

## ELECTRICAL LEGEND

ALL SYMBOLS SHOWN MAY NOT APPEAR IN ALL DRAWINGS.  
SYMBOLS ARE SHOWN SCHEMATIC AND MAY NOT BE TO SCALE.

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	2'x4' FLUORESCENT LIGHT FIXTURE		MICROPHONE
	2'x4' FLUORESCENT LIGHT FIXTURE ON EMERGENCY CIRCUIT		FIRE ALARM PULL STATION
	2'x4' FLUORESCENT LIGHT FIXTURE SWITCHED W/ INBOARD LAMPS ONE SWITCH AND OUTBOARD LAMPS ON ANOTHER		FIRE ALARM VISUAL SIGNAL ONLY
	2'x4' FLUORESCENT FIXTURE W/INBOARD LAMPS ON EMERGENCY CIRCUIT AND OUTBOARD LAMPS ON NORMAL CIRCUIT		FIRE ALARM AUDIO/VISUAL SIGNAL
	2'x2' FLUORESCENT LIGHT FIXTURE		FIRE ALARM AUDIO-ONLY
	2'x2' FLUORESCENT LIGHT FIXTURE ON EMERGENCY CIRCUIT		CEILING SMOKE DETECTOR WITH STROBE AT ACCESSIBLE ROOMS AND HEARING IMPAIRED ROOMS
	1'x4' FLUORESCENT LIGHT FIXTURE		FIRE ALARM SPRINKLER FLOW SWITCH
	TRACK LIGHT		FIRE ALARM SPRINKLER TAMPER SWITCH
	INCANDESCENT, FLUORESCENT, OR HID WALL WASHER LIGHT FIXTURE CEILING MTD.		FIRE ALARM SPRINKLER PRESSURE SWITCH
	INCANDESCENT, FLUORESCENT, OR HID FIXTURE CLG. OR WALL MTD.		FIRE ALARM SMOKE DETECTOR CEILING OR WALL MOUNTED
	INCANDESCENT, FLUORESCENT, OR HID FIXTURE ON EMERGENCY CCT. CLG. OR WALL MTD.		HEAT DETECTOR CEILING OR WALL MOUNTED
	EXIT LIGHT, CEILING OR WALL MOUNTED - SHADING INDICATING SINGLE OR DOUBLE FACE; DIRECTIONAL ARROWS AS INDICATED		DUCT SMOKE DETECTOR
	WALL SWITCH SPST, 20A/120/277V		CEILING CARBON MONOXIDE DETECTOR
	WALL MOUNTED INFRARED MOTION DETECTOR SWITCH SPST, 20A/120/277V		SMOKE DOOR HOLDER
	DOUBLE POLE TOGGLE SWITCH, 20A/120/277V		FIRE ALARM CONTROL PANEL
	3-WAY WALL SWITCH, 20A/120/277V		FIRE ALARM ANNUNCIATOR PANEL
	FAN SPEED CONTROL SWITCH		P.A. SPEAKER, CEILING OR WALL MOUNTED
	WALL DIMMER SWITCH		MICROPHONE OUTLET
	KEY OPERATED WALL SWITCH		DISCONNECT SWITCH - 30/-/3 INDICATES 30A, 3-POLE, NONFUSED; 30/30/3 INDICATES 30A, 3-POLE, 30A FUSE
	MOTOR RATED SWITCH		CIRCUIT BREAKER DISCONNECT SWITCH - THERMAL MAGNETIC CB IN NEMA 1 ENCL; AMPS/POLES AS INDICATED
	SINGLE RECEPTACLE - 20A/125V/2P/3W/G NEMA 5-20R		DISCONNECT SWITCH - 30/30/3 INDICATES 30A, 3-POLE, 30A FUSE
	DUPLEX RECEPTACLE - 20A/125V/2P/3W/G NEMA 5-20R		MOTOR STARTER FVNR UNO; NUMBER INDICATES NEMA SIZE
	DUPLEX RCPT. SPLIT-WIRED - 20A/125V/2P/3W/G NEMA 5-20R		COMBINATION MOTOR CONTROLLER/DISCONNECT SWITCH
	DUPLEX RCPT. GFCI - 20A/125V/2P/3W/G NEMA 5-20R		MOTOR
	QUADRAPLEX RECEPTACLE (TWO DUPLEX RCPTS. UNDER ONE COVERPLATE)		PANELBOARD
	ISOLATED GROUND DUPLEX RECEPTACLE - 20A/125V NEMA 5-20R		EQUIPMENT CONNECTION
	DUPLEX RECEPTACLE ON EMERGENCY CIRCUIT		CIRCUIT CONDUCTOR INDICATION (NEUTRAL, PHASE, EQUIPMENT GROUND, ISOLATED GROUND, SWITCH LEG) (NO INDICATION REPRESENTS 2#12, 1#12G, 1/2"C. UNO)
	FLOOR MOUNTED DUPLEX RECEPTACLE - FLUSH MOUNTED UNO		CIRCUIT HOME RUN TO PANELBOARD (2 #12, 1 #12G, 3/4"C. 20A/1P CB UNO)
	SPECIAL PURPOSE RECEPTACLE (NEMA NO. AS INDICATED)		THREE SINGLE POLE DEVICE CIRCUIT NUMBERS
	JUNCTION BOX - SIZE & MOUNTING AS REQUIRED		MULTI-POLE DEVICE CIRCUIT NUMBERS
	MULTIOUTLET ASSEMBLY - LENGTH AND OUTLET SPACING AS INDICATED	ELECTRICAL ABBREVIATIONS	
	TELEPHONE/DATA OUTLET, WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING FROM OUTLET BOX	AFF	ABOVE FINISHED FLOOR
	TELEPHONE OUTLET, WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING FROM OUTLET BOX	BFC	BELOW FINISHED CEILING
	TELEPHONE OUTLET, WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING FROM OUTLET BOX	C	CONDUIT
	TELEPHONE OUTLET, WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING FROM OUTLET BOX	CB	CIRCUIT BREAKER
	TELEPHONE OUTLET, WALL MOUNTED - STUB 3/4" C. ABOVE ACCESSIBLE CEILING FROM OUTLET BOX	EC	EMPTY CONDUIT
	FLOOR MOUNTED TELEPHONE OUTLET - FLUSH MOUNTED UNO	EX	EXISTING
	DATA OUTLET, WALL MOUNTED - STUB 3/4" C. ABOVE CEILING FROM OUTLET BOX	F	FUSE
	FLOOR MOUNTED DATA OUTLET - FLUSH MOUNTED UNO	G	GROUND (EQUIPMENT)
	FLOOR MOUNTED TELEPHONE/DATA OUTLET - FLUSH MOUNTED UNO	GFCI	GROUND FAULT INTERRUPTER
	TELEVISION OUTLET, CLG. OR WALL MOUNTED - STUB 3/4" C. ABOVE CEILING FROM OUTLET BOX	IC	INTERRUPTING CAPACITY
	PUSHBUTTON	IG	ISOLATED GROUND
	CLOCK HANGER OUTLET 15A/125V/2P/3W/G RECEPTACLE	MTD	MOUNT OR MOUNTED
	OCCUPANCY MOTION SENSOR, CEILING MOUNTED	NC (N.C.)	NORMALLY CLOSED
	OCCUPANCY MOTION SENSOR, WALL MOUNTED	NF	NONFUSED
	DOORBELL LIGHT (STROBE) AT ACCESSIBLE ROOMS AND HEARING IMPAIRED ROOMS	NIC	NOT IN CONTRACT
	DOORBELL CHIME AND LIGHT (STROBE) AT ACCESSIBLE ROOMS AND HEARING IMPAIRED ROOMS	PC	PHOTOCELL
		TC	TIME CLOCK
		NL	NIGHT LIGHT
		NO (N.O.)	NORMALLY OPEN
		RCPT(S)	RECEPTACLE(S)
		PNL	PANEL
		SO (S.O.)	SPACE ONLY
		SP	SPARE
		ST (S.T.)	SHUNT TRIP
		SW	SWITCH
		UF	UNDERFLOOR
		UG	UNDERGROUND
		UNO(U.N.O.)	UNLESS NOTED OTHERWISE
		WG	WIRE GUARD
		WP	WEATHERPROOF
		XFMR	TRANSFORMER
		TBD	TO BE DETERMINED OR COORDINATED BY OWNER/ARCHITECT

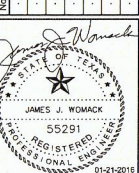
### GENERAL NOTES

- A. PROVIDE LABOR, MATERIALS, EQUIPMENT, AND TRANSPORTATION TO RECEIVE, INSTALL, ADJUST, AND PUT INTO OPERATION COMPLETE ELECTRICAL SYSTEMS IN ACCORDANCE WITH THE INTENT OF THE CONTRACT DOCUMENTS. PROVIDE PRODUCTS NOT MENTIONED BUT OBVIOUSLY NECESSARY AND INCIDENTAL TO THE COMPLETION OF THIS WORK.
- B. WORK SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING: MECHANICAL WORK AS REQUIRED FOR COORDINATION, POWER DISTRIBUTION, AND INSTALLATION OF MATERIALS.
- C. ALL WORK DONE SHALL BE PERFORMED BY QUALIFIED ELECTRICIANS, UNDER THE SUPERVISION AND DIRECTION OF A SUPERINTENDENT HAVING SUCCESSFUL EXPERIENCE INSTALLING AND SUPERVISING EQUIPMENT AND SYSTEMS OF SIMILAR TYPE AND SIZE AS INDICATED BY CONTRACT DOCUMENTS.
- D. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT RULES, REGULATIONS, AND INDUSTRY STANDARDS OF THE NATIONAL ELECTRICAL CODE, UL, IPCA, NEMA, NFPA, OSHA, NATIONAL ELECTRICAL SAFETY CODE, AND ANY LOCAL CODES, LAWS, OR ORDINANCES. IN THE EVENT THAT A DISCREPANCY IS FOUND IN THE CONTRACT DOCUMENTS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- E. EXAMINE AND BECOME FAMILIAR WITH ALL CONTRACT DOCUMENTS IN THEIR ENTIRETY. SURVEY THE PROJECT AND BECOME FAMILIAR WITH EXISTING CONDITIONS AND SCOPE OF WORK. ALL COSTS SUBMITTED SHALL BE BASED ON A THOROUGH KNOWLEDGE OF ALL WORK AND MATERIALS REQUIRED. ANY ADDITIONAL COSTS DUE TO FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- F. COORDINATE WORK WITH ALL OTHER TRADES. GIVE SPECIAL CONSIDERATION TO COORDINATING INSTALLATION OF PIPING. VERIFY EXACT LOCATION OF EQUIPMENT WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- G. PRODUCTS OF A SIMILAR NATURE SHALL BE THE SAME TYPE AND MANUFACTURER. PROVIDE THE STANDARD PRODUCTS OF MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SPECIFIED PRODUCTS, UNLESS OTHERWISE REQUIRED BY THE DRAWINGS.
- H. ALL PRODUCTS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH NATIONALLY RECOGNIZED AND ACCEPTED STANDARDS AND PROCEDURES.
- J. ALL ELECTRICAL DISTRIBUTION EQUIPMENT, TRANSFORMERS, PANELBOARDS, AND OTHER ENCLOSED EQUIPMENT SHALL BE IDENTIFIED AS INDICATED ON THE CONTRACT DRAWINGS. SAID IDENTIFICATION SHALL CONSIST OF PERMANENTLY ATTACHED ENGRAVED LAMINATED PLASTIC NAMEPLATES. EACH BRANCH CIRCUIT OVERCURRENT PROTECTION DEVICE SHALL BE IDENTIFIED BY CIRCUIT NUMBER. EACH BRANCH CIRCUIT SPICE OR TERMINATING SHALL BE IDENTIFIED BY PANEL AND CIRCUIT DESIGNATION SHOWN ON THE JUNCTION OR OUTLET BOX, OR UPON INDIVIDUAL WIRES IN CASES WHERE MORE THAN ONE OF EACH PHASE CONDUCTOR OCCURS.
- K. ALL WIRING SHALL BE #12 AWG, THW OR THWN, CU, SOFT DRAWN OF 98% CONDUCTIVITY AS A MINIMUM, UNLESS NOTED OTHERWISE. ALL WIRING SHALL BE IN CONDUIT.
- L. ALL BRANCH CIRCUIT OVERCURRENT PROTECTION DEVICES SHALL BE 20 AMPERE CIRCUIT BREAKERS UNLESS NOTED OTHERWISE. 120/240 VOLT CIRCUIT BREAKERS SHALL BE RATED AT 10,000 AIC. ALL 277/480 VOLT CIRCUIT BREAKERS SHALL BE RATED AT 14,000 AIC UNLESS NOTED OTHERWISE (REFERENCE ELECTRICAL PANEL SCHEDULES, ONE LINE, AND RISER DIAGRAMS).
- M. REFERENCE BASE BUILDING SPECIFICATIONS FOR DEVICES, MATERIALS AND WORKMANSHIP REQUIREMENTS NOT SPECIFIED ON THESE DRAWINGS. THERE SHALL BE NO DEVIATION FROM SPECIFICATIONS WITHOUT THE WRITTEN APPROVAL OF THE ARCHITECT AND ENGINEER.
- N. UPON COMPLETION OF WORK, PREPARE POWER "AS-BUILTS" WITH ELECTRONIC CAD FILES. PRESENT COMPLETED ELECTRONIC DRAWINGS TO OWNER AND TWO SETS OF PRINTS TO ENGINEER. "AS-BUILT" DRAWINGS SHALL INCLUDE ALL BRANCH CIRCUIT WORK, ANY PANELBOARD INFORMATION AVAILABLE, FINAL SWITCHING, ETC.
- O. ELECTRICAL PLAN DRAWINGS ARE DIAGRAMMATIC; THEREFORE, MODIFICATION TO SPECIFIC LOCATIONS CAN CHANGE.
- P. REFER TO OTHER DOCUMENTS FOR GUIDANCE AND VERIFICATION OF DIMENSIONS, CEILING HEIGHTS, EQUIPMENT COORDINATION, AND LOCATION OF PIPING, STRUCTURAL STEEL, OTHER EQUIPMENT, ETC.
- Q. PENETRATIONS OF WALLS, FLOORS AND ROOF FOR THE PASSAGE OF ELECTRICAL RACEWAYS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER. PENETRATIONS ARE TO BE PROPERLY SEALED AFTER INSTALLATION OF RACEWAYS TO MAINTAIN THE STRUCTURAL, WATERPROOF AND FIREPROOF INTEGRITY OF THE WALL, FLOOR OR ROOF SYSTEM TO BE PENETRATED.
- S. CONTRACTOR SHALL NOTIFY ENGINEER WHERE FIELD CONDITIONS VARY FROM CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL COORDINATE WITH ENGINEER OF ANY CHANGES TO ELECTRICAL PANEL SCHEDULES WHERE VARYING FIELD CONDITIONS AFFECT SUCH SCHEDULES.
- T. PROVIDE GREEN TYPE THWN-2 EQUIPMENT GROUND WIRE IN ALL CONDUITS.
- V. ALL EXPOSED CONDUIT SUBJECT TO PHYSICAL DAMAGE AND BELOW 12' AFF SHALL BE RIGID GALVANIZED STEEL. UNDERGROUND CONDUIT SHALL BE PVC EXCEPT FOR ELBOWS AND WHERE CONDUIT PENETRATES THE SLAB OR GRADE BEAM. PROVIDE WRAPPED OR PVC COATED GRC 6" ABOVE AND BELOW THE SLAB AND 2 FEET INSIDE AND OUTSIDE GRADE BEAMS. THE ELECTRICAL SECONDARY AND PRIMARY SERVICE CONDUITS SHALL BE PVC CONDUIT.

**LES LACS POND**  
**WATER WELL REBUILDING PROJECT**  
 TOWN OF ADDISON  
 DALLAS COUNTY, TEXAS



Revision	Date	Description



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