

GENERAL SPECIFICATIONS

INTRODUCTION
THE CONTRACTOR FOR INSTALLATION OF THE ELECTRICAL SYSTEM WILL BE ACCOMPLISHED IN THE FIELD AT THE DIVISION LEVEL. THESE SPECIFICATIONS ARE TO AID IN PREPARATION OF DIVISION LEVEL STORE PLANS AND CONTRACT DOCUMENTS...

WIRING METHODS

PART 1 - GENERAL
1.1 SUMMARY
A. SECTION INCLUDES:
1. WIRE AND CABLE.
2. CONDUIT.
3. OUTLET BOXES AND CONDUIT FITTINGS.
4. WIRING DEVICES.
1.2 REFERENCES
A. THE PUBLICATIONS LISTED BELOW FORM A PART OF THIS SPECIFICATION TO THE EXTENT REFERENCED. PUBLICATIONS ARE REFERENCED WITHIN THE TEXT BY THE BASIC DESIGNATION ONLY...

PANELBOARDS

PART 1 - GENERAL
1.1 SUMMARY
A. SECTION INCLUDES:
1. LIGHTING/APPLIANCE PANELBOARDS.
2. RELATED REQUIREMENTS:
1. SECTION 16050 - BASIC ELECTRICAL MATERIALS AND METHODS, GROUNDING.
1.2 REFERENCES
A. NATIONAL ELECTRICAL CODE (NFPA-70), AND INTERIM AMENDMENTS IN EFFECT.
1.3 QUALITY ASSURANCE
A. COMPLY WITH NATIONAL ELECTRICAL CODE.
B. COMPLY WITH LOCAL AND STATE UTILITY REGULATIONS AND LAWS.
1.4 SYSTEM DESCRIPTION
A. ELECTRICAL SYSTEM VOLTAGES: THE FOLLOWING VOLTAGES SHALL APPLY UNLESS OTHERWISE NOTED.
1. RECEPTACLE AND SMALL POWER SYSTEMS: 208Y/120 VOLT, 3 PHASE, 4 WIRE WYE, 60 HZ, SLD GROUNDING NEUTRAL.

GENERAL NOTES

1. PROVIDE SEALS AT RACEWAY PENETRATIONS AS FOLLOWS:
A. FIRE RATED WALLS: SEAL WITH SEALANT HAVING A T-RATING TO MATCH OR EXCEED WALL RATING.
B. EXTERIOR: REFER TO ARCHITECTURAL DOCUMENTS FOR SEALING REQUIREMENTS AT ALL EXTERIOR MOUNTED DEVICES, FIXTURES, ENCLOSURES, AND RACEWAY PENETRATIONS.
2. PROVIDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR (SIZE PER NEC) IN PVC TYPE CONDUIT, POWER CIRCUITS, ISOLATED GROUND CIRCUITS, OR AS SHOWN ON PLANS. CONDUIT SHALL BE SIZED PER NEC BASED ON THWN 600 VOLT COPPER SINGLE CONDUCTORS, PLUS THE EQUIPMENT GROUNDING CONDUCTOR.

SYMBOL LEGEND

Table with columns for SYMBOL and DESCRIPTION. Includes symbols for EXIT FIXTURE, EMERGENCY FIXTURE, SWITCH, RECEPTACLE, CONDUIT, and various electrical components.

HARRISON FRENCH & ASSOCIATES, LTD.
1705 S. Walton Blvd., Suite 3
Bentonville, Arkansas 72712
1 479.273.7780
F 888.520.9685
www.hfa-arc.com

STIPULATION FOR REUSE
THE DRAWINGS ARE PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. ANY REUSE OR REPRODUCTION OF THESE DRAWINGS FOR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF HARRISON FRENCH & ASSOCIATES, LTD. IS STRICTLY PROHIBITED.

200 S KINGS HWY
FORT PIERCE, FL 34945
SPEEDCO REBRANDING & LIGHT MECHANICAL ADDITION
PROJECT NUMBER: 05-18-04047

Love's Travel Stop & Country Stores

Professional Engineer Seal: NATHAN CONNORS, LICENSE NO. 15168, STATE OF ARKANSAS.

Nathan Connors, P.E.
License #15168
Harrison French & Associates, LTD.
COA #26421

SAFETY SWITCHES

PART 1 - GENERAL
1.1 SUMMARY
A. SECTION INCLUDES:
1. SAFETY DISCONNECT SWITCHES.
1.2 REFERENCES
A. THE PUBLICATIONS LISTED BELOW FORM A PART OF THIS SPECIFICATION TO THE EXTENT REFERENCED WITHIN THE TEXT BY THE BASIC DESIGNATION ONLY.
B. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
1. NEMA 250 - ENCLOSURES FOR ELECTRICAL EQUIPMENT (1000 VOLTS MAXIMUM).
PART 2 - PRODUCTS
2.1 SAFETY SWITCHES
A. SWITCH INTERIOR:
1. DEAD-FRONT CONSTRUCTION WITH HINGED ARC SUPPRESSOR AND SWITCH BLADES WHICH ARE FULLY VISIBLE IN THE OFF POSITION AND WITH DOOR OPEN.
B. SWITCH MECHANISM:
1. QUICK-MAKE AND QUICK-BREAK OPERATING HANDLE AND MECHANISM WITH A DUAL POSITION OR TRIP TO PREVENT UNAUTHORIZED OPENING OF THE SWITCH WATER PIPE USING SUITABLE GROUND TESTING EQUIPMENT.
2. PROVIDE ELECTRICAL INTERLOCK SWITCH TO DE-ENERGIZE CONTROL WIRING AS REQUIRED.
3. LINE AND LOAD TERMINALS OF THE DEVICE RATED 100 AMPERES OR LESS SHALL BE RATED FOR 75 DEGREES C.
4. PROVIDE OPERATING HANDLE WITH PROVISIONS FOR INSTALLATION OF A PADLOCK IN "OFF" OR "ON" POSITIONS.
C. RATINGS:
1. SWITCHES HORSEPOWER RATED FOR 600 VOLTS, 60 HZ, HEAVY-DUTY TYPE.
2. WHERE SWITCHES ARE INDICATED TO BE FUSED, FURNISH WITH PROVISIONS FOR FUSES.
D. ENCLOSURES:
1. NEMA 1 CODE GAUGE SHEET STEEL WITH HINGED COVER, EXCEPT WHERE EXPOSED TO WEATHER.
2. IF EXPOSED TO WEATHER, PROVIDE NEMA 3R ENCLOSURE.
PART 3 - EXECUTION
3.1 INSTALLATION
A. INSTALL MOTOR AND CIRCUIT DISCONNECT IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS. APPLICABLE CODES SHALL TAKE PRECEDENCE OVER DRAWING DETAILS.
B. PROVIDE PROPERLY SIZED GROUNDING LUG AND TERMINATIONS FOR ALL SAFETY SWITCHES.

ALL ELECTRICAL SERVICE AND DISTRIBUTION EQUIPMENT, PANELBOARDS, DISCONNECT SWITCHES AND LIGHTING FIXTURES TO BE FURNISHED BY THE ACCOUNT VENDOR, GRAYBAR.

CONTACT:
JOE STOLL
8170 LACKLAND ROAD
ST. LOUIS, MO 63114
PHONE: 314-573-2208
FAX: 314-573-0903
EMAIL: LOVES@GRAYBAR.COM

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY OF PERFORMING HIS WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED BECAUSE OF CONDITIONS THAT OCCUR DUE TO FAILURE TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.

MATERIALS AND METHODS

PART 2 - EXECUTION
2.1 INSTALLATION
A. INSTALL SPECIFIED MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS INDICATED ON DRAWINGS.
B. CUTTING AND PATCHING: WHERE CUTTING IS REQUIRED THROUGH WALLS, FLOORS, OR CEILINGS, MAKE OPENINGS NO LARGER THAN REQUIRED AND REPAIR AFFECTED SURFACES TO MATCH ADJACENT SURFACES.
C. ELECTRICAL EQUIPMENT SUPPORTS: SUPPORT ELECTRICAL EQUIPMENT WITH HANGERS AND SUPPORTS SPECIFIED ABOVE OR IN ANOTHER APPROVED MANNER WHERE DETAILS ARE NOT INDICATED.
D. SLEEVES: INSTALL WHERE CONDUITS PASS THROUGH CONCRETE FLOORS, CAULK SLEEVES THROUGH OUTSIDE WALLS ABOVE GRADE WITH SEALANT.
E. FASTENING AND ANCHORING: FASTEN CONDUIT STRAPS, DISCONNECT SWITCHES, PANELBOARDS, AND OTHER EQUIPMENT SECURED TO WALLS AND SLABS WITH CADMIUM PLATED SCREWS OR BOLTS AND LEAD CINCH ANCHORS OR EXPANSION BOLTS AND INSTALL IN HOLES DRILLED WITH PROPER SIZE MASONRY DRILL. PROPERLY SIZE ANCHORS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR LOAD TO BE SUPPORTED.
F. TORQUE ALL CONDUCTOR CONNECTION TO MANUFACTURER'S RECOMMENDED VALUES. INSPECT PANELBOARDS FOR PHYSICAL DAMAGE, PROPER ALIGNMENT, ANCHORAGE, AND GROUNDING. CHECK PROPER INSTALLATION AND TIGHTNESS OF CONNECTIONS FOR CIRCUIT BREAKERS, FUSIBLE SWITCHES, AND FUSES.
2.2 GROUNDING
A. GENERAL: GROUND ALL METALLIC CONDUITS, SUPPORTS, CABINETS, EQUIPMENT, SYSTEM NEUTRALS, METAL BUILDING STRUCTURES, AND OTHER ITEMS REQUIRED TO BE GROUNDING IN ACCORDANCE WITH THE NEC AND OTHER APPLICABLE CODES AND AS INDICATED ON DRAWINGS.
B. EQUIPMENT GROUNDING:
1. MAKE CONDUITS ELECTRICALLY CONTINUOUS USING PROPER FITTINGS, CONNECTIONS, GROUNDING BUSHINGS, ETC.
2. WHERE GALVANIZED RIGID METAL CONDUIT (GRM) PENETRATES THE GRADE OUTDOORS OR PENETRATES THE SLAB, INSTALL INSULATING GROUNDING BUSHINGS.
3. INSTALL AN INSULATED EQUIPMENT GROUND WIRE AS SHOWN ON DRAWINGS.
C. METAL UNDERGROUND COLD WATER PIPE: CONNECT TO ELECTRICAL SYSTEM IF AVAILABLE AND PERMITTED BY LOCAL CODES. INSTALL JUMPERS AROUND WATER METERS, VALVES, OR OTHER DEVICES WHICH MIGHT CAUSE AN INTERRUPTION OF CONTINUITY DURING SERVICE.
D. CONCRETE ENCASED ELECTRODES: WHERE INSTALLED ON THE DRAWINGS, FURNISH AND INSTALL ELECTRODES, JUMPERS, AND APPROVED FITTINGS IN ACCORDANCE WITH THE DRAWINGS.
E. GROUND RODS: IF GROUND RODS ARE REQUIRED, INSTALL TWO 5/8 INCH MINIMUM DIAMETER COPPERWELD RODS DRIVEN VERTICALLY NOT LESS THAN 12 FEET APART AND EACH WITH 8 FEET OF LENGTH IN CONTACT WITH THE SOIL.

PART 1 - GENERAL
1.1 SUMMARY
A. SECTION INCLUDES:
1. ELECTRICAL IDENTIFICATION
2. HANGERS AND SUPPORTS
3. CONDUIT SLEEVES
4. ELECTRICAL CONTRACTOR PRODUCTS
1.2 ELECTRICAL IDENTIFICATION
A. NAMEPLATES: PROVIDE LAMINATED PLASTIC NAMEPLATES WITH 3/4 INCH MINIMUM CONTRASTING COLOR ENGRAVED LETTERS.
1.3 HANGERS AND SUPPORTS
A. CONDUIT AND EQUIPMENT SUPPORTS: HANGERS SHALL BE SERIES P3000 OR P3300 CHANNELS BY UNISTRUT DEPENDING ON LOAD AND SPAN INVOLVED. USE PIPE HANGERS BY MINERALLAC, OR CADDY CLIPS BY ERICO ONLY WHERE IMPRACTICAL TO INSTALL UNISTRUT HANGERS.
B. ATTACH HANGERS AND SUPPORTS TO STRUCTURE OVERHEAD BY METHODS APPROVED AT JOB SITE. DO NOT USE FASTENERS WHICH PENETRATE THE ROOF DECK.
1.4 CONDUIT SLEEVES
A. SLEEVES: GALVANIZED, BLACK STEEL OR SCHEDULE 40 PVC PIPE.
1.5 GROUNDINGS AND BONDING
A. INSULATED GROUNDING BUSHING: STEEL WITH FEED-THRU LUGS.
B. INSULATED EQUIPMENT GROUND WIRE: COPPER.

Order Plans

ISSUE BLOCK table with columns for STORE NO., DOCUMENT DATE, CHECKED BY, DRAWN BY, and PROTO CYCLE.

ELECTRICAL SPECIFICATIONS & GENERAL NOTES

SHEET: YE1