VRV SYSTEM OUTDOOR UNIT SCHEDULE

PLAN CODE	MFGR	MODEL	SERVES (FLR)	FLOW RATE (GPM)	COOLING CAPACITY (BTUH)	HEATING CAPACITY (BTUH)	COOLING WATER TEMP IN/OUT (F)	HEATING WATER TEMP IN/OUT (F)	POWER	MCA (EACH)	COMPRESSOR RLA (EACH)	REFRIGERANT / POUNDAGE (LBS)	INDOOR SYSTEM	REMARKS
WCCU-1	DAIKIN	RWEYQ168PTJU-HR	1956 - Basement	50	163,020	206,189	86/94.6	68/61.3	208/3/60	22.4	15.4	R-410A / 49.5	SEE SCHEDULE	1, 2, 3, 4, 5, 6
WCCU-2	DAIKIN	RWEYQ168PTJU-HR	1956 - 1st	50	170,722	207,115	86/94.7	68/61.3	208/3/60	22.4	15.4	R-410A / 45.0	SEE SCHEDULE	1, 2, 3, 4, 5, 6
WCCU-3	DAIKIN	RWEYQ144PTJU-HR	1956 - 2nd	50	156,173	204,478	86/94.1	68/61.3	208/3/60	22.4	11.6	R-410A / 42.3	SEE SCHEDULE	1, 2, 3, 4, 5, 6
WCCU-4	DAIKIN	RWEYQ144PTJU-HR	1956 - 3rd	50	154,801	203,588	86/94.0	68/61.3	208/3/60	22.4	11.6	R-410A / 42.7	SEE SCHEDULE	1, 2, 3, 4, 5, 6
WCCU-5	DAIKIN	RWEYQ144PTJU-HR	1956 - 4th	50	121,551	163,647	86/91.7	68/62.8	208/3/60	22.4	11.6	R-410A / 38.9	SEE SCHEDULE	1, 2, 3, 4, 5, 6
WCCU-6	DAIKIN	RWEYQ144PTJU-HR	1956 - 5th	50	150,578	200,028	86/93.7	68/61.4	208/3/60	22.4	11.6	R-410A / 40.9	SEE SCHEDULE	1, 2, 3, 4, 5, 6
WCCU-7	DAIKIN	RWEYQ252PTJU-HR	1936 - 1st	75	244,547	310,354	86/94.9	68/61.2	208/3/60	22.4	15.4	R-410A / 112.5	SEE SCHEDULE	1, 2, 3, 4, 5, 6
WCCU-8	DAIKIN	RWEYQ216PTJU-HR	1936 - 2nd	75	181,153	255,670	86/92.4	68/62.3	208/3/60	22.4	11.6	R-410A / 88.5	SEE SCHEDULE	1, 2, 3, 4, 5, 6
WCCU-9	DAIKIN	RWEYQ252PTJU-HR	1936 - 3rd	75	247,456	310,885	86/95.1	68/61.2	208/3/60	22.4	15.4	R-410A / 113.9	SEE SCHEDULE	1, 2, 3, 4, 5, 6
WCCU-10	DAIKIN	RWEYQ252PTJU-HR	1936 - 2nd/3rd	75	262,638	311,826	86/95.4	68/61.2	208/3/60	22.4	15.4	R-410A / 76.0	SEE SCHEDULE	1, 2, 3, 4, 5, 6

REMARKS
1. SYSTEM CONSISTS OF UNITS INDICATED. SYSTEM IS A SPECIFICALLY DESIGNED VRV SYSTEM & INCLUDES WATER COOLED INDOOR UNITS, INDOOR COIL UNITS AND SPECIFIED CONTROLS. HEATING AND COOLING CAPACITIES CALCULATED FROM SYSTEM DESIGN. CONTRACTOR TO PROVIDE WATER COOLED CONDENSING EQUIPMENT CAPABLE OF HANDLING THE FAN COIL PEAK LOADS (AS SCHEDULED) WITHIN MANUFACTURER'S OPERATIONAL GUIDELINES.
2. REFER TO SPECIFICATIONS FOR CONTROLS & ACCESSORIES
3. FACTORY DISCONNECTS, COORDINATE WITH EC
4. FACTORY START-UP AND OWNER TRAINING REQUIRED. SEASONAL PERFORMANCE VERIFICATION REQUIRED. SEE SPECIFICATIONS.
5. EACH CONDENSING UNIT (WCCU-) SHALL BE PROVIDED WITH A FACTORY MOUNTED, THREE-PHASE VOLTAGE MONITOR (PVM) TO PROTECT MOTORS FROM COMMON VOLTAGE FAULTS INCLUDING VOLTAGE UNBALANCE, OVER/UNDER VOLTAGE, PHASE LOSS, REVERSAL, INCORRECT SEQUENCING AND RAPID SHORT CYCLING.
6. OUTDOOR UNIT PERFORMANCE CALCULATED USING 35% PROPYLENE GLYCOL.

PUMP SCHEDULE

PLAN CODE	TYPE	MFGR	MODEL	SERVICE	FLUID	GPM	HEAD (FT)	IMPELLOR DIAMETER (IN.)	RPM	HP	POWER (V/Ph/Hz)	REMARKS
CUP-1	FLOOR MTD	TACO	FI3009	CONDENSING UNIT (HEAT PUMP) LOOP PUMP	35% PG	300	65	8.3	1760	10.0	208/3/60	1, 3, 4
CUP-2	FLOOR MTD	TACO	FI3009	CONDENSING UNIT (HEAT PUMP) LOOP PUMP	35% PG	300	65	8.3	1760	10.0	208/3/60	1, 3, 4
HCP-1	IN-LINE	TACO	0012	VAU-1 HEATING COIL	35% PG	26	7	-	1725	1/8	120/1/60	
HCP-2	IN-LINE	TACO	0011	VAU-2 HEATING COIL	35% PG	14	17	-	3250	1/8	120/1/60	
BIP-1	FLOOR MTD	TACO	KV1507	BOILER INJECTION PUMP	35% PG	55	7	5.7	1150	1.0	208/3/60	1, 2
BIP-2	FLOOR MTD	TACO	KV1507	BOILER INJECTION PUMP	35% PG	55	7	5.7	1150	1.0	208/3/60	1, 2
CIP-1	IN-LINE	TACO	KV5095	CHILLER INJECTION PUMP	35% PG	600	17	7.5	1160	5.0	208/3/60	1, 2, 4
CIP-2	IN-LINE	TACO	KV5095	CHILLER INJECTION PUMP	35% PG	600	17	7.5	1160	5.0	208/3/60	1, 2, 4

REMARKS:
1. VFD COMPATIBLE MOTOR. VFD BY TC CONTRATOR.
2. 100% REDUNDANT PUMPS
3. PARALLEL PUMPS
4. PREMIUM EFFICIENCY MOTOR

AIR SEPARATOR SCHEDULE

PLAN CODE	MFGR	MODEL	FLOW (GPM)	PRESSURE DROP (FT)	PIPE SIZE (IN.)	REMARKS
AS-1	SPIROVENT	VHR600	600	3.8	6"	1

REMARKS:
1. PERFORMANCE RATED FOR 35% PROPYLENE GLYCOL

GRILLES, REGISTERS & DIFFUSERS SCHEDULE

PLAN CODE	MFGR	MODEL	FACE SIZE	NECK SIZE	CFM	MATERIAL	FINISH	FRAME STYLE	REMARKS
S-1	KRUEGER	1240	24 x 24	6 x 6	50 - 175	STEEL	WHITE	LAY-IN	1
S-2	KRUEGER	1240	24 x 24	8 x 8	180 - 350	STEEL	WHITE	LAY-IN	1
S-3	KRUEGER	S80	14 x 8	12 x 6	230 - 260	STEEL	WHITE	SURFACE	
S-4	KRUEGER	S80	14 x 10	12 x 8	320 - 335	STEEL	WHITE	SURFACE	
R-1	KRUEGER	6490	24 x 24	8 x 8	75 - 195	STEEL	WHITE	LAY-IN	
R-2	KRUEGER	6490	24 x 24	10 x 10	200 - 350	STEEL	WHITE	LAY-IN	
R-3	KRUEGER	6490	24 x 24	12 x 12	355 - 495	STEEL	WHITE	LAY-IN	
R-4	KRUEGER	6490	24 x 24	14 x 14	500 - 700	STEEL	WHITE	LAY-IN	
R-5	KRUEGER	S80	14 x 12	12 x 10	300 - 320	STEEL	WHITE	SURFACE	
R-6	KRUEGER	S80	14 x 8	12 x 6	190 - 260	STEEL	WHITE	SURFACE	
R-7	KRUEGER	S80	16 x 14	14 x 12	580 - 690	STEEL	WHITE	SURFACE	
T-1	KRUEGER	S85H	12 x 10	10 x 8	75 - 195	STEEL	WHITE	SURFACE	
T-2	KRUEGER	S85H	8 x 6	6 x 4	50	STEEL	WHITE	SURFACE	
E-1	KRUEGER	S80H	8 x 8	6 x 6	10 - 100	STEEL	WHITE	SURFACE	

REMARKS:
1. PROVIDE SQUARE TO ROUND NECK ADAPTOR
2. FIELD PAINT TO COLOR CHOSEN BY ARCHITECT

GLYCOL MAKE-UP UNIT SCHEDULE

PLAN CODE	MFGR	MODEL	SERVICE	CAPACITY (GAL.)	PUMP GPM	PUMP HEAD (PSI)	POWER (V/Ph/Hz)
GMU-1	WESSELS	GMP-13050	HEAT PUMP LOOP	50	1.8	50	120/1/60

REFRIGERANT MONITOR SCHEDULE

PLAN CODE	MFGR	MODEL	SERVES	MONITOR LOCATION	RANGE (PPM)	RESPONSE TIME (SEC)	REMARKS
RM-1	TOXALERT	TOX-REFRIG	WCCU-1, 2, 3	MECH ROOM 73 (1956 BLDG)	15-500	30	1
RM-2	TOXALERT	TOX-REFRIG	WCCU-4, 5, 6	MECH ROOM 375 (1956 BLDG)	15-500	30	1
RM-3	TOXALERT	TOX-REFRIG	WCCU-7, 8, 9, 10	CHILLER RM 52 (1956 BLDG)	15-500	30	

REMARKS:
1. TC CONTRACTOR TO PROVIDE AND INSTALLTOX-REFRIG PANEL WITH THREE (3) TOX-REFRIG/ANA SENSORS. SEE PLANS FOR PANEL AND SENSOR LOCATIONS.
2. FACTORY START-UP AND OWNER TRAINING REQUIRED

BUFFER TANK SCHEDULE

PLAN CODE	MFGR	MODEL	SERVES	TOTAL VOLUME (GAL)	SUPPLY/RETURN CONNECTIONS	WEIGHT (LBS)
BT-1	LOCHINVAR	BVU-200	BOILER LOOP	200	3"	900

REMARKS:
1. PROVIDE HYDRAULICALLY SEPARATED BUFFER TANK WITH BUILT-IN AIR SEPARATION AND AUTOMATIC AIR VENT SYSTEM.

EXHAUST FAN SCHEDULE

PLAN CODE	SERVES	MFGR	MODEL NO.	DRIVE	CFM	RPM	ESP (IN W.G.)	HP (W)	POWER (V/PH/Hz)	TYPE	REMARKS
EF-1	REFRIG. EVAC- BOILER ROOM 53	COOK	90 SQIB	BELT	700	1440	0.25	1/6 HP	120/1/60	SQUARE IN-LINE	1
EF-2	REFRIG. EVAC- MECH ROOM 175	COOK	GN-420	DIRECT	300	1075	0.25	137 W	120/1/60	SQUARE IN-LINE	1
EF-3	REFRIG. EVAC- MECH ROOM 275	COOK	GN-420	DIRECT	300	1075	0.25	137 W	120/1/60	SQUARE IN-LINE	1
EF-4	REFRIG. EVAC- MECH ROOM 375	COOK	GN-420	DIRECT	300	1075	0.25	137 W	120/1/60	SQUARE IN-LINE	1
EF-5	REFRIG. EVAC- MECH ROOM 475	COOK	GN-420	DIRECT	300	1075	0.25	137 W	120/1/60	SQUARE IN-LINE	1
EF-6	REFRIG. EVAC- MECH ROOM 575	COOK	GN-420	DIRECT	300	1075	0.25	137 W	120/1/60	SQUARE IN-LINE	1

REMARKS:
1. FACTORY DISCONNECT
2. PROVIDE BACK-DRAFT DAMPER

VENTILATION AIR UNIT SCHEDULE

PLAN CODE	VAU-1	VAU-2
MANUFACTURER	MCQUAY	MCQUAY
MODEL	CAH010GHAC	CAH006GHAC
SUPPLY FAN		
NO./DIAMETER	1/15	1/10.62
TYPE	FC	FC
ACFM	5,080	2,755
ACTUAL ESP	1	1.0
TSP	1.84	1.81
RPM @ ACFM & TSP	1,014	1,509
HP	3.0	2.0
POWER	208/3/60	208/3/60
HOT WATER COIL		
FLUID	35% PG	35% PG
FACE AREA (SF)	10.69	6.56
FACE VELOCITY (FPM)	475	420
EAT/LAT -DEGREES F	-20/80	-20/81.2
EWT/LWT-DEGREES F	140/100	140/99.5
CAPACITY (MBH)	479,283	262,786
AIR PRESS. DROP (IN W.G.)	0.29	0.25
WATER FLOW RATE (GPM)	25.5	13.8
WATER PRESSURE DROP (FT)	5.2	2.1
FILTERS		
TYPE	(6) 4" MERV-10	(4) 2" MERV-10
AIR PRESS. DROP (IN W.G.)	0.55	0.54

REMARKS:
1. FACTORY DISCONNECT AND STARTER
2. SMOKE DETECTOR AT UNIT, BY EC.
3. FACTORY START-UP AND OWNER TRAINING REQUIRED

FLUID COOLER SCHEDULE

PLAN CODE	FC-1				
MFGR	EVAPCO				
MODEL	ATWB 9-3I14				
TYPE	FLUID COOLER				
CAPACITY (TONS/ MBH)	152 / 2,280				
FLOW (GPM)	600				
FLUID	35% PROPYLENE GLYCOL				
EWT/LWT (°F)	94/86				
AMBIENT WB (°F)	66				
SUCTION SIZE	6"				
MAX PD (PSI)	3.9				
POWER (V/Ph/Hz)	208/3/60				
FAN MOTOR (QTY/ HP)	(1) 10.0				
SPRAY PUMP (HP)	3.0				
IMMERSION HEATERS (kW)	(2) 7kW				
AIRFLOW (CFM) (1)	55,780				
	MAXIMUM SOUND POWER LEVELS (DB 10-12 WATT)				
DISTANCE (FT)	MOTOR SIDE	OPP. END	BACK SIDE	TOP	END
5	80	80	80	71	80
50	60	58	58	60	58

REMARKS:
1. AIRFLOW CAPACITY PERFORMANCE AT 3,300 FT. ELEVATION
2. FLANGED COIL CONNECTIONS
3. FACTORY ELECTRIC IMMERSION SUMP HEATER, HEATER CONTROL PANEL, THERMOSTAT, BULB WELL, AND LOW WATER CUT-OFF
4. FAN VFD BY TC CONTRACTOR. PREMIUM EFFICIENCY MOTOR, INVERTOR CAPABLE.
5. SUPER LOW SOUND FAN AND DISCHARGE HOOD PACKAGE WITH DAMPERS
6. FACTORY START-UP AND OWNER TRAINING REQUIRED
7. FACTORY FURNISHED CHEMICAL TREATMENT SYSTEM

HOOD SCHEDULE

PLAN CODE	MFGR	MODEL	SERVES	SERVICE	CFM	THROAT SIZE (WxH)	THROAT AREA (SF)	VELOCITY (FPM)	PRESSURE DROP (IN WG)	ACCESSORIES
IH-1	GREENHECK	FGI	VAU-1	OSA INTAKE	5,080	26 x 26	4.69	1,082	0.154	1,2,3,4,5, 6
IH-2	GREENHECK	FGI	VAU-2	OSA INTAKE	2,755	24 x 24	4.0	689	0.081	1,2,3,4,5, 6

REMARKS:
1. PROVIDE WITH INTEGRAL BIRD AND INSECT SCREEN
2. PROVIDE WITH BAKED ENAMEL FINISH WITH COLOR SELECTED BY ARCHITECT.
3. ANTI-CONDENSATE COATING
4. FACTORY ROOF CURB HEIGHT- 16"
5. FACTORY DAMPER INSTALLED WITH MOTORIZED ACTUATOR BY TC CONTRACTOR.
6. MC TO CONFIRM ACTUAL STRUCTURAL CLEARANCE BEFORE PURCHASING AND INSTALLING THIS EQUIPMENT.

PLUMBING FIXTURE AND CONNECTION SCHEDULE

FIXTURE							CONNECTIONS		REMARKS
PLAN CODE	ITEM	MFGR	MODEL	TYPE	MATERIAL	COLOR	WASTE	VENT	
FS-1	FLOOR SINK	ZURN	FD2378	NO HUB	CAST IRON	WHITE	2"	1 1/2"	FS TO BE 8x8 AS PER PLANS

REMARKS: ALL PLUMBING EQUIPMENT SHALL BE IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS AND BE OF SIZE AND TYPE INDICATED. EACH SHALL BE OF MAKE AND MODEL LISTED OR EQUAL.

100% CONSTRUCTION DOCUMENTS

REVISIONS:

ADD1	5/02/13
REISSUE	6/20/13

SCOTT HART
HVAC SYSTEMS - A/E #2012-30-04
HELENA, MONTANA

100% CONSTRUCTION DOCUMENTS

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MONTANA
T. ZOE SMITH
NO. 11151 PE
LICENSED PROFESSIONAL ENGINEER

MECHANICAL SCHEDULES

SHEET
M001

1956 BUILDING - VRV SYSTEM INDOOR UNIT SCHEDULE

PLAN CODE	MFGR (5)	MODEL	SERVES	CONFIGURATION	COOLING PERFORMANCE		HEATING PERFORMANCE		FAN DATA					REMARKS
					RETURN AIR CONDITIONS (°F / % RH)	ZONE TOTAL CAPACITY (BTUH)	EAT (°F)	CAPACITY (BTUH)	AIRFLOW (LOW-HIGH CFM)	ESP (IN. W.C.)	POWER (V/Ph/Hz)	COND. UNIT TAG	UNIT MCA (AMPS)	
BASEMENT														
FCU-70	DAIKIN	FXZQ09M7VJU	70	CEILING CASSETTE	78 / 45	6,226	68	4,693	247-320	-	208/1/60	WCCU-1	0.8	1, 2, 3, 4, 5
FCU-69	DAIKIN	FXMQ24PVJU	69	CEILING DUCT	78 / 45	15,523	68	8,140	565-688	0.8	208/1/60	WCCU-1	1.8	1, 2, 3, 4, 5
FCU-68	DAIKIN	FXZQ07M7VJU	68	CEILING CASSETTE	78 / 45	3,742	68	3,775	247-320	-	208/1/60	WCCU-1	0.8	1, 2, 3, 4, 5
FCU-66	DAIKIN	FXMQ07PVJU	66, 67	CEILING DUCT	78 / 45	5,689	68	4,142	230-317	0.4	208/1/60	WCCU-1	0.6	1, 2, 3, 4, 5
FCU-65	DAIKIN	FXMQ18PVJU	64, 65	CEILING DUCT	78 / 45	11,757	68	8,275	530-636	0.8	208/1/60	WCCU-1	1.6	1, 2, 3, 4, 5
FCU-62	DAIKIN	FXMQ24PVJU	62	CEILING DUCT	78 / 45	11,345	68	9,127	565-688	0.8	208/1/60	WCCU-1	1.8	1, 2, 3, 4, 5
FCU-60	DAIKIN	FXZQ07M7VJU	60	CEILING CASSETTE	78 / 45	3,116	68	8,094	247-320	-	208/1/60	WCCU-1	0.8	1, 2, 3, 4, 5
FCU-74	DAIKIN	FXMQ07PVJU	59, 74	CEILING DUCT	78 / 45	5,986	68	2,869	230-317	0.4	208/1/60	WCCU-1	0.6	1, 2, 3, 4, 5
FCU-71	DAIKIN	FXMQ48PVJU	71, 72	CEILING DUCT	78 / 45	32,276	68	7,596	1,020-1,270	1.0	208/1/60	WCCU-1	4.4	1, 2, 3, 4, 5
FCU-51	DAIKIN	FXAQ07PVJU	129	WALL MOUNTED	78 / 45	2,215	68	3,650	160-260	-	208/1/60	WCCU-1	0.3	1, 2, 3, 4, 5
FCU-73	DAIKIN	FXAQ18PVJU	135	WALL MOUNTED	78 / 45	5,600	68	8,990	400-500	-	208/1/60	WCCU-1	0.4	1, 2, 3, 4, 5
FCU-158	DAIKIN	FXMQ07PVJU	158	CEILING DUCT	78 / 45	2,027	68	4,200	230-317	0.4	208/1/60	WCCU-1	0.6	1, 2, 3, 4, 5
FCU-160	DAIKIN	FXMQ09PVJU	17	CEILING DUCT	78 / 45	7,597	68	9,775	230-317	0.4	208/1/60	WCCU-1	0.6	1, 2, 3, 4, 5
FIRST FLOOR														
FCU-170	DAIKIN	FXZQ07M7VJU	170	CEILING CASSETTE	78 / 45	4,708	68	4,754	247-320	-	208/1/60	WCCU-2	0.8	1, 2, 3, 4, 5
FCU-169	DAIKIN	FXZQ07M7VJU	169	CEILING CASSETTE	78 / 45	3,859	68	4,269	247-320	-	208/1/60	WCCU-2	0.8	1, 2, 3, 4, 5
FCU-168	DAIKIN	FXZQ07M7VJU	168	CEILING CASSETTE	78 / 45	4,138	68	4,165	247-320	-	208/1/60	WCCU-2	0.8	1, 2, 3, 4, 5
FCU-167A	DAIKIN	FXMQ18PVJU	167, 167A,B,C,D	CEILING DUCT	78 / 45	9,626	68	7,468	530-636	0.8	208/1/60	WCCU-2	1.6	1, 2, 3, 4, 5
FCU-164	DAIKIN	FXMQ18PVJU	163, 164, 165	CEILING DUCT	78 / 45	12,203	68	11,203	530-636	0.8	208/1/60	WCCU-2	1.6	1, 2, 3, 4, 5
FCU-162	DAIKIN	FXMQ18PVJU	162	CEILING DUCT	78 / 45	10,283	68	7,307	530-636	0.8	208/1/60	WCCU-2	1.6	1, 2, 3, 4, 5
FCU-161	DAIKIN	FXZQ07M7VJU	161	CEILING CASSETTE	78 / 45	3,914	68	4,804	247-320	-	208/1/60	WCCU-2	0.8	1, 2, 3, 4, 5
FCU-160	DAIKIN	FXMQ09PVJU	160	CEILING DUCT	78 / 45	7,597	68	9,775	230-317	0.4	208/1/60	WCCU-2	0.6	1, 2, 3, 4, 5
FCU-159	DAIKIN	FXMQ07PVJU	159	CEILING DUCT	78 / 45	4,087	68	2,601	247-320	0.4	208/1/60	WCCU-2	0.6	1, 2, 3, 4, 5
ADD2 FCU-153-S	DAIKIN	FXMQ30PVJU	153N	CEILING DUCT	78 / 45	28,283	68	13,889	565-690	0.8	208/1/60	WCCU-2	1.6	1, 2, 3, 4, 5
FCU-153-N	DAIKIN	FXMQ30PVJU	153S	CEILING DUCT	78 / 45	28,283	68	13,889	565-690	0.8	208/1/60	WCCU-2	1.6	1, 2, 3, 4, 5
FCU-174	DAIKIN	FXZQ07M7VJU	174	CEILING CASSETTE	78 / 45	4,246	68	3,104	247-320	-	208/1/60	WCCU-2	0.8	1, 2, 3, 4, 5
FCU-173	DAIKIN	FXZQ07M7VJU	173	CEILING CASSETTE	78 / 45	5,779	68	3,869	247-320	-	208/1/60	WCCU-2	0.8	1, 2, 3, 4, 5
FCU-172	DAIKIN	FXMQ24PVJU	172	CEILING DUCT	78 / 45	16,286	68	5,661	565-688	0.8	208/1/60	WCCU-2	1.8	1, 2, 3, 4, 5
FCU-171	DAIKIN	FXZQ07M7VJU	171	CEILING CASSETTE	78 / 45	5,419	68	2,818	247-320	-	208/1/60	WCCU-2	0.8	1, 2, 3, 4, 5
FCU-166	DAIKIN	FXMQ07PVJU	166	CEILING DUCT	78 / 45	4,802	68	0	230-317	0.4	208/1/60	WCCU-2	0.6	1, 2, 3, 4, 5
SECOND FLOOR														
FCU-270	DAIKIN	FXMQ12PVJU	270	CEILING DUCT	78 / 45	8,839	68	7,109	247-335	0.4	208/1/60	WCCU-3	0.6	1, 2, 3, 4, 5
FCU-269	DAIKIN	FXZQ07M7VJU	269	CEILING CASSETTE	78 / 45	3,451	68	3,967	247-320	-	208/1/60	WCCU-3	0.8	1, 2, 3, 4, 5
FCU-267	DAIKIN	FXMQ18PVJU	267	CEILING DUCT	78 / 45	14,091	68	8,356	530-636	0.8	208/1/60	WCCU-3	1.6	1, 2, 3, 4, 5
FCU-260-N	DAIKIN	FXMQ30PVJU	260N, 266A	CEILING DUCT	78 / 45	17,413	68	14,110	565-690	0.66	208/1/60	WCCU-3	1.6	1, 2, 3, 4, 5
FCU-260-S	DAIKIN	FXMQ30PVJU	260S	CEILING DUCT	78 / 45	17,413	68	14,110	565-690	0.66	208/1/60	WCCU-3	1.6	1, 2, 3, 4, 5
FCU-252	DAIKIN	FXMQ12PVJU	251, 252	CEILING DUCT	78 / 45	8,453	68	10,256	247-335	0.4	208/1/60	WCCU-3	0.6	1, 2, 3, 4, 5
FCU-254	DAIKIN	FXMQ30PVJU	253, 254, 255	CEILING DUCT	78 / 45	17,708	68	9,669	565-690	0.66	208/1/60	WCCU-3	1.6	1, 2, 3, 4, 5
FCU-273	DAIKIN	FXMQ30PVJU	273, 274	CEILING DUCT	78 / 45	19,959	68	9,397	565-690	0.66	208/1/60	WCCU-3	1.6	1, 2, 3, 4, 5
FCU-272	DAIKIN	FXZQ09M7VJU	272	CEILING CASSETTE	78 / 45	6,399	68	3,052	247-320	-	208/1/60	WCCU-3	0.8	1, 2, 3, 4, 5
FCU-268	DAIKIN	FXMQ07PVJU	268	CEILING DUCT	78 / 45	4,495	68	0	230-317	0.4	208/1/60	WCCU-3	0.6	1, 2, 3, 4, 5
THIRD FLOOR														
FCU-371	DAIKIN	FXMQ30PVJU	371	CEILING DUCT	78 / 45	17,118	68	11,620	565-690	0.66	208/1/60	WCCU-4	1.6	1, 2, 3, 4, 5
FCU-367	DAIKIN	FXMQ07PVJU	367	CEILING DUCT	78 / 45	2,437	68	0	230-317	0.4	208/1/60	WCCU-4	0.6	1, 2, 3, 4, 5
FCU-368A	DAIKIN	FXZQ07M7VJU	368A	CEILING CASSETTE	78 / 45	2,385	68	3,355	247-320	-	208/1/60	WCCU-4	0.8	1, 2, 3, 4, 5
FCU-367A	DAIKIN	FXMQ18PVJU	367A,B,C, 368	CEILING DUCT	78 / 45	9,909	68	10,322	530-636	0.8	208/1/60	WCCU-4	1.6	1, 2, 3, 4, 5
FCU-366	DAIKIN	FXMQ07PVJU	365, 366	CEILING DUCT	78 / 45	5,394	68	5,643	230-317	0.4	208/1/60	WCCU-4	0.6	1, 2, 3, 4, 5
FCU-364	DAIKIN	FXMQ07PVJU	363, 364	CEILING DUCT	78 / 45	6,406	68	6,045	230-317	0.4	208/1/60	WCCU-4	0.6	1, 2, 3, 4, 5
FCU-362	DAIKIN	FXZQ07M7VJU	362	CEILING CASSETTE	78 / 45	3,440	68	4,952	247-320	-	208/1/60	WCCU-4	0.8	1, 2, 3, 4, 5
FCU-360	DAIKIN	FXZQ07M7VJU	360	CEILING CASSETTE	78 / 45	2,681	68	2,350	247-320	-	208/1/60	WCCU-4	0.8	1, 2, 3, 4, 5
FCU-359	DAIKIN	FXZQ07M7VJU	359	CEILING CASSETTE	78 / 45	4,231	68	4,026	247-320	-	208/1/60	WCCU-4	0.8	1, 2, 3, 4, 5
FCU-348	DAIKIN	FXZQ12M7VJU	348	CEILING CASSETTE	78 / 45	7,461	68	4,592	265-335	-	208/1/60	WCCU-4	0.8	1, 2, 3, 4, 5
FCU-352	DAIKIN	FXMQ09PVJU	349, 352	CEILING DUCT	78 / 45	7,547	68	5,460	230-317	0.4	208/1/60	WCCU-4	0.6	1, 2, 3, 4, 5
FCU-353	DAIKIN	FXZQ09M7VJU	353	CEILING CASSETTE	78 / 45	7,053	68	3,180	247-320	-	208/1/60	WCCU-4	0.8	1, 2, 3, 4, 5
FCU-354	DAIKIN	FXZQ09M7VJU	354	CEILING CASSETTE	78 / 45	7,425	68	3,188	247-320	-	208/1/60	WCCU-4	0.8	1, 2, 3, 4, 5
FCU-355	DAIKIN	FXZQ07M7VJU	355	CEILING CASSETTE	78 / 45	5,873	68	2,688	247-320	-	208/1/60	WCCU-4	0.8	1, 2, 3, 4, 5
FCU-374	DAIKIN	FXZQ07M7VJU	374	CEILING CASSETTE	78 / 45	4,898	68	2,606	247-320	-	208/1/60	WCCU-4	0.8	1, 2, 3, 4, 5
FCU-373	DAIKIN	FXMQ18PVJU	372, 373	CEILING DUCT	78 / 45	10,785	68	5,063	530-636	0.8	208/1/60	WCCU-4	1.6	1, 2, 3, 4, 5
FCU-351	DAIKIN	FXMQ07PVJU	351	CEILING DUCT	78 / 45	5,811	68	0	230-317	0.4	208/1/60	WCCU-4	0.6	1, 2, 3, 4, 5
FOURTH FLOOR														
FCU-471	DAIKIN	FXZQ12M7VJU	471	CEILING CASSETTE	78 / 45	7,386	68	6,205	265-335	-	208/1/60	WCCU-5	0.8	1, 2, 3, 4, 5
FCU-470	DAIKIN	FXMQ12PVJU	470	CEILING DUCT	78 / 45	8,902	68	6,545	247-335	0.4	208/1/60	WCCU-5	0.6	1, 2, 3, 4, 5
FCU-469	DAIKIN	FXMQ12PVJU	469, 469A	CEILING DUCT	78 / 45	9,264	68	7,647	247-335	0.4	208/1/60	WCCU-5	0.6	1, 2, 3, 4, 5
FCU-467	DAIKIN	FXMQ30PVJU	465, 466, 467, 468	CEILING DUCT	78 / 45	9,754	68	8,484	565-690	0.66	208/1/60	WCCU-5	1.6	1, 2, 3, 4, 5
PROP FCU-463	DAIKIN	FXMQ30PVJU	463	CEILING DUCT	78 / 45	18,467	68	13,620	565-690	0.66	208/1/60	WCCU-5	1.6	1, 2, 3, 4, 5
FCU-460	DAIKIN	FXZQ12M7VJU	460	CEILING CASSETTE	78 / 45	7,500	68	6,500	265-335	-	208/1/60	WCCU-5	0.8	1, 2, 3, 4, 5
FCU-459	DAIKIN	FXMQ07PVJU	459, 477	CEILING DUCT	78 / 45	5,778	68	6,841	230-317	0.4	208/1/60	WCCU-5	0.6	1, 2, 3, 4, 5
FCU-478	DAIKIN	FXMQ07PVJU	478	CEILING DUCT	78 / 45	5,666	68	3,962	230-317	0.4	208/1/60	WCCU-5	0.6	1, 2, 3, 4, 5
FCU-473A	DAIKIN	FXMQ18PVJU	473	CEILING DUCT	78 / 45	10,994	68	6,840	530-636	0.8	208/1/60	WCCU-5	1.6	1, 2, 3, 4, 5
FCU-473	DAIKIN	FXZQ07M7VJU	473A, 474	CEILING CASSETTE	78 / 45	3,153	68	2,050	247-320	-	208/1/60	WCCU-5	0.8	1, 2, 3, 4, 5
FCU-472	DAIKIN	FXMQ12PVJU	472, 472A	CEILING DUCT	78 / 45	8,426	68	4,095	247-335	0.4	208/1/60	WCCU-5	0.6	1, 2, 3, 4, 5
FIFTH FLOOR														
FCU-572	DAIKIN	FXMQ36PVJU	572	CEILING DUCT	78 / 45	29,792	68	13,570	810-1,020	0.71	208/1/60	WCCU-6	2.9	1, 2, 3, 4, 5
FCU-569	DAIKIN	FXZQ07M7VJU	569	CEILING CASSETTE	78 / 45	4,982	68	3,907	247-320	-	208/1/60	WCCU-6	0.8	1, 2, 3, 4, 5
FCU-568A	DAIKIN	FXMQ09PVJU	568, 568A	CEILING DUCT	78 / 45	7,547	68	4,352	230-317	0.4	208/1/60	WCCU-6	0.6	1, 2, 3, 4, 5
FCU-567	DAIKIN	FXMQ09PVJU	567	CEILING CASSETTE	78 / 45	6,555	68	3,751	247-320	-	208/1/60	WCCU-6	0.8	1, 2, 3, 4, 5
FCU-565	DAIKIN	FXMQ18PVJU	565	CEILING DUCT	78 / 45	13,821	68	6,718	530-636	0.8	208/1/60	WCCU-6	1.6	1, 2, 3, 4, 5
FCU-563	DAIKIN	FXMQ30PVJU	563, 564, 565A	CEILING DUCT	78 / 45	16,698	68	10,140	565-690	0.66	208/1/60	WCCU-6	1.6	1, 2, 3, 4, 5
FCU-562	DAIKIN	FXZQ09MPVJU	562	CEILING CASSETTE	78 / 45	6,170	68	4,696	247-320	-	208/1/60	WCCU-6	0.8	1, 2, 3, 4, 5
FCU-560	DAIKIN	FXZQ07MPVJU	560	CEILING CASSETTE	78 / 45	3,011	68	1,517	247-320	-	208/1/60	WCCU-6	0.8	1, 2, 3, 4, 5
FCU-561	DAIKIN	FXZQ09MPVJU	561	CEILING CASSETTE	78 / 45	6,745	68	5,143	247-320	-	208/1/60	WCCU-6	0.8	1, 2, 3, 4, 5
FCU-559	DAIKIN	FXMQ24PVJU	559, 570	CEILING DUCT	78 / 45	15,957	68	7,492	565-688	0.8	208/1/60	WCCU-6	1.8	1, 2, 3, 4, 5
FCU-573	DAIKIN	FXMQ18PVJU	573, 574	CEILING DUCT	78 / 45	14,586	68	6,845	530-636	0.8	208/1/60	WCCU-6	1.6	1, 2, 3, 4, 5

ADD2 1) 30% THROW AWAY FILTERS FOR DUCTED UNITS. ALL OTHER FAN COIL UNITS TO HAVE WASHABLE, LONG-LIFE FILTER WITH MILDEW PROOF RESIN.
2) FACTORY CONDENSATE PUMPS
3) UNIT CONTROLLED BY FACTORY WALL MOUNTED SENSOR PLATE.
4) EQUIPMENT SUPPLIER SHALL CONFIRM ALL REFRIGERANT PIPING RUNS ARE WITHIN ALLOWABLE MANUFACTURER LIMITS. THE CURRENT DUCT, EQUIPMENT, AND PIPING LAYOUT IS SPECIFIC TO THE BASIS OF DESIGN, DAIKIN. THE SELECTED VRF SYSTEM MANUFACTURER IS RESPONSIBLE FOR REVIEW AND APPROVAL OF FINAL DESIGN.
5) FACTORY START-UP AND OWNER TRAINING REQUIRED. SEASONAL PERFORMANCE VERIFICATION REQUIRED. SEE SPECIFICATIONS.

BRANCH SELECTOR SCHEDULE

PLAN CODE	MFGR	MODEL	SERVES	POWER	AMP DRAW
BASEMENT					
BS-11	DAIKIN	BSVQ60PVJU	FCU-71	208/1/60	0.1A
BS-170	DAIKIN	BSV4Q36PVJU	FCU-70, FCU-74, FCU-69, FCU-68	208/1/60	0.4A
BS-171	DAIKIN	BSV4Q36PVJU	FCU-62, FCU-65, FCU-66, FCU-73	208/1/60	0.4A
BS-172	DAIKIN	BSV4Q36PVJU	FCU-60, FCU-158, FCU-160, FCU-51	208/1/60	0.4A
FIRST FLOOR					
BS-20	DAIKIN	BSVQ36PVJU	FCU-161	208/1/60	0.1A
BS-23	DAIKIN	BSVQ36PVJU	FCU-159	208/1/60	0.1A
BS-24	DAIKIN	BSVQ36PVJU	FCU-153 N&S	208/1/60	0.1A
BS-173	DAIKIN	BSV6Q36PVJU	FCU-170, FCU-171, FCU-172, FCU-173, FCU-166, FCU-174	208/1/60	0.6A
BS-174	DAIKIN	BSV4Q36PVJU	FCU-164, FCU-167A, FCU-168, FCU-169, FCU-162	208/1/60	0.4A
SECOND FLOOR					
BS-35	DAIKIN	BSVQ36PVJU	FCU-252	208/1/60	0.1A
BS-36	DAIKIN	BSVQ36PVJU	FCU-254	208/1/60	0.1A
BS-175	DAIKIN	BSV4Q36PVJU	FCU-270, FCU-272, FCU-268, FCU-273	208/1/60	0.4A
BS-176	DAIKIN	BSV4Q36PVJU	FCU-269, FCU-267, FCU-260N, FCU-260S	208/1/60	0.4A
THIRD FLOOR					
BS-177	DAIKIN	BSV4Q36PVJU	FCU-371, FCU-351, FCU-373, FCU-374	208/1/60	0.4A
BS-178	DAIKIN	BSV4Q36PVJU	FCU-364, FCU-366, FCU-367A, FCU-367, FCU-368A	208/1/60	0.4A
BS-179	DAIKIN	BSV4Q36PVJU	FCU-348, FCU-359, FCU-360, FCU-362	208/1/60	0.4A
BS-195	DAIKIN	BSV4Q36PVJU	FCU-352, FCU-353, FCU-354, 355	208/1/60	0.4A
FOURTH FLOOR					
BS-180	DAIKIN	BSV4Q36PVJU	FCU-471, FCU-472, FCU-473, FCU-478	208/1/60	0.4A
BS-181	DAIKIN	BSV6Q36PVJU	FCU-470, FCU-469, FCU-467, FCU-473A, FCU-463, FCU-459	208/1/60	0.6A
PROP BS-196	DAIKIN	BSVQ36PVJU	FCU-460	208/1/60	0.1A
FIFTH FLOOR					
BS-70	DAIKIN	BSVQ36PVJU	FCU-572	208/1/60	0.1A
BS-81	DAIKIN	BSVQ36PVJU	FCU-573	208/1/60	0.1A
BS-182	DAIKIN	BSV4Q36PVJU	FCU-569, FCU-567, FCU-568A, FCU-559, FCU-565	208/1/60	0.4A
BS-183	DAIKIN	BSV4Q36PVJU	FCU-560, FCU-561, FCU-562, FCU-563	208/1/60	0.4A

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
—D—	DRAIN
—HWS—	HEATING WATER SUPPLY (GLYCOL)
----HWR----	HEATING WATER RETURN (GLYCOL)
—HPS—	HEAT PUMP SUPPLY (GLYCOL)
----HPR----	HEAT PUMP RETURN (GLYCOL)
—CWS—	CHILLED WATER SUPPLY (GLYCOL)
----CWR----	CHILLED WATER RETURN (GLYCOL)
—RL—	REFRIGERANT LIQUID
----RS----	REFRIGERANT SUCTION
----HG----	HOT GAS
----PC----	PUMPED CONDENSATE
----CD----	CONDENSATE DRAIN
	GATE VALVE
	BALL VALVE
	BUTTERFLY VALVE
	GLOBE VALVE
	TRIPLE DUTY VALVE
	SWING CHECK VALVE
	STRAINER (WITH BLOWDOWN)
	FLEX CONNECTOR
	HOSE END DRAIN VALVE
	PRESSURE REDUCING VA.
	SAFETY RELIEF VALVE
	PRESSURE RELIEF VALVE
	UNION
	MOTORIZED T.C. VALVE/2-WAY
	MOTORIZED T.C. VALVE/3-WAY
	AUTOMATIC CONTROL VALVE (ELEC)
	AUTOMATIC CONTROL VALVE
	ECCENTRIC PLUG BALANCING VALVE OR PLUG VALVE
	MANUAL FLOW BALANCING VALVE (CIRCUIT SETTER)
	AUTOMATIC FLOW BALANCING VALVE
	TEE UP
	TEE DOWN
	ELBOW UP
	ELBOW DOWN
	PIPE SIZE CHANGE OR REDUCER/INCREASER
	PIPE SLEEVE
	PIPE GUIDE
	PIPE ANCHOR
	PRESSURE/TEMP. TEST PLUG
	DIAL THERMOMETER OR TEMPERATURE GAUGE
	PRESSURE GAUGE (W/ SNUBBER)
FCU-XXX / XX CFM	FAN COIL UNIT VENTILATION AIR TO RETURN TO FAN COIL UNIT

SYMBOL	DESCRIPTION
T	ELECTRIC THERMOSTAT OR WALL SENSOR PLATE
	ELECTRIC THERMOSTAT W/GUARD
T	PNEUMATIC THERMOSTAT OR DDC TEMPERATURE SENSOR (JOB SPECIFIC)
	CONTROL WIRE
24x12	DUCT SIZES ARE OUTSIDE SHEET MTL DIMENSIONS. FIRST NUMBER IS SIZE OF THE SURFACE SHOWN.
	SECTION THROUGH SUPPLY DUCT
	SECTION THROUGH RETURN OR EXHAUST DUCT
	ACOUSTICALLY LINED SHEET METAL DUCT
VD	MANUAL BALANCING DAMPER
	FLEX CONNECTOR
AD AD	ACCESS DOORS
FD	FIRE DAMPER
FSD	FIRE/SMOKE DAMPER
M	MOTORIZED DAMPER
	RECTANGULAR SWEEP (LONG)
	45° LOW-LOSS TAKE-OFF FITTING W/ DAMPER & FLEX DUCT
	45° LOW-LOSS TAKE-OFF FITTING W/ DAMPER & RIGID ROUND DUCT
	SQUARE-TO-ROUND TRANSITION
	BELOW GRADE DUCTWORK SHOWN AS HEAVY DASHED OUTLINE
SD-1 (PLAN CODE) 200 (CFM)	DIFFUSER, REGISTER, OR GRILLE
CX	CONNECT NEW WORK TO EXISTING
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
C	COMMON
(E)	EXISTING
	SURFACE MOUNTED SUPPLY DIFFUSER SEE SCHEDULE FOR SIZE
	RETURN OR EXHAUST GRILLE SEE SCHEDULE FOR SIZE
	SIDEWALL RETURN OR EXHAUST GRILLE SEE SCHEDULE FOR SIZE

HVAC ABBREVIATIONS

AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
ACFM	ACTUAL CFM
AHU	AIR HANDLING UNIT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
AMP	AMPERE (AMP,AMPS)
APD	AIR PRESSURE DROP
APPROX	APPROXIMATE
BHP	BRAKE HORSEPOWER, BOILER HORSEPOWER
BTU	BRITISH THERMAL UNIT
MBH	BTU PER HOUR (THOUSAND)
CU FT	CUBIC FEET
CU IN	CUBIC INCH
CFM	CUBIC FEET PER MINUTE
SCFM	CFM, STANDARD CONDITIONS
DB	DECIBEL
DIA, Ø	DIAMETER
ID	DIAMETER, INSIDE
OD	DIAMETER, OUTSIDE
DBT	DRY-BULB TEMPERATURE
E,(E)	EXISTING
EAT	ENTERING AIR TEMPERATURE
E.C.	ELECTRICAL CONTRACTOR
EDR	EQUIVALENT DIRECT RADIATION
EXP	EXPANSION
EWT	ENTERING WATER TEMPERATURE
F	FAHRENHEIT
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FOOT OR FEET
HZ	FREQUENCY
GA	GAGE OR GAUGE
GAL	GALLONS
G.C.	GENERAL CONTRACTOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GPD	GALLONS PER DAY
HD	HEAD
HGT	HEIGHT
HP	HORSEPOWER
RH	HUMIDITY, RELATIVE
KW	KILOWATT
KWH	KILOWATT HOUR
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
LF	LINEAR FEET
MAX	MAXIMUM
M.C.	MECHANICAL CONTRACTOR
MIN	MINIMUM
NG	NATURAL GAS
N O	NORMALLY OPEN
N C	NORMALLY CLOSED
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NO	NUMBER
OBD	OPPOSED BLADE DAMPER
OA	OUTSIDE AIR
%	PERCENT
PH	PHASE(ELECTRICAL)
LBS	POUNDS
PSI	POUNDS PER SQUARE INCH
PSIA	PSI ABSOLUTE
PD	PRESSURE DROP OR DIFFERENCE
PSIG	PSI GAUGE
R/O	RUN OUT
RH	RELATIVE HUMIDITY
RA	RETURN AIR
RPM	REVOLUTIONS PER MINUTE
SH	SENSIBLE HEAT
SPEC	SPECIFICATION
SP VOL	SPECIFIC VOLUME
STD	STANDARD
SP	STATIC PRESSURE
SUCT	SUCTION
SA	SUPPLY AIR
TEMP	TEMPERATURE
TD	TEMPERATURE DIFFERENCE
T STAT	THERMOSTAT
TONS	TONS OF REFRIGERATION
T.C.	TEMPERATURE CONTROL
TYP	TYPICAL
VA	VENTILATION AIR
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
V	VOLT
VOL	VOLUME
VFD	VARIABLE FREQUENCY DRIVE
WPD	WATER PRESSURE DROP
W/	WITH

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HVAC SYSTEMS - A/E #2012-30-04
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MONTANA T. JOE SMYRNE 151 PE LICENSED PROFESSIONAL ENGINEER

CTA®

MECHANICAL SCHEDULES AND LEGEND

SHEET
M002

1936 BUILDING - VRV SYSTEM INDOOR UNIT SCHEDULE

PLAN CODE	MFGR (5)	MODEL	SERVES (N-NORTH) (S-SOUTH)	CONFIGURATION	COOLING PERFORMANCE		HEATING PERFORMANCE		FAN DATA					REMARKS
					RETURN AIR CONDITIONS (°F / % RH)	ZONE TOTAL CAPACITY (BTUH)	EAT (°F)	ZONE TOTAL CAPACITY (BTUH)	AIRFLOW (LOW-HIGH CFM)	ESP (IN. W.C.)	POWER (V/Ph/Hz)	COND. UNIT TAG	UNIT MCA (AMPS)	
FIRST FLOOR														
FCU-101A	DAIKIN	FXAQ07PVJU	101A	WALL MOUNTED	78 / 45	6,135	68	4,056	160-260	-	208/1/60	WCCU-7	0.3	1, 2, 3, 4, 5
FCU-125	DAIKIN	FXAQ07PVJU	125	WALL MOUNTED	78 / 45	3,580	68	6,775	160-260	-	208/1/60	WCCU-7	0.3	1, 2, 3, 4, 5
ADD FCU-123A	DAIKIN	FXMQ18PVJU	123A, 124, 124A	CEILING DUCT	78 / 45	11,419	68	16,741	530-636	0.8	208/1/60	WCCU-7	1.6	1, 2, 3, 4, 5
FCU-123	DAIKIN	FXZQ07M7VJU	123	CEILING CASSETTE	78 / 45	5,458	68	6,035	247-320	-	208/1/60	WCCU-7	0.8	1, 2, 3, 4, 5
FCU-126	DAIKIN	FXLQ12MVJU9	126	FLOOR MOUNTED	78 / 45	3,490	68	2,052	210-280	-	208/1/60	WCCU-7	0.5	1, 2, 3, 4, 5
FCU-127	DAIKIN	FXLQ12MVJU9	127	FLOOR MOUNTED	78 / 45	4,498	68	2,264	210-280	-	208/1/60	WCCU-7	0.5	1, 2, 3, 4, 5
FCU-120	DAIKIN	FXMQ24PVJU	120	CEILING DUCT	78 / 45	16,026	68	8,298	565-688	0.8	208/1/60	WCCU-7	1.8	1, 2, 3, 4, 5
FCU-117	DAIKIN	FXMQ30PVJU	117, 117A, 118, 119	CEILING DUCT	78 / 45	20,775	68	14,568	565-690	0.66	208/1/60	WCCU-7	1.6	1, 2, 3, 4, 5
FCU-115	DAIKIN	FXMQ30PVJU	114, 115, 116	CEILING DUCT	78 / 45	17,353	68	12,747	565-690	0.66	208/1/60	WCCU-7	1.6	1, 2, 3, 4, 5
FCU-112	DAIKIN	FXMQ30PVJU	111, 112, 113	CEILING DUCT	78 / 45	18,314	68	11,343	565-690	0.66	208/1/60	WCCU-7	1.6	1, 2, 3, 4, 5
FCU-109	DAIKIN	FXMQ24PVJU	108, 109, 110	CEILING DUCT	78 / 45	16,136	68	9,122	565-688	0.8	208/1/60	WCCU-7	1.8	1, 2, 3, 4, 5
FCU-107	DAIKIN	FXMQ07PVJU	107, 107A	CEILING DUCT	78 / 45	6,296	68	5,256	230-317	0.4	208/1/60	WCCU-7	0.6	1, 2, 3, 4, 5
FCU-103	DAIKIN	FXMQ18PVJU	103	CEILING DUCT	78 / 45	10,359	68	7,694	530-636	0.8	208/1/60	WCCU-7	1.6	1, 2, 3, 4, 5
FCU-102	DAIKIN	FXMQ24PVJU	102	CEILING DUCT	78 / 45	15,987	68	11,130	565-688	0.8	208/1/60	WCCU-7	1.8	1, 2, 3, 4, 5
FCU-101	DAIKIN	FXAQ07PVJU	101	WALL MOUNTED	78 / 45	4,396	68	4,721	160-260	-	208/1/60	WCCU-7	0.3	1, 2, 3, 4, 5
FCU-100	DAIKIN	FXMQ07PVJU	100	CEILING DUCT	78 / 45	5,567	68	5,116	230-317	0.4	208/1/60	WCCU-7	0.6	1, 2, 3, 4, 5
FCU-128	DAIKIN	FXMQ07PVJU	128, 129	CEILING DUCT	78 / 45	5,197	68	0	230-317	0.4	208/1/60	WCCU-7	0.6	1, 2, 3, 4, 5
FCU-122	DAIKIN	FXZQ07M7VJU	122	CEILING CASSETTE	78 / 45	3,548	68	449	247-320	-	208/1/60	WCCU-7	0.8	1, 2, 3, 4, 5
FCU S5-1	DAIKIN	FXAQ07PVJU	S5-1	WALL MOUNTED	78 / 45	2,250	68	4,.000	160-260	-	208/1/60	WCCU-7	0.3	1, 2, 3, 4, 5
FCU S1-1	DAIKIN	FXAQ07PVJU	S1-1	WALL MOUNTED	78 / 45	2,250	68	4,000	160-260	-	208/1/60	WCCU-7	0.3	1, 2, 3, 4, 5
FCU S2-1	DAIKIN	FXAQ07PVJU	S2-1	WALL MOUNTED	78 / 45	2,250	68	4,000	160-260	-	208/1/60	WCCU-7	0.3	1, 2, 3, 4, 5
SECOND FLOOR														
FCU-201A	DAIKIN	FXMQ30PVJU	201, 201A, 201B	CEILING DUCT	78 / 45	19,943	68	11,543	565-690	0.66	208/1/60	WCCU-8	1.6	1, 2, 3, 4, 5
FCU-237	DAIKIN	FXZQ07M7VJU	237	CEILING CASSETTE	78 / 45	2,994	68	3,580	247-320	-	208/1/60	WCCU-8	0.8	1, 2, 3, 4, 5
FCU-234	DAIKIN	FXMQ18PVJU	234, 235, 236	CEILING DUCT	78 / 45	11,062	68	12,266	160-260	-	208/1/60	WCCU-8	0.3	1, 2, 3, 4, 5
FCU-233	DAIKIN	FXZQ07M7VJU	233	CEILING CASSETTE	78 / 45	5,720	68	4,117	247-320	-	208/1/60	WCCU-8	0.8	1, 2, 3, 4, 5
FCU-232	DAIKIN	FXZQ07M7VJU	232	CEILING CASSETTE	78 / 45	5,301	68	6,098	247-320	-	208/1/60	WCCU-8	0.8	1, 2, 3, 4, 5
FCU-238	DAIKIN	FXLQ12MVJU9	238	FLOOR MOUNTED	78 / 45	2,906	68	1,422	210-280	-	208/1/60	WCCU-8	0.5	1, 2, 3, 4, 5
FCU-239	DAIKIN	FXLQ12MVJU9	239	FLOOR MOUNTED	78 / 45	4,108	68	1,492	210-280	-	208/1/60	WCCU-8	0.5	1, 2, 3, 4, 5
FCU-231	DAIKIN	FXMQ30PVJU	230, 231, 231A	CEILING DUCT	78 / 45	22,846	68	10,450	565-690	0.66	208/1/60	WCCU-10	1.6	1, 2, 3, 4, 5
FCU-229	DAIKIN	FXZQ18M7VJU	229	CEILING DUCT	78 / 45	9,128	68	4,342	160-260	-	208/1/60	WCCU-10	0.3	1, 2, 3, 4, 5
FCU-225	DAIKIN	FXMQ30PVJU	225	CEILING DUCT	78 / 45	19,369	68	9,841	565-690	0.66	208/1/60	WCCU-10	1.6	1, 2, 3, 4, 5
FCU-221	DAIKIN	FXMQ18PVJU	220A, 221	CEILING DUCT	78 / 45	12,720	68	9,550	160-260	-	208/1/60	WCCU-10	0.3	1, 2, 3, 4, 5
FCU-220	DAIKIN	FXMQ30PVJU	220	CEILING DUCT	78 / 45	16,352	68	7,602	565-690	0.66	208/1/60	WCCU-10	1.6	1, 2, 3, 4, 5
FCU-217	DAIKIN	FXMQ30PVJU	216, 217, 219	CEILING DUCT	78 / 45	24,661	68	12,004	565-690	0.66	208/1/60	WCCU-10	1.6	1, 2, 3, 4, 5
FCU-215	DAIKIN	FXMQ24PVJU	215	CEILING DUCT	78 / 45	15,974	68	7,011	565-688	0.8	208/1/60	WCCU-8	1.8	1, 2, 3, 4, 5
FCU-215A	DAIKIN	FXAQ18PVJU	215A	WALL MOUNTED	78 / 45	12,075	68	3,249	400-500	-	208/1/60	WCCU-8	0.4	1, 2, 3, 4, 5
FCU-240A	DAIKIN	FXAQ07PVJU	240A	WALL MOUNTED	78 / 45	6,368	68	2,855	160-260	-	208/1/60	WCCU-8	0.3	1, 2, 3, 4, 5
FCU-205	DAIKIN	FXMQ30PVJU	205	CEILING DUCT	78 / 45	20,178	68	10,256	565-690	0.66	208/1/60	WCCU-8	1.6	1, 2, 3, 4, 5
FCU-204	DAIKIN	FXMQ36PVJU	202, 203, 204	CEILING DUCT	78 / 45	24,829	68	12,358	810-1,020	0.71	208/1/60	WCCU-8	2.9	1, 2, 3, 4, 5
FCU-200	DAIKIN	FXMQ07PVJU	200	CEILING DUCT	78 / 45	5,624	68	4,938	230-317	0.4	208/1/60	WCCU-8	0.6	1, 2, 3, 4, 5
FCU-206	DAIKIN	FXZQ07M7VJU	206	CEILING CASSETTE	78 / 45	1,586	68	0	247-320	0.4	208/1/60	WCCU-8	0.8	1, 2, 3, 4, 5
FCU-240	DAIKIN	FXMQ12PVJU	240, 241	CEILING DUCT	78 / 45	7,342	68	3,301	335-247	0.4	208/1/60	WCCU-10	0.6	1, 2, 3, 4, 5
FCU S1-2	DAIKIN	FXAQ07PVJU	S1-2	WALL MOUNTED	78 / 45	2,250	68	4,000	160-260	-	208/1/60	WCCU-8	0.3	1, 2, 3, 4, 5
FCU S2-2	DAIKIN	FXAQ07PVJU	S2-2	WALL MOUNTED	78 / 45	2,250	68	4,000	160-260	-	208/1/60	WCCU-10	0.3	1, 2, 3, 4, 5
THIRD FLOOR														
FCU-301	DAIKIN	FXZQ18M7VJU	301	CEILING CASSETTE	78 / 45	8,643	68	6,741	353-495	-	208/1/60	WCCU-9	0.9	1, 2, 3, 4, 5
FCU-327A	DAIKIN	FXZQ09M7VJU	327A	CEILING CASSETTE	78 / 45	6,340	68	5,346	247-320	-	208/1/60	WCCU-9	0.8	1, 2, 3, 4, 5
FCU-325	DAIKIN	FXMQ30PVJU	325, 327	CEILING DUCT	78 / 45	19,046	68	12,817	565-690	0.66	208/1/60	WCCU-9	1.6	1, 2, 3, 4, 5
FCU-323	DAIKIN	FXMQ24PVJU	323	CEILING DUCT	78 / 45	16,272	68	10,904	565-688	0.8	208/1/60	WCCU-9	1.8	1, 2, 3, 4, 5
FCU-321	DAIKIN	FXLQ12MVJU9	321	FLOOR MOUNTED	78 / 45	5,083	68	2,196	210-280	-	ADD 208/1/60	WCCU-9	0.5	1, 2, 3, 4, 5
FCU-320	DAIKIN	FXLQ12MVJU9	320	FLOOR MOUNTED	78 / 45	6,759	68	2,370	210-280	-	208/1/60	WCCU-9	0.5	1, 2, 3, 4, 5
FCU-319	DAIKIN	FXMQ30PVJU	319	CEILING DUCT	78 / 45	19,604	68	7,691	565-690	0.66	208/1/60	WCCU-9	1.6	1, 2, 3, 4, 5
FCU-318	DAIKIN	FXZQ07M7VJU	318	CEILING CASSETTE	78 / 45	5,616	68	2,315	247-320	-	208/1/60	WCCU-10	0.8	1, 2, 3, 4, 5
FCU-317	DAIKIN	FXMQ48PVJU	316, 316A, 317, 317A	CEILING DUCT	78 / 45	36,405	68	15,433	1,020-1,270	1.0	208/1/60	WCCU-10	4.4	1, 2, 3, 4, 5
FCU-315	DAIKIN	FXMQ24PVJU	315	CEILING DUCT	78 / 45	15,384	68	10,509	565-688	0.8	208/1/60	WCCU-10	1.8	1, 2, 3, 4, 5
FCU-312	DAIKIN	FXMQ36PVJU	312, 314	CEILING DUCT	78 / 45	25,966	68	12,145	810-1,020	0.71	208/1/60	WCCU-10	2.9	1, 2, 3, 4, 5
FCU-309	DAIKIN	FXMQ48PVJU	308, 309, 310, 311	CEILING DUCT	78 / 45	30,194	68	15,009	1,020-1,270	1.0	208/1/60	WCCU-9	4.4	1, 2, 3, 4, 5
FCU-308A	DAIKIN	FXZQ18M7VJU	308A	CEILING CASSETTE	78 / 45	11,415	68	6,841	353-495	-	208/1/60	WCCU-9	0.9	1, 2, 3, 4, 5
FCU-306	DAIKIN	FXMQ48PVJU	304, 305, 306, 307	CEILING DUCT	78 / 45	36,331	68	15,958	1,020-1,270	1.0	208/1/60	WCCU-9	4.4	1, 2, 3, 4, 5
FCU-302	DAIKIN	FXMQ36PVJU	301A, 302, 303	CEILING DUCT	78 / 45	28,335	68	11,987	810-1,020	0.71	208/1/60	WCCU-9	2.9	1, 2, 3, 4, 5
FCU-322	DAIKIN	FXMQ18PVJU	300, 322	CEILING DUCT	78 / 45	14,984	68	7,697	530-636	0.8	208/1/60	WCCU-9	1.6	1, 2, 3, 4, 5
FCU-328	DAIKIN	FXMQ24PVJU	328	CEILING DUCT	78 / 45	15,488	68	4,726	565-688	0.8	208/1/60	WCCU-10	1.8	1, 2, 3, 4, 5
FCU-319A	DAIKIN	FXZQ07M7VJU	319A	CEILING CASSETTE	78 / 45	1,525	68	0	247-320	-	208/1/60	WCCU-9	0.8	1, 2, 3, 4, 5

ADD 1) 30% THROW AWAY FILTERS FOR DUCTED UNITS. ALL OTHER FAN COIL UNITS TO HAVE WASHABLE LONG-LIFE FILTER WITH MILDEW PROOF RESIN.
2) FACTORY CONDENSATE PUMPS
3) UNIT CONTROLLED BY FACTORY WALL MOUNTED SENSOR PLATE.
4) EQUIPMENT SUPPLIER SHALL CONFIRM ALL REFRIGERANT PIPING RUNS ARE WITHIN ALLOWABLE MANUFACTURER LIMITS. THE CURRENT DUCT, EQUIPMENT, AND PIPING LAYOUT IS SPECIFIC TO THE BASIS OF DESIGN, DAIKIN. THE SELECTED VRF SYSTEM MANUFACTURER IS RESPONSIBLE FOR REVIEW AND APPROVAL OF FINAL DESIGN.
5) FACTORY START-UP AND OWNER TRAINING REQUIRED. SEASONAL PERFORMANCE VERIFICATION REQUIRED. SEE SPECIFICATIONS.

BRANCH SELECTOR SCHEDULE

PLAN CODE	MFGR	MODEL	SERVES	POWER	AMP DRAW
FIRST FLOOR					
BS-163	DAIKIN	BSVQ36PVJU	FCU-S1-1	208/1/60	0.1A
BS-184	DAIKIN	BSV4Q36PVJU	FCU-112, FCU-S2-1, FCU-117, FCU-115	208/1/60	0.4A
BS-185	DAIKIN	BSV6Q36PVJU	FCU-122, FCU-107, FCU-109, FCU-127, FCU-126, FCU-120, FCU-121	208/1/60	0.6A
BS-186	DAIKIN	BSV4Q36PVJU	FCU-125, FCU-123A, FCU-123, FCU-S5-1	208/1/60	0.4A
BS-187	DAIKIN	BSV4Q36PVJU	FCU-101, FCU-101A, FCU-102, FCU-100, FCU-103	208/1/60	0.4A
SECOND FLOOR					
BS-188	DAIKIN	BSV6Q36PVJU	FCU-239, FCU-238, FCU-215, FCU-215A, FCU-240A, FCU-206, FCU-S1-2	208/1/60	0.6A
BS-189	DAIKIN	BSV4Q36PVJU	FCU-201A, FCU-204, FCU-205, FCU-232	208/1/60	0.4A
BS-190	DAIKIN	BSV4Q36PVJU	FCU-233, FCU-200, FCU-234, FCU-237	208/1/60	0.4A
BS-114	DAIKIN	BSVQ60PVJU	FCU-325, 327A	208/1/60	0.1A
BS-124	DAIKIN	BSVQ60PVJU	FCU-306	208/1/60	0.1A
BS-149	DAIKIN	BSVQ60PVJU	FCU-309	208/1/60	0.1A
BS-191	DAIKIN	BSV4Q36PVJU	FCU-308A, FCU-319A, FCU-319, FCU-320, FCU-321	208/1/60	0.4A
BS-192	DAIKIN	BSV4Q36PVJU	FCU-323, FCU-302, FCU-301, FCU-322	208/1/60	0.4A
BS-128	DAIKIN	BSVQ36PVJU	FCU-225, FCU-229	208/1/60	0.1A
BS-129	DAIKIN	BSVQ36PVJU	FCU-221	208/1/60	0.1A
BS-134	DAIKIN	BSVQ60PVJU	FCU-220	208/1/60	0.1A
BS-137	DAIKIN	BSVQ60PVJU	FCU-317	208/1/60	0.1A
BS-193	DAIKIN	BSV4Q36PVJU	FCU-231, FCU-S2-2, FCU-217, FCU-206	208/1/60	0.4A
BS-194	DAIKIN	BSV4Q36PVJU	FCU-312, FCU-318, FCU-328, FCU-315	208/1/60	0.4A

REVISIONS:
REISSUE 6/20/13

100% CONSTRUCTION DOCUMENTS

SCOTT HART
HVAC SYSTEMS - A/E #2012-30-04
HELENA, MONTANA

100% CONSTRUCTION DOCUMENTS

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MONTANA T. DOE 151 PE LICENSED PROFESSIONAL ENGINEER

CTA

MECHANICAL SCHEDULES

SHEET
M003