



ADDENDUM NO. 1

PROJECT: NORTHWEST CONSOLIDATED SCHOOL DISTRICT OF SHELBY CO.
TRITON CENTRAL HIGH SCHOOL RENOVATIONS –

PROJECT NUMBER: 23106

DATE: May 4, 2023



THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND IS ISSUED IN ACCORDANCE WITH THE INSTRUCTIONS TO BIDDERS. ACKNOWLEDGE RECEIPT OF THIS ADDENDUM BY SIGNING THE ADDENDUM ACKNOWLEDGMENT SECTION OF THE BID FORM.

Specification Divisions Revisions:

1. Delete Section 11 1320 Projection Screens from the Project Manual Index.
2. Reference the attached Addendum No. 1 document from LANCER Associates of the Project Manual, specification Section 08 1213 Steel Frames for the door frames.
3. Reference the attached Addendum No. 1 document from LANCER Associates of the Project Manual, specification Section 08 7100 Door Hardware for the door hardware schedule.

Architecture Drawing Revisions:

1. Drawing No.: LS001
Drawing Sheet Title: LIFE SAFETY PLAN 1ST FLOOR
Revisions:
a) Added sheet to set.
2. Drawing No.: A100
Drawing Sheet Title: NEW FLOOR PLAN AND RCP PLAN
Revisions:
Section cut reference changed to 3/A701.
3. Drawing No.: A701
Drawing Sheet Title: DOOR AND CURTAIN WALL SCHEDULES
Revisions:



- a) Added window elevation and section.
- b) Added hardware sets to schedule.

Attachments:

Specification Section 08 1213 Steel Frames

Specification Section 08 7100 Door Hardware

Sheet LS001 - LIFE SAFETY PLAN 1ST FLOOR

Sheet A701 - DOOR AND CURTAIN WALL SCHEDULES

ADDENDUM No. 1

MEP ITEMS

PROJECT: NEW CLASSROOM RENOVATION

NORTHWEST CONSOLIDATED SCHOOL

DISTRICT OF SHELBY COUNTY

FAIRLAND, INDIANA 46126

DATE: 4 MAY 2023

TO ALL BIDDERS OF RECORD:

This addendum forms as part of the Contract Documents and modifies the original Mechanical specifications and drawings dated May 2023. Acknowledgment of receipt of this Addendum is required. Failure to do so may subject the bidder to disqualification.

A. Changes to Drawings

1. Sheets DMP-101, M101, E102, and E301 changed to indicate Alternate #2.
2. Sheet P101 changed to indicate existing 4-inch waste running in classroom from Owner provided drawings. Field verify location.

B. Attachments

1. Sheets DMP-101, P-101, M101, E102, and E301.

End of Mechanical and Electrical Items

HEATING ● AIR CONDITIONING ● PLUMBING ● ELECTRICAL ● ENERGY

SECTION 08 1213 - STEEL FRAMES

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes non-rated and fire rated steel frames.

1. Provide frames for interior glazed lights.

1.2 REFERENCES

- A. ASTM International:

1. ASTM A591/A591M - Standard Specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Mass Applications.
2. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

- B. Hollow Metal Manufacturers Association:

1. HMMA 802 - Manufacturing of Hollow Metal Doors and Frames.
2. HMMA 820 - Hollow Metal Frames.
3. HMMA 830 - Hardware Preparation and Locations for Hollow Metal Doors and Frames.
4. HMMA 840 - Installation and Storage of Hollow Metal Doors and Frames.
5. HMMA 850 - Fire Rated Hollow Metal Doors & Frames.
6. HMMA 890 - Technical Summary of Hollow Metal by HMMA.

- C. National Fire Protection Association:

1. NFPA 80 - Standard for Fire Doors, Fire Windows.
2. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.

- D. Underwriters Laboratories Inc.:

1. UL 10B - Fire Tests of Door Assemblies.
2. UL 10C - Positive Pressure Fire Tests of Door Assemblies.

- E. Uniform Building Code:

1. UBC Standard 7-2 - Fire Tests of Door Assemblies.

1.3 SUBMITTALS

- A. Division 01 - Submittal Procedures: Submittal procedures.

- B. Shop Drawings: Indicate frame elevations, reinforcement, anchor types and spacings, location of cut-outs for hardware, and finish.

- C. Product Data: Submit frame configuration and finishes.
- D. Manufacturer's Installation Instructions: Submit special installation instructions.
- E. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

1.4 QUALITY ASSURANCE

- A. Conform to requirements of HMMA 890 - Hollow Metal Manual, including HMMA 802, HMMA 820, HMMA 830, HMMA 840, and HMMA 850.
- B. Fire Rated Frame Construction: Conform to one of the following:
 - 1. NFPA 252; with neutral pressure level at 40 inches (1015 mm) maximum above sill at 5 minutes into test.
 - 2. UL 10C.
 - 3. 20-Minute Fire Rated Corridor and Smoke Barrier Frames: Fire tested without hose stream test.
- C. Fire Rated Frame Construction: Conform to UBC Standard 7-2.
- D. Installed Fire Rated Frame Assembly: Conform to NFPA 80 for fire rated class same as fire door.
- E. Smoke and Draft Control Door Frames: Tested in accordance with UL 1784.
 - 1. Air Leakage: Maximum 3.0 cfm/sf (0.0154 cu m/s/sq m) of door opening with 0.10 inch water gage (24.9 Pa) pressure differential.
- F. Attach label from agency approved by authority having jurisdiction to identify each fire rated door frame.
 - 1. Attach smoke label to smoke and draft control door frames.

1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years [documented] experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Division 01 - Product Requirements: Product storage and handling requirements.
- B. Accept frames on site in manufacturer's packaging. Inspect for damage.
- C. Break seal on-site to permit ventilation.

1.7 COORDINATION

- A. Division 01 - Administrative Requirements: Coordination and project conditions.

- B. Coordinate Work with frame opening construction, door and hardware installation.
- C. Sequence installation to accommodate required door hardware electric wire connections.

PART 2 PRODUCTS

2.1 STEEL FRAMES

- A. Manufacturers:
 - 1. Ceco Door Products.
 - 2. Curries.
 - 3. Steelcraft.
 - 4. Habersham Metal Products.
 - 5. Republic Builders Products.
 - 6. Metal Products Inc. (MPI).
- B. Product Description: Shop fabricated steel frames, fire rated and non-rated types.

2.2 COMPONENTS

- A. Steel: Galvanized sheet in accordance with ASTM A653/A653M; G90.
 - 1. Interior Frames: 16 gage/0.053 inch thick material, base metal thickness.

2.3 ACCESSORIES

- A. Silencers: Resilient rubber fitted into drilled hole.
- B. Removable Stops: Rolled steel channel shape, mitered corners; prepared for countersink style tamper proof screws.
- C. Epoxy Coating.
- D. Primer: Zinc chromate type.

2.4 FABRICATION

- A. Fabricate frames as welded unit.
- B. Mullions for Double Doors: Fixed type, of same profiles as jambs.
- C. Transom Bars for Glazed Lights: Fixed type, of same profiles as jamb and head.
- D. Fabricate frames with hardware reinforcement plates welded in place. Furnish mortar guard boxes.
- E. Attach fire rated label to each fire rated frame.

- F. Reinforce frames wider than 48 inches (1 200 mm) with roll formed steel channels fitted tightly into frame head, flush with top.
- G. Prepare frames for silencers. Furnish three single silencers for single doors [and mullions of double doors] on strike side. Furnish two single silencers on frame head at double doors without mullions.
- H. Fabricate frames to suit masonry wall coursing with 4 or 2 inch head member.

2.5 SHOP FINISHING

- A. Interior Units: ASTM A653/A653M G90.
- B. Primer: Air dried.
- C. Prior to shipment, inside surfaces of all masonry frames shall be coated with epoxy, minimum 5 mils DFT.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Division 01 - Administrative Requirements: Coordination and project conditions.
- B. Verify opening sizes and tolerances are acceptable.

3.2 INSTALLATION

- A. Install frames in accordance with HMMA 840.
- B. Coordinate with masonry, gypsum board and concrete wall construction for anchor placement.
- C. Coordinate installation of glass and glazing specified in Section 08800.
- D. Coordinate installation of frames with installation of hardware specified in Section 08710 and doors.
- E. Install roll formed steel reinforcement channels between two abutting frames. Anchor to structure and floor.

3.3 ERECTION TOLERANCES

- A. Division 01 - Quality Requirements: Tolerances.
- B. Maximum Diagonal Distortion: 1/16 inch measured with straight edges, crossed corner to corner.

END OF SECTION 08 1213

SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Mechanical and electrified door hardware
2. Electronic access control system components

B. Section excludes:

1. Windows
2. Cabinets (casework), including locks in cabinets
3. Signage
4. Toilet accessories
5. Overhead doors

C. Related Sections:

1. Division 01 Section "Alternates" for alternates affecting this section.
2. Division 06 Section "Rough Carpentry"
3. Division 06 Section "Finish Carpentry"
4. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
5. Division 08 Sections:
 - a. "Metal Doors and Frames"
 - b. "Flush Wood Doors"
 - c. "Aluminum-Framed Entrances and Storefronts"
6. Division 26 "Electrical" sections for connections to electrical power system and for low-voltage wiring.
7. Division 28 "Electronic Safety and Security" sections for coordination with other components of electronic access control system and fire alarm system.

1.02 REFERENCES

A. UL LLC

1. UL 10B - Fire Test of Door Assemblies
2. UL 10C - Positive Pressure Test of Fire Door Assemblies
3. UL 1784 - Air Leakage Tests of Door Assemblies
4. UL 305 - Panic Hardware

B. DHI - Door and Hardware Institute

1. Sequence and Format for the Hardware Schedule
2. Recommended Locations for Builders Hardware
3. Keying Systems and Nomenclature
4. Installation Guide for Doors and Hardware

C. NFPA – National Fire Protection Association

1. NFPA 70 – National Electric Code
2. NFPA 80 – 2016 Edition – Standard for Fire Doors and Other Opening Protectives
3. NFPA 101 – Life Safety Code
4. NFPA 105 – Smoke and Draft Control Door Assemblies
5. NFPA 252 – Fire Tests of Door Assemblies

D. ANSI - American National Standards Institute

1. ANSI A117.1 – 2017 Edition – Accessible and Usable Buildings and Facilities
2. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties
3. ANSI/BHMA A156.28 - Recommended Practices for Keying Systems
4. ANSI/WDMA I.S. 1A - Interior Architectural Wood Flush Doors
5. ANSI/SDI A250.8 - Standard Steel Doors and Frames

1.03 SUBMITTALS

A. General:

1. Submit in accordance with Conditions of Contract and Division 01 Submittal Procedures.
2. Prior to forwarding submittal:
 - a. Review drawings and Sections from related trades to verify compatibility with specified hardware.
 - b. Highlight, encircle, or otherwise specifically identify on submittals: deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.

B. Action Submittals:

1. Product Data: Submit technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
 - a. Wiring Diagrams: For power, signal, and control wiring and including:
 - 1) Details of interface of electrified door hardware and building safety and security systems.
 - 2) Schematic diagram of systems that interface with electrified door hardware.
 - 3) Point-to-point wiring.
 - 4) Risers.
3. Samples for Verification: If requested by Architect, submit production sample of requested door hardware unit in finish indicated and tagged with full description for coordination with schedule.
 - a. Samples will be returned to supplier. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.
4. Door Hardware Schedule:
 - a. Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.

- b. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
 - c. Indicate complete designations of each item required for each opening, include:
 - 1) Door Index: door number, heading number, and Architect's hardware set number.
 - 2) Quantity, type, style, function, size, and finish of each hardware item.
 - 3) Name and manufacturer of each item.
 - 4) Fastenings and other pertinent information.
 - 5) Location of each hardware set cross-referenced to indications on Drawings.
 - 6) Explanation of all abbreviations, symbols, and codes contained in schedule.
 - 7) Mounting locations for hardware.
 - 8) Door and frame sizes and materials.
 - 9) Degree of door swing and handing.
 - 10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.
5. Key Schedule:
- a. After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.
 - b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
 - c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
 - d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
 - e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion. Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
 - f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.
- C. Informational Submittals:
- 1. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.
 - 2. Provide Product Data:
 - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
 - b. Include warranties for specified door hardware.
- D. Closeout Submittals:
- 1. Operations and Maintenance Data: Provide in accordance with Division 01 and include:
 - a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
 - b. Catalog pages for each product.
 - c. Final approved hardware schedule edited to reflect conditions as installed.
 - d. Final keying schedule
 - e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
 - f. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.

E. Inspection and Testing:

1. Submit written reports to the Owner and Authority Having Jurisdiction (AHJ) of the results of functional testing and inspection for:
 - a. Fire door assemblies, in compliance with NFPA 80.
 - b. Required egress door assemblies, in compliance with NFPA 101.

1.04 QUALITY ASSURANCE

A. Qualifications and Responsibilities:

1. Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
2. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
3. Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
 - a. For door hardware: DHI certified AHC or DHC.
 - b. Can provide installation and technical data to Architect and other related subcontractors.
 - c. Can inspect and verify components are in working order upon completion of installation.
 - d. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.
4. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.

B. Certifications:

1. Fire-Rated Door Openings:
 - a. Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.
 - b. Provide only items of door hardware that are listed products tested by UL LLC, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.
2. Smoke and Draft Control Door Assemblies:
 - a. Provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105
 - b. Comply with the maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.
3. Electrified Door Hardware

- a. Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.
- 4. Accessibility Requirements:
 - a. Comply with governing accessibility regulations cited in "REFERENCES" article 087100, 1.02.D3 herein for door hardware on doors in an accessible route. This project must comply with all Federal Americans with Disability Act regulations and all Local Accessibility Regulations.
- C. Pre-Installation Meetings
 - 1. Keying Conference
 - a. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
 - 1) Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 - 2) Preliminary key system schematic diagram.
 - 3) Requirements for key control system.
 - 4) Requirements for access control.
 - 5) Address for delivery of keys.
 - 2. Pre-installation Conference
 - a. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Inspect and discuss preparatory work performed by other trades.
 - c. Inspect and discuss electrical roughing-in for electrified door hardware.
 - d. Review sequence of operation for each type of electrified door hardware.
 - e. Review required testing, inspecting, and certifying procedures.
 - f. Review questions or concerns related to proper installation and adjustment of door hardware.
 - 3. Electrified Hardware Coordination Conference:
 - a. Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.
- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.
- C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
- D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.

- F. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

1.06 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.
- D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

1.07 WARRANTY

- A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.
 - 1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
 - 2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.
 - a. Mechanical Warranty
 - 1) Locks: *** Years (Sch L-3, Sch ND-10, Sch ALX-10, Fal-10)
 - 2) Exit Devices: *** Years (VD-3, Fal-10)
 - 3) Closers: *** Years (LCN 4000-30, LCN 4050-25, LCN 1450-25, LCN 1250-15, LCN CONC-15, FAL SC-10, FAL CON-5)
 - b. ***Electrical Warranty
 - 1) ***Locks: 1 Year
 - 2) ***Exit Devices: 1 Year
 - 3) ***Closers: 2 Years
 - 4) ***Automatic Operators: *** Years (LCN-2, FAL-1)

1.08 MAINTENANCE

- A. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.
- B. Turn over unused materials to Owner for maintenance purposes.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. The Owner requires use of certain products for their unique characteristics and project suitability to ensure continuity of existing and future performance and maintenance standards. After investigating available product offerings, the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute."
 - 1. Where "No Substitute" is noted, submittals and substitution requests for other products will not be considered.
- B. Approval of manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category shall be in accordance with QUALITY ASSURANCE article, herein.
- C. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.
- D. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.

2.02 MATERIALS

- A. Fabrication
 - 1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.
 - 2. Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
 - 3. Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.
- B. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
 - 1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.
 - 2. For closers and panic devices: Verify with Architect and/or Owner if thru-bolts are required at specific door materials.

2.03 HINGES

- A. Manufacturers and Products:
 - 1. Scheduled Manufacturer and Product:
 - a. Ives 5BB series
 - 2. Acceptable Manufacturers and Products:
 - a. Hager BB series
 - b. McKinney TB series
 - c. Stanley (Best/Dormakaba) FBB series

B. Requirements:

1. Provide hinges conforming to ANSI/BHMA A156.1.
2. Provide five knuckle, ball bearing hinges.
3. Hinge Height:
 - a. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide: 4-1/2 inches (114 mm) high
 - b. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide: 5 inches (127 mm) high
 - c. 2 inches or thicker doors: 5 inches (127 mm) high, regardless of door width
4. Hinge Width: 4-1/2 inches (114 mm) wide typical. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
5. Hinge quantity: Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
6. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
 - a. Steel Hinges: Steel pins
 - b. Non-Ferrous Hinges: Stainless steel pins
 - c. Out-Swinging Exterior Doors: Non-removable pins
 - d. Out-Swinging Interior Lockable Doors: Non-removable pins
 - e. Interior Non-lockable Doors: Non-rising pins
7. Provide hinges with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component. Provide mortar guard for each electrified hinge specified.
8. ***Where new hinges are specified for existing doors or existing frames, provide new hinges of identical size to hinge preparation present in existing door or existing frame.

2.04 MORTISE LOCKS AND DEADBOLTS**A. Manufacturers and Products:**

1. Scheduled Manufacturer and Product:
 - a. Schlage L9000 series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide mortise locks conforming to ANSI/BHMA A156.13 Series 1000, Grade 1, and UL Listed for 3-hour fire doors.
2. Indicators: Where specified, provide indicator window measuring a minimum 2-inch x 1/2 inch with 180-degree visibility. Provide messages color-coded with full text and/or symbols, as scheduled, for easy visibility.
3. Provide locks manufactured from heavy gauge steel, containing components of steel with a zinc dichromate plating for corrosion resistance.
4. Provide lock case that is multi-function and field reversible for handing without opening case. Cylinders: Refer to "KEYING" article, herein.
5. Provide locks with standard 2-3/4 inches (70 mm) backset with full 3/4 inch (19 mm) throw stainless steel mechanical anti-friction latchbolt. Provide deadbolt with full 1-inch (25 mm) throw, constructed of stainless steel.

6. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim. Provide electrified options as scheduled in the hardware sets. Where scheduled, provide switches and sensors integrated into the locks and latches.
7. Provide motor based electrified locksets that comply with the following requirements:
 - a. Universal input voltage – single chassis accepts 12 or 24VDC to allow for changes in the field without changing lock chassis.
 - b. Fail Safe/Fail Secure – changing mode between electrically locked (fail safe) and electrically unlocked (fail secure) is field selectable without opening the lock case.
 - c. Low maximum current draw – maximum 0.4 amps to allow for multiple locks on a single power supply.
 - d. Low holding current – maximum 0.01 amps to produce minimal heat, eliminate “hot levers” in electrically locked applications, and to provide reliable operation in wood doors that provide minimal ventilation and air flow.
 - e. Connections – provide quick-connect Molex system standard.
8. Lever Trim: Solid brass, bronze, or stainless steel, cast or forged in design specified, with wrought roses and external lever spring cages. Provide thru-bolted levers with 2-piece spindles.
 - a. Lever Design: Schlage 06A
 - b. Verify/Match Existing.

2.05 CYLINDERS

A. Manufacturers:

1. Scheduled Manufacturer and Product:
 - a. Schlage
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide cylinders/cores to match Owner’s existing key system, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer’s series as indicated. Refer to “KEYING” article, herein.
2. Provide cylinders in the below-listed configuration(s), distributed throughout the Project as indicated.
 - a. ***Match owner's existing system.
3. Verify with Owner where permanent cores are to be shipped to.

2.06 KEYING

- ### A. Provide a factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.

B. Requirements:

1. Provide keying system capable of multiplex masterkeying.
2. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
 - a. Master Keying system as directed by the Owner.
 - b. Match Owner's existing system.

- c. (Great)Grand Master Key System: Cylinders/cores operated by change(day) keys and subsequent masters (including grand/great grand) keys.
3. Forward biting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores involved at no additional cost to Owner.
4. Provide keys with the following features:
 - a. Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
5. Identification:
 - a. Mark permanent cylinders/cores and keys with applicable blind code for identification. Do not provide blind code marks with actual key cuts.
 - b. Identification stamping provisions must be approved by the Architect and Owner.
 - c. Stamp cylinders/cores and keys with Owner's unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT DUPLICATE."
 - d. Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.
6. Quantity: Furnish in the following quantities.
 - a. Change (Day) Keys: 3 per cylinder/core.
 - b. Permanent Control Keys: 3 (only applicable to interchangeable core).
 - c. Master Keys: 6/ea (per master).
 - d. Unused balance of key blanks shall be provided to Owner with cut keys.
7. Verify with Owner where permanent keys are to be shipped to.

2.07 DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. LCN 4040XP series
2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
2. Provide door closers with fully hydraulic, full rack and pinion action with high strength cast iron cylinder, and full complement bearings at shaft.
3. Cylinder Body: 1-1/2-inch (38 mm) diameter piston with 5/8-inch (16 mm) diameter double heat-treated pinion journal. QR code with a direct link to maintenance instructions.
4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards. Provide snap-on cover clip, with plastic covers, that secures cover to spring tube.
6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck. Provide graphically labelled instructions on the closer body adjacent to each adjustment valve. Provide positive stop on reg valve that prevents reg screw from being backed out.

7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
8. Pressure Relief Valve (PRV) Technology: Not permitted.
9. Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: Powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A156.4 and ASTM B117, or has special rust inhibitor (SRI).
10. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

2.08 PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Trimco
 - b. Rockwood
 - c. Hager

B. Requirements:

1. Provide protection plates with a minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
2. Sizes plates 2 inches (51 mm) less width of door on single doors, pairs of doors with a mullion, and doors with edge guards. Size plates 1 inch (25 mm) less width of door on pairs without a mullion or edge guards.
3. At fire rated doors, provide protection plates over 16 inches high with UL label.

2.09 DOOR STOPS AND HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Trimco
 - b. Rockwood

B. Provide door stops at each door leaf:

1. Provide wall stops wherever possible. Provide concave type where lockset has a push button of thumbturn.
2. Where a wall stop cannot be used, provide universal floor stops.
3. Where wall or floor stop cannot be used, provide overhead stop.
4. Provide roller bumper where doors open into each other and overhead stop cannot be used.

2.10 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Zero International
2. Acceptable Manufacturers:
 - a. National Guard
 - b. Reese
 - c. Pemko

B. Requirements:

1. Provide thresholds, weather-stripping, and gasketing systems as specified and per architectural details. Match finish of other items.
2. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
3. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.
4. Size thresholds 1/2 inch (13 mm) high by 5 inches (127 mm) wide by door width unless otherwise specified in the hardware sets or detailed in the drawings.

2.11 SILENCERS

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Rockwood
 - b. Trimco

B. Requirements:

1. Provide "push-in" type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
3. Omit where gasketing is specified.

2.12 FINISHES

- A. Provide finish for each item as indicated in the sets.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance. Verify doors, frames, and walls have been properly reinforced for hardware installation.

- B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- C. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.
 - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
 - 2. Custom Steel Doors and Frames: HMMA 831.
 - 3. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A
 - 4. Installation Guide for Doors and Hardware: DHI TDH-007-20
- B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.
- C. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- D. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- E. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.
- I. Lock Cylinders:
 - 1. Install construction cores to secure building and areas during construction period.
 - 2. Replace construction cores with permanent cores as indicated in keying section.
- J. Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY sections for:
 - 1. Conduit, junction boxes and wire pulls.
 - 2. Connections to and from power supplies to electrified hardware.
 - 3. Connections to fire/smoke alarm system and smoke evacuation system.
 - 4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
 - 5. Connections to panel interface modules, controllers, and gateways.
 - 6. Testing and labeling wires with Architect's opening number.

- K. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.
- L. Door Closers: Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.
- M. Closer/Holders: Mount closer/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.
- N. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.
- O. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- P. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.
- Q. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
- R. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- S. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

3.03 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.
 - 1. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
- B. Occupancy Adjustment: Approximately three to six months after date of Substantial Completion, examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors and door hardware.

3.04 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items per manufacturer's instructions to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

3.05 DOOR HARDWARE SCHEDULE

- A. The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.
- B. Discrepancies, conflicting hardware, and missing items are to 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.
- C. Hardware items are referenced in the following hardware schedule. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.
- D. Hardware Sets:

90844 X-80336 Version 1

Hardware Group No. 01

For use on Door #(s):

C114A

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	CLASSROOM LOCK	L9070 (VERIFY LEVER DESIGN/CYLINDER TYPE)	626	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 01~1

For use on Door #(s):

C114B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	PRIVACY LOCK	L9040 06N 09-544 L283-722	626	SCH
1	EA	SURFACE CLOSER	4040XP REG	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	MOP PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS20/WS20X	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 04

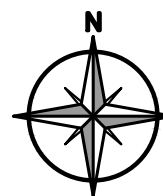
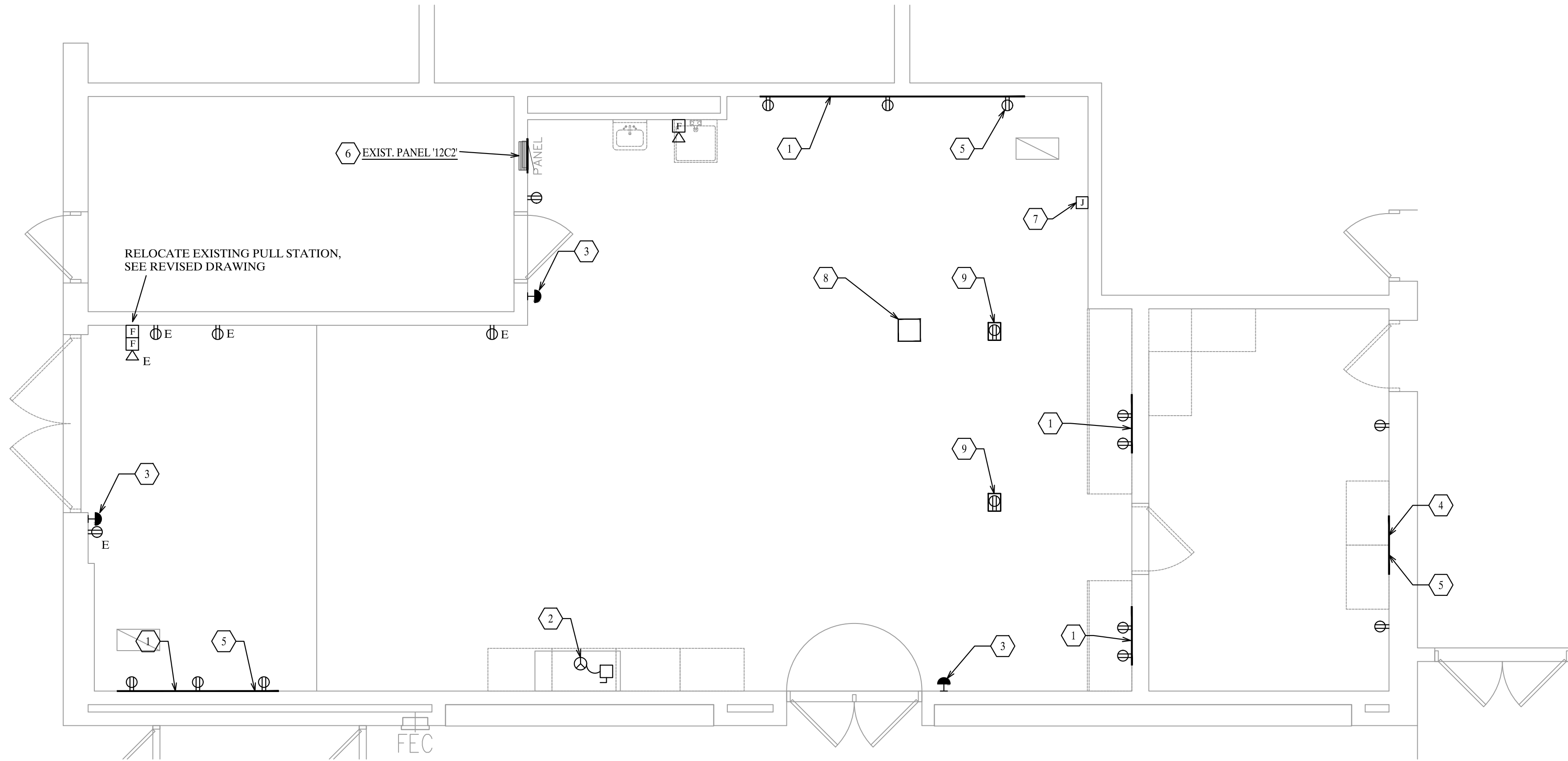
For use on Door #(s):

C114C

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 5 X 4.5 (NRP AS REQ'D)	652	IVE
1	EA	CLASSROOM SECURITY	L9071 (VERIFY LEVER DESIGN/CYLINDER TYPE)	626	SCH
1	EA	SURFACE CLOSER (W/ DEAD STOP)	4040XP CUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

END OF SECTION



DEMOLITION FLOOR PLAN - POWER

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

GENERAL NOTES:

- ALL EXISTING ELECTRICAL DEVICES SHALL REMAIN UNLESS OTHERWISE NOTED OR INDICATED.
- CONTRACTOR SHALL REMOVE EXISTING BRANCH CIRCUIT CONDUIT AND WIRE COMPLETE BACK TO THE PANEL FOR DEVICES THAT ARE BEING REMOVED.
- CONTRACTOR SHALL REMOVE EXISTING CEILING SPEAKERS AND RE-INSTALL IN NEW CEILING.
- EXISTING FIRE ALARM DEVICES SHALL REMAIN

PLAN NOTES:

- SURFACE RACEWAY TO BE REMOVED. REMOVE POWER AND LOW-VOLTAGE WIRING.
- EXISTING VRF UNIT TO REMAIN. UNDER ALTERNATE #2, THIS UNIT WILL BE DEMOLISHED AND THE POWER TO EXTEND TO NEW UNIT. SEE REVISED SHEET.
- MUSHROOM PUSH-BUTTON TO BE REMOVED.
- NETWORK TERMINAL BLOCK TO BE REMOVED.
- DATA OUTLET TO BE REMOVED.
- EXISTING PANEL TO REMAIN.
- PROVIDE COVER PLATE FOR EXISTING JUNCTION BOX.
- CEILING MOUNTED PROJECTOR TO BE REMOVED.
- CEILING PULL DOWN RETRACTABLE RECEPTACLE TO BE REMOVED.

NEW CLASSROOM RENOVATION
NORTHWEST CONSOLIDATED SCHOOL
DISTRICT OF SHELBY COUNTY
FAIRLAND, IN 46126



William J. Snodgrass

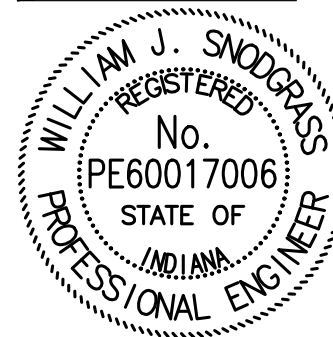
PROJECT: 23036
DATE: 05-01-2023
STATE FILING
ADDITIONAL 1: 05-04-2023

ELECTRICAL
DEMOLITION
PLAN POWER

E102



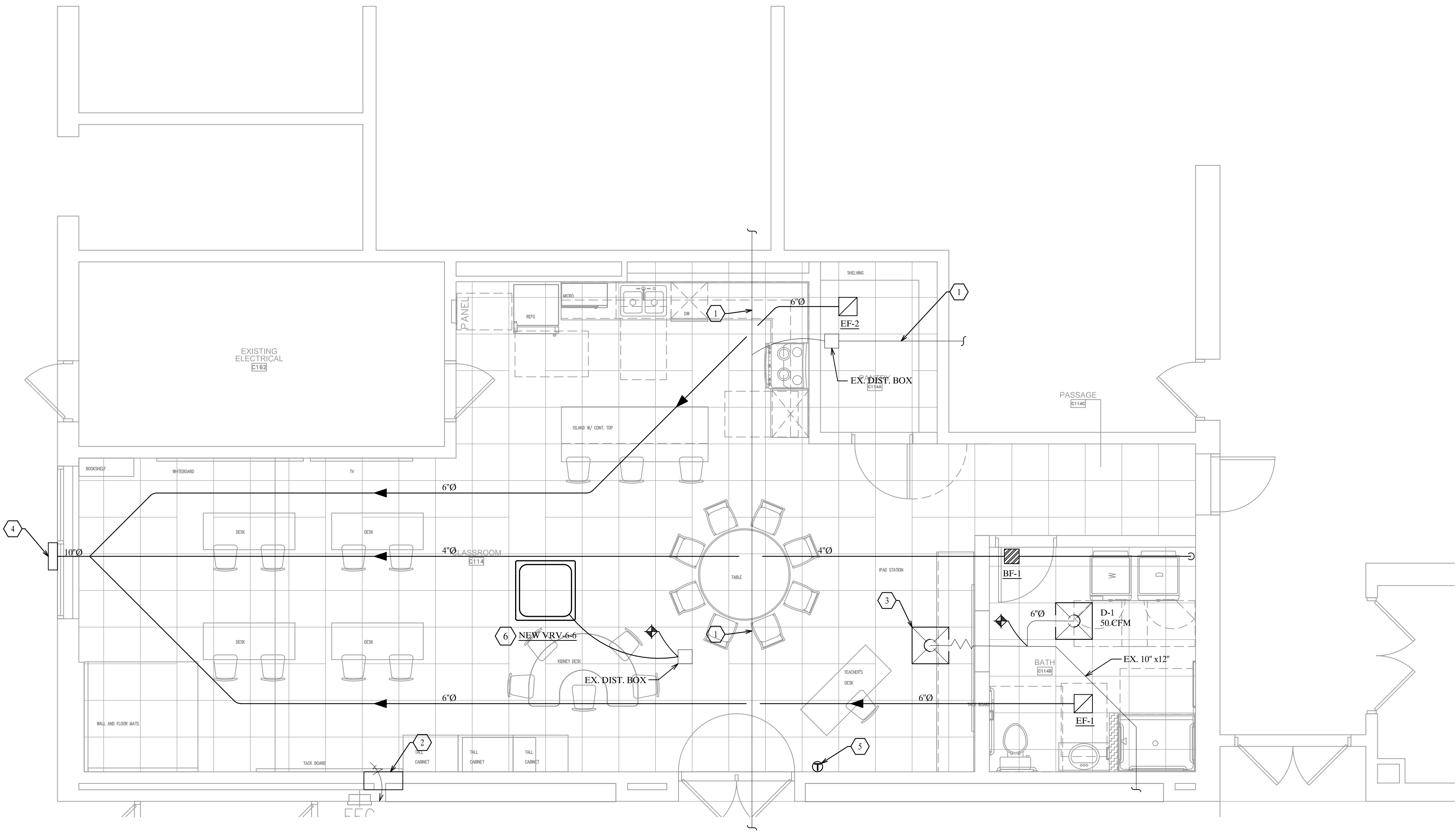
SCALE: 1/4"= 1'-0"



PROJECT: 23036
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STATE FILING
ADDENDUM 1 05-04-2023

E30 1

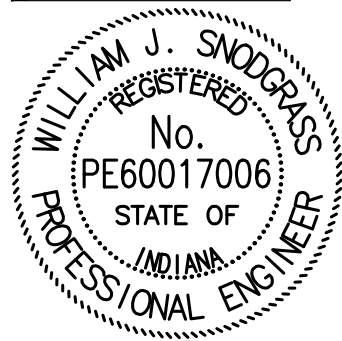




- # PLAN NOTES:
- EXISTING SETS OF REFRIGERANT PIPING.
 - EXISTING ABOVE CEILING RETURN OPENING.
 - EXISTING DIFFUSER RELOCATED INTO NEW CEILING AS REQUIRED.
 - WALL EXHAUST HOOD.
 - RELOCATE EXISTING THERMOSTAT. RECONNECT TO NEW VRV-6-6 AS REQUIRED.
 - UNDER ALTERNATE #2, PROVIDE AND INSTALL NEW VRV UNIT AS SHOWN. CONNECT CONDENSATE DRAIN TO NEAREST WASTE/VENT LINE AS REQUIRED.

 FLOOR PLAN - HVAC
SCALE: 1/4"= 1'-0"

NEW CLASSROOM RENOVATION
NORTHWEST CONSOLIDATED SCHOOL
DISTRICT OF SHELBY COUNTY
FAIRLAND, IN 46126



William J. Snodgrass

PROJECT: 23036	
DATE: 05-01-2023	
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ADDITIONAL 1 (5-04-2023)	

HVAC PLAN

M101

PLUMBING FIELD VERIFY:

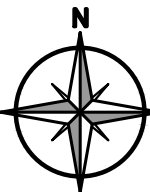
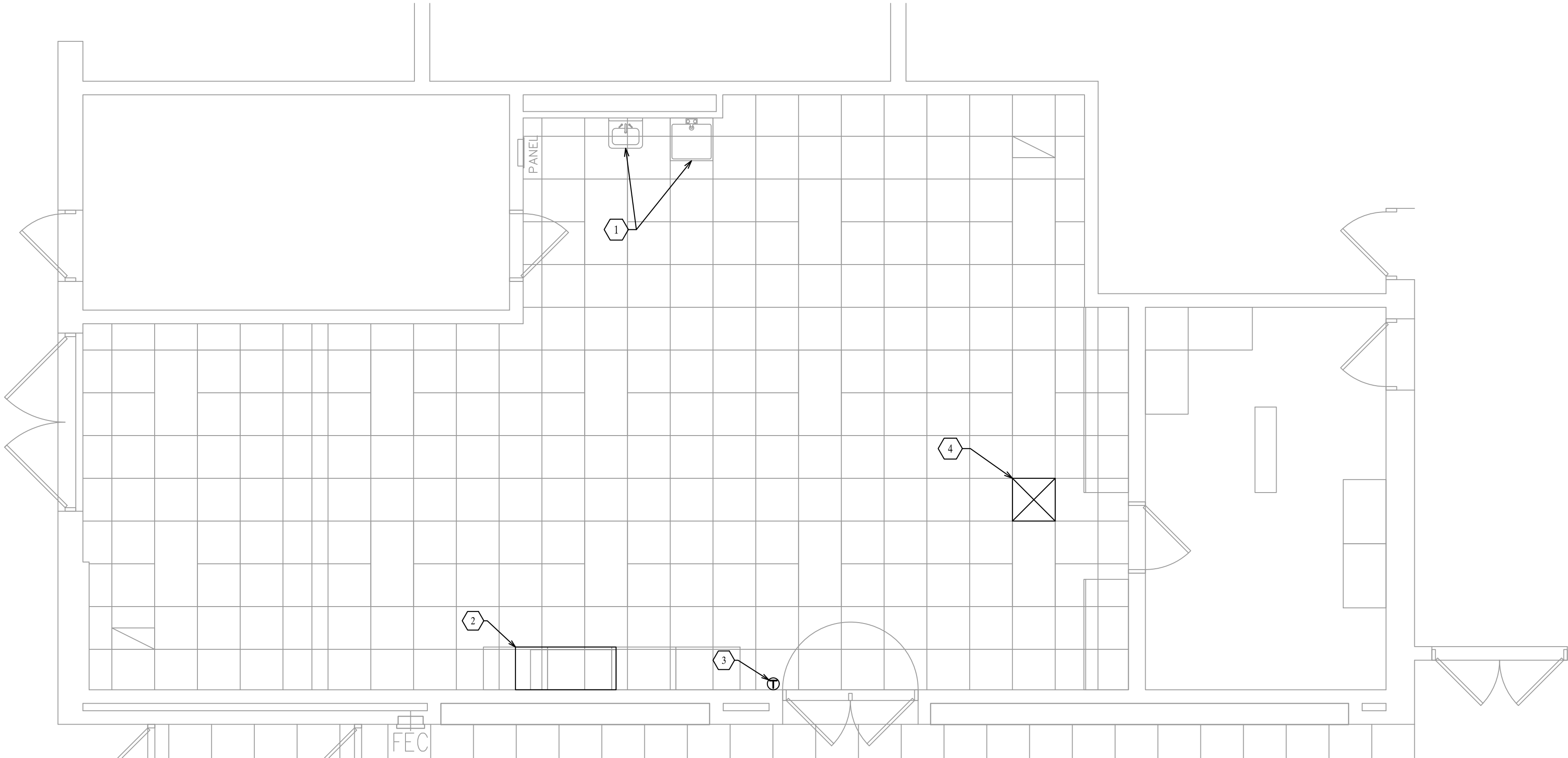
INFORMATION CONCERNING THE LOCATION(S) AND SIZES OF EXISTING EQUIPMENT AND PIPING WAS OBTAINED FROM EXISTING DRAWINGS AND CURSORY FIELD OBSERVATION, HOWEVER, ACTUAL "ASBUILT" DRAWINGS WERE NOT AVAILABLE, CERTAIN INFORMATION CONCERNING THE LOCATION OF THE EXISTING CONDITIONS HAS BEEN ASSUMED IN THIS DRAWING. THE EXACT LOCATION(S) AND DIRECTION OF FLOW OF ALL EXISTING EQUIPMENT, ETC., IS UNKNOWN. REASONABLE EFFORT HAS BEEN MADE TO ACCURATELY DEPICT THE EXISTING CONDITIONS, HOWEVER, ALL EXISTING WORK MUST BE VERIFIED IN THE FIELD TO DETERMINE THE EXACT LOCATIONS, DIRECTIONS OF PIPE RUNS, SIZE, ETC. PRIOR TO STARTING CONSTRUCTION. ANY CONFLICT BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER FOR VERIFICATION AND/OR CORRECTION.

MECHANICAL FIELD VERIFY:

INFORMATION CONCERNING THE LOCATION(S) AND SIZES OF EXISTING DUCTWORK AND DIFFUSERS WAS OBTAINED FROM EXISTING DRAWINGS AND CURSORY FIELD OBSERVATION, HOWEVER, ACTUAL "ASBUILT" DRAWINGS WERE NOT AVAILABLE, CERTAIN INFORMATION CONCERNING THE LOCATION OF THE EXISTING CONDITIONS HAS BEEN ASSUMED IN THIS DRAWING. THE EXACT LOCATION(S) AND DIRECTION OF FLOW OF ALL EXISTING EQUIPMENT, ETC., IS UNKNOWN. REASONABLE EFFORT HAS BEEN MADE TO ACCURATELY DEPICT THE EXISTING CONDITIONS, HOWEVER, ALL EXISTING WORK MUST BE VERIFIED IN THE FIELD TO DETERMINE THE EXACT LOCATIONS, DIRECTIONS OF DUCT RUNS, SIZE, ETC. PRIOR TO STARTING CONSTRUCTION. ANY CONFLICT BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER FOR VERIFICATION AND/OR CORRECTION.

PLAN NOTES:

1. REMOVE FIXTURE COMPLETE. PREPARE WASTE, VENT, CW&HW PIPING FOR NEW FIXTURE CONNECTIONS AS REQUIRED.
2. UNDER ALTERNATE #2, REMOVE EXISTING VRV VEILING MOUNTED UNIT. PREPARE REFRIGERANT PIPING FOR CONNECTION TO NEW UNIT AS REQUIRED.
3. EXISTING THERMOSTAT TO BE RELOCATED, SEE REVISED PLAN.
4. RELOCATE EXISTING DIFFUSER IN NEW CEILING.



PLUMBING & MECHANICAL DEMOLITION PLAN

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

DRAWING INDEX	
DRAWING No.	DRAWING TITLE
DMP101	PLUMBING & MECHANICAL DEMOLITION PLAN

NEW CLASSROOM RENOVATION
NORTHWEST CONSOLIDATED SCHOOL
DISTRICT OF SHELBY COUNTY
FAIRLAND, IN 46126



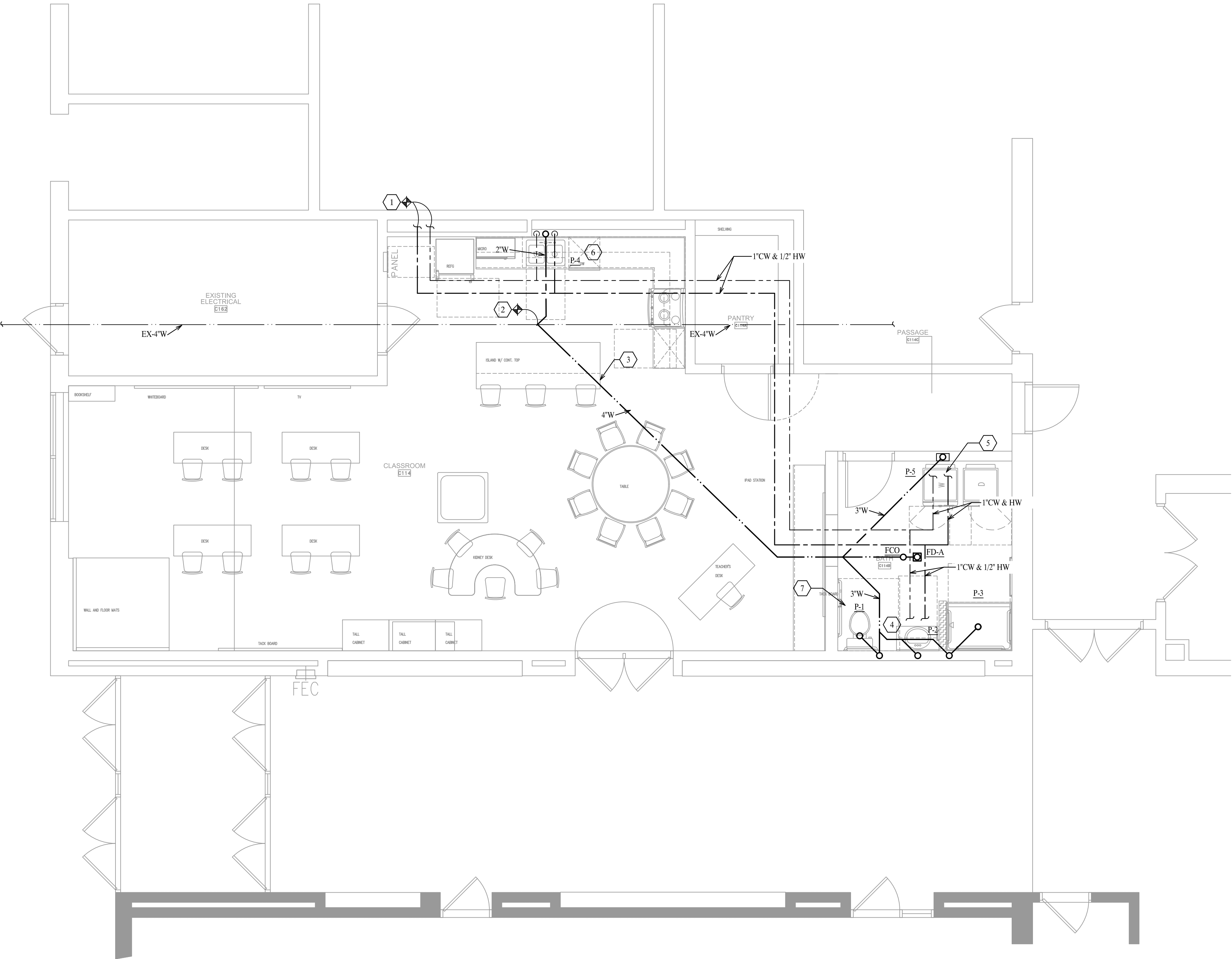
William J. Snodgrass

PROJECT: 23036	
DATE: 05-01-2023	
STATE FILING	
ADDITIONAL 1 05-04-2023	

PLUMBING &
MECHANICAL
DEMOLITION PLAN

DMP101

DAE
DESIGN-AIRE ENGINEERING, INC.
2707 Rand Road
Indianapolis, Indiana 46241
Voice (317) 464-9980
Fax (317) 464-9393
Email: dae@design-aire.com
daeengineering.com
Mechanical, Electrical, and Energy Engineering



- # PLAN NOTES:
1. CONNECT TO EXISTING CW&HW NEAR THIS LOCATION AS REQUIRED.
 2. CONNECT TO NEAREST 4"W AS REQUIRED.
 3. SAW CUT AND TRENCH FOR WASTE PIPE, PATCH FLOOR TO MATCH EXISTING.
 4. CONNECT 1"CW TO P-1 AND 1/2" CW&HW TO P-2 AND P-3 AS REQUIRED.
 5. CONNECT 1/2" CW&HW TO P-5.
 6. CONNECT DISHWASHER TO SINK TAILPIECE AS REQUIRED.
 7. THE THREE PLUMBING FIXTURES IN THIS ROOM ARE AN ALTERNATE BID. FIXTURE ROUGH-INS ARE BASE BID.

 **FLOOR PLAN - PLUMBING**
SCALE: 1/4"= 1'-0"

NEW CLASSROOM RENOVATION
NORTHWEST CONSOLIDATED SCHOOL
DISTRICT OF SHELBY COUNTY
FAIRLAND, IN 46126

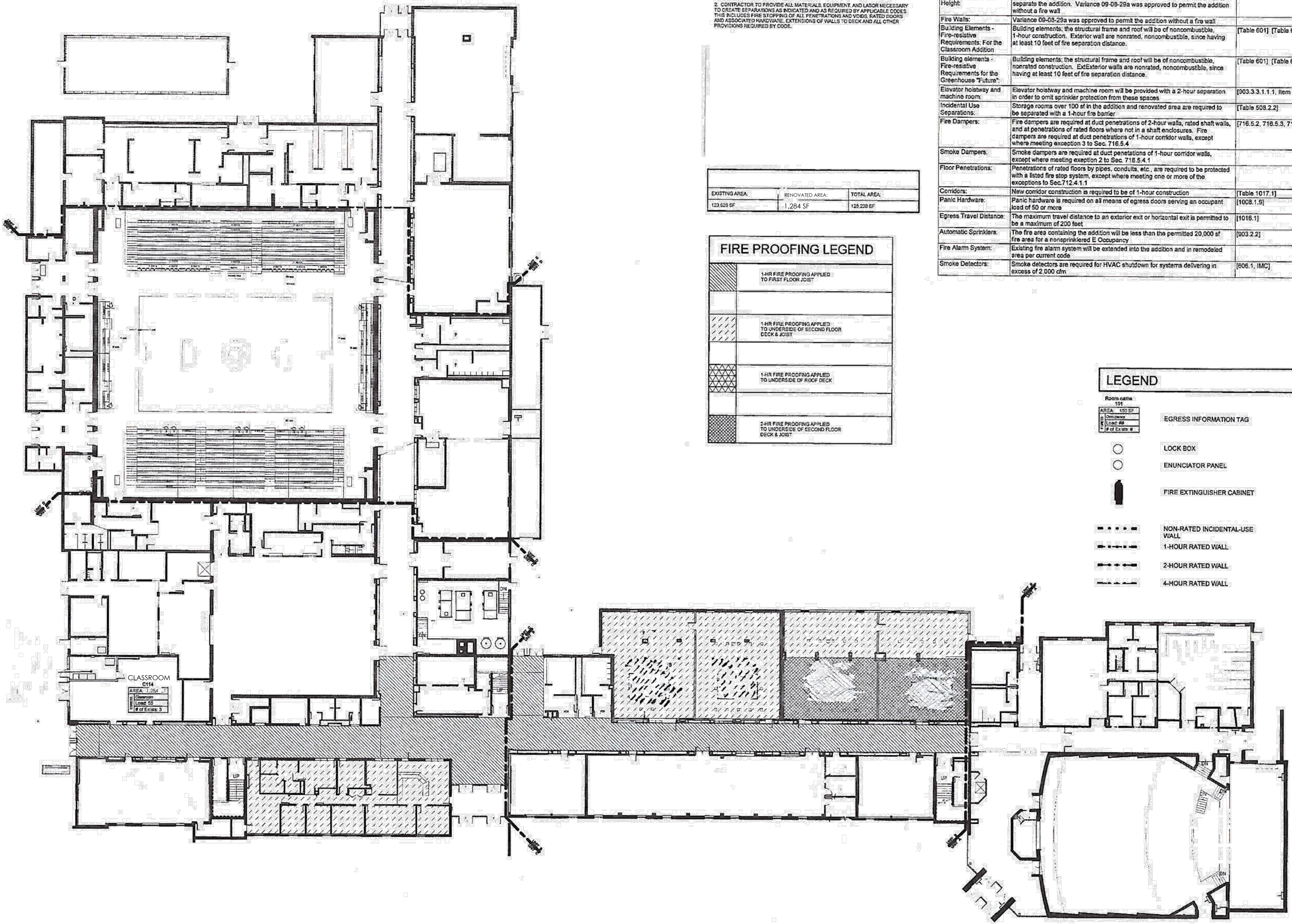


William J. Snodgrass

PROJECT: 23036	
DATE: 05-01-2023	
STATE FILING	
ADDITIONAL 1: 05-04-2023	

PLUMBING
PLAN

P101



BLDG/PROJECT DESCRIPTION

THE PROJECT INVOLVES A MECHANICAL, ELECTRICAL, AND TECHNOLOGY UPGRADES FOR 125,230 SF, AS WELL AS PLUMBING, STRUCTURAL, AND ARCHITECTURAL CONSTRUCTION TO SUPPORT UPGRADES. A+11612 IF ADDITION FOR NEW CLASSROOM CONFIGURATION, ALSO A RECONFIGURATION OF EXISTING CLASSROOM TO RELOCATE THE MEDIA CENTER. NEW FINISHES FOR INDICATED SPACES. A COMPLETE RE-ROOF OF ENTIRE FACILITY.

GENERAL NOTES:

- 1. CODE REFERENCES ARE FROM THE 2008 INDIANA BUILDING CODE (IBC) UNLESS OTHERWISE NOTED.
- 2. CONTRACTOR TO PROVIDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO CREATE SEPARATIONS AS INDICATED AND AS REQUIRED BY APPLICABLE CODES. THIS INCLUDES FIRE STOPPING OF ALL PENETRATIONS AND VOIDS, RATED DOORS, AND ASSOCIATED HARDWARE, EXTENSIONS OF WALLS TO DECK AND ALL OTHER PROVISIONS REQUIRED BY CODE.

EXISTING AREA	RENOVATED AREA	TOTAL AREA
123,620 SF	1,284 SF	125,230 SF

FIRE PROOFING LEGEND

[Pattern]	1-HR FIRE PROOFING APPLIED TO FIRST FLOOR JOIST
[Pattern]	1-HR FIRE PROOFING APPLIED TO UNDERSIDE OF SECOND FLOOR DECK & JOIST
[Pattern]	1-HR FIRE PROOFING APPLIED TO UNDERSIDE OF ROOF DECK
[Pattern]	2-HR FIRE PROOFING APPLIED TO UNDERSIDE OF SECOND FLOOR DECK & JOIST

CODE SUMMARY

	CODE REFERENCE
Application Code:	2008 INDIANA BUILDING CODE (IBC)
Occupancy Classification:	Educational use areas for high school students - E Occupancy. Assembly uses accessory to a Group E are not considered separate occupancies. [305.1] [508.3.1, exc.2]
Construction Type, Allowable Area and Height:	Variance 09-08-29a was approved to permit the classroom addition to be of Type IIA Construction, and to permit a 2-hour fire barrier in lieu of a fire wall to separate the addition. Variance 09-08-29a was approved to permit the addition without a fire wall.
Fire Walls:	Variance 09-08-29a was approved to permit the addition without a fire wall.
Building Elements - Fire-resistive Requirements: For the Classroom Addition	Building elements; the structural frame and roof will be of noncombustible, 1-hour construction. Exterior wall are nonrated, noncombustible, since having at least 10 feet of fire separation distance. [Table 601] [Table 602]
Building elements - Fire-resistive Requirements for the Greenhouse "Future":	Building elements; the structural frame and roof will be of noncombustible, nonrated construction. Exterior walls are nonrated, noncombustible, since having at least 10 feet of fire separation distance. [Table 601] [Table 602]
Elevator hoistway and machine room.	Elevator hoistway and machine room will be provided with a 2-hour separation in order to omit sprinkler protection from these spaces. [303.3.3.1.1, Item 4]
Incidental Use Separations:	Storage rooms over 100 sf in the addition and renovated area are required to be separated with a 1-hour fire barrier. [Table 508.2.2]
Fire Dampers:	Fire dampers are required at duct penetrations of 2-hour walls, rated shaft walls, and at penetrations of rated floors where not in a shaft enclosures. Fire dampers are required at duct penetrations of 1-hour corridor walls, except where meeting exception 3 to Sec. 716.5.4. [716.5.2, 716.5.3, 716.6.1]
Smoke Dampers:	Smoke dampers are required at duct penetrations of 1-hour corridor walls, except where meeting exception 2 to Sec. 716.5.4.1.
Floor Penetrations:	Penetrations of rated floors by pipes, conduits, etc., are required to be protected with a listed fire stop system, except where meeting one or more of the exceptions to Sec. 712.4.1.1.
Corridors:	New corridor construction is required to be of 1-hour construction. [Table 1017.1]
Panic Hardware:	Panic hardware is required on all means of egress doors serving an occupant load of 50 or more. [1008.1.9]
Egress Travel Distance:	The maximum travel distance to an exterior exit or horizontal exit is permitted to be a maximum of 200 feet. [1016.1]
Automatic Sprinklers:	The fire area containing the addition will be less than the permitted 20,000 sf fire area for a nonsprinklered E Occupancy. [903.2.2]
Fire Alarm System:	Existing fire alarm system will be extended into the addition and in remodeled area per current code.
Smoke Detectors:	Smoke detectors are required for HVAC shutdown for systems delivering in excess of 2,000 cfm. [906.1, IMC]

LEGEND

Room name:	101
Area:	120 SF
Occupancy:	
Load #:	#
# of Exits:	#

- EGRESS INFORMATION TAG
- LOCK BOX
- ENUNCIATOR PANEL
- FIRE EXTINGUISHER CABINET
- NON-RATED INCIDENTAL-USE WALL
- 1-HOUR RATED WALL
- 2-HOUR RATED WALL
- 4-HOUR RATED WALL

NEW CLASSROOM RENOVATION
NORTHWEST CONSOLIDATED SCHOOL
DISTRICT OF SHELBY COUNTY
FAIRLAND, IN 46126



PROJECT: 23106
DATE: 05-02-2023
STATE FILED SET

LIFE SAFETY
PLAN FIRST
FLOOR

LS001