

ELECTRICAL PANEL SCHEDULES

NEC 2020 (NFPA 70-2020), VERIFY AGAINST THE AHJ-ADOPTED EDITION | SERVICE 240/120 V, 1 PH, 400 A

PANEL LP-1										SERVES: LIGHTING, RECEPTACLE, MECHANICAL, EQUIPMENT										
VOLTAGE 240/120 V, 1 PH, 3 W					BUS RATING 400 A					MAINS MLO, 350 A OCPD AT MDP					MIN AIC 25 kA (AFC 24.9 kA)					
TYPE PANELBOARD					FED FROM MDP					FEEDER (3) 500 KCMIL CU + #3 CU EGC, 10 FT, VD 0.12%					POSITIONS 84 (61 USED)					
CKT	CIRCUIT DESCRIPTION				TYPE	TRIP	P	PHASE A		PHASE B		P	TRIP	TYPE	CIRCUIT DESCRIPTION				CKT	
1	FT-1 FOOD TRUCK / CATERER TRAILER, 30 A 240 V				E	25	2	2,880	2,800	2,880	2,800	2	25	E	OV-1 VENTLESS DOUBLE-STACK CONVECTION OVEN (1 OF 2)				2	
3	RECEPTACLE																			4
5	OV-1 VENTLESS DOUBLE-STACK CONVECTION OVEN (2 OF 2)				E	25	2	2,800	2,250	2,800	2,250	2	25	E	WH-1 50 GAL ELECTRIC WATER HEATER				6	
7																				8
9	CB-1 COFFEE BREWER				E	15	2	1,800	1,728	1,800	1,728	2	20	M	EUH-1 ELECTRIC UNIT HEATER (240/1, MCA 18 A)				10	
11																				12
13	EC-1 EVAPORATIVE COOLER (230/1, MCA 15 A)				M	15	2	1,380	1,152	1,380	1,152	2	15	M	EWH ELECTRIC WALL HEATER (240/1, MCA 12 A)				14	
15																				16
17	HC-1 HEATED HOLDING CABINET (1 OF 2)				E	20	1	2,000	1,920			1	20	E	STG-1 BAND / DJ STAGE POWER: PA (1 OF 4)				18	
19	HC-1 HEATED HOLDING CABINET (2 OF 2)				E	20	1			2,000	1,920	1	20	E	STG-1 BAND / DJ STAGE POWER: PA (2 OF 4)				20	
21	STG-1 BAND / DJ STAGE POWER: PA (3 OF 4)				E	20	1	1,920	1,800			1	15	E	BUF-1 BUFFET LINE: CHAFERS, SOUP WELLS (1 OF 3)				22	
23	STG-1 BAND / DJ STAGE POWER: PA (4 OF 4)				E	20	1			1,920	1,800	1	15	E	BUF-1 BUFFET LINE: CHAFERS, SOUP WELLS (2 OF 3)				24	
25	BUF-1 BUFFET LINE: CHAFERS, SOUP WELLS (3 OF 3)				E	15	1	1,800	1,800			1	15	E	OUT-1 LAWN CEREMONY POWER PEDESTAL (2 OF 2)				26	
27	OUT-1 LAWN CEREMONY POWER PEDESTAL (1 OF 2)				E	15	1			1,800	1,800	1	20	R	RECEPTACLE HALL (1 OF 2)				28	
29	RECEPTACLE HALL (2 OF 2)				R	20	1	1,800	1,500			1	20	E	SL-1 STRING AND ACCENT LIGHTING				30	
31	BAR-1 BAR: GLASS CHILLER, BLENDER (1 OF 2)				E	15	1			1,500	1,500	1	15	E	BAR-1 BAR: GLASS CHILLER, BLENDER (2 OF 2)				32	
33	IM-1 ICE MACHINE				E	15	1	1,200	1,200			1	15	E	UPL-1 UPLIGHTING AND DANCE FLOOR (1 OF 2)				34	
35	LIGHTING HALL				L	20	1			1,260	1,200	1	15	E	PB-1 PHOTO BOOTH / GUEST TABLE				36	
37	RECEPTACLE STAGING				R	20	1	1,080	800			1	15	E	RI-1 REACH-IN REFRIGERATOR (1 OF 2)				38	
39	UPL-1 UPLIGHTING AND DANCE FLOOR (2 OF 2)				E	15	1			1,200	1,000	1	15	E	AV-1 PROJECTOR, SCREEN, PRESENTATION AV				40	
41	RI-1 REACH-IN REFRIGERATOR (2 OF 2)				E	15	1	800	360			1	20	R	RECEPTACLE MECH-JAN				42	
43	XL-1 EXTERIOR AND PATH LIGHTING				E	15	1			500	480	1	15	M	IR-1/2 GAS IR TUBE HEATER (120/1, MCA 5 A)				44	
45	EF-5 EF (120/1, MCA 2 A)				M	15	1	192	180			1	20	R	RECEPTACLE TR2				46	
47	LIGHTING STAGING				L	20	1			255	180	1	20	R	RECEPTACLE TR1				48	
49	CF-1 CEILING FANS (HALL) (1 OF 4)				E	15	1	150	150			1	15	E	CF-1 CEILING FANS (HALL) (3 OF 4)				50	
51	RECEPTACLE TR3				R	20	1			180	150	1	15	E	CF-1 CEILING FANS (HALL) (2 OF 4)				52	
53	EF-1 EF (120/1, MCA 1 A)				M	15	1	96	96			1	15	M	EF-2 EF (120/1, MCA 1 A)				54	
55	CF-1 CEILING FANS (HALL) (4 OF 4)				E	15	1			150	96	1	15	M	EF-3 EF (120/1, MCA 1 A)				56	
57	EF-4 EF (120/1, MCA 1 A)				M	15	1	96	40			1	20	L	LIGHTING TR3				58	
59	LIGHTING TR1				L	20	1			40	40	1	20	L	LIGHTING TR2				60	
61	SPACE														SPACE				62	
63	LIGHTING MECH-JAN				L	20	1			27					SPACE				64	
65	SPACE														SPACE				66	
67	SPACE														SPACE				68	
69	SPACE														SPACE				70	
71	SPACE														SPACE				72	
73	SPACE														SPACE				74	
75	SPACE														SPACE				76	
77	SPACE														SPACE				78	
79	SPACE														SPACE				80	
81	SPACE														SPACE				82	
83	SPACE														SPACE				84	
CONNECTED LOAD BY PHASE (VA)								37,770		37,788										
CONNECTED CURRENT BY PHASE (A)								315		315										

LOAD CLASS	CONNECTED VA	DEMAND FACTOR	DEMAND VA	BASIS
LIGHTING	1,662	125%	2,078	NEC 220.42, 125% CONTINUOUS
RECEPTACLE	5,580	100%	5,580	NEC TABLE 220.44
MECHANICAL	9,576	100%	9,576	100%
EQUIPMENT	58,740	94%	55,325	NEC 220.56 KITCHEN, 125% CONTINUOUS
LARGEST MOTOR	-	25%	690	NEC 430.24, 25% OF EC-1
TOTAL	75,558	-	73,248	

TOTAL CONNECTED LOAD	75,558 VA
TOTAL DEMAND LOAD	73,248 VA
DEMAND CURRENT	305.2 A
PHASE IMBALANCE	0.0%
SPACES	23

PANEL MDP														SERVES: BRANCH PANEL FEEDER AND PV									
VOLTAGE 240/120 V, 1 PH, 3 W					BUS RATING 400 A				MAINS MLO, 400 A OCPD AT SERVICE DISCONNECT										MIN AIC 35 kA (AFC 30.7 kA)				
TYPE MAIN DISTRIBUTION PANEL					FED FROM UTILITY SERVICE				FEEDER (3) 600 KCMIL CU + #3 CU EGC, 15 FT, VD 0.16%										POSITIONS 12 (4 USED)				
CKT	CIRCUIT DESCRIPTION	TYPE	TRIP	P	PHASE A				PHASE B				P	TRIP	TYPE	CIRCUIT DESCRIPTION	CKT						
					VA		VA		VA		VA												
1	LP-1 FEEDER	FDR	350	2	37,779											SPACE	2						
3									37,779							SPACE	4						
5	SPACE															SPACE	6						
7	SPACE															SPACE	8						
9	SPACE								-				2	30	PV	PV-1 PV INVERTER OUTPUT (BACKFED)	10						
11	SPACE											-					12						
CONNECTED LOAD BY PHASE (VA)					37,779				37,779														
CONNECTED CURRENT BY PHASE (A)					315				315														

TOTAL CONNECTED LOAD	75,558 VA
TOTAL DEMAND LOAD	73,248 VA
DEMAND CURRENT	305.2 A
PHASE IMBALANCE	0.0%
SPACES	8

GENERAL NOTES

- LOADS AND DEMAND PER NEC 2020 ARTICLE 220, CALCULATED FROM THE EQUIPMENT LIST. VERIFY AGAINST APPROVED EQUIPMENT NAMEPLATES BEFORE RELEASE.
- ALL BREAKERS AND BUS FULLY RATED FOR THE MINIMUM AIC SHOWN. NO SERIES RATINGS. AVAILABLE FAULT CURRENT PER E-701.
- CIRCUIT NUMBERS ARE BUS POSITIONS. A 2-POLE BREAKER OCCUPIES BOTH POSITIONS SHOWN. SPACE IS A BUSSED SPACE FOR A FUTURE BREAKER.
- PV BACKFEED BREAKER AT THE END OF THE BUS OPPOSITE THE MAIN, NEC 705.12(B)(3)(2). PROVIDE THE WARNING LABEL "DO NOT RELOCATE THIS OVERCURRENT DEVICE".
- TYPE: L LIGHTING, R RECEPTACLE, M MECHANICAL, E EQUIPMENT, PV PHOTOVOLTAIC SOURCE, FDR FEEDER. PHASE VA IS CONNECTED LOAD.
- DESCRIPTIONS ARE SHORTENED TO FIT. FULL TEXT AND DEMAND BASIS PER CIRCUIT ARE IN THE DESIGN WORKBOOK.

FLAG: FAULT CURRENT: TX-2 DATA IS ASSUMED: REC HAS NOT SIZED PAD TX-2; 100 KVA 1-PH, 1.5%Z, INFINITE-BUS PRIMARY. GET KVA, %Z AND PRIMARY FAULT MVA FROM THE UTILITY, THEN RERUN BEFORE EQUIPMENT RELEASE.

SUTTON MECHANICAL & ENVIRONMENTAL

PROJECT NO: 2026-12
PROJECT: FARMWILD ORANGERY
CLIENT: FARMWILD



ELECTRICAL PANEL SCHEDULES

DRAWN BY: MS
DATE: 2026-09-30

E-601
REV: A