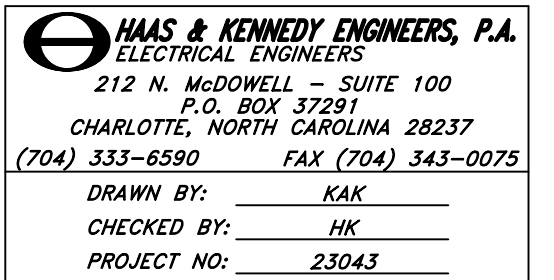


ARCHITECT/ENGINEER SEAL



CONSULTANT



FOOD LION

2110 EXECUTIVE DRIVE
SALISBURY, NC 28145
PH: 704-633-8250 FX: 704-636-4940

REVISION / ISSUE HISTORY

| REV | DATE | REVISION / ISSUE NAME |
|-----|------------|-----------------------|
| | 04/14/2023 | PERMIT |
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| PROJECT NO 2220380 | DRAWN BY WSM |
| PERMIT SUB DATE 04/14/2023 | CHECKED BY HCK |

PROJECT
FOOD LION STORE #2594

3260 RAY ROAD
SPRING LAKE, NC 28390
2594FLMK23

CLIENT
FOOD LION

2110 EXECUTIVE DRIVE
SALISBURY, NC 28145
PH: 704-633-8250 F: 704-636-5940

SHEET TITLE
EMS NOTES



Supermarket Environment Services Co.
P.O. Box 667
Kernersville, N.C. 27285-0667



**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 billy@trs-sesco.com).

ELECTRICAL Contractor:

- 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 provide 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 with lighting installed above (e.g. 2x4 fixtures, high bays) which is on load 1 will be required to be two circuited with both circuits on EMS load 9. Grid/track lighting that does not have load 1 lighting installed above will be required to be two circuited with both circuits on EMS load 1. Additional contactor(s) may be required and supplied by EC.
- All accent lighting (wall wash, perimeter, 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.

Ph. (336) 996-2220 Fax (336) 996-3360



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P.O. Box 667
Kernersville, N.C. 27285-0667



- EC responsible for providing communication cable for all refrigeration controllers and the HVAC controller. This will be in the form of CAT5 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 H1 and IO1 (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.
- In all high spend stores the EC is to physically remove the Lite Miser and have it ready to be shipped back on the salvage truck.
- All new 2X4 lay in fixtures need to be added to the load 1 energy management control. EC to furnish contactor if needed.

**Electrical Contractor
Food Lion 2800 series stores only (BILo takeovers)**

- EC to install and wire all existing to remain kitchen hoods with a new control panel furnished by SESCO.
- The panel will need to be mounted in a location convenient enough for fan and light operations.
- EC to demo all old controls and on/off switches.
- EC to confirm all cooking equipment is powered by shunt trip breaker.
- EC to provide wires and terminate from fire system microswitch to hood control panel and terminate on CI/ARI 120 volt control circuit.
- EC to install current transducers in the electrical panel for all cooking equipment under the hood and wire control back to the hood control panel. CT's furnished by SESCO for automated fan control.
- EC to be present to perform test on system to confirm all wiring is compliant with NFPA 96.
- GC/EC may need to confirm motor horsepower and/or data plate information.

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- MECHANICAL Contractor:**
- 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 daisy 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. 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.

Note – The energy load pattern in table A below is typical of most Food Lion stores built prior to 2005. Table B is representative of Food Lion stores built since 2005.

| Table A | | Table B | |
|--|---------------------------|---|-----------------------------------|
| Load 1 – Work Lights | Load 5 – Store Front Sign | Load 1 – Work Lights | Load 5 – Sign Lights |
| Load 2 – ½ Sales Lights | Load 6 – Case Lights | Load 2 – ½ Sales Lights | Load 6 – Medium Temp. Case Lights |
| Load 3 – Security- Outside Canopy Lights | Load 7 – Water Heaters | Load 3 – Security – Outside Canopy Lights | Load 7 – Low Temp. Case Lights |
| Load 4 – Deli Lights & Hood Exhaust | Load 8 – Parking Lot | Load 4 – Deli Lights | Load 8 – Parking Lot |
| | | Load 9 – Produce & Wine Track Lights | Load 13 – RT & LT Up Lights |
| | | Load 10 – Machine Room Exhaust Fan | Load 14 – Rear Up Lights |
| | | Load 11 – Machine Room Supply Fan | Load 15 – Parking Lot Security |
| | | Load 12 – Water Heaters | Load 16 – Beer Case Lights |

Revision 12 November 5, 2021

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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 [BILLY@TRS-SESCO.COM](mailto:billy@trs-sesco.com)).