

ELECTRICAL ABBREVIATIONS

Table listing electrical abbreviations such as AMP, AC, A/C, AFF, AFG, AHU, ALT, ALT, ANN, APPROX, ARCH, ATC, CONTROL, ATIS, AWG, BAS, BFC, BLDG, BOD, C, CND, CATV, CB, CCIV, CKT, CLD, CONN, CPT, CT, CTR, CU, CO, CX, DC, DISC, DN, DP, DPST, DPDT, DT, DWG, E, EMERG, EA, EC, EF, EH, ELEC, ELEV, ETR, EX, EXP, FWC, FR, FAAP, FACP, FBO, FC, FDR, FLA, FLR, FU, FUSS, FVR, FVNR, GEN, GFI, GRD, GRS, HID, HOA, HP, HPS, HTR, HV, HZ, IG, JB, KCMIL, KV, KVA, KVAR, KW, KWH, LA, LC, LGT, LING, LP, LRA, MATV, MCB, MCC, MCH, MFI, MHO, MS, MID, MV, NC, NEC, NFSS, NO, OC, OFCI, OFOI, OH, PH, P, P, PF, PFC, PL, PLC, PNL, PP, PR, PT, PVC, P, QTY, RGS, REC, RECP, REQ'D, RFI, RGS, RLA, RM, RVAT, RX, SC, SEC, SN, S/N, SP, SPDT, SS, SSI, ST, SW, SWBD, TBR, TC, TEL, TELF, TOD, TRANS, TR, TIB, TIB, TW, TYP, UG, UH, UON, V, VFC, W, W, WP, XP, ZS1W, ZS2W, etc.

POWER SYMBOLS

Table listing power symbols with descriptions and mounting heights (MH). Includes symbols for combination switches, duplex receptacles, floor mounted duplex receptacles, ceiling mounted duplex receptacles, pedestal type duplex receptacles, special receptacles, and various control centers and switches.

LIGHTING SYMBOLS

Table listing lighting symbols with descriptions and mounting heights (MH). Includes symbols for single pole toggle switches, double pole toggle switches, three-way toggle switches, key operated switches, dimmer switches, adjustable digital time switches, momentary contact switches, occupancy sensors, time clocks, relays, lighting fixtures, and emergency lighting fixtures.

SPECIAL SYSTEMS SYMBOLS

Table listing special systems symbols with descriptions and mounting heights (MH). Includes symbols for horn type speakers, fire alarm flashing strobe lights, fire alarm horns, fire alarm annunciator panels, fire alarm pull stations, fire alarm control panels, fire alarm remote alarm lights, fire alarm system addressable relays, fire alarm system remote alarm lights, fire alarm system addressable relays, fire alarm system addressable relays, flow switch connections, fireman's telephone jacks, monitor system jacks, ceiling speakers, amplifiers, keypads, card readers, door alarm contacts, and data outlet rough-in locations.

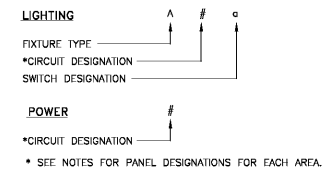
ELECTRICAL GENERAL AND SYMBOL NOTES:

- 1. THIS IS A STANDARD SYMBOL LIST. SOME SYMBOLS MAY NOT APPEAR ON THE ACCOMPANYING DRAWINGS.
- 2. REFER TO SPECIFICATIONS FOR DETAILED REQUIREMENTS.
- 3. PLAN AND SECTION SYMBOLS MAY ALSO BE USED ON REFER DRAWINGS.
- 4. ON SINGLE LINE DIAGRAMS FOR 3 PHASE SYSTEMS, DEVICE QUANTITY = 3, UNLESS OTHERWISE NOTED.
- 5. DEVICE SHALL BE MOUNTED A MINIMUM OF 90" AFF TO BOTTOM OF DEVICE OR BELOW THE FINISHED CEILING OF NOT LESS THAN 6" TO TOP OF DEVICE, RECEPTACLES EXCEPTED.
- 6. UNLESS OTHERWISE NOTED, ALL INTERIOR CONDUITS AND BOXES SHALL BE CONCEALED.
- 7. INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS VERSION OF THE IBC, NFPA, NEC AND THE AUTHORITY HAVING JURISDICTION.
- 8. THE ELECTRICAL PLANS ARE DIAGNOSTIC ONLY. FIELD MEASURE FOR EXACT BUILDING DIMENSION. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS MOUNTING HEIGHTS NOT IDENTIFIED ON THESE PLANS.
- 9. THE CONTRACTOR SHALL ROUTE CABLE AND CONDUIT ALONG THE SHORTEST, MOST COST EFFECTIVE AND MOST CONSTRUCTIBLE ROUTE WHERE POSSIBLE, WHILE REMAINING IN COMPLIANCE WITH THE CONTRACT DOCUMENTS AND GOVERNING CODES AND STANDARDS.
- 10. ANY ELECTRICAL EQUIPMENT OR CONDUIT AND WIRING THAT ARE REQUIRED TO BE RELOCATED DUE TO CONSTRUCTION SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SERVICE TO ANY SUCH EQUIPMENT.
- 11. COORDINATE ALL ELECTRICAL EQUIPMENT AND DEVICES WITH OTHER TRADES TO AVOID CONFLICTS. PROVIDE ALL NECESSARY PIPING, EQUIPMENT, HANGERS, OR FITTINGS, ETC. IN ORDER TO AVOID CONFLICTS AT NO ADDITIONAL COST TO THE OWNER.
- 12. COORDINATE JUNCTION BOX AND RECEPTACLE MOUNTING HEIGHTS FOR EQUIPMENT FURNISHED BY OTHER TRADES. ASSET AS NECESSARY TO ACCOMMODATE THE EQUIPMENT SELECTED. PROVIDE ALL ELECTRICAL CONNECTIONS TO HARD WIRE TO THE EQUIPMENT.
- 13. COORDINATE ALL WORK WITH EXISTING CONDITIONS AND MAKE FIELD ADJUSTMENTS AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.
- 14. ALL NEW CIRCUIT BREAKERS INSTALLED IN EXISTING PANELBOARDS SHALL BE COORDINATE MAKE WITH EXISTING PANELBOARDS AND FIELD SURVEYS AND FIELD SURVEYS SHALL BE USED TO VERIFY EXACT LOCATION OF ALL ELECTRICAL ITEMS IN THE FIELD PRIOR TO THE START OF ANY WORK.
- 15. CONTRACTOR SHALL REINSTALL ALL CEILING MOUNTED FIXTURES EQUIPMENT AND DEVICES WHICH WERE REMOVED AND PROTECT DURING DEMOLITION.
- 16. FOR ALL EQUIPMENT WHICH IS CONNECTED TO EXISTING CIRCUITS, EXTEND CONDUIT AND WIRING AS NECESSARY TO MAKE FINAL CONNECTION. COORDINATE WITH EQUIPMENT CONNECTION LOCATION.

ELECTRICAL GENERAL DEMOLITION NOTES

- 1. ITEMS INDICATED WITH A DASHED LINE ARE TO BE REMOVED IN THEIR ENTIRETY UNLESS OTHERWISE NOTED. ITEMS THAT ARE EXISTING TO REMAIN ARE INDICATED WITH A SOLID LINE.
- 2. EXISTING CONDITIONS SUCH AS LIGHTING FIXTURES, RECEPTACLES, ETC. WERE OBTAINED FROM AVAILABLE RECORD DRAWINGS AND FIELD SURVEYS AND ARE NOT WARRANTED TO BE CORRECT OR COMPLETE. CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL ELECTRICAL ITEMS IN THE FIELD PRIOR TO THE START OF ANY WORK.
- 3. SHOULD THE CONTRACTOR ENCOUNTER ANY MAJOR ELECTRICAL ITEMS WHICH ARE NOT ADDRESSED OR ARE A MAJOR DEVIATION FROM THE DRAWINGS HE SHALL STOP WORK IMMEDIATELY AND NOTIFY THE OWNER AND ENGINEER. ENGINEER WILL REVIEW THE ITEMS IN QUESTIONS AND PROVIDE DIRECTION.
- 4. THE OWNER SHALL BE GIVEN FIRST RIGHT OF REFUSAL FOR ALL ELECTRICAL EQUIPMENT WHICH IS TO BE REMOVED. ALL ELECTRICAL EQUIPMENT WHICH IS TO BE REMOVED SHALL BE STORED ON THE SITE WHERE DIRECTED BY THE OWNER. THE CONTRACTOR SHALL PROMPTLY DISPOSE OF ALL ELECTRICAL ITEMS WHICH ARE REMOVED AND NOT DESIRED BY THE OWNER.
- 5. ALL BRANCH CIRCUIT WIRING WHICH MUST BE IN SERVICE AND WHICH IS DISCONNECTED AS A RESULT OF DEMOLITION WORK SHALL BE PROPERLY RECONNECTED.
- 6. WHERE EXISTING DEVICES REMAIN IN WALLS WHICH RECEIVE A NEW FINISH, CONTRACTOR SHALL SUPPLY ALL NECESSARY OUTLET BOX EXTENSIONS, PLASTER RINGS, ETC.
- 7. REMOVE ALL EMPTY RACEWAYS AND BOXES THAT ARE ABANDONED.
- 8. DEVICES, FIXTURES, EQUIPMENT, ETC. SHOWN TO BE DEMOLISHED SHALL BE REMOVED ALONG WITH ASSOCIATED BOXES, CONDUITS, HANGERS AND MISCELLANEOUS MATERIAL BACK TO NEAREST JUNCTION OR SOURCE IF THE CIRCUIT IS DEDICATED TO WHAT IS BEING DEMOLISHED. PROTECT CIRCUITS FOR REUSE WHERE INDICATED. IF EXISTING DEVICES OR EQUIPMENT WILL REMAIN ON THE CIRCUIT, DEMOLISH BACK TO JUNCTION AND MAINTAIN CONTINUITY FOR REMAINDER OF CIRCUIT.
- 9. IN ALL AREAS WHICH ARE TO HAVE CEILING REMOVED, THE CONTRACTOR SHALL DISCONNECT LIGHTING FIXTURES, AND OTHER CEILING MOUNTED EQUIPMENT AND DEVICES, FIXTURES, EQUIPMENT AND DEVICES SHALL BE PROVIDED FOR REINSTALLATION. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS.

CIRCUIT DESIGNATIONS

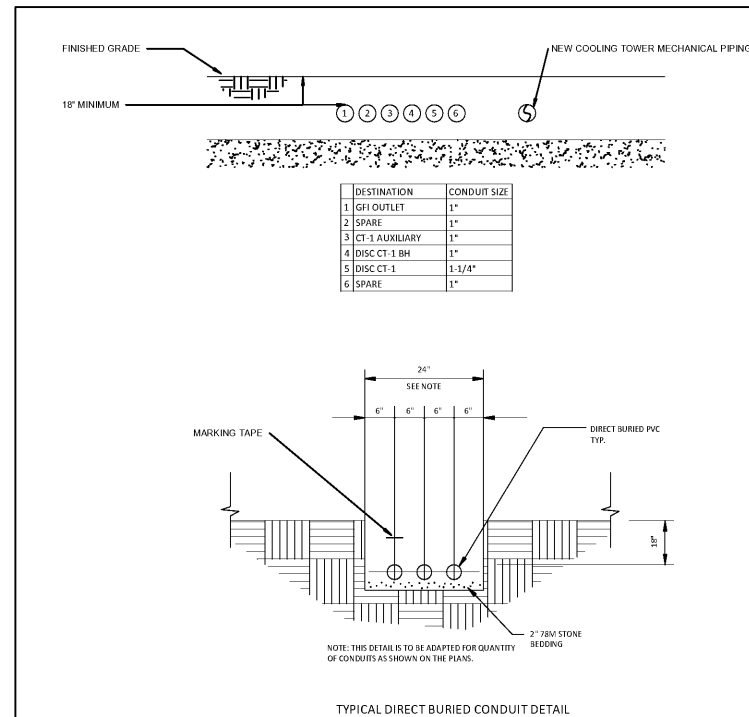


ELECTRICAL DRAWING PRESENTATION

Table listing electrical drawing presentation symbols and descriptions. Includes symbols for revision numbers, drawing notes, equipment tags, section/elevation identification, part plan and detail identification, existing line types, new electrical work, and demolition line types.

EQUIPMENT DESIGNATIONS

Table listing equipment designations and descriptions. Includes SWGR (Switchgear), SWBD (Switchboard), PNL (Panelboard), MCC (Motor Control Center), and XTMR (Transformer).



DIRECT BURIED CONDUIT

Table listing project milestones and dates.

50% CD	08/07/2018
55% CD - re-submittal	11/20/2018
90% CD	10/04/2019
PERMIT SET	11/15/2019
BID SET	12/20/2019



Table for sheet title and number.

SHEET TITLE	ELECTRICAL SYMBOLS AND NOTES
SHEET NUMBER	E001

SCALE: 1 NONE

E001