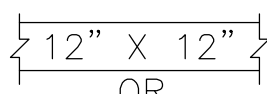
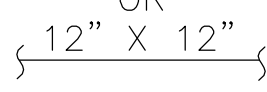


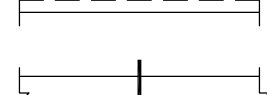
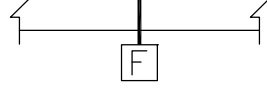
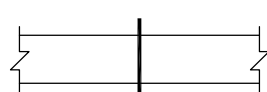
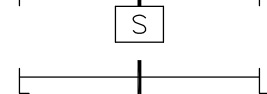
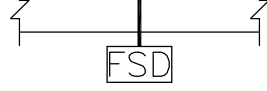
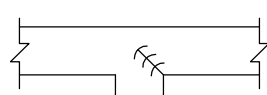
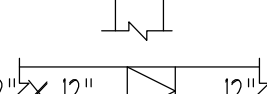

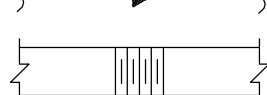
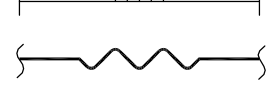


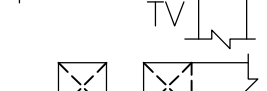
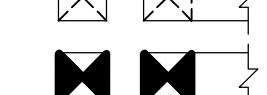
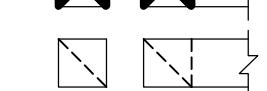
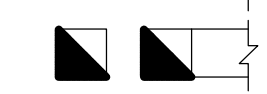
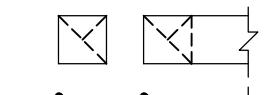
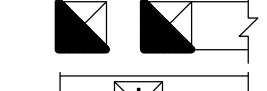
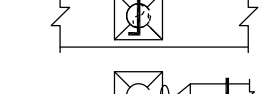

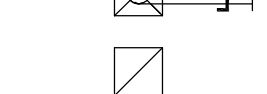
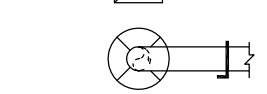
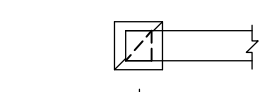
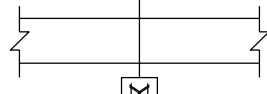
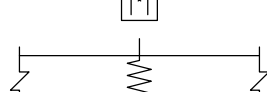
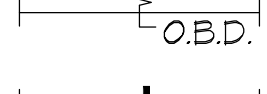



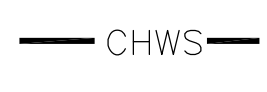













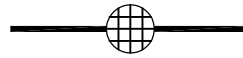

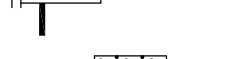

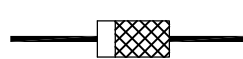
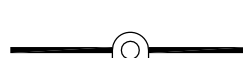

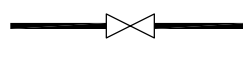

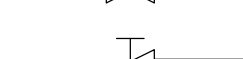

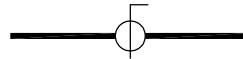


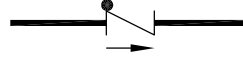


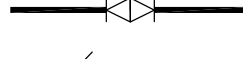



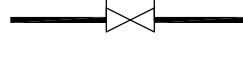


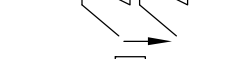
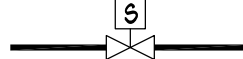


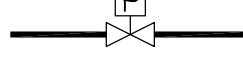
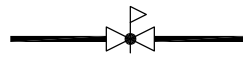


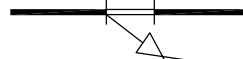
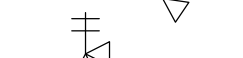


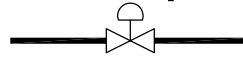


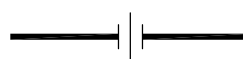

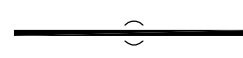









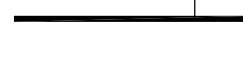



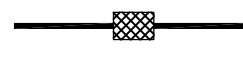

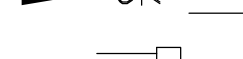





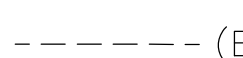


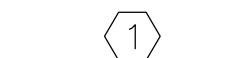









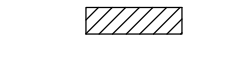














MECHANICAL SYMBOL LIST

(NOTE: ALL OF THE SYMBOLS INDICATED BELOW MAY NOT APPEAR ON THIS PROJECT)

	DUCT W/ SIZE INDICATED (FIRST FIG. IS SIDE SHOWN)
	V.D.
	DUCT WITH ACOUSTIC LINING
	F.D.R.
	S.D.
	F.S.D.
	EX.
	TR
	FLEX
	SD
	T.V.'S
	S.A.
	S.A.
	R.A.
	R.A.
	E.A.
	E.A.
	D.D.
	S.A.D.
	S.A.D.
	R.A.G.
	S.A.D.
	R.A.G.
	M.D.
	O.B.D.
	V.D.
	HHWS
	HHWR
	CHWS
	CHWR
	HPWS
	HPWR
	CWS
	CWR
	IWS
	HPR
	HPS
	LPR
	LPS
	MPR

	MPS	MEDIUM PRESSURE STEAM SUPPLY
	RD	REFRIGERANT DISCHARGE PIPING
	RL	REFRIGERANT LIQUID PIPING
	RS	REFRIGERANT SUCTION PIPING
	RF	REFRIGERANT FILTER
	RS	REFRIGERANT STRAINER
	RFD	REFRIGERANT FILTER AND DRIER
	RD	REFRIGERANT DRIER
	RI	REFRIGERANT VIBRATION ISOLATOR
	ROS	REFRIGERANT OIL SEPARATOR
	G.V.	GATE VALVE
	GLV	GLOBE VALVE
	ANV	ANGLE VALVE
	B.L.V.	BALL VALVE
	B.F.V.	BUTTERFLY VALVE
	C.H.V.	CHECK VALVE
	TDV	TRIPLE DUTY VALVE
	B.V.	BALANCING VALVE
	H.V.	3/4" HOSE END DRAIN VALVE
	S.O.V.	SHUT-OFF VALVE IN RISER
	C.C.	CIRCUIT SETTER BALANCE VALVE
	B.P.	BACKFLOW PREVENTOR
	R.P.B.P.	REDUCED PRESSURE BACKFLOW PREVENTOR
	S.V.	SOLENOID VALVE
	F.S.	FLOW SWITCH
	P.S.	PRESSURE SWITCH
	P.R.V.	PRESSURE REDUCING VALVE
	S.T.R.	STRAINER
	S.T.R.	STRAINER WITH 3/4" HOSE END DRAIN VALVE
	P.T.R.	PRESSURE - TEMPERATURE RELIEF VALVE
	RV	PRESSURE RELIEF VALVE
	2VAL	2-WAY CONTROL VALVE
	3VAL	3-WAY CONTROL VALVE
	U	UNION
	F	FLANGE
	FL	FLEXIBLE PIPING CONNECTOR
	CR	CONCENTRIC REDUCER
	ER	ECCENTRIC REDUCER
	P.R.G.	PRESSURE GAUGE WITH GAUGE COCK
	TH.	THERMOMETER
	A.A.V.	AUTOMATIC AIR VENT
	M.A.V.	MANUAL AIR VENT
	V.B.	VACUUM BREAKER
	P.A.	PIPE ANCHOR
	P.G.	PIPE ALIGNMENT GUIDE
		PIPE WITH HEAT TRACING
	E.J.	PIPE EXPANSION JOINT
		NORTH ARROW

	P.D.	PIPING TEE DOWN
	P.U.	PIPING TEE UP
	P.U.	PIPING ELBOW UP
	P.D.	PIPING ELBOW DOWN
		BRANCH - TOP CONNECTION
		BRANCH - BOTTOM CONNECTION
		BRANCH - SIDE CONNECTION
	P.T.	PLUGGED TEE
	P.T.T.	PRESSURE & TEMPERATURE TAP
	C.O.P.	CAP ON END OF PIPE
	F.L.X.	FLEXIBLE COUPLING
		ARROW INDICATES DIRECTION OF FLOW
	L.W.C.O.	LOW WATER CUT-OFF
	P.O.C.	POINT OF CONNECTION - NEW ITEMS TO EXISTING ITEMS
	A.P.	ACCESS PANEL
	R.M.	DUCTWORK / PIPING / EQUIPMENT TO BE REMOVED
		EXISTING DUCTWORK / PIPING / EQUIPMENT TO REMAIN
		MECHANICAL EQUIPMENT INDICATED (SEE SCHEDULE)
		DIFFUSER OR GRILLE INDICATED (SEE SCHEDULE)
	T.	THERMOSTAT
	H.	HUMIDISTAT
	T.2	THERMOSTAT WITH ZONE INDICATED
	P.T.M.	PONTENTIOMETER
	S.E.N.	SENSOR
	S.DET.	SMOKE DETECTOR
	T.C.P.	TEMPERATURE CONTROL PANEL
	AFF	ABOVE FINISHED FLOOR
	AFG	ABOVE FINISHED GRADE
	BDD	BACKDRAFT DAMPER
	BHP	BRAKE HORSEPOWER
	B.J.	BETWEEN JOISTS
	B.O.D.	BOTTOM OF DUCT
	B.O.G. (L.)	BOTTOM OF GRILLE (LOUVER)
	B.O.R.	BOTTOM OF REGISTER
	BTUH	BRITISH THERMAL UNITS PER HOUR
	CFH	CUBIC FEET PER HOUR
	CFM	CUBIC FEET PER MINUTE
	CLG	CEILING
	DB	DRY BULB TEMPERATURE
	DL	DOOR LOUVER
	DN	DOWN
	(E)	EXISTING
	EAT	ENTERING AIR TEMPERATURE
	EDB	ENTERING DRY BULB
	ESP	EXTERNAL STATIC PRESSURE
	EWT	ENTERING WATER TEMPERATURE
	°F	DEGREES FARENHEIT
	F.A.	FROM ABOVE





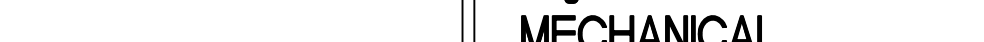
F.B.	FROM BELOW
FT.	FEET
GA	GAUGE
GAL	GALLON
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HD	HEAD
HP	HORSEPOWER
HR	HOUR
KW	KILOWATTS
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	BRITISH THERMAL UNITS PER HOUR (THOUSANDS)
MIN	MINIMUM
MUA	MAKE-UP AIR
(N)	NEW
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NOM	NOMINAL
OA	OUTSIDE AIR
OC	ON CENTER
OSA	OUTSIDE AIR
PD	PRESSURE DROP
RAG	RETURN AIR GRILLE
RH	RELATIVE HUMIDITY
RPM	REVOLUTION PER MINUTE
SAD	SUPPLY AIR DIFFUSER
S.E.E.R.	SEASONAL ENERGY EFFICIENCY RATIO
SF	SQUARE FEET
S.M.	SHEET METAL
SP	STATIC PRESSURE
ST	MANUAL TIMER SWITCH
STD	STANDARD
T	TEMPERATURE
T.A.	TO ABOVE
TAG	TRANSFER AIR GRILLE
T.B.	TO BELOW
T.J.	THROUGH JOISTS
T.O.D.	TOP OF DUCT
T.O.G.(L.)	TOP OF GRILLE (LOUVER)
T.O.R.	TOP OF REGISTER
TYP	TYPICAL
U.C.	UNDERCUT DOOR
U.F.	UNDER FLOOR
WB	WET BULB TEMPERATURE
WC	WATER COLUMN
WG	WATER GAUGE
W.P.D.	WATER PRESSURE DROP

BASIS OF DESIGN CONDITIONS FOR MECHANICAL & PLUMBING SYSTEMS		
Site Elevation Above MSL	4,500 feet	
Peak Summer Outdoor Design Temperature	95°F dry bulb (DB) / 61°F wet bulb (WB) (1 Percent Occurrence)	
Minimum Outdoor Winter Design Temperature	10°F (99.6 percent Occurrence)	
Space	Winter (°F DB)	Summer (°F DB)
Cafeteria, Offices, Restrooms, Shops	72	75
Kitchen Preparation and Cleanup	75	75
Applicable Codes and Standards		
<ul style="list-style-type: none">International Mechanical Code (IMC)International Building Code (IBC)International Plumbing Code (IPC)National Standard Plumbing Code (NSPC)VA Seismic Design Requirements, H-18-8NFPA National Fire CodesASHRAE Standards 90.1, 90.2, and 62Occupational, Safety and Health Administration (OSHA) StandardsSheet Metal and Air Conditioning Contractors National Association (SMACNA)Energy Policy Act of 2005 (EPAct)DOE Interim Final Rule: Energy Conservation Standards for New Federal, Commercial and Multi-Family High-Rise Residential Buildings and New Low-Rise Residential Buildings, 10 CFR Parts 433, 434 and 435Sheet Metal and Air Conditioning Contractors National Association (SMACNA)All other Public Laws, Executive Orders, Code of Federal Regulations, City of Reno, Washoe County, and State of Nevada and Federal Standards as applicable.		

GENERAL MECHANICAL NOTES

- DUE TO THE SMALL SCALE OF THE DRAWINGS, IT IS IMPOSSIBLE TO SHOW ALL REQUIRED OFFSETS, ELEVATIONS, ETC., IT IS THEREFORE THE CONTRACTORS RESPONSIBILITY TO REVIEW THE PROJECT DRAWINGS AND SPECIFICATIONS THOROUGHLY PRIOR TO SUBMITTING A BID ON THIS PROJECT. CONTRACTOR IS RESPONSIBLE TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS AS SHOWN IN THE CONTRACT DOCUMENTS IN ORDER TO MEET THE INTENT OF THE DESIGN.
- CONTRACTOR SHALL COORDINATE EXACT ROUTING OF ALL HVAC SYSTEM EQUIPMENT, DUCTWORK, PIPING, AND ALL ASSOCIATED COMPONENTS IN THE FIELD. CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF EQUIPMENT WITH EXISTING FIELD CONDITIONS PRIOR TO STARTING WORK. PROVIDE REQUIRED DUCT AND PIPING OFFSETS, TRANSITIONS, ETC. AS REQUIRED TO MEET THE INTENT OF THE DESIGN. IF ANY SYSTEMS REQUIRE SIGNIFICANT CHANGES, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE PROPOSED CHANGES TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING THE WORK. NO EXTRAS WILL BE ALLOWED FOR FAILURE TO COMPLY WITH THE ABOVE.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL BUILDING PERMITS, WORKING PERMITS REQUIRED FOR THIS PROJECT.
- CONTRACTOR TO GUARANTEE ALL WORK AND MATERIALS TO BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE. CONTRACTOR WILL PROMPTLY REMEDY SUCH DEFECTS AND ANY DAMAGE TO THE PROPERTY DONE DURING THE CONTRACTED WORK AT NO EXPENSE TO THE OWNER.
- CONTRACTOR IS RESPONSIBLE FOR THE CUTTING, SAWCUTTING OPENINGS OF WALLS, CEILINGS, SOFFITS AS REQUIRED FOR THE INSTALLATION OF EQUIPMENT AND DUCTWORK AS REQUIRED. SEE STRUCTURAL DRAWINGS FOR INFORMATION RELATING TO ALL NEW PENETRATIONS. ALL PENETRATIONS AND/OR EXISTING DUCTWORK TO BE REUSED SHALL BE SEALED WEATHER TIGHT AND PROTECTED FROM THE OUTDOOR WEATHER CONDITIONS SUCH THAT NO DAMAGE OCCURS TO THE BUILDING.

FULLY SPRINKLERED

			CONSULTANTS:			ARCHITECT/ENGINEERS:		<div>Drawing Title MECHANICAL SYMBOL LIST</div> <div>Approved Project Director</div>	<div>Project Title VA SIERRA NEVADA HEALTH CARE SYSTEM - CANTEEN RELOCATION DESIGN - , RENO, NEVADA</div> <div>Location 975 KIRMAN AVE, RENO, NEVADA 89502</div> <div>Date 06 JAN, 2012</div> <div>Checked TPF</div> <div>Drawn EBW</div>	<div>Project Number 654-11-227</div> <div>Building Number 1</div> <div>Drawing Number M0.1</div> <div>Dwg. - of -</div>	<div>Office of Construction and Facilities Management</div> <div> Department of Veterans Affairs</div>		
			 <div>DINTER ENGINEERING CONFIDENCE Airfield Electrical Mechanical 385 Gentry Way Reno, NV 89502 Ph: 775.826.4044 Fax: 775.826.4190 www.dinter.com J-4217.6</div>			<div> vern martin design associates (a Nevada Corporation) Food Facilities Design 760 Robin St., Reno, Nevada 89509 P:(775) 240-2637 F:(775) 201-0066 E:vern@martinreno.com</div>						<div> 1400 s. virginia st suite c reno, nevada 89502 p:775.328.1010 f:775.328.1020 info@vwarchitects.com</div>	
Revisions:		Date											