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A NEW TRAVEL STOP  
 STORE NO. 735  
 CALHOUN, GA



Revisions:

No.	Date

Project No.: LVS - 18735  
 Date: 05-22-18  
 Sheet No.:

**BE-6.1**

OF:

**RISER DIAGRAM GENERAL NOTES:**

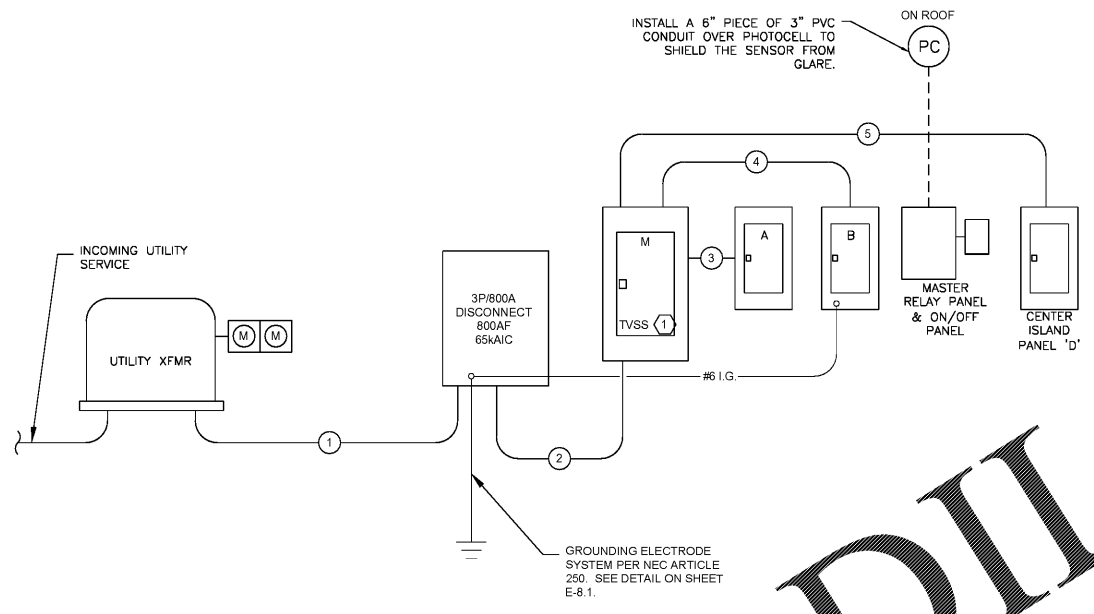
- EQUIPMENT BRACING RATINGS ARE BASED ON CALCULATIONS THAT ASSUME INFINITE UTILITY BUS AND A UTILITY TRANSFORMER RATED AT 750KVA. IF A LARGER TRANSFORMER IS SUPPLIED, ENGINEER MUST BE NOTIFIED PRIOR TO EQUIPMENT ORDERING FOR CONSULTATION.
- ALL SWITCHGEAR SHALL BE PROVIDED BY OWNER. ANY REQUIRED FUSES BY E.C. BYLOVE(S) WILL ONLY BE RELEASED AFTER THE E.C. HAS VERIFIED WITH THE UTILITY COMPANY THAT THE DESIGN PERTAINING TO THE ELECTRICAL SERVICE (METERING, CT ENCLOSURE(S), CONDUIT(S), TRANSFORMER PAD, ETC.) MEETS THEIR REQUIREMENTS. THE OWNER (LOVE'S) MUST RECEIVE THIS VERIFICATION TO RELEASE THE ORDER.

**RISER DIAGRAM KEYED NOTES:**

1. GROUNDING ELECTRODE SYSTEM PER NEC ARTICLE 250. SEE DETAIL ON SHEET E-8.1.

**FEEDER SCHEDULE**

- 2 SETS EACH OF 4 - 500KCMIL IN 2 - 3/2" CONDUITS.
- 2 SETS EACH OF 4 - 500KCMIL, #1/0 GROUND IN 2 - 3/2" CONDUITS.
- 4 #3/0, #6 GROUND IN 2 1/2" CONDUIT.
- 4 #4/0, #4 GROUND IN 2 1/2" CONDUIT.
- 4 - #1/0, #6 GROUND IN 2" CONDUIT.



**1 ELECTRICAL RISER DIAGRAM**

**DISTRIBUTION BOARD M**

120/208 VOLTS 3 φ 4 W 800 A AMP MLO 22000 A.I.C. RATING  
 800 A AMP BUS RECESSED MOUNTED

CKT NO.	TRIP/ POLES	DESCRIPTION	DEMAND LOAD VA	CIRCUIT NOTES
1	200/3	PANEL A	16884	
2	225/3	PANEL B	57915	
3	150/3	BK-RTU-1	36720	HACR BREAKER
4	150/3	PANEL D	42480	
5	150/3	BK-RTU-2	41760	HACR BREAKER
6	20/3	STEAMER OVEN	2100	WIRE THROUGH MASTER CONTROL PANEL
7	40/3	SOFTSERVE MACHINE	4240	
8	30/3	FROZEN COKE MACHINE	5100	
9	30/3	WALK-IN FREEZER COND.	3960	
10	20/2	EF-1	1872	WIRE THROUGH MASTER CONTROL PANEL
11	20/2	EF-2	1872	WIRE THROUGH MASTER CONTROL PANEL
12	20/2	WALK-IN COOLER COND.	1310	
13	90/3	BK-DWH-1	24000	
14	90/3	ELECTRIC BROILER	23500	WIRE THROUGH MASTER CONTROL PANEL

Load Category	Connected Load (KVA) x	Demand Factor =	Demand Load (KVA)	TOTAL CONN. LOAD:	TOTAL DEMAND LOAD:	TOTAL DEMAND LOAD:	SPARE CAPACITY:
Cooling and Heating	78.5	0.80	62.8	285.5 KVA	230.5 KVA	639.8 AMPS	160.2 AMPS
Equipment	27.0	1.00	27.0				
Heating	24.4	1.25	30.5				
Kitchen Equipment - Non-Dwelling Unit	135.4	0.65	88.0				
Lighting	1.7	1.25	2.1				
Lighting - Exterior	4.3	1.25	5.4				
Motors	2.4	1.00	2.4				
Motors (Largest)	1.9	1.25	2.3				
Receptacles (0 - 10 KVA)	10.0	1.00	10.0				
Receptacles (Over 10 KVA)	0.1	0.50	0.0				

**PANEL A**

CKT NO	TRIP AMPS	POLE	DESCRIPTION	LOAD (VA)	PHASE	LOAD (VA)	DESCRIPTION	POLE	TRIP AMPS	CKT NO
1	20	1	SPARE	0	A	243	LTG - DINING	1	20	2
3	20	1	SPARE	0	B	327	LTG - DINING	1	20	4
5	20	1	SPARE	0	C	126	LTG - KITCHEN	1	20	6
7	20	1	SPARE	0	A	200	OCU/CARD SWIPE	1	20	8
9	20	1	STREET SIGN	720	B	720	DIGITAL MENU BOARD	1	20	10
11	20	1	AIR CURTAIN	500	C	0	SPARE	1	20	12
13	20	1	D.T. MENU SIGN *1	1000	A	0	SPARE	1	20	14
15	20	1	SPARE	0	B	550	LTG - KITCHEN, OFFICE	1	20	16
17	20	1	SPARE	0	C	0	SPARE	1	20	18
19	20	1	BUILDING SIGN *1	720	A	0	SPARE	1	20	20
21	20	1	SPARE	0	B	720	RELAY PANEL	1	20	22
23	20	1	BUILDING SIGN *1	720	C	184	LTG - EXTERIOR *1	1	20	24
25	20	1	REC - DINING	1080	A	0	REC - TELE	1	20	26
27	20	1	LTG - EXTERIOR *1	246	B	1440	REC - DINING	1	20	28
29	20	1	WALK-IN HEAT TAPE	400	C	360	REC - KITCHEN	1	20	30
31	20	1	REC - ROOF, EXT. WP	540	A	0	SPARE	1	20	32
33	20	1	REC - SERVICE COUNTER	360	B	0	SPARE	1	20	34
35	20	1	D.T. CAMERA	360	C	900	REC - OFFICE	1	20	36
37	20	1	LTG - KITCHEN	411	A	720	REC - OFFICE	1	20	38
39	20	1	REC - CREW, STORAGE	720	B	0	SPARE	1	20	40
41	20	1	BUILDING SIGN *1	720	C	180	SAFE	1	20	42

PANEL NOTES:  
 1. CIRCUIT THROUGH MASTER RELAY PANEL

CONNECTION	LOAD (VA)	DEMAND FACTOR	DEMAND LOAD (KVA)	CONNECTED LOAD (KVA)	DEMAND LOAD (KVA)	SPARE CAPACITY
4914	9803	4450	15.2 KVA	42.1 AMPS	16.9 KVA	55.2 KVA
Equipment	0.9	1.00	0.9	16.9 KVA	46.9 AMPS	77 %
Heating	0.4	1.25	0.5	46.9 KVA	59.9 AMPS	
Lighting	1.7	1.25	2.1	46.9 KVA	59.9 AMPS	
Lighting - Exterior	4.3	1.25	5.4	46.9 KVA	59.9 AMPS	
Motors	0.0	1.00	0.0	46.9 KVA	59.9 AMPS	
Motors (Largest)	0.5	1.25	0.6	46.9 KVA	59.9 AMPS	
Receptacles (0 - 10 KVA)	7.4	1.00	7.4	46.9 KVA	59.9 AMPS	

**PANEL B**

CKT NO	TRIP AMPS	POLE	DESCRIPTION	LOAD (VA)	PHASE	LOAD (VA)	DESCRIPTION	POLE	TRIP AMPS	CKT NO
1	20	1	SELF SERVE DRINK DISP.	800	A	0	SPARE	1	20	2
3	20	1	REC - POS	1080	B	636	PRODUCT HOLDING FREEZER	1	20	4
5	20	1	REC - POS	1080	C	0	SPARE	1	20	6
7	20	1	D.T. DRINK DISP.	180	A	1200	MEAT FREEZER	1	20	8
9	20	1	REAR DOOR BUZZER	180	B	324	UC REFRIG. - KITCHEN	1	20	10
11	20	1	DOOR ALARM	20	C	900	HOLDING CABINET	1	20	12
13	20	1	SPARE	0	A	780	REACH-IN FREEZER	1	20	14
15	20	1	SERVICE CNTR, D.T. REC	360	B	324	UC REFRIG. - SERVICE	1	20	16
17,19	20	2	ICE MACHINE - DINING	1320	C	324	UC REFRIG. - KITCHEN	1	20	18
17,19	20	2	ICE MACHINE - DINING	1320	A	1320	ICE MACHINE	2	20	20,22
21,23	20	2	COFFEE/TEA BREWER	1352	B	1320	ICE MACHINE	2	20	20,22
21,23	20	2	COFFEE/TEA BREWER	1352	C	4680	ELECTRIC FRYER *1	3	50	24,26,28
25	20	1	SHORTENING STORAGE	500	A	4680	ELECTRIC FRYER *1	3	50	24,26,28
27	20	1	CARBONATOR	864	B	4680	ELECTRIC FRYER *1	3	50	24,26,28
29	20	1	CARBONATOR	864	C	3120	PRODUCT HOLDING UNIT/FRY DUMP	2	40	30,32
31	20	1	CARBONATOR	864	A	3120	PRODUCT HOLDING UNIT/FRY DUMP	2	40	30,32
33,35,37	50	3	ELECTRIC FRYER *1	4680	B	0	SPARE	1	20	34
33,35,37	50	3	ELECTRIC FRYER *1	4680	C	0	SPARE	1	20	36
33,35,37	50	3	ELECTRIC FRYER *1	4680	A	0	SPARE	1	20	38
39,41,43	50	3	ELECTRIC FRYER *1	4680	B	0	SPARE	1	20	40
39,41,43	50	3	ELECTRIC FRYER *1	4680	C	0	SPARE	1	20	42
39,41,43	50	3	ELECTRIC FRYER *1	4680	A	0	SPARE	1	90	44
45,47,49	50	3	ELECTRIC FRYER *1	4680	B	0	SPARE	1	90	46
45,47,49	50	3	ELECTRIC FRYER *1	4680	C	0	SPARE	1	90	48
45,47,49	50	3	ELECTRIC FRYER *1	4680	A	0	SPARE	1	90	50
51	20	1	SPARE	0	B	0	SPARE	1	20	52

PANEL NOTES:  
 1. CIRCUIT THROUGH MASTER CONTROL PANEL

CONNECTION	LOAD (VA)	DEMAND FACTOR	DEMAND LOAD (KVA)	CONNECTED LOAD (KVA)	DEMAND LOAD (KVA)	SPARE CAPACITY
28604	25160	27700	81.5 KVA	226.1 AMPS	57.9 KVA	160.8 AMPS
Equipment	11.5	1.00	11.5	57.9 KVA	73.1 KVA	23.1 KVA
Kitchen Equipment - Non-Dwelling Unit	67.3	0.65	43.7	160.8 AMPS	23.1 KVA	64.2 AMPS
Receptacles (0 - 10 KVA)	2.7	1.00	2.7	64.2 AMPS	29 %	

Order Plans @