ADDENDUM NO. 3

October 1, 2024

WHITING HIGH SCHOOL AUDITORIUM IMPROVEMENTS PROJECT
Whiting, IN 46394

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 September 6, 2024 by Fanning Howey Associates, Inc. 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 3-1 through ADD 3-2 and attached Addendum No. 3 from Fanning Howey Associates, Inc. dated September 30, 2024 and consisting of 2 pages, Specification Section 08 71 00 – Door Hardware, Specification Section 11 60 00 – Theater and Stage Equipment, revised Specification Section 26 09 61 – Theatrical Lighting, Control and Wiring Devices, and 22 drawings.

A. SPECIFICATION SECTION 00 00 20 - TABLE OF CONTENTS

1. **Add:**

   Specification Section 08 71 00 – Door Hardware
   Specification Section 11 60 00 – Theater and Stage Equipment

2. **Delete**:

   Specification Section 11 61 43 – Stage Curtains

B. SPECIFICATION SECTION 01 12 00 - MULTIPLE CONTRACT SUMMARY

A. BID CATEGORY NO. 01 – GENERAL TRADES

1. **Add:**

Specification Section 08 71 00 – Door Hardware
Specification Section 11 60 00 – Theater and Stage Equipment

2. **Delete:**

Specification Section 11 61 43 –Stage Curtains

A D D E N D U M N O. 3

Whiting High School – Auditorium Improvements

NHES – Water Heater Replacement

School City of Whiting
Whiting, Indiana

Project No. 224023.01 and 224098.00

Index of Contents

Addendum No. 3, 7 items, 2 pages
New Project Manual Sections: 08 71 00 – Door Hardware and 11 60 00 – Theater and Stage Equipment
Revised Project Manual Section: 26 09 61 – Theatrical Lighting, Control and Wiring Devices
New Drawing Sheets: AT.01 – Theatre Equipment Plans, TL1.2A – Unit A Second Floor Demolition Plan - Lighting and TL4.0 – Theatrical Lighting Details
Revised Drawing Sheets: Cover, S1.10, S1.20, S5.01, AD1.2A, AD1.3A, AD1.4A, AF2.01, AF6.01, AQ1.2A, AQ1.3A, AQ6.01, E0.01, ED1.1A, EL1.1A, EP1.1A, E4.01, TL1.3A, TL2.2A, and TL2.3A

Date: September 30, 2024

I hereby certify that this Addendum was prepared by me or under my direct supervision and that I am a duly registered Architect/Engineer under the Laws of the State of Indiana.

FANNING/HOWEY ASSOCIATES, INC.
ARCHITECTS/ENGINEERS/CONSULTANTS

Paul A. Miller, License No. AR10800161
Expiration Date: 12/31/2025

TO: ALL BIDDERS OF RECORD

ADDENDUM NO. 3 to Drawings and Project Manual, dated September 6, 2024, for Whiting High School – Auditorium Improvements and NHES – Water Heater Replacement for School City of Whiting, 1500 Center Street, Whiting, Indiana 46394; as prepared by Fanning/Howey Associates, Inc., Indianapolis, Indiana.
This Addendum shall hereby be and become a part of the Contract Documents the same as if originally bound thereto.

The following clarifications, amendments, additions, revisions, changes, and modifications change the original Contract Documents only in the amount and to the extent hereinafter specified in this Addendum.

Each bidder shall acknowledge receipt of this Addendum in his proposal or bid.

NOTE: Bidders are responsible for becoming familiar with every item of this Addendum. (This includes miscellaneous items at the very end of this Addendum.)

RE: ALL BIDDERS

ITEM NO. 1. AVAILABLE PROJECT INFORMATION

A. Existing Drawings: Existing Fire Protection Plans from 1984 Building Project have been provided as part of this Addendum. Existing Drawings are not part of the Construction Documents and have been provided for informational use only. The Contractor should visit the site and acquaint themselves with all existing conditions prior to bidding. All additional investigation must be coordinated with the Construction Manager and Owner.

ITEM NO. 2. PROJECT MANUAL, TABLE OF CONTENTS

A. Book 2, page 00 01 10 -1, Add DIVISION 08: Add Section 08 71 00 – Door Hardware.

B. Book 2, page 00 01 10 -2, DIVISION 11: Add Section 11 60 00 – Theater and Stage Equipment

C. Bood 2, page 00 01 10 -2, DIVISION 11: Delete Section 11 61 43 – Stage Curtains

ITEM NO. 3. NEW PROJECT MANUAL SECTIONS

A. New Project Manual Sections 08 71 00 – Door Hardware and 11 60 00 – Theater and Stage Equipment are included with and hereby made a part of this Addendum.

ITEM NO. 4. REVISED PROJECT MANUAL SECTION

A. Section 26 09 61 – Theatrical Lighting, Control and Wiring Devices has been revised, dated 9/30/24, and is included with and hereby made a part of this Addendum.

ITEM NO. 5. PROJECT MANUAL, SECTION 11 61 43 – STAGE CURTAINS

A. Delete this Section in its entirety.

ITEM NO. 6. NEW DRAWING SHEETS

A. Drawing Sheet No's.: AT.01 – Theatre Equipment Plans, TL1.2A – Unit A Second Floor Demolition Plan - Lighting and TL4.0 – Theatrical Lighting Details are included with and hereby made a part of this Addendum.

ITEM NO. 7. REVISED DRAWING SHEETS

A. Drawing Sheets Cover, S1.10, S1.20, S5.01, AD1.2A, AD1.3A, AD1.4A, AF2.01, AF6.01, AQ1.2A, AQ1.3A, AQ6.01, E0.01, ED1.1A, EL1.1A, EP1.1A, E4.01, TL1.3A, TL2.2A, and TL2.3A have been revised, dated 9/30/24, and are included with and hereby made a part of this Addendum. These Drawings supersede the original documents.

END OF ADDENDUM

SECTION 08 71 00 - DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes commercial door hardware for the following:

1. Swinging doors.

B. Door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.

C. Related Sections:

1. Division 08 Section “Door Hardware Schedule”.

D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. State Building Codes, Local Amendments.

E. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:

1. ANSI/BHMA Certified Product Standards - A156 Series.
2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
3. ANSI/UL 294 - Access Control System Units.
4. UL 305 - Panic Hardware.
5. ANSI/UL 437- Key Locks.

1.3 SUBMITTALS

A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing, fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
3. Content: Include the following information:

    a. Type, style, function, size, label, hand, and finish of each door hardware item.
    b. Manufacturer of each item.
    c. Fastenings and other pertinent information.
    d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    e. Explanation of abbreviations, symbols, and codes contained in schedule.
    f. Mounting locations for door hardware.
    g. Door and frame sizes and materials.
    h. Warranty information for each product.

4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

C. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.

D. Informational Submittals:

1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

1.4 CLOSEOUT SUBMITTALS

A. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

B. Project Record Documents: Provide record documentation of as-built door hardware sets in digital format (.pdf, .docx, .xlsx, .csv) and as required in Division 01, Project Record Documents.

1.5 QUALITY ASSURANCE

A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.

B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).

C. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.

F. Each unit to bear third party permanent label indicating compliance with the referenced testing standards.

G. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
3. Review sequence of operation narratives for each unique access controlled opening.
4. Review and finalize construction schedule and verify availability of materials.
5. Review the required inspecting, testing, commissioning, and demonstration procedures

H. At completion of installation, provide written documentation that components were applied according to manufacturer's instructions and recommendations and according to approved schedule.

1.6 DELIVERY, STORAGE AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.7 COORDINATION

A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.8 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
4. Electrical component defects and failures within the systems operation.

C. Warranty Period: Unless otherwise indicated, warranty shall be one year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 CYLINDERS AND KEYING

A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.

B. Keying System: Each type of lock and cylinders to be factory keyed.

1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.
2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
3. New System: Key locks to a new key system as directed by the Owner.

2.2 MORTISE LOCKS AND LATCHING DEVICES

A. Mortise Locksets, Grade 1 (Heavy Duty): Provide ANSI/BHMA A156.13, Series 1000, Operational Grade 1 Certified Products Directory (CPD) listed mortise locksets. Listed manufacturers shall meet all functions and features as specified herein.

1. Manufacturers:

a. Sargent Manufacturing (SA) - 8200 Series.

2.3 LOCK AND LATCH STRIKES

A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.

3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.

B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Strikes for Bored Locks and Latches: BHMA A156.2.
3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
4. Dustproof Strikes: BHMA A156.16.

2.4 CONVENTIONAL EXIT DEVICES

A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. Exit devices shall have a five-year warranty.
2. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
3. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer’s catalog and template book for specific requirements.
4. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
5. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.

    a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
    b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.

7. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2” wide stiles.
9. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
10. Rail Sizing: Provide exit device rails factory sized for proper door width application.
11. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.

B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed exit devices. Listed manufacturers shall meet all functions and features as specified herein.

1. Manufacturers:

a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
b. Sargent Manufacturing (SA) - 80 Series.

2.5 SURFACE DOOR CLOSERS

A. All door closers specified herein shall meet or exceed the following criteria:

1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.
2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.
4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.

B. Door Closers, Surface Mounted (Cam Action): ANSI/BHMA 156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, high efficiency door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be of the cam and roller design, one piece cast aluminum silicon alloy body with adjustable backcheck and independently controlled valves for closing sweep and latch speed.

1. Manufacturers:

a. Corbin Russwin (RU) - DC5000 Series.
b. Norton Rixson (NO) - 2800ST Series.
c. Sargent Manufacturing (SA) - 422 Series.

2.6 ARCHITECTURAL SEALS

A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.

B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.

C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.

1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NFPA 252, Standard Methods of Fire Tests of Door Assemblies.

D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.

E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

F. Manufacturers:

1. Pemko (PE).

2.7 FABRICATION

A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.8 FINISHES

A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware

C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.

B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.

1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. DHI TDH-007-20: Installation Guide for Doors and Hardware.
3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.

C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

D. Push Plates and Door Pulls: When through-bolt fasteners are in the same location as a push plate, countersink the fasteners flush with the door face allowing the push plate to sit flat against the door.

E. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

F. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

A. Field Inspection (Punch Report): Reference Division 01 Sections “Closeout Procedures”. Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.

1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

3.5 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.6 CLEANING AND PROTECTION

A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.

B. Clean adjacent surfaces soiled by door hardware installation.

C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SETS

A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

1. Quantities listed are for each pair of doors, or for each single door.
2. The supplier is responsible for handing and sizing all products.
3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.
4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.

B. Manufacturer's Abbreviations:

1. SA - SARGENT
2. NO - Norton
3. PE - Pemko
4. OT - Other

Hardware Sets

Set: 1.0

Doors: A-225B, A-230A

1	Rim Exit Device, Passage	8515 ETL	US32D	SA
1	Hardware	Existing to remain		OT

Notes:
On existing door and frame, field verify for proper operation.
Modify set to achieve direct retrofit.
Provide proper door/frame prep and plates as req'd.

Set: 2.0 - not used

1	Passage Latch	8215 LNL	US32D	SA
1	Hardware	Existing to remain		OT

Notes:
On existing door and frame, field verify for proper operation.
Modify set to achieve direct retrofit.
Provide proper door/frame prep and plates as req'd.

Set: 3.0

Doors: A-322

1	Cam Surface Closer	PS2800ST (Push side)	689	NO
1	Seals	S88BL		PE
1	Hardware	Existing to remain		OT

Notes:
On existing door and frame, field verify for proper operation.
Modify set to achieve direct retrofit.
Provide proper door/frame prep and plates as req'd.

END OF SECTION 08 71 00

SECTION 11 60 00 - THEATER AND STAGE EQUIPMENT

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Curtains and Rigging Systems:
   1. Counterweight rigging.
   2. Stage curtains and tracks.

1.2 SUBMITTALS

A. Product Data: Manufacturer's data sheets on each product to be used, including:
   1. Rated capacities, construction details, material descriptions, dimensions of individual components, profiles, and finishes.
   2. Product Schedule:
      a. Use designations indicated on the Drawings.
      b. Include room locations, dimensions, accessories, finishes, and project specific notes.

B. Shop Drawings:
   1. Submit component and project specific installation drawings, cut sheets, and schedules showing all information necessary to fully explain the design features, appearance, function, fabrication, installation, and use of system components in all phases of operation. Submit for approval before beginning any fabrication, installation, or erection.
   2. Include fabrication and installation details. Distinguish between factory and field work.
   3. Include plans, elevations, sections, attachments and work by other trades.
   4. Include wiring diagrams when applicable.

C. Coordination Drawings: Project-specific Coordination Drawings, indicating the following items drawn and coordinated with each other. Include information required by Installers of each item in order to coordinate the Work. Include the following:
   1. Relationship of items shown on separate Shop Drawings.
   2. Dimensions and required clearances of adjacent or related work.
   3. Order of assembly of separate items.
   4. Information required for interface with other trades and components, including mechanical, electrical, and communication work.

D. Samples for Initial Selection: For each type of stage curtain indicated; include color charts showing the full range of colors, textures, and patterns available, together with a 8-inch square sample (any color) of each type fabric.

E. Closeout Submittals:
   1. Operation and Maintenance Data: For adjusting, repairing and replacing components and accessories.
   2. Warranty: Submit manufacturer's warranty.
   3. As-Built Drawings: For completed work.
   4. Field Quality Control Reports: Documenting inspections and demonstrations of installed products and equipment.

1.3 QUALITY ASSURANCE

A. Curtain and Rigging Systems, Manufacturer Qualifications: Minimum 5 years experience in manufacture of similar products in use in similar environments, including project size, and complexity, and with the production capacity to meet the construction and installation schedule.

1. Theatrical rigging systems are specialized overhead lifting systems. Due to the highly specialized nature of theatrical rigging equipment, and the safety requirements of the equipment, the rigging products provided for this work shall be the products of a single rigging manufacturer for quality, consistency and ease of integration. Accessory items such as wire rope, fittings, and curtain tracks may be from other specialty manufacturers.
2. The rigging manufacturer shall have the following programs in place.
    a. The manufacturer shall have a product testing program, including determination of recommended working loads for products based on destructive testing and review by a licensed engineer.

B. Rigging Systems, Installer Qualifications: Manufacturer's authorized representative, trained and approved for installation of units required for this Project.
1. The Rigging Contractor shall be an approved rigging manufacturer or an authorized representative or dealer of an approved manufacturer. The contractor shall have been installing stage rigging systems for a period of five years or more, and shall have completed at least ten installations of this type and scope. The AHJ shall be the final judge of the suitability of experience.
2. The Rigging Contractor shall employ an Entertainment Technician Certification Program (ETCP) Certified Theatre Rigger. A Certified Rigger shall be either the project manager or site foreman, and be responsible for the overall project including the layout, inspection, and onsite user training.
3. Pre-Approved Rigging Installers
    a. Beck Studios - 1001 Tech Dr, Milford, OH 45150
    513-831-6650
    b. Associated Controls and Design - 6850 Guion Rd, Indianapolis, IN 46268
    877-298-3961
    c. Heartland Scenic Studio - 5329 Lindbergh Dr, Omaha, NE 68110
    402-341-9121
    d. The Chicago Flyhouse - 2450 W Hubbard St, Chicago, IL 60612
    773-533-1590
    e. Gopher Stage Lighting - 149 Thompson Ave E #130, West St Paul, MN 55118
    612-871-0138

C. Rigging Systems, Minimum Standards of Safety, the following factors shall be used:
1. Cables and Fittings: 8:1 Safety Factor.
2. Cable D/d ratio: Sheave tread diameter is the minimum D/d ratio per the "Wire Rope User Manual" or recommended by the wire rope manufacturer.
3. Tread Pressures: 500 lbs. for cast iron, 900 lbs. for Nylatron, 1000 lbs. for steel.
4. Maximum Fleet Angle: 1-1/2 degrees.
5. Steel: 1/5 of yield strength or per AISC Specification.
6. Bearings: Two times required load at full speed for 2000 hours.
7. Bolts: Minimum SAE J429 Grade 5 (ISO R898 Class 8.8), zinc plated.
8. Motors: 1.0 NEMA Service Factor.
9. Gearboxes: 1.25 Mechanical Strength Service Factor, 1.0 Gearing Service Factor.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in manufacturer's original unopened containers with manufacturer's labels attached. Do not deliver material until spaces to receive them are clean, dry, and ready for their installation. Ship to jobsite only after roughing-in, painting and other finishing work has been completed, installation areas are ready to accept work.

B. Handle and install materials to avoid damage.

1.5 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install materials until spaces are enclosed and weather tight, wet work in spaces is complete and dry, HVAC system is operating and maintaining ambient temperature at occupancy levels during the remainder of the construction period.

B. Field Measurements: Verify field measurements as indicated on Shop Drawings. Where measurements are not possible, provide control dimensions and templates.
   1. Coordinate installation and location of blocking and supports as requested.
   2. Verify openings, clearances, storage requirements and other dimensions relevant to the installation and final application.
   3. Where applicable, coordinate locations of electrical junction boxes.

C. Field Measurements: Verify field measurements as indicated on Shop Drawings. Where measurements are not possible, provide control dimensions and templates.
   1. Coordinate locations of electrical junction boxes.

D. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.6 WARRANTY

A. Special Warranty for Curtain Systems: Provide manufacturer's standard limited 3 year warranty against defects in materials or workmanship from the date of Substantial Completion. The warranty is contingent on inspection of the equipment and training of its use being provided annually by an Entertainment Technician Certification Program (ETCP) Certified Theatre Rigger at the Owner's expense. It is the responsibility of the end user to make arrangements for the annual inspection and training. Failure to obtain the inspection and training annually shall result in a one year warranty. The warranty shall not cover equipment that has become defective due to misuse, abuse, accident, act of God, alteration, vandalism, ordinary wear and tear, improper maintenance, or used not in a manner intended.

B. Special Warranty for Rigging Systems: Provide manufacturer's standard limited 3 year warranty against defects in materials or workmanship from the date of Substantial Completion. The warranty is contingent on inspection of the equipment and training of its use being provided annually by an Entertainment Technician Certification Program (ETCP) Certified Theatre Rigger at the Owner's expense. It is the responsibility of the end user to make arrangements for the annual inspection and training. Failure to obtain the inspection and training annually shall reduce warranty coverage to one year after substantial completion. The warranty shall not cover equipment that has become defective due to misuse, abuse, accident, act of God, alteration, vandalism, ordinary wear and tear, improper maintenance, or used not in a manner intended.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Requests for substitutions shall be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
   1. Manufacturers seeking approval shall submit the following:
      a. Project references: Minimum of 5 installations not less than 3 years old, of comparable size, scope and complexity of this project, complete with owner contact information.
      b. Sample warranty.
   2. Submit substitution request not less than required days prior to bid date.

3. Approval shall be indicated by issuance of written Addendum.
4. Approved manufacturers shall meet separate requirements of Submittals Article.
5. Manufacturers' products that are either listed as pre-approved in these Specifications or who have been granted approval as an alternate must still demonstrate all of the material performance and operational characteristics required by this Section.

B. Rigging Systems, Requirements for Approval: Other equipment manufacturers seeking approval shall submit the following information at least 2 weeks prior to the bid opening date. Approval of manufacturers shall be by addenda. Failure to submit any of the required information shall automatically disqualify the manufacturers from consideration of approval.
1. Evidence that the manufacturer has been in business for a minimum of ten years manufacturing stage equipment.
2. A listing of 10 equivalent installations, including:
   a. Name, address and telephone number of owner.
   b. Name, address and telephone number of architect.
   c. Scope of work.
3. A brief written description of the manufacturer's operation including facilities, financial capabilities, and experience of key personnel.
4. Written, third party evidence showing that the manufacturer has the testing, quality management and insurance programs required above in place.

2.2 COUNTERWEIGHT RIGGING

A. 12 Inch Nylon Head Block - Underhung.
1. Type: Single Purchase 12 inch (304.8 mm) Head Block:
2. The sheave shall be filled nylon with a 12 inch (304.8 mm) outer diameter. The sheave shall be equipped with a 1 inch (25.4 mm) diameter shaft and two tapered roller bearings.
3. Base angles shall be a minimum 2 inch x 1.5 inch x 1/4 inch (50.8 mm x 38.1 mm x 6.4 mm) angle with the short leg turned in.
4. Side plates shall be a minimum of 10-gauge (3.57 mm) steel, and shall fully enclose the sheave. Side plates shall be bolted and welded to the base angles for extra strength.
5. Auxiliary base angles shall be a minimum 2 inch x 1-1/2 inch x 1/4 inch (50.8 mm x 38.1 mm x 6.4 mm) angle with the short leg turned in. Angles shall be supplied with punched holes and 1/2 inch (12.7 mm) bolts, flat washers and lock nuts.
6. The block and associated mounting hardware shall have a recommended working load of at least 2,500 lbs. (1,134 KG).
7. Head blocks shall be grooved for six or eight 1/4 inch (6.4 mm) lift lines and one 3/4 inch (19.1 mm) hand line.

B. 8 Inch Nylon Universal Loft Block.
1. The sheave shall have an 8-1/2 inch (215.9 mm) outside diameter and shall be filled nylon. The sheave shall be equipped with a 17 mm (.67in) diameter shaft and two sealed, precision ball bearings.
2. Base angles shall be a minimum 1-1/2 inch x 1-1/2 inch x 3/16 inch (38.1 mm x 38.1 mm x 4.76 mm) angle punched with a universal hole pattern for easy installation.
3. Side plates shall be a minimum of 12-gauge (2.78 mm) steel, and shall fully enclose the sheave. Side plates shall be bolted to the base angles.
4. The block and associated mounting hardware shall have a recommended working load of at least 750 lbs. (340.2 KG), and shall be designed for use in either upright or underhung usage.
5. Loft blocks shall be grooved for one 1/4 inch (6.4 mm) lift line.

C. Idler Assemblies.
   1. Loft block idlers shall be provided to carry the weight of the cables and prevent rubbing against adjacent block side plates. They shall not be installed to carry line loads or to act as deflector or mule blocks.
   2. Idler assemblies shall consist of one or two 3-1/2 inch (88.9 mm) diameter, 3-line filled ABS idler pulleys mounted on the side of the loft block housing.
   3. The sheaves shall have 1/4 inch (6.4 mm) cable grooves and two sealed, precision ball bearings and shall ride on a 1/4 inch (6.4 mm) shaft inserted through the block housing.
   4. A 1/8 inch (3.2 mm) diameter bail shall mount in the housing and captivate the cables in the grooves.
   5. All nuts shall be of the nylon insert self-locking type.

D. Wire Guide - Arbor.
   1. Arbor shall be of specified length, or long enough to accommodate counterweights to balance its pipe batten and related equipment, whichever is longer.
   2. The arbor top shall be a fabricated weldment of 1/2 inch (12.7 mm) steel plate and 7 gauge (4.76 mm) formed side plates. The side plates shall be punched to receive 8 cables, and shall be tied together with a bolt and spacer providing a tie-off point for the hand line.
   3. The arbor bottom shall be 1/2 inch x 3 inch (12.7 mm x 76.2 mm) steel bar with counterweight rests to keep the weights from resting on the inner arbor rod nuts, and a forged steel eye for the hand line tie off.
   4. The top and bottom of the arbor shall be tied together by means of two 3/4 inch (19.05 mm) steel arbor rods. The arbor rods shall have three nuts at each end, the outermost being a lock nut.
   5. The top and bottom shall have smoothed and rounded 3/8 inch (9.52 mm) holes for 1/4 inch (6.4 mm) diameter guide wires located on 15 inch (381 mm) centers.
   6. Provide 12-gauge (2.78 mm) spreader plates (two minimum) on arbor rods so they can be spaced between counterweights on 2ft (609.6 mm) centers. Provide a retaining collar on each rod, each with a 1/4 inch (6.4 mm) set screw with red plastic knob for easy locking. The front retaining collar shall be welded to the top spreader plate.
   7. The arbor shall be guided by 1/4 inch (6.35 mm) diameter wire ropes when installed. The guides shall be tensioned with turnbuckles tightened to prevent excessive play in the arbor travel but not so tight as to over stress the attachment points of the cables.

E. Wire Guide - Locking Rail.
   1. Rope locks and index cards shall be mounted on a formed steel angle no smaller than 3-1/2 inch x 5 inch x 1/4 inch (88.9 mm x 127 mm x 6.4 mm).
   2. The onstage edge of the rail shall be sloped and punched to receive formed clips which hold plastic write-on index cards centered on the installed sets. Provide one numbered plastic write-on card for each installed set.
   3. Stanchions made from 1/2 inch x 3 inch (12.7 mm x 76.2 mm) flat bar and 3 inch (76.2 mm) channel shall be provided on 5 feet (1.52m) (maximum) centers. A 4 inch (101.6 mm) Channel shall be mounted along the stanchions to provide a lower bumper for wire guided counterweight arbors.
   4. Two angles on the stanchions shall be provided to support 855M floor blocks.
   5. The entire locking rail shall be designed and installed to withstand a minimum up load of 500 pounds per foot (226.8 KG per 304.8 mm) per AISC standards.

F. Floor Block: Nylon Wire Guide Floor Block.
   1. The sheave shall have an 8 inch (203.2 mm) outside diameter and shall be filled nylon. The sheave shall be equipped with a 17 mm (0.67 inch) diameter shaft and two sealed, precision ball bearings.

2. Base angles shall be a minimum 1.5 inch x 1.5 inch x 3/16 inch (38.1 mm x 38.1 mm x 4.76 mm) angle.
3. Side plates shall be a minimum of 12-gauge steel (2.78 mm), and shall fully enclose the sheave.
4. Base angles shall incorporate tie off points for guide wires.

G. Rope Lock.
1. The rope lock shall consist of an ASTM A536 ductile iron housing, cams and handle. The cams shall compress the rope, not bend it over tight radius corners that reduce its strength. The housing shall allow the use of a standard padlock to hold the handle in its closed position.
2. In order to reduce noise during operation, there shall be a rubber bumper in the housing to silence the handle when it is opened. The dogs that grip the rope shall be machined to fit closely to reduce noise and not use washers.
3. Adjustment for rope shall be from 5/8 inch to 1 inch (15.9 mm to 25.4 mm) by means of a 0.5 inch (12.7 mm) nylon tipped, socket head adjustment screw with lock nut at the rear of the housing.
4. The handle shall be 9 inch (228.6 mm) long with a nylon powder or vinyl dip coating. The handle shall be installed so that it passes two degrees past vertical to lock the hand line.
5. A coated, oval, welded steel ring shall be provided as a safety lock.
6. The rope lock shall mount to the locking rail with four 3/8 inch (9.5 mm) hex bolts and lock nuts.

H. Pipe Batten.
1. All battens shall be 1.5 inch (38.1 mm) nominal diameter, schedule 40 pipe in lengths as shown on the drawings or Bill of Materials. All joints shall be spliced with 18 inch (457.2 mm) long sleeves with 9 inch (228.6 mm) extending into each pipe and held by two 3/8 inch (9.52 mm) hex bolts and lock nuts on each side of the joint.
2. Each end shall be covered with a bright yellow, closed end, soft vinyl safety cap at least 4 inch (101.6 mm) in length.

I. Turnbuckles and Pipe Clamp.
1. Turnbuckles: Turnbuckles.
   a. Turnbuckles shall be drop forged and galvanized, and conform to ASTM F-1145 Type 1, Grade 1 standard. Turnbuckles shall be moused after adjustment to prevent loosening.
2. Pipe Clamps: Pipe Clamps.
   a. Full Pipe Clamps:
   b. Pipe clamps shall be made of two strips of 12 Ga. (2.780 mm) by 2 inch (50.8 mm) hot rolled steel formed to encompass and clamp the pipe batten to prevent its rotation. Corners shall be rounded.
   c. There shall be a 3/8 inch x 1 inch (9.525 mm x 25.4 mm) hex bolt with lock nut above and below the batten. A 5/8 inch (15.875 mm) hole in the top of each clamp half allows the attachment of cable, chain, or other fittings.
   d. Full pipe clamps shall have a manufacturer's recommended load rating of at least 750 lbs (340.2 KG).

J. Counterweight:
1. Standard 6 Inch Counterweight:
   a. Counterweights shall be 6 inches wide x 13 3/4 inches (349.25 mm) long, with U-shaped cutouts for the arbor rods. Counterweights shall be flame or laser cut steel. Each piece shall be free from slag and sharp edges. The thickness of counterweights shall not vary more than 3/16 inch (4.76 mm) from nominal dimension.

b. Opposite corners shall be notched for ease of handling. Alternate weights when stacking to provide finger holds when loading arbors.
c. Provide 25 percent of weight 2 inches (50.8 mm) thick and 75 percent of weight 1 inch (25.4 mm) thick for ease of balancing.

K. Hand Line - Suregrip.
1. Hand line shall be 3/4 inch (19.05 mm) in diameter, employing a 3-strand composite construction combining filament and staple/spun polyester wrapped around fibrillated polyolefin.
2. The hand line shall contain an identifying tape showing the manufacturer's name, phone number, website, and year of manufacture.
3. The hand line shall contain a red safety/wear indicator that becomes visible as the rope nears the end of its useful life.
4. The rope shall hold knots well, be easily spliced and be dense enough to allow it to be clamped in a rope lock without damage. Rope shall not be subject to rotting, mildew, resistance to UV, or moisture damage, nor shall its length be affected by changes in humidity.
5. Tape ends before cutting. Attach to arbor with two half hitches or bowline and tape end to standing line with electrical tape.
6. Hand lines shall be SureGrip rope.

2.3 STAGE CURTAINS AND TRACKS

A. Tracks:
1. Product: 280 Track.

B. Stage Curtains:
1. Description and Sizes: As shown on drawings.
2. Fabric Types:
a. Fabric: 25 oz. Charisma Velour, 100 percent polyester IFR velour, KM Fabrics, standard color to be selected.
b. Fabric: Seamless Sharkstooth Scrim, 100 percent Cotton.
1) Color: Black.
c. Fabric: Seamless Trevira Muslin, 100 percent polyester IFR, color - white.
3. Flame Resistance:
a. All Polyester fabrics are woven from fibers that are inherently flame retardant for the life of the fabric. These curtains never need to be re-treated for flame retardancy.
b. 100 percent cotton fabrics are to be chemically mill treated by an immersion process. This process lasts approximately 5 years and then shall be re-done for flame retardancy according to the requirements of the National Fire Protection Association's NFPA #701 together with dry cleaning.
c. A Certificate of Flame Resistance is to be provided for each fabric supplied. The certificates shall be issued by the fabric manufacturer or converter. Certificates issued by the supplier or fabricator are not acceptable.
d. Each curtain is to be labeled with a permanent tag giving the flame retardancy information and providing a suggested date for testing, if applicable.
4. Fabrication:
a. General: Curtains are to be fabricated in the sizes and fabrics shown in the curtain schedule. Curtains are to be stitched with thread matching the color of the curtain using a single needle lock stitched. No less than full widths of fabric are to be used in leg curtains. All fabrics with a grain or pile shall have all strips running in the same direction.
b. Fullness: Fullness as listed in the Curtain Schedule is to be in addition to allowances for seams, side hems and turn backs.

c. Pleats: Where fullness is indicated in the Curtain Schedule, pleats shall be box type on 12 inch (305 mm) centers. Valances and borders are to have their pleats arranged to conceal the seams.
d. Top Finish: 3-1/2 inch (89 mm) jute webbing or 3 inch (76 mm) Poly webbing shall be double stitched to the top of the curtain with 2 inch (50.8 mm) of face fabric turned under the webbing. Brass rustproof grommets shall be inserted in pleat centers (12 inch (305 mm)) centers on flat curtains.
e. Track-mounted curtains shall be supplied with plated wire S-hooks or CCF-2 curtain to carrier snap hooks. Batten-mounted curtains are to be supplied with 36 inch (914 mm) braided #4 cotton tie lines. Tie lines shall be black or white to best match the curtains with the center line in an alternate color to aid in hanging curtains.
f. Bottom Hems:
    1) Valances and borders shall have 4 inch (102 mm) bottom hems.
    2) All full height curtains shall have 6 inch (152 mm) bottom hems complete with separate interior chain pockets filled with #8 plated jack chains. Chain pockets shall be stitched so that the chain shall ride 2 inch (51 mm) above the finished bottom edge of the curtain.
    3) Scrims, drops and cycloramas shall have an additional strip of webbing with ties on 12 inch (305 mm) centers sewn to the back of the hem and shall be furnished with a 3/4 inch (19 mm) pipe batten, threaded and coupled every 10 feet-0 inch (305 mm).
g. Side Hems:
    1) All lined traveler curtains shall have 1/2 width of face fabric turned back at the leading edge.
    2) All other side hems shall be 2 inch (51 mm).
h. Lining: Lining, if required in the above listing, shall conform to the following requirements.
    1) Lining shall be in the same fullness as face fabric.
    2) Lining shall finish 2 inch (51 mm) shorter than face fabric.
    3) Lining shall be attached to the face fabric along the sides and bottom hems by 4 inch (102 mm) twill tape.

C. Heavy Duty Curtain Track:
1. 280 HD Curtain Track.
2. Track shall be of 14 ga (1.980 mm) galvanized construction, entirely enclosed except for the slot in the bottom. Each section of track less than 20 ft (6,096 mm) shall be in one continuous piece. Splice clamps shall be permitted for section lengths over 20 ft (6,096 mm).
3. Carriers shall be constructed of nylon, supported from two heavy-duty polyethylene wheels held in the ball bearing by a nickel-plated steel rivet. Each carrier shall be equipped with a free-moving swivel and sufficient trim chain to accommodate a curtain S-hook. Each carrier shall have a back-pack. Rubber washers shall be provided between each back-pack and carrier to reduce noise.
4. The Master Carrier block shall be constructed of plated steel having two cable clips to clamp the cord to the carrier. Four wheels in pairs identical to the single carrier above shall support the block.
5. Live and dead end pulleys shall be adjustable, equipped with oil-impregnated sleeve bearing wheels on adequately guarded plated steel housings. End stops at each track end and one adjustable, demountable floor pulley shall be furnished. Stretch-resistant, fiberglass center operating cord shall be 3/8 inch (9.5 mm) in diameter.
6. Track shall be rigged for bi-parting operation with a 36 inch (914.4 mm) center overlap. Hanging clamps shall be provided for suspension at 6 ft (1,829 mm) foot maximum intervals.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine installation areas and mounting surfaces with Installer present, for compliance with manufacturer's installation tolerances including required clearances, floor level, location of blocking and anchoring reinforcements, and other existing conditions that may affect installation or performance.

B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work. If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

C. Proceed with installation only after correction of unsatisfactory conditions.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION - GENERAL

A. Install manufactured units in accordance with manufacturer's recommendations, approved submittals, and in proper relationship with adjacent construction.

B. Clean exposed surfaces. Comply with manufacturer's written instructions for cleaning and touchup of minor finish damage.

C. Install stage curtain system according to curtain fabricators written instructions.

3.4 INSTALLATION OF RIGGING SYSTEMS

A. Equipment shall be installed by fully trained superintendents and workmen. The Rigging Contractor shall employ Entertainment Technician Certification Program (ETCP) Certified theatre Riggers. Certified Riggers shall, at a minimum, be used as the project manager and site foreman and be responsible for the overall project including the layout, inspection, and onsite user training.

B. Equipment shall be installed per plans and specifications. Equipment shall be aligned, adjusted, and trimmed for the most efficient operation, the greatest safety and for the best visual appearance.

C. Standards: Installation practices shall be in accordance with OSHA Safety and Health Standards and all local codes. All welding shall be performed in full compliance with the latest edition of the Structural Welding Code (ANSI/AWS D1.1).

D. Alignment: Mule blocks, cable rollers and guides shall be installed, as required, to provide proper alignment, to maintain specified fleet angles, and to prevent contact with other surfaces.

E. Attachments: All equipment shall be securely attached to the building structure.

F. Curtain Installation:
1. Track Hung: Secure curtains to track carriers with track manufacturer’s special heavy duty S-hooks or snape hooks.
2. Batten Hung: Secure curtains to pipe battens with trim and support cable tie lines or chains.

3.5 INSPECTION AND TESTING OF RIGGING SYSTEMS

A. Inspection: During the installation of equipment the Rigging Contractor shall arrange for access as necessary for inspection of equipment by the Owner's representatives.

B. System Pre-Testing By Rigging Contractor: On completion of installation the Rigging Contractor shall conduct a complete test of the system to ensure it is working properly and in conformance with this specification.

C. Completion Testing: Upon completing the installation, the Rigging Contractor shall notify the Owner or Owner's Representative, who shall schedule inspection and testing of the full rigging system. At the time of testing, the Rigging Contractor shall furnish sufficient workers to operate all equipment and to perform such adjustments and tests as may be required by the Owner's representative. All testing equipment and personnel shall be at the Rigging Contractor's expense. Any equipment, which fails to meet with approval, shall be repaired or replaced with suitable equipment and the inspection shall be re-scheduled under the same conditions as previously specified. At the time of these inspections, no other work shall be performed in the auditorium and stage areas. All temporary bracing, scaffolding, etc. shall be removed to permit full operation of, and access to, all equipment. Final approval shall be withheld until all systems have been thoroughly tested and found to be in full working order and meets requirements herein.
   1. Manual counterweight rigging shall be tested in accordance with ANSI E1.4 "Entertainment Technology Manual Counterweight Rigging Systems".
   2. Provide written recommendations to the Owner for necessary repairs or changes not included in the warranty. Provide a copy to the rigging equipment Manufacturer and in the Operations Manual.

D. The Owner or Owner's Representative shall witness and sign off on the inspection. A copy of the certificate shall be included in the permanent log turned over to the owner.

E. Upon completion of the work, the Rigging Contractor shall submit 3 copies of a comprehensive Operating and Maintenance Manual including as-built shop drawings, equipment descriptions, and parts lists. The Rigging Contractor shall provide a safety and instruction class with personnel designated by the owner to demonstrate and explain the operation and maintenance of the systems.

F. Signage with basic operating instructions and warnings shall be posted in the area where the equipment shall be operated. Signage shall be in conformance with ANSI-Z535.

3.6 RIGGING SYSTEMS, FOLLOW-UP INSPECTION

A. The Contractor shall return to site 12 months after system turnover and provide the following services:
   1. Inspection in accordance with ANSI E1.4-1 Entertainment Technology - Manual Counterweight Rigging Systems, ANSI E1.6-1 Entertainment Technology - Powered Hoist Systems, and ANSI E1.47 - Recommended Guidelines for Entertainment Rigging System Inspections.
   2. Make all required adjustments.
   3. Correct all warranty items and provide a written report to the Owner and Manufacturer.
   4. Provide written recommendations to the Owner and Manufacturer for necessary repairs or changes not included in the warranty.
   5. Conduct a rigging operation and safety class.

3.7 FIELD QUALITY CONTROL

A. Inspect installed work to verify compliance with requirements.
   1. Verify that HVAC work and electrical work complies with manufacturer's submittals and written installation requirements.
   2. Perform installation and startup checks as recommended by manufacturer.
   3. Prepare inspection reports and submit to Architect.

3.8 DEMONSTRATION

A. Train Owner's personnel to adjust, operate, and maintain equipment. Turn over keys, tools, and operation and maintenance instructions to Owner.

3.9 CLEANING AND PROTECTION

A. Repair or replace defective work as directed by Architect upon inspection.

B. Clean surfaces. Touch up marred finishes, or replace damaged components that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by manufacturer.

C. Protect installed products from damage, abuse, dust, dirt, stain, or paint until completion of project. Do not permit use during construction.

END OF SECTION

SECTION 26 09 61 – THEATRICAL LIGHTING CONTROLS, LIGHTING INSTRUMENTS, AND WIRING DEVICES

PART 1 - GENERAL

1.1 SYSTEM DESCRIPTION AND WORK INCLUDED:

A. The systems shall be designed for the control of theatrical and shall consist of factory pre-wired connector strips and processing rack enclosures containing control electronics, power supplies, breakers, and terminals.

B. The Theatrical Contractor, as part of the work of this section, shall provide, install and test a complete lighting control system as specified herein for areas indicated on the drawings and circuit schedules. The Theatrical Contractor shall coordinate with the Electrical Contractor to ensure that all necessary components are furnished and installed to provide a complete system.

C. The Electrical Contractor shall furnish all conduit, wire, connectors, hardware and other incidental items necessary for the complete and proper operation of the lighting control system

D. The Theatrical and Electrical Contractor shall coordinate all work described in this section with all other applicable plans and specifications, including but not limited to:

1. General Conditions
2. Electrical Section General Provisions
3. Conduit
4. Wire and Cable
5. Manufactured Wiring Assemblies
6. Theatrical Rigging Systems

E. This project must be completed within a specific time frame. Refer to architect's construction schedule requirements for details. Electrical Contractor will be responsible for ensuring that all required processes occur in a timely manner that permits installation and completion of project within the specified time.

1.2 REFERENCES

A. ANSI/NFPA 70 - National Electrical Code

1.3 SUBMITTALS

A. Manufacturer shall provide one set of full system submittals. Submittals shall include:

1. Full system riser diagram(s) illustrating interconnection of system components, wiring requirements, back box sizes and any special installation considerations.
2. Full set of printed technical data sheets.

3. Detailed set of circuit and control schedules, including complete list of any and all deviations from specifications.

B. Submit manufacturer's installation instructions under provisions of Section 26 05 00.

1.4 PROJECT RECORD DOCUMENTS

A. Submit project record documents under provisions of Section 26 05 00.

B. Accurately record location of dimmer rack and control enclosures. Include description of switching and circuiting arrangements.

1.5 OPERATION AND MAINTENANCE DATA

A. Submit operation and maintenance data under provisions of Section 26 05 00.

B. Include replacement part numbers.

1.6 QUALITY ASSURANCE

A. Manufacturer shall have a minimum of 10 years continuous experience in the manufacturing of theatrical lighting control equipment.

B. Proposed equipment shall be UL and C-UL listed, and/or CE marked (where applicable) and bears the appropriate labels.

1.7 WARRANTY

A. Manufacturer shall warrant products under normal use and service to be free from defects in materials and workmanship for a period of two years from date of commissioning.

1.8 COMMISSIONING

A. System shall be completely commissioned by a manufacturer-authorized engineer. All loads shall be tested live for continuity and freedom from defects and all control wiring shall be tested for continuity and connections prior to energizing the system. The commission shall include demonstrating and educating the owner's representative(s) on the system capabilities, operation and maintenance.

B. The contractor shall notify the architect/engineer and owner's representative ten working days prior to scheduled commissioning date. Training of the owner's representative(s) on the system capabilities, operation and maintenance shall be broken out into 3 days of training. At least on of these days will be scheduled more than 2 weeks after initial commissioning.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. All control equipment and luminaires herein specified shall be manufactured by (or by prior-approved manufacturer):

1. Electronic Theater Controls

2.2 POWER CONTROL

A. Echo Relay Panel Mains Feed (ERP) by ETC Inc. Control-oriented power center. Supports up to 24 relays or dimmers with integral branch breakers. Integrated DMX and Ethernet connectivity. Optional 0-10 V, DALI, and contact input control cards. UL 924 listed for emergency lighting control.

1. Construction: Steel, 16 ga.

   a. Finish: Black, fine-textured, scratch-resistant powder coat.

   b. Door options available for surface or recess mount applications.

   c. Flush-Mount Door: Extends 1 inch beyond all panel edges to hide wall cutout.

   d. Removable Outer Panel: Includes integral locking door to limit access to electronics, breakers, and local relay overrides.

   e. Full Front Access: No side clearance required.

   f. Removable Covers: For access to Class 1 and 2 wiring.

2. Thermal:

   a. Temperature: 32 to 104 degrees F (0 to 40 degrees C).

   b. Humidity: 10 to 90 percent, non-condensing.

3. Electrical:

   a. Main Feed Power Input:

   b. Power: Single-Phase 3-Wire Plus Ground: 120/240 V.

   c. Separate Wiring Chambers: For Class 1 and Class 2 terminations.

   d. Max Input Current: 200 Amps.

   e. Main Circuit Breaker: 200 Amps.

   f. Branch Breaker Panel: Supports 3-phase or 1-phase sub-feed of a second panel up to 100 Amps.

   g. Short-Circuit Rating: 10,000 to 42,000 Amps symmetrical.

   h. Branch Circuit Breakers: 1, 2, or 3 pole. 10, 15, and 20 A. Rating: 80

percent.

4. Inrush-pulse tolerance: 8 to 10.5 times rated current for half-cycle at 60 Hz.
5. Power Control Cards:
    a. ERP 1PR: Single-pole, 20 A relay card.
    b. ERP-DIM: Single-pole, 300 W phase-adaptive dimmer card.
    c. ERP-DIM-MLV: Single-pole, 300 W forward-phase dimmer card.
6. Relay Ratings:
    a. Electronic Ballast: 16 A.
    b. Isolation: 4000 V RMS.
    c. State: Latching; mechanically held.
    d. Life: 100,000 cycles at full resistive load.
    e. Current-Reporting Accuracy: Plus or minus 5 percent of connected load.
7. Dimmer Ratings:
    a. ERP-DIM:Phase-adaptive (default reverse-phase), 300 W resistive or electronic load capacity.
    b. ERP-DIM-MLV: Forward-phase, 300 W magnetic or resistive load capacity.
8. Control:
    a. User interface:
        - Graphical display with LED backlight.
        - Button Interface With: 0 to 9 number buttons.
        - Navigation Buttons: Up, down, back and enter.
        - "Light bulb" test button for local preset activation, sequence and set level overrides.
        - USB interface: For upload of setup and software updates.
    b. Control Wiring Terminations:
        - Control Terminals: Accept 12 AWG wire.
        - Control Wiring Exiting Panel: Class 2.
        - Control Terminations: Utilize removable connectors.
    c. Relay Modes: Normal (priority/HTP), latch-lock or last-action.
    d. Configurable DMX on/off threshold.
    e. Status feedback for breaker state, relay state, current drawer circuit, phase voltage and energy usage per circuit.
    f. Presets and sequences:
        - Sixteen spaces with 64 presets per space configurable

via local UI.

- One 16 step sequence per space.

g. UL924 Listed emergency control bypass.

h. Configurable Data-Loss Behavior: Play preset; Hold last look; Wait and fade.

9. Accessories:

a. Dimming 0-10 V: 24 outputs of 0-10 V sink dimming control rated for 100 mA per output.

b. Contact Input: 24 dry contact inputs used to:

- Trigger Presets and Sequences: Play at priority configured for architectural sources.
- Control of One or More Outputs. Priority of outputs is configurable. If no configuration, the last action takes precedence.

c. DALI Control Loops: 24 broadcast DALI controls. Each loop supports 64 ballasts. External DALI power supply required.

d. RideThru Option: Short-term power backup of control electronics.

- Automatically engages when power is lost.
- Recharges during normal power operation.

e. Tamper-Proof Hardware Kit: Special screw heads prevent access to panel interior.

10. Standards Compliance: Listed: cULus, UL508, UL67, and UL924. ANSI E1.11 DMX512-A and ANSI E1.31 streaming ACN.

11. Quantities and configurations of Echo Relay Panel Mains Feed enclosures, power control cards, and accessories to be supplied as shown on project drawings.

2.3 LIGHTING CONTROL CONSOLE – AUDITORIUM

A. ETC-ION XE

1. Dual DMX-512 universes.
2. 40 Fader wing.
3. All associated hardware and software to form a complete system.
4. Training of owner's rep for a minimum of 4 hours onsite. Training shall include use of preset scenes, as well as all necessary skills to create complete scenes and cue lists.

2.4 REMOTE PLUG-IN STATIONS

1. General: The remote plug-in stations shall consist of the appropriate connectors required for the system in use. These stations shall be available with 'NET 3' protocol and/or DMX output.

B. Connector Options:

1. The following standard components shall be available for Remote Plug-in Stations:

a. 5-Pin female XLR connectors for DMX output/input.
b. Duplex Edison power receptacle.

2.5 BUTTON STATIONS

1. Preset/fader stations shall operate using programmable buttons and/or faders as indicated on drawings.

2. Integral Pilot Light or LED: Indicate that controls are active or powered by being on continuously when powered or when pushbuttons are actuated.

3. Labeling of buttons and faders shall be engraved/screened by manufacturer, using approved text returned with shop drawing submittals.

4. Station control components shall be designed to operate standard default or custom system functions. Function options include: preset selection.

5. Stations shall utilize RS-232 standard protocol and shall be appropriate DIN-style connector

6. See theatrical lighting drawings for control station details.

2.6 LIGHTING INSTRUMENTS

A. See luminaire schedule for lighting instrument specifications.

2.7 STAGE LIGHTING CIRCUIT RACEWAYS AND BOXES

A. Stage lighting circuits that are not wall-mounted shall be supplied in raceway devices that are attached to the rigging system truss and battens, or structure as indicated in the drawings. These raceway wiring devices shall be UL listed and labeled, and have the following features:

B. Fabricated from galvanized steel or aluminum wireway, not to exceed 7”H x 4”D x length as specified on drawings, black powder coat finish. UL 1573 compliant with interlocking covers.

C. Fully wired at factory in segments ready for final assembly on jobsite, with line and control terminations at one end of the device as shown on drawings.

D. Line terminations shall be with compression or tension clamp terminals listed for 12-8 gauge wire.

E. Where applicable, control terminations and distribution shall be within a portion of the raceway that is separated by a voltage barrier from the line portion.

F. Devices less than 5’ in length shall not be segmented.

G. Clamp brackets for suspension shall be fabricated from ASTM A36 steel, and shall use grade 5 rated hardware. Spacing shall be no greater than 5' on center or as recommended by manufacturer.

H. Load connectors shall be UL listed 20 ampere Type-A Parallel blade U-Ground NEMA 5-20R Plug, spaced as called out on drawings, and shall be recessed as indicated.

I. Wall-mounted outlet box wiring devices shall be UL listed and labeled, and have the following features:

J. Fabricated from galvanized steel or aluminum, not to exceed 7"H x 4"D x 14"L, finished in black powder coat. Surface mount boxes shall have covers flush to backbox with no protruding edges. Recessed box covers shall flange over the wall opening by no less than ½" per side.

K. Outlet boxes, whether flush or surface mount, shall be supplied with backbox assembly.

L. Fully wired at factory with feed-through terminal strips for line connection to box. Line terminations shall be with compression or tension clamp terminals listed for 12-8 gauge wire.

M. Load connectors shall be UL listed 20 ampere Type-A Parallel blade U-Ground NEMA 5-20R Plug, spaced as called out on drawings, and shall be flush-or pigtail-mounted as indicated. Pigtails shall be of the length indicated, and shall be fabricated of 12/3 SOW type cable with strain relief.

2.8 CIRCUIT LABELING

A. All stage lighting wiring devices containing load connectors shall have circuit numbering clearly labeled with 2" white or yellow numbers as follows:

B. Raceway circuits clamped to box truss: numbers located on upstage side of raceway strip, directly above outlet. Raceway circuits clamped to pipe grid (TV): numbers on both sides of raceway, directly above pigtail.

C. DMX output devices shall be labeled with 1" letters adjacent to the connector plate, with copy as follows: "DMX OUT"

2.9 POWER AND DMX DISTRIBUTION (CONNECTOR STRIPS)

A. General

1. Connectors shall be available as 20A, 50A and 100A grounded stage pin, 20A twist lock and 20A "U" ground (dual rated "T-slot"); other connectors shall be available as specified

2. Pigtails shall be three-wire type "S" jacketed cable sized for the maximum circuit ampacity

a. Pigtails with 20 amp stage pin connectors shall be terminated using 12 gauge 4 way indent crimp (with inspection window) type where the wire is inserted and crimped directly in the socket

3. Terminations for pigtail connectors shall utilize feed- through terminals individually labeled with corresponding circuit numbers

    a. 20 amp circuits shall use screwless tension clamp terminals listed for 20 – 8 gauge wire

    b. 50 amp circuits shall use compression terminals listed for 10 – 1 gauge wire

    c. 100 amp circuits shall use compression terminals listed for 8 – 2/0 gauge wire

    d. Terminals that place a screw directly on the wire are not acceptable

4. Outlet and pigtail boxes shall be supplied with appropriate brackets and hardware for mounting as shown on the drawings

    a. Standard mounting options shall include pipe or wall mounting

    b. Brackets shall be made from ASTM A36 steel

    c. Hardware shall be ASTM A307 grade 5

5. A low voltage distribution system shall be available to incorporate DMX, Ethernet or other protocols as specified in the power distribution box

    a. A voltage barrier shall be used to separate the low voltage wiring for the electrical circuits

6. Power distribution equipment shall be listed by a nationally recognized test lab (NRTL)

B. Physical:

1. Outlet and pigtail boxes shall be 6.25” H x 3.3” D and fabricated from 18 gauge galvanized steel and finished in black fine-texture powder coat paint
    a. Covers shall be fabricated from 16-gauge galvanized steel

2. Outlet and pigtail boxes shall be available in any length specified in increments of 3-inches with a maximum length of up to 3-feet

3. Pigtails and outlets shall be spaced on 18” centers or as otherwise specified

4. Outlets shall be mounted on individual 3” panels

5. Circuits shall be labeled with 1.25” lettering. Circuit labeling options shall include:

    a. Circuits shall be labeled on the front side of the connector strip with white lettering on black background labels

    b. Circuits shall be labeled on front and back sides of the connector strip with white lettering on black background labels

c. Circuits shall be labeled on the front side of the connector strip with engraved lamacoid labels utilizing white lettering on black background labels

d. Circuits shall be labeled on the front and rear sides of the connector strip with engraved lamacoid labels utilizing white lettering on black background labels

e. Circuits shall be labeled on one side of the connector strip using individual circuit cover plates with lettering engraved in the cover and filled with the specified color

f. Circuits shall be labeled using specified labeling per plans and drawings

C. Outlet and pigtail boxes shall be supplied with appropriate brackets and hardware for mounting as shown on the drawings.
1. Standard mounting options shall include pipe or wall mounting.
2. Brackets shall be made from ASTM A36 steel.
3. Hardware shall be ASTM A307 grade 5

D. Refer to drawings and schedules for number of circuits served at each location.

2.10 STAGE RACEWAY MULTICABLE

A. Multiconductor cable shall use conductors of no less than #12 gauge stranded copper, with no less than one ground conductor per cable length. Number of conductors shall be determined by contractor as appropriate to serve each device.

B. Theatrical contractor shall coordinate number of cables, length, and installation with rigging contractor, so that appropriate cable pickups can be furnished and installed for each cable group.

C. Each multicable shall have a Kellums or equivalent basket-style strain relief located at the raceway and at the junction box. In addition, basket strain relief at the junction box shall be independently secured to the building structure to avoid excessive strain on the junction box.

D. If more than one multicable serves a raceway device, bundle cables together using electrical tape and wire tie or other appropriate means, on 8’-10’ intervals to avoid cable separation and possible fouling on adjacent rigging or equipment. Where applicable, tape control signal cable to multicable independently of bundle so that control cable jacket is not damaged and wire is not pinched.

2.11 GRIDIRON JUNCTION BOXES

A. Boxes shall be fabricated from cold-rolled steel or aluminum, with nema-1 screw cover enclosure. They shall be UL listed and labeled, and shall be finished in matte black powder coat.

B. Boxes shall be of appropriate size to accommodate the number of circuits being served for each location (not to exceed 48). All boxes shall be no more than 4” indepth.

C. Each box shall contain feed-through terminal strips in a quantity to provide up to 48 circuit wire pairs. Terminations shall be with compression or tension clamp terminals listed for 14-8 gauge wire. Terminal strips shall have provision for labeling of circuit numbers.

D. Each box shall contain a ground lug sized for #10-#4 wire, bonded to the box. In addition, ground terminal strip(s) sized for #14-#8 wire shall be bonded to the box, with sufficient terminals for the number of circuits fed through the box.

E. Refer to drawings and schedules for number of circuits served at each location.

PART 3 - EXECUTION

3.1 PREPARATION

A. Review equipment submittals prior to installation and electrical rough-in. Verify location, size, and type of devices. Coordinate details of equipment connections with supplier and engineer.

3.2 INSTALLATION

A. It shall be the responsibility of the Contractor to receive and store the necessary materials and equipment for installation of the control system. It is the intent of these specifications and plans to include everything required for proper and complete installation and operation of the dimming system, even though every item may not be specifically mentioned. The contractor shall deliver on a timely basis to other trades any equipment that must be installed during construction.

B. The Contractor shall be responsible for field measurements and coordinating physical size of all equipment with the architectural requirements of the spaces into which they are to be installed.

C. The Contractor shall install all lighting control and dimming equipment in accordance with manufacturer's approved shop drawings.

D. All branch load circuits shall be live tested before connecting the loads to the dimmer system load terminals.

E. Use wire and cable with insulation suitable for temperatures encountered in heat- producing equipment where appropriate.

F. For catwalk, pipe grid, and wall-mounted devices, supply all line and signal wiring in conduit per Division 26 specifications.

G. Make wiring connections in pre-wired devices in accordance with manufacturer's instructions

3.3 MANUFACTURER'S SERVICES

A. Manufacturer shall provide factory authorized technician to confirm proper installation and operation of all system components.

B. Upon completion of the installation, including testing of load circuits, the contractor shall notify the theatrical system manufacturer that the system is available for formal checkout.

C. No power shall be applied to the system unless specifically authorized by written instructions from the manufacturer.

D. The Contractor shall be liable for any return visits by the factory engineer as a result of incomplete or incorrect wiring.

E. Commissioning agent shall verify all scenes with ownership and designer before formal check out. All scenes defined on plans shall be subject to change in field during commissioning and fine tuning.

F. Upon completion of the formal checkout, the factory engineer shall demonstrate operation and maintenance of the system to the owner's representative(s). A minimum allowance of 3 days shall be made for programming and training by the factory engineer. Owner will have the option of videotaping all training sessions. Manufacturer shall provide competent factory-authorized technician to train Owner personnel in the operation, maintenance and programming of the lighting control system. Submit training plan with notification seven (7) days prior to proposed training dates.

3.4 EXAMINATION

A. Verify that surfaces are ready to receive work.

B. Verify field dimensions are as shown on the drawings.

C. Verify that required utilities are available, in proper location, and ready for use.

D. Beginning of installation means installer accepts existing conditions.

E. Verify that equipment is properly wired, terminated, and ready for electrical connection and energization.

3.5 INSTALLATION NOTES

A. Install in accordance with manufacturer's instructions.

B. All wiring shall be installed in conduit.

C. Allow space for adequate ventilation and circulation of air.

END OF SECTION 26 09 61

CONSTRUCTION DOCUMENTS

WHITING HIGH SCHOOL - AUDITORIUM IMPROVEMENTS

1751 OLIVER STREET
WHITING, IN 46394

224023.01

09-06-2024

OWNER

SCHOOL CITY OF WHITING

ARCHITECT

FANNING HOWEY ASSOCIATES INC.
350 E NEW YORK ST, STE#300,
INDIANAPOLIS, IN 46204
317-848-0966

STRUCTURAL ENGINEER

JPS CONSULTING ENGINEERS
9365 COUNSELORS ROW, SUITE 116
INDIANAPOLIS, IN 46240
317-617-4270

TECHNOLOGY ENGINEERS

IMEG
8900 KEYSTONE CROSSING
SUITE 210
INDIANAPOLIS, IN 46240
317-848-5045

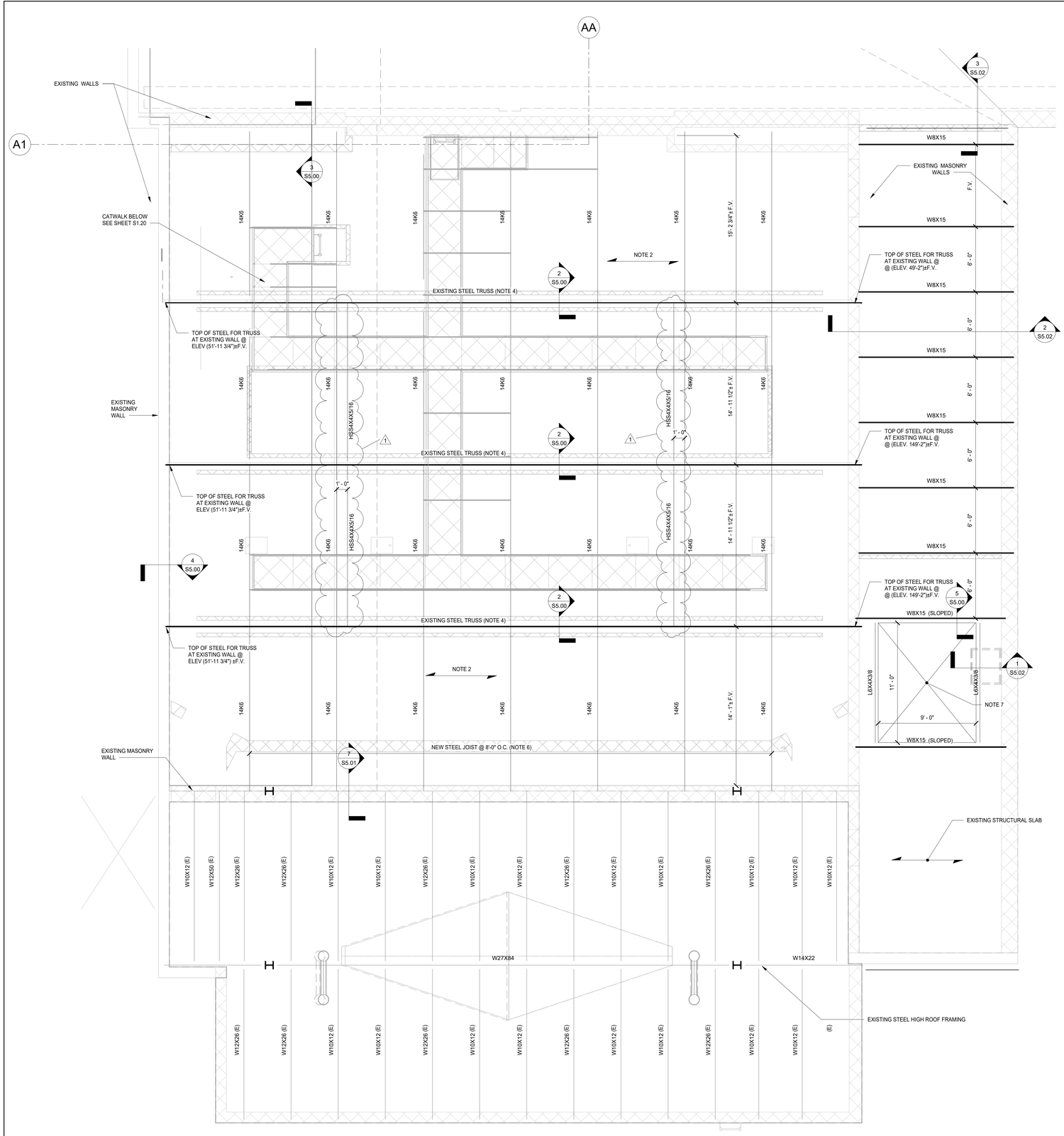
CONSTRUCTION DOCUMENTS

PAULA MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09-06-2024

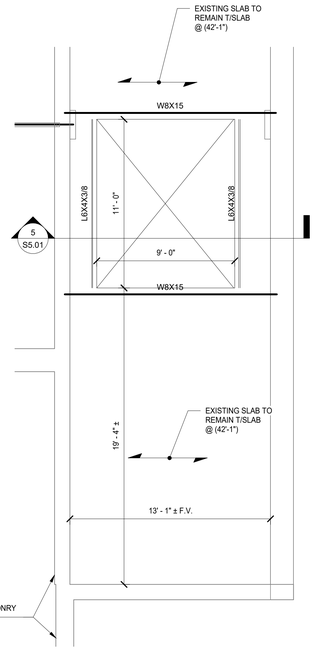
COVER SHEET

COVER



1 S1.10 UNIT A FRAMING PLAN
1/4" = 1'-0"

PLAN NOTES:
1. REFER TO SHEETS S0.01 - S0.02 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. ROOF DECK SHALL BE 3" 20 GAGE WIDE RIBBED GALVANIZED METAL ROOF DECK.
3. THE GC SHALL COORDINATE THE SIZE AND LOCATION OF ALL ROOF PENETRATIONS WITH THE VARIOUS TRADES.
4. SEE S5.00-01 FOR EXISTING STEEL TRUSS ELEVATION AND REINFORCEMENT REQUIREMENTS.
5. VERIFY CATWALK LOCATION WITH ARCH DRAWINGS.
6. THE JOIST SEAT FOR NEW JOISTS SHALL BE LOCATED OVER THE PANEL POINT ON THE EXISTING STEEL TRUSS. THIS SHOULD BE AT 6'-0" O.C. ± FIELD VERIFY.
7. INSTALL STEEL SUPPORT STRUCTURE, CUT OPENING THROUGH EXISTING ROOF SLAB, INSTALL MECHANICAL EQUIPMENT, INFILL OPENING WITH 3" METAL ROOF DECK PER S5.02-01.
8. THE SEATS FOR ALL NEW JOISTS ARE TO BE 5" TALL.



2 S1.10 MECHANICAL ROOM CAP FRAMING PLAN
1/4" = 1'-0"

PLAN NOTES:
1. REFER TO SHEETS S0.01 - S0.03 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. THIS PLAN SHOWS NEW FRAMING AROUND A NEW MECHANICAL OPENING THROUGH THE EXISTING SLAB DIRECTLY ABOVE THE MECHANICAL ROOM.
3. THE G.C. SHALL COORDINATE ALL OPENING SIZES AND LOCATION WITH THE VARIOUS TRADES DIMENSIONS SHOWN ARE FOR BIDDING PURPOSES.

WHITING HIGH SCHOOL - AUDITORIUM IMPROVEMENTS

1751 OLIVER STREET
WHITING, IN 46394

SCHOOL CITY OF WHITING

ARCHITECT

FANNING HOWEY

317-848-0966 WWW.FHAI.COM
350 E NEW YORK ST, STE#300, INDIANAPOLIS, IN 46204

JPS CONSULTING ENGINEERS, LLC
9365 Counselors Row, Suite 116
Indianapolis, IN 46240

ph 317.617.4270
www.jpsconsultingengineers.com

A B C

KEY PLAN N

CONSTRUCTION DOCUMENTS

CHRISTOPHER E. SNYDER REGISTERED No. 10302023 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT MANAGER: CES
DRAWN BY: JCB
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09.05.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 3	09.30.2024

UNIT A ROOF FRAMING PLAN

S1.10

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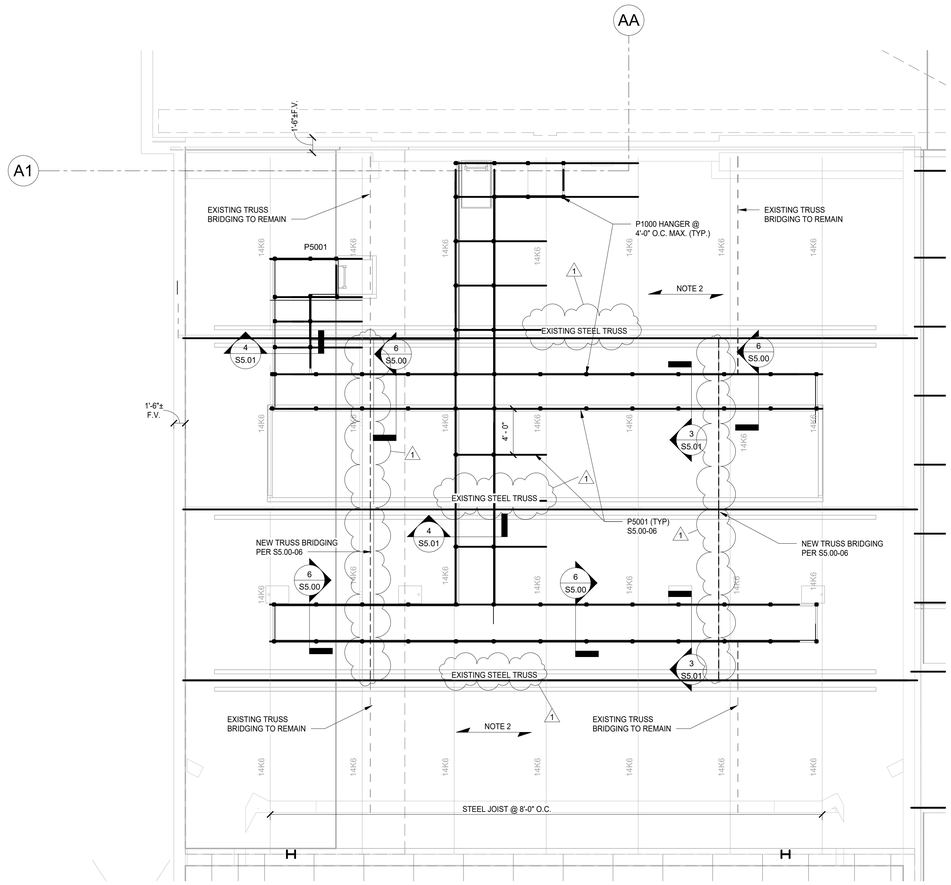
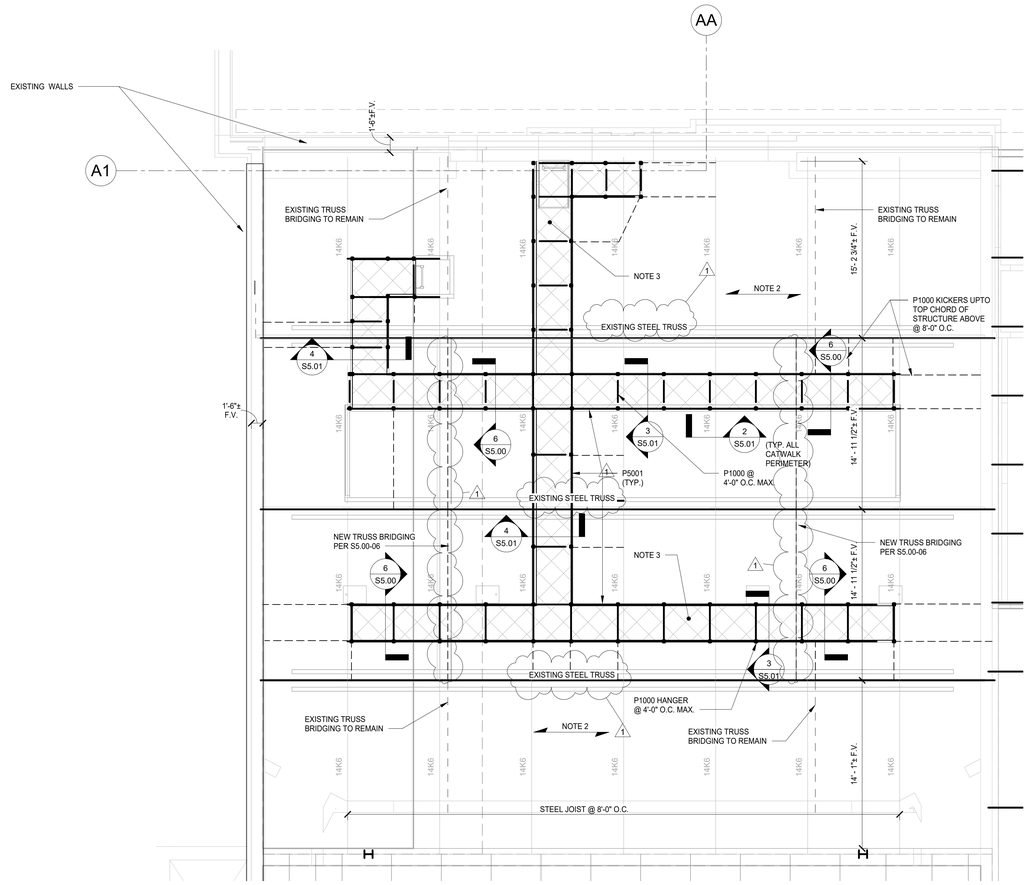


1 S1.20 CAT WALK FRAMING PLAN (HIGH UNISTRUT)
3/16" = 1'-0"

PLAN NOTES:

1. REFER TO SHEETS S0.01 - S0.02 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. ALL SIZES AND NOTES ARE BASED ON UNISTRUT. ALTERNATE STRUT WOULD BE ACCEPTABLE IF STRUCTURAL PROPERTIES ARE THE SAME.
3. CATWALK WALKING SURFACE SHALL BE A 3/8" GRADE 36 STEEL PLATE WITH A SKID RESISTANT WALKING SURFACE PER THE SPECIFICATIONS.



2 S1.20 CAT WALK FRAMING PLAN (LOW UNISTRUT)
3/16" = 1'-0"

PLAN NOTES:

1. REFER TO SHEETS S0.01 - S0.02 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. ALL SIZES AND NOTES ARE BASED ON UNISTRUT. ALTERNATE STRUT WOULD BE ACCEPTABLE IF STRUCTURAL PROPERTIES ARE THE SAME.
3. CATWALK WALKING SURFACE SHALL BE A 3/8" GRADE 36 STEEL PLATE WITH A SKID RESISTANT WALKING SURFACE PER THE SPECIFICATIONS.

WHITING HIGH SCHOOL - AUDITORIUM IMPROVEMENTS

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WHITING, IN 46394

SCHOOL CITY OF WHITING

ARCHITECT

FANNING HOWEY

317-848-0966 WWW.FHAI.COM
350 E NEW YORK ST, STE#300, INDIANAPOLIS, IN 46204

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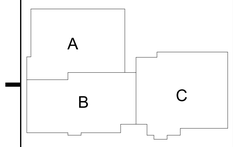
ph 317.617.4270
www.jpsconsultingengineers.com



KEY PLAN

CONSTRUCTION DOCUMENTS

PROJECT MANAGER: CES
DRAWN BY: JCB
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09.05.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 3	09.30.2024

S1.20 CATWALK FRAMING PLAN (HIGH UNISTRUT)

S1.20

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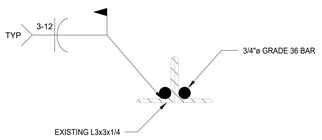
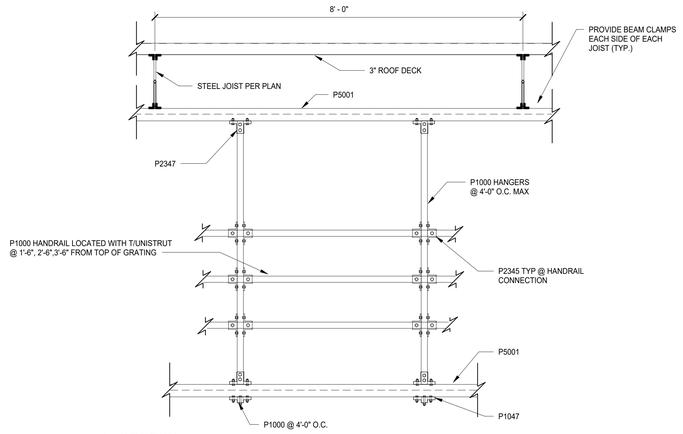
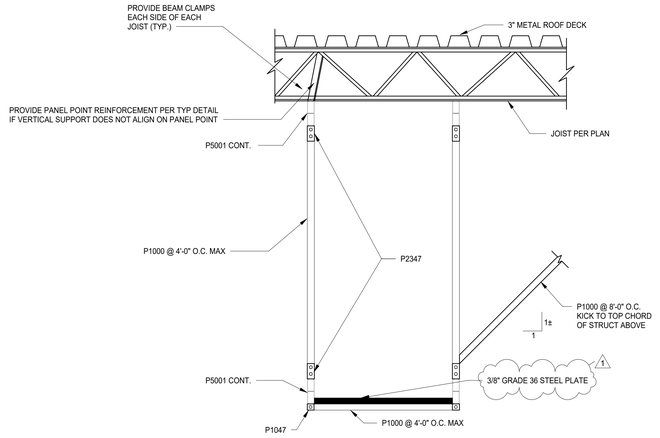


1 S5.01 VERTICAL CHORDS REINFORCEMENT SECTION
3" = 1'-0"



2 S5.01 SECTION
3/4" = 1'-0"



3 S5.01 SECTION
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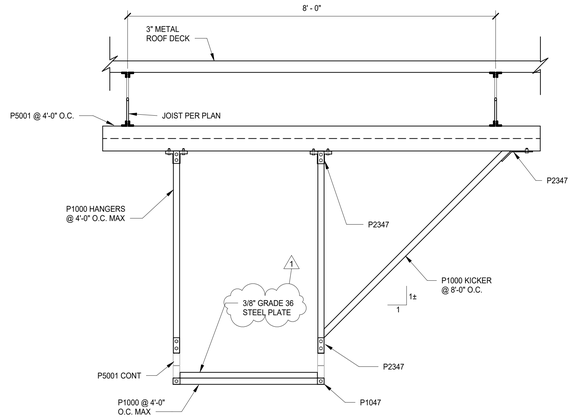

4 S5.01 SECTION
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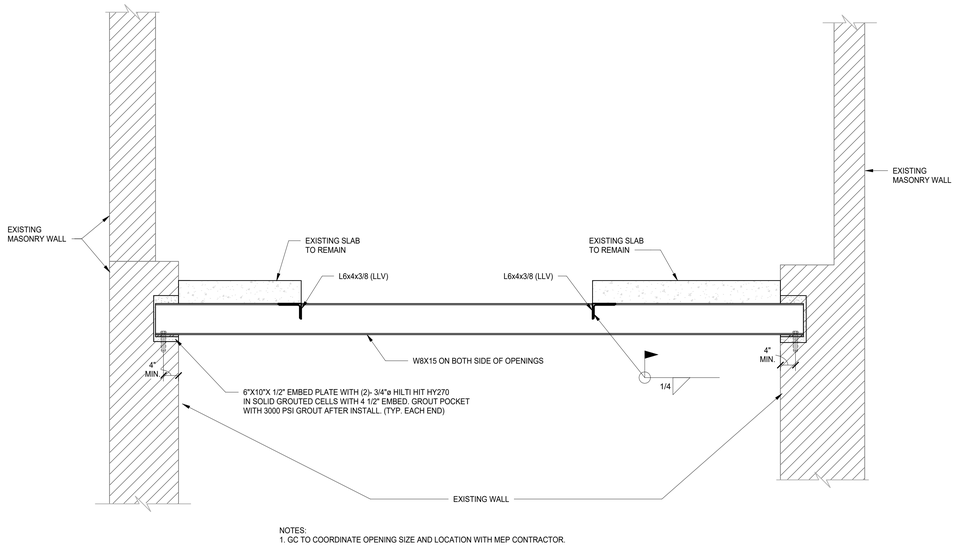
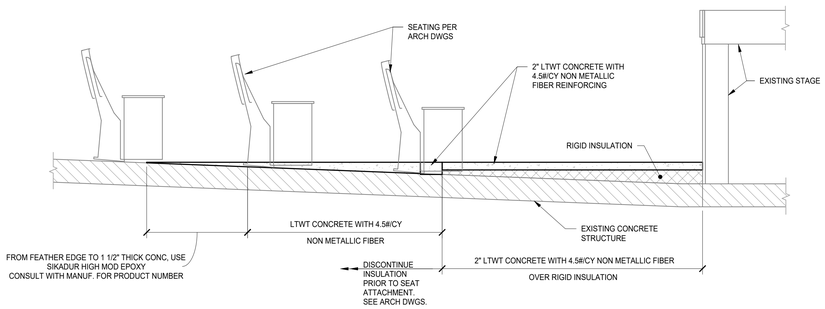
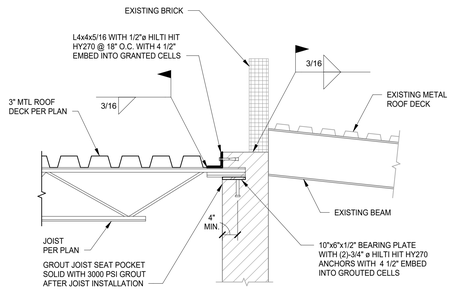


NOTES:
1. GC TO COORDINATE OPENING SIZE AND LOCATION WITH MEP CONTRACTOR.

5 S5.01 SECTION
3/4" = 1'-0"



6 S5.01 SECTION
3/4" = 1'-0"



7 S5.01 SECTION
3/4" = 1'-0"

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WHITING, IN 46394

SCHOOL CITY OF WHITING

ARCHITECT

FANNING HOWEY

317-848-0966 WWW.FHAI.COM
350 E NEW YORK ST, STE#300, INDIANAPOLIS, IN 46204

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Indianapolis, IN 46240

ph 317.617.4270
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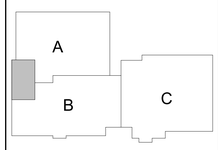


KEY PLAN N

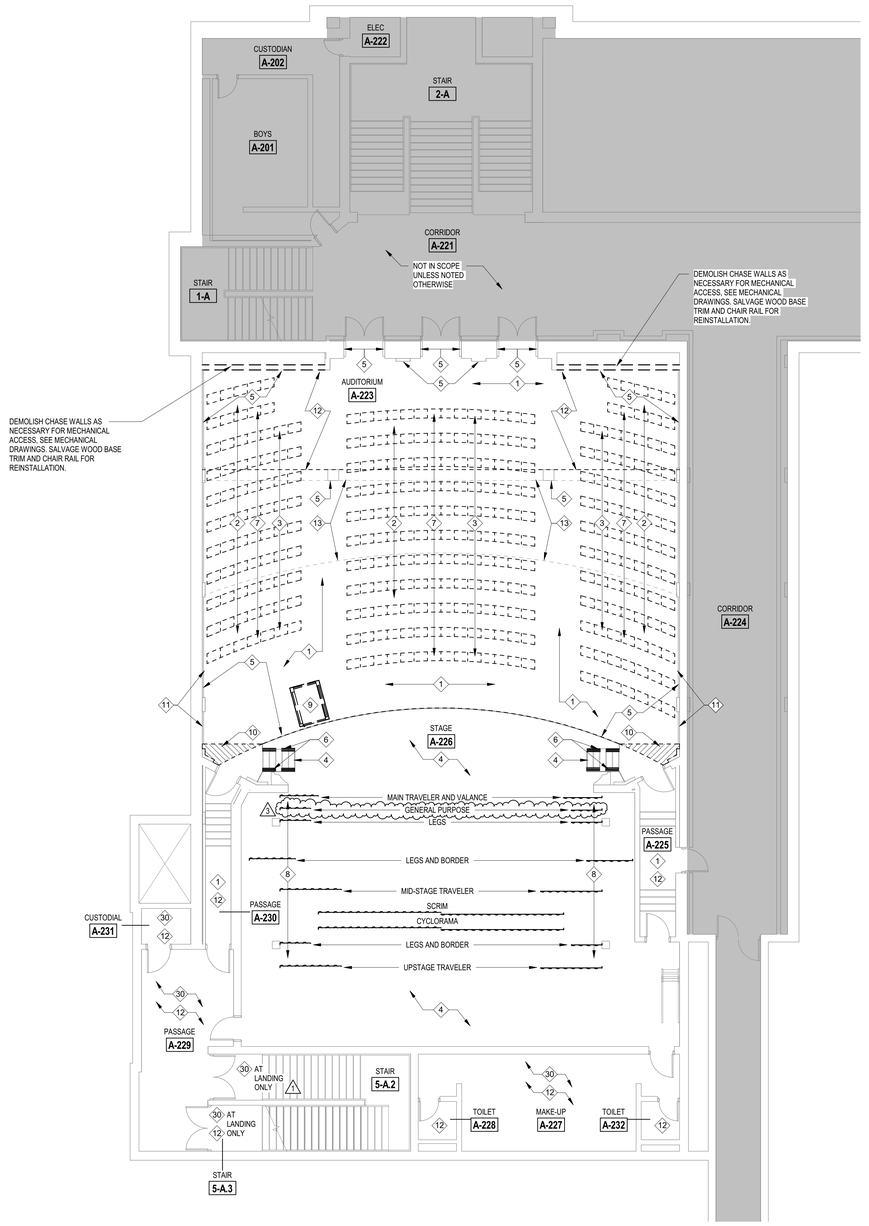
CONSTRUCTION DOCUMENTS

PROJECT MANAGER: CES
DRAWN BY: JCB
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09.05.2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM 3	09.30.2024

REINFORCING AND CATWALK DETAILS

S5.01



1 UNIT 'A' SECOND FLOOR DEMOLITION PLAN

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

ARCHITECTURAL DEMOLITION GENERAL NOTES

A. DEMOLITION IS TO FOLLOW ESTABLISHED CONSTRUCTION SEQUENCE. CONTRACTOR IS TO VERIFY THEIR WORK IN THE FIELD WITH THE DEMOLITION DRAWINGS, NEW CONSTRUCTION DRAWINGS, AND THE EXISTING IN-FIELD CONDITIONS. REPORT DISCREPANCIES TO THE ARCHITECT.
B. "FLOORING" DENOTES FLOOR COVERING MATERIALS INCLUDING BACKINGS, ADHESIVES, BASES, DOWN TO BUT EXCLUSIVE OF FLOOR SLABS AND STRUCTURAL MATERIALS, UNLESS NOTED OTHERWISE.
C. "CEILING" DENOTES CEILING MATERIALS INCLUDING SUSPENSION SYSTEMS ADHESIVE RESIDUES, MOLDINGS, UP TO BUT EXCLUSIVE OF STRUCTURAL MATERIALS.
D. WALLS TO BE REMOVED SHALL BE REMOVED TO A POINT 2" (MIN.) BELOW THE EXISTING FLOOR SLAB (UNLESS SETTING ON SLAB). PATCH WITH NEW CONCRETE TO BE FLUSH WITH THE EXISTING FLOOR SLAB.
E. WHEN OPENINGS ARE CUT INTO AN EXISTING WALL, THE OPENING SHALL BE A MINIMUM OF 1'-4" LONGER THAN THE FINISHED OPENING REQUIRED TO ALLOW FOR 8" (MIN) OF NEW CMU TOOTHED-IN AT EDGES.
F. AFTER THE DEMOLITION OF MATERIALS, THE RESULTING EXPOSED SURFACE SHALL BE SMOOTH AND FLUSH WITH EXISTING CONDITIONS.
G. MECHANICAL AND ELECTRICAL ITEMS THAT ARE CAPPED AND ABANDONED SHALL BE LOCATED BEHIND FINAL FINISH SYSTEMS.
H. COORDINATE THIS WORK WITH DEMOLITION WORK ON STRUCTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL.
I. PROVIDE INTERIOR AND EXTERIOR SHORING, BRACING, OR SUPPORT TO PREVENT MOVEMENT OR SETTLEMENT OF EXISTING STRUCTURES.
J. CONTRACTOR TO FIELD VERIFY PORTIONS OR SECTIONS OF EXISTING WALLS TO BE FILLED IN AND SALVAGE NECESSARY MATERIAL.
K. MATERIALS OF DEMOLITION SHALL BE DISPOSED OF OFF-SITE UNLESS OTHERWISE DIRECTED BY OWNER.
L. OWNER TO REMOVE EXISTING FURNITURE AND MISCELLANEOUS ITEMS NOT SHOWN AND NOT TO BE DEMOLISHED. CONTRACTOR TO NOTIFY OWNER IN ADVANCE WHEN ITEMS NEED TO BE REMOVED. CONTRACTOR IS RESPONSIBLE FOR OTHER ITEMS TO BE REMOVED.
M. ITEMS TO BE PATCHED. REMOVE ALL LOOSE OR DAMAGED MATERIAL. REFINISH TO LIKE NEW CONDITION, OR IF CONDITION WARRANTS REPLACE IN ENTIRETY.
N. THE OWNER SHALL RESERVE RIGHT TO CLAIM ANY MATERIALS THAT ARE BEING DEMOLISHED PRIOR TO THE CONTRACTOR DISPOSING OF THEM OFF SITE.
O. "TURNED OVER TO THE OWNER" DENOTES: 1) TAG AND IDENTIFY ITEMS: 2) STORE IN AN ORDERLY FASHION IN A LOCATION DESIGNATED BY THE OWNER.
P. ITEMS MADE OBSOLETE TO ACCOMODATE NEW CONSTRUCTION OR RENOVATION SHALL BE REMOVED.
Q. ITEMS TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY.
R. AFTER REMOVAL OF ITEMS, THE EXISTING WALL SURFACES (IF EXPOSED) SHALL BE REPAIRED/PATCHED AS REQUIRED TO RECEIVE NEW FINISHES.

DEMOLITION PLAN NOTES

1 REMOVE EXISTING BROADLOOM CARPET COMPLETELY INCLUDING ADHESIVES. PREPARE SUBSTRATE FOR NEW FINISHES, SEE FINISH PLANS.
2 REMOVE EXISTING PATCHING MATERIAL FROM EXISTING/PREVIOUSLY PATCHED ANCHOR LOCATIONS WITHIN TERRAZZO FLOORING, ASSUME 2 PATCH LOCATIONS PER QUANTITY OF EXISTING AUDITORIUM SEAT ARMREST. FILL LOCATIONS WITH TERRAZZO EPOXY TO MATCH SURROUNDING TERRAZZO, SEE SPECIFICATIONS. PREPARE FOR TERRAZZO FLOOR REFINISHING.
3 REMOVE EXISTING AUDITORIUM SEAT ANCHORS, ASSUME 2 ANCHOR LOCATIONS PER QUANTITY OF EXISTING AUDITORIUM SEAT ARMREST. PATCH EXISTING ANCHOR LOCATIONS WITH TERRAZZO EPOXY TO MATCH SURROUNDING TERRAZZO, SEE SPECIFICATIONS. PREPARE FOR TERRAZZO FLOOR REFINISHING.
4 SAND EXISTING WOOD STAGE/STAGE STAIRS AND PREPARE FOR NEW FINISH. SEE FINISH PLANS.
5 REMOVE EXISTING CARPET AND ADHESIVES COMPLETE AT WALLS, COLUMNS, PILASTERS, FACE OF STAGE, AND BELOW THE CHAIR RAILS. CLEAN, PATCH, AND REPAIR EXISTING SUBSTRATE TO REPAIR SUBSTRATE TO RECIEVE NEW FINISH PER INTERIOR ELEVATIONS AND FINISH SCHEDULES.
6 REMOVE EXISTING HANDRAILS AND PATCH/PREP FOR NEW WORK.
7 REMOVE EXISTING AUDITORIUM SEATING COMPLETELY. PREPARE FOR REPAIR/REFINISH OF TERRAZZO FLOOR.
8 DEMOLISH EXISTING STAGE RIGGING AND CURTAINS, INCLUDING BUT NOT LIMITED TO: MAIN TRAVELER/VALANCE, LEGS, BORDERS, MID-STAGE TRAVELER, SCRIM, CYCLORAMA, UPSTAGE TRAVELER. SEE UNIT 'A' SECOND FLOOR DEMOLITION PLAN FOR LOCATIONS OF EACH. SEE SHEET AT.01 FOR ADDITIONAL INFORMAITON.
9 REMOVE EXISTING WHEELCHAIR LIFT COMPLETELY.
10 GRIND EXISTING TERRAZO FLOOR TO BE LEVEL AT HATCHED LOCATION. COORDINATE EXTENTS WITH NEW WORK.
11 REMOVE EXISTING WOOD BASE TRIM WHERE FLOOR IS TO BE LEVELED AND SALVAGE FOR REUSE. SEE FINISH PLANS.
12 DEMOLISH EXISTING SUSPENDED ACOUSTIC CEILING SYSTEM COMPLETELY, PREPARE FOR NEW SUSPENDED ACOUSTIC CEILING SYSTEM.
13 PATCH, REPAIR, AND PREP PLASTER FOR NEW PAINT. SEE INTERIOR SCHEDULES.
30 REMOVE EXISTING VCT FLOORING AND BASE COMPLETELY INCLUDING ADHESIVES. PREPARE SUBSTRATE FOR NEW FINISHES, SEE FINISH PLANS.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

WHITING HIGH SCHOOL - AUDITORIUM IMPROVEMENTS

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SCHOOL CITY OF WHITING

ARCHITECT

FANNING HOWEY

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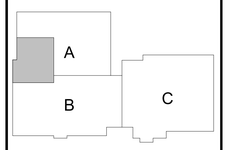
350 E NEW YORK ST, STE#300, INDIANAPOLIS, IN 46204



KEY PLAN N

CONSTRUCTION DOCUMENTS

PAULA A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: NVW
DRAWN BY: NVW
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09-06-2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #1	09.18.2024
3	ADDENDUM #3	09.30.2024

UNIT 'A' SECOND FLOOR DEMOLITION PLAN

AD1.2A

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1 UNIT 'A' THIRD FLOOR DEMOLITION PLAN

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

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ARCHITECTURAL DEMOLITION GENERAL NOTES

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F. AFTER THE DEMOLITION OF MATERIALS, THE RESULTING EXPOSED SURFACE SHALL BE SMOOTH AND FLUSH WITH EXISTING CONDITIONS.
G. MECHANICAL AND ELECTRICAL ITEMS THAT ARE CAPPED AND ABANDONED SHALL BE LOCATED BEHIND FINAL FINISH SYSTEMS.
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DEMOLITION PLAN NOTES

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2 REMOVE EXISTING PATCHING MATERIAL FROM EXISTING/PREVIOUSLY PATCHED ANCHOR LOCATIONS WITHIN TERRAZZO FLOORING. ASSUME 2 PATCH LOCATIONS PER QUANTITY OF EXISTING AUDITORIUM SEAT ARMREST. FILL LOCATIONS WITH TERRAZZO EPOXY TO MATCH SURROUNDING TERRAZZO. SEE SPECIFICATIONS. PREPARE FOR TERRAZZO FLOOR REFINISHING.
5 REMOVE EXISTING CARPET AND ADHESIVES COMPLETE AT WALLS, COLUMNS, PILASTERS, FACE OF STAGE, AND BELOW THE CHAIR RAILS. CLEAN, PATCH, AND REPAIR EXISTING SUBSTRATE TO REPAIR SUBSTRATE TO RECIEVE NEW FINISH PER INTERIOR ELEVATIONS AND FINISH SCHEDULES.
7 REMOVE EXISTING AUDITORIUM SEATING COMPLETELY. PREPARE FOR REPAIR/REFINISH OF TERRAZZO FLOOR.
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12 DEMOLISH EXISTING SUSPENDED ACOUSTIC CEILING SYSTEM COMPLETELY. PREPARE FOR NEW SUSPENDED ACOUSTIC CEILING SYSTEM.
14 BASE BID: EXISTING RAILING TO REMAIN. ALTERNATE #2 BID: DEMOLISH EXISTING RAILING COMPLETELY. PATCH/REPAIR EXISTING WOOD WALL CAP TRIM AND PREPARE FOR NEW RAILING SYSTEM.
15 DEMOLISH EXISTING CASEWORK COUNTERTOP AND SUPPORTS COMPLETELY. DEMOLISH PARTIAL HEIGHT SUPPORT WALL COMPLETELY.
16 DEMOLISH EXISTING THEATRICAL LIGHTING OPENINGS IN CEILING ABOVE. SEE UNIT 'A' ATTIC DEMOLITION PLAN FOR MORE INFORMATION.
22 ALTERNATE #4 BID: REMOVE EXISTING SUSPENDED ACOUSTIC CEILING SYSTEM COMPLETELY.
23 ALTERNATE #4 BID: REMOVE EXISTING LIGHTING, OCCUPANCY SENSORS, SWITCHES, SWITCH WIRING, AND ALL CEILING-MOUNTED ELECTRICAL DEVICES. REMOVE ALL WIRING AND CONDUIT BACK TO PANEL BOARD COMPLETE.
24 ALTERNATE #4 BID: REMOVE EXISTING MECHANICAL DIFFUSER/GRILLE. REMOVE BRANCH DUCT BACK TO MECHANICAL CHASE.
25 ALTERNATE #4 BID: REMOVE ALL CEILING-MOUNTED FIRE ALARM NOTIFICATION DEVICES, SALVAGE FOR REINSTALLATION. REMOVE ALL WIRING AND CONDUIT BACK TO FIRE ALARM PANEL COMPLETE.
26 ALTERNATE #4 BID: REMOVE ALL CEILING-MOUNTED TECHNOLOGY DEVICES, SALVAGE FOR REINSTALLATION. TEMPORARILY SECURE WIRE BACK TO MAIN WIRE RUN LOCATIONS WITHIN CORRIDORS SUPPORTED BY STRUCTURAL BEAM MEMBERS THAT ARE EXISTING TO REMAIN.
27 ALTERNATE #4 BID: REMOVE EXISTING SPRINKLER HEADS, BRANCH PIPING, AND MAINS BACK TO RISERS, CAP AT RISER AND PREPARE FOR REINSTALLATION WORK TO FOLLOW.

VERIFICATION NOTE

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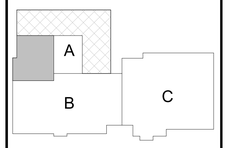


KEY PLAN N

CONSTRUCTION DOCUMENTS

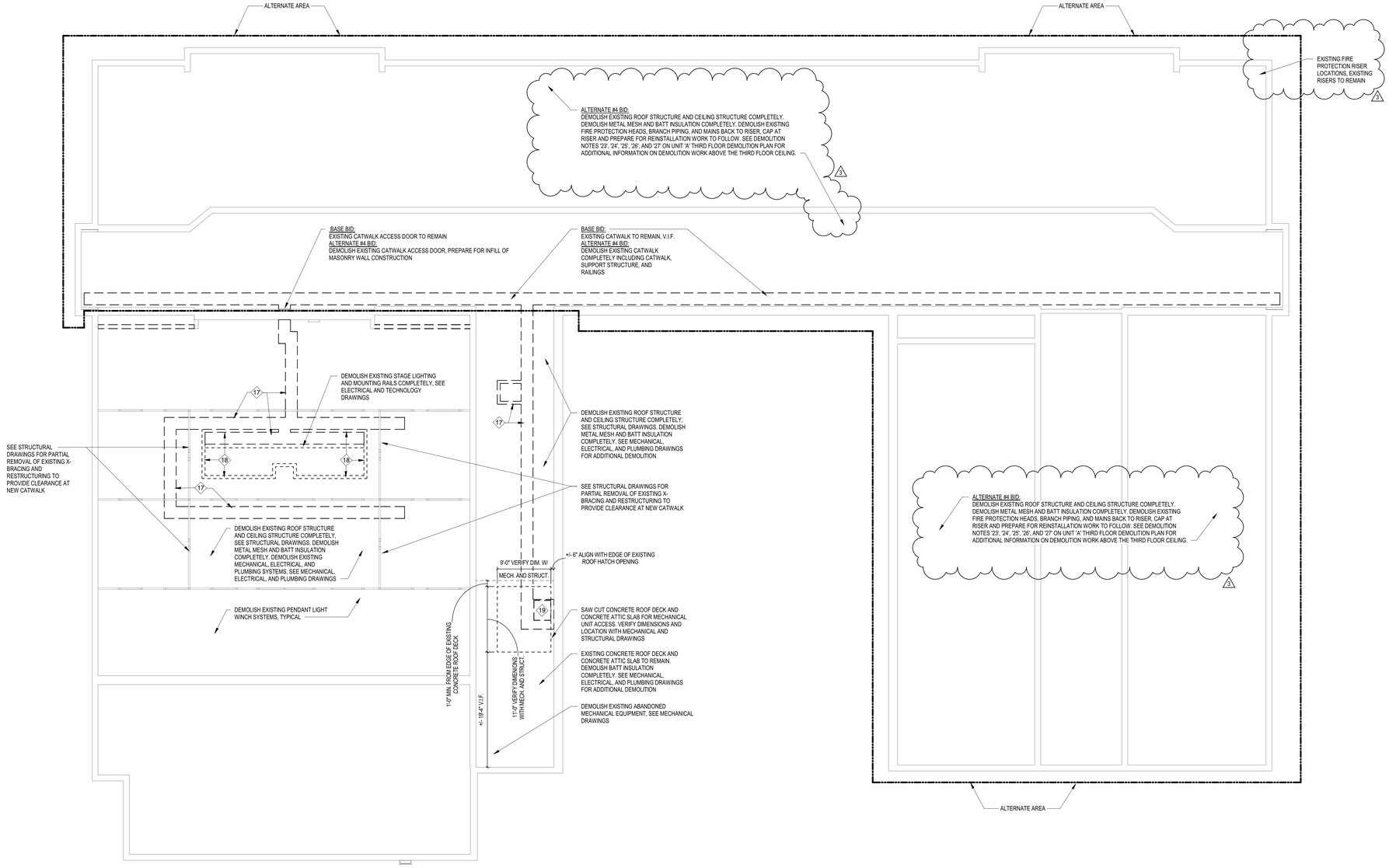
PAUL A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: NVW
DRAWN BY: NVW
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09-06-2024

REV. NO.	DESCRIPTION	DATE
3	ADDENDUM #3	09.30.2024

UNIT 'A' THIRD FLOOR DEMOLITION PLAN

AD1.3A



1 UNIT 'A' ATTIC DEMOLITION PLAN

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

ARCHITECTURAL DEMOLITION GENERAL NOTES

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R. AFTER REMOVAL OF ITEMS, THE EXISTING WALL SURFACES (IF EXPOSED) SHALL BE REPAIRED/PATCHED AS REQUIRED TO RECEIVE NEW FINISHES.

DEMOLITION PLAN NOTES

17 DEMOLISH EXISTING CATWALK COMPLETELY INCLUDING CATWALK, SUPPORT STRUCTURE, AND RAILINGS. SEE STRUCTURAL DRAWINGS.
18 DEMOLISH EXISTING WOOD FRAMED BATT INSULATED WALLS COMPLETELY.
19 DEMOLISH EXISTING ROOF HATCH COMPLETELY. PREPARE OPENING IN CONCRETE ROOF DECK FOR INFILL PER STRUCTURAL DRAWINGS.

VERIFICATION NOTE

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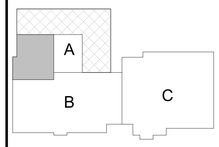

KEY PLAN N

CONSTRUCTION DOCUMENTS

PAULA MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: NVW
DRAWN BY: NVW
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09-06-2024

REV. NO.	DESCRIPTION	DATE
3	ADDENDUM #3	09.30.2024

UNIT 'A' ATTIC DEMOLITION PLAN

AD1.4A

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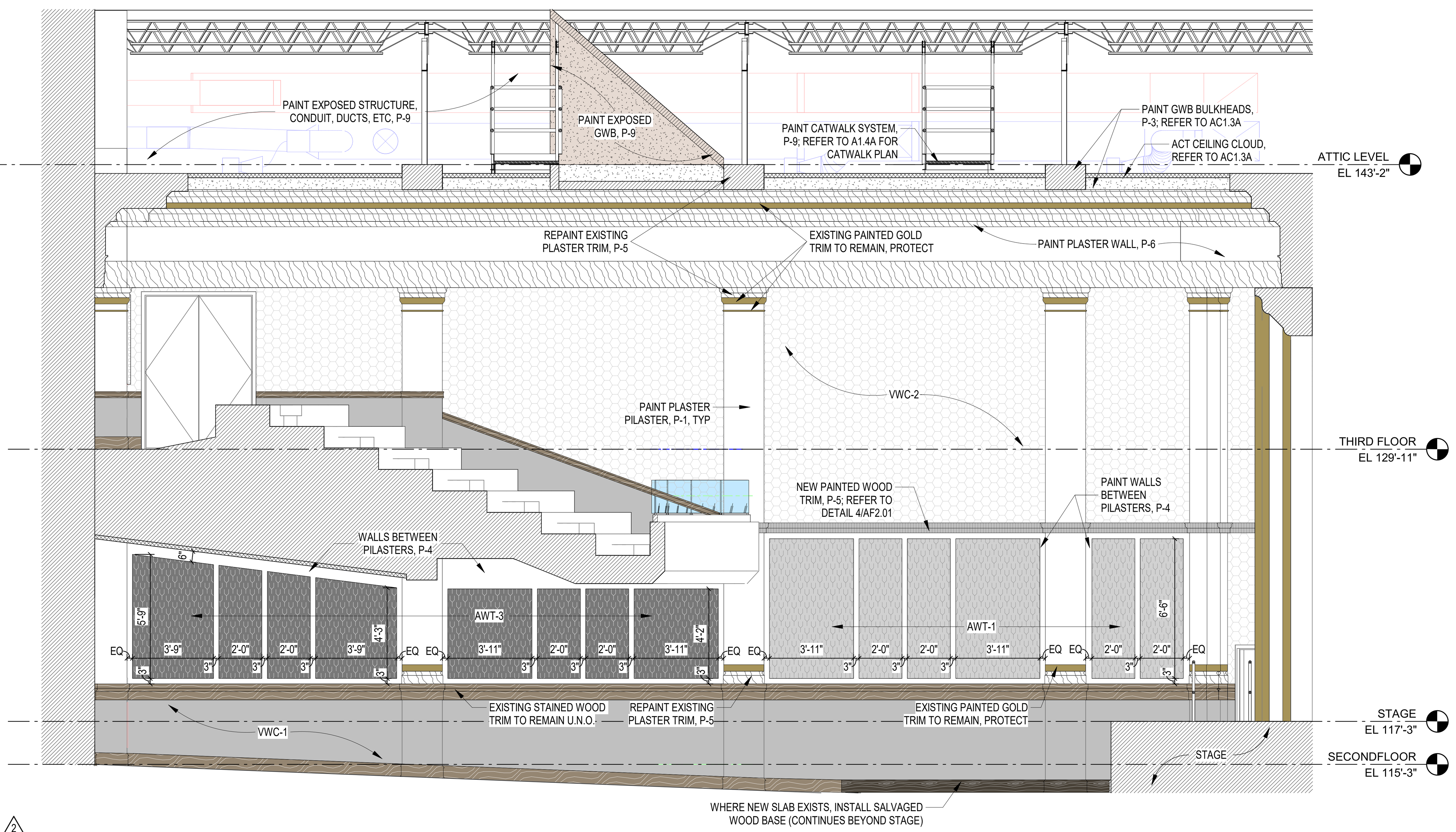
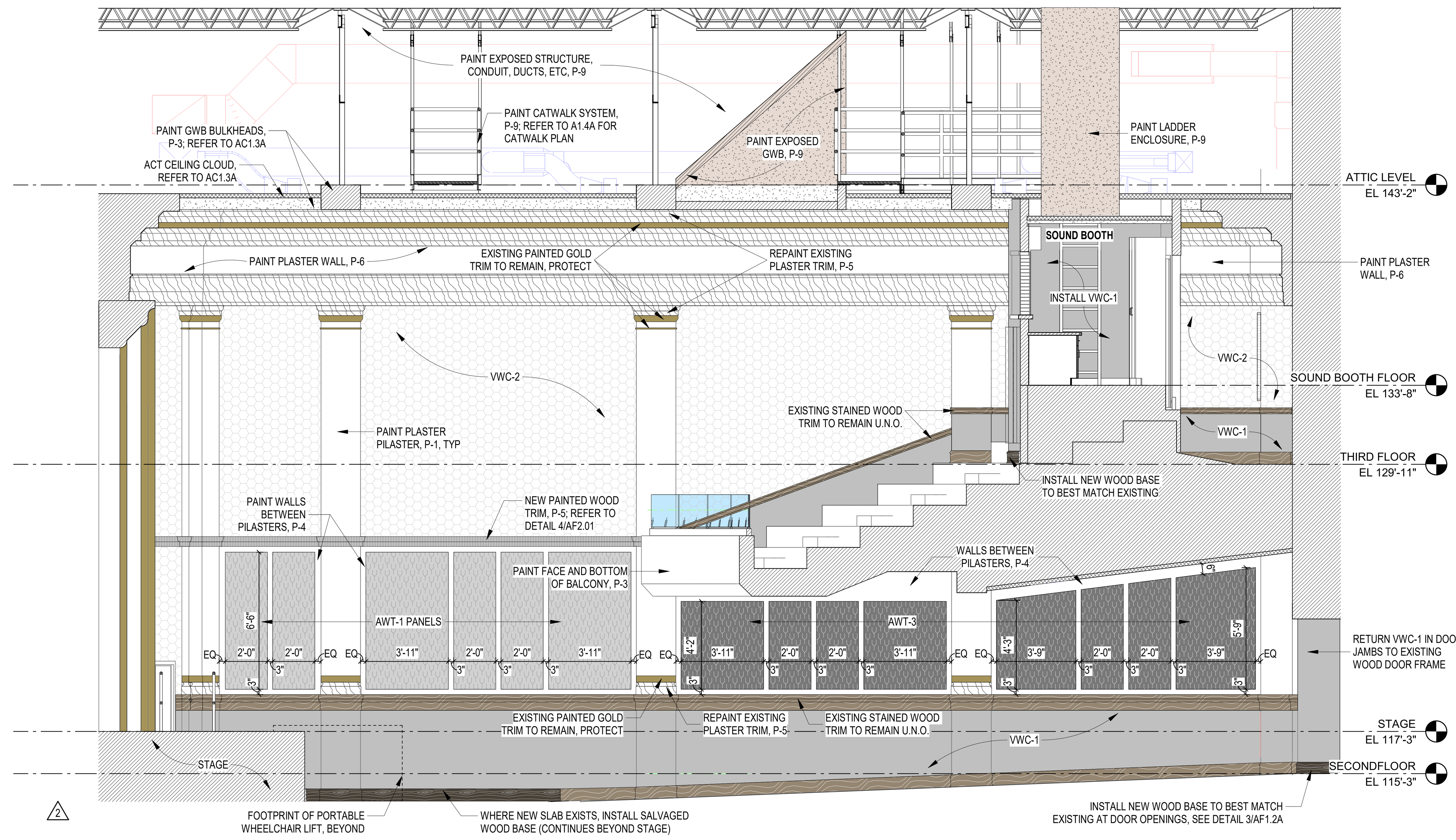


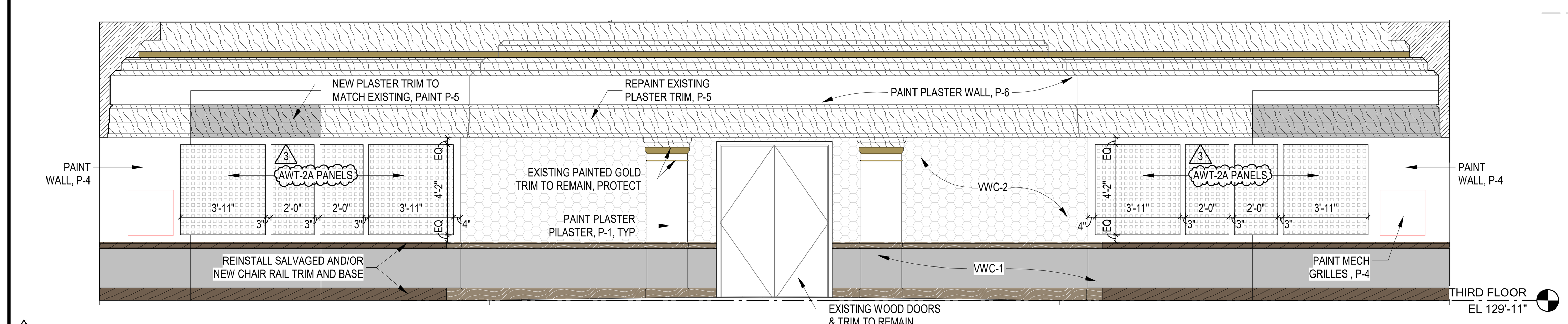
3 INTERIOR ELEVATION - SOUTH

SCALE: 1/4" = 1'-0"



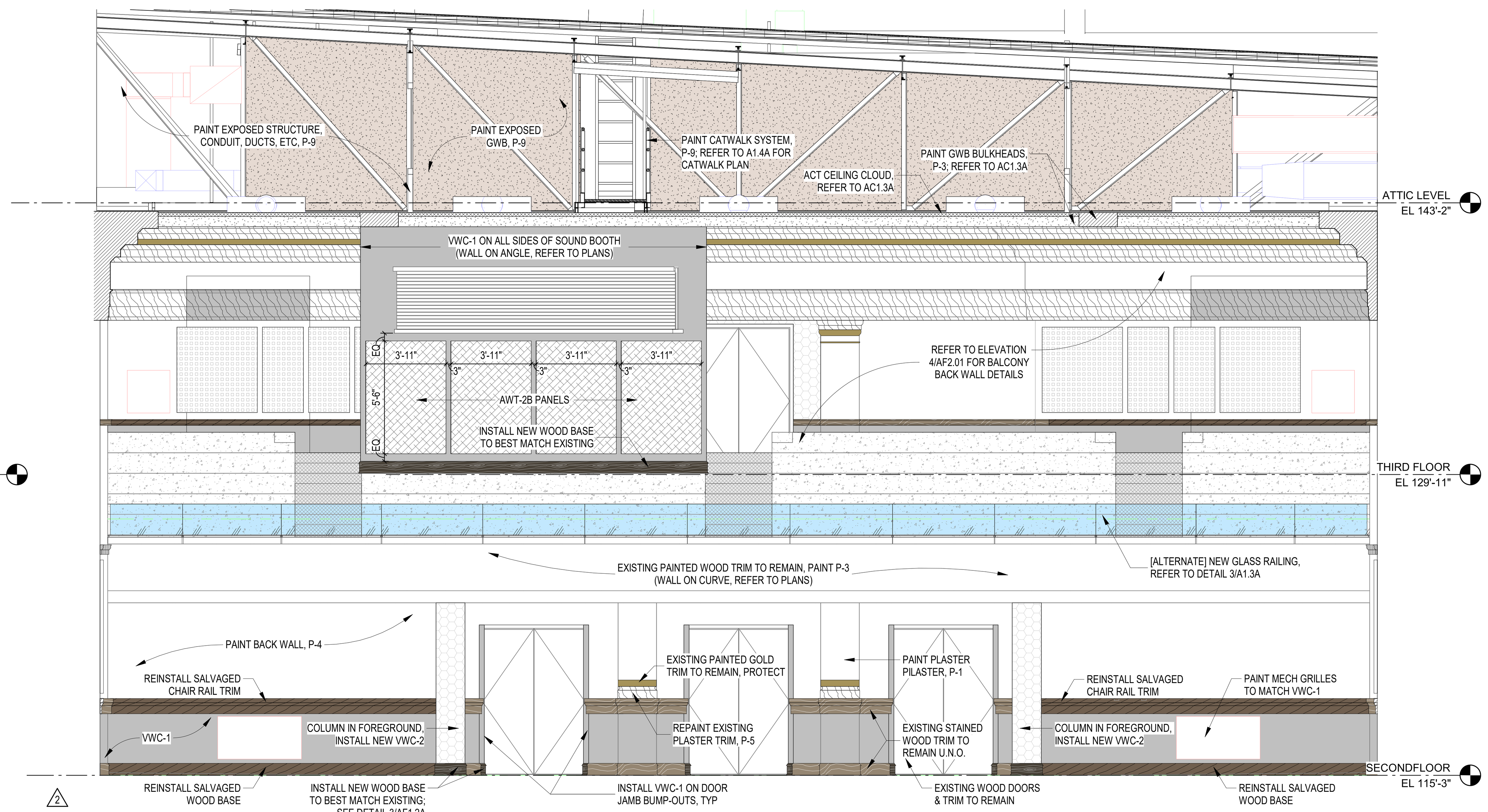
1 INTERIOR ELEVATION - NORTH

SCALE: 1/4" = 1'-0"



4 BALCONY - EAST

SCALE: 1/4" = 1'-0"



2 INTERIOR ELEVATION - EAST

SCALE: 1/4" = 1'-0"

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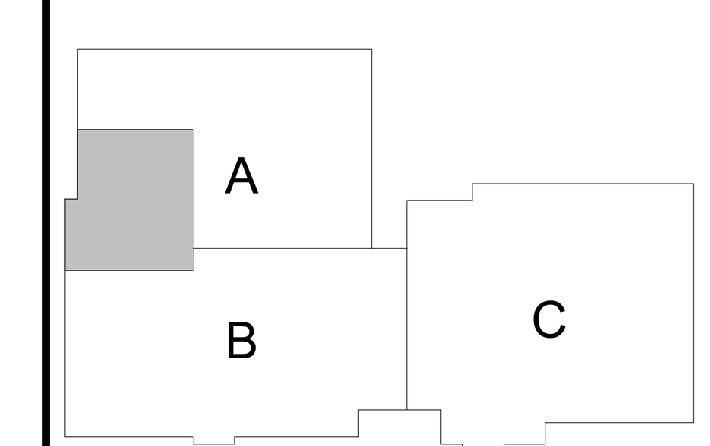

KEY PLAN

CONSTRUCTION DOCUMENTS

PAUL A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: NVW
DRAWN BY: AML
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09-06-2024

REV. NO.	DESCRIPTION	DATE
2	ADDENDUM #2	09.24.2024
3	ADDENDUM #3	09.30.2024

INTERIOR ELEVATIONS

AF2.01

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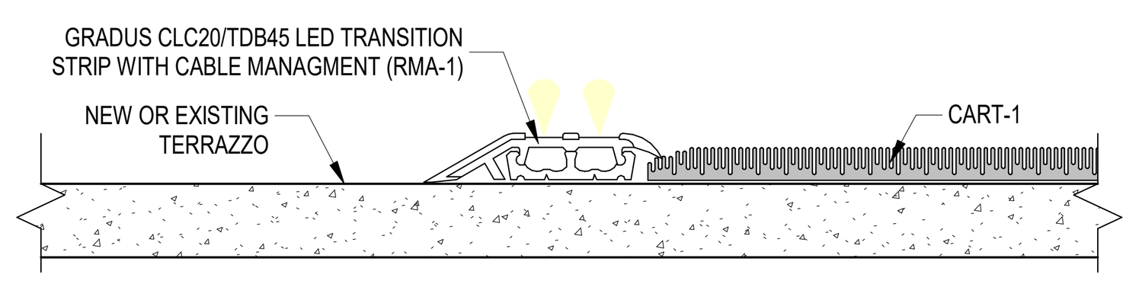
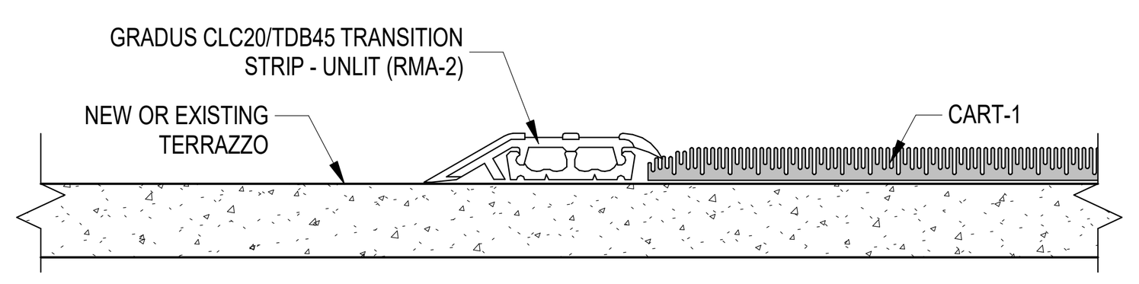


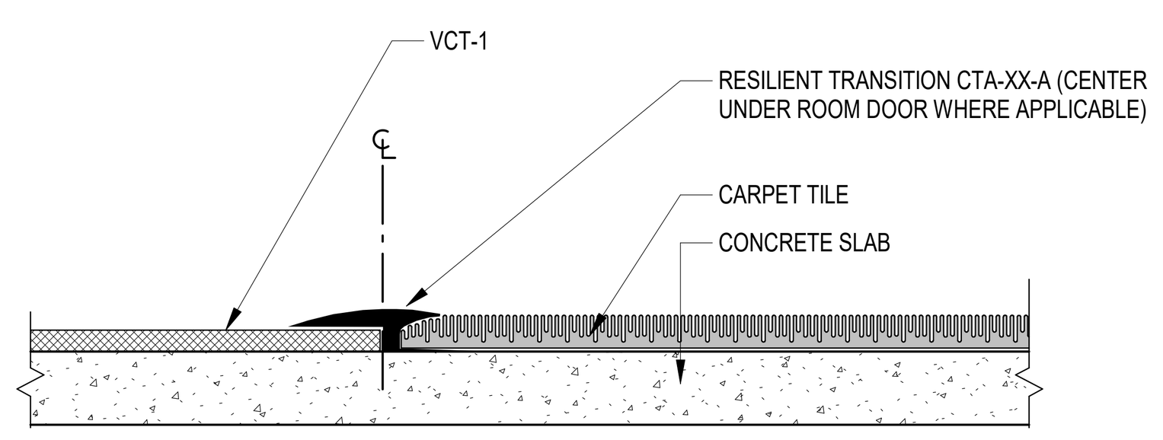
FLOOR TRANSITION DETAIL (RMA-1) — XTERR to CART

- SCALE: NTS
- REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION
- DETAIL SIMILAR FOR DRF TO CSC OR RESILIENT FLOORING TRANSITION. VERIFY CONDITIONS IN FIELD.



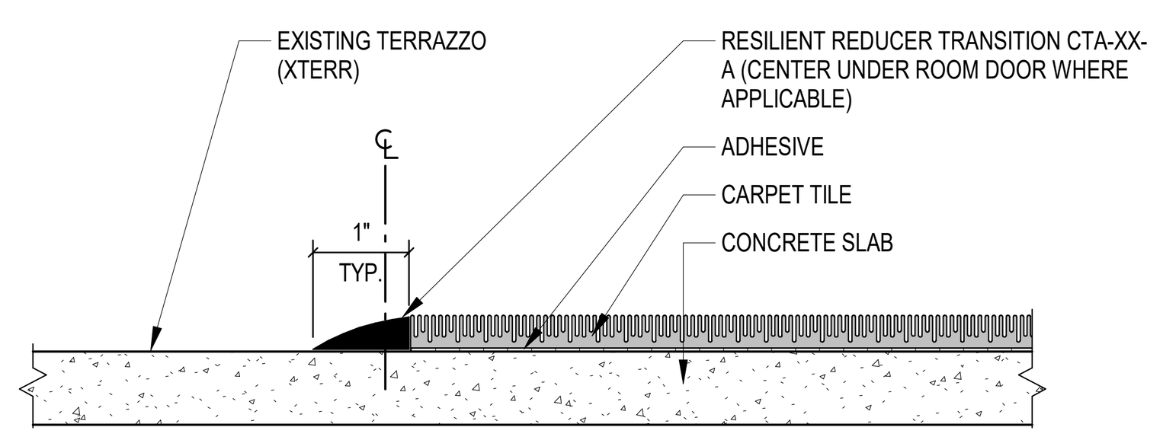
FLOOR TRANSITION DETAIL (RMA-2) — XTERR to CART

- SCALE: NTS
- REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION
- DETAIL SIMILAR FOR DRF TO CSC OR RESILIENT FLOORING TRANSITION. VERIFY CONDITIONS IN FIELD.



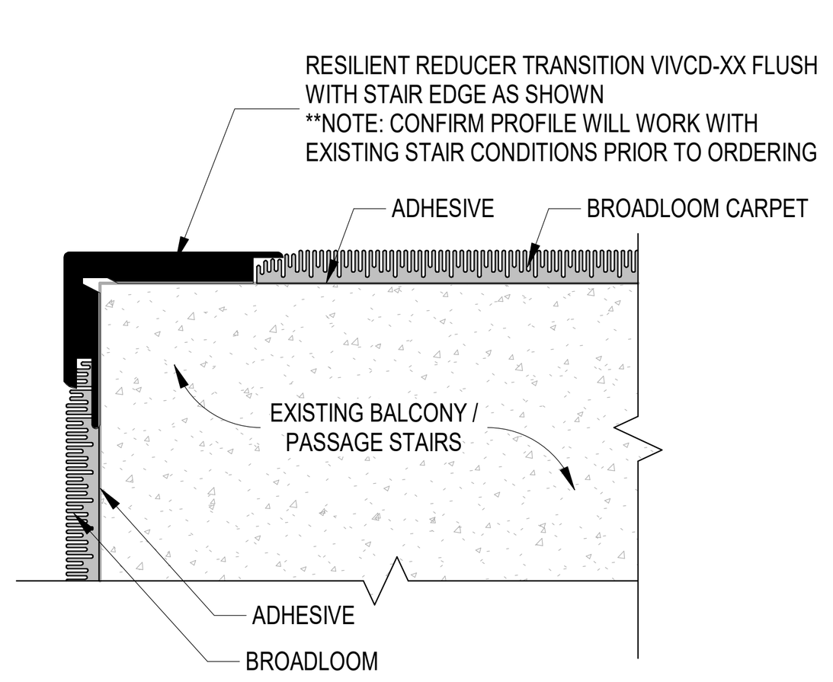
FLOOR TRANSITION DETAIL — CART to VCT

- SCALE: NTS
- REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION



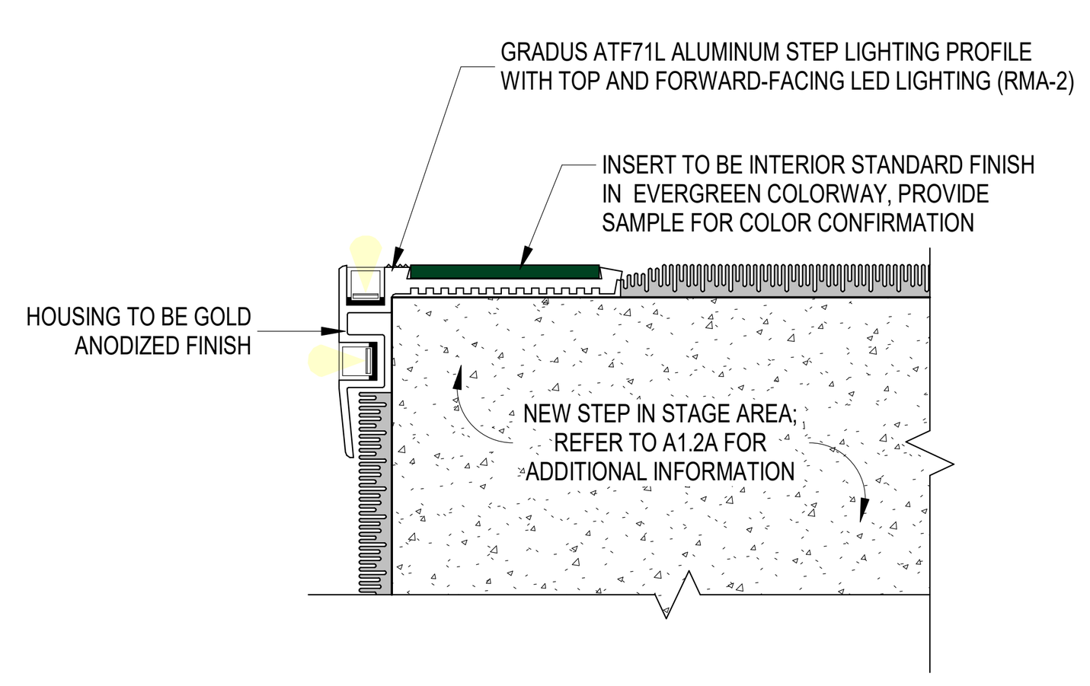
FLOOR TRANSITION DETAIL — CART to XTERR

- SCALE: NTS
- REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION
- DETAIL SIMILAR FOR TERR TO CSC FLOORING TRANSITION.



STEP TRANSITION DETAIL (RSA-1) — CAR-1 STEP DETAIL

- SCALE: NTS
- REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION
- DETAIL SIMILAR FOR DRF TO CSC OR RESILIENT FLOORING TRANSITION. VERIFY CONDITIONS IN FIELD.



STEP TRANSITION DETAIL (RSA-2) — CART-1 STEP DETAIL

- SCALE: NTS
- REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION
- DETAIL SIMILAR FOR DRF TO CSC OR RESILIENT FLOORING TRANSITION. VERIFY CONDITIONS IN FIELD.

LIST OF FINISHES

REFER TO AF SERIES DWG. SHEETS

FLOOR MATERIALS

BROADLOOM CARPET

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
CAR-1	MOHAWK / LIVE AND LEARN COLLECTION / MIRADA STITCHLOCK	TO BE SELECTED

- SUBMIT INSTALLATION DRAWINGS INDICATING LAYOUT OF CARPET TILE PRIOR TO INSTALLATION FOR APPROVAL.

CARPET TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
CART-1	INTERFACE / PAST FORWARD COLLECTION CHESHIRE STREET	DUNE 108209 / 50CM X 50CM

- ALL CARPET BACKING TO HAVE A MOISTURE RESISTANT BARRIER.
- SUBMIT INSTALLATION DRAWINGS INDICATING LAYOUT OF CARPET TILE PRIOR TO INSTALLATION FOR APPROVAL.

EPOXY TERRAZZO FLOORING

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
ETF-1	PER SPECIFICATIONS	BEST MATCH EXISTING; FORMULA SIMILAR TO: 80% SAN SABA #1, 10% ITALIAN RED VERONA #3, 10% ITALIAN BLACK #3, MATRIX TO MATCH EXISTING

- THE ABOVE FORMULA REPRESENTS A BEST GUESS ON EXISTING CONDITIONS; FORMULA MUST BE VERIFIED ON SITE
- EPOXY TERRAZO IS INCLUDED FOR PATCHING PURPOSES.
- REFER TO TERRAZZO RESTORATION SPECIFICATION FOR ADDITIONAL INFORMATION.
- MANUFACTURER TO SUBMIT ACTUAL PRODUCT SAMPLES AFTER SELECTION OF ALL ETF COLORS FOR VERIFICATION AND APPROVAL.

RESILIENT STAIR ACCESSORIES

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
RSA-1	JOHNSONITE / VIRCN-XX-A	TO BE SELECTED, VISUALLY-IMPAIRED STRIP COLOR TO BE SELECTED
RSA-2	GRADUS / ATF71L	GOLD ANODIZED HOUSING, VISUALLY-IMPAIRED STRIP TO BE EVERGREEN

VINYL COMPOSITION TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
VCT-1	TARKET / VCT II	TO BE SELECTED / 12"X12"

BASE MATERIALS

RESILIENT BASE

COVE BASE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
RB-1	JOHNSONITE	TO BE SELECTED

WOOD BASE

REFER TO DETAIL 3/AF1.2A

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
WDB-1	HARDWOOD, TO MATCH EXISTING	STAIN TO MATCH EXISTING

WALL FINISHES

PAINT

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
P-1 (PILASTERS)	SHERWIN WILLIAMS	TO BE SELECTED
P-2 (DOOR FRAMES)	SHERWIN WILLIAMS	TO BE SELECTED
P-3 (CEILINGS/TRIM)	SHERWIN WILLIAMS	TO BE SELECTED
P-4 (WALLS)	SHERWIN WILLIAMS	TO BE SELECTED
P-5 (WALL TRIM)	SHERWIN WILLIAMS	TO BE SELECTED
P-6 (UPPER WALL)	SHERWIN WILLIAMS	TO BE SELECTED
P-7 (GOLD TRIM)	SHERWIN WILLIAMS	TO BE SELECTED
P-8 (STAGE WALLS)	SHERWIN WILLIAMS	TO BE SELECTED
P-9 (STRUCTURE)	SHERWIN WILLIAMS	SW6258 TRICORN BLACK
P-10 (CORRIDOR GWBB)	SHERWIN WILLIAMS	TO BE SELECTED

3

VINYL WALLCOVERING

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
VWC-1 (WAINSCOT)	MOMENTUM / BALLIANO TEXTURE	VINHO A184-276
VWC-2 (WALLS)	MOMENTUM / CAPULET DAMASK	CREAM L2-CK-01

ACOUSTICAL FINISHES

ACOUSTICAL WALL TILES

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
AWT-1	KINETICS / TAD PANEL XOREL / SPIRE	2-1/8" THICK PANEL COLOR TO BE SELECTED
AWT-2A	KINETICS / HARDSIDE PANEL MAHARAM / MODE	2" THICK PANEL COLOR TO BE SELECTED
AWT-2B	KINETICS / HARDSIDE PANEL MAHARAM / MODE	2" THICK PANEL COLOR TO BE SELECTED
AWT-3	REFER TO SPECIFICATIONS XOREL / SPIRE	1/2" THICK PANEL COLOR TO BE SELECTED (SAME AS AWT-1)

3

CEILING FINISHES

REFER TO AC SERIES DWG. SHEETS

ACOUSTICAL CEILING TILE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
ACT-1 (AUDITORIUM)	ARMSTRONG / CALLA #2822	TO BE SELECTED / 2'X2' / TEGULAR EDGE
ACT-2 (AUDITORIUM)	USG INTERIORS / SHEETROCK LAY-IN CEILING PANEL, CLIMAPLUS #3270	TO BE SELECTED / 2'X2' / SQUARE EDGE
ACT-3 (SOUND BOOTH)	ARMSTRONG / BACKSTAGE NOIR #1318	BLACK / 2'X2' / SQUARE EDGE WITH BLACK GRID
ACT-4 (CLASSROOMS/MISC)	ARMSTRONG / SCHOOL ZONE FINE FISSURED HIGH NRC #1713	WHITE / 2'X2' / SQUARE EDGE
ACT-5 (CORRIDORS)	ARMSTRONG / FINE FISSURED HIGH NRC #1754	WHITE / 2'X2' / SQUARE EDGE
ACT-6 (RESTROOMS)	ARMSTRONG / TUNDRA #301	WHITE / 2'X2' / SQUARE EDGE

PAINTED EXPOSED STRUCTURE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION

PES - REFER TO REFLECTED CEILING PLANS AND PROJECT MANUAL FOR PAINT TYPE AND HEIGHT.

GYPSUM WALLBOARD CEILING AND BULKHEADS

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION

GWB - REFER TO REFLECTED CEILING PLANS AND PROJECT MANUAL FOR TYPE AND HEIGHT.
GWBB - REFER TO REFLECTED CEILING PLANS AND PROJECT MANUAL FOR BULKHEAD TYPE AND HEIGHT.

MISCELLANEOUS FINISHES

INTERIOR WOOD TRIM

- STAIN NEW WOOD BASE TO BEST MATCH EXISTING. TRIM TO BE HARDWOOD WITH GRAIN TO BEST MATCH EXISTING. REFER TO WOOD BASE DETAIL 3/AF1.2A.
- PAINT NEW WOOD 2-PIECE CROWN AS NOTED ON ELEVATIONS. REFER TO DETAIL 4/AF1.2A.

RESILIENT MOLDING ACCESSORIES

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
RMA-1	GRADUS / CLC20/-TDB45 LED TRANSITION	BLACK
RMA-2	GRADUS / CLC20/-TDB45 UNLIT TRANSITION	BLACK

MATERIAL & FINISH GENERAL NOTES

GENERAL

A. REFER TO FINISH PLAN DRAWINGS AND DETAILS (AF SERIES) FOR MATERIALS, PATTERNS AND COLORS.
B. REFER TO AQ6.01 LIST OF FINISHES FOR ADDITIONAL FINISHES NOT NOTED ON THIS SHEET.

FLOORING

A. CENTER FLOORING TILE AND PATTERN IN ROOM UNLESS OTHERWISE INDICATED ON FINISH PLANS.
B. ALIGN EDGE OF FINISHED FLOOR MATERIAL WITH EDGE OF WALL OR CASEWORK.
C. FLOOR FINISH MATERIAL TRANSITIONS SHALL OCCUR UNDER THE CENTER OF THE DOOR UNLESS OTHERWISE INDICATED, WHERE THE FLOORING MATERIAL CHANGES FROM ROOM TO ROOM.
D. EXTEND FLOOR MATERIAL AND PATTERN UNDER ALL OPEN TO THE FLOOR CASEWORK AND FURNITURE.
E. PATCH ALL EXISTING AND NEW HOLES IN TERRAZZO TO BEST MATCH EXISTING. POLISH ALL TERRAZZO.

CARPET TILE

A. ALL CARPET TILE TO BE INSTALLED **NON-DIRECTIONALLY** FOR ALL SPECIFIED TYPES/COLORS.

PAINT & STAIN

A. PAINT ALL PREVIOUSLY PAINTED PLASTER TRIM **EXCEPT** FOR "GOLD" PAINTED TRIM.
B. **DO NOT PAINT** ANY PREVIOUSLY STAINED WOOD TRIM.
C. STAIN NEW WOOD TRIM TO BEST MATCH EXISTING WOOD TRIM WHERE NOTED.
D. PAINT NEW WOOD TRIM WHERE NOTED.

PAINT TYPE GENERAL NOTES

A. UNDER SECTION 099123 - INTERIOR PAINTING, PAINT EXPOSED PIPES, DUCTWORK, BREACHING, CONDUIT, INSULATED PIPES, CONDUIT HANGERS, SUPPORTS, BRACING, ETC., WHICH OCCURS IN SPACES DESIGNATED TO BE PAINTED IN PART OR WHOLE.
B. PAINTING AND FINISHING OF EXTERIOR SURFACES AS DESIGNATED. DETAILS SHALL BE UNDER THE WORK SECTION 0991113 - EXTERIOR PAINTING.
C. ALL GYPSUM BOARD WALLS SHALL BE PAINTED WITH INTERIOR PAINT TYPE #9.22 (SEMI-GLOSS) UNLESS OTHERWISE INDICATED.
D. ALL GYPSUM BOARD CEILINGS AND SOFFITS SHALL BE PAINTED WITH PAINT TYPE #9.21 (FLAT) UNLESS OTHERWISE INDICATED.
E. PAINT ALL NON-INTEGRALLY COLORED CMU WALLS WITH INTERIOR PAINT TYPE #4.14 (SEMI-GLOSS), UNLESS OTHERWISE INDICATED.
F. ALL FERROUS METAL (EXCLUDING STRUCTURE) SHALL BE PAINTED INTERIOR PAINT TYPE #5.12.
G. ALL GALVANIZED METAL (EXCLUDING STRUCTURE) SHALL BE PAINTED INTERIOR PAINT TYPE #5.32.
H. ALL EXPOSED STEEL (FERROUS) STRUCTURE SHALL BE PAINTED INTERIOR PAINT TYPE #5.11.
I. ALL EXPOSED GALVANIZED-METAL STRUCTURE SHALL BE PAINTED INTERIOR PAINT TYPE #5.31.
J. ALL WALLS ARE TO RECEIVE AN EGGSHELL FINISH AND ALL CEILINGS/BULKHEADS ARE TO RECEIVE A FLAT FINISH.

PAINT COLOR GENERAL NOTES

A. PAINT ALL EXPOSED STEEL ON STAIRS, RAILS, AND STRINGERS P-2.
B. PAINT ALL GWB SOFFITS P-3 UNLESS OTHERWISE NOTED ON FINISH PLANS OR INTERIOR ELEVATIONS.
C. PAINT ALL SIDES (HORIZ. AND VERT.) OF SOFFIT INDICATED COLOR, UNLESS OTHERWISE NOTED.
D. PAINT ALL PAINTED EXPOSED CEILINGS AND GYPSUM BOARD CEILINGS P-3 UNLESS OTHERWISE NOTED ON FINISH PLANS, CEILING PLANS, OR INTERIOR ELEVATIONS.
E. ALL INTERIOR HOLLOW METAL FRAMES AND DOOR FRAMES TO BE PAINTED P-2 UNLESS OTHERWISE NOTED.
F. ALL EXPOSED INTERIOR STEEL COLUMNS SHALL BE PAINTED TO MATCH ADJACENT WALL COLOR, UNLESS OTHERWISE INDICATED ON INTERIOR ELEVATIONS OR FINISH PLANS.

2

WHITING HIGH SCHOOL - AUDITORIUM IMPROVEMENTS

1751 OLIVER STREET
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SCHOOL CITY OF WHITING

ARCHITECT

FANNING HOWEY

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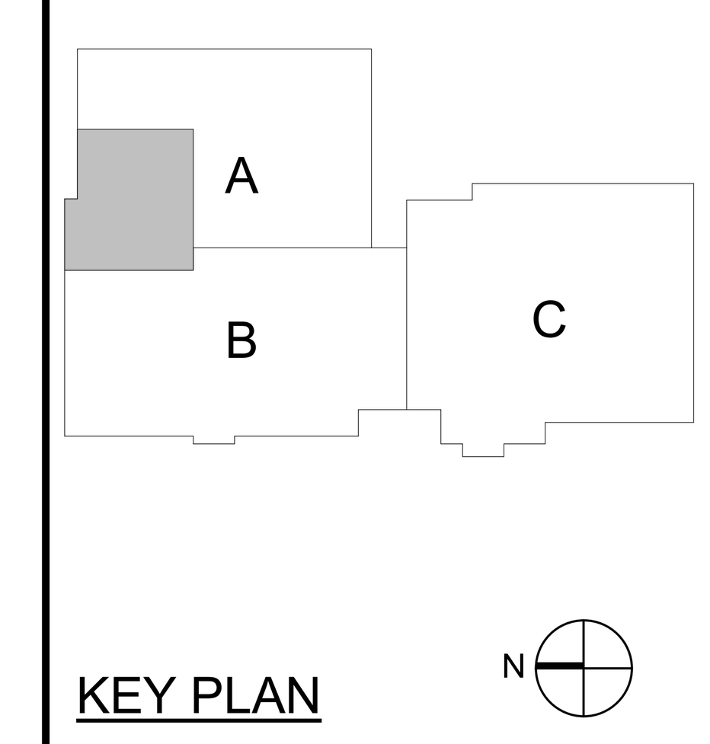
350 E NEW YORK ST, STE#300, INDIANAPOLIS, IN 46204



KEY PLAN

CONSTRUCTION DOCUMENTS

PAUL A. MILLER
REGISTERED
No. AR10800161
STATE OF INDIANA
ARCHITECT

PROJECT MANAGER: NVW
DRAWN BY: AML
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09-06-2024

REV. NO.	DESCRIPTION	DATE
2	ADDENDUM #2	09.24.2024
3	ADDENDUM #3	09.30.2024

LIST OF FINISHES & FLOORING TRANSITIONS

AF6.01

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ROOM LEGEND

ROOM NO.	ROOM NAME	AREA (SF)
1-A	STAIR	233 SF
2-A	STAIR	531 SF
5-A.2	STAIR	157 SF
5-A.3	STAIR	157 SF
A-201	BOYS	266 SF
A-202	CUSTODIAN	146 SF
A-221	CORRIDOR	916 SF
A-222	ELEC	34 SF
A-223	AUDITORIUM	3,013 SF
A-224	CORRIDOR	841 SF
A-225	PASSAGE	102 SF
A-226	STAGE	2,206 SF
A-227	MAKE-UP	348 SF
A-228	TOILET	25 SF
A-229	PASSAGE	274 SF
A-230	PASSAGE	76 SF
A-231	CUSTODIAL	30 SF
A-232	TOILET	25 SF

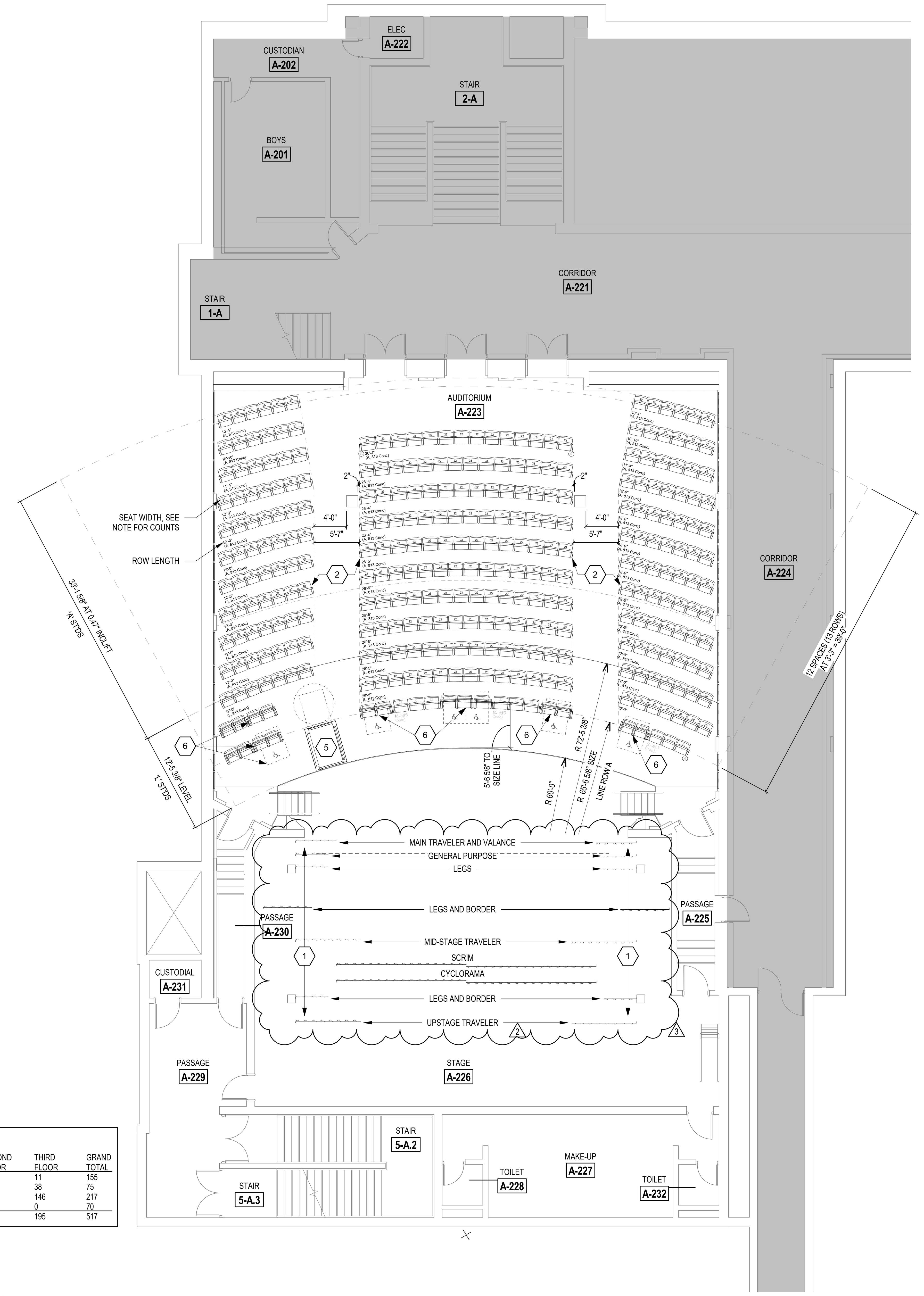
EQUIPMENT GENERAL NOTES

A. ALL COUNTERTOPS TO HAVE CONTINUOUS 4" HIGH BACKSPLASHES AND ENDSPLASHES UNLESS NOTED OTHERWISE.
B. HIDDEN LINES (-----) INDICATE ITEMS TO BE PART OF LOOSE EQUIPMENT PACKAGE OR BY OWNER, NOT INCLUDED IN CONSTRUCTION CONTRACTS. DASHED LINES (– – –) INDICATE OVERHEAD ITEMS (INCLUDED IN CONSTRUCTION CONTRACTS).
C. (TB) INDICATES 4' HIGH TACK BOARD LENGTH AS INDICATED. REFER TO MOUNTING HEIGHT DRAWING.
D. PROVIDE FILLER STRIPS BETWEEN CASEWORK UNITS AND WALL OR BETWEEN ANY UNIT AS REQUIRED. EXTEND COUNTER TO FACE OF WALL OR ADJACENT TALL CABINET.
E. ALL CASEWORK DOORS AND DRAWERS SHALL BE LOCKABLE.
F. ALL EXPOSED ENDS AND BACKS OF CASEWORK SHALL BE FINISHED.
G. CASEWORK INSTALLER SHALL CUT CASEWORK AS REQUIRED FOR PLUMBING/ELECTRICAL LINES.
H. CASEWORK INSTALLER SHALL CAULK BETWEEN COUNTERS, BACKSPLASHES, AND WALLS.
I. ALL WALL-MOUNTED CASEWORK SHALL BE MOUNTED WITH THE TOP AT 7'-0" AFF UNLESS OTHERWISE NOTED.
J. REFER TO LIST OF FINISHES FOR COLOR SELECTIONS.

EQUIPMENT NOTES (X)

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

1 NEW STAGE RIGGING AND CURTAINS, INCLUDING BUT NOT LIMITED TO: MAIN TRAVELER/VALANCE, LEGS, BORDERS, MID-STAGE TRAVELER, SCRIM, CYCLORAMA, UPSTAGE TRAVELER. SEE AT.01 FOR LOCATIONS OF EACH AND CURTAIN SCHEDULE. VERIFY EXISTING STAGE RIGGING AND CURTAINS PRIOR TO DEMOLITION AS THIS IS A DIRECT 1:1 REPLACEMENT. (3)
2 NEW UPHOLSTERED AUDITORIUM SEATING; REFER TO AQ6.01 AND SPECIFICATIONS FOR ADDITIONAL DETAILS.
5 PORTABLE WHEELCHAIR LIFT, REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION
6 DASHED LINE INDICATES WHEELCHAIR FLOOR SPACE; SHADED ARMREST INDICATES AUDITORIUM SEATING ON MOVABLE BASES



CHAIR SUMMARY TOTALS:

91.12.66.4 FLOOR MOUNT	SECOND FLOOR	THIRD FLOOR	GRAND TOTAL
20" CHAIRS	144	11	155
21" CHAIRS	37	38	75
22" CHAIRS	71	146	217
23" CHAIRS	70	0	70
	322	195	517

1 UNIT 'A' SECOND FLOOR EQUIPMENT PLAN

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

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WHITING HIGH SCHOOL - AUDITORIUM IMPROVEMENTS

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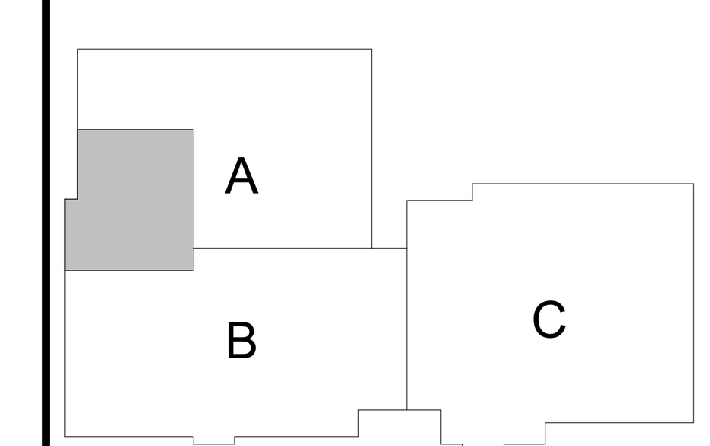


KEY PLAN

CONSTRUCTION DOCUMENTS

PAUL A. MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: NVW
DRAWN BY: AML
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09-06-2024

REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #1	09.18.2024
2	ADDENDUM #2	09.24.2024
3	ADDENDUM #3	09.30.2024

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

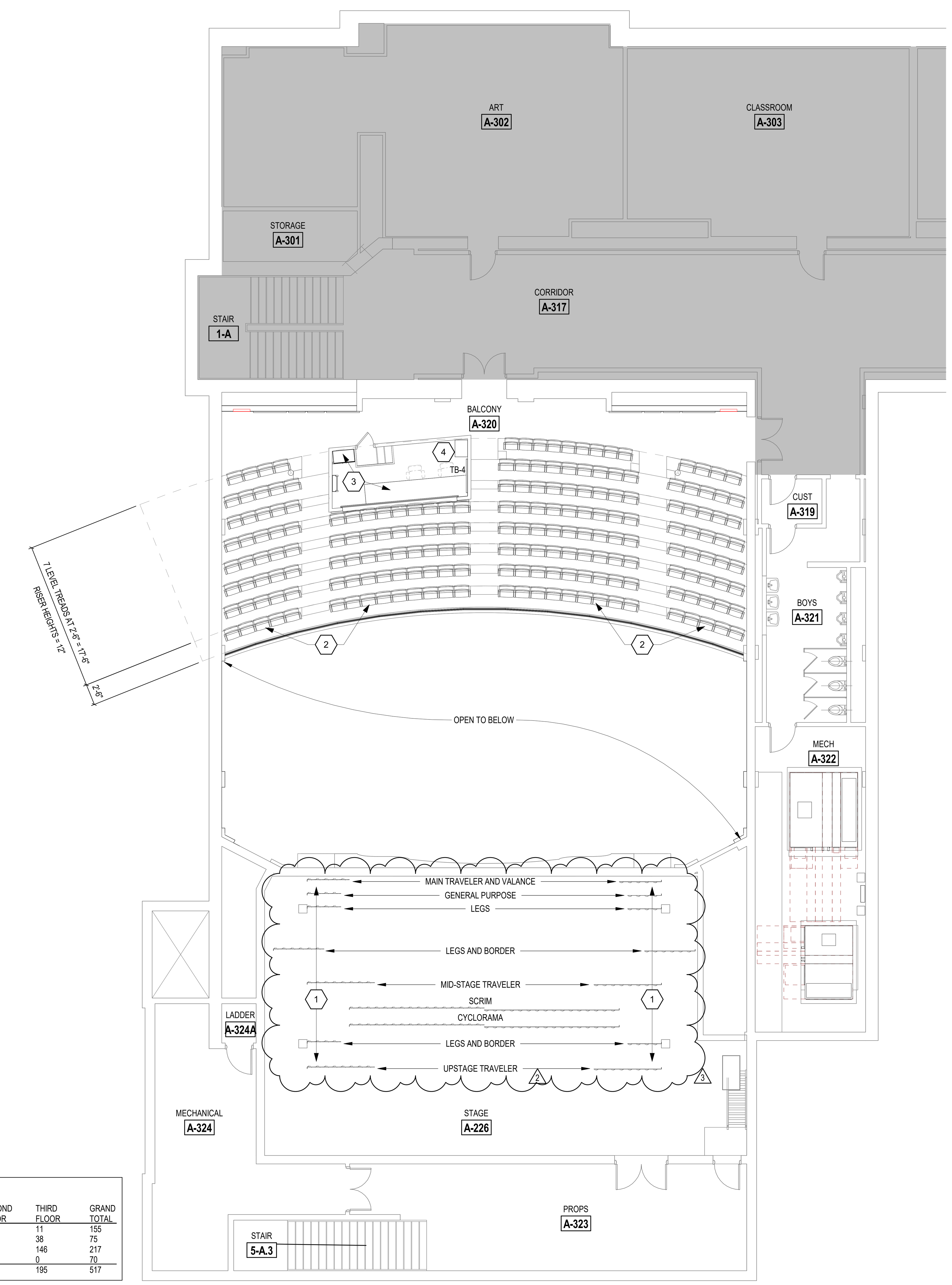
SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

UNIT 'A' SECOND FLOOR EQUIPMENT PLAN

AQ1.2A

ROOM LEGEND

ROOM NO.	ROOM NAME	AREA (SF)
1-A	STAIR	233 SF
5-A.3	STAIR	157 SF
A-223	AUDITORIUM	3,013 SF
A-226	STAGE	2,206 SF
A-227	Room	89 SF
A-301	STORAGE	95 SF
A-302	ART	1,013 SF
A-303	CLASSROOM	727 SF
A-304	CLASSROOM	669 SF
A-317	CORRIDOR	2,626 SF
A-319	CUST	38 SF
A-320	BALCONY	1,490 SF
A-321	BOYS	245 SF
A-322	MECH	473 SF
A-323	PROPS	556 SF
A-324	MECHANICAL	395 SF
A-324A	LADDER	19 SF
A-324B	LIGHTS	71 SF
A-325	SOUND BOOTH	109 SF



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

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EQUIPMENT GENERAL NOTES

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B. HIDDEN LINES (-----) INDICATE ITEMS TO BE PART OF LOOSE EQUIPMENT PACKAGE OR BY OWNER, NOT INCLUDED IN CONSTRUCTION CONTRACTS. DASHED LINES (– – –) INDICATE OVERHEAD ITEMS (INCLUDED IN CONSTRUCTION CONTRACTS).
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I. ALL WALL-MOUNTED CASEWORK SHALL BE MOUNTED WITH THE TOP AT 7'-0" AFF UNLESS OTHERWISE NOTED.
J. REFER TO LIST OF FINISHES FOR COLOR SELECTIONS.

EQUIPMENT NOTES (X)

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

1 NEW STAGE RIGGING AND CURTAINS, INCLUDING BUT NOT LIMITED TO: MAIN TRAVELER/VALANCE, LEGS, BORDERS, MID-STAGE TRAVELER, SCRIM, CYCLORAMA, UPSTAGE TRAVELER. SEE AT.01 FOR LOCATIONS OF EACH AND CURTAIN SCHEDULE. VERIFY EXISTING STAGE RIGGING AND CURTAINS PRIOR TO DEMOLITION AS THIS IS A DIRECT 1:1 REPLACEMENT. (3)
2 NEW UPHOLSTERED AUDITORIUM SEATING; REFER TO AQ6.01 AND SPECIFICATIONS FOR ADDITIONAL DETAILS.
3 NEW PL-1 PLASTIC LAMINATE CASEWORK & PL-2 COUNTERTOP IN THIS ROOM, REFER TO DETAIL 2/A1.3A FOR ADDITIONAL INFORMATION
4 EQUIPMENT RACK, REFER TO TECHNOLOGY DRAWINGS

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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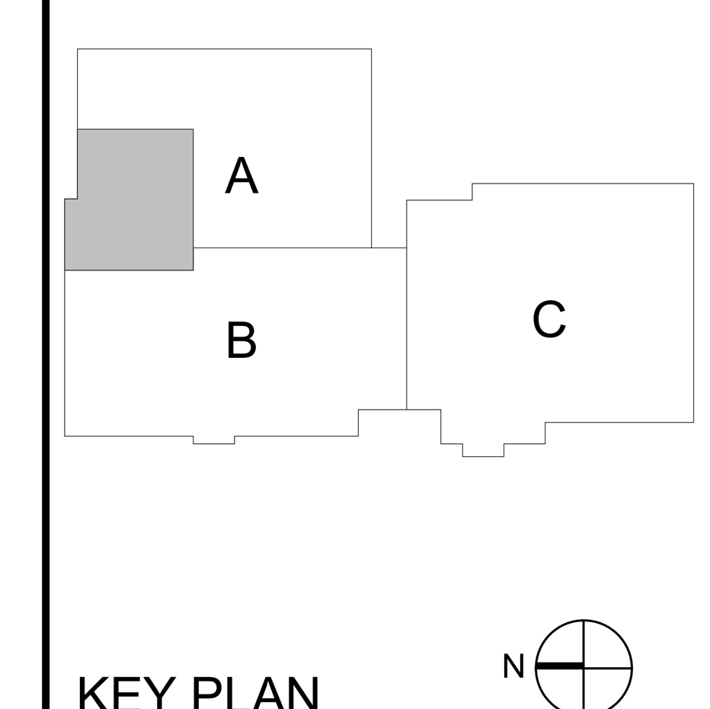

KEY PLAN

CONSTRUCTION DOCUMENTS

PAUL A. MILLER
REGISTERED
No. AR10800161
STATE OF
INDIANA
ARCHITECT

PROJECT MANAGER: NVW
DRAWN BY: AML
PROJECT NUMBER: 224023.01
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REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #1	09.18.2024
2	ADDENDUM #2	09.24.2024
3	ADDENDUM #3	09.30.2024

UNIT 'A' THIRD FLOOR EQUIPMENT PLAN

AQ1.3A

LIST OF FINISHES

EQUIPMENT MATERIALS

AUDITORIUM SEATING - SECOND FLOOR (LOWER LEVEL)

BASIS OF DESIGN	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION

IRWIN SEATING - MILLENNIUM 91.12.66.4, THREE-QUARTER FOLD CHAIR
INCLUDE ROUNDED BACK, TUFTED UPHOLSTERY, ROUNDED LAMINATE END PANEL AND ARM CAP, POLYMER INTERMEDIATE ARM CAPS
SEAT TO BE "NO. 12 UNIVERSAL" SEAT WITH UPHOLSTERED FOAM CUSHION AND POLY ON BOTTOM
INCLUDE PLATES WITH AISLE AND SEAT NUMBERS
[ALTERNATE] INCLUDE "FULTON" CAST ALUMINUM END PANELS AND INTERMEDIATE WOOD ARM CAPS

UPHOLSTERY: GRADE 5, TO BE SELECTED
POLY: STANDARD COLOR, TO BE SELECTED
[BASE BID] LAMINATE END PANELS & AISLE ARM CAPS: FORMICA NATURAL WALNUT 5793-NG
[ALTERNATE] CAST ALUMINUM END PANELS: STANDARD PAINT COLOR, TO BE SELECTED WITH STANDARD METALLIC GOLD HIGHLIGHT △2

AUDITORIUM SEATING - THIRD FLOOR (BALCONY LEVEL)

BASIS OF DESIGN	REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION

IRWIN SEATING - MILLENNIUM 91.15.66.4, FULL FOLD CHAIR
INCLUDE ROUNDED BACK, TUFTED UPHOLSTERY, ROUNDED LAMINATE END PANEL AND ARM CAP, POLYMER INTERMEDIATE ARM CAPS
SEAT TO BE "NO. 15 CRUSADER" SHORTENED SEAT WITH UPHOLSTERED FOAM CUSHION AND STAINED VENEER ON BOTTOM
INCLUDE PLATES WITH AISLE AND SEAT NUMBERS
[ALTERNATE] INCLUDE "FULTON" CAST ALUMINUM END PANELS AND INTERMEDIATE WOOD ARM CAPS

UPHOLSTERY: GRADE 5, TO BE SELECTED
BOTTOM VENEER: BEST MATCH TO END PANEL LAMINATE
POLY: STANDARD COLOR, TO BE SELECTED
[BASE BID] LAMINATE END PANELS & AISLE ARM CAPS: FORMICA NATURAL WALNUT 5782-NG
[ALTERNATE] CAST ALUMINUM END PANELS: STANDARD PAINT COLOR, TO BE SELECTED WITH STANDARD METALLIC GOLD HIGHLIGHT

HP PLASTIC LAMINATE

MATERIAL ABBREVIATION	*MATERIAL/MANUFACTURER*	*COLOR SELECTION*
PL-1	WILSONART / FORMICA / NEVAMAR	STANDARD, TO BE SELECTED
PL-2	WILSONART / FORMICA / NEVAMAR	STANDARD, TO BE SELECTED

STAGE CURTAIN

MATERIAL ABBREVIATION	*MATERIAL/MANUFACTURER*	*COLOR SELECTION*
	REFER TO SPECIFICATIONS	TO BE SELECTED △2

- REFER TO DRAWING AT.01 FOR MORE INFORMATION ON CURTAIN LOCATIONS/TYPES △3

TACKBOARD

MATERIAL ABBREVIATION	*MATERIAL/MANUFACTURER*	*COLOR SELECTION*
TB	REFER TO SPECIFICATIONS	STANDARD, TO BE SELECTED

EQUIPMENT MATERIAL/FINISH GEN. NOTES

A. COLOR SELECTION OF ALL FINISHES FOR INTERIOR ARCHITECTURAL WOODWORK/CUSTOM CASEWORK ITEMS ARE NOTED ON CASEWORK ELEVATIONS AND DETAIL DRAWINGS. △2

B. EDUCATION CASEWORK FINISHES ARE AS FOLLOWS (UNLESS OTHERWISE NOTED):
- COUNTERTOPS AND WORKSURFACES ARE TO BE PL-2, UNLESS OTHERWISE NOTED.
- CABINETS/VERTICAL SURFACES ARE TO BE PL-1, UNLESS OTHERWISE NOTED.
- INTERIOR MELAMINE TO BE WHITE.
- 3MM AND 1MM PVC EDGES ON CASEWORK ARE TO MATCH PL-1. COLOR SELECTION TO BE DETERMINED.
- HANDLES TO BE BRUSHED CHROME.
- HINGES TO BE BRUSHED CHROME.
- GROMMETS COLOR SELECTION TO BE DETERMINED.
- TECHNOLOGY CABINET VENT COLOR TO BE DETERMINED.

WHITING HIGH SCHOOL - AUDITORIUM IMPROVEMENTS

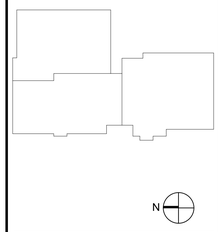
1751 OLIVER STREET
WHITING, IN 46394

SCHOOL CITY OF WHITING

ARCHITECT

FANNING HOWEY

317-848-0966 WWW.FHAI.COM
350 E NEW YORK ST, STE#300, INDIANAPOLIS, IN 46204



N

CONSTRUCTION DOCUMENTS

PAULA MILLER REGISTERED No. AR10800161 STATE OF INDIANA ARCHITECT

PROJECT MANAGER: NVW
DRAWN BY: AML
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09-06-2024

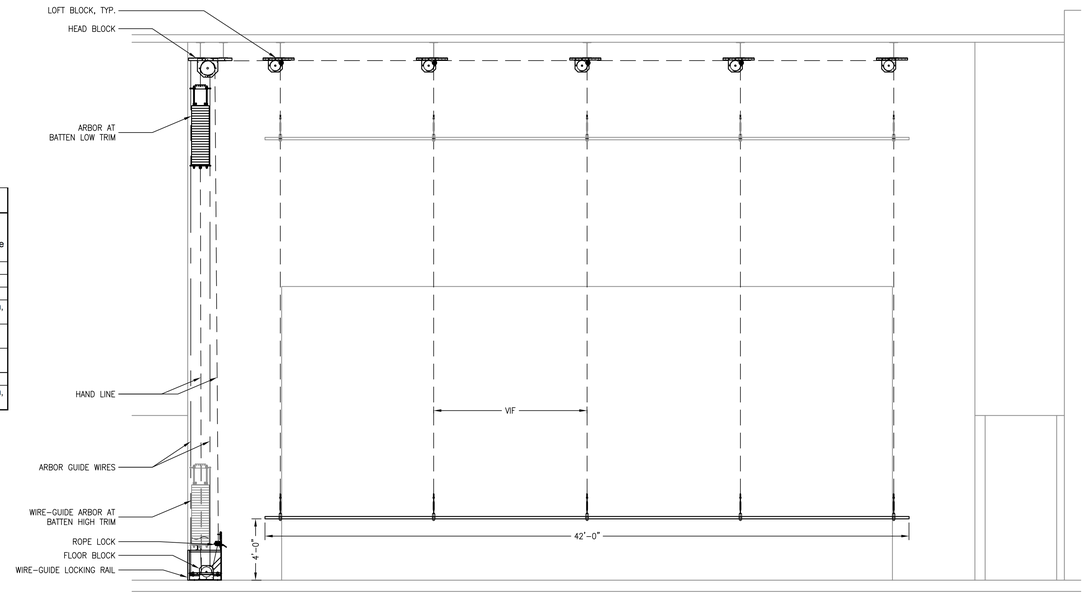
REV. NO.△	DESCRIPTION	DATE
2	ADDENDUM #2	09.24.2024
3	ADDENDUM #3	09.30.2024

LIST OF EQUIPMENT FINISHES AND DETAILS

AQ6.01

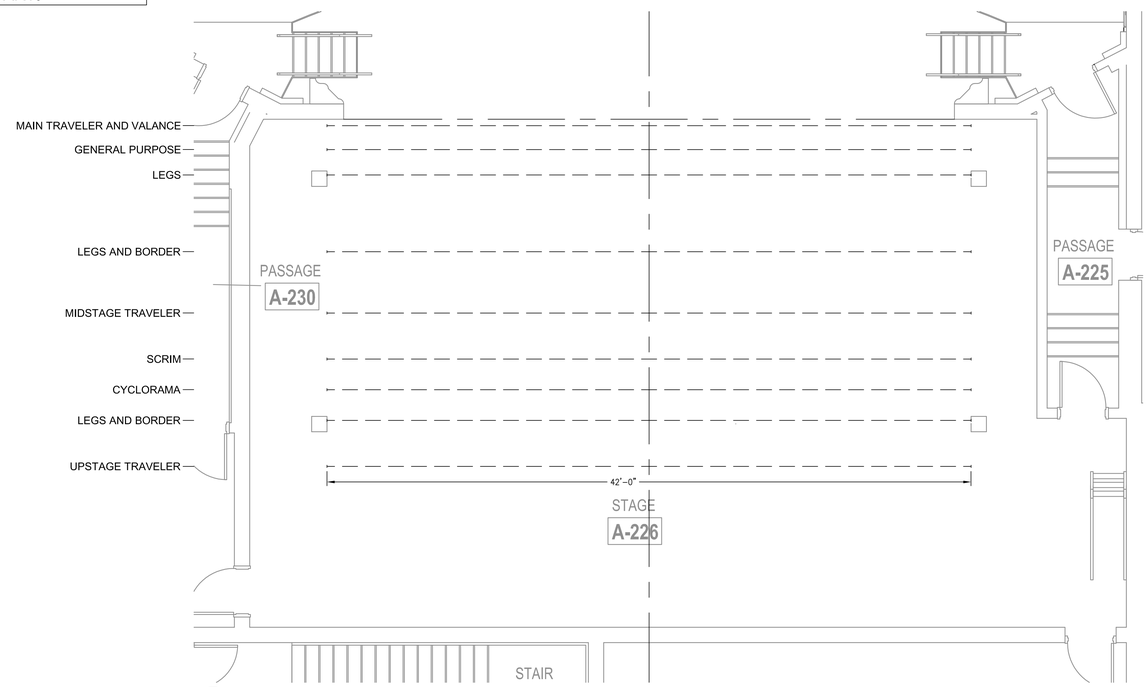
Line Set	Distance from Plaster	Description	Rigging Type	Gross Capacity	Estimated Live Load	Lift Lines	Batten Travel	Batten Length	Drapery Track	Drapery Width	Drapery Height	Qty. per Line Set	Fullness	Fabric	Color	Notes
1	VIF	Main Curtain & Valence	Counterweight	1,045	920	VIF	VIF	42'-0"	ADC 280 Rope Pull	VIF	VIF	2/1	50%	25 oz. IFR Velour	TBD	Valance - WGT, side hem, bottom chain Main - S-hooks, 1/2 width onstage side finish, bottom chain
2	VIF	General Purpose	Counterweight	1,045	920	VIF	VIF	42'-0"		VIF	VIF					
3	VIF	Legs	Counterweight	1,045	920	VIF	VIF	42'-0"		VIF	VIF	2	50%	25 oz. IFR Velour	Black	WGT, side hem, bottom chain
4	VIF	Legs and Border	Counterweight	1,045	920	VIF	VIF	42'-0"		VIF	VIF	2/1	50%	25 oz. IFR Velour	Black	WGT, side hem, bottom chain
5	VIF	Midstage Traveler	Counterweight	1,045	920	VIF	VIF	42'-0"	ADC 280 Rope Pull	VIF	VIF	2	50%	25 oz. IFR Velour	Black	S-hooks, 1/2 width onstage side finish, bottom chain
6	VIF	Scrim	Counterweight	1,045	920	VIF	VIF	42'-0"		VIF	VIF	1	0%	IFR Sharkstooth	Black	WGT, side hem, bottom pipe pocket Supply 1" pipe
7	VIF	Cyclorama	Counterweight	1,045	920	VIF	VIF	42'-0"		VIF	VIF	1	0%	IFR Seamless Muslin	White	WGT, side hem, bottom pipe pocket Supply 1" pipe
8	VIF	Legs and Border	Counterweight	1,045	920	VIF	VIF	42'-0"		VIF	VIF	2/1	50%	25 oz. IFR Velour	Black	WGT, side hem, bottom chain
9	VIF	Upstage Traveler	Counterweight	1,045	920	VIF	VIF	42'-0"	ADC 280 Rope Pull	VIF	VIF	2	50%	25 oz. IFR Velour	Black	S-hooks, 1/2 width onstage side finish, bottom chain

3 / AT-01 *THEATRE RIGGING - LINESET AND SOFTGOODS SCHEDULE*
SCALE:



2 / AT-01 *THEATRE RIGGING - ELEVATION VIEW, TYP.*
SCALE: 1/4" = 1'-0"

NOTE:
REPLACE ALL RIGGING IN-KIND. SITE VISIT AND MEASUREMENTS OF EXISTING EQUIPMENT IS NECESSARY.



1 / AT-01 *THEATRE RIGGING - PLAN VIEW*
SCALE: 1/4" = 1'-0"

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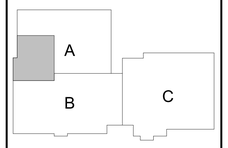


KEY PLAN N

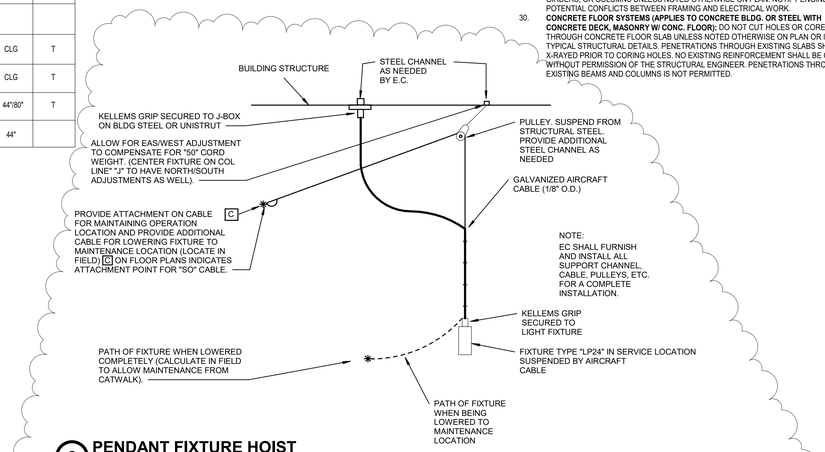
CONSTRUCTION DOCUMENTS

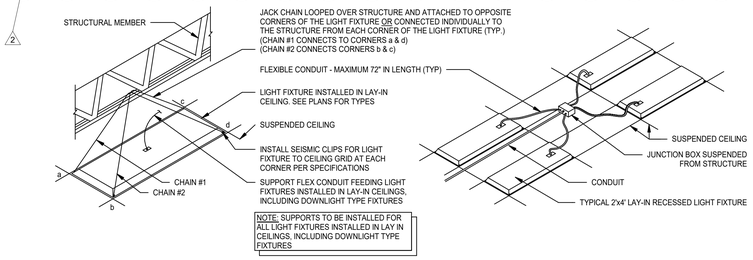
PROJECT MANAGER:
DRAWN BY:
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09-06-2024

REV. NO.△	DESCRIPTION	DATE
1	ADDENDUM #3	09.30.2024

THEATRE EQUIPMENT PLANS

AT.01





ELECTRICAL ABBREVIATIONS

ABBREVIATIONS USED ON THE CONTRACT DOCUMENTS, INCLUDE BUT ARE NOT LIMITED TO THOSE LISTED BELOW

#	NUMBER
(N)P(N)W	NUMBER OF POLES, NUMBER OF WIRES
AFC	ABOVE FINISHED COUNTERTOP
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLER UNIT
AIC	AMPERE INTERRUPTING CAPACITY
AID	ADDRESSABLE INTERFACE DEVICE
AR	AS REQUIRED
AT	AMP TRIP
AWG	AMERICAN WIRE GAUGE
A/V	AUDIO VISUAL
B	BLANK
C	CONDUIT (GENERIC TERM FOR RACEWAY, PROVIDE AS SPECIFIED)
Cd	CANDELA
CLG	CEILING MOUNTED
CAM	CAMERA
CL	LIGHTING CONTACTOR
CMF	COMBINATION MOTOR FUSIBLE STARTER
D	DEMO TABLE
DC	DIRECT CURRENT
DED	DEDICATED DEVICE ON INDIVIDUAL BRANCH CIRCUIT
DF	DUAL FACE
DIA	DIAMETER
DISTR	DISTRIBUTION
DPST	DOUBLE POLE SINGLE THROW
DPDT	DOUBLE POLE DOUBLE THROW
EBJ	EQUIPMENT BONDING JUMPER ON LOAD SIDE OF AN OVER-CURRENT DEVICE
EC	ELECTRICAL CONTRACTOR
EM	WIRED ON EMERGENCY CIRCUIT
EOL	END OF LINE
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
EX	EXISTING
F	FLUSH
F@	FUSED AT
FA	FIRE ALARM
FBO	FURNISHED BY OTHERS
FDN	FOUNDATION
FRE	FIBERGLASS REINFORCED EPOXY CONDUIT
H-O-A	HAND-OFF-AUTO
K/O	KNOCK-OUT
LFMC	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT
LFNC	LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT
LSIG	LONG TIME, SHORT TIME, INSTANTANEOUS AND GROUND FAULT TRIP ADJUSTMENTS TO BE PROVIDED ON A CIRCUIT BREAKER
LV	LOW VOLTAGE
MBJ	MAIN BONDING JUMPER
MC/ER	MAIN CROSS-CONNECT/EQUIPMENT ROOM
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MH	MOUNTING HEIGHT (ON PLAN), ALL MOUNTING HEIGHTS FOR DEVICE BOXES ARE FROM FINISHED FLOOR TO BOTTOM OF BOX, UNO. VERIFY OUTLET LOCATIONS WITH OTHER TRADES BEFORE ROUGH-IN
MLO	MAIN LUGS ONLY
MOD	MOTOR OPERATED DISCONNECT SWITCH
MOCP	MAXIMUM OVER-CURRENT PROTECTION
MSB	MAIN SWITCHBOARD
MTD	MOUNTED
MTG	MOUNTING
MTS	MANUAL TRANSFER SWITCH
MV	MEDIUM VOLTAGE
N	GROUNDED CIRCUIT CONDUCTOR (NEUTRAL)
+N	INDICATES MOUNTING HEIGHT (N) TO BOTTOM OF DEVICE FROM FINISH FLOOR, UNO
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NFS	NONFUSIBLE SWITCH
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NM	NONMETALLIC SHEATHED CABLE
NO	NORMALLY OPEN
NRTL	NATIONALLY RECOGNIZED TESTING LAB
NTS	NOT TO SCALE
OC	ON CENTER
OCPD	OVER-CURRENT PROTECTIVE DEVICE
PB	PULL BOX
PE	PNEUMATIC/ELECTRIC
PR	PAIR
R	RELEASE
RAF	RETURN AIR FAN
S	SURFACE
SBJ	SYSTEM BONDING JUMPER
SIG	SIGNAL
SN	SOLID NEUTRAL
SP	SPARE
SPL	SPLICE
SPDT	SINGLE POLE DOUBLE THROW
SPST	SINGLE POLE SINGLE THROW
SS	STAINLESS STEEL
SSBJ	SUPPLY-SIDE BONDING JUMPER
ST	SHUNT TRIP
STP	SHIELDED TWISTED PAIR
STL	CARBON STEEL
SUSP	SUSPENDED
SW	SWITCH
SWBD	SWITCHBOARD
TC	TELEPHONE CABINET
TCP	TEMPERATURE CONTROL PANEL
TEL/DATA	TELEPHONE/DATA
TEL	TELEPHONE
TERM	TERMINAL(S)
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
TTB	TELEPHONE TERMINATION BOARD
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
VIF	VERIFY IN FIELD
WH	WATTHOUR
WM	WALL MOUNTED
WP	WEATHERPROOF
XFMR	TRANSFORMER

POWER SYMBOLS

SYMBOL	DESCRIPTION	MOUNTING HEIGHT TO BOTTOM
—	CONDUIT CONCEALED ABOVE CEILING OR IN WALL	
– – – – –	CONDUIT CONCEALED IN OR BELOW FLOOR, OR UNDER GROUND	
⊖X 1AL1-1 ⊕ ● ■ ⊕	20 AMP, 125 VOLT, NEMA 5-20R DUPLEX RECEPTACLE WITH COMMON COVER PLATE MOUNTED VERTICALLY +16" TO BOTTOM. LETTER(S) IN FRONT INDICATES LOAD TYPE, SEE BELOW. SINGLE LINE INDICATES HORIZONTAL MOUNTING, DOUBLE LINE INDICATE QUAD, DARK CENTER INDICATES ABOVE COUNTERTOP MOUNTING (44") NEMA 5-20R, UNO. CIRCUIT NUMBER (e.g. "1AL1-1") ADJACENT TO THE SYMBOL ON PLANS INDICATES PANELBOARD/CIRCUIT NUMBER SERVING RECEPTACLE, UNO. B RECEPTACLE WITH 20 AMP SINGLE POLE SWITCH IN 2 GANG BOX AND COMMON COVER PLATE C CASEWORK, COORDINATE WITH ARCHITECTURAL CO COPY MACHINE CM COFFEE MAKER E RED RECEPTACLE AND STAINLESS COVER PLATE, CONNECT TO BACKUP POWER GF GROUND FAULT CIRCUIT INTERRUPTING TYPE I ISOLATED GROUND M MONITOR - 60" AFF MW MICROWAVE R REFRIGERATOR - 48" AFF TL TWIST LOCK TR TAMPER RESISTANT U DUPLEX RECEPTACLE WITH (2) USB PORTS UR UNDER COUNTER REFRIGERATOR V VENDING MACHINE, FEED FROM 30 mA GFCI BREAKER IN PANELBOARD. VP WALL MOUNTED VIDEO PROJECTOR, 96" AFF UNO WB WHITEBOARD WC ELECTRIC WATER COOLER. FEED FROM 5 mA GFCI BREAKER IN PANELBOARD. WF WASHFOUNTAIN/LAVATORY. CONNECT TO NEAREST THROUGH FEED GFCI RECEPTACLE. WM WASHING MACHINE. FEED FROM 30 mA GFCI BREAKER IN PANELBOARD. WP WEATHER RESISTANT GFCI WITH IN-USE TYPE WEATHERPROOF COVER HINGED AT TOP X EXPLOSION PROOF	
⊖	20 AMP DUPLEX RECEPTACLE FLUSH CEILING MOUNTED , NEMA 5-20R	CLG
▷	SPECIAL POWER RECEPTACLE, AMPS, VOLTS AND NEMA CONFIGURATION AS DEFINED ON PLANS BY CODED NOTE	16"
▶	SINGLE STRAIGHT BLADE, SPECIAL RECEPTACLE, 20A, 125/250 VOLT, 3P, 4W, NEMA 14-20R	16"
F	20 AMP DUPLEX RECEPTACLE IN FLUSH FLOOR MOUNTED BOX,NEMA 5-20R. USE A CAST BOX AT GRADE LEVEL, USE A STAMPED STEEL BOX FOR UPPER FLOORS. REFER TO SPECIFICATIONS FOR REQUIREMENTS.	-
T	20 AMP DUPLEX RECEPTACLE IN FIRE RATED POKE-THRU FLOOR DEVICE, NEMA 5-20R. REFER TO SPECIFICATIONS FOR REQUIREMENTS.	-
▣	HIGH CAPACITY FLOOR BOX WITH 4 DUPLEX RECEPTACLES, NEMA 5-20R, UNO FOR POWER AND DATA. REFER TO SPECIFICATIONS FOR REQUIREMENTS.	-
⊓	DISTRIBUTION PANEL, SEE ONE LINE DIAGRAM	-
▨	SURFACE CIRCUIT BREAKER PANELBOARD, SEE ONE LINE DIAGRAM	-
▨	FLUSH MOUNTED CIRCUIT BREAKER PANELBOARD, SEE ONE LINE DIAGRAM	-
☐	NON-FUSED DISCONNECT, 3 POLE, NEMA 1, UNO. 30 AMP UNO. -WP SUFFIX DESIGNATES NEMA 3R ENCLOSURE. -WP4X SUFFIX DESIGNATES NEMA 4X STAINLESS STEEL ENCLOSURE.	48"
F 100A-3P	FUSED DISCONNECT, 3 POLE, NEMA 1, UNO. 30 AMP UNO. -WP SUFFIX DESIGNATES NEMA 3R ENCLOSURE. -WP4X SUFFIX DESIGNATES NEMA 4X STAINLESS STEEL ENCLOSURE.	48"
☒	COMBINATION MAGNETIC MOTOR STARTER, WITH 30 AMP - 3 POLE CIRCUIT BREAKER DISCONNECT SWITCH, NEMA SIZE 1, UNO WITH H.O.A. SWITCH AND RED PILOT LIGHT (RUNNING).	48"
S M	MANUAL MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION, UNO. FLUSH MOUNTED IN FINISH SPACES.	44"
VFC	VARIABLE FREQUENCY CONTROLLER, FURNISHED BY DIV. 23 CONTRACTOR, INSTALLED BY DIV. 26 CONTRACTOR, UNO. COORDINATE FINAL MOUNTING HEIGHT.	60"
⌀	MOTOR	-
Ⓙ Ⓙ	JUNCTION BOX, PIGTAIL INDICATED FLEXIBLE CONDUIT CONNECTION TO EQUIPMENT	-
CP	CONTROL PANEL SUPPLIED BY VENDOR, INSTALLED AND WIRED BY CONTRACTOR. COORDINATE FINAL MOUNTING HEIGHT	-

LIGHTING SYMBOLS

SYMBOL	DESCRIPTION	MH
H	OCCUPANCY SENSOR - CEILING MOUNTED, ULTRASONIC AND INFRARED SENSOR FOR CORRIDOR & HALLWAY APPLICATIONS, 56'x16' (MIN.) RECTANGULAR SHAPED COVERAGE PATTERN. PROVIDE WITH RELAY OPTION. "Λ" PORTION OF SYMBOL INDICATES AIMING OF ULTRASONIC SENSORS.	CLG
CT	OCCUPANCY SENSOR - CEILING MOUNTED, DUAL TECHNOLOGY, 360 DEGREE PATTERN, 2000 S.F. COVERAGE. PROVIDE WITH RELAY OPTION. "Λ" PORTION OF SYMBOL INDICATES AIMING OF ULTRASONIC SENSORS.	CLG
CT	OCCUPANCY SENSOR - CEILING MOUNTED, DUAL TECHNOLOGY, DIRECTIONAL/180 DEGREE PATTERN, 1200 S.F. COVERAGE (MIN.). PROVIDE WITH RELAY OPTION. PROVIDE WITH CEILING MOUNTING BRACKET ACCESSORY IF NOT SUPPLIED AS STANDARD WITH SENSOR. "Λ" PORTION OF SYMBOL INDICATES AIMING.	CLG
ST	OCCUPANCY SENSOR - WALL SWITCH TYPE, DUAL TECHNOLOGY WITH MANUAL OVERRIDE SWITCH	44"
SI	OCCUPANCY SENSOR - WALL SWITCH TYPE,INFRARED WITH MANUAL OVERRIDE SWITCH	44"
S K	KEY OPERATED SWITCH, NUMBER INDICATES NUMBER OF POLES, 277V, 20A, FLUSH UNO	44"
S 3	SWITCH, NUMBER INDICATES NUMBER OF POLES, 277V, 20A, FLUSH UNO	44"
S a	SINGLE POLE SWITCH, 277V, 20A, FLUSH UNO TYPICAL, SUBSCRIPT a, b, c INDICATES WHICH LUMINAIRE THAT WILL BE CONTROLLED VIA SWITCH LEG	44"
S D	WALL BOX DIMMER 277V, 1200 WATT MINIMUM, FLUSH, UNO. PROVIDE WATTAGE SIZE TO EXCEED CIRCUIT LOAD	44"
⊘	DOWNLIGHT LUMINAIRE, APPROXIMATE SIZE INDICATED	-
◑	DOWNLIGHT LUMINAIRE CONNECTED TO EMERGENCY SYSTEM AS INDICATED	-
○ ☐	WALL SCONCE LUMINAIRE	-
→ ⊗	WALL MOUNTED EXIT SIGN, DIRECTIONAL ARROWS AS SHOWN	96"
⊗ ⊗	CEILING MOUNTED EXIT SIGN, SHADED PORTION(S) INDICATES SINGLE OR DOUBLE FACE	CLG
⊓	EMERGENCY LIGHTING UNIT WITH 2 HEADS AND BATTERY	76"
▭	WALL-BRACKET LUMINAIRE, APPROXIMATE SIZE INDICATED	-
◢	WALL-BRACKET LUMINAIRE CONNECTED TO EMERGENCY SYSTEM AS INDICATED	-
▭	RECESSED LUMINAIRE, APPROXIMATE SIZE INDICATED. ("NL", INDICATES NIGHT LIGHT FIXTURES)	CLG
◢	RECESSED LUMINAIRE CONNECTED TO EMERGENCY SYSTEM AS INDICATED	CLG
▭	SURFACE OR PENDANT MOUNTED LUMINAIRE, APPROXIMATE SIZE INDICATED	CLG
◢	SURFACE OR PENDANT MOUNTED LUMINAIRE CONNECTED TO EMERGENCY SYSTEM AS INDICATED	CLG
⊙	PENDANT LUMINAIRE, APPROXIMATE SIZE INDICATED	CLG
◑	PENDANT LUMINAIRE CONNECTED TO EMERGENCY SYSTEM AS INDICATED	CLG

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION	MH	LEGEND NOTE
AID	ADDRESSABLE INTERFACE DEVICE	-	
Ⓗ	HEAT DETECTOR, 190 DEGREES F FIXED TEMPERATURE (UNO), CEILING MOUNTED	CLG	
Ⓟ D	ROUND INDICATES CEILING MOUNTED,SQUARE INDICATES DUCT MOUNTED, PHOTOELECTRIC SMOKE DETECTOR		
F F	AUDIBLE AND VISIBLE NOTIFICATION APPLIANCE (HORN/STROBE), CEILING MOUNTED, EXTRA LINE INDICATES WALL MOUNTING AT 80" AFF	CLG	T
V V	VISIBLE NOTIFICATION APPLIANCE (STROBE), CEILING MOUNTED, EXTRA LINE INDICATES WALL MOUNTING AT 80" AFF	CLG	T
F	MANUAL FIRE ALARM PULL STATION, AND AUDIBLE AND VISIBLE NOTIFICATION APPLIANCE ABOVE (HORN/STROBE), WALL MOUNTED	44"/80"	T
F	MANUAL FIRE ALARM PULL STATION, WALL MOUNTED	44"	

LUMINAIRE SCHEDULE

PLAN TYPE	MANUFACTURER/CATALOG	MOUNTING	LAMPS				DESCRIPTION	VA LOAD
			NO.	WATTS	TYPE	LUMENS		
FP24	FOCAL POINT SKYDOME SERIES IMPACT LIGHTING WAF.R SERIES PMC LIGHTING SD SERIES	SUSPENDED	2	55 W	BIAX	4800 lm	2' DIAMETER ROUND SUSPENDED FIXTURE, FLAT OPAL LENS, AIRCRAFT CABLE SUSPENSION IN LENGTH AS REQUIRED TO MOUNT AT HEIGHT(S) INDICATED ON DRAWINGS. FIXTURE HOUSING AND MOUNTING ACCESSORIES WHITE IN COLOR.	97 VA
LD61	PORTFOLIO LD6A SERIES PHILIPS LIGHTOLIER C6L SERIES GOTHAM EVO SERIES PRESCOLITE LF6LED SERIES	RECESSED	1	22 W	LED	1500 lm	6-INCH ROUND APERTURE OPEN REFLECTOR LED DOWNLIGHT, MEDIUM DISTRIBUTION, 4000K, CLEAR SPECULAR FINISH, SELF-FLANGED, 0-10VDC MVOLT DIMMING DRIVER, BAR HANGER ACCESSORY.	22 VA
LD62	GOTHAM INCITO SERIES	RECESSED	1	32 W	LED	3000 lm	6-INCH ROUND APERTURE OPEN REFLECTOR LED DOWNLIGHT, 60 DEGREE BEAM SPREAD, 2700K, CLEAR SPECULAR FINISH, WHITE TRIM, SELF-FLANGED, 1% DIMMING DMX CONTROL, MVOLT DRIVER, BAR HANGER ACCESSORY.	32 VA
LD63	GOTHAM INCITO SERIES	RECESSED	1	32 W	LED	3000 lm	6-INCH ROUND APERTURE OPEN REFLECTOR LED DOWNLIGHT, 20 DEGREE BEAM SPREAD, 2700K, CLEAR SPECULAR FINISH, WHITE TRIM, SELF-FLANGED, 1% DIMMING DMX CONTROL, MVOLT DRIVER, BAR HANGER ACCESSORY.	32 VA
LD64	GOTHAM INCITO SERIES	RECESSED	1	74 W	LED	6000 lm	6-INCH ROUND APERTURE OPEN REFLECTOR LED DOWNLIGHT, 45 DEGREE BEAM SPREAD, 2700K, CLEAR SPECULAR FINISH, WHITE TRIM, SELF-FLANGED, 1% DIMMING DMX CONTROL, MVOLT DRIVER, BAR HANGER ACCESSORY.	74 VA
LF1	LITHONIA CPX SERIES	RECESSED	1	36 W	LED	4000 lm	1 BY 4-FOOT BACKLIT LED FLAT PANEL WITH SATIN WHITE DIFFUSER, 4000K, 0-10VDC MVOLT DIMMING DRIVER.	36 VA
LF2	LITHONIA CPX SERIES	RECESSED	1	39 W	LED	4000 lm	2 BY 4-FOOT BACKLIT LED FLAT PANEL WITH SATIN WHITE DIFFUSER, 4000K, 0-10VDC MVOLT DIMMING DRIVER.	39 VA
LF2X	LITHONIA CPX SERIES	RECESSED	1	39 W	LED	4000 lm	2 BY 4-FOOT BACKLIT LED FLAT PANEL WITH SATIN WHITE DIFFUSER, 4000K, 0-10VDC MVOLT DIMMING DRIVER, WITH EMERGENCY BATTERY PACK.	39 VA
LN2	METALUX SNLED LENSED SERIES DAY-BRITE LF SERIES LITHONIA ZL1D SERIES COLUMBIA LCL SERIES	SURFACE CEILING	1	22 W	LED	3900 lm	4-FOOT LED STRIP FIXTURE, SEMI-FROSTED SQUARE LENS, NARROW DISTRIBUTION, 4000K, 0-10VDC MVOLT DIMMING DRIVER.	22 VA
LN2X	METALUX SNLED LENSED SERIES DAY-BRITE LF SERIES LITHONIA ZL1D SERIES COLUMBIA LCL SERIES	SURFACE CEILING	1	22 W	LED	3900 lm	4-FOOT LED STRIP FIXTURE, SEMI-FROSTED SQUARE LENS, NARROW DISTRIBUTION, 4000K, 0-10VDC MVOLT DIMMING DRIVER, WITH EMERGENCY BATTERY PACK.	22 VA
LP24	GRACIE LARGE CAPTURED GLOBE	SUSPENDED	1	18 W	LED	1500 lm	6" ROUND PENDANT FIXTURE. MOUNT AT 24' A.F.F. TO BOTTOM OF FIXTURE.	18 VA
LR2	METALUX WNLED SERIES DAY-BRITE OWL SERIES LITHONIA SBL SERIES COLUMBIA LAW SERIES OR A/E APPROVED EQUAL	SUSPENDED	1	48 W	LED	4000 lm	4-FOOT LED WRAP AROUND FIXTURE, ACRYLIC PRISMATIC DIFFUSER, 4000K, 0-10VDC MVOLT DIMMING DRIVER, AIRCRAFT CABLE SUSPENSION.	48 VA
LR2X	METALUX WNLED SERIES DAY-BRITE OWL SERIES LITHONIA SBL SERIES COLUMBIA LAW SERIES OR A/E APPROVED EQUAL	SUSPENDED	1	48 W	LED	4000 lm	4-FOOT LED WRAP AROUND FIXTURE, ACRYLIC PRISMATIC DIFFUSER, 4000K, 0-10VDC MVOLT DIMMING DRIVER, AIRCRAFT CABLE SUSPENSION, WITH EMERGENCY BATTERY PACK.	48 VA
XC	SURE-LITES CX SERIES CHLORIDE 55 LINE SERIES LITHONIA SIGNATURE SERIES DUAL-LITE SEMPRA SERIES OR A/E APPROVED EQUAL	SURFACE CEILING	1	3 W	GREEN LED	0 lm	CAST ALUMINUM EXIT SIGN, SELF-POWERED, SINGLE FACE, DIRECTIONAL ARROWS INDICATED, WHITE HOUSING, MVOLT INPUT. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.	3 VA
XW	SURE-LITES CX SERIES CHLORIDE 55 LINE SERIES LITHONIA SIGNATURE SERIES DUAL-LITE SEMPRA SERIES	SURFACE WALL	1	3 W	GREEN LED	0 lm	CAST ALUMINUM EXIT SIGN, SELF-POWERED, SINGLE FACE, DIRECTIONAL ARROWS INDICATED, WHITE HOUSING, MVOLT INPUT. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.	3 VA

2

LUMINAIRE SCHEDULE - GENERAL NOTES

1. FOR ALL DOWNLIGHTING FIXTURES, PROVIDE REQUIRED MOUNTING HARDWARE FOR MOUNTING IN LAY-IN TYPE CEILINGS.
2. CONTRACTOR TO VERIFY TYPES AND QUANTITY OF LIGHT FIXTURES REQUIRING EMERGENCY TRANSFER DEVICES AND PROVIDE REQUIRED QUANTITY OF EMERGENCY TRANSFER DEVICES, LABOR, MATERIAL, ETC. IN THE PROJECT BID FOR FIELD INSTALLATION OF EMERGENCY TRANSFER DEVICES.
3. LIGHT FIXTURE SUBMITTALS TO INCLUDE DATA SHEETS FOR ALL FIXTURE TYPES, INCLUDING ADDITIONAL DATA SHEETS FOR BALLAST COMBINATIONS REQUIRED TO MEET THE INSTALLATION REQUIREMENTS OF THE VARIOUS FIXTURE TYPES INDICATED IN THE REMARKS COLUMN OF THE FIXTURE SCHEDULES OR ON THE DRAWINGS. SUBMITTALS SHALL ALSO INDICATE COLOR FOR ANY CUSTOM COLOR LIGHT FIXTURES.

ELECTRICAL GENERAL NOTES

1. THE TERM "PROVIDE" INDICATES CONTRACTOR SHALL FURNISH AND INSTALL ITEMS AND CONNECT AS REQUIRED TO OBTAIN A COMPLETE AND OPERABLE SYSTEM.
2. COORDINATE DEVICE LOCATIONS WITH ARCHITECTURAL PLANS, CASEWORK, WINDOWS, WALL FINISHES, EQUIPMENT, AND OTHER TRADES PRIOR TO ROUGH IN. DEVICES ARE INTENDED TO BE ACCESSIBLE, DO NOT INSTALL BEHIND CASEWORK, DOORS OR EQUIPMENT UNLESS INDICATED ON PLANS. NOTIFY ARCHITECT IN WRITING OF CONFLICTS PRIOR TO PROCEEDING WITH WORK.
3. WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ALL LOCAL, STATE AND NATIONAL CODES INCLUDING, BUT NOT LIMITED TO NFPA 70 (NATIONAL ELECTRIC CODE), NFPA 72, NFPA 101, INTERNATIONAL BUILDING CODE, ETC.
4. CONFLICTS BETWEEN THE APPLICABLE CODES, STANDARDS, AND THE PLANS AND SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT IN WRITING PRIOR TO PROCEEDING WITH WORK.
5. CONTRACTOR SHALL FOLLOW SEISMIC RESTRANT AND DESIGN REQUIREMENTS CONTAINED IN LATEST ADOPTED STATE AND INTERNATIONAL BUILDING CODES WITH ALL AMENDMENTS AS ADOPTED.
6. ADDITIONAL ELECTRICAL REQUIREMENTS MAY BE SHOWN ON PLANS FROM OTHER DISCIPLINES IN THIS SET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL PLANS AND SPECIFICATIONS FOR A COMPLETE UNDERSTANDING OF THE PROJECT REQUIREMENTS.
7. WHERE CONFLICTS ARE FOUND BETWEEN DRAWINGS, DETAILS, OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY. NOTIFY ARCHITECT OF DISCREPANCY IN WRITING.
8. INITIATING WORK CONSTITUTES CONTRACTOR ACCEPTANCE OF THE EXISTING CONDITIONS ASSOCIATED WITH THE WORK IN QUESTION.
9. CONTRACTOR SHALL CONTACT UTILITIES AND VERIFY UTILITY REQUIREMENTS PRIOR TO COMMENCING CONSTRUCTION. CONFLICTS BETWEEN UTILITY REQUIREMENTS AND THE PLANS OR SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT IN WRITING PRIOR TO PROCEEDING WITH WORK. CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION MEETING WITH THE UTILITY COMPANY TO REVIEW REQUIREMENTS. INCOMING SERVICE CONDUITS AND SUBSTRUCTURES SHALL BE INSTALLED PER UTILITY COMPANY STANDARDS.
10. THESE DRAWINGS AND SPECIFICATIONS DO NOT INDICATE METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND IS RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFE PRACTICES.
11. DRAWINGS ARE DIAGRAMMATIC IN NATURE AND CANNOT SHOW EVERY CONNECTION, JUNCTION BOX, WIRE, AND CONDUIT, ETC. THE EXACT LOCATIONS AND ARRANGEMENT OF PARTS SHALL BE DETERMINED AS THE WORK PROGRESSES. ITEMS NOT INDICATED ON DRAWINGS REASONABLY INFERRED TO BELONG TO THE WORK DESCRIBED SHALL BE FURNISHED AND INSTALLED TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
12. WORK SHALL BE COORDINATED WITH EXISTING CONDITIONS, NEW CONSTRUCTION, OWNER'S VENDORS, OTHER TRADES, AND THEIR DOCUMENTS. THE CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING HIS BID. CONTRACTOR SHALL CONTACT OWNER FOR AN APPOINTMENT TO VISIT THE SITE.
13. AN INSULATED GROUND CONDUCTOR SIZED PER NEC SHALL BE PROVIDED WITH EACH FEEDER AND BRANCH CIRCUIT.
14. PROVIDE A DEDICATED NEUTRAL FOR EACH LINE TO NEUTRAL CIRCUIT. MULTI-WIRE BRANCH CIRCUITS ARE NOT PERMITTED UNLESS SPECIFICALLY INDICATED ON PLANS.
15. MINIMUM WIRE SIZE IS #12 AWG. SEE SPECIFICATIONS FOR MINIMUM CONDUIT SIZE.
16. CONDUIT SHALL BE CONCEALED WHEREVER POSSIBLE ABOVE CEILINGS, INSIDE WALLS, OR UNDER FLOOR SLAB WHERE SHOWN ON DRAWINGS. IN AREAS WITH NO CEILING, RUN EXPOSED CONDUIT AS HIGH AS POSSIBLE AND PARALLEL TO NEARBY SURFACES OR EXISTING RACEWAYS. CONDUIT SHALL NOT BE INSTALLED IN FLOOR SLAB UNLESS SPECIFICALLY INDICATED ON PLANS AND WHERE APPROVED BY STRUCTURAL ENGINEER. DO NOT INSTALL MC CABLE IN EXPOSED LOCATIONS.
17. CONTRACTOR SHALL PROVIDE RIGID METAL SLEEVES TO FACILITATE PATHWAYS THROUGH FULL HEIGHT WALLS FOR ELECTRICAL AND TELECOMMUNICATION WIRING.
18. PROVIDE TEMPORARY OR PERMANENT END CAPS FOR STUBBED CONDUITS. PROVIDE INSULATED THROAT BUSHINGS FOR CONDUITS INTENDED TO REMAIN OPEN ENDED.
19. MOUNTING HEIGHTS FOR WALL MOUNTED DEVICES INDICATED ABOVE FINISHED FLOOR ARE TO BOTTOM OF DEVICE UNO. MOUNTING HEIGHTS TO CEILING SUSPENDED DEVICES ARE TO BOTTOM OF DEVICE UNO.
20. PROVIDE SOUND INSULATING PUTTY AROUND DEVICES INSTALLED ON OPPOSITE SIDES OF A WALL IN THE SAME VERTICAL CHANNEL. IF DEVICES ARE LOCATED AT LEAST 8" HORIZONTALLY APART NO SOUND INSULATING PUTTY IS REQUIRED.
21. COORDINATE CEILING MOUNTED DEVICES WITH MECHANICAL AND ARCHITECTURAL REFLECTED CEILING PLANS. NOTIFY ARCHITECT IN WRITING OF CONFLICTS PRIOR TO PROCEEDING WITH WORK.
22. JUNCTION BOXES LOCATED ABOVE ACCESSIBLE CEILINGS SHALL BE LOCATED NO MORE THAN 36" ABOVE CEILING LEVEL. LABEL EACH BOX IN AREA OF WORK WITH A PERMANENT MARKER OR IN ACCORDANCE WITH SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.
23. ELECTRICAL PANELS INCLUDING BUT NOT LIMITED TO FIRE ALARM CONTROL PANELS, LIGHTING CONTROL PANELS, POWER DISTRIBUTION WILL HAVE A MAX DEVICE HEIGHT OF 72" AFF.
24. PROVIDE GROUNDING TYPE EXPANSION FITTINGS OR OTHER APPROVED METHODS TO ALLOW FOR EXPANSION, CONTRACTION, AND DEFLECTION WHERE CONDUITS CROSS BUILDING EXPANSION JOINTS.
25. PROVIDE SEPARATE RACEWAY FOR EMERGENCY SYSTEM WIRING PER NEC ARTICLE 700. MINIMUM WIRE SIZE #10 AWG.
26. ALL CONDUITS SHALL INCLUDE AN INSULATED GROUND WIRE, SIZED PER N.E.C.
27. **MASONRY LOAD-BEARING WALLS AND MASONRY SHEAR WALLS**: DO NOT PENETRATE CMU WALLS INDICATED AS BEARING WALLS AND SHEAR WALLS ON STRUCTURAL DRAWINGS UNLESS NOTED OTHERWISE ON PLAN. DO NOT CORE THROUGH CMU BOND BEAMS OR LINTELS. DO NOT CUT ANY VERTICAL REINFORCING IN CMU WALLS. OBTAIN PRIOR APPROVAL FROM ENGINEER BEFORE PENETRATING ANY OF THE STRUCTURAL ELEMENTS LISTED ABOVE.
28. **CONCRETE BEARING WALLS AND BEAMS:** DO NOT PENETRATE CONCRETE WALLS INDICATED AS BEARING WALLS AND SHEAR WALLS ON STRUCTURAL DRAWINGS UNLESS NOTED OTHERWISE ON PLAN. DO NOT CORE THROUGH CONCRETE BEAMS , GIRDERS, OR COLUMNS. DO NOT CUT ANY VERTICAL REINFORCING IN CONCRETE WALLS. OBTAIN PRIOR APPROVAL FROM STRUCTURAL ENGINEER BEFORE PENETRATING ANY OF THE STRUCTURAL ELEMENTS LISTED ABOVE.
29. **STEEL FRAMING:** DO NOT CUT OR CORE THROUGH ANY STRUCTURAL STEEL BEAMS, GIRDERS, OR COLUMNS UNLESS NOTED OTHERWISE ON PLAN. NOTIFY ENGINEER OF POTENTIAL CONFLICTS BETWEEN FRAMING AND ELECTRICAL WORK.
30. **CONCRETE FLOOR SYSTEMS (APPLIES TO CONCRETE BLDG. OR STEEL WITH CONCRETE DECK, MASONRY W/ CONC. FLOOR):** DO NOT CUT HOLES OR CORE THROUGH CONCRETE FLOOR SLAB UNLESS NOTED OTHERWISE ON PLAN OR IN TYPICAL STRUCTURAL DETAILS. PENETRATIONS THROUGH EXISTING SLABS SHALL BE X-RAYED PRIOR TO CORING HOLES. NO EXISTING REINFORCEMENT SHALL BE CUT WITHOUT PERMISSION OF THE STRUCTURAL ENGINEER. PENETRATIONS THROUGH EXISTING BEAMS AND COLUMNS IS NOT PERMITTED.

2 PENDANT FIXTURE HOIST

NOT TO SCALE

2

NOTE: SUPPORTS TO BE INSTALLED FOR ALL LIGHT FIXTURES INSTALLED IN LAY IN CEILINGS, INCLUDING DOWNLIGHT TYPE FIXTURES

1 RECESSED LIGHT FIXTURE SUPPORT

NOT TO SCALE

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1751 OLIVER STREET
WHITING, IN 46394

SCHOOL CITY OF WHITING

ARCHITECT

FANNING HOWEY

317.848.0966 WWW.FHAI.COM
350 E. New York St., Indianapolis, IN 46204

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CONSTRUCTION DOCUMENTS

BRIAN W. BUTLER
No. PE 11600305

DRAWN BY: ISD
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09.06.2024

REV. NO.	DESCRIPTION	DATE
2	Addendum #3	09.30.2024

ELECTRICAL SYMBOLS AND ABBREVIATIONS

E0.01

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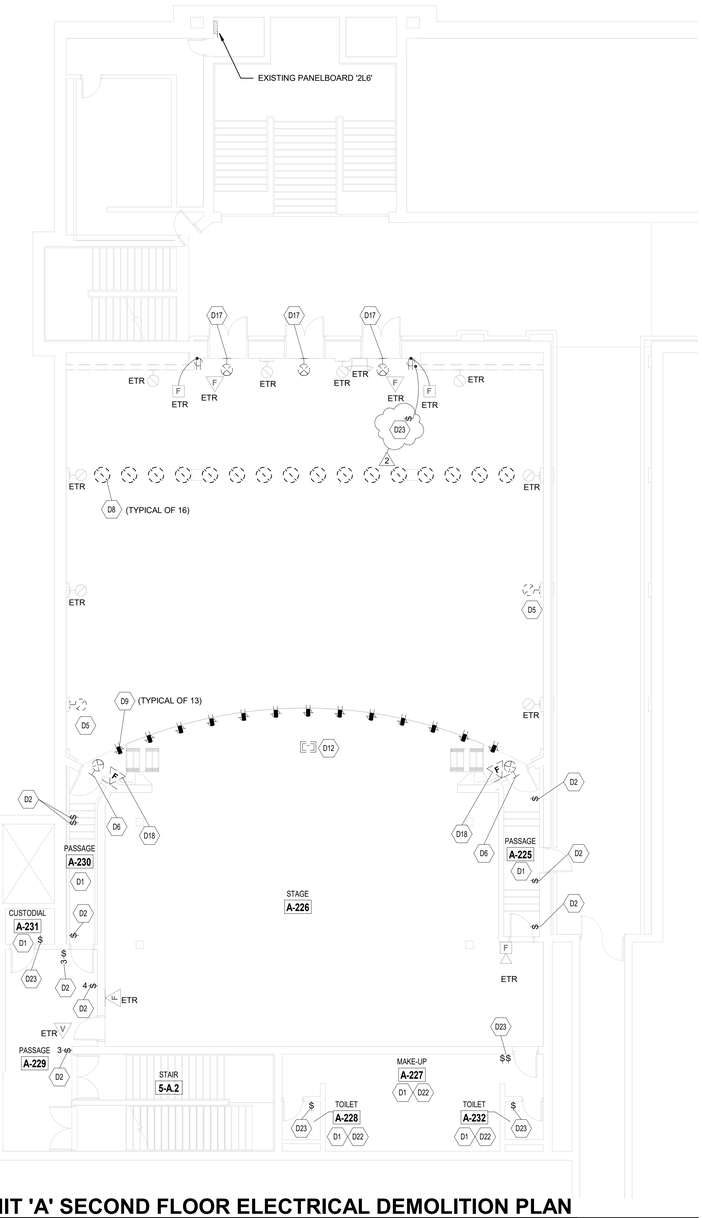
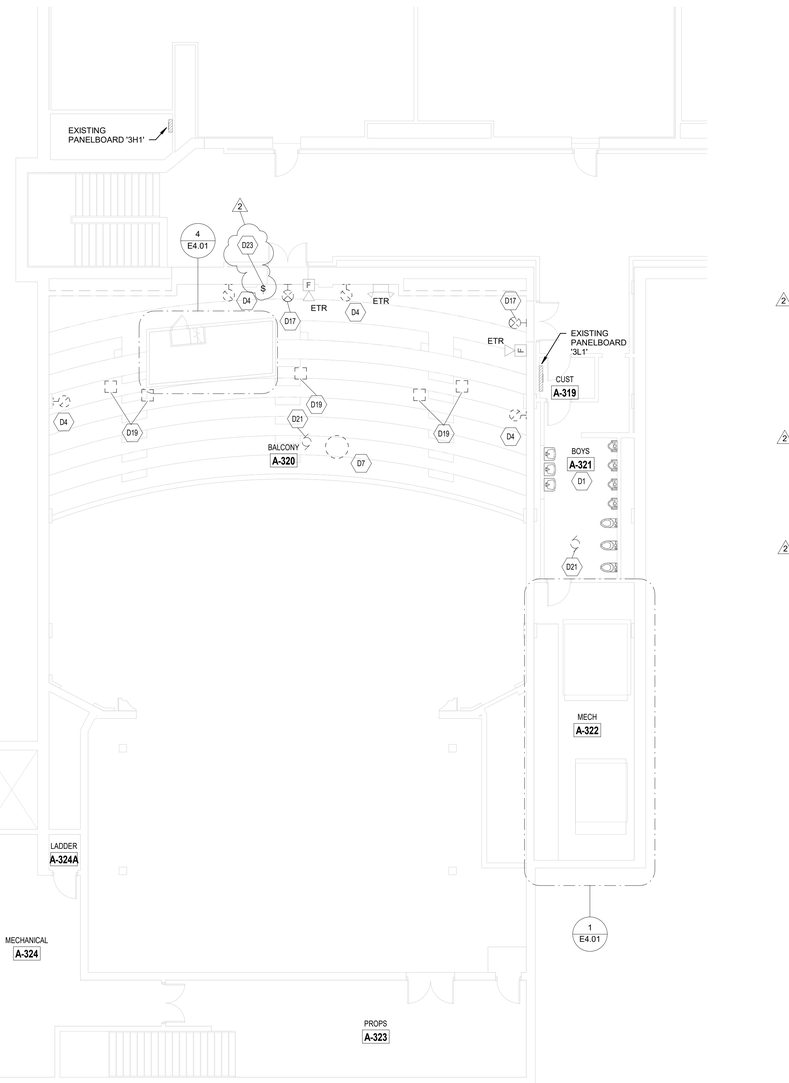


UNIT 'A' SECOND FLOOR ELECTRICAL DEMOLITION PLAN

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



UNIT 'A' THIRD FLOOR ELECTRICAL DEMOLITION PLAN

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

DEMOLITION PLAN GENERAL NOTES

1. REFER TO ELECTRICAL SPECIFICATION SECTION 260005 "ELECTRICAL DEMOLITION" FOR ADDITIONAL REQUIREMENTS THAT APPLY TO THIS DRAWING SHEET.

DEMOLITION PLAN NOTES

(X)

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

SHEET KEYNOTES	
D1	REMOVE ALL LIGHT FIXTURES IN THIS SPACE. TIE BACK EXISTING CIRCUIT FOR REUSE.
D2	REMOVE LIGHT SWITCH AT THIS LOCATION. TIE BACK EXISTING SWITCH WIRING FOR REUSE.
D4	REMOVE EXISTING WALL SCONCE FIXTURE. PROTECT AND STORE FOR REINSTALLATION ON FIRST FLOOR. REMOVE ALL WIRING. CAP CONDUIT AND ABANDON IN PLACE. REMOVE ALL ASSOCIATED WALL SWITCHES AND SWITCH WIRING.
D5	REMOVE DAMAGED LIGHT FIXTURE AT THIS LOCATION AND DISPOSE OF PROPERLY. REMOVE ALL CONDUIT.
D6	REMOVE DAMAGED EXIT SIGN AT THIS LOCATION. TIE BACK EXISTING CIRCUIT FOR REUSE.
D7	DISCONNECT AND REMOVE EXISTING DECORATIVE PENDANT FIXTURE AT THIS APPROXIMATE LOCATION. RETURN FIXTURE TO OWNER. REMOVE ALL CONDUIT AND WIRING BACK TO PANELBOARD COMPLETE.
D8	DISCONNECT AND REMOVE SURFACE MOUNTED LIGHT FIXTURES AND DISPOSE OF PROPERLY. REMOVE CONDUIT AND WIRING BACK TO EXISTING TO REMAIN. REMOVE ALL ASSOCIATED SWITCHES AND SWITCH WIRING COMPLETE.
D9	REMOVE EXISTING RECEPTACLE AT THIS LOCATION. TIE BACK EXISTING CIRCUIT FOR REUSE.
D12	DISCONNECT AND REMOVE EXISTING FLOORBOX AT THIS LOCATION. TIE BACK CIRCUIT FOR REUSE.
D17	DISCONNECT AND REMOVE EXISTING EXIT SIGN. TIE BACK EXISTING CIRCUIT FOR REUSE.
D18	REMOVE DAMAGED FIRE ALARM DEVICE AT THIS LOCATION. TIE BACK CIRCUIT FOR REUSE.
D19	DISCONNECT AND REMOVE EXISTING AISLE LIGHTING AT THIS LOCATION. REMOVE ALL WIRING COMPLETE. CAP AND ABANDON CONDUITS IN PLACE.
D21	DISCONNECT EXISTING EXHAUST FAN LOCATED ON ROOM. TIE BACK EXISTING CIRCUIT FOR REUSE.
D22	REMOVE EXISTING FIRE ALARM NOTIFICATION DEVICE ON CEILING IN THIS SPACE. STORE FOR REINSTALLATION. TIE BACK EXISTING CIRCUIT FOR REUSE.
D23	REMOVE LIGHT SWITCH AND CONTROLS WIRING AT THIS LOCATION.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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1751 OLIVER STREET
WHITING, IN 46394

SCHOOL CITY OF WHITING

ARCHITECT

FANNING HOWEY

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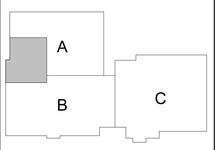
350 E. New York St., Indianapolis, IN 46204



KEY PLAN N

CONSTRUCTION DOCUMENTS

BRIAN W. BUTLER REGISTERED No. PE 10000 STATE OF PROFESSIONAL ENGINEER

DRAWN BY: ISD

PROJECT NUMBER: 224023.01

PROJECT ISSUE DATE: 09.06.2024

REV. NO.	DESCRIPTION	DATE
1	Addendum #1	09.17.2024
2	Addendum #3	09.30.2024

UNIT 'A' SECOND AND THIRD FLOOR ELECTRICAL DEMOLITION PLANS

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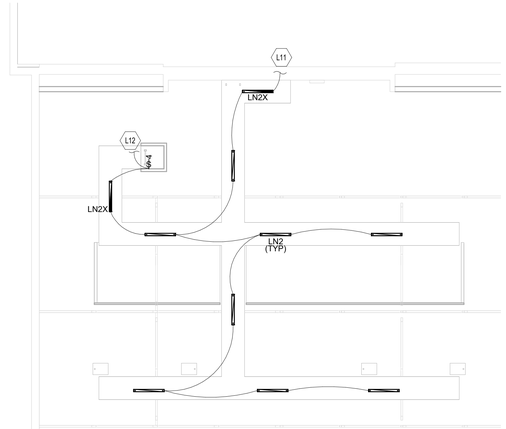
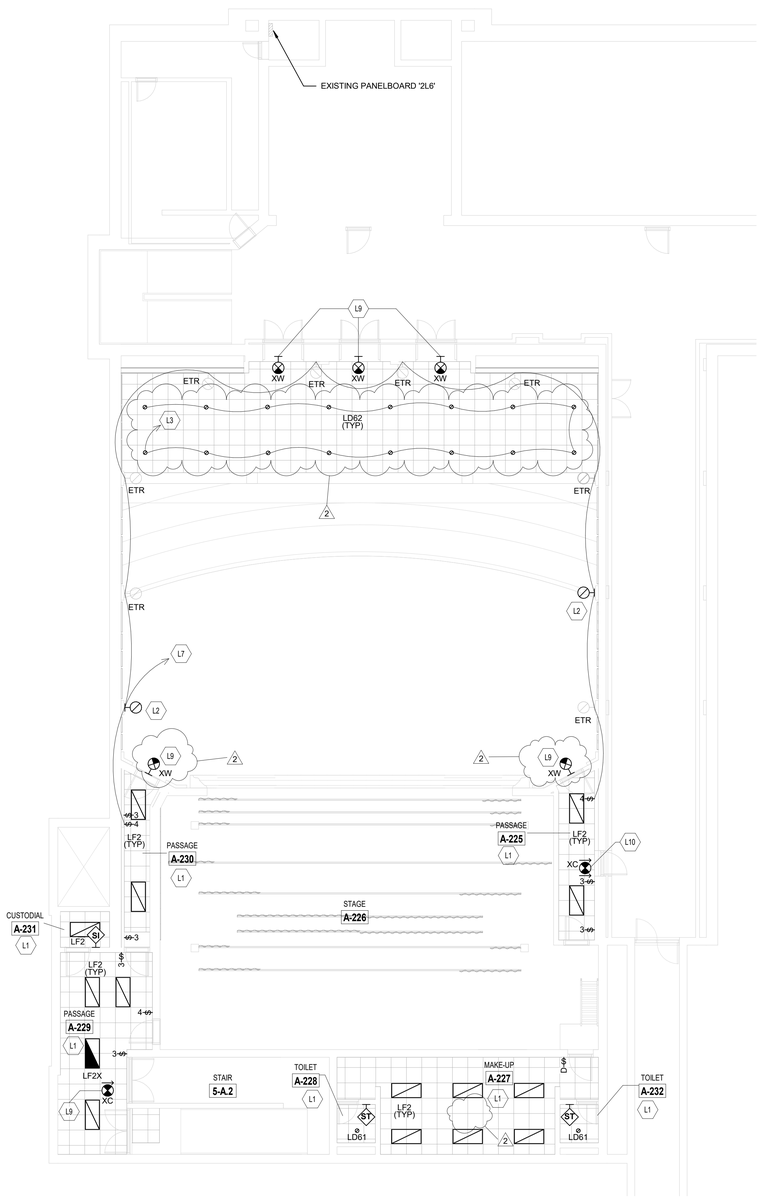


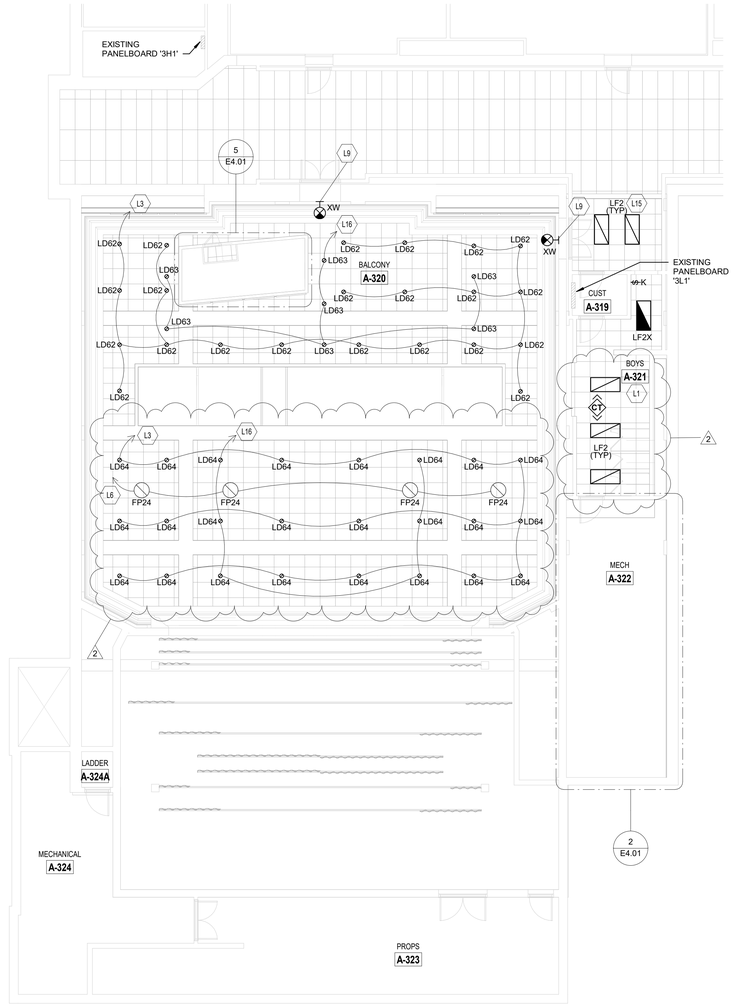
UNIT 'A' ATTIC LIGHTING PLAN

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



UNIT 'A' SECOND FLOOR LIGHTING PLAN

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



UNIT 'A' THIRD FLOOR LIGHTING PLAN

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

LIGHTING PLAN GENERAL NOTES

1. FINAL CONNECTION TO RECESSED LUMINAIRES SHALL BE WITH FLEXIBLE METALLIC CONDUIT, MC CABLE OR MANUFACTURED WIRING SYSTEM.
2. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR LOCATION OF LUMINAIRES. COORDINATE LOCATION OF LUMINAIRES, LOUDSPEAKERS, DIFFUSERS, GRILLES, AND OTHER CEILING INSTALLED ELEMENTS WITH THEIR RESPECTIVE INSTALLERS.
3. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND ROOM FINISH SCHEDULE TO DETERMINE PROPER TYPE OF LUMINAIRE TRIM REQUIRED FOR CEILING TYPE PRIOR TO ORDERING LUMINAIRES. PROVIDE LUMINAIRES COMPATIBLE WITH CEILING TYPE.
4. RECESSED LUMINAIRE IN GRID CEILING SYSTEMS SHALL BE PROVIDED WITH SEISMIC CLIPS OR PROVIDE ATTACHMENT TO CEILING GRID SYSTEM AND SUPPORTED PER PROJECT MANUAL AND DETAIL **"1/E0.01"**.
5. LUMINAIRE TYPE IS SHOWN ONLY ONCE, AS "TYP." IN EVERY ROOM. PROVIDE SAME TYPE OF LUMINAIRE THROUGH-OUT SAME ROOM UNLESS OTHERWISE INDICATED.
6. PROVIDE NO. 10 AWG, MINIMUM, CONDUCTORS FOR EXIT SIGNS AND SECURITY LIGHT CIRCUITS.
7. REFER TO THEATRICAL LIGHTING PLANS AND SPECIFICATIONS FOR INFORMATION ABOUT NEW THEATRICAL LIGHTING CONTROL SYSTEM.

2

LIGHTING PLAN NOTES

X

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

SHEET KEYNOTES	
L1	CONNECT NEW LIGHT FIXTURES TO EXISTING CIRCUIT SERVING THIS SPACE.
L2	INSTALL WALL SCONCE STORED DURING DEMOLITION AT THIS LOCATION.
L3	CONNECT NEW HOUSE LIGHTING TO NEW THEATRICAL RELAY PANEL IN MECHANICAL ROOM.
L6	CONNECT NEW DECORATIVE PENDANT LIGHTING TO NEW THEATRICAL RELAY PANEL IN MECHANICAL ROOM. REFER TO DETAIL 2 ON SHEET E0.01 FOR INFORMATION REGARDING FIXTURE HOIST MOUNTING.
L7	CONNECT WALL SCONCES PROVIDED BY OWNER TO EXISTING CIRCUIT SERVING PREVIOUS FIXTURE. PROVIDE LED RETROFIT BULB FOR EACH WALL SCONCE FIXTURE. VERIFY BULB TYPE AND SIZE IN FIELD. CONNECT FIXTURES TO NEW THEATRICAL RELAY PANEL IN MECHANICAL ROOM.
L9	CONNECT NEW EXIT SIGN TO EXISTING CIRCUIT AT THIS LOCATION.
L10	CONNECT NEW EXIT SIGN TO CIRCUIT SERVING NEAREST EXISTING EXIT SIGN. EXTEND EXISTING CIRCUIT AS NEEDED TO FACILIATE CONNECTION.
L11	CONNECT NEW SWITCH WIRING TO EXISTING SWITCH WIRING SERVING EXISTING ATTIC LIGHTING.
L12	CONNECT TO NEW LIGHT SWITCH IN SOUND BOOTH BELOW.
L15	CONNECT NEW LIGHT FIXTURES TO EXISTING CIRCUIT SERVING THIS SPACE. CONNECT TO EXISTING CONTROLS PREVIOUSLY SERVING THIS SPACE.
L16	CONNECT LIGHTING TO RELAY PANEL THROUGH BATTERY INVERTER "CBI" LOCATED IN MECHANICAL ROOM. INTERCONNECT WITH DMX BYPASS EQUIPMENT AND NORMAL POWER SENSE FEED AS REQUIRED.

2

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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1751 OLIVER STREET
WHITING, IN 46394

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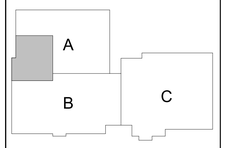

KEY PLAN

N

CONSTRUCTION DOCUMENTS

DRAWN BY: ISD

PROJECT NUMBER: 224023.01

PROJECT ISSUE DATE: 09.06.2024

REV. NO.	DESCRIPTION	DATE
1	Addendum #1	09.17.2024
2	Addendum #3	09.30.2024

UNIT 'A' SECOND, THIRD AND ATTIC FLOOR LIGHTING PLANS

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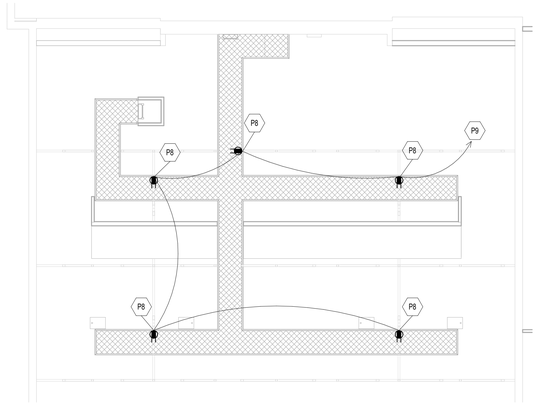
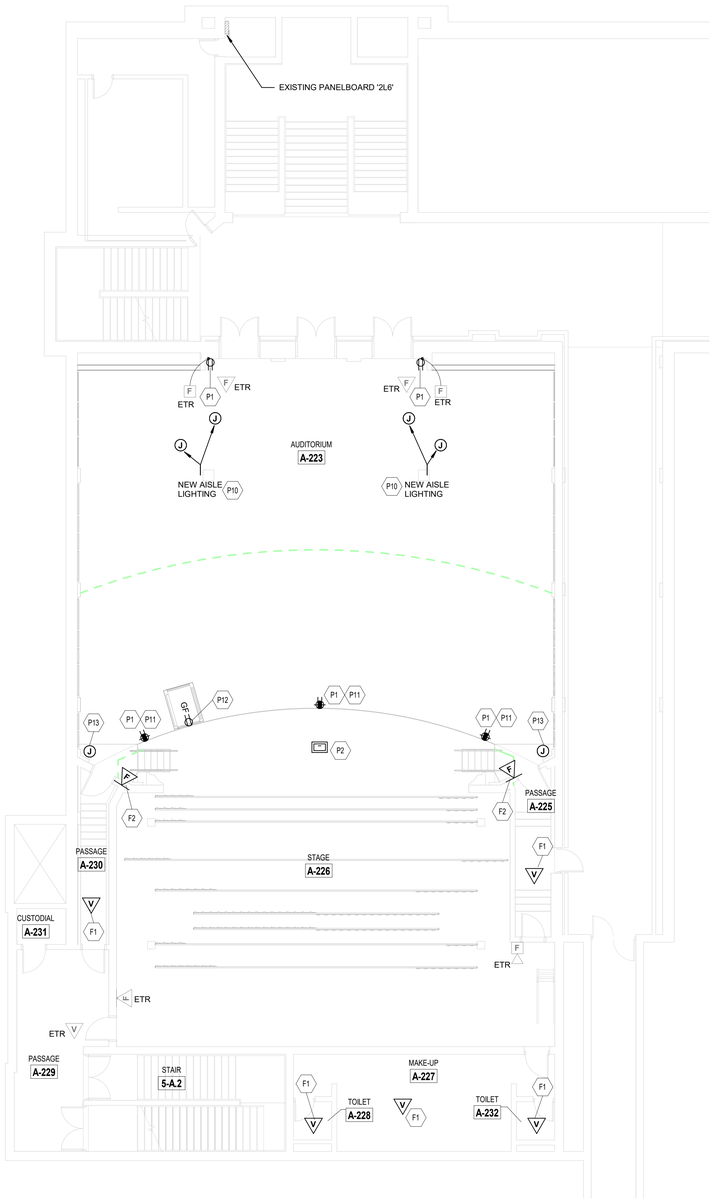


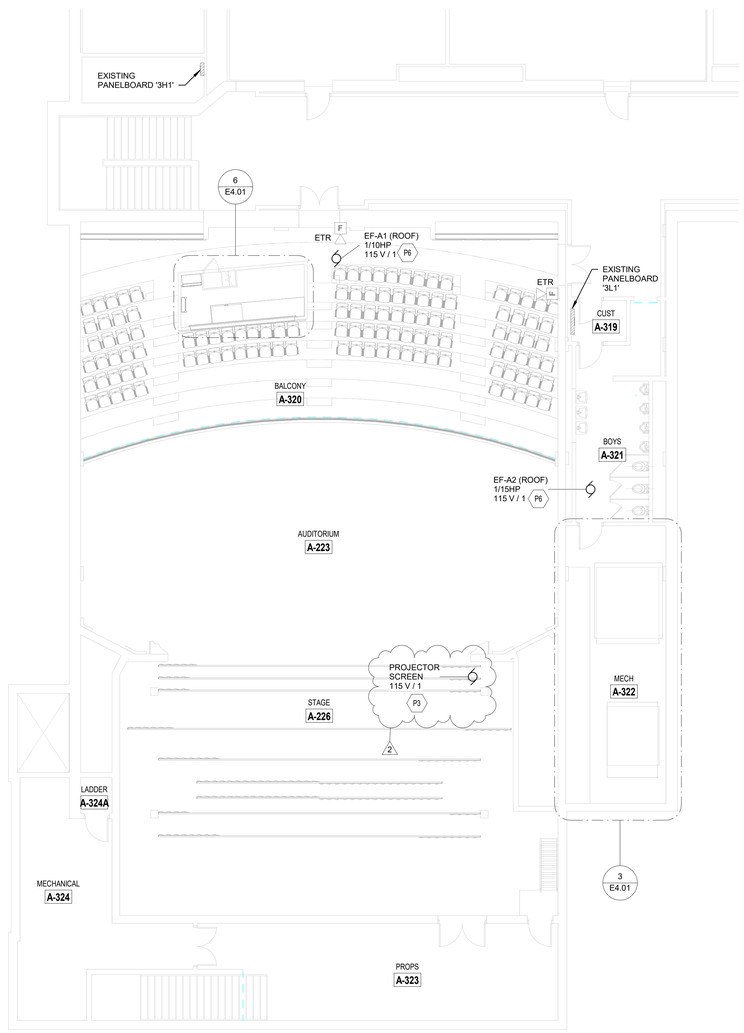
UNIT 'A' ATTIC POWER AND SYSTEMS PLAN

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



UNIT 'A' SECOND FLOOR POWER AND SYSTEMS PLAN

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



UNIT 'A' THIRD FLOOR POWER AND SYSTEMS PLAN

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

POWER PLAN GENERAL NOTES

1. PROVIDE REVISED TYPED PANELBOARD DIRECTORIES FOR EACH PANELBOARD ADDED OR MODIFIED DURING CONSTRUCITON. FIELD VERIFY EXISTING CIRCUIT INFORMATION WITH OWNER'S ASSISTANCE TO ENSURE FINAL DIRECTORY IS ACCURATE. UNUSED SPARE BREAKERS SHALL BE IN THE OFF POSITION.
2. VIDEO PROJECTOR RECEPTACLE TO BE MOUNTED ABOVE WALL MOUNTED PROJECTOR BRACKET, 96" A.F.F. UNO.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.
4. LABEL EACH RECEPTACLE WITH THE PANEL NAME AND CIRCUIT NUMBER ON THE FACE OF EACH COVER PLATE WITH A TYPED LAMINATED LABEL.
5. PROVIDE "GFCI PROTECTED" LABEL ON COVER PLATE FOR ANY GFCI PROTECTED DEVICE.
6. CONTRACTOR SHALL INCREASE CIRCUIT CONDUCTOR SIZE TO COMPENSATE FOR VOLTAGE DROP DUE TO EXCESSIVE CIRCUIT LENGTHS. IN NO CASE SHALL VOLTAGE DROP EXCEED NFPA 70 (N.E.C.) REQUIREMENTS.
7. REFER TO MECHANICAL PLANS FOR LOCATION OF MECHANICAL EQUIPMENT. LOCATE DISCONNECT SWITCHES PER NEC.
8. REFER TO "CONTROL SCHEMATICS" MECHANICAL DRAWINGS FOR ADDITIONAL CONTROL WIRING AND CONTROL CONNECTIONS.
9. ALL DEVICES, EQUIPMENT, FIXTURES, AND THE LIKE, SHALL BE BONDED WITH A PROPERLY SIZED EQUIPMENT GROUNDING CONDUCTOR. MAINTAIN MECHANICAL/ELECTRICAL BONDS OF METALLIC RACEWAY SYSTEM.

POWER AND SYSTEMS PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

SHEET KEYNOTES

F1	PROVIDE NEW FIRE ALARM NOTIFICATION DEVICE AT THIS LOCATION. EXTEND NEAREST EXISTING FIRE ALARM NOTIFICATION CIRCUIT AND CONNECT NEW DEVICE.
F2	CONNECT NEW FIRE ALARM DEVICE TO EXISTING CIRCUIT AT THIS LOCATION.
P1	CONNECT NEW RECEPTACLE TO EXISTING CIRCUIT AT THIS LOCATION.
P2	PROVIDE NEW RECEPTACLES IN FLOOR BOX. CONNECT RECEPTACLES IN NEW FLOOR BOX TO CIRCUIT TIED BACK DURING DEMOLITION. REWORK EXISTING WIRING UNDER STAGE AREA TO FACILITATE RECONNECTION. FLOOR BOX PROVIDED BY AV CONTRACTOR. SEE TECHNOLOGY PLANS FOR MORE INFORMATION.
P3	PROVIDE NEW PROJECTOR SCREEN WITH 2 #12, #12 G IN 1/2" CONDUIT FROM PANEL '3L1'. PROVIDE NEW 20A/1P CIRCUIT BREAKER IN PANEL '3L1'.
P6	CONNECT NEW ROOFTOP EXHAUST FAN TO EXISTING CIRCUIT SERVING PREVIOUS ROOFTOP EXHAUST FAN. EXTEND EXISTING CIRCUIT AS NEEDED TO FACILITATE CONNECTION.
P8	MOUNT NEW RECEPTACLE TO SURFACE OF STRUCTURAL STEEL.
P9	CONNECT NEW CATWALK RECEPTACLES TO NEW 20A/1P CIRCUIT BREAKER IN PANEL '3L1'.
P10	CONNECT TO NEW THEATRICAL LIGHTING RELAY PANEL IN MECHANICAL ROOM.
P11	RECEPTACLES ALONG EDGE OF STAGE SHALL BE BROWN IN COLOR.
P12	PROVIDE GFCI RECEPTACLE AT THIS LOCATION FOR WHEELCHAIR LIFT. PROVDE NEW DEDICATED 20A/1P CIRCUIT BREAKER IN PANEL '3L1' AND CONNECT TO GFCI RECEPTACLE. RECEPTACLE SHALL BE BROWN IN COLOR.
P13	PROVIDE JUNCTION BOX UNDER STAIR FOR LIGHTING. CONNECT TO NEW THEATRICAL LIGHTING RELAY PANEL IN MECHANICAL ROOM.

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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WHITING, IN 46394

SCHOOL CITY OF WHITING

ARCHITECT

FANNING HOWEY

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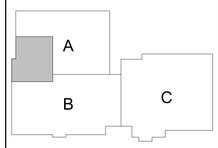

KEY PLAN N

CONSTRUCTION DOCUMENTS

BRIAN W. BUTLER REGISTERED No. PE19800026 STATE OF PROFESSIONAL ENGINEER

DRAWN BY: ISD
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09.06.2024

REV. NO.	DESCRIPTION	DATE
2	Addendum #3	09.30.2024

UNIT 'A' SECOND, THIRD AND ATTIC POWER AND SYSTEMS PLANS

EP1.1A

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SHEET KEYNOTES	
D1	REMOVE ALL LIGHT FIXTURES IN THIS SPACE. TIE BACK EXISTING CIRCUIT FOR REUSE.
D2	REMOVE LIGHT SWITCH AT THIS LOCATION. TIE BACK EXISTING SWITCH WIRING FOR REUSE.
D3	REMOVE DIMMER SWITCH AND WIRING AT THIS LOCATION COMPLETE.
D10	REMOVE ALL EXISTING RECEPTACLES IN THIS SPACE. TIE BACK EXISTING CIRCUITS FOR REUSE.
D11	DISCONNECT EXISTING MECHANICAL EQUIPMENT AT THIS LOCATION. REMOVE ALL CONDUIT AND WIRING BACK TO EXISTING TO REMAIN.
D13	DISCONNECT EXISTING CONTROL PANEL AT THIS LOCATION. TIE BACK CIRCUIT FOR REUSE.
D14	ALL CONDUIT AND WIRING FEEDING EXISTING DEVICES TO REMAIN IS TO BE REMOVED AND RELOCATED TO FACILITATE REMOVAL OF SLAB LOCATED ABOVE CONDUIT AND FOR INSTALLATION OF FUTURE MECHANICAL EQUIPMENT. VERIFY EXACT QUANTITIES AND LOCATION OF CONDUIT AND WIRING IN FIELD.
D15	DISCONNECT EXISTING STAGE RELAY CABINET FROM ALL CONDUIT AND WIRING. ALL WIRING SERVING EXISTING STAGE LIGHT FIXTURES TO BE REPLACED SHALL BE REMOVED IN THEIR ENTIRETY. ALL CONDUIT NOT TO BE REUSED SHALL BE REMOVED IN THEIR ENTIRETY. ALL CONDUIT AND WIRING SERVING EXISTING STAGE LIGHT FIXTURES TO REMAIN SHALL REMAIN AND BE TIED BACK FOR REUSE. ALL EXISTING CIRCUITS SERVING EXISTING FLOOR POCKETS TO REMAIN SHALL BE TIED BACK FOR REUSE.
D20	DISCONNECT EXISTING MECHANICAL EQUIPMENT. REMOVE ALL CONDUIT AND WIRING BACK TO PANELBOARD COMPLETE. REMOVE EXISTING CIRCUIT BREAKER SERVING THIS EQUIPMENT FROM PANELBOARD.
D21	DISCONNECT EXISTING EXHAUST FAN LOCATED ON ROOM. TIE BACK EXISTING CIRCUIT FOR REUSE.
F3	PROVIDE NEW DUCT-MOUNTED SMOKE DETECTOR IN RETURN AIR DUCT. CONNECT TO EXISTING FIRE ALARM CIRCUIT IN THIS AREA.
L1	CONNECT NEW LIGHT FIXTURES TO EXISTING CIRCUIT SERVING THIS SPACE.
L4	CONNECT TO NEW LIGHT FIXTURES IN CATWALK AREA ABOVE.
L5	CONNECT NEW THEATRICAL LIGHTING RELAY PANEL TO EXISTING CIRCUIT SERVING PREVIOUS RELAY PANEL AT THIS LOCATION. WIRE NEW RELAY PANEL THROUGH NEW 200A, 208V, 3P, HEAVY DUTY, NONFUSED DISCONNECT SWITCH ADJACENT TO NEW RELAY PANEL. PROVIDE 4-250 KCMIL IN 2-1/2" CONDUIT FROM DISCONNECT TO RELAY PANEL. CONNECT ALL CIRCUITS SERVED BY PREVIOUS DIMMER RACK THAT WERE TIED BACK DURING DEMOLITION TO NEW RELAY PANEL. PROVIDE NEW WIRING IN EXISTING CONDUIT TO NEW STAGE LIGHTING FIXTURES.
L13	PROVIDE A NEW CENTRAL BATTERY INVERTER “CBI”, 1.2KW, 120V INPUT AND OUTPUT, CONNECT TO RELAY PANEL AND EMERGENCY LIGHTING SHOWN ON PLANS. INVERTER TO BE CHLORIDE, DUAL-LITE, LITHONIA, OR EMERGI-LITE.
P1	CONNECT NEW RECEPTACLE TO EXISTING CIRCUIT AT THIS LOCATION.
P4	CONNECT NEW AIR HANDLING UNIT TO EXISTING CIRCUIT SERVING PREVIOUS UNIT. CONNECT THROUGH INTEGRAL VFC WITH FACTORY DISCONNECT. MATCH EXISTING CONDUCTOR AND CONDUIT SIZE. PROVIDE DEDICATED CIRCUIT FOR INTEGRAL LIGHTS AND RECEPTACLES FROM SPARE 20A/1P CIRCUIT BREAKER IN PANEL '3L1'.
P5	PROVIDE NEW 30A/3P CIRCUIT BREAKER IN PANEL '3H1'. CONNECT NEW AIR HANDLING UNIT WITH 3 #10, #10 G IN 3/4" C THROUGH INTEGRAL VFC WITH FACTORY DISCONNECT. PROVIDE DEDICATED CIRCUIT FOR INTEGRAL LIGHTS AND RECEPTACLES FROM NEW 20A/1P CIRCUIT BREAKER IN PANEL '3L1'.
P7	CONNECT NEW CONTROL PANEL TO EXISTING CIRCUIT TIED BACK DURING DEMOLITION.
P14	PROVIDE CIRCUITS FOR NEW MAIN SOUND RACK AT THIS LOCATION. PROVIDE THREE (3) NEW 20A/1P AND THREE (3) NEW 30A/1P CIRCUIT BREAKERS IN PANEL '3L1'. PROVIDE 2 #12, #12 G IN 1/2" CONDUIT FROM EACH 20A BREAKER AND 2 #10 , #10 G IN 1/2" CONDUIT FROM EACH 30A BREAKER IN PANEL'3L1' TO NEW MAIN SOUND RACK. REFER TO TECHNOLOGY PLANS FOR MORE INFORMATION.
P15	PROVIDE CIRCUIT FOR NEW SURGE PROTECTOR AT THIS LOCATION. PROVIDE NEW 20A/1P CIRCUIT BREAKER IN PANEL '3L1'. PROVIDE 2 #12, #12 G IN 1/2" CONDUIT FROM PANEL '3L1' TO THIS LOCATION. REFER TO TECHNOLOGY PLANS FOR MORE INFORMATION.

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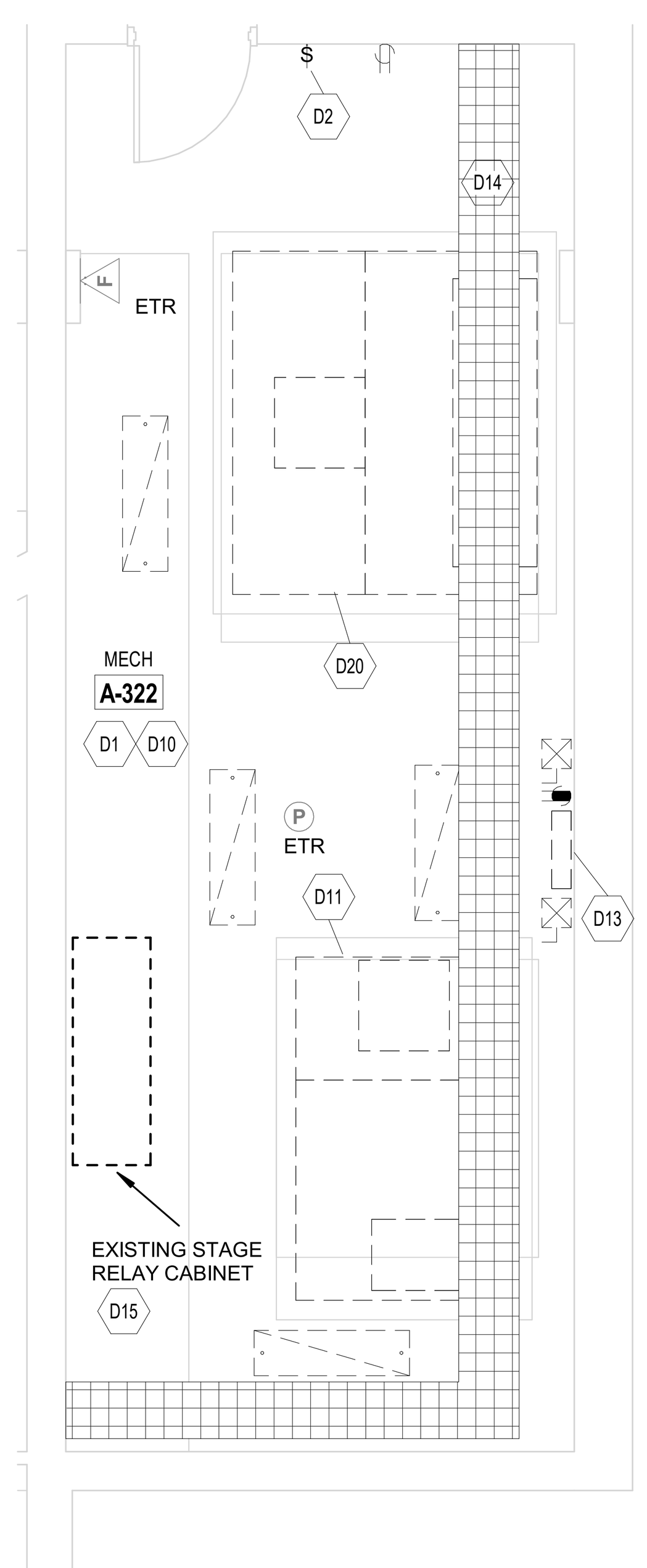
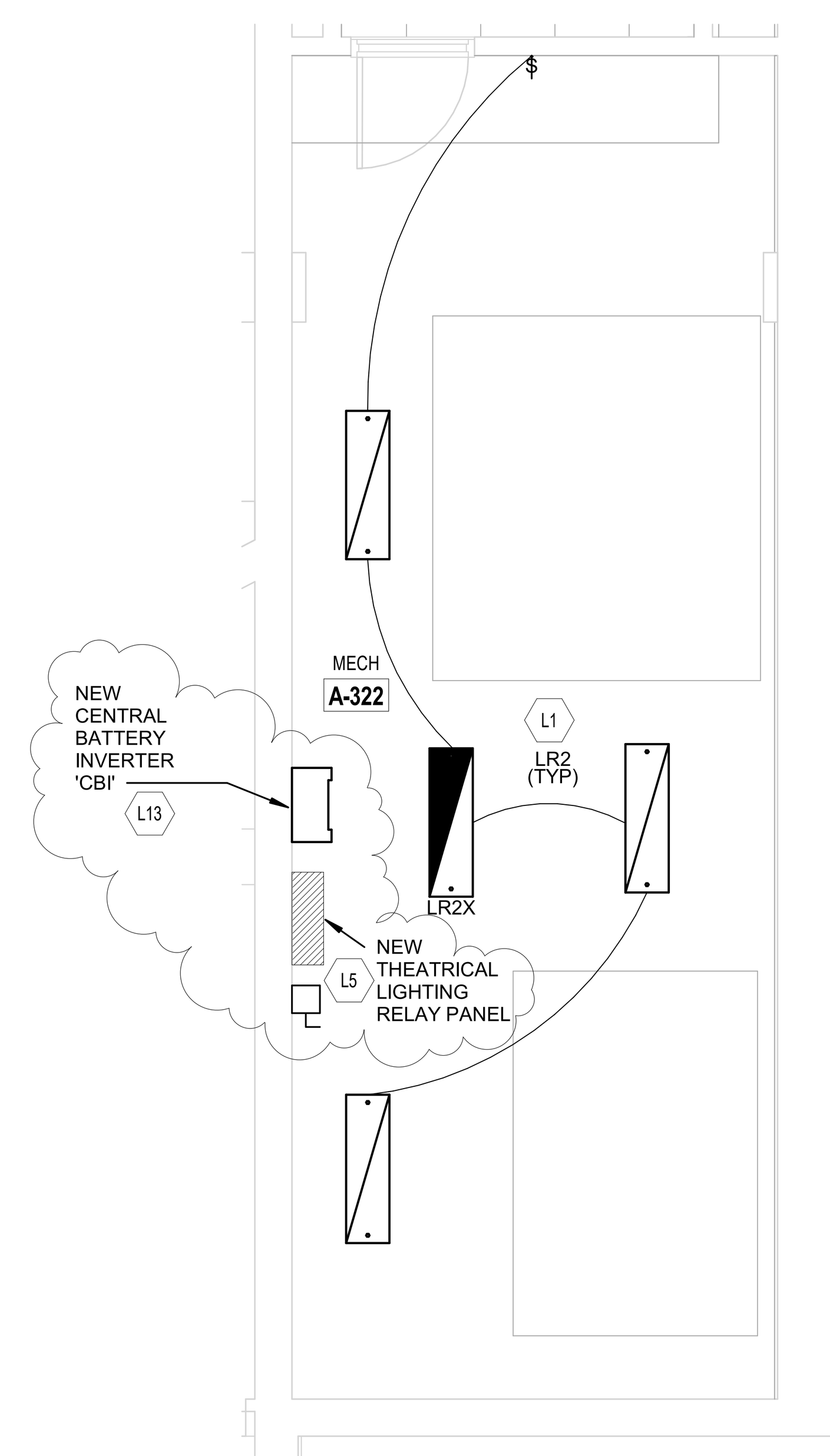
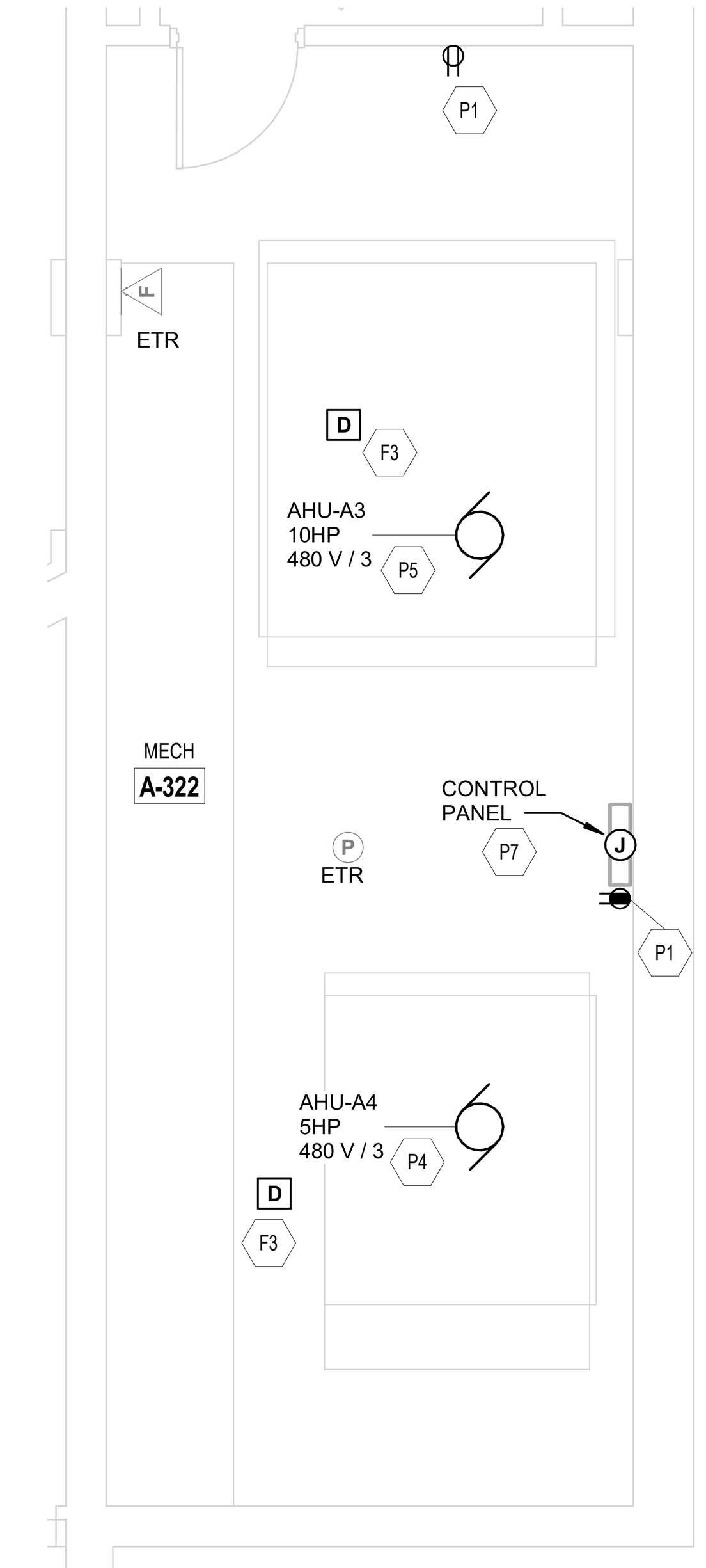


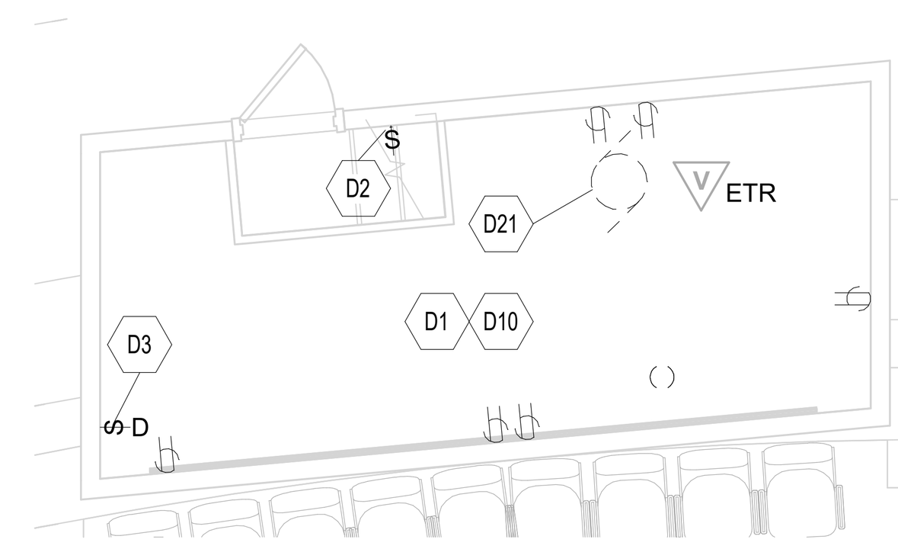
1 **MECHANICAL ROOM DEMOLITION PLAN**
SCALE: 1/4" = 1'-0"



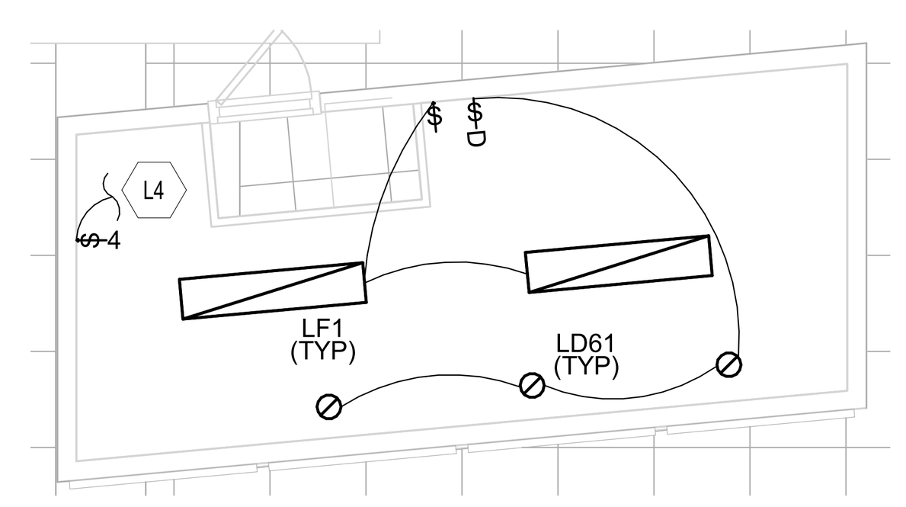
2 **MECHANICAL ROOM LIGHTING PLAN**
SCALE: 1/4" = 1'-0"



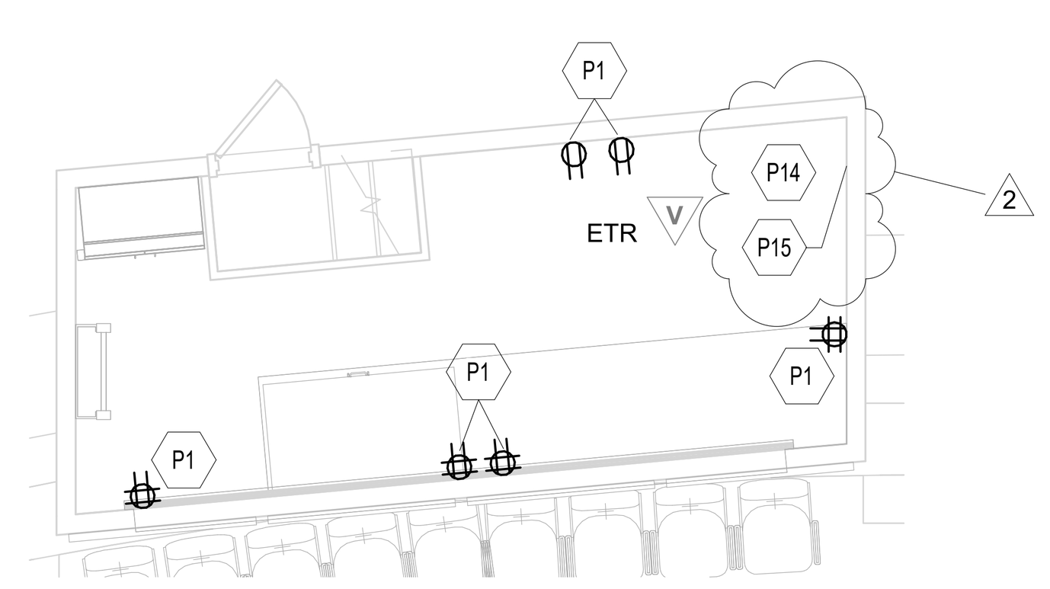
3 **MECHANICAL ROOM POWER AND SYSTEMS PLAN**
SCALE: 1/4" = 1'-0"



4 **SOUND BOOTH DEMOLITION PLAN**
SCALE: 1/4" = 1'-0"



5 **SOUND BOOTH LIGHTING PLAN**
SCALE: 1/4" = 1'-0"



6 **SOUND BOOTH POWER AND SYSTEMS PLAN**
SCALE: 1/4" = 1'-0"

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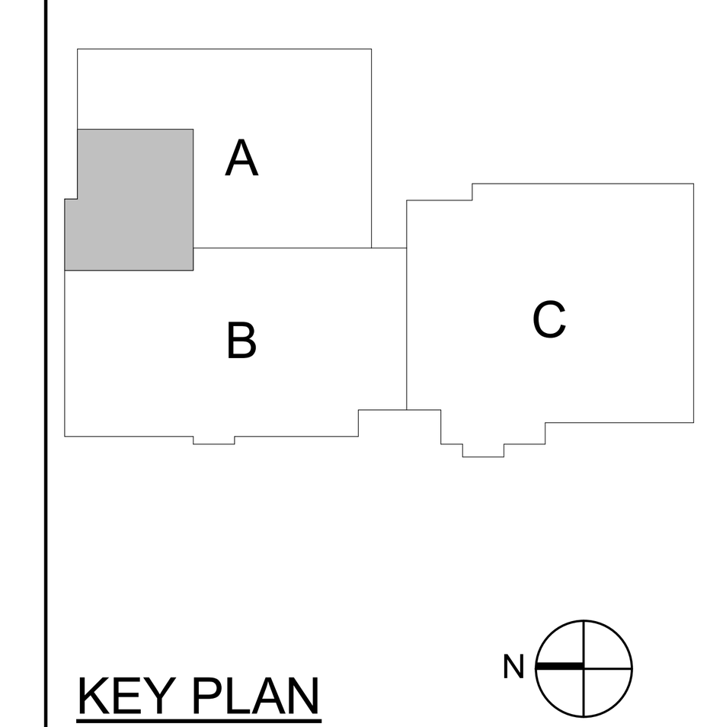
WHITING, IN 46394

SCHOOL CITY OF WHITING

ARCHITECT

FANNING HOWEY

317.848.0966 WWW.FHAI.COM
350 E. New York St., Indianapolis, IN 46204



KEY PLAN

CONSTRUCTION DOCUMENTS

BRIAN W. BUTLER REGISTERED No. PE11600005 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWN BY: ISD
PROJECT NUMBER: 224023.01
PROJECT ISSUE DATE: 09.06.2024

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2	Addendum #3	09.30.2024

ENLARGED ELECTRICAL PLANS

E4.01

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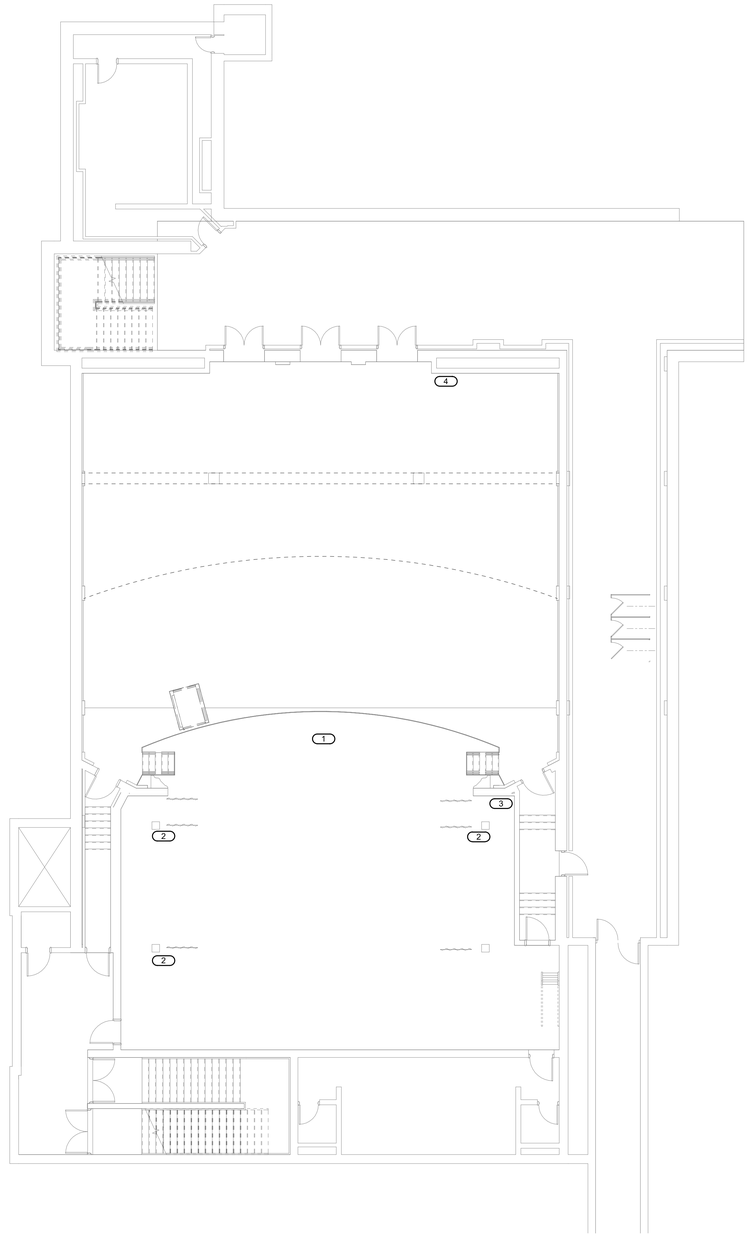
GENERAL NOTES:

1. REMOVE ALL EXISTING POWER AND DMX DISTRIBUTION ELEMENTS ON EXISTING ELECTRIC BATTENS AND PULL WIRES BACK TO DISTRIBUTION PANELS. RETAIN RACEWAY IF CONDITION PERMITS FOR REUSE.
2. REMOVE AND DISPOSE OF ALL EXISTING LUMINAIRES.
3. REMOVE AND DISPOSE OF ALL EXISTING THEATRICAL LIGHTING CONTROL INFRASTRUCTURE AND PREP LOCATIONS FOR NEW EQUIPMENT.

KEY NOTES: (#)

1. EXISTING FLOOR BOX. DETAILS FOR DEMOLITION ON TECHNOLOGY DRAWING, T1.2A.
2. EXISTING WALL BOX. DETAILS FOR DEMOLITION ON TECHNOLOGY DRAWING, T1.2A.
3. EXISTING WALL CONTROLLER. REMOVE WALL BOX AND EQUIPMENT WITHIN. PULL WIRE BACK TO DIMMING RACKS IN MECHANICAL AREA ON 3RD FLOOR. EXISTING CONDUIT TO REMAIN IF IT IS STRUCTURALLY SOUND AND PHYSICALLY WITHOUT DAMAGE.
4. EXISTING ENTRY STATION TO BE REMOVED. PULL WIRE BACK TO INFRASTRUCTURE AND LEAVE PULL CORD. EXISTING BACK BOX AND CONDUIT TO REMAIN IF IT IS STRUCTURALLY SOUND AND PHYSICALLY WITHOUT DAMAGE.



NORTH

1 UNIT 'A' SECOND FLOOR DEMOLITION PLAN - LIGHTING

1/8" = 1'-0"

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1751 OLIVER STREET
WHITING, IN 46394

IMEG
www.imegcorp.com
8900 KEYSTONE CROSSING
SUITE 210
INDIANAPOLIS, IN 46240
P. 317.848.5045 F. 317.844.2201
PROJECT #24002203.00

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PROJECT NUMBER: 224023.01
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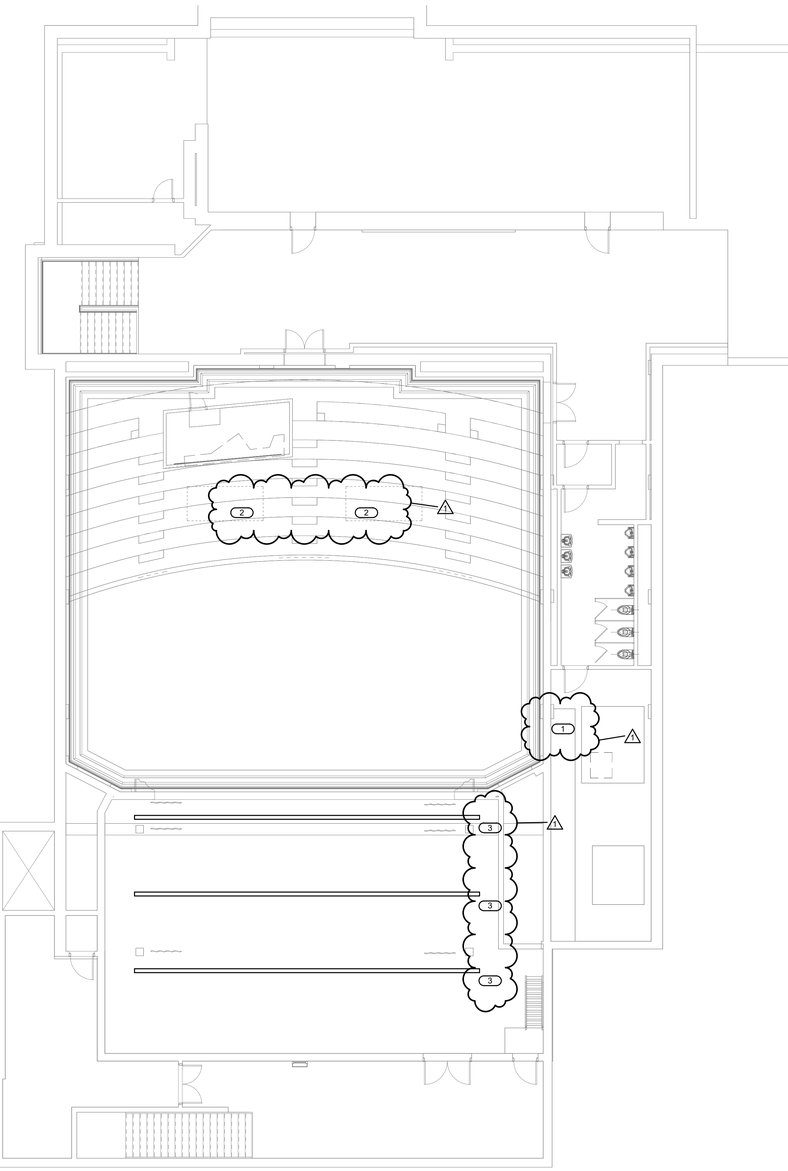
REV. NO.	DESCRIPTION	DATE

UNIT 'A' SECOND FLOOR DEMOLITION PLAN - LIGHTING

TL1.2A



GENERAL NOTES:

1. REMOVE ALL EXISTING POWER AND DMX DISTRIBUTION ELEMENTS ON EXISTING ELECTRIC BATTENS AND PULL WIRES BACK TO DISTRIBUTION PANELS. RETAIN RACEWAY IF CONDITION PERMITS (CONDUIT SHALL BE STRUCTURALLY SECURE AND FREE FROM PHYSICAL DAMAGE IF REUSED) FOR REUSE.
2. REMOVE AND DISPOSE OF ALL EXISTING LUMINAIRES.
3. REMOVE AND DISPOSE OF ALL EXISTING THEATRICAL LIGHTING CONTROL INFRASTRUCTURE AND PREP LOCATIONS FOR NEW EQUIPMENT.

KEY NOTES: (#)

1. REMOVE EXISTING DIMMING RACK AND ASSOCIATED INFRASTRUCTURE.
2. EXISTING CEILING OPENING FOR CATWALK LIGHTING POSITION ACCESS. REMOVE DURING RECONSTRUCTION OF CEILING. SEE ARCHITECTURAL DETAILS FOR ADDITIONAL INFORMATION.
3. EXISTING ELECTRIC BATTENS. REMOVAL OF EXISTING LUMINAIRES AND POWER/DMX DISTRIBUTION INFRASTRUCTURE. TYP. OF 3 LOCATIONS. COORDINATE WITH STRUCTURAL/RIGGING CONSULTANT TO DETERMINE QUALITY OF FUNCTION AND SAFETY.

1 UNIT 'A' THIRD FLOOR DEMOLITION PLAN - LIGHTING

1/8" = 1'-0"

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1751 OLIVER STREET
WHITING, IN 46394

IMEG
www.imegcorp.com
8900 KEYSTONE CROSSING
SUITE 210
INDIANAPOLIS, IN 46240
P. 317.848.5045 F. 317.844.2201
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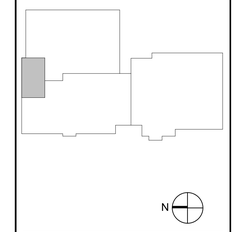

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DRAWN BY: CHRWOJ
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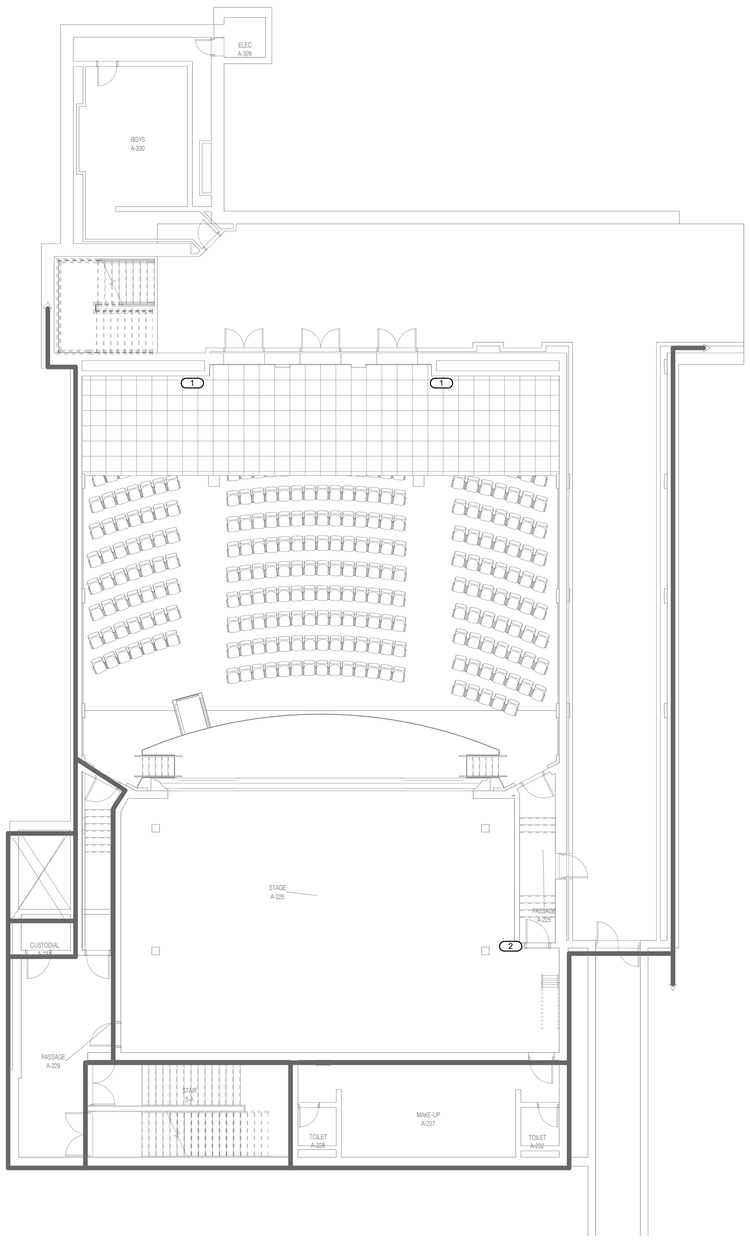
1	ADDENDUM #3	09.30.2024

UNIT 'A' THIRD FLOOR DEMOLITION PLAN - LIGHTING

TL1.3A



1 UNIT 'A' SECOND FLOOR PLAN - LIGHTING

1/8" = 1'-0"

GENERAL NOTES:

1. ALL THEATRICAL LIGHTING SHALL BE PROVIDED, INSTALLED, AIMED AND FOCUSED BY A THEATRICAL EQUIPMENT SUPPLIER OR LIGHTING CONTROL SYSTEMS INTEGRATOR (LCSI). GENERAL CONTRACTOR AND ELECTRICAL CONTRACTOR TO SOLICIT BIDS FOR THE THEATRICAL LIGHTING PACKAGE FROM A COMPANY CAPABLE OF ALL OF THE ABOVE THAT ARE LOCAL TO THE WHITING, INDIANA AREA.

   A. THE PROVIDER OF THE SYSTEM HEREIN DESCRIBED SHALL BE ACKNOWLEDGED IN BUSINESS AS A LIGHTING CONTROL SYSTEMS INTEGRATION COMPANY, HEREAFTER REFERRED TO AS LCSI. THIS COMPANY SHALL EMPLOY FULL TIME SYSTEMS INTEGRATORS AND PROJECT MANAGERS WITH EXPERIENCE IN COMPLETING WORK OF SIMILAR OR GREATER SIZE AND SCOPE. THE ROLE OF THE LCSI IN THIS PROJECT SHALL BE TO PROVIDE ALL EQUIPMENT LISTED ON THESE DRAWINGS AND IN SPECIFICATION SECTION 26 09 61 TO THE ELECTRICAL CONTRACTOR FOR INSTALLATION. THE LCSI SHALL FURNISH A COMPLETE WORKING SYSTEM TO THE ELECTRICAL CONTRACTOR, MEETING THE INTENT OF THIS SPECIFICATION. THE LCSI SHALL COORDINATE DELIVERY SCHEDULES AND INSTALLATION OF EQUIPMENT WITH THE ELECTRICAL CONTRACTOR. ADDITIONALLY, THE LCSI SHALL BE RESPONSIBLE FOR ALL DOCUMENTATION FOR EQUIPMENT IN THIS SECTION, SYSTEM RECORD DRAWINGS, FINAL TESTING OF THE SYSTEM AND TRAINING OF THE OWNER'S PERSONNEL AS REQUIRED BY THIS SPECIFICATION.

   B. THE LCSI SHALL HAVE EXPERIENCE IN THE OPERATION AND INSTALLATION OF SIMILAR EQUIPMENT ASSOCIATED WITH THE CONSTRUCTION AND/OR RENOVATION OF FACILITIES SIMILAR IN SCOPE TO THIS PROJECT.

   C. THE LCSI SHALL HAVE BEEN IN BUSINESS FOR A MINIMUM OF 20 CONSECUTIVE YEARS AND SHALL HAVE NO HISTORY OF BANKRUPTCY.

   D. THE LCSI SHALL BE AN AUTHORIZED DEALER FOR AN ADEQUATE NUMBER OF MANUFACTURERS OF SYSTEM PRODUCTS NECESSARY TO PROVIDE A COMPLETE WORKING SYSTEM MEETING THE INTENT OF THIS SPECIFICATION. SYSTEM PRODUCTS SHALL INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
      a. DIMMING EQUIPMENT
      b. CONTROL SYSTEMS
      c. LIGHTING FIXTURES
      d. POWER DISTRIBUTION EQUIPMENT

   E. THE LCSI SHALL OFFER A MAINTENANCE AND SERVICE CONTRACT.

   F. THE SYSTEMS INTEGRATION COMPANY SHALL DESIGNATE A DEDICATED PROJECT MANAGER. THE LCSI'S PROJECT MANAGER SHALL BE THE MAIN CONTACT BETWEEN THE SYSTEMS INTEGRATOR, MANUFACTURERS, ARCHITECTS, ENGINEERS AND CONTRACTORS FROM CONTRACT AWARD UNTIL FINAL SIGN OFF. THE LCSI'S PROJECT MANAGER SHALL BE THE SAME PERSON THROUGHOUT THE ENTIRE COURSE OF THE PROJECT, UNLESS OTHERWISE APPROVED BY THE ARCHITECT.

   G. THE LCSI SHALL BE RESPONSIBLE FOR INITIAL SYSTEM STARTUP, INCLUDING BUT NOT LIMITED TO:
      a. ADDRESSING ALL DMX/RDM LUMINAIRES.
      b. HANGING ALL LUMINAIRES AT BATTENS AND CATWALKS
      c. INITIAL PROGRAMMING OF LIGHTING CONTROL CONSOLE (MIN. 3 SAMPLE RECALLABLE PRESETS)
      d. TRAINING OF OWNER UPON COMPLETION OF INSTALLATION.

   H. APPROVED LIGHTING CONTROL SYSTEMS INTEGRATION COMPANIES SHALL BE THE FOLLOWING, OR APPROVED EQUAL:

      a. BARBIZON LIGHTING CO., CHICAGO, IL
      b. GRAND STAGE COMPANY, CHICAGO, IL

KEYNOTES:

1. PROVIDE NEW LIGHTING CONTROL ENTRY STATIONS (ON-OFF FUNCTIONALITY) FROM ETC. NEW ENTRY STATIONS TO BE RECESSED IN EXISTING WALL. REUSE EXISTING BACKBOX AND RACEWAY WHERE POSSIBLE.

   COORDINATE WITH SPECIFICATION SECTION 26 09 61 - THEATRICAL LIGHTING CONTROLS, LIGHTING INSTRUMENTS AND WIRING DEVICES. NEW CONTROLS STATION SHALL BE:

   MANUFACTURER: ETC
   MODEL: UNISON ECHO INSPIRE CONTROL STATION - 2 BUTTON

   ENTRY STATION SHALL RECALL LAST PRESET USED WITH ONE BUTTON AND TURN ALL LIGHTS IN THE AUDITORIUM OFF WITH REMAINING BUTTON.

2. PROVIDE ETC GRAPHIC USER INTERFACE FOR LIGHTING CONTROL SYSTEM IN SURFACE WALL MOUNT BACK-BOX. COORDINATE LOCATION DURING ROUGH-IN. GRAPHIC CONTROL STATION SHALL BE:

   MANUFACTURER: ETC
   MODEL: ECHOTOUCH CONTROLLER MK2

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WHITING, IN 46394

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www.imegcorp.com
8900 KEYSTONE CROSSING
SUITE 210
INDIANAPOLIS, IN 46240
P: 317.848.5045 F: 317.844.2201
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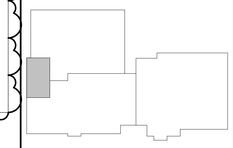

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CONSTRUCTION DOCUMENTS

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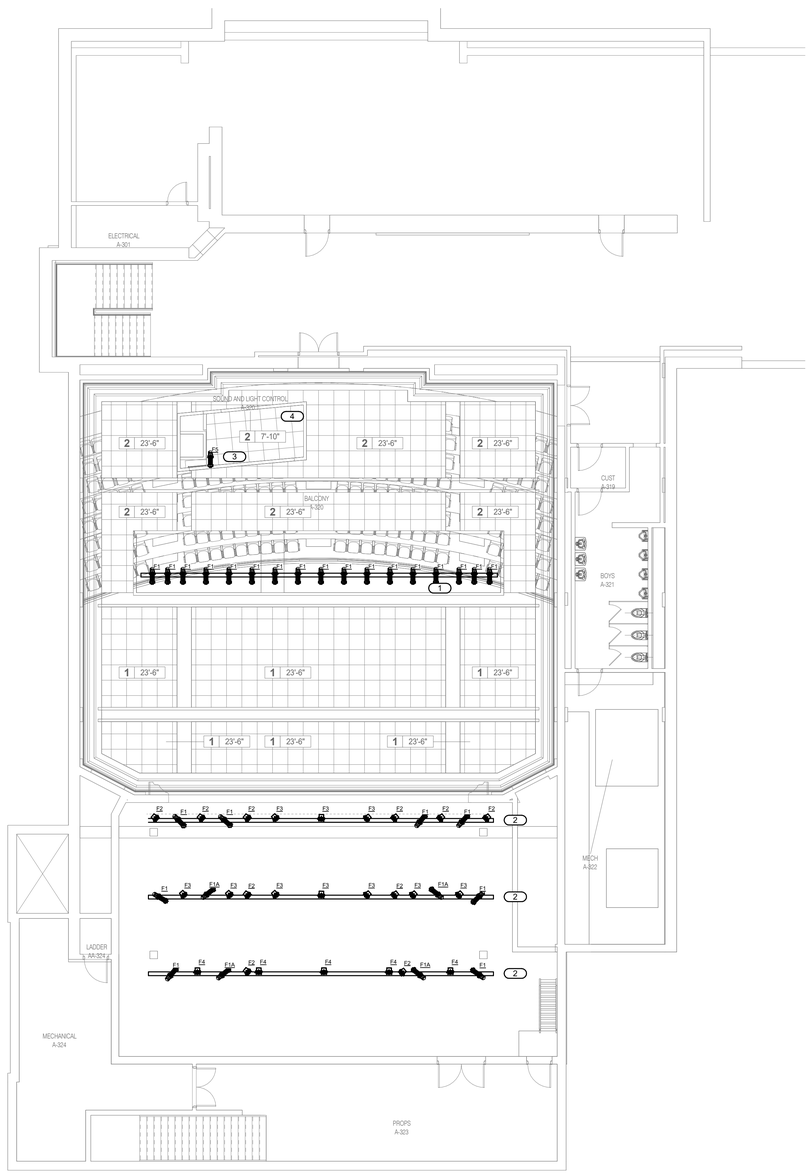
UNIT 'A' SECOND FLOOR PLAN - LIGHTING

TL2.2A



1 UNIT 'A' THIRD FLOOR PLAN - LIGHTING

1/8" = 1'-0"

GENERAL NOTES:

1. ALL THEATRICAL LIGHTING SHALL BE PROVIDED, INSTALLED, AIMED AND FOCUSED BY A THEATRICAL EQUIPMENT SUPPLIER OR LIGHTING CONTROL SYSTEMS INTEGRATOR (LCSI). GENERAL CONTRACTOR AND ELECTRICAL CONTRACTOR TO SOLICIT BIDS FOR THE THEATRICAL LIGHTING PACKAGE FROM A COMPANY CAPABLE OF ALL OF THE ABOVE THAT ARE LOCAL TO THE WHITING, INDIANA AREA.

   A. THE PROVIDER OF THE SYSTEM HEREIN DESCRIBED SHALL BE ACKNOWLEDGED IN BUSINESS AS A LIGHTING CONTROL SYSTEMS INTEGRATION COMPANY, HEREAFTER REFERRED TO AS LCSI. THIS COMPANY SHALL EMPLOY FULL TIME SYSTEMS INTEGRATORS AND PROJECT MANAGERS WITH EXPERIENCE IN COMPLETING WORK OF SIMILAR OR GREATER SIZE AND SCOPE. THE ROLE OF THE LCSI IN THIS PROJECT SHALL BE TO PROVIDE ALL EQUIPMENT LISTED ON THESE DRAWINGS AND IN SPECIFICATION SECTION 26 09 61 TO THE ELECTRICAL CONTRACTOR FOR INSTALLATION. THE LCSI SHALL FURNISH A COMPLETE WORKING SYSTEM TO THE ELECTRICAL CONTRACTOR, MEETING THE INTENT OF THIS SPECIFICATION. THE LCSI SHALL COORDINATE DELIVERY SCHEDULES AND INSTALLATION OF EQUIPMENT WITH THE ELECTRICAL CONTRACTOR. ADDITIONALLY, THE LCSI SHALL BE RESPONSIBLE FOR ALL DOCUMENTATION FOR EQUIPMENT IN THIS SECTION, SYSTEM RECORD DRAWINGS, FINAL TESTING OF THE SYSTEM AND TRAINING OF THE OWNER'S PERSONNEL AS REQUIRED BY THIS SPECIFICATION.

   B. THE LCSI SHALL HAVE EXPERIENCE IN THE OPERATION AND INSTALLATION OF SIMILAR EQUIPMENT ASSOCIATED WITH THE CONSTRUCTION AND/OR RENOVATION OF FACILITIES SIMILAR IN SCOPE TO THIS PROJECT.

   C. THE LCSI SHALL HAVE BEEN IN BUSINESS FOR A MINIMUM OF 20 CONSECUTIVE YEARS AND SHALL HAVE NO HISTORY OF BANKRUPTCY.

   D. THE LCSI SHALL BE AN AUTHORIZED DEALER FOR AN ADEQUATE NUMBER OF MANUFACTURERS OF SYSTEM PRODUCTS NECESSARY TO PROVIDE A COMPLETE WORKING SYSTEM MEETING THE INTENT OF THIS SPECIFICATION. SYSTEM PRODUCTS SHALL INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
      a. DIMMING EQUIPMENT
      b. CONTROL SYSTEMS
      c. LIGHTING FIXTURES
      d. POWER DISTRIBUTION EQUIPMENT

   E. THE LCSI SHALL OFFER A MAINTENANCE AND SERVICE CONTRACT.

   F. THE SYSTEMS INTEGRATION COMPANY SHALL DESIGNATE A DEDICATED PROJECT MANAGER. THE LCSI'S PROJECT MANAGER SHALL BE THE MAIN CONTACT BETWEEN THE SYSTEMS INTEGRATOR, MANUFACTURERS, ARCHITECTS, ENGINEERS AND CONTRACTORS FROM CONTRACT AWARD UNTIL FINAL SIGN OFF. THE LCSI'S PROJECT MANAGER SHALL BE THE SAME PERSON THROUGHOUT THE ENTIRE COURSE OF THE PROJECT, UNLESS OTHERWISE APPROVED BY THE ARCHITECT.

   G. THE LCSI SHALL BE RESPONSIBLE FOR INITIAL SYSTEM STARTUP, INCLUDING BUT NOT LIMITED TO:
      a. ADDRESSING ALL DMX/RDM LUMINAIRES.
      b. HANGING ALL LUMINAIRES AT BATTENS AND CATWALKS
      c. INITIAL PROGRAMMING OF LIGHTING CONTROL CONSOLE (MIN. 3 SAMPLE RECALLABLE PRESETS)
      d. TRAINING OF OWNER UPON COMPLETION OF INSTALLATION.

   H. APPROVED LIGHTING CONTROL SYSTEMS INTEGRATION COMPANIES SHALL BE THE FOLLOWING, OR APPROVED EQUAL:
      a. BARBIZON LIGHTING CO., CHICAGO, IL
      b. GRAND STAGE COMPANY, CHICAGO, IL

2. FINAL ARRANGEMENT OF THE LUMINAIRES WITHIN THIS SYSTEM WILL BE COORDINATED DURING CONSTRUCTION SUBMITTAL PHASE OF PROJECT WITH OWNER'S REP AND DESIGN TEAM.

3. REUSE EXISTING RACEWAY FOR POWER AND DMX DISTRIBUTION WHERE POSSIBLE. RACEWAY TO BE REUSED WILL BE STRUCTURALLY SOUND AND PHYSICALLY FREE OF DAMAGE. EXISTING RACEWAY IS LOCATED RUNNING FROM DEMO'D DIMMING RACK IN MECHANICAL MEZZANINE TO STAGE, CATWALK AND CONTROL BOOTH.

4. LIGHTING CONTROL INFRASTRUCTURE:
   A. CONTRACTOR WILL WORK WITH LOCAL ETC REPRESENTATIVE TO PROVIDE A THEATRICAL LIGHTING CONTROL SYSTEM THAT HAS A MINIMUM OF 48 RELAYS, ARCHITECTURAL/HOUSE LIGHTING INTEGRATION TO THE LIGHTING CONTROL CONSOLE, ENTRY STATIONS AND TOUCHSCREEN ON STAGE. CONTRACTORWILL PROVIDE ALL EQUIPMENT REQUIRED TO ACHIEVE THIS.
      a. LIGHTING CONTROL CONSOLE
         - MANUFACTURER: ETC
         - MODEL: ION XE 20 2K-US
         - ACCESSORIES: Eos FADER WING (40 FADER), ETC PAD

   B. POWER AND DMX DISTRIBUTION WILL BE MOUNTED TO ELECTRIC BATTENS ON-STAGE AND ALONG THE CATWALK RAILING SPACED EVENLY THROUGHOUT TO ACCOMMODATE THE LUMINAIRES AND DMX CONTROL SIGNALS TO EACH. THIS CAN BE ACCOMPLISHED WITH CONNECTOR STRIPS OR SMALLER DISTRIBUTION BOXES (COORDINATED DURING SUBMITTALS). THIS INFRASTRUCTURE WILL RUN BACK TO ETC 'ECHO' RELAY PANEL LOCATED IN MECHANICAL MEZZANINE. ADDITIONAL POWER AND 'DMX-OUT' WALL PLATES WILL BE LOCATED AROUND THE WINGS AND BACK STAGE AREA AT 18" AFF (QTY. 5 MINIMUM). COORDINATE WITH ELECTRICAL DRAWINGS.

   C. DMX EMERGENCY BYPASS CONTROLLER SHALL BE PROVIDED TO ALLOW EMERGENCY LIGHTING SWITCHOVER OF HOUSE AND AISLE LIGHTS FROM NORMAL POWER TO REMOTE INVERTER EMERGENCY POWER IN THE EVENT OF A POWER OUTAGE OR FIRE ALARM TRIGGER. SEE ELECTRICAL PLANS FOR INVERTER INFORMATION.

KEYNOTES:

1. CATWALK LOCATION.
   A. PROVIDE SCHEDULE #40 STEEL PIPE RAILING ASSEMBLY (SEE ARCHITECTURAL DETAILS FOR CONSTRUCTION). RAILING MUST BE CAPABLE OF SUPPORTING MINIMUM 50LBS/FT DEAD LOAD.
   B. PROVIDE POWER AND DMX DISTRBUTION INFRASTRUCTURE VIA THEATRICAL PLUGSTRIPS WITH DEDICATED CIRCUIT AND RELAY LABELLING PER LOCATION. "DMX OUT" AT EACH END OF THE RAILING PLUG STRIPS.

2. ELECTRICAL BATTENS AT STAGE AREA
   A. PROVIDE NEW POWER AND DMX DISTRBUTION INFRASTRUCTURE VIA THEATRICAL PLUGSTRIPS WITH DEDICATED CIRCUIT AND RELAY LABELLING PER LOCATION. "DMX OUT" AT EACH END OF THE RAILING PLUG STRIPS.
   B. IF EXISTING BATTENS ARE TO BE REUSED, CLEAN AND REMOVE ALL EXISTING LIGHTING AND POWER INFRASTRUCTURE TO ALLOW FOR INSTALLATION OF NEW EQUIPMENT.

3. INSTALL LIGHTING CONTROL CONSOLE AND DMX DISTRIBUTION (DMX IN) PORT IN CONTROL ROOM ON THIRD LEVEL. COORDINATE EXACT LOCATION AND DESK LAYOUT WITH DESIGN TEAM DURING SUBMITTAL PHASE. LOCATE TYPE T5 FOLLOWSPOT IN THIS AREA.

4. COORDINATE THEATRICAL CONTROL INFRASTRUCTURE (I.E. RELAY PANEL, DMX DISTRIBUTION SWITCH(ES), PARADIGM ARCHITECTURAL LIGHTING PROCESSOR, ETC.) DMX EMERGENCY BYPASS CONTROLLER IN EXISTING MECHANICAL ROOM WHERE PRIOR THEATRICAL DIMMING EQUIPMENT WAS LOCATED.

WHITING HIGH SCHOOL - AUDITORIUM IMPROVEMENTS

1751 OLIVER STREET
WHITING, IN 46394

IMEG
www.imegcorp.com
8900 KEYSTONE CROSSING
SUITE 210
INDIANAPOLIS, IN 46240
P: 317.848.5045 F: 317.844.2201
PROJECT #24002203.00

SCHOOL CITY OF WHITING

ARCHITECT

FANNING HOWEY

WWW.FHAI.COM

N

CONSTRUCTION DOCUMENTS

DRAWN BY: CHRWOJ

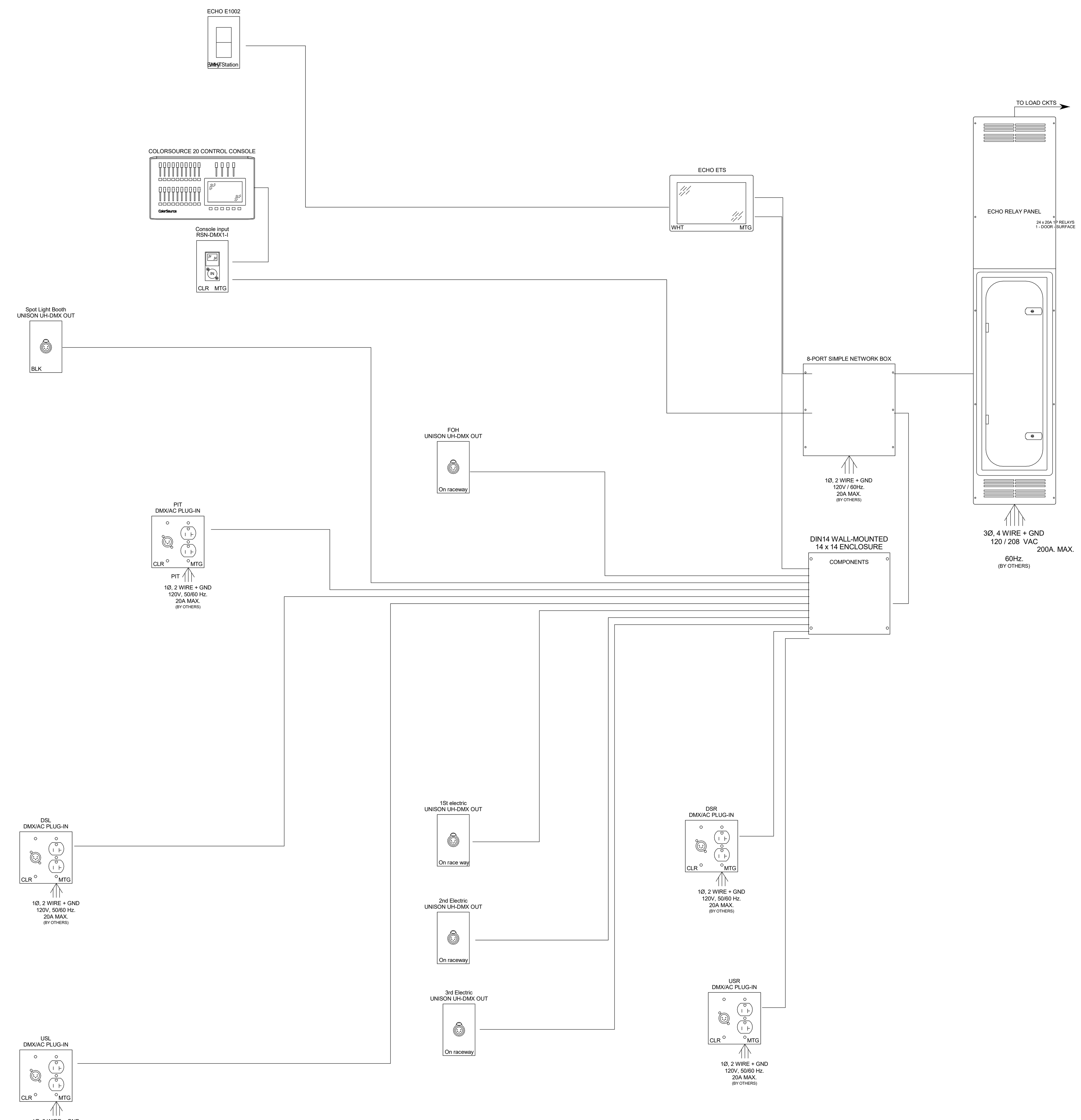
PROJECT NUMBER: 224023.01

PROJECT ISSUE DATE: 09-06-2024

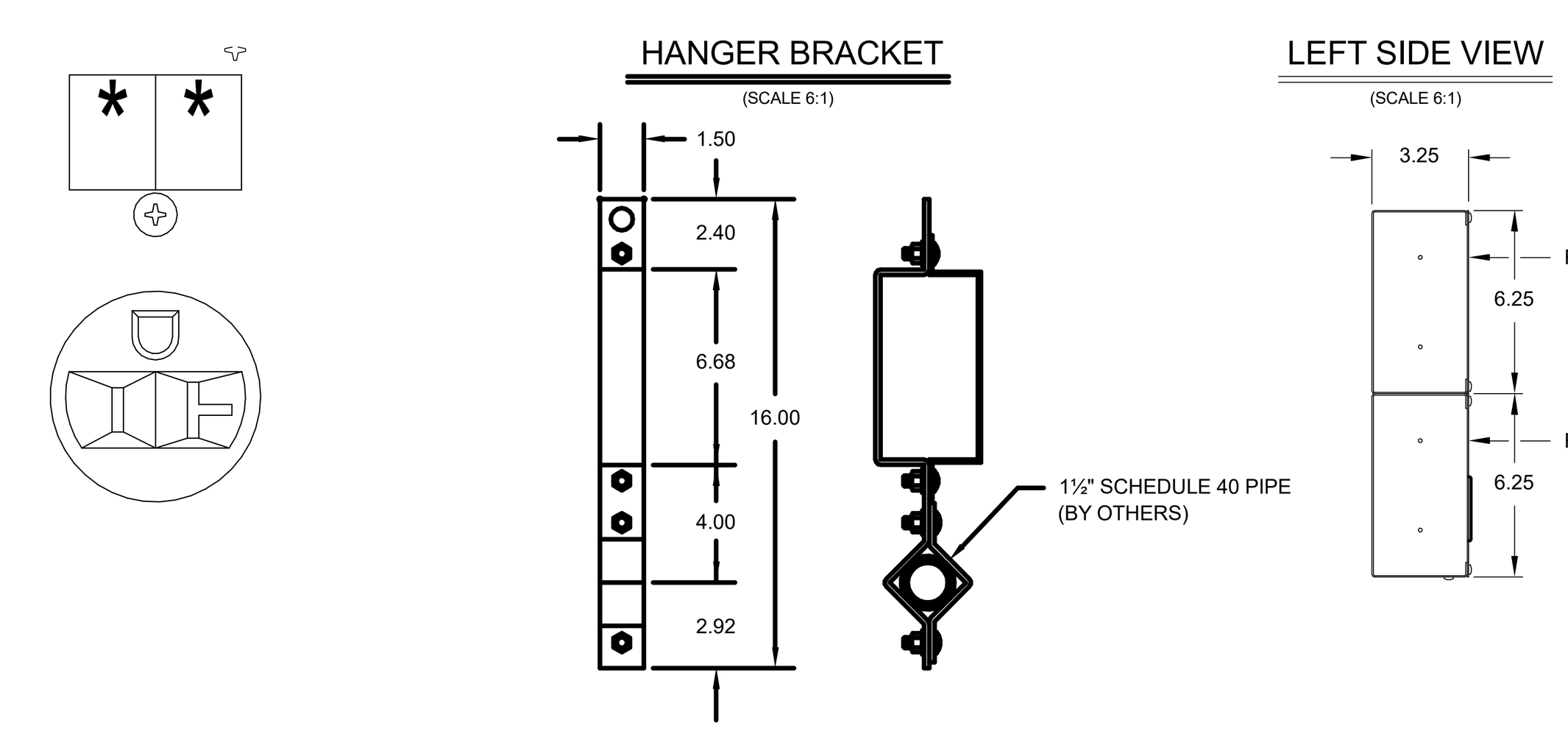
REV. NO.	DESCRIPTION	DATE
1	ADDENDUM #3	09.30.2024

UNIT 'A' THIRD FLOOR PLAN - LIGHTING

TL2.3A



1 THEATRICAL CONTROL ONE-LINE
NO SCALE



PARTS LIST

ITEM	QTY.	DESCRIPTION	DESIGNATION	PART NUMBER
A	1	15??????-???-A 9944-29BO/29-L		TL?????-DSTP?
B	10	SINGLE-PIPE HANGER BRACKET ASSEMBLY	(TYPE 21)	7099A1021
C	1	SINGLE-PIPE TERMINAL BOX HANGER BRACKET	(NOT SHOWN)	7099A1027

NOTES:

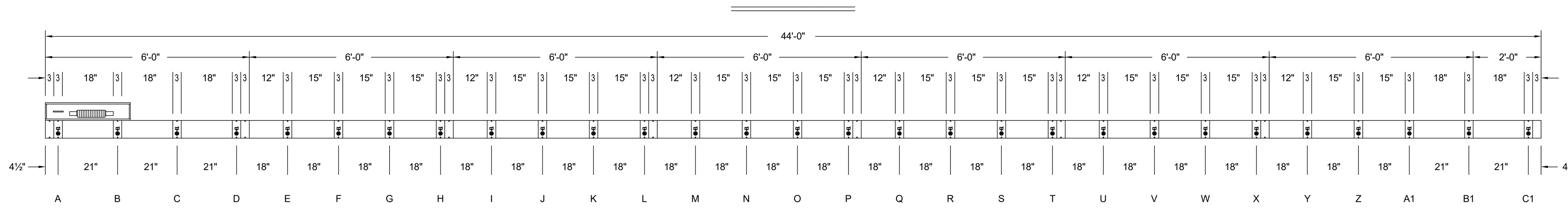
1.) CONNECTOR STRIP TROUGH AND COVER ARE 18 GA. STEEL. END CAPS ARE 14 GA. STEEL. ALL ARE FINISHED IN A BLACK FINE-TEXTURED POWDER COAT.

2.) HANGER BRACKETS ARE 7 GA. STEEL FINISHED IN A BLACK FINE-TEXTURED POWDER COAT. INDICATED QUANTITY OF BRACKETS SHALL BE PLACED NO GREATER THAN 5'-0" APART ALONG THE LENGTH OF THE CONNECTOR STRIP.

3.) CIRCUITS ARE DESIGNATED WITH 2.00" BLACK LEXAN LABELS WITH WHITE TEXT.

4.) CONNECTOR STRIP IS ETL LISTED.

MODEL #9944-29XO/29-L
COVER VIEW



CIRCUIT DESIGNATION																														
CONNECTOR STRIP #	LOCATION	OUTLET DESIGNATION																												
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)	(Z)	(A1)	(B1)	(C1)
(1)	______																													

** - CIRCUIT NUMBERING MUST BE PROVIDED PRIOR TO MANUFACTURING.

2 THEATRICAL CONNECTOR STRIP DETAILS
NO SCALE

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WHITING, IN 46394

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SUITE 210
INDIANAPOLIS, IN 46240
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REV. NO.	DESCRIPTION	DATE

THEATRICAL LIGHTING DETAILS

TL4.0

NOTES

1. SEE SHEET FM-2 AND M-3 FOR GENERAL NOTES, LEGEND SCHEDULES AND DETAILS.

6" DRY PIPE RISER
3" RISER UP FROM BELOW
6" RISER UP FROM BELOW
SEE CONTROL VALVE DETAIL ON SHEET FP-10
ELECTRICALLY SUPERVISED O.S.&Y. VALVE FA-6

DEMO BACK TO EXISTING RISER. RISER TO REMAIN.

DARKROOM A-307
DARKROOM A-308
CLASSROOM A-309
CLASSROOM A-303
STORAGE A-304
PUBLICATIONS A-305
ART A-302
STORAGE A-301
STAIR 1A
CORRIDOR A-317
STAIR 4A
GIRLS A-316
PASSAGE A-318
CUSTODIAN A-319
BALCONY A-320
BOYS A-321
ROOF
CLASSROOM A-310
CLASSROOM A-315
CLASSROOM A-311
CLASSROOM A-314
CORRIDOR A-313
STORAGE A-312
ELEVATOR #1
CUSTODIAN S-320
CORRIDOR A-311
SEE SHEET FP-7
SEE SHEET FP-4 FOR DRY PIPE LAYOUT FOR THIS AREA
SEE BASE BID DRAWINGS
MECHANICAL EQUIPMENT A-322
MECHANICAL EQUIPMENT A-324
HOLD MAINS AS HIGH AS POSSIBLE
DOWN TO CEILING OF PROP ROOM
PROPS A-323
STAIR 5A
SEE SHEET FP-7

NOTE:
PROVIDE SPRINKLERS ABOVE & BELOW CEILING AS REQUIRED

UNIT "A" FIRE PROTECTION THIRD FLOOR PLAN

SCALE : 1/8"-1'-0"

KEY PLAN
NO SCALE

NORTH

EVERETT I. BROWN COMPANY
ARCHITECTS
ENGINEERS
• INDIANAPOLIS, INDIANA • 46241
• PARK FLETCHER •

EVERETT I. BROWN COMPANY
5500 WEST BRADBURY AVENUE •
WHITING SCHOOL COMPLEX

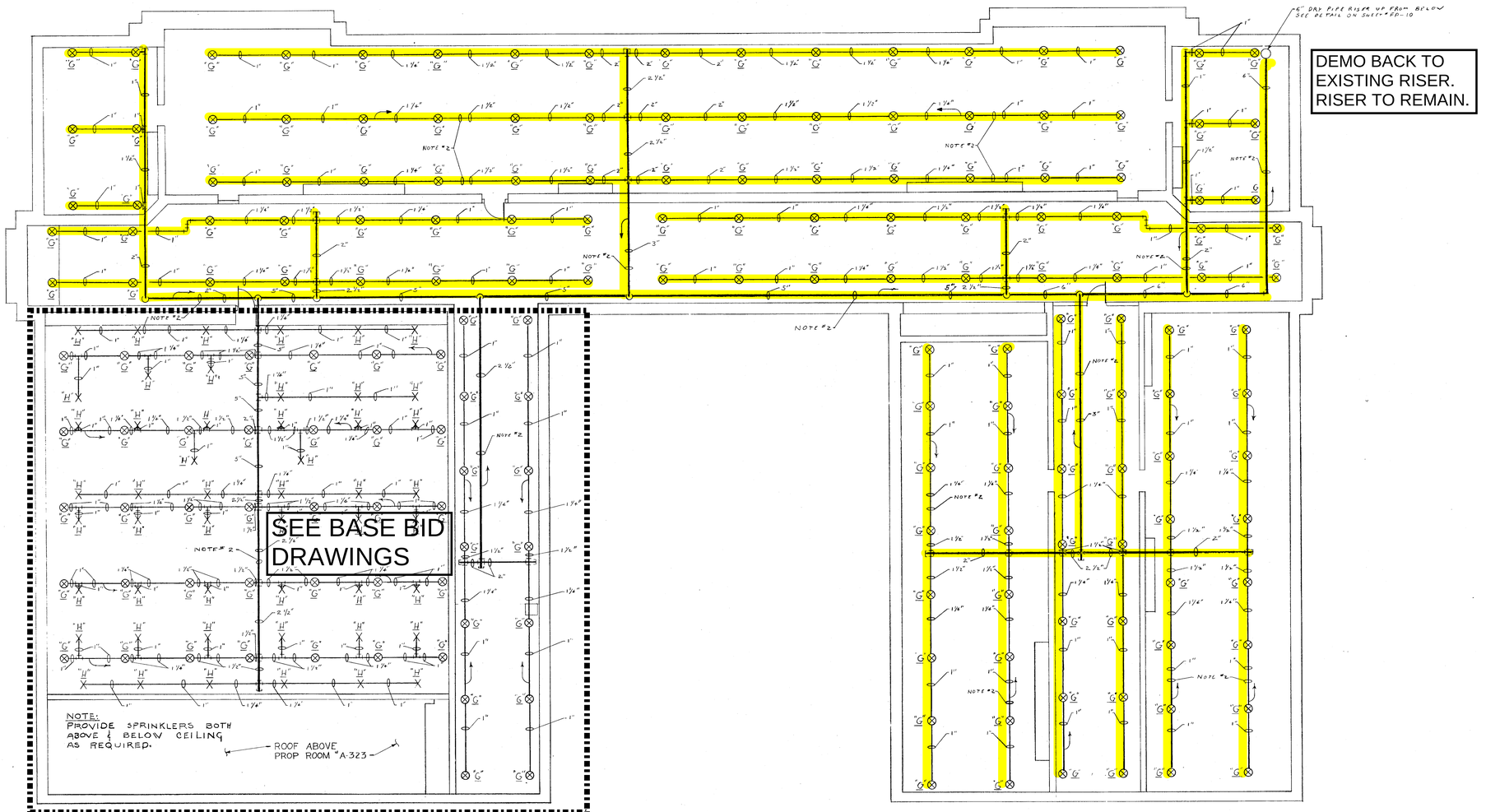
JOSEPH D. POWER
REGISTERED
NO. 7466
STATE OF INDIANA
PROFESSIONAL ENGINEER

PROJECT 831-140
DATE JAN. 26, 1984
REVISED

NO. FP-3
OF 11

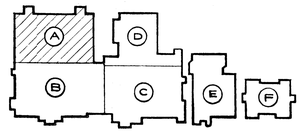
NOTES:

1. SEE SHEETS IM-2 AND M-3 FOR GENERAL NOTES, LEGEND, SCHEDULES AND DETAILS.
2. ALL DRY PIPE SPRINKLER MAINS SHALL SLOPE DOWN TOWARD RISER.



UNIT "A" FIRE PROTECTION ATTIC PLAN

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



KEY PLAN
NO SCALE

NORTH

EVERETT I. BROWN COMPANY
ARCHITECTS ENGINEERS
5500 WEST BRADBURY AVENUE • INDIANAPOLIS, INDIANA • 46241
WHITING SCHOOL COMPLEX
• PARK FLETCHER •

JOSEPH D. POWER REGISTERED PROFESSIONAL ENGINEER NO. 7466 STATE OF INDIANA

PROJECT 831-140
DATE JAN. 26, 1984
REVISED

NO. FP-4
OF 11