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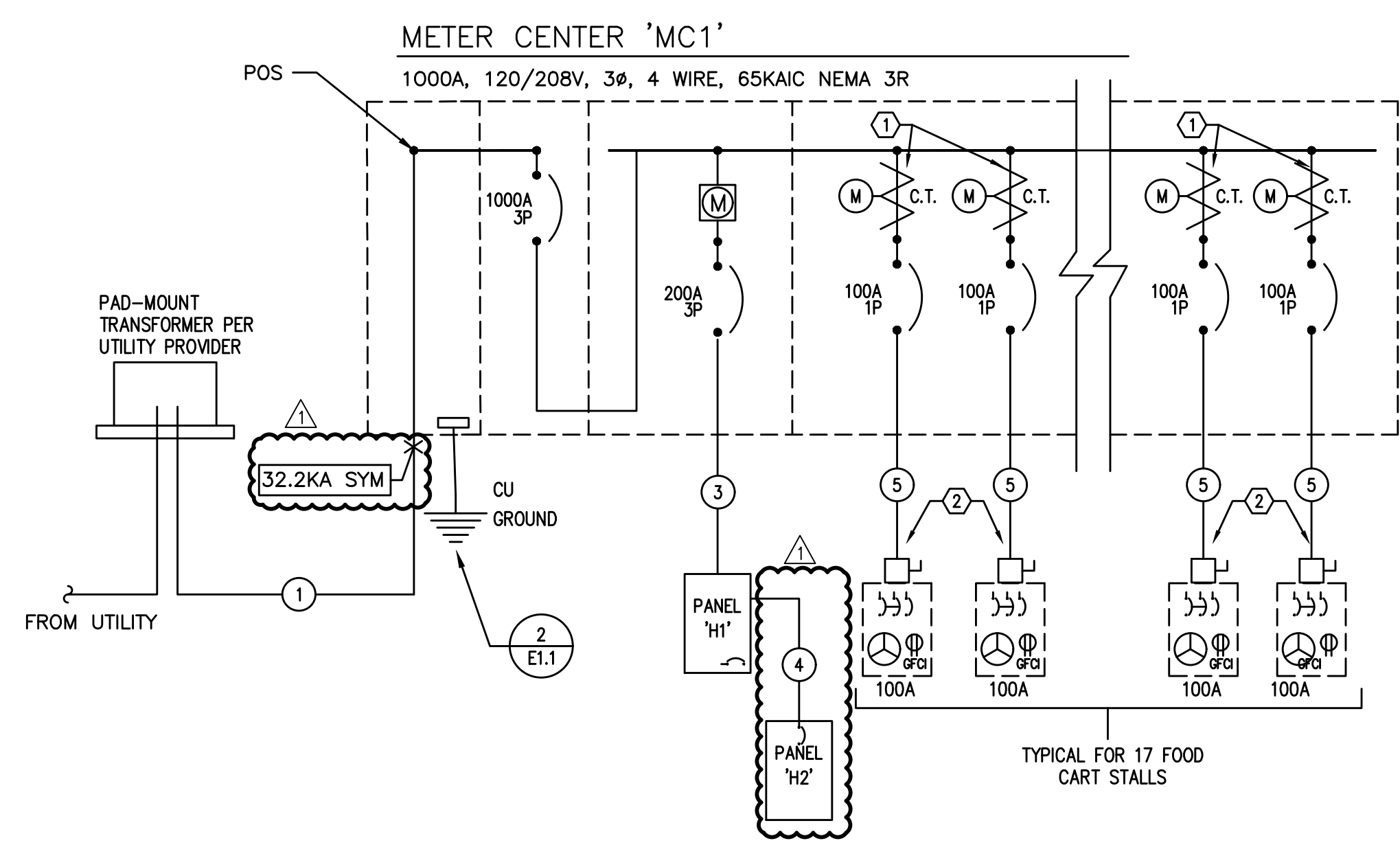
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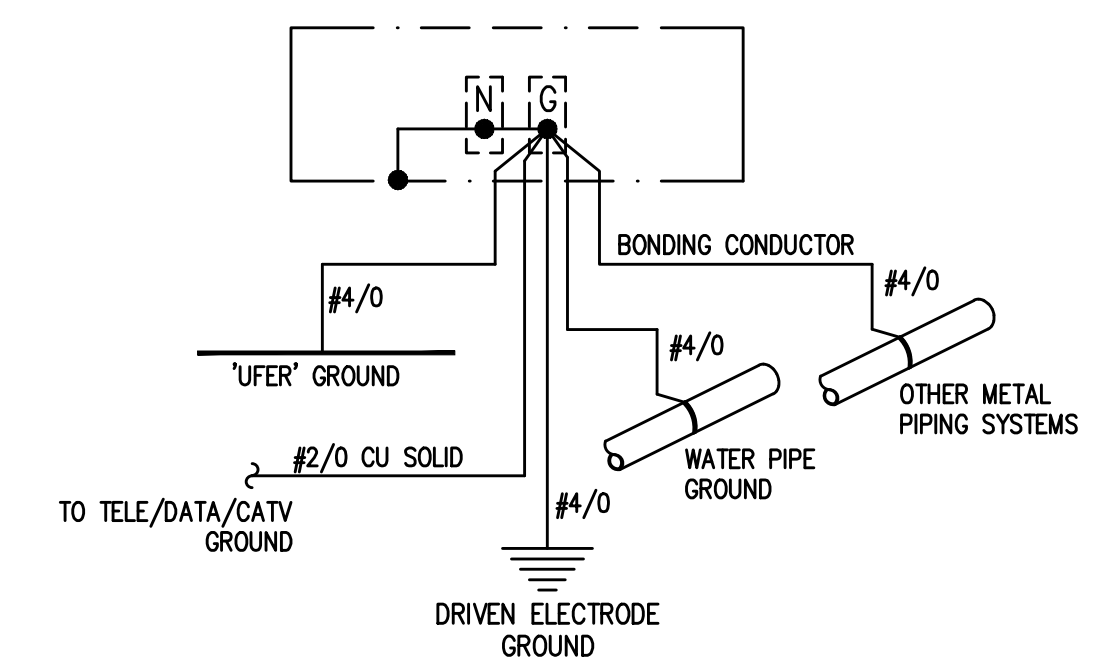
ELECTRICAL ONE-LINE DIAGRAM & SCHEDULES
REV. DATE DESCRIPT.
01.11.2022 REVIEW COMMENTS

E1.1

March 8, 2021
Drawn by: DMT



1 ELECTRICAL ONE-LINE DIAGRAM
E1.1 208Y/120V, 3Ø, 4W



2 TYPICAL GROUNDING DETAIL
E1.1 N.T.S.

FEEDER SCHEDULE (COPPER)				
NO.	AMPS	CONDUIT	CONDUCTOR	
1	1000A	(4) 4"	PER UTILITY CO.	& GND
2	1000A	(4) 4"	(4) #600KCMIL	& (1) #4/0 GND
3	200A	2"	(4) #3/0	& (1) #6 GND
4	100A	1 1/2"	(4) #1	& (1) #8 GND
5	100A	1 1/2"	(3) #1	& (1) #8 GND

* PARALLEL FEEDERS PER UTILITY PROVIDER'S DIRECTION.

ONE-LINE GENERAL NOTES:

- A. COORDINATE ALL WORK ASSOCIATED WITH ELECTRIC SERVICE WITH LOCAL UTILITY. PROVIDE ALL CONDUIT, GROUNDING, TRANSFORMER VAULT/PAD, ETC., IN ACCORDANCE WITH SERVING UTILITY REQUIREMENTS.
- B. COORDINATE METERING REQUIREMENTS WITH UTILITY.
- C. FOR LOAD CENTER FEEDER LENGTHS GREATER THAN 145'-0" FROM METER CENTER, INCREASE WIRE SIZE AS REQUIRED FOR VOLTAGE DROP.
- D. PER NEC 240.87, THE ELECTRICAL CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR ARC ENERGY REDUCTION DEVICE(S) FOR CIRCUIT BREAKERS 1200A OR GREATER. CONTRACTOR SHALL PROVIDE AN ENERGY-REDUCING ACTIVE FLASH MITIGATION SYSTEM OR OTHER METHOD APPROVED BY THE NEC.
- E. BRANCH CIRCUIT BREAKERS EXPOSED TO FAULT CURRENTS HIGHER THAN THEIR AIC RATING SHALL BE SERIES-RATED, UNLESS OTHERWISE NOTED. CIRCUIT BREAKER/CIRCUIT BREAKER AND FUSE/CIRCUIT BREAKER COMBINATIONS FOR SERIES CONNECTED INTERRUPTING RATINGS SHALL BE LISTED BY UL AS RECOGNIZED COMPONENT COMBINATIONS. ANY SERIES RATED COMBINATION USED SHALL BE MARKED ON THE END USE EQUIPMENT ALONG WITH THE STATEMENTS "CAUTION - SERIES RATED SYSTEM. _____A AVAILABLE. IDENTICAL REPLACEMENT COMPONENT REQUIRED".

FOODLANDIA ELECTRICAL SERVICE LOAD SUMMARY										
LOAD	LIGHTS	RECEPT	HEAT	KITCHEN	EQUIP	MOTORS	MISC	LARGEST MOTOR		
House panels H1/H2	3,500	9,360	1,000	5,000	2,000	16,476				
Food Cart Space #1									14,440	
Food Cart Space #2									14,440	
Food Cart Space #3									14,440	
Food Cart Space #4									14,440	
Food Cart Space #5									14,440	
Food Cart Space #6									14,440	
Food Cart Space #7									14,440	
Food Cart Space #8									14,440	
Food Cart Space #9									14,440	
Food Cart Space #10									14,440	
Food Cart Space #11									14,440	
Food Cart Space #12									14,440	
Food Cart Space #13									14,440	
Food Cart Space #14									14,440	
Food Cart Space #15									14,440	
Food Cart Space #16									14,440	
Food Cart Space #17									14,440	
SUBTOTAL	3,500	9,360	1,000	5,000	2,000	16,476	245,480		0	
X-FACTOR	1.25	1 + .5	1	0.85	1	1	1		0.25	
CODE LOAD:	4,375	9,360	1,000	3,250	2,000	16,476	245,480		0	
CONN LOAD:	283 KVA									
VOLTS:	208 3ph									
TOTAL CALC.:	282 KVA									
CALC AMPS:	783 AMPS									

10/15/2021

MECHANICAL EQUIPMENT SCHEDULE									
NO.	EQUIPMENT NAME	HP/KW	VOLTS	PH	AMPS	CONDUIT	WIRE	GND	CIRCUIT
EF-1	EXHAUST FAN NO. 1	1/6HP	120	1		1/2"	#12	#12	SEE E2.0
EF-2	EXHAUST FAN NO. 2	7.8W	120	1		1/2"	#12	#12	SEE E2.0
EH-1	ELECT. HEATER NO. 1	1000W	120	1		1/2"	#12	#12	SEE E2.0
EH-2	ELECT. HEATER NO. 2	500W	120	1		1/2"	#12	#12	SEE E2.0
IHP-1	SPLIT SYST NO. 1 A&B (INDOOR)		208	1		1/2"	#12	#12	INTERCONNECT W/ OHP
OHP-1	SPLIT SYST NO. 1 (OUTDOOR)		208	1	15.8	1/2"	#12	#12	H1-9,11
RH-1	RADIANT HEATER NO. 1 (GAS)	5W	120	1		1/2"	#12	#12	H2-5
RH-2	RADIANT HEATER NO. 2 (GAS)	5W	120	1		1/2"	#12	#12	H2-7
RP-1	RECIRC. PUMP NO. 1	1/2HP	120	1		1/2"	#12	#12	H1-19
WH-1	WATER HEATER NO. 1	4.5KW	208	1		1/2"	#12	#12	H1-15,17

GENERAL EQUIPMENT NOTES:

- A. CONTRACTOR/DESIGNER SHALL VERIFY ALL MECHANICAL EQUIPMENT CONNECTION LOAD REQUIREMENTS WITH THE MECHANICAL EQUIPMENT PROVIDER PRIOR TO ROUGH IN.
- B. MECHANICAL EQUIPMENT SIZES SHOWN IN THE MECHANICAL SCHEDULE ABOVE ARE FOR REFERENCE ONLY AND MAY NOT REFLECT THE ACTUAL EQUIPMENT TO BE INSTALLED.

KEYED ONE-LINE NOTES:

- 1. UTILITY METERS FOR EACH FOOD TRUCK SPACE.
- 2. RV TYPE POWER CONNECTION WITH UTILITY DISCONNECT TO BE INSTALLED AT EACH FOOD TRUCK SPACE. REFER TO THE ELECTRICAL SITE PLAN ON SHEET E0.1 FOR ADDITIONAL INFORMATION.

MFA PANEL SCHEDULE											
panel	H1 (PLAZA)	mounting SURFACE	location				connected load amps				
			UTILITY RM		bus & main						
voltage	120/208V	phase	200A		MCB		calculated load amps				
			a	b	c	va					
service	va	a/p	no.	a b c	a/p	va	service				
1	LIGHTS	614	20/1	1	*	2	20/1	900	RECEPTACLES	2	
1	LIGHTS - EXTERIOR	270	20/1	3	*	4	20/1	900	RECEPTACLES	2	
1	LIGHTS - INTERIOR + EF-2	260	20/1	5	*	6	20/1	900	RECEPTACLES	2	
1	LIGHTS - INTERIOR + EF-1	210	20/1	7	*	8	20/1	900	RECEPTACLES	2	
3	IHP-1/OHP-1	1643	20/2	9	*	10	20/1	900	RECEPTACLES	2	
3		1643	20/1	11	*	12	20/1	0	SPARE		
5	PHONE BOARD	500	20/1	13	*	14	30/3	2100	TRASH COMPACTOR	6	
3	WH-1	2250	30/2	15	*	16	*	2100		6	
3		2250	*	17	*	18	*	2100		6	
6	RP-1	1176	20/1	19	*	20	100/3	6564	PANEL H2	7	
	SPARE	0	20/1	21	*	22	*	5640		7	
	SPARE	0	20/1	23	*	24	*	4400		7	
	BLANK			25	*	26			BLANK		
	BLANK			27	*	28			BLANK		
	BLANK			29	*	30			BLANK		
	BLANK			31	*	32			BLANK		
	BLANK			33	*	34			BLANK		
	BLANK			35	*	36			BLANK		
	BLANK			37	*	38			BLANK		
	BLANK			39	*	40			BLANK		
	BLANK			41	*	42			BLANK		
Phase A		12964 VA		NOTES:				line-line voltage			
Phase B		13703 VA						largest motor (va)		208	
Phase C		11553 VA						calculated load (va)		0	
Total Connected		38220 VA									
load code:	ph. A	ph. B	ph. C	total	factor						
1. LIGHTS=	824	270	260	VA	1354	1.25			1693		
2. RECEPT=	1800	1800	900	VA	4500	1 + 0.5			4500		
3. HEATING=	0	3893	3893	VA	7786	1.00			7786		
4. KITCHEN=	0	0	0	VA	0	1.00			0		
5. EQUIP.=	500	0	0	VA	500	1.00			500		
6. MOTORS=	3276	2100	2100	VA	7476	*			7476		
7. MISC=	6564	6564	4400	VA	16604	1.00			16604		
(* 125% of the largest motor + 100% of the balance)		TOTAL =								38559	

MFA PANEL SCHEDULE											
panel	H2 (NEMA 3R)	mounting SURFACE	location				connected load amps				
			PLAZA STRUCTURE		bus & main						
voltage	120/208V (SCCR: 42KAIC)	phase	100A		MCB		calculated load amps				
			a	b	c	va					
service	va	a/p	no.	a b c	a/p	va	service				
1	LIGHTS	1264	20/1	1	*	2	20/1	900	RECEPTACLES	2	
1	LIGHTS	840	20/1	3	*	4	20/1	900	RECEPTACLES	2	
3	RH-1 (GAS)	500	20/1	5	*	6	20/1	900	RECEPTACLES	2	
3	RH-2 (GAS)	500	20/1	7	*	8	20/1	900	RECEPTACLES	2	
6	OUTDOOR FAN	1500	20/1	9	*	10	20/1	900	RECEPTACLES	2	
6	OUTDOOR FAN	1500	20/1	11	*	12	20/1	1500	OUTDOOR FAN	6	
6	OUTDOOR FAN	1500	20/1	13	*	14	20/1	1500	OUTDOOR FAN	6	
6	OUTDOOR FAN	1500	20/1	15	*	16	20/1	0	SPARE		
	BLANK			17	*	18			BLANK		
	BLANK			19	*	20			BLANK		
	BLANK			21	*	22			BLANK		
	BLANK			23	*	24			BLANK		
	BLANK			25	*	26			BLANK		
	BLANK			27	*	28			BLANK		
	BLANK			29	*	30			BLANK		
	BLANK			31	*	32			BLANK		
	BLANK			33	*	34			BLANK		
	BLANK			35	*	36			BLANK		
	BLANK			37	*	38			BLANK		
	BLANK			39	*	40			BLANK		
	BLANK			41	*	42			BLANK		
Phase A		6564 VA		NOTES:				line-line voltage			
Phase B		5640 VA						largest motor (va)		208	
Phase C		4400 VA						calculated load (va)		0	
Total Connected		19604 VA									
load code:	ph. A	ph. B	ph. C	total	factor						
1. LIGHTS=	1264	840	0	VA	2104	1.25			2630		
2. RECEPT=	1800	1800	900	VA	4500	1 + 0.5			4500		
3. HEATING=	500	0	500	VA	1000	1.00			1000		
4. KITCHEN=	0	0	0	VA	0	1.00			0		
5. EQUIP.=	0	0	0	VA	0	1.00			0		
6. MOTORS=	3000	3000	3000	VA	9000	*			9000		
7. MISC=	0	0	0	VA	0	1.00			0		
(* 125% of the largest motor + 100% of the balance)		TOTAL =								17130	



EXPRESSES 12-31-2021
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