

ELECTRICAL SYMBOLS LEGEND			
	HOME RUN TO PANEL. CIRCUIT NUMBERS, PHASE, NEUTRAL, AND GROUND CONDUCTORS INDICATED ALONG WITH ISOLATED GROUND CONDUCTOR IF APPLICABLE. PARTIAL CIRCUIT.		
	CONDUIT INSTALLED CONCEALED ABOVE CEILING OR IN WALL.		
---	CONDUIT INSTALLED CONCEALED BELOW FLOOR SLAB OR UNDERGROUND.		
	GROUND CONNECTION.		
\$	SINGLE POLE SWITCH, +3'-10" OR AS NOTED.		
\$ ³	THREE-WAY SWITCH, +3'-10" OR AS NOTED.		
\$ ^K	KEY OPERATED SWITCH, +3'-10" OR AS NOTED.		
\$ ^{WP}	WEATHERPROOF TOGGLE SWITCH, +3'-10" OR AS NOTED.		
\$ ^P	SINGLE POLE SWITCH WITH PILOT LIGHT, +3'-10" OR AS NOTED.		
	WALL MOUNTED OCCUPANCY SENSOR, +3'-10" OR AS NOTED.		
	CEILING MOUNTED OCCUPANCY SENSOR.		
	CEILING MOUNTED INTERIOR DAYLIGHT HARVESTING PHOTOCELL SENSOR.		
	POWER PACK, INSTALLED ABOVE ACCESSIBLE CEILING.		
	SIMPLEX RECEPTACLE, +18" OR AS NOTED.		
	ISOLATED GROUND SIMPLEX RECEPTACLE, +18" OR AS NOTED.		
	DUPLEX RECEPTACLE, +18" OR AS NOTED.		
	ISOLATED GROUND DUPLEX RECEPTACLE, +18" OR AS NOTED.		
	QUADRUPLX RECEPTACLE +18" OR AS NOTED.		
	ISOLATED GROUND QUADRUPLX RECEPTACLE, +18" OR AS NOTED.		
	GROUND FAULT INTERRUPTING RECEPTACLE, +18" OR AS NOTED.		
	WEATHERPROOF GROUND FAULT INTERRUPTING RECEPTACLE, +18" OR AS NOTED.		
	SURGE PROTECTED RECEPTACLE, +18" OR AS NOTED.		
	RECEPTACLE INSTALLED HORIZONTALLY AT +18" OR AS NOTED.		
	RECEPTACLE INSTALLED HORIZONTALLY, BOTTOM AT +6" ABOVE COUNTER TOP.		
	RECEPTACLE INSTALLED FLUSH IN CEILING.		
	ISOLATED GROUND RECEPTACLE INSTALLED FLUSH IN CEILING.		
	SPECIAL RECEPTACLE, NEMA STYLE AS NOTED, +18" OR AS NOTED.		
	FLUSH FLOOR MOUNTED RECEPTACLE, LETTER INDICATES TYPE.		
	JUNCTION BOX.		
	DISCONNECT SWITCH, TOP AT +6'-0" OR AS NOTED.		
	DISCONNECT SWITCH PROVIDED WITH EQUIPMENT.		
	EXTERIOR PHOTOCELL, INSTALLED ON ROOF FACING NORTH.		
	CONTROL OR POWER RELAY, INSTALLED AS NOTED.		
	PUSHBUTTON, TOP AT +4'-6" OR AS NOTED.		
	DOOR BELL CHIMEM, +6'-0" OR AS NOTED.		
	CONTROL TRANSFORMER, INSTALLED AS NOTED.		
	THERMOSTAT, TEMPERATURE SENSOR, CARBON DIOXIDE SENSOR AND HUMIDISTAT PROVIDED BY MECHANICAL CONTRACTOR, +3'-10" OR AS NOTED.		
	ELECTRICALLY OPERATED DAMPER, PROVIDED BY MECHANICAL CONTRACTOR.		

ELECTRICAL GENERAL NOTES

- 1 INCLUDE ALLOWANCE FOR UNFORSEEN CONDITIONS THAT MAY EFFECT THE SCOPE OF WORK. MINOR DEVIATIONS REQUIRED FOR ACCOMPLISHING THE INTENT OF THIS DESIGN ARE TO BE INCLUDED IN THIS ALLOWANCE.
- 2 ELECTRICAL DESIGN HAS BEEN BASED ON THE INSTALLATION OF 75°C CONDUCTORS COATED TO THE INSIDE AND EQUIPMENT U.L. LISTED FOR A MINIMUM 75°C CONDUCTORS TERMINATED ON EQUIPMENT WITH A LOWER RATING 60°C OR NO RATING SHOWN TO HAVE CONDUCTOR SIZE INCREASED TO CONFORM TO ADOPTED ELECTRICAL CODE AND U/LCUL NO. 485 REQUIREMENTS.
- 3 CONDUIT INSTALLED INSIDEORS SHALL BE ELECTRICAL METALLIC TUBING (EMT), MINIMUM 1/2" OR AS NOTED.
- 4 CONDUIT INSTALLED BELOW SLAB SHALL BE RIGID STEEL, IMC, PVC OR HDPE, MINIMUM 3/4". IF PVC OR HDPE IS USED, TRANSITION TO RIGID STEEL BEFORE TURNING UP AND PENETRATING FLOOR SLAB.
- 5 CONDUCTORS SHALL BE A MINIMUM OF #12 THRU#14WV COPPER UNLESS NOTED OTHERWISE ON PLANS OR IN SPECIFICATIONS. BRANCH CIRCUITS SHALL BE PROVIDED WITH (2) #12 CONDUCTORS AND (1) #12 EQUIPMENT GROUND CONDUCTOR UNLESS NOTED OTHERWISE.
- 6 BRANCH CIRCUITS SHOWN WITH TWO GROUNDING CONDUCTORS SHALL HAVE ONE EQUIPMENT GROUND CONDUCTOR (GREEN) AND ONE ISOLATED GROUND CONDUCTOR (GREEN W/ WHITE STRIP) INSTALLED IN RACEWAY.
- 7 DIRECT CURRENT WIRING SHALL BE (2) #10 IN 1/2" CONDUIT UNLESS NOTED OTHERWISE.
- 8 CONTROL VOLTAGE WIRING SHALL BE PENUM RATED OR INSTALLED IN CONDUIT.
- 9 PROVIDE FLEXIBLE CONNECTIONS ONLY FOR FINAL CONNECTION TO EQUIPMENT. 6" MINIMUM LENGTH. PROVIDE LIQUID TIGHT FLEXIBLE EQUIPMENT. 6" MINIMUM LENGTH. PROVIDE LIQUID TIGHT FLEXIBLE CONNECTION AT EXTERIOR LOCATIONS AND WHERE EXPOSURE TO MOISTURE IS POSSIBLE.
- 10 ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A PULL WIRE.
- 11 ALL RACEWAYS SHALL CONTAIN A GROUNDING ELECTRODE SIZED PER THE ADOPTED ELECTRICAL CODE.
- 12 COORDINATE WORK ABOVE THE CEILING WITH OTHER TRADES TO PROVIDE THE GREATEST POSSIBLE CLEARANCE. CONDUIT RUNS SHALL BE RUN THROUGH TRUSSES WHERE POSSIBLE.
- 13 VERIFY EXACT PLACEMENT OF ALL DEVICES SHOWN ON THE CONSTRUCTION DOCUMENTS PRIOR TO FINAL PLACEMENT.
- 14 ALL PANELBOARDS, SWITCHBOARDS AND LINE VOLTAGE CONTROL EQUIPMENT SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTING, SERVICING OR MAINTENANCE OF EQUIPMENT. MARKING SHALL BE SLAF ADHESIVE, COMMERCIAL LABEL, CONFORMING TO ADOPTED CODES.
- 15 LIGHT SWITCHES, ELECTRICAL OUTLETS, THERMOSTATS AND OTHER ENVIRONMENTAL CONTROLS LOCATED NO HIGHER THAN 48" AND NO LOWER THAN 18" ABOVE THE FLOOR. IF REACH IS OVER AN OBSTRUCTION BETWEEN 20" AND 48" IN DEPTH, THE MINIMUM HEIGHT IS TO BE REDUCED TO 44" FOR FORWARD APPROACH OR 46" FOR SIDE APPROACH. PROVIDE THE OBSTRUCTION IS NO MORE THAN 18" IN DEPTH. OBSTRUCTIONS SHALL NOT EXTEND MORE THAN 25" FROM THE WALL BENEATH A CONTROL.
- 16 TERMS, SHALL - ACTION THAT IS REQUIRED WITHOUT OPTION OR QUALIFICATION. FURNISH - CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING. INSTALL - CONTRACTOR SHALL BE RESPONSIBLE FOR LABOR AND CONSTRUCTION EQUIPMENT NECESSARY TO SET IN PLACE, CONNECT, CALIBRATE AND/OR TEST EQUIPMENT FURNISHED BY HIM OR OTHERS. PROVIDE - CONTRACTOR SHALL FURNISH AND INSTALL.

REMODEL GENERAL NOTES

- ALL EXISTING EQUIPMENT, WIRING DEVICES, LIGHTS, CONDUIT, WIRING, CIRCUITING, ETC., NOT DISTURBED BY NEW CONSTRUCTION WORK SHALL BE MAINTAINED AND UNDAMAGED. THESE DEVICES, IF SHOWN, ARE SHOWN FOR INFORMATION PURPOSES ONLY. VISIT THE JOB SITE TO VERIFY ALL EXISTING CONDITIONS AND FAMILIARIZE THE DEVICES WITH ALL RELATION TO BE DONE AT THE JOB SITE. FAILURE TO DO SO SHALL NOT RELIEVE CONTRACTOR OF THE RESPONSIBILITY FOR PERFORMING ALL WORK NECESSARY TO PROVIDE A WORKMANLIKE INSTALLATION.
- EXISTING SERVICES (ELECTRICAL, FIRE ALARM, ETC.) SHALL NOT BE INTERRUPTED WITHOUT PRIOR SCHEDULING OF SUCH OUTAGES WITH THE OWNER, ARCHITECT, AND ALL OTHER PARTIES INVOLVED.
- MAINTAIN ACCURATE RECORDS OF ALL MODIFICATIONS TO EXISTING SYSTEMS WHICH ARE TO REMAIN. DELIVER ALL "RECORD" DRAWINGS TO THE OWNER INDICATING SUCH CHANGES.
- DISCONNECT AND LABEL ABANDONED FEEDERS AND CIRCUITS.
- REMOVE ALL EXPOSED CONDUITS, CONDUITS ABOVE LAY-IN CEILINGS, OR EQUIPMENT WHICH IS ABANDONED.
- WHERE NEW WORK INTERFERES WITH CIRCUITS IN ROOMS OTHERWISE UNDISTURBED, EXISTING CIRCUITS SHALL BE REWORKED AS REQUIRED TO MAINTAIN SERVICE.
- ALL EQUIPMENT, FIXTURES, PANELBOARDS, CONDUIT AND WIRING THAT ARE REMOVED SHALL BE REMOVED FROM THE JOB SITE, UNLESS DIRECTED OTHERWISE BY THE ARCHITECT OR OWNER'S REPRESENTATIVE.
- EXISTING ROUGH-IN BOXES AND CONDUIT MAY BE UTILIZED IF THEY ARE OF PROPER SIZE AND IN SUITABLE LOCATION(S) FOR NEW CONSTRUCTION. DEVICES AND WIRING SHALL BE NEW.
- CIRCUIT ROUTINGS SHOWN IN REMODELED AREAS MAY BE MODIFIED TO SUIT FIELD CONDITIONS. KEEP DEVICES AND/OR FEEDER CIRCUITS APPROXIMATELY AS INDICATED TO LIMIT VOLTAGE DROP OF FEEDER AND BRANCH CIRCUITS.
- VERIFY THE LOCATION AND CONDITION OF ALL EXISTING UTILITIES AND PROTECT DURING THE COURSE OF THEIR WORK. EXISTING UTILITIES, BUILDING MATERIALS AND ANY ASSOCIATED ITEMS WHICH ARE DAMAGED BY CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE (IN A TIMELY MANNER) AND TO THE OWNER'S APPROVAL
- COORDINATE THE REMOVAL OR RELOCATION OF ALL MECHANICAL AND PLUMBING EQUIPMENT, DISCONNECT AND REMOVE ALL ELECTRICAL POWER AND CONTROL CIRCUITS FOR EQUIPMENT BEING REMOVED OR RELOCATED. EXISTING CONDUIT AND ROUGH-IN MAYBE USED FOR RELOCATED OR NEW EQUIPMENT. ALL CONDUCTORS SHALL BE NEW.
- REMOVE ALL EXISTING DATA, TELEPHONE, FIRE ALARM CABLING AND ANY OTHER LOW VOLTAGE WIRING THAT ARE NOT TO BE USED.
- DESIGN IS BASED ON FIELD INFORMATION, AS-BUILT DRAWINGS AND OWNER FURNISHED INFORMATION. VERIFY ACCURACY OF ALL EXISTING CONDITIONS. IN CASE OF DISCREPANCY, PROVIDE ALL NECESSARY CONDUIT, WIRE, BOXES, FITTINGS, ETC. FOR A COMPLETELY FUNCTIONING ELECTRICAL SYSTEM. ENTIRE INSTALLATION TO COMPLY WITH SPECIFICATIONS AND ADOPTED ELECTRICAL CODE.

The logo for Dialectic Engineering features a large, bold, black letter 'D' on the left. To its right, the word 'Dialectic' is written in a large, black, sans-serif font, with 'ENGINEERING' in a smaller, all-caps, black, sans-serif font directly beneath it. Below the logo, the company's address is listed: 'Dialectic, Inc.', '310 W 20th Street, Suite 200', and 'Kansas City, MO 64108'. To the right of the address, the phone number 'T 816-997-9601' and 'F 816-997-9602' are provided, along with the website 'DialecticEng.com'. At the bottom left, it says 'Tennessee Certificate of Authorization Number 3171'. At the bottom right, it says 'Copyright 2021'.

Dialectic Engineering
310 W 20th Street 200
Kansas City, MO 64108
Ph: (816)997.9627
Contact: Joe Hillebrenner, P.E.

LEGEND & KEYNOTES

