

| DISTRIBUTION | |
|--------------|---|
| | NEW 208Y/120 PANELBOARD |
| | NEW 480Y/277 PANELBOARD |
| | HOMERUN TO PANELBOARD |
| | EQUIPMENT ON SAME CIRCUIT BUT SEPARATELY CONTROLLED |
| | CONDUIT CONCEALED IN WALL OR CEILING |
| | CONDUIT RUN UNDER FLOOR OR UNDERGROUND |

| EQUIPMENT | |
|-----------|--|
| | JUNCTION BOX |
| | JUNCTION BOX - WALL MOUNT |
| | DISCONNECT SWITCH - MOUNTED 5' ABOVE FINISHED FLOOR OR ON EQUIPMENT |
| | COMBINATION STARTER/DISCONNECT - 5' ABOVE FINISHED FLOOR OR ABOVE CEILING |
| | MOTOR |
| | MANUAL MOTOR STARTER |
| | TV OUTLET - MOUNT 18" AFF UNLESS NOTED OTHERWISE. |
| | MAIN DISTRIBUTION FRAME |
| | WALL MOUNTED CLOCK - MOUNTING HT. TO CENTER OF DEVICE AS SPECIFIED ON 'E3' SERIES DRAWINGS |
| | WALL MOUNTED PAGING HORN |
| | CEILING MOUNTED PAGING SPEAKER |
| | CEILING MOUNTED LOCAL SPEAKER |
| | SPEAKER/CLOCK COMBO |

| FIRE ALARM | |
|------------|--|
| | FIRE ALARM PULL STATION - 42" ABOVE FINISHED FLOOR |
| | COMBINATION FIRE ALARM HORN W/ VISUAL UNIT (STROBE) - 80" - BOTTOM OF LENS, AFF ALL DEVICES MUST HAVE ADJUSTABLE CANDELA RATINGS |
| | COMBINATION FIRE ALARM HORN W/ VISUAL UNIT (STROBE) - CEILING MOUNTED ALL DEVICES MUST HAVE ADJUSTABLE CANDELA RATINGS |
| | VISUAL ONLY UNIT - 80" - BOTTOM OF LENS, AFF ALL DEVICES MUST HAVE ADJUSTABLE CANDELA RATINGS |
| | VISUAL ONLY UNIT - CEILING MOUNTED ALL DEVICES MUST HAVE ADJUSTABLE CANDELA RATINGS |
| | MAGNETIC DOOR HOLD OPEN (24VAC) (FURNISHED BY OTHERS) |
| | SMOKE DETECTOR |
| | DUCT TYPE SMOKE DETECTOR - FURNISH AND INSTALLED BY MC, WIRED BY E.C.. |
| | HEAT DETECTOR |
| | CARBON MONOXIDE DETECTOR |

(XX) RECOMMENDED VISUAL UNIT CANDELA RATING

| RECEPTACLES | |
|-------------|---|
| | DUPLEX RECEPTACLE - WALL MOUNTED |
| | QUADRUPLX RECEPTACLE - WALL MOUNTED |
| | DUPLEX RECEPTACLE - CEILING MOUNTED |
| | SPECIAL - SINGLE PHASE - WALL MOUNTED (SIZE AS INDICATED) |
| | SPECIAL - THREE PHASE - WALL MOUNTED (SIZE AS INDICATED) |
| | DATA OUTLET |
| | DATA OUTLET (NUMBER DENOTES QUANTITY OF DEVICES) |
| | COMBINATION TELE/DATA OUTLET (NUMBER DENOTES QUANTITY OF DATA DEVICES) |
| | TELEPHONE OUTLET, WALL HUNG |
| | DATA OUTLET, WALL MOUNTED, FOR OWNER PROVIDED WIRELESS SYSTEM |
| | DATA OUTLET, CEILING MOUNTED, FOR OWNER PROVIDED WIRELESS SYSTEM |
| | FLOOR BOX WITH DATA OUTLETS AND ELECTRICAL RECEPTACLES (NUMBER DENOTES QUANTITY OF DEVICES) |
| | MULTI-MEDIA INTERFACE: VGA W/ 3.5MM (AUDIO/VIDEO), HDMI, USB EXTENDER OUTLET |
| | PLUG LOAD CONTROLLER, WATTSTOPPER #LMP1-201. DEVICE SHALL BE MOUNTED ABOVE CEILING. PROVIDE A 4"x4" JUNCTION BOX FOR DEVICE MOUNTING. |

NOTES:
1. DEVICES TO BE MOUNTED 18" ABOVE FINISHED FLOOR, UNLESS NOTED OTHERWISE.
2. AC = ABOVE COUNTER TOP APPROXIMATELY 42" ABOVE FINISHED FLOOR.
3. GFI = GROUND FAULT INTERRUPTER
4. WP = GROUND FAULT INTERRUPTER WITH WEATHERPROOF WHILE-IN-USE COVER

| LIGHTING CONTROL | |
|------------------|--|
| | SINGLE POLE LIGHT SWITCH - FLUSH MOUNTED |
| | THREE-WAY LIGHT SWITCH - FLUSH MOUNTED |
| | FOUR-WAY LIGHT SWITCH - FLUSH MOUNTED |
| | OCCUPANCY SENSOR - WALLSTATION, WATTSTOPPER #LMDW-100-W (PROVIDE WITH ENGRAVING) |
| | LOW-VOLTAGE 1-BUTTON WALLSTATION, WATTSTOPPER #LMSW-101-W (PROVIDE WITH ENGRAVING) |
| | LOW-VOLTAGE 3-BUTTON WALLSTATION, WATTSTOPPER #LMSW-103-W (PROVIDE WITH ENGRAVING) |
| | LOW-VOLTAGE 4-BUTTON WALLSTATION, WATTSTOPPER #LMSW-104-W (PROVIDE WITH ENGRAVING) |
| | LOW-VOLTAGE DIMMING WALLSTATION, WATTSTOPPER #LMDM-101-W (PROVIDE WITH ENGRAVING) |
| | DIGITAL PARTITION SWITCH, WATTSTOPPER #LMPS-104-W (PROVIDE WITH ENGRAVING) |
| | LOW-VOLTAGE VACANCY/OCCUPANCY SENSOR - DUAL TECHNOLOGY, CEILING MOUNTED, WATTSTOPPER #LMDC-100 (REFER TO SEQUENCE OF OPERATIONS FOR VAC/OCC MODE) |
| | PHOTOSENSOR - SINGLE ZONE SWITCHING AND DIMMING, CLOSED LOOP WATTSTOPPER #LMLS-400 |
| | ROOM CONTROLLER, 1-LOAD, 2-LOAD, OR 3-LOAD AS REQUIRED PER ROOM, DEVICE SHALL BE MOUNTED ABOVE CEILING. WATTSTOPPER #LMRC-210 FOR ALL LED LUMINAIRES, WATTSTOPPER #LMRC-220 FOR LED RETROFIT LUMINAIRES. |
| | EMERGENCY LIGHTING CONTROL UNIT, DEVICE SHALL BE MOUNTED ABOVE CEILING. WATTSTOPPER #ELCU200 |
| | NETWORK BRIDGE CONTROLLER (NOT SHOWN ON PLANS), PROVIDE (1) ONE PER ROOM, DEVICE SHALL BE MOUNTED ABOVE CEILING. WATTSTOPPER #LMBC-300 |
| | PARTITION INTERFACE, WATTSTOPPER #LMIO-102. DEVICE SHALL BE MOUNTED ABOVE CEILING. |
| | ISOLATED RELAY INTERFACE, WATTSTOPPER #LMRI-100. DEVICE SHALL BE MOUNTED ABOVE CEILING. TIES INTO ROOM VAV BOXES. NOT SHOWN ON DRAWINGS. |
| | LOW-VOLTAGE WIRING PER MANUFACTURER'S RECOMMENDATIONS |

GENERAL LIGHTING CONTROL NOTES:

- CONTRACTOR TO FIELD VERIFY NUMBER OF RELAYS REQUIRED PER CIRCUIT AND PROVIDE APPROPRIATE DEVICE.
- PROVIDE A 4"x4" JUNCTION BOX FOR DEVICE MOUNTING.
- PROVIDE A 4"x4" JUNCTION BOX IF DEVICE IS BEING MOUNTED WITHOUT THE ROOM CONTROLLER.
- DEVICE MOUNTING BRACKET SHALL BE ZIP TIED TO STRUCTURE.
- MOUNT SWITCHES AND WALLSTATIONS 48" AFF.
- REFER TO LIGHTING CONTROL SEQUENCE OF OPERATIONS ON 'E5' SERIES DRAWINGS FOR WALLSTATION ENGRAVING SCHEDULE.

GENERAL NOTES:

- VERIFY ALL CONDITIONS AND MEASUREMENTS ON SITE PRIOR TO THE INSTALLATION OF ANY EQUIPMENT.
- INSTALL WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND EQUIPMENT MANUFACTURER'S RECOMMENDED INSTRUCTIONS.
- CONTACT THE UTILITY COMPANIES PRIOR TO BEGINNING WORK.
- INSTALL FIRE ALARM SYSTEMS IN ACCORDANCE WITH NEPA.
- THE INTENT OF THE FIRE ALARM AUDIBLE DEVICES IS TO PROVIDE A SOUND LEVEL OF +15db OVER AMBIENT IN ALL OCCUPIED AREAS OF THE BUILDING. PROVIDE DEVICES IN A QUANTITY AND CAPACITY TO MEET THIS REQUIREMENT.
- INSTALL CONDUIT AND BOXES ABOVE SUSPENDED CEILING OR CONCEALED IN WALLS.
- WHERE NOTED ON THE DRAWINGS, INSTALL WIRE AND DEVICES IN SURFACE MOUNTED RACEWAY. EXTEND CONDUIT TO RACEWAY ENTRANCE.
- THE DRAWINGS DO NOT INDICATE PULL/SPLICE BOXES. INSTALL BOXES TO MEET JOB CONDITIONS AND NEC REQUIREMENTS.
- FASTEN HORIZONTAL CONDUIT TO THE BUILDING PERMANENT STRUCTURE AT A SPACING NOT MORE THAN 7'-6". FASTEN EXPOSED CONDUIT ON MASONRY AT A SPACING NOT MORE THAN 5'-0". USE BEAM CLAMPS AND STUD ANCHORS. DO NOT USE FRICTION CLAMPS.
- INSTALL EXPANSION FITTINGS WITH BONDING JUMPEERS WHERE CONDUITS PASS THROUGH EXPANSION OR CONTROL JOINTS.
- INSTALL AN INDEPENDENT GROUND WIRE FOR ALL FEEDERS AND SUBFEEDERS SHOWN ON THE ONE-LINE DIAGRAM. INSTALL AN INDEPENDENT GROUND IN ALL CONDUITS, WHETHER INDICATED OR NOT ON THE DRAWINGS. SIZE WIRE PER NEC REQUIREMENTS.
- GROUND ALL ELECTRICAL EQUIPMENT PER THE NATIONAL ELECTRICAL CODE. DO NOT EXCEED 10 OHMS.
- COORDINATE THE INSTALLATION OF LIGHTING FIXTURES, RECEPTACLES, DISCONNECT SWITCHES, AND SWITCHES WITH THE INSTALLATION OF OTHER EQUIPMENT.
- THE LOCATION OF SWITCHES, BOXES, AND CONDUITS PROVIDING POWER TO EQUIPMENT SHOWN ON THE DRAWINGS IS APPROXIMATE. COORDINATE FINAL LOCATION OF ELECTRICAL DEVICES WITH THE INSTALLATION OF OTHER EQUIPMENT. DO NOT MOUNT ELECTRICAL DEVICES TO INTERFERE WITH EQUIPMENT ACCESS.
- WHEREVER THE INSTALLATION OF ELECTRICAL EQUIPMENT SHOWN ON THE DRAWINGS IS IMPRACTICAL DUE TO LOCAL INTERFERENCE OR OTHER REASONS, CONTACT THE ENGINEER AND INSTALL THE EQUIPMENT AT NEW LOCATIONS AS DIRECTED.
- SIZE CONDUITS IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE BUT NOT LESS THAN 3/4". WHERE FIXTURES ARE SUPPORTED FROM CONDUIT, THE MINIMUM SIZE SHALL BE 1".
- MOUNT PANELBOARDS WITH TOP OF ENCLOSURE AT 6'-0" ABOVE FINISHED FLOOR.
- PROVIDE ALL PANELBOARDS WITH SOLID NEUTRAL AND EQUIPMENT GROUND BUS.
- COORDINATE CABLE LENGTH AND VOLTAGE DROP LIMITATIONS FOR ALL SYSTEMS AND MAKE ANY ADJUSTMENTS NECESSARY, INCLUDING, BUT NOT LIMITED TO, WIRE AND CONDUIT SIZE, INCREASE AND/OR ADDING EQUIPMENT TO MAKE A COMPLETE AND OPERABLE SYSTEM AND TO MEET REFERENCED CODE AND STANDARDS REQUIREMENTS. THIS SHALL BE DONE AT NO ADDITIONAL COST.
- THE OWNER WILL RETAIN SALVAGE RIGHTS TO ALL LIGHT FIXTURES PRIOR TO DISPOSAL BY THE CONTRACTOR.
- ALL EXISTING OR NEW EXPOSED CONDUIT SHALL BE PAINTED THE SAME COLOR OF THE CEILING OR WALL. COORDINATE WITH THE ARCHITECTURAL PLANS FOR PROPER PAINT COLORS NEEDED.
- MEASURE STEADY STATE LOAD CURRENTS AT EACH PANELBOARD FEEDER, RE-ARRANGE CIRCUITS IN THE PANELBOARD TO BALANCE THE PHASE LOADS TO WITHIN 5 PERCENT OF EACH OTHER. MAINTAIN PROPER PHASING FOR MULTIWIRE BRANCH CIRCUITS.
- CUT OPENINGS IN FLOORS, WALLS, ROOFS, AND CEILINGS REQUIRED FOR INSTALLATION OF ELECTRICAL EQUIPMENT, WIRING, CONDUIT, ETC. PATCH AND REPAIR ANY EXISTING FLOORS, WALLS, ROOF, AND CEILING OPENINGS LEFT BY REMOVAL OR INSTALLATION OF ELECTRICAL EQUIPMENT, WIRING, CONDUIT, ETC. PATCHING SHALL MATCH THE EXISTING ADJACENT SUBSTRATE.
- THE FOLLOWING INSTALLATION STANDARDS SHALL BE FOLLOWED ON ALL WALL MOUNTED DEVICES, UNLESS NOTED OTHERWISE: (A) EXISTING MASONRY WALLS: SURFACE MOUNTED RACEWAY. RUN FEED FROM CEILING IN RACEWAY; (B) EXISTING STUD WALLS: FLUSH MOUNTED WALL DEVICES, CUT WALL AND FISH AS REQUIRED; (C) NEW WALLS: FLUSH MOUNTED WALL DEVICES.
- FIRE ALARM CABLEING ABOVE RECESSED CEILINGS AND IN INACCESSIBLE LOCATIONS MAY BE ROUTED EXPOSED. ALL OTHER AREAS SHALL HAVE CABLE IN CONDUIT.

ABBREVIATIONS:

| | |
|-------------|--|
| A, AMP | AMPERE |
| AC | ABOVE COUNTER |
| AF | ABOVE FINISHED FLOOR |
| AFG | ABOVE FINISHED GRADE |
| AHU | AIR HANDLING UNIT |
| ALT | ALTERNATE |
| APP | AREA PROTECTION PANEL |
| ATC | AUTOMATIC TEMPERATURE CONTROL |
| ATS | AUTOMATIC TRANSFER SWITCH |
| BFF | BELOW FINISHED FLOOR |
| BFG | BELOW FINISHED GRADE |
| C | CONDUIT |
| CU | CONDENSING UNIT |
| CUH | CABINET UNIT HEATER |
| DA | DIAMETER |
| DM | DIGITAL METER |
| DWG | DRAWING |
| E.C. | ELECTRICAL CONTRACTOR |
| EF | EXHAUST FAN |
| ELEC | ELECTRICAL |
| ELEV | ELEVATION |
| EP | EXPLOSION PROOF |
| EX | EXISTING BACK BOX TO REMAIN |
| ETR | EXISTING TO REMAIN |
| EXR | EXISTING DEVICE TO BE RELOCATED |
| FAN | FAN COIL UNIT |
| FLA | FULL LOAD AMPERES |
| G, GND, GRD | GROUND |
| G.C. | GENERAL CONTRACTOR |
| H.C. | HEATING CONTRACTOR |
| HD | HIGH INTENSITY DISCHARGE |
| HP | HORSE POWER |
| HVAC | HEATING, VENTILATION & AIR CONDITIONING |
| KCMIL | THOUSAND CIRCULAR MILS |
| KVA | KILOVOLT AMPERES |
| KW | KILOWATT |
| M.C. | MECHANICAL CONTRACTOR |
| MOUNTED | MOUNTED |
| NEC | NATIONAL ELECTRIC CODE |
| NEMA | NATIONAL ELECTRIC MANUFACTURER'S ASSOCIATION |
| OHF | OVERHEAD FIBER |
| P.C. | PLUMBING CONTRACTOR |
| TVSS | TRANSIENT VOLTAGE SURGE SUPPRESSOR |
| TYP | TYPICAL |
| UH | UNIT HEATER |
| UF | UNDERGROUND FIBER |
| V | VOLTS |
| WG | WIRE GUARD |
| WP | WEATHERPROOF |

THE SYMBOLS AND ABBREVIATIONS SHOWN ARE STANDARDS AND DO NOT NECESSARILY APPEAR ON THE DRAWINGS.

| LIGHTING FIXTURE SCHEDULE | | | | | | | | | |
|---------------------------|--------------|--|--|------|---------|--------------|----------|--------------------------------------|--|
| MARK | MANUFACTURER | MODEL NO. | DESCRIPTION | LAMP | WATTAGE | VOLTAGE | MOUNTING | REMARKS | |
| E1 | LITHONIA | LHQML-LED-R-HO | DUAL HEAD COMBINATION EXIT AND EMERGENCY BATTERY FIXTURE | LED | 10 W | | | PROVIDE WITH UL924 COMPLIANT BATTERY | |
| E2 | LITHONIA | ELA-T-QWP-L0309 | WEATHERPROOF DUAL HEAD REMOTE LAMP | LED | 2 W | | | FED FROM FIXTURE E2 BATTERY PACK | |
| RA | LITHONIA | 2GTL-4-40L-EZ1-LP840 | 2X4 LENSED TROFFER | LED | 31 W | UNV 120/277V | RECESSED | CONTROL HOUSE RECESSED | |
| SA | LITHONIA | FEML48-4000LM-LP4FL-MD-MVOLT-GZ-10-40K-60CRI | 4' GASKETED AND LENSED SURFACE FIXTURE | LED | 31 W | | | CONTROL HOUSE SURFACE | |

GENERAL LIGHTING FIXTURE NOTES:

- COORDINATE MOUNTING HEIGHTS WITH 'A' SERIES DRAWINGS PRIOR TO INSTALLATION.
- VERIFY ALL CEILING TYPES SHOWN ON THE 'A' SERIES DRAWINGS AND PROVIDE ALL NECESSARY MOUNTING ACCESSORIES.
- EXIT SIGNS SHALL BE CEILING, WALL, OR END MOUNTED. FIELD COORDINATE FINAL MOUNTING REQUIREMENTS.
- EXIT SIGNS SHALL HAVE DIRECTIONAL CHEVRONS AS REQUIRED. FIELD COORDINATE FINAL CHEVRON CONFIGURATION.
- PROVIDE APPROPRIATE CABLE/CORD LENGTH FOR ALL PENDANT MOUNTED FIXTURES. REFER TO 'A' SERIES FLOOR PLANS, SECTIONS, AND INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION. WHEN MOUNTING HEIGHT OF ANY LIGHT FIXTURES IS NOT CLEARLY STATED OR SHOWN ON DRAWINGS, CONTACT ENGINEER FOR APPROPRIATE LENGTH PRIOR TO INSTALLATION.

PROVIDE FIXTURES AS SCHEDULED OR EQUAL AS APPROVED BY THE PROFESSIONAL.

DRAWING LIST

E0.1 GENERAL NOTES
E1.1 FLOOR PLANS - ELECTRICAL



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REVISIONS

| NO. | DATE | BY | DESCRIPTION OF CHANGES |
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RENOVATIONS TO THE ISABEL HOLMES BRIDGE



GENERAL NOTES

PLOT SCALE:
12" = 1'-0"
FILENAME:
1878 Holmes Bridge NC Rev18
ELECT.rvt
DATE:
NOVEMBER 2, 2018

PROJECT
3133

E0.1



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