

GENERAL ELECTRICAL NOTES:

- ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE MOST RECENT ADOPTED NFPA, NATIONAL ELECTRIC CODE, AND LOCAL CODES.
  - ALL MATERIALS, DEVICES, APPLIANCES, AND EQUIPMENT SHALL BE NEW AND LABEL LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY APPROVED BY THIS STATE.
  - WIRING SHALL BE COPPER SINGLE CONDUCTORS. MINIMUM WIRE SIZE IS #12 AWG. CONDUCTORS #8 AND LARGER SHALL BE TYPE THHN OR THWN STRANDED. #12 THRU #10 SHALL BE THWN SOLID. WIRE TO LIGHT FIXTURES SHALL BE AS REQUIRED BY U.L. LABEL. COLOR CODE CONDUCTORS.
  - CONDUITS SHALL BE STEEL INDOORS AND SCHEDULE 40 PVC OUTDOORS OR BELOW FLOOR SLAB. EMT SHALL BE USED FOR SIZES 1/2" THROUGH 3 1/2".
  - CONNECT ALL HVAC, PLUMBING AND OTHER CONTRACTOR OR OWNER FURNISHED EQUIPMENT. VERIFY ALL LOCATIONS OF HVAC, PLUMBING AND OTHER CONTRACTOR OR OWNER FURNISHED EQUIPMENT PRIOR TO ROUGH-IN. CHECK EQUIPMENT SHOP DRAWINGS AND COORDINATE WITH HVAC, PLUMBING, AND ALL OTHER EQUIPMENT CONTRACTORS FOR DISCONNECT SWITCH, CONDUIT, WIRING REQUIREMENTS, FUSE AND BREAKER SIZES, VOLTAGE REQUIREMENTS AND LOCATIONS. PROVIDE A TIMER FOR ALL PLUMBING RECIRCULATION PUMPS. MAKE ALL NECESSARY REVISIONS TO THESE ITEMS AT NO ADDITIONAL COST TO THE OWNER.
  - ELECTRICAL CONTRACTOR SHALL PROVIDE LOAD DATA SHEET, TO THE POWER COMPANY, AT THE BEGINNING OF THE PROJECT, AS PER LOAD BREAKDOWN SHOWN ON PLANS.
  - ELECTRICAL CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY THE OWNER. EXCEPTION: INCANDESCENT LIGHT BULBS SHALL BE GUARANTEED FOR 30 DAYS.
  - THE ELECTRICAL CONTRACTOR SHALL VISIT THE JOBSITE PRIOR TO SUBMISSION OF BID TO FAMILIARIZE HIMSELF WITH THE CONDITIONS UNDER WHICH THE WORK WILL BE PERFORMED AND THE EXTENT OF WORK REQUIRED. INCLUDE ALL COST IN BID PRICE.
  - SUPPORT ALL CONDUITS WITH STRAPS AND CLAMPS. RUN ALL CONDUIT PARALLEL OR PERPENDICULAR TO BUILDINGS.
  - ELECTRICAL DEMOLITION, RELOCATION OF EXISTING EQUIPMENT, CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THIS NEW WORK IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. THE EXTENT OF THE WORK REQUIRED SHALL BE DETERMINED DURING THE PREBID JOBSITE VISIT.
  - ALL STRAPPING OF CONDUIT SHALL COMPLY WITH ARTICLE 1621 OF THE INTERNATIONAL BUILDING CODE.
  - FOR ALL BREAKERS AND DEVICES:
    - A. SERIES RATING NOT ALLOWED.
    - B. THE MANUFACTURER OF THE MAIN SWITCHGEAR, AND/OR PANEL BOARDS SHALL PROVIDE A COORDINATION STUDY AND A SHORT CIRCUIT STUDY, AND ARC FLASH ANALYSIS TO DETERMINE ALL SETTINGS OF ELECTRONIC BREAKERS, GFI SETTINGS, AND ADJUSTABLE TRIP SETTINGS ON ALL NON-ELECTRONIC BREAKERS. THESE SETTINGS SHALL BE INCLUDED IN THE SHOP DRAWINGS FOR THE ENGINEERS REVIEW. SHOP DRAWINGS WILL BE REJECTED IF SETTINGS ARE NOT INCLUDED THE MANUFACTURER OF THE MAIN SWITCHGEAR, AND/OR PANELBOARDS SHALL BE RESPONSIBLE. FOR OBTAINING ALL INFORMATION FROM THE GENERATOR MANUFACTURER, HVAC MANUFACTURER, FIELD VERIFYING ANY EXISTING BREAKERS, OR OBTAINING ANY PIECE OF BREAKER DATA WHICH WILL BE NEEDED FOR THE COORDINATION STUDY.
    - C. THE ELECTRICAL CONTRACTOR TO PROVIDE ARC FLASH LABELS ON ALL PANELS AS REQUIRED PER N.E.C. LABELING SHALL INCLUDE:
      1. THE PANEL NAME
      2. THE CLASSIFICATION
      3. THE SHOCK HAZARD LEVEL WHEN COVER IS REMOVED AND LIMITED.
      4. THE PROTECTION REQUIRED.
      5. THE RESTRICTED AND PROHIBITED APPROACH BOUNDARIES.
    - D. THE MANUFACTURER OF THE MAIN SWITCHGEAR, AND/OR PANELBOARDS SHALL SELECT BREAKERS THAT ARE CAPABLE OF BEING ADJUSTED TO ALLOW FOR A MAXIMUM ARC FLASH RATING OF 3.
  - PROVIDE MIN. 24" HORIZONTAL SEPARATION BETWEEN BOXES INSTALLED IN OPPOSITE SIDES OF A SAME WALL AS INDICATED IN N.E.C. 300.21
  - ALL DISCONNECTS SHALL BE HEAVY DUTY RATED, WITH ARC GUARD, AND SHALL HAVE A MECHANICAL INTERLOCK TO PREVENT THE DOOR FROM BEING OPENED, WITHOUT DEFEATING THE INTERLOCK. THE MECHANICAL INTERLOCK SHALL ALSO PREVENT ACTIVATING THE SWITCH WHEN THE DOOR IS OPEN. THE MECHANICAL INTERLOCK SHALL BE DEFEATABLE BY A SPECIAL TOOL, AND SHALL BE U.L. LISTED AS PART OF THE DISCONNECT.
  - SERVICE GROUND IMPEDANCE SHALL BE MEASURED, AND SHALL BE 5 OHMS OR LESS. IF UPON MEASUREMENT, SERVICE GROUND READING EXCEEDS 5 OHMS, THEN ADDITIONAL GROUND RODS SHALL BE DRIVEN TO REDUCE READING TO 5 OHMS OR LESS. NOTIFY ENGINEER OF FINAL SERVICE GROUND MEASUREMENT.
  - BREAKERS THAT FEED CONTACTORS AND TIME CLOCKS TO BE CURRENT LIMITING TO ALLOW A MAXIMUM LET THRU OF 22K AIC WITH 80K AIC AVAILABLE.
  - ALL TERMINATIONS ON PANELS SHALL HAVE DUAL RATED 80°C/75°C LUGS.
  - PROVIDE INTERNAL OR EXTERNAL DISCONNECTING MEANS FOR EACH FLUORESCENT LUMINAIRE THAT UTILIZES DOUBLE-ENDED LAMPS AND CONTAIN BALLAST(S) THAT CAN BE SERVICED IN PLACE TO COMPLY WITH N.E.C. 410.130(G).
  - ELECTRICAL CONTRACTOR TO PROVIDE SEPARATE NEUTRAL FOR EACH BRANCH CIRCUIT TO MEET NEC 210.4. NO SHARED NEUTRALS OR MULTIPOLE BRANCH BREAKERS.
  - SERVICE CONDUCTORS SHALL CONFORM TO N.E.C. 230.6
  - ALL METAL HALIDE BALLAST SHALL BE PULSE START TYPE.
  - ALL TELECOMMUNICATIONS CONDUIT, SLEEVES, OR PATHWAYS ARE TO BE LONG SWEEPING TYPE. ALL CONDUITS (BENDING RADIUS) ARE TO BE INSTALLED PER MANUFACTURER'S AND TELECOM CONTRACTORS' RECOMMENDATIONS.
  - THE ELECTRICAL CONTRACTOR SHALL FIELD SURVEY THE INTERIORS OF ALL PANELS AND SWITCHGEAR IN WHICH BREAKERS ARE BEING INSTALLED, AND VERIFY THAT ALL INTERIOR BUSSING AND FRAMES ARE AVAILABLE PRIOR TO SUBMISSION OF BID. ANY ADDITIONAL BUSSING REQUIRED WITHIN PANELS AND SWITCHGEAR SHALL BE INCLUDED IN BID PRICE.
  - ALL EGRESS LIGHTING SHALL COMPLY WITH N.C. BUILDING CODE SECTION 1006.2. THE ELECTRICAL CONTRACTOR SHALL VERIFY THIS IN THE FIELD AND ADD ADDITIONAL EMERGENCY LIGHTS IF REQUIRED.
  - NO OPEN FLAME DEVICES SHALL BE UTILIZED TO BEND PVC CONDUIT. ALL HEATING DEVICES MUST BE ENCLOSED FLAME (HEAT GUN OR HEAT ROLLER, NO TORCHES). ALL HEATING METHODS MUST BE APPROVED BY ELECTRICAL ENGINEER PRIOR TO INSTALLATION. ANY CONDUIT THAT HAS BEEN HEATED TO WHERE PVC IS DAMAGED OR DISCOLORED SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST.
  - ELECTRICAL CONTRACTOR TO VERIFY REFRIGERATION CIRCUITS ARE NOT OVERLOADED, LARGEST SIZE OF BREAKERS TO BE 30A FOR A/S AND LIGHTS, 15A ON CASE FANS (TYP.).
  - ENERGY MANAGEMENT SYSTEM LIMITS COINCIDENTAL DEMAND PER MDP TO LESS THAN 800 AMPS, ALLOWING FOR MORE THAN 20% SPARE CAPACITY. NO FUTURE EXPANSIONS ARE PLANNED. PANEL SIZE SHALL NOT BE INCREASED WITHOUT PRIOR APPROVAL OF OWNER.
  - FOR PANEL REQUIREMENTS VERIFY WITH REFRIGERATION SUMMARY. REFRIGERATION SUMMARY SHALL GOVERN DESIGN.
  - ELECTRICAL CONTRACTOR TO REMOVE ANY MULTIPLE LANDED CONDUCTORS ON A SINGLE BREAKER AND CONNECT EACH CONDUCTOR TO A SINGLE BREAKER.
  - ALL CIRCUITS FEEDING CASES SHALL BE LABELED WITH CASE REFRIGERATION CIRCUIT NUMBER ALONG WITH CASE TYPE. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY ALL CIRCUITS.
  - ELECTRICAL CONTRACTOR VERIFY ALL CIRCUITS AND REMOVE ANY UNUSED CONDUCTORS IN ALL PANELS (FIELD VERIFY EACH BREAKER)
- ELECTRICAL CONTRACTOR SHALL ENSURE THE FOLLOWING ITEMS ARE COMPLETE PRIOR TO CRESCENT COMMISSIONING VISIT:
- REPLACE ALL MISSING, BROKEN, OR OTHERWISE DEFICIENT JUNCTION BOX/DEVICE COVERS FOR PROJECT CLOSEOUT. NON WEATHER PROOF DEVICE COVERS ARE TO BE STAINLESS STEEL. WEATHERPROOF DEVICE COVERS ARE TO BE INSTALLED IN PREP AREAS AND OUTSIDE, ALL WP COVERS ARE TO BE AL (ALUMINUM). SEE CRESCENT REPORT FOR FURTHER INFO.
  - PROPERLY SEAL ALL CONDUITS ENTERING WALK-IN COOLERS AND FREEZERS TO PREVENT MOISTURE. SEE CRESCENT REPORT FOR FURTHER INFO.
  - PROVIDE AND INSTALL FOUR (4) 1" EMPTY CONDUITS WITH PULL STRINGS FROM NEW PANEL "OW" TO ABOVE ACCESSABLE CEILING SPACE FOR FUTURE USE.
  - REPLACE ALL MISSING LABELS AND TAGS ON PANELS, SAFETY DISCONNECTS, ELECTRICAL DISTRIBUTION EQUIPMENT MAIN BREAKERS. ALL CIRCUITS SHOULD BE PROPERLY LABELED WITH PHENOLIC TAGS, BLACK ON WHITE, 1.5" TALL. COORDINATE PHENOLIC TAG LABELS WITH ARCH FLASH REPORT PROVIDED BY CRESCENT.
  - VACUUM ALL BRANCH CIRCUIT PANELBOARDS AND ALL ELECTRICAL ENCLOSURE COVERS SHALL BE INSTALLED AND ADEQUATELY SECURE TO OBTAIN PROJECT CLOSEOUT. SEE CRESCENT REPORT FOR FURTHER INFO.
  - PLACE REFRIGERATION CONTROL CABLE IN CONDUIT.
  - TIE UP ALL LOW VOLTAGE AND MC CABLE. NO NEW MC CABLE IS TO BE INSTALLED AS A HOME RUN OR BE VERTICALLY EXPOSED ON A WALL/ CONSTRUCTED ASSEMBLY.
  - VERIFY ALL EMERGENCY LIGHTING BE ON A SCHEDULED CIRCUIT AND ON THE LINE SIDE OF ANY ENERGY MANAGEMENT CONTROL.
  - PROVIDE AND INSTALL CORRECTED TYPE-WRITTEN DATED PANEL SCHEDULES IN ELECTRICAL PANELS (NEW AND EXISTING) AT THE END OF THE PROJECT. HAND WRITTEN SCHEDULES SHALL BE MAINTAINED THROUGHOUT THE PROJECT.
  - ALL NEW DISCONNECTS SHALL BE GENERAL ELECTRIC, GENERAL DUTY AT MINIMUM ER RATED AS REQUIRED, AND NON FUSED UNLESS SPECIFIED OTHERWISE BY EQUIPMENT NAMEPLATE.
  - TRACE ALL CIRCUITS AND PROPERLY IDENTIFY THOSE CIRCUITS ON THE PANEL SCHEDULES. WHERE THE FOOD LION CONSTRUCTION SUPERVISOR HAS DIRECTED THE ELECTRICAL CONTRACTOR TO LEAVE A SPARE BREAKER WIRED TO A CERTAIN END LOCATION, THE BREAKER SHALL BE LABELED "SPARE TO JUNCTION BOX AT END LOCATION." ALL SPARE UNUSED BREAKERS SHALL HAVE UNUSED WIRE REMOVED AND BREAKER LABELED AS SPARE.
  - CORRECT TERMINATIONS IN SWEAT MISER PANEL. SEE CRESCENT REPORT FOR FURTHER INFO.

EMS LOAD 1  
(WORK LIGHTS)

LOCATION
WOMEN'S REST ROOM
MENS REST ROOM
LOUNGE
STORAGE / ICE CREAM FREEZER
1/2 SALES AREA LIGHTING
DEPT. MNGR'S OFFICE/ PC TRAINING ROOM
JANITOR'S AREA
MEAT/DELI/BAKERY FREEZER
MEAT PREP
MEAT COOLER
PRODUCE PREP
PRODUCE COOLER
STORE MANAGERS OFFICE
CASH OFFICE/WORK ROOM
CORRIDOR
CHECKOUTS
CUSTOMER SERVICE
DSD STATION
RECEIVING AREA / GROCERY STAGING
DATA CLOSET
VESTIBULE LIGHTS
PRODUCE AIR CURTAINS
PRODUCE ROLL UP DOORS
JANITOR'S AREA EXHAUST FAN
PRODUCE TRACK LIGHTING
WINE TRACK LIGHTING

EMS LOAD 2  
(HALF SALES)

LOCATION
1/2 SALES AREA LIGHTING

EMS LOAD 3  
(SECURITY)

LOCATION
DOCK CANOPY LIGHTS
FRONT CANOPY LIGHTS
PHARMACY DRIVE THRU CANOPY LIGHTS

EMS LOAD 4  
(DELI/BAKERY)

LOCATION
DELI/BAKERY LIGHTING
CHICKEN FRYER
ROTISSERIE
OLIVE CART

EMS LOAD 5  
(STOREFRONT)

LOCATION
EXTERIOR STOREFRONT SIGN LIGHTING
ROAD SIGN LIGHTING

1  
E6.03 EMS LOADS – TABLE A  
SCALE : NONE

EMS LOAD 1  
(WORK LIGHTS)

LOCATION
WOMEN'S REST ROOM
MENS REST ROOM
LOUNGE
STORAGE / ICE CREAM FREEZER
1/2 SALES AREA LIGHTING
DEPT. MNGR'S OFFICE/ PC TRAINING ROOM
JANITOR'S AREA
MEAT/DELI/BAKERY FREEZER
MEAT PREP
MEAT COOLER
PRODUCE PREP
PRODUCE COOLER
STORE MANAGERS OFFICE
CASH OFFICE/WORK ROOM
CORRIDOR
CHECKOUTS
CUSTOMER SERVICE
DSD STATION
RECEIVING AREA / GROCERY STAGING
DATA CLOSET
VESTIBULE LIGHTS
PRODUCE AIR CURTAINS
PRODUCE ROLL UP DOORS
JANITOR'S AREA EXHAUST FAN
PRODUCE TRACK LIGHTING
WINE TRACK LIGHTING

EMS LOAD 2  
(HALF SALES)

LOCATION
1/2 SALES AREA LIGHTING

EMS LOAD 3  
(SECURITY)

LOCATION
DOCK CANOPY LIGHTS
FRONT CANOPY LIGHTS
PHARMACY DRIVE THRU CANOPY LIGHTS

EMS LOAD 4  
(DELI/BAKERY)

LOCATION
DELI/BAKERY LIGHTING
CHICKEN FRYER
ROTISSERIE
OLIVE CART

EMS LOAD 5  
(STOREFRONT)

LOCATION
EXTERIOR STOREFRONT SIGN LIGHTING
ROAD SIGN LIGHTING

EMS LOAD 6  
(MED TEMP CASES)

LOCATION
BEER SIGNAGE RECEPTACLES
DAILY CASE LIGHTS
PRODUCE CASE LIGHTS
MEAT CASE LIGHTS
BAKERY CASE LIGHTS
LUNCH MEAT CASE LIGHTS

2  
E6.03 EMS LOADS – TABLE B  
SCALE : NONE

EMS LOAD 2  
(HALF SALES)

LOCATION
1/2 SALES AREA LIGHTING

EMS LOAD 3  
(SECURITY)

LOCATION
DOCK CANOPY LIGHTS
FRONT CANOPY LIGHTS
PHARMACY DRIVE THRU CANOPY LIGHTS

EMS LOAD 4  
(DELI/BAKERY)

LOCATION
DELI/BAKERY LIGHTING
CHICKEN FRYER
ROTISSERIE
OLIVE CART

EMS LOAD 5  
(STOREFRONT)

LOCATION
EXTERIOR STOREFRONT SIGN LIGHTING
ROAD SIGN LIGHTING

EMS LOAD 6  
(ALL CASE LIGHTS)

LOCATION
BEER SIGNAGE RECEPTACLES
DAILY CASE LIGHTS
PRODUCE CASE LIGHTS
MEAT CASE LIGHTS
BAKERY CASE LIGHTS
FROZEN FOOD CASE LIGHTS
LUNCH MEAT CASE LIGHTS
ICE CREAM CASE LIGHTS

EMS LOAD 7  
(WATER HEATERS)

LOCATION
WATER HEATERS (MECHANICAL ROOM)

EMS LOAD 8  
(PARKING LOT LIGHTS)

LOCATION
PARKING LOT LIGHTING DIRECTLY AFFECTING STORE OPERATIONS

EMS LOAD 7  
(LOW TEMP CASES)

LOCATION
FROZEN FOOD LIGHTS
FROZEN MEAT LIGHTS
ICE CREAM LIGHTS
FROZEN BAKERY LIGHTS

EMS LOAD 8  
(PARKING LOT LIGHTS)

LOCATION
PARKING LOT LIGHTING DIRECTLY AFFECTING STORE OPERATIONS

EMS LOAD 9  
(SPARE)

LOCATION

EMS LOAD 10  
(EXHAUST FAN)

LOCATION
MECHANICAL ROOM

EMS LOAD 11  
(SUPPLY FAN)

LOCATION
MECHANICAL ROOM

EMS LOAD 12  
(WATER HEATERS)

LOCATION
WATER HEATERS (MECHANICAL ROOM)

EMS LOAD 13  
(ACCENT LIGHTING)

LOCATION
RIGHT AND LEFT WALL CASE UP-LIGHTING

EMS LOAD 14  
(DECOR/SIGNAGE LIGHTING)

LOCATION
CASE UP-LIGHTING
DEPARTMENT SIGN LIGHTING

EMS LOAD 15  
(PARKING LOT SECURITY LIGHTS)

LOCATION
STORE PARKING LOT SECURITY LIGHTING

EMS LOAD 16  
(BEER CASE LIGHTING)

LOCATION
BEER CASE LIGHTING

EMS REMODEL NOTES  
FOR ELECTRICAL AND MECHANICAL CONTRACTORS

THESE NOTES ARE PROVIDED TO CLARIFY THE PORTION OF THIS PROJECT. IF THERE IS A CONFLICT BETWEEN THESE NOTES AND THE PRINT THESE NOTES TAKE PRECEDENCE OVER THE PRINT. IF THERE ARE ANY QUESTIONS REGARDING THE INTENT OR SCOPE OF THESE NOTES PLEASE CONTACT SESCO BILL MCCOLLOUGH (336-580-0152 OR [BILL@TRS-SESCO.COM](mailto:BILL@TRS-SESCO.COM)).

ELECTRICAL:

- EACH REFRIGERATION CIRCUIT WILL HAVE ITS OWN ELECTRICAL CIRCUIT. AS AN EXAMPLE, IF ONE REFRIGERATION CIRCUIT IS REMOVED AND IS REPLACED BY TWO REFRIGERATION CIRCUITS AN ADDITIONAL ELECTRICAL CIRCUIT WILL BE REQUIRED. THIS CIRCUIT WILL HAVE LIGHTS AND FANS SEPARATED AND ANTI-SWEAT RAN THROUGH THE ANTI-SWEAT CONTROLLER FOR ALL NEW AND RELOCATED GLASS DOOR FROZEN FOOD CASES.
- ALL REFRIGERATED CASE LIGHTS WILL BE ON LOAD SIX. EXISTING CASES DO NOT APPLY, ALTHOUGH IF AN EXISTING ELECTRICAL CIRCUIT IS RE-USED FOR NEW CASES AND OR RELOCATED CASES THE LIGHTING CIRCUIT WILL NEED TO BE ON LOAD SIX.
- IF A CASE(S) REQUIRES AN ANTI-SWEAT CIRCUIT AND THE EXISTING WIRING DOES NOT HAVE THIS AVAILABLE THEN AN ADDITIONAL CIRCUIT FOR ANTI-SWEAT WILL BE PROVIDED AND RAN THROUGH THE ANTI-SWEAT PANEL. EC NEEDS TO LABEL ALL NEW CIRCUITS WITH BOTH BREAKER AND REFRIGERATION CIRCUIT IDENTIFICATION.
- IF THE FROZEN FOOD LINE UP HAS CHANGED LOCATIONS THE ANTI-SWEAT HUMIDITY SENSOR LOCATION MUST BE RELOCATED. CONTACT THE ENERGY TEAM MEMBER OR YOUR EMS REPRESENTATIVE FOR LOCATION.
- ALL NEW AND EXISTING WALK IN COOLER AND FREEZER LIGHTS ARE TO LOAD 1. INSURE THAT FREEZER LIGHTS AND HEATER ARE NOT ON THE SAME CIRCUIT. DELI WALK-INS CAN BE LOAD 1 OR 4. EC TO FURNISH CONTACTOR(S) IF NEEDED.
- IF THE VESTIBULE HAS BEEN RE-WORKED IN SUCH A MANNER THAT THE INSIDE LIGHTS HAVE NOW BECOME THE OUTSIDE CANOPY LIGHTS, THESE LIGHTS WILL NEED TO BE RELOCATED TO LOAD THREE. IF OUTSIDE LIGHTS HAVE NOW BECOME INSIDE LIGHTS THESE WILL NEED TO BE ON LOAD 1.
- IF A SEAFOOD STEAMER HOOD IS INSTALLED AN INTERLOCK CONTROL BOX WILL SERVE AS A WAY OF RUNNING THE HOOD DURING THE STEAMING PROCESS. POWER FOR THE STEAMER AND CONTROL POWER FOR THE HOOD EXHAUST FAN IS ROUTED THROUGH THIS CONTROL BOX. THE CONTROL POWER FOR THE EXHAUST WILL BE ROUTED THROUGH A LOAD 1 CONTACTOR PRIOR TO FEEDING THIS CONTROL BOX. SEE THE ATTACHMENT FOR DETAIL. THE CONTROL BOX WILL BE SUPPLIED BY SESCO TO THE MECHANICAL CONTRACTOR AND IS TO BE WIRED BY THE ELECTRICAL CONTRACTOR.
- ALL NEW GRID/TRACK LIGHTING WILL BE REQUIRED TO BE TWO CIRCUITED WITH BOTH CIRCUITS ON EMS LOAD 1. ADDITION CONTACTOR(S) MAY BE REQUIRED AND SUPPLIED BY EC.
- ALL ACCENT LIGHTING (WALL, WASH, DECOR OR UP LIGHTS) WILL BE ON LOAD 14. IN AN OLDER STORE THERE MAY NOT BE A LOAD 14 IN WHICH CASE THE EC WILL WIRE TO LOAD 6. COORDINATE WITH SESCO.
- EC RESPONSIBLE FOR PROVIDING COMMUNICATION CABLE FOR ALL REFRIGERATION CONTROLLERS AND THE HVAC CONTROLLER. THIS WILL BE IN THE FORM OF CATS CABLES FOR EACH CONTROLLER WITH STORES THAT HAVE E-2 CONTROLLERS OR 4 WIRE SHIELDED CABLE WITH STORES THAT HAVE EARLIER VERSIONS OF CPC CONTROLLERS. COORDINATE WITH THE SESCO REPRESENTATIVE FOR THIS STORE. YOU CAN CONTACT SESCO AT 336-996-2220.
- IF DE-STRAT FANS ARE USED THEY ARE TO BE WIRED THROUGH LOAD 1 CONTACTORS. EC TO FURNISH CONTACTOR(S) IF NEEDED.
- ANY ADDITIONAL BACK ROOM LIGHTING (OFFICES, RESTROOMS, MACHINE ROOMS ETC.) SHALL BE BROKEN THROUGH LOAD 1 CONTACTORS. EC TO FURNISH CONTACTOR(S) IF NEEDED.
- ALL NEW AND/OR REWORKED EBU LIGHTING AND NIGHT LIGHTING SHALL BE ON A SWITCH FREE CIRCUIT. IF THE EXISTING WIRING IS ON EMS IT WILL NEED TO BE MOVED TO EITHER THE EBU CIRCUIT OR NIGHT LIGHT CIRCUIT.
- FOR ANY STORE RECEIVING A FIRE ALARM UPGRADE. EC SHALL PROVIDE CONDUIT AND TWO 14 AWG WIRE FOR FIRE ALARM CONTACT INTERFACE RELAY WITH ECP. THE TWO 14 AWG SHALL BE ABLE TO REACH ENTIRE ECP AND LABELED "FIRE ALARM". CONTACT SHOULD BE WITHIN FOUR FEET OF ECP WHENEVER POSSIBLE. TERMINATION BY OTHERS.
- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT REQUIRED BY MECHANICAL CONTRACTOR. BX OR FREE AIR CABLE IS NOT ALLOWED. SENSOR AND CONTROL WIRING CANNOT BE IN SAME CONDUIT. NEEDS TO BE COMPLETED IN A TIMELY MANNER. COORDINATE REQUIREMENTS WITH MC.
- ELECTRICAL CONTRACTOR NEEDS TO INSTALL AND WIRE CT'S FOR THE COOKING EQUIPMENT UNDER THE KITCHEN HOOD. THE CONTROL WIRING FOR THE CT'S WILL BE TAKEN FROM THE HOOD CONTROL PANEL TERMINALS L4 AND L4A (2 #14) AND WIRED IN PARALLEL SO THAT THE HOOD FANS RUN WITH THE EQUIPMENT. CONTACT SESCO PARTS FOR THE NUMBER OF CT'S REQUIRED KEEPING IN MIND THAT ONE CT CAN BE USED ON MORE THAN ONE PIECE OF EQUIPMENT DEPENDING ON WIRE SIZE. CONTACT SESCO COMMISSIONING WITH ANY QUESTIONS.
- IF EC IS REUSING EXISTING CIRCUITS FOR EITHER CONTROL OR POWER FOR THE HOOD FAN(S) HE SHALL ENSURE THAT NEITHER IS CONNECTED TO LOAD 4.

MECHANICAL:

- ALL CONTROL WIRING PROVIDED BY THE MECHANICAL CONTRACTOR IS TO BE 14 GAUGE STRANDED. BX CABLE IS NOT ALLOWED. ALL SHIELDED CABLE IS TO BE 22 GAUGE OR LARGER. ALL WIRING SHALL BE IN CONDUIT PROVIDED BY ELECTRICIAN. SENSOR CABLE CANNOT BE IN THE SAME CONDUIT WITH CONTROLS. TERMINATIONS FOR THE MECHANICAL CONTROLS BY MECHANICAL CONTRACTOR.
- IF PRINTS CALL FOR RE-WIRING OF EXISTING FANS IN MOTOR ROOM THE MC IS RESPONSIBLE FOR PROVIDING MOTOR STARTER FOR THREE PHASE FANS OR CONTACTORS FOR SINGLE PHASE FANS IF NO STARTER OR CONTACTOR IS EXISTING. NEW MACHINE ROOM FANS THAT REQUIRE A STARTER OR CONTACTOR SHALL BE PROVIDED BY MC IF NOT ALREADY PROVIDED BY SESCO.
- FOR STORES THAT ARE RECEIVING FIRE ALARM UPGRADE THE MC WILL BE RESPONSIBLE FOR REMOVING ALL OLD SMOKE DETECTORS. ONCE SYSTEM HAS BEEN SWITCHED OVER TO FIRE ALARM CONTACT, SESCO WILL NOTIFY GC IN WRITING. MC WILL THEN REMOVE OLD DETECTORS. WIRING FROM DETECTORS IS TO BE REMOVED TO ASSOCIATED JUNCTION BOXES AND CAPPED OFF WITH WIRE NUTS. WIRING FROM ECP TERMINALS IS TO BE REMOVED TO TROUGH AND CAPPED OFF WITH WIRE NUTS.
- IF THE PRODUCE PREP THERMOSTAT IS BEING REPLACED WITH A TEMPERATURE SENSOR THAT IS WIRED BACK TO THE ECP, THE MC WILL DAISSY CHAIN THE SENSOR CABLE FROM THE ECP OVER TO THE APPROPRIATE REFRIGERATION RACK. TERMINATION BY OTHERS.

FIRE ALARM NOTE:

- FOR STORES THAT ARE RECEIVING FIRE ALARM UPGRADE, THE FIRE ALARM CONTRACTOR IS TO INSTALL, POWER, AND MONITOR ALL NEW SMOKE DETECTORS FOR ALL AHU'S AND RTU'S. FA CONTRACTOR IS TO PROVIDE A RELAY ENCLOSED WITHIN FOUR FEET OF THE ECP AND CONTROLLED BY FIRE PANEL. CONTACT WILL BE WIRED BY SESCO. EXISTING (OLD) SMOKE DETECTORS WILL REMAIN IN PLACE UNTIL SESCO SWITCHES SYSTEM OVER TO FIRE ALARM PANEL. REFER TO M1.01.

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EMS NOTE FOR ENERGY LOAD

PATTERN IN TABLE A IS TYPICAL OF MOST FOOD LION STORES BUILT PRIOR TO 2005. TABLE B IS REPRESENTATIVE OF FOOD LION STORES BUILT AFTER 2005.

ELECTRICAL CONTRACTOR TO FIELD VERIFY EXACT EMS LOAD CONFIGURATION WITH SESCO REPRESENTATIVE PRIOR TO CONNECTION OF ELECTRICAL LOAD TO EMS PANEL.

PANEL:PL										VOLTAGE: 208Y/120 VOLT, 3PH, 4W, 60 Hz										100% NEUTRAL BUS																			
LOCATION: WORK ROOM										MAINS: 225 AMP <input checked="" type="checkbox"/> MLO										<input type="checkbox"/> LOCK ON CIRCUIT																			
FED FROM: MDP-2										AMP MAIN BREAKER										<input checked="" type="checkbox"/> SHUNT TRIP																			
MOUNTING: <input type="checkbox"/> UNITIZED SWITCHGEAR <input checked="" type="checkbox"/> FLUSH <input type="checkbox"/> SURFACE										MINIMUM AIC RATING: 65 KA																													
DEVICE										BRANCH CIRCUIT										BRANCH CIRCUIT										DEVICE									
EMS LOAD	COND SIZE	WIRE SIZE	AMP TRIP	POLES	DESIGNATION	VOLT-AMPS	NO.	PHASE LOAD (VOLT-AMPS)			NO.	VOLT-AMPS	DESIGNATION	POLES	AMP TRIP	WIRE SIZE	COND SIZE	EMS LOAD																					
								A	B	C																													
-	10	30	2		SITE LIGHTING	2000	1	4000			2	2000							SITE LIGHTING	2	30	10	-																
-	10	30	2		SITE LIGHTING	2000	3		4000		4	2000							SITE LIGHTING	2	30	10	-																
-	10	30	2		SITE LIGHTING	2000	5			4000	6	2000							SITE LIGHTING	2	30	10	-																
-	10	30	2		SITE LIGHTING	2000	7	4000			8	2000							SITE LIGHTING	2	30	10	-																
-	10	30	2		SITE LIGHTING	2000	9		4000		10	2000							SITE LIGHTING	2	30	10	-																
-	10	30	2		SITE LIGHTING	2000	11			2600	12	2000							SITE LIGHTING	2	30	10	-																
-	10	20	1		PYLON LIGHTS	1200	13	3200			14	600							LIGHTING CONTROLLER	1	20	12	-																
-	10	20	1		PYLON LIGHTS	1200	15		1200		16	0							BLANK	1	-	-	-																
-	10	20	1		PYLON LIGHTS	1200	17			1200	18	0							BLANK	1	-	-	-																
-	10	20	1		IRIGATION CONTROLS	600	19	600			20	0							BLANK	1	-	-	-																
-	-	-	-	1	BLANK	0	21			0	22	0							BLANK	1	-	-	-																
-	-	-	-	1	BLANK	0	23			0	24	0							BLANK	1	-	-	-																
-	-	-	-	1	BLANK	0	25	0			26	0							BLANK	1	-	-	-																
-	-	-	-	1	BLANK	0	27			0	28	0							BLANK	1	-	-	-																
-	-	-	-	1	BLANK	0	29			0	30	0							BLANK	1	-	-	-																
TOTALS PER PHASE							11800	9200	7800	TOTAL CONNECTED LOAD (VA)							28,800																						
NOTES: EXISTING PANEL EXISTING INFORMATION FROM FOOD LBN ASSULYS, ELECTRICAL CONTRACTOR TO FIELD VERIFY PANEL CIRCUITS																									BOLD INDICATES NEW WORK														
ELECTRICAL CONTRACTOR TO REMOVE DOUBLE TERMINATION ON BREAKER																																							
SEE SHEET E6.04 ELECTRICAL DEFICIENCIES TO BE REPAIRED LIST FOR FURTHER BREAKER INFORMATION D-28,31																																							