

MARK	BUILDING	SERVES	SUPPLY AIR FLOW (CFM)	SUPPLY E.S.P. (IN W.C.)	SUPPLY FAN HP	EXHAUST AIR FLOW (CFM)	EXHAUST E.S.P. (IN W.C.)	EXHAUST FAN HP	ELECTRICAL V/PH/Hz	WHEEL PERFORMANCE						SUPPLEMENTARY HEAT			MANUFACTURER	MODEL NUMBER	NOTES
										COOLING EA EAT DB/WB (°F)	COOLING SA LAT DB/WB (°F)	HEATING EA EAT DB/WB (°F)	HEATING SA LAT DB/WB (°F)	OUTSIDE COOLING DB/WB (°F)	OUTSIDE HEATING DB/WB (°F)	TYPE	CAPACITY (kW)	HEATING LAT (°F)			
										75 / 63	80 / 67	70 / 52	55 / 46	94 / 75	16 / 13						
ERV-2-1	OPERATIONS	ALL OCCUPIED	1,200	0.8	3/4	1,000	0.6	3/4	460/3/60	75 / 63	80 / 67	70 / 52	55 / 46	94 / 75	16 / 13	ELECTRIC	10	70	GREENHECK	ERV-20-30L-EH-01	SEE NOTES

- NOTES:
1. PROVIDE SUPPLY AND RETURN AIR FILTERS RACK WITH 2" FILTERS (30%) AND THREE SPARE SETS OF FILTERS.
  2. PROVIDE PURGE CYCLE.
  3. PROVIDE ROTATION SENSOR.
  4. PROVIDE TIMED EXHAUST FROST CONTROL.
  5. PROVIDE MODULATING WHEEL CONTROL.

MARK	BUILDING	SERVES	AIR FLOW (CFM)	MIN. OA (CFM)	E.S.P. (IN W.C.)	TOTAL COOLING CAPACITY (MBH)	SENSIBLE COOLING CAPACITY (MBH)	COOLING E.A.T. DB/WB (°F)	COOLING L.A.T. DB/WB (°F)	ELECTRIC HEAT CAPACITY (kW)	AMBIENT TEMP. (°F)	REFRIG.	ELECTRICAL V/PH/Hz	MANUFACTURER	MODEL	NOTES
AHU-4-1	FINISHED WATER	ELECTRICAL ROOM	3745	60	0.20	122.8	89.4	80 / 67	57 / 55	20	95	R-410A	480 / 3 / 60	SPECIFIC SYSTEMS	APK-120-C-WHD	SEE NOTES 1,3,4
AHU-4-2	FINISHED WATER	ELECTRICAL ROOM	3745	60	0.20	122.8	89.4	80 / 67	57 / 55	20	95	R-410A	480 / 3 / 60	SPECIFIC SYSTEMS	APK-120-C-WHD	SEE NOTES 1,3,4
AHU-8-1	GENERATOR	ELECTRICAL ROOM	1700	70	0.20	56.5	40.8	80 / 67	57 / 55	15	95	R-410A	480 / 3 / 60	BARD	WL552-C15SP	SEE NOTES 3,4,5
AHU-8-2	GENERATOR	ELECTRICAL ROOM	1700	70	0.20	56.5	40.8	80 / 67	57 / 55	15	95	R-410A	480 / 3 / 60	BARD	WL552-C15SP	SEE NOTES 3,4,5

- NOTES:
1. PROVIDE WITH SPECIFIC SYSTEMS MULTIPLEXER AUTOMATIC MULTI-UNIT CONTROLLER SUITABLE FOR THE NUMBER OF UNITS TO BE INSTALLED PER BUILDING.
  2. UNIT SHALL MOUNT ON EXISTING 5'-6" PLATFORM.
  3. UNIT SHALL BE WALL MOUNTED A MINIMUM OF 2'-0" ABOVE GRADE.
  4. PROVIDE WITH ECONOMIZER, 2-STAGE COOLING, FILTERS, FREEZESTAT AND LOW-AMBIENT CONTROL.
  5. PROVIDE BARD LEAD/LAG UNIT CONTROLLER FOR MULTI UNIT CONTROL.

MARK	BUILDING	SERVES	AIR FLOW (CFM)	MIN. OA (CFM)	E.S.P. (IN W.C.)	TOTAL COOLING CAPACITY (MBH)	SENSIBLE COOLING CAPACITY (MBH)	COOLING E.A.T. DB/WB (°F)	COOLING L.A.T. DB/WB (°F)	ELECTRIC HEAT CAPACITY (kW)	AMBIENT TEMP. (°F)	REFRIG.	ELECTRICAL V/PH/Hz	MANUFACTURER	MODEL	NOTES
AHU-4-3	FINISHED WATER	ELECTRICAL ROOM	3745	60	0.20	122.8	89.4	80 / 67	57 / 55	20	95	R-410A	480 / 3 / 60	SPECIFIC SYSTEMS	APK-120-C-WHD	INSTALL IN PHASE 2. SEE NOTES 1,3,4
AHU-4-4	FINISHED WATER	ELECTRICAL ROOM	3745	60	0.20	122.8	89.4	80 / 67	57 / 55	20	95	R-410A	480 / 3 / 60	SPECIFIC SYSTEMS	APK-120-C-WHD	INSTALL IN PHASE 2. SEE NOTES 1,3,4

- NOTES:
1. PROVIDE WITH SPECIFIC SYSTEMS MULTIPLEXER AUTOMATIC MULTI-UNIT CONTROLLER SUITABLE FOR THE NUMBER OF UNITS TO BE INSTALLED.
  2. UNIT SHALL MOUNT ON EXISTING 5'-6" PLATFORM.
  3. UNIT SHALL BE WALL MOUNTED A MINIMUM OF 2'-0" ABOVE GRADE.
  4. PROVIDE WITH ECONOMIZER, 2-STAGE COOLING, FILTERS, FREEZESTAT AND LOW-AMBIENT CONTROL.

MARK	BUILDING	SERVES	TYPE	SUPPLY FAN				HEATING SECTION			COOLING COIL			ELECTRICAL VOLTS/PH/Hz	MANUFACTURER	MODEL	REMARKS
				MAX AIR FLOW (CFM)	MIN AIR FLOW (CFM)	OUTDOOR AIR FLOW (CFM)	FAN QTY.	E.S.P. (IN. WG)	NOMINAL CAPACITY @ 47°F AMBIENT (MBH)	ELEC HEAT KW	NOMINAL TOTAL CAP. (MBH)	SENSIBLE CAP. (MBH)	EAT DB/WB (°F)				
				1410	990	55	2	0.4	54.0	48.0	36.6	75.2 / 62.7	208 / 1 / 60				
AHU-2-1	OPERATIONS	LOBBY M101	HORIZONTAL DUCTED	1410	990	55	2	0.4	54.0	N/A	24.0	15.9	75.4 / 62.8	208 / 1 / 60	DAIKIN ELECTRIC	PCFY-P24NKMU-E	SEE NOTES 1,2,3,4,6
AHU-2-2	OPERATIONS	ELECTRICAL M105	CEILING SUSPENDED	635	495	0	3	0.1	27.0	N/A	24.0	15.9	75.0 / 62.5	208 / 1 / 60	DAIKIN ELECTRIC	PCFY-P24NKMU-E	SEE NOTES 1,2,3,4,6
AHU-2-3	OPERATIONS	ELECTRICAL M105	CEILING SUSPENDED	635	495	50	3	0.1	27.0	N/A	24.0	15.9	75.0 / 62.5	208 / 1 / 60	DAIKIN ELECTRIC	PCFY-P24NKMU-E	SEE NOTES 1,2,3,4,6
AHU-2-4	OPERATIONS	MECH M102	WALL-MOUNTED	920	710	0	1	0.1	34.0	N/A	30.0	22.7	75.0 / 62.5	208 / 1 / 60	DAIKIN ELECTRIC	PKFY-P30NKMU-E2	SEE NOTES 1,2,3,4,6
AHU-2-5	OPERATIONS	CORRIDOR M108, M103	HORIZONTAL DUCTED	600	425	205	1	0.4	20.0	N/A	18.0	14.1	76.8 / 63.9	208 / 1 / 60	DAIKIN ELECTRIC	PEFY-P18NMAU-E2	SEE NOTES 1,2,3,4,6
AHU-2-6	OPERATIONS	LOBBY A100	CEILING CASSETTE	775	775	50	1	0.1	40.0	N/A	36.0	21.4	75.3 / 62.8	208 / 1 / 60	DAIKIN ELECTRIC	PLFY-P36NBMU-E	SEE NOTES 1,2,3,4,6
AHU-2-7	OPERATIONS	LOBBY A100	CEILING CASSETTE	565	565	50	1	0.1	34.0	N/A	30.0	16.7	75.5 / 62.9	208 / 1 / 60	DAIKIN ELECTRIC	PLFY-P30NBMU-E	SEE NOTES 1,2,3,4,6
AHU-2-8	OPERATIONS	BREAK A102, SUPPLY A101	HORIZONTAL DUCTED	880	620	160	2	0.4	27.0	N/A	24.0	18.8	77.7 / 64.0	208 / 1 / 60	DAIKIN ELECTRIC	PEFY-P24NMAU-E2	SEE NOTES 1,2,3,4,6
AHU-2-9	OPERATIONS	CORR A110, LOCKER A106	HORIZONTAL DUCTED	370	265	65	1	0.4	13.5	N/A	12.0	8.0	77.5 / 63.9	208 / 1 / 60	DAIKIN ELECTRIC	PEFY-P12NMAU-E2	SEE NOTES 1,2,3,4,6
AHU-2-10	OPERATIONS	CONTROL A108, SUPPLY A107	HORIZONTAL DUCTED	1165	810	160	2	0.6	40.0	N/A	36.0	27.3	77.5 / 63.9	208 / 1 / 60	DAIKIN ELECTRIC	PEFY-P36NMAU-E2	SEE NOTES 1,2,3,4,6,7
AHU-2-11	OPERATIONS	ELECTRICAL A115	CEILING CASSETTE	775	775	0	1	0.1	40.0	N/A	36.0	22.1	75.2 / 62.7	208 / 1 / 60	DAIKIN ELECTRIC	PLFY-P36NBMU-E	SEE NOTES 1,2,3,4,6
AHU-2-12	OPERATIONS	ELECTRICAL A115	CEILING CASSETTE	775	775	45	1	0.1	40.0	N/A	36.0	22.1	75.2 / 62.7	208 / 1 / 60	DAIKIN ELECTRIC	PLFY-P36NBMU-E	SEE NOTES 1,2,3,4,6
AHU-2-13	OPERATIONS	CONTROL LAB B A109	CEILING CASSETTE	425	425	80	1	0.1	17.0	N/A	15.0	9.7	77.7 / 64.1	208 / 1 / 60	DAIKIN ELECTRIC	PLFY-P15NBMU-E	SEE NOTES 1,2,3,4,6
AHU-2-14	OPERATIONS	OPEN OFFICE A111	HORIZONTAL DUCTED	495	350	90	1	0.4	17.0	N/A	15.0	11.1	75.9 / 63.2	208 / 1 / 60	DAIKIN ELECTRIC	PEFY-P15NMAU-E2	SEE NOTES 1,2,3,4,6
AHU-2-15	OPERATIONS	OFFICE A112	CEILING CASSETTE	390	390	50	1	0.1	13.5	N/A	12.0	8.3	77.5 / 63.9	208 / 1 / 60	DAIKIN ELECTRIC	PLFY-P12NCMU-E	SEE NOTES 1,2,3,4,6
AHU-2-16	OPERATIONS	TRAINING A114	HORIZONTAL DUCTED	880	620	140	2	0.4	27.0	N/A	24.0	18.8	75.8 / 63.1	208 / 1 / 60	DAIKIN ELECTRIC	PEFY-P24NMAU-E2	SEE NOTES 1,2,3,4,6
AHU-2-17	OPERATIONS	STAIRS A113/M106	CEILING CASSETTE	350	280	0	1	0.1	9.0	N/A	8.0	6.4	75.0 / 62.5	208 / 1 / 60	DAIKIN ELECTRIC	PLFY-P08NCMU-E	SEE NOTES 1,2,3,4,6

- NOTES:
1. PROVIDE MOTORS WITH OVERLOAD PROTECTION.
  2. PROVIDE CONDENSATE PUMP. ROUTE TO NEAREST MOP SINK. SEE PIPING PLANS FOR ROUTE.
  3. PROVIDE SIMPLE MA THERMOSTAT CONTROLLER FOR EACH UNIT. UNITS AHU-2-2 AND AHU-2-3 SHALL BE CONTROLLED BY THE SAME THERMOSTAT. AHU-2-6 AND AHU-2-7 SHALL BE CONTROLLED BY THE SAME THERMOSTAT. AHU-2-11 AND AHU-2-12 SHALL BE CONTROLLED BY THE SAME THERMOSTAT.
  4. SEE CONDENSING UNIT SCHEDULE FOR ASSOCIATED EQUIPMENT.
  5. PROVIDE SUPPLEMENTARY ELECTRIC HEAT WITH SCR.
  6. CONTRACTOR THAT INSTALLS VRF SYSTEM MUST BE A MITSUBISHI CERTIFIED CONTRACTOR.
  7. PROVIDE SUPPLY AND RETURN DUCT SMOKE DETECTORS.

MARK	BUILDING	SERVICE	TONS	NO. OF FANS	NO. OF CIRCUITS	MCA	AMBIENT TEMP. (°F)	EER	VOLTS / PH / HZ	REFRIG.	MANUFACTURER	MODEL	ASSOCIATED EQUIPMENT	REMARKS
CU-2-1	OPERATIONS	FIRST FLOOR	12	2	1	24	95	12.2	480 / 3 / 60	R-410A	DAIKIN ELECTRIC	PURY-P144YKMU-A	AHU-2-1 THRU AHU-2-5	VRF SYSTEM. SEE ALL NOTES.
CU-2-2	OPERATIONS	SECOND FLOOR	22	4	2	24 + 21	95	11.0	480 / 3 / 60	R-410A	DAIKIN ELECTRIC	PURY-P264YSKMU-A	AHU-2-6 THRU AHU-2-17	VRF SYSTEM. SEE ALL NOTES.
CU-2-3	OPERATIONS	MUA-2-1	10	1	2	23	95	12.6	480 / 3 / 60	R-410A	AAON	CC-C-010-3-D-2-DGD0BA0	MAU-2-1	SEE NOTES 1,2,3,7
CU-2-4	OPERATIONS	MUA-2-2	5	1	1	13	95	11.1	480 / 3 / 60	R-410A	AAON	CB-B-060-3-D-1-DGS0AA0	MAU-2-2	SEE NOTES 1,2,3,7

- NOTES:
1. PROVIDE MOTORS WITH OVERLOAD PROTECTION.
  2. PROVIDE LOW AMBIENT CONTROL.
  3. PROVIDE MOTOR STARTER AT CONDENSING UNIT LOCATION.
  4. CU-2-1 SHALL BE PROVIDED WITH A CMY-R100XL CBK TWINNING KIT FOR A SINGLE PIPING CIRCUIT TO THE BC CONTROLLER. ELECTRICAL CONTRACTOR SHALL PROVIDE TWO SEPARATE ELECTRICAL CONNECTIONS FOR CU-2-1.
  5. CU-2-1 SHALL BE PROVIDED WITH A MODEL CMB-P108NU-GA BC CONTROLLER. CU-2-2 SHALL BE PROVIDED WITH A MODEL CMB-P1016NU-HA. CONTROLLERS SHALL BE LOCATED IN THE FIRST FLOOR MECHANICAL ROOM. SEE SHEET M-2103.
  6. CONTRACTOR THAT INSTALLS VRF SYSTEMS MUST BE A MITSUBISHI CERTIFIED CONTRACTOR.
  7. PROVIDE ROOF CURB.

MARK	BUILDING	SERVES	TYPE	MOUNTING	MATERIAL	AIR FLOW (CFM)	SIZE (W X H)	S.P. (IN. W.C.)	THROAT VELOCITY (FT/MIN)	THROAT AREA (SQ.FT)	MANUFACTURER	MODEL	NOTES
GH-2-1	OPERATIONS	PARTS M110	OA INTAKE	ROOF	ALUMINUM	1,000	18 X 18	0.053	444	2.3	GREENHECK	FGI	SEE NOTES 1,2,3,4
GH-2-2	OPERATIONS	SODIUM HYPO C100	OA INTAKE	ROOF	ALUMINUM	12,900	60 X 60	0.071	516	25.0	GREENHECK	FGI	SEE NOTES 1,2,3,4
GH-2-3	OPERATIONS	ALUM ROOM C101	OA INTAKE	ROOF	ALUMINUM	11,700	58 X 58	0.067	501	23.4	GREENHECK	FGI	SEE NOTES 1,2,3,4
GH-2-4	OPERATIONS	BUILDING OA INTAKE	OA INTAKE	ROOF	ALUMINUM	1,200	20 X 20	0.050	432	2.8	GREENHECK	FGI	SEE NOTES 1,2,3,4
GH-2-5	OPERATIONS	BUILDING EXHAUST	EXHAUST	ROOF	ALUMINUM	1,000	16 X 16	0.044	563	1.8	GREENHECK	FGR	SEE NOTES 1,2,3,5
GH-2-6	OPERATIONS	MUA-2-1	OA INTAKE	ROOF	ALUMINUM	2,000	24 X 24	0.067	500	4.0	GREENHECK	FGI	SEE NOTES 1,2,3,4
GH-2-7	OPERATIONS	MUA-2-2	OA INTAKE	ROOF	ALUMINUM	800	16 X 16	0.054	450	1.8	GREENHECK	FGI	SEE NOTES 1,2,3,4
GH-2-8	OPERATIONS	EF-2-11	EXHAUST	ROOF	ALUMINUM	2,100	22 X 22	0.054	625	3.4	GREENHECK	FGR	SEE NOTES 1,2,3,5
GH-2-9	OPERATIONS	EF-2-12	EXHAUST	ROOF	ALUMINUM	900	16 X 16	0.035	506	1.8	GREENHECK	FGR	SEE NOTES 1,2,3,5

- NOTES:
1. PROVIDE ROOF CURB SUITABLE FOR SLOPED ROOF.
  2. PROVIDE INTERNAL ALUMINUM INSECT SCREEN.
  3. PROVIDE FLAT EXPANDED BIRD SCREEN.
  4. PROVIDE MOTORIZED DAMPER.
  5. PROVIDE GRAVITY DAMPER.

**TETRA TECH**  
www.tetra-tech.com  
101 QUALITY CIRCLE, SUITE 140  
HUNTSVILLE, ALABAMA 35805  
PHONE: (256) 424-4077 FAX: (256) 424-4087

BID SET  
ALABAMA PROFESSIONAL ENGINEER  
No. 16553  
DONALD S. BOYER  
1/24/2014

MARK	DATE	DESCRIPTION	BY

HUNTSVILLE UTILITIES  
SOUTHEAST WATER TREATMENT PLANT  
MECHANICAL HVAC SCHEDULES

Project No.: 200-11740-10003  
Designed By: SBR  
Drawn By: SBR  
Checked By: DSB

**M-9601**