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|------------------|--|-------------------------|
| Project Number   | 1817                                     |                         |
| Revisions        |  |                         |
| Revision History |  |                         |
| Number           | Date                                     | Description             |
|                  | 08/20/19                                 | ISSUED FOR CONSTRUCTION |
|                  |  |                         |
| Drawing Title    | ELECTRICAL NOTES, DETAILS, AND SCHEDULES |                         |
| Drawing Status   | ISSUED FOR CONSTRUCTION                  |                         |
| Drawing Number   |  |                         |

| LIGHTING FIXTURE SCHEDULE |  |       |                                   |         |
|---------------------------|--|-------|-----------------------------------|---------|
| TYPE                      | MANUFACTURER   | VOLTS | LAMP WATTAGE/TYPE                 | REMARKS |
| F1                        | TRAY LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.                   | 120   | 8W LED                            | 1       |
| F2                        | TRAY LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.                   | 120   | 8W LED                            | 1       |
| F3                        | TRAY LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.                   | 120   | 18W LED                           | 1       |
| F4                        | TRAY LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.                   | 120   | 11W LED                           | 1       |
| F6                        | ARTEMIDE LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.               | 120   | 100W G60 LED                      | 1       |
| F7                        | TRAY   |       | 18W                               | 1       |
| F8                        | LITHONIA LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.               | 120   | 28W LED                           | 1       |
| F9                        | LITHONIA LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.               | 120   | 17W LED                           | 1       |
| F10                       | TRANSFORMER LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.            | 120   | 15W LED                           | 1       |
| F11                       | TRAY BRILLIANT WALLING LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS. | 120   | 5.5W LED                          | 1       |
| F12                       | FONTANA ARTE LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.           | 120   | (5) 150W (9W) T10 RECESSED L16/27 | 1       |
| F13                       | TRAY BRILLIANT WALLING LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS. | 120   | 30W LED                           | 1       |
| F14                       | TRAY LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.                   | 120   | 30W LED                           | 1       |
| F15                       | TRAY LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.                   | 120   | 5W/7 FT LED                       | 1       |
| F16                       | PARTY LIGHTS LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.           | 120   | 2W/7 FT LED                       | 1       |
| F20                       | TRAY LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.                   | 120   | 3W LED                            | 1       |
| F21                       | TRAY LIGHTING, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.                   | 120   | 10W LED                           | 1       |
|                           | EXTRORAM, REFER TO ARCHITECTURAL PLANS FOR FURTHER DETAILS.                        | 120   | 1.5W LED                          |         |

NOTE:  
1. PROVIDE FIXTURES WITH GENERATOR TRANSFER DEVICES AS INDICATED ON FLOOR PLANS.

GENERAL ELECTRICAL NOTES:

- FOR EXACT LOCATION OF EQUIPMENT MOUNTED IN SUSPENDED CEILINGS, SUCH AS LIGHTING FIXTURES, AND SMOKE DETECTORS, SEE ARCHITECTURAL REFLECTED CEILING PLANS. ARCHITECTURAL REFLECTED PLAN SHALL GOVERN FINAL LOCATION.
- PRIOR TO ROUGH-IN, CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL WIRING DEVICES WITH ARCHITECTURAL ELEVATION TO AVOID CONFLICTS WITH CASEWORK, COUNTER TOPS, DOOR SWINGS, ETC. WHERE CONFLICTS OCCUR, CONTRACTOR SHALL CONTACT THE ARCHITECT IN WRITING FOR RESOLUTION.
- ALL MOUNTING HEIGHT DIMENSIONS ARE TO THE CENTER OF THE OUTLET BOX UNLESS OTHERWISE NOTED.
- FOR EXACT LOCATION OF ALL EXTERIOR LIGHTING FIXTURES MOUNTED ON EXTERIOR OF BUILDING, ARCHITECTURAL ELEVATIONS SHALL GOVERN.
- PRIOR TO ROUGH-IN FOR ALL LIGHTING SWITCHES, VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL PLANS.
- THE CONTRACTOR SHALL USE CARE WHEN CUTTING OPENINGS FOR OUTLET BOXES IN CMU WALLS. OUTLET BOXES SHALL BE INSTALLED IN CMU WALLS SECURELY WITH EPOXY.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING OUTLET BOX INSTALLATION WITH WALL FINISH (GYPSUM FURRING, TILE, ETC.). THE CONTRACTOR SHALL PROVIDE AND INSTALL ANY EXTENSION RINGS NECESSARY TO ACCOMMODATE WALL FINISHES.
- ALIGN VERTICALLY AND HORIZONTALLY ALL LIGHT SWITCHES, THERMOSTATS, FIRE ALARM PULL STATIONS, ETC. ALL THESE ITEMS SHALL BE CLUSTERED WHERE POSSIBLE. COORDINATE EXACT REQUIREMENTS WITH ARCHITECT.
- COORDINATE MOUNTING OF ALL EXTERIOR DISCONNECT WITH ARCHITECTURAL ELEVATIONS. IF NOT INDICATED ON ARCHITECTURAL ELEVATIONS, REQUEST ELEVATIONS OF DISCONNECT SWITCHES FROM ARCHITECT IN WRITING PRIOR TO ROUGH-IN.
- ALL CONDUIT IN OCCUPIED AREAS (INCLUDING SERVICE SHOP, NVD, SERVICE DRIVE, DETAIL BAYS, ETC.) TO BE RECESSED WITH RECESSED DEVICES.
- ALL 15 OR 20 AMPERE 120 VOLT RECEPTACLES LOCATED WITHIN 6 FEET OF A SINK SHALL BE GFCI PROTECTED IN ACCORDANCE WITH NEC 210.8(B)(6).

UTILITY NOTES:

- PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL HAVE ALL EXISTING UNDERGROUND UTILITIES LOCATED.

FIRE PROOFING NOTES:

- ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING FIRE STOPPING AT ALL WALL, FLOOR AND CEILING PENETRATIONS WHERE CONDUIT PENETRATIONS OCCUR.

PROVIDE FIRE STOPPING AT CONDUIT PENETRATIONS PER UL ABBREVIATIONS

|        |                                     |        |                          |
|--------|-------------------------------------|--------|--------------------------|
| A      | — AMPERES                           | MGB    | — MAIN CIRCUIT BREAKER   |
| A.F.F. | — ABOVE FINISHED FLOOR              | MLO    | — MAIN LUG ONLY          |
| A.F.G. | — ABOVE FINISHED GRADE              | NIS    | — NOT TO SCALE           |
| B.F.G. | — BELOW FINISHED GRADE              | P      | — POLE                   |
| C      | — CONDUIT                           | PNL    | — PANEL                  |
| ETR    | — EXISTING TO REMAIN                | SN     | — SOLID NEUTRAL          |
| F      | — FUSE                              | U.O.N. | — UNLESS OTHERWISE NOTED |
| GFI    | — GROUND FAULT CIRCUIT INTERRUPTING | V      | — VOLTS                  |
| G      | — GROUND                            | W      | — WIRE                   |
| KVA    | — KILO VOLT AMP                     | WP     | — WEATHERPROOF           |
| KW     | — KILOWATT                          |        |                          |

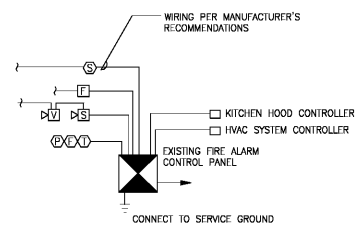
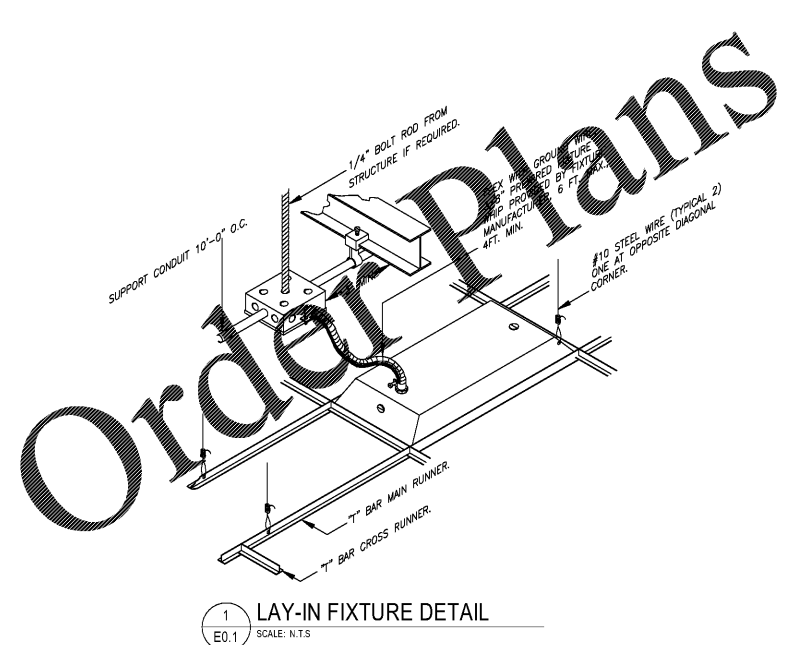
WIRING SIZE CHART

CONTRACTOR SHALL PROVIDE WIRING FOR 120 V. CIRCUITS (LINE TO NEUTRAL) OF SIZE BELOW DEPENDING UPON CIRCUIT LENGTH:

|              |              |
|--------------|--------------|
| < 100 FT     | #12 AWG (CU) |
| 100 - 180 FT | #10 AWG (CU) |
| 180 - 250 FT | #8 AWG (CU)  |

ELECTRICAL LEGEND

- LIGHTING**
- [Symbol] LIGHTING FIXTURE.
  - [Symbol] EMERGENCY LIGHTING FIXTURE. PROVIDE WITH INTEGRAL BATTERY BACK-UP.
  - [Symbol] DOWNLIGHT.
  - [Symbol] POLE MOUNTED LIGHT FIXTURE.
  - [Symbol] EXIT LIGHTING FIXTURE. FACE PLATES (MARKED) AND DIRECTIONAL ARROWS AS INDICATED. PROVIDE WITH BATTERY BACKUP, CONNECT ANIMAL OF LOCAL SWITCH.
  - S SINGLE POLE SWITCH, 20A, 120/277 VOLT, 48" A.F.F..
  - S3 THREE-WAY SWITCH, 20A, 120/277 VOLT, 48" A.F.F..
  - S4 FOUR-WAY SWITCH, 20A, 120/277 VOLT, 48" A.F.F..
  - SD DIMMER SWITCH, 120 VOLT, 48" A.F.F.. PROVIDE WATTAGE AS REQUIRED. PROVIDE FLUORESCENT OR LOW VOLTAGE TYPE AS REQUIRED.
  - SSos TWO WALL MOUNTED SWITCH IN COMMON BOX, 20A, 120/277V, 48" AFF WITH INTEGRAL DUAL TECHNOLOGY OCCUPANCY SENSOR, BY WAIT STOPPER OR APPROVED EQUAL, PROVIDED WITH NUMBER OF SWITCH PACKS AS REQUIRED AND ALL OTHER REQUIRED ACCESSORIES FOR PROPER INSTALLATION.
  - Sos WALL MOUNTED SWITCH, 20A, 120/277V, 48" AFF WITH INTEGRAL DUAL TECHNOLOGY OCCUPANCY SENSOR, BY WAIT STOPPER OR APPROVED EQUAL, PROVIDED WITH NUMBER OF SWITCH PACKS AS REQUIRED AND ALL OTHER REQUIRED ACCESSORIES FOR PROPER INSTALLATION.
  - ES DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR AND ASSOCIATED LIGHTING RELAY PACK. PROVIDE WAIT STOPPER OR EQUAL, PROVIDED WITH NUMBER OF SWITCH PACKS AS REQUIRED AND ALL OTHER REQUIRED ACCESSORIES FOR PROPER INSTALLATION.
- POWER**
- [Symbol] DUPLEX GROUNDING TYPE RECEPTACLE, 20A, 125 VOLT, NEMA 5-20R, 18" U.O.N.
  - [Symbol] (2) DUPLEX GROUNDING TYPE RECEPTACLES IN COMMON BOX, 20A, 125 VOLT, NEMA 5-20R, 18" A.F.F., U.O.N.
  - [Symbol] DUPLEX ISOLATED GROUNDING TYPE RECEPTACLE, 20A, 125 VOLT, NEMA 5-20R, 18" A.F.F., U.O.N. RECEPTACLE BODY SHALL BE OPEN.
  - [Symbol] DUPLEX GROUND FAULT INTERRUPTER TYPE RECEPTACLE, 20A, 125 VOLT, NEMA 5-20R, 18" A.F.F., U.O.N.
  - [Symbol] GROUND FAULT INTERRUPTER TYPE RECEPTACLE, MOUNT HORIZONTALLY 18" A.F.F., U.O.N. IN OUTLET BOX WITH DEVICE COVER.
  - [Symbol] DUPLEX GROUNDING TYPE RECEPTACLE, 20A, 125 VOLT, NEMA 5-20R, MOUNT HORIZONTALLY 6" A.F.F., WATER COOL.
  - [Symbol] SPECIAL RECEPTACLE, AMPERAGE, AND VOLTAGE AS INDICATED, 18" AFF, UON.
  - [Symbol] RECEPTACLE, TELEPHONE/DATA OUTLETS, FLUSH MOUNT IN FLUSH MOUNTED FLOOR BOX WITH RUBBER OR ANTI-TERMOPLASTIC CARPET COVER PLATE. PROVIDE TWO DUPLEX RECEPTACLES AND (1) LEAD WASTE OUTLET. COORDINATE DEPTH OF FLOOR BOX WITH SLAB DEPTH. COORDINATE EXACT LOCATION WITH ARCHITECT. PROVIDE 3/4" CONDUIT WITH CONDUCTORS INDICATED FOR SERVICE TO RECEPTACLE OUTLET. PROVIDE (1) 1-1/4" CONDUIT WITH PULLWIRE FROM EACH SPECIAL SYSTEMS OUTLET TO ABOVE NEAREST ACCESSIBLE CEILING FOR SPECIAL SYSTEM WIRING BY OTHERS.
  - [Symbol] PANELBOARD, 3 PHASE, 4 WIRE, 5N
- JUNCTION BOX**
- [Symbol] JUNCTION BOX.
  - [Symbol] DISCONNECT SWITCH, 240 OR 600 VOLTS AS REQUIRED. AMPS, POLES AND FUSING AS NOTED, NEMA 1, U.O.N.
  - [Symbol] MOTOR RATED SWITCH, MOUNT WITHIN SIGHT OF EQUIPMENT.
  - [Symbol] MOTOR CONNECTION, WITH INTEGRAL DISCONNECTING MEANS.
  - [Symbol] STARTER
  - [Symbol] KEYNOTE.
- SPECIAL SYSTEMS**
- [Symbol] TELEPHONE/DATA OUTLET 18" A.F.F., U.O.N. SINGLE GANG BOX WITH DEVICE PLATE. PROVIDE 1" (UON) CONDUIT WITH PULLWIRE FROM OUTLET TO ABOVE ACCESSIBLE CEILING.
  - [Symbol] TELEPHONE OUTLET 18" A.F.F., U.O.N. SINGLE GANG BOX WITH DEVICE PLATE. PROVIDE 3/4" (UON) CONDUIT WITH PULLWIRE FROM OUTLET TO ABOVE ACCESSIBLE CEILING.
  - [Symbol] TELEVISION OUTLET 18" A.F.F. SINGLE GANG BOX WITH DEVICE PLATE. PROVIDE 3/4" (UON) CONDUIT WITH PULLWIRE FROM OUTLET TO ABOVE ACCESSIBLE CEILING.
  - [Symbol] TELEPHONE/TELEVISION BACKBOARD, 4' X 4' X 3/4" THICK EXTERIOR GRADE PLYWOOD. MOUNT VERTICALLY WITH BOTTOM OF PLYWOOD 6" A.F.F., U.O.N.
- FIRE ALARM SYSTEMS**
- [Symbol] FIRE ALARM PULL STATION. WALL MOUNT AT 48" A.F.F.
  - [Symbol] FIRE ALARM SPEAKER/STROBE. WALL MOUNT 80" A.F.F. TO BOTTOM OF OUTLET BOX, A.F.F. OR 6" BELOW CEILING IN COMPLIANCE WITH ADA REQUIREMENTS.
  - [Symbol] FIRE ALARM SPEAKER/STROBE. CEILING MOUNT IN COMPLIANCE WITH ADA REQUIREMENTS.
  - [Symbol] FIRE ALARM STROBE. WALL MOUNT 80" TO BOTTOM OF OUTLET BOX, A.F.F. OR 6" BELOW CEILING IN COMPLIANCE WITH ADA REQUIREMENTS.
  - [Symbol] FIRE ALARM SMOKE DETECTOR, PHOTOELECTRIC TYPE.
  - [Symbol] FIRE ALARM HEAT DETECTOR.
  - [Symbol] DUCT SMOKE DETECTOR.
  - [Symbol] FIRE ALARM TAMPER SWITCH
  - [Symbol] FIRE ALARM FLOW SWITCH



- INSTALL FIRE ALARM SYSTEM IN ACCORDANCE WITH ADA, NFPA 72, INTERNATIONAL BUILDING CODE, AND ALL LOCAL CODES.
- PROVIDING WIRING PER MANUFACTURER'S RECOMMENDATIONS.
- CONNECT SYSTEM TO EXISTING HVAC SYSTEM CONTROLLERS FOR SHUTDOWN OF ENTIRE HVAC SYSTEM UPON ALARM.
- NO SMOKE DETECTORS SHALL BE LOCATED WITHIN 3 FEET OF AN HVAC SUPPLY OR RETURN VENT.
- MODIFY EXISTING FIRE ALARM SYSTEM AS REQUIRED TO ACCEPT NEW DEVICES.