

ELECTRICAL NOTES:

GENERAL

- A. The Contractor shall obtain and pay for all "Electrical" applications, permits, fees, tests, or inspections.
- B. The electrical installation shall conform with the currently adopted issue of the National Electrical Code (NEC), National Fire Prevention Association (NFPA), local and state building codes, and all other codes and regulations of the authorities having jurisdiction.
- C. The Contractor shall visit the site of the project in order to discover any difficulties or conditions that may affect the execution of the work and include all cost in his bid.
- D. Provide all labor, material, equipment, and tools required for the complete and operational installation of the electrical systems indicated on the Drawings and required to comply with the local authorities having jurisdiction at the site of the project.
- E. The Contractor shall provide temporary lighting and power per OSHA regulations.
- F. The Contractor shall make final connections and terminations to all equipment, including but not limited to lighting, HVAC, Plumbing, Fire Protection, modular furniture, and 911 Equipment; he shall provide all devices necessary for final connections and proper electrical control. The Contractor shall install all loose disconnects, starters, control panels, control devices, etc... provided with equipment being supplied by others.
- G. The electrical installation shall comply with the latest edition of the National Electrical Code (NEC) and all state and local codes, and shall conform to the requirements of the local utility company providing service. The Contractor will obtain and pay for all permits and/or inspections as required by any governing body. The Contractor shall determine exact locations in the field and ensure proper clearances are followed.

PRODUCTS

- A. All materials and equipment shall be new and U.L. Labeled for the specific application indicated on the drawings, and shall comply with all requirements of the authorities having jurisdiction.
- B. All materials and equipment shall be meet the appropriate ANSI, or NEMA, standard for the specific application indicated on the drawings.
- C. The Contractor shall provide materials manufactured by those listed herein, or may substitute a product of equal or greater quality of that specified, where "Or Approved Equal" appears adjacent to the catalog number of the specified manufacturer. The Architect designated representative shall make the final determination of the substituted product's equality.

COORDINATION

- A. The Electrical Drawings are schematic, and are not intended to show the exact location of conduit, outlets, switches, lights, etc...; the Contractor shall coordinate the electrical installation with Civil, Structural, Architectural, Mechanical, Plumbing, and Fire Protection Drawings and trades and with actual construction and equipment.
- B. The Contractor shall coordinate underground conduit runs, and other features of the electrical installation with utility lines and right-of-ways. Coordinate electrical installation so that required clearances are maintained.
- C. The Contractor shall coordinate all conduit runs, and other features of the electrical installation with Civil, Architectural, Structural, Plumbing, and Fire Protection drawings and trades and avoid all interferences.
- D. The Contractor shall coordinate electrical power service installation requirements with the electrical power service provider. Coordinate, provide, and install secondary conduit/conductors, terminations, metering, etc... and all electrical items required by the electrical power service provider. All costs associated with bringing power to the site shall be included in Contractor's bid price.
- E. The Contractor shall coordinate telephone service demarcation point and service requirements with telephone service provider. Coordinate, provide, and install service point equipment, service conduits, conduit routing, etc... and all other items required by the telephone service provider.
- F. The Contractor shall review HVAC, Plumbing, Fire Protection, modular furniture, and owner furnished equipment's electrical characteristics and connection location and coordinate the electrical installation to that equipment. It shall be the responsibility of the electrical contractor to provide conduit, conductors, plugs, receptacles, devices, and connections to match the electrical requirements of that equipment.
- G. Notify the Engineer immediately of any deviations from the construction documents which may be necessary in order to meet field conditions, or to coordinate electrical requirements with equipment being provided by other divisions. Obtain approval from the Engineer prior to implementing any deviations.

INSTALLATION

- A. All conductors shall be copper with THWN-2 insulation, #12 AWG minimum for power and lighting, #14 AWG minimum for signal wire. Conductors #10 and smaller to be solid, all others to be stranded.
- B. The outer jacket of all conductors shall be the color indicated below:

208/120 volt system	480/277 volt system
Phase A - Black	Phase A - Brown
Phase B - Red	Phase B - Orange
Phase C - Blue	Phase C - Yellow
Neutral - White	Neutral - White
Ground - Green	Ground - Green
- C. The Contractor shall provide a weatherproof seal for any penetrations of the exterior walls.
- D. All interior wiring routed in the ceilings/walls or exposed shall be in minimum 1/2" EMT conduit.
- E. Exterior underground electrical service conductors shall be buried 24" below final grade.
- F. Exterior underground conduits shall be PVC-40 buried 24" below finished grade. All elbows shall be rigid.
- G. All fittings shall be cast; set screw type for EMT and threaded for RMC. with threaded hubs.

SYSTEMS

- A. The Contractor shall furnish and install all devices and system not specified by owner, by Vendor, or by Owners. The Contractor shall furnish and install all provisions for vendor installations as indicated on the plans.
- B. The Contractor shall coordinate all work with system vendors prior to purchasing materials or beginning construction.
- C. The Contractor shall provide 1-4" PVC-40 conduit from the telephone backboard to the telephone service point. At telephone backboard provide a ground bar and #6 copper conductor to building steel or service ground and terminate.
- D. The Contractor shall provide a Plywood telephone backboard of the size and location indicated on the drawings.
- E. The Contractor shall furnish and wire all smoke detectors specified on the mechanical drawings and/or in the specifications. Mechanical contractor will install.
- F. The Contractor shall coordinate all security system requirements with the security vendor/consultant prior to construction. All raceway, boxes and power requirements shall be determined and completed by the contractor.
- G. The Contractor shall furnish and install all telephone and computer data outlet boxes and conduits to the electrical room as indicated on the plans. Computer and telephone wiring and terminations to be performed by others.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	NOTES
	CONDUIT RUN CONCEALED ABOVE CEILINGS OR INSIDE WALLS	
	EXPOSED CONDUIT RUN	
	CONDUIT RUN BELOW FINISHED GRADE OR BELOW FINISHED SLAB	
	#2/0 BARE COPPER GROUNDING CONDUCTOR	
	GROUND ROD AND WELL	
	COMPRESSION TYPE GROUNDING BOND TO MOTOR CASING OR EQUIPMENT	
	CADWELD CONNECTION TO GROUND RING	
	48"X96"X1" PLYWOOD TELEPHONE TERMINAL BOARD	
	NON-FUSED, LOCKABLE IN "OFF", DISCONNECT SWITCH. TEXT INDICATES : VOLTS/POLES/AMPS/ENCLOSURE TYPE.	MOUNT ON EQUIPMENT, OR 48" WHEN WALL MOUNTING.
	FUSED, LOCKABLE IN "OFF", DISCONNECT SWITCH. TEXT INDICATES : VOLTS/POLES/FUSE RATING/ENCLOSURE TYPE.	MOUNT ON EQUIPMENT, OR 48" WHEN WALL MOUNTING.
	PANELBOARD	
	FIRE ALARM MANUAL PULL STATION	46" A.F.F.
	FIRE ALARM HORN/STROBE	84" A.F.F.
	FIRE ALARM STROBE	84" A.F.F.
	FIRE ALARM SMOKE DETECTOR	CEILING MTD FOR FINISHED CEILINGS OTHERWISE MOUNT TO BOTTOM OF STRUCTURE
	FIRE ALARM HEAT DETECTOR	CEILING MTD FOR FINISHED CEILINGS OTHERWISE MOUNT TO BOTTOM OF STRUCTURE
	FIRE ALARM FLOW SWITCH	
	FIRE ALARM TAMPER SWITCH	
	JUNCTION BOX	
	DUPLEX 120V RECEPTACLE	MOUNT @ 14" A.F.F.
	QUADRUPEX 120V RECEPTACLE	MOUNT @ 14" A.F.F.
	GFI DUPLEX 120V RECEPTACLE	EMOUNT @ 14" A.F.F.
	ABOVE COUNTER DUPLEX 120V RECEPTACLE	MTD 6" ABOVE COUNTER BACKSPLASH OR 42" A.F.F.
	ABOVE COUNTER GFI DUPLEX 120V RECEPTACLE	MTD 6" ABOVE COUNTER BACKSPLASH OR 42" A.F.F.
	240V/1Ø RECEPTACLE AS PER EQUIPMENT MANUFACTURER'S SPECIFICATIONS.	MOUNT @ 14" A.F.F.
	SPECIAL PURPOSE RECEPTACLE AS PER EQUIPMENT MANUFACTURER'S SPECIFICATIONS.	MOUNT @ 14" A.F.F.
	FLUSH POKE-THRU DEVICE WITH QUADRUPEX 120V RECEPTACLE, WALKER #RCSUB SERIES	
	TELEPHONE OUTLET	MOUNT @ 14" A.F.F.
	DATA OUTLET	MOUNT @ 14" A.F.F.
	COMBINATION TELEPHONE/DATA OUTLET	MOUNT @ 14" A.F.F.
	WALL MOUNTED TELEPHONE OUTLET	MOUNT @ 60" A.F.F.
	ABOVE COUNTER TELEPHONE OUTLET	MTD 6" ABOVE COUNTER BACKSPLASH OR 42" A.F.F.
	120/277V, 20A TOGGLE SWITCH	MOUNT @ 42" A.F.F.
	120/277V, 20A 2-POLE TOGGLE SWITCH	MOUNT @ 42" A.F.F.
	120/277V, 20A 3-WAY TOGGLE SWITCH	MOUNT @ 42" A.F.F.
	120/277V, 20A SLIDE DIMMER SWITCH	
	120/277V, 20A MOTOR-RATED TOGGLE SWITCH	MOUNT @ 42" A.F.F.
	120/277V, TOGGLE SWITCH WITH INTEGRAL OCCUPANCY SENSOR	
	MOTOR	
	MOTOR STARTER	
	TIME CLOCK LOCATION	MOUNT @ 60" A.F.F., U.O.N.
	CABLE TELEVISION OUTLET	MOUNT @ 14" A.F.F., U.O.N.

ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.

ABBREVIATIONS

EG	EQUIPMENT GROUND	AHU	AIR HANDLING UNIT	E	EXISTING DEVICE
IG	ISOLATED GROUND	CU	CONDENSING UNIT	AFF	ABOVE FINISH FLOOR
WP	WEATHERPROOF	RTU	ROOF TOP UNIT	AFG	ABOVE FINISH GRADE
WH	WATER HEATER	NL	NIGHT LIGHT	U.O.N.	UNLESS OTHERWISE NOTED
DF	DRINKING FOUNTAIN	C/T	CURRENT TRANSFORMER	N.T.S.	NOT TO SCALE
EF	EXHAUST FAN	ER	EXISTING RELOCATED DEVICE	GFI	GROUND FAULT INTERRUPTER

- NOTE:
- ALL CONDUIT FOR POWER & LIGHTING SHALL INCLUDE A GROUNDING CONDUCTOR PROPERLY SIZED FOR THE LOAD PER NEC.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL DEMOLITION WORK FOR THIS PROJECT. THIS WORK SHALL INCLUDE BUT IS NOT LIMITED TO THE DISCONNECTION, REMOVAL AND STORAGE ON SITE OF LIGHTING FIXTURES, PANELBOARDS, DISCONNECT SWITCHES, RECEPTACLES, JUNCTION BOXES, WIRE, CABLE, LIGHT SWITCHES, CONDUIT, ELECTRICAL SERVICES ETC. PER THE SCOPE OF WORK OF THIS PROJECT. COORDINATE WITH OWNER/ARCHITECT.

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<p style="font-size: 10px;"> ELECTRIC SPECIFICATIONS AND LEGEND WILD WOLF - COMMERCIAL DEVELOPMENT BOYD MORRIS ROAD & GA HWY 293 SPUR BARTOW COUNTY, GEORGIA 30120 </p>									
<p style="font-size: 10px;"> DRAWN BY: E-01 CHECKED BY: DATE: 06/18/20 </p>									

