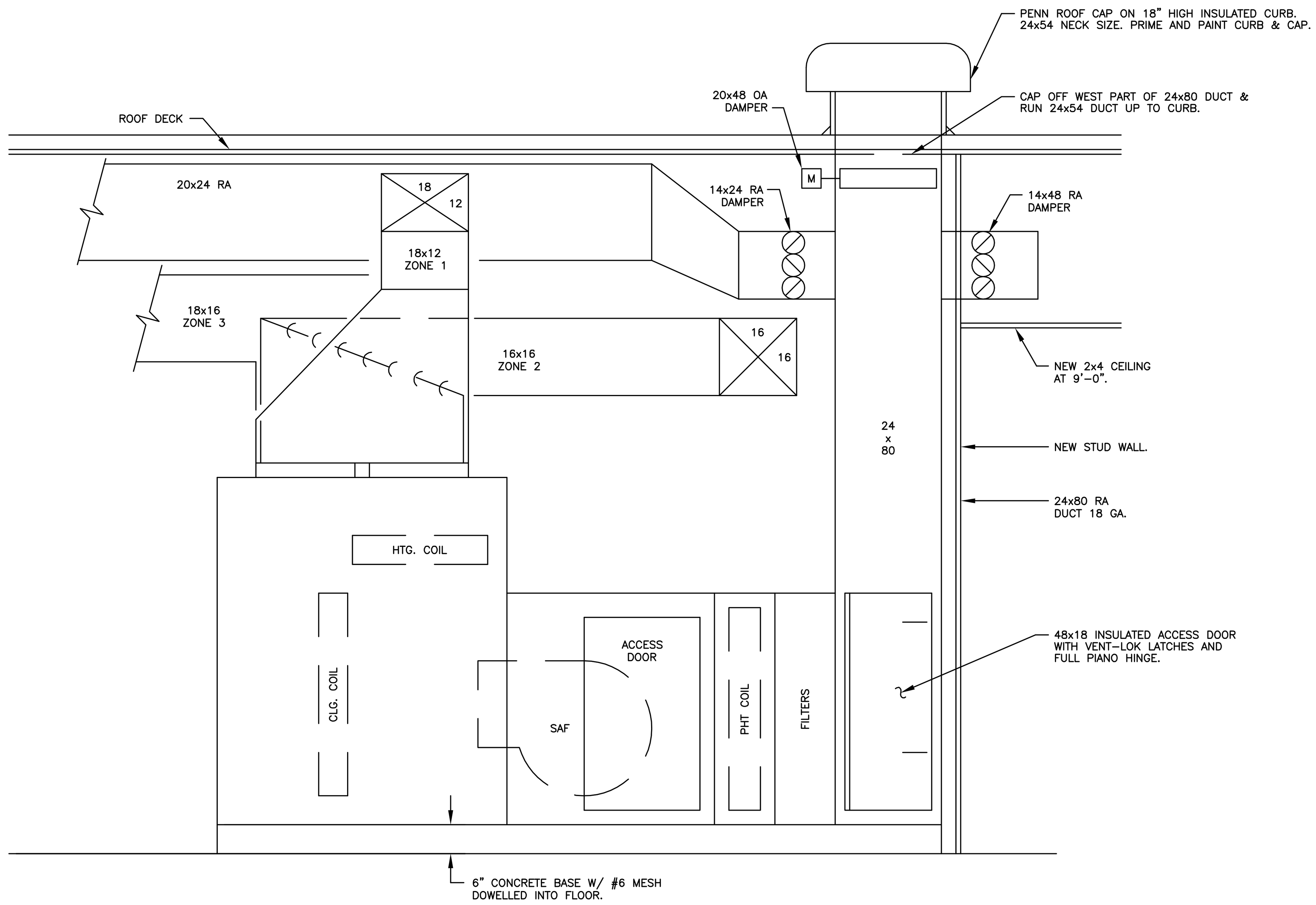
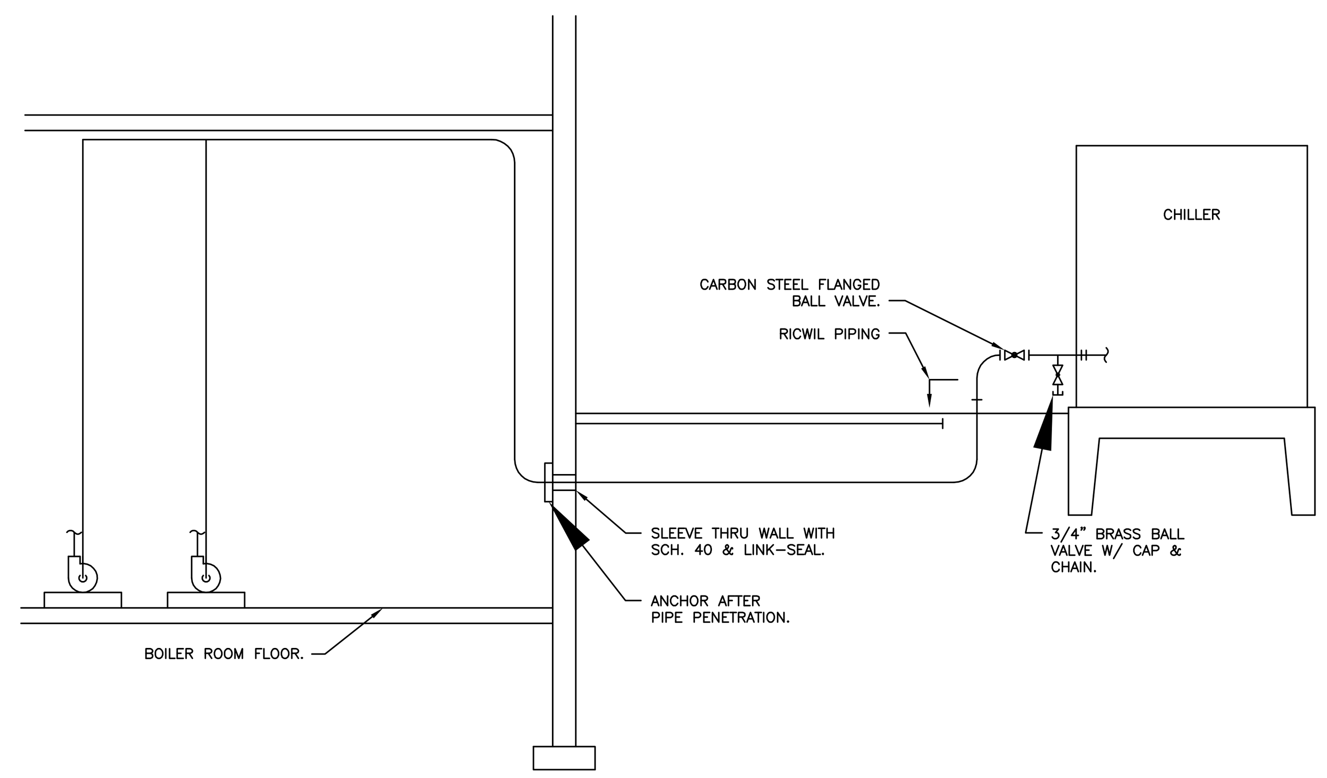


SECTION THROUGH AIR HANDELER
SCALE: 1/2"=1'-0"



SECTION THROUGH CHILLER
SCALE: NONE

HVAC EQUIPMENT

AHH-1 AIR HANDELER
TWO DECK MULTIZONE UNIT WITH FLAT FILTER SECTION, PREHEAT COIL SECTION, FAN AND COIL SYSTEM. 18 GAUGE OUTER CASING AND FULLY LINED HOUSING WITH 20 GAUGE INNER CASING. INNER CASING IN FAN SECTION TO BE PERFORATED. INSULATED WITH 1" THICK 6 LB. DENSITY INSULATION. FULL INSULATED STAINLESS STEEL SLOPED DRAIN PAN UNDER COOLING COIL SECTION. MOUNT UNIT ON 6" CONCRETE BASE.

FILTER SECTION
12" DEEP, MAXIMUM AIR VELOCITY OF 500 FPM FOR 30/30 PLEATED. SIDE ACCESS DOOR.

PREHEAT COIL SECTION
12" DEEP, 1 ROW, 12 FPI, ____ SQ. FT. FACE AREA, 8000 CFM, 50°F EAT, 60°F LAT, 180°F EWT, 150°F CWT, 87 MBH, 0.1" APD, 5 FT. WPD, 6 GPM.

FAN SECTION
FORWARD CURVED, DWDI, CENTRIFUGAL, 8000 CFM, 2.75" TSP, 1263 RPM, 8 BHP, 10 HP PREMIUM EFFICIENCY MOTOR 200/3/60, MOUNT ON STEEL RAILS AND STEEL SPRING VIBRATION ISOLATORS, EXTENDED LUBE LINES TO OUTSIDE OF HOUSING. FULL SIZE ACCESS DOOR WITH STAINLESS STEEL PIANO HINGE AND DUAL VENT-LOK LATCHES.

COLD DECK COIL
CHILLED WATER COIL, 8000 CFM, 16.75 S.F., 478 FPM VELOCITY, 81/67 EAT, 54.1/53.8 LAT, 45 EWT, 55.1 LWT, 64 GPM, 0.79" APD, 6.1' WPD.

HOT DECK COIL
HOT WATER COIL, 6800 CFM, 9.33 S.F., 729 FPM VELOCITY, 55°F EAT, 100°F LAT, 330 MBH, 22 GPM, _' WPD, 0.4" APD, 180°F EWT, 150°F LWT.

AIR HANDELER BASED ON MCQUAY VISION, TOW DECK MULTIZONE, SIZE 17.

PACKAGED CHILLER
204.9 TONS CAPACITY, 95°F AMBIENT, 224.5 COMPRESSOR KW, 45°F LWT, 55°F EWT.

PRESENT OPERATION: 410 GPM, 11' WPD
(FUTURE OPERATION: 490 GPM, 14.5' WPD)

ELECTRIC: 480/3/60, 399 AMPS MCA, 500 AMPS RECOMMENDED FUSE SIZE, WIRE WITH 6#3/0 (TWO CABLES PER PHASE) AND 2#4 GROUND.

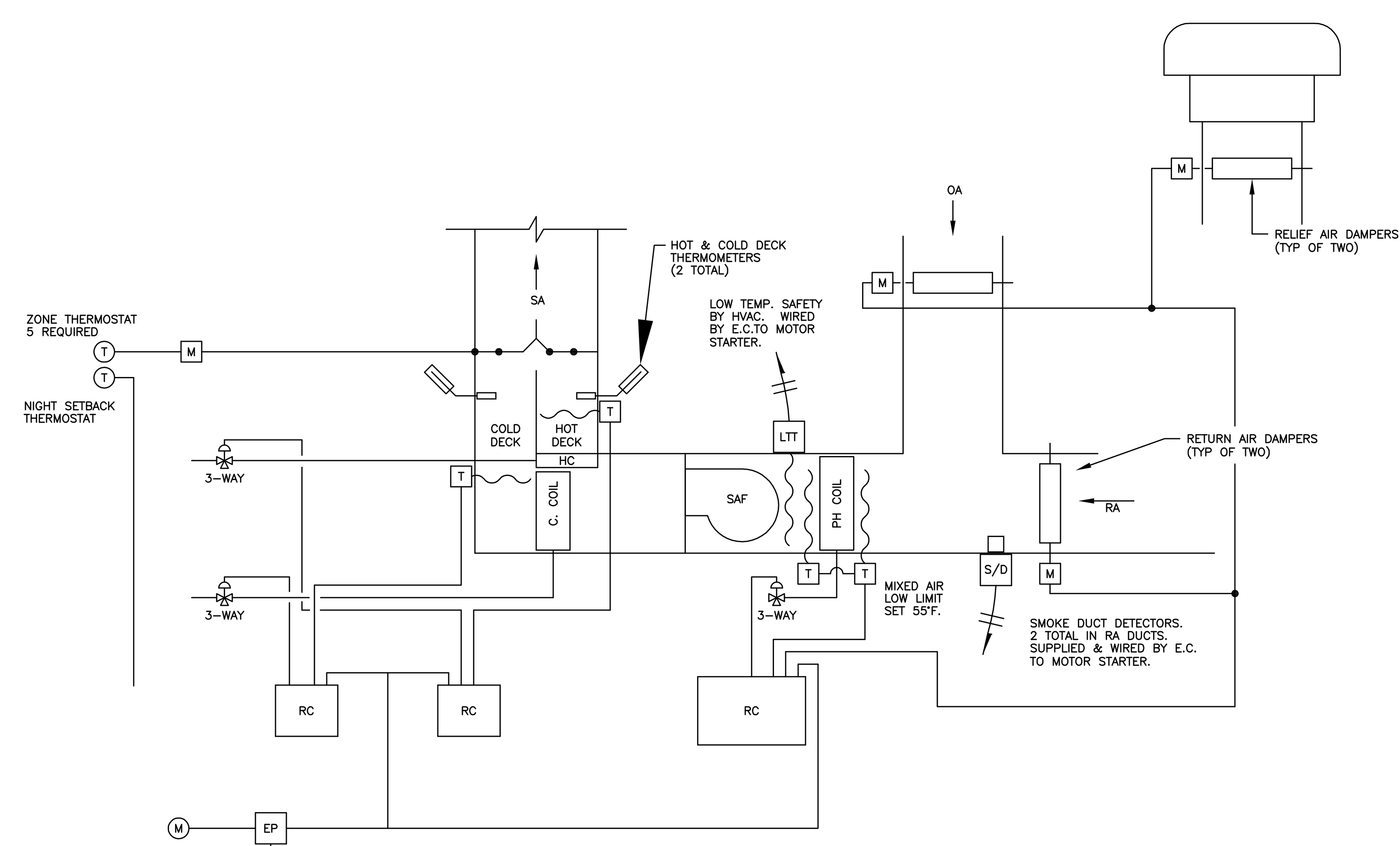
CHILLED WATER PUMPS (2 TOTAL)
410 GPM, 75 FT. HD, 1750 RPM, 11 BHP, 15 HP MOTOR, PREMIUM EFFICIENCY MOTOR, CAST IRON BODY. BASED ON WEINMAN END SUCTION MODEL 3KH. PROVIDE SECOND SPARE IMPELLERS TO OPERATE AT 490 GPM AT 75 FT. HD.

SEQUENCE OF OPERATION
AH-1
UPON STARTUP IN THE AUTO POSITION THROUGH THE DOC CONTROL SYSTEM TIME CLOCK IN THE BOILER ROOM (INTERLOCK WIRES BY E.C.) OR THROUGH HAND POSITION ON THE STARTER, THE CONTROL SYSTEM SHALL BE ACTIVATED. THE OUTSIDE AIR DAMPER SHALL OPEN TO MINIMUM POSITION OR DAMPERS (OUTSIDE AIR, RETURN AIR, AND RELIEF AIR) IN SEQUENCE WITH THE 15% OA (1200 CFN AS SET BY BALANCE SUBCONTRACTOR). THE MIXED AIR PREHEAT COIL SHALL MAINTAIN A LEAVING AIR TEMPERATURE OF 60°F (ADJUSTABLE). A MIXED AIR OVERRIDE SENSOR SHALL MAINTAIN A MINIMUM MIXED AIR TEMPERATURE OF 50°F. THE HOT DECK TEMPERATURE SHALL BE RESET WITH OUTSIDE AIR TEMPERATURE AT 100°F AT 0°F OUTSIDE AIR TO 80°F AT 60°F OUTSIDE AIR THROUGH A 3-WAY FULL MODULATING CONTROL VALVE. THE COLD DECK TEMPERATURE SHALL BE MAINTAINED AT 55°F ADJUSTABLE.

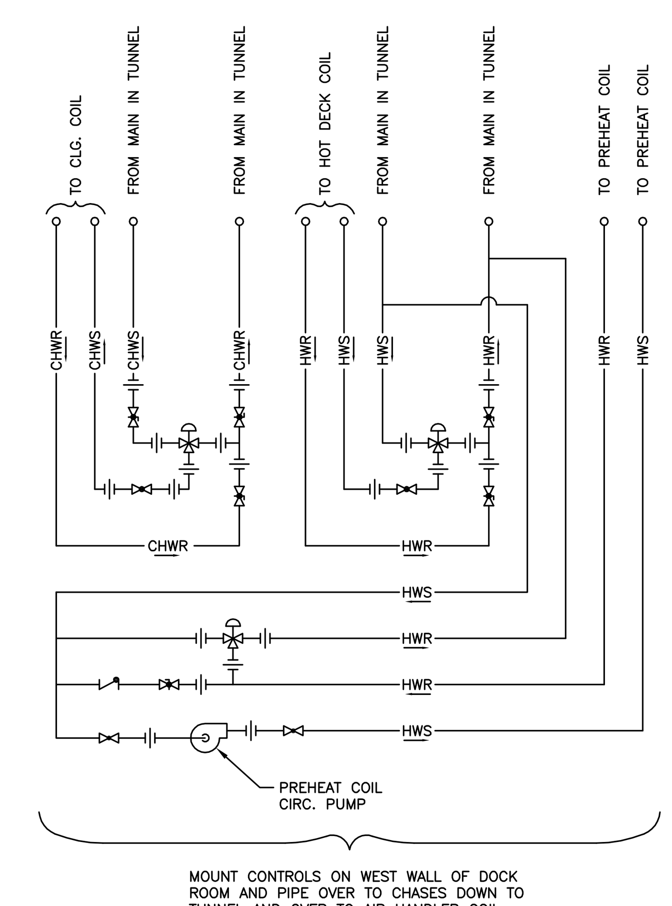
AT A SELECTED OUTSIDE AIR TEMPERATURE,(65°F) AND ONLY WHEN DRILLED WATER IS AVAILABLE, THE OUTSIDE AIR DAMPERS SHALL CLOSE TO MINIMUM POSITION AND THE RETURN AIR DAMPERS SHALL OPEN FULL; THE RELIEF DAMPERS SHALL CLOSE FULL. THE MIXED AIR DAMPERS SHALL REVERT TO ECONOMIZERS MODE BELOW THE SELECTED SWITCH OVER TEMPERATURE. TWO RETURN AIR DUCT SMOKE DETECTORS, SUPPLIED, INSTALLED AND WIRED BY E.C. SHALL SHUT DOWN THE AIR HANDELER AND SIGNAL THE FIRE ALARM SYSTEM. ALL WIRING IS TO BE BY THE E.C. THE LOW LIMIT TEMPERATURE SAFETY, SUPPLIED AND INSTALLED BY HVAC BUT WIRED TO THE STARTER BY THE E.C., SHALL SHUT DOWN THE AIR HANDELER. ALL INTERLOCK WIRING SHALL BE BY THE E.C.

THE PREHEAT 3-WAY VALVE SHALL BE N.O. TO THE COIL. THE COLD DECK 3-WAY VALVE SHALL BE N.C. TO THE COIL. THE HOT DECK 3-WAY VALVE SHALL BE N.O. TO THE COIL. ALL VALVES SHALL BE PNEUMATIC, FULL MODULATING.

START-STOP INTERLOCK WIRING BETWEEN THEFAN STARTER AND THE DDC CONTROL PANEL SHALL BE BY THE E.C. THE PREHEAT COIL HOT WATER CIRCULATING PUMP SHALL START BELOW 40°F AMBIENT. INTERLOCK WIRING TO DDC PANEL BY E.C.



AH-1 CONTROL DIAGRAM
SCALE: NONE



COIL CONTROL PIPING DIAGRAM
SCALE: NONE

DIFFUSER (D) REGISTER (R) GRILLE (G) SCHEDULE

LABEL	TYPE	NECK	FACE	INSTALLATION	CONSTRUCTION	FINISH	TITUS MODEL NO.	ACCESSORIES REMARKS
R1	SUPPLY	18"x16"	20"x18"	SURF.	STL	BWE	272RL	OBD
R2	SUPPLY	18"x12"	20"x14"	SURF.	STL	BWE	272RL	OBD
R3	SUPPLY	24"x12"	26"x14"	SURF.	STL	BWE	272RL	OBD
R4	RETURN	36"x30"	38"x32"	SURF.	STL	BWE	23RL	OBD
R5	RETURN	24"x22"	24"x22"	SURF.	STL	BWE	23RL	OBD
R6	RETURN	36"x20"	38"x22"	SURF.	STL	BWE	13RL	OBD

ABBREVIATIONS: STL = STEEL; EG = EQUALIZATION GRID; BWE = BAKED WHITE ENAMEL; OBD = OPPOSED BLADE DAMPER

HVAC DETAILS AND DIAGRAMS

CHILLER REPLACEMENT AND CONTROL ALTERATIONS

DRAWN BY	DATE	JOB NO.	DETAIL NOS.
			SHEET NO.
			H