

## ELECTRICAL SYMBOLS

NOT ALL SYMBOLS ARE NECESSARILY USED ON DRAWINGS. ALL MOUNTING HEIGHTS ARE TO BE FROM THE TOP OF THE DEVICE, UNLESS NOTED OTHERWISE.

### LIGHTING FIXTURES

D LP-21.9	4" LINEAR LIGHT (UPPER CASE LETTER INDICATES FIXTURE TYPES, UPPER CASE LETTERING WITH HYPHEN FOLLOWED BY A NUMBER INDICATES PANEL AND CIRCUIT NUMBER, LOWER CASE LETTER INDICATES SWITCHING).
●	HIGH BAY LIGHT
○	PENDANT LIGHT
○	RECESSED DOWNLIGHT
○	REMOTE EMERGENCY HEAD
□	EXTERIOR WALL PACK
□	POLE MOUNTED SITE LIGHT
—	4" LINEAR LIGHT WITH EMERGENCY BATTERY BACKUP
□	EMERGENCY LIGHT WITH BATTERY BACK-UP
□	EXIT SIGN WITH EMERGENCY BATTERY BACKUP (HATCH INDICATES ILLUMINATED FACE; DIRECTIONAL ARROWS ON SIGN AS INDICATED)

### MISCELLANEOUS

J	JUNCTION BOX
PC	EXTERIOR PHOTOCELL
nOS	CEILING MOUNTED OCCUPANCY SENSOR (LOWER CASE LETTER INDICATES SWITCHING)
n	CORNER MOUNTED OCCUPANCY SENSOR (LOWER CASE LETTER INDICATES SWITCHING)
●	PUSH BUTTON STATION (MOUNTING HEIGHT 48" AFF)
▲	TELEPHONE OUTLET BOX, WALL-TYPE WITH 3/4" CONDUIT STUBBED UP IN WALL AND TURNED OUT IN CEILING AREA WITH INSULATED BUSHING. (MOUNTING HEIGHT 18" AFF)
▲	TELEPHONE DATA OUTLET BOX, WALL-TYPE WITH 3/4" CONDUIT STUBBED UP IN WALL AND TURNED OUT IN CEILING AREA WITH INSULATED BUSHING. (MOUNTING HEIGHT 18" AFF)
▲	DATA OUTLET BOX, WALL-TYPE WITH 3/4" CONDUIT STUBBED UP IN WALL AND TURNED OUT IN CEILING AREA WITH INSULATED BUSHING. (MOUNTING HEIGHT 18" AFF)
EF 1	MECHANICAL EQUIPMENT TAG (UPPER HALF INDICATES EQUIPMENT TYPE, BOTTOM HALF INDICATES EQUIPMENT NUMBER. *REFER TO MECHANICAL SCHEDULES ON SHEET M3.

### SWITCHES

\$ <sup>1</sup>	SINGLE-POLE SWITCH (MOUNTED AT 48" AFF TO TOP) (LOWER CASE LETTER INDICATES SWITCHING)
\$ <sup>PL</sup>	SINGLE-POLE SWITCH WITH PILOT LIGHT (MOUNTED AT 48" AFF TO TOP)
\$ <sup>3</sup>	3-WAY SWITCH (MOUNTED AT 48" AFF TO TOP)
\$ <sup>OC</sup>	OCCUPANCY SENSOR SWITCH
\$ <sup>M</sup>	SINGLE-POLE, MOTOR-RATED SWITCH
M <sup>2</sup>	2-POLE, MOTOR-RATED SWITCH
\$	SWITCH BANK WITH COVERPLATE

### POWER AND CONTROL

T	TRANSFORMER
□	PANEL
○	MOTOR
□	DISCONNECT SWITCH (NON-FUSED EXCEPT AS NOTED)
⌘	COMBINATION STARTER DISCONNECT SWITCH

### RECEPTACLES\*

○	SINGLE RECEPTACLE (GROUND TYPE)
○	DUPLEX RECEPTACLE (GROUND TYPE)
○	DUPLEX RECEPTACLE IG
○	DUPLEX RECEPTACLE GFCI
○	QUAD RECEPTACLE
○	QUAD RECEPTACLE GFCI
○	QUAD RECEPTACLE GFCI
○	SPECIAL RECEPTACLE (AS NOTED)

\*REFERENCE SHEET E3 FOR SPECIFIC ROOM MOUNTING HEIGHT REQUIREMENTS.

### ELECTRICAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	GFCI	GROUND FAULT INTERRUPTER	SW	SWITCH
BC	BELOW FINISHED CEILING	IC	INTERRUPTING CAPACITY	TR	TAMPER RESISTANT
C	CONDUIT	IG	ISOLATED GROUND	TYP	TYPICAL
CB	CIRCUIT BREAKER	MTD	MOUNT OR MOUNTED	UF	UNDER FLOOR
CLG	CEILING	NC (N.C.)	NORMALLY CLOSED	UG	UNDERGROUND
EC	EMPTY CONDUIT	NF	NON FUSED	UNO (U.N.O.)	UNLESS NOTED OTHERWISE
EOL	END OF LINE	NIC	NOT IN CONTRACT	WG	WIRE GUARD
EWL	ELECTRIC WATER COOLER	NL	NIGHT LIGHT	WP	WEATHERPROOF
(G)	GROUND (EQUIPMENT)	NO (N.O.)	NORMALLY OPEN	XFMR	TRANSFORMER

### LIGHT FIXTURE SCHEDULE

FIXTURE TAG	MANUFACTURER	MODEL #	LAMP	VOLTAGE	INSTALLATION	DESCRIPTION	WATTS	QUANTITY	NOTES
A	CDS LIGHTING	KIRK-P-USV	LED BULB (80W PAR20 EQUIV)	120V	SUSPENDED	DECORATIVE LED PENDANT	12	5	8
D	CREE	LS4C-40L-30K-10V-FD	LED	120V	CEILING AND SUSPENDED	4" LINEAR STRIP, 4,000 LUMENS, 3500K, 80 CRI	30	30	3,6,9
DE	CREE	LS4C-40L-30K-10V-FD-EB14	LED	120V	CEILING AND SUSPENDED	4" LINEAR STRIP, 4,000 LUMENS, 3500K, 80 CRI WITH EMERGENCY BACKUP	30	14	3,6,9
E	CREE	E-XML1W	LED	120V	SEE NOTES	EMERGENCY DUAL HEAD LIGHTING UNIT	1.8	12	1
EA	CREE	E-XML2HG	LED	120V	WALL	EMERGENCY EXTERIOR REMOTE DUAL HEAD (WET LOCATION LISTED)	2	3	2
F	CREE	NBL-A-LV-M-40K-8-UL-10V + ALR16, WG-A, AP-619P	LED	120V	SUSPENDED	HIGH BAY, 20900 LUMENS, 4000K, 80 CRI	142	19	3
K	FURNISHED BY BSRO	FURNISHED BY BSRO	INTEGRAL LED	120V	SUSPENDED	FIRESTONE CORO REEL LIGHT	5	6	5
N3	CREE	XSPW-B-WM-3ME-4L-67K-UL	LED	120V	EXTERIOR WALL	EXTERIOR WALL PACK, TYPE III 4270 LUMENS, 6700K	31	8	7
N4	CREE	XSPW-B-WM-4ME-4L-67K-UL	LED	120V	EXTERIOR WALL	EXTERIOR WALL PACK, TYPE III 8100 LUMENS, 6700K	47	8	7
X	CREE	E-XCL2RRCW	LED	120V	SEE NOTES	EXIT SIGN WITH TWO HEADS (SEE TYPE)	3.4	3	4

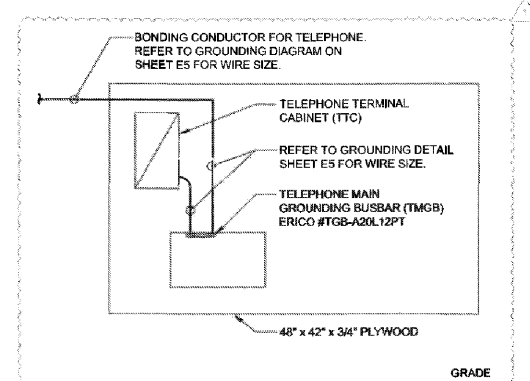
- NOTES:**
- FIXTURE MOUNTED 12" BELOW CEILING OR AT 13'-4" AFF IN ALL AREAS WITHOUT A CEILING.
  - MOUNT ON WALL MINIMUM OF 12" ABOVE DOOR JAMB, CONNECT TO BATTERY SIDE OF EXIT LIGHT.
  - INSTALL LIGHTS AT 13'-0" AFF IN THE SERVICE BAY, UNLESS NOTED OTHERWISE.
  - MOUNT EXIT SIGNS IN SHOWROOM AT 12'-0" AFF TO BOTTOM OF SIGN. IN ALL OTHER AREAS, MOUNT ON WALL 6" ABOVE DOOR OR MOUNT ON CEILING AS APPLICABLE (MAXIMUM 8'-0" AFF).
  - COORDINATE EXACT FIXTURE PLACEMENT WITH ARCHITECTURAL DRAWINGS.
  - INSTALL LIGHTS AT STRUCTURE LEVEL IN THE FOLLOWING AREAS: INVENTORY AND UTILITY AREAS. ALL WALL LIGHTS AT 12'-0" AFF IN THE FOLLOWING AREAS: CUSTOMER SHOWROOM AND OFFICE. INSTALL LIGHTS AT 8'-0" AFF IN THE FOLLOWING AREAS: BREAK ROOM, SHOP TOILET, AND GUEST TOILET.
  - REFERENCE ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT.
  - FIXTURES ARE TO BE SUSPENDED FROM STRUCTURE AT 8'-0" AFF TO BOTTOM. PROVIDE 6'-0" LONG CORD, SPECIFY CORD LENGTH TO MANUFACTURER. REFER TO SPECS SECTION 265119-3.3H FOR MORE INFORMATION.
  - FIXTURES ARE TO BE SUSPENDED FROM STRUCTURE WITH ALL-THEAD ROD. REFER TO SPECS SECTION 265119-3.3H FOR MORE INFORMATION.

### LIGHTING GENERAL NOTES

- ALL LIGHTING FIXTURES SHALL BE RATED FOR BUILDING SYSTEM VOLTAGE. CONTRACTOR MUST VERIFY ALL LOCATIONS. CONTRACTOR SHALL FURNISH AND INSTALL ALL LIGHTING FIXTURES COMPLETE WITH PLASTER FINISHES AND ALL OTHER INSTALLATION AND HANGING HARDWARE AS REQUIRED FOR A COMPLETE AND FINISHED INSTALLATION AT EACH FIXTURE LOCATION.
- VERIFY AND COORDINATE ALL LIGHTING FIXTURE CALL LOG NUMBERS AND LOCATIONS WITH THE INTENT OF FIXTURE DESCRIPTIONS LISTED AND VERIFY FIXTURE QUANTITIES. FIXTURE QUANTITIES SHOWN ARE FOR INFORMATION ONLY. ANY DISCREPANCY SHALL BE REPORTED IN WRITING TO THE ARCHITECT PRIOR TO INSTALLATION.
- ALL FIXTURES SHALL BE U.L. LABELED. ALL LIGHTING FIXTURES EXPOSED TO WEATHER OR MOISTURE SHALL BEAR U.L. "WET LOCATION" LABEL, AND LIGHTING FIXTURES EXPOSED TO DAMPNESS SHALL BEAR U.L. "DAMP LOCATION" LABEL.
- ALL EXIT SIGNS SHALL BE INSTALLED COMPLETE WITH ALL ACCESSORIES REQUIRED TO PROVIDE AN UNOBSTRUCTED VIEW OF EACH SIGN FACE. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND LOCATION OF ALL EXIT SIGNS WITH LOCAL AUTHORITIES. EXIT SIGNS WILL BE ADJUSTED AS NECESSARY WITHOUT ADDITIONAL COST.
- FIELD ADJUST AIMING PATTERN OF EXTERIOR LIGHTS AT NIGHT SESSION. BSRO TO DETERMINE TIME AND DATE.
- ALL EXIT SIGNS AND BATTERY EMERGENCY UNITS MUST BE APPROVED BY LOCAL CODE. MAINTAIN A MINIMUM OF 90 MINUTES OF CONTINUOUS ILLUMINATION, AND SHALL PROVIDE A MINIMUM OF 1 FOOT CANDLE AT THE WALKING SURFACE LEVEL IN SPACES THAT REQUIRE TWO OR MORE MEANS OF EGRESS. THE CONTRACTOR WILL FURNISH AND INSTALL ANY ADDITIONAL EMERGENCY UNITS AS REQUESTED BY THE LOCAL AUTHORITY HAVING JURISDICTION AT THE FINAL INSPECTION ANY ADDITIONAL COST TO BE APPROVED BY BSRO.
- REFER TO APPLICABLE SECTIONS OF THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS FOR LIGHTING FIXTURES.

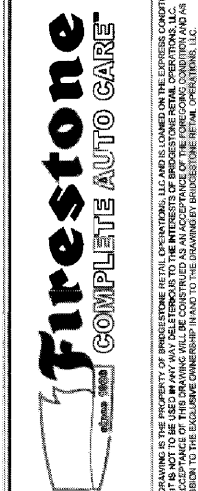
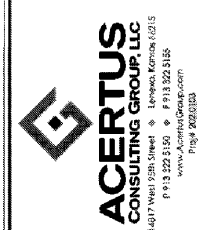
### GENERAL ELECTRICAL NOTES

- THESE GENERAL NOTES APPLY TO ALL WORK IN THIS PROJECT, AND THE WORD "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".
- REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ADDITIONAL GENERAL NOTES WHICH WILL APPLY HERE.
- NOTES ON DRAWINGS MAY APPLY TO ALL SIMILAR CONDITIONS WHETHER THEY ARE REPEATED OR NOT.
- THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE A.D.A.A.G. (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES).
- CONTRACTOR MUST VISIT THE SITE TO FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS WHICH WILL BE AFFECTED DURING CONSTRUCTION PRIOR TO SUBMITTING HIS BID PROPOSAL.
- WHERE SEVERAL DEVICES ARE GANGED TOGETHER, THE COVER PLATE SHALL BE OF THE GANGED STYLE FOR THE NUMBER OF DEVICES USED.
- THE COLOR OF ALL ISOLATED GROUND RECEPTACLES AND COVER PLATES SHALL MATCH THOSE OF OTHER DEVICES ON THE JOB.
- BOXES LOCATED ON OPPOSITE SIDES OF NON-FIRE RATED WALLS SHALL BE OFFSET A MINIMUM OF 6" HORIZONTALLY. BOXES ON OPPOSITE SIDES OF FIRE RATED WALL SHALL BE OFFSET A MINIMUM OF 24" HORIZONTALLY. "THRU-THE-WALL" BOXES SHALL NOT BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
- VERIFY TOTAL CONNECTED LOADS AND HORSE POWER WITH OTHER TRADE'S CONTRACTORS PRIOR TO WIRING OF ALL EQUIPMENT. MAKE ANY CHANGES TO OVERCURRENT DEVICES OR FEEDER SIZE PER LOCAL ELECTRICAL CODE.
- ALL TEMPERATURE CONTROL WIRING AND CONDUIT SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR. CONTRACTOR SHALL ADJUST CONDUIT ROUTING TO NOT INTERFERE WITH ANY HANGING SIGNS OR BOARDS. COORDINATE ALL CONDUIT LOCATIONS WITH THE FIXTURE PLAN ON SHEET F1 PRIOR TO ROUGH-IN TO ENSURE NO ENCROACHMENT OF CONDUIT OR DEVICE WITH SIGNS OR BOARDS.
- FIELD VERIFY LOCATION OF AREA SMOKE DETECTORS AND HEAT DETECTORS. DO NOT LOCATE WITHIN 36" OF AN HVAC DIFFUSER (SUPPLY OR RETURN), IN A DIRECT AIR FLOW OR WITHIN 36" OF A SPRINKLER HEAD. COORDINATE LOCATIONS WITH LIGHT FIXTURES.
- VERIFY ALL FURNITURE, MODULAR FURNITURE AND EQUIPMENT LOCATIONS WITH ARCHITECTURAL PLANS, ELEVATIONS AND REVIEWED SHOP DRAWINGS. PRIOR TO MAKING THE ACTUAL ELECTRICAL INSTALLATION CONTRACTOR SHALL ADJUST RECEPTACLES, OUTLETS OR CONNECTION LOCATIONS TO ACCOMMODATE FURNITURE AND/OR EQUIPMENT.
- ONLY IN SERVICE BAY AREA AND INVENTORY AREA CONDUIT SHOULD BE ROUTED 1'-12" AWAY OR AS TIGHT AS POSSIBLE TO THE UNDERSIDE OF THE STRUCTURE. ROUTE CONDUIT AND UNISTRUT TIGHT TO BOTTOM OF STRUCTURE, IN A CLEAN AND ORDERLY MANNER. ABSOLUTELY NO CONDUITS ARE TO BE ROUTED UNDER OR IN THE BUILDING SLAB.
- ALL ELECTRICAL WORK AND MATERIALS SHALL COMPLY WITH LATEST NEC AND ALL LOCAL CODES AND ORDINANCES. IN CASE OF CONFLICT AMONG REQUIREMENTS THE MORE RESTRICTING SHALL APPLY. ALL WORKING CLEARANCES AROUND THE PANELS SHALL CONFORM TO NEC ARTICLE 110 WHICH INCLUDES ALL TRADES. CONTRACTOR MAY USE PULL BOXES, WIREWAYS ETC. AS NECESSARY TO MANAGE CONDUIT ROUTING CLEAR OF THE WORK SPACE AS DEFINED BY THE NEC. THIS SHALL BE CONSIDERED "MEANS AND METHODS".



**1 TELEPHONE GROUNDING DIAGRAM**  
SCALE: N.T.S.

- NOTES:**
- AT ALL GROUND BARS INCLUDE NONMETALLIC LABEL: "WARNING IF THIS CONNECTOR ON CABLE IS LOOSE OR MUST BE REMOVED PLEASE CALL THE BUILDING MANAGER".
  - RUN CONDUCTOR FROM GROUND TO TELEPHONE TERMINAL CABINET.
  - ALL CONNECTORS TO GROUND BARS SHALL BE 2 HOLE COMPRESSION TYPE.
  - GROUNDING BARS SHALL BE ELECTROLYTIC COPPER, MOUNTED ON FIBERGLASS INSULATORS, AND NEMA BOLT HOLE SIZING AND SPACING.
  - ALL BONDING CONDUCTORS SHALL BE CONTINUOUS AND ROUTED IN THE SHORTEST POSSIBLE STRAIGHT LINE PATH.
  - ROUTE GROUNDING WIRE FROM EACH "TMGB" AND "TTC" TO NEAREST VERTICAL STRUCTURAL STEEL MEMBER AND CADWELD.
  - ROUTE CONDUCTOR FROM "TMGB" AND "TTC" TO RELAY RACK IN IT CLOSET AND CADWELD TO RACK.
  - ALL TELEPHONE CLOSETS WITH MULTIPLE WIRE MANAGEMENT RACKS WILL HAVE BONDING JUMPER INSTALLED.



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**NEW FCAC STORE**  
2020 I  
283 DAWSONVILLE HIGHWAY SW  
GAINESVILLE, GA 30501



ISSUE BLOCK	
▲	07/20/20 REV #1
▲	10/02/20 REV #2
▲	10/16/20 REV #4
▲	11/13/20 IFC

PROPERTY NO.: 160109  
6 DIGIT NO.: 908074  
4 DIGIT NO.: 7843  
ACR PROJECT NUMBER: 1955656  
TO PERMIT. DATE: 04/08/20  
TO BID. DATE: ##-##-##

SHEET TITLE:  
**ELECTRICAL SYMBOLS, NOTES AND SCHEDULES**  
SHEET NUMBER:  
**E1**