ADDENDUM NO. 02

February 21, 2024

Addition and Renovations to Franklin Central High School Phase 2A
6215 S. Franklin Rd
Indianapolis, IN, 46259

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications and the Drawings dated January 29, 2024, by VPS Architecture. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 2 – 1 through ADD 2 -2 and attached VPS Architecture Addendum No. 2 dated February 21, 2024, consisting of 4 pages, Specification Section 09 68 13 – Tile Carpeting, 26 05 33.16 Boxes and Covers for Electrical Systems and 15 Addendum Drawings.

Below is the link for the Optional Virtual Bid Opening, which Bids are due February 27, at 2:00PM (local time)

Microsoft Teams meeting
Join on your computer, mobile app or room device
Click here to join the meeting
Meeting ID: 242 057 440 199
Passcode: Ypm62f
Download Teams | Join on the web
Or call in (audio only)
+1 317-762-3960,,894369146# United States, Indianapolis
Phone Conference ID: 894 369 146#
Find a local number | Reset PIN

A. SPECIFICATION SECTION 01 21 00 ALLOWANCES

A. Article 3.01 Product Allowance:

1. Bid Category No. 1 – Include $75,000 in your bid for soil stabilization.

END OF ADDENDUM

VPS ARCHITECTURE

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Distribution: To all Planholders

ADDENDUM NO. 2 (TWO)

DATE: **February 21, 2024**
PROJECT: **Additions & Renovations to Franklin Central High School Phase 2A**
OWNER: **Franklin Township Community School Corporation**
PROJECT NO.: **2022063.00**

The original Specifications and Drawings dated January 2024 for the project referenced above, are amended as noted in this Addendum No. 2 (Two). Receipt of this Addendum and any subsequent Addenda must be acknowledged on the Proposal Form. This section of the Addendum consists of 33 (Thirty-Three) items and 18 (Eighteen) attachments.

ITEM **DESCRIPTION**

Clarifications:

2-1 The exterior sheathing behind the concrete screen wall shall be as specified, Securock ExoAir 430 or equal. All other sheathing shall be 5/8" Densglass Gold. The framing for the screen wall shall be 16 gauge minimum.

2-2 The wood doors for the project shall be field glazed.

Specification Items:

2-3 Section 042000 Unit Masonry:

A. Paragraph 3.16: Omit reference to water repellent.
B. Paragraph 3.6: Omit reference to cell insulation.

2-4 Section 084113 Aluminum Framed Entrances and Storefronts:

A. 2-year installation warranty required.

B. 10-year finish warranty required.

2-5 Section 084413 Glazed Aluminum Curtain Walls: 2-year installation warranty required.

2-6 Section 088000 Glazing: Basis-of-Design for insulated glass shall be as Oldcastle, as follows (refer to attached IG Vision Unit Performance Characteristics):

- Exterior Lite: 6mm (1/4") Guardian SunGuard SNZ 51/23 on Gray Low-E #2 Cavity: ½" (Air Fill)
- Interior Lite: 6mm (1/4") Guardian Clear

2-7 Section 096813 Tile Carpeting:

A. Replace section in its entirety with attached revision.
B. Field Carpet (Type A) shall be 80%. Accent Carpet (Type B) shall be 20%. Install method shall be ashlar. Rectilinear carpet patterns will be issued via ASI.

2-8 Section 098000 Acoustic Room Components:

A. SounDesign is an approved manufacturer.
B. Sound Seal is an approved manufacturer.

2-9 Section 098400 Acoustical Panels:

A. Acoustical Wall Panels in Practice rooms shall be 2'-0" W x 4'-0" H, mounted at 36" AFF to bottom of panel. Spacing between shall be 6"-8" +/- as required to fill each wall space in each practice room.
B. SounDesign is an approved manufacturer.
C. Sound Seal is an approved manufacturer.

2-10 Section 102113 Toilet Compartments: Door configuration on toilet stalls shall eliminate sight lines with a shiplap cut edge and continuous stainless steel piano hinges.

2-11 Section 123200 Manufactured Wood Casework:

A. Omit line item 2.8.B.5. Countertops shall have applied backsplashes with 3 mm edgebanding.
B. Laminate color selection(s) shall be made by Architect from manufacturer's standard range.
C. Solid Surfacing color selection(s) shall be made by Architect from manufacturer's standard range.

2-12 Section 123583 Specialty Casework:

A. The Music Library shelf system shall be located in Music Library J111.
B. Straight grille doors are acceptable for the Music Storage cabinetry.
C. Paragraph 2.3.E: Basis-of-Design for the Acousti-Cabinets shall be Wenger UltraStor (acoustical absorbent back panels not required).

2-13 Section 221319 Sanitary Waste Piping Specialties: Add subparagraph 2.2.B.1 as follows, "Sioux Chief."

2-14 Section 221319.13 Sanitary Drains: Add subparagraph 2.2.A.e as follows, "Sioux Chief."

2-15 Section 221423 Storm Drainage Piping Specialties:

A. Add subparagraph 2.1.A.1.a.5) as follows, "Sioux Chief."
B. Add subparagraph 2.2.A.1.5) as follows, "Sioux Chief."

2-16 Section 224200 Commercial Plumbing Fixtures: Add subparagraph 2.7.A.e as follows, "Sioux Chief".

2-17 Section 232113 Hydronic Piping:

A. Add subparagraph 2.1.A. as follows, "6. Chilled-water piping: 150 psig at 73 deg. F."
B. Add subparagraph 2.6.G as follows, "Chilled-Water Piping, above ground, NPS 2 and smaller, shall be the following:
   1. Type L (Type B) drawn-temper copper tubing, wrought-copper fittings, and soldered joints."
C. Add subparagraph 2.6.H as follows, "Chilled-water piping, above ground, NPS 2-1/2" and larger, shall be the following:
   1. Schedule 40 steel pipe, wrought-steel fittings, and welded joints.

2. Schedule 40 steel pipe, grooved, mechanical joint coupling and fittings; and grooved, mechanical joints."

2-18 Section 260533.16 Boxes and Covers for Electrical Systems: Replace section in its entirety with attached revision.

Drawing Items:

2-19 Refer to attached drawing, SF-1L2, for deck and structure height reference over new Unit L areas.

2-20 MH1F: Replace drawing in its entirety with attached revision.

2-21 MH1J: Replace drawing in its entirety with attached revision.

2-22 MH1L: Replace drawing in its entirety with attached revision.

2-23 EC01: Replace drawing in its entirety with attached revision.

2-24 EDS01: Replace drawing in its entirety with attached revision.

2-25 EF1L: Replace drawing in its entirety with attached revision.

2-26 EL1F: Replace drawing in its entirety with attached revision.

2-27 EL2J: Replace drawing in its entirety with attached revision.

2-28 EP1F: Replace drawing in its entirety with attached revision.

2-29 EP1J: Replace drawing in its entirety with attached revision.

2-30 EP1L: Replace drawing in its entirety with attached revision.

2-31 EP2J: Replace drawing in its entirety with attached revision.

2-32 E801: Replace drawing in its entirety with attached revision.

2-33 E804: Replace drawing in its entirety with attached revision.

VPS ARCHITECTURE

PREPARED BY: 
George S. Link, AIA

Attachments:
IG Vision Unit Performance Characteristics
Section 096813 Tile Carpeting
Section 260533.16 Boxes and Covers for Electrical Systems
SF-1L2
MH1F
MH1J
MH1L
EC01
EDS01
EF1L
EL1F
EL2J
EP1F
EP1J
EP1L
EP2J
E801
E804

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes:

1. Modular, fusion-bonded carpet tile.

B. Flooring System shall be awarded to one Manufacturer.

C. Related Sections include the following:

1. Division 09 Section "Resilient Base and Accessories" for resilient wall base and accessories

1.3 SUBMITTALS

A. Product Data: For each type of product indicated. Include manufacturer's written data on physical characteristics, durability, and fade resistance. Include installation recommendations for each type of substrate.

B. Samples: For each of the following products and for each color and texture required. Label each Sample with manufacturer's name, material description, color, pattern, and designation indicated on Drawings and in schedules.

1. Carpet Tile: Full-size Sample.
2. Exposed Edge, Transition, and other Accessory Stripping: 12-inch- (300-mm-) long Samples.

C. Product Schedule: For carpet tile. Use same designations indicated on Drawings.

D. Qualification Data: For Installer.

E. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency.

F. Maintenance Data: For carpet tiles to include in maintenance manuals. Include the following:

1. Methods for maintaining carpet tile, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
2. Precautions for cleaning materials and methods that could be detrimental to carpet tile.

G. Warranty: Special warranty specified in this Section.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who is certified by the Floor Covering Installation Board or who can demonstrate compliance with its certification program requirements.

B. Fire-Test-Response Characteristics: Provide products with the critical radiant flux classification indicated in Part 2, as determined by testing identical products per ASTM E 648 by an independent testing and inspecting agency acceptable to authorities having jurisdiction.

C. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." Review methods and procedures related to carpet tile installation including, but not limited to, the following:

1. Review delivery, storage, and handling procedures.
2. Review ambient conditions and ventilation procedures.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Comply with CRI 104, Section 5, "Storage and Handling."

1.6 PROJECT CONDITIONS

A. Comply with CRI 104, Section 7.2, "Site Conditions; Temperature and Humidity" and Section 7.12, "Ventilation."

B. Environmental Limitations: Do not install carpet tiles until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.

C. Do not install carpet tiles over concrete slabs until slabs have cured and are sufficiently dry to bond with adhesive and concrete slabs have pH range recommended by carpet tile manufacturer.

D. Where demountable partitions or other items are indicated for installation on top of carpet tiles, install carpet tiles before installing these items.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. The carpet manufacturer shall have no less than fifteen years of production experience with modular carpet.

B. The carpet manufacturer must provide verification of its registration to the ISO 9001 Quality Management System and the ISO 14001 Environmental Management System Standards.

C. The carpet manufacturer must demonstrate environmental responsibility and a commitment to sustainability through programs of source reduction, recycling, reuse and conservation.

D. Products: Subject to compliance with requirements, provide Interface Carpet Tile (no substitutions).

2.2 CARPET TILE

A. All carpet shall be tufted, manufacturer's first quality and recyclable through an existing carpet reclamation program.

B. Dye-Lots – Each specified i2 carpet tile style shall have mergeable dye lots (same color manufactured at different times with no distinguishable variation) and require no more than 1% attic stock. No shading with non-directional installation.

C. Installation Method and Waste – Specified carpet tile must install in a non-directional method (no attention to pile direction required during installation) and should produce no more than 1.4% waste during installation.

D. Carpet tile should contain recycled content.

2.3 CARPET SHALL MEET THE FOLLOWING PERFORMANCE STANDARD*:

A. Carpet Flammability	
a. Pill Test (ASTM D2859 or CPSC FF-1-70)	Passes
b. Radiant Panel Test (ASTM E648)	$\geq$ .45 watts/cm^2, Class I
B. Smoke Density (ASTM E662)	$\leq$450 Flaming Mode
C. Dimensional Stability (Aachen Method Din 54318)	Passes
D. Static Generation at 70^0 F. (AATCC 134 w/neolite)	$\leq$ 3.5 kV at 20% R.H.
E. Lightfastness (AATCC 16E):	4.0 after 60 hours
F. Crocking (AATCC 165):	4.0 wet, dry
G. Nitrogen Dioxide (AATCC 164)	4.0
H. Ozone Fade (AATCC 109)	4.0
I. Antimicrobial (AATCC 174, Part II)	$\geq$ 95.0% reduction
J. 10 Fungicidal (AATCC 174, Part III):	No growth
K. Soil/Stain Protection (AATCC 175-1991)	$\geq$ 8.0 on the Red 40 Stain Scale
L. Appearance Retention	Severe use

2.4 PRODUCT SPECIFICATIONS

A. Type A (Field 80%): Interface Night Lights Collection, Soft Glow, Color: Iron Azure, Installation Method: Ashlar. Rectilinear pattern will be issued via ASI.

B. Type B (Accent 20%): Interface Night Lights Collection, Glisten, Color: Iron, Installation Method: Ashlar. Rectilinear pattern will be issued via ASI.

1. Construction Type	Tufted Textured Loop or Textured Patterned Loop
2. Face Fiber	Type 6,6 Nylon
3. Modification Ratio	<2.5
4. Dye Method	100% Solution Dyed
5. Dye Lots	Matched
6. Soil/Stain Block Treatment	Protekt^2®, StainSmart or Equivalent. Must provide Stain & Bleach Protection.
7. Antimicrobial	Intersept® Broad Spectrum Preferred
8. Primary Backing	Woven Preferred
9. Secondary Backing	Thermoplastic Backing
10. Yarn Weight	15 – 20 oz. per yard^2
11. Gauge	1/12” minimum
12. Stitches	8.16/inch minimum
13. Pile Thickness	0.08 in minimum
14. Pile Density (UM44D)	6500 minimum
15. Total Thickness	To match LVT selection with no Transition Strip required.
16. Size	Planks
17. Installation	Per manufacturer’s recommendation.

C. Type C (Walk-Off): Interface Step Repeat Collection, SR799, Color: Midnight.

1. Construction Type	Tufted Textured Loop, Cut Pile, or Tip Sheared Patterned Loop
2. Face Fiber	Type 6,6 Nylon Preferred
3. Primary Backing	Woven Preferred

4. Secondary Backing	Thermoplastic
5. Yarn Weight	24 oz. per yard^2 minimum
6. Pile Thickness	0.186 in minimum
7. Size	50cm x 50cm (19.69 x 19.69)
8. Installation	Quarterturn.

2.5 MINIMUM CONSTRUCTION STANDARDS IN ADDITION TO PRODUCT SPECIFICATIONS

A. Nylon Specification – Premium Branded 100% Invista, Blue Chip™, or Antron Type 6, 6 Nylon with modification ratio of less than 2.5 (Supplier may propose yarn with a % of bio-based material if available).

B. Antimicrobial Preservative

1. The preservative must with registered with the EPA and have a stamped EPA Technical Bulletin stating it is approved for use in carpets.

2. The preservative should be incorporated into the primary backing of the product during the manufacturing process not topically applied to the carpet fibers.

3. The preservative must not be metallic or halogen based (No zinc, copper, tin, chlorine, bromine, etc.) and have low water solubility (30 ppm or less) for good durability.

4. The preservative should be low in toxicity (not less than an oral LD50 of 2.4g/Kg), show no mold or bacterial growth when tested per the ASTM E2471 Standard Test Method, and meet the AATCC method 174 parts II and III.

5. The antimicrobial treated carpet must maintain, for the warranted life of the carpet, a minimum of 90% reduction of the microorganisms and be environmentally responsible, i.e., biodegradable and not toxic to non-target species.

2.6 WARRANTY

A. Wear - Surface fiber wear shall not be more than 10% by weight in 20 years. (Note: Wear warranty shall not require the use of chair pads) Non Pro-rated.

B. Static – Static generation as less than 3.0 kV at 70^o F, and 20% R.H. for a period not less than 20 years.

C. No delamination for a period not less than 20 years.

D. No edge ravel for a period not less than 20 years.

E. No dimensional instability (i.e. shrinkage, curling, and doming) which adversely affect the ability of the tile to lay flat for a period not less than 20 years.

F. Mold Resistant Warranty. Must meet ASTM E 2471-05

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and other conditions affecting carpet tile performance. Examine carpet tile for type, color, pattern, and potential defects.

B. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and the following:

1. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by carpet tile manufacturer.
2. Subfloor finishes comply with requirements specified in Division 03 Section "Cast-in-Place Concrete" for slabs receiving carpet tile.
3. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. General: Comply with CRI 104, Section 6.2, "Site Conditions; Floor Preparation," and with carpet tile manufacturer's written installation instructions for preparing substrates indicated to receive carpet tile installation. Provide and install required moisture mitigation on concrete floor surfaces to allow for scheduled timely installation of floor covering. Moisture mitigation products must be approved by floor covering product manufacturer.

B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, depressions, and protrusions in substrates. Fill or level cracks, holes and depressions 1/8 inch (3 mm) wide or wider and protrusions more than 1/32 inch (0.8 mm), unless more stringent requirements are required by manufacturer's written instructions.

C. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by carpet tile manufacturer.

D. Clean metal substrates of grease, oil, soil and rust, and prime if directed by adhesive manufacturer. Rough sand painted metal surfaces and remove loose paint. Sand aluminum surfaces, to remove metal oxides, immediately before applying adhesive.

E. Broom and vacuum clean substrates to be covered immediately before installing carpet tile.

3.3 INSTALLATION

A. General: Comply with CRI 104, Section 14, "Carpet Modules," and with carpet tile manufacturer's written installation instructions.

B. Installation Method: Glue down; install every tile with full-spread, releasable, pressure-sensitive adhesive.

C. Employ use of manufacturer's recommended adhesive that requires no subfloor moisture testing when installed with standard adhesive and the slab meets ASTM F-710 including proof of the presence of an intact moisture vapor retarder per ASTM E-1745 (Class B or Better), in direct contact with the concrete slab, no standing water, no free liquids present, no evidence of moisture staining, no hydrostatic pressure, and a pH level that does not exceed 12. For all other conditions or when the above requirements are not met, the limits are in-situ relative humidity (maximum RH 95% per ASTM F-2170) and/or moisture vapor emissions (maximum 10 lbs./1,000 SF/24 hrs., per ASTM F-1869).

D. Expansion Joins: Do not bridge building expansion joints with continuous carpeting; provide for movement as recommended by Manufacturer.

E. Maintain dye lot integrity. Do not mix dye lots in same area.

F. Cut and fit carpet tile to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet tile manufacturer.

G. Extend carpet tile into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.

H. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on finish flooring as marked on subfloor. Use nonpermanent, non-staining marking device.

I. Install pattern parallel to walls and borders.

J. Stagger joints of carpet tiles so carpet tile grid is offset from access flooring panel grid. Do not fill seams of access flooring panels with carpet adhesive; keep seams free of adhesive.

3.4 CLEANING AND PROTECTION

A. Perform the following operations immediately after installing carpet tile:

1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet tile manufacturer.
2. Remove yarns that protrude from carpet tile surface.
3. Vacuum carpet tile using commercial machine with face-beater element.

B. Protect installed carpet tile to comply with CRI 104, Section 16, "Protection of Indoor Installations."

C. Protect carpet tile against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet tile manufacturer.

3.5 DEMONSTRATION

1. Engage a manufacturer's representative to train the Owner's personnel to clean and properly and maintain the flooring. Refer to Division 01 Section "Demonstration and Training."

2. Provide at the training, in hard copy and PDF, Maintenance Instructions of the manufacturer's resilient flooring maintenance instructions.

END OF SECTION 096813

SECTION 260533.16 - BOXES AND COVERS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Metallic outlet boxes, device boxes, rings, and covers.
2. Junction boxes and pull boxes.
3. Cover plates for device boxes.
4. Hoods for outlet boxes.

B. Products Installed, but Not Furnished, under This Section:

1. See Section 260553 "Identification for Electrical Systems" for electrical equipment labels.

C. Related Requirements:

1. Section 260010 "Supplemental Requirements for Electrical" for additional abbreviations, definitions, submittals, qualifications, testing agencies, and other Project requirements applicable to Work specified in this Section.

1.2 ACTION SUBMITTALS

A. Product Data:

1. Metallic outlet boxes, device boxes, rings, and covers.
2. Junction boxes and pull boxes.
3. Cover plates for device boxes.
4. Hoods for outlet boxes.

1.3 INFORMATIONAL SUBMITTALS

A. Manufacturers' Published Instructions:

1. Metallic outlet boxes, device boxes, rings, and covers.
2. Junction boxes and pull boxes.
3. Cover plates for device boxes.
4. Hoods for outlet boxes.

PART 2 - PRODUCTS

2.1 METALLIC OUTLET BOXES, DEVICE BOXES, RINGS, AND COVERS

A. Performance Criteria:

1. Regulatory Requirements: Listed and labeled in accordance with NFPA 70, by qualified electrical testing laboratory recognized by authorities having jurisdiction, and marked for intended location and application.
2. Listing Criteria: UL CCN QCIT; including UL 514A.

B. Source Quality Control:

1. Product Data: Prepare and submit catalog cuts, brochures, and performance data illustrating size, physical appearance, and other characteristics of product.
2. Manufacturer's Published Instructions: Prepare and submit installation, testing, and operating instructions for product.

C. UL QCIT - Metallic Outlet Boxes and Covers:

1. Description: Box having pry out openings, knockouts, threaded entries, or hubs in either the sides of the back, or both, for entrance of conduit, conduit or cable fittings, or cables, with provisions for mounting outlet box cover, but without provisions for mounting wiring device directly to box.

2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Appleton; Emerson Electric Co., Automation Solutions.
b. Arlington Industries, Inc.
c. Crouse-Hinds; brand of Eaton, Electrical Sector.
d. Hubbell Premise Wiring; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
e. Hubbell Wiring Device-Kellems; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
f. Killark; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
g. O-Z/Gedney; brand of Emerson Electric Co., Automation Solutions, Appleton Group.
h. Pass & Seymour; Legrand North America, LLC.
i. Raco Taymac Bell; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
j. Spring City Electrical Manufacturing Company.
k. Wiremold; Legrand North America, LLC.

3. Options:

a. Material: Sheet steel Cast metal.
b. Sheet Metal Depth: Minimum 2.5 inch.
c. Cast-Metal Depth: Minimum 2.4 inch.

D. UL QCIT - Metallic Conduit Bodies:

1. Description: Means for providing access to interior of conduit or tubing system through one or more removable covers at junction or terminal point. In the United States, conduit bodies are listed in accordance with outlet box requirements.

2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. Appleton; Emerson Electric Co., Automation Solutions.
    b. Crouse-Hinds; brand of Eaton, Electrical Sector.
    c. Killark; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
    d. O-Z/Gedney; brand of Emerson Electric Co., Automation Solutions, Appleton Group.
    e. Pass & Seymour; Legrand North America, LLC.
    f. Raco Taymac Bell; brand of Hubbell Electrical Solutions; Hubbell Incorporated.

E. UL QCIT - Metallic Device Boxes:

1. Description: Box with provisions for mounting wiring device directly to box.

2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. Appleton; Emerson Electric Co., Automation Solutions.
    b. Arlington Industries, Inc.
    c. Crouse-Hinds; brand of Eaton, Electrical Sector.
    d. Hubbell Premise Wiring; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
    e. Hubbell Wiring Device-Kellems; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
    f. Killark; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
    g. O-Z/Gedney; brand of Emerson Electric Co., Automation Solutions, Appleton Group.
    h. Raco Taymac Bell; brand of Hubbell Electrical Solutions; Hubbell Incorporated.

3. Options:

    a. Material: Sheet steel Cast metal.
    b. Sheet Metal Depth: minimum 2.5 inch.
    c. Cast-Metal Depth: minimum 2.4 inch.

F. UL QCIT - Metallic Extension Rings:

1. Description: Ring intended to extend sides of outlet box or device box to increase box depth, volume, or both.

2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. Appleton; Emerson Electric Co., Automation Solutions.
    b. Cooper B-line; brand of Eaton, Electrical Sector.
    c. Crouse-Hinds; brand of Eaton, Electrical Sector.
    d. Hubbell Wiring Device-Kellems; brand of Hubbell Electrical Solutions; Hubbell Incorporated.

e. O-Z/Gedney; brand of Emerson Electric Co., Automation Solutions, Appleton Group.
f. Pass & Seymour; Legrand North America, LLC.
g. Raco Taymac Bell; brand of Hubbell Electrical Solutions; Hubbell Incorporated.

G. UL QCIT - Metallic Floor Boxes and Floor Box Covers:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. ABB, Electrification Business.
b. AFC Cable Systems; Atkore International.
c. Arlington Industries, Inc.
d. Arrow Hart, Wiring Devices; Eaton, Electrical Sector.
e. FSR Inc.
f. Hubbell Premise Wiring; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
g. Hubbell Wiring Device-Kellems; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
h. Leviton Manufacturing Co., Inc.
i. Pass & Seymour; Legrand North America, LLC.
j. Raco Taymac Bell; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
k. Wiremold; Legrand North America, LLC.

2. Listing Criteria: Investigated, labeled, and marked by qualified electrical testing laboratory in accordance with guide information and standards specified for the following UL product categories:

a. UL CCN QCIT; including UL 514A.

3. Standard Features: Box mounted in floor with floor box cover and other components to complete floor box enclosure.

2.2 JUNCTION BOXES AND PULL BOXES

A. Performance Criteria:

1. Regulatory Requirements: Listed and labeled in accordance with NFPA 70 and marked for intended location and use.
2. Listing Criteria: UL CCN BGUZ; including UL 50 and UL 50E.

B. Source Quality Control:

1. Product Data: Prepare and submit catalog cuts, brochures, and performance data illustrating size, physical appearance, and other characteristics of product.
2. Manufacturer's Published Instructions: Prepare and submit installation, testing, and operating instructions for product.

C. UL BGUZ - Indoor Sheet Metal Junction and Pull Boxes:

1. Description: Box with a blank cover that serves the purpose of joining different runs of raceway or cable.

2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. Cooper B-line; brand of Eaton, Electrical Sector.
    b. Hoffman; brand of nVent Electrical plc.
    c. Hubbell Industrial Controls; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
    d. Hubbell Wiring Device-Kellems; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
    e. O-Z/Gedney; brand of Emerson Electric Co., Automation Solutions, Appleton Group.
    f. Raco Taymac Bell; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
    g. Spring City Electrical Manufacturing Company.

3. Options:

    a. Degree of Protection: Type 2.

D. UL BGUZ - Indoor Cast-Metal Junction and Pull Boxes:

1. Description: Box with a blank cover that serves the purpose of joining different runs of raceway or cable.

2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. Adalet.
    b. Appleton; Emerson Electric Co., Automation Solutions.
    c. Crouse-Hinds; brand of Eaton, Electrical Sector.
    d. O-Z/Gedney; brand of Emerson Electric Co., Automation Solutions, Appleton Group.

3. Options:

    a. Degree of Protection: Type 2.

E. UL BGUZ - Outdoor Sheet Metal Junction and Pull Boxes:

1. Description: Box with a blank cover that serves the purpose of joining different runs of raceway or cable.

2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. Appleton; Emerson Electric Co., Automation Solutions.
    b. Cooper B-line; brand of Eaton, Electrical Sector.
    c. FSR Inc.
    d. Hoffman; brand of nVent Electrical plc.
    e. Hubbell Wiring Device-Kellems; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
    f. O-Z/Gedney; brand of Emerson Electric Co., Automation Solutions, Appleton Group.
    g. Raco Taymac Bell; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
    h. Square D; Schneider Electric USA.

3. Options:

a. Degree of Protection: Type 3R.

F. UL BGUZ - Outdoor Cast-Metal Junction and Pull Boxes:

1. Description: Box with a blank cover that serves the purpose of joining different runs of raceway or cable.

2. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Appleton; Emerson Electric Co., Automation Solutions.
b. Crouse-Hinds; brand of Eaton, Electrical Sector.
c. O-Z/Gedney; brand of Emerson Electric Co., Automation Solutions, Appleton Group.

3. Options:

a. Degree of Protection: Type 3R.

2.3 COVER PLATES FOR DEVICES BOXES

A. Performance Criteria:

1. Regulatory Requirements: Listed and labeled in accordance with NFPA 70 and marked for intended location and use.
2. Listing Criteria: UL CCN QCIT or UL CCN QCMZ; including UL 514D.
3. Wallplate-Securing Screws: Metal with head color to match wallplate finish.

B. Source Quality Control:

1. Product Data: Prepare and submit catalog cuts, brochures, and performance data illustrating size, physical appearance, and other characteristics of product.
2. Sustainable Design Submittals: Prepare and submit the following documentation for adhesive solvents:
3. Manufacturer's Published Instructions: Prepare and submit installation, testing, and operating instructions for product.

C. UL QCIT or QCMZ - Metallic Cover Plates for Device Boxes:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. ABB, Electrification Business.
b. Appleton; Emerson Electric Co., Automation Solutions.
c. Crouse-Hinds; brand of Eaton, Electrical Sector.
d. Hubbell Premise Wiring; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
e. Hubbell Wiring Device-Kellems; brand of Hubbell Electrical Solutions; Hubbell Incorporated.

f. Leviton Manufacturing Co., Inc.
g. O-Z/Gedney; brand of Emerson Electric Co., Automation Solutions, Appleton Group.
h. Pass & Seymour; Legrand North America, LLC.
i. Raco Taymac Bell; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
j. Wiremold; Legrand North America, LLC.

2. Options:

a. Damp and Wet Locations: Listed, labeled, and marked for location and use. Provide gaskets and accessories necessary for compliance with listing.
b. Wallplate Material: As indicated on architectural Drawings.

D. UL QCIT or QCMZ - Nonmetallic Cover Plates for Device Boxes:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. ABB, Electrification Business.
b. Appleton; Emerson Electric Co., Automation Solutions.
c. Crouse-Hinds; brand of Eaton, Electrical Sector.
d. Hubbell Premise Wiring; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
e. Hubbell Wiring Device-Kellems; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
f. Leviton Manufacturing Co., Inc.
g. O-Z/Gedney; brand of Emerson Electric Co., Automation Solutions, Appleton Group.
h. Pass & Seymour; Legrand North America, LLC.
i. Raco Taymac Bell; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
j. Wiremold; Legrand North America, LLC.

2. Options:

a. Damp and Wet Locations: Listed, labeled, and marked for location and use. Provide gaskets and accessories necessary for compliance with listing.
b. Wallplate Material: 0.060 inch thick, high-impact thermoplastic (nylon) with smooth finish and color matching wiring device.
c. Color: As indicated on architectural Drawings.

2.4 HOODS FOR OUTLET BOXES

A. Performance Criteria:

1. Regulatory Requirements: Listed and labeled in accordance with NFPA 70 and marked for intended location and use.
2. Listing Criteria:

a. UL CCN QCIT or UL CCN QCMZ; including UL 514D.
b. Receptacle, Hood, Cover Plate, Gaskets, and Seals: UL 498 Supplement SA when mated with box or enclosure complying with UL 514A, UL 514C, or UL 50E.

3. Mounts to box using fasteners different from wiring device.

B. Source Quality Control:

1. Product Data: Prepare and submit catalog cuts, brochures, and performance data illustrating size, physical appearance, and other characteristics of product.
2. Manufacturer's Published Instructions: Prepare and submit installation, testing, and operating instructions for product.

C. UL QCIT or QCMZ - Extra-Duty, While-in-Use Hoods for Outlet Boxes:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. ABB, Electrification Business.
b. Allied Tube & Conduit; Atkore International.
c. Appleton; Emerson Electric Co., Automation Solutions.
d. Leviton Manufacturing Co., Inc.
e. Raco Taymac Bell; brand of Hubbell Electrical Solutions; Hubbell Incorporated.

2. Additional Characteristics: Marked "Extra-Duty" in accordance with UL 514D.
3. Options:

a. Provides gray, weatherproof, "while-in-use" cover.
b. Manufacturer may combine nonmetallic device box with hood as extra-duty rated assembly.

PART 3 - EXECUTION

3.1 PREPARATION

A. Shop Drawings: Prepare and submit the following:

1. Shop Drawings for Floor Boxes: Show that floor boxes are located to avoid interferences and are structurally allowable. Indicate floor thickness where boxes are embedded in concrete floors and underfloor clearances where boxes are installed in raised floors.

3.2 SELECTION OF BOXES AND COVERS FOR ELECTRICAL SYSTEMS

A. Unless more stringent requirements are specified in Contract Documents or manufacturers' published instructions, comply with NFPA 70 for selection of boxes and enclosures. Consult Architect for resolution of conflicting requirements.

B. Degree of Protection:

1. Outdoors:

a. Type 3R unless otherwise indicated.
b. Locations Exposed to Hosedown: Type 4.

c. Locations Subject to Potential Flooding: Type 6P.
d. Locations Aboveground Where Mechanism Must Operate When Ice Covered: Type 3S.
e. Locations in-Ground or Exposed to Corrosive Agents: Type 4X.
f. Locations in-Ground or Exposed to Corrosive Agents Where Mechanism Must Operate When Ice Covered: Type 3SX.

2. Indoors:

a. Type 1 unless otherwise indicated.
b. Damp or Dusty Locations: Type 12.
c. Surface Mounted in Kitchens and Other Locations Exposed to Oil or Coolants: Type 12.
d. Flush Mounted in Kitchens and Other Locations Exposed to Oil or Coolants: Type 12.
e. Locations Exposed to Airborne Dust, Lint, Fibers, or Flyings: Type 4.
f. Locations Exposed to Hosedown: Type 4.
g. Locations Exposed to Brief Submersion: Type 6.
h. Locations Exposed to Prolonged Submersion: Type 6P.
i. Locations Exposed to Corrosive Agents: Type 4X.
j. Locations Exposed to Spraying Oil or Coolants: Type 13.

C. Exposed Boxes Installed Less Than 2.5 m (8 ft) Above Floor:

1. Provide cast-metal boxes.
2. Provide exposed cover. Flat covers with angled mounting slots or knockouts are prohibited.

3.3 INSTALLATION OF BOXES AND COVERS FOR ELECTRICAL SYSTEMS

A. Comply with manufacturer's published instructions.

B. Reference Standards for Installation: Unless more stringent installation requirements are specified in Contract Documents or manufacturers' published instructions, comply with the following:

1. Outlet, Device, Pull, and Junction Boxes: Article 314 of NFPA 70.
2. Consult Architect for resolution of conflicting requirements.

C. Special Installation Techniques:

1. Provide boxes in wiring and raceway systems wherever required for pulling of wires, making connections, and mounting of devices or fixtures.
2. Mount boxes at heights indicated on Drawings. If mounting heights of boxes are not individually indicated, give priority to ADA requirements. Install boxes with height measured to center of box unless otherwise indicated.
3. Recessed Boxes in Masonry Walls: Saw-cut opening for box in center of cell of masonry block, and install box flush with surface of wall. Prepare block surfaces to provide a flat surface for a raintight connection between box and cover plate or supported equipment and box, whether installed indoors or outdoors.
4. Horizontally separate boxes mounted on opposite sides of walls so they are not in the same vertical channel.
5. Locate boxes so that cover or plate will not span different building finishes.
6. Support boxes in recessed ceilings independent of ceiling tiles and ceiling grid.

7. Support boxes of three gangs or more from more than one side by spanning two framing members or mounting on brackets specifically designed for purpose.
8. Fasten junction and pull boxes to, or support from, building structure. Do not support boxes by conduits.
9. Set metal floor boxes level and flush with finished floor surface.
10. Do not install aluminum boxes, enclosures, or fittings in contact with concrete or earth.
11. Do not rely on locknuts to penetrate nonconductive coatings on enclosures. Remove coatings in the locknut area prior to assembling conduit to enclosure to ensure a continuous ground path.
12. Boxes and Enclosures in Areas or Walls with Acoustical Requirements:

    a. Seal openings and knockouts in back and sides of boxes and enclosures with acoustically rated putty.
    b. Provide gaskets for wallplates and covers.

13. Identification: Provide labels for boxes and associated electrical equipment.

    a. Identify field-installed conductors, interconnecting wiring, and components.
    b. Provide warning signs.
    c. Label each box with engraved metal or laminated-plastic nameplate.

3.4 PROTECTION

A. After installation, protect boxes from construction activities. Remove and replace items that are contaminated, defaced, damaged, or otherwise caused to be unfit for use prior to acceptance by Owner.

END OF SECTION 260533.16

creative engineering solutions
mechanical • electrical • plumbing

PROJECT NAME
OWNER NAME
CES PROJECT NO.
ADDENDUM NO.
DATED: {}

This Addendum consists of <number> Addendum page(s) and <number> attachment pages totaling <number> pages. This Addendum shall supplement, amend, and become part of the Bid Documents. All Bids shall be based on these modifications. Bidders shall acknowledge the receipt of this addendum on their Bid Form.

PART 1 - CHANGES TO PRIOR ADDENDA

PART 2 - CHANGES TO THE PROJECT MANUAL

Modifications described herein shall be incorporated in the Project Manual. All other Work shall remain unchanged.

2.1 DIVISION 22 – PLUMBING

A. **Section 221319 "SANITARY WASTE PIPING SPECIALTIES"**

1. ADD Subparagraph 2.2, B., 1., d. as follows:

   d. Sioux Chief

B. Section 221319.13 "**SANITARY DRAINS**"

1. ADD Subparagraph 2.2, A., 1., e. as follows:

   e. Sioux Chief

C. Section 221423 "**STORM DRAINAGE PIPING SPECIALTIES**"

1. ADD Subparagraph 2.1, A., 1., a., 5) as follows:

   5) Sioux Chief.

2. ADD subparagraph 2.2, A., 1., 5) as follows:

   5) Sioux Chief.

D. Section 224200 "**COMMERCIAL PLUMBING FIXTURES**"

1. ADD Subparagraph 2.7, A., e. as follows:

   e. Sioux Chief.

2.2 DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING(HVAC)

A. **Section 232113 "Hydronic Piping"**

1. ADD Subparagraph 2.1.A as follows:

"6. Chilled-Water Piping: 150 psig at 73 deg. F."

B. Section 232113 "Hydronic Piping"

1. ADD Subparagraph 2.6 as follows:

"G. Chilled-water piping, aboveground, NPS 2 and smaller, shall be the following:
1. Type L (Type B) drawn-temper copper tubing, wrought-copper fittings, and soldered joints."

"H. Chilled-water piping, aboveground, NPS 2-1/2" and larger, shall be the following:
1. Schedule 40 steel pipe, wrought-steel fittings, and welded joints.
2. Schedule 40 steel pipe, grooved, mechanical joint coupling and fittings; and grooved, mechanical joints.

2.3 DIVISION 26 – ELECTRICAL

A. **Section 260533.16 "BOXES AND COVERS FOR ELECTRICAL SYSTEMS"**

1. DELETE AND REPLACE Document in its entirety.

PART 3 - CHANGES TO THE DRAWINGS

Modifications described herein shall be incorporated in the Drawings. All other Work shall remain unchanged.

3.1 DRAWING SHEETS: ADDITIONS, DELETIONS AND REPLACEMENTS

DRAWING NO.	INDICATE ACTION: REPLACE (R), ADD (A), DELETE (D)
M-SERIES DRAWINGS	
MH1F – FIRST FLOOR HVAC PLAN – UNIT F	DELETE AND REPLACE
MH1J – FIRST FLOOR & MEZZANINE – UNIT J	DELETE AND REPLACE
MH1L – FIRST FLOOR HVAC PLAN – UNIT L	DELETE AND REPLACE
E-SERIES DRAWINGS	
EC01 – FIRST FLOOR CONDUIT ROUTING PLAN	DELETE AND REPLACE
EDS01 – ELECTRICAL SITE DEMOLITION PLAN	DELETE AND REPLACE
EF1L – FIRST FLOOR FIRE ALARM PLAN – UNIT L	DELETE AND REPLACE
EL1F – FIRST FLOOR LIGHTING PLAN – UNIT F	DELETE AND REPLACE
EL2J – MEZZANINE FLOOR LIGHTING PLAN – UNIT J	DELETE AND REPLACE
EP1F – FIRST FLOOR POWER PLAN – UNIT F	DELETE AND REPLACE
EP1J – FIRST FLOOR POWER PLAN – UNIT J	DELETE AND REPLACE
EP1L – FIRST FLOOR POWER PLAN – UNIT L	DELETE AND REPLACE
EP2J – MEZZANINE POWER PLAN – UNIT J	DELETE AND REPLACE
E801 – LIGHTING SCHEDULES	DELETE AND REPLACE
E804 – PANELBOARD SCHEDULES	DELETE AND REPLACE

END OF ADDENDUM «NFFIELD:ROOT:ADDENDUMNUMBER»

1. Exterior Lite: 6mm (1/4") Guardian SunGuard® SNX 51/23 on Gray Low-E #2
2. Cavity: 1/2" (Air Fill)
3. Interior Lite: 6mm (1/4") Guardian Clear
4. Performance Characteristics

Thermal		Optical	
Winter U-factor (Btu/h·ft^2·F):	0.29	Visible Light Transmittance:	26%
Winter U-factor (W/m^2·K):	1.62	Visible Light Reflectance (outside):	7%
Solar Heat Gain Coefficient:	0.16	Visible Light Reflectance (inside):	13%
Shading Coefficient:	0.19	Total Solar Transmittance:	10%
Light to Solar Gain:	1.57	Total Solar Reflectance (outside):	17%
		Ultraviolet Transmittance:	5%

#	Revision	Date
A2	ADDENDUM 2	2/21/24

INTERIOR/EXTERIOR/EMERGENCY & EXIT LIGHT FIXTURES SCHEDULE

LABEL	DESCRIPTION	VOLTAGE	SOURCE: TYPE	SOURCE: LUMENS	SOURCE: WATTS	SOURCE: CCT / CRI	MOUNTING	LENS/REFLECTOR	CERTIFICATIONS	ACCEPTABLE MANUFACTURERS	LABEL
A	2X4 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	3,000 LM	25 W	4000 K / 80 CRI	RECESSED	WHITE FROST ACRYLIC	DLC	METALUX 24FP COLUMBIA CGT LITHONIA CPX ENERGY HARNESS WILLIAMS BP	A
AX	2X4 LED FLAT PANEL. 0-10V DIMMING. PROVIDE EMERGENCY BATTERY INVERTER.	120/277 V	LED	3,000 LM	25 W	4000 K / 80 CRI	RECESSED	WHITE FROST ACRYLIC	DLC	METALUX 24FP COLUMBIA CGT LITHONIA CPX ENERGY HARNESS WILLIAMS BP	AX
B	2X4 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	6,000 LM	42 W	4000 K / 80 CRI	RECESSED	WHITE FROST ACRYLIC	DLC	METALUX 24FP COLUMBIA CGT LITHONIA CPX ENERGY HARNESS WILLIAMS BP	B
BX	2X4 LED FLAT PANEL. 0-10V DIMMING. PROVIDE EMERGENCY BATTERY INVERTER.	120/277 V	LED	6,000 LM	42 W	4000 K / 80 CRI	RECESSED	WHITE FROST ACRYLIC	DLC	METALUX 24FP COLUMBIA CGT LITHONIA CPX ENERGY HARNESS WILLIAMS BP	BX
C	2X2 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	3,200 LM	30 W	4000 K / 80 CRI	RECESSED	WHITE FROST ACRYLIC	DLC	METALUX 24FP COLUMBIA CGT LITHONIA CPX ENERGY HARNESS WILLIAMS BP	C
CX	2X2 LED FLAT PANEL. 0-10V DIMMING. PROVIDE EMERGENCY BATTERY INVERTER.	120/277 V	LED	3,2000 LM	30 W	4000 K / 80 CRI	RECESSED	WHITE FROST ACRYLIC	DLC	METALUX 24FP COLUMBIA CGT LITHONIA CPX ENERGY HARNESS WILLIAMS BP	CX
D A2	2X2 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	4,000 LM	36 W	4000 K / 80 CRI	RECESSED	WHITE FROST ACRYLIC	DLC	METALUX 24FP COLUMBIA CGT LITHONIA CPX ENERGY HARNESS WILLIAMS BP	D
DX	2X2 LED FLAT PANEL. 0-10V DIMMING. PROVIDE EMERGENCY BATTERY INVERTER.	120/277 V	LED	4,000 LM	36 W	4000 K / 80 CRI	RECESSED	WHITE FROST ACRYLIC	DLC	METALUX 24FP COLUMBIA CGT LITHONIA CPX ENERGY HARNESS WILLIAMS BP	DX
F	4' LENSED LED STRIP LIGHT. 0-10V DIMMING, WHITE FINISH.	120/277 V	LED	5,000 LM	41 W	4000 K / 80 CRI	CABLE MOUNTED TO STRUCTURE	SEMI-FROSTED LENS	N/A	METALUX SNLED COLUMBIA MPS LITHONIA CSS WILLIAMS 75	F
FX	4' LENSED LED STRIP LIGHT. 0-10V DIMMING, WHITE FINISH. INTEGRAL BATTERY INVERTER.	120/277 V	LED	5,000 LM	41 W	4000 K / 80 CRI	CABLE MOUNTED TO STRUCTURE	SEMI-FROSTED LENS	N/A	METALUX SNLED COLUMBIA MPS LITHONIA CSS WILLIAMS 75	FX
G	2X4 ARCHITECTURAL LED TROFFER. 0-10V DIMMING.	120/277 V	LED	3,000 LM	23 W	4000 K / 80 CRI	RECESSED	SMOOTH FROSTED ACRYLIC LENS	DLC	METALUX 24CZ COLUMBIA RLA24 LITHONIA 2BLT WILLIAMS LT	G
GX	2X4 ARCHITECTURAL LED TROFFER. 0-10V DIMMING, INTEGRAL BATTERY INVERTER	120/277 V	LED	3,000 LM	23 W	4000 K / 80 CRI	RECESSED	SMOOTH FROSTED ACRYLIC LENS	DLC	METALUX 24CZ COLUMBIA RLA24 LITHONIA 2BLT WILLIAMS LT	GX
H	2X4 ARCHITECTURAL LED TROFFER. 0-10V DIMMING.	120/277 V	LED	4,000 LM	31 W	4000 K / 80 CRI	RECESSED	SMOOTH FROSTED ACRYLIC LENS	DLC	METALUX 24CZ COLUMBIA RLA24 LITHONIA 2BLT WILLIAMS LT	H
HX	2X4 ARCHITECTURAL LED TROFFER. 0-10V DIMMING, INTEGRAL BATTERY INVERTER	120/277 V	LED	4,000 LM	31 W	4000 K / 80 CRI	RECESSED	SMOOTH FROSTED ACRYLIC LENS	DLC	METALUX 24CZ COLUMBIA RLA24 LITHONIA 2BLT WILLIAMS LT	HX
J	2X4 ARCHITECTURAL LED TROFFER. 0-10V DIMMING.	120/277 V	LED	4,800 LM	39 W	4000 K / 80 CRI	RECESSED	SMOOTH FROSTED ACRYLIC LENS	DLC	METALUX 24CZ COLUMBIA RLA24 LITHONIA 2BLT WILLIAMS LT	J
K	2X4 ARCHITECTURAL LED TROFFER. 0-10V DIMMING.	120/277 V	LED	6,000 LM	47 W	4000 K / 80 CRI	RECESSED	SMOOTH FROSTED ACRYLIC LENS	DLC	METALUX 24CZ COLUMBIA RLA24 LITHONIA 2BLT WILLIAMS LT	K
L	2X2 ARCHITECTURAL LED TROFFER. 0-10V DIMMING.	120/277 V	LED	2,000 LM	16 W	4000 K / 80 CRI	RECESSED	SMOOTH FROSTED ACRYLIC LENS	DLC	METALUX 22CZ COLUMBIA RLA22 LITHONIA 2BLT WILLIAMS LT	L
LX A2	2X2 ARCHITECTURAL LED TROFFER. 0-10V DIMMING, INTEGRAL BATTERY INVERTER	120/277 V	LED	2,000 LM	16 W	4000 K / 80 CRI	RECESSED	SMOOTH FROSTED ACRYLIC LENS	DLC	METALUX 22CZ COLUMBIA RLA22 LITHONIA 2BLT WILLIAMS LT	LX
M	2X2 ARCHITECTURAL LED TROFFER. 0-10V DIMMING.	120/277 V	LED	3,300 LM	27 W	4000 K / 80 CRI	RECESSED	SMOOTH FROSTED ACRYLIC LENS	DLC	METALUX 22CZ COLUMBIA RLA22 LITHONIA 2BLT WILLIAMS LT	M
MX	2X2 ARCHITECTURAL LED TROFFER. 0-10V DIMMING, INTEGRAL BATTERY INVERTER	120/277 V	LED	3,300 LM	27 W	4000 K / 80 CRI	RECESSED	SMOOTH FROSTED ACRYLIC LENS	DLC	METALUX 22CZ COLUMBIA RLA22 LITHONIA 2BLT WILLIAMS LT	MX
P	6" ROUND LED DOWNLIGHT. SELF-FLANGED TRIM. 0-10V DIMMING.	120/277 V	LED	1,000 LM	10 W	4000 K / 80 CRI	RECESSED	DIFFUSE IMPACT RESISTANT POLYCARBONATE LENS	N/A	HALO COMMERCIAL PRESCOLITE LTR-6RD LITHONIA LDN6	P
PX	6" ROUND LED DOWNLIGHT. SELF-FLANGED TRIM. 0-10V DIMMING, INTEGRAL BATTERY INVERTER	120/277 V	LED	1,000 LM	10 W	4000 K / 80 CRI	RECESSED	DIFFUSE IMPACT RESISTANT POLYCARBONATE LENS	N/A	HALO COMMERCIAL PRESCOLITE LTR-6RD LITHONIA LDN6	PX
Q	24" DIA. ROUND, DIRECT LED PENDANT. MATTE WHITE FINISH. 0-10V DIMMING TO 1%. 12" BELOW CEILING. ALUMINUM FINISH. 3 VERTICAL CABLE SUPPORT.	120/277 V	LED	2,700 LM	35 W	4000 K / 80 CRI	AIRCRAFT CABLE	FLAT WHITE ACRYLIC LENS	N/A	CAMMAN P1022 EUREKA 4800 FINELITE HP-2-C ALW MR1.5	Q
R	36" DIA. ROUND, DIRECT LED PENDANT. MATTE WHITE FINISH. 0-10V DIMMING TO 1%. 12" BELOW CEILING. ALUMINUM FINISH. 3 VERTICAL CABLE SUPPORT.	120/277 V	LED	4,900 LM	60 W	4000 K / 80 CRI	AIRCRAFT CABLE	FLAT WHITE ACRYLIC LENS	N/A	CAMMAN P1022 EUREKA 4800 FINELITE HP-2-C ALW MR1.5	R
WX	LED WALL LIGHT. DIE-CAST ALUMINUM HOUSING. HINGED DOOR FRAME. MEDIUM BRONZE FINISH. U.L. LISTED FOR WET LOCATIONS, FORWARD THROW, INTEGRAL BATTERY INVERTER	120/277 V	LED	4,500 LM	35 W	4000 K / 80 CRI	WALL MOUNTED	TYPE IV DISTRIBUTION	N/A	LITHONIA WEDGE 2 MCGRAW EDISON TRAPEZOID PERFORMANCE LIGHTING SHIELD	WX
X	LED EXIT LIGHT, THERMOPLASTIC HOUSING, REFER TO FLOOR PLANS FOR FACES AND ARROWS. STENCIL FACE, RED LETTERS. SELF-POWERED. NICKEL-CADMIUM BATTERY. SELF-DIAGNOSTIC/SELF-TESTING MODULE.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	N/A	N/A	SURE-LITES CX DUAL-LITE SE LITHONIA LE LSL LSXDC	X

GENERAL LIGHT FIXTURE SCHEDULE NOTES

A REFER TO LIGHT FIXTURE SCHEDULE AND REFLECTED CEILING PLANS FOR MOUNTING REQUIREMENTS, CEILING TYPES, AND FINAL LOCATIONS. PROVIDE APPROPRIATE MOUNTING TRIM REQUIRED FOR CEILING TYPE.

B PROVIDE FACTORY INSTALLED DISCONNECTS FOR ALL LINEAR FIXTURES.

C PROVIDE VIBRATION DAMPERS FOR ALL ALUMINUM AND STEEL POLES 15'-0" AND ABOVE.

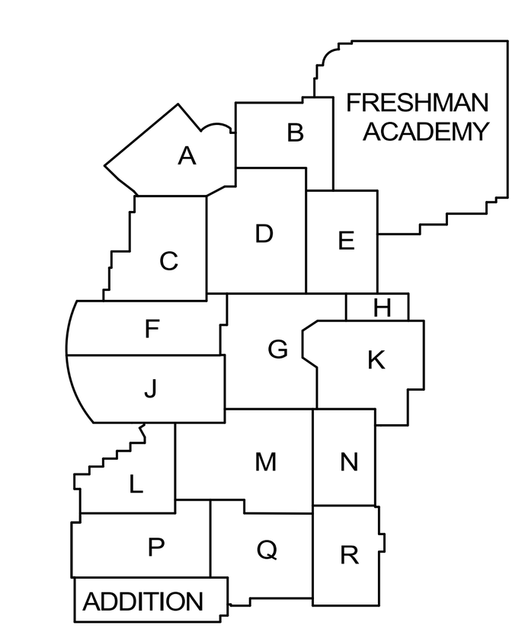
D PROVIDE SELF-DIAGNOSTICS AND SELF-TESTING FOR ALL LIFE SAFETY FIXTURES (EXIT FIXTURES, WALL PACKS, INVERTERS BALLASTS, ETC.)

E PROVIDE ELECTRONIC DIMMIING DRIVER DOWN TO 10%.

F PROVIDE CLIPS AND CABLE SUPPORTS FOR EACH LIGHT FIXTURE.

G REFER TO ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS AND ELEVATIONS.

creative engineering solutions
mechanical • electrical • plumbing
201 S Rural St., Suite 210
Indianapolis, IN 46201 • 463-777-8182
www.creativeng.net



KEY PLAN

NORTH

VPS ARCHITECTURE
905 N. Capital Ave. - Suite 100 Indianapolis, Indiana 46204
P (317) 353-3281
www.VPSARCH.com

ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2A

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

LIGHTING SCHEDULES

DAVID L. JONES III REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022043.00

Project Date: February 14, 2024

Drawing No: E801

#	Revision	Date
A2	ADDENDUM 2	2/21/24

BRANCH PANELBOARD SCHEDULE

DESIGNATION: 1GPJ4 **VOLTS:** 480Y/277 V **MAINS RATING:** 60 A
LOCATION: ELECTRICAL-2 J104-2 **PHASES:** 3 **MAINS TYPE:** MLO
MOUNTING: SURFACE **WIRES:** 4
SUPPLY FROM: 1NPJ4 **AIC RATING:** 26 KAIC

O	CKT NO.	DESCRIPTION	ROOM #	TRIP	P	A	A	B	B	C	C	P	TRIP	ROOM #	DESCRIPTION	CKT NO.	O
	1	1GXRJ		30 A	3	3.51	0.45					1	20 A	F102	LIGHTING - EMERGENCY	2	
--	3	--	--	--	--			3.54	0.77			1	20 A	UNIT F/J	LIGHTING - EMERGENCY F105 -...	4	
--	5	--	--	--	--					3.59	1.84	1	20 A	UNIT F/J	LIGHTING - EMERGENCY EGRESS	6	
	7	LIGHTING - EXIT SIGNS	UNIT F/J	20 A	1	0.09	0.00					1	20 A		SPARE	8	--
	9	LIGHTING - EMERGENCY...	UNIT F/J	20 A	1			0.23	0.00			1	20 A		SPARE	10	--
--	11	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	12	--
--	13	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	14	--
--	15	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	16	--
--	17	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	18	--
--	19	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	20	--
--	21	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	22	--
--	23	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	24	--
					TOTAL LOAD:	4.04 kVA		4.54 kVA		5.42 kVA							
					TOTAL AMPS:	15 A		17 A		20 A							

TOTAL CONNECTED LOAD: 14.00 kVA — TOTAL DEMAND LOAD: 14.84 kVA
TOTAL CONNECTED AMPS: 20 A — TOTAL DEMAND AMPS: 18 A

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Lighting - Interior	3368 VA	125.00%	4210 VA
C	CONTACTOR CONTROLLED	Mechanical - Motor	0 VA	0.00%	0 VA
G	GFCI PROTECTED	Power - Continuous	1210 VA	100.00%	1210 VA
P	HANDLE LOCKING DEVICE	RECEPTACLE	9420 VA	100.00%	9420 VA
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION: 1GPL4 **VOLTS:** 480Y/277 V **MAINS RATING:** 60 A
LOCATION: ELEC.-2 L139-2 **PHASES:** 3 **MAINS TYPE:** MLO
MOUNTING: SURFACE **WIRES:** 4
SUPPLY FROM: 1NPL4 **AIC RATING:** 26 KAIC

O	CKT NO.	DESCRIPTION	ROOM #	TRIP	P	A	A	B	B	C	C	P	TRIP	ROOM #	DESCRIPTION	CKT NO.	O
	1	1GXRL		30 A	3	3.72	0.99					1	20 A	UNIT L	LIGHTS	2	
--	3	--	--	--	--			3.71	0.10			1	20 A	UNIT L	LIGHTS	4	
--	5	--	--	--	--					4.03	0.00	1	20 A		SPARE	6	--
--	7	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	8	--
--	9	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	10	--
--	11	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	12	--
--	13	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	14	--
--	15	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	16	--
--	17	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	18	--
--	19	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	20	--
--	21	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	22	--
--	23	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	24	--
					TOTAL LOAD:	4.71 kVA		3.81 kVA		4.03 kVA							
					TOTAL AMPS:	17 A		14 A		15 A							

TOTAL CONNECTED LOAD: 12.54 kVA — TOTAL DEMAND LOAD: 12.38 kVA
TOTAL CONNECTED AMPS: 17 A — TOTAL DEMAND AMPS: 15 A

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Lighting - Interior	1092 VA	125.00%	1365 VA
C	CONTACTOR CONTROLLED	Mechanical - Motor	0 VA	0.00%	0 VA
G	GFCI PROTECTED	Power - Continuous	590 VA	100.00%	590 VA
P	HANDLE LOCKING DEVICE	RECEPTACLE	10860 VA	96.04%	10430 VA
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION: 1GPJ1 **VOLTS:** 208Y/120 V **MAINS RATING:** 50 A
LOCATION: ELECTRICAL-2 J104-2 **PHASES:** 3 **MAINS TYPE:** MCB
MOUNTING: SURFACE **WIRES:** 4
SUPPLY FROM: 1GXRJ **AIC RATING:** 26 KAIC

O	CKT NO.	DESCRIPTION	ROOM #	TRIP	P	A	A	B	B	C	C	P	TRIP	ROOM #	DESCRIPTION	CKT NO.	O
	1	RECEPTACLE		20 A	1	0.18	0.50					1	20 A		RECEPTACLE	2	
	3	RECEPTACLE	J104	20 A	1			0.18	0.36			1	20 A	J101A	RECEPTACLE	4	
	5	ACCESS CONTROL	J101A	20 A	1					0.36	0.72	1	20 A	J209	RECEPTACLE	6	
	7	TCC	J209	20 A	1	0.50	0.72					1	20 A	J101A	RECEPTACLE	8	
--	9	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	10	--
	11	RECEPTACLE	F102,...	20 A	1					0.90	0.11	2	40 A		IT SPLIT SYSTEM	12	
	13	SWITCH	J101A	30 A	2	1.50	0.11					--	--	--	--	14	--
--	15	--	--	--	--			1.50	1.50			2	30 A	J101A	SWITCH	16	
--	17	SPARE		20 A	1					0.00	1.50	--	--	--	--	18	--
--	19	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	20	--
--	21	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	22	--
--	23	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	24	--
--	25	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	26	--
--	27	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	28	--
--	29	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	30	--
--	31	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	32	--
--	33	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	34	--
--	35	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	36	--
--	37	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	38	--
--	39	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	40	--
--	41	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	42	--
					TOTAL LOAD:	3.51 kVA		3.54 kVA		3.59 kVA							
					TOTAL AMPS:	29 A		30 A		30 A							

TOTAL CONNECTED LOAD: 10.63 kVA — TOTAL DEMAND LOAD: 10.63 kVA
TOTAL CONNECTED AMPS: 30 A — TOTAL DEMAND AMPS: 30 A

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Mechanical - Motor	0 VA	0.00%	0 VA
C	CONTACTOR CONTROLLED	Power - Continuous	1210 VA	100.00%	1210 VA
G	GFCI PROTECTED	RECEPTACLE	9420 VA	100.00%	9420 VA
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION: 1GPL1 **VOLTS:** 208Y/120 V **MAINS RATING:** 50 A
LOCATION: ELEC.-2 L139-2 **PHASES:** 3 **MAINS TYPE:** MCB
MOUNTING: SURFACE **WIRES:** 4
SUPPLY FROM: 1GXRL **AIC RATING:** 26 KAIC

O	CKT NO.	DESCRIPTION	ROOM #	TRIP	P	A	A	B	B	C	C	P	TRIP	ROOM #	DESCRIPTION	CKT NO.	O
	1	Power - Continuous		30 A	1	0.00	0.18					1	20 A	L139	RECEPTACLE	2	
	3	RECEPTACLE	L139	20 A	1			0.72	0.90			1	20 A		RECEPTACLE	4	
	5	Power - Continuous		20 A	1					0.50	0.54	1	20 A	L104	RECEPTACLE	6	
	7	RECEPTACLE	L139A	20 A	2	1.50	0.18					1	20 A	L103	RECEPTACLE	8	
--	9	--	--	--	--			1.50	0.05			2	40 A	L139A,R...	SPLIT SYSTEM FOR IDF L139A	10	
	11	RECEPTACLE	L104	20 A	1					0.54	0.05	--	--	--	--	12	--
	13	RECEPTACLE	L104	20 A	1	0.36	0.00					1	20 A		SPARE	14	--
	15	RECEPTACLE	L139	20 A	1			0.18	0.36			1	20 A		RECEPTACLE	16	
	17	RECEPTACLE	L139A	20 A	2					1.50	0.18	1	20 A	L139A	RECEPTACLE	18	
--	19	--	--	--	--	1.50	0.00					1	20 A		SPARE	20	--
--	21	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	22	--
	23	RECEPTACLE	L104	20 A	1					0.36	0.36	1	20 A	L104	RECEPTACLE	24	
--	25	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	26	--
--	27	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	28	--
--	29	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	30	--
--	31	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	32	--
--	33	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	34	--
--	35	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	36	--
--	37	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	38	--
--	39	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	40	--
--	41	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	42	--
					TOTAL LOAD:	3.72 kVA		3.71 kVA		4.03 kVA							
					TOTAL AMPS:	31 A		31 A		34 A							

A2

TOTAL CONNECTED LOAD: 11.45 kVA — TOTAL DEMAND LOAD: 11.02 kVA
TOTAL CONNECTED AMPS: 34 A — TOTAL DEMAND AMPS: 31 A

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Mechanical - Motor	0 VA	0.00%	0 VA
C	CONTACTOR CONTROLLED	Power - Continuous	590 VA	100.00%	590 VA
G	GFCI PROTECTED	RECEPTACLE	10860 VA	96.04%	10430 VA
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION: 1NPL4 **VOLTS:** 480Y/277 V **MAINS RATING:** 1 A
LOCATION: **PHASES:** 3 **MAINS TYPE:** MLO
MOUNTING: SURFACE **WIRES:** 4
SUPPLY FROM: **AIC RATING:**

O	CKT NO.	DESCRIPTION	ROOM #	TRIP	P	A	A	B	B	C	C	P	TRIP	ROOM #	DESCRIPTION	CKT NO.	O
	1	Lighting - Interior		20 A	1	2.52	3.13					1	20 A		Lighting - Interior	2	
	3	1GPL4		60 A	3			4.71	0.00			1	20 A		SPARE	4	--
--	5	--	--	--	--					3.81	0.00	1	20 A		SPARE	6	--
--	7	--	--	--	--	4.03	0.00					1	20 A		SPARE	8	--
--	9	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	10	--
--	11	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	12	--
--	13	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	14	--
--	15	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	16	--
--	17	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	18	--
--	19	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	20	--
--	21	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	22	--
--	23	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	24	--
--	25	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	26	--
--	27	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	28	--
--	29	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	30	--
--	31	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	32	--
--	33	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	34	--
--	35	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	36	--
--	37	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	38	--
--	39	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	40	--
--	41	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	42	--
					TOTAL LOAD:	9.67 kVA		4.71 kVA		3.81 kVA							
					TOTAL AMPS:	35 A		18 A		14 A							

TOTAL CONNECTED LOAD: 18.19 kVA — TOTAL DEMAND LOAD: 19.45 kVA
TOTAL CONNECTED AMPS: 35 A — TOTAL DEMAND AMPS: 23 A

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Lighting - Interior	6742 VA	125.00%	8427 VA
C	CONTACTOR CONTROLLED	Mechanical - Motor	0 VA	0.00%	0 VA
G	GFCI PROTECTED	Power - Continuous	590 VA	100.00%	590 VA
P	HANDLE LOCKING DEVICE	RECEPTACLE	10860 VA	96.04%	10430 VA
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

PANELBOARD ABBREVIATIONS

FTL FEED THROUGH LUGS
MCB MAIN CIRCUIT BREAKER
MFS MAIN FUSED SWITCH
MLO MAIN LUGS ONLY
SFL SUB-FEED LUGS
SPD SURGE PROTECTION DEVICE

SWITCHBOARD/PANELBOARD NOTES

A VERIFY SIZE AND QUANTITY OF LUGS REQUIRED PER ONE-LINE DIAGRAM.
B VERIFY PANEL / LUG SIZE REQUIRED FOR FEEDERS INDICATED ON ONE-LINE DIAGRAM. MODIFY AS REQUIRED FOR LARGER FEEDERS.
C VERIFY CONDUIT ENTRY LOCATION ON EACH PANEL.
D CONFIRM FINAL ROOM NAMES AND NUMBERS WITH OWNER PRIOR TO CREATING FINAL PANELBOARD DIRECTORIES.
E MODIFY AIC RATINGS INDICATED ON SCHEDULES, AS REQUIRED, PER SPECIFICATION SECTION 260574.99.

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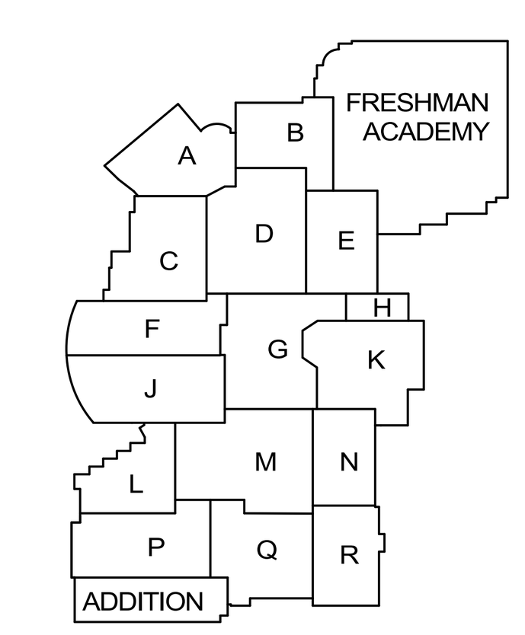

KEY PLAN

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2A

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

PANELBOARD SCHEDULES

DAVID L. JONES III REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022043.00

Project Date: February 14, 2024

Drawing No: E804

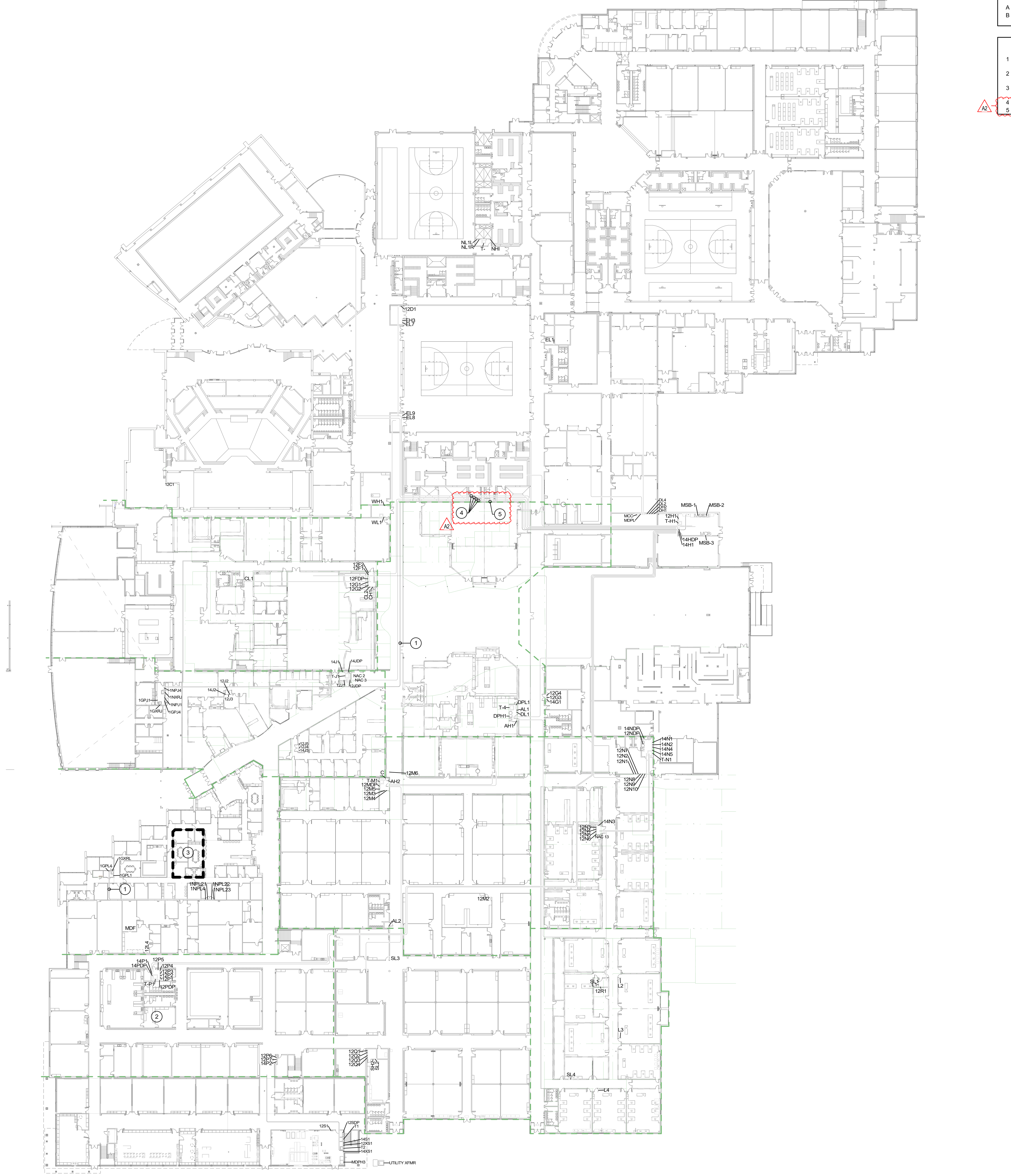
GENERAL ROUTING NOTES

A REFER TO SHEET E001 FOR ADDITIONAL INFORMATION.
B EXISTING CONDUIT ROUTING IS DIAGRAMMATIC AND HAS NOT BEEN FIELD VERIFIED.

◯ ROUTING PLAN NOTES

1 PROPOSED ROUTING IS DIAGRAMATIC. NOT ALL JUNCTION BOXES ARE INDICATED. FIELD COORDINATE AND FIELD ROUTE FEEDER AS NECESSARY.
2 COORDINATE WITH MECHANICAL CONTRACTOR THE DISCONNECTION AND INSTALLATION OF VARIABLE FREQUENCY DRIVES AND MOTORS IN THIS AREA.
3 COORDINATE ROUTING FOR ALL DEVICES WITHIN AND ABOVE THIS AREA. COORDINATE WITH STRUCTURAL DRAWINGS.
A2 4 CONDUITS ARE INSTALLED ON SECOND FLOOR. FIELD VERIFY.
5 ROUTE CONDUIT WITH EXISTING CONDUIT.

#	Revision	Date
A2	ADDENDUM 2	2/21/24



1 FIRST FLOOR CONDUIT ROUTING PLAN
1" = 40'-0"

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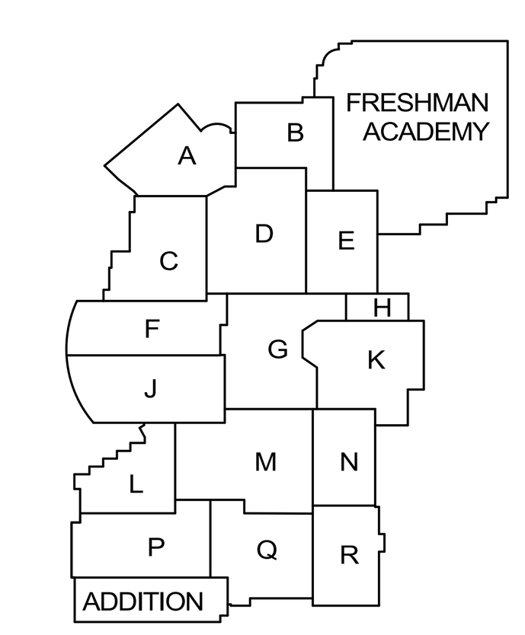

KEY PLAN

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2A

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:
FIRST FLOOR CONDUIT ROUTING PLAN

DAVID L. JONES III REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022043.00
Project Date: February 14, 2024
Drawing No: EC01

#	Revision	Date
A2	ADDENDUM 2	2/21/24

GENERAL SITE DEMOLITION NOTES

A REFER TO SHEET E001 FOR ADDITIONAL INFORMATION.

B THIS DRAWING REPRESENTS INFORMATION OBTAINED FROM ORIGINAL CONTRACT DRAWINGS AND FIELD SURVEY. VERIFY BY ON-SITE OBSERVATION THE EXTENT OF WORK PRIOR TO SUBMISSION OF BID.

C CONTRACT DOCUMENTS CONSIST OF BOTH PROJECT MANUAL AND DRAWINGS AND ARE MEANT TO BE COMPLEMENTARY. ANYTHING APPEARING ON EITHER MUST BE EXECUTED THE SAME AS IF SHOWN ON BOTH.

D THOROUGHLY EXAMINE THE WORK OF OTHER CONTRACTORS AND PROPERLY INSTALL ALL WORK REQUIRED FOR THE PROJECT.

E THE OWNER HOLDS RIGHT OF FIRST REFUSAL FOR ALL DEMOLISHED ELECTRICAL EQUIPMENT.

F ALL ELECTRICAL ITEMS SHOWN WITH LIGHT LINEWORK ARE EXISTING TO REMAIN.

G REMOVE ALL ELECTRICAL ITEMS SHOWN WITH BOLD/DASHED LINEWORK COMPLETE.

H COORDINATE AND DISCONNECT ALL ARCHITECTURAL, MECHANICAL, AND PLUMBING EQUIPMENT AS NOTED FOR REMOVAL BY OTHERS. REMOVE ALL ASSOCIATED ELECTRICAL EQUIPMENT, RACEWAYS, CONDUCTORS, ETC. SERVING THE EQUIPMENT.

I PROVIDE ALL CUTTING AND PATCHING AS REQUIRED FOR THE REMOVAL OF EXISTING ELECTRICAL EQUIPMENT. REFER TO SPECIFICATIONS.

J PROVIDE A BLANK COVERPLATE FOR ALL EXISTING WALL OPENINGS WHERE ELECTRICAL EQUIPMENT HAS BEEN REMOVED AND NOT REPLACED. IN AREAS RECEIVING NEW WALL TREATMENTS, PATCH THE EXISTING OPENING.

K REFER TO LOCAL UTILITIES GUIDE FOR DETAILS AND REQUIREMENTS. INCLUDING, BUT NOT LIMITED TO, SERVICE REQUIREMENTS FOR UNDERGROUND PRIMARY, PROTECTIVE POLES FOR PAD-MOUNTED EQUIPMENT, UTILITY TRANSFORMER CONCRETE PAD DETAIL, ETC. INCLUDE ALL UTILITY FEES REQUIRED IN BID.

L COORDINATE WITH C-SERIES DRAWINGS FOR ALL OTHER UTILITIES.

◇ SITE DEMOLITION PLAN NOTES

1 REWORK CONDUIT AS REQUIRED FOR EXPANSION. MAINTAIN EXISTING LIGHTING CIRCUIT AND CONTROL.

2 REMOVE CONDUIT AND CONDUCTORS. MAINTAIN EXISTING LIGHTING CIRCUIT AND CONTROL.

3 REMOVE LIGHT POLE AND BASE COMPLETE.

4 REMOVE LIGHT BOLLARD AND BASE COMPLETE.

1 ELECTRICAL SITE DEMOLITION PLAN
1" = 60'-0"

BEFORE YOU DIG

THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONTACT 811 TO OBTAIN UNDERGROUND UTILITY LOCATIONS AMD AN AUTHORIZATION NUMBER PRIOR TO ANY CONSTRUCTION.

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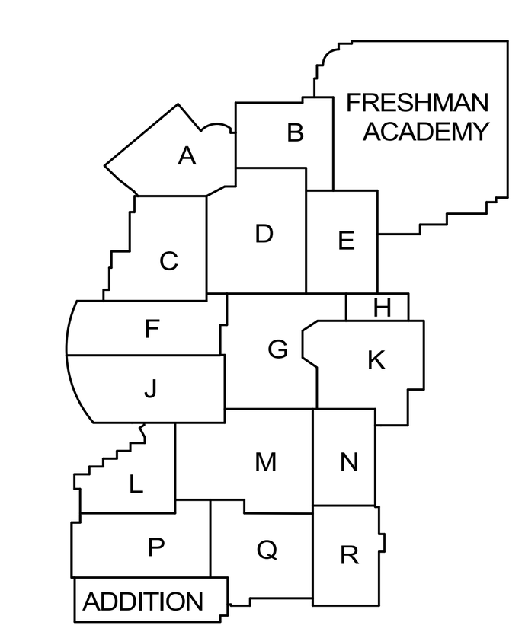

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2A

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION INDIANAPOLIS, INDIANA

Drawing Title:

ELECTRICAL SITE DEMOLITION PLAN

DAVID L. JONES III REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022043.00

Project Date: February 14, 2024

Drawing No: EDS01

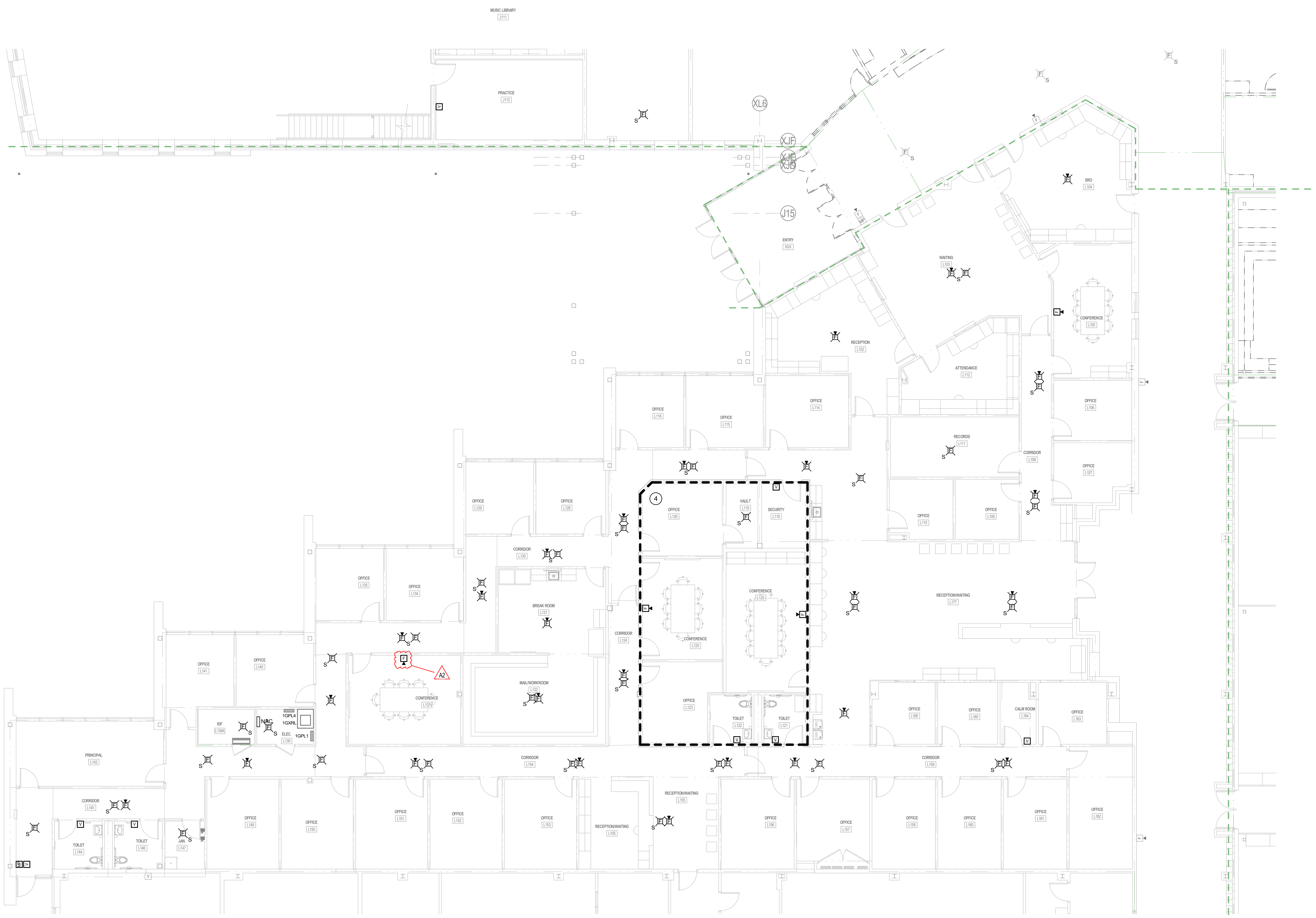
#	Revision	Date
A2	ADDENDUM 2	2/21/24

GENERAL FIRE ALARM NOTES

A REFER TO SHEET E001 FOR ADDITIONAL INFORMATION.
B FIRE ALARM SYSTEM IS A DELEGATED DESIGN AND STATE SUBMISSION.
C PROVIDE A FULL TEST ON FIRE ALARM SYSTEM.
D REFER TO ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS AND ELEVATIONS.

FIRE ALARM PLAN NOTES

1 PROVIDE FIRE ALARM CONTROL PANEL WITH LANDLINE REMOTE DIALER AND CELLULAR DIALER. PROGRAM FACP AS PRIMARY. CONNECT TO EXISTING FACP. PROGRAM EXISTING FACP AS SECONDARY. MAINTAIN ALL DEVICES NOT REMOVED IN TIS PROJECT. CONNECT ALL NEW FIRE ALARM DEVICES TO THIS FACP.
2 INSTALL RELOCATED FIRE ALARM DEVICE.
3 PROVIDE FIRE ALARM DEVICE.
4 COORDINATE ROUTING FOR ALL DEVICES WITHIN AND ABOVE THIS AREA. COORDINATE WITH STRUCTURAL DRAWINGS.



1 **FIRST FLOOR FIRE ALRM PLAN - UNIT L**
1/8" = 1'-0"

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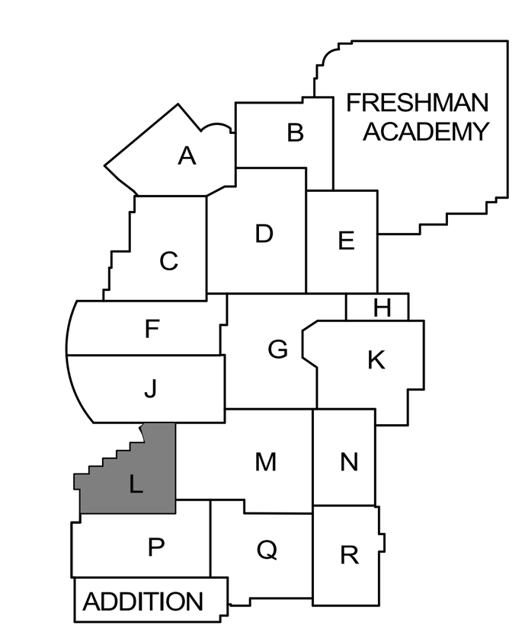

KEY PLAN

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2A

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

FIRST FLOOR FIRE ALARM PLAN - UNIT L

DAVID L. JONES III REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022043.00

Project Date: February 14, 2024

Drawing No: EF1L

GENERAL LIGHTING NOTES

A REFER TO SHEET E001 FOR ADDITIONAL INFORMATION.

◯ LIGHTING PLAN NOTES

1. RELOCATED LIGHT FXTURE. CONNECT TO EXISTING LIGHTING CIRCUIT AND LIGHTING CONTROL CIRCUIT.
2. RELOCATED EXIT SIGN. CONNECT TO EXISTING EXIT SIGN CIRCUIT THAT SERVES THIS AREA.
3. PROVIDE A 12 HOUR MECHANICAL TIME SWITCH.
4. COORDINATE ROUTING FOR ALL DEVICES WITHIN AND ABOVE THIS AREA. COORDINATE WITH STRUCTURAL DRAWINGS.
5. CONNECT TO LIGHTING CONTACTOR.
6. RELOCATED LIGHT SWITCHES.
7. PROVIDE LIGHT SWITCH.

#	Revision	Date
A2	ADDENDUM 2	2/21/24

1 FIRST FLOOR LIGHTING PLAN - UNIT F
1/8" = 1'-0"

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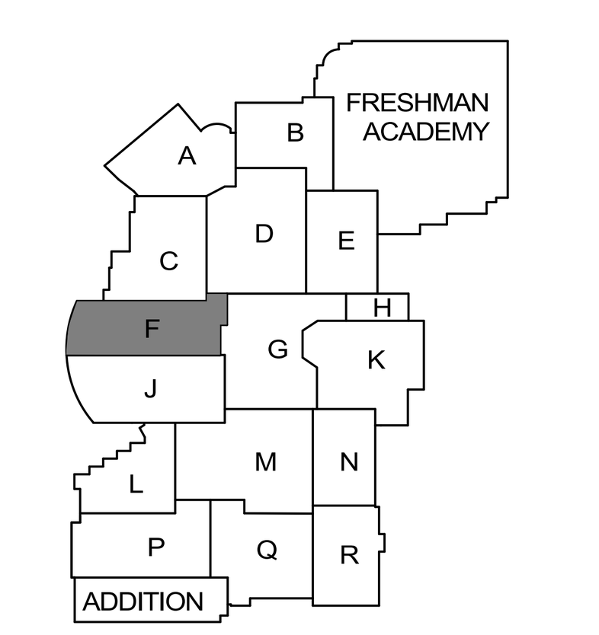

KEY PLAN

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2A

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

FIRST FLOOR LIGHTING PLAN - UNIT F

DAVID L. JONES III REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022043.00

Project Date: February 14, 2024

Drawing No: EL1F

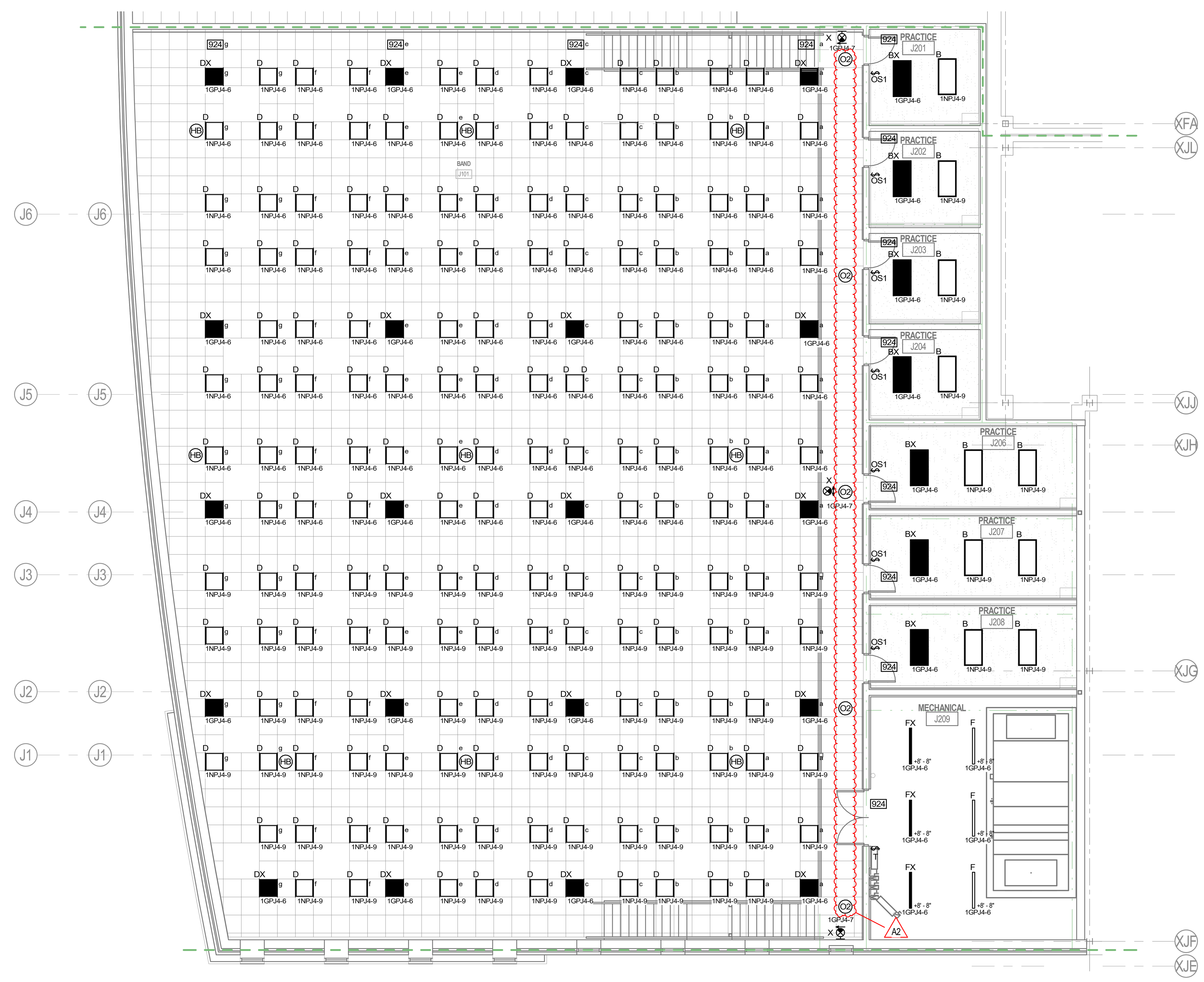
GENERAL LIGHTING NOTES

A REFER TO SHEET E001 FOR ADDITIONAL INFORMATION.

LIGHTING PLAN NOTES

1 RELOCATED LIGHT FXTURE. CONNECT TO EXISTING LIGHTING CIRCUIT AND LIGHTING CONTROL CIRCUIT.
2 RELOCATED EXIT SIGN. CONNECT TO EXISTING EXIT SIGN CIRCUIT THAT SERVES THIS AREA.
3 PROVIDE A 12 HOUR MECHANICAL TIME SWITCH.
4 COORDINATE ROUTING FOR ALL DEVICES WITHIN AND ABOVE THIS AREA. COORDINATE WITH STRUCTURAL DRAWINGS.
5 CONNECT TO LIGHTING CONTACTOR.
6 RELOCATED LIGHT SWITCHES.
7 PROVIDE LIGHT SWITCH.

#	Revision	Date
A2	ADDENDUM 2	2/21/24



2 MEZZANINE FLOOR LIGHTING PLAN - UNIT J
1/8" = 1'-0"

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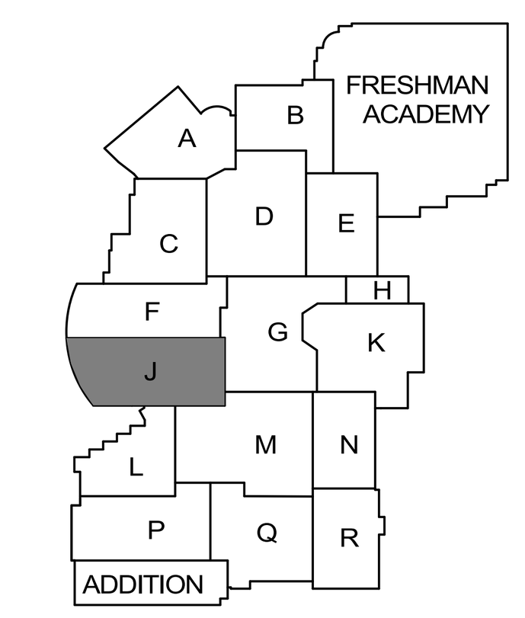

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2A

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

MEZZANINE FLOOR LIGHTING PLAN - UNIT J

DAVID L. JONES III REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022043.00

Project Date: February 14, 2024

Drawing No: EL2J

GENERAL POWER NOTES

A REFER TO SHEET E001 FOR ADDITIONAL INFORMATION.

B COORDINATE LOCATIONS AND REQUIREMENTS FOR A/V AND IT WITH TECHNOLOGY DRAWINGS.

◯ POWER PLAN NOTES

1 PROVIDE POWER CONNECTION TO FIRE ALARM CONTROL PANEL. PROVIDE 20A/120V CIRCUIT BREAKER. MATCH KAIC RATING OF PANELBAORD.

2 PROVIDE PANELBOARD INTERIORS AND DOOR IN DOOR.

3 PROVIDE INTERNAL AND EXTERNAL CONDUIT SEAL.

4 PROVIDE 60A/3P CIRCUIT BREAKER. MATCH KAIC RATING OF PANELBAORD.

5 PROVIDE F60 FEEDER TO PANELBAORD 1GPL4.

6 PROVIDE POWER CONNECTION TO RECEPTACLE THAT SERVES THIS AREA.

7 PROVIDE POWER CONNECTION TO PROJECTOR.

8 PROVIDE POWER CONNECTION TO A/V RACK.

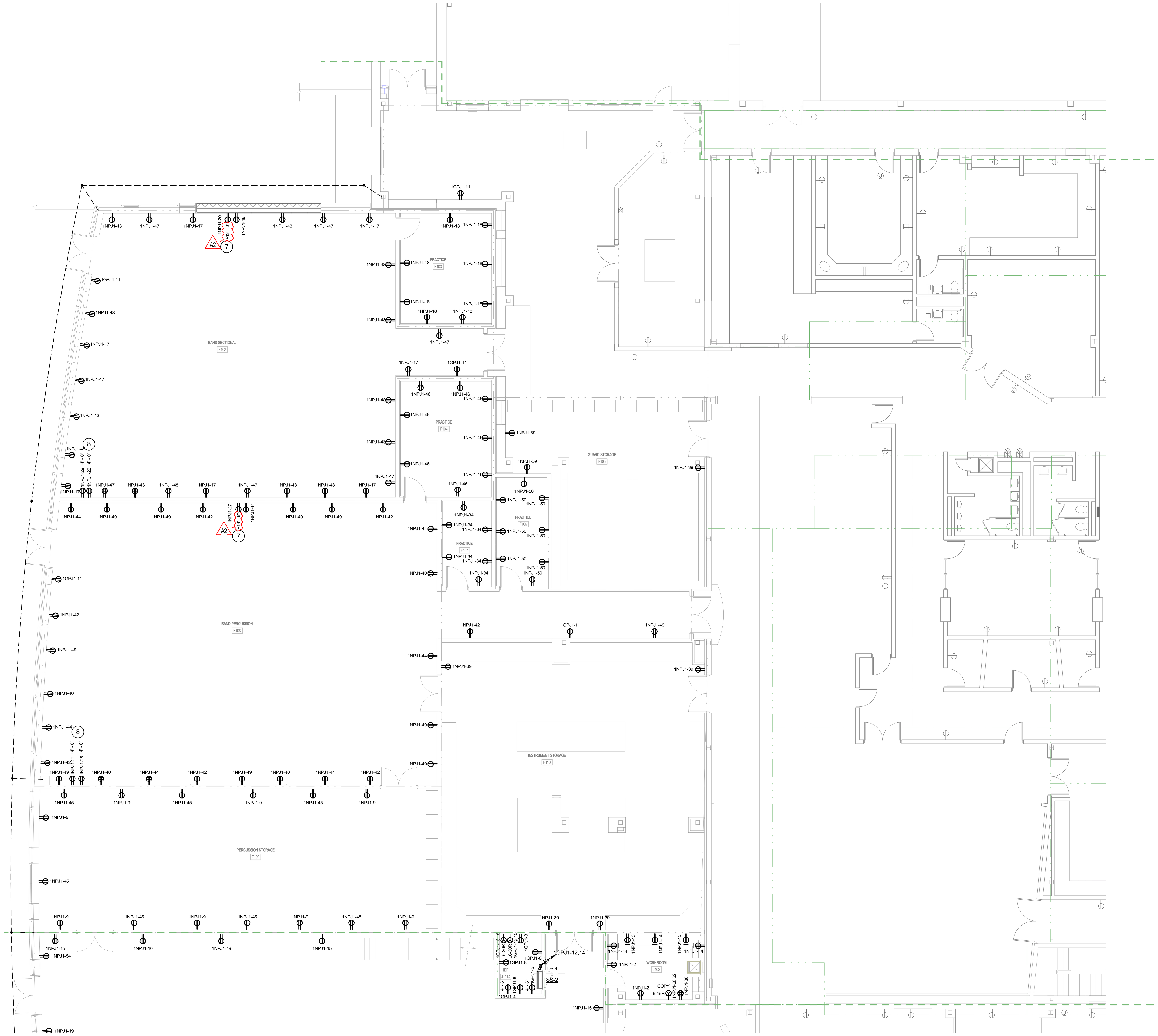
9 COORDINATE ROUTING FOR ALL DEVICES WITHIN AND ABOVE THIS AREA. COORDINATE WITH STRUCTURAL DRAWINGS.

10 PROVIDE SHIELED VFD CABLE WITH (2)#12 TRAVELERS.

11 PROVIDE POWER CONNECTION TO TEMPERATURE CONTROL PANEL.

12 PROVIDE POWER CONNECTION TO VIDEO BOARD.

#	Revision	Date
A2	ADDENDUM 2	2/21/24



1 FIRST FLOOR POWER PLAN - UNIT F
1/8" = 1'-0"

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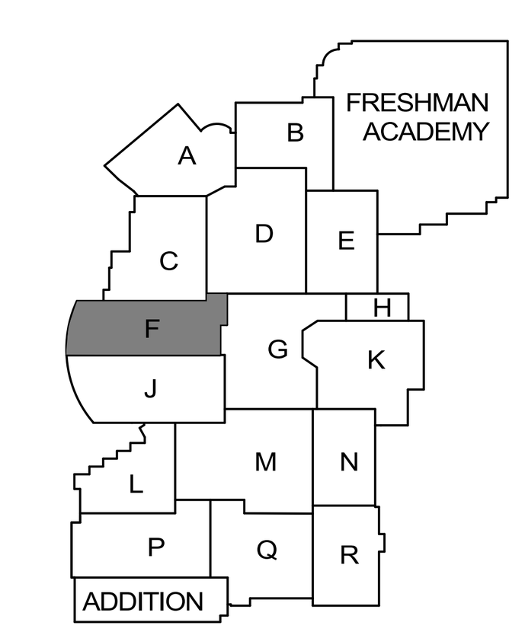

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ADDITION & RENOVATIONS TO:

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FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION INDIANAPOLIS, INDIANA

Drawing Title:

FIRST FLOOR POWER PLAN - UNIT F

DAVID L. JONES III REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022043.00

Project Date: February 14, 2024

Drawing No: EP1F

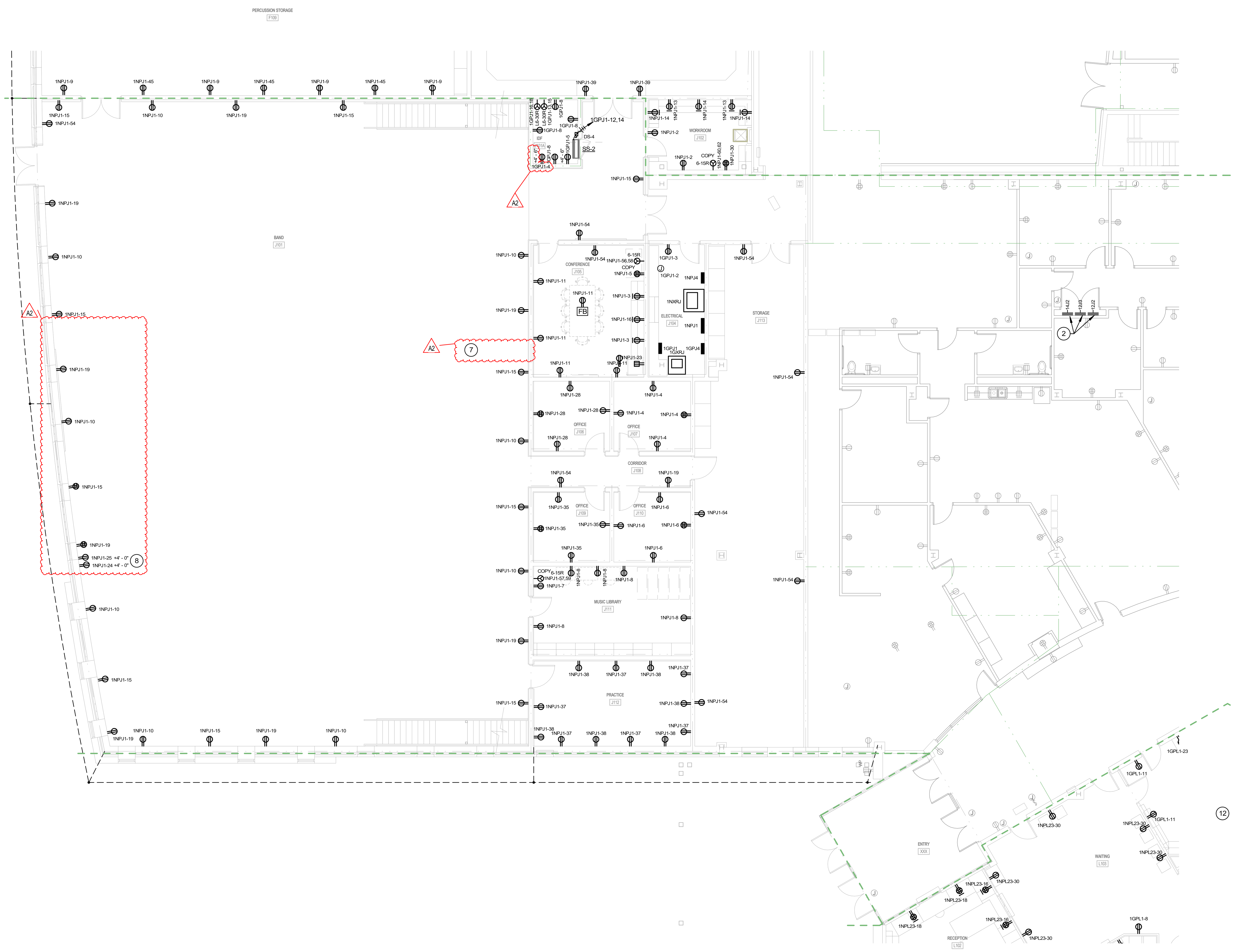
#	Revision	Date
A2	ADDENDUM 2	2/21/24

GENERAL POWER NOTES

A REFER TO SHEET E001 FOR ADDITIONAL INFORMATION.
B COORDINATE LOCATIONS AND REQUIREMENTS FOR A/V AND IT WITH TECHNOLOGY DRAWINGS.

POWER PLAN NOTES

1 PROVIDE POWER CONNECTION TO FIRE ALARM CONTROL PANEL. PROVIDE 20A/120V CIRCUIT BREAKER. MATCH KAIC RATING OF PANELBAORD.
2 PROVIDE PANELBOARD INTERIORS AND DOOR IN DOOR.
3 PROVIDE INTERNAL AND EXTERNAL CONDUIT SEAL.
4 PROVIDE 60A/3P CIRCUIT BREAKER. MATCH KAIC RATING OF PANELBAORD.
5 PROVIDE F60 FEEDER TO PANELBAORD 1GPL4.
6 PROVIDE POWER CONNECTION TO RECEPTACLE THAT SERVES THIS AREA.
7 PROVIDE POWER CONNECTION TO PROJECTOR.
8 PROVIDE POWER CONNECTION TO A/V RACK.
9 COORDINATE ROUTING FOR ALL DEVICES WITHIN AND ABOVE THIS AREA. COORDINATE WITH STRUCTURAL DRAWINGS.
10 PROVIDE SHIELED VFD CABLE WITH (2)#12 TRAVELERS.
11 PROVIDE POWER CONNECTION TO TEMPERATURE CONTROL PANEL.
12 PROVIDE POWER CONNECTION TO VIDEO BOARD.



1 FIRST FLOOR POWER PLAN - UNIT J
1/8" = 1'-0"

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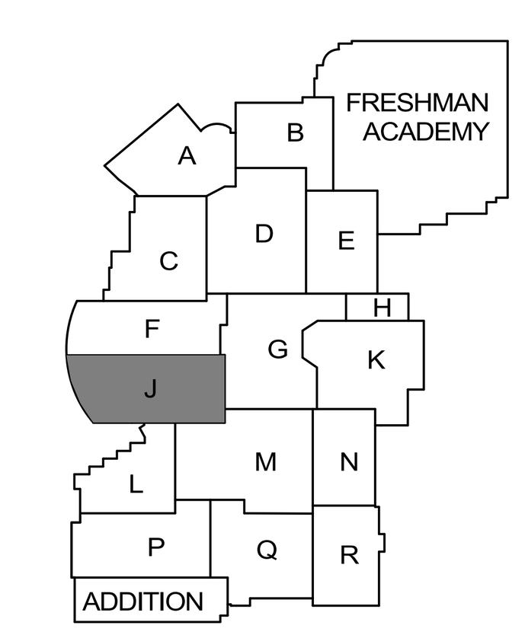

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ADDITION & RENOVATIONS TO:

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FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

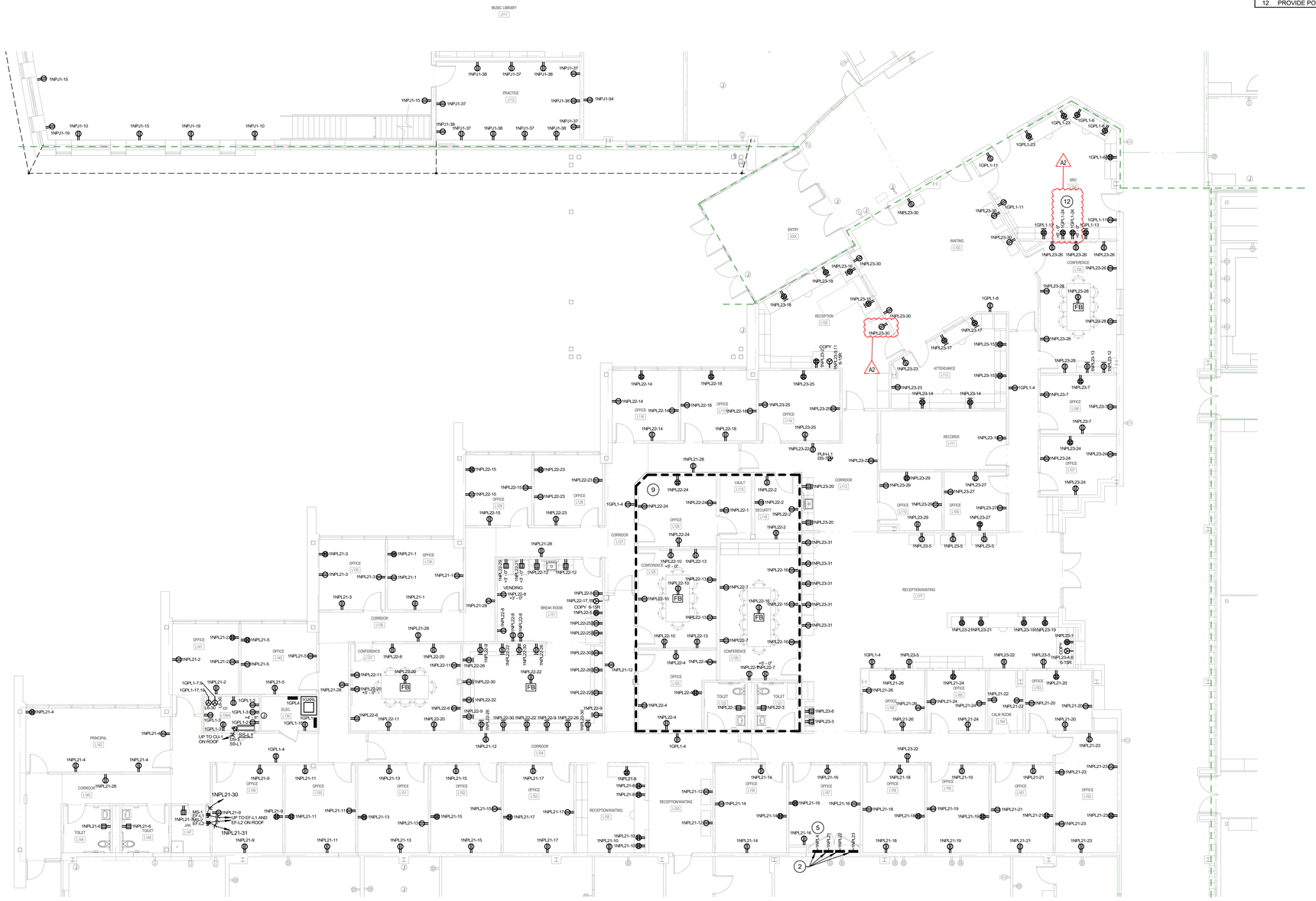
FIRST FLOOR POWER PLAN - UNIT J

DAVID L. JONES III REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022043.00

Project Date: February 14, 2024

Drawing No: EP1J



GENERAL POWER NOTES

A REFER TO SHEET E001 FOR ADDITIONAL INFORMATION.
B COORDINATE LOCATIONS AND REQUIREMENTS FOR A/V AND IT WITH TECHNOLOGY DRAWINGS.

○ POWER PLAN NOTES

1 PROVIDE POWER CONNECTION TO FIRE ALARM CONTROL PANEL. PROVIDE 20A/120V CIRCUIT BREAKER. MATCH KAIC RATING OF PANELBAORD.
2 PROVIDE PANELBOARD INTERIORS AND DOOR IN DOOR.
3 PROVIDE INTERNAL AND EXTERNAL CONDUIT SEAL.
4 PROVIDE 60A/3P CIRCUIT BREAKER. MATCH KAIC RATING OF PANELBAORD.
5 PROVIDE F60 FEEDER TO PANELBAORD 1GPL4.
6 PROVIDE POWER CONNECTION TO RECEPTACLE THAT SERVES THIS AREA.
7 PROVIDE POWER CONNECTION TO PROJECTOR.
8 PROVIDE POWER CONNECTION TO A/V RACK.
9 COORDINATE ROUTING FOR ALL DEVICES WITHIN AND ABOVE THIS AREA. COORDINATE WITH STRUCTURAL DRAWINGS.
10 PROVIDE SHIELED VFD CABLE WITH (2)#12 TRAVELERS.
11 PROVIDE POWER CONNECTION TO TEMPERATURE CONTROL PANEL.
12 PROVIDE POWER CONNECTION TO VIDEO BOARD.

#	Revision	Date
A2	ADDENDUM 2	2/21/24

1 FIRST FLOOR POWER PLAN - UNIT L

1/8" = 1'-0"

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2A

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

FIRST FLOOR POWER PLAN - UNIT L

DAVID L. JONES III
NO. PE12100175

David L. Jones III

Project No: 2022043.00

Project Date: February 14, 2024

Drawing No: EP1L

-EP1L_ FIRST FLOOR POWER PLAN - UNIT L
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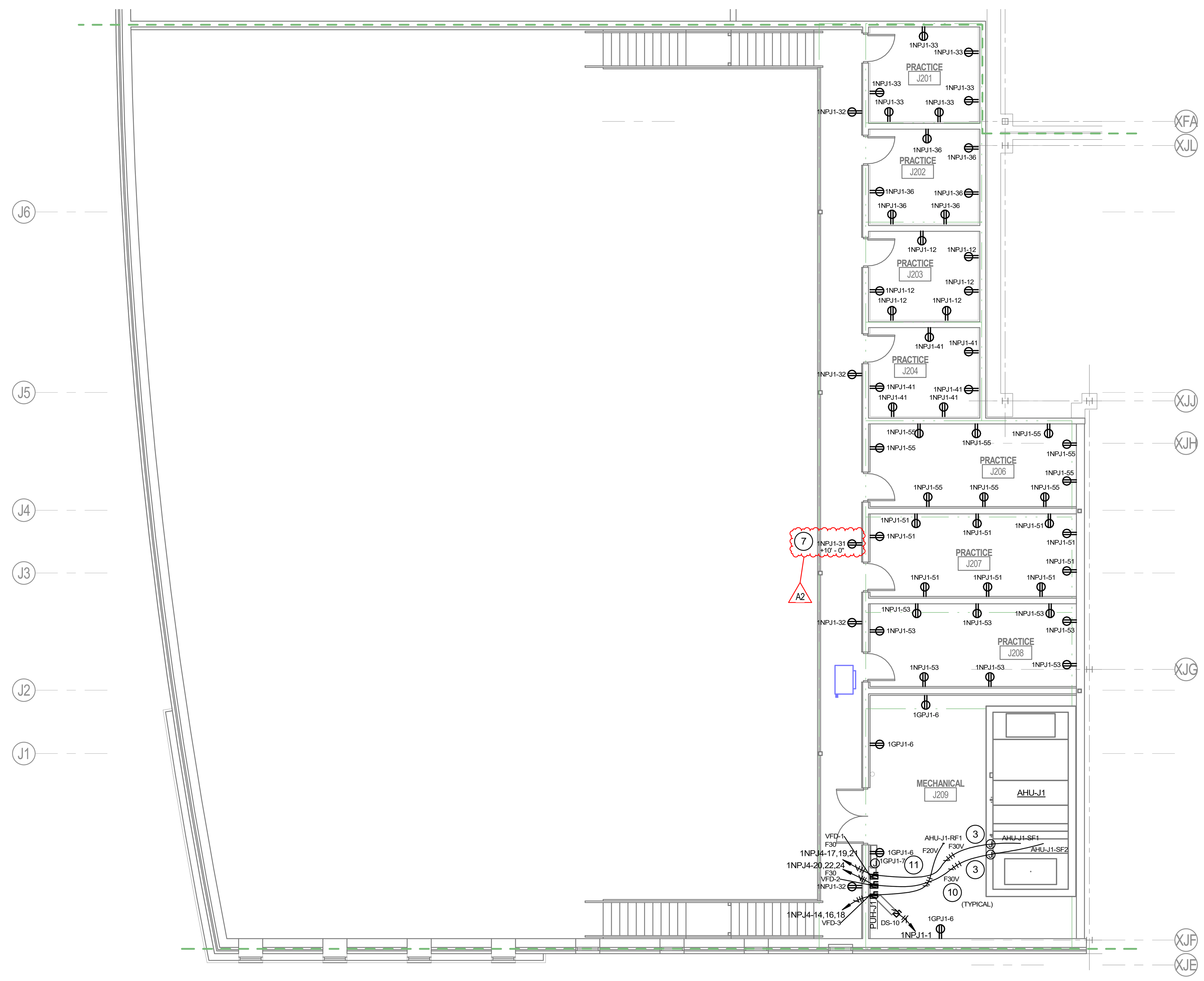
#	Revision	Date
A2	ADDENDUM 2	2/21/24

GENERAL POWER NOTES

A REFER TO SHEET E001 FOR ADDITIONAL INFORMATION.
B COORDINATE LOCATIONS AND REQUIREMENTS FOR A/V AND IT WITH TECHNOLOGY DRAWINGS.

◯ POWER PLAN NOTES

1 PROVIDE POWER CONNECTION TO FIRE ALARM CONTROL PANEL. PROVIDE 20A/120V CIRCUIT BREAKER. MATCH KAIC RATING OF PANELBAORD.
2 PROVIDE PANELBOARD INTERIORS AND DOOR IN DOOR.
3 PROVIDE INTERNAL AND EXTERNAL CONDUIT SEAL.
4 PROVIDE 60A/3P CIRCUIT BREAKER. MATCH KAIC RATING OF PANELBAORD.
5 PROVIDE F60 FEEDER TO PANELBAORD 1GPL4.
6 PROVIDE POWER CONNECTION TO RECEPTACLE THAT SERVES THIS AREA.
7 PROVIDE POWER CONNECTION TO PROJECTOR.
8 PROVIDE POWER CONNECTION TO A/V RACK.
9 COORDINATE ROUTING FOR ALL DEVICES WITHIN AND ABOVE THIS AREA. COORDINATE WITH STRUCTURAL DRAWINGS.
10 PROVIDE SHIELED VFD CABLE WITH (2)#12 TRAVELERS.
11 PROVIDE POWER CONNECTION TO TEMPERATURE CONTROL PANEL.
12 PROVIDE POWER CONNECTION TO VIDEO BOARD.



1 MEZZANINE FLOOR POWER PLAN - UNIT J
1/8" = 1'-0"

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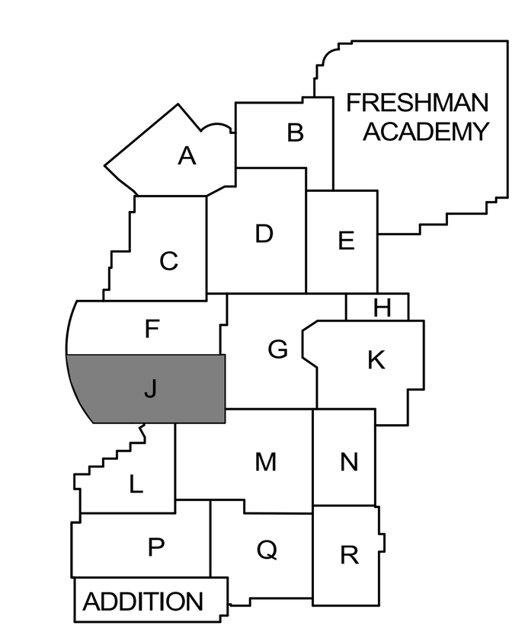

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2A

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

MEZZANINE FLOOR POWER PLAN - UNIT J

DAVID L. JONES III REGISTERED NO. PE12100175 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022043.00

Project Date: February 14, 2024

Drawing No: EP2J

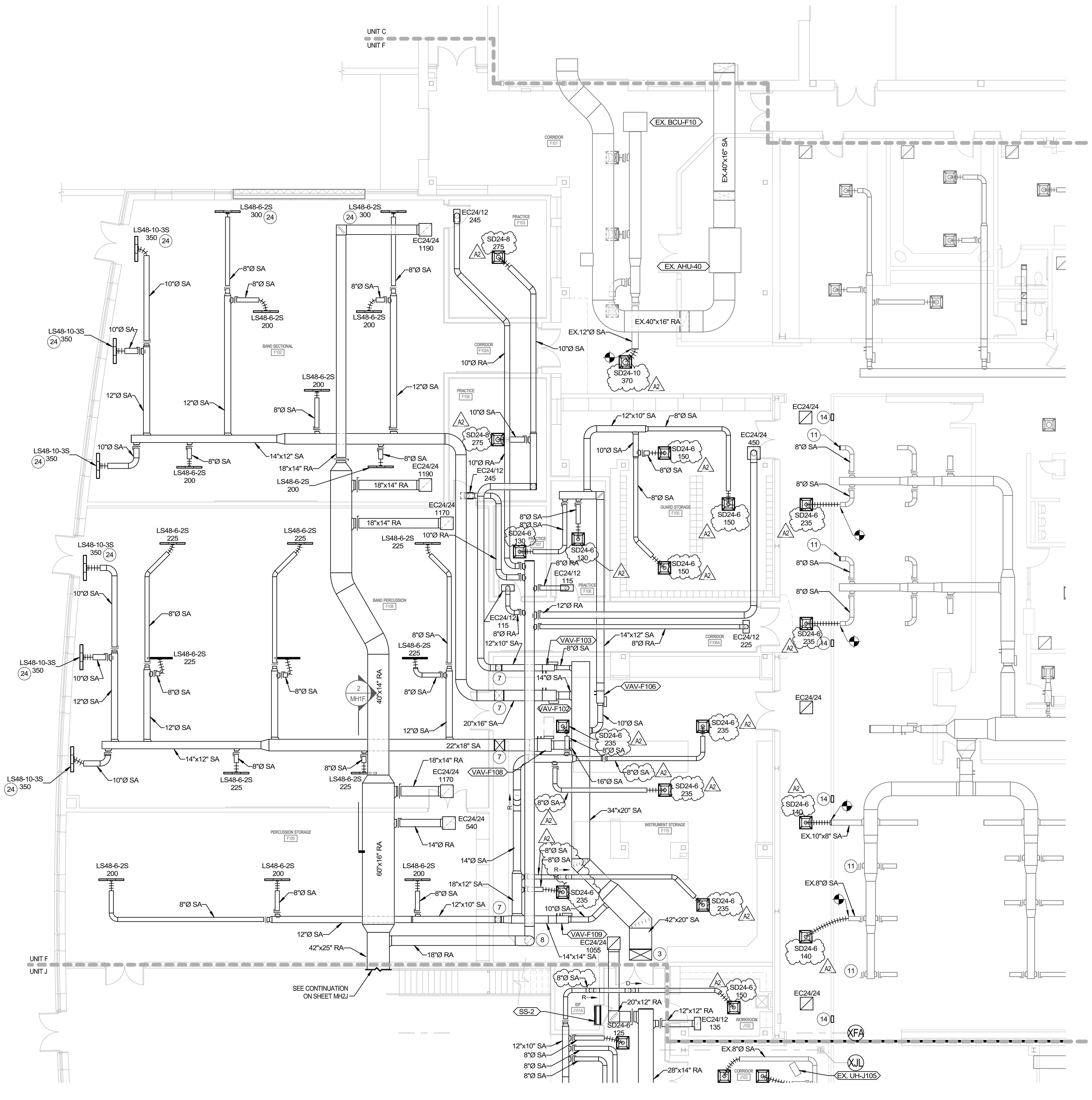
MECHANICAL HVAC PLAN NOTES

1. 30"x15" RETURN UP TO MECHANICAL ROOM.
2. 12"x12" SUPPLY UP TO MECHANCIAL ROOM.
3. 30"x20" SUPPLY DUCT UP.
4. ALIGN DIFFUSER / GRILLE TO NEW CEILING GRID.
5. VFD LOCATION. PROVIDED BY TCC.
6. TEMPERATURE CONTROL PANEL PROVIDED BY TCC.
7. SUPPLY DUCT RISE. SUPPLY DUCT ABOVE 21'-4" CEILING TO BE ROUTED BELOW RETURN DUCT.
8. RETURN DUCT DROP. RETURN DUCT THIS LOCATION TO BE ROUTED ABOVE SUPPLY DUCT.
9. DAMPER TO BE MOUNTED WHERE ACCESSIBLE FROM MEZZANINE.
10. LINEAR SUPPLY DIFFUSER, PROVIDE WITH BLANK OFF STRIP. NO AIRFLOW, FOR AESTHETICS ONLY.
11. CAP EXISTING DUCT.
12. UP TO INTAKE HOOD ON ROOF. MOTORIZED DAMPER INSTALLED IN VERTICAL RISER.
13. UP TO RELIEF HOOD ON ROOF. MOTORIZED DAMPER INSTALLED IN VERTICAL RISER.
14. PROVIDE 12"x10" OPENING IN TEMPORARY WALL FOR RETURN AIR PATH BACK TO AHU'S ON MEZZANINE ABOVE.
15. PROVIDE BLUE FILTER AT ALL AIR INTAKES DURING CONSTRUCTION PHASE.
16. 10"x8" EXHAUST DUCT UP TO EXHAUST FAN ON ROOF.
17. RELOCATED TEMPERATURE SENSOR, HANG AND SUPPORT FROM STRUCTURE TO MAINTAIN SPACE TEMPERATURE AND OPERATION OF EXISTING AIR HANDLING UNIT.
18. INTERNALLY LINE DUCT.
19. INTERNALLY AND EXTERNALLY LINE DUCT.
20. TRANSFER AIR DUCT 16x12 , SEE DETAIL 8 ON M501.
21. TRANSFER AIR DUCT FROM EGG CRATE GRILLE, ROUTE TO CORRIDOR PLENUM AND TURN UP TOWARDS ROOF. INTERNALLY LINE WITH 1" INSULATION AND INSTALL 1/2" WELDED MESH WIRE AT OPENING
22. ROUTE SUPPLY DUCT BETWEEN JOISTS PRIOR TO DUCT DROP.
23. PRESSURE SENSOR LOCATED ABOVE CEILING. TO MEASURE SPACE PRESSUR AND OUTSIDE PRSSURE DIFFERENTIAL
24. ORIENT DIRECTION OF AIR THROW TOWARDS PERIMETER WINDOWS / WALL.
25. PROVIDE MOTORIZED DAMPER IN EXISTING 62"x60" RELIEF DUCT. REFER TO M701 CONTROLS DRAWING FOR DETAILS.

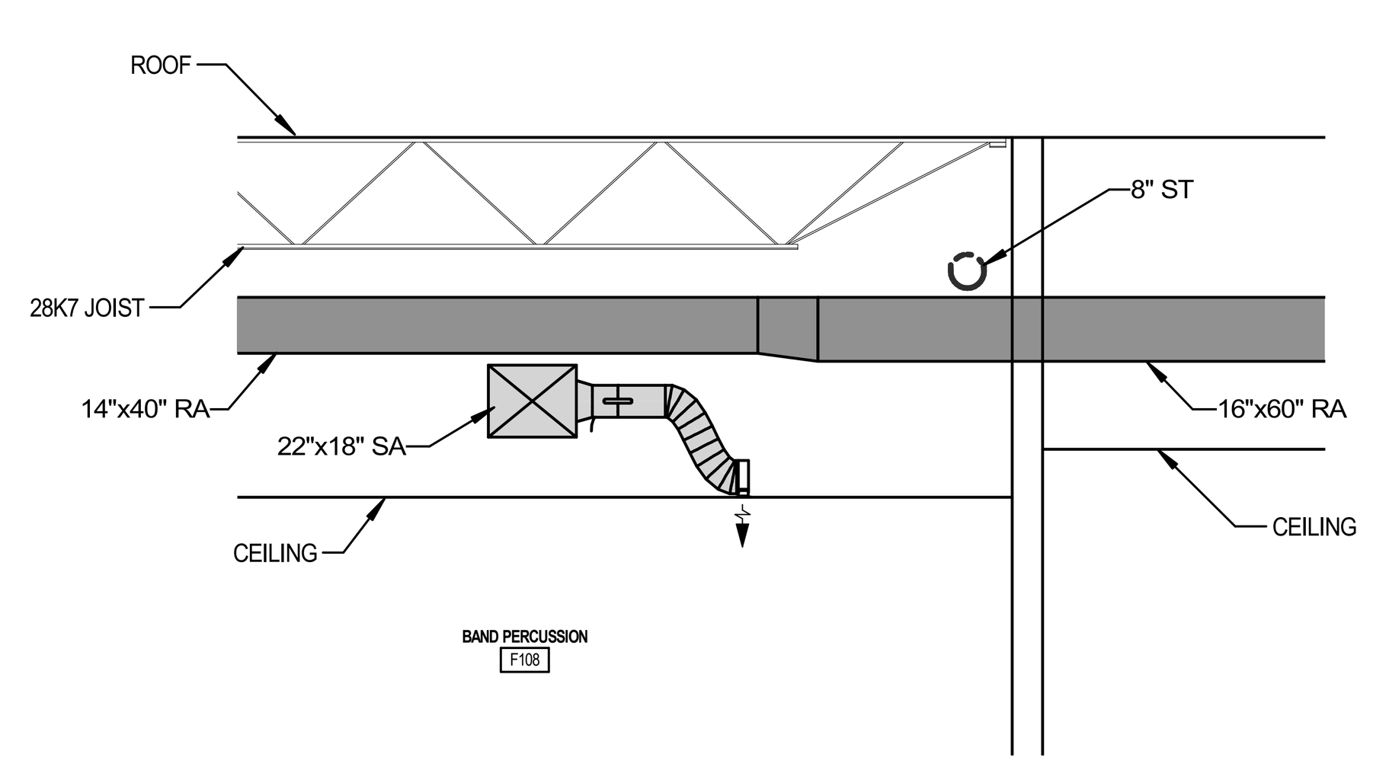
MECHANICAL GENERAL NOTES

A. DARK LINES INDICATE NEW WORK.
B. LIGHT SOLID LINES INDICATE EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING AND/OR MECHANICAL ACCESSORIES TO REMAIN AS-IS. CONTRACTOR TO FIELD VERIFY ACTUAL EXISTING CONDITIONS PRIOR TO BIDDING.
C. MARK ALL LOCATIONS OF MECHANICAL EQUIPMENT ABOVE CEILING WITH ENGRAVED PLASTIC TAGS ON CEILING GRID BELOW.
D. RETURN AIR VALUES FOR AHU-J1 TO BE DETERMINED DURING SYSTEM BALANCING BY TEST AND BALANCE CONTRACTOR AND TCC TO ACHIEVE DESIGN SEQUENCE OF OPERATION.

#	Revision	Date
A2	ADDENDUM #2	02.21.2024



1 FIRST FLOOR HVAC PLAN - UNIT F
1/8" = 1'-0"



2 BAND PERCUSSION ROOM DUCT SECTION
1/4" = 1'-0"

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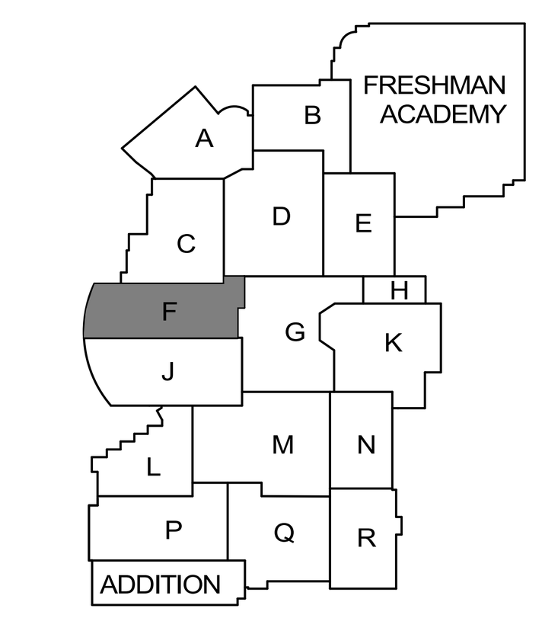

KEY PLAN

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ADDITION & RENOVATIONS TO:
FRANKLIN CENTRAL HIGH SCHOOL PHASE 2A
FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION INDIANAPOLIS, INDIANA

Drawing Title:
FIRST FLOOR HVAC PLAN - UNIT F

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

Project No: 2022043.00
Project Date: February 14, 2024
Drawing No: MH1F

MECHANICAL HVAC PLAN NOTES

1 30"x15" RETURN UP TO MECHANICAL ROOM.
2 12"x12" SUPPLY UP TO MECHANCIAL ROOM.
3 30"x20" SUPPLY DUCT UP.
4 ALIGN DIFFUSER / GRILLE TO NEW CEILING GRID.
5 VFD LOCATION. PROVIDED BY TCC.
6 TEMPERATURE CONTROL PANEL PROVIDED BY TCC.
7 SUPPLY DUCT RISE. SUPPLY DUCT ABOVE 21'-4" CEILING TO BE ROUTED BELOW RETURN DUCT.
8 RETURN DUCT DROP. RETURN DUCT THIS LOCATION TO BE ROUTED ABOVE SUPPLY DUCT.
9 DAMPER TO BE MOUNTED WHERE ACCESSIBLE FROM MEZZANINE.
10 LINEAR SUPPLY DIFFUSER, PROVIDE WITH BLANK OFF STRIP. NO AIRFLOW, FOR AESTHETICS ONLY.
11 CAP EXISTING DUCT.
12 UP TO INTAKE HOOD ON ROOF. MOTORIZED DAMPER INSTALLED IN VERTICAL RISER.
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14 PROVIDE 12"x10" OPENING IN TEMPORARY WALL FOR RETURN AIR PATH BACK TO AHU'S ON MEZZANINE ABOVE.
15 PROVIDE BLUE FILTER AT ALL AIR INTAKES DURING CONSTRUCTION PHASE.
16 10"x8" EXHAUST DUCT UP TO EXHAUST FAN ON ROOF.
17 RELOCATED TEMPERATURE SENSOR, HANG AND SUPPORT FROM STRUCTURE TO MAINTAIN SPACE TEMPERATURE AND OPERATION OF EXISTING AIR HANDLING UNIT.
18 INTERNALLY LINE DUCT.
19 INTERNALLY AND EXTERNALLY LINE DUCT.
20 TRANSFER AIR DUCT 16x12 , SEE DETAIL 8 ON M501.
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22 ROUTE SUPPLY DUCT BETWEEN JOISTS PRIOR TO DUCT DROP.
23 PRESSURE SENSOR LOCATED ABOVE CEILING. TO MEASURE SPACE PRESSUR AND OUTSIDE PRSSURE DIFFERENTIAL
24 ORIENT DIRECTION OF AIR THROW TOWARDS PERIMETER WINDOWS / WALL.
25 PROVIDE MOTORIZED DAMPER IN EXISTING 62"x60" RELIEF DUCT. REFER TO M701 CONTROLS DRAWING FOR DETAILS.

MECHANICAL GENERAL NOTES

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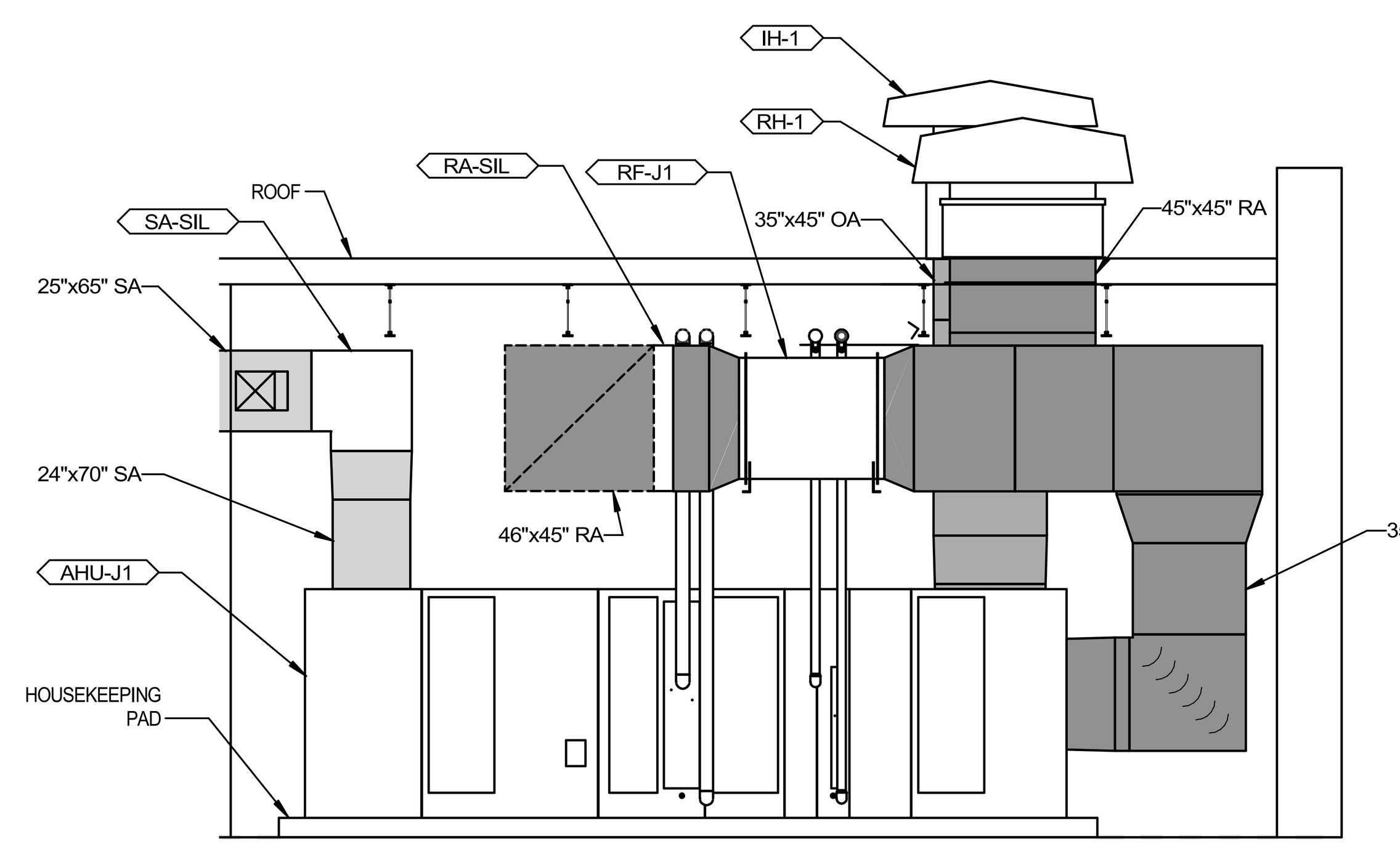
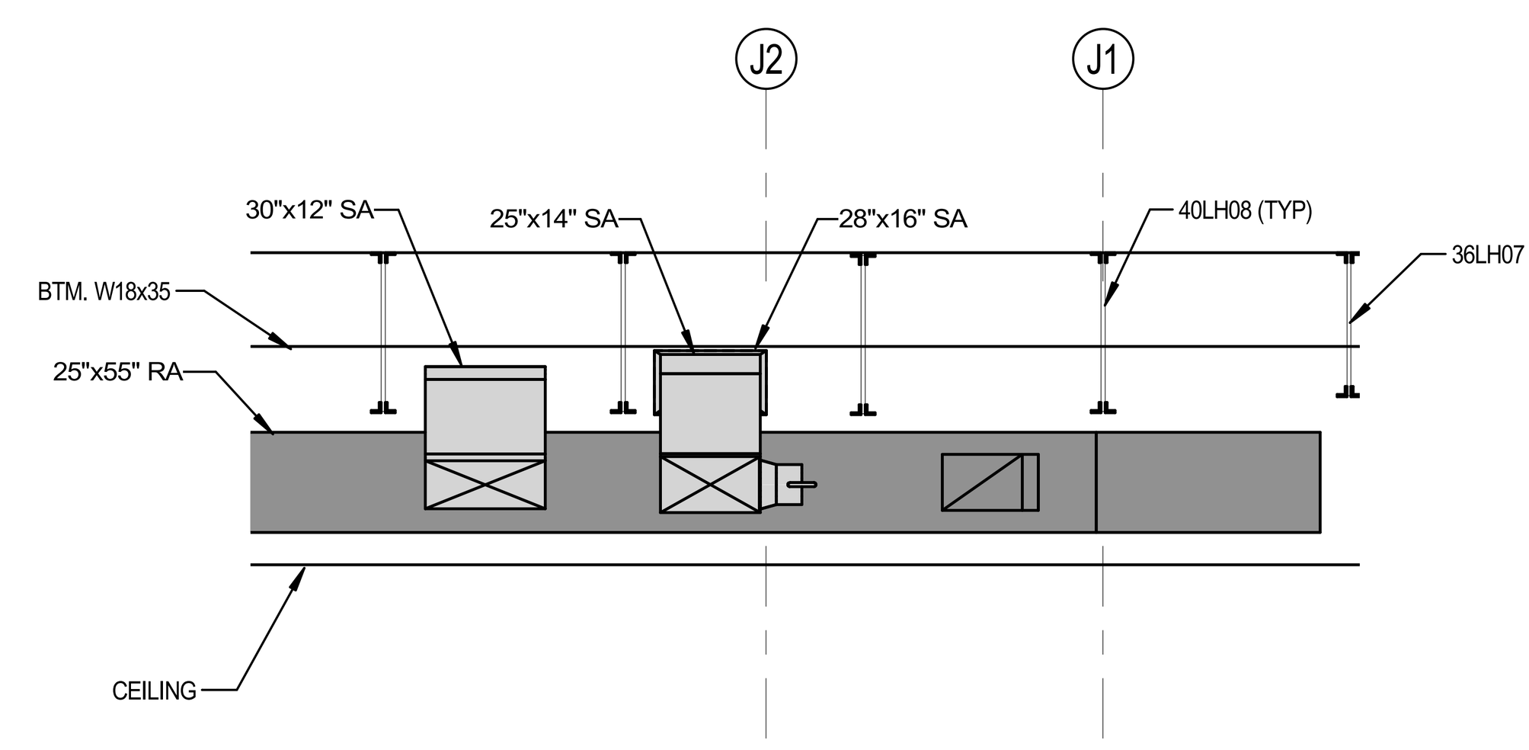
C MARK ALL LOCATIONS OF MECHANICAL EQUIPMENT ABOVE CEILING WITH ENGRAVED PLASTIC TAGS ON CEILING GRID BELOW.
D RETURN AIR VALUES FOR AHU-J1 TO BE DETERMINED DURING SYSTEM BALANCING BY TEST AND BALANCE CONTRACTOR AND TCC TO ACHIEVE DESIGN SEQUENCE OF OPERATION.

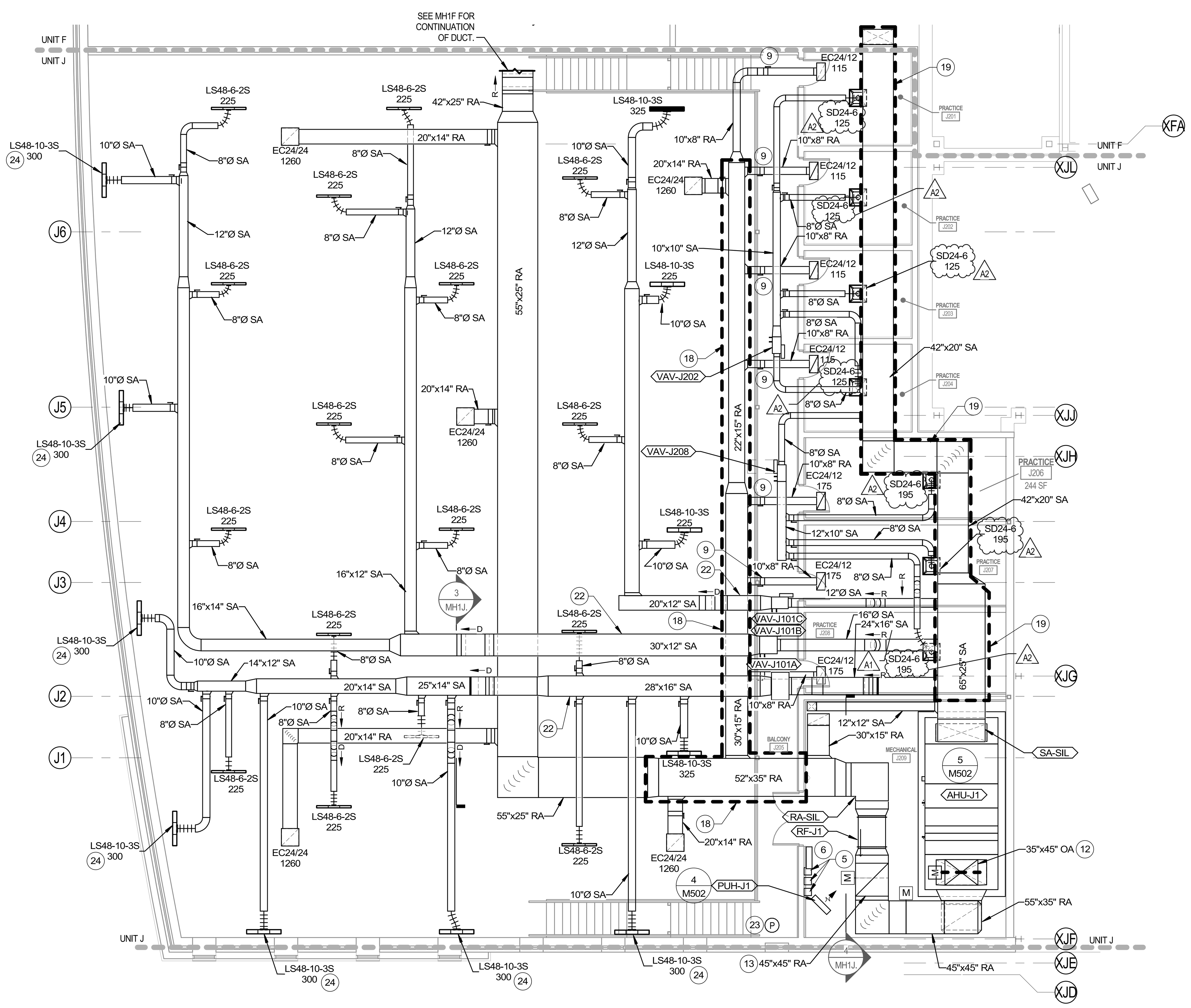
#	Revision	Date
A1	ADDENDUM #1	02.09.2024
A2	ADDENDUM #2	02.21.2024



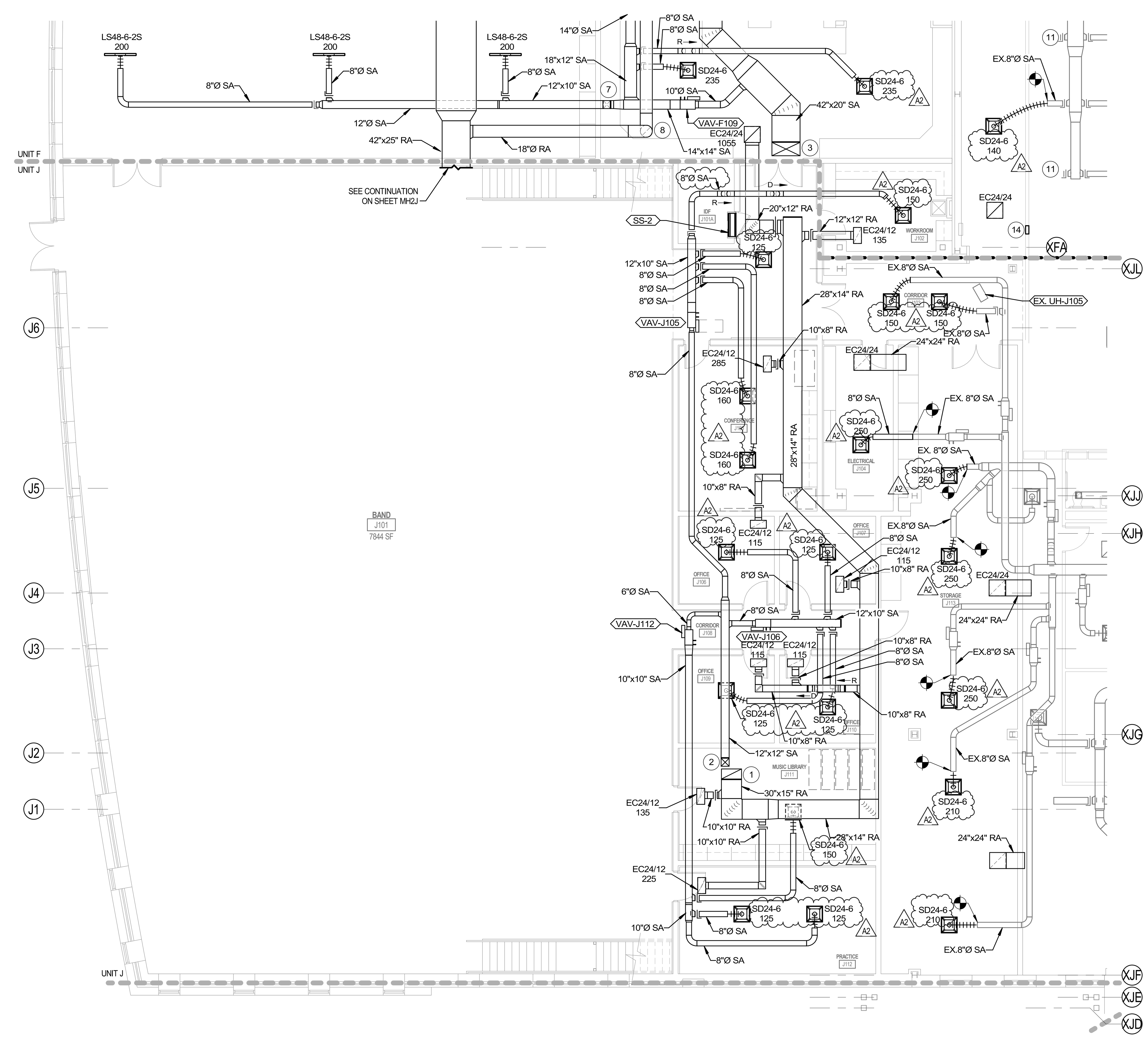
4 MECHANICAL ROOM DUCT SECTION
1/4" = 1'-0"



3 BAND ROOM DUCT SECTION
1/4" = 1'-0"



2 CHOIR MEZZANINE HVAC PLAN - UNIT J
1/8" = 1'-0"



1 FIRST FLOOR HVAC PLAN - UNIT J
1/8" = 1'-0"

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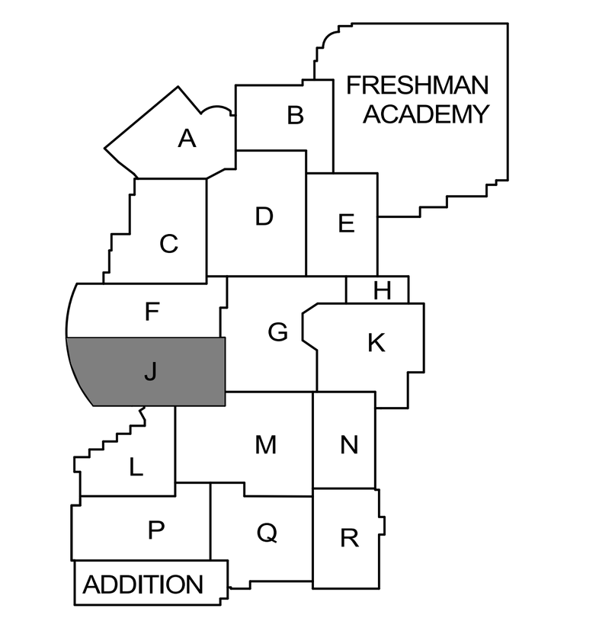

KEY PLAN

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2A

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

FIRST FLOOR & MEZZANINE HVAC PLANS - UNIT J

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

Project No: 2022043.00

Project Date: February 14, 2024

Drawing No: MH1J

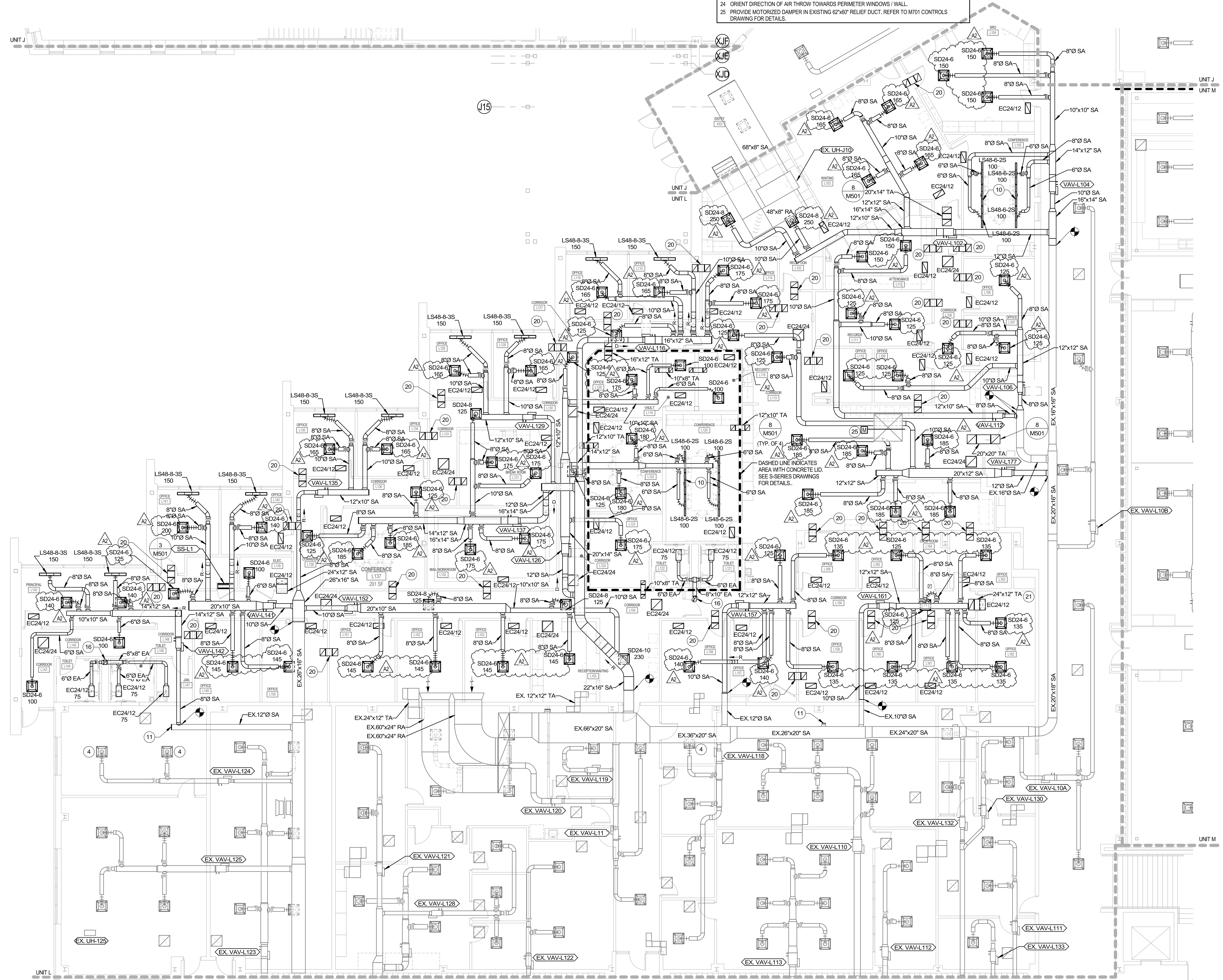
MECHANICAL HVAC PLAN NOTES

1. 30"x15" RETURN UP TO MECHANICAL ROOM.
2. 12"x12" SUPPLY UP TO MECHANCIAL ROOM.
3. 30"x20" SUPPLY DUCT UP.
4. ALIGN DIFFUSER / GRILLE TO NEW CEILING GRID.
5. VFD LOCATION. PROVIDED BY TCC.
6. TEMPERATURE CONTROL PANEL PROVIDED BY TCC.
7. SUPPLY DUCT RISE. SUPPLY DUCT ABOVE 21'-4" CEILING TO BE ROUTED BELOW RETURN DUCT.
8. RETURN DUCT DROP. RETURN DUCT THIS LOCATION TO BE ROUTED ABOVE SUPPLY DUCT.
9. DAMPER TO BE MOUNTED WHERE ACCESSIBLE FROM MEZZANINE.
10. LINEAR SUPPLY DIFFUSER, PROVIDE WITH BLANK OFF STRIP. NO AIRFLOW, FOR AESTHETICS ONLY.
11. CAP EXISTING DUCT.
12. UP TO INTAKE HOOD ON ROOF. MOTORIZED DAMPER INSTALLED IN VERTICAL RISER.
13. UP TO RELIEF HOOD ON ROOF. MOTORIZED DAMPER INSTALLED IN VERTICAL RISER.
14. PROVIDE 12"x10" OPENING IN TEMPORARY WALL FOR RETURN AIR PATH BACK TO AHU'S ON MEZZANINE ABOVE.
15. PROVIDE BLUE FILTER AT ALL AIR INTAKES DURING CONSTRUCTION PHASE.
16. 10"x8" EXHAUST DUCT UP TO EXHAUST FAN ON ROOF.
17. RELOCATED TEMPERATURE SENSOR, HANG AND SUPPORT FROM STRUCTURE TO MAINTAIN SPACE TEMPERATURE AND OPERATION OF EXISTING AIR HANDLING UNIT.
18. INTERNALLY LINE DUCT.
19. INTERNALLY AND EXTERNALLY LINE DUCT.
20. TRANSFER AIR DUCT 16x12 , SEE DETAIL 8 ON M501.
21. TRANSFER AIR DUCT FROM EGG CRATE GRILLE, ROUTE TO CORRIDOR PLENUM AND TURN UP TOWARDS ROOF. INTERNALLY LINE WITH 1" INSULATION AND INSTALL 1/2" WELDED MESH WIRE AT OPENING
22. ROUTE SUPPLY DUCT BETWEEN JOISTS PRIOR TO DUCT DROP.
23. PRESSURE SENSOR LOCATED ABOVE CEILING. TO MEASURE SPACE PRESSUR AND OUTSIDE PRSSURE DIFFERENTIAL
24. ORIENT DIRECTION OF AIR THROW TOWARDS PERIMETER WINDOWS / WALL.
25. PROVIDE MOTORIZED DAMPER IN EXISTING 62"x60" RELIEF DUCT. REFER TO M701 CONTROLS DRAWING FOR DETAILS.

MECHANICAL GENERAL NOTES

A. DARK LINES INDICATE NEW WORK.
B. LIGHT SOLID LINES INDICATE EXISTING MECHANICAL EQUIPMENT, DUCTWORK, PIPING AND/OR MECHANICAL ACCESSORIES TO REMAIN AS-IS. CONTRACTOR TO FIELD VERIFY ACTUAL EXISTING CONDITIONS PRIOR TO BIDDING.
C. MARK ALL LOCATIONS OF MECHANICAL EQUIPMENT ABOVE CEILING WITH ENGRAVED PLASTIC TAGS ON CEILING GRID BELOW.
D. RETURN AIR VALUES FOR AHU-J1 TO BE DETERMINED DURING SYSTEM BALANCING BY TEST AND BALANCE CONTRACTOR AND TCC TO ACHIEVE DESIGN SEQUENCE OF OPERATION.

#	Revision	Date
A2	ADDENDUM #2	02.21.2024



1 FIRST FLOOR HVAC PLAN - UNIT L
1/8" = 1'-0"

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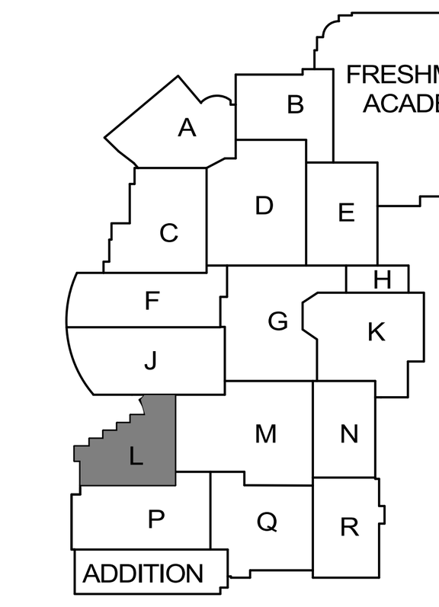

KEY PLAN

NORTH

VPS ARCHITECTURE
905 N. Capital Ave. - Suite 100 Indianapolis, Indiana 46204
P (317) 353-3281
www.VPSARCH.com

ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2A

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION INDIANAPOLIS, INDIANA

Drawing Title:

FIRST FLOOR HVAC PLAN - UNIT L

GABRIEL S. CURRLER
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No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

Project No: 2022043.00

Project Date: February 14, 2024

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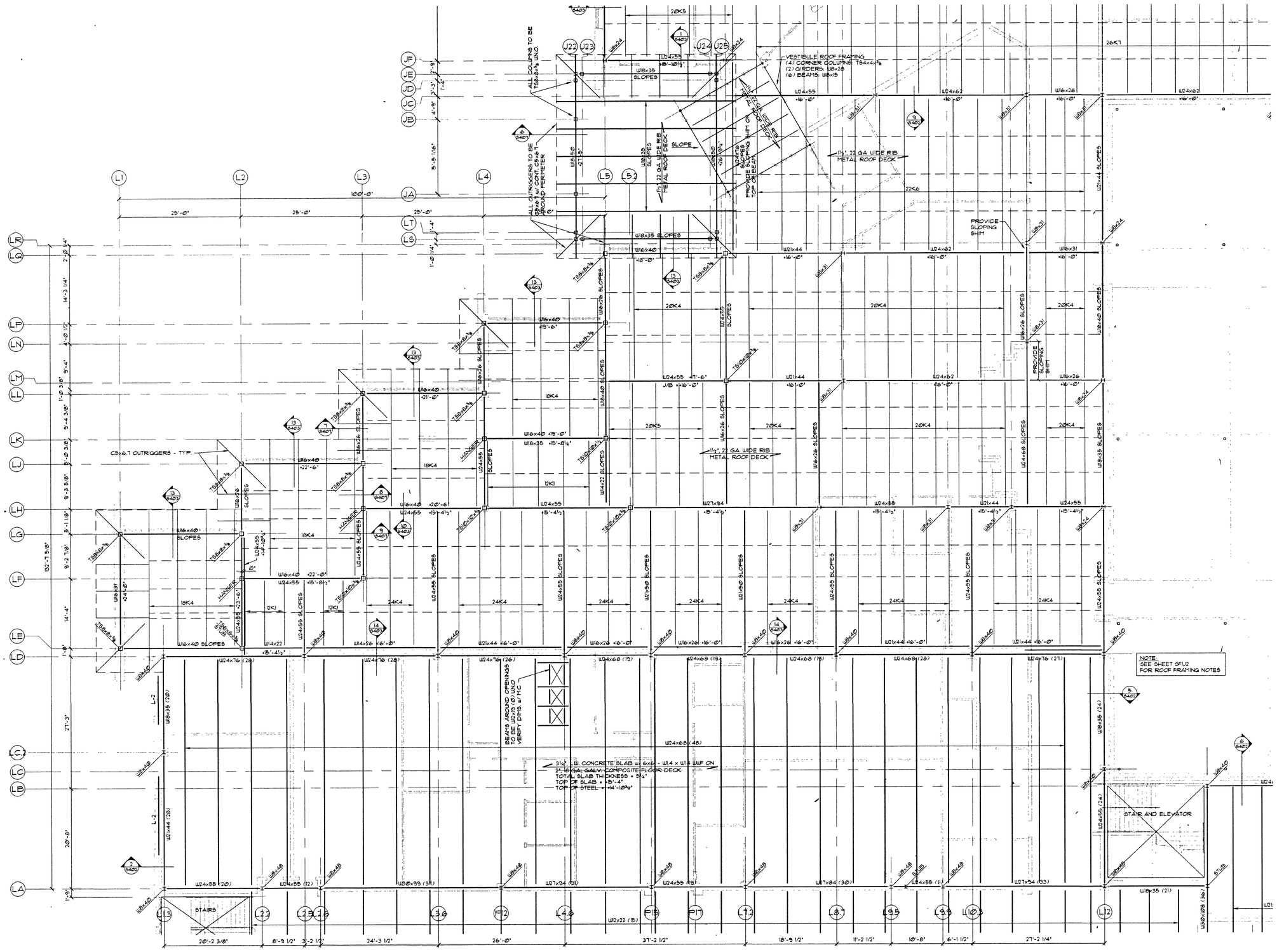

Roof Framing Plan - Unit L

Scale: 1/8" = 1'-0"

NORTH

SCHMIDT ASSOCIATES

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Project No 1999-A36
Project Date 08 . 04 . 00
Produced rmd
Revision Date

WESLEY B. HARRISON No 88041011 STATE OF INDIANA REGISTERED PROFESSIONAL ENGINEER

NORTH

A B C D E F G H J K L M N P Q R

Franklin Central
High School

Additions / Renovations

Unit L- Roof Framing Plan

SFIL2