SYMBOLS AND ABBREVIATIONS

ABV	AUTOMATIC BALANCING VALVE	HWS	HOT WATER SUPPLY
AC	AIR CONDITIONING	HVAC	HEATING, VENTILATING AND AIR CONDITIONING
AD	ACCESS DOOR	IER	INVERTED ECCENTRIC REDUCER
AFF	ABOVE FINISH FLOOR	L	LOUVER
AP	ACCES PANEL	LAT	LEAVING AIR TEMPERATURE
APD	AIR PRESSURE DROP	LDB	LEAVING DRY BULB
ATC	AUTOMATIC TEMP. CONTROL	LWB	LEAVING WET BULB
AV	AUTOMATIC VENT	MBH	THOUSAND BTU PER HOUR
BD	BACKDRAFT DAMPER	MD	MANUAL DAMPER
BJ	BAR JOIST	MOD	MOTOR OPERATED DAMPER
BV	BALANCING VALVE	MV	MANUAL VENT
CCU	COMPRESSOR/CONDENSER UNIT	NTS	NOT TO SCALE
CFH	CUBIC FEET PER HOUR	OA	OUTDOOR AIR
CFM	CUBIC FEET PER MINUTE	OD	OUTSIDE DIMENSION
CTE	CONNECT TO EXISTING	P	PUMP
CV	CONTROL VALVE	PC	PLUMBING CONTRACTOR
D	DRAIN	PG	PRESSURE GAUGE
DIC	DOWN IN CORNER/CHASE	R	RETURN
DIFF	DIFFUSER	RA	RETURN AIR
DIW	DOWN IN WALL	RHC	REHEAT COIL
DSD	DUCT SMOKE DETECTOR	RIS	RUBBER-IN-SHEAR
EAT	ENTERING AIR TEMPERATURE	RR	RETURN REGISTER
EC	ELECTRICAL CONTRACTOR	S	SUPPLY
EDB	ENTERING DRY BULB	SA	SUPPLY AIR
EF	EXHAUST FAN	SG	SUPPLY GRILLE
EG	EXHAUST GRILLE	SP	STATIC PRESSURE
ER	EXHAUST REGISTER	SR	SUPPLY REGISTER
ESP	EXTERNAL STATIC PRESSURE	T	THERMOMETER
EWB	ENTERING WET BULB	TC	TEMPERATURE CONTROL
EWT	ENTERING WATER TEMPERATURE	TCP	TEMPERATURE CONTROL PANEL
FC	FLEXIBLE CONNECTOR	TG	TRANSFER GRILLE
FD	FIRE DAMPER	TS	TRANSFER SILENCER
FP	FINNED PIPE	TSP	TOTAL STATIC PRESSURE
FV	FACE VELOCITY	T'STAT	THERMOSTAT
GC	GENERAL CONTRACTOR	TV	TURNING VANE
GPH	GALLONS PER HOUR	UC	UNDERCUT
GPM	GALLONS PER MINUTE	V	VENT
GV	GATE VALVE	VI	VIBRATION ISOLATOR
HC	HEATING CONTRACTOR	WPD	WATER PRESSURE DROP
HD	HEAVY DUTY	WTD	WATER TEMPERATURE DROP
HRU	HEAT RECOVERY UNIT		
HWR	HOT WATER RETURN		

WATER SUPPLY PIPING
WATER RETURN PIPING
E — EXISTING PIPING
PIPE ANCHOR
UNION
FLANGE
GATE VALVE
GLOBE VALVE
CHECK VALVE
BALANCING VALVE
CONTROL VALVE (TWO WAY)
CONTROL VALVE (THREE WAY)
BALL VALVE
STRAINER
INVERTED ECCENTRIC REDUCER
THERMOSTAT
THERMOSTAT WITH GUARD
CONNECT TO EXISTING
MANUAL DAMPER
FLEXIBLE DUCT
LAY-IN DIFFUSER
SURFACE MOUNT DIFFUSER
SUPPLY AIR DUCT
RETURN / RELIEF AIR DUCT

GENERAL NOTES

1. Mechanical Contractor shall coordinate work with all other trades.
2. All piping and ductwork shall be run concealed and on warm side of building insulation unless noted otherwise.
3. Piping and ductwork is shown diagramatically. Exact locations to be adjusted as required to suit field conditions.
4. All duct sizes indicated are outside (sheet metal) dimensions.
5. All cutting and patching shall be provided by General Contractor.
6. All square elbows in ductwork shall have turning vanes.
7. Refer to reflected ceiling plans for exact locations of all ceiling registers, diffusers and grilles.
8. All dimensions are approximate and are to be verified in the field.
9. Heating systems designed for 180°F. water entering water temperature.
10. All branch water piping to individual terminal heating units to be not less than ¾" unless noted otherwise.
11. All reductions in water pipe sizes in the direction of flow shall be accomplished with inverted ecentric reducers. Reducing tee fittings are not acceptable.
12. Provide automatic air vents at all locations where water piping drops in the direction of flow, at all high points and elsewhere as indicated on drawings.
13. Provide drains at all low points in the water piping system.

AIR TERMINAL SCHEDULE

TAG	NECK SIZE	MAX CFM	MAX NC	REMARKS
D1	6" DIA	140	20	SQUARE DIFFUSER / LAY-IN FRAME
D2	8" DIA	250	20	SQUARE DIFFUSER / LAY-IN FRAME
D3	10" DIA	400	20	SQUARE DIFFUSER / LAY-IN FRAME
D4	12" DIA	600	20	SQUARE DIFFUSER / LAY-IN FRAME
D5	8" DIA	250	20	SQUARE DIFFUSER / PLASTER FRAME
D6	10" DIA	400	20	SQUARE DIFFUSER / PLASTER FRAME
ERI	14"x8"	300	20	EXHAUST REGISTER
RRI	24"x12"	600	20	RETURN REGISTER / LAY IN FRAME
RR2	24"x24"	1,000	20	RETURN REGISTER / LAY IN FRAME
SRI	14"x8"	0	20	DOUBLE DEFLECTION SUPPLY REGISTER

VARIABLE AIR VOLUME UNIT SCHEDULE

UNIT TAG	UNIT SIZE	VALVE CFM		VALVE SIZE	HEATING COIL									REMARKS
		MAX.	MIN.		CFM	ROWS	EAT	LAT	MBH	EWT	GPM	WPD	S.P.	
VAV 5-12	14	2,100	1,050	14	1,050	2	55	93.4	43.55	180	1.75	0.53	0.38	SINGLE DUCT TERMINAL
VAV 5-13	14	1,820	910	14	910	2	55	94.5	38.86	180	1.50	0.41	0.29	SINGLE DUCT TERMINAL
VAV 5-14	14	1,700	560	14	560	2	55	118.3	35.68	180	1.25	0.29	0.26	SINGLE DUCT TERMINAL
VAV 5-15	6	200	0	6	na	na	na	na	na	na	na	na	na	SINGLE DUCT TERMINAL

COIL FACE VELOCITY AND STATIC PRESSURE ARE BASED ON THE MAXIMUM AIR FLOW RATE. BASED ON 40% GLYCOL SOLUTION

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Scale: 1/8" = 1'-0"

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Issued For Construction

MECHANICAL
LEGEND, NOTES
& SCHEDULE

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