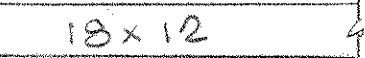
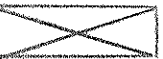
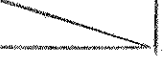


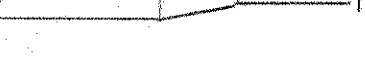
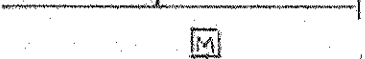


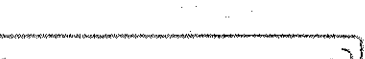






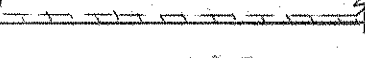

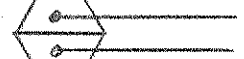








HVAC - LEGEND SYMBOLS, & ABBREVIATIONS







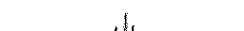




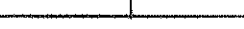





AIR SYSTEM

	DUCT SIZE IN INCHES 1st FIG. SIDE SHOWN - 2nd FIG. DEPTH
	SUPPLY DUCT SECTION
	RETURN, EXHAUST OR RELIEF DUCT
	CEILING DIFFUSER
	RETURN, RELIEF OR EXHAUST GRILLE OR REGISTER
	TRANSITION
	MANUAL DAMPER
	MOTORIZED DAMPER
	ELBOW TURNED DOWN
	ELBOW - TURNED UP
	ELBOW WITH TURNING VANES
	TYPICAL DUCT SPLIT WITH SPLITTER DAMPER
	EQUIPT. FLEXIBLE CONN.
	SUPPLY AIR REGISTER WITH VOLUME EXTRACTOR
	BRANCH DUCT TAKE-OFF, PROVIDE WITH SPLITTER DAMPER
	FIRE OR SMOKE DETECTOR
	ACOUSTIC LINED DUCT
	FIRE DAMPER

EQUIPMENT SYMBOLS

	TAG LETTER TAG NUMBER	EQUIPMENT IDENTIFICATION
	THERMOSTAT (5'-0" ABOVE FL. UNLESS NOTED)	
	POWER ROOF FAN	
	GRAVITY ROOF VENT	
	VERTICAL UNIT HEATER	
	HORIZONTAL UNIT HEATER	
	FIN RADIATOR	

PIPING LEGEND

	HWS	HOT WATER SUPPLY
	HWR	HOT WATER RETURN
	-	A/C CONDENSATE DRAIN
	PA.	PIPE ANCHOR
	-	PIPE GUIDE
	-	FLEXIBLE PIPE CONNECTOR
	STR.	STRAINER
	-	UNION
	GV.	GATE VALVE
	GLV.	GLOBE VALVE
	C.V.	CHECK VALVE
	-	BALANCE COCK
	-	PRESSURE REDUCING VALVE
	-	PRESSURE RELIEF VALVE
	-	HOSE END DRAIN VALVE W/CAP
	-	2 WAY & 3 WAY CONTROL VALVES
	-	COMBINATION BALANCE COCK/SHUT OFF VALVE

ABBREVIATIONS

AF	ABOVE FLOOR
ATC	AUTOMATIC TEMPERATURE CONTROL
ARCH.	ARCHITECTURAL
AUTO	AUTOMATIC
BT.	BOTTOM
C.D.	CEILING DIFFUSER
C.R.	CEILING REGISTER
C.L.	CENTERLINE
CLG.	CEILING
CFM	CUBIC FEET PER MINUTE
DWG.	DRAWING
ELEC.	ELECTRICAL
EXIST.	EXISTING
EXH.	EXHAUST
FLEX.	FLEXIBLE
FL.	FLOOR
F.D.	FIRE DAMPER
GR.	GRILLE
HORIZ.	HORIZONTAL
MAX.	MAXIMUM
MIN.	MINIMUM
O.A.	OUTSIDE AIR
OPNG.	OPENING
R.A.	RETURN AIR
REG.	REGISTER
RM.	ROOM
RPM.	REVOLUTIONS PER MINUTE
S.A.	SUPPLY AIR
STAT.	THERMOSTAT
STL.	STEEL
STRUCT.	STRUCTURAL
TEMP.	TEMPERATURE
TYP.	TYPICAL
VERT.	VERTICAL
HP	HORSEPOWER
GPM	GALLONS PER MINUTE

ROOFTOP A/C UNIT SCHEDULE

TAG	TYPE	CFM		EVAP. FAN & MOTOR				COOLING COIL						COMPRESSOR NOMINAL HP	CONDENSER FAN HP	CONDENSING TEMP. (MAX)	O.A. AMBIENT TEMP.	ELEC.		
		TOTAL	O.A. (MIN.)	EXTERNAL STATIC PRESSURE	HP MIN	FAN RPM (APPROX)	ELEC.	CAPACITY - BTU/HR (MIN)		MAX. FACE VELOCITY (FPM)	AIR ENT.		AIR LGV.						ROWS (MIN.)	
AC-1	SINGLE PACKAGE	4200	1280	* 0.80	3	850	208V-3	99,000	146,000	560	80°	66°	55°	55.5°	3	12	2	130°	91°F	208V-3

* NOTE: EXTERNAL STATIC PRESSURE INCLUDES AN ALLOWANCE OF 0.20" H₂O FOR FILTERS & ECONOMIZER.

GRILLE, REGISTER & DIFFUSER SCHEDULE

TAG	CFM	TYPE	MOUNTING	NECK SIZE	REMARKS
CD-1	235	SQUARE CEILING DIFFUSER	LAY-IN	8" DIA	23 1/2" x 23 1/2" OUTSIDE FOR LAY-IN ON T-BAR
CD-2	355			8" DIA	
CD-3	340			8" DIA	
CD-4	190			6" DIA	
CD-5	145			6" DIA	
CD-6	125			6" DIA	
CD-7	275			8" DIA	
CD-8	140			6" DIA	
CD-9	265			8" DIA	
CR-1	80	CEILING REGISTER	FLUSH-CEILING	8" x 6"	
CR-2	50			8" x 6"	
CR-3	220			16" x 10"	
CR-4	400			20" x 12"	
CR-5	60			8" x 6"	
CR-6	180			16" x 8"	
CR-7	1550		LAY-IN	48" x 24"	47 1/2" x 23 1/2" OUTSIDE FOR LAY-IN ON T-BAR
CR-8	600		FLUSH	18" x 18"	
CR-9	1550		LAY-IN	48" x 24"	47 1/2" x 23 1/2" OUTSIDE FOR LAY-IN ON T-BAR
CR-10	250		FLUSH CEILING	16" x 10"	
CR-11	40			8" x 6"	
CR-12	500			22" x 12"	
CR-13	100			8" x 8"	
CR-14	80			8" x 6"	
CR-15	265			18" x 10"	
CR-16	275			18" x 10"	

FAN SCHEDULE

TAG	TYPE	CFM	STATIC PRESSURE	APPROX FAN RPM	MOTOR		REMARKS
					HP	ELEC.	
EF-1	POWER ROOF	3750	3"	600	3/4	208V-3	TIP SPEED - 4000 FPM (MAX)
EF-2	POWER ROOF	4000	1/4"	575	1/2	208V-3	
EF-3	POWER ROOF	550	1/4"	690	1/2	120V	
EF-4	POWER ROOF	470	1/4"	670	1/2	120V	
EF-5	POWER ROOF	610	1/4"	710	1/2	120V	
EF-6	POWER ROOF	145	1/4"	1650	1/5	120V	
EF-7	POWER ROOF	600	1/4"	850	1/2	120V	
EF-8	POWER ROOF	1200	1/4"	950	1/2	120V	
EF-9	POWER ROOF	990	1/4"	970	1/2	120V	
EF-10	POWER ROOF	510	1/4"	925	1/2	120V	
EF-11	POWER ROOF EXPLOSION PROOF	1200	1/4"	950	1/2	120V	
EF-12	CENTRIFUGAL	1050	3"	2300	1 1/2	208V-3	CLOCKWISE ROTATION UP BLAST DISCH.
SF-1	POWER ROOF SUPPLY	4000	1/4"	860	1/2	208V-3	PROPELLER TYPE

PUMP SCHEDULE

TAG	TYPE	GPM	HEAD (FT.)	MOTOR		
				HP	RPM	ELEC.
P-1	BASE MOUNTED	75	40	2	1750	208V-3
P-2	IN-LINE	50	15	1/2	1750	208V-3

FIN RADIATION SCHEDULE

TAG	CAPACITY BTUH	APPROX ELEMENT LENGTH	TIEES	AVG. WATER TEMP.	TUBE FIN	ENCLOSURE
FR-1	6560	6 1/2'	2	180°F	COPPER ALUM.	APPROX. 14" HIGH - LENGTH AS INDICATED. PIPE RETURN THRU UPPER ELEMENT.
FR-2	7570	7 1/2'	2			
FR-3	14140	14'	2			
FR-4	18180	18'	2			
FR-5	20000	4 PIECES 9' LONG	2			
FR-6	11200	10'	2			
FR-7	14000	16'	1			APPROX. 14" HIGH AND 20' LONG
FR-8	1320	1 1/2'	1			APPROX. 14" HIGH AND 3' LONG
FR-9	7400	3 1/2' IN 2 PIECES	1			APPROX. 14" HIGH-LENGTH AS INDICATED (WITH INSIDE CORNER) ON 2 WALLS
FR-10	2200	2 1/2'	1			APPROX. 14" HIGH AND 4' LONG
FR-11	880	1'	1			APPROX. 14" HIGH AND 7' LONG
FR-12	7040	8'	1			APPROX. 14" HIGH AND 10' LONG
FR-13	825	1 1/2'	1			INVERTED ENCLOSURE 4" BELOW CEILING OMIT DAMPER - ENCL. APPROX. 3' LONG

NOTE: ENCLOSURES SHALL BE ROUNDED TOP WITH FULL LENGTH DAMPERS, EXCEPT AS NOTED

UNIT HEATER SCHEDULE

TAG	TYPE	CAPACITY BTUH (MIN)	WATER			CFM (MIN)	MOTOR		
			GPM	IN	OUT		HP	RPM	ELEC
UH-1	VERTICAL	40,000	4.0	190°	170°	1200	1/2	1100	120V
UH-2	VERTICAL	19,000	1.9	190°	170°	1000	1/20	1550	120V
UH-3	VERTICAL	18,000	1.8	190°	170°	700	1/20	1150	120V
UH-4	VERTICAL	17000	1.7	190°	170°	600	1/20	1550	120V
UH-5	HORIZONTAL	2000	1.0	190°	186°	135	1/25	1050	120V
UH-6	VERTICAL	12000	1.2	190°	170°	745	1/20	1550	120V
UH-7	HORIZONTAL	45000	4.5	190°	170°	1150	1/2	1550	120V
MU-1	MAKE-UP AIR UNIT	425,000	49	200	182	6600 AT 10° TO 70°F	3/4	350	208V-3
CH-1	CABINET FLOOR MOUNT	15000	1.0	190°	160°	200	1/2	-	120V
CH-2	CABINET FLOOR MOUNT	24,000	1.0	190°	140°	400	1/2	-	120V
CH-3	CABINET INVERTED	20,000	1.0	190°	150°	400	1/2	-	120V

NOTE: CABINET HEATER CH-3 SHALL BE MOUNTED 6" BELOW FINISHED CEILING.

BOILER SCHEDULE

TAG	TYPE	OUTPUT		FUEL	FUEL FIRING RATE	REMARKS
		GROSS BTU/HR	NET BTU/HR			
HB-1	HOT WATER - FIRE BOX DESIGN - SUITABLE FOR FUTURE CONVERSION TO COAL STOKER FIRING	1,327,000	1,154,000	NATURAL GAS @ 1000 BTU PER CU. FT.	1060 CU. FT./HR.	PROVIDE WITH 24" HIGH STEEL BASE

HEATING COIL SCHEDULE

TAG	CAPACITY	SIZE	AIR				WATER				ROWS
			CFM	ENT.	LVG.	ΔP MAX	GPM	ENT.	LVG.	ΔP MAX	
HC-1	33480	24x15'	1550	51°F	70°F	0.30"	1.75	190°F	150°F	2.0'	1
HC-2	24200	18x12'	1180	51°F	70°F	0.30"	1.20	190°F	150°F	2.0'	1
HC-3	3000	12x6'	145	51°F	70°F	0.30"	0.60	190°F	150°F	2.0'	1
HC-4	16830	18x12'	820	51°F	70°F	0.30"	0.85	190°F	150°F	2.0'	1
HC-5	10250	12x12'	500	51°F	70°F	0.30"	1.0	190°F	170°F	2.0'	1

DESCRIPTION		DESCRIPTION
AS BUILT REVISIONS		
SUBMITTED <i>Gerald F. DeMarco</i> ARCHITECT		
SUBMITTED <i>William Joseph Burkhage</i> ENGINEER		
APPROVED DEPARTMENT OF TRANSPORTATION		
APPROVED		
CHECKED BY DEPARTMENT OF GENERAL SERVICES		
ARCH.	STRUCT.	PLBG. ELEC. MISC.
COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF GENERAL SERVICES HARRISBURG PENNSYLVANIA		
PROJECT NO. D.G.S. 960-10		
EMERGENCY EQUIPMENT & MAINTENANCE BUILDING HARRISBURG INTERNATIONAL AIRPORT MIDDLETOWN DAUPHIN COUNTY PENNSYLVANIA		
GERALD F. DE MARCO REGISTERED ARCHITECT 276 EAST GROVE AVE. CLARK'S SUMMIT, PENNA.		
BURKHAGE-EVANS ASSOCIATES CONSULTING ENGINEERS 709 NORTH STATE ST. CLARK'S SUMMIT, PENNA.		
HVAC - SCHEDULES LEGEND & SYMBOLS		
DRAWN BY PJG		
DATE 3-11-80		
CHECKED BY J.C.H.		
SCALE NOTED		
DRAWING NO. H-1		