

PANELBOARD: LA

208Y/120 VOLTS, 3 PHASE, 4 WIRE
400 AMP MAIN BKR, SURFACE MTD.
W/SPD - SURGE PROTECTION DEVICE, S.E. SERVICE ENTRANCE LABELED W/GRD. BUS 65000 AIC LABELED

CIRC NO.	LOAD V. A.	LOAD TYPE	LOAD DESCRIPTION	P.	AMP SIZE	AMP SIZE	LOAD DESCRIPTION	LOAD TYPE	LOAD V. A.	CIRC NO.		
1	400	RCPT	RM 106/105 RECEPT	1	20	A	20	1	EXTERIOR ROOF RECEPT	RCPT	200	2
3	1000	RCPT	RM 105 RECEPT	1	20	B	20	1	GAZEBO RECEPT	RCPT	400	4
5	800	RCPT	RM 105 RECEPT	1	20	C	20	1	NORTH INTERIOR LIGHTING	LGHT	1200	6
7	800	RCPT	RM 103 RECEPT	1	20	A	20	1	RM 103/102/101 LIGHTS	LGHT	1600	8
9	600	RCPT	RM102/101 RECEPT	1	20	B	20	1	RM 101 CHANDELIER LIGHTS	LGHT	1600	10
11	1600	RCPT	RM 104 DRINKING FOUNTAINS	1	20	C	20	1	GAZEBO LIGHTS	LGHT	400	12
13	1200	RCPT	RM 110/111/EXTERIOR RECEPT	1	20	A	20	1	EXTERIOR PERIMETER LIGHTS	LGHT	1200	14
15	600	RCPT	RM 108 RECEPT	1	20	B	20	1	EXTERIOR SITE LIGHTS	LGHT	900	16
17	1200	RCPT	RM 108 REFRIDGERATOR	1	20	C	20	1	RP-1	MOTR	350	18
19	1200	RCPT	RM 108 ICE MAKER	1	20	A	20	1	RM 101 CHANDELIER LIGHTS	LGHT	1600	20
21	400	RCPT	RM 108 RECEPT	1	20	B	20	1	RM 101 CHANDELIER LIGHTS	LGHT	1600	22
23	1200	RCPT	RM 108 REFRIDGERATOR	1	20	C	20	1	RM 105 LIGHTS	LGHT	1400	24
25	1200	RCPT	RM 108 MICROWAVE	1	20	A	20	1	EF-1	MOTR	696	26
27	1200	RCPT	RM 108 RECEPT	1	20	B	20	1	EF-2	MOTR	22	28
29	400	RCPT	RM 109 RECEPT	1	20	C	25	2	EUH-1	HEAT	3000	30
31	8000	RCPT	RM 108 RANGE	2	50	A	1	1				32
33												
35	1000	RCPT	RM 105 PROJECTOR	1	20	C	30	1	F-2	MOTR	1176	34
37			SPARE	1	20	A	20	1	SPARE			38
39			SPARE	1	20	B	20	1	SPARE			40
41			SPARE	1	20	C	20	1	SPARE			42
43	3141	H/M	CU-1	2	25	A	20	1	FIRE ALARM CONTROL PANEL	POWR	1000	44
45												
47	5117	MOTR	CU-2	2	50	C	20	1	RM 105 RECEPT	RCPT	600	48
49												
51	5242	MOTR	MSS-OU-1	2	50	B	80	3	RTU-1	MOTR	19599	52
53												
55	480	HEAT	GWH-1	1	20	A	1	1				56
57	1539	MOTR	MSS-OU-2	2	20	B	20	1	BRIDGE LIGHTS	LGHT	200	58
59												
61			SPARE	1	20	A	20	1	RM 102 PLUMBING SENSORS	POWR	100	62
63			SPARE	1	20	B	20	1	SPARE			64
65			SPARE	1	20	C	20	1	SPARE			66
67			SPACE			A	20	1	SPARE			68
69			SPACE			B	20	1	SPARE			70
71			SPACE			C			SPACE			72
73			SPACE			A			SPACE			74
75			SPACE			B			SPACE			76
77			SPACE			C			SPACE			78
79			SPACE			A			SPACE			80
81			SPACE			B			SPACE			82
83			SPACE			C			SPACE			84

- ① PROVIDE GFCI CIRCUIT BREAKER VIA CONTACTOR 'A'
- ② VIA CONTACTOR 'A'
- ③ FURNISH LOCK-ON CLIP

PANELBOARD: LA	CONNECTED KVA:						DEMAND FACTOR	CONT. KVA	CONT. FACT	SIZING AMPS:			
	PH-A	PH-B	PH-C	TOTAL	PH-A	PH-B				PH-C	TOTAL		
Lighting	4.4	4.3	3.0	11.7	1	11.7	1.25	40.6	45.8	44.8	31.2		
Receptacle (First 10000VA at 1 + remainder at 0.5)	9.8	9.2	6.8	10.0	1	10.0	> 1	49.7	56.7	53.2	39.3		
Largest Motor	0.0	0.0	0.0	0.0	1	0.0	0.25	6.9	6.9	6.9	6.9		
Motor	10.1	11.4	14.5	36.0	1	36.0	1	99.9	84.0	95.1	120.7		
Heating	3.3	1.3	1.5	6.0	1	6.0	1.25	21.0	34.0	13.3	15.6		
Power	1.1	0.0	0.5	1.6	1	1.6	1	4.4	9.2	0.0	4.2		
Spare						0.2		40.6	40.7	40.7	40.7		
TOTAL KVA:	28.6	26.2	26.3	81.1		87.9		TOTAL AMPS:	PH-A	PH-B	PH-C		
TOTAL AMPS:	238.6	218.3	219.1	225.2				263.1	277.2	254.0	258.6		

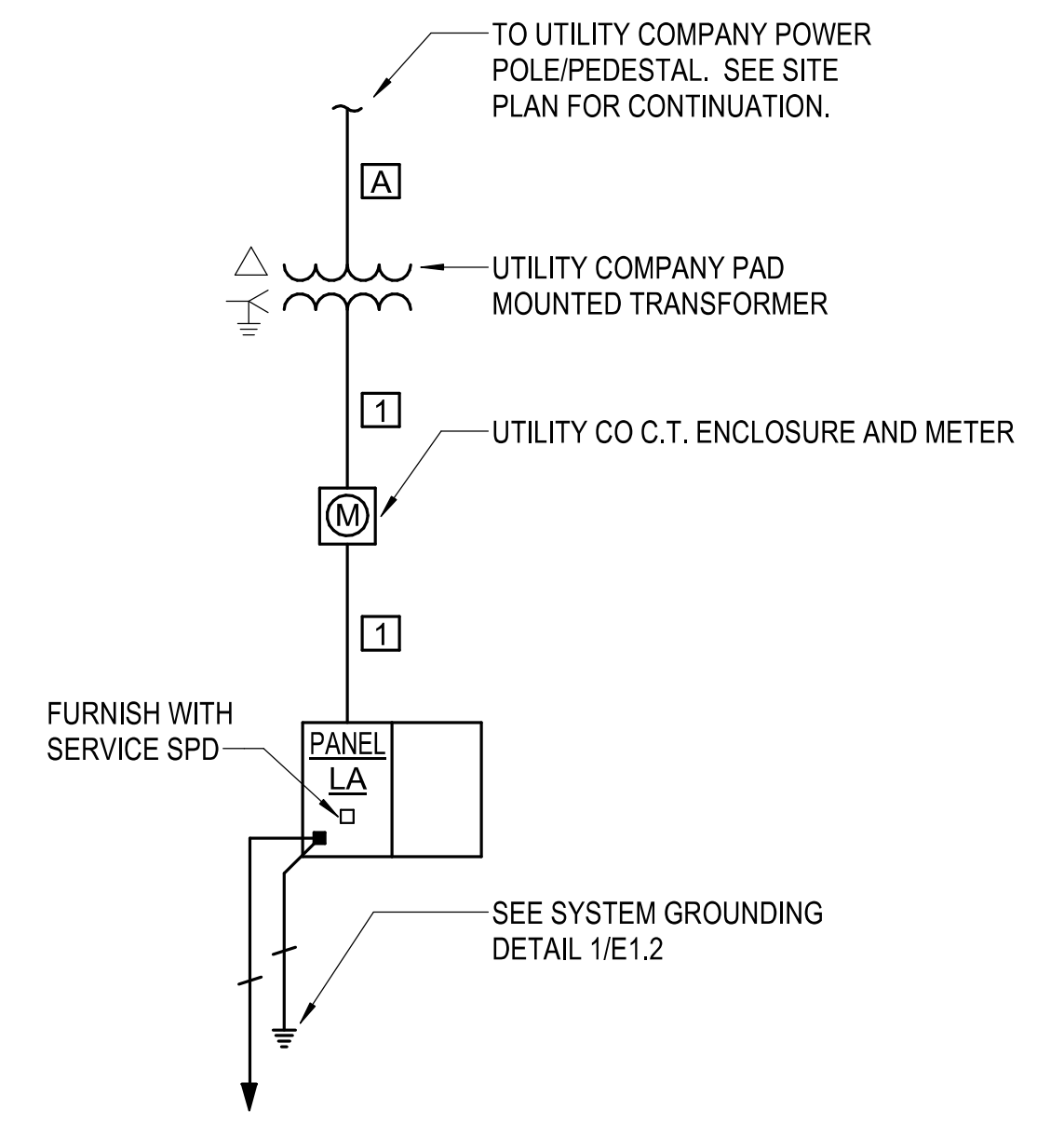
FEEDER SCHEDULE

DESIG.	EQUIPMENT SERVED	CONDUCTORS		GROUND SIZE PER SET	ISOLATED GROUND SIZE	CONDUIT SIZE PER SET	SPARE CONDUIT
		SETS	NO.				
A	UTILITY CO. PRIMARY	--	--	--	--	4" C.	--
1	PANELBOARD:LA	1	4	#500 KCMIL CU	#3	4" C.	--

EQUIPMENT CONNECTION SCHEDULE

UNIT DESIG	UNIT VOLTAGE	LOAD			PANEL DEVICE		DEVICE AT UNIT				FEEDER DESCRIPTION OR SEE THE FEEDER SCHEDULE	REMARKS OR SEE THE INDICATED NOTES BELOW		
		H.P.	FLA	KVA	CIRCUIT NUMBER	BKR.	FUSE	NEMA START	BKR.	FUSE			NEMA START	
MECHANICAL EQUIPMENT CONNECTIONS														
RTU ROOF TOP UNIT														
①	208/3	27.3A	54.4	19.59	LA:52	80		3		100	70	3	1 3 #3 AWG THWN; #8 AWG GRD; 1-1/4" C.	NEMA-3R
EF EXHAUST FAN														
1	120/1	0.25	5.8	0.666	LA:26	20		1				1	FUSTAT	1 2 #12 AWG THWN; #12 AWG GRD; 1/2" C.
⑦	120/1	22	0.2	0.022	LA:28	20		1				1	TOGGLE	1 2 #12 AWG THWN; #12 AWG GRD; 1/2" C.
EUH ELECTRIC UNIT HEATER														
1	208/1	14.4	3.000	LA:30	25		2			30	20	2		1 2 #10 AWG THWN; #10 AWG GRD; 1/2" C.
F FURNACE														
1	120/1	0.5	9.8	1.176	LA:34	20		1				1	FUSTAT	1 2 #12 AWG THWN; #12 AWG GRD; 1/2" C.
2	120/1	0.75	13.8	1.656	LA:36	30		1		20	20	1	MMS	1 2 #10 AWG THWN; #10 AWG GRD; 1/2" C.
CU CONDENSING UNIT														
1	208/1	2.8A	15.1	3.141	LA:43	25		2		30	20	2		1 2 #12 AWG THWN; #12 AWG GRD; 1/2" C.
2	208/1	21.8A	24.6	5.117	LA:47	50		2		60	35	2		1 2 #8 AWG THWN; #10 AWG GRD; 3/4" C.
MSS-IU MINI SPLIT UNIT - INDOOR														
①	208/1	2.3A	2.3	0.478						20	4	2	MMS	1 2 #12 AWG THWN; #12 AWG GRD; 1/2" C.
⑤	208/1	0.4A	0.4	0.083						20	1	2	MMS	1 2 #12 AWG THWN; #12 AWG GRD; 1/2" C.
MSS-OU MINI SPLIT UNIT - OUTDOOR														
①	208/1	22A	25.2	5.242	LA:51	50		2		60	40	2		1 2 #6 AWG THWN; #10 AWG GRD; 3/4" C.
⑤	208/1	7A	7.4	1.539	LA:57	20		2		30	15	2		1 2 #12 AWG THWN; #12 AWG GRD; 1/2" C.
GWH WATER HEATER														
1	120/1	4.0	0.48	LA:55	20		1					1	FUSTAT	1 2 #12 AWG THWN; #12 AWG GRD; 1/2" C.
RP RECIRCULATION PUMP														
1	120/1	350	2.9	0.35	LA:18	20		1				1	FUSTAT	1 2 #12 AWG THWN; #12 AWG GRD; 1/2" C.

- ① ALL CONNECTIONS AND ELECTRICAL EQUIPMENT LISTED IN SCHEDULE SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. FIELD VERIFY CONNECTION REQUIREMENTS AND EQUIPMENT PROVIDED BY OTHERS PRIOR TO ROUGH-IN.
- ② REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR THE REQUIREMENTS ASSOCIATED WITH WIRING AND CONNECTIONS OF INTERLOCKING, THERMOSTAT LOCATIONS, EXHAUST FAN CONTROL SWITCHES, AND OTHER CONTROLS OF MECHANICAL EQUIPMENT.
- ③ SIZE FUSES FOR MOTOR FUSTATS BASED ON 125% OF MANUFACTURER'S NAMEPLATE FULL LOAD AMPERAGE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ④ PROVIDE DUCT MOUNTED SMOKE DETECTORS IN THE SUPPLY AND RETURN DUCTS. VERIFY THE REQUIRED QUANTITY OF DUCT SMOKE DETECTORS FOR EACH UNIT WITH THE FINAL INSTALLED DUCTWORK LAYOUT TO MEET NFPA REQUIREMENTS. PROVIDE FAN SHUT DOWN RELAY TO SHUT DOWN MECHANICAL UNIT UPON ANY ALARM AT THE FIRE ALARM CONTROL PANEL.
- ⑤ MINI-SPLIT SYSTEM: INDOOR UNIT IS FED FROM THE OUTDOOR UNIT, PROVIDE INTERCONNECTING WIRING AS REQUIRED. PROVIDE A 2-POLE MANUAL MOTOR STARTING SWITCH WITHOUT OVERLOADS FOR INDOOR LOCAL DISCONNECTING MEANS. PROVIDE WITH APPROPRIATE COVERPLATE. FIELD VERIFY ALL CONNECTION REQUIREMENTS PRIOR TO ROUGH-IN WITH EQUIPMENT PROVIDED.
- ⑥ NOT USED
- ⑦ EXHAUST FAN TO BE CONTROLLED WITH LIGHT SWITCH.



A ELECTRICAL ONE-LINE DIAGRAM
NO SCALE

