PANEL "2A1"

3P100 AMP MAIN

MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
10	1	RECEPT - A124	1	20	0.4 | 0.4			15	1	IRRIGATION CONTROLLER	2	12
10	3	RECEPT - A126	1	20		0.4 | 0.8		20	1	RECEPT - A138	4	12
10	5	RECEPT - WC	1	20			0.4 | 0.6	20	1	RECEPT - A137, A145	6	12
10	7	RECEPT - A123, 128, 129	1	20	1.0 | 1.2			20	1	RECEPT - A134	8	12
10	9	RECEPT - A130	1	20		0.8 | 1.0		20	1	SPARE	10	-
10	11	RECEPT - A148 (EXTERIOR)	1	20			0.6 | 0.6	20	1	RECEPT - EXTERIOR	12	10
10	13	RECEPT - A102	1	20	0.4 | 0.4			20	1	RECEPT	14	12
10	15	RECEPT - A102	1	20		0.8 | 0.5		15	1	HWCP - 1	16	12
10	17	RECEPT - SND EQUIP	1	20			0.8 | 0.5	15	1	HWRP - 1	18	12
10	19	RECEPT - A101, A105	1	20	0.4 | 1.2			20	1	EF-A4	20	12
12	21	FCU-A6	1	15		0.4 | 1.7		25	1	EF-A6	22	12
12	23	FCU-A7	1	15			0.4 | 1.7	25	1	EF-A7	24	12
10	25	FCU-A8	1	20	1.2 | -			-	-	PFB	26	-
12	27	RECEPT - ROOF	1	20		0.2 | -		-	-	PFB	28	-
10	29	RECEPT - SCOREBOARD	1	20			0.5 | -	-	-	PFB	30	-
-	31	PFB	-	-	- | -			-	-	PFB	32	-
-	33	PFB	-	-		- | -		-	-	PFB	34	-
-	35	PFB	-	-			- | -	-	-	PFB	36	-
-	37	PFB	-	-	- | -			-	-	PFB	38	-
-	39	PFB	-	-		- | -		-	-	PFB	40	-
-	41	PFB	-	-			- | -	-	-	PFB	42	-

	PHASE A	PHASE B	PHASE C
CONNECTED LOAD/PHASE	6.6	6.6	6.4

TOTAL CONNECTED LOAD 19.4 KVA
DEMAND FACTOR 1.0
TOTAL DEMAND LOAD 19.4 KVA= 54 AMPS

PANEL "2A2"

120/208 VOLTS, 3 PHASE, 4 WIRE
3P100 AMP MAIN BREAKER

MIN AIC: 10K
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	RECEPT - A111	1	20	1.0 | 0.4			20	1	RECEPT - A121 & A122	2	12
12	3	RECEPT - A113	1	20		1.0 | 1.0		20	1	RECEPT - A121 & A122	4	12
12	5	RECEPT - A112, A110, A108	1	20			0.8 | 0.8	20	1	RECEPT - A121 & A122	6	12
12	7	RECEPT - WATER COOLER	1	20	0.4 | 0.8			20	1	RECEPT - A121 & A122	8	12
12	9	RECEPT - A117	1	20		0.2 | 0.5		20	1	RECEPT - A121 & A122	10	12
12	11	RECEPT - EXTERIOR	1	20			0.4 | 0.5	20	1	RECEPT - A121 & A122	12	12
12	13	RECEPT - WH	1	15	0.8 | 0.5			20	1	RECEPT - A121 & A122	14	12
-	15	PFB	-	-		- | 0.5		20	1	RECEPT - A121 & A122	16	12
-	17	PFB	-	-			- | 1.0	20	1	SPARE	18	-
-	19	PFB	-	-	- | 1.0			20	1	SPARE	20	-
-	21	PFB	-	-		- | 1.0		20	1	SPARE	22	-
-	23	PFB	-	-			- | 1.0	20	1	SPARE	24	-

	PHASE A	PHASE B	PHASE C
CONNECTED LOAD/PHASE	4.9	4.2	4.5

TOTAL CONNECTED LOAD 13.6 KVA
DEMAND FACTOR 1.0
TOTAL DEMAND LOAD 13.6 KVA= 38 AMPS

PANEL "2B"

120/208 VOLTS, 3 PHASE, 4 WIRE
3P125 AMP MAIN BREAKER

MIN AIC: 10K
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	RECEPT - M105, M107	1	20	0.8 | 0.6			20	1	RECEPT - EXTERIOR	2	12
12	3	RECEPT - M102	1	20		0.5 | 1.0		20	1	RECEPT - M101	4	10
12	5	RECEPT - M102	1	20			0.5 | 1.0	20	1	RECEPT - M101	6	10
12	7	RECEPT - M109, 110, 112	1	20	0.6 | 1.0			20	1	RECEPT - M101	8	10
12	9	RECEPT - M104 & M111	1	20		0.4 | 1.0		20	1	RECEPT - M101	10	10
12	11	RECEPT - M113	1	20			0.4 | 1.0	20	1	FUEL DISPENSER	12	10
12	13	RECEPT - REFRIG	1	20	0.8 | 1.0			20	1	DRYER	14	10
12	15	RECEPT - REFRIG	1	20		0.8 | 5.0			1	WELDER	16	10
12	17	RECEPT - 113, 117, 120, 122	1	20			0.8 | 5.0	50			18	10
12	19	RECEPT - 118	1	20	0.6 | -			-	-	PFB	20	-
12	21	RECEPT - 119	1	20		0.4 | -		-	-	PFB	22	-
-	23	SPARE	1	20			1.0 | -	-	-	PFB	24	-
12	25	FCU-04	1	15	0.7 | -			-	-	PFB	26	-
12	27	FCU-05	1	15		0.7 | -		-	-	PFB	28	-
12	29	FCU-06	1	15			0.5 | -	-	-	PFB	30	-

	PHASE A	PHASE B	PHASE C
CONNECTED LOAD/PHASE	6.1	10.8	11.2

TOTAL CONNECTED LOAD 28.1 KVA
DEMAND FACTOR 1.0
TOTAL DEMAND LOAD 28.1 KVA= 78 AMPS

PANEL [illegible]

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	RECEPT - A131	1	20	0.6 | 1.2			20	1	RECEPT - FREEZER	2	12
12	3	RECEPT - A131 & A133	1	20		0.6 | 1.2		20	1	RECEPT - REFRIG	4	12
10	5	RECEPT - A116 & A118	1	20			0.4 | 1.6	20	1	RECEPT - REFRIG	6	12
10	7	RECEPT - A116	1	20	0.8 | 0.8			20	1	RECEPT - A146	8	12
10	9	RECEPT - A116	1	20		0.8 | 0.8		20	1	RECEPT - A146	10	12
12	11	RECEPT - A106	1	20			0.8 | 0.4	20	1	RECEPT - A146, 143	12	12
12	13	RECEPT - A107	1	20	1.0 | 1.0			20	1	RECEPT - ASSEMBLY	14	10
12	15	RECEPT - A107	1	20		1.0 | 1.0		20	1	RECEPT - ASSEMBLY	16	10
12	17	RECEPT - A107	1	20			1.0 | 0.5	20	1	HOOD FIRE CRTL PNL	18	12
12	19	RECEPT - A103	1	20	1.0 | 1.0			20	1	RECEPT - A116	20	10
12	21	RECEPT - A103	1	20		0.8 | 1.0		20	1	RECEPT - A116	22	10
12	23	RECEPT - A103	1	20			0.8 | 1.0	20	1	RECEPT - A116	24	10
12	25	RECEPT - A104	1	20	0.8 | 1.2			20	1	SPARE	26	-
12	27	IDS PANEL - A133	1	20		1.5 | 1.2		20	1	SPARE	28	-
12	29	FM-200	1	20			0.5 | 0.4	15	1	SPARE	30	-
2	31		3		- | 1.0			20	1	BATTERY CHARGER	32	12
2	33	PANEL GS				- | 1.2		20	1	DAY TANK PUMP	34	12
2	35			70			- | 1.0	20	1	DEHUMIDIFIER	36	12
2	37		3		5.0 | -			-	-	PFB	38	-
2	39	PANEL "2E1B"				5.0 | -		-	-	PFB	40	-
2	41			100			5.0 | -	-	-	PFB	42	-

	PHASE A	PHASE B	PHASE C
CONNECTED LOAD/PHASE	14.4	14.9	12.4

TOTAL CONNECTED LOAD 41.7 KVA
DEMAND FACTOR 1.0
TOTAL DEMAND LOAD 41.7 KVA= 116 AMPS

PANEL "K"

120 VOLTS, 3 PHASE, 4 WIRE
175 AMP MAIN BREAKER
REQ'D OPTIONS: SHUNT TRIP

MIN AIC: 10K
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
8	1	R-COFFEE BREWER	2		3.3 | 1.2			20	1	RECEPT	2	12
8	3			40		3.3 | 1.2		20	1	RECEPT	4	12
12	5	R-JUICE/WATER DISP	1	20			1.0 | 1.2	20	1	RECEPT	6	12
12	7	R-20 QT. MIXER	1	20	1.2 | -			-	-	PFB	8	-
12	9	R-GRIDDLE	1	20		1.0 | -		-	-	PFB	10	-
12	11	R-HOT FOOD COUNTER	2				1.3 | -	-	-	PFB	12	-
12	13			20	1.3 | -			-	-	PFB	14	-
12	15	R-COLD FOOD COUNTER	1	15		0.7 | 1.2		20	1	RECEPT	16	12
12	17	R-HEATED CABINET	1	20			1.8 | 1.2	20	1	FLY FAN	18	12
-	19	SPARE	1	20	1.0 | 1.2			20	1	FLY FAN	20	12
12	21	SLICER	1	20		1.2 | 1.3			2	ICE MACHINE	22	12
12	23	DOUBLE OVEN	1	25			1.7 | 1.3	20			24	12
12	25	DOUBLE OVEN	1	25	1.7 | 0.6			-	2	TILTING FRYING PAN	26	12
-	27	PFB	-	-		- | 0.6		20			28	12
-	29	PFB	-	-			- | -	-	-	PFB	30	-
10	31		3		3.2 | -			-	-	PFB	32	-
10	33	DISHWASHER				3.2 | -		-	-	PFB	34	-
10	35			30			3.2 | -	-	-	PFB	36	-
8	37		3		4.0 | 3.6				3		38	8
8	39	BOOSTER HEATER				4.0 | 3.6				TILTING KETTLE	40	8
8	41			50			4.0 | 3.6	40			42	8

	PHASE A	PHASE B	PHASE C
CONNECTED LOAD/PHASE	22.3	21.3	20.3

TOTAL CONNECTED LOAD 63.9 KVA
DEMAND FACTOR 0.65
TOTAL DEMAND LOAD 41.5 KVA= 115 AMPS

PROVIDE MAIN BREAKER WITH SHUNT TRIP

PANEL "C"

120/208 VOLTS, 3 PHASE, 4 WIRE
3P50 AMP MAIN BREAKER

MIN AIC: 10K
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	LIGHTS	1	20	1.0 | 0.4			20	1	RECEPT	2	12
12	3	LIGHTS/TIME SWITCH	1	20		0.6 | -		-	-	PFB	4	12
-	5	SPARE	1	20			1.0 | -	-	-	PFB	6	12
-	7	PFB	-	-	- | -			-	-	PFB	8	12
-	9	PFB	-	-		- | -		-	-	PFB	10	12
-	11	PFB	-	-			- | -	-	-	PFB	12	12

	PHASE A	PHASE B	PHASE C
CONNECTED LOAD/PHASE	1.2	0.6	1.0

TOTAL CONNECTED LOAD 2.8 KVA
DEMAND FACTOR 1.0
TOTAL DEMAND LOAD 2.8 KVA= 8 AMPS

PANEL "2E2"

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
12	1	RECEPT - M121	1	20	0.8 | 1.0			20	1	RECEPT - M103	2	12
12	3	RECEPT - M116	1	20		0.8 | 1.0		20	1	RECEPT - M103	4	12
12	5	RECEPT - M116	1	20			0.8 | 1.0	20	1	RECEPT - M103	6	12
12	7	RECEPT - M116	1	20	0.8 | 1.0			15	1	FM-200	8	12
12	9	RECEPT - M103	1	20		0.8 | 1.0		20	1	SPARE	10	-
-	11	SPARE	1	20			1.0 | 1.0	20	1	SPARE	12	-
-	13	PFB	-	-	- | -			-	-	PFB	14	-
-	15	PFB	-	-		- | -		-	-	PFB	16	-
-	17	PFB	-	-			- | -	-	-	PFB	18	-
-	19	PFB	-	-	- | 1.2			20	1	FCU-03	20	12
-	21	PFB	-	-		- | 1.7		25	1	EF-01	22	12
-	23	PFB	-	-			- | 0.5	20	1	FCU-02	24	12
-	25	PFB	-	-	- | 1.2			20	1	EF-02	26	12
-	27	PFB	-	-		- | -		-	-	PFB	28	-
-	29	PFB	-	-			- | -	-	-	PFB	30	-
-	31	PFB	-	-	- | -			-	-	PFB	32	-
-	33	PFB	-	-		- | -		-	-	PFB	34	-
-	35	PFB	-	-			- | -	-	-	PFB	36	-
-	37	PFB	-	-	- | -			-	-	PFB	38	-
-	39	PFB	-	-		- | -		-	-	PFB	40	-
-	41	PFB	-	-			- | -	-	-	PFB	42	-

	PHASE A	PHASE B	PHASE C
CONNECTED LOAD/PHASE	6.0	5.8	4.8

TOTAL CONNECTED LOAD 16.6 KVA
DEMAND FACTOR 1.0
TOTAL DEMAND LOAD 16.6 KVA= 43 AMPS

PANEL "2E1B"

120/208 VOLTS, 3 PHASE, 4 WIRE
3P100 AMP MAIN BREAKER
REQ'D OPTIONS: SHUNT TRIP

MIN AIC: 10K
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
-	1	SPARE	1	20	1.0 | 1.2			20	1	EF-A2	2	10
-	3	SPARE	1	20		1.0 | 1.7		25	1	EF-A1	4	10
-	5	SPARE	1	20			1.0 | 0.2	1.5	1	VAV-C,D,F	6	12
-	7	PFB	-	-	- | 1.2			20	1	FCU-A2	8	10
-	9	PFB	-	-		- | 0.4		15	1	FCU-A4	10	12
10	11	FCU	2				- | 0.4	15	1	FCU-A3	12	12
10	13			20	- | 1.2			20	1	FCU-A1	14	12
10	15	CU	2			- | -		20	1	PFB	16	10
10	17			30			- | 1.2	20	1	FCU-A10	18	10
10	19		3		0.8 | 1.2			20	1	FCU-A5	20	12
10	21	FCU-A9				0.8 | 1.0		20	1	SPARE	22	-
10	23			20			0.8 | 1.0	20	1	SPARE	24	-

	PHASE A	PHASE B	PHASE C
CONNECTED LOAD/PHASE	6.6	5.1	4.6

TOTAL CONNECTED LOAD 16.3 KVA
DEMAND FACTOR 1.0
TOTAL DEMAND LOAD 16.3 KVA= 45 AMPS

PANEL "GS"

120/208 VOLTS, 3 PHASE, 4 WIRE
3P70 AMP MAIN BREAKER
REQ'D OPTIONS: NEMA 3R

MIN AIC: 10K
MOUNTING: SURFACE

WIRE SIZE (AWG)	CKT NO	USE	CKT BKR POLE	CKT BKR AMP	CONNECTED LOAD (KVA) PHASE A	PHASE B	PHASE C	CKT BKR AMP	CKT BKR POLE	USE	CKT NO	WIRE SIZE (AWG)
10	1		3		- | -			20	1	LIGHTS	2	-
10	3	GATE OPERATOR				- | -		20	1	A/C	4	-
10	5			30			- | -	20	1	RECEPT	6	-
10	7		3		- | -			20	1	SPARE	8	-
10	9	GATE OPERATOR				- | -		20	1	SPARE	10	-
10	11			30			- | -	20	1	SPARE	12	-

	PHASE A	PHASE B	PHASE C
CONNECTED LOAD/PHASE	6.6	5.1	4.6

TOTAL CONNECTED LOAD 16.3 KVA
DEMAND FACTOR 1.0
TOTAL DEMAND LOAD 16.3 KVA= 45 AMPS

REVISION NO.	SYM	DESCRIPTION	SHT. OF	DATE	APPROVED PUBLIC WORKS ADMINISTRATOR
	AB	AS-BUILT		07/09	
PCD-6	6	REVISED PANEL "2E1B"			
PCD-5	5	ADDED PANEL "GS"	13/15	7/29/04	
PAD		POST ADDENDUM	39/41	11/26/02	
ADD-4	A4	ADE-009 ADDENDUM NO. 4		8/13/02	

AS-BUILT DRAWING

VINCENT K. MIYAGAWA — LICENSED PROFESSIONAL ENGINEER — No. 4334-E — HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

DEPT. OF ACCOUNTING & GENERAL SERVICES
DIVISION OF PUBLIC WORKS
STATE OF HAWAII

MAUI ARMY NATIONAL GUARD
PUUNENE ARMORY
PUUNENE, MAUI, HAWAII

PANEL SCHEDULE

ECS, Inc.

DAGS JOB NO.

DRAWING NO. E-20