 SHOWER ROOM 203 LOBBY 204 MECHANICAL ROOM 205 MCTS DEBRUE 206 MCTS LOCKER ROOM 207 UNIVERSAL WASHROOM 208 CORRIDOR 209 MCTS LOCKER ROOM 210 CORRIDOR 211 CORRIDOR 212 MCTS KITCHEN 213 SHARED BOARDROOM/TRAINING ROOM 214 MCTS OPERATIONS ROOM 215 STAIR #2 216 MCTS OFFICE 217 VESTIBULE 218 ELEVATOR



**CONTROLS PLAN - GENERATOR ROOM**

SCALE : 1:50

0m 1m 2m 3m 4m 5m



**CONTROLS PLAN - C&P BUILDING**

SCALE : 1:100

0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m