

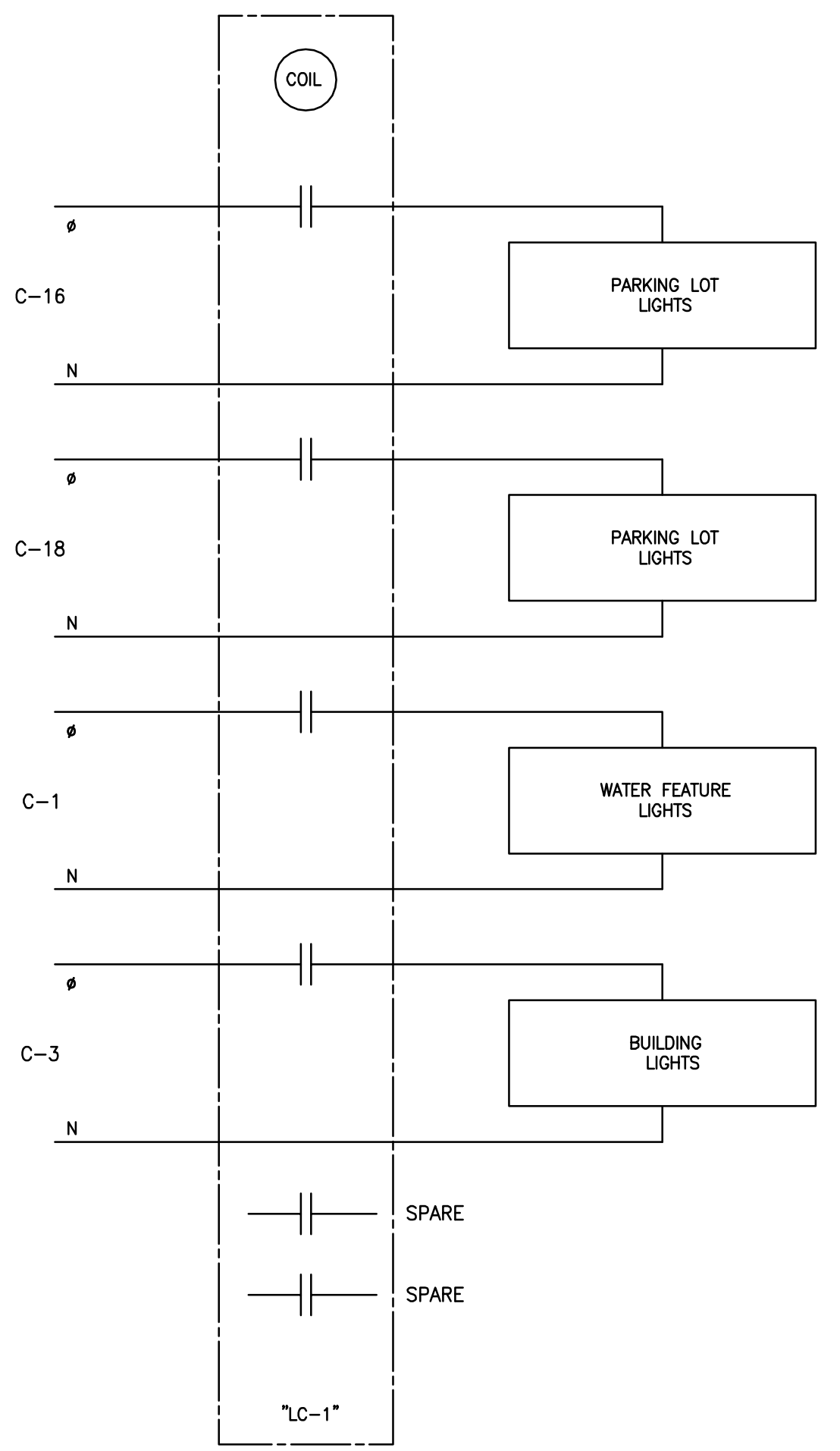
Thomas R. Cook

GENERAL ELECTRICAL NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH NATIONAL, STATE, AND LOCAL CODES IN FORCE AT THE TIME OF BIDDING, INCLUDING, BUT NOT LIMITED TO, THE INDIANA CONSTRUCTION RULES AND NATIONAL ELECTRICAL CODE.
- DRAWINGS ARE DIAGRAMMATIC AND GENERALLY INDICATIVE OF WORK REQUIRED. SURFACE RACEWAY, TELEPHONE/DATA OUTLETS AND POWER OUTLETS HAVE BEEN LOCATED BASED ON PRELIMINARY CASE WORK AND COUNTER DIMENSIONS. THIS CONTRACTOR SHALL VERIFY IN FIELD ACTUAL CASE WORK AND COUNTER DIMENSIONS AND LOCATIONS AND COORDINATE ELECTRICAL EQUIPMENT LOCATIONS WITH ACTUAL CASE WORK PROVIDED PRIOR TO INSTALLATION OF ROUGH-IN'S. WHERE REQUIRED, ELECTRICAL ITEM LOCATIONS, MOUNTING HEIGHTS, ETC. SHALL BE REVISED AS REQUIRED TO ACCOMMODATE ADJACENT CASE WORK, COUNTERS AND OTHER EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER.
- WHERE FLUORESCENT TROFFERS ARE INSTALLED IN SUSPENDED ACCESSIBLE CEILINGS, PROVIDE FOUR (4) CLIPS PER FIXTURE (FURNISHED BY LIGHT FIXTURE MANUFACTURER) AND CONNECT EACH FLUORESCENT TROFFER TO THE SUSPENDED CEILING "T"-BAR AT FOUR LOCATIONS PER TROFFER. TROFFER SHALL ALSO BE SUPPORTED FROM THE STRUCTURE WITH (2) SUPPORT WIRES ATTACHED AT OPPOSITE CORNERS OF THE LIGHT FIXTURE.
- ALL CONDUITS SHALL BE CONCEALED WITHIN WALLS, CEILINGS OR FLOORS UNLESS SPECIFICALLY INDICATED ON THE DRAWINGS OR PRE-APPROVED BY THE ARCHITECT/ENGINEER.
- INSTALL A SEPARATE GROUNDING CONDUCTOR, INSULATED GREEN, IN ALL CONDUITS. WHERE WIRING COUNTS ARE INDICATED ON DRAWINGS, THESE WIRING COUNTS EXCLUDE THE GROUNDING CONDUCTOR, HOWEVER, GROUNDING CONDUCTOR IS REQUIRED.
- MAINTAIN ACCURATE RECORDS OF ALL CHANGES MADE DURING CONSTRUCTION. PROVIDE A NEATLY MARKED SET OF BLUEPRINTS TO THE ENGINEER/ARCHITECT AT COMPLETION OF THE PROJECT, INDICATING ALL FIELD CHANGES.
- INCREASE BRANCH CIRCUIT CONDUCTORS TO ACCOMMODATE FOR VOLTAGE DROP. 120V CIRCUITS OVER 100' SHALL BE #10 AWG MINIMUM.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF LIGHT FIXTURES. CONTRACTORS TO CORRELATE LOCATIONS OF LIGHTING, SPEAKERS, AIR DIFFUSERS, GRILLES, ETC., WITH REFLECTED CEILING PLANS AS REQUIRED AND DIRECTED BY THE ARCHITECT.
- ALL DEVICES, EQUIPMENT, FIXTURES, ETC., MUST BE GROUNDED BY USE OF A PROPERLY SIZED GROUNDING CONDUCTOR. MECHANICAL/ELECTRICAL BONDS OF THE METALLIC RACEWAY SYSTEM SHALL ALSO BE MAINTAINED.
- REFER TO MECHANICAL PLANS FOR EXACT LOCATION OF MECHANICAL EQUIPMENT AND LOCATE DISCONNECT SWITCHES IN ACCORDANCE WITH THE N.E.C.
- REFER TO DIV. 15 SPECIFICATIONS, HVAC PLANS AND PLUMBING PLANS FOR ADDITIONAL ELECTRICAL WORK AND INCLUDE ALL COST IN BASE BID.
- REFER TO "CONTROL SCHEMATICS" MECHANICAL DRAWINGS FOR ADDITIONAL CONTROL WIRING AND CONTROL CONNECTIONS BY THIS CONTRACTOR.
- UNLESS OTHERWISE NOTED, ALL DEVICE ELEVATIONS REFER TO CENTER OF OUTLET BOX. (SEE SPECIFICATIONS.) DIV. 16 SHALL VERIFY ALL OUTLET LOCATIONS WITH OTHER TRADES.
- ALL RECEPTACLES SHOWN BACK-TO-BACK IN WALLS SHALL BE SEPARATED BY 8" MINIMUM.
- PROVIDE "SEAL-OFFS" WHEN PIPING PASSES THROUGH AREAS OF DIFFERENT AMBIENT TEMPERATURES AND/OR HAZARDOUS AREAS.
- PROVIDE AND INSTALL (MIN) #6 INSULATED COPPER GROUND BONDING JUMPER ACROSS INLET AND OUTLET PIPING OF ALL MECHANICAL UNITS AND JUNCTIONS WHERE NON-METALLIC OR DISSIMILAR METALS INTERRUPT THE PATH TO GROUND. THESE ITEMS SHALL INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
 - WATER HEATERS
 - WATER METER
 - WATER SOFTENERS
- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CUTTING AND PATCHING REQUIRED FOR THE PROPER INSTALLATION, SUPPORT, OR ANCHORAGE OF ELECTRICAL EQUIPMENT. E.C. SHALL LAYOUT CAREFULLY IN ADVANCE WHERE CUTTING, CHANNELING OR DRILLING IS NECESSARY FOR THE PROPER COMPLETION OF ELECTRICAL WORK. COORDINATE WITH OTHER TRADES AS REQUIRED.

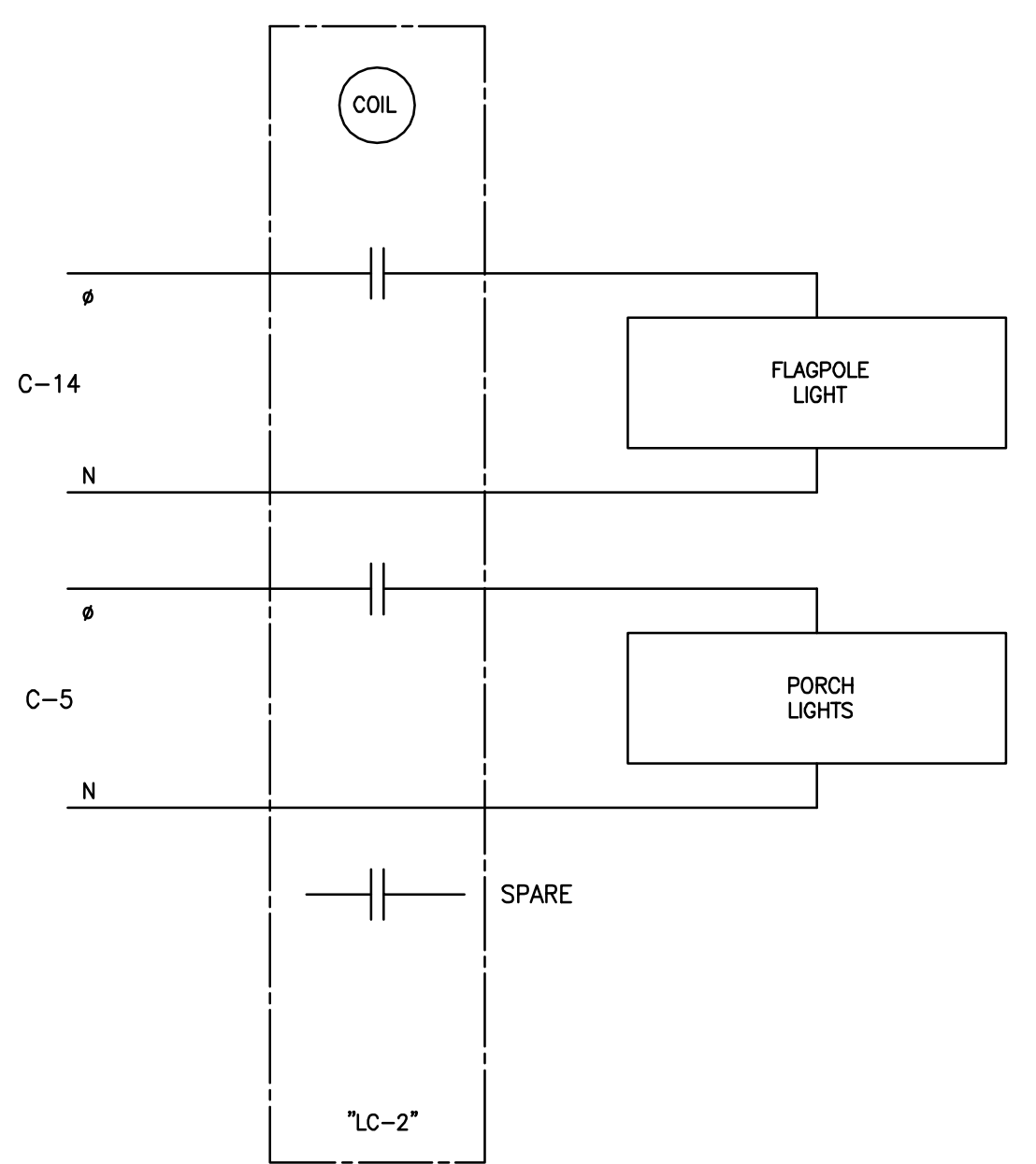
ELECTRICAL LEGEND

A.F.G.	ABOVE FINISHED GRADE	○	MOTOR LOCATION
A.F.F.	ABOVE FINISHED FLOOR	⊗	MANUAL MOTOR STARTER
B.F.C.	BELOW FINISHED CEILING	⊗	COMBINATION SOLID STATE MOTOR STARTER AND DISCONNECT SWITCH W/H-O-A CONTROL
C	CONDUIT	⊗	NON-FUSED DISCONNECT SWITCH. 30A OR AS INDICATED.
C.B.	CIRCUIT BREAKER	⊗	FUSED DISCONNECT SWITCH. 30A DISC. WITH XXXX FUSE OR AS INDICATED.
COMB.	COMBINATION	⊗	CONTROL CONNECTION
DISC.	DISCONNECT	⊗	JUNCTION BOX
E.C.	ELECTRICAL CONTRACTOR/TRADE	⊗	FLOW SWITCH
F.A.C.P.	FIRE ALARM CONTROL PANEL	⊗	TAMPER SWITCH
G.C.	GENERAL CONTRACTOR/TRADE	⊗	THERMOSTAT
H.O.A.	HAND-OFF-AUTOMATIC	⊗	SECURITY CAMERA, ROUGH IN LOCATION
LTG.	LIGHTING	⊗	POWER DISTRIBUTION PANELBOARD
MFG'R.	MANUFACTURER	⊗	SURFACE MOUNTED PANELBOARD
M.C.	MECHANICAL CONTRACTOR/TRADE	⊗	UNDERFLOOR DUCT AND JUNCTION BOX FOR TRIPLE, DOUBLE OR SINGLE DUCT SYSTEM AS INDICATED BY THE NUMBER OF PARALLEL DOTTED LINES.
M.D.P.	MAIN DISTRIBUTION PANELBOARD	⊗	T.V. OUTLET
O.L.	OVERLOAD	⊗	PHOTOELECTRIC CONTROL
RCPT.	RECEPTACLE	⊗	"A", "B-B" = LIGHT FIXTURE TYPE FROM SCHEDULE B1 = PANEL AND CIRCUIT NUMBER e = SWITCH CONTROL
T.T.B.	TELEPHONE TERMINAL BOARD	⊗	WIRE AND CONDUIT SIZE OTHER THAN MINIMUM SPECIFIED.
XFMR	TRANSFORMER	⊗	CONDUIT SIZE
W.P.	WEATHERPROOF	⊗	WIRE SIZE
S	SINGLE POLE SWITCH	⊗	NUMBER OF WIRES
S ³	THREE-WAY SWITCH	⊗	CONDUIT AND WIRE
⊗	LIGHT DIMMER AND SWITCH VOLTAGE AND RATING AS INDICATED	⊗	CONDUIT AND WIRE RUN TO BE CONTINUED ON THE DRAWING OF ADJACENT AREAS.
⊗	20A, 125V DUPLEX RECEPTACLE	⊗	HOME RUN TO PANELBOARD. A1,3 = PANELBOARD "A", CIRCUITS 1 AND 3, THREE CROSS LINES = 3 WIRES. UNLESS OTHERWISE NOTED, THE CONDUIT AND WIRE SIZES ARE THE MINIMUM AS REQUIRED BY THE SPECIFICATIONS. LONG CROSS LINE = NEUTRAL.
⊗	DUPLEX RECEPTACLE FLOOR MOUNTED	⊗	JUNCTION BOX FOR MOTION SENSOR. SENSOR BY OTHERS.
⊗	SPECIALTY RECEPTACLE. AMPACITY AND NEMA CONFIGURATION AS SHOWN ON PLANS	⊗	JUNCTION BOX FOR TEMPERATURE SENSOR. SENSOR BY OTHERS.
⊗	"WP" AT ANY RECEPTACLE SYMBOL INDICATES IT IS A WEATHERPROOF DEVICE WITH INTEGRAL GROUND FAULT CURRENT PROTECTION.	⊗	JUNCTION BOX FOR GLASS BREAK DEVICE. DEVICE BY OTHERS.
⊗	DOUBLE DUPLEX RECEPTACLE	⊗	JUNCTION BOX FOR KEY PAD. DEVICE BY OTHERS.
⊗	RECEPTACLE MOUNTING HEIGHT = 1'-6" UNLESS NOTED "+*" AT ANY RECEPTACLE SYMBOL = 44" MOUNTING HEIGHT OR AS INDICATED		
⊗	DUPLEX RECEPTACLE WITH INTEGRAL GROUND FAULT INTERRUPTER		
⊗	DOUBLE DUPLEX RECEPTACLE WITH INTEGRAL GROUND FAULT INTERRUPTER		
⊗	TELEPHONE TERMINAL BOARD		
⊗	TELEPHONE/DATA OUTLET (DOUBLE GANG J-BOX WITH BLANK COVER PLATE)		



- NOTES:**
- SEE LIGHTING PLANS FOR EXACT LOCATIONS OF LIGHT FIXTURES. CONDUCTORS SHALL BE SIZED FOR VOLTAGE DROP.
 - LIGHTING CONTACTOR SHALL BE ELECTRICALLY OPERATED, MECHANICALLY HELD, 120V COIL, (2) WIRE CONTROL INSIDE A NEMA-1 ENCLOSURE. SQUARE D "LXG 60" OR EQUALS BY GENERAL ELECTRIC, SIEMENS AND CUTLER-HAMMER.

LC-1 DETAIL
 NOT TO SCALE

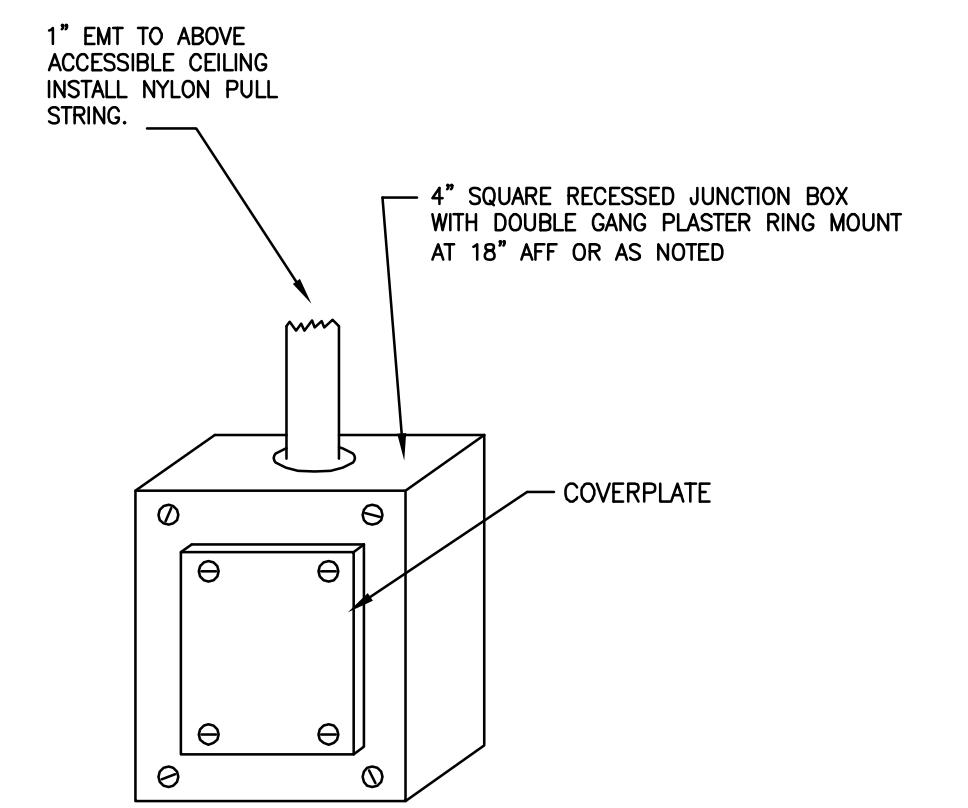
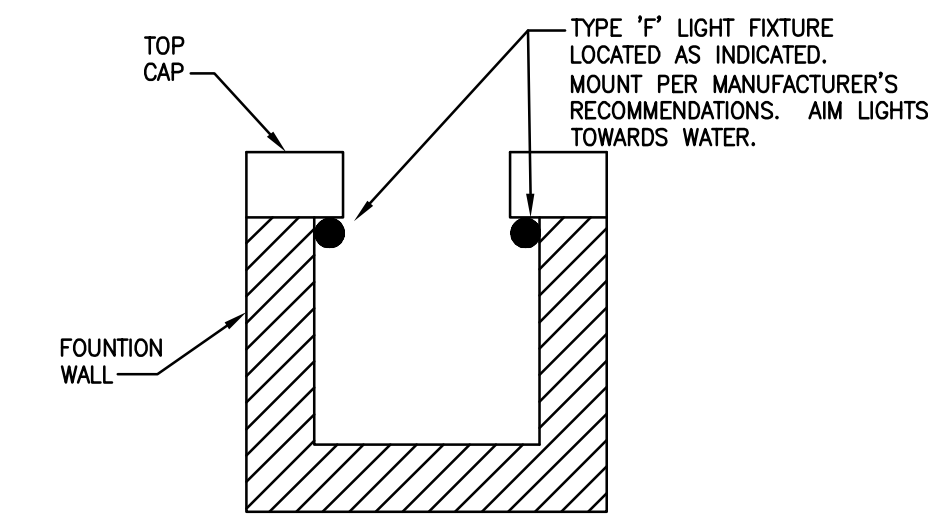


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- SEE LIGHTING PLANS FOR EXACT LOCATIONS OF LIGHT FIXTURES. CONDUCTORS SHALL BE SIZED FOR VOLTAGE DROP.
 - LIGHTING CONTACTOR SHALL BE ELECTRICALLY OPERATED, MECHANICALLY HELD, 120V COIL, (2) WIRE CONTROL INSIDE A NEMA-1 ENCLOSURE. SQUARE D "LXG 30" OR EQUALS BY GENERAL ELECTRIC, SIEMENS AND CUTLER-HAMMER.

LC-2 DETAIL
 NOT TO SCALE

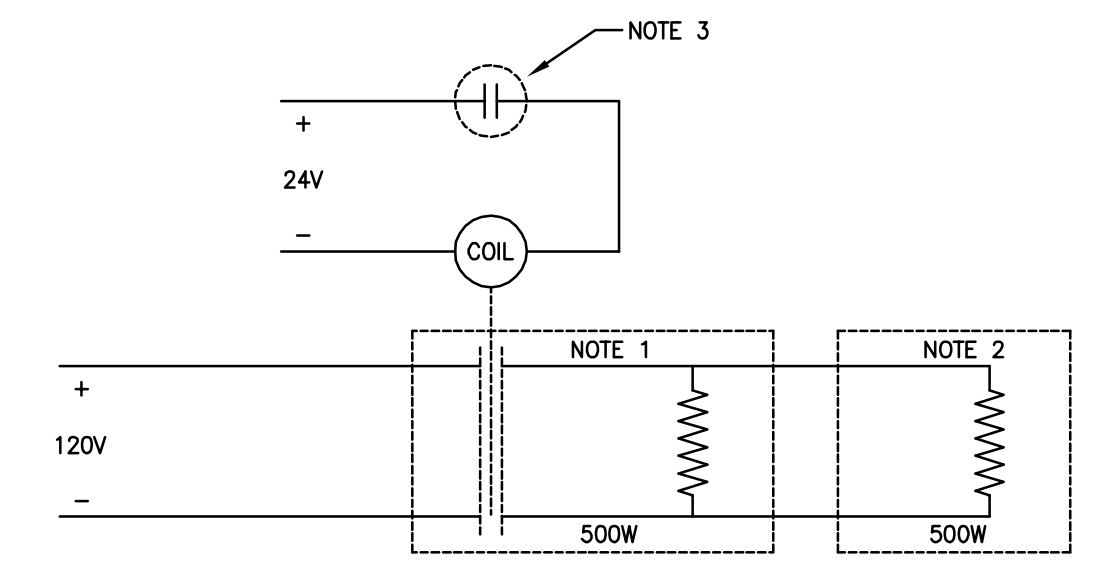
WATER FEATURE LIGHT FIXTURE MOUNTING DETAIL

NOT TO SCALE



TELEPHONE/DATA OUTLET DETAIL

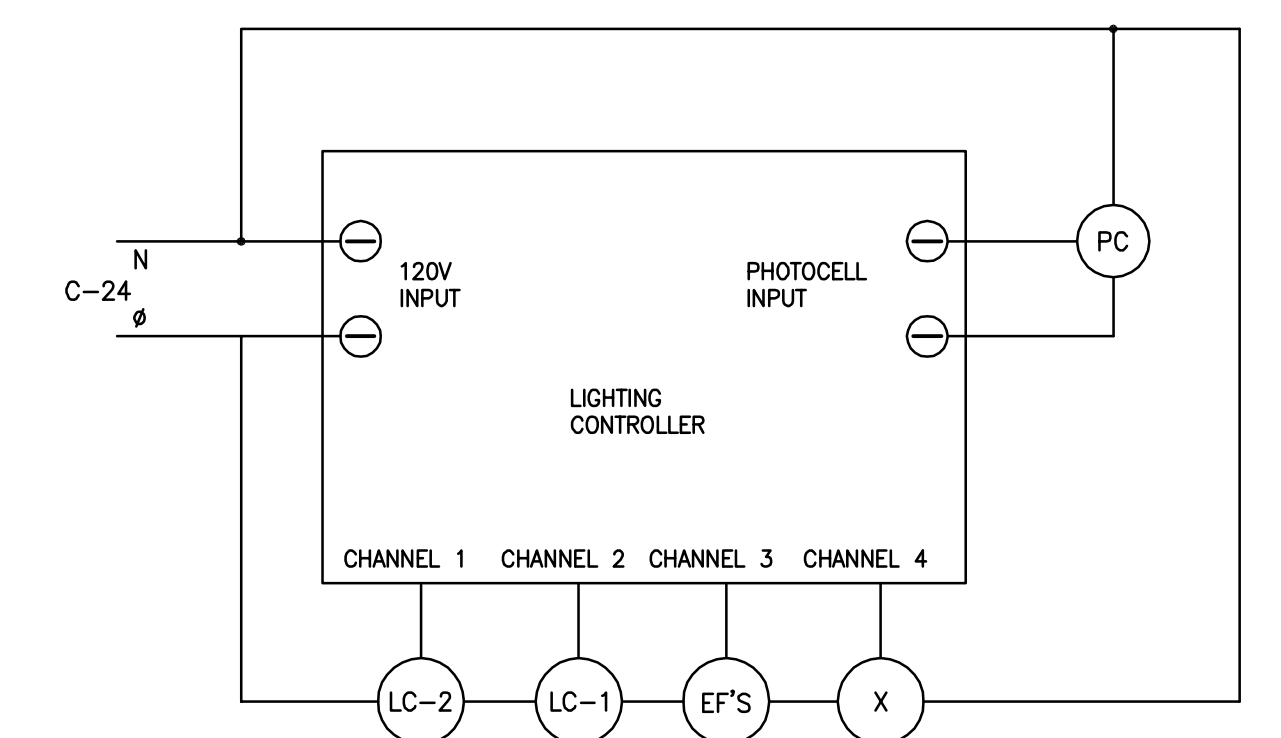
NOT TO SCALE



- DETAIL NOTES:**
- ELECTRIC BASEBOARD HEATER WITH 25A/2P LOW VOLTAGE RELAY QMARK PART #CBD1508-HBBLVRLB.
 - ELECTRIC BASEBOARD HEATER QMARK PART #CBD1508.
 - T-STAT BY M.C. COORDINATE CONTROL CIRCUIT LOCATION PRIOR TO ROUGH-IN.

BASEBOARD CONTROL DETAIL

NOT TO SCALE



- NOTES:**
- DIGITAL LIGHTING CONTROLLER SHALL BE TORK "DGLC" OR EQUALS BY PARAGON AND INTERMATIC.
 - CHANNEL 1 SHALL BE ON BY PHOTOCELL AND OFF BY CLOCK. COORDINATE DUSK SET POINTS WITH OWNER.
 - CHANNEL 2 SHALL BE ON AT DUSK, AND OFF AT DAWN. COORDINATE DUSK SET POINTS WITH OWNER.
 - CHANNEL 3 SHALL BE ON BY TIMECLOCK, AND OFF BY TIMECLOCK. COORDINATE DUSK SET POINTS WITH OWNER.
 - COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF PHOTOCELL WITH ARCHITECT PRIOR TO ROUGH-IN.

LIGHTING CONTROL DETAIL

NOT TO SCALE