

ELECTRICAL SYMBOLS LIST	
<b>CIRCUITING &amp; NOTES</b>	
+46"	SPECIAL MOUNTING HEIGHT FOR ASSOCIATED DEVICE (CENTERLINE OF DEVICE)
GFI	GROUND FAULT CIRCUIT INTERRUPTER DEVICE
WP	WEATHERPROOF ENCLOSURE ON DEVICE
WR	WEATHERPROOF RESISTANT DEVICE
(TIE)	PARTIAL HOMERUN. REFER TO PLANS FOR ADDITIONAL DEVICES CONNECTED TO THIS CIRCUIT.
[X]	ELECTRICAL FLOOR PLAN NOTE WITH DESIGNATION
2	CONDUIT CONCEALED WHERE POSSIBLE OR AS NOTED, ARROWS INDICATE HOME RUN TO PANEL. CIRCUIT NUMBERS INDICATED
+	#12 WIRE IN CONDUIT, UNLESS NOTED OTHERWISE ON DRAWINGS OR SPECIFICATION
⊕	GROUNDING CONDUCTOR, #12 WIRE UNLESS NOTED OTHERWISE ON DRAWINGS OR SPECIFICATION
---	CONDUIT ROUTED UNDER FLOOR/GRADE
<b>LIGHTING</b>	
⊕	EMERGENCY TWIN HEAD LIGHT FIXTURE
↑	EXIT LIGHT WITH DIRECTIONAL ARROWS INDICATED
⊕	STRIP FIXTURE WITH TYPE DESIGNATION
⊕	RECESSED OR SURFACE MOUNTED FIXTURE WITH TYPE DESIGNATION
⊕	NIGHT LIGHT, CONNECT TO UNSWITCHED CIRCUIT
⊕	CEILING OR RECESSED FIXTURE WITH TYPE DESIGNATION
⊕	WALL MOUNTED FIXTURE WITH TYPE DESIGNATION
<b>POWER DEVICES</b>	
⊕	DUPLEX RECEPTACLE, BOTTOM OF BOX AT 16" AFF, UNLESS NOTED OTHERWISE
⊕	FOURPLEX RECEPTACLE, BOTTOM OF BOX AT 16" AFF, UNLESS NOTED OTHERWISE
⊕	DEVICE MOUNTED ABOVE COUNTER AND/OR SPLASH GUARD
⊕	PANEL BOARD, TOP OF BOX 6'-0" AFF
⊕	JUNCTION BOX
⊕	NON-FUSED DISCONNECT SWITCH
⊕	FUSED DISCONNECT SWITCH
⊕	MOTOR WITH DESIGNATION
<b>CONTROLS</b>	
S	SINGLE POLE WALL SWITCH, TOP OF BOX AT 48" AFF
Sp	DIMMER SWITCH, TOP OF BOX AT 48" AFF
Sm	MANUAL MOTOR STARTER WITH OVERLOADS
So	INFRARED OCCUPANCY SENSOR, MATT STOPPER #FF-100, TOP OF BOX AT 48" AFF
<b>COMMUNICATIONS</b>	
▼	DATA/TELEPHONE OUTLET WITH 3/4" CONDUIT STUBBED UP TO ABOVE ACCESSIBLE CEILING, BOTTOM OF BOX AT 16", UNLESS NOTED OTHERWISE. PROVIDE WITH FULL STRING

**ELECTRICAL SPECIFICATIONS**

- GENERAL PROVISIONS:
    - PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, NECESSARY FOR THE COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEMS OUTLINED.
    - OBTAIN ALL PERMITS, FEES, LICENSES, INSPECTIONS, AND CERTIFICATES OF COMPLIANCE OR APPROVAL AS REQUIRED BY THE AUTHORITIES AND UNDERTAKING.
    - ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST APPROVED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL APPLICABLE LAWS, CODES AND REGULATIONS OF THE GOVERNMENTAL BODIES HAVING JURISDICTION OVER THE SITE.
    - ALL TESTING REQUIRED BY AUTHORITIES SHALL BE CONSIDERED PART OF THIS WORK.
    - DURING CONSTRUCTION, ALL FIXTURES, EQUIPMENT, CONDUIT, ETC. SHALL BE COVERED, PLUGGED, OR CAPPED AS REQUIRED TO KEEP CLEAN AND UNHARMED. ALL DAMAGED ITEMS SHALL BE RESTORED TO ORIGINAL CONDITION OR REPLACED. ALL PROTECTIVE COVERING SHALL BE REMOVED BEFORE FINAL ACCEPTANCE.
    - PROVIDE ALL NECESSARY CUTTING AND PATCHING OF WALLS, FLOORS, CEILING, AND ROOFS AS NECESSARY. PATCH AROUND ALL OPENINGS SHALL MATCH ADJACENT AREA. COORDINATE ALL ROOFING WORK WITH OWNER OR RESPONSIBLE PARTY, SO THAT THE EXISTING ROOFING WARRANTY WILL BE MAINTAINED.
    - CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS AGAINST DEFECTS FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE.
  - OPERATION AND MAINTENANCE MANUALS:
    - DURING THE COURSE OF CONSTRUCTION, COLLECT AND COMPILE OPERATING INSTRUCTIONS, WIRING DIAGRAMS, CATALOG CUTS, LUBRICATION AND PREVENTIVE MAINTENANCE INSTRUCTIONS, PARTS LISTS, ETC. FOR ALL EQUIPMENT FURNISHED TO THE PROJECT.
    - ALL LITERATURE AND INSTRUCTIONS SHIPPED WITH THE EQUIPMENT SHALL BE SAVED FOR INCLUSION IN THE OPERATION AND MAINTENANCE MANUALS.
    - ALL LITERATURE LISTED ABOVE AND ALL PAPERS LISTING WARRANTIES, ETC. SHALL BE BOUND IN A 3-RING BINDER AND LABELED WITH THE PROJECT NAME, ADDRESS, ARCHITECT, ENGINEER, CONTRACTORS, ETC.
  - MANUFACTURERS:
    - MANUFACTURERS, MODEL NUMBERS, ETC. INDICATED OR SCHEDULED ON THE DRAWINGS SHALL BE INTERPRETED AS HAVING ESTABLISHED A STANDARD OF QUALITY AND SHALL NOT BE CONSIDERED AS LIMITING CONTRACTOR. ARTICLES, FIXTURES, ETC. OF EQUAL QUALITY BY MANUFACTURERS SHALL BE ACCEPTABLE, SUBJECT TO STRUCTURAL AND ELECTRICAL CONSTRAINTS OF THE PROJECT DESIGN, UNLESS NOTED OTHERWISE.
  - TESTING, AND BALANCING:
    - ALL CIRCUITS SHALL BE TESTED FOR CONTINUITY, SHORTS, AND GROUNDS BEFORE CONNECTING TO THE PROPER PHASE OR PHASES TO BALANCE THE LOAD BETWEEN PHASES.
    - POWER AND LIGHTING PANELS SHALL BE PROPERLY PHASED TO DISTRIBUTE THE LOAD AND SHALL BE CONNECTED AND ADJUSTED TO OPERATE AS SPECIFIED.
    - ALL MOTORS AND SIMILAR EQUIPMENT SHALL BE CHECKED FOR PROPER PHASE ROTATION AND OPERATION.
  - CONDUITS:
    - CONDUIT INSIDE THE BUILDING SHALL BE METALLIC TUBING (EMT), BEARING THE UL LABEL WITH COMPRESSION TYPE FITTINGS OR SCREW SET FITTINGS.
    - CONDUIT EXPOSED TO THE WEATHER, INSTALLED UNDERGROUND, IN CONCRETE, OR USED FOR SERVICE ENTRANCE SHALL BE STANDARD RIGID CONDUIT (SCHEDULE 40) WITH THREADED FITTINGS.
    - UNDERGROUND CONDUIT MAY BE POLYVINYL CHLORIDE WITH A DEFLECTION TEMPERATURE UNDER LOAD AT 264 PSI OF 76 DEGREES C, AND A TENSILE STRENGTH OF 5,200 PSI. JOINTS SHALL BE FLUSH SOLVENT WELDED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CONDUIT SHALL BE EQUAL TO OR EXCEED THE MANUFACTURER'S LISTED TYPICAL STRENGTH. CONDUIT AND FITTINGS SHALL BE PROVIDED BY THE SAME MANUFACTURER.
    - FLEXIBLE METAL CONDUIT SHALL ONLY BE USED FOR CONNECTIONS TO MOTORS, TRANSFORMERS, AND LIGHT FIXTURES. MAXIMUM LENGTH SHALL BE 6'-0".
  - CONDUCTORS:
    - WIRES SHALL BE CONTINUOUS WITHOUT SPLICES OR TAPS IN CONDUIT RUNS. ALL SPLICES SHALL BE MADE IN JUNCTION, PULL, OR OUTLET BOXES. ALL WIRE SHALL BE INSTALLED IN CONDUIT, WIREWAYS, OR OTHER PROTECTIVE COVER SANCTIONED BY CODES.
    - CONDUCTORS FOR LIGHTING AND POWER SHALL BE COPPER, MINIMUM NO. 12 AWG, 600 VOLT.
    - NO. 10 GAUGE AND SMALLER CONDUCTORS SHALL BE TYPE THIN (NET LOCATIONS) OR THIN (DRY LOCATIONS) SOLID CONDUCTOR, UNLESS OTHERWISE INDICATED.
    - NO. 8 GAUGE AND LARGER CONDUCTORS SHALL BE TYPE THIN (NET LOCATIONS) OR THIN (DRY LOCATIONS), STRANDED, UNLESS OTHERWISE INDICATED.
    - SERVICE ENTRANCE AND PANEL FEEDER CONDUCTORS, NO. 8 GAUGE AND LARGER SHALL BE TYPE XHHW-2 (NET LOCATIONS) OR THIN (DRY LOCATIONS), STRANDED COPPER, UNLESS OTHERWISE INDICATED.
  - MC CABLE (WHERE ALLOWED BY LANDLORD) - MAXIMUM LENGTH OF 10'
    - MC CABLE SHALL CONSIST OF INTERLOCK ARMORED CABLE MADE OF THREE OR FOUR TYPE THIN SOLID (NO. 8 AND LARGER) OR STRANDED COPPER CONDUCTORS INSULATED WITH HEAT AND MOISTURE RESISTANT POLYVINYL CHLORIDE (PVC), WITH NYLON OR EQUIVALENT UL LISTED JACKET PER UL STANDARD 88. THE THREE CONDUCTORS SHALL BE TWINED TOGETHER WITH THE COPPER GROUNDING CONDUCTOR, SUITABLE FILLERS, AND WRAPPED IN BINDER TAPE. THE ASSEMBLY SHALL BE ARMORED WITH SPIRALLY WRAPPED INTERLOCKED ANCHOR OR ALUMINUM OR GALVANIZED STEEL.
    - CABLES SHALL BE TESTED IN ACCORDANCE WITH UL STANDARD 1568 FOR TYPE MC CABLE AND RATED AT 600 VOLTS, 90 DEG. C FOR DRY LOCATIONS AND 75 DEG. C FOR WET LOCATIONS.
  - WIRING DEVICES:
    - WALL SWITCHES SHALL BE SPECIFICATION GRADE, QUIET TYPE, PUSH TOGGLE SWITCH, RATED FOR 20 AMPS, WITH THERMOPLASTIC COVER PLATES.
    - SINGLE POLE: HUBBELL #G51221-X, OR EQUAL.
    - THREE WAY: HUBBELL #G51221-X, OR EQUAL.
  - RECEPTACLES SHALL BE SPECIFICATION GRADE DUPLEX, GROUNDING THREE WIRE TYPE, RATED FOR 20 AMPS, WITH THERMOPLASTIC COVER PLATES. HUBBELL #G5952-X, OR EQUAL.
  - GROUND FAULT INTERRUPTER RECEPTACLES (GFI) SHALL BE HUBBELL #G520-XL. DEVICE COVER PLATES SHALL BE AS HEREINAFTER SPECIFIED.
  - ISOLATED GROUND RECEPTACLES (IG) SHALL BE HUBBELL #G5952G, ORANGE COLOR. DEVICE COVER PLATES SHALL BE AS HEREINAFTER SPECIFIED.
  - RECEPTACLES OUTSIDE BUILDINGS AND WHERE NOTED AS WEATHERPROOF, SHALL BE LISTED WEATHER RESISTANT HUBBELL #G5952X, OR EQUAL. WEATHER RESISTANT COPPER CONDUCTORS INSULATED WITH HEAT AND MOISTURE RESISTANT POLYVINYL CHLORIDE (PVC), WITH NYLON OR EQUIVALENT UL LISTED JACKET PER UL STANDARD 88. THE THREE CONDUCTORS SHALL BE TWINED TOGETHER WITH THE COPPER GROUNDING CONDUCTOR, SUITABLE FILLERS, AND WRAPPED IN BINDER TAPE. THE ASSEMBLY SHALL BE ARMORED WITH SPIRALLY WRAPPED INTERLOCKED ANCHOR OR ALUMINUM OR GALVANIZED STEEL.
  - EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT TYPE PER SPECIFICATION.
  - VERIFY DEVICES AND DEVICE COVERPLATES COLOR WITH ARCHITECT.
- BOXES:
  - HOT DIPPED GALVANIZED STEEL BOXES. PROVIDE THE FOLLOWING CONDITIONS FOR INSTALLATION.
  - ALL BOXES SHALL BE FLUSH MOUNTED, UNLESS OTHERWISE INDICATED.
- PANELBOARDS:
  - PANELBOARDS ARE EXISTING. ALL SHALL BE REWIRING PROVIDED WITH CIRCUIT BREAKERS AS REQUIRED TO CONDUIT CIRCUITS AS SHOWN ON THE DRAWINGS. ADDITIONAL CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC, QUICK-BREAK, MOUNT ON THE FRONT WITH CIRCUIT BREAK SINGLE OR MULTI-POLE RATINGS AND SHALL BE LISTED (UL 818) (TYPE THIN).
  - ALL PANELBOARDS SHALL BE WEATHER RESISTANT TYPE PER SPECIFICATION.
  - ALL PANELBOARDS SHALL BE WEATHER RESISTANT TYPE PER SPECIFICATION.
- LETTERING:
  - LETTERING SHALL BE PROVIDED AS REQUIRED TO IDENTIFY MAIN CIRCUIT, LISTING LOAD SERVED AND IDENTIFYING DATA.
- DISCONNECTS:
  - DISCONNECTS SHALL BE INTERNALLY OPERATED, QUICK-MAKE, QUICK-BREAK, SAFETY, WITH PROVISIONS FOR PAD LOCKING. FUSED AND NON-FUSED DISCONNECT SWITCHES SHALL BE PROVIDED AS INDICATED.
  - INDOOR SWITCHES SHALL BE NEMA 1 AND OUTDOOR SWITCHES SHALL BE NEMA 3B, UNLESS INDICATED OTHERWISE.
- FUSES:
  - ALL CIRCUITING CIRCUIT BREAKER PANELS SHALL BE CURRENT LISTING UL CLASS RK-1 FUSES.
  - ALL 200 AMPERES RMS BYM INTERRUPTING CAPACITY. FUSING ELEMENTS SHALL BE SILVER FOR RATINGS ABOVE 80 AMPERES.
  - ALL OTHER FUSES SHALL BE UL CLASS RK-9, DUAL-ELEMENT WITH A MINIMUM TIME DELAY OF 10 SECONDS AT 200% RATING. FUSES SHALL HAVE CURRENT LISTING CIRCUIT LINKS AND 200,000 AMPERES RMS BYM INTERRUPTING CAPACITY. FUSING ELEMENTS SHALL BE COPPER.
- LIGHT FIXTURES:
  - WHERE LIGHT FIXTURES ARE MOUNTED IN A LAY-IN CEILING, PROVIDE A MINIMUM OF 2 SUPPORT WIRES ATTACHED DIRECTLY BETWEEN EACH LIGHT FIXTURE AND THE BUILDING STRUCTURE. SUPPORT WIRES SHALL BE A MINIMUM OF 12 GAUGE GALVANIZED STEEL, SOFT ANNEALED.
  - FIXTURES ARE REQUIRED AT ALL LIGHTING OUTLETS SHOWN ON THE DRAWINGS. APPROVED LIGHTING FIXTURE WIRE IS REQUIRED IN ALL FIXTURES AND FIXTURE RACEWAYS. WEATHERPROOF WIRING IS REQUIRED FOR EXTERIOR FIXTURES. ALL PARTS OF FIXTURES AND WIRING SHALL BE IN ACCORDANCE WITH NEC REQUIREMENTS.
  - ALL FIXTURES SHALL CARRY UL AND ETL LABELS. ALL FLUORESCENT FIXTURE BALLASTS SHALL BE HIGH FREQUENCY ELECTRONIC BALLASTS WITH A TOTAL HARMONIC DISTORTION OF LESS THAN 20%, REGARDLESS OF THE NUMBER OF LAMPS CONNECTED TO EACH BALLAST AND SHALL HAVE CEM LABEL. ALL FLUORESCENT FIXTURES INSTALLED SHALL INCORPORATE BALLAST PROTECTION. ALL FLUORESCENT BALLASTS SHALL HAVE AN AMBIER NOISE RATING OF "CLASS A" OR BETTER. ALL FLUORESCENT BALLASTS SHALL HAVE A STANDARD BALLAST FACTOR UNLESS SPECIFIED OTHERWISE.
- SLEEVES:
  - PROVIDE, SET, AND PROPERLY LOCATE PIPE SLEEVES AS REQUIRED FOR THIS WORK.
  - INTERIOR PARTITIONS: 1/2" GAUGE GALVANIZED STEEL, PACK BETWEEN CONDUIT AND SLEEVE WITH FIRE SAFING AND CAULK AT EACH END WITH FIRE RESISTANT SEALANT.
  - ROOF: PROSET OR EQUAL, MANUFACTURED PVC SCHEDULE 40 PIPE SLEEVE WITH WEATHERPROOF SEAL. COORDINATE WITH ROOFING CONTRACTOR AND FLASH AS REQUIRED TO MAINTAIN ROOF WARRANTY.

**ELECTRICAL SPECIFICATIONS (CONTINUED)**

- GROUNDING:
  - GROUND ALL ELECTRICAL APPARATUS IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) 250, AND ANY LOCAL REQUIREMENTS. INSURE CONTINUOUS BOND WHERE FLEXIBLE CONDUIT IS USED. PROVIDE BONDING JUMPER INSIDE ALL FLEXIBLE CONDUIT.
  - BOND METAL PIPING SYSTEMS IN COMPLIANCE WITH NEC 250.4(A)(4).
- REMODELING WORK:
  - DEMOLITION DISCONNECT, DEMOLISH AND REMOVE ABANDONED ELECTRICAL MATERIALS AND EQUIPMENT INDICATED TO BE REMOVED AND NOT INDICATED TO BE SALVAGED OR REMAIN.
  - EQUIPMENT TO BE SALVAGED:
    - DISCONNECT AND REMOVE EXISTING ELECTRICAL EQUIPMENT INDICATED TO BE REMOVED AND SALVAGED. DELIVER EQUIPMENT TO THE LOCATION DESIGNATED BY THE OWNER FOR STORAGE.
    - ALL MATERIALS AND EQUIPMENT DESIGNATED TO BE REUSED OR RELOCATED SHALL BE CAREFULLY REMOVED AND STORED UNTIL NEEDED FOR REMODELING WORK. ALL ITEMS SHALL BE RESTORED TO LIKE NEW CONDITION WITH RUST OR CORROSION REMOVED, SURFACE PAINT TOUCHED UP OR REPAINTED AS REQUIRED TO MATCH NEW CONSTRUCTION, AND THOROUGHLY CLEANED AND INSPECTED. ANY ITEMS WHICH BECOME DAMAGED BEYOND REPAIR AS A RESULT OF CONSTRUCTION OR DEMOLITION ACTIVITY SHALL BE REPLACED WITH NEW MATERIAL EQUIVALENT IN EVERY RESPECT.
  - DISPOSAL AND CLEANUP: REMOVE FROM THE SITE AND LEGALLY DISPOSE OF DEMOLISHED MATERIALS AND EQUIPMENT NOT INDICATED TO BE SALVAGED.
  - PROTECT ADJACENT MATERIALS INDICATED TO REMAIN. INSTALL AND MAINTAIN DUST AND NOISE BARRIERS TO KEEP DIRT, DUST, AND NOISE FROM BEING TRANSMITTED TO ADJACENT AREAS. REMOVE PROTECTION AND BARRIERS AFTER REMODELING OPERATIONS ARE COMPLETE.
  - PROVIDE ALL ALTERATIONS AND REPAIRS INDICATED AND/OR REQUIRED FOR THE PROPER INSTALLATION AND OPERATION OF ALL EXISTING ELECTRICAL SYSTEMS, INTEGRATING THE NEW AND EXISTING AREAS. LOCATE, IDENTIFY, AND PROTECT ELECTRICAL SERVICES PASSING THROUGH REMODELING AREA AND SERVING OTHER AREAS OUTSIDE THE REMODELING LIMITS. MAINTAIN SERVICES TO AREAS OUTSIDE REMODELING LIMITS. WHEN SERVICES MUST BE INTERRUPTED, INSTALL TEMPORARY SERVICES FOR AFFECTED AREAS.
    - ABANDONED CONDUIT SHALL HAVE WIRE REMOVED AND SHALL BE GAPPED. ABANDONED OUTLETS IN WALLS OR PARTITIONS SHALL HAVE DEVICES AND WIRE REMOVED, AND SHALL BE COVERED.
    - WHERE EXISTING CONDUITS TERMINATE AT AN EXISTING OUTLET IN A WALL, CEILING, OR FLOOR, TO BE REMOVED, DISCONNECT AND REMOVE DEVICE AND WIRE FROM CONDUIT. CONDUIT SHALL BE CUT BACK AND GAPPED (BELOW THE FLOOR OR ABOVE THE CEILING) SO NOT TO CREATE AN OBSTRUCTION. PATCH FLOOR TO MATCH EXISTING.
    - WHERE EXISTING CIRCUITS EXTEND BEYOND THE OUTLET IN THE EXISTING WALL, CEILING, OR FLOOR TO BE REMOVED, FURNISH AND INSTALL NEW CONDUIT AND WIRE TO EITHER REROUTE THE CIRCUIT OR FEED THE REMAINING OUTLETS FROM ANOTHER ELECTRICAL SOURCE, BUT IN SUCH A MANNER AS NOT TO REVERSE THE CIRCUIT. ALL REROUTED CONDUIT SHALL BE APPROVED BY THE ARCHITECT.
    - WHERE EXISTING OUTLETS IN A WALL, CEILING, OR FLOOR TO BE REMOVED ARE ESSENTIAL TO MAINTAIN OPERATION OF OTHER REMAINING OUTLETS, RELOCATE THE OUTLET TO A NEW GOVERNMENT LOCATION. EXISTING WIRING DEVICES SHALL NOT BE REUSED, UNLESS OTHERWISE INDICATED.
    - WHERE LIGHTING FIXTURES ARE INDICATED TO BE DEMOLISHED, REMOVE ALL WIRE AND MODIFY THE EXISTING CONDUIT (IF APPLICABLE) FOR THE NEW LIGHTING. ALL UNUSED CONDUIT SHALL BE REMOVED.
    - WHERE A TELEPHONE CIRCUIT EXTENDS BEYOND AN OUTLET IN AN EXISTING WALL, CEILING, OR FLOOR TO BE REMOVED, PROVIDE NECESSARY EMPTY CONDUIT AND NOTIFY THE OWNER WHO WILL REQUEST THE OWNER TO ARRANGE WITH THE TELEPHONE COMPANY FOR NEW WIRING TO OUTLETS THAT REMAIN.
    - WHERE EXISTING CONDUIT AND WIRE RUNS ARE LOCATED IN OR ATTACHED TO AN EXISTING WALL, CEILING OR FLOOR TO BE REMOVED, THEY SHALL BE REMOVED IN EITHER NEW OR EXISTING CONSTRUCTION TO MAINTAIN CONTINUITY OF CIRCUITS UNLESS OTHERWISE INDICATED.
    - CONDUIT SHALL BE CONCEALED WITHIN THE EXISTING BUILDING CONSTRUCTION WHERE POSSIBLE, EXCEPT WHERE OTHERWISE INDICATED.
    - EXISTING WIRE SHALL BE DISCONNECTED AND REMOVED WHEREVER EXISTING CIRCUITS ARE ABANDONED.

**ELECTRICAL GENERAL NOTES:**

- COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACES AVAILABLE, AND WITHOUT INTERFERENCES.
- WHERE CONDUIT IS SHOWN UNDER FLOOR, VERIFY IF FLOOR IS STRUCTURAL SLAB OR SLAB ON GRADE. IF STRUCTURAL SLAB, CORE DRILL PENETRATION, AND ROUTE CONDUIT IN SPACE BELOW. IF SLAB ON GRADE, SAW CUT EXISTING FLOOR. SLAB AS REQUIRED FOR INSTALLATION OF UNDER FLOOR CONDUIT. NO STRUCTURAL ELEMENTS SHALL BE CORE DRILLED OR SAW CUT. WHEN SAW CUTTING, PATCH FLOOR TO MATCH EXISTING SURFACE AS REQUIRED.
- IT IS THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO PROPERLY BALANCE ALL BRANCH CIRCUITS BETWEEN THE PHASES OF THE SYSTEM REGARDLESS OF CIRCUITING INDICATED.
- ALL EXPOSED RACEWAYS SHALL BE IN EMT CONDUIT, MC CABLE IS NOT PERMITTED IN EXPOSED AREAS.
- ELECTRICAL CONTRACTOR TO COORDINATE MANUFACTURER ELECTRICAL REQUIREMENTS FOR HVAC EQUIPMENT BEING FURNISHED WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF LIGHT FIXTURES AND DEVICES.
- REFER TO ARCHITECTURAL & STRUCTURAL DRAWINGS FOR REQUIREMENTS FOR SUPPORTING TRANSFORMERS, EQUIPMENT, ETC. FROM THE STRUCTURE. PROVIDE ADDITIONAL STEEL AS REQUIRED TO PROPERLY SUPPORT SYSTEMS FROM THE STRUCTURE.
- EACH BRANCH CIRCUIT SHALL HAVE A DEDICATED NEUTRAL PER NEC 210.4.
- ALL BRANCH CIRCUITS SHALL BE SIZED TO ALLOW FOR A MAXIMUM OF 3% VOLTAGE DROP. ALL FEEDERS SHALL BE SIZED TO ALLOW FOR A MAXIMUM OF 2% VOLTAGE DROP. ELECTRIC CONTRACTOR SHALL VERIFY WIRING INDICATED IS SUFFICIENT AND INCREASE CONDUCTOR SIZE AS REQUIRED BASED OFF ACTUAL INSTALLED LENGTH OF CONDUCTORS.
- PROVIDE DIM VOLTAGE RANGE BETWEEN ALL 0-10V DIMMING DRIVERS CONTROLLED BY DIMMERS PER MANUFACTURER'S INSTRUCTION WHETHER INDICATED ON PLANS OR NOT.

LIDS - LIGHT FIXTURE SCHEDULE		
FIXTURE	DESCRIPTION	HEIGHT
●	HALO RECESSED 6" DOWNLIGHT HTT-30CAT - SPECULAR CLEAR SOLAIS - LR30 LED LAMP LR36/40/30V/1850	CL6 HT
●	HALO RECESSED 6" DOWNLIGHT HTT-30SBAT - SPECULAR BLACK SOLAIS - LR30 LED LAMP LR36/40/30V/1850	CL6 HT
⊕	POWER SECURE - SOLAIS SEMI-RECESSED LED 1 HEAD ADJUSTABLE ACCENT LIGHT XSR12/1M20/25M/30V/1450/BK/BK IT MATT - LED - BLACK	CL6
⊕	POWER SECURE - SOLAIS SEMI-RECESSED LED 1 HEAD ADJUSTABLE ACCENT LIGHT XSR12/1M20/25M/30V/1450/WH/WH MATT - LED - WHITE	CL6 HT
⊕	POWER SECURE - SOLAIS SEMI-RECESSED LED 1 HEAD ADJUSTABLE ACCENT LIGHT XSR12/1M20/25M/30V/1450/BK/BK IT MATT - LED - BLACK	CL6 HT
⊕	POWER SECURE - SOLAIS SEMI-RECESSED LED 3 HEAD ADJUSTABLE ACCENT LIGHT XSR12/1M20/25M/30V/1450/WH/WH IT MATT - LED - WHITE	CL6 HT
⊕	POWER SECURE - SOLAIS SEMI-RECESSED LED 4 HEAD ADJUSTABLE ACCENT LIGHT XSR22/1M20/25M/30V/1450/BK/BK IT MATT - LED - BLACK	CL6 HT
⊕	AMP LIGHTING DECORATIVE WAREHOUSE PENDANT BLACK W/WHITE GRILL ACCESSORY 12" DIA - BLACK - BLACK GRILL #B12-W-H-30K-RTC-BLG-GR12 IT MATT - LED	7'-0" AFF TO BOTTOM OF FIXTURE
⊕	COOPER - METALUX 22CZ-LED420-UNV-LB40-CDI-U	CL6 HT
⊕	COOPER - METALUX 22CZ-LED420-UNV-EL14H-LB40-CDI-U EMERGENCY EGRESS LIGHTING	CL6 HT
⊕	COOPER LIGHTING - SURE-LITES LEM WITH BATTERY BACK UP WHITE FINISH - SURFACE MOUNTED EMERGENCY EXIT LIGHT - 120V	CL6 HT
⊕	BARRON EXITRONIX EMERGENCY LIGHTING - LED EDGE LIT EXIT SIGN #R02E-U-RC-BL - 120V - LED - BLACK	PER CODE
⊕	COOPER - SURE-LITES LPXTORWHM	PER CODE
⊕	COOPER - METALUX-LED 45NLED-LD4-30SL-LN-UNV-LB35-CDI-U CEILING MOUNTED	CL6 HT
⊕	BROAN - EXHAUST FAN #616 - 2 AMPS - TO CFM 4" RD DUCT	CL6 HT
⊕	FLUSH MOUNTED STEREO SPEAKER - BLACK - RE. TC10	CL6 HT

OWNER SHALL PROVIDE LIGHT FIXTURES FOR THE PROJECT. GC SHALL BE RESPONSIBLE FOR RECEIVING, NOTING DAMAGE CLAIMS, UNLOADING, STORAGE AND INSTALLING LIGHT FIXTURES AS WELL AS PROVIDING ALL MOUNTING HARDWARE. CITY LIGHTING CONTACT IS STEVE BENTRUP - 314.534.1090

TESTING OF EMERGENCY LIGHTING IS REQUIRED. CALL FOR TESTING PRIOR TO FINAL INSPECTION - TESTING MUST BE BY DISCONNECTION OF THE MAIN

**Lids™**

LD #38  
OAKWOOD CENTER  
177 WEBBANK EXPRESSWAY  
SUITE 100  
OVERTON, IA 70053

PROJECT NUMBER  
19433-377

DESIGNER



STUDIO T2 DESIGN  
INTERIOR ARCHITECTURE & DESIGN  
800 STATE LINE ROAD SUITE 180  
LEAWOOD, KANSAS 66208

**GENERAL NOTES**

RELATED DOCUMENTS: This drawing is a single part of an integrated set of Construction Contract Documents. The General Conditions of the Contract, the General Requirements, (Division 1 of the Specifications), applicable requirements of Division 2 (see Division 11 Sections of the Specifications), and other Drawings may apply to the work described on this drawing. Failure to review other documents does not release the Contractor from providing a complete project.

COMPLY WITH all laws, code and ordinances of authority having jurisdiction, and with requirements of the Landlord, if applicable. VERIFY ALL CONDITIONS and dimensions prior to construction. Commencement of work constitutes acceptance and acceptance of existing conditions.

CALCULATE AND MEASURE required dimensions, do not scale the drawings unless otherwise directed.

APPROXIMATION of a material or equipment item to work installed by others constitutes acceptance of that work, and assumption of responsibility for satisfactory installation.

MEASUREMENTS shown are to finish face of a material, unless otherwise indicated.

**PROJECT CONTACT**

THOM TOBEN  
EMAIL: TLTOBEN@ST2D.COM  
PH: 913.649.6037

**IN ASSOCIATION WITH**

**REVISIONS AND NOTATIONS**

NO.	DESCRIPTION	DATE

DATE  
4 - FEBRUARY 2019

**DRAWING TITLE**

ELECTRICAL SPECIFICATIONS

**DRAWING NUMBER**

E0

**BC ENGINEERS**  
INCORPORATED  
5720 Heeder Shawnee, Ks. 66203 (913)262-1772

Order Plans @

WWW.IDMPLANS.COM

This drawing has been prepared by the Engineer, or under his supervision. This drawing is provided as an illustration of the design and is intended for use in the project only. Pursuant to the Architectural Works Copyright Protection Act of 1990, all drawings, specifications, notes and changes, including the overall form, arrangement and composition of letters and elements appearing hereon, constitute the original, copyrighted work of the design professional. Any reproduction, use, or disclosure of information contained herein without prior written consent of the Engineer is strictly prohibited. © 2019 BC Engineers, Inc.