

AIR DISTRIBUTION SYMBOLS

	RECTANGULAR DUCT, (FIRST NUMBER IS SIDE SHOWN) DIMENSIONS IN INCHES
	12 INCH ROUND DUCT
	MOTORIZED DAMPER
	FLEXIBLE DUCT
	DUCT FLEXIBLE CONNECTOR (FC)
	DUCT DROPS AND RISES IN DIRECTION OF AIR FLOW
	RETURN DUCT TURNED UP OR DOWN (DASHED)
	SUPPLY DUCT TURNED UP OR DOWN (DASHED)
	EXHAUST DUCT TURNED UP OR DOWN (DASHED)
	ACOUSTICAL LINING (DUCT DIM. FOR NET FREE AREA)
	ROUND DUCT ELBOW DOWN
	ROUND DUCT ELBOW UP
	SQUARE TO ROUND TRANSITION
	CAP (DUCT AND/OR PIPE)
	INDICATES DUCT, PIPING, EQUIPMENT TO BE REMOVED.
	EA EXHAUST AIR
	RA RETURN AIR
	SA SUPPLY AIR
	VOLUME DAMPER
	FIRE DAMPER
	SMOKE DAMPER
	COMBINATION SMOKE/FIRE DAMPER
	RECTANGULAR ELBOW W/TURNING VANES
	DIRECTION OF AIR FLOW (IN)
	DIRECTION OF AIR FLOW (OUT)
	HUMIDISTAT OR HUMIDITY SENSOR
	THERMOSTAT (T'STAT) OR TEMP. SENSOR
	SMOKE DETECTOR
	DIFFUSER, REGISTER OR GRILLE TAG CFM AIR FLOW TYP. 3 QUANTITY
	FINNED TUBE TAG LENGTH OF FINNED ELEMENT
	DETAIL NO. SHEET NO. WHERE DETAIL IS LOCATED
	EQUIPMENT TAG EQUIPMENT NO.
	LIMITS OF DEMOLITION
	CONNECT TO EXISTING

PIPING SYMBOLS

	UNION		ORIFICE FLOWMETER
	FLANGE		FLEXIBLE PIPE CONNECTOR
	PIPE ANCHOR		EXPANSION JOINT
	PIPE GUIDE OR SLEEVES		STEAM TRAP (FLOAT AND THERMOSTATIC INDICATED T.T. THERMOSTAT, B.T. BUCKET TRAP, T.D. THERMODYNAMIC TRAP)
	PIPE ELBOW TURNED DOWN		CONCENTRIC REDUCER/INCREASER
	PIPE ELBOW TURNED UP		ECCENTRIC REDUCER/INCREASER
	PIPING TEE-DOWN		DIRECTION OF FLOW
	PIPING TEE-UP		PUMP
	PIPE RISER		FINNED TUBE BASEBOARD
	PIPE PITCHES DOWN		HUMIDIFIER
	GENERIC VALVE, SEE SPECIFICATIONS FOR TYPE		DIFFERENTIAL PRESSURE TRANSMITTER
	GATE VALVE		
	BALL VALVE		
	BUTTERFLY VALVE (MANUAL)		
	2-WAY CONTROL VALVE		
	3-WAY CONTROL VALVE		
	BALANCING VALVE (CIRCUIT SETTER)		
	CHECK VALVE		
	PLUG VALVE		
	GLOBE VALVE		
	NEEDLE VALVE		
	BACK FLOW PREVENTER		
	SOLENOID VALVE		
	PRESSURE REDUCING OR REGULATING VALVE		
	PRESSURE RELIEF VALVE		
	STRAINER		
	STRAINER W/BLOWDOWN		
	MANUAL AIR VENT		
	AUTOMATIC AIR VENT		
	PRESSURE SWITCH		
	FLOW SWITCH		
	PRESSURE GAUGE AND COCK		
	THERMOMETER AND WELL		
	TEMPERATURE & PRESSURE TAP (PETE'S PLUG)		
	HOSE END DRAIN VALVE WITH CAP		

ABBREVIATIONS

AAV	AUTOMATIC AIR VENT	ENC	ENCLOSURE	PSE	PROCESS SOLVENT EXHAUST
ACC	AIR COOLED CONDENSER	ER	EXHAUST REGISTER	PP	POLY-PROPYLENE
ACU	AIR CONDITIONING UNIT	(E)	EXISTING	PPE	PRE PURCHASED EQUIPMENT
ACV	AUTOMATIC CONTROL VALVE	EXIST.	EXISTING	PRS	PRESSURE REDUCING STATION
AD	ACCESS DOOR	FBO	FURNISHED BY OWNER	PRV	PRESSURE REDUCING VALVE
AE	ACID EXHAUST	FBP	FACE AND BYPASS	PVD	PNEUMATIC VOLUME DAMPER
AFF	ABOVE FINISHED FLOOR	FC	FLEXIBLE CONNECTION	(R)	REMOVE
AFMS	AIR FLOW MEASURING STATION	FD	FIRE DAMPER	RA	RETURN AIR
AHU	AIR HANDLING UNIT	FG	FIBERGLASS	(REL.)	RELOCATED
ATC	AUTOMATIC TEMPERATURE CONTROL	F & T	FLOAT AND THERMOSTATIC	RF	RETURN FAN
AV	AIR VENT	FO	FLAT OVAL	RG	RETURN GRILLE
BB	BASEBOARD	FTR	FINNED TUBE RADIATION	RHC	REHEAT COIL
BDD	BACKDRAFT DAMPER	FS	FLOW SWITCH	RM	ROOM
BG	BLAST GATE	GC	GENERAL CONTRACTOR	RR	RETURN REGISTER
BLDG	BUILDING	GPM	GALLONS PER MINUTE	RV	RELIEF VALVE
BOD	BOTTOM OF DUCT	H	HUMIDIFIER	SA	SUPPLY AIR
BOP	BOTTOM OF PIPE	HRU	HEAT RECOVERY UNIT	SCV	SELF CONTAINED VALVE
BTU	BRITISH THERMAL UNIT	HTR	HEATER	SD	SMOKE DETECTOR
CBD	COUNTER BALANCED DAMPER	H & V	HEATING AND VENTILATION	SF	SUPPLY FAN
CD	CEILING DIFFUSER	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	SG	SUPPLY GRILLE
CFF	CAPPED FOR FUTURE	HW	HOT WATER	SR	SUPPLY REGISTER
CFM	CUBIC FEET PER MINUTE	HX	HEAT EXCHANGER	SS	STAINLESS STEEL
CLG	CEILING	IN WG	INCHES WATER GAUGE	TE	TEMPERATURIZED ELEMENT (SENSOR)
CONT	CONTINUATION	LD	LINED DUCT	TG	TRANSFER GRILLE
COORD	COORDINATE	MAU	MAKE UP AIR UNIT	TOD	TOP OF DUCT
CP	CONDENSATE PUMP & RECEIVER	MAX	MAXIMUM	TOP	TOP OF PIPE
CT	COOLING TOWER	MBH	1000 BTU/HR.	TTS	TIGHT TO STEEL
CTE	CONNECT TO EXISTING	ME	MECHANICAL ENGINEER	TV	TURNING VANE(S)
CU	COPPER	MFR	MANUFACTURER	TYP	TYPICAL
CUH	CABINET UNIT HEATER	MIN	MINIMUM	UH	UNIT HEATER
CV	CONTROL VALVE	MD	MOTOR OPERATED DAMPER	UIC	UP IN CHASE
CW	COLD WATER	MPV	MULTI-PURPOSE VALVE	UIW	UP IN WALL
DC	DOUBLE CONTAINED	MTD	MOUNTED	UV	UNIT VENTILATOR
DDC	DIRECT DIGITAL CONTROL	MUA	MAKE UP AIR	VAV	VARIABLE AIR VOLUME BOX
DIA	DIAMETER	NPW	NON-POTABLE WATER	VB	VACUUM BREAKER
DIC	DOWN IN CHASE	NTS	NOT TO SCALE	VTR	VENT THRU ROOF
DIW	DOWN IN WALL	OA	OUTSIDE AIR	VD	MANUAL VOLUME DAMPER
DN	DOWN	OB	OPPOSED BLADE DAMPER	VCFF	VALVED AND CAPPED FOR FUTURE
DT	DROP AND TRANSITION	OED	OPEN ENDED DUCT	VFD	VARIABLE FREQUENCY DRIVE
DWG	DRAWING	PAE	PROCESS ACID EXHAUST	VOC	VOLATILE ORGANIC COMPOUNDS
DWH	DOMESTIC WATER HEATER	PHE	PROCESS HEAT EXHAUST	W/	WITH
EA	EXHAUST AIR				
EF	EXHAUST FAN				

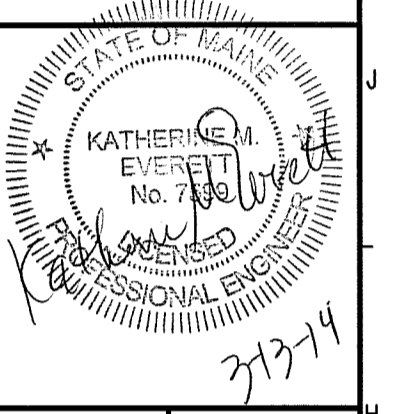
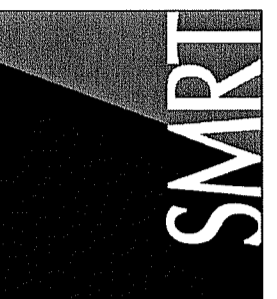
PIPING SYSTEMS

— CD —	CONDENSATE DRAIN	— HG —	HOT GAS	— RL —	REFRIGERANT LIQUID
— CHWS —	CHILLED WATER SUPPLY	— HPS —	HIGH PRESSURE STEAM	— RS —	REFRIGERANT SUCTION
— CHWR —	CHILLED WATER RETURN	— HPR —	HIGH PRESSURE CONDENSATE RETURN	— TWS —	TEMPERED CHILLED WATER SUPPLY
— CWS —	CONDENSER WATER SUPPLY	— HWS —	HOT WATER SUPPLY	— TWR —	TEMPERED CHILLED WATER RETURN
— CWR —	CONDENSER WATER RETURN	— HWR —	HOT WATER RETURN	— ZB —	ZONE VALVE BOX
— DB —	DISTRIBUTION VALVE BOX	— LPS —	LOW PRESSURE STEAM		
— FCS —	FREE COOLING SUPPLY	— LPR —	LOW PRESSURE RETURN		
— FCR —	FREE COOLING RETURN	— MPS —	MEDIUM PRESSURE STEAM		
— FOS —	FUEL OIL SUPPLY	— MPR —	MEDIUM PRESSURE RETURN		
— FOR —	FUEL OIL RETURN	— NPW —	NON POTABLE COLD WATER		
— FOV —	FUEL OIL VENT	— PCWR —	PROCESS COOLING WATER RETURN		
— GCR —	GRAVITY STEAM CONDENSATE RETURN	— PC —	PUMPED STEAM CONDENSATE		
— GLY —	GLYCOL	— PD —	PUMPED DISCHARGE		
— HCR —	HOT/ CHILLED WATER RETURN	— PW —	POTABLE WATER		
— HCS —	HOT/ CHILLED WATER SUPPLY	— R —	RELIEF LINE		

GENERAL NOTE
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NUCLEAR MEDICINE RENOVATIONS
PORTLAND, MAINE

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LEGEND &
ABBREVIATIONS

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