	ELECTRICAL SYMBOL LEC	GEND
	LINE TYPE DESIGNATIONS	1
SYMBOL	DESCRIPTION	REMARKS
	EXISTING (UNLESS OTHERWISE INDICATED)	
DACIC DDAMIN	PROVIDE AS NEW (UNLESS OTHERWISE INDICATED)	
BASIC DRAWIN SYMBOL	DESCRIPTION	REMARKS
<b>(#)</b>	KEYED DRAWING NOTE	
<u> </u>	REMOVALS	
M LJ	CIRCUIT	
ONE-LINE/RISE		
SYMBOL	DESCRIPTION	REMARKS
<u> </u>	CIRCUIT BREAKER	
	FUSE	
0 0	DISCONNECT SWITCH (NON-FUSED)	
°~-	DISCONNECT SWITCH (FUSED)	
<b>~</b>	TRANSFER SWITCH	
<u>im</u>	TRANSFORMER	
	PANELBOARD	
<u> </u>	METER (SELF CONTAINED)	
(M)	METER (WITH CURRENT TRANSFORMERS)	
(#)	MOTOR (NUMBER INDICATES HORSEPOWER)	
<u>G</u>	GENERATOR	
<u> </u>	GROUND CONNECTION	
$\sim$	CONTINUATION	
POWER - DISTE		DEMARKS
SYMBOL	DESCRIPTION PANELBOARD (FLUSH-MOUNTED)	REMARKS
	PANELBOARD (SURFACE-MOUNTED)	
	TRANSFORMER	
ATS	AUTOMATIC TRANSFER SWITCH	
MTS	MANUAL TRANSFER SWITCH	
П	DISCONNECT SWITCH (NON-FUSED)	
	DISCONNECT SWITCH (FUSED)	
MS	MANUAL MOTOR STARTER	
$\bowtie$	MAGNETIC MOTOR STARTER	
⊠h	COMBINATION MAGNETIC MOTOR STARTER/DISCONNECT	
VFD	VARIABLE FREQUENCY DRIVE (VFD)	
	MOTOR	
$\overline{+}$	HARD-WIRED EQUIPMENT CONNECTION	
(G)	GENERATOR	
⊗ POWER - BRAN	GROUND ROD	
SYMBOL	DESCRIPTION	REMARKS
φ	SIMPLEX RECEPTACLE	MOUNT AT 18" AFF, UNO
φ	DUPLEX RECEPTACLE	MOUNT AT 18" AFF, UNO
Φ	DUPLEX RECEPTACLE	MOUNT ABOVE COUNTER, UNO MOUNT HORIZONTAL FOR ADA
<del>***</del>	TWO DUPLEX RECEPTACLES MOUNTED IN COMMON BOX	MOUNT AT 18" AFF, UNO
Φ	SPECIAL PURPOSE RECEPTACLE, SUBSCRIPT INDICATES TYPE	MOUNT AT 18" AFF, UNO
	JUNCTION BOX OR OUTLET BOX	, , , ,
	RECEPTACLE(S) IN RECESSED FLOOR BOX	
⊢ MH	INCOLF INOLL(O) IN NECESSED FLOOR DOA	

CEILING MOUNTED RECEPTACLE(S)

1.	THE GENERAL NOTES APPLY TO ALL DRAWINGS UNDER THIS CONTRACT. REFER TO INDIVIDUAL DRAWINGS FOR ADDITIONAL NOTES.
2.	ALL ELECTRICAL WORK SHOWN SHALL BE PROVIDED AS NEW UNLESS OTHERWISE NOTED.
3.	DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. FOLLOW DRAWING IN LAYING OUT WORK AND CHECK DRAWINGS OF OTHER TRADES TO VERIFY SPACE CONDITIONS. MAINTAIN HEADROOM AND SPACE CONDITIONS. BRANCH CIRCUIT NUMBERS ARE FOR REFERENCE ONLY. CONTRACTOR SHALL DETERMINE THE CIRCUIT NUMBERS AND PROVIDE A SCHEDULE IN PANEL IDENTIFYING BRANCH CIRCUITS.

**GENERAL NOTES** 

4. JUNCTION AND PULL BOXES SHALL GENERALLY BE LOCATED FOR FLUSH MOUNTING IN FINISHED SPACES. WHERE NECESSARY, CONDUITS SHALL BE REROUTED OR OTHER ARRANGEMENTS MADE FOR CONCEALMENT. PULL BOXES SHALL BE PROVIDED AS INDICATED AND WHEREVER NECESSARY TO FACILITATE PULLING OF WIRE AND COORDINATE LOCATIONS WITH OTHER TRADES. COVERS OF JUNCTION AND PULL BOXES SHALL BE ACCESSIBLE. FOR EMPTY RACEWAY RUNS, PULL BOXES SHALL BE PROVIDED EVERY 100 FEET AND AS INDICATED OR

- BOXES SHALL BE SET SQUARE AND TRUE WITH BUILDING FINISH. WALL AND SWITCH OUTLETS SHALL BE ERECTED IN ADVANCE OF FURRING AND FIREPROOFING. BOXES SHALL BE SECURED TO BUILDING STRUCTURE BY ADJUSTABLE STRAP IRONS.
- 6. IN EXISTING BUILDINGS, ALL REQUIRED ACCESS DOORS SHALL BE FURNISHED AND INSTALLED UNDER THE ELECTRICAL SECTION. ALL ACCESS DOOR LOCATIONS SHALL BE FIELD COORDINATED WITH THE OWNER.
- NO ELECTRICAL RACEWAYS OR CONDUCTORS SHALL BE INSTALLED WITHIN 3 INCHES OF STEAM OR HOT WATER PIPES, OR APPLIANCES, EXCEPT FOR CROSSING WHERE RACEWAYS SHALL BE AT LEAST 1 INCH FROM PIPE COVER.
- 8. SUFFICIENTLY LONG WIRE SLACK SHALL BE LEFT IN RUNS TO ALLOW FOR MAKING PROPER FINAL CONNECTIONS. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH #12 AWG STEEL DRAG WIRES.
- 9. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL HVAC EQUIPMENT. (AC UNITS, FANS, VAV BOXES,
- 10. REFER TO PLUMBING DRAWINGS FOR EXACT LOCATION OF ALL PLUMBING EQUIPMENT.
- 11. ALL WIRING SHALL BE ROUTED IN AN ORGANIZED AND NEAT MANNER.
- 12. SUBMIT DIMENSIONED LAYOUTS OF ALL ELECTRIC EQUIPMENT WITH EQUIPMENT SUBMITTALS.
- 13. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL RACEWAYS RUNS WITH EXISTING CONDITIONS AND INCLUDE ALL PULLBOXES, OFFSETS, CUTTING, PATCHING, PAINTING TO MATCH EXISTING, SUPPORTS, ETC. AS REQUIRED.
- 14. THE ROUTING AND LOCATION OF CONDUIT RUNS ARE GENERALLY NOT DIMENSIONAL ON THE DRAWINGS BUT SHALL BE DETERMINED IN THE FIELD TO SUIT THE LOCATIONS OF EQUIPMENT, TO CONFORM TO STRUCTURAL AND ARCHITECTURAL FEATURES AND TO AVOID INTERFERENCES.
- 15. ALL CUTTING AND RESTORATION OF SLAB AND FLOOR SHALL BE IN ACCORDANCE WITH STRUCTURAL ENGINEER'S REQUIREMENTS AND AS APPROVED BY ENGINEER.
- 16. ELECTRICAL CONTRACTOR SHALL VERIFY ALL PENETRATIONS, POKE THRUS, AND EXISTING CONDUIT LOCATIONS PRIOR TO MODIFICATION.
- 17. ALL SIGHT EXPOSED ELECTRICAL DEVICES SHALL BE LOCATED AS PER ARCHITECT'S DRAWINGS AND/OR
- 18. WHERE CONDUIT OR JUNCTION BOXES ARE RUN IN SLAB, THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING, PATCHING, AND RESTORATION OF SLAB AND FLOOR.
- 19. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LIGHT FIXTURES, REMOTE BALLASTS AND ASSOCIATED WIRING, SUPPORTS, HARDWARE, AND ACCESSORIES AS REQUIRED.
- 20. SYMBOLS AND LEGENDS SHOWN ON THIS DRAWING ARE FOR ELECTRICAL DRAWINGS ONLY. SEE ARCHITECTURAL DRAWINGS AND TRADE DRAWINGS FOR RESPECTIVE SYMBOLS AND LEGENDS.
- 21. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL SLAB CUTS, FOUNDATION WALL PENETRATIONS, WALL OPENINGS, CORE DRILLING, ROOF PENETRATIONS, ETC. AND PATCHING AS REQUIRED TO PROVIDE ALL ELECTRICAL WORK. FOR FOUNDATION WALL PENETRATIONS PROVIDE 4"X4"X3/8" WELDED STEEL ANGLE BY THE CONTRACTOR AND APPROVED BY THE STRUCTURAL ENGINEER AND PROVIDE WATER PROOFING ALL ROOF, TUNNEL AND FOUNDATION PENETRATIONS SHALL BE WATER PROOFED. COORDINATE WORK SO AS TO
- 22. SEPARATE RACEWAYS SHALL BE PROVIDED FOR CONDUCTORS OF NORMAL AND EMERGENCY CIRCUITS.
- 23. HORIZONTAL OR CROSS RUNS IN PARTITIONS OR WALLS ARE NOT PERMITTED.

MAINTAIN ANY AND ALL WARRANTIES FOR ROOF SYSTEMS, FOUNDATIONS, ETC.

- 24. THE ELECTRICAL CONTRACTOR SHALL NOT INSTALL MORE THAN THE NUMBER OF CIRCUITS SHOWN IN ANY HOMERUN CIRCUIT.
- THE EXISTING FIRE PROOFING WAS REMOVED TO EXPOSE EXISTING STEEL FOR NEW HANGER INSTALLATION. REFER TO SPECIFICATION SECTION FIRE PROOFING. 26. ALL RACEWAYS, WIRING, AND ASSOCIATED ELECTRICAL EQUIPMENT SHALL BE ROUTED CONCEALED EXCEPT IN

25. CONTRACTOR TO PROVIDE FIRE PROOFING AT ALL PENETRATIONS OF RATED PARTITIONS, FLOORS, AND WHERE

- UNFINISHED AREAS.
- 27. ALL EQUIPMENT, MATERIALS, ETC. SHALL BE SUBMITTED TO ENGINEER FOR APPROVAL. REFER TO SPECIFICATIONS FOR ADDITIONAL ACTION SUBMITTAL AND SHOP DRAWING REQUIREMENTS.
- 28. PRIOR TO CONSTRUCTION, COORDINATE WITH LOCAL AHJ THE UL CONDITIONAL LISTING REQUIREMENTS FOR ALL JUNCTIONS BOXES UTILIZED IN RATED WALLS AND CEILINGS.
- 29. WHERE CONFLICTS EXIST BETWEEN THE INFORMATION INCLUDED IN THESE DRAWINGS OR BETWEEN INFORMATION PROVIDED IN THESE DRAWINGS AND THE PROJECT SPECIFICATIONS OR WITHIN THE PROJECT SPECIFICATIONS, THE MORE STRINGENT AND/OR HIGHEST COST REQUIREMENTS SHALL APPLY. SHOULD THE CONTRACTOR REQUIRE FURTHER CLARIFICATION, AN RFI SHALL BE SUBMITTED FOR CLARIFICATION. WHERE CONFLICTS DO EXIST, THE PROJECT ENGINEER OF RECORD SHALL HAVE THE SOLE DISCRETION AND RIGHT TO PROVIDE INTERPRETATION OF INTENT OF THE CONTRACT DOCUMENTS AS REQUIRED AND THIS INTERPRETATION SHALL SERVE TO DIRECT THE CONTRACTOR IN ACCORDANCE WITH THE IMPLIED INTENT OF THE CONSTRUCTION DOCUMENTS WITHOUT ADDITIONAL COST TO THE PROJECT.
- 30. ALL VALUE ENGINEERING OR DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE DESIGN TEAM FOR APPROVAL. ANY COST INCURRED AS A RESULT OF ANY DEVIATIONS FROM THE BASIS OF DESIGN INDICATED IN THE CONTRACT DOCUMENTS (E.G. ELECTRICAL MODIFICATIONS TO ACCOMMODATE ALTERNATE EQUIPMENT SELECTIONS, DESIGN RELATED EXPENSES FOR REQUIRED DRAWING MODIFICATIONS. ETC)SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NO INCREASE IN CONTRACT COST WILL BE GRANTED UNLESS BORNE BY AND APPROVED IN WRITING BY THE OWNER CONTRACT DOCUMENTS ARE DEFINED TO INCLUDE ALL DISCIPLINES AND DIVISIONS OF THE CONTRACT.

Α	AMPERE(S)	KAIC	1000 AMPERE INTERRUPTING
AC	AI TERNATING CURRENT	RAIC	CAPACITY
ADA	AMERICANS WITH DISABILITIES ACT	KCMIL	1000 CIRCULAR MIL(S)
AFCI	ARC-FAULT CIRCUIT INTERRUPTER	KVA	KILOVOLT AMPERE(S)
AFF	ABOVE FINISHED FLOOR	KW	KILOWATT(S)
AFG	ABOVE FINISHED GRADE	LTG	LIGHTING
AHJ	AUTHORITY HAVING JURISDICTION	MC	MECHANICAL CONTRACTOR
ANSI	AMERICAN NATIONAL STANDARDS	MCA	MINIMUM CIRCUIT AMPACITY
7	INSTITUTE	MCB	MAIN CIRCUIT BREAKER
ATS	AUTOMATIC TRANSFER SWITCH	MIC	MICROWAVE
AWG	AMERICAN WIRE GUAGE	MISC	MISCELLANEOUS
BLDG	BUILDING	MIN	MINIMUM
C	CONDUIT	MFR	MANUFACTURER
CB/CKT BKR	CIRCUIT BREAKER	MH	MOUNTING HEIGHT
CL	CLOSET	MTD	MOUNTED
CLG	CEILING	N	NEUTRAL
CKT	CIRCUIT	NC	NORMALLY CLOSED
CO	CONDUIT ONLY	NEC	NATIONAL ELECTRIC CODE
CONC	CONCRETE	NFPA	NATIONAL FIRE PROTECTION
COND	CONDUCTOR		ASSOCIATION
CONST	CONSTRUCTION	NL	NIGHT LIGHT
CONT	CONTRACT	NO	NORMALLY OPEN
CP	CONTROL PANEL	NTS	NOT TO SCALE
CT	CURRENT TRANSFORMER	P	POLE
CU	COPPER	PB	PULL BOX
DED	DEDICATED	PC	PLUMBING CONTRACTOR
DISC	DISCONNECT	PH/Ø	PHASE
DISH	DISHWASHER	PL	PLUG LOAD
DISP	DISPOSAL	PNL	PANEL
DIV	DIVISION	PRI	PRIMARY
DT	DUAL TECHNOLOGY (IR/US)	PWR	POWER
DWG	DRAWING	QTY	QUANTITY
EA	EACH	REC/RECEPT	RECEPTACLE
EC	ELECTRICAL CONTRACTOR	REF	REFRIGERATOR
ELEC	ELECTRICAL CONTRACTOR	SEC	SECONDARY
EM/EMER	EMERGENCY	SPEC	SPECIFICATION
EX/EXIST	EXISTING	SW	SWITCH
F	FUSE	TEL	TELEPHONE
FA	FIRE ALARM	TVSS	TRANSIENT VOLTAGE SURGE
FBO	FURNISHED BY OTHERS	1,00	SUPPRESSION
FDR	FEEDER	TYP	TYPICAL
FL	FLOOR	UG	UNDERGROUND
FLA	FULL LOAD AMPS	UL	UNDERWRITER'S LABORATORIES
FLUOR	FLUORESCENT	UNO	UNLESS NOTED OTHERWISE
FT	FEET	UON	UNLESS OTHERWISE NOTED
G/GND	GROUND	UPS	UNINTERRUPTIBLE POWER SUPP
GC G/GND	GENERAL CONTRACTOR	US	ULTRASONIC
		-	
GFI	GROUND FAULT INTERRUPTER	UV	ULTRAVIOLET
HC	HUNG CEILING	V	VOLT(S)
HOA	HAND-OFF-AUTO SELECTOR SWITCH	VA	VADIABLE ERECHENCY PRIVE
HP	HORSEPOWER	VFD	VARIABLE FREQUENCY DRIVE
IR	INFRARED	W WP	WATT(S)

## **BRANCH CIRCUIT NOTES**

- CIRCUIT NUMBERS ARE FOR REFERENCE ONLY AND INDICATE THE DEVICES REQUIRED TO BE CONNECTED TO DESIGNATED CIRCUITS.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND PROVIDING THE ACTUAL NUMBER OF CONDUCTORS REQUIRED FOR ALL BRANCH CIRCUIT WIRING TO SERVE THE INTENDED
- 3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY BALANCING LOADS ON ALL THREE PHASES.
- 4. ALL BRANCH CIRCUITS SHALL HAVE SEPARATE GROUND WIRE.
- 5. ALL BRANCH CIRCUITS SHALL HAVE SEPARATE NEUTRAL WIRE.
- 6. ALL BRANCH CIRCUITS SHALL BE SIZED PER OVERCURRENT PROTECTION RATING AND NEC REQUIREMENTS (INCLUDING NEC CONDUCTOR AMPACITY TABLES, ARTICLE 334.80, AND 338.10(B)(4)).
- 7. PROVIDE ARC-FAULT CIRCUIT PROTECTION PER NEC ARTICLE 210.12.

## REGULATORY NOTES

ALL WORK SHALL BE DONE IN COMPLIANCE WITH THE LOCALLY ADOPTED CODES AND STANDARDS, INCLUDING ALL LOCAL AMENDMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ANY VARIANCE REQUEST AND OBTAINING APPROVAL FROM THE AHJ PRIOR TO DEVIATION. THE CONTRACTOR IS RESPONSIBLE FOR ASSURING COMPLIANCE WITH ALL CODES, STANDARDS AND REGULATORY RULINGS AS ENFORCED BY THE AHJ. THESE INCLUDE:

THE CITY OF WACO, TEXAS ADOPTED CODES

- 1. 2018 INTERNATIONAL BUILDING CODE
- 2. 2018 INTERNATIONAL EXISTING BUILDING CODE 3. 2015 INTERNATIONAL ENERGY CONSERVATION CODE
- 4. 2018 INTERNATIONAL FUEL GAS CODE
- 5. 2018 INTERNATIONAL PLUMBING CODE
- 6. 2018 INTERNATIONAL MECHANICAL CODE
- 7. 2018 INTERNATIONAL FIRE CODE
- 8. 2020 NATIONAL ELECTRICAL CODE

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