

**GENERAL NOTES:**  
EXISTING EQUIPMENT AND CONDUCTORS ARE SHOWN GREY SCALE. NEW EQUIPMENT AND CONDUCTORS ARE SHOWN BOLD.

**ADD ALTERNATE BID**  
(DO NOT PROVIDE ADDED CAPACITY FOR FUTURE SERVICE LOADS)  
CONTRACTOR SHALL PROVIDE THE OWNER WITH AN ADD ALTERNATE BID TO PROVIDE THE FOLLOWING EQUIPMENT IN LIEU OF THAT INDICATED BY KEYED NOTE #2 ON THIS SINGLE LINE:  
3-225 AMP FUSES  
3-4/0 CU. WITH 184 CU. GND. IN 2" (TRANSFORMER PRIMARY)  
1-150 KVA TRANSFORMER  
2 SETS OF 4-3/2 CU. WITH 181/0 CU. GND IN 2" (TRANSFORMER SECONDARY)  
1-54 POLE, 400 AMP MAIN BREAKER PANELBOARD

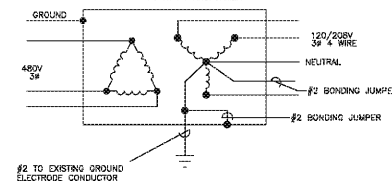
**ELECTRICAL SHEET LIST**

DRAWING NUMBER	DRAWING TITLE
E-101	SINGLE LINE DIAGRAM NOTES AND LOAD ANALYSIS
E-201	REFRIGERATION RENOVATION POWER PLAN
E-301	MEZZANINE POWER & LIGHTING PLAN

**LOAD ANALYSIS - FOR SERVICE #1 OF 1 480Y/277V, 3 PHASE, 4 WIRE**

LOAD	KVA	NEC DEMAND FACTOR	NEC KVA	5 AMP VAC	NOTES
EXISTING PEAK LOAD	800	1.25	1000	800	NEC Article 220, Part C Section 220-20
NEW PEAK LOAD	907	1.25	1134	907	
ALTERNATE LOAD	907	1.25	1134	907	
LIGHTING - Commercial	6.2	1.00	6	6	NEC Article 215, Section 215-3
PLUMBING EQUIPMENT	0.0	1.00	0	0	NEC Article 440, Part I Section 440-13 & 210-21
PROCESS REFRIGERATION	988.0	1.00	988	988	NEC Article 440, Part II Section 440-30
AUTOMATIC EQUIPMENT	0.0	0.65	0	0	NEC Article 220, Part B Section 220-21
WATER HEATERS	0.0	1.00	0	0	NEC Article 220, Part B Section 220-20
REFRIGERATORS - 180 BHP	0.0	1.00	0	0	NEC Article 220, Part B Section 220-19
REFRIGERATORS - 200 BHP	0.0	0.90	0	0	NEC Article 220, Part B Section 220-19
OTHER - Commercial	0.0	1.75	0	0	NEC Article 215, Section 215-3
OTHER - Non-Commercial	0.0	1.00	0	0	NEC Article 215, Section 215-3
<b>TOTAL LOAD</b>			<b>1006</b>	<b>1006</b>	
SERVICE EQUIP. RATINGS - AMPS					

PLEASE USE THESE SERVICE RATINGS: 1.5 KW/HP=92.25VA



**3 TRANSFORMER GROUNDING DETAIL**  
SCALE: NONE

**ELECTRICAL LEGEND**

- Ⓢ 20A DUPLEX RECEPTACLE (WP-WEATHERPROOF, GFI-GROUND FAULT INTERRUPTER)
- Ⓢ THREE-WAY 20A SWITCH
- Ⓢ EQUIPMENT CONNECTION
- Ⓢ JUNCTION BOX 4X2-1/8 UNLESS OTHERWISE NOTED
- FLOUORESCENT STRIP LIGHT FIXTURE 32W T8
- LED STRIP LIGHT FIXTURE HUBBELL MODEL LCLB-40-ML-E-U
- LED STRIP LIGHT FIXTURE HUBBELL MODEL LCLB-40-ML-E-U-ELLT4 FIXTURE PROVIDED WITH EMERGENCY BATTERY PACK
- Ⓢ EXIT SIGN (SINGLE FACE) DUAL-LITE MODEL EVE-U-R-W-E-1
- Ⓢ GROUND FAULT CIRCUIT INTERRUPTER
- FLUSH MOUNTED PANELBOARD
- SURFACE MOUNTED PANELBOARD
- Ⓢ PLAN NOTE SYMBOL
- CONDUIT AND WIRE CONCEALED IN WALLS OR CEILING
- CONDUIT AND WIRE CONCEALED BELOW FLOOR
- Ⓢ CIRCUIT BREAKER (POLES/FRAME/TRIP)
- Ⓢ TRANSFORMER
- Ⓢ GROUND CONNECTION
- Ⓢ FUSED SAFETY SWITCH (POLES/SIZE/FUSE)
- Ⓢ NON-FUSED SAFETY SWITCH (POLES/SIZE)
- Ⓢ WALL MOUNTED STROBE (XX-CANDELA)

**GENERAL PROJECT NOTES**

1. THE E.C. SHALL VERIFY FIELD CONDITIONS PRIOR TO SUBMITTING BIDDING DRAWINGS AND FIELD OBSERVATIONS. THE E.C. SHALL VERIFY EXISTING CONDITIONS, CIRCUIT NUMBERS AND DIMENSIONS PRIOR TO BEGINNING ANY WORK. BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT PRIOR TO COMMENCING WORK.
2. THE E.C. SHALL REMOVE ANY UNUSED CONDUIT AND WIRING, INCLUDING LOW VOLTAGE COMMUNICATION AND DIS WIRING RESULTING FROM THE RENOVATION OR ENCOUNTERED DURING THE RENOVATION OF THE STORE.
3. THE E.C. SHALL FULLY COORDINATE WORK WITH ALL OTHER APPLICABLE TRADES.
4. THE E.C. SHALL PRESERVE DEMOLISHED FIXTURES AND EQUIPMENT FOR REUSE WITH OTHER AREAS OF THE RENOVATION, DISPOSE OF UNUSED FIXTURES, EQUIPMENT AND TRASH AS DIRECTED BY THE OWNER.
5. THE E.C. SHALL MAINTAIN ALL EMERGENCY LIGHTING, FIRE ALARM SYSTEMS AND POWER TO ALLOW FOR UNINTERRUPTED TRADING DURING THE COURSE OF THE RENOVATION. PROTECT TEMPORARY POWER AND WIRING AS REQUIRED DURING THE RENOVATION.
6. COORDINATE CUTTING AND PATCHING OF WALLS WITH OTHER TRADES WITH THE GC AND OTHER APPLICABLE TRADES.
7. WHERE WALL FINISHES ARE BEING RENOVATED OR REPLACED, THE E.C. SHALL REMOVE COVERPLATES, PROVIDE BOX EXTENSION, REMOVE AND REPLACE ELECTRICAL DEVICES, DISCONNECTS AND ELECTRICAL EQUIPMENT AS REQUIRED. COORDINATE WITH ARCHITECTURAL PLANS.
8. AS PART OF THIS RENOVATION THE E.C. SHALL VERIFY THE CIRCUIT IDENTIFICATION OF ALL BRANCHES AND ALL AFFECTED PANELS, PANELBOARDS AND SWITCHGEAR AND PROVIDE NEW WRITTEN PANELBOARD SCHEDULES AND PANEL CIRCUIT IDENTIFICATIONS FOR MECHANICAL EQUIPMENT, E.C.'S, HP'S, ROTARY EQUIPMENT, WATER HEATERS, ETC. IN CONFORMANCE WITH THE LABELS ON THE EQUIPMENT.
9. THE E.C. SHALL EXISTING CONDUIT AND WIRING IN PLACE, INCLUDING WIRING FROM THE RENOVATION, DEMOLITION FOR NEW CIRCUITS FROM THE EXISTING IN GOOD CONDITION AND MEETS THE REQUIREMENTS FOR REUSE. REFER TO THE PANEL SCHEDULES FOR THE PROJECT PHASING.
10. THE E.C. SHALL CONSULT WITH THE ARCHITECT, MECHANICAL, PLUMBING, REFRIGERATION, EMS, AND ANY OTHER PLAN WITHIN THE PROJECT TO COORDINATE AND DETERMINE ANY AFFECTED DEVICES THAT MAY HAVE WORK. DO NOT BID FROM A PARTIAL SET. THE E.C. SHALL VERIFY THE WORK WILL BE ALLOWED FOR FAILURE TO AND COORDINATE WITH ALL PLANS.

**SEISMIC REQUIREMENTS**

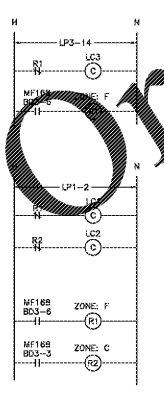
1. PROVIDE SEISMIC BRACING FOR ALL ELECTRICAL EQUIPMENT, TRANSFORMERS, LIGHTING FIXTURES AND CONDUIT SYSTEMS IN ACCORDANCE WITH IBC 2012 AND ASCE 7. SYSTEMS SHALL BE BRACED FOR SEISMIC CATEGORY D.

**DEMOLITION - DISPOSAL OF MATERIALS**

THE ELECTRICAL CONTRACTOR SHALL REMOVE ALL ELECTRICAL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS. THIS IS NOT LIMITED TO LAMPS, BALLASTS, FIXTURES, TRANSFORMERS, PANELS, BREAKERS, CONDUIT, WIRING, AND ALL OTHER ELECTRICAL EQUIPMENT. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A LETTER INDICATING ANY SUCH MATERIALS THAT ARE TO BE REMOVED IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

**KEYED NOTES**

1. 3-#1 CU. WITH 184 CU. GND IN 1-1/4"
2. 4-4/0 CU. WITH 182 CU. GND IN 2-1/2"
3. SEE NOTE REGARDING ADD ALTERNATE BID PRIOR TO ORDERING EQUIPMENT.
4. REPLACE EXISTING FUSES WITH NEW UL LISTED FUSE. SIZE AS INDICATED AND THE TYPE SHALL MATCH EXISTING.
5. NEW REFRIGERATION RACKS TO BE INSTALLED BY REFRIGERATION CONTRACTOR. ELECTRICAL CONTRACTOR SHALL DISCONNECT THE EXISTING RACKS TO ALLOW FOR REMOVAL, AND RECONNECT THE NEW RACKS. REFER TO THE REFRIGERATION DRAWING R26.2 FOR THE PROJECT PHASING.
6. 3/2 WITH 18 0 GND IN 1-1/4"
7. INSTALL NEW UL LISTED FUSES IN EXISTING FUSED SWITCH.
8. DISCONNECT EXISTING ROOF TOP CONDENSING UNITS TO ALLOW FOR REMOVAL BY THE REFRIGERATION CONTRACTOR. DEMOLISH ALL CONDENSING UNITS TO THE SOURCE AND MARK THE BREAKER AS SPARE(S).
9. LOCAL DISCONNECT/BREAKER PROVIDED WITH EQUIPMENT.



**2 LIGHTING CONTROL SCHEMATIC**  
SCALE: NONE

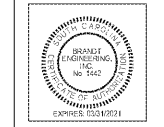
**LIGHTING CONTACTOR SCHEDULE**

ZONE	CONTACTOR	CONTACTOR CONTROL	CONTACTOR	LOAD
F	L1	EMER POINT	L1-1	200W/175
			L1-2	200W/175
C	L2	EMER POINT	L2-1	200W/175
			L2-2	200W/175



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**WHOLE FOODS MARKET**  
REFRIGERATION RACK UPGRADE  
PATRIOTS PLAZA SHOPPING CENTER  
923 HOUSTON NORTH CAROLINA 29464  
MT. PLEASANT, SOUTH CAROLINA 29464

DATE: JUNE 22, 2020  
REVISED: JUNE 22, 2020  
FOR CONSTRUCTION



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DRAWN BY: EW  
APPROVED BY: RK-C  
REVISION: 20240

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1 SINGLE LINE DIAGRAM NOTES  
2 LOAD ANALYSIS

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