

9/17/2024 10:01:20 PM M-702 Autodesk Docs\\US_D3754500_USD_Aerojet Rocketdyne\\03754500_CNDN_OSD_Mixer-Building_1_MECH.rvt

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ELECTRIC BOILER SCHEDULE																		
EQUIPMENT NUMBER	BASIS OF DESIGN		GENERAL			HEATING DATA							LB/HR		ELECTRICAL DATA		WT (LBS)	REMARKS
	MANUFACTURER	MODEL	LOCATION	SERVICE	DESCRIPTION	FLUID TYPE	INPUT (MBH)	OUTPUT (MBH)	GPM	TEMP RISE (°F)	MAX OPERATING PRESSURE (PSI)	STEPS	NOMINAL	ACTUAL	POWER (KW)	V/PH/HZ		
EB-1	REIMERS ELECTRA STEAM	HLR105K3D	UTILITY RM	PROCESS EQUIPMENT	ELECTRIC HOT WATER BOILER	WATER	358	358	48	14.9	85	4	N/A	N/A	105	480/3/60	410	ALL NOTES BELOW
EB-2	CHROMALOX	CES-68B	UTILITY RM	MDU-1 HUMIDIFIER	VERTICAL STEAM BOILER	STEAM	232	232	N/A	N/A	15	N/A	205	125	68	480/3/60	400	ALL NOTES BELOW

EB-1 NOTES:
1. PROVIDE WITH:
A. INTEGRAL TRANSFORMER FOR CONTROL POWER FOR SINGLE POINT POWER.
B. INTEGRAL A.S.M.E PRESSURE RELIEF VALVE
C. INTEGRAL CONTROLLER W/ BACNET PROTOCOL INTERFACE
D. INTEGRAL DISCONNECT
E. CONCRETE HOUSEKEEPING PAD A MINIMUM OF 6" HT AND EXTEND 6" ON ALL SIDES.

EB-2 NOTES:
1. PROVIDE WITH
A. CONCRETE HOUSEKEEPING PAD A MINIMUM OF 6" HT AND EXTEND 6" ON ALL SIDES.
B. 2 KVA TRANSFORMER FOR SINGLE POINT POWER.
C. INTEGRAL CONTROLLER W/ BACNET PROTOCOL INTERFACE
D. CHEMICAL TREATMENT SYSTEM BY CHEM AQUA

EB-2 NOTES CONTINUED:
2. WATER QUALITY REQUIREMENTS FROM CHROMALOX:
A. TOTAL HARDNESS: 0-0.3 PPM AS CaCO3
B. IRON: 0.1 PPM
C. COPPER: 0.05 PPM
D. SILICA: 150 PPM
E. ALKALINITY: 700 PPM
F. TOTAL DISSOLVED SOLIDS: 2200 TO 2800 PPM
G. CONDUCTIVITY: 7000 MICRO OHM S/CM
H. OXYGEN: 0-0.007 PPM
I. pH: 8.5 to 10.0
J. NOTES: PPM = PARTS PER MILLION

GENERAL NOTES:
ALL EQUIPMENT TO BE FM GLOBAL APPROVED

C

WATER COOLING TOWER SCHEDULE																			
EQUIPMENT NUMBER	BASIS OF DESIGN		GENERAL			COOLING DATA							FAN		SUMP VOLUME (GAL)	V/PH/HZ	SHIPPING WT. (LB)	OPERATING WT. (LB)	REMARKS
	MANUFACTURER	MODEL	LOCATION	SERVICE	DESCRIPTION	FLUID TYPE	NOMINAL TONS	ACTUAL TONS	FLOW (GPM)	ENTRY WATER TEMP. °F	LEAVING WATER TEMP. °F	ENT. AIR WET BULB TEMP °F	QTY.	HP EACH					
	CT-1	DELTA	PARAGON	EXTERIOR	PROCESS EQUIPMENT	INDUCED DRAFT COUNTERFLOW	WATER	55	111.4	90	122 °F	85 °F	80 °F	1	2	355	460/3/60	1180	3980

NOTES:
1. ACTUAL TONS IS GREATER THAN NOMINAL TONS DUE TO COOLING TOWER COUNTERFLOW CORRECTION FACTOR.
2. PROVIDE WITH:
A. FREEZE PROTECTION CONTROL SUMP PACKAGE
B. INTEGRAL CONTROLLER W/ BACNET PROTOCOL INTERFACE
C. INTEGRAL DISCONNECT
D. INTEGRAL VFD
3. DUAL POINT POWER:
A. FAN (ELECTRIC INFO LISTED ABOVE)
B. 6KW, 460/3/60 V/PH/HZ SUMP HEATER PACKAGE

PUMP SCHEDULE

PUMP SCHEDULE												
EQUIPMENT NUMBER	BASIS OF DESIGN		LOCATION	SERVICE	DESCRIPTION	FLOW (GPM)	HEAD (FT)	MOTOR SPEED (RPM)	ELECTRICAL		WT (LB)	REMARKS
	MANUFACTURER	MODEL							MOTOR HP	V/PH/HZ		
CP-1	GRUNDFOS	CRE 15-2 A-GJ-A-E-HQQE	UTILITY RM	CT-1	VERTICAL CENTRIFUGAL	90	65	3007	5	460/3/60	170	ALL NOTES BELOW
CP-2	GRUNDFOS	CRE 15-2 A-GJ-A-E-HQQE	UTILITY RM	CT-1	VERTICAL CENTRIFUGAL	90	65	3007	5	460/3/60	170	ALL NOTES BELOW
PHWP-1	SCOT PUMP	16 SF 2 X 1.5	UTILITY RM	EB-1	CLOSE COUPLED END SUCTION	48	90	3500	3	460/3/60	170	ALL NOTES BELOW

CP-1 & CP-2 NOTES:
1. CP-1 AND CP-2 ARE A N+1 CONFIGURATION
2. PROVIDE WITH:
A. INTEGRAL CONTROLLER W/ BACNET PROTOCOL INTERFACE
B. INTEGRAL DISCONNECT
C. VFD BY L&H AIRCO
D. CONCRETE HOUSEKEEPING PAD A MINIMUM OF 4" HT AND EXTEND 6" ON ALL SIDES.

PHWP-1 NOTES:
1. PUMP HEAD IS AN ESTIMATE. PUMP IS IDENTICAL TO HWP IN EXISTING MIXER BUILDING.
2. PROVIDE WITH:
A. INTEGRAL CONTROLLER W/ BACNET PROTOCOL INTERFACE
B. INTEGRAL DISCONNECT
C. VFD BY L&H AIRCO
D. CONCRETE HOUSEKEEPING PAD A MINIMUM OF 4" HT AND EXTEND 6" ON ALL SIDES.

SPLIT SYSTEM AIR UNIT SCHEDULE

EQUIPMENT NUMBER	BASIS OF DESIGN		GENERAL			FAN			FILTER TYPE	COOLING DATA						ELECTRICAL DATA			OPERATING WT. (LB)	REMARKS
	MANUFACTURER	MODEL	LOCATION	AREA SERVED	DESCRIPTION	TOTAL CFM	O.A. CFM	EXT. S.P. (IN.WG.)		MBH		EAT DB	EAT WB	LAT DB	LAT WB	V/PH/HZ	MCA (A)	MOP (A)		
										SENS.	TOTAL									
SSAU-1	TRANE	TPKA0A0241KA70A	IT RM	IT RM	WALL MOUNTED DUCTLESS UNIT	705	0	0.00	MERV8	18.5	24.0	80 °F	67 °F	56.1 °F	56.0 °F	N/A	1	N/A	46	ALL NOTES BELOW
SSAU-2	TRANE	TEM6B0C60H51	CONTROL RM	CONTROL RM	HORIZONTAL DUCTED AHU	2000	0	0.25	MERV8	45.5	51.4	76 °F	62 °F	54.8 °F	52.8 °F	208/1/60	9	15	174	ALL NOTES BELOW

SSAU-1 NOTES:
1. POWER FROM SSCU-1
2. PROVIDE WITH:
A. CONDENSATE PUMP

SSAU-2 NOTES:
1. PROVIDE WITH:
A. CONDENSATE PUMP

SPLIT SYSTEM CONDENSING UNIT SCHEDULE

EQUIPMENT NUMBER	BASIS OF DESIGN		LOCATION	DESCRIPTION	SERVICE	OUTSIDE AIR TEMP. °F	COOLING	V/PH/HZ	MCA (A)	MOP	REMARKS
	MANUFACTURER	MODEL NO.					CAPACITY				
							MBH				
SSCU-1	TRANE	TRUYA0241HA70NA	EXTERIOR	COOLING ONLY CONDENSING UNIT	SSAU-1	105 °F	24	208/1/60	19	26 A	ALL NOTES BELOW
SSCU-2	TRANE	4TTA7060A4	EXTERIOR	COOLING ONLY CONDENSING UNIT	SSAU-2	105 °F	60	480/3/60	9	15 A	ALL NOTES BELOW

SSCU-1 NOTES:
1. PROVIDE WITH:
A. 12" TALL STAND MODEL NO: QSMS1201M
B. LOW AMBIENT COOLING CAPABILITY

SSCU-2 NOTES:
1. PROVIDE WITH:
A. LOW AMBIENT COOLING CAPABILITY
B. CONCRETE HOUSEKEEPING PAD A MINIMUM OF 4" HT AND EXTEND 6" ON ALL SIDES.

ELECTRIC UNIT HEATER SCHEDULE

EQUIPMENT NUMBER	BASIS OF DESIGN		AREA SERVED	DESCRIPTION	CFM	FAN MOTOR HP	KW	TEMPERATURE RISE	V/PH/HZ	MAX MOUNTING HEIGHT (FT)	REMARKS
	MANUFACTURER	MODEL									
EUH-1	MODINE	HER75C 3301	UTILITY RM	HORIZONTAL	530 CFM	0.025	7.5	45	480/3/60	8	ALL NOTES BELOW

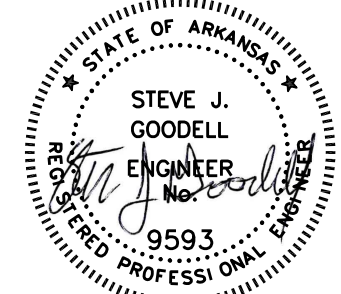
NOTES:
1. PROVIDE WITH:
A. UNIT MOUNTED THERMOSTAT
B. DISCONNECT
C. WALL MOUNTING BRACKET

AIR DEVICE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL NO	SIZE	REMARKS
S1	SURFACE MOUNTED SUPPLY DOUBLE DEFLECTION GRILLE WITH INTEGRAL VOLUME DAMPER	PRICE	520D	SEE PLANS	
S2	24"X24" FACE CEILING MOUNTED SUPPLY DIFFUSER	PRICE	SPD	8" DIAM NECK	



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Exp. Date: 1/23/2024



09/18/2024

Mixer-Building-1
Camden OSD
Calhoun County, Arkansas
Aerojet Rocketdyne



MECHANICAL
HVAC SCHEDULES

SHEET NO

M-702

SCALE 12" = 1'-0"
DATE 09/18/2024
PROJ D3754502
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