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RENOVATIONS TO THE
 STEVENS AVENUE ARMORY

MECHANICAL LEGENDS AND ABBREVIATIONS

SCALE: AS NOTED

DATE: 05-24-16

DWG. M-001

SHEET: 122 OF 169

MECHANICAL SYMBOLS LEGEND

	SYMBOL PER ABBREVIATION LIST		SQUARE ELBOW WITH TURNING VANES		ELBOW DOWN		AUTOMATIC FLOW CONTROL VALVE		CONCENTRIC REDUCER		WALL MOUNTED THERMOSTAT WITH INTEGRAL CONTACTORS, USER-ADJUSTABLE
	EQUIPMENT SEQUENCE NUMBER		FLEXIBLE DUCT		PIPE TEE UP OR UP AND DOWN		PIPE PITCH DOWN		ECCENTRIC REDUCER		WALL MOUNTED THERMOSTAT/TEMPERATURE SENSOR BY EQUIPMENT MANUFACTURER
	AIR INLET OR OUTLET WITH CFM		HEATING COIL		ELBOW UP OR UP AND DOWN		PRESSURE RELIEF VALVE		VACUUM BREAKER		WALL MOUNTED TEMPERATURE SENSOR (REFER TO CONTROL DIAGRAMS FOR VARYING SPECIFIC REQUIREMENTS)
	FINTUBE DESIGNATION		CHILLED WATER COOLING COIL		PIPE TEE DOWN		2-WAY AUTOMATIC CONTROL VALVE		FLEXIBLE CONNECTOR		DUCT MOUNTED TEMPERATURE SENSOR
	MBH		DIRECT EXPANSION COOLING COIL		STRAINER		QUICK CLOSING, FUSIBLE LINK		OS&Y VALVE IN VERTICAL		FLUID TEMPERATURE SENSOR WITH WELL
	GPM SETTING FOR BALANCING VALVE		FINTUBE RADIATION AND ENCLOSURE		BALL VALVE		PIPE ANCHOR		BALL VALVE IN VERTICAL		TEMPERATURE SENSOR
	KEYNOTE		CENTRIFUGAL FAN		BUTTERFLY VALVE		CAP		PUMP SUCTION DIFFUSER		LOW TEMPERATURE FREEZESTAT
	CONNECT TO EXISTING		INLINE FAN		GATE VALVE		ALIGNMENT GUIDE		MANUAL SWITCH		OCCUPANCY SENSOR
	RETURN GRILLE/REGISTER		DIRECTION OF AIR FLOW		CHECK VALVE		PIPE REDUCER/INCREASER		FLOAT AND THERMOSTATIC STEAM TRAP		PRESSURE SWITCH
	SUPPLY DIFFUSER/REGISTER/GRILLE		MANUAL DAMPER		CHECK VALVE, SPRING TYPE		OS&Y VALVE		AIR PRESSURE SENSOR		FLOW SWITCH
	EXHAUST GRILLE/REGISTER		MOTORIZED DAMPER, PARALLEL BLADE		GATE, ANGLE VALVE		THERMOMETER		RELATIVE HUMIDITY SENSOR		CURRENT SENSOR
	SIDEWALL REGISTER/GRILLE		MOTORIZED DAMPER, OPPOSED BLADE		GLOBE VALVE		THERMOSTATIC STEAM TRAP		DUCT MOUNTED SMOKE DETECTOR		DIFFERENTIAL PRESSURE SWITCH
	LINEAR SLOT DIFFUSER/RETURN		MOTOR		GLOBE, ANGLE VALVE		AIR VENT, AUTOMATIC		VARIABLE FREQUENCY DRIVE		AIR FLOW MONITORING STATION
	ACCESS DOOR ON BOTTOM OF DUCT		ROOF VENTILATOR, EXHAUST/RELIEF		CALIBRATED BALANCING VALVE WITH POSITIVE SHUTOFF		AIR VENT, MANUAL		AIR FLOW SENSOR		CARBON DIOXIDE SENSOR
	DUCT										
	FLEXIBLE CONNECTION										
	SUPPLY DUCT UP										
	RETURN DUCT UP										
	EXHAUST DUCT UP										

MECHANICAL ABBREVIATIONS

#/HR	POUNDS PER HOUR	EER	ENERGY EFFICIENCY RATIO	IN	INCHES	PSI	POUNDS PER SQUARE INCH
A	AMPERE, AIR	EF	EXHAUST FAN	INDIR	INDIRECT WASTE	PSIG	POUNDS PER SQUARE INCH GAGE
AC	AIR CONDITIONING, AIR CONDITIONER	EFF	EFFICIENCY	KW	KILOWATT	PVC	POLY VINYL CHLORIDE
ACI	AMERICAN CONCRETE INSTITUTE	ELEC	ELECTRIC	L	LOUVER, LENGTH	QTY	QUANTITY
AD	ACCESS DOOR	ELEV	ELEVATION, ELEVATOR	L/S	LITERS PER SECOND	R	RADIUS, RETURN
ADA	AMERICANS WITH DISABILITIES ACT	EQUIP	EQUIPMENT	LAT	LEAVING AIR TEMPERATURE	RA	RETURN AIR
AFF	ABOVE FINISHED FLOOR	ESP	EXTERNAL STATIC PRESSURE	LBG	LINEAR BAR GRILLE	RAT	RETURN AIR TEMPERATURE
AMB	AMBIENT	EVAP	EVAPORATOR	LBS	POUNDS	RF	RETURN FAN
AMS	AIRFLOW MONITORING STATION	EWB	ENTERING WET BULB TEMPERATURE	LD	LOUVERED DOOR	REFRIG	REFRIGERANT
APD	AIR PRESSURE DROP	EWC	ELECTRIC WATER COOLER	LDB	LEAVING DRY BULB	REQ'D	REQUIRED
APPROX	APPROXIMATELY	EWI	ENTERING WATER TEMPERATURE	LF	LINEAR FEET	RH	RELATIVE HUMIDITY
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	EXIST	EXISTING	LOC	LOCATION/LOCATED	RL	REFRIGERANT LIQUID
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	EXP	EXPANSION	LPG	LIQUIFIED PETROLEUM GAS	RLA	RUNNING LOAD AMPERES
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	EXT	EXPANSION TANK	LPS	LOW PRESSURE STEAM	RM	ROOM
ASS'Y	ASSEMBLY	F	DEGREES FAHRENHEIT	LPC	LOW PRESSURE STEAM CONDENSATE	RO	RETURN/TRANSFER OPENING
ATV	ATMOSPHERIC VENT	FACP	FIRE ALARM CONTROL PANEL	LRA	LOCKED ROTOR AMPS	RPM	REVOLUTIONS PER MINUTE
BDD	BACKDRAFT DAMPER	FC	FLEX CONNECTOR, FAN COIL	LW	LOW TEMPERATURE	RPZ	REDUCED PRESSURE ZONE
BHP	BRAKE HORSEPOWER	FCO	FLOOR CLEANOUT	LWB	LEAVING WET BULB	RS	REFRIGERANT SUCTION
BLDG	BUILDING	FD	FLOOR DRAIN, FIRE DAMPER	LWT	LEAVING WATER TEMPERATURE	RTU	ROOFTOP UNIT
BTU	BRITISH THERMAL UNIT	FF	FINISH FLOOR	MAX	MAXIMUM	S	SUPPLY
BTUH	BTU PER HOUR	FIX	FIXTURE	MAX PD	MAXIMUM PRESSURE DROP	SA	SUPPLY AIR, SOUND ATTENUATOR
CAP	CAPACITY	FLA	FULL LOAD AMPS	MBH	1000 BTU PER HOUR	SAT	SUPPLY AIR TEMPERATURE, SUSPENDED ACOUSTICAL TILE
CC	COOLING COIL	FLR	FLOOR	MBU	1000 BTU	SC	SENSIBLE COOLING
CD	CONDENSATE DRAIN	FOR	FUEL OIL RETURN	MCA	MINIMUM CIRCUIT AMPERES	SEER	SEASONAL ENERGY EFFICIENCY RATIO
CENT	CENTRIFUGAL	FOS	FUEL OIL SUPPLY	MECH	MECHANICAL	SF	SQUARE FOOT, SUPPLY FAN
CFM	CUBIC FEET/MINUTE	FFM	FEET PER MINUTE	MERV	MINIMUM EFFICIENCY REPORTING VALUE	SIM	SIMILAR
CLG	CEILING	FR	FINTUBE RADIATION	MFR	MANUFACTURER	SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION
C	CENTERLINE	FS	FLOW SWITCH	MIN	MINIMUM	SP	STATIC PRESSURE
CO	CLEANOUT, CARBON MONOXIDE CONNECTION	FSD	FIRE AND SMOKE DAMPER	mm	MILLIMETERS	SQ	SQUARE
CONN	CONNECTION	FT	FOOT/FEET	M	MOTOR	SS	STAINLESS STEEL
CONC	CONCRETE	G	NATURAL GAS	MTG	MOUNTING	T	THERMOSTAT, TRANSFER
COND	CONDENSATE, CONDITIONS, CONDENSING	GA	GAUGE	MUA	MAKE UP AIR	TC	TOTAL COOLING
COP	COEFFICIENT OF PERFORMANCE	GAL	GALLONS	N/A	NOT APPLICABLE	TEMP	TEMPERATURE CONTROL PANEL
CS	CURRENT SENSOR	GALV	GALVANIZED	NAT'L	NATURAL	TS	TEMPERATURE, TEMPORARILY
CU	CONDENSING UNIT	GPH	GALLONS PER HOUR	N/C	NOT IN CONTRACT	TSP	TEMPERATURE SENSOR
CUH	CABINET UNIT HEATER	GPM	GALLONS PER MINUTE	NO	NOISE CRITERIA, NORMALLY CLOSED	TYP	TYPICAL
CWR	CHILLED WATER RETURN	GRV	GRAVITY RELIEF VENTILATOR	NPT	NATIONAL PIPE THREAD	UC	UNDER CUT
CWS	CHILLED WATER SUPPLY	GWB	GYPSPUM WALLBOARD	NTS	NOT TO SCALE	UH	UNIT HEATER
D	DEPTH, DAMPER	GYP	GYPSPUM WALLBOARD	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	UL	UNDERWRITERS LABORATORY
DB	DRY BULB	H	HUMIDIFIER/HUMIDISTAT, HEIGHT	OA	OUTSIDE AIR	V	VENT, VALVE, VOLTS
dB	DECIBELS	H2O	WATER	OAT	OUTSIDE AIR TEMPERATURE	VAV	VARIABLE AIR VOLUME
DDC	DIRECT DIGITAL CONTROLS	HC	HEATING COIL	OB	OPPOSED BLADE DAMPER	VDV	MANUAL VOLUME DAMPER IN VERTICAL
DEG	DEGREES	HTG	HEATING	OC	ON CENTER	VEL	VELOCITY
Ø, DIA	DIAMETER	HGT	HEIGHT	OD	OUTSIDE DIAMETER	VFD	VARIABLE FREQUENCY DRIVE
DIF	DIFFERENTIAL	HORIZ	HORIZONTAL	OED	OPEN ENDED DUCT	VTR	VENT TO ROOF
DISCH	DISCHARGE	HP	HORSEPOWER	OEP	OPEN ENDED PIPE	W	WIDTH
DISPL	DISPLACEMENT	HR	HOUR	OS&Y	OUTSIDE STEM & YOKE	W/	WITH
DN	DOWN	HT	HEIGHT	P	PUMP, PITCH OR PRESSURE	WB	WET BULB
DP	DIFFERENTIAL PRESSURE	HUMID	HUMIDIFIER	PA	PASCALS	WC	WATER COLUMN
DPS	DIFFERENTIAL PRESSURE SWITCH	HV	HEATING & VENTILATING UNIT	PAC	PACKAGED AIR CONDITIONER	WG	WATER GAUGE
DSF	DESTRATIFICATION FAN	HVAC	HEATING, VENTING & AIR CONDITIONING (UNIT)	PC	PUMPED CONDENSATE	WPD	WATER PRESSURE DROP
DWG	DRAWING	HWR	HOT WATER RETURN	PD	PRESSURE DIFFERENCE		
DX	DIRECT EXPANSION	HWS	HOT WATER SUPPLY	PH	PHASE		
E	EXISTING, EXHAUST	HZ	HERTZ	POS	POSITIVE		
EA	EXHAUST AIR, EACH	ID	INSIDE DIAMETER	PR	PANEL RADIATOR		
EAT	ENTERING AIR TEMPERATURE			PRESS	PRESSURE		
EDB	ENTERING DRY BULB TEMPERATURE			PRV	PRESSURE REDUCING VALVE		

MECHANICAL LINE TYPE LEGEND

-----	REMOVE ITEMS
_____	EXIST ITEMS TO REMAIN
_____	PROVIDE ITEMS
_____ RL _____	REFRIGERANT LIQUID
_____ RS _____	REFRIGERANT SUCTION
_____ RS/RL _____	REFRIGERANT SUCTION AND LIQUID
_____ CD _____	CONDENSATE DRAIN
_____ LPS _____	LOW PRESSURE STEAM
_____ LPC _____	LOW PRESSURE CONDENSATE
_____ PC _____	PUMPED CONDENSATE
_____ ATV _____	ATMOSPHERIC VENT
_____ FOS _____	FUEL OIL SUPPLY
_____ FOR _____	FUEL OIL RETURN
_____ G _____	NATURAL GAS
_____ HWS _____	HOT WATER SUPPLY (33% GLYCOL SOLUTION)
_____ HWR _____	HOT WATER RETURN (33% GLYCOL SOLUTION)
_____ CWS _____	CHILLED WATER SUPPLY (33% GLYCOL SOLUTION)
_____ CWR _____	CHILLED WATER RETURN (33% GLYCOL SOLUTION)
_____	CONTROL WIRING