

DIVISION 16
ELECTRICAL

SECTION 16400
ELECTRICAL

PART 1 – GENERAL

1.1 DESCRIPTION

- A. Work included: Provide complete electrical power and lighting service facilities in accordance with all applicable codes, ordinances and the National Electrical Code, with all supplements, where shown on the Drawings, as specified herein, and as needed for a complete and proper installation including, but not necessarily limited to.
1. Coordination of electrical power service installation with the Local Utility Company.
 2. Conduit and wiring from ground pedestal at property line to building.
 3. A complete system of electrical wiring for lighting and receptacle circuits.
 4. A complete system of electric wiring for power and control of equipment as shown on the Drawings.
 5. Inspection, test and guarantees.
 6. ABC Liquors, Inc. shall be responsible for the installation of the fire, security alarm systems. ABC Liquors, Inc. shall be responsible for the installation of the sound system. Drawings are included with the bid set so that the Contractor can coordinate Owners Work.
 7. Owner shall supply panels, gear, disconnects and fixtures. Contractor shall coordinate deliveries of Owners Materials with Graybar, Contact Brian MacLane at 407-841-4810.

1.2 QUALITY ASSURANCE

- A. Without additional cost to the Owner, provide such other labor and materials as required to complete the work of this Section in accordance with the requirements of Governmental agencies having jurisdiction, regardless of whether such materials and associated labor are called for elsewhere in these Contract Documents.

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1.3 WARRANTY

- A. Contractor to provide standard one (1) year labor warranty on all installation.

PART 2 – GENERAL

2.1 GENERAL

- A. Temporary Power:

1. Provide temporary power as described in Section 01500 of these Specifications.
- B. A typewritten directory, listing branch circuit numbers and designation of circuit controlled, shall be placed on inside cover of panels by the Electrical Contractor. All disconnect switches, motor controllers, relays, starters and panels shall be clearly labeled as to their function with a hard plastic label with engraved lettering, min. ½” height.
- C. Furnish and install all electrical power and control connections to the equipment indicated on the Drawings unless otherwise noted.
- D. Provide only materials that are new of the type and quality specified. Where Underwriter’s Laboratories, Inc. have established standards for such materials, provide only materials bearing the UL label.
- E. All conductor insulation, unless noted otherwise, shall be THHN or THWN as specified. The conductors shall be of copper having a minimum conductivity of 98%. Splices or joints in conductors shall be mechanically and electrically sound and shall be made in outlet boxes only, except ballast connections similar to type Y, R, G or B “Scotchlok” connectors only. At each outlet box, a loop of wire not less than 8” long shall be left for connection to devices. Conductors in fluorescent fixture wiring channels shall be type THHN.

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- F. All outlet boxes are to be one piece pressed steel, installed where required. Outlet boxes in walls or ceiling shall be flush with finish, recessed within ¼” of the finished surface.
- G. Install, completely wired and lamped, all fixtures where designated on the Drawings and as listed on the fixture schedule. All ballast shall be provided with internal automatic resetting thermal protector. The mounting and support of fixtures is the responsibility of this Contractor. Correlate support and mounting method with all contractors involved. Emergency and exit lighting shall meet local codes.
- H. All switches shall be 120/277 volt, 20 amp, Hubbell 1222-1 or equal P & S, G.E., or Sierra, complying with test of Federal Spec WS 896a, NEMA-WD-1 and UL tests UL20. Color: white in all areas / dark brown against wood or paneling. All plates shall be labeled on the inside as to which circuit connection is made.
- I. Description of equipment, position of the equipment, and electric outlets to serve same as indicated on the Drawings are approximate only and must be correlated at the site with all parties involved. The electrical contractor must make reasonable adjustments of his conduit wiring and outlets to accommodate exact locations and dimensions of equipment.
- J. Furnish and install all electrical power and control connections to the equipment indicated on the Drawings unless otherwise noted. The electrical contractor will provide all conduit and wiring from the panel to these circuits. The control equipment, relays, controls and devices necessary for the operation of the equipment will be furnished by the respective subcontractors.
- K. An equipment grounding conductor shall be provided in all electrical raceways systems to ensure electrical continuity and shall have the capacity to conduct safely any fault current likely to be imposed. (Ref. 250.95 NEC).
- L. Conduit system to be a combination of Electrical Metal Tubing, Flexible Metallic Tubing or PVC embedded in two (2) inch concrete.

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M. Electrical Contractor to coordinate with Phone Company for new phone Lines. Electrical Contractor to run three pairs from Power Company source to phone board in the electrical room. Phone board 7 fire rated plywood will be supplied and installed by Owner, Contractor shall supply and install associated power. Owner shall be responsible for installing conduit from phone board to POS Counter as shown on plan.

END OF SECTION
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