

**DELAWARE OFFICE:**

2500 WRANGLE HILL ROAD  
FOX RUN OFFICE PLAZA, SUITE 110  
BEAR, DE 19701

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**ARCHITECTS**

**ENGINEERS**

**FACILITIES SOLUTIONS**

**ASI No. 4R2 – Lighting Replacement**

**TO** : **Conventional Builders**

**FROM** : **Dan Shurina**

**DATE** : **02/02/2024**

**REFERENCE** : **19121 East Wing HVAC Replacement at DeIDOT Admin Bldg**

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**Changes to Scope:**

1. Provide cost proposal for to replace lighting in the OSEC area as described herein.
2. Existing wiring may be reused to the extent permitted by field conditions and following an evaluation of the existing conductors by the Contractor.
3. Owner will furnish light fixtures for installation. Contractor to field verify quantities of fixtures and include total fixture quantity in cost proposal to Contractor.
4. The cost proposal is to include demolition of existing can light fixtures which have been abandoned above ceiling and demolition of associated wiring.
5. The contractor is to provide hangers at existing wiring in the OSEC area which is not properly supported and is to remain.
6. See attached drawings for lighting replacement scope of work.

**Changes to Drawings:**

1. Drawing E-000
  - a. Added new lighting controls symbols under Electrical Symbol Legend.
  - b. Added Light Fixture Schedule.
2. Drawing ED112A – Added new drawing with lighting and lighting devices demolition work.
3. Drawing E112A – Added new drawing with new lighting and lighting device replacements.

END

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**Product Number:** 62698

**Order Abbreviation:** PANELF3BS035UNVD8SC722GWH

**General Description:** Lumen and CCT Selectable LED Panel 3B, 20/30/35W, 120-277V, 0-10V dim, 2200/3300/4000 lumens, 80+ CRI, 3500/4000/5000K, 2x2, White

**Product Information**

|                                 |                                      |
|---------------------------------|--------------------------------------|
| Power Factor                    | ≥ 0.90                               |
| Total Harmonic Distortion (THD) | < 20 %                               |
| Efficacy (LPW)                  | 105 lm/W                             |
| Operating Voltage (V)           | 120                                  |
| Power (W)                       | 120                                  |
| Abbrev. With Packaging Info.    | PANELF3BS035UNVD8SC722GWH 4/CS 1/SKU |
| Color Temperature/CCT (K)       | 3500                                 |
| Ordering Abbreviation           | PANELF3BS035UNVD8SC722GWH            |
| Average Rated Life 1 (hr)       | 50000                                |
| UPC Code                        | UPC046135626982                      |
| Color Rendering Index (CRI)     | 80                                   |
| Service Life Rating             | 50000                                |
| Lumens (lm)                     | 2200 ... 4000 lm                     |
| Wattage (W)                     | 35.00 W                              |
| Color Range                     | 3500 K                               |
| Connectors                      | WAGO                                 |
| Fixture Warranty                | 5 years                              |
| Housing                         | Aluminum Steel                       |
| Luminaire Finish                | White                                |
| Luminaire Type                  | Panel                                |
| Mounting                        | Recessed/Suspended/Surface           |
| Certification Listing           | RoHS,FCC                             |
| Nominal Length (inch)           | 23.819 in                            |
| Width (in)                      | 23.82 in                             |
| Width (mm)                      | 605.00 mm                            |

## ELECTRICAL ABBREVIATIONS

|  |  |
|--|--|
| (D) - DENOTES EQUIPMENT OR WIRING TO BE DEMOLISHED   | KVA - KILO VOLT AMPERE                       |
| (E) - DENOTES EXISTING EQUIPMENT OR WIRING TO REMAIN | LG - LG CORPORATION                          |
| (N) - DENOTES NEW EQUIPMENT OR WIRING                | LI - LONG TIME + INSTANTANEOUS               |
| A - AMPERE   | LSI - LONG TIME + SHORT TIME + INSTANTANEOUS |
| AF - AMPERE FRAME                                    | MCB - MAIN CIRCUIT BREAKER                   |
| AFF - ABOVE FINISHED FLOOR                           | MDP - MAIN DISTRIBUTION PANEL                |
| AT - AMPERE TRIP                                     | MTS - MANUAL TRANSFER SWITCH                 |
| ATS - AUTOMATIC TRANSFER SWITCH                      | MVARS - MEGA VOLT AMPERE SHORT CIRCUIT       |
| BLDG - BUILDING                                      | OC - ON CENTER                               |
| C - CONDUIT  | PH - PHASE                                   |
| CB - CIRCUIT BREAKER                                 | QOP - QUIK OPEN PROTECTION                   |
| ENCL - ENCLOSURE                                     | SPD - SURGE PROTECTIVE DEVICE                |
| FA - FIRE ALARM                                      | SW - SWITCH                                  |
| GA - GENERAL ELECTRIC                                | SWB - SWITCHBOARD                            |
| KA - KILO AMPERE                                     | UG - UNDERGROUND                             |
| KV - KILO VOLT                                       | V - VOLTS                                    |
|  | W - WATTS OR WIRE                            |
|  | Z - IMPEDANCE                                |

## ELECTRICAL SYMBOL LEGEND

### Power Devices

|  |  |
|--|--|
|  | TWIST LOCK, GENERAL PURPOSE RECESSED SINGLE RECEPTACLE, CEILING MOUNTED - 20AMP, 125VOLTS, NEMA L5-20R, ELECTRICAL BOX TO BE 2-1/8" DEEP.  |
|  | GENERAL PURPOSE RECESSED SINGLE RECEPTACLE - 20AMP, 125VOLTS, NEMA5-20R, ELECTRICAL BOX TO BE 2-1/8" DEEP.   |
|  | GENERAL PURPOSE DUPLEX RECEPTACLE - 20AMP, 125VOLTS, NEMA5-20R, ELECTRICAL BOX TO BE 2-1/8" DEEP (MIN.).   |
|  | GENERAL PURPOSE QUADPLEX RECEPTACLE - 20AMP, 125VOLTS, NEMA5-20R, ELECTRICAL BOX TO BE 2-1/8" DEEP (MIN.).   |
|  | GENERAL PURPOSE GFCI RECEPTACLE (DUPLEX OR QUADPLEX) - 20AMP, 125VOLTS, NEMA5-20R, ELECTRICAL BOX TO BE 2-1/8" DEEP. OUTLETS INSTALL OUTDOORS OR ON ROOF SHALL HAVE DIECAST ALUMINUM BOX 2-1/8" DEEP (MIN.), AND WHILE IN USE COVER THOMAS&BETTS CKSUV OR APPROVED EQUAL.  |
|  | JUNCTION BOX - FOR FUTURE ACCESS CONTROL HARDWARE  |
|  | FRACTIONAL HORSEPOWER MOTOR STARTER WITH OVERLOAD IN NEMA 1 ENCLOSURE, SQ'D G2P OR APPROVED EQUAL FOR INDOORS, FWP2 FOR OUTDOORS WITH NEMA 4 ENCLOSURE   |
|  | FUSED DISCONNECT SWITCH-HEAVY DUTY, 3POLE WITH FUSE CLIPS SUITABLE FOR CLASS 'R' FUSES, NEMA 1 UNLESS NOTED. WP-WEATHER PROOF-NEMA3R ENCLOSURE. (NOMENCLATURE: 30A20A + SWITCH SIZE/FUSE SIZE), SQ D CLASS 3110 OR EQUAL.  |
|  | COMBINATION MAGNETIC STARTER, FUSIBLE DISCONNECT SWITCH TYPE, 3POLE, FULL VOLTAGE NON-REVERSIBLE TYPE WITH FUSED CONTROL, TRANSFORMER, BI-METALLIC OVERLOAD RELAYS, ON/OFF PUSH BUTTONS OR HAND-OFF-AUTO SELECTOR SWITCH, (1)N.O.(1)N.C. AUXILIARY CONTACTS AND LED PILOT LIGHT, CLASS 'R' FUSE CLIPS, NEMA 1 ENCLOSURE UNLESS NOTED. SQ D CLASS #838 OR EQUAL, NEMA 1 - SIZE 1. |
|  | VFD - VENDOR SUPPLIED - SEE ELECTRICAL GENERAL NOTE #31.   |
|  | CIRCUIT BREAKER  |
|  | MOTOR  |

### Fire Alarm Devices

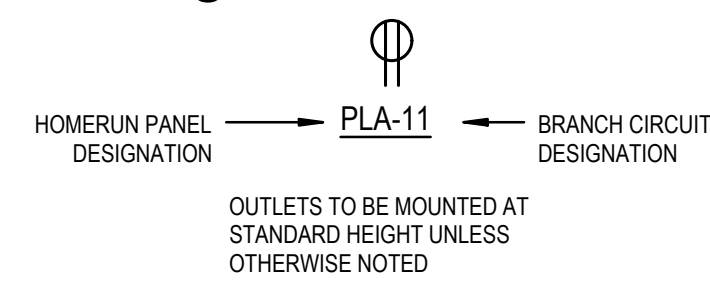
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|--|--|
|  | FIRE ALARM CONTROL PANEL   |
|  | VOICE EVACUATION CONTROL PANEL   |
|  | DETECTION DEVICE - SMOKE DETECTOR, DUCT DETECTOR (SUPPLIED AND INSTALLED BY MECHANICAL EQUIPMENT VENDOR, WIRED BY ELECTRICAL CONTRACTOR), SEE DUCT DETECTOR CONTROL WIRING DIAGRAM & DUCT DETECTOR CONTROL WIRING DETAIL ON SHEET E-500. ELECTRICAL CONTRACTOR TO PROVIDE EACH DUCT DETECTOR WITH A MONITORING MODULE, CONTROL RELAY, AND TEST SWITCH. |
|  | CONTROL RELAY - PROVIDE LOW VOLTAGE WIRING TO FACP.  |
|  | DUCT DETECTOR REMOTE TEST SWITCH - SEE DUCT DETECTOR CONTROL WIRING DIAGRAM & DUCT DETECTOR CONTROL WIRING DETAIL ON SHEET E-500.  |

### Lighting Controls

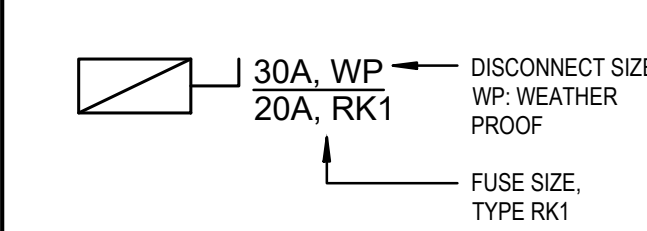
|  |  |
|--|--|
|  | WALL SWITCH - 20A, 120/277V, SINGLE POLE, HEAVY DUTY, TOGGLE TYPE  |
|  | WALL SWITCH (3-WAY) - 20A, 120/277V, SINGLE POLE, HEAVY DUTY, TOGGLE TYPE  |
|  | WALL SWITCH (4-WAY) - 20A, 120/277V, SINGLE POLE, HEAVY DUTY, TOGGLE TYPE  |
|  | WALL SWITCH (DIMMING MOTION SENSOR) - 20A, 120/277V, SINGLE POLE, HEAVY DUTY, TOGGLE TYPE. PROVIDE 0-10V WIRING BETWEEN LIGHT FIXTURES AND DIMMER SWITCH. LEGRAND-DW-311 OR APPROVED EQUAL.              |
|  | SLIDING DIMMER WITH ON/OFF SWITCH, RATED FOR 120/277V - 105 AMP, LED-RAND / CD/FBL3P OR APPROVED EQUAL. COLOR TO BE SELECTED BY ARCHITECT. PROVIDE LOW VOLTAGE WIRING BETWEEN SWITCH AND LIGHT FIXTURES. |
|  | MOTION SENSOR, CEILING MOUNTED, 2000 SQFT - HUBBELL / OMNI-OT-2000 OR APPROVED EQUAL. PROVIDE LOW VOLTAGE WIRING TO POWER PACK.  |
|  | POWER PACK - HUBBELL / LVPP OR APPROVED EQUAL. PROVIDE LOW VOLTAGE WIRING TO MOTION SENSOR. CONNECT TO LOCAL LIGHTING CIRCUIT WITH 2#12 - 1#120 - 3#12C WIRING.  |

## GRAPHIC CONVENTIONS

### Wiring Devices



### Disconnects



## LIGHTING FIXTURE SCHEDULE

| TYPE | LAMPS           | VOLTAGE | MOUNT    | FIXTURE DESCRIPTION                 | MANUFACTURER/CATALOG NUMBER          | REMARKS  |
|------|-----------------|---------|----------|-------------------------------------|--------------------------------------|--|
| A    | LED 3300 LUMENS | 120/277 | RECESSED | 2X2 ENERGY EFFICIENT LED FLAT PANEL | LEDVANCE / PANELF3B8030UNVDBSC7229WH | PROVIDE MOUNTING HARDWARE AS REQUIRED. SET TO 3300 LUMENS AND 3500K CCT. |

## ELECTRICAL GENERAL NOTES

- PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, COORDINATION, ADDITIONAL DESIGN AND ALL INCIDENTALS NECESSARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM AS DETAILED ON PLANS TO THE SATISFACTION OF THE ENGINEER AND THE OWNER. COORDINATE ALL WORK WITH THE ENGINEER BEFORE THE START OF WORK.
- PRIOR TO SUBMITTING BID, THE CONTRACTOR SHALL VISIT THE SITE AND BE THOROUGHLY FAMILIAR WITH THE EXISTING CONDITIONS AND PROPOSED CONSTRUCTION. CONTRACTOR SHALL INCLUDE IN THEIR BID ALL MATERIAL, LABOR, AND ALL INCIDENTALS FOR A COMPLETE INSTALLATION WHETHER SPECIFICALLY INDICATED OR NOT. ALL ERRORS, DISCREPANCIES AND MISSED ITEMS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER DURING THE BIDDING PROCESS BY THE CONTRACTOR. THESE ITEMS SHALL BE INCLUDED IN THE BID PRICE. NO EXTRA COST WILL BE ALLOWED FOR ANY DISCREPANCY WHICH COULD HAVE BEEN NOTICED AT THE SITE VISIT BY THE CONTRACTOR.
- PERFORM WORK AS REQUIRED BY APPLICABLE CODES, REGULATIONS, AND LAWS OF LOCAL, STATE, AND FEDERAL GOVERNMENTS AND OTHER AUTHORITIES WITH LAWFUL JURISDICTION. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE.
- MATERIAL AND EQUIPMENT SHALL BE NEW (UNLESS NOTED), UL, NEMA, ANSI, IEEE, AND A CM APPROVED FOR INTENDED PURPOSE. MATERIAL AND INSTALLATION SHALL MEET REQUIREMENTS OF NATIONAL AND LOCAL ELECTRICAL CODE.
- GIVE NOTICES, FILE PLANS, OBTAIN PERMITS, AND LICENSES, PAY FEES AND BACK CHARGES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES THAT HAVE JURISDICTION.
- MAINTAIN RECORD DRAWINGS ON SITE. RECORD SET MUST BE COMPLETE AND CURRENT AND AVAILABLE FOR INSPECTION WHEN REQUISITIONS FOR PAYMENT ARE SUBMITTED.
- GUARANTEE WORK IN WRITING PER SPECIFICATIONS, REPAIR OR REPLACE DEFECTIVE MATERIALS OR INSTALLATION AT NO COST TO OWNER DURING THE GUARANTEE PERIOD. CORRECT DAMAGE CAUSED IN MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER GUARANTEE AT NO COST TO OWNER. SUBMIT GUARANTEE TO OWNER BEFORE FINAL PAYMENT.
- COORDINATE ALL ELECTRICAL ITEMS WITH EXISTING FIELD CONDITIONS. LOCATIONS SHOWN ARE APPROXIMATE AND MAY REQUIRE MINOR ADJUSTMENT IN THE FIELD TO SATISFY THE DESIGN INTENT.
- DAMAGE TO EXISTING FACILITIES AND EQUIPMENT SHALL BE REPAIRED OR REPLACED IMMEDIATELY BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- THE LOCATIONS ON THESE PLANS ARE APPROXIMATE AND REQUIRE COORDINATION WITH ALL OTHER TRADES AND VERIFICATION OF EXISTING CONDITIONS. ROUTING OF CONDUIT IS DIAGNOSTIC IN NATURE AND NOT INTENDED TO SHOW ALL REQUIRED OFFSETS AND DETAILS. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING ASSOCIATED EQUIPMENT AND CONDITIONS. COORDINATE THE LOCATION OF ALL EQUIPMENT WITH THE ENGINEER AND THE OWNER. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER TRADES' DRAWINGS AND SPECIFICATIONS AND COORDINATING WITH ALL OTHER TRADES DURING BIDDING AND CONSTRUCTION. THE CONTRACTOR IS TO INCLUDE CIRCUIT LENGTHS OF WIRE AND CONDUIT REQUIRED TO INSTALL CONNECTED DEVICES AND EQUIPMENT SUCH AS PANELBOARDS, SWITCHBOARDS, TRANSFORMERS, ETC. WITHIN 15 FEET OF THE LOCATION SHOWN.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUITY OF ALL POWER, CONTROL, FIRE ALARM, SECURITY SYSTEMS, AND COMMUNICATIONS FUNCTIONS TO ALL AREAS AFFECTED BY DEMOLITION AND/OR NEW CONSTRUCTION.
- REPAIR AND PATCH ANY DISTURBED AREAS TO MATCH ADJACENT CONSTRUCTION.
- DISCONNECT AND MAKE SAFE ANY EQUIPMENT TO BE REMOVED BY OTHERS. COORDINATE REMOVAL OF EQUIPMENT WITH OTHER TRADES PRIOR TO DEMOLITION.
- IN ANY AREA REQUIRING THE PERFORMANCE OF ANY TRADE'S WORK, THIS CONTRACTOR SHALL CAREFULLY REMOVE AND STORE ANY OR ALL ELECTRICAL ITEMS IN PATH OF WORK, REINSTALLING, AND RECONNECTING SAME AS REQUIRED, IN ACCORDANCE WITH THE PLANS AND/OR AS DIRECTED AFTER COMPLETION OF OTHER TRADES' WORK IN THAT AREA.
- PRIOR TO THE START OF DEMOLITION, CONTRACTOR SHALL FIELD VERIFY ALL BRANCH CIRCUITS AND MAINTAIN THOSE CIRCUITS THAT EXTEND OUTSIDE THE SCOPE OF WORK.
- AFTER RENOVATING EXISTING ELECTRICAL WORK, THE CONTRACTOR SHALL ENSURE THAT ALL REMAINING AND NEW EQUIPMENT WILL OPERATE PROPERLY, INCLUDING BUT NOT LIMITED TO BACKFEEDING OF EXISTING POWER AND LIGHTING CIRCUITS. REFER TO SINGLE LINE DIAGRAM.
- ALL ELECTRICAL WORK INDICATED TO REMAIN SHALL BE SUITABLY PROTECTED TO PREVENT ANY DAMAGE.
- WHERE ELECTRICAL SYSTEMS PASS THROUGH RENOVATED AREAS TO SERVE OTHER PORTIONS OF THE PREMISES, SYSTEMS SHALL BE SUITABLY PROTECTED TO PREVENT DAMAGE OR RELOCATED AND THE SYSTEMS RESTORED TO NORMAL OPERATION. ANY OUTAGES IN SYSTEMS SHALL BE COORDINATED WITH OWNER. RESTORE POWER TO EXISTING TO REMAIN EQUIPMENT IF INTERRUPTED BY DEMOLISHED CIRCUITS IN THE AREA.
- CONTRACTOR SHALL SUBMIT FOR REVIEW, SHOP DRAWINGS FOR ALL EQUIPMENT AND MATERIALS USED ON THE PROJECT. SUBMITTALS SHALL BE REVIEWED BY THE ENGINEER BEFORE PURCHASE OF MATERIALS.
- ALL WIRING SHALL BE COPPER, 600V, 75/90° RATED WITH FLAME-RETARDANT, HEAT AND MOISTURE RESISTANT INSULATION.
- PERMANENTLY LABEL ALL NEW ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, DEVICE DESIGNATION AND SUPPLY CIRCUIT DESIGNATION. UPDATE OR REPLACE PANEL DIRECTORIES TO INCLUDE NEW CIRCUIT INFORMATION RESULTING FROM THIS PROJECT.
- PROVIDE TEMPORARY POWER AND LIGHTING FOR ALL TRADES AS REQUIRED TO COMPLETE THE PROJECT. ALL TEMPORARY AND INTERIM EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS INCLUDING, BUT NOT LIMITED TO NFPA 110 AND NFPA 70.
- REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION THAT IS NOT SHOWN ON THE DRAWINGS.
- OPENINGS IN EXISTING CONCRETE AND MASONRY WALLS AND FLOORS REQUIRED FOR CONDUIT INSTALLATION SHALL BE CORE DRILLED. MAXIMUM CORE DRILL SIZE SHALL BE 5" IN DIAMETER. CORE DRILL LOCATIONS SHALL BE SPACED A MINIMUM OF 6" FROM EACH OTHER MEASURED FROM THE OUTSIDE EDGE OF THE CORE DRILL. ALL CORE DRILL OPENINGS SHALL BE PROPERLY SEALED ACCORDING TO THEIR LOCATION AND APPLICATION.
- ALL OUTGAGES SHALL BE KEPT TO A MINIMUM. ALL WORK THAT REQUIRES A SUSTAINED EQUIPMENT OUTAGE SHALL BE PERFORMED CONTINUOUSLY AROUND THE CLOCK UNTIL WORK IS COMPLETED UNLESS NOTED OTHERWISE. COORDINATE OUTGAGES WITH OWNER REPRESENTATIVE.
- PROVIDE FOR EACH BRANCH CIRCUIT AND FEEDER CIRCUIT A DEDICATED EQUIPMENT GROUND WIRE. FOR SINGLE PHASE BRANCH CIRCUITS OF 120V/1PH OR 277V/1PH, PROVIDE DEDICATED HOT, DEDICATED NEUTRAL AND DEDICATED EQUIPMENT GROUND WIRES. SHARING OF NEUTRAL OR EQUIPMENT GROUND WIRES IS NOT PERMITTED. WIRING TO ALL HVAC EQUIPMENT OR OTHER TRADE EQUIPMENT SHALL BE IN CONDUIT. ALL EQUIPMENT AND FEEDER WIRING IN MECHANICAL ROOM/ELECTRICAL ROOM SHALL BE IN RIGID CONDUIT. USE OF MC CABLE IS LIMITED TO BRANCH CIRCUIT WIRING ABOVE RECESSED CEILING OR CONCEALED IN WALL. WIRING TO OUTLETS ON TABLE SHALL BE PROVIDED IN EITHER EMT CONDUIT OR FLEXIBLE METAL CONDUIT.
- PROVIDE IDENTIFICATION LABELS FOR ALL BRANCH CIRCUITS AND FEEDERS CIRCUITS AT JUNCTION BOXES, PANELBOARDS, TROUGHS, AND SPICE BOXES.
- PROVIDE UNSPLICED FEEDERS FROM PANELBOARD OR SWITCHBOARD TO ALL EQUIPMENT, INCLUDING ALL 20 AMPERE SINGLE POLE BRANCH CIRCUIT WIRING.
- ALL WIRING DEVICES ARE TO BE RECESSED WHERE POSSIBLE. WHERE RECESSING IS NOT POSSIBLE, WIRING DEVICES ARE TO BE SURFACE MOUNTED WITH CIRCUIT WIRING ROUTED IN SURFACE MOUNTED CONDUIT PER SPECIFICATIONS.
- ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL 1/2" #14-3/4" FROM EACH VENDOR SUPPLIED DUCT SMOKE DETECTOR TO FACP. INSTALLATION OF DETECTOR BY MECHANICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY ELECTRICAL TERMINATIONS. EACH BLOWER COIL (BC) AND EACH ENERGY RECOVERY VENTILATOR (ERV) WILL HAVE (1) SUPPLY DUCT SMOKE DETECTOR AND (1) RETURN DUCT SMOKE DETECTOR.
- VFD CABLE SHALL BE OKONITE C-L-X TYPE MC-HL (XHVV2) OR APPROVED EQUAL. 3/C VFD CABLE SHALL BE RATED FOR 2000V MARINE CABLE AND UL LISTED AS TYPE MC-HL CABLE PER UL2256(E8916). VFD CABLES SHALL HAVE UNCOATED SOFT COPPER STRANDED CONDUCTORS RATED FOR 90 DEG CENTIGRADE WET OR DRY. CROSS LINK POLYETHYLENE HIGH DIELECTRIC STRENGTH COLOR CODED INSULATION, AND THREE BARE SOFT STRANDED GROUND CONDUCTORS WITH NON-HYGROSCOPIC FILLER AND BINDER TAPE. SHEATH SHALL BE CLOSE FITTING, IMPERVIOUS, CONTINUOUS WELDED CORRUGATED ALUMINUM C-L-X PER UL1569. SHEATH SHALL BE PROTECTED WITH LOW TEMPERATURE BLACK PVC JACKET. CONTRACTOR SHALL PROVIDE PROPER FITTINGS FOR INSTALLATION OF VFD CABLE.
- ALL CONDUIT PENETRATIONS THROUGH WALLS OR CEILINGS SHALL BE PATCHED AND SEALED WITH FIRE RATED FOAM SEALANT.
- PROVIDE INSULATING BUSHINGS ON CONDUIT THREADS OR CONNECTORS WHERE RACEWAYS WITH CONDUITS OR MC CABLES ENTER A BOX OR ENCLOSURE. THIS BUSHING SHALL BE INSTALLED ON ALL CABLES AND CONDUITS.
- PROVIDE FIRE ALARM RATED MC CABLE FOR CONNECTIONS BETWEEN FIRE ALARM DEVICES. MC CABLE SHALL RUN CONCEALED ABOVE CEILINGS AND IN DRYWALL WHERE EXPOSED, PROVIDE EMT; NO EXPOSED MC CABLE IS PERMITTED.
- (N) DENOTES NEW EQUIPMENT OR WIRING.
- (E) DENOTES EXISTING EQUIPMENT OR WIRING TO REMAIN.
- (D) DENOTES EQUIPMENT OR WIRINGS TO BE DEMOLISHED.

### FIRE ALARM SYSTEM:

PROVIDE NEW FIRE ALARM SYSTEM DEVICES AND CONNECT TO EXISTING FIRE ALARM SYSTEM (LOCATED IN STORAGE RM L000). ALL NEW DEVICES AND WIRING SHALL BE COMPATIBLE WITH EXISTING FIRE ALARM SYSTEM. PROVIDE REQUIRED TESTING AND INSPECTION AS REQUIRED BY STATE OF DELAWARE FIRE MARSHAL'S OFFICE.

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OMB / DFM PROJECT NO. M15511000003  
ADMINISTRATION BUILDING  
HVAC REPLACEMENT

HIGHWAY ADMINISTRATION BUILDING  
800 S BAY RD., DOVER, DELAWARE 19901

## REVISIONS

| MARK | DESCRIPTION | DATE    |
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| 1    | ASI #4      | 1/26/24 |
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SHEET TITLE

SYMBOLS,  
ABBREVIATIONS AND  
NOTES

BIDDING  
DOCUMENTS

JUNE 1, 2022

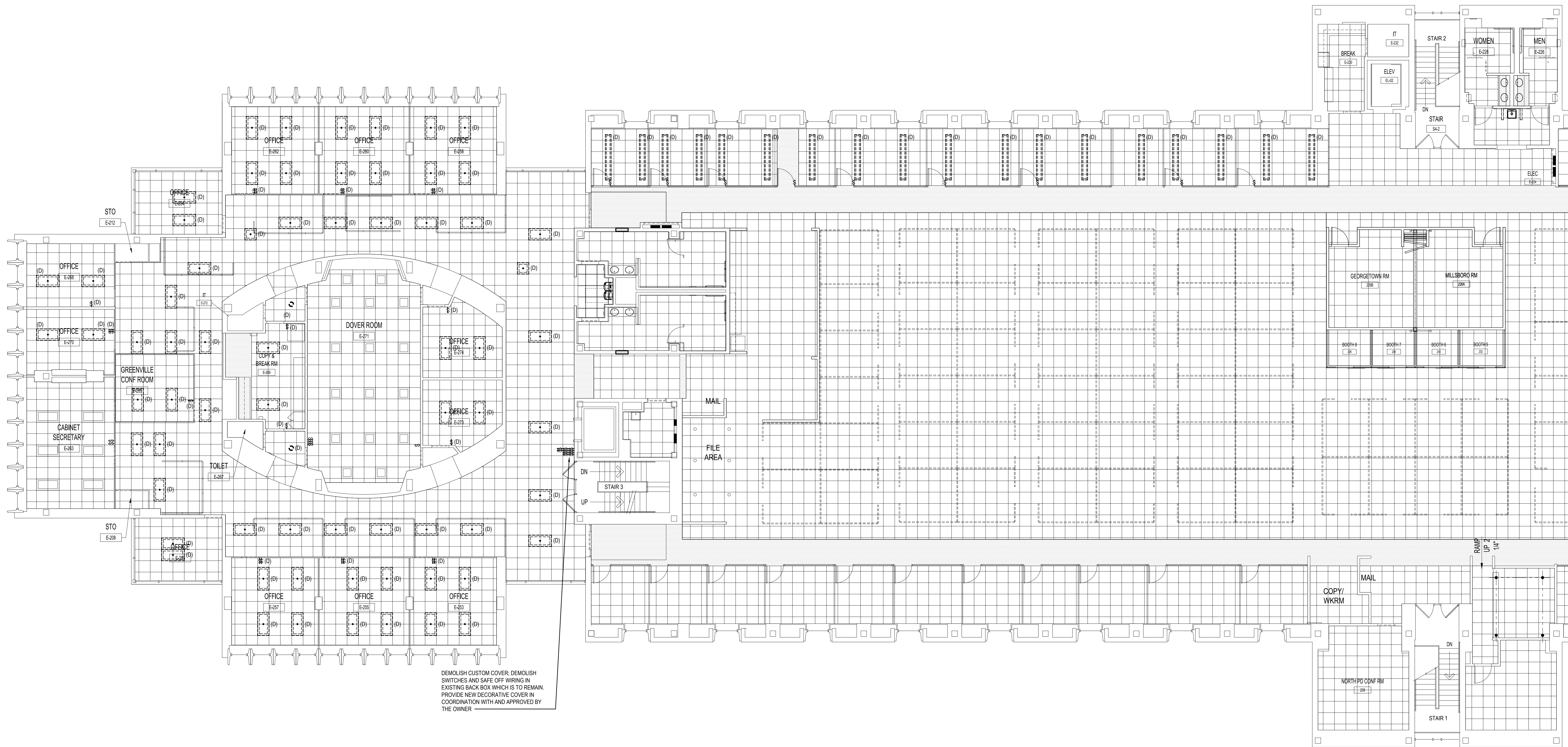
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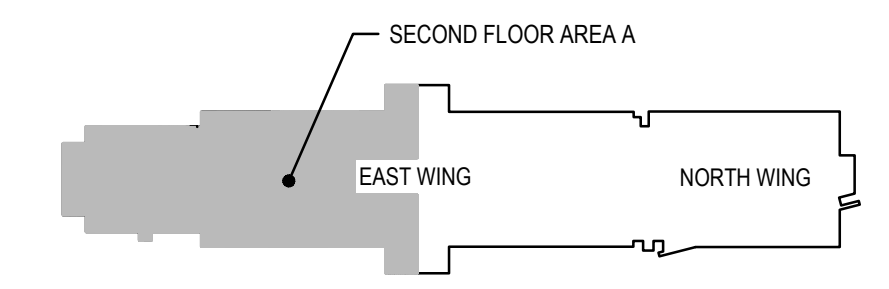
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**ELECTRICAL DEMOLITION NOTES:**

1. ALL DEMO FIXTURES AND SWITCHES ARE INDICATED IN THICK LINES WITH THE (D) NOTATION. ALL WIRING IS TO BE RETAINED AND REUSED IN NEW CONSTRUCTION.

1
**ELECTRICAL SECOND FLOOR DEMOLITION PLAN - AREA A**  
 ED112A SCALE: 1/8" = 1'-0"



**SECOND FLOOR KEY PLAN**  
 SCALE: NTS

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**OMB / DFM PROJECT NO. MJ5511000003**  
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 800 S BAY RD. DOVER, DELAWARE 19901  
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SHEET TITLE  
**SECOND FLOOR LIGHTING DEMOLITION PLAN - AREA A**  
**BIDDING DOCUMENTS**  
 JUNE 1, 2022  
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