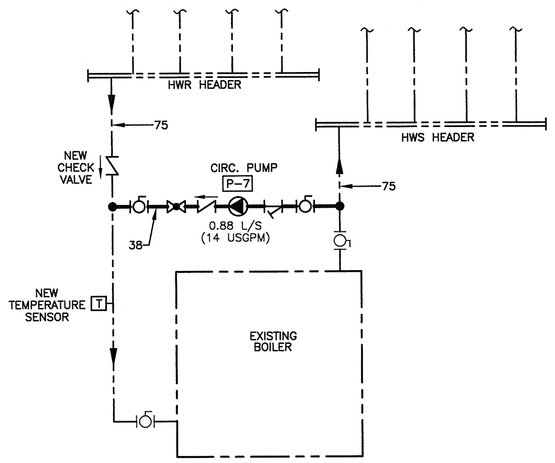
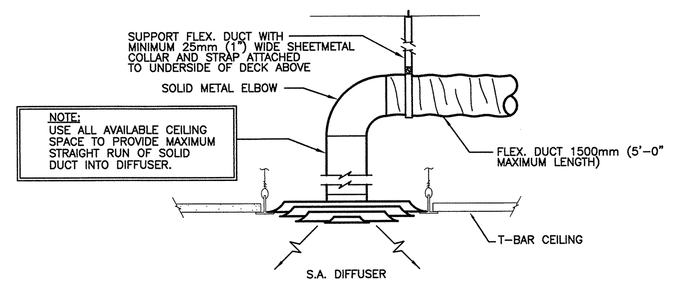


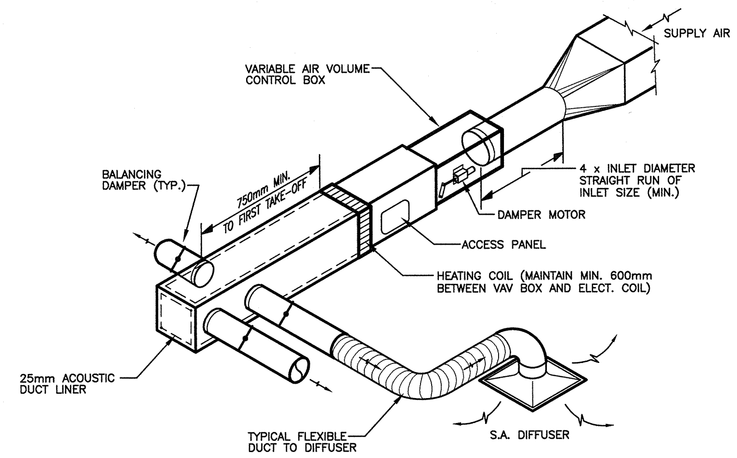
SCHEMATIC

BOILER BYPASS PUMP PIPING ARRANGEMENT N.T.S.



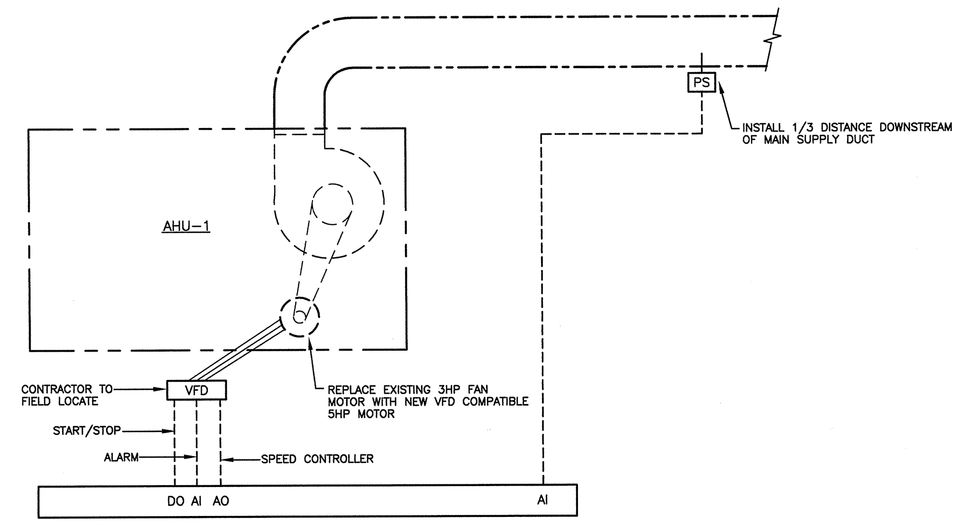
DETAIL

TYPICAL CONNECTION TO SUPPLY AIR DIFFUSER N.T.S.



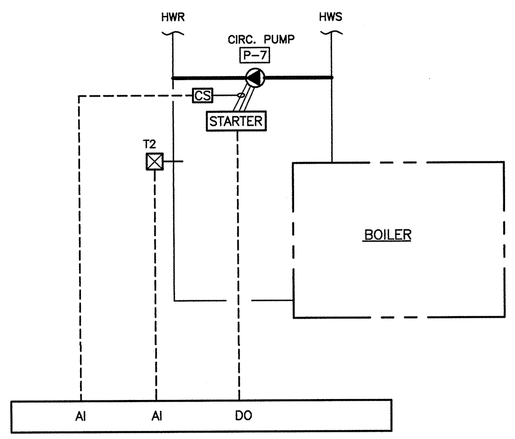
DETAIL

TYPICAL VAV BOX ARRANGEMENT N.T.S.



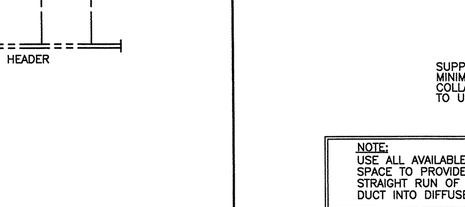
SCHEMATIC

EXISTING AIR HANDLING UNIT AHU-1 N.T.S.



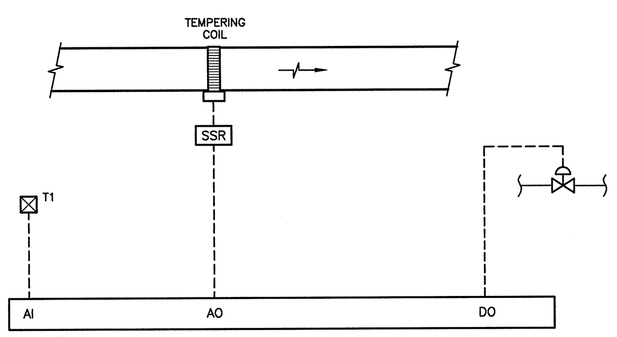
SCHEMATIC

BOILER ANTI-SHOCK CONTROL N.T.S.



SCHEMATIC

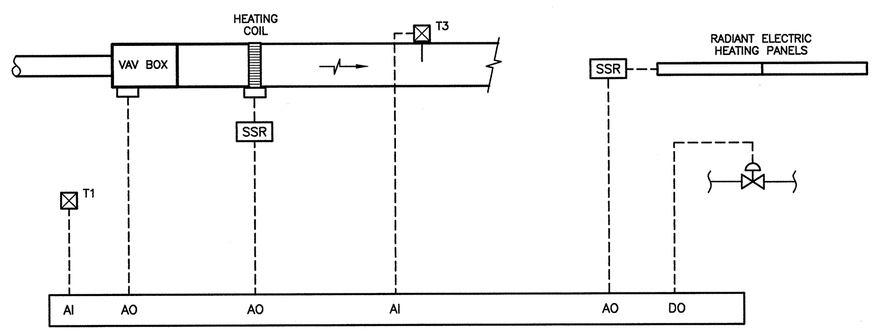
EXISTING SPACE IN-FLOOR HEAT CONTROL N.T.S.



TEMPERING COIL

SCHEMATIC

NEW SPACE TEMPERATURE CONTROL N.T.S.



VAV BOX, HEATING COIL AND RADIANT PANEL

SCHEMATIC

NEW SPACE TEMPERATURE CONTROL N.T.S.

CP-1 (FAN ROOM)

SERVING	INPUTS	OUTPUTS
AHU-1	OVERRIDE	
AHU-1		START/STOP
AHU-1	STATUS	
AHU-1	FILTER STATUS	
AHU-1	RETURN AIR TEMPERATURE	
AHU-1	MIXED AIR TEMPERATURE	
AHU-1	MIXED AIR DAMPER SETPOINT (MIN.)	
AHU-1	SUPPLY AIR TEMPERATURE	
AHU-1	SPACE SENSOR	
AHU-1		MIXED AIR DAMPER SETTING
AHU-1		3 WAY HEATING CONTROL VALVE
AHU-1		COOLING STAGE 1
AHU-1		COOLING STAGE 2
EF-1		START/STOP
EF-1	STATUS	
PUMP P-3		START/STOP
PUMP P-3	STATUS	
AHU-2		START/STOP
AHU-2	STATUS	
AHU-2	FILTER STATUS	
AHU-2	RETURN AIR TEMPERATURE	
AHU-2	MIXED AIR TEMPERATURE	
AHU-2	MIXED AIR DAMPER SETPOINT (MIN.)	
AHU-2	SUPPLY AIR TEMPERATURE	
AHU-2		MIXED AIR DAMPER SETTING
AHU-2		3-WAY HEATING CONTROL VALVE
PUMP P-2		START/STOP
PUMP P-2	STATUS	

CP-2 (BOILER ROOM)

SERVING	INPUTS	OUTPUTS
HEATING PLANT	BOILER STATUS	
HEATING PLANT	BOILER HEATING WATER SUPPLY	
PUMP P1		START/STOP
PUMP P1	STATUS	
PUMP P6		START/STOP
PUMP P6	STATUS	
HEATING WATER LOOP SUPPLY TEMPERATURE	TEMPERATURE SENSOR	
4-WAY VALVE		OPEN
4-WAY VALVE		CLOSED
PUMP P4		START/STOP
PUMP P4	STATUS	
PUMP P5		START/STOP
PUMP P5	STATUS	
TRAP PRIMER VALVE		OPEN/CLOSED-TPS
ALL	OUTSIDE AIR TEMPERATURE SENSOR	
ALL	GENERATOR ON	

NOTE: WIRE DIGITAL INPUT TO GENERATOR TRANSFER SWITCH CONTACT IN BOILER ROOM.

CP-101 (ROOM 111)

SERVING ROOM	INPUTS	OUTPUTS
108	TEMPERATURE SENSOR	
108		CONTROLS VALVE - MANIFOLD #1
109	TEMPERATURE SENSOR	
109		CONTROLS VALVE - MANIFOLD #1
110	TEMPERATURE SENSOR	
110		CONTROLS VALVE - MANIFOLD #1
111	TEMPERATURE SENSOR	
111		CONTROLS VALVE - MANIFOLD #1
112	TEMPERATURE SENSOR	
112		CONTROLS VALVE - MANIFOLD #1
113	TEMPERATURE SENSOR	
113		CONTROLS VALVE - MANIFOLD #1
114	TEMPERATURE SENSOR	
114		CONTROLS VALVE - MANIFOLD #1
117	TEMPERATURE SENSOR	
117		CONTROLS VALVE - MANIFOLD #1

CP-102 (ROOM 131)

SERVING ROOM	INPUTS	OUTPUTS
100	TEMPERATURE SENSOR	
100		CONTROLS VALVE - MANIFOLD #2
101	TEMPERATURE SENSOR	
101		CONTROLS VALVE - MANIFOLD #2
103	TEMPERATURE SENSOR	
103		CONTROLS VALVE - MANIFOLD #2
107	TEMPERATURE SENSOR	
107		CONTROLS VALVE - MANIFOLD #2
124	TEMPERATURE SENSOR	
124		CONTROLS VALVE - MANIFOLD #2
127	TEMPERATURE SENSOR	
127		CONTROLS VALVE - MANIFOLD #2
131-1/2	TEMPERATURE SENSOR	
131-1		CONTROLS VALVE - MANIFOLD #2
131-2		CONTROLS VALVE - MANIFOLD #2

CP-103 (ROOM 138)

SERVING ROOM	INPUTS	OUTPUTS
119	TEMPERATURE SENSOR	
119		CONTROLS VALVE - MANIFOLD #3
132	TEMPERATURE SENSOR	
132		CONTROLS VALVE - MANIFOLD #3
134	TEMPERATURE SENSOR	
134		CONTROLS VALVE - MANIFOLD #3
141	TEMPERATURE SENSOR	
141		CONTROLS VALVE - MANIFOLD #3
144	TEMPERATURE SENSOR	
144		UNIT HEATER #2 - ON/OFF
159	TEMPERATURE SENSOR	
159		CONTROLS VALVE - MANIFOLD #3
160	TEMPERATURE SENSOR	
160		UNIT HEATER #1 - ON/OFF
161	TEMPERATURE SENSOR	
161		CONTROLS VALVE - MANIFOLD #3

CP-104 (ROOM 149)

SERVING ROOM	INPUTS	OUTPUTS
150		CONTROLS VALVE - MANIFOLD #4
151		CONTROLS VALVE - MANIFOLD #4
152		CONTROLS VALVE - MANIFOLD #4
153		CONTROLS VALVE - MANIFOLD #4
155	TEMPERATURE SENSOR	
155		CONTROLS VALVE - MANIFOLD #4
142	TEMPERATURE SENSOR	
142		CONTROLS VALVE - MANIFOLD #5
146	TEMPERATURE SENSOR	
146		CONTROLS VALVE - MANIFOLD #5
147	TEMPERATURE SENSOR	
147		CONTROLS VALVE - MANIFOLD #5
148	TEMPERATURE SENSOR	
148		CONTROLS VALVE - MANIFOLD #5
149	TEMPERATURE SENSOR	
149		CONTROLS VALVE - MANIFOLD #5

NOTE: ROOMS 150-153 AND 155 CONTROLLERS ARE ONE OUTPUT CONTROLLED BY THE SENSOR IN ROOM 155.

SCHEDULES

EXISTING DIGITAL CONTROL PANELS N.T.S.

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No.	Issue	Date

No.	Revision	Ckd. By	Date

RELEASED FOR CONSTRUCTION

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VALID FOR THE YEAR 2012
J. A. Gilverson
No.967
DATE: Mar. 28/13
LICENSED PROFESSIONAL ENGINEER
PROVINCE OF PRINCE EDWARD ISLAND

Const. North

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Dwg. Title

VENTILATION SCHEMATICS & DETAILS

Project No. FRE-00210847-A0

Dwg. No. **2300-3**

Rev. No. 0

Scale N.T.S.
This drawing is not to be scaled