

**ADDENDUM NO. 02 – PORTAGE PUBLIC SCHOOLS – HAVERHILL ELEMENTARY SCHOOL BP 6:
CONSTRUCTION**

August 3rd, 2023

The following items are changes, clarifications, corrections of errors, etc., with respect to the Contract Documents previously issued. This addendum shall be a part of the Contract Documents.

Items listed below may or may not affect the cost of the Contractor's Proposal. Changes in cost shall be incorporated in the Contractor's Proposal.

ITEM No.1

DRAWING AND SPECIFICATION CHANGES AS NOTED BY TOWER PINKSTER - ATTACHED

- See Tower Pinkster write up
- Specification Sections: 04 2000.
- Drawings: G101, G102, IG002, I101C, I101D, I102C, I102D, I1221, I222, I223, I226, I227, I303, I307, E102C

ITEM No.2

Pre-Bid RFI's & Bid Scope Clarifications – ATTACHED

ITEM No.3

Post-Bid Interview Schedule – ATTACHED

ADDENDUM NO. 2 (BP 6)

DATE OF ISSUANCE:	August 2, 2023
PROJECT:	Haverhill Elementary School Bid Package 6: Construction 6633 Haverhill Avenue Portage, MI 49024
OWNER:	Portage Public Schools
ARCHITECT'S PROJECT NO.:	21-237.20
ORIGINAL BID ISSUE DATE:	June 30, 2023

SCOPE OF WORK

This Addendum includes changes to, or clarifications of, the original Bidding Documents and any previously issued addenda, and shall be included in the Bid. All of these Addendum items form a part of the Contract Documents. The Bidder shall acknowledge receipt of this Addendum in the appropriate space provided on the Bid Form. Failure to do so may result in disqualification of the Bid.

DOCUMENTS INCLUDED IN THIS ADDENDUM

This Addendum includes **two (2)** pages of text and the following documents:

- Bidding Documents: **None.**
- Contract Conditions: **None.**
- Specification Sections: **04 2000.**
- Drawings: **G101, G102, IG002, I101C, I101D, I102C, I102D, I1221, I222, I223, I226, I227, I303, I307, E102C**

CHANGES TO PREVIOUSLY ISSUED ADDENDA

None.

CHANGES TO BIDDING REQUIREMENTS

None.

CHANGES TO CONTRACT CONDITIONS

None.

CHANGES TO SPECIFICATIONS

ADD-2 Item No. S-1 - Interior DCMU Color

Refer to Specification Section: 04 2000 Unit Masonry

Add 2.4.D.3.d: Interior DCMU shall be Consumers Concrete Permagrid Latte.

CHANGES TO DRAWINGS

ADD-2 Item No. D-1 - Fire extinguisher cabinet locations

Refer to Sheet(s): G101

Relocated fire extinguisher cabinets on the first and second floors.

ADD-2 Item No. D-2 - Visual Display Board Size Updates and Relocations and subsequent receptacle relocations.

Refer to Sheet(s): IG002, I101C, I101D, I102C, I102D, I221, I222, I223, I226, I227, I303, I307, E102C

Due to size limitations of raw materials for markerboards, markerboards were revised as follows:

6'-0" Wide by 6'-0" High Markerboards – Omitted size from project, revise to board sizes and locations indicated on drawings.

8'-0" Wide by 6'-0" High Markerboards – Turn Raw Material, provide vertical seam at the center of board.

4'-0" Wide by 6'-0" High Markerboards – Turn Raw Material, no seam.

3'-0" Wide by 6'-0" High Markerboards – Turn Raw Material, no seam.

Markerboards were updated and relocated as required – Refer to finish plans and visual display board schedule. Outlets were adjusted in Room 246 due to markerboard relocation.

END OF ADDENDUM.

SECTION 04 2000 - UNIT MASONRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Concrete masonry units. (also refer to section 04 2200 for additional structural requirements)
 - a. Decorative Concrete Masonry Units (DCMU) (Ground face interior)
2. Lintels.
3. Brick.
4. Mortar and grout materials.
5. Reinforcement.
6. Ties and anchors.
7. Embedded flashing.
8. Accessories.
9. Mortar and grout mixes.

B. Products Installed but not Furnished under This Section:

1. Cast-stone trim in unit masonry.
2. Steel lintels in unit masonry.
3. Steel shelf angles for supporting unit masonry.
4. Cavity wall insulation adhered to masonry backup.

C. Related Requirements:

1. Section 04 2200 "Concrete Masonry Units" for additional structural requirements.
2. Section 05 1200 "Structural Steel" for installing anchor sections of adjustable masonry anchors for connecting to structural steel frame.
3. Section 07 1900 "Water Repellents" for water repellents applied to unit masonry assemblies.
4. Section 07 2100 "Thermal Insulation" for parapet wall insulation.
5. Section 07 2119 "Foamed-in-Place Insulation" for cavity wall insulation.
6. Section 07 6200 "Sheet Metal Flashing and Trim" for exposed sheet metal flashing and for furnishing manufactured reglets installed in masonry joints.

1.2 DEFINITIONS

- A. CMU(s): Concrete masonry unit(s).
- B. Reinforced Masonry: Masonry containing reinforcing steel in grouted cells.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

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1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: For the following:
 - 1. Masonry Units: Indicate sizes, profiles, coursing, and locations of special shapes.
 - 2. Reinforcing Steel: Indicate bending, lap lengths, and placement of unit masonry reinforcing bars. Comply with ACI 315R. Indicate elevations of reinforced walls.
 - 3. Fabricated Flashing: Detail corner units, end-dam units, and other special applications.
- C. Samples for Initial Selection:
 - 1. Weep/cavity vents.
- D. Samples for Verification: For each type and color of the following:
 - 1. Decorative CMUs.
 - 2. Clay face brick, in the form of straps of five or more bricks.
 - 3. Pigmented mortar. Make Samples using same sand and mortar ingredients to be used on Project.

1.5 INFORMATIONAL SUBMITTALS

- A. List of Materials Used in Constructing Mockups: List generic product names together with manufacturers, manufacturers' product names, model numbers, lot numbers, batch numbers, source of supply, and other information as required to identify materials used. Include mix proportions for mortar and grout and source of aggregates.
 - 1. Submittal is for information only. Receipt of list does not constitute approval of deviations from the Contract Documents unless such deviations are specifically brought to the attention of Architect and approved in writing.
- B. Material Certificates: For each type of the following:
 - 1. Masonry units.
 - a. Include data on material properties.
 - b. For brick, include size-variation data verifying that actual range of sizes falls within specified tolerances.
 - c. For exposed brick, include test report for efflorescence in accordance with ASTM C67/C67M.
 - 2. Cementitious materials. Include name of manufacturer, brand name, and type.
 - 3. Mortar admixtures.
 - 4. Preblended, dry mortar mixes. Include description of type and proportions of ingredients.
 - 5. Grout mixes. Include description of type and proportions of ingredients.
 - 6. Reinforcing bars.
 - 7. Joint reinforcement.
 - 8. Anchors, ties, and metal accessories.
- C. Qualification Statements: For testing agency.

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- D. Mix Designs: For each type of mortar and grout. Include description of type and proportions of ingredients. Provide one of the following:
1. Include test reports for mortar mixes required to comply with property specification. Test in accordance with ASTM C109/C109M for compressive strength, ASTM C1506 for water retention, and ASTM C91/C91M for air content.
 2. Include test reports, in accordance with ASTM C1019, for grout mixes required to comply with compressive strength requirement.
- E. Cold-Weather and Hot-Weather Procedures: Detailed description of methods, materials, and equipment to be used to comply with requirements.

1.6 QUALITY ASSURANCE

- A. Qualifications:
1. Installers: All masonry flashing installers must complete the International Masonry Institute Flashing Upgrade training course.
 2. Testing Agency Qualifications: Qualified in accordance with ASTM C1093 for testing indicated.

1.7 MOCKUPS

- A. Sample Panel Mockups: Build sample panels to verify selections made under Sample submittals and to demonstrate aesthetic effects. Comply with requirements in Section 01 4000 "Quality Requirements" for mockups.
1. Build sample panels for each type of exposed unit masonry construction and typical exterior wall in sizes approximately 60 inches long by 48 inches high by full thickness.
 2. Clean one-half of exposed faces of panels with masonry cleaner indicated.
 3. Protect approved sample panels from the elements with weather-resistant membrane.
 4. Approval of sample panels is for color, texture, and blending of masonry units; relationship of mortar and sealant colors to masonry unit colors; tooling of joints; aesthetic qualities of workmanship; and other material and construction qualities specifically approved by Architect in writing.
 - a. Approval of sample panels does not constitute approval of deviations from the Contract Documents contained in sample panels unless Architect specifically approves such deviations in writing.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store masonry units on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied. If units become wet, do not install until they are dry.
- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.

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- C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- D. Deliver preblended, dry mortar mix in moisture-resistant containers. Store preblended, dry mortar mix in delivery containers on elevated platforms in a dry location or in covered weatherproof dispensing silos.
- E. Store masonry accessories, including metal items, to prevent corrosion and accumulation of dirt and oil.

1.9 FIELD CONDITIONS

- A. Protection of Masonry: During construction, cover tops of walls, projections, and sills with waterproof sheeting at end of each day's work. Cover partially completed masonry when construction is not in progress.
 - 1. Extend cover a minimum of **24 inches** down both sides of walls, and hold cover securely in place.
 - 2. Where one wythe of multiwythe masonry walls is completed in advance of other wythes, secure cover a minimum of **24 inches** down face next to unconstructed wythe, and hold cover in place.
- B. Do not apply uniform or concentrated loads for at least three days after building masonry walls, pilasters or columns.
- C. Stain Prevention: Prevent grout, mortar, and soil from staining the face of masonry to be left exposed or painted. Immediately remove grout, mortar, and soil that come in contact with such masonry.
 - 1. Protect base of walls from rain-splashed mud and from mortar splatter by spreading coverings on ground and over wall surface.
 - 2. Protect sills, ledges, and projections from mortar droppings.
 - 3. Protect surfaces of window and door frames, as well as similar products with painted and integral finishes, from mortar droppings.
 - 4. Turn scaffold boards near the wall on edge at the end of each day to prevent rain from splashing mortar and dirt onto completed masonry.
- D. Cold-Weather Requirements: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen substrates. Remove and replace unit masonry damaged by frost or by freezing conditions. Comply with cold-weather construction requirements contained in TMS 602.
 - 1. Cold-Weather Cleaning: Use liquid cleaning methods only when air temperature is **40 deg F** and higher and will remain so until masonry has dried, but not less than seven days after completing cleaning.
- E. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in TMS 602.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

- A. Obtain exposed masonry units from single source.

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- B. For cementitious mortar components, obtain each color and grade from single source with resources to provide materials of consistent quality in appearance and physical properties.

2.2 PERFORMANCE REQUIREMENTS

- A. Concrete masonry shall have the minimum compressive strength f_m as indicated in the Structural Drawings.

2.3 UNIT MASONRY, GENERAL

- A. Masonry Standard: Comply with TMS 602, except as modified by requirements in the Contract Documents.
- B. Defective Units: Referenced masonry unit standards may allow a certain percentage of units to contain chips, cracks, or other defects exceeding limits stated. Do not use units where such defects are exposed in the completed Work and will be within **20 ft.** vertically and horizontally of a walking surface.
- C. Fire-Resistance Ratings: Comply with requirements for fire-resistance-rated assembly designs indicated.
 - 1. Where fire-resistance-rated construction is indicated, use the equivalent thickness method for masonry units in accordance with ACI 216.1 or.

2.4 CONCRETE MASONRY UNITS

- A. Shapes: Provide shapes indicated and as follows, with exposed surfaces matching exposed faces of adjacent units unless otherwise indicated.
 - 1. Provide special shapes for lintels, corners, jambs, sashes, movement joints, headers, bonding, and other special conditions.
 - 2. Provide bullnose units for outside corners unless otherwise indicated.
- B. Integral Water Repellent: Provide units made with integral water repellent for exterior exposed units.
 - 1. Integral Water Repellent: Liquid polymeric, integral water-repellent admixture that does not reduce flexural bond strength. Units made with integral water repellent, when tested in accordance with ASTM E514/E514M as a wall assembly made with mortar containing integral water-repellent manufacturer's mortar additive, with test period extended to 24 hours, will show no visible water or leaks on the back of test specimen.
 - a. **Products:** Subject to compliance with requirements, provide one of the following:
 - 1) **ACM Chemistries;**
 - 2) **Euclid Chemical Company (The); an RPM company;** Eucon Blocktite.
 - 3) **GCP Applied Technologies Inc.;**
 - 4) **Master Builders Solutions;**
 - 5) **Moxie International;**
- C. CMUs: ASTM C90, normal weight for below grade applications and medium or normal weight for above grade applications, unless indicated otherwise.

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1. For strength requirements refer to Structural Drawings.
2. Size (Width): Manufactured to dimensions **3/8 inch** less than nominal dimensions.
3. Exposed Faces: Provide color and texture matching the range represented by Architect's sample.

D. Decorative CMUs (DCMU): ASTM C90, medium weight.

1. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of **3050 psi**.
2. Pattern and Texture: Standard pattern, ground-face finish. Match Architect's samples.
3. Colors: Consumers Concrete
 - a. DCMU-1: Carmel
 - 1) 1A: 8 inch high by 24 inch wide by 4 inch thick. Ground Face
 - 2) 1B: 8 inch high by 16 inch wide by 4 inch thick. Ground Face
 - 3) 1C: 8 inch high by 16 inch wide by 4 inch thick. Stri-Face
 - b. DCMU-2: Sage
 - 1) 2A: 8 inch high by 24 inch wide by 4 inch thick. Ground Face
 - 2) 2B: 8 inch high by 16 inch wide by 4 inch thick. Ground Face
 - 3) 2C: 8 inch high by 16 inch wide by 4 inch thick. Stri-Face
 - c. DCMU-3 2: Tweed
 - 1) 3A: 8 inch high by 24 inch wide by 4 inch thick. Ground Face
 - 2) 3B: 8 inch high by 16 inch wide by 4 inch thick. Ground Face
 - 3) 3C: 8 inch high by 16 inch wide by 4 inch thick. Stri-Face
 - d. **DCMU: All Interior DCMU shall be Consumers Concrete Permagrind Latte**
 - 1) **8 inch high by 16 inch wide by 4 inch or 8 inch thick. See drawings for thickness. Ground Face.**
4. Special Aggregate: Provide units made with aggregate matching aggregate in Architect's sample.

2.5 LINTELS

- A. Masonry Lintels: Prefabricated or built-in-place masonry lintels made from bond beam CMUs matching adjacent CMUs in color, texture, and density classification, with reinforcing bars placed as indicated and filled with coarse grout. Cure precast lintels before handling and installing. Temporarily support built-in-place lintels until cured.
- B. Offset Angle Supports: Steel plate brackets anchored to structure, allowing continuous insulation behind shelf angle supporting veneer. Component and anchor size and spacing engineered by manufacturer.
 1. Manufacturers: Subject to compliance with requirements provide products by one of the following:
 - a. FERO Corporation
 - b. Halfen USA, Inc.
 - c. Hohmann & Barnard, Inc.
 2. Stainless Steel: ASTM A240/A240M or ASTM A666, Type 304.

2.6 BRICK

- A. General: Provide shapes indicated and as follows, with exposed surfaces matching finish and color of exposed faces of adjacent units:
1. For ends of sills and caps and for similar applications that would otherwise expose unfinished brick surfaces, provide units without cores or frogs and with exposed surfaces finished.
 2. Provide special shapes for applications where stretcher units cannot accommodate special conditions, including those at corners, movement joints, bond beams, sashes, and lintels requiring brick of size, form, color, and texture on exposed surfaces that cannot be produced by sawing where shapes produced by sawing would result in sawed surfaces being exposed to view.
- B. Clay Face Brick: Facing brick complying with ASTM C216, Grade SW, Type FBX.
1. **Manufacturers:** Subject to compliance with requirements, provide products by one of the following:
 - a. **Acme Brick Company.**
 - b. **Belden Brick Company (The).** Basis of Design
 - c. **Boral Bricks, Inc; Boral Limited.**
 - d. **Bowerston Shale Company**
 - e. **Endicott Clay Products Co.**
 - f. **General Shale Brick, Inc.**
 2. Haverhill Elementary Products: Subject to compliance with requirements, provide the following:
 - a. Brick 1: Color: Modular Sherwood Gray Velour 22-33 Eased Edge (Job Specific Portage Schools). FBX, Belden Brick. Modular 7.625 inch long x 2.25 inch high x 3.625 inch deep. Running Bond.
 - b. Brick 2: Color: Black Diamond Velour, FBX, Belden Brick. Belden Brick. Modular 7.625 inch long x 2.25 inch high x 3.625 inch deep. Running Bond.
 - c. Brick 3: Color: Mango Glaze, FBX, Belden Brick, Modular, 7.625 inch long x 2.25 inch high x 3.625 inch deep, Running Bond.
 3. Unit Compressive Strength: Provide units with minimum average net-area compressive strength of **6600 psi.**
 4. Initial Rate of Absorption: Less than **30 g/30 sq. in.** per minute when tested in accordance with ASTM C67/C67M.
 5. Efflorescence: Provide brick that has been tested in accordance with ASTM C67/C67M and is rated "not effloresced."
 6. Size (Actual Dimensions): **3-5/8 inches** deep by **2-1/4 inches** high by **7-5/8 inches** long. Unless noted otherwise.
 7. Application: Use where brick is exposed unless otherwise indicated.

2.7 MORTAR AND GROUT MATERIALS

- A. Portland Cement: ASTM C150/C150M, Type I or II, except Type III may be used for cold-weather construction. Provide natural color or white cement as required to produce mortar color indicated.

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1. Alkali content will not be more than 0.1 percent when tested in accordance with ASTM C114.
- B. Hydrated Lime: ASTM C207, Type S.
- C. Portland Cement-Lime Mix: Packaged blend of portland cement and hydrated lime containing no other ingredients.
- D. ASTM C91/C91M does not require masonry cement to comply with any performance tests for flexural bond strength; confirm project requirements. See the Evaluations. Mortar Cement: ASTM C1329/C1329M.
 1. Lafarge North America, Inc.
- E. Mortar Pigments: Natural and synthetic iron oxides and chromium oxides, compounded for use in mortar mixes and complying with ASTM C979/C979M. Use only pigments with a record of satisfactory performance in masonry mortar.
 1. **Manufacturers:** Subject to compliance with requirements, provide products by one of the following:
 - a. **Davis Colors.**
 - b. **Euclid Chemical Company (The); an RPM company.**
 - c. **Lanxess Corporation.**
 - d. **Solomon Colors Inc.**
- F. Colored Cement Products: Packaged blend made from portland cement and hydrated lime and mortar pigments, all complying with specified requirements, and containing no other ingredients.
 1. Colored Portland Cement-Lime Mix:
 - a. **Manufacturers:** Subject to compliance with requirements, provide products by one of the following:
 - 1) Argos USA, LLC
 - 2) Holcim (US) Inc.
 - 3) Lehigh Hanson, HeidelbergCement Group
 2. Formulate blend as required to produce color indicated or, if not indicated, as selected from manufacturer's standard colors.
 3. Pigments do not exceed 10 percent of portland cement by weight.
 4. Pigments do not exceed 5 percent of mortar cement by weight.
- G. Preblended Dry Mortar Mix: Packaged blend made from portland cement and hydrated lime, sand, mortar pigments, water repellents, and admixtures and complying with ASTM C1714/C1714M.
- H. Aggregate for Mortar: ASTM C144.
 1. For mortar that is exposed to view, use washed aggregate consisting of natural sand or crushed stone.
 2. For joints less than **1/4 inch** thick, use aggregate graded with 100 percent passing the **No. 16** sieve.
- I. Aggregate for Grout: ASTM C404.

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- J. Cold-Weather Admixture: Nonchloride, noncorrosive, accelerating admixture complying with ASTM C494/C494M, Type C, and recommended by manufacturer for use in masonry mortar of composition indicated.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Euclid Chemical Company (The); an RPM company.
 - b. GCP Applied Technologies Inc.
- K. Water-Repellent Admixture: Liquid water-repellent mortar admixture intended for use with CMUs containing integral water repellent from same manufacturer.
1. Products: Subject to compliance with requirements, provide one of the following:
 - a. ACM Chemistries;
 - b. Euclid Chemical Company (The); an RPM company
 - c. GCP Applied Technologies Inc.;
 - d. Master Builders Solutions;
- L. Water: Potable.

2.8 REINFORCEMENT

- A. Reinforcing Bars:
1. Horizontal and vertical reinforcement bars shall comply with requirements of Section 03 2000
- B. Reinforcing Bar Positioners: Wire units designed to fit into mortar bed joints spanning masonry unit cells and to hold reinforcing bars in center of cells. Units are formed from **0.148-inch** steel wire, hot-dip galvanized after fabrication. Provide units designed for number of bars indicated. Refer to Section 04 2200.
- C. Masonry-Joint Reinforcement, General: ASTM A951/A951M.
1. Interior Walls: Hot-dip galvanized carbon steel.
 2. Exterior Walls: Hot-dip galvanized carbon steel.
 3. Wire Size for Side Rods: As indicated on Structural Drawings diameter.
 4. Wire Size for Cross Rods: **0.148-inch** diameter.
 5. Wire Size for Veneer Ties: **0.187-inch** diameter.
 6. Spacing of Cross Rods, Tabs, and Cross Ties: Not more than **16 inches** o.c.
 7. Provide in lengths of not less than **10 ft.**, with prefabricated corner and tee units.
- D. Masonry-Joint Reinforcement for Single-Wythe Masonry: Ladder type with single pair of side rods.
- E. Masonry-Joint Reinforcement for Multiwythe Masonry:
1. Walls Without Cavities Ladder type with one side rod at each face shell of hollow masonry units more than **4 inches** wide, plus two side rods at each wythe of masonry **4 inches** wide or less.
 2. Walls With Cavities: Adjustable (two-piece) type, either ladder or truss design, with one side rod at each face shell of backing wythe and with separate adjustable ties with pintle-and-eye connections

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having a maximum horizontal play of **1/16 inch** and maximum vertical adjustment of **1-1/4 inches**. Size ties to extend at least halfway through facing wythe but with at least **5/8-inch** cover on outside face.

2.9 TIES AND ANCHORS

- A. General: Ties and anchors extend at least **1-1/2 inches** into veneer but with at least a **5/8-inch** cover on outside face.
- B. Materials: Provide ties and anchors specified in this article that are made from materials that comply with the following unless otherwise indicated:
1. Hot-Dip Galvanized, Carbon-Steel Wire: ASTM A1064/A1064M, with ASTM A153/A153M, Class B-2 coating.
 2. Steel Sheet, Galvanized after Fabrication: ASTM A1008/A1008M, Commercial Steel, with ASTM A153/A153M, Class B coating.
 3. Steel Plates, Shapes, and Bars: ASTM A36/A36M.
- C. Adjustable Anchors for Connecting to Structural Steel Framing: Provide anchors that allow vertical or horizontal adjustment but resist tension and compression forces perpendicular to plane of wall.
1. Anchor Section for Welding to Steel Frame: Crimped **1/4-inch-** diameter, hot-dip galvanized steel wire.
 2. Tie Section: Triangular-shaped wire tie made from **0.187-inch-** diameter, hot-dip galvanized steel wire.
- D. Adjustable Anchors for Connecting to Concrete: Provide anchors that allow vertical or horizontal adjustment but resist tension and compression forces perpendicular to plane of wall.
1. Connector Section: Dovetail tabs for inserting into dovetail slots in concrete and attached to tie section; formed from **0.060-inch-** thick steel sheet, galvanized after fabrication.
 2. Tie Section: Triangular-shaped wire tie made from **0.187-inch-** diameter, hot-dip galvanized steel wire.
- E. Partition Top Anchors: Refer to Section 04 2200.
- F. Adjustable Masonry-Veneer Anchors:
1. General: Provide anchors that allow vertical adjustment but resist a **100 lbf** load in both tension and compression perpendicular to plane of wall without deforming or developing play in excess of **1/16 inch**.
 2. Fabricate sheet metal anchor sections and other sheet metal parts from **0.0785-inch-** thick steel sheet, galvanized after fabrication.
 3. Fabricate wire ties from **0.187-inch-** diameter, hot-dip galvanized-steel wire unless otherwise indicated.
 4. Masonry-Veneer Anchors; Double-Pintle Plate: Rib-stiffened, sheet metal anchor section with screw holes at top and bottom, projecting horizontal leg with slots for vertical legs of double pintle wire tie.
 - a. **Products:** Subject to compliance with requirements, provide one of the following:

- 1) [Heckmann Building Products, Inc.](#);
 - 2) [Hohmann & Barnard, Inc](#); HB-213.HB-282
 - 3) [Quality Steel and Wire LLC](#);
 - 4) [Wire-Bond](#); RJ-711 (#2401).
5. Polymer-Coated, Steel Drill Screws for Steel Studs: ASTM C954 except manufactured with hex washer head and neoprene or EPDM washer, **No. 10** diameter by length required to penetrate steel stud flange with not less than three exposed threads, and with organic polymer coating with salt-spray resistance to red rust of more than 800 hours in accordance with ASTM B117.

2.10 EMBEDDED FLASHING

- A. Metal Flashing: Provide metal flashing complying with SMACNA's "Architectural Sheet Metal Manual" and as follows:

1. Stainless Steel: ASTM A240/A240M or ASTM A666, Type 304, **0.016 inch** thick.
2. Zinc Sheet: Zinc, 99 percent pure, alloyed with 0.08 to 1.00 percent copper, 0.06 to 0.20 percent titanium, and up to 0.015 percent aluminum; with manufacturer's standard factory-applied, flexible, protective back coating.
 - a. Products: Subject to compliance with requirements, provide one of the following:
 - 1) [Contrarian Metal Resources](#); Alloy 710 Zinc.
 - 2) [Jarden Zinc Products](#); Solid Zinc Strip.
 - 3) [Rheinzink America Inc.](#); RHEINZINK.
 - 4) [Umicore Building Products USA, Inc.](#); VM ZINC series.
 - b. Install Zinc above at all locations of cast stone
3. Fabricate continuous flashings in sections **96 inches** long minimum, but not exceeding **12 ft.**. Provide splice plates at joints of formed, smooth metal flashing.
4. Fabricate through-wall flashing with snaplock receiver on exterior face where indicated to receive counterflashing.
5. Fabricate metal drip edges from stainless steel, except above cast stone provide zinc. Extend at least **3 inches** into wall and **1/2 inch** out from wall, with outer edge bent down 30 degrees and hemmed.

- B. Flexible Flashing: Use one of the following unless otherwise indicated:

1. Copper-Fabric Flashing: **3 oz./sq. ft.** copper sheet bonded between two layers of glass-fiber cloth.
 - a. Manufacturers: Subject to compliance with requirements, provide products by the following:
 - 1) [Advanced Building Products Inc.](#)
 - 2) [Hohmann & Barnard, Inc.](#)
 - 3) [STS Coatings, Inc.](#)
 - 4) [Wire-Bond](#).
 - 5) York Manufacturing, Inc., Flash-Vent Copper, Basis of Design
2. Self-Adhering, Stainless Steel Fabric Flashing: Composite, flashing product consisting of **2 mil** of Type 304 stainless steel sheet, bonded to a layer of polymeric fabric with a permanent, clear adhesive, to produce an overall thickness of **10 mil**.
 - a. Products: Subject to compliance with requirements, provide one of the following:

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- 1) Hohmann & Barnard, Inc.; Mighty-Flash SA
 - 2) [VaproShield LLC](#): VaproThru-Wall Flashing SA
 - 3) GE Silicones, Inc.: GE Elemax SS Flashing
 - 4) Wire-Bond, Bond-n-Flash S.A.
 - 5) York Manufacturing, Inc; York 304 SA SS
- b. Provide 20 year material warranty
- C. Application: Provide metal flashing exterior drip edge termination with flexible flashing through wall.
1. At locations within 12 inches of grade, omit metal drip edge, extend flexible flashing beyond exterior face of wall and cut off flush with face of wall after masonry wall construction is completed.
 2. At locations 12 inches to 72 inches above grade, smooth all sharp edges and corners to avoid injury.
- D. Application: Use the following above all cast stone:
1. Provide flexible flashing with zinc drip edge or flexible flashing over zinc sheet with drip edge.
- E. Drainage Plane Flashing: Contractors Option in lieu of providing materials separately. Fabricate from stainless steel and drainage membrane to shapes indicated, including weep tabs, termination bar, and drip edge. Provide flashing materials as follows:
1. Products: Subject to compliance with requirements, provide one of the following:
 - a. [Mortar Net Solutions](#);
 - b. [STS Coatings, Inc.](#);
 2. Stainless Steel: ASTM A240/A240M or ASTM A666,, 2 mil stainless steel sheet, bonded to a layer of polymeric fabric with a permanent, clear adhesive, to produce an overall thickness of 10 mil (0.25 mm).
 3. Fabricate continuous flashings in sections 60 inches long, minimum.
 4. Accessories: Provide preformed corners, end dams, other special shapes, and seaming materials produced by flashing manufacturer.
- F. Solder and Sealants for Sheet Metal Flashings:
1. Solder for Stainless Steel: ASTM B32, Grade Sn60, with acid flux of type recommended by stainless steel sheet manufacturer.
 2. Elastomeric Sealant: ASTM C920, chemically curing silicone sealant; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and remain watertight.
- G. Adhesives, Primers, and Seam Tapes for Flashings: Flashing manufacturer's standard products or products recommended by flashing manufacturer for bonding flashing sheets to each other and to substrates.
- H. Termination Bars for Flexible Flashing, Flanged: Stainless steel sheet 0.019 inch by 1-1/2 inches with a 3/8-inch flange at top.

2.11 FERO FAST BRACKET SYSTEM

- A. FAST Standard Brackets, Rectangular Washers, Shim Rods, and Shim Plates for support of shelf angles.
1. All components manufactured by FERO Corporation, Edmonton, AB.
 2. FAST Brackets to not exceed maximum spacings listed in FERO published load table and technical information and as indicated on the drawings.
 3. FAST Bracket depth to fill wall cavity or as shown in construction documents.
 4. FAST Bracket height to meet anchor to shelf and distance.
 5. FERO shim plates to be used for meeting construction tolerances.
 6. Installer to install FAST Bracket system in compliance with FERO published technical
 7. documentation.
 8. All components to be hot dipped galvanized after fabrication to meet the requirements of ASTM
 9. A123 and CSA A370-14.

2.12 ACCESSORIES

- A. Compressible Filler: Premolded filler strips complying with ASTM D1056, Grade 2A1; compressible up to 35 percent; of width and thickness indicated; formulated from neoprene.
- B. Preformed Control-Joint Gaskets: Made from styrene-butadiene-rubber compound, complying with ASTM D2000, Designation M2AA-805 and designed to fit standard sash block and to maintain lateral stability in masonry wall; size and configuration as indicated. Minimum durometer hardness of 80.
- C. Bond-Breaker Strips: Asphalt-saturated felt complying with ASTM D226/D226M, Type I (No. 15 asphalt felt).
- D. Weep/Cavity Vents: Use one of the following unless otherwise indicated:
1. Cellular Plastic Weep/Vent: One-piece, flexible extrusion made from UV-resistant polypropylene copolymer, full height and width of head joint and depth **1/8 inch** less than depth of outer wythe, in color selected from manufacturer's standard.
 - a. **Products:** Subject to compliance with requirements, provide one of the following:
 - 1) **Advanced Building Products Inc.;** Mortar Maze Weep Vent.
 - 2) **Heckmann Building Products, Inc**
 - 3) **Hohmann & Barnard, Inc;** QV Quadro-Vent.
 - 4) **Mortar Net Solutions**
 - 5) **Wire-Bond;** Cell Vent (#3601).
 2. Mesh Weep/Vent: Free-draining mesh; made from polyethylene strands, full height and width of head joint and depth **1/8 inch** less than depth of outer wythe; in color selected from manufacturer's standard.
 - a. **Products:** Subject to compliance with requirements, provide one of the following:
 - 1) **CavClear; a division of Archovations, Inc.;**
 - 2) **Hohmann & Barnard, Inc;**
 - 3) **Keene Building Products;** Driwall Weep Vents 025.
 - 4) **Mortar Net Solutions;** Mortar Net Weep Vents.
- E. Cavity Drainage Material: Free-draining mesh, made from polymer strands that will not degrade within the wall cavity.

ADDENDUM NO. 2

1. Mortar Deflector: Strips, full depth of cavity and **10 inches** high, with dovetail-shaped notches that prevent clogging with mortar droppings.
 - a. **Products:** Subject to compliance with requirements, provide one of the following:
 - 1) **Advanced Building Products Inc.;** Mortar Break DT.
 - 2) **Hohmann & Barnard, Inc;** Mortar Trap.
 - 3) **Keene Building Products;**
 - 4) **Mortar Net Solutions;** Mortar Net with Insect Barrier.
 - 5) **Illinois Products Corporation; Mortar Grab**
 - 6) **Wire-Bond;** Cavity Net DT.
 - 7) **York Manufacturing, Inc; Weep-Net.**

2. Rainscreen Drainage Mat: Sheets or strips not less than full depth of cavity thick and installed to full height of cavity, to prevent weep holes from clogging with mortar.
 - a. **Products:** Subject to compliance with requirements, provide one of the following:
 - 1) **Advanced Building Products Inc.;** Mortairvent CW.
 - 2) **CavClear; a division of Archovations, Inc.;**
 - 3) **Keene Building Products;**
 - 4) **Mortar Net Solutions;**
 - 5) **Wire-Bond;.**

- F. Proprietary Acidic Masonry Cleaner: Manufacturer's standard-strength cleaner designed for removing mortar/grout stains, efflorescence, and other new construction stains from new masonry without discoloring or damaging masonry surfaces. Use product expressly approved for intended use by cleaner manufacturer and manufacturer of masonry units being cleaned.
 1. **Products:** Subject to compliance with requirements, provide one of the following:
 - a. **Diedrich Technologies, Inc.; a Hohmann & Barnard company;.**
 - b. **EaCo Chem, Inc.;**
 - c. **PROSOCO, Inc;** Sure Klean® 600, Vana Trol

2.13 MORTAR AND GROUT MIXES

- A. General: Do not use admixtures, including pigments, air-entraining agents, accelerators, retarders, water-repellent agents, antifreeze compounds, or other admixtures unless otherwise indicated.
 1. Do not use calcium chloride in mortar or grout.
 2. Use portland cement-lime or mortar cement mortar unless otherwise indicated.
 3. Add cold-weather admixture (if used) at same rate for all mortar that will be exposed to view, regardless of weather conditions, to ensure that mortar color is consistent.

- B. Preblended, Dry Mortar Mix: Furnish dry mortar ingredients in form of a preblended mix. Measure quantities by weight to ensure accurate proportions, and thoroughly blend ingredients before delivering to Project site.

- C. Mortar for Unit Masonry: Comply with ASTM C270, Proportion Specification. Provide the following types of mortar for applications stated unless another type is indicated.
 1. For masonry below grade or in contact with earth, use Type S.

ADDENDUM NO. 2

2. For exterior, above-grade, load-bearing, nonload-bearing walls, and parapet walls; for interior load-bearing walls; for interior nonload-bearing partitions; and for other applications where another type is not indicated, use Type N.
- D. Pigmented Mortar: Use colored cement product or select and proportion pigments with other ingredients to produce color required. Do not add pigments to colored cement products.
1. Pigments do not exceed 10 percent of portland cement by weight.
 2. Pigments do not exceed 5 percent of mortar cement by weight.
 3. Mix to match Architect's sample.
 4. Application: Use pigmented mortar for exposed mortar joints with the following units:
 - a. Decorative CMUs
 - b. Clay face brick.
 - c. Cast stone trim units
- E. Grout for Unit Masonry: Comply with ASTM C476.
1. Use grout of type indicated or, if not otherwise indicated, of type (fine or coarse) that will comply with TMS 602 for dimensions of grout spaces and pour height.
 2. Proportion grout in accordance with ASTM C476, Table 1.
 3. Provide grout with a slump of 8 to 11 inches as measured in accordance with ASTM C143/C143M.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Before installation, examine rough-in and built-in construction for piping systems to verify actual locations of piping connections.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. Thickness: Build cavity and composite walls and other masonry construction to full thickness shown. Build single-wythe walls to actual widths of masonry units, using units of widths indicated.
- B. Build chases and recesses to accommodate items specified in this and other Sections.
- C. Leave openings for equipment to be installed before completing masonry. After installing equipment, complete masonry to match construction immediately adjacent to opening.
- D. Use full-size units without cutting if possible. If cutting is required to provide a continuous pattern or to fit adjoining construction, cut units with motor-driven saws; provide clean, sharp, unchipped edges. Allow units to dry before laying unless wetting of units is specified. Install cut units with cut surfaces and, where possible, cut edges concealed.

ADDENDUM NO. 2

- E. Select and arrange units for exposed unit masonry to produce a uniform blend of colors and textures. Mix units from several pallets or cubes as they are placed.
- F. Wetting of Brick: Wet brick before laying if initial rate of absorption exceeds 30 g/30 sq. in. per minute when tested in accordance with ASTM C67/C67M. Allow units to absorb water so they are damp but not wet at time of laying.

3.3 TOLERANCES

A. Dimensions and Locations of Elements:

- 1. For dimensions in cross section or elevation, do not vary by more than plus 1/2 inch or minus 1/4 inch.
- 2. For location of elements in plan, do not vary from that indicated by more than plus or minus 1/2 inch.
- 3. For location of elements in elevation, do not vary from that indicated by more than plus or minus 1/4 inch in a story height or 1/2 inch total.

B. Lines and Levels:

- 1. For bed joints and top surfaces of bearing walls, do not vary from level by more than 1/4 inch in 10 ft., or 1/2-inch maximum.
- 2. For conspicuous horizontal lines, such as lintels, sills, parapets, and reveals, do not vary from level by more than 1/8 inch in 10 ft., 1/4 inch in 20 ft., or 1/2-inch maximum.
- 3. For vertical lines and surfaces, do not vary from plumb by more than 1/4 inch in 10 ft., 3/8 inch in 20 ft., or 1/2-inch maximum.
- 4. For conspicuous vertical lines, such as external corners, door jambs, reveals, and expansion and control joints, do not vary from plumb by more than 1/8 inch in 10 ft., 1/4 inch in 20 ft., or 1/2-inch maximum.
- 5. For lines and surfaces, do not vary from straight by more than 1/4 inch in 10 ft., 3/8 inch in 20 ft., or 1/2-inch maximum.
- 6. For vertical alignment of exposed head joints, do not vary from plumb by more than 1/4 inch in 10 ft., or 1/2-inch maximum.
- 7. For faces of adjacent exposed masonry units, do not vary from flush alignment by more than 1/16 inch except due to warpage of masonry units within tolerances specified for warpage of units.

C. Joints:

- 1. For bed joints, do not vary from thickness indicated by more than plus or minus 1/8 inch, with a maximum thickness limited to 1/2 inch.
- 2. For exposed bed joints, do not vary from bed-joint thickness of adjacent courses by more than 1/8 inch.
- 3. For head and collar joints, do not vary from thickness indicated by more than plus 3/8 inch or minus 1/4 inch.
- 4. For exposed head joints, do not vary from thickness indicated by more than plus or minus 1/8 inch. Do not vary from adjacent bed-joint and head-joint thicknesses by more than 1/8 inch.
- 5. For exposed bed joints and head joints of stacked bond, do not vary from a straight line by more than 1/16 inch from one masonry unit to the next.

3.4 LAYING MASONRY WALLS

- A. Lay out walls in advance for accurate spacing of surface bond patterns with uniform joint thicknesses and for accurate location of openings, movement-type joints, returns, and offsets. Avoid using less-than-half-size units, particularly at corners, jambs, and, where possible, at other locations.
- B. Bond Pattern for Exposed Masonry: Unless otherwise indicated, lay exposed masonry in running bond; do not use units with less-than-nominal 4-inch horizontal face dimensions at corners or jambs.
- C. Lay concealed masonry with all units in a wythe in running bond or bonded by lapping not less than 4 inches. Bond and interlock each course of each wythe at corners. Do not use units with less-than-nominal 4-inch horizontal face dimensions at corners or jambs.
- D. Stopping and Resuming Work: Stop work by stepping back units in each course from those in course below; do not tooth. When resuming work, clean masonry surfaces that are to receive mortar, remove loose masonry units and mortar, and wet brick if required before laying fresh masonry.
- E. Built-in Work: As construction progresses, build in items specified in this and other Sections. Fill in solidly with masonry around built-in items.
- F. Fill space between steel frames and masonry solidly with mortar unless otherwise indicated.
- G. Where built-in items are to be embedded in cores of hollow masonry units, place a layer of metal lath, wire mesh, or plastic mesh in the joint below, and rod mortar or grout into core.
- H. Fill cores in hollow CMUs with grout 24 inches under bearing plates, beams, lintels, posts, and similar items unless otherwise indicated.
- I. Build nonload-bearing interior partitions full height of story to underside of solid floor or roof structure above unless otherwise indicated.
 - 1. Install compressible filler in joint between top of partition and underside of structure above.
 - 2. Fasten partition top anchors to structure above and build into top of partition. Grout cells of CMUs solidly around anchors, Space anchors 48 inches o.c. unless otherwise indicated.
 - 3. Wedge nonload-bearing partitions against structure above with small pieces of tile, slate, or metal. Fill joint with mortar after dead-load deflection of structure above approaches final position.
 - 4. At fire-rated partitions, treat joint between top of partition and underside of structure above to comply with Section 07 8443 "Joint Firestopping."

3.5 MORTAR BEDDING AND JOINTING

- A. Lay CMUs as follows:
 - 1. Bed face shells in mortar and make head joints of depth equal to bed joints.
 - 2. Bed webs in mortar in all courses of piers, columns, and pilasters.
 - 3. Bed webs in mortar in grouted masonry, including starting course on footings.
 - 4. With webs fully bedded in mortar in all courses of fire rated walls, including contiguous piers, columns and pilasters.

ADDENDUM NO. 2

5. With webs fully bedded in mortar in all courses of walls forming mechanical shafts, including but not necessarily limited to, plumbing shafts, supply and return air shafts not containing fabricated ducts.
 6. Fully bed entire units, including areas under cells, at starting course on footings where cells are not grouted.
 7. Fully bed units and fill cells with mortar at anchors and ties as needed to fully embed anchors and ties in mortar.
- B. Lay solid masonry units with completely filled bed and head joints; butter ends with sufficient mortar to fill head joints and shove into place. Do not deeply furrow bed joints or slush head joints.
- C. Set cast-stone trim units in full bed of mortar with full vertical joints. Fill dowel, anchor, and similar holes.
1. Clean soiled surfaces with fiber brush and soap powder and rinse thoroughly with clear water.
 2. Allow cleaned surfaces to dry before setting.
 3. Wet joint surfaces thoroughly before applying mortar.
- D. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.
1. Provide raked joints for application of sealant in joints in sills, coping, and similar items.
- E. Cut joints flush for masonry walls to receive plaster or other direct-applied finishes (other than paint) unless otherwise indicated.

3.6 COMPOSITE MASONRY

- A. Bond wythes of composite masonry together as follows:
1. Masonry-Joint Reinforcement: Installed in horizontal mortar joints.
- B. Bond wythes of composite masonry together using bonding system indicated on Drawings.
- C. Collar Joints: Solidly fill collar joints by parging face of first wythe that is laid and shoving units of other wythe into place.
- D. Corners: Provide interlocking masonry unit bond in each wythe and course at corners unless otherwise indicated.
1. Provide continuity with masonry-joint reinforcement at corners by using prefabricated L-shaped units as well as masonry bonding.
- E. Intersecting and Abutting Walls: Unless vertical expansion or control joints are indicated at juncture, bond walls together as follows:
1. Provide continuity with masonry-joint reinforcement by using prefabricated T-shaped units.

3.7 CAVITY WALLS

- A. Bond wythes of cavity walls together as follows:
1. Masonry-Joint Reinforcement: Installed in horizontal mortar joints.

ADDENDUM NO. 2

- B. Keep cavities clean of mortar droppings and other materials during construction. Bevel beds away from cavity, to minimize mortar protrusions into cavity. Do not attempt to trowel or remove mortar fins protruding into cavity.
- C. Installing Cavity Wall Insulation: Spray adhesive on cavity side of back-up in accordance with insulation manufacturer's written instructions and recommendations. Extend to adjacent materials to provide a complete installation without gaps.
- D. Thickness: 3 inches unless indicated otherwise.
 - 1. Fill cracks and open gaps in insulation with crack sealer compatible with insulation and masonry.

3.8 ANCHORED MASONRY VENEERS

- A. Anchor masonry veneers to wall framing with masonry-veneer anchors to comply with the following requirements:
 - 1. Fasten screw-attached anchors through sheathing to wall framing with metal fasteners of type indicated. Use two fasteners unless anchor design only uses one fastener.
 - 2. Embed in masonry joints.
 - 3. Locate anchor sections to allow maximum vertical differential movement of ties up and down.
 - 4. Space anchors as indicated, but not more than 18 inches o.c. vertically and 24 inches o.c. horizontally, with not less than one anchor for each 2 sq. ft. of wall area. Install additional anchors within 12 inches of openings and at intervals, not exceeding 8 inches, around perimeter.
- B. Provide not less than 2 inches of airspace between back of masonry veneer and face of insulation.
 - 1. Keep airspace clean of mortar droppings and other materials during construction. Bevel beds away from airspace, to minimize mortar protrusions into airspace. Do not attempt to trowel or remove mortar fins protruding into airspace.

3.9 MASONRY-JOINT REINFORCEMENT

- A. General: Install entire length of longitudinal side rods in mortar with a minimum cover of 5/8 inch on exterior side of walls, 1/2 inch elsewhere. Lap reinforcement a minimum of 6 inches.
 - 1. Space reinforcement not more than 16 inches o.c.
 - 2. Space reinforcement not more than 8 inches o.c. in foundation walls and parapet walls.
 - 3. Provide reinforcement not more than 8 inches above and below wall openings and extending 12 inches beyond openings.
- B. Interrupt joint reinforcement at control and expansion joints unless otherwise indicated.
- C. Provide continuity at wall intersections by using prefabricated T-shaped units.
- D. Provide continuity at corners by using prefabricated L-shaped units.

- E. Cut and bend reinforcing units as directed by manufacturer for continuity at returns, offsets, column fireproofing, pipe enclosures, and other special conditions.

3.10 ANCHORING MASONRY TO STRUCTURAL STEEL AND CONCRETE

- A. Anchor masonry to structural steel and concrete, where masonry abuts or faces structural steel or concrete, to comply with the following:
 - 1. Provide an open space not less than **1/2 inch** wide between masonry and structural steel or concrete unless otherwise indicated. Keep open space free of mortar and other rigid materials.
 - 2. Anchor masonry with anchors embedded in masonry joints and attached to structure.
 - 3. Space anchors as indicated, but not more than **24 inches** o.c. vertically and **36 inches** o.c. horizontally.

3.11 CONTROL AND EXPANSION JOINTS

- A. General: Install control- and expansion-joint materials in unit masonry as masonry progresses. Do not allow materials to span control and expansion joints without provision to allow for in-plane wall or partition movement.
- B. Form control joints in concrete masonry as follows:
 - 1. Install preformed control-joint gaskets designed to fit standard sash block.
- C. Form expansion joints in brick as follows:
 - 1. Build in compressible joint fillers where indicated.
- D. Provide horizontal, pressure-relieving joints by either leaving an airspace or inserting a compressible filler of width required for installing sealant and backer rod specified in Section 07 9200 "Joint Sealants," but not less than **3/8 inch**.
 - 1. Locate horizontal, pressure-relieving joints beneath shelf angles supporting masonry.

3.12 LINTELS

- A. Install steel lintels where indicated.
- B. Provide concrete or masonry lintels where indicated and where openings of more than **12 inches** for brick-size units and **24 inches** for block-size units are indicated without structural steel or other supporting lintels.
- C. Provide minimum bearing of **8 inches** at each jamb unless otherwise indicated.

3.13 FLASHING, WEEP HOLES, AND CAVITY VENTS

- A. General: Install embedded flashing and weep holes in masonry at shelf angles, lintels, ledges, other obstructions to downward flow of water in wall, and where indicated. Install cavity vents at shelf angles, ledges, and other obstructions to upward flow of air in cavities, and where indicated.

ADDENDUM NO. 2

- B. Install flashing as follows unless otherwise indicated:
1. Prepare masonry surfaces so they are smooth and free from projections that could puncture flashing. Where flashing is within mortar joint, place through-wall flashing on sloping bed of mortar and cover with mortar. Before covering with mortar, seal penetrations in flashing with adhesive, sealant, or tape as recommended by flashing manufacturer.
 2. At multiwythe masonry walls, including cavity walls, extend flashing through outer wythe, turned up a minimum of **8 inches**, and secure top of flashing to the inner wythe with termination bar and sealant.
 3. At masonry-veneer walls, extend flashing through veneer, across airspace behind veneer, and up face of sheathing at least **8 inches**; and secure top of flashing to the inner wythe with termination bar and sealant.
 4. At lintels and shelf angles, extend flashing **6 inches** minimum, to edge of next full unit at each end. At heads and sills, extend flashing **6 inches** minimum, to edge of next full unit and turn ends up not less than **2 inches** to form end dams.
 5. Install metal drip edges beneath flexible flashing at exterior face of wall. Stop flexible flashing **1/2 inch** back from outside face of wall, and adhere flexible flashing to top of metal drip edge.
- C. Install reglets and nailers for flashing and other related construction where they are indicated to be built into masonry.
- D. Install weep holes in exterior wythes and veneers in head joints of first course of masonry immediately above embedded flashing.
1. Use specified weep/cavity vent products to form weep holes.
 2. Space weep holes **24 inches** o.c. unless otherwise indicated.
- E. Retain last subparagraph above if weep holes other than those made of plastic tubing or wicking are used. Retain first subparagraph below if weep holes made of plastic tubing or wicking are used. Delete subparagraph below if pea gravel is not used full height in cavities. Place cavity drainage material in cavities to comply with configuration requirements for cavity drainage material in "Accessories" Article.
- F. Install cavity vents in head joints in exterior wythes at spacing indicated. Use specified weep/cavity vent products to form cavity vents.
- 3.14 REINFORCED UNIT MASONRY
- A. Temporary Formwork and Shores: Construct formwork and shores as needed to support reinforced masonry elements during construction.
1. Construct formwork to provide shape, line, and dimensions of completed masonry as indicated. Make forms sufficiently tight to prevent leakage of mortar and grout. Brace, tie, and support forms to maintain position and shape during construction and curing of reinforced masonry.
 2. Do not remove forms and shores until reinforced masonry members have hardened sufficiently to carry their own weight and that of other loads that may be placed on them during construction.
- B. Placing Reinforcement: Comply with requirements in TMS 602.

- C. Grouting: Do not place grout until entire height of masonry to be grouted has attained enough strength to resist grout pressure.
 - 1. Comply with requirements in TMS 602 for cleanouts and for grout placement, including minimum grout space and maximum pour height.
 - 2. Limit height of vertical grout pours to not more than **60 inches**.

3.15 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections. Allow inspectors access to scaffolding and work areas as needed to perform tests and inspections. Retesting of materials that fail to comply with specified requirements will be at Contractor's expense.
- B. Inspections: Special inspections in accordance with [TMS 402/ACI 530/ASCE 5 and TMS 602/ASCE 6.
 - 1. Begin masonry construction only after inspectors have verified proportions of site-prepared mortar.
 - 2. Place grout only after inspectors have verified compliance of grout spaces and of grades, sizes, and locations of reinforcement.
 - 3. Place grout only after inspectors have verified proportions of site-prepared grout.
- C. Testing Prior to Construction: One set of tests.
- D. Testing Frequency: One set of tests for each **5000 sq. ft.** of wall area or portion thereof.
- E. Clay Masonry Unit Test: For each type of unit provided, in accordance with ASTM C67/C67M for compressive strength.
- F. Concrete Masonry Unit Test: For each type of unit provided, in accordance with ASTM C140/C140M for compressive strength.
- G. Mortar Aggregate Ratio Test (Proportion Specification): For each mix provided, in accordance with ASTM C780.
- H. Grout Test (Compressive Strength): For each mix provided, in accordance with ASTM C1019.

3.16 REPAIRING, POINTING, AND CLEANING

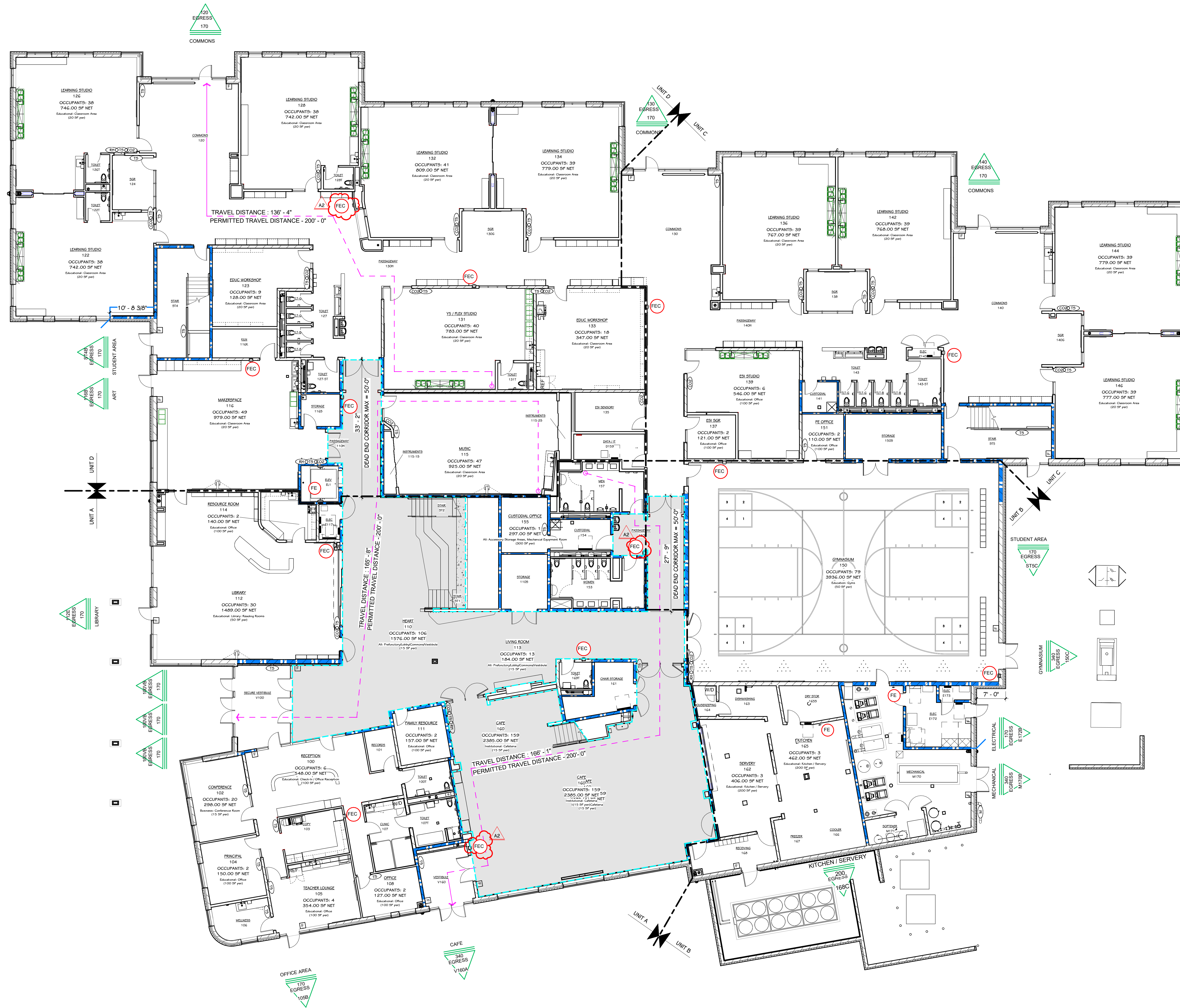
- A. Remove and replace masonry units that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Install new units to match adjoining units; install in fresh mortar, pointed to eliminate evidence of replacement.
- B. Pointing: During the tooling of joints, enlarge voids and holes, except weep holes, and completely fill with mortar. Point up joints, including corners, openings, and adjacent construction, to provide a neat, uniform appearance. Prepare joints for sealant application, where indicated.
- C. In-Progress Cleaning: Clean unit masonry as work progresses by dry brushing to remove mortar fins and smears before tooling joints.

- D. Final Cleaning: After mortar is thoroughly set and cured, clean exposed masonry as follows:
1. Remove large mortar particles by hand with wooden paddles and nonmetallic scrape hoes or chisels.
 2. Test cleaning methods on sample wall panel; leave one-half of panel uncleaned for comparison purposes. Obtain Architect's approval of sample cleaning before proceeding with cleaning of masonry.
 3. Protect adjacent stone and nonmasonry surfaces from contact with cleaner by covering them with liquid strippable masking agent or polyethylene film and waterproof masking tape.
 4. Wet wall surfaces with water before applying cleaners; remove cleaners promptly by rinsing surfaces thoroughly with clear water.
 5. Clean brick by bucket-and-brush hand-cleaning method described in BIA Technical Notes 20.
 6. Clean concrete masonry by applicable cleaning methods indicated in NCMA TEK 8-4A.
 7. Clean masonry with a proprietary acidic masonry cleaner applied according to manufacturer's written instructions.
 8. Clean cast stone trim to comply with cast stone manufacturer's written instructions.

3.17 MASONRY WASTE DISPOSAL

- A. Salvageable Materials: Unless otherwise indicated, excess masonry materials are Contractor's property. At completion of unit masonry work, remove from Project site.
- B. Waste Disposal as Fill Material: Dispose of clean masonry waste, including excess or soil-contaminated sand, waste mortar, and broken masonry units, by crushing and mixing with fill material as fill is placed.
1. Crush masonry waste to less than **4 inches** in each dimension.
 2. Mix masonry waste with at least two parts of specified fill material for each part of masonry waste. Fill material is specified in Section 31 2000 "Earth Moving."
 3. Do not dispose of masonry waste as fill within **18 inches** of finished grade.
- C. Masonry Waste Recycling: Return broken CMUs not used as fill to manufacturer for recycling.
- D. Excess Masonry Waste: Remove excess clean masonry waste that cannot be used as fill, as described above or recycled, and other masonry waste, and legally dispose of off Owner's property.

END OF SECTION 04 2000



FIRST FLOOR CODE COMPLIANCE OVERALL PLAN
 3/32" = 1'-0"

CODE COMPLIANCE KEY

EGRESS SYMBOLS

- EGRESS EXIT NUMBER FROM ROOM OR SPACE
- MAXIMUM NUMBER OF OCCUPANTS PERMITTED BY EGRESS WIDTH
- ROOM OR SPACE EGRESS IS FROM

TRAVEL DISTANCE : 100'-0"
PERMITTED TRAVEL DISTANCE - 200'-0"

EXISTING TRAVEL DISTANCE TO EGRESS DOOR
 DIRECTION OF EGRESS
 PERMITTED MAXIMUM TRAVEL DISTANCE PER CONDITION

FIRE SAFETY SYMBOLS

- EXISTING FIRE EXTINGUISHER
- EXISTING FIRE EXTINGUISHER CABINET
- FIRE EXTINGUISHER
- FIRE EXTINGUISHER CABINET
- AUTOMATED EXTERNAL DEBRILLATOR (AED) RECESSED CABINET

SMOKE EVACUATION AREAS

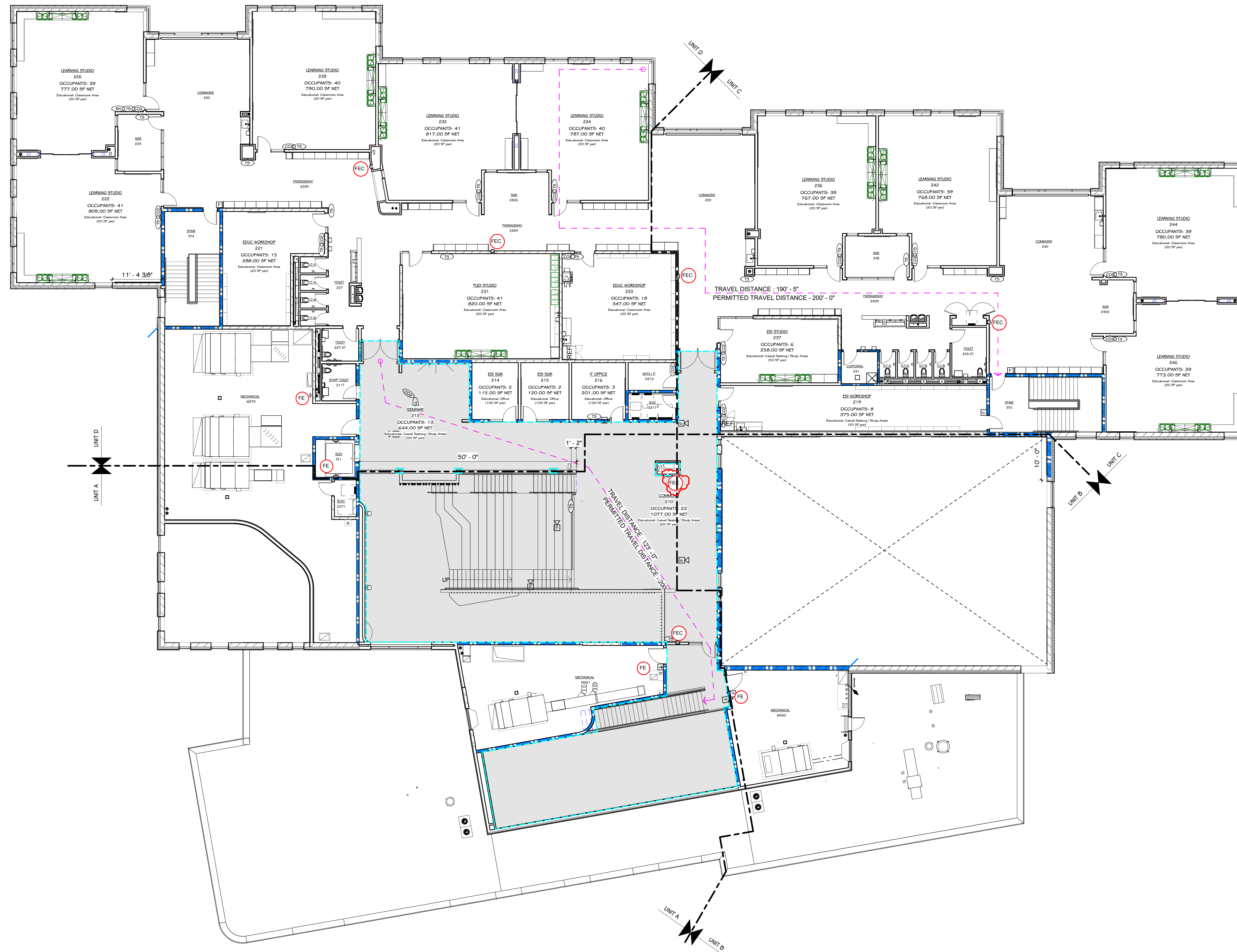
- ATRIUM

FIRE-RATING KEY

DESIGNATION	PARTITION RATING	PRIORITY
[Green Hatched Box]	3 HOUR	1
[Red Hatched Box]	2 HOUR FIRE/SMOKE	2
[Red Hatched Box]	2 HOUR	3
[Blue Hatched Box]	1 HOUR FIRE/SMOKE	4
[Blue Hatched Box]	1 HOUR	5
[White Box]	SMOKE RESISTANT	6

- ALL PENETRATIONS THROUGH A FIRE OR SMOKE RATED PARTITION SHOULD BE SEALED WITH AN APPROVED U.L. RATED PRODUCT.
- THE TOPS OF ALL FIRE RATED PARTITIONS SHALL BE SEALED TO THE CONTINUOUS STRUCTURE ABOVE WITH A U.L. RATED SYSTEM OR ASSEMBLY.
- WOOD BLOCKING IN FIRE-RATED PARTITIONS SHALL BE NON-COMBUSTIBLE TREATED WOOD.
- REFER TO SPECIFICATION U.L. RATING INFORMATION.
- FIRE-RATED WALLS ENDING INTO AN ACOUSTICAL DECK MUST HAVE THE FLUTES FILLED, REFER TO TOP OF WALL DETAIL AT ACOUSTIC DECK SHOWN ON THIS SHEET.
- FOR MASONRY WALLS THE MASON SHALL FILL VOIDS AND FIRE SPRAY WITH UL LISTED MATERIAL.
- FOR STUD WALLS USE FIRE SAFING AND FIRE CAULK.

THIS DRAWING SHEET IS INTENDED TO BE PLOTTED IN COLOR. IF THIS TEXT APPEARS IN BLACK AND WHITE, IT IS PLOTTED INCORRECTLY. DISCARD AND OBTAIN AN ACCURATE DRAWING



SECOND FLOOR CODE COMPLIANCE OVERALL PLAN
3/32" = 1'-0"

CODE COMPLIANCE KEY

EGRESS SYMBOLS

- EGRESS EXIT NUMBER FROM ROOM OR SPACE
- MAXIMUM NUMBER OF OCCUPANTS PERMITTED BY EGRESS WIDTH
- ROOM OR SPACE EGRESS IS FROM
- EXISTING TRAVEL DISTANCE TO EGRESS DOOR
- DIRECTION OF EGRESS
- PERMITTED TRAVEL DISTANCE - 100'-0"
- PERMITTED TRAVEL DISTANCE - 200'-0"
- PERMITTED MAXIMUM TRAVEL DISTANCE PER CONDITION

FIRE SAFETY SYMBOLS

- EXISTING FIRE EXTINGUISHER
- EXISTING FIRE EXTINGUISHER CABINET
- FIRE EXTINGUISHER
- FIRE EXTINGUISHER CABINET
- AUTOMATED EXTERNAL DEBRILLATOR (AED) RECESSED CABINET

SMOKE EVACUATION AREAS

- ATRIUM

FIRE-RATING KEY

DESIGNATION	PARTITION RATING	PRIORITY
[Green hatched pattern]	3 HOUR	1
[Red hatched pattern]	2 HOUR FIRE/SMOKE	2
[Red hatched pattern]	2 HOUR	3
[Blue hatched pattern]	1 HOUR FIRE/SMOKE	4
[Blue hatched pattern]	1 HOUR	5
[White pattern]	SMOKE RESISTANT	6

- ALL PENETRATIONS THROUGH A FIRE OR SMOKE RATED PARTITION SHOULD BE SEALED WITH AN APPROVED U.L. RATED PRODUCT.
- THE TOPS OF ALL FIRE RATED PARTITIONS SHALL BE SEALED TO THE CONTINUOUS STRUCTURE ABOVE WITH A U.L. RATED SYSTEM OR ASSEMBLY.
- WOOD BLOCKING IN FIRE-RATED PARTITIONS SHALL BE NON-COMBUSTIBLE TREATED WOOD.
- REFER TO SPECIFICATION U.L. RATING INFORMATION.
- FIRE-RATED WALLS ENDING INTO AN ACOUSTICAL DECK MUST HAVE THE FLUTES FILLED, REFER TO TOP OF WALL DETAIL AT ACOUSTIC DECK SHOWN ON THIS SHEET.
- FOR MASONRY WALLS THE MASON SHALL FILL VOIDS AND FIRE SPRAY WITH UL LISTED MATERIAL.
- FOR STUD WALLS USE FIRE SAFING AND FIRE CAULK.

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MARKERBOARD SCHEDULE

MARK	QTY	SIZE (W x H)	MATERIAL	FRAME MATERIAL	REMARKS
MB-1	17	6'-0" x 4'-0"	LOW-GLOSS PORCELAIN ENAMEL STEEL	ANODIZED ALUMINUM FRAME	
MB-2	9	4'-0" x 4'-0"	LOW-GLOSS PORCELAIN ENAMEL STEEL	ANODIZED ALUMINUM FRAME	
MB-3	3	3'-0" x 6'-0"	LOW-GLOSS PORCELAIN ENAMEL STEEL	ANODIZED ALUMINUM FRAME	OVERSIZED HEIGHT BOARD TO BE FABRICATED WITHOUT JOINT
MB-4	17	4'-0" x 6'-0"	LOW-GLOSS PORCELAIN ENAMEL STEEL	ANODIZED ALUMINUM FRAME	OVERSIZED HEIGHT BOARD TO BE FABRICATED WITHOUT JOINT
MB-5	5	12'-0" x 4'-0"	LOW-GLOSS PORCELAIN ENAMEL STEEL	ANODIZED ALUMINUM FRAME	
MB-6	8	8'-0" x 6'-0"	LOW-GLOSS PORCELAIN ENAMEL STEEL	ANODIZED ALUMINUM FRAME	OVERSIZED HEIGHT BOARD TO BE FABRICATED WITHOUT JOINT
MB-7	1	8'-0" x 4'-0"	LOW-GLOSS PORCELAIN ENAMEL STEEL	ANODIZED ALUMINUM FRAME	
MB-8	1	8'-0" x 4'-0"	LOW-GLOSS PORCELAIN ENAMEL STEEL	ANODIZED ALUMINUM FRAME	MARKERBOARD SURFACE WITH STAFF LINES FOR MUSIC EDUCATION.
MB-9	1	6'-0" x 4'-0"	LOW-GLOSS PORCELAIN ENAMEL STEEL	ANODIZED ALUMINUM FRAME	GYMNASIUM MARKERBOARD - DO NOT INCLUDE MARKERBOARD TRAY/RAIL.

TACKBOARD SCHEDULE

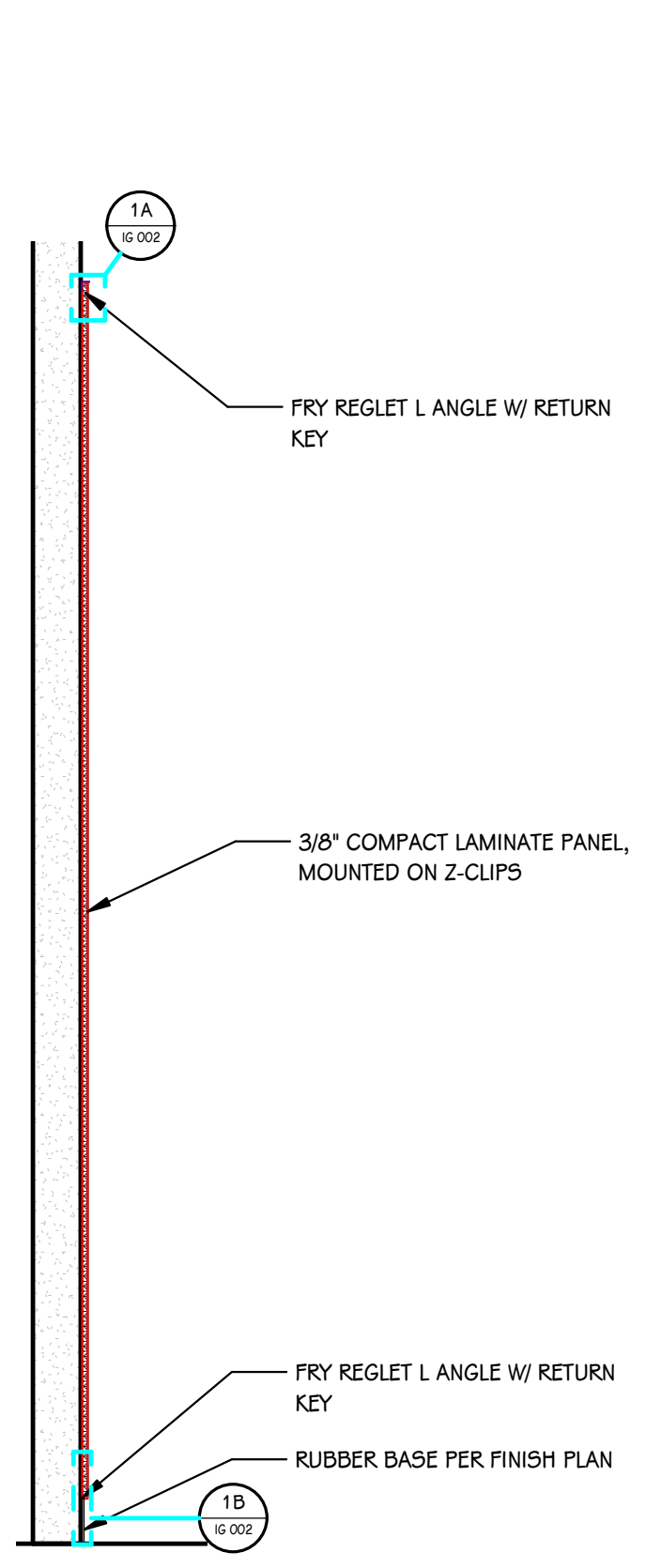
MARK	QTY	SIZE (W x H)	MATERIAL	FRAME MATERIAL	REMARKS
TB-2	3	4'-0" x 4'-0"	COLOR-IMPREGNATED CORK	ANODIZED ALUMINUM FRAME	
TB-3	1	6'-0" x 4'-0"	COLOR-IMPREGNATED CORK	ANODIZED ALUMINUM FRAME	
TB-4	2	4'-0" x 6'-0"	COLOR-IMPREGNATED CORK	ANODIZED ALUMINUM FRAME	
TB-5	1	8'-0" x 4'-0"	COLOR-IMPREGNATED CORK	ANODIZED ALUMINUM FRAME	
TB-6	2	8'-0" x 6'-0"	COLOR-IMPREGNATED CORK	ANODIZED ALUMINUM FRAME	
TB-7	2	8'-0" x 6'-0"	COLOR-IMPREGNATED CORK	ANODIZED ALUMINUM FRAME	
TB-8	2	8'-0" x 6'-0"	COLOR-IMPREGNATED CORK	ANODIZED ALUMINUM FRAME	

GENERAL NOTES - VISUAL DISPLAY BOARDS

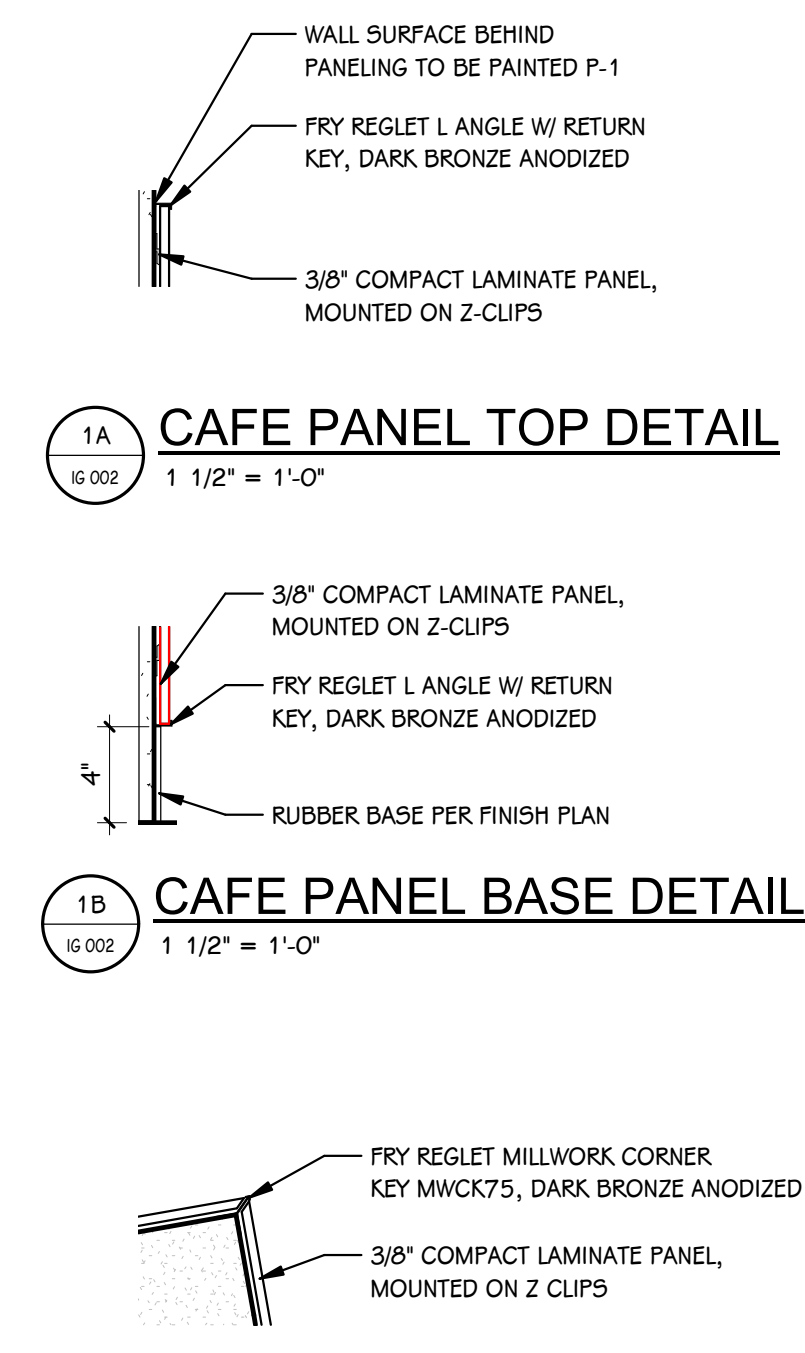
- REFER TO SPECIFICATION FOR ADDITIONAL INFORMATION.
- VISUAL DISPLAY BOARD TAGS REPRESENT A SINGLE UNIT. COMBINATION BOARDS INCLUDE MORE THAN ONE MATERIAL TYPE IN THE OVERALL UNIT. (I.E., MARKERBOARDS WITH ATTACHED TACKBOARDS)
- TYPICAL MOUNTING HEIGHT WILL BE 7'-4" A.F.F. TO HEAD HEIGHT, UNLESS NOTED OTHERWISE.
- VISUAL DISPLAY BOARDS TO BE MOUNTED CENTERED ON WALL OR BETWEEN ARCHITECTURAL ELEMENTS AND CASEGOODS, UNLESS NOTED OTHERWISE
- COORDINATE MOUNTING LOCATION AND REQUIREMENTS WITH ANY TECHNOLOGY EQUIPMENT (PROJECTOR, SMART BOARDS, ETC.)

GENERAL NOTES - INTERIORS

- REFER TO MATERIAL SELECTION SCHEDULE FOR FINISH INFORMATION.
- REFER TO ARCHITECTURAL FLOOR PLANS AND SPECIFICATION FOR ADDITIONAL INFORMATION ON CONSTRUCTION MATERIALS.
- REFER TO REFLECTED CEILING PLANS FOR CEILING FINISH AND HEIGHTS.
- REFER TO DOOR SCHEDULE FOR FINISH ON DOORS AND FRAMES.
- REFER TO ARCHITECTURAL ENLARGED TOILET ROOM PLANS FOR TOILET ACCESSORIES, PARTITIONS, BARRIER-FREE REQUIREMENTS, ETC.
- REFER TO ARCHITECTURAL ENLARGED STAIR PLANS FOR RAILINGS, GUARDRAILS, FINISH COLORS OF ANY PAINTED METALS, ETC. COORDINATE STAIR DETAILS WITH FLOORING TYPES INDICATED ON FINISH PLANS.
- REFER TO INTERIORS TYPICAL DETAIL SHEETS FOR TILE TRIM DETAILS, FLOORING TRANSITIONS, WAINSCOT DETAILS, AND TYPICAL TILE PATTERN REQUIREMENTS.
- REFER TO INTERIOR ELEVATION SHEETS FOR REQUIREMENTS, GENERAL NOTES, ABBREVIATIONS, AND HARDWARE/ACCESSORY SELECTIONS FOR CASEWORK.
- REFER TO FINISH PLANS FOR VISUAL DISPLAY BOARD LOCATIONS AND QUANTITIES.
- WALL MOUNTED DIFFUSERS, GRILLES, ACCESS PANELS, ELECTRICAL PANELS, ETC. ARE TO BE PAINTED WITH AN OIL-BASED PAINT TO MATCH THE ADJACENT WALL FINISH.
- CEILING ACCESS PANELS ARE TO BE PAINTED TO MATCH ADJACENT CEILING FINISH.
- AT AREAS OF EXPOSED CEILING WHERE THE DUCTWORK AND DIFFUSERS ARE TO BE PAINTED, COORDINATE WITH MECHANICAL SPECIFICATIONS AND REFER TO THE REFLECTED CEILING PLAN KEY FOR PAINT COLORS.
- REFER TO ARCHITECTURAL FLOOR PLANS FOR LOCKER LOCATIONS, FINISHES, AND QUANTITIES.
- DETAILS SHOWN ILLUSTRATE DESIGN INTENT, NOT ALL POSSIBLE CONDITIONS. FOR CONDITIONS NOT SHOWN, USE DETAILS CLOSEST TO CONDITION IN QUESTION.



1
1/16/2023
3/4" = 1'-0"

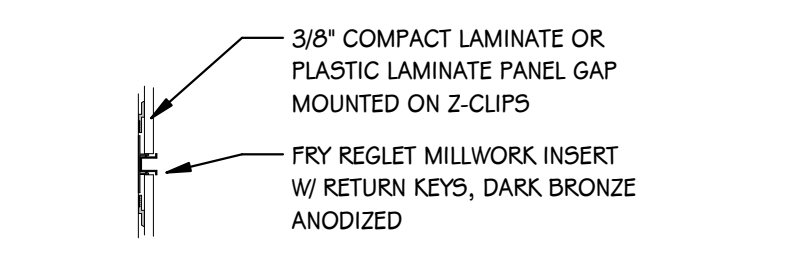


1A
1/16/2023
1 1/2" = 1'-0"

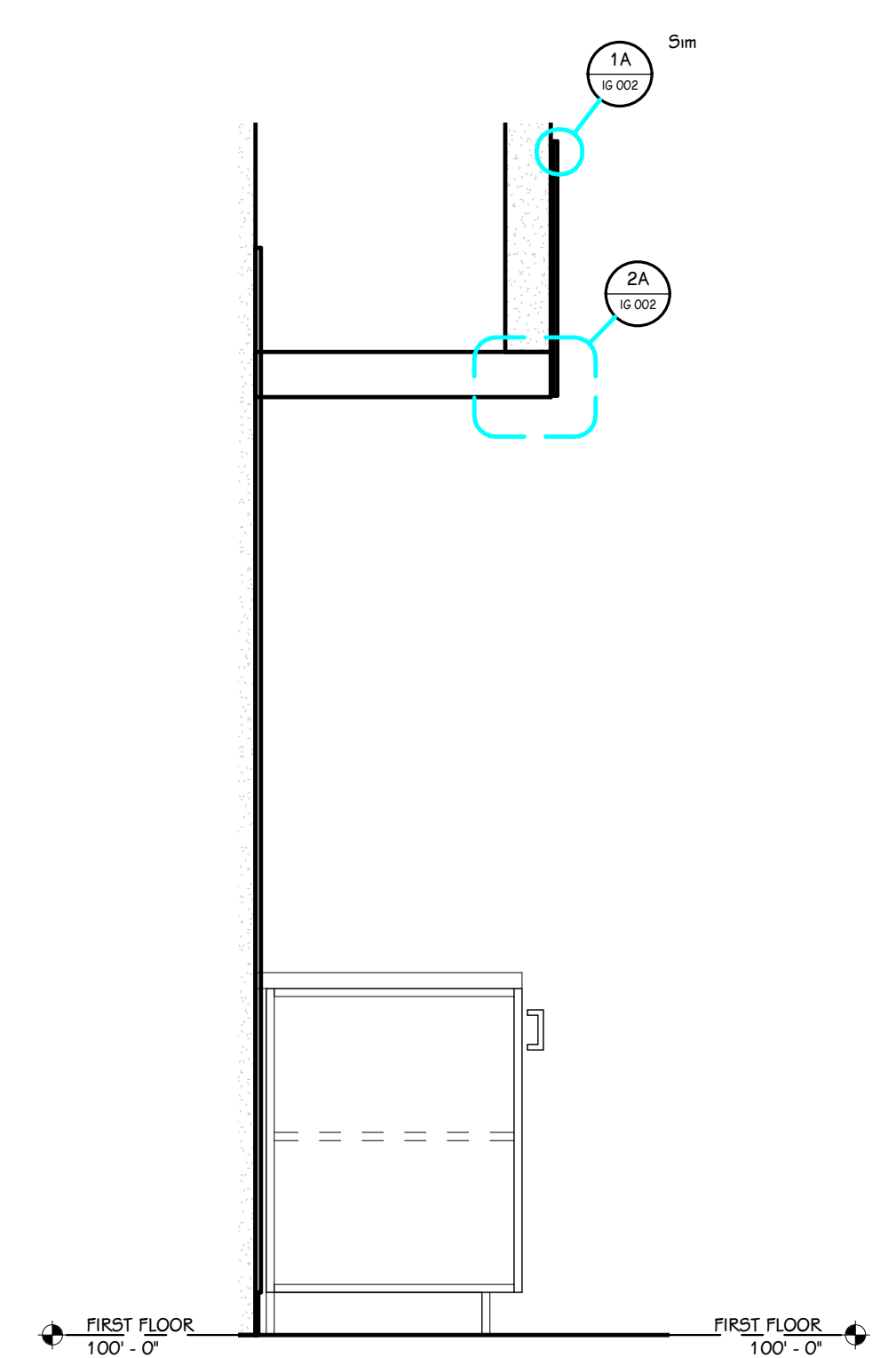
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1 1/2" = 1'-0"



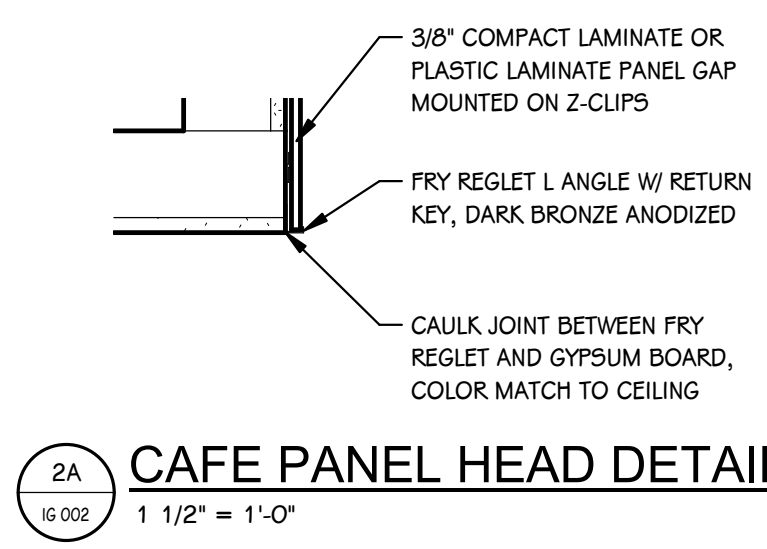
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1/16/2023
1 1/2" = 1'-0"



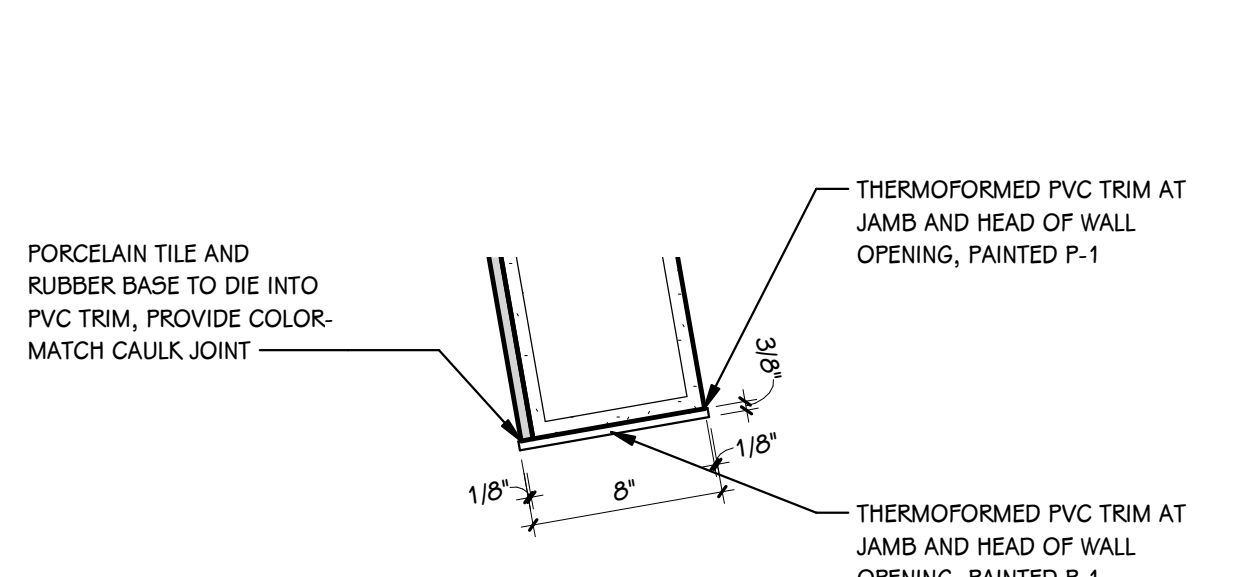
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1/16/2023
1 1/2" = 1'-0"



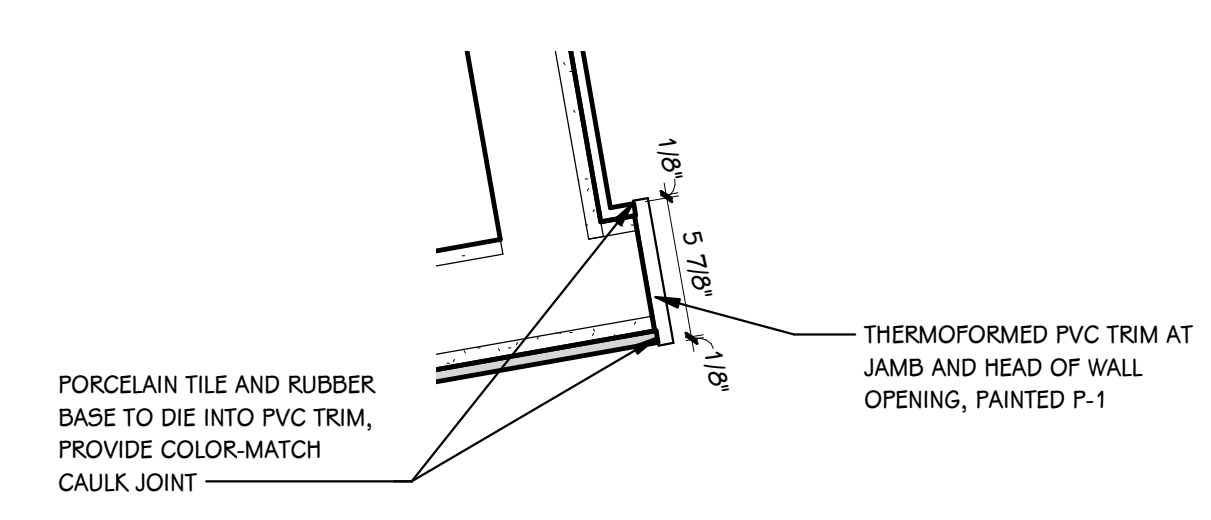
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1/16/2023
3/4" = 1'-0"



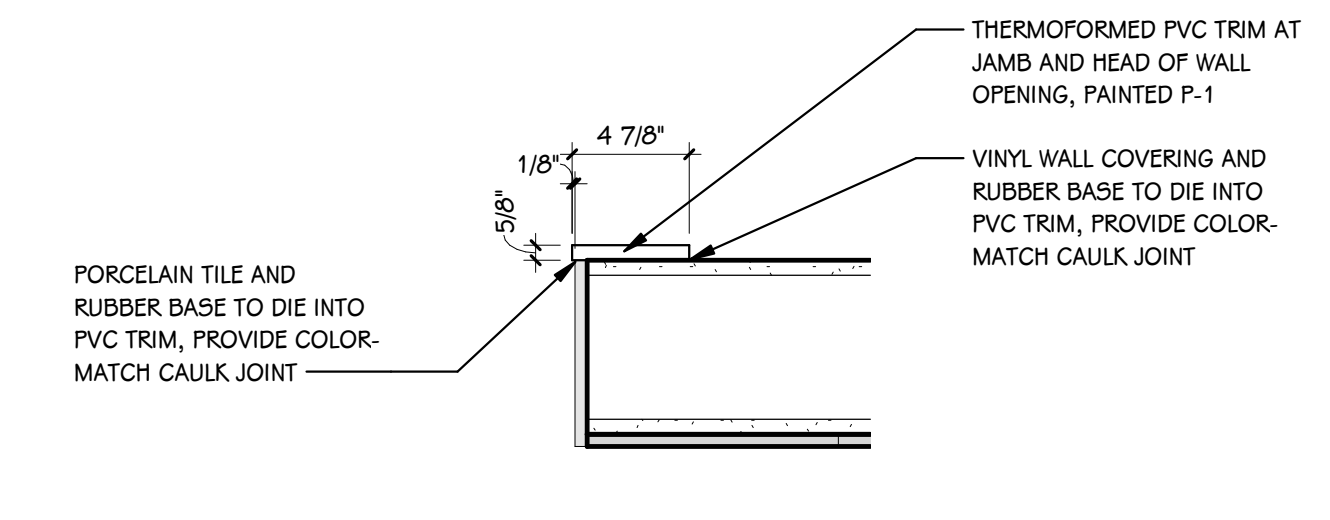
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1/16/2023
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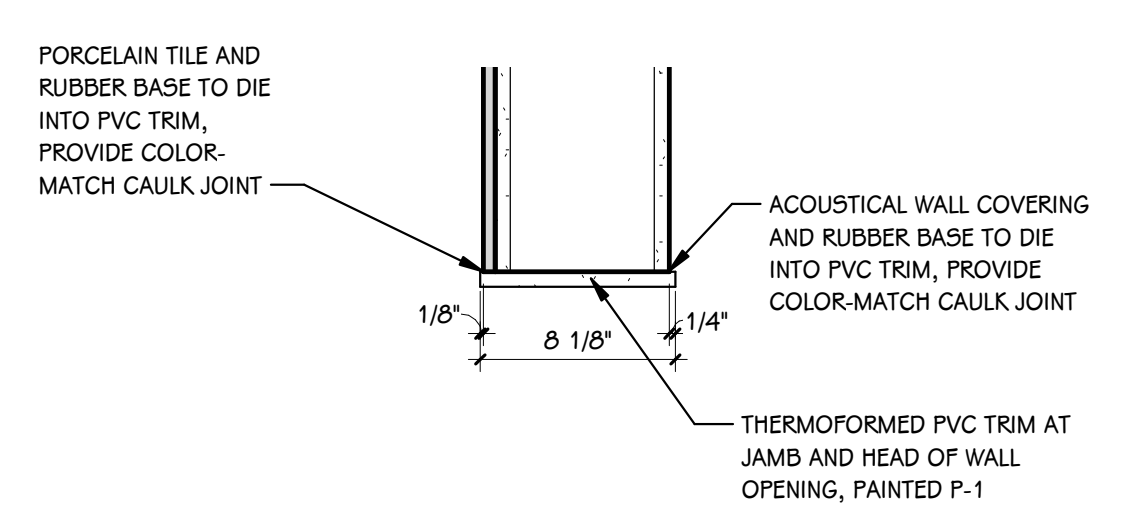
3
1/16/2023
1 1/2" = 1'-0"



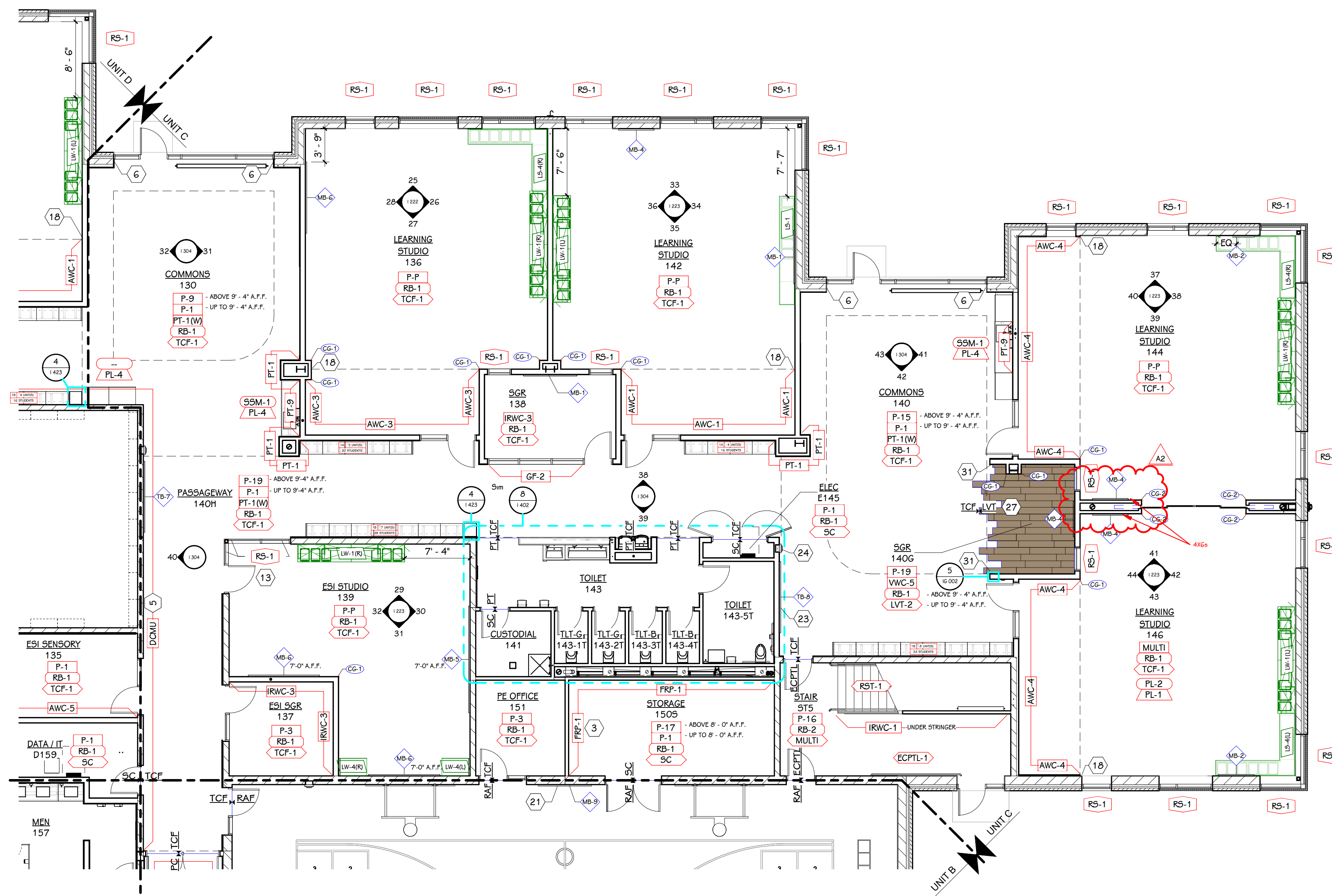
4
1/16/2023
1 1/2" = 1'-0"



5
1/16/2023
1 1/2" = 1'-0"



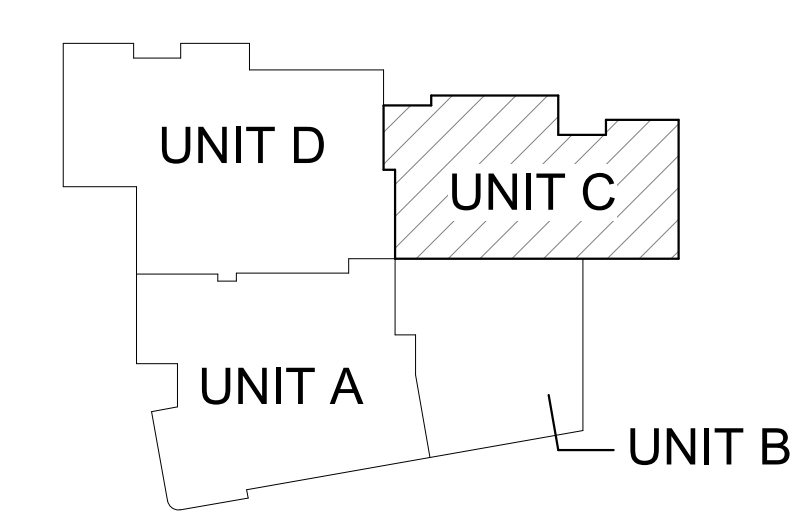
6
1/16/2023
1 1/2" = 1'-0"



FIRST FLOOR FINISH PLAN - UNIT C
1/8" = 1'-0"

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HAVERHILL ELEMENTARY



KEY PLAN
SCALE: NO SCALE

FINISH PLAN KEY

- INDICATES MATERIAL TYPE
- INDICATES CORRESPONDING SELECTION IN SCHEDULE
- WALL FINISH
- BASE FINISH
- FLOOR FINISH
- COUNTER FINISH
- CABINET FINISH (BASE AND UPPER)
- INDICATES EXTENT OF ATYPICAL FINISH
- INDICATES TRANSITION BETWEEN DISSIMILAR FLOOR MATERIALS
- INDICATES MULTIPLE MATERIAL TYPES ON A SURFACE, REFER TO DETAIL OR ELEVATION
- INDICATES PATTERNED INSTALLATION OF A SINGLE MATERIAL TYPE, REFER TO DETAIL OR ELEVATION
- INDICATES PATTERN INTENT, REFER TO DETAIL OR ELEVATION
- INDICATES PORCELAIN TILE WANSCOT, REFER TO DETAIL
- INDICATES VISUAL DISPLAY BOARD, REFER TO SCHEDULES
- INDICATES PREFABRICATED EDUCATIONAL CASEGOODS, REFER TO SPECIFICATION
- INDICATES CUBBY TYPE - REFER TO TYPICAL DETAILS
- INDICATES NUMBER OF MODULAR CUBBY UNITS PER RUN
- INDICATES TOTAL QUANTITY OF STUDENTS PER RUN
- INDICATES CORNER GUARD, REFER TO SCHEDULE

GENERAL NOTES - FINISH PLAN

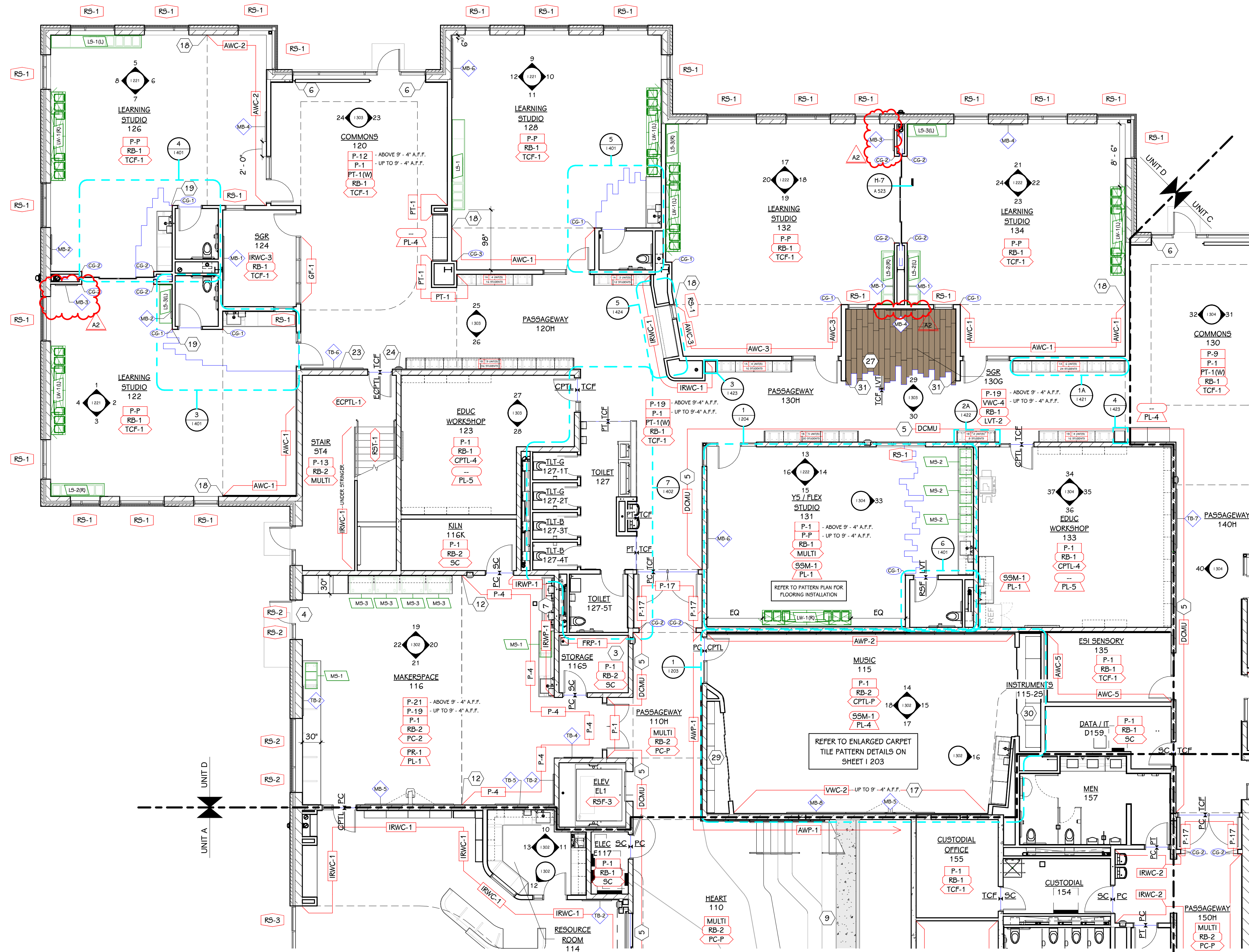
- 1 FINISH TAGS APPLY TO LIKE MATERIALS IN ENTIRE ROOM. I.E. CASEWORK TAG MAY ONLY CALLOUT ONE RUN OF CASEWORK, BUT ALL CASEWORK IN ROOM RECEIVE THE SAME FINISHES, UNLESS TAGGED DIFFERENTLY.
- 2 REFER TO ENLARGED FINISH PLANS AND PATTERN PLANS FOR ADDITIONAL FINISH DETAILS.
- 3 CASEWORK FINISH TAGS DO NOT APPLY TO CUSTOM MILLWORK PIECES. REFER TO ENLARGED MILLWORK DETAILS FOR FINISH MATERIALS.
- 4 CASEWORK FINISH TAGS DO NOT APPLY TO EDUCATIONAL CASEGOOD PIECES. REFER TO TAGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON TYPE AND FINISH.
- 5 WALL MOUNTED DIFFUSERS, GRILLES, ACCESS PANELS, ELECTRICAL PANELS, ETC. ARE TO BE PAINTED WITH AN OIL-BASED PAINT TO MATCH ADJACENT WALL FINISH.
- 6 CEILING ACCESS PANELS ARE TO BE PAINTED TO MATCH ADJACENT CEILING FINISH.
- 7 REFER TO VISUAL DISPLAY BOARD SCHEDULE AND GENERAL NOTES FOR MORE INFORMATION.
- 8 PORCELAIN TILE WANSCOT IS NOT REQUIRED BEHIND STUDENT CUBBIES.

KEYED NOTES - FINISH PLANS

- 1 ALIGN FLOORING TRANSITION BEYOND RADIUS OF BULLNOSE BLOCK.
- 2 PAINT WALL RETURNS AND HORIZONTAL FACE OF BULKHEAD P-1.
- 3 PEP PANELS TO BE INSTALLED ABOVE RUBBER BASE, INSTALL FULL SHEET VERTICALLY ORIENTED.
- 4 INSTALL ROLLER SHADES OVER DOOR AND SIDELITE, ART ROOM ONLY.
- 5 DO NOT APPLY PAINT OR PORCELAIN TILE WANSCOT TO DECORATIVE CONCRETE MASONRY WALLS, TYPICAL.
- 6 RETURN PORCELAIN TILE WANSCOT BACK TO STOREFRONT.
- 7 SKIMCOAT CMU WALL AS REQUIRED FOR SMOOTH IRWP-1 INSTALLATION, REFER TO ELEVATION FOR EXTENTS.
- 8 PROVIDE PEP-1 ALL FACES OF COLUMN WRAP - PROVIDE ALL TRIMS AND OUTSIDE CORNER PIECES AS NECESSARY TO COMPLETE INSTALLATION.
- 9 MEDIUM-GRIND POLISHED CONCRETE STAIR - SEE ARCHITECTURAL STAIR DRAWINGS FOR MORE INFORMATION.
- 10 PFT-1 VERTICALLY STACKED, ALL FACES OF COLUMN WRAP.
- 11 REFER TO SECOND FLOOR FINISH PLAN AND PATTERN ELEVATIONS FOR BULKHEAD PAINTING SCOPE.
- 12 ALIGN PAINT TRANSITION TO BULKHEAD.
- 13 INSTALL THREE WINDOW TREATMENTS.
- 14 VERIFY FINISH EXTENTS WITH FOOD SERVICE EQUIPMENT PRIOR TO INSTALLATION.
- 15 ROLLER SHADE TO BE RECESSED WITHIN CEILING HEADBOX, REFER TO ARCHITECTURAL.
- 16 THERMOFORMED PVC TRIM AT JAMB AND HEAD OF WALL OPENING, REFER TO DETAILS.
- 17 TERMINATE WALLCOVERING AT HEIGHT INDICATED, PROVIDE FRY REGLET ALUMINUM WALLCOVERING BASE/TERMINATION TRIM OR SIMILAR. CLEAR ANODIZED FINISH.
- 18 ALIGN WALL FINISH MATERIAL TRANSITION TO BULKHEAD, REFER TO ELEVATIONS.
- 19 ALIGN FLOORING TRANSITION TO CORNER.
- 20 PROVIDE LEVEL 5 GYPSUM BOARD WALL FINISH.
- 21 ABUSE RESISTANT GYPSUM BOARD PROJECTION SURFACE WITH LEVEL 5 FINISH WITH MITERED DARK BRONZE ANODIZED J-CANAL FRAME, REFER TO ELEVATION.
- 22 PROVIDE CONTINUOUS MITERED FURRING STRIPS ABOVE WANSCOT FOR FLUSH AND FLAT TACKBOARD INSTALLATION, CAULK ALL JOINTS AND PAINT TO MATCH WALL.
- 23 PROVIDE CONTINUOUS MITERED FURRING STRIPS ABOVE WANSCOT FOR FIRE EXTINGUISHER CABINET INSTALLATION, CAULK ALL JOINTS AND PAINT TO MATCH WALL.
- 24 AREA RUG, BY FURNITURE.
- 25 METAL LOCKERS, REFER TO ARCHITECTURAL.
- 26 STAGGER EDGE OF FLOORING TRANSITION, CUT CARPET TILE TO COPE TO FULL WIDTH OF LVT PLANK.
- 27 MEDIUM-GRIND POLISHED CONCRETE INFILL IN METAL PAN STAIRS, PROVIDE (2) INSET STAINLESS STEEL BARS AT NOSING OF EACH STAIR TREAD.
- 28 36" WIDE X 12" DEEP ADJUSTABLE PR-1 SHELVING ON WALL STANDARDS.
- 29 36" WIDE X 24" DEEP ADJUSTABLE PR-1 SHELVING ON WALL STANDARDS.
- 30 PVC TRIM WHERE INDICATED, REFER TO DETAILS.
- 31 WALL FINISH VARIES, REFER TO ELEVATIONS AND DETAILS.

WINDOW TREATMENT KEY

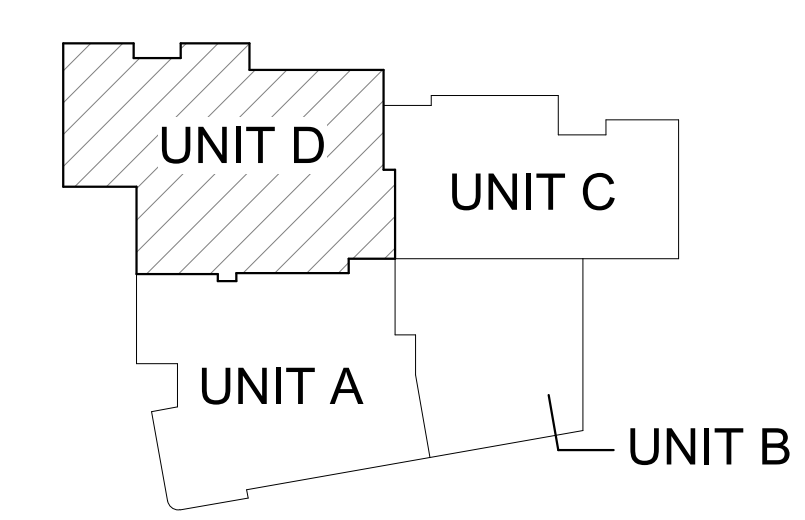
- RS-1 ROLLER SHADE, SINGLE MANUAL SHADE/CLOTHES; 3% LIGHT-FILTERING
 - RS-2 ROLLER SHADE, DUAL MANUAL (INCLUDING DOOR & SIDELITE) SHADE/CLOTHES; 3% LIGHT-FILTERING & BLACKOUT PROVIDE JAMB-MOUNTED CHANNELS FOR LIGHT-BLOCKING
 - RS-3 ROLLER SHADE, DUAL MANUAL SHADE/CLOTHES; 3% LIGHT-FILTERING & BLACKOUT
 - RS-4 ROLLER SHADE, DUAL MOTORIZED SHADE/CLOTHES; 3% LIGHT-FILTERING & BLACKOUT
- 1 REFER TO SPECIFICATION FOR MORE INFORMATION.
 - 2 WINDOW TREATMENT TAGS SHOWN ON PLAN REPRESENTS A SINGLE SHADE.
 - 3 TREATMENT TAGS SHOWN ON EXTERIOR OF WALL FOR CLARITY - AT INTERIOR LOCATIONS, TAG SHOWN INSIDE ROOM FOR MOUNTING.
 - 4 REFER TO FLOOR PLANS, EXTERIOR ELEVATIONS AND FRAME TYPES FOR HEIGHT AND WIDTH OF OPENINGS.
 - 5 WINDOW TREATMENTS ARE TO BE MOUNTED INSIDE OF THE WINDOW OPENING FROM HEAD TO SILL AND JAMB TO JAMB, UNLESS NOTED OTHERWISE.
 - 6 VERIFY ALL DIMENSIONS IN FIELD PRIOR TO FABRICATION.



FIRST FLOOR FINISH PLAN - UNIT D
1/8" = 1'-0"

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HAVERHILL ELEMENTARY



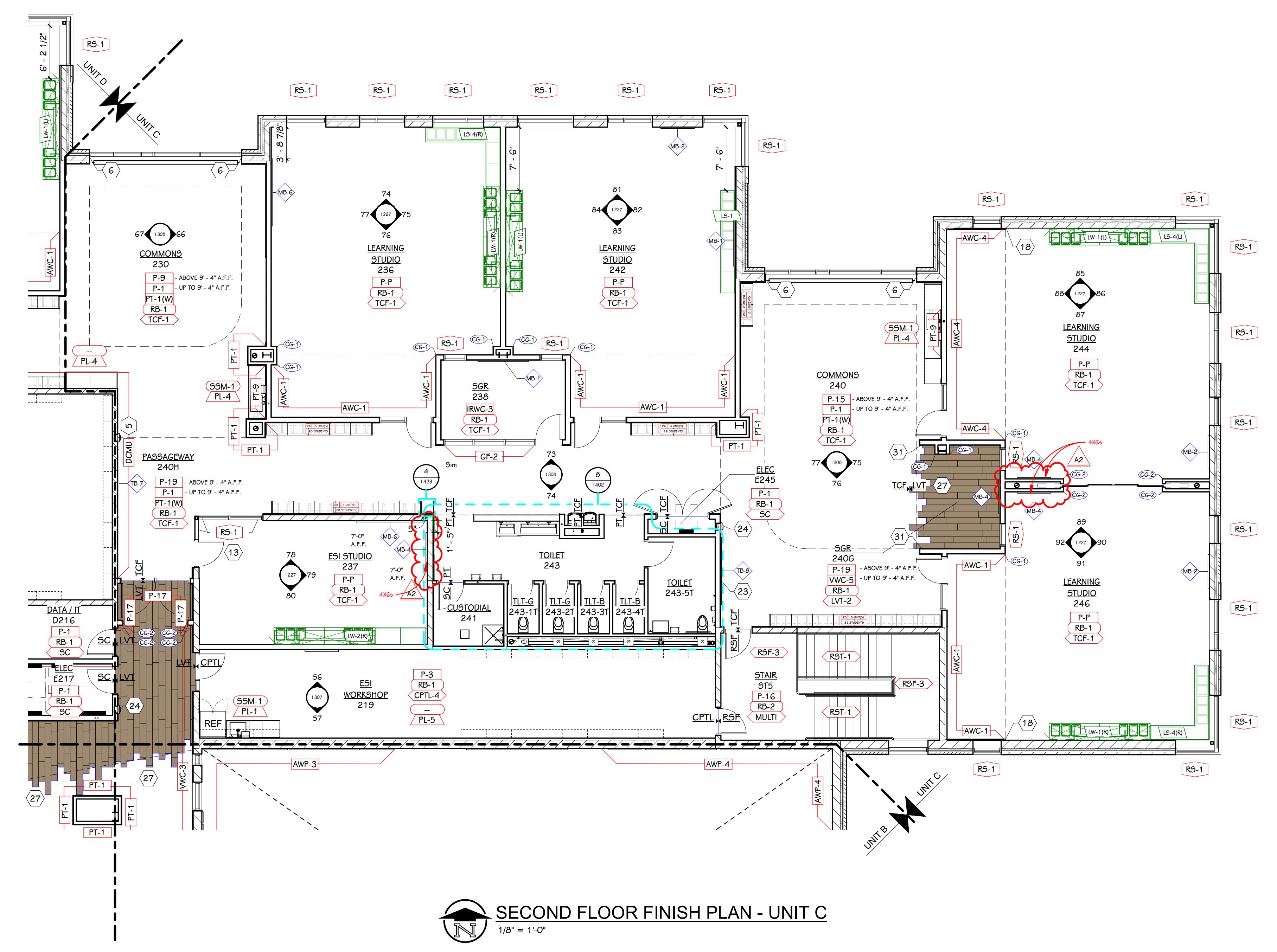
KEY PLAN
SCALE: NO SCALE

- FINISH PLAN KEY**
- INDICATES MATERIAL TYPE
 - INDICATES CORRESPONDING SELECTION IN SCHEDULE
 - WALL FINISH
 - BASE FINISH
 - FLOOR FINISH
 - COUNTER FINISH
 - CABINET FINISH (BASE AND UPPER)
 - INDICATES EXTENT OF ATYPICAL FINISH
 - INDICATES TRANSITION BETWEEN DISSIMILAR FLOOR MATERIALS
 - INDICATES MULTIPLE MATERIAL TYPES ON A SURFACE, REFER TO DETAIL OR ELEVATION
 - INDICATES PATTERNED INSTALLATION OF A SINGLE MATERIAL TYPE, REFER TO DETAIL OR ELEVATION
 - INDICATES PATTERN INTENT, REFER TO DETAIL OR ELEVATION
 - INDICATES PORCELAIN TILE WAINSCOT, REFER TO DETAIL
 - INDICATES VISUAL DISPLAY BOARD, REFER TO SCHEDULES
 - INDICATES PRE-FABRICATED EDUCATIONAL CASEGOODS, REFER TO SPECIFICATION
 - INDICATES CUBBY TYPE - REFER TO TYPICAL DETAILS
 - INDICATES NUMBER OF MODULAR CUBBY UNITS PER RUN
 - INDICATES TOTAL QUANTITY OF STUDENTS PER RUN
 - INDICATES CORNER GUARD, REFER TO SCHEDULE

- GENERAL NOTES - FINISH PLAN**
- 1 FINISH TAGS APPLY TO LIKE MATERIALS IN ENTIRE ROOM. I.E. CASEWORK TAG MAY ONLY CALLOUT ONE RUN OF CASEWORK, BUT ALL CASEWORK IN ROOM RECEIVE THE SAME FINISHES, UNLESS TAGGED DIFFERENTLY.
 - 2 REFER TO ENLARGED FINISH PLANS AND PATTERN PLANS FOR ADDITIONAL FINISH DETAILS.
 - 3 CASEWORK FINISH TAGS DO NOT APPLY TO CUSTOM MILLWORK PIECES. REFER TO ENLARGED MILLWORK DETAILS FOR FINISH MATERIALS.
 - 4 CASEWORK FINISH TAGS DO NOT APPLY TO EDUCATIONAL CASEGOOD PIECES. REFER TO TAGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON TYPE AND FINISH.
 - 5 WALL MOUNTED DIFFUSERS, GRILLES, ACCESS PANELS, ELECTRICAL PANELS, ETC. ARE TO BE PAINTED WITH AN OIL-BASED PAINT TO MATCH THE ADJACENT WALL FINISH.
 - 6 CEILING ACCESS PANELS ARE TO BE PAINTED TO MATCH ADJACENT CEILING FINISH.
 - 7 REFER TO VISUAL DISPLAY BOARD SCHEDULE AND GENERAL NOTES FOR MORE INFORMATION.
 - 8 PORCELAIN TILE WAINSCOT IS NOT REQUIRED BEHIND STUDENT CUBBIES.

- KEYED NOTES - FINISH PLANS**
- 1 ALIGN FLOORING TRANSITION BEYOND RADIUS OF BULLNOSE BLOCK.
 - 2 PAINT WALL RETURNS AND HORIZONTAL FACE OF BULKHEAD P-1.
 - 3 PFP PANELS TO BE INSTALLED ABOVE RUBBER BASE, INSTALL FULL SHEET VERTICALLY ORIENTED.
 - 4 INSTALL ROLLER SHADES OVER DOOR AND SIDELITE, ART ROOM ONLY.
 - 5 DO NOT APPLY PAINT OR PORCELAIN TILE WAINSCOT TO DECORATIVE CONCRETE MASONRY WALLS, TYPICAL.
 - 6 RETURN PORCELAIN TILE WAINSCOT BACK TO STOREFRONT.
 - 7 SKIMCOAT CMU WALL AS REQUIRED FOR SMOOTH IRWP-1 INSTALLATION, REFER TO ELEVATION FOR EXTENTS.
 - 8 PROVIDE PFP-1 ALL FACES OF COLUMN WRAP - PROVIDE ALL TRIMS AND OUTSIDE CORNER PIECES AS NECESSARY TO COMPLETE INSTALLATION.
 - 9 MEDIUM-GRIND POLISHED CONCRETE STAIR - SEE ARCHITECTURAL STAIR DRAWINGS FOR MORE INFORMATION.
 - 10 PFT-1 VERTICALLY STACKED, ALL FACES OF COLUMN WRAP.
 - 11 REFER TO SECOND FLOOR FINISH PLAN AND PATTERN ELEVATIONS FOR BULKHEAD PAINTING SCOPE.
 - 12 ALIGN PAINT TRANSITION TO BULKHEAD.
 - 13 INSTALL THREE WINDOW TREATMENTS.
 - 14 VERIFY FINISH EXTENTS WITH FOOD SERVICE EQUIPMENT PRIOR TO INSTALLATION.
 - 15 ROLLER SHADE TO BE RECESSED WITHIN CEILING HEADBOX, REFER TO ARCHITECTURAL.
 - 16 TRIM/OPERATED PVC TRIM AT JAMB AND HEAD OF WALL OPENING, REFER TO DETAILS.
 - 17 TERMINATE WALLCOVERING AT HEIGHT INDICATED, PROVIDE TRY REGLET ALUMINUM WALLCOVERING BASE/TERMINATION TRIM OR SIMILAR - CLEAR ANODIZED FINISH.
 - 18 ALIGN WALL FINISH MATERIAL TRANSITION TO BULKHEAD, REFER TO ELEVATIONS.
 - 19 ALIGN FLOORING TRANSITION TO CORNER.
 - 20 PROVIDE LEVEL 5 GYPSUM BOARD WALL FINISH.
 - 21 ABUSE RESISTANT GYPSUM BOARD PROJECTION SURFACE WITH LEVEL 5 FINISH WITH MITERED DARK BRONZE ANODIZED J-CANAL FRAME, REFER TO ELEVATION.
 - 22 PROVIDE CONTINUOUS, MITERED FURRING STRIPS ABOVE WAINSCOT FOR FLUSH AND FLAT TACKBOARD INSTALLATION, CAULK ALL JOINTS AND PAINT TO MATCH WALL.
 - 23 PROVIDE CONTINUOUS, MITERED FURRING STRIPS ABOVE WAINSCOT FOR FIRE EXTINGUISHER CABINET INSTALLATION, CAULK ALL JOINTS AND PAINT TO MATCH WALL.
 - 24 AREA RUG, BY FURNITURE.
 - 25 METAL LOCKERS, REFER TO ARCHITECTURAL.
 - 26 STAGGER EDGE OF FLOORING TRANSITION, CUT CARPET TILE TO COPE TO FULL WIDTH OF LVT PLANK.
 - 27 MEDIUM-GRIND POLISHED CONCRETE INFILL IN METAL PAN STAIRS, PROVIDE (2) INSET STAINLESS STEEL BARS AT NOSING OF EACH STAIR TREAD.
 - 28 36" WIDE X 12" DEEP ADJUSTABLE PR-1 SHELVING ON WALL STANDARDS.
 - 29 36" WIDE X 24" DEEP ADJUSTABLE PR-1 SHELVING ON WALL STANDARDS.
 - 30 PVC TRIM WHERE INDICATED, REFER TO DETAILS.
 - 31 WALL FINISH VARIES, REFER TO ELEVATIONS AND DETAILS.

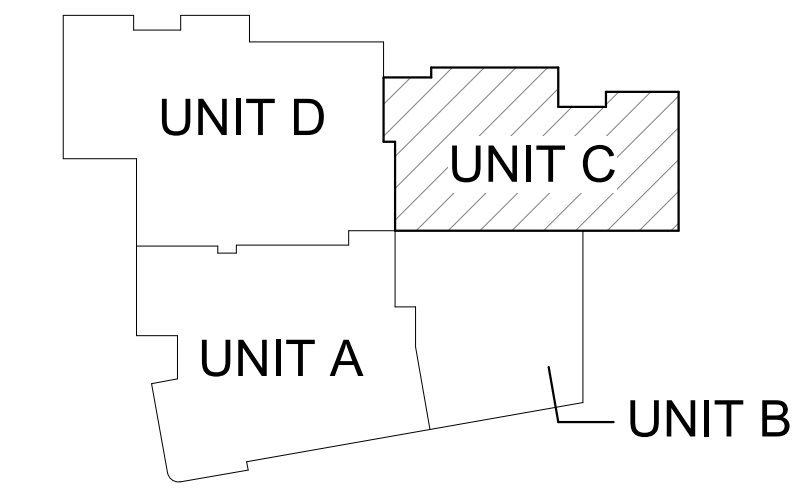
- WINDOW TREATMENT KEY**
- RS-1 ROLLER SHADE, SINGLE MANUAL SHADE/CLOTHES; 3% LIGHT-FILTERING
 - RS-2 ROLLER SHADE, DUAL MANUAL (INCLUDING DOOR & SIDELITE) SHADE/CLOTHES; 3% LIGHT-FILTERING & BLACKOUT PROVIDE JAMB-MOUNTED CHANNELS FOR LIGHT-BLOCKING
 - RS-3 ROLLER SHADE, DUAL MANUAL SHADE/CLOTHES; 3% LIGHT-FILTERING & BLACKOUT
 - RS-4 ROLLER SHADE, DUAL MOTORIZED SHADE/CLOTHES; 3% LIGHT-FILTERING & BLACKOUT
- 1 REFER TO SPECIFICATION FOR MORE INFORMATION.
 - 2 WINDOW TREATMENT TAGS SHOWN ON PLAN REPRESENTS A SINGLE SHADE.
 - 3 TREATMENT TAGS SHOWN ON EXTERIOR OF WALL FOR CLARITY - AT INTERIOR LOCATIONS, TAG SHOWN INSIDE ROOM FOR MOUNTING.
 - 4 REFER TO FLOOR PLANS, EXTERIOR ELEVATIONS AND FRAME TYPES FOR HEIGHT AND WIDTH OF OPENINGS.
 - 5 WINDOW TREATMENTS ARE TO BE MOUNTED INSIDE OF THE WINDOW OPENING FROM HEAD TO SILL AND JAMB TO JAMB, UNLESS NOTED OTHERWISE.
 - 6 VERIFY ALL DIMENSIONS IN FIELD PRIOR TO FABRICATION.



SECOND FLOOR FINISH PLAN - UNIT C
1/8" = 1'-0"

THIS DRAWING SHEET IS INTENDED TO BE PLOTTED IN COLOR. IF THIS TEXT APPEARS IN BLACK AND WHITE, IT IS PLOTTED INCORRECTLY. DISCARD AND OBTAIN AN ACCURATE DRAWING

HAVERHILL ELEMENTARY



KEY PLAN
SCALE: NO SCALE

FINISH PLAN KEY

- INDICATES MATERIAL TYPE
- INDICATES CORRESPONDING SELECTION IN SCHEDULE
- WALL FINISH
- BASE FINISH
- FLOOR FINISH
- COUNTER FINISH
- CABINET FINISH (BASE AND UPPER)
- INDICATES EXTENT OF ATYPICAL FINISH
- INDICATES TRANSITION BETWEEN DISSIMILAR FLOOR MATERIALS
- INDICATES MULTIPLE MATERIAL TYPES ON A SURFACE, REFER TO DETAIL OR ELEVATION
- INDICATES PATTERNED INSTALLATION OF A SINGLE MATERIAL TYPE, REFER TO DETAIL OR ELEVATION
- INDICATES PATTERN INTENT, REFER TO DETAIL OR ELEVATION
- INDICATES PORCELAIN TILE WANSCOT, REFER TO DETAIL
- INDICATES VISUAL DISPLAY BOARD, REFER TO SCHEDULES
- INDICATES PRE-FABRICATED EDUCATIONAL CASEGOODS, REFER TO SPECIFICATION
- INDICATES CUBBY TYPE - REFER TO TYPICAL DETAILS
- INDICATES NUMBER OF MODULAR CUBBY UNITS PER RUN
- INDICATES TOTAL QUANTITY OF STUDENTS PER RUN
- INDICATES CORNER GUARD, REFER TO SCHEDULE

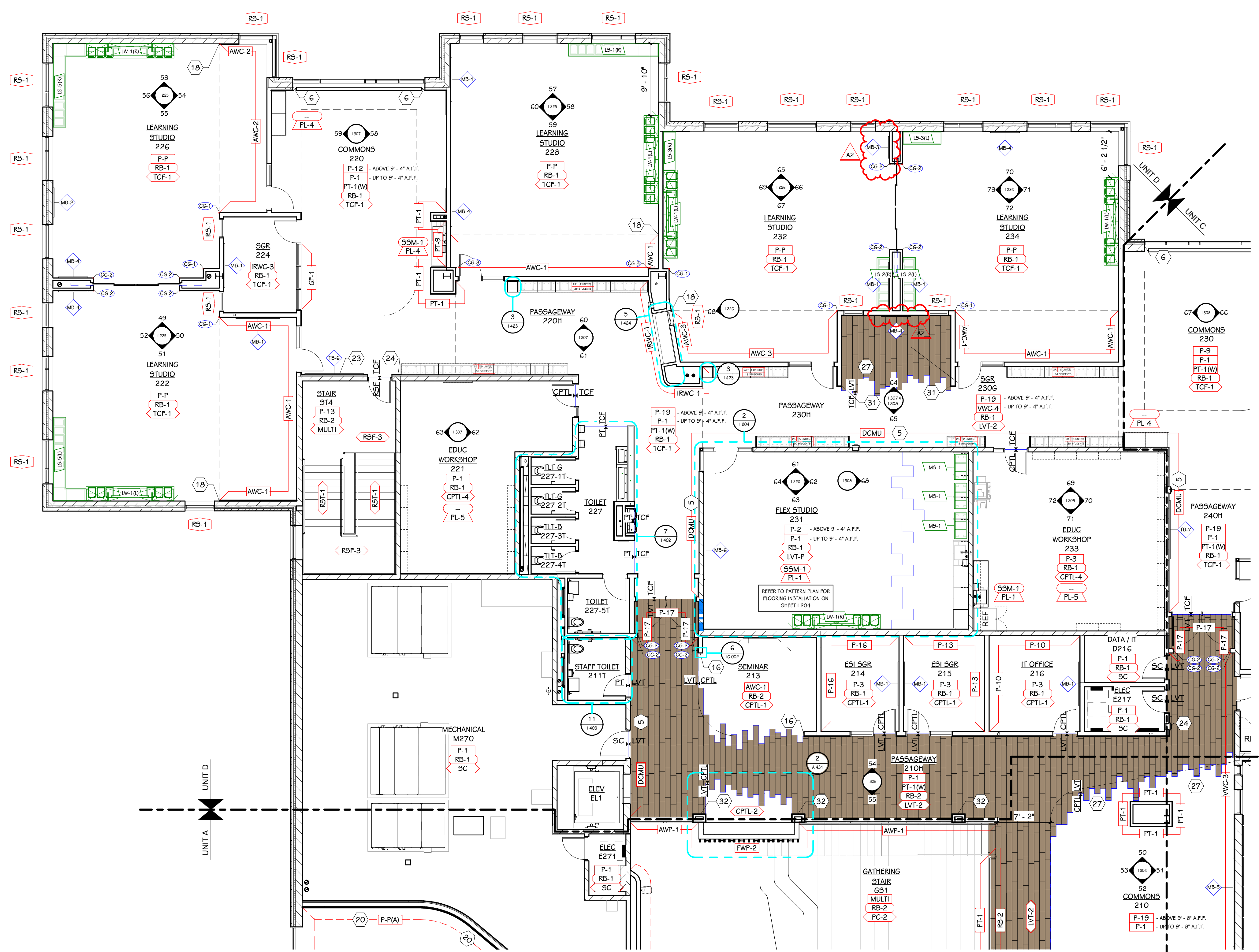
- GENERAL NOTES - FINISH PLAN**
- 1 FINISH TAGS APPLY TO LIKE MATERIALS IN ENTIRE ROOM. I.E. CASEWORK TAG MAY ONLY CALLOUT ONE RUN OF CASEWORK, BUT ALL CASEWORK IN ROOM RECEIVE THE SAME FINISHES, UNLESS TAGGED DIFFERENTLY.
 - 2 REFER TO ENLARGED FINISH PLANS AND PATTERN PLANS FOR ADDITIONAL FINISH DETAILS.
 - 3 CASEWORK FINISH TAGS DO NOT APPLY TO CUSTOM MILLWORK PIECES. REFER TO ENLARGED MILLWORK DETAILS FOR FINISH MATERIALS.
 - 4 CASEWORK FINISH TAGS DO NOT APPLY TO EDUCATIONAL CASEGOOD PIECES. REFER TO TAGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON TYPE AND FINISH.
 - 5 WALL MOUNTED DIFFUSERS, GRILLES, ACCESS PANELS, ELECTRICAL PANELS, ETC. ARE TO BE PAINTED WITH AN OIL-BASED PAINT TO MATCH THE ADJACENT WALL FINISH.
 - 6 CEILING ACCESS PANELS ARE TO BE PAINTED TO MATCH ADJACENT CEILING FINISH.
 - 7 REFER TO VISUAL DISPLAY BOARD SCHEDULE AND GENERAL NOTES FOR MORE INFORMATION.
 - 8 PORCELAIN TILE WANSCOT IS NOT REQUIRED BEHIND STUDENT CUBBIES.

- KEYED NOTES - FINISH PLANS**
- 1 ALIGN FLOORING TRANSITION BEYOND RADIUS OF BULLNOSE BLOCK.
 - 2 PAINT WALL RETURNS AND HORIZONTAL FACE OF BULKHEAD P-1.
 - 3 PEP PANELS TO BE INSTALLED ABOVE RUBBER BASE, INSTALL FULL SHEET VERTICALLY ORIENTED.
 - 4 INSTALL ROLLER SHADES OVER DOOR AND SIDELITE, ART ROOM ONLY.
 - 5 DO NOT APPLY PAINT OR PORCELAIN TILE WANSCOT TO DECORATIVE CONCRETE MASONRY WALLS, TYPICAL.
 - 6 RETURN PORCELAIN TILE WANSCOT BACK TO STOREFRONT.
 - 7 SKIMCOAT CMU WALL AS REQUIRED FOR SMOOTH IRWP-1 INSTALLATION, REFER TO ELEVATION FOR EXTENTS.
 - 8 PROVIDE PEP-1 ALL FACES OF COLUMN WRAP - PROVIDE ALL TRIMS AND OUTSIDE CORNER PIECES AS NECESSARY TO COMPLETE INSTALLATION.
 - 9 MEDIUM-GRIND POLISHED CONCRETE STAIR - SEE ARCHITECTURAL STAIR DRAWINGS FOR MORE INFORMATION.
 - 10 PFT-1 VERTICALLY STACKED, ALL FACES OF COLUMN WRAP.
 - 11 REFER TO SECOND FLOOR FINISH PLAN AND PATTERN ELEVATIONS FOR BULKHEAD PAINTING SCOPE.
 - 12 ALIGN PAINT TRANSITION TO BULKHEAD.
 - 13 INSTALL THREE WINDOW TREATMENTS.
 - 14 VERIFY FINISH EXTENTS WITH FOOD SERVICE EQUIPMENT PRIOR TO INSTALLATION.
 - 15 ROLLER SHADE TO BE RECESSED WITHIN CEILING HEADBOX, REFER TO ARCHITECTURAL.
 - 16 THERMOFORMED PVC TRIM AT JAMB AND HEAD OF WALL OPENING, REFER TO DETAILS.
 - 17 TERMINATE WALLCOVERING AT HEIGHT INDICATED, PROVIDE FRY REGLET ALUMINUM WALLCOVERING BASE/TERMINATION TRIM OR SIMILAR. CLEAR ANODIZED FINISH.
 - 18 ALIGN WALL FINISH MATERIAL TRANSITION TO BULKHEAD, REFER TO ELEVATIONS.
 - 19 ALIGN FLOORING TRANSITION TO CORNER.
 - 20 PROVIDE LEVEL 5 GYPSUM BOARD WALL FINISH.
 - 21 ABUSE RESISTANT GYPSUM BOARD PROJECTION SURFACE WITH LEVEL 5 FINISH WITH MITERED DARK BRONZE ANODIZED J-CANNEL FRAME, REFER TO ELEVATION.
 - 22 PROVIDE CONTINUOUS MITERED FURRING STRIPS ABOVE WANSCOT FOR FLUSH AND FLAT TACKBOARD INSTALLATION, CAULK ALL JOINTS AND PAINT TO MATCH WALL.
 - 23 PROVIDE CONTINUOUS MITERED FURRING STRIPS ABOVE WANSCOT FOR FIRE EXTINGUISHER CABINET INSTALLATION, CAULK ALL JOINTS AND PAINT TO MATCH WALL.
 - 24 AREA RUG, BY FURNITURE.
 - 25 METAL LOCKERS, REFER TO ARCHITECTURAL.
 - 26 STAGGER EDGE OF FLOORING TRANSITION, CUT CARPET TILE TO COPE TO FULL WIDTH OF LVT PLANK.
 - 27 MEDIUM-GRIND POLISHED CONCRETE INFILL IN METAL PAN STAIRS, PROVIDE (2) INSET STAINLESS STEEL BARS AT NOSING OF EACH STAIR TREAD.
 - 28 36" WIDE X 12" DEEP ADJUSTABLE PR-1 SHELVING ON WALL STANDARDS.
 - 29 36" WIDE X 24" DEEP ADJUSTABLE PR-1 SHELVING ON WALL STANDARDS.
 - 30 PVC TRIM WHERE INDICATED, REFER TO DETAILS.
 - 31 WALL FINISH VARIES, REFER TO ELEVATIONS AND DETAILS.
 - 32

WINDOW TREATMENT KEY

RS-1	ROLLER SHADE, SINGLE MANUAL SHADE/CLOTHES; 3% LIGHT-FILTERING
RS-2	ROLLER SHADE, DUAL MANUAL (INCLUDING DOOR & SIDELITE) SHADE/CLOTHES; 3% LIGHT-FILTERING & BLACKOUT PROVIDE JAMB-MOUNTED CHANNELS FOR LIGHT-BLOCKING
RS-3	ROLLER SHADE, DUAL MANUAL SHADE/CLOTHES; 3% LIGHT-FILTERING & BLACKOUT
RS-4	ROLLER SHADE, DUAL MOTORIZED SHADE/CLOTHES; 3% LIGHT-FILTERING & BLACKOUT

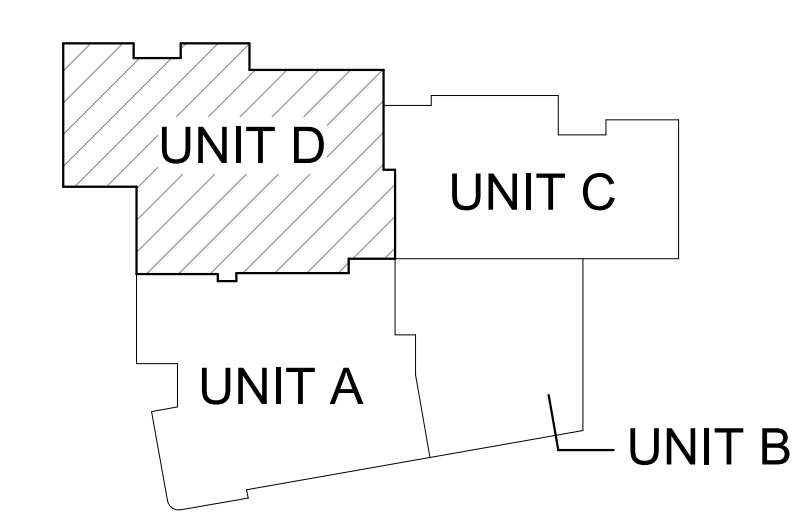
- 1 REFER TO SPECIFICATION FOR MORE INFORMATION.
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- 5 WINDOW TREATMENTS ARE TO BE MOUNTED INSIDE OF THE WINDOW OPENING FROM HEAD TO SILL AND JAMB TO JAMB, UNLESS NOTED OTHERWISE.
- 6 VERIFY ALL DIMENSIONS IN FIELD PRIOR TO FABRICATION.



SECOND FLOOR FINISH PLAN - UNIT D
1/8" = 1'-0"

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HAVERRHILL ELEMENTARY



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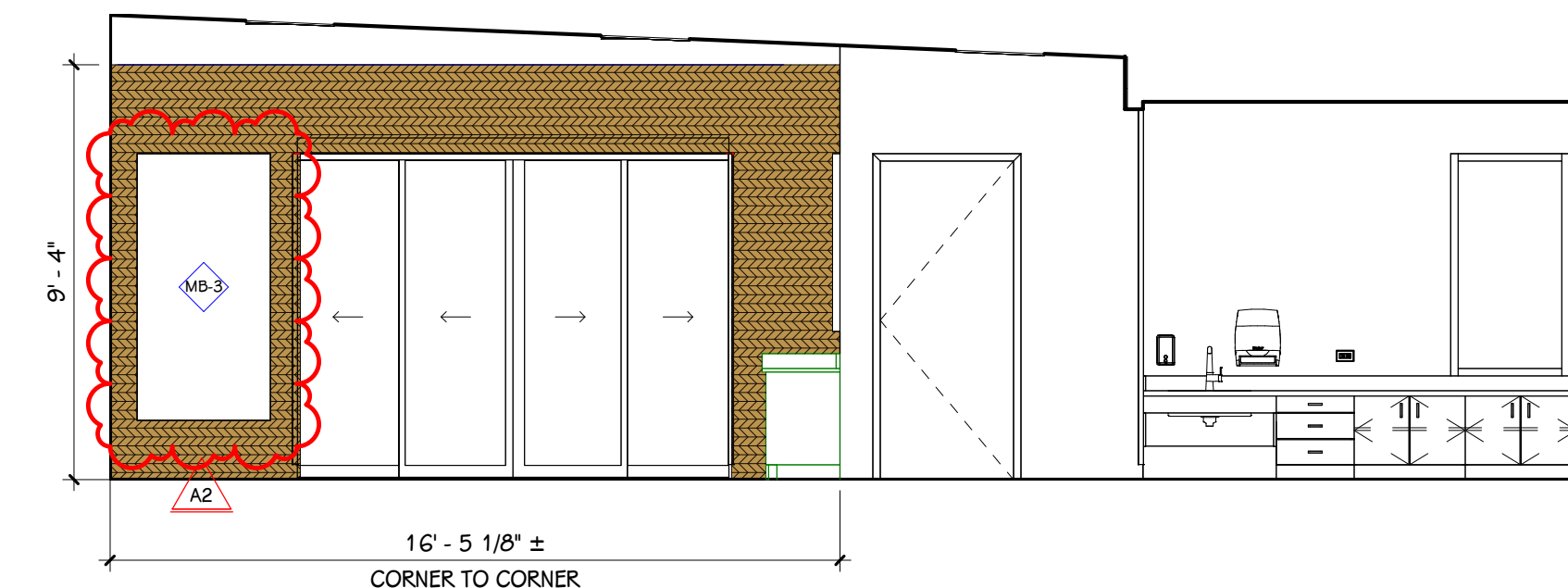
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 - ABUSE RESISTANT GYPSUM BOARD PROJECTION SURFACE WITH LEVEL 5 FINISH WITH MITERED DARK BRONZE ANODIZED J-CHANNEL FRAME. REFER TO ELEVATION.
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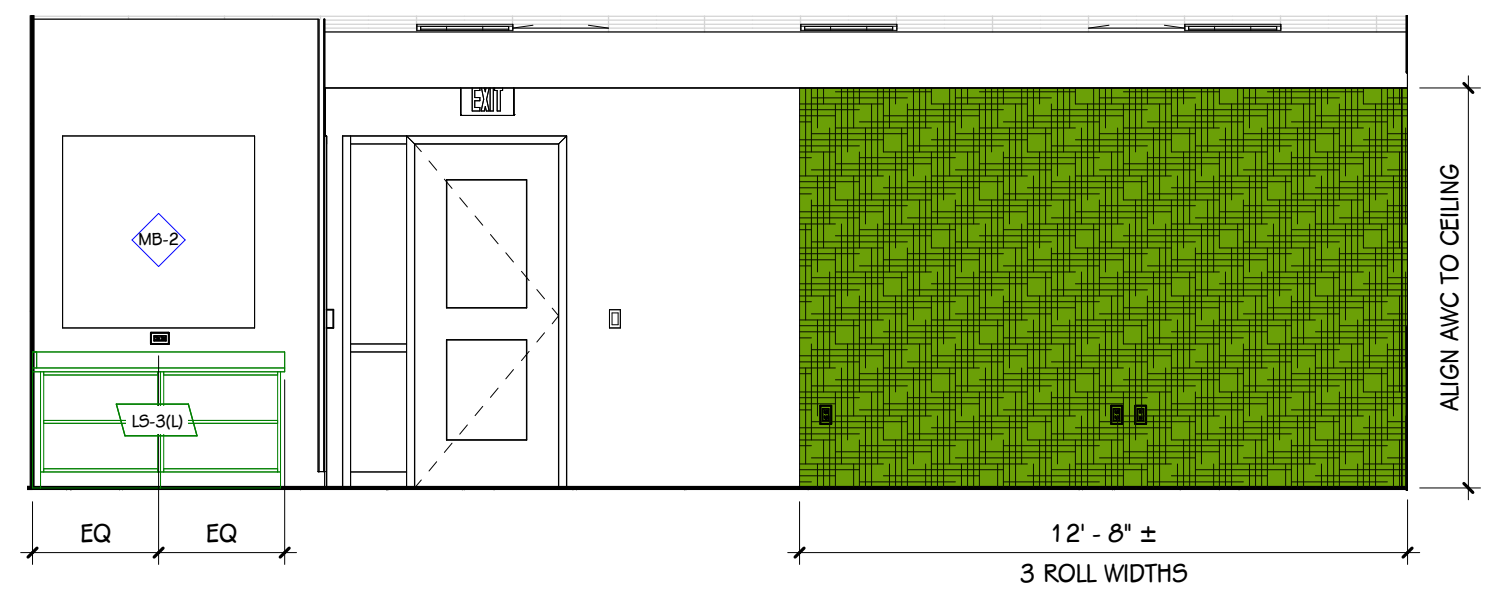
WINDOW TREATMENT KEY

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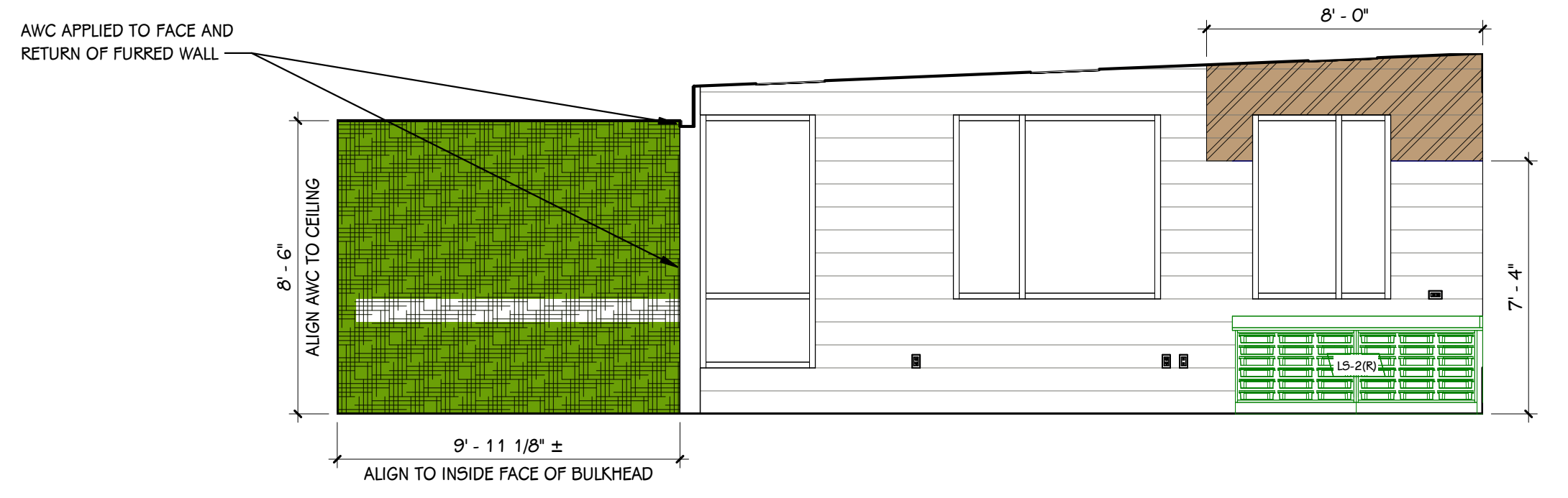
- REFER TO SPECIFICATION FOR MORE INFORMATION.
- WINDOW TREATMENT TAGS SHOWN ON PLAN REPRESENTS A SINGLE SHADE.
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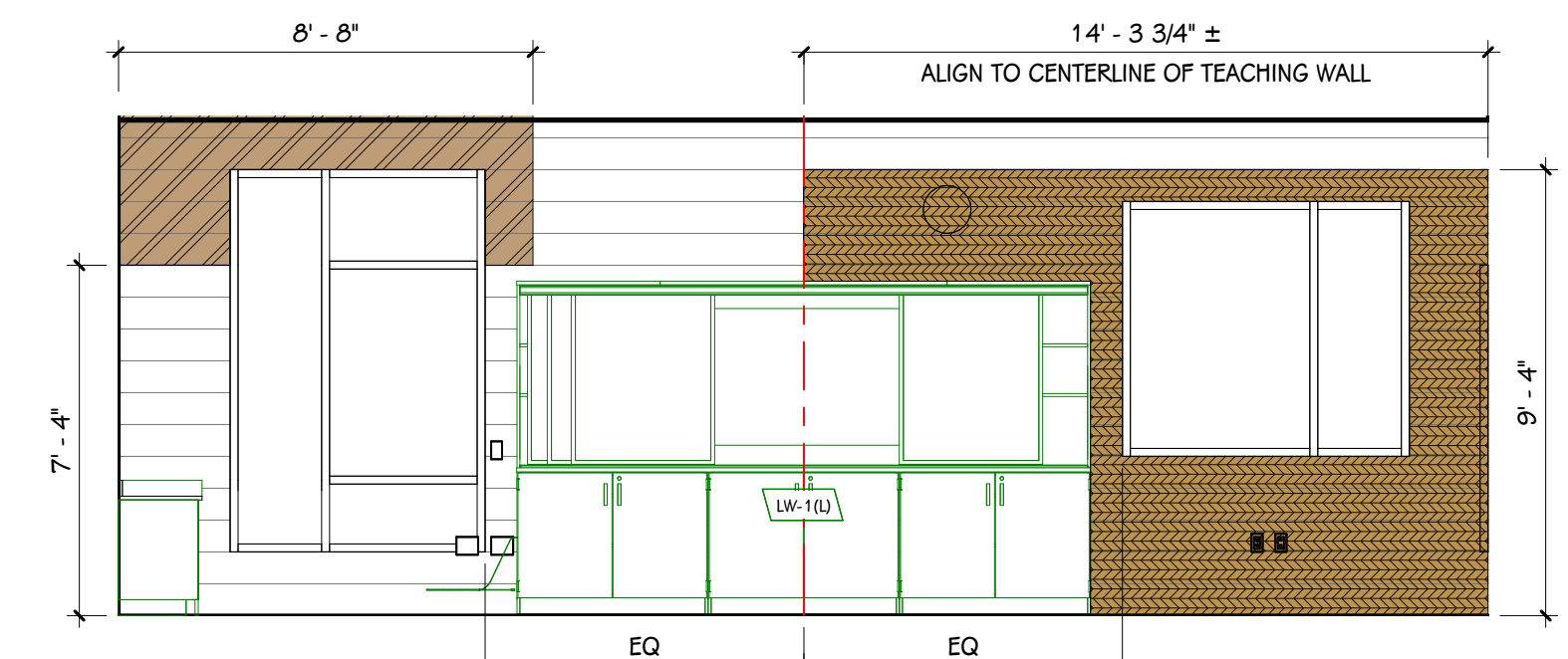
1 LEARNING STUDIO 122 - NORTH
1/4" = 1'-0"



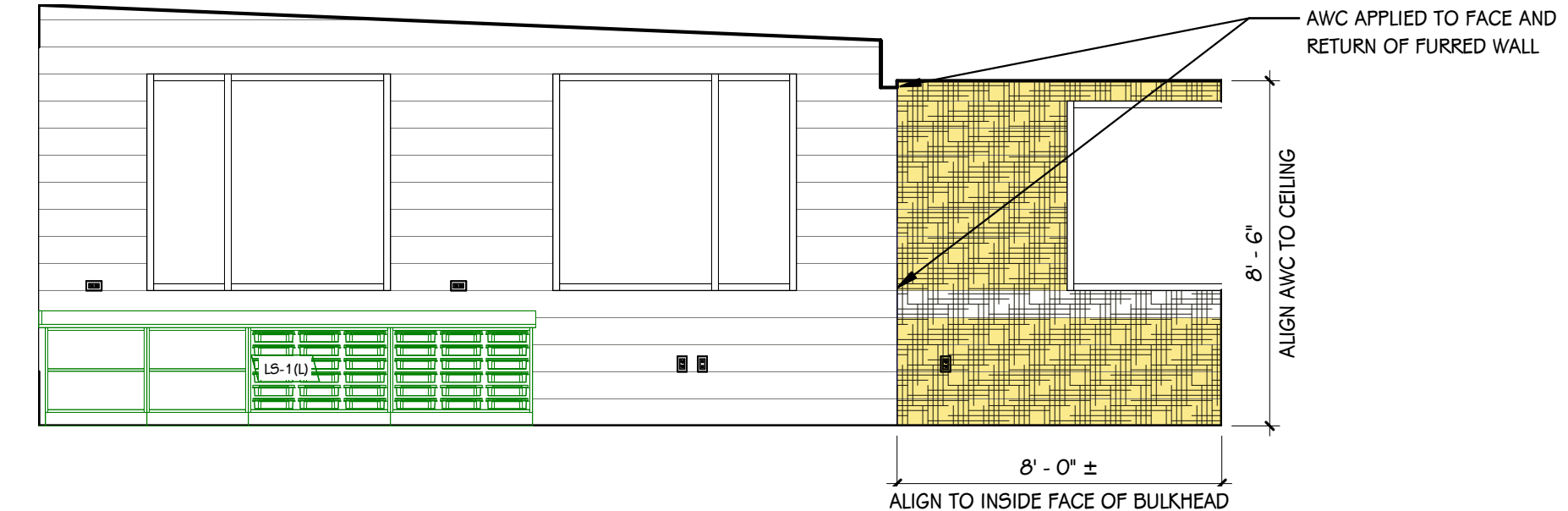
2 LEARNING STUDIO 122 - EAST
1/4" = 1'-0"



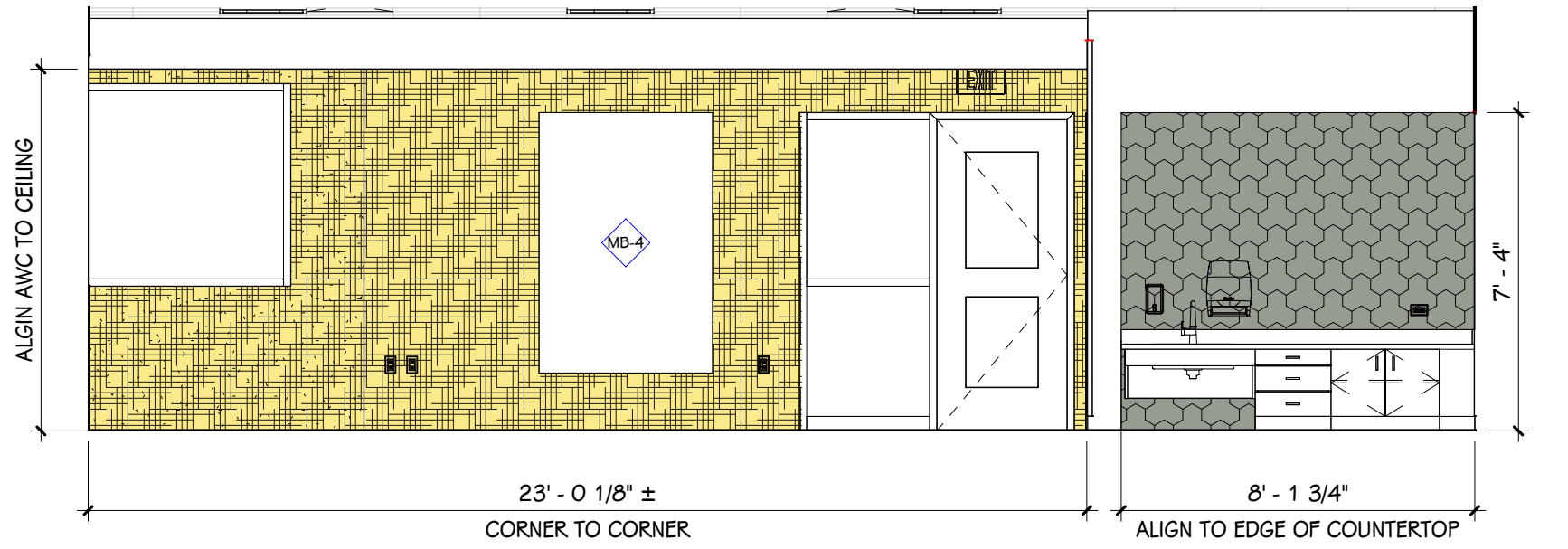
3 LEARNING STUDIO 122 - SOUTH
1/4" = 1'-0"



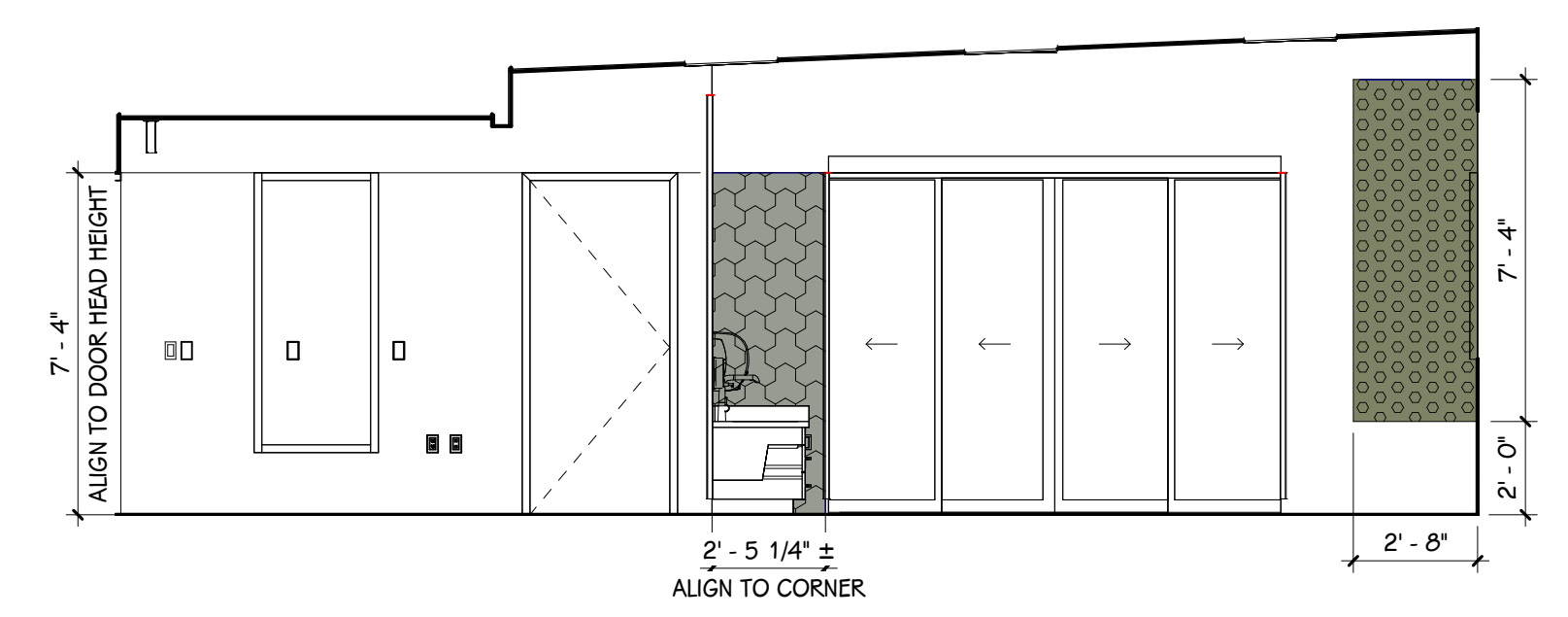
4 LEARNING STUDIO 122 - WEST
1/4" = 1'-0"



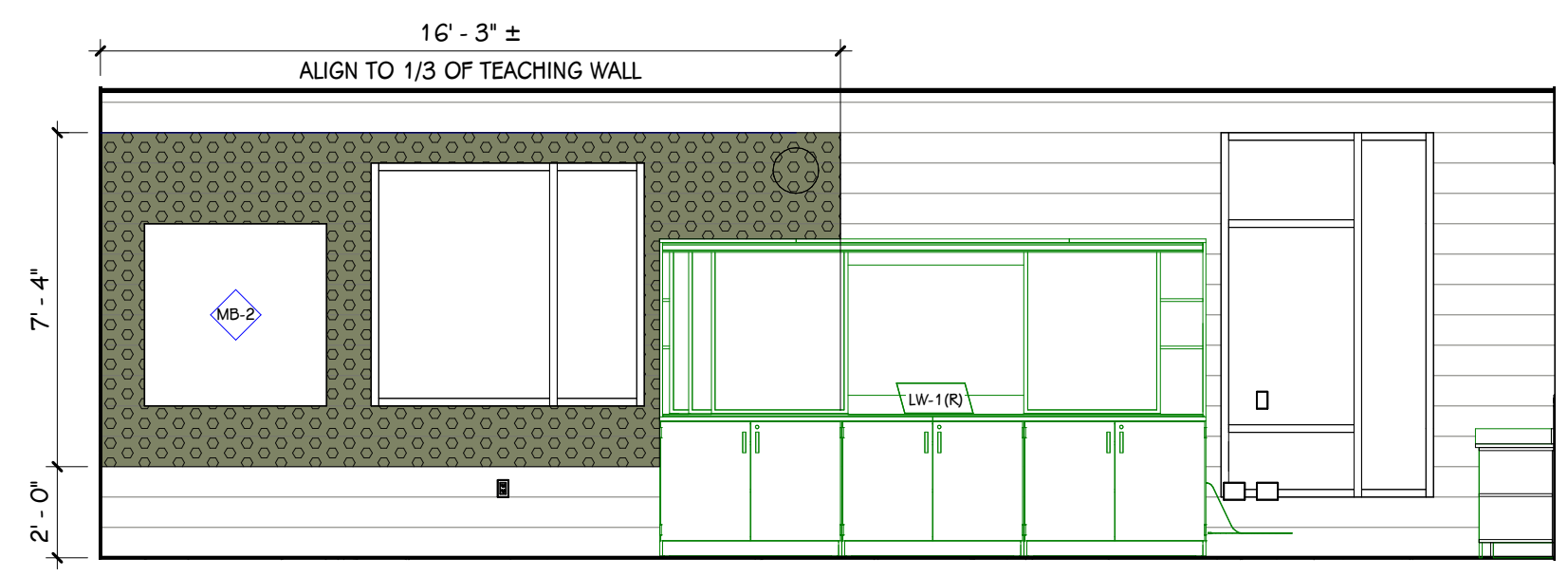
5 LEARNING STUDIO 126 - NORTH
1/4" = 1'-0"



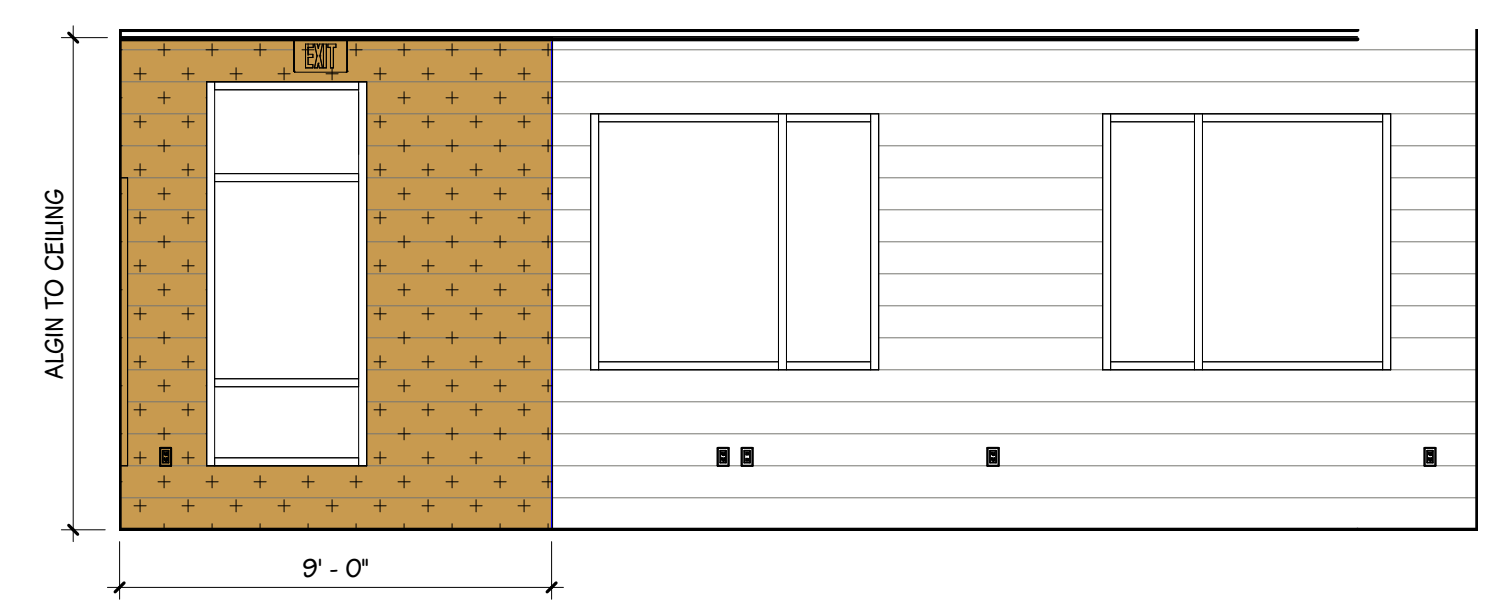
6 LEARNING STUDIO 126 - EAST
1/4" = 1'-0"



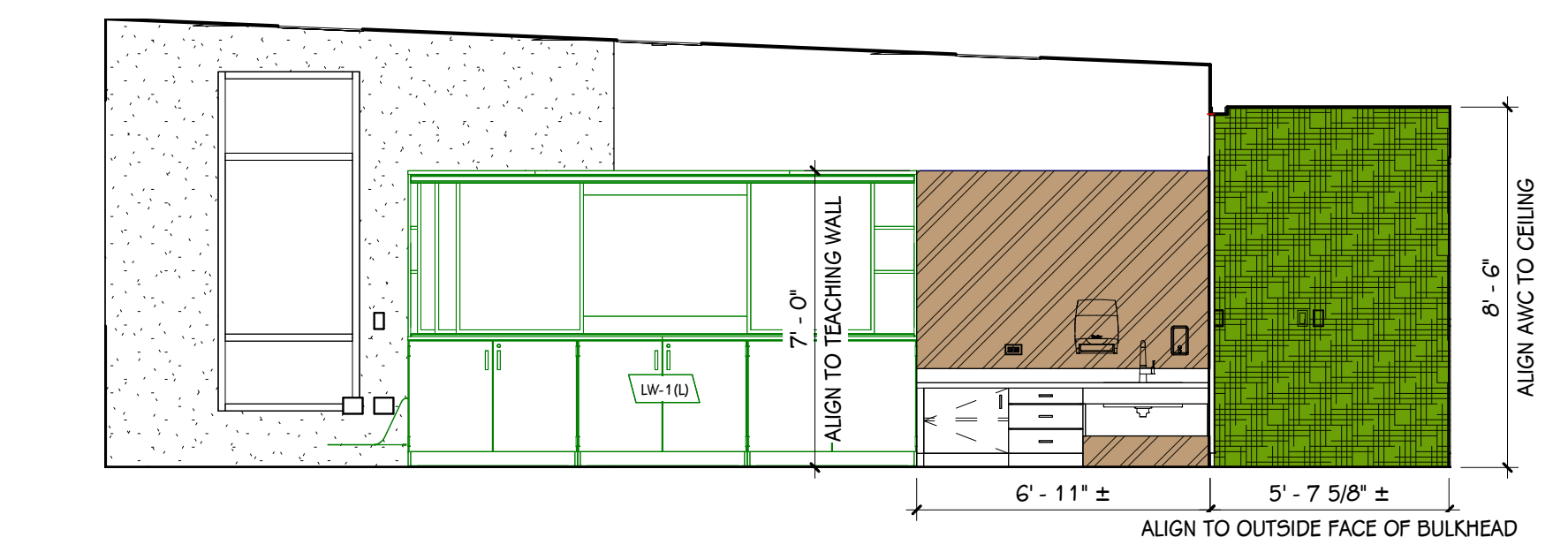
7 LEARNING STUDIO 126 - SOUTH
1/4" = 1'-0"



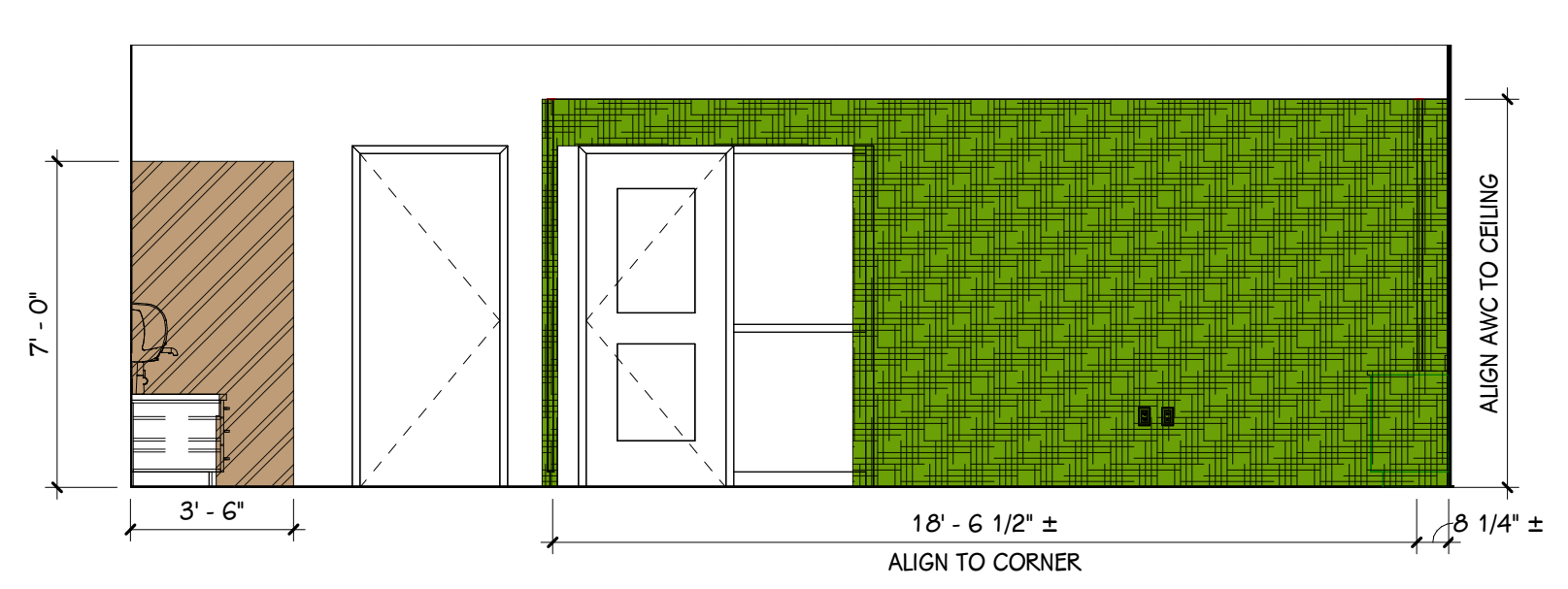
8 LEARNING STUDIO 126 - WEST
1/4" = 1'-0"



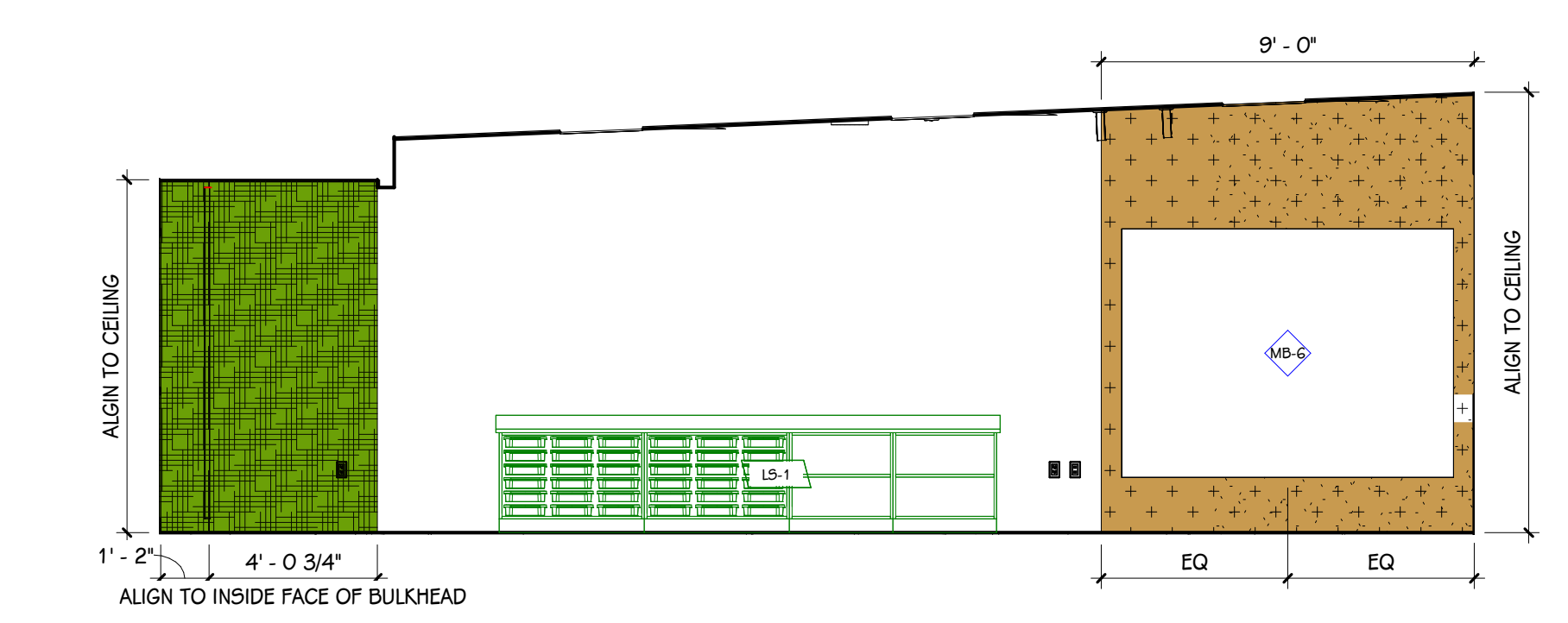
9 LEARNING STUDIO 128 - NORTH
1/4" = 1'-0"



10 LEARNING STUDIO 128 - EAST
1/4" = 1'-0"



11 LEARNING STUDIO 128 - SOUTH
1/4" = 1'-0"



12 LEARNING STUDIO 128 - WEST
1/4" = 1'-0"

GENERAL NOTES - PATTERN ELEVATIONS

- 1 REFER TO FINISH PLANS FOR INTERIOR ELEVATIONS OF CASEWORK AND NON-PATTERNED FINISH DETAILS.
- 2 REFER TO MATERIAL SELECTION SCHEDULE, FINISH PLANS, AND SPECIFICATION FOR ADDITIONAL FINISH INFORMATION.
- 3 REFER TO REFLECTED CEILING PLANS FOR CEILING AND BULKHEAD HEIGHTS AND FINISHES.
- 4 NOT ALL MATERIALS ARE ILLUSTRATED. REFER TO FINISH PLANS AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION. (E. RUBBER BASE NOT INDICATED, INSTALL PER FINISH PLAN)
- 5 ALIGN PATTERN TO NEAREST HORIZONTAL MASONRY JOINT, UNLESS NOTED OTHERWISE.
- 6 WHERE PATTERNS ARE INDICATED TO ALIGN TO CASEWORK OR SHELVING, COORDINATE WITH APPROVED SHOP DRAWINGS.

COLOR LEGEND - PATTERN ELEVATIONS

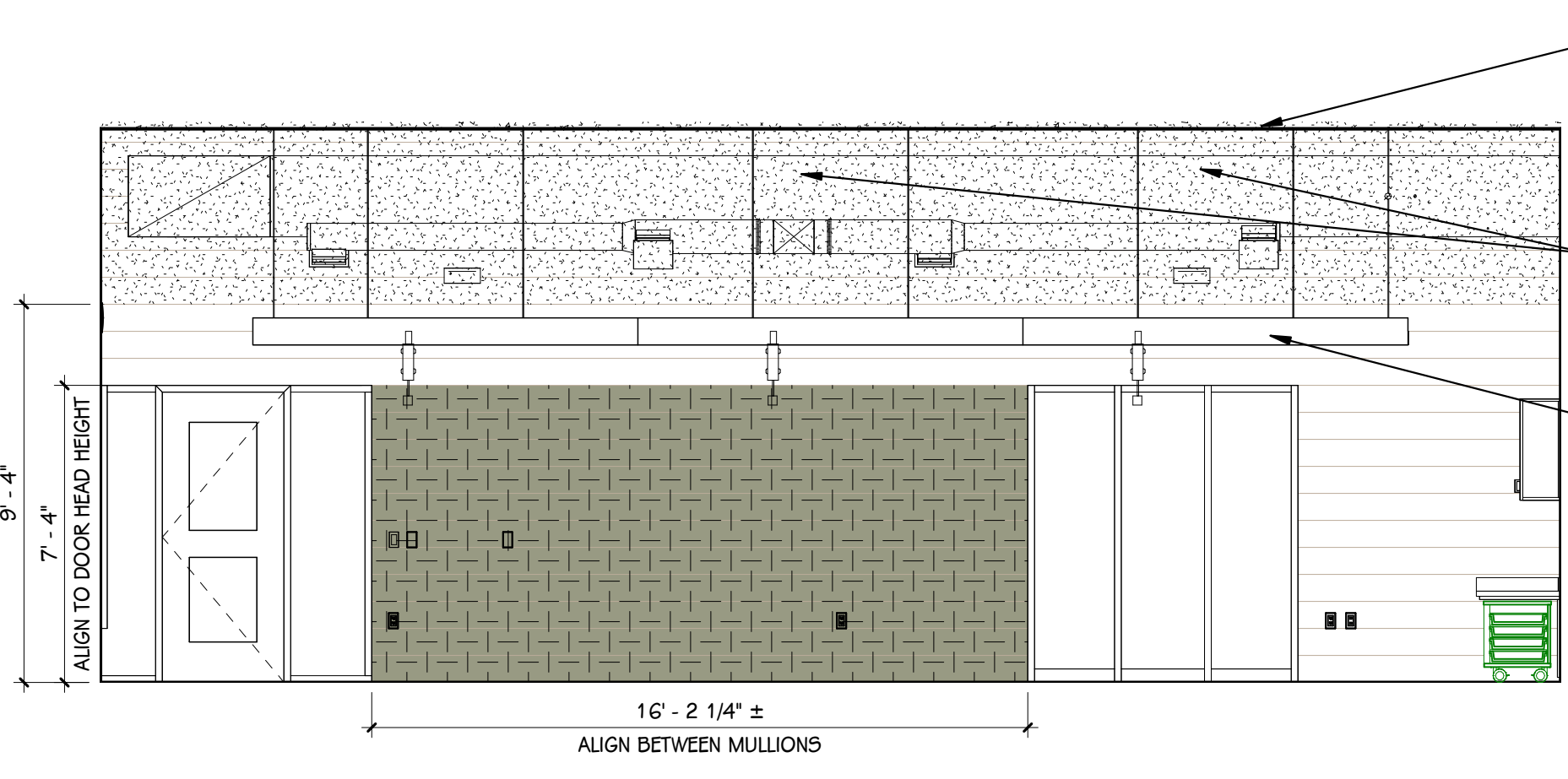
	AWC-1: GHERKIN		P-9: RIVERWAY
	AWC-2: BEEHIVE		P-10: TEMPE STAR
	AWC-3: MURALLA		P-11: HARMONIC TAN
	AWC-4: VINTAGE		P-12: ALCHEMY
	P-4: GREEN ONYX		P-13: DIFFERENT GOLD
	P-5: ARTICHOKE		P-14: MESA TAN
	P-6: OAKMOSS		P-15: BRANDYWINE
	P-7: VOGUE GREEN		P-16: ROCKWOOD TERRA COTTA
	P-8: ACACIA HAZE		

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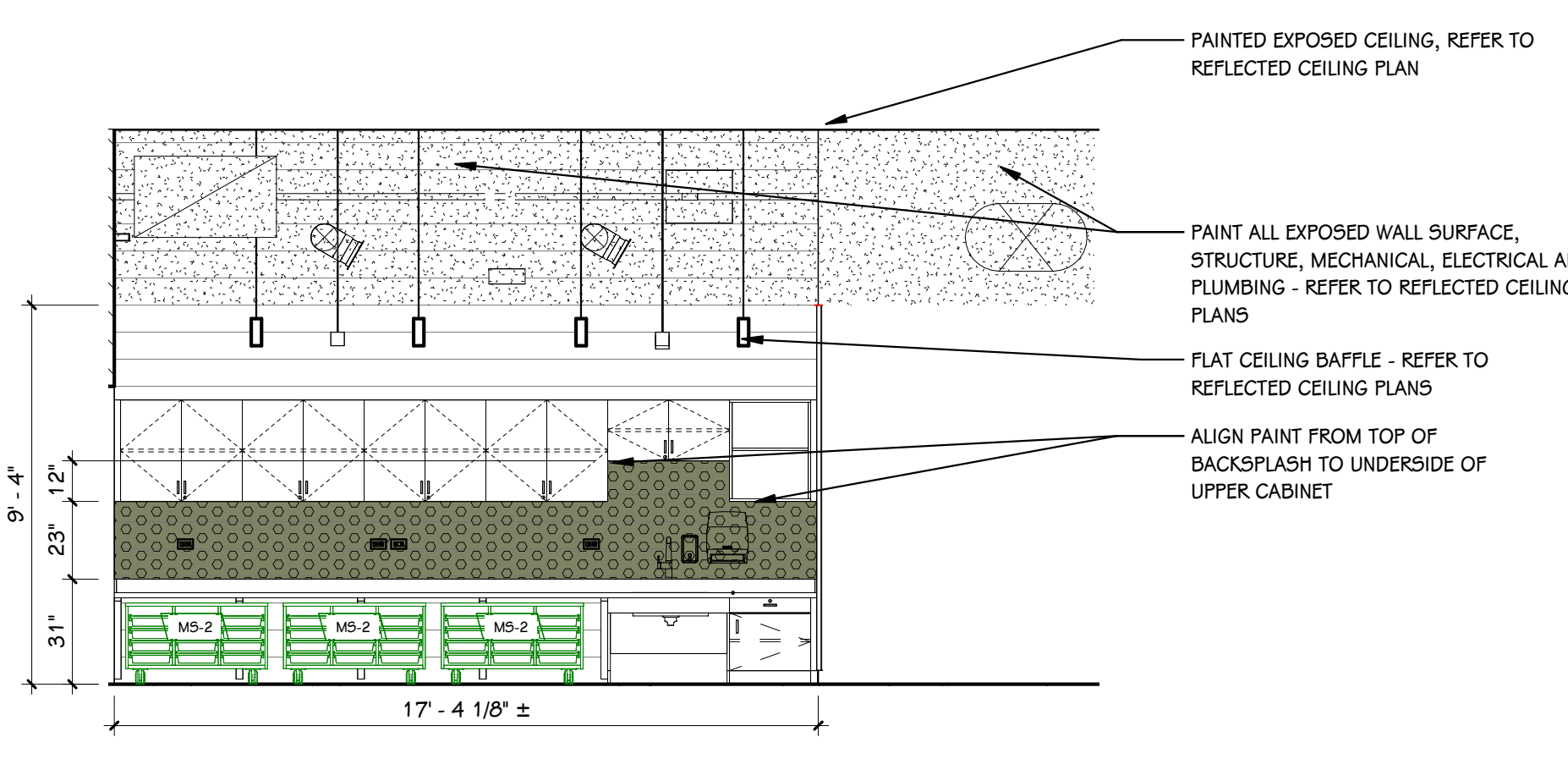
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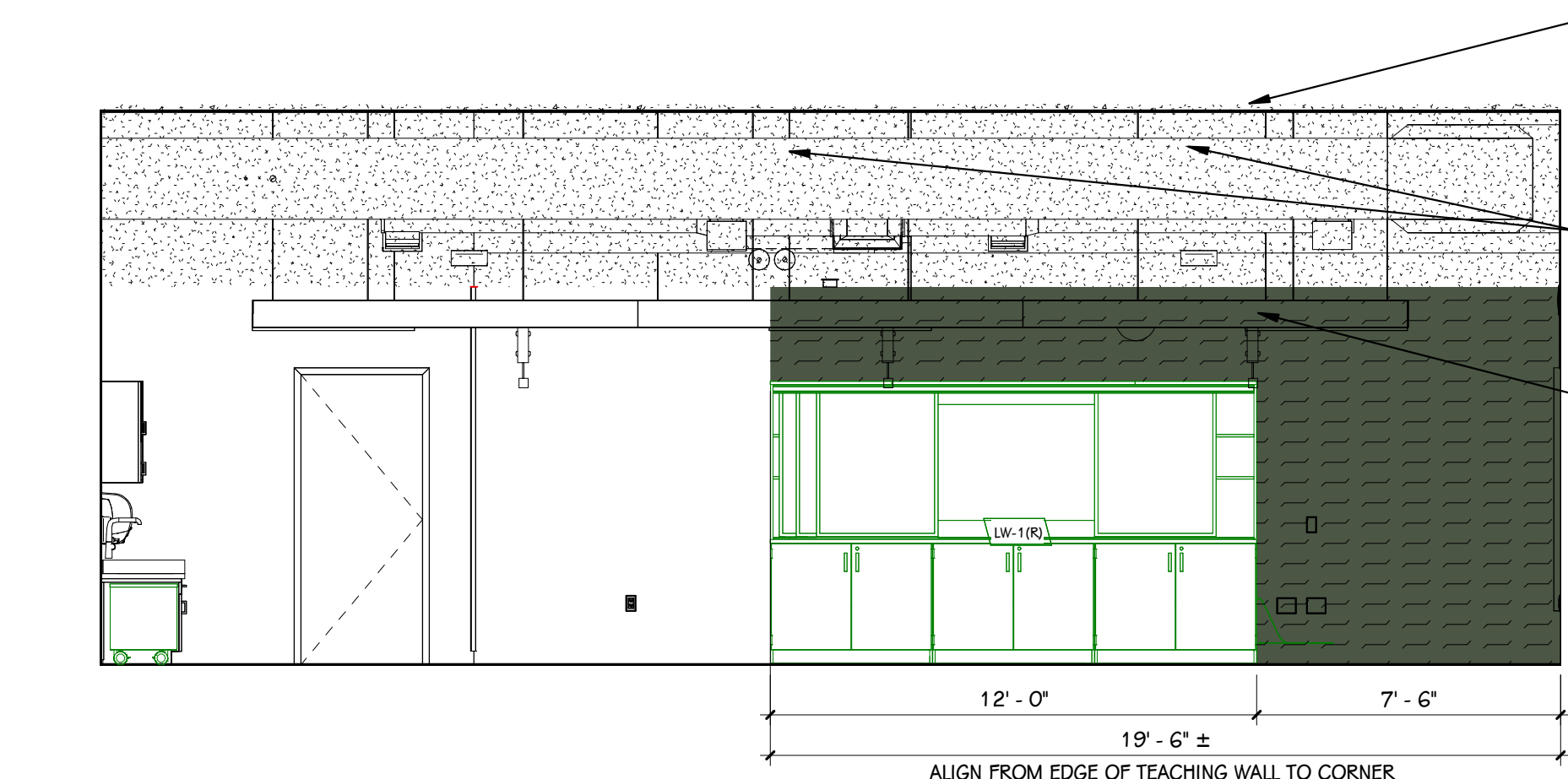
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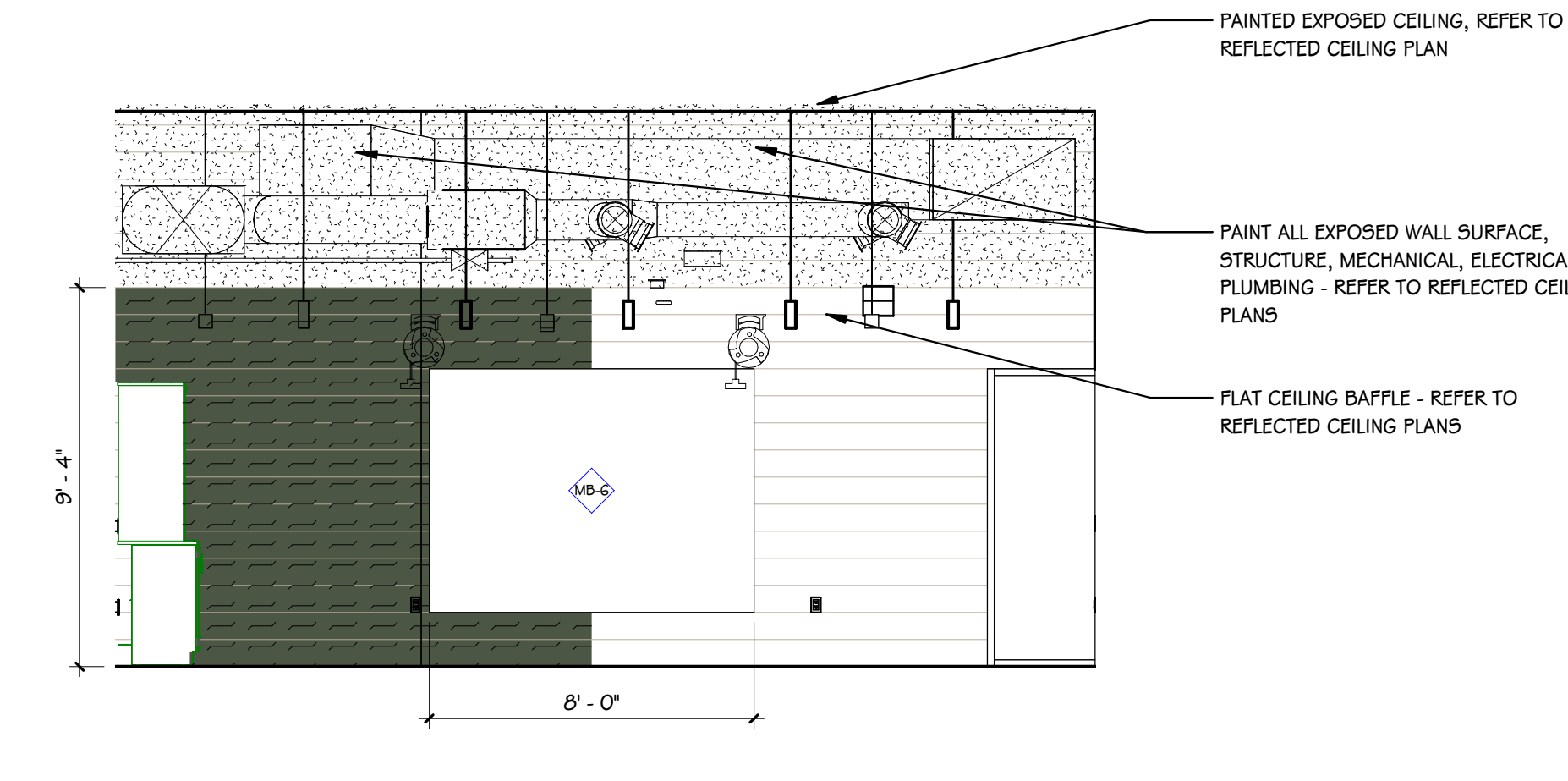
13 Y5/FLEX STUDIO 131 - NORTH
1/4" = 1'-0"



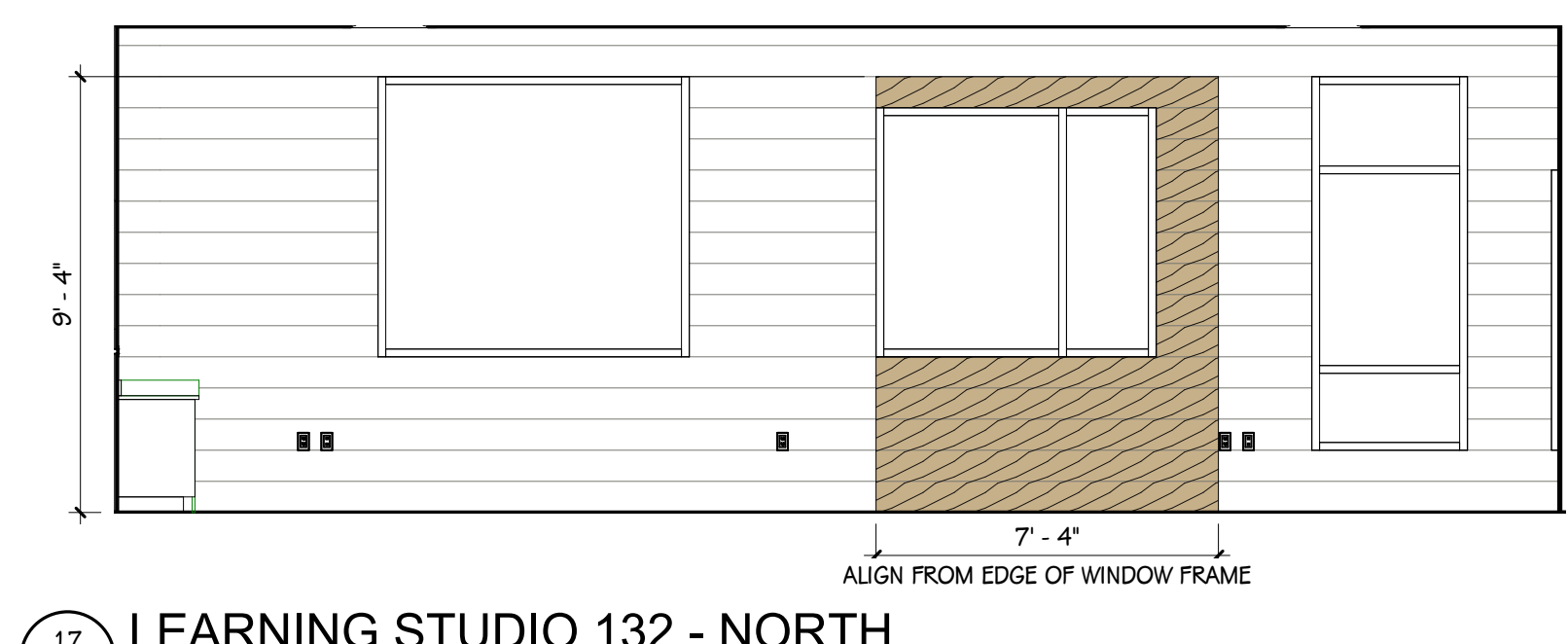
14 Y5/FLEX STUDIO 131 - EAST
1/4" = 1'-0"



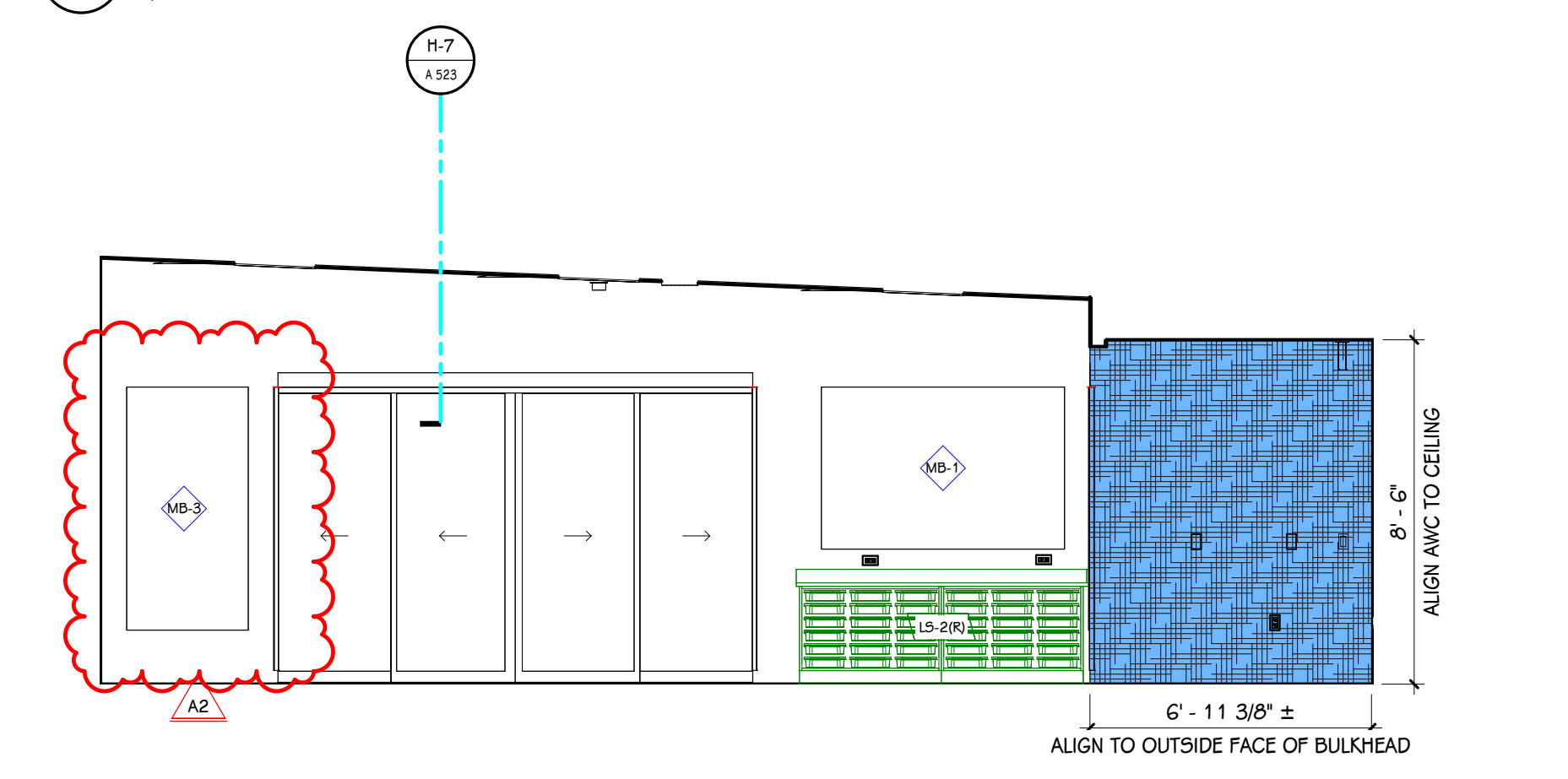
15 Y5/FLEX STUDIO 131 - SOUTH
1/4" = 1'-0"



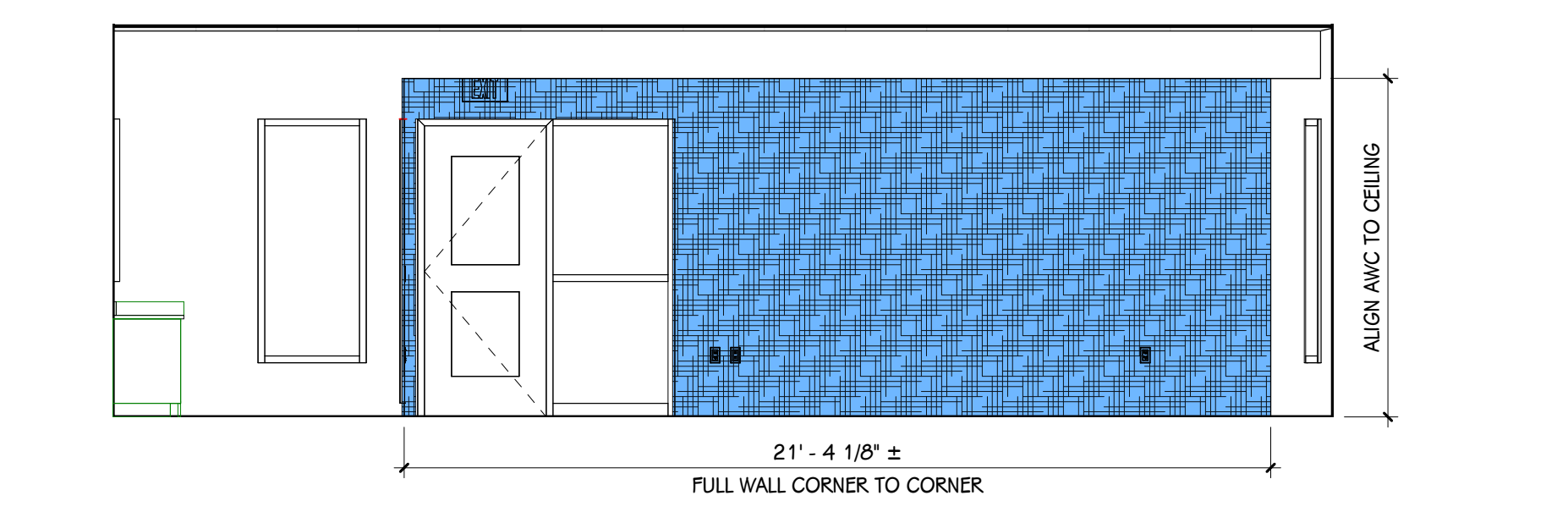
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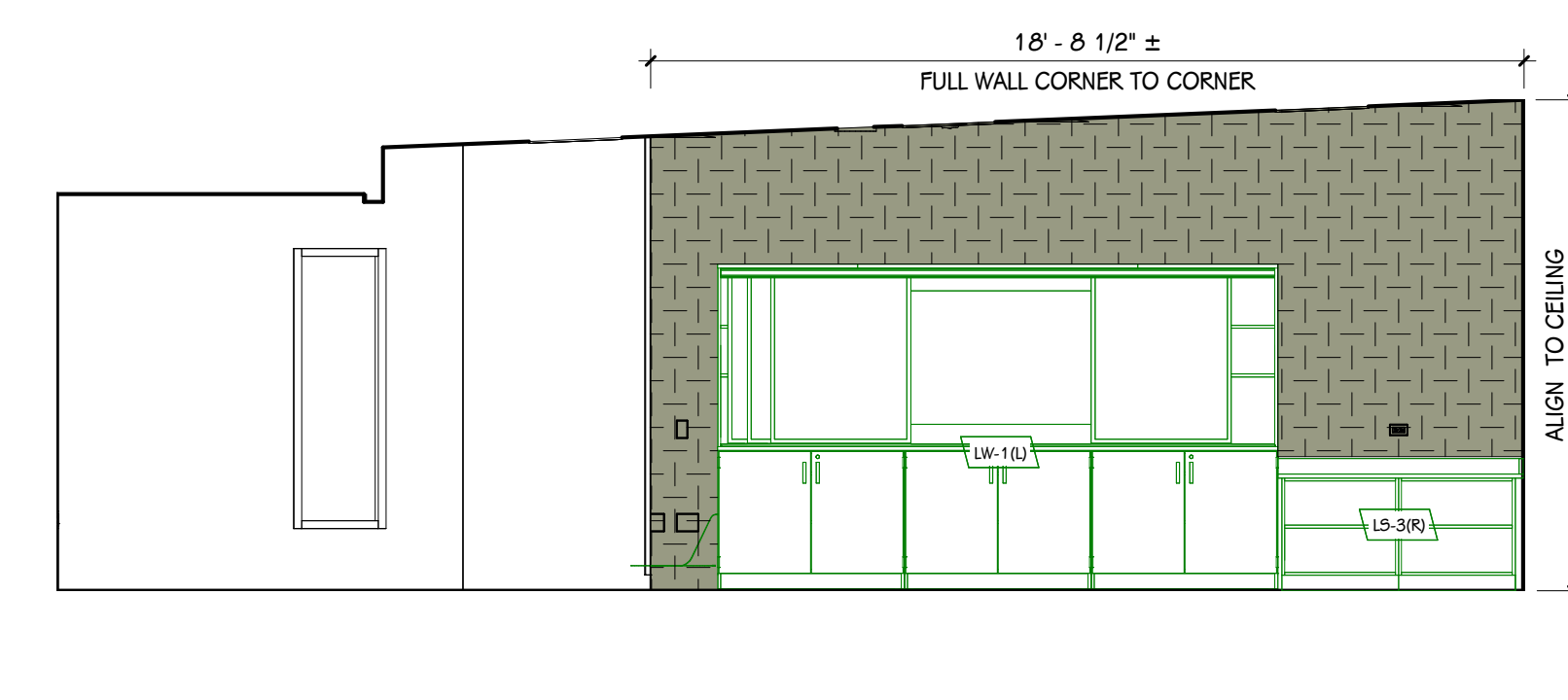
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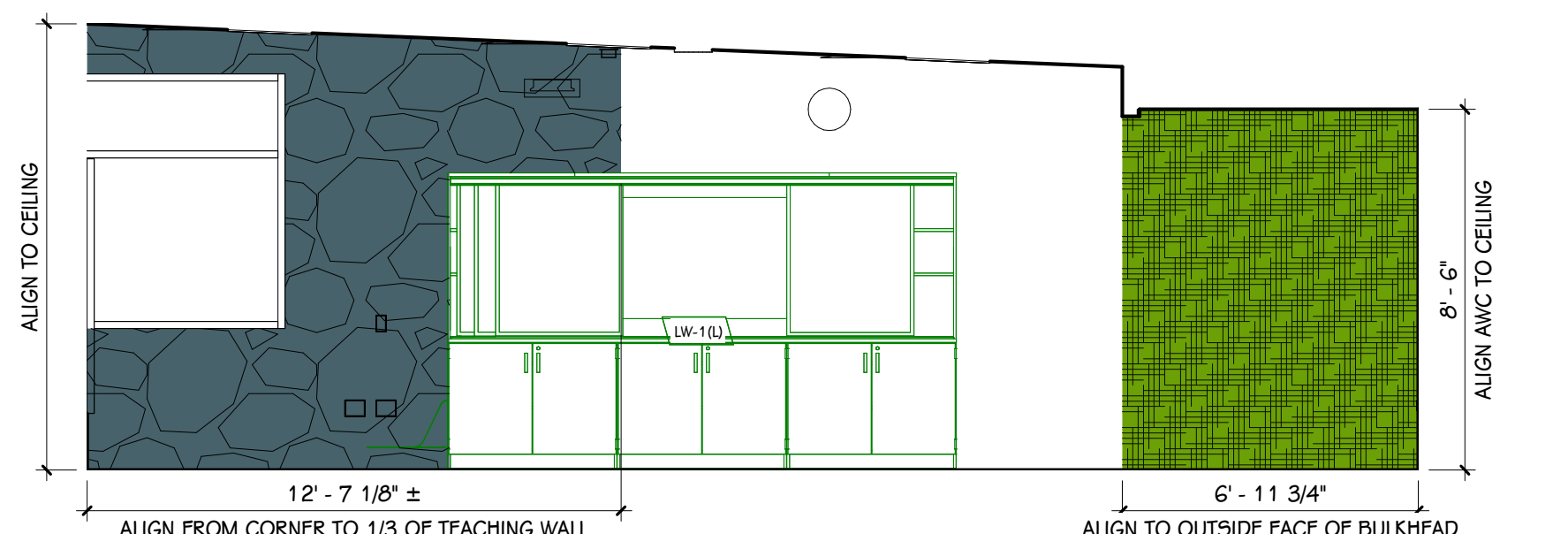
19 LEARNING STUDIO 132 - SOUTH
1/4" = 1'-0"



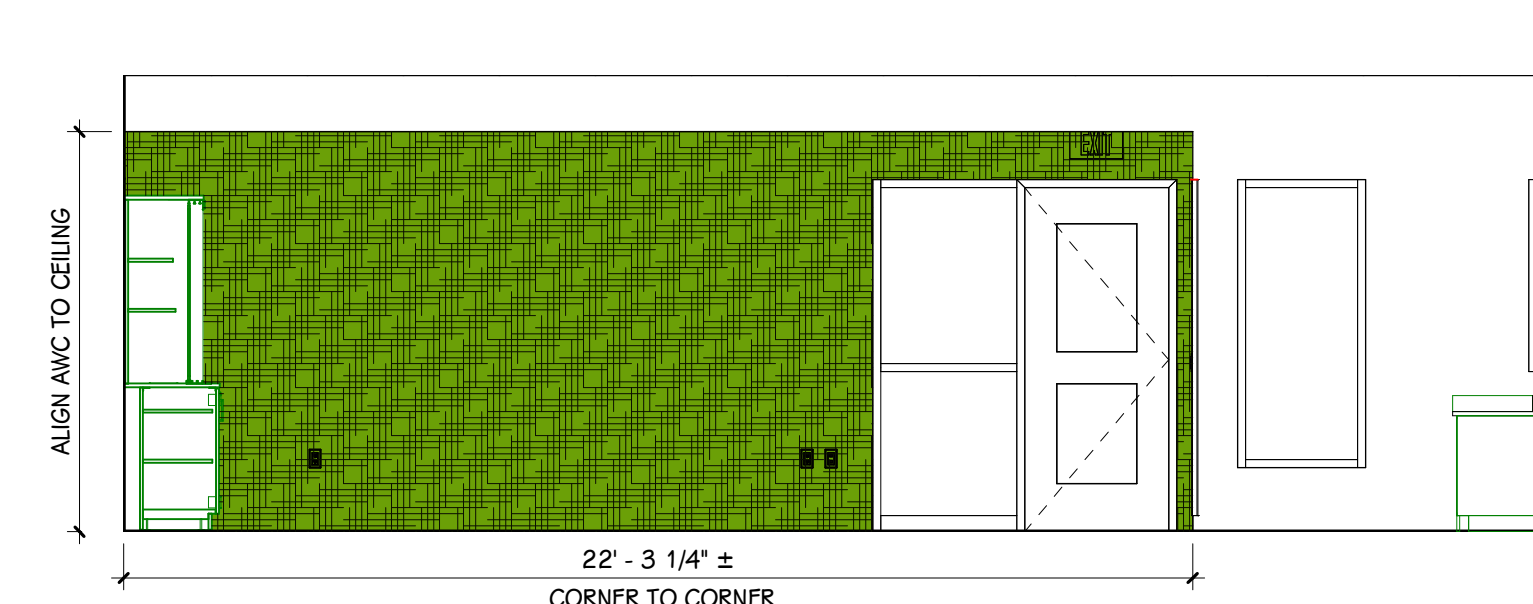
20 LEARNING STUDIO 132 - WEST
1/4" = 1'-0"



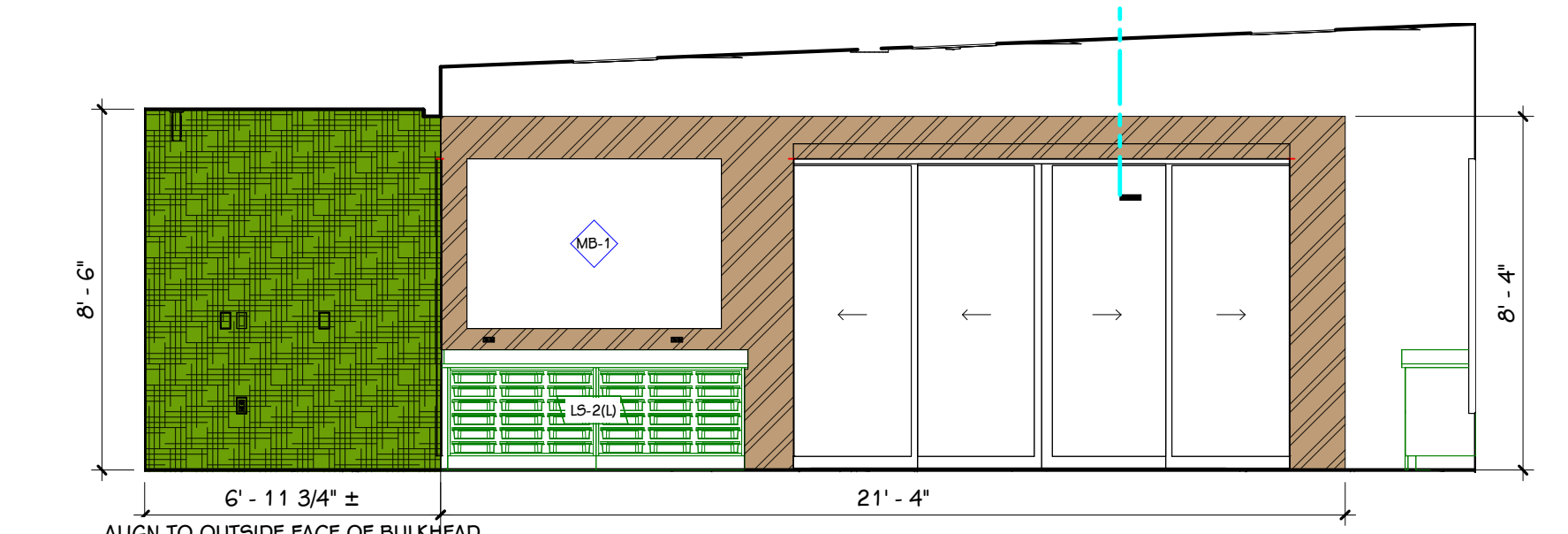
21 LEARNING STUDIO 134 - NORTH
1/4" = 1'-0"



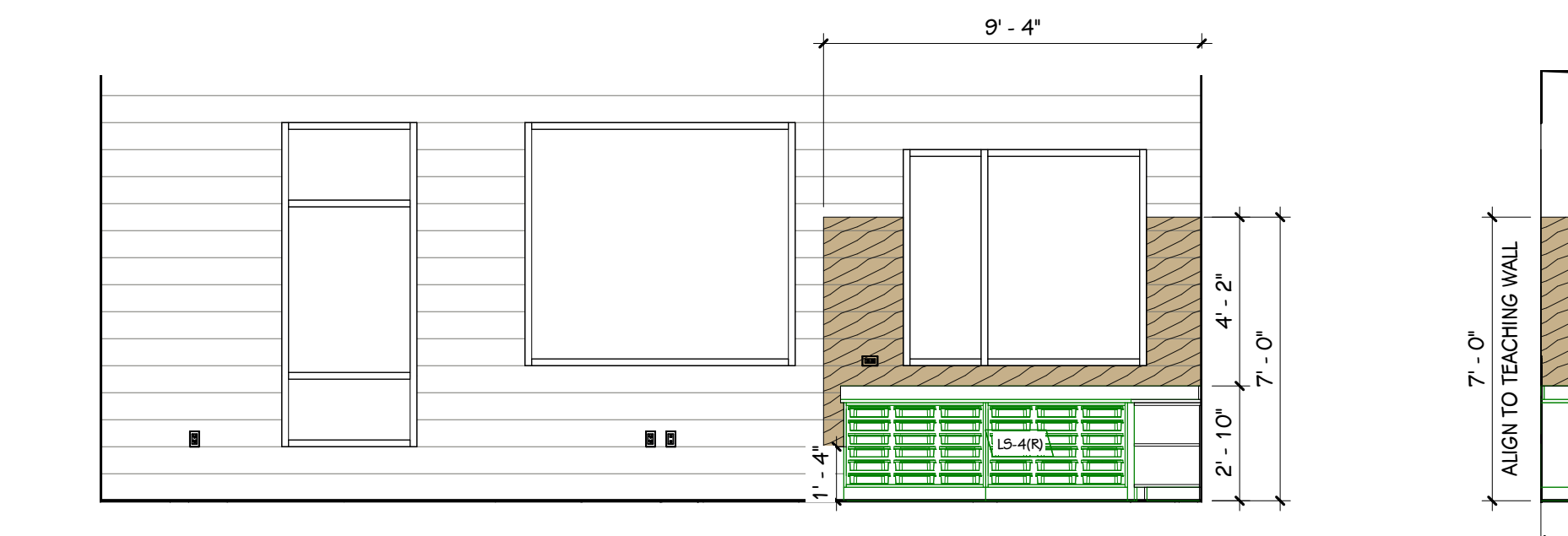
22 LEARNING STUDIO 134 - EAST
1/4" = 1'-0"



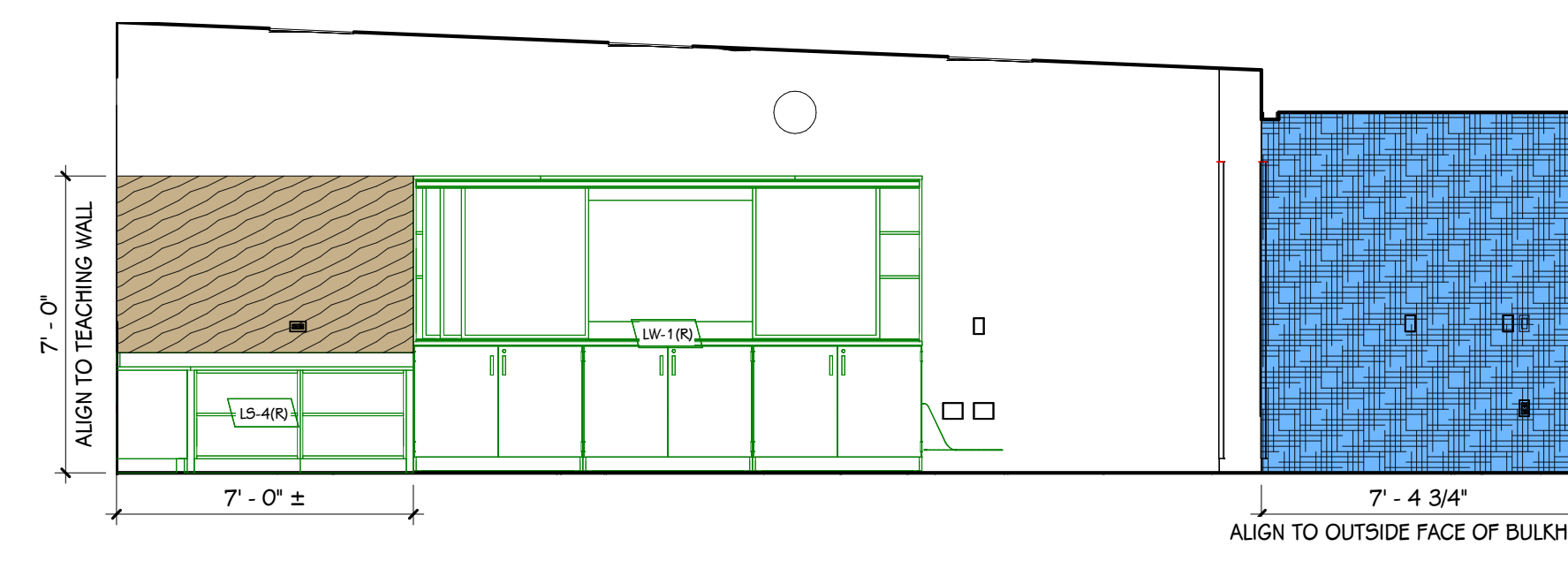
23 LEARNING STUDIO 134 - SOUTH
1/4" = 1'-0"



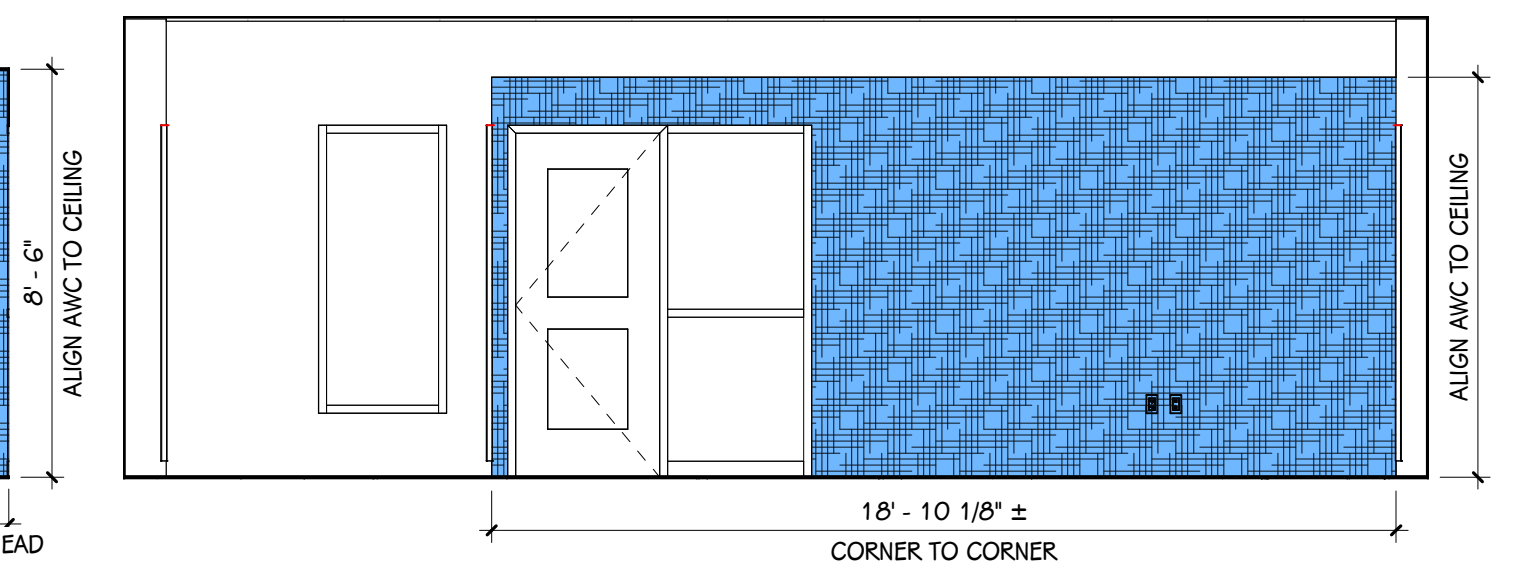
24 LEARNING STUDIO 134 - WEST
1/4" = 1'-0"



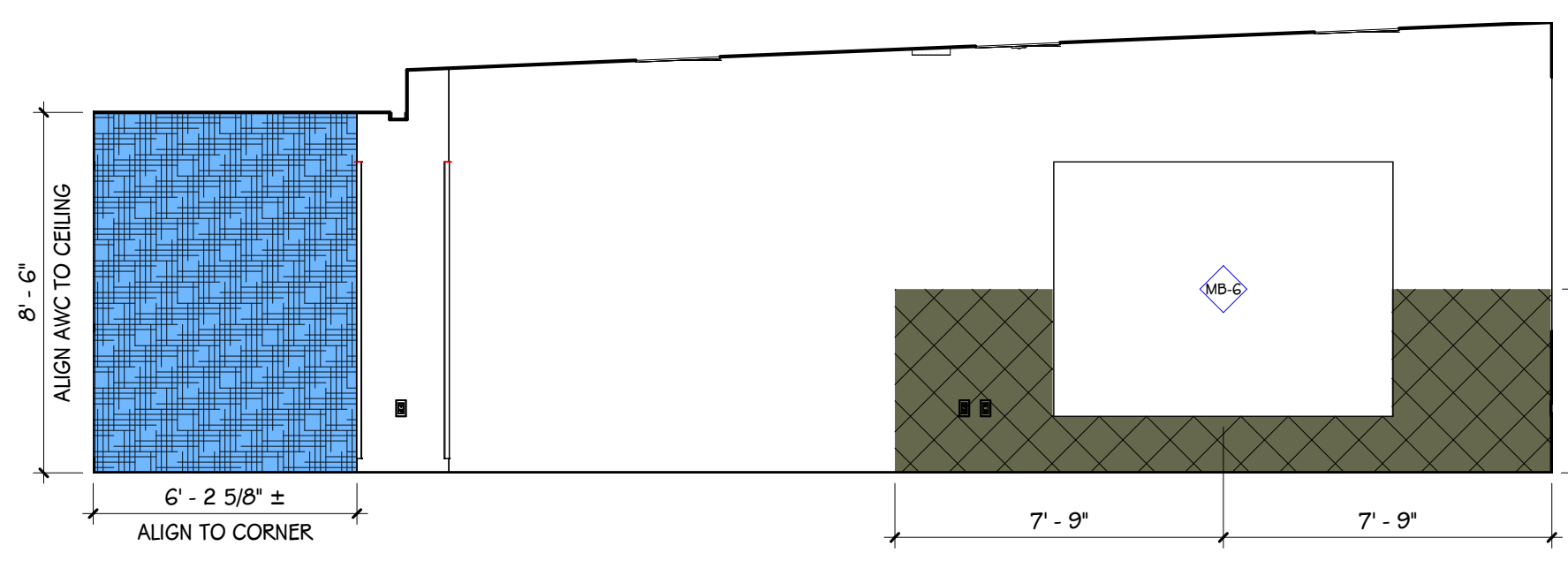
25 LEARNING STUDIO 136 - NORTH
1/4" = 1'-0"



26 LEARNING STUDIO 136 - EAST
1/4" = 1'-0"

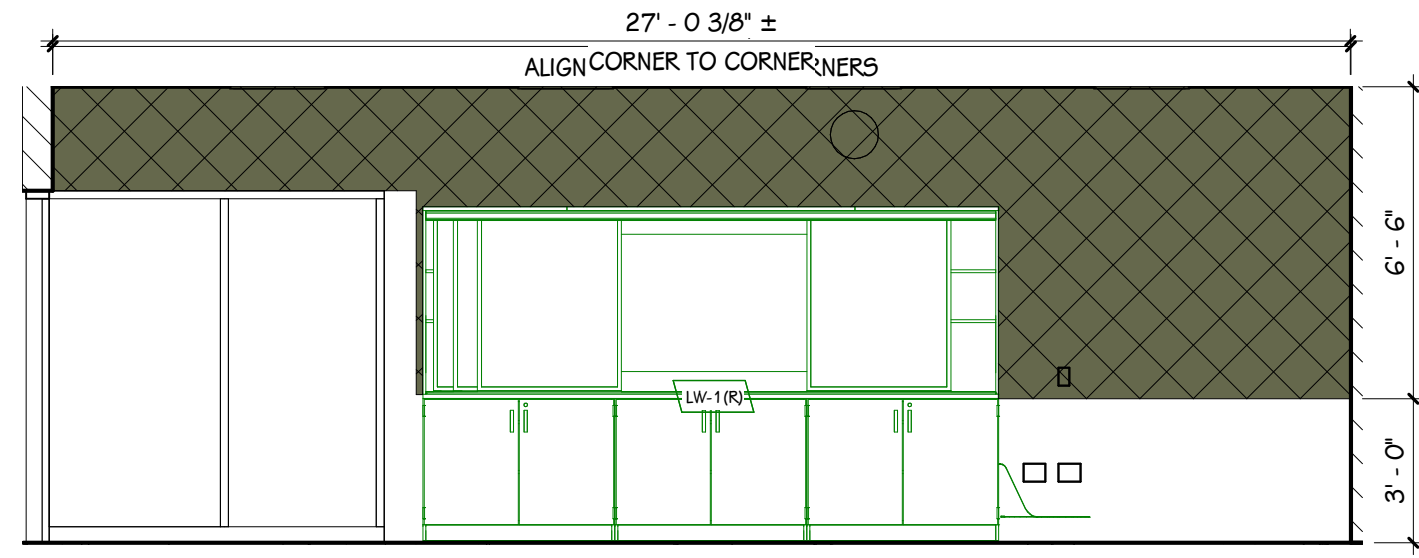


27 LEARNING STUDIO 136 - SOUTH
1/4" = 1'-0"

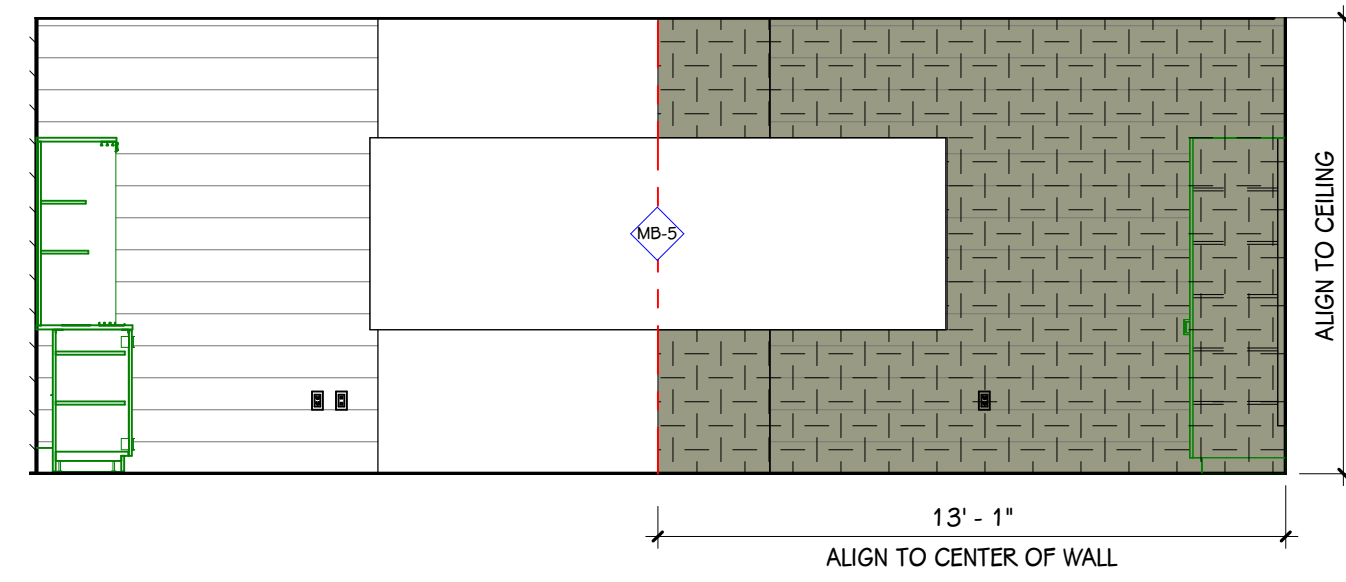


28 LEARNING STUDIO 136 - WEST
1/4" = 1'-0"

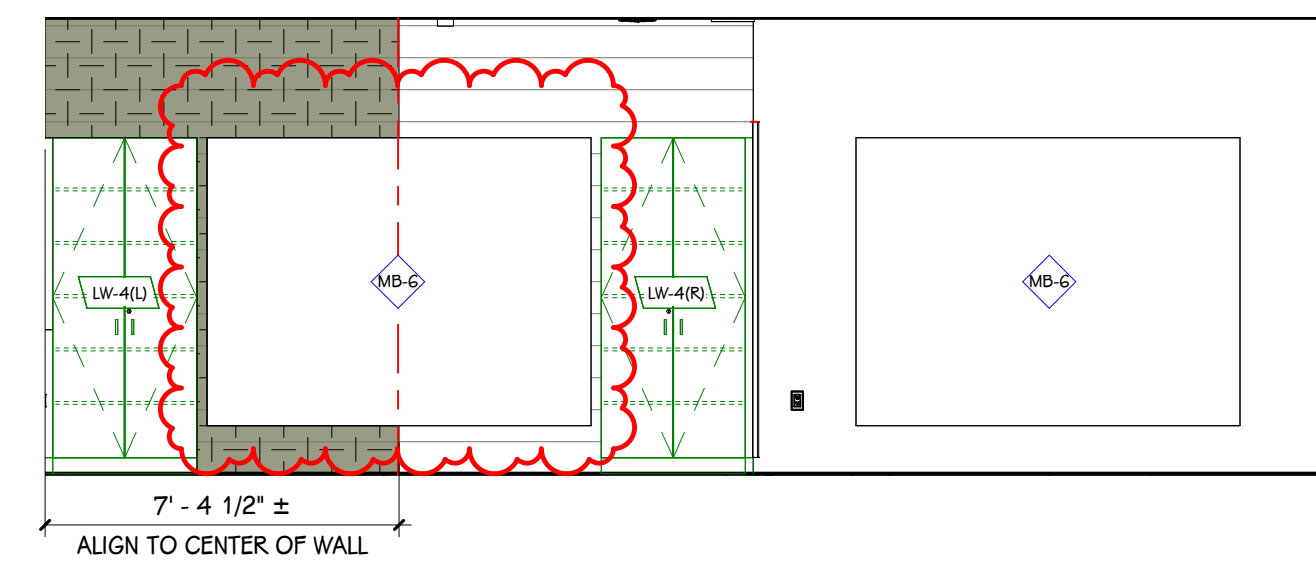
THIS DRAWING SHEET IS INTENDED TO BE PLOTTED IN COLOR. IF THIS TEXT APPEARS IN BLACK AND WHITE, IT IS PLOTTED INCORRECTLY. DISCARD AND OBTAIN AN ACCURATE DRAWING



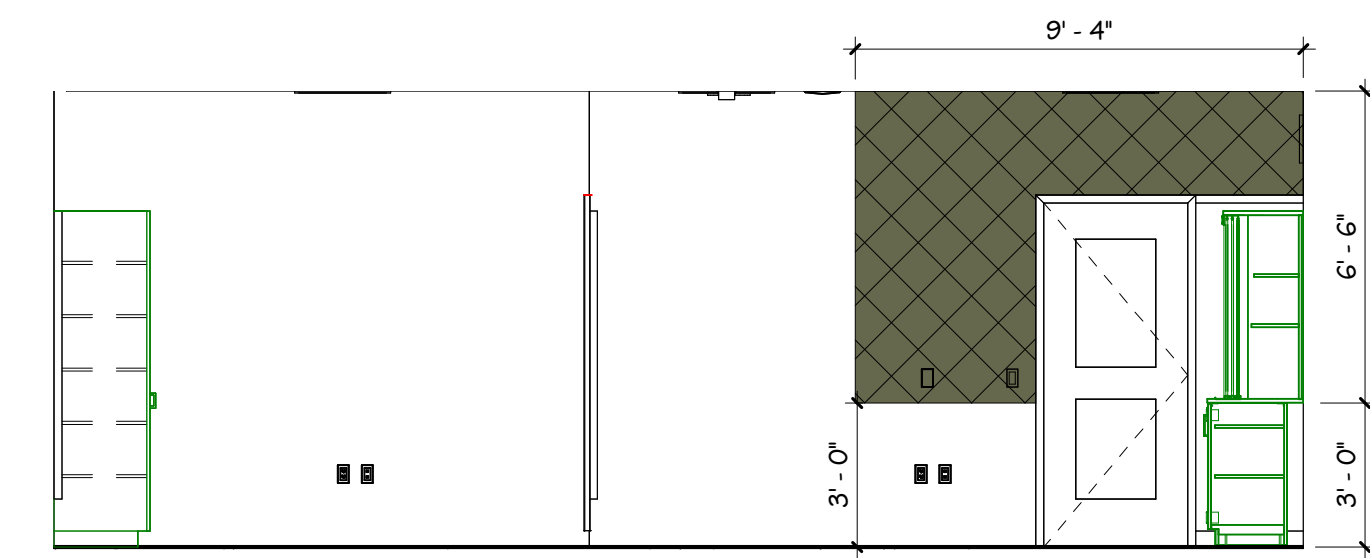
29 ESI STUDIO 139 - NORTH
1/4" = 1'-0"



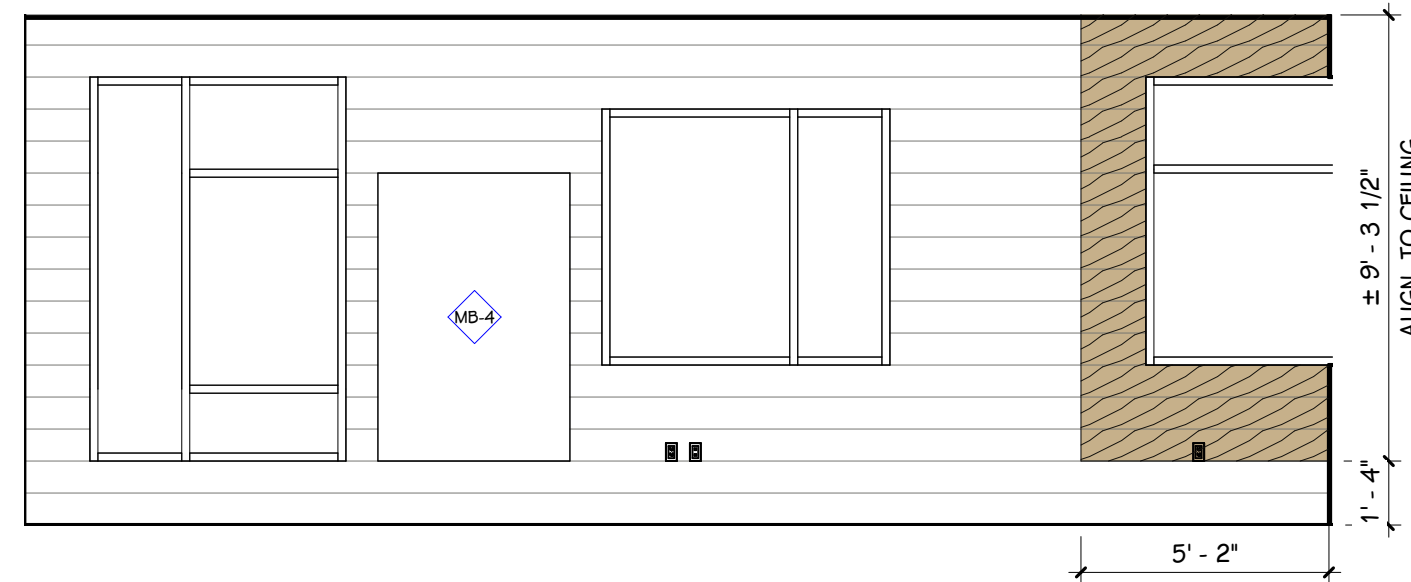
30 ESI STUDIO 139 - EAST
1/4" = 1'-0"



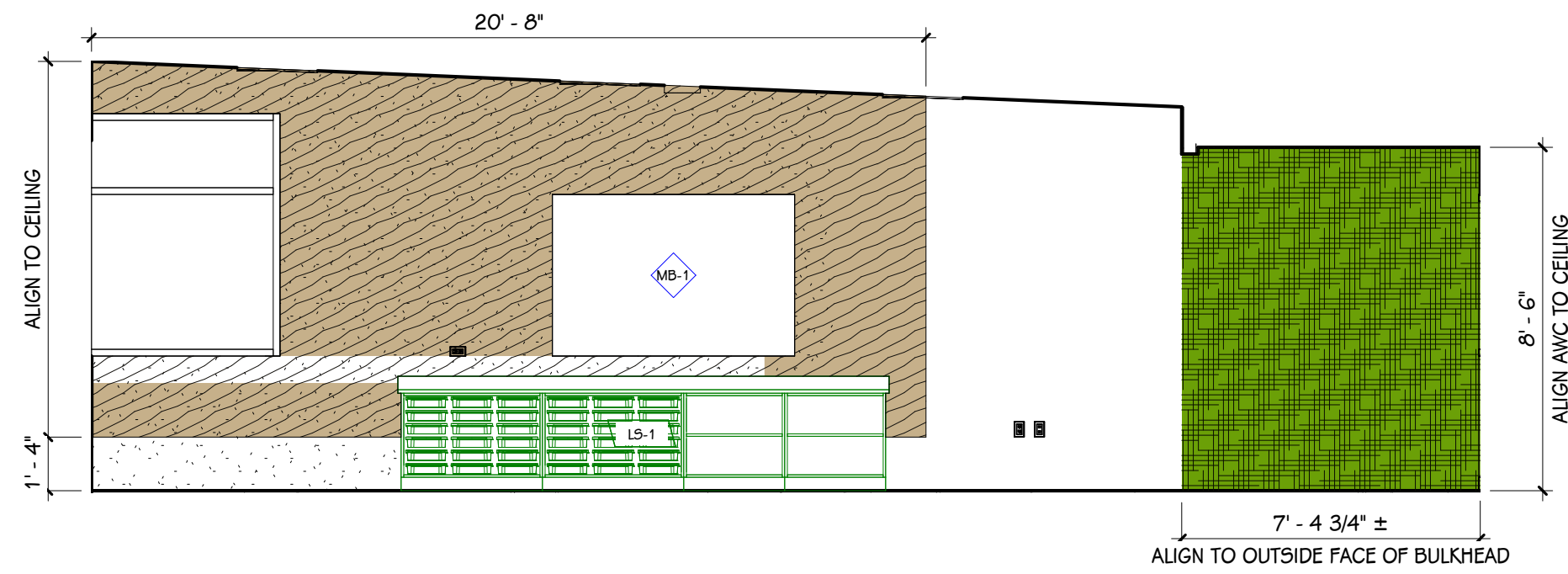
31 ESI STUDIO 139 - SOUTH
1/4" = 1'-0"



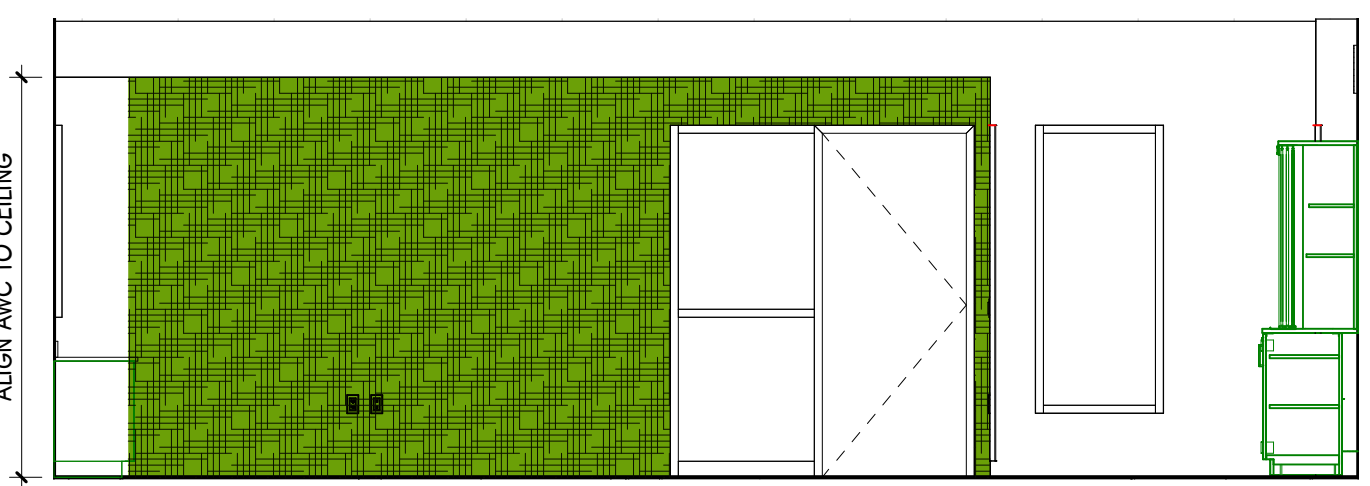
32 ESI STUDIO 139 - WEST
1/4" = 1'-0"



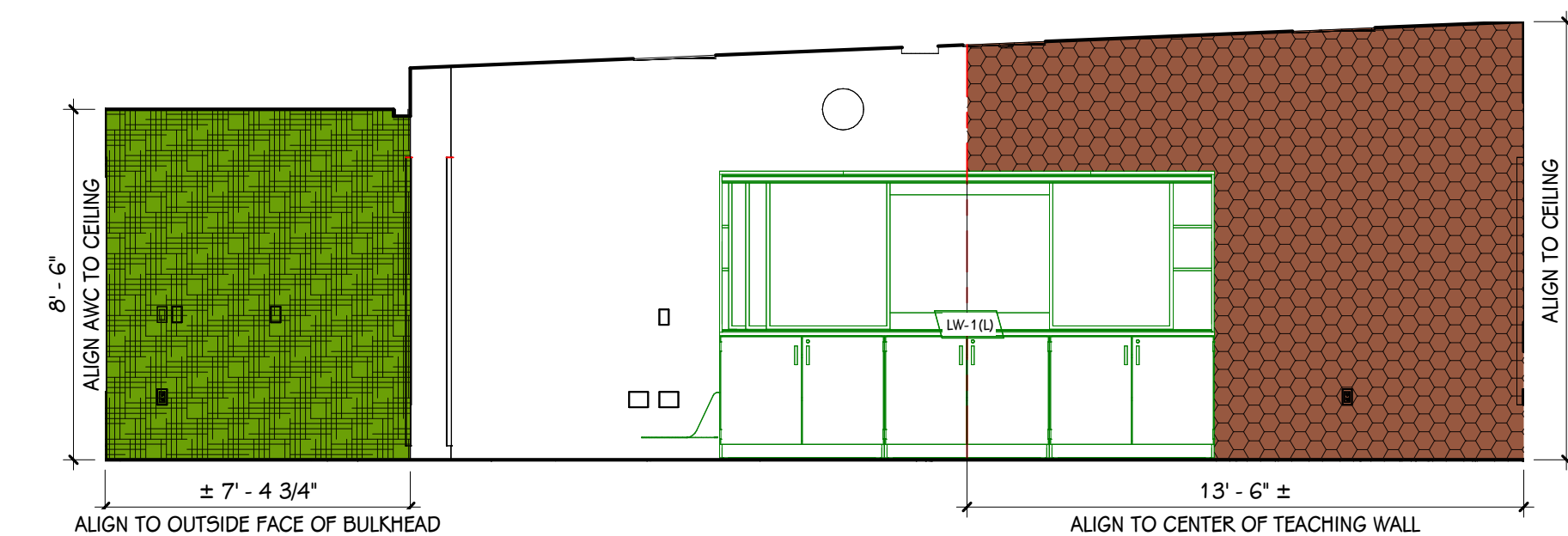
33 LEARNING STUDIO 142 - NORTH
1/4" = 1'-0"



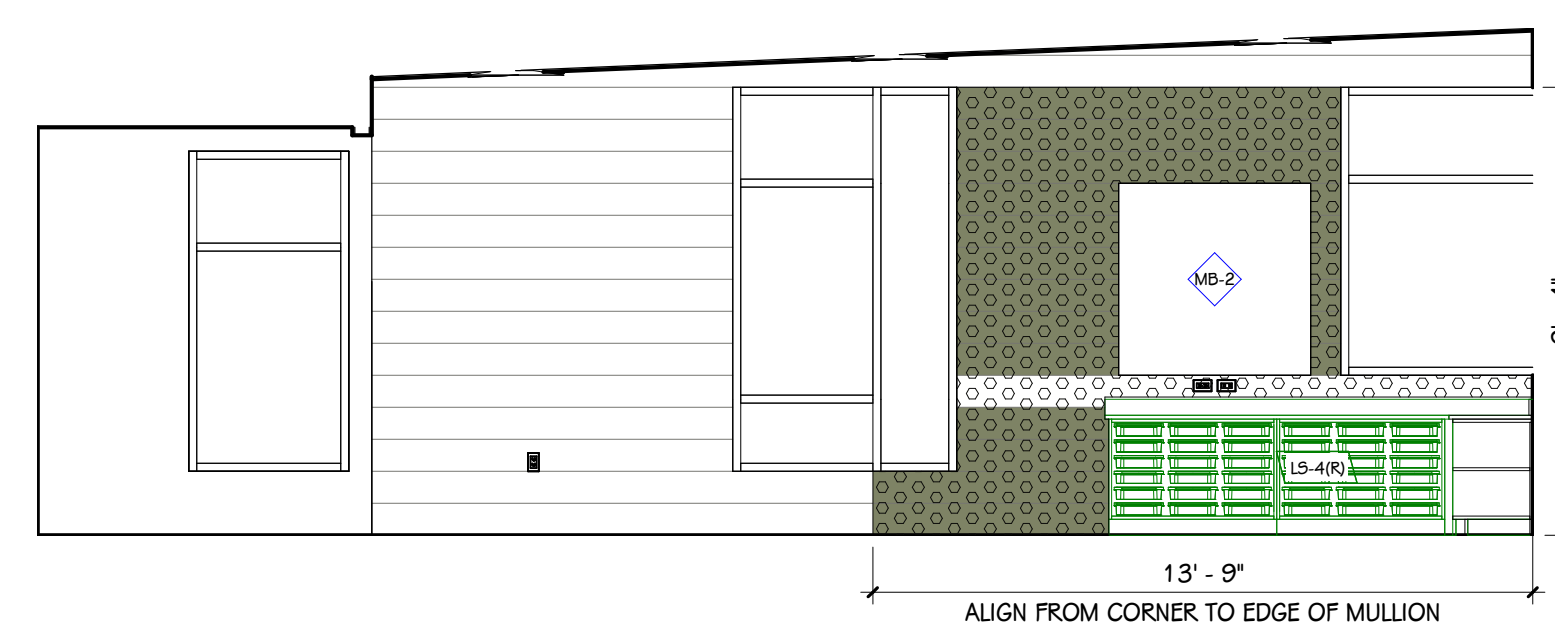
34 LEARNING STUDIO 142 - EAST
1/4" = 1'-0"



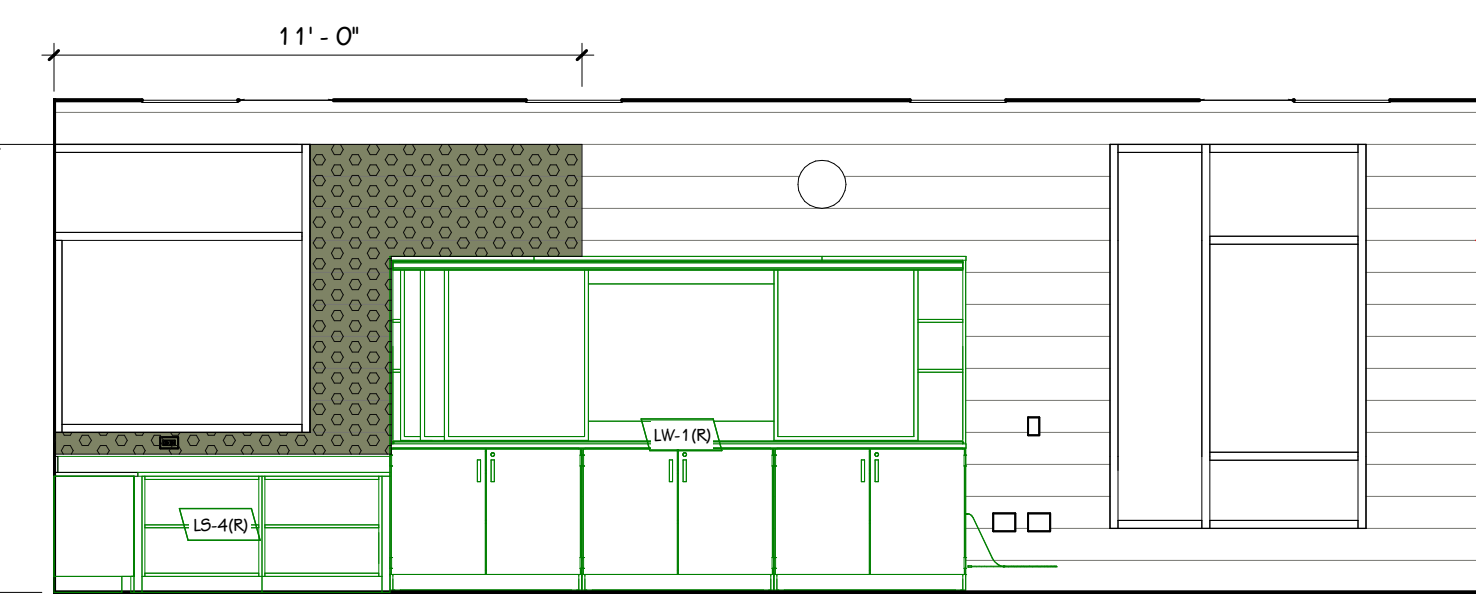
35 LEARNING STUDIO 142 - SOUTH
1/4" = 1'-0"



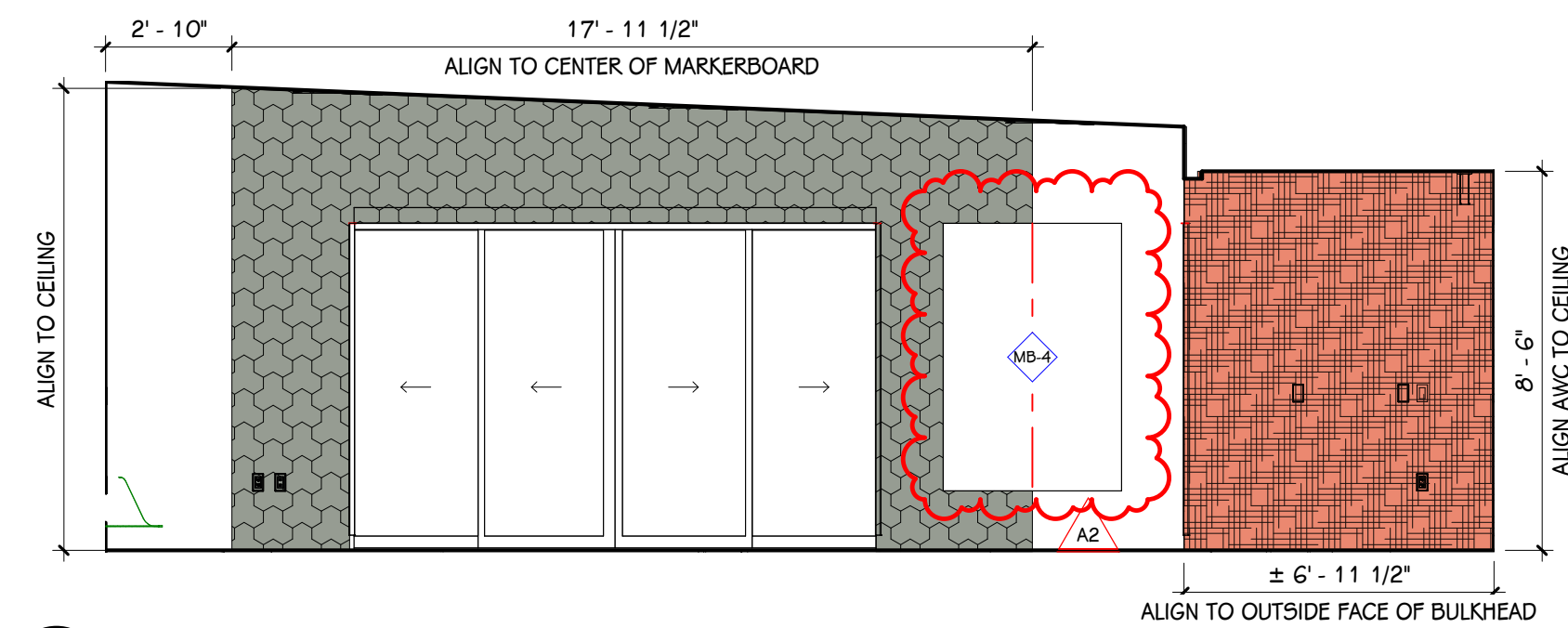
36 LEARNING STUDIO 142 - WEST
1/4" = 1'-0"



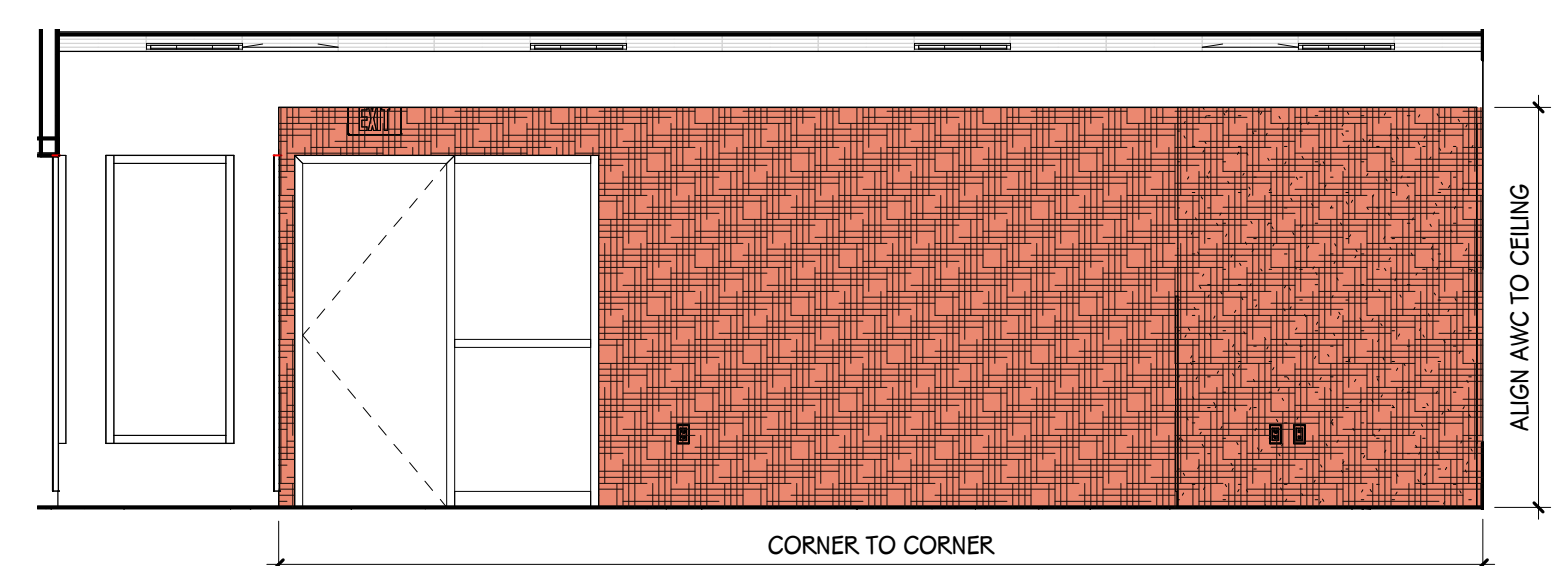
37 LEARNING STUDIO 144 - NORTH
1/4" = 1'-0"



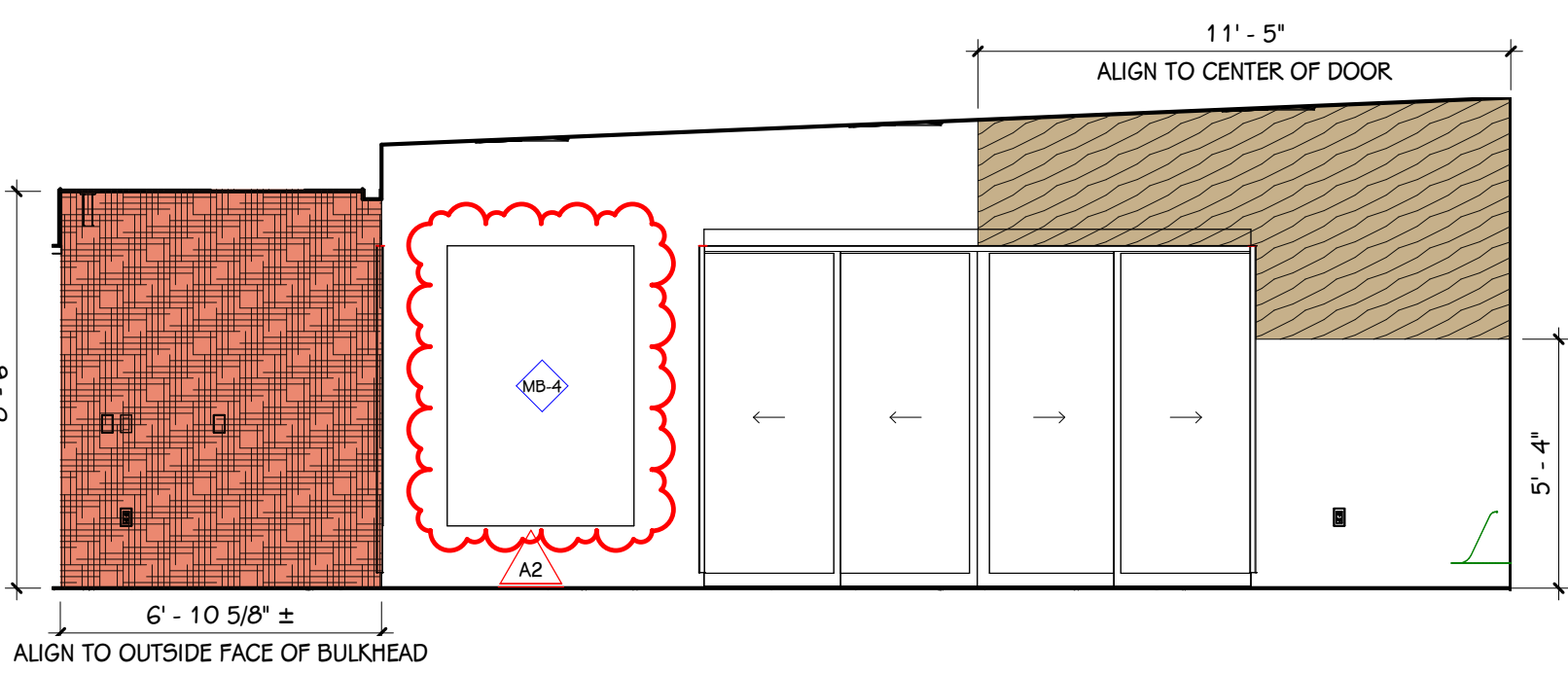
38 LEARNING STUDIO 144 - EAST
1/4" = 1'-0"



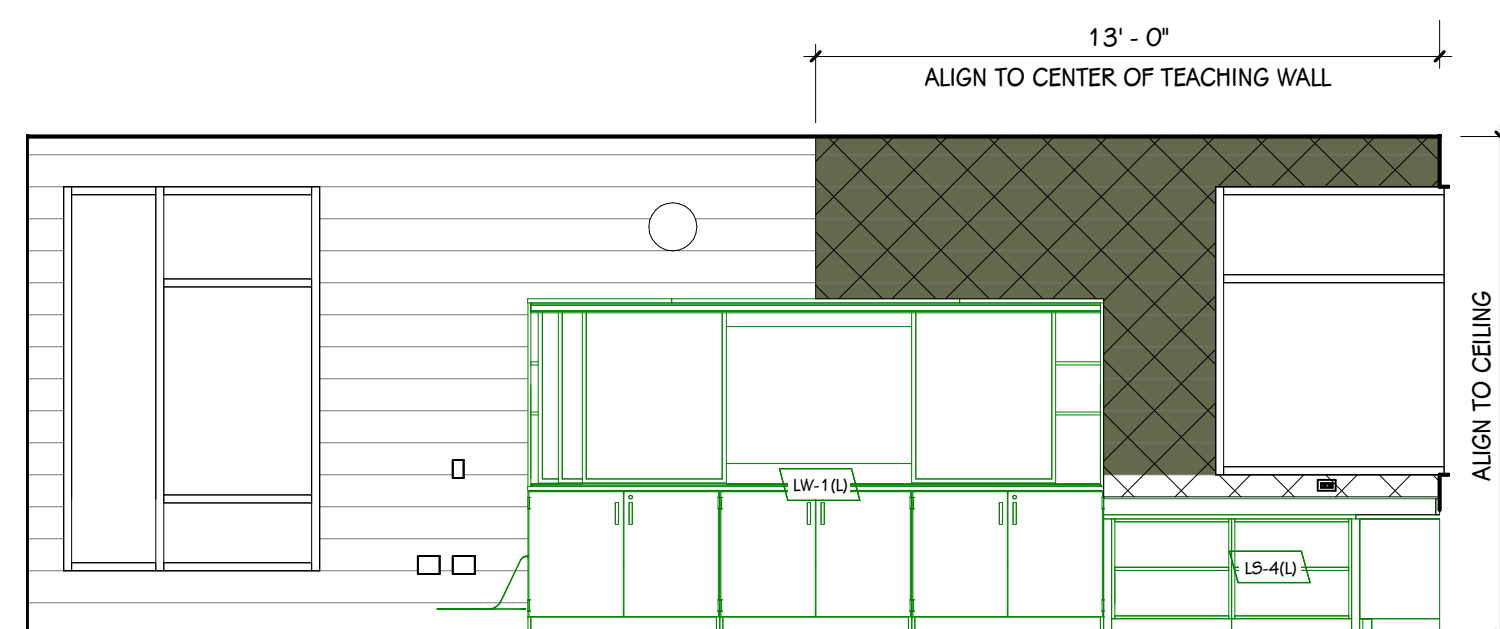
39 LEARNING STUDIO 144 - SOUTH
1/4" = 1'-0"



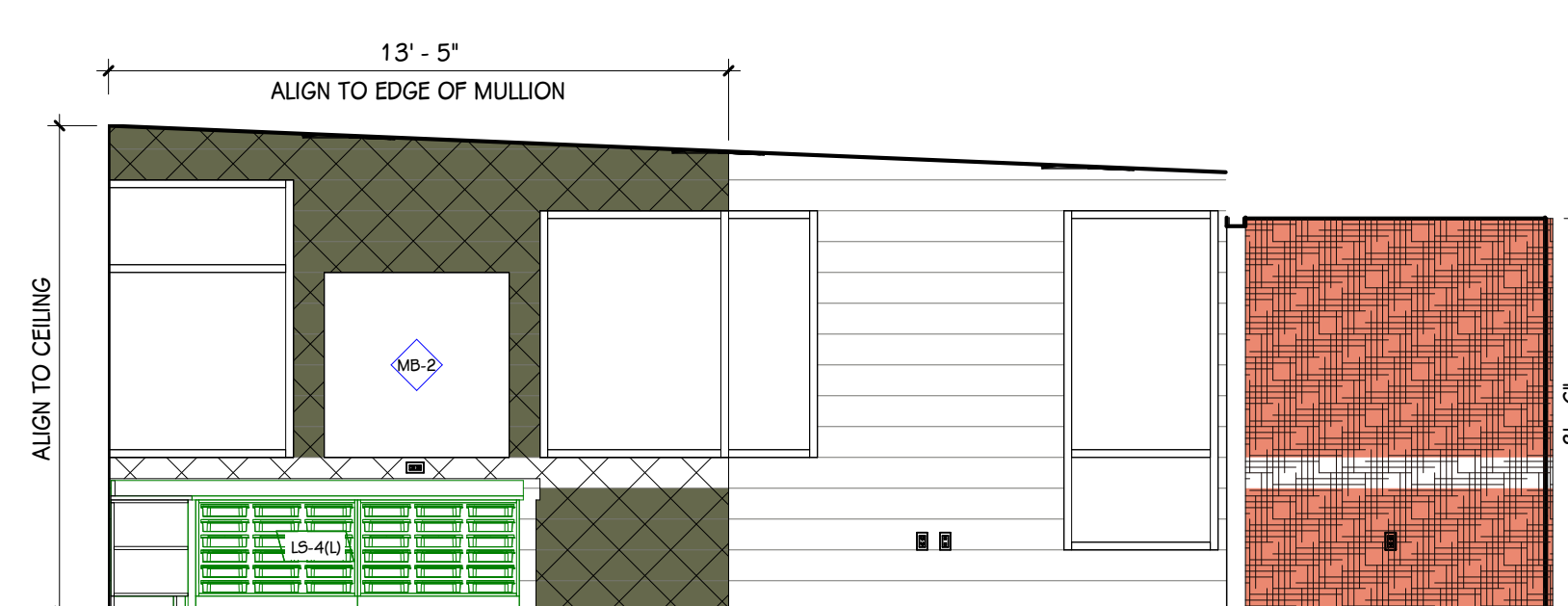
40 LEARNING STUDIO 144 - WEST
1/4" = 1'-0"



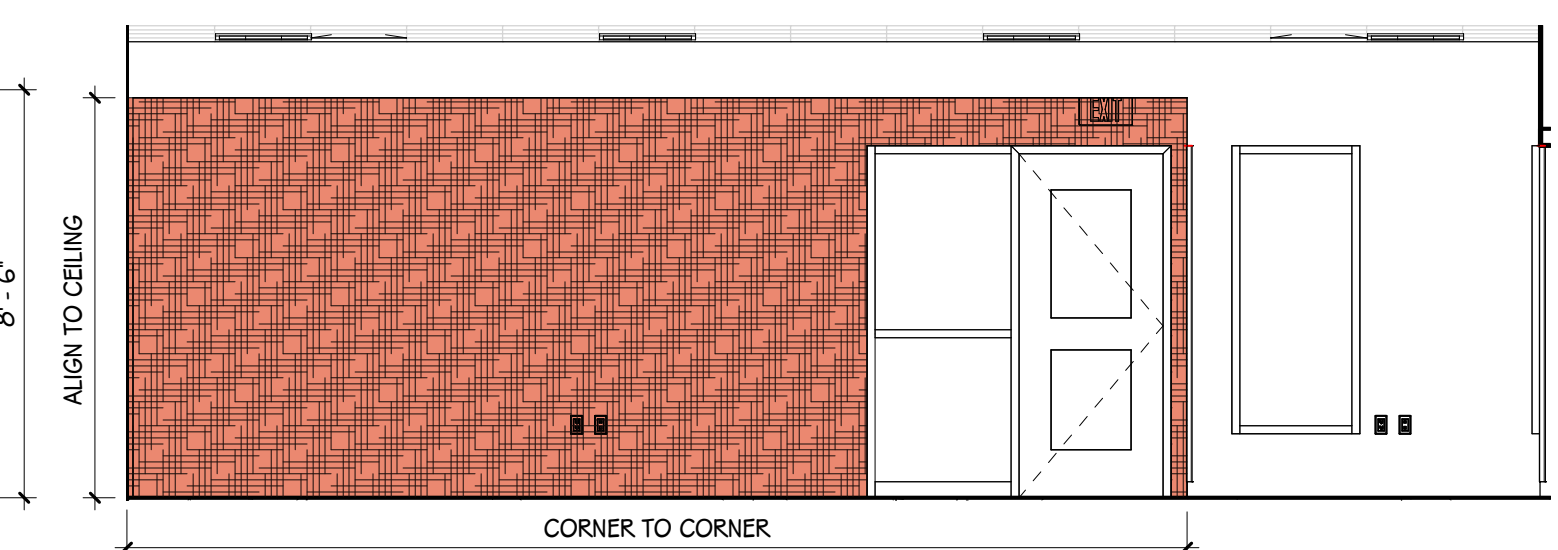
41 LEARNING STUDIO 146 - NORTH
1/4" = 1'-0"



42 LEARNING STUDIO 146 - EAST
1/4" = 1'-0"



43 LEARNING STUDIO 146 - SOUTH
1/4" = 1'-0"



44 LEARNING STUDIO 146 - WEST
1/4" = 1'-0"

GENERAL NOTES - PATTERN ELEVATIONS

- 1 REFER TO FINISH PLANS FOR INTERIOR ELEVATIONS OF CASEWORK AND NON-PATTERNED FINISH DETAILS.
- 2 REFER TO MATERIAL SELECTION SCHEDULE, FINISH PLANS, AND SPECIFICATION FOR ADDITIONAL FINISH INFORMATION.
- 3 REFER TO REFLECTED CEILING PLANS FOR CEILING AND BULKHEAD HEIGHTS AND FINISHES.
- 4 NOT ALL MATERIALS ARE ILLUSTRATED. REFER TO FINISH PLANS AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION. (E. RUBBER BASE NOT INDICATED, INSTALL PER FINISH PLAN)
- 5 ALIGN PATTERN TO NEAREST HORIZONTAL MASONRY JOINT, UNLESS NOTED OTHERWISE.
- 6 WHERE PATTERNS ARE INDICATED TO ALIGN TO CASEWORK OR SHELVING, COORDINATE WITH APPROVED SHOP DRAWINGS.

COLOR LEGEND - PATTERN ELEVATIONS

AWC-1: GHERKIN	P-9: RIVERWAY
AWC-2: BEEHIVE	P-10: TEMPE STAR
AWC-3: MURALLA	P-11: HARMONIC TAN
AWC-4: VINTAGE	P-12: ALCHEMY
P-4: GREEN ONYX	P-13: DIFFERENT GOLD
P-5: ARTICHOKE	P-14: MESA TAN
P-6: OASMOSS	P-15: BRANDYWINE
P-7: VOGUE GREEN	P-16: ROCKWOOD TERRA COTTA
P-8: ACACIA HAZE	

ADD. No. 2
BUL. No. 1

AUG 2, 2023
JUN. 4, 2023

ISSUED FOR

DATE

PROJECT TITLE
HAVERHILL ELEMENTARY SCHOOL
BID PACKAGE 6: CONSTRUCTION

OWNER
PORTAGE PUBLIC SCHOOLS

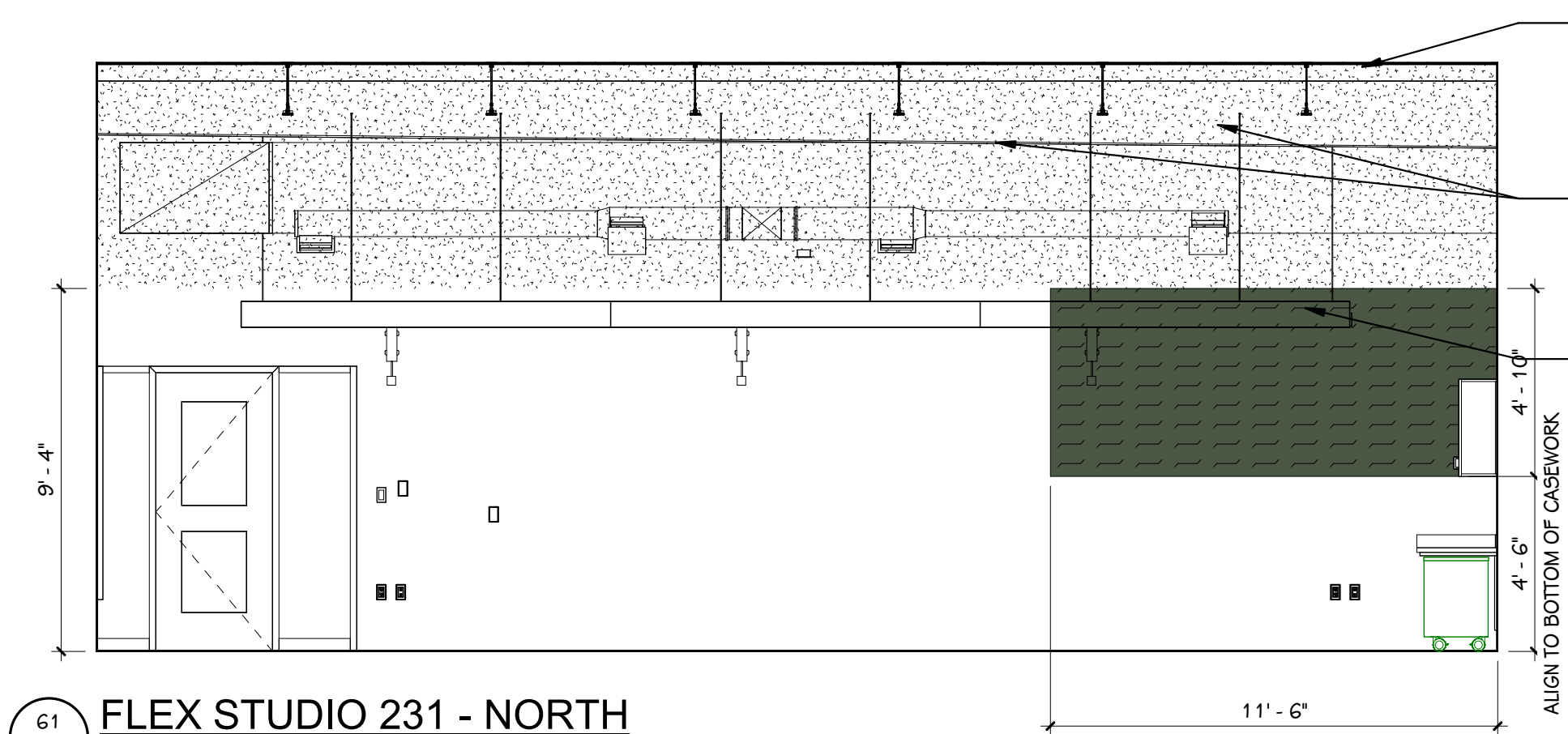
Portage, Michigan

SHEET TITLE
PATTERN ELEVATIONS

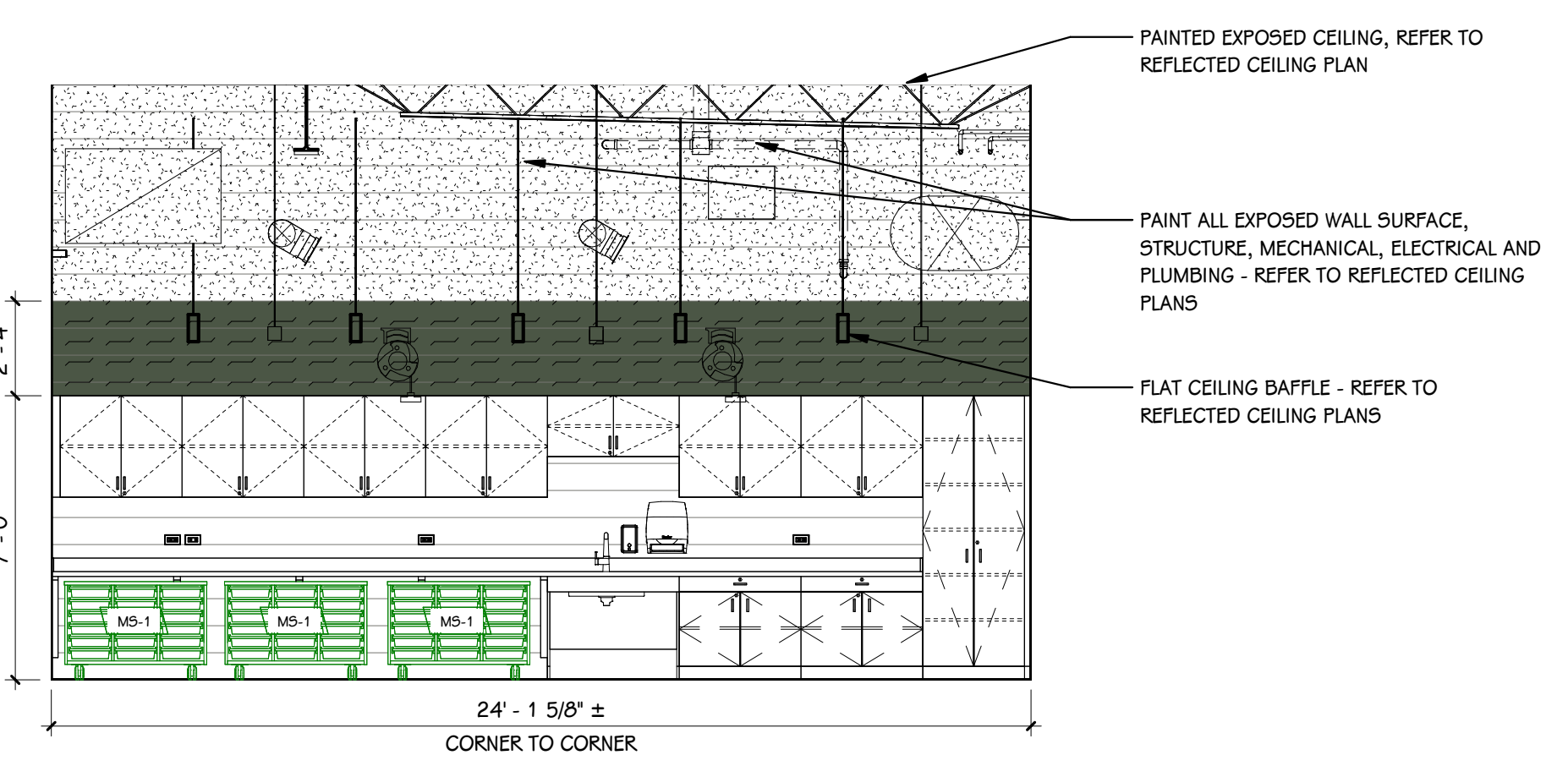
DATE
JUNE 30, 2023

SHEET NUMBER
1223
21-237.20

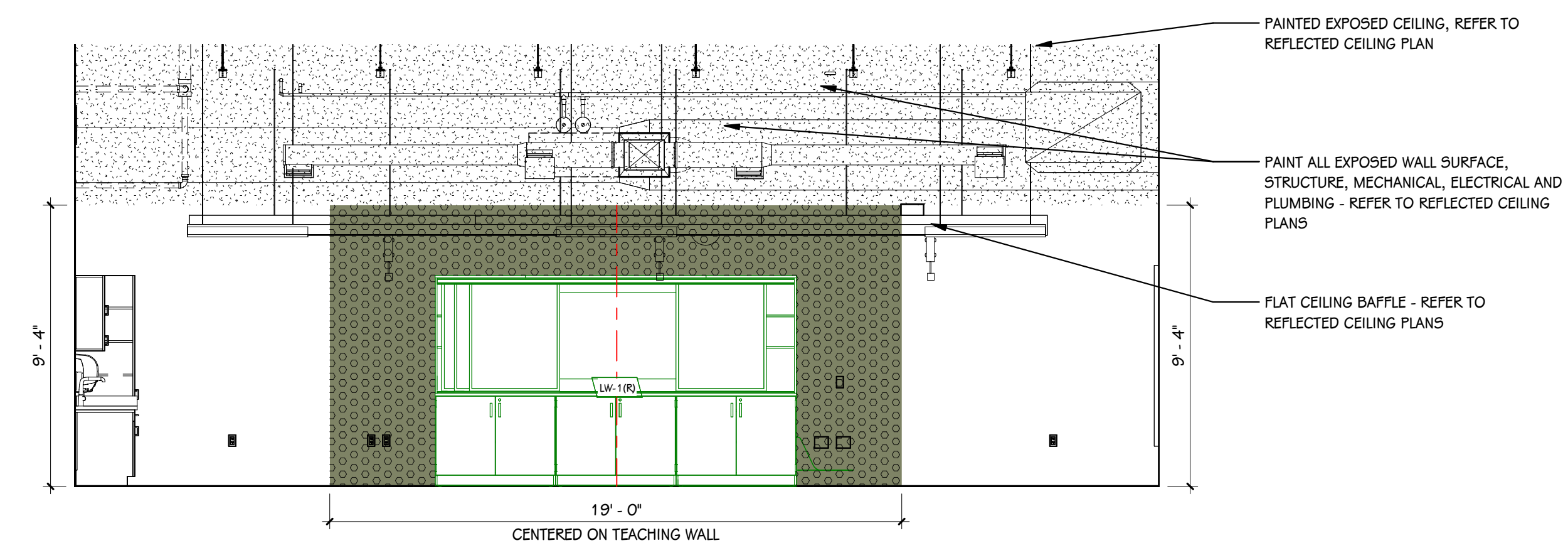
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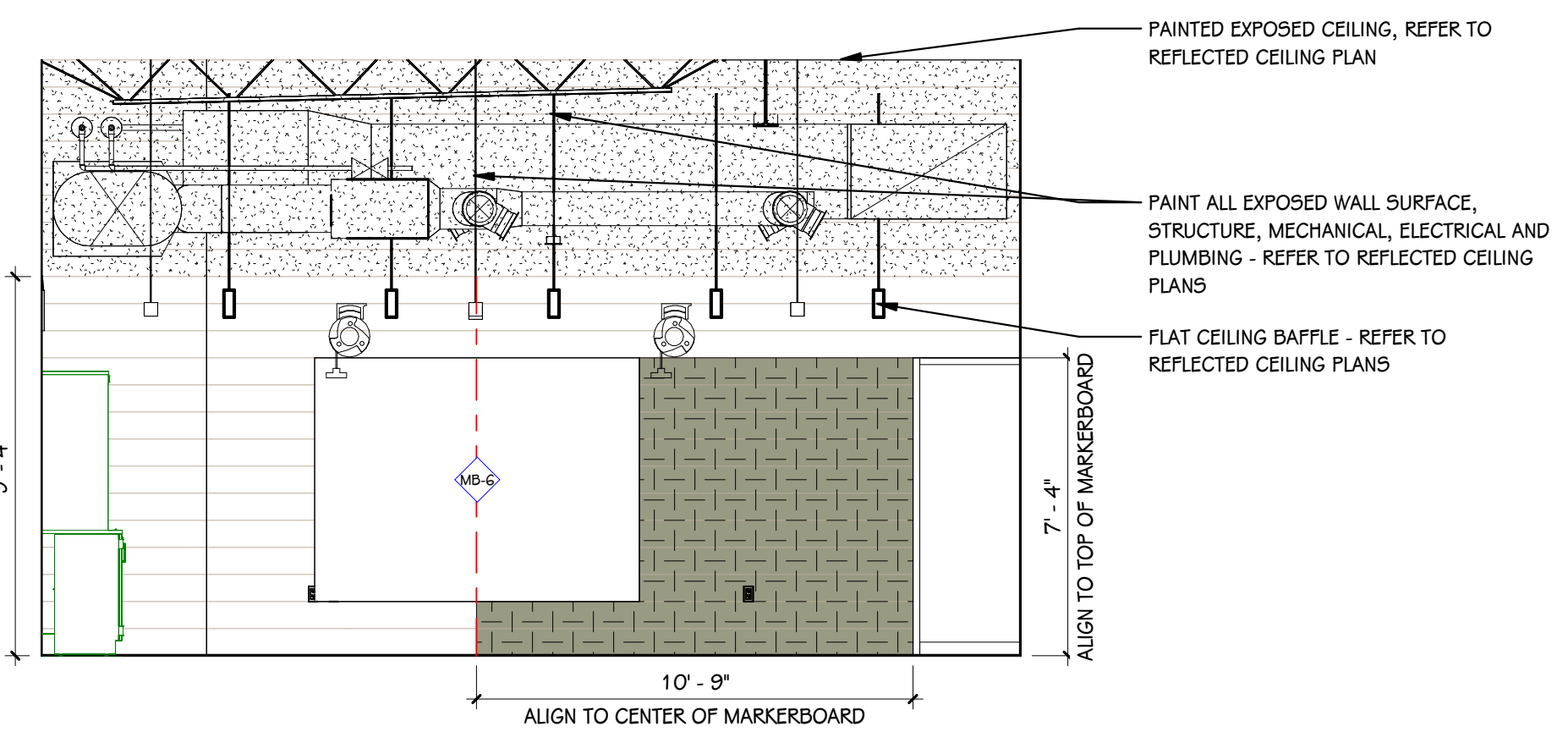
61 FLEX STUDIO 231 - NORTH
1/4" = 1'-0"



62 FLEX STUDIO 231 - EAST
1/4" = 1'-0"



63 FLEX STUDIO 231 - SOUTH
1/4" = 1'-0"



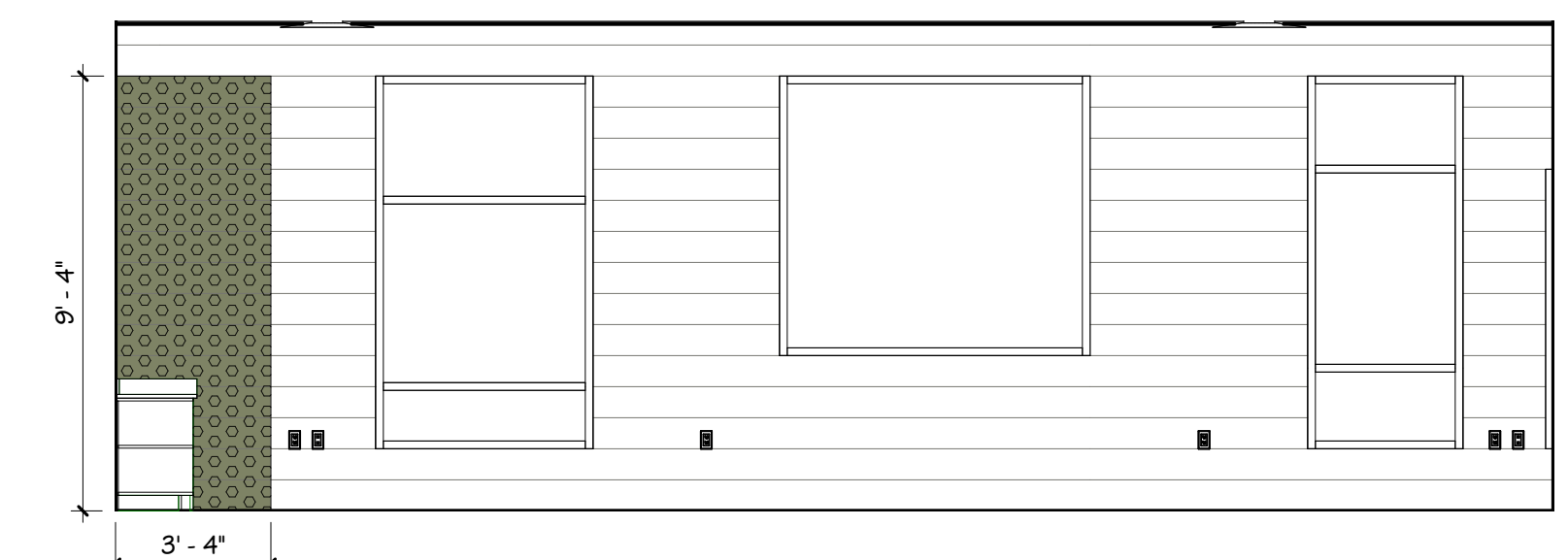
64 FLEX STUDIO 231 - WEST
1/4" = 1'-0"

GENERAL NOTES - PATTERN ELEVATIONS

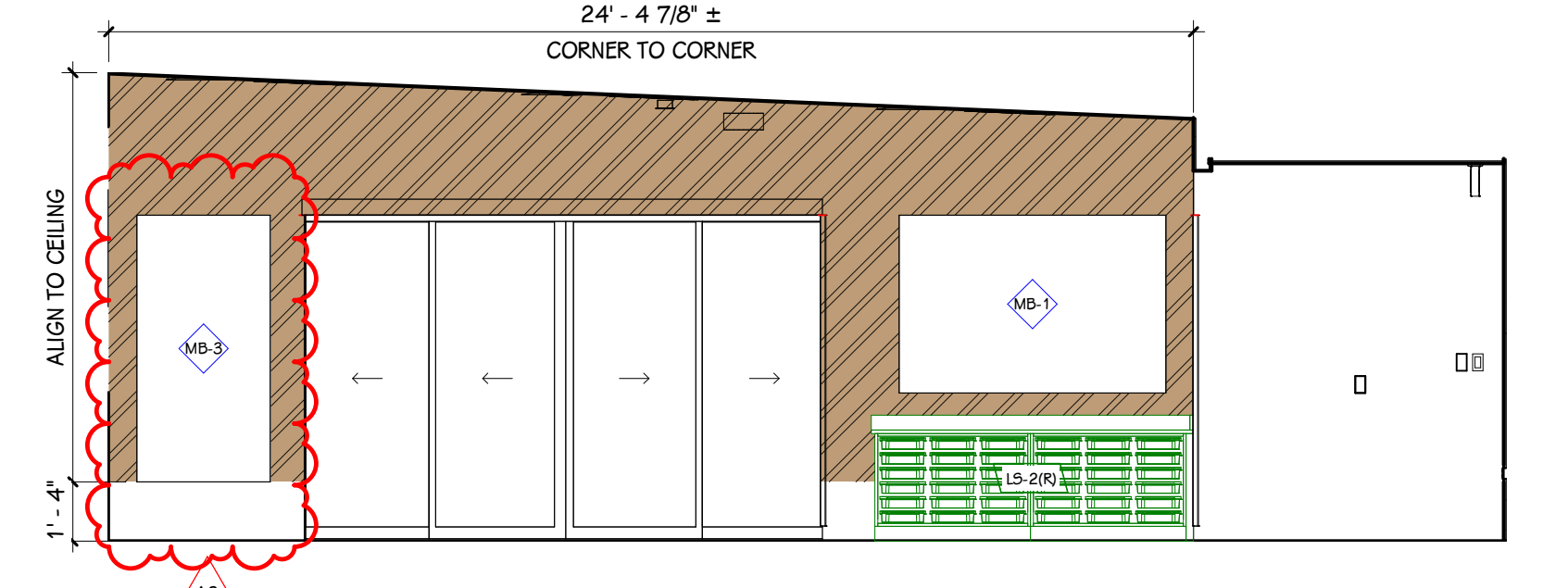
- REFER TO FINISH PLANS FOR INTERIOR ELEVATIONS OF CASEWORK AND NON-PATTERNED FINISH DETAILS.
- REFER TO MATERIAL SELECTION SCHEDULE, FINISH PLANS, AND SPECIFICATION FOR ADDITIONAL FINISH INFORMATION.
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COLOR LEGEND - PATTERN ELEVATIONS

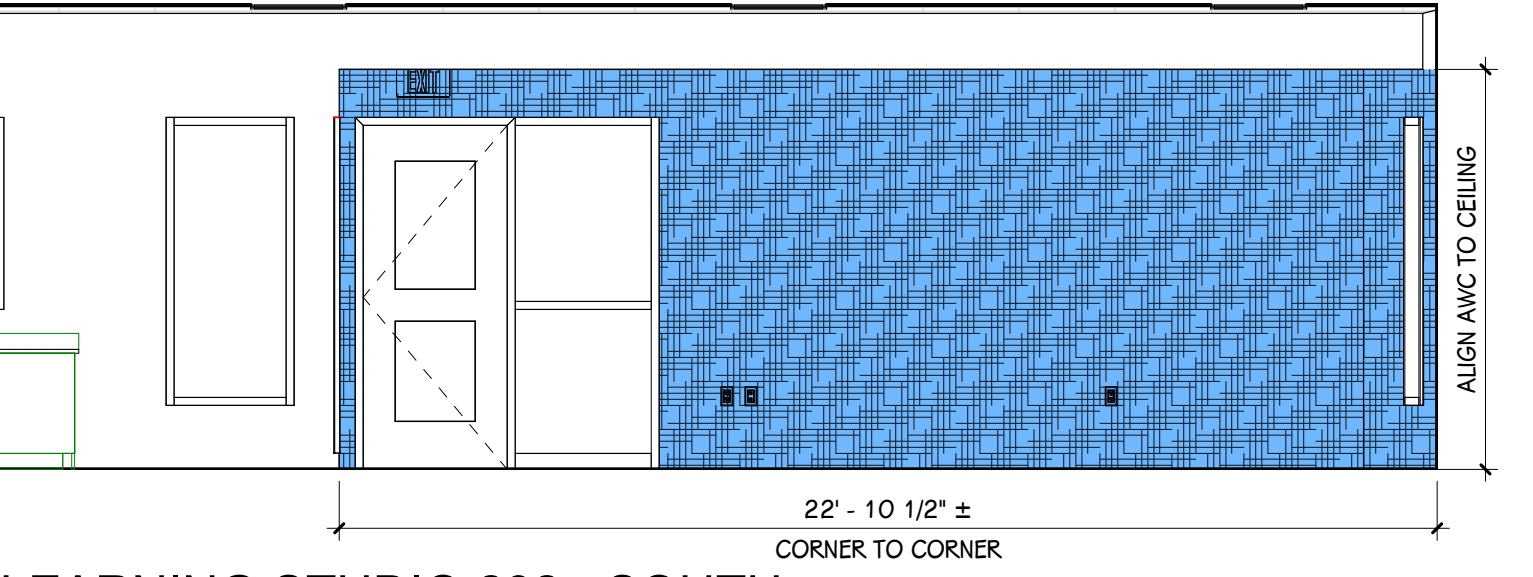
AWC-1: GHERKIN	P-9: RIVERWAY
AWC-2: BEEHIVE	P-10: TEMPE STAR
AWC-3: MURALLA	P-11: HARMONIC TAN
AWC-4: VINTAGE	P-12: ALCHEMY
P-4: GREEN ONYX	P-13: DIFFERENT GOLD
P-5: ARTICHOKE	P-14: MESA TAN
P-6: OASMOSS	P-15: BRANDYWINE
P-7: VOGUE GREEN	P-16: ROOKWOOD TERRA COTTA
P-8: ACACIA HAZE	



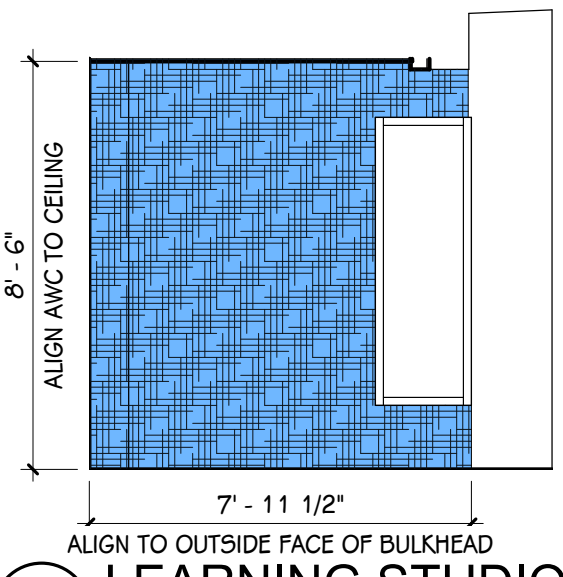
65 LEARNING STUDIO 232 - NORTH
1/4" = 1'-0"



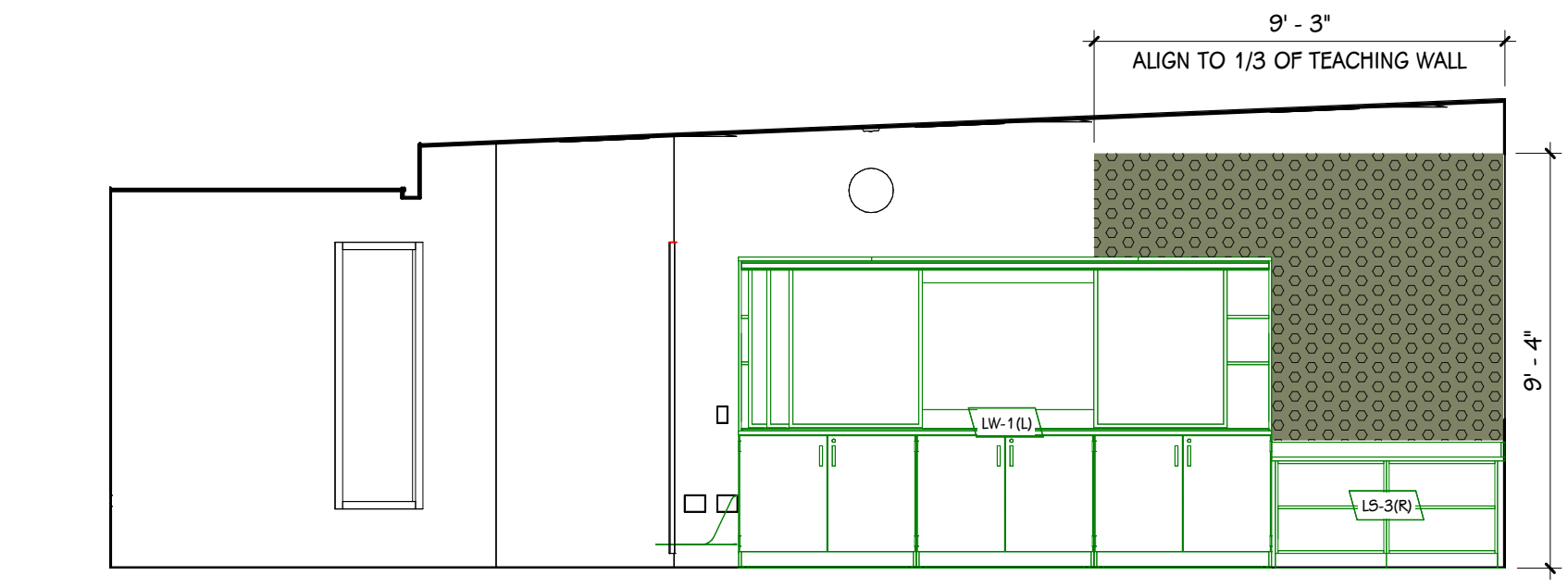
66 LEARNING STUDIO 232 - EAST
1/4" = 1'-0"



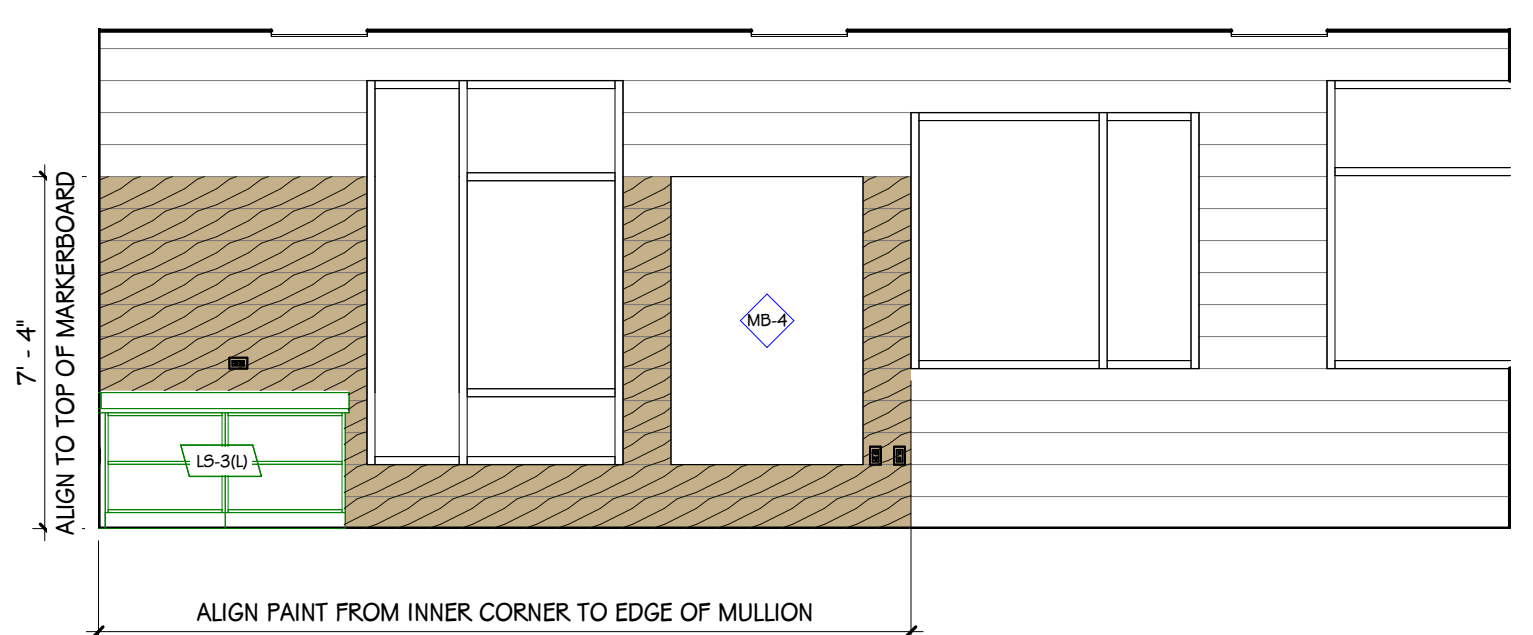
67 LEARNING STUDIO 232 - SOUTH
1/4" = 1'-0"



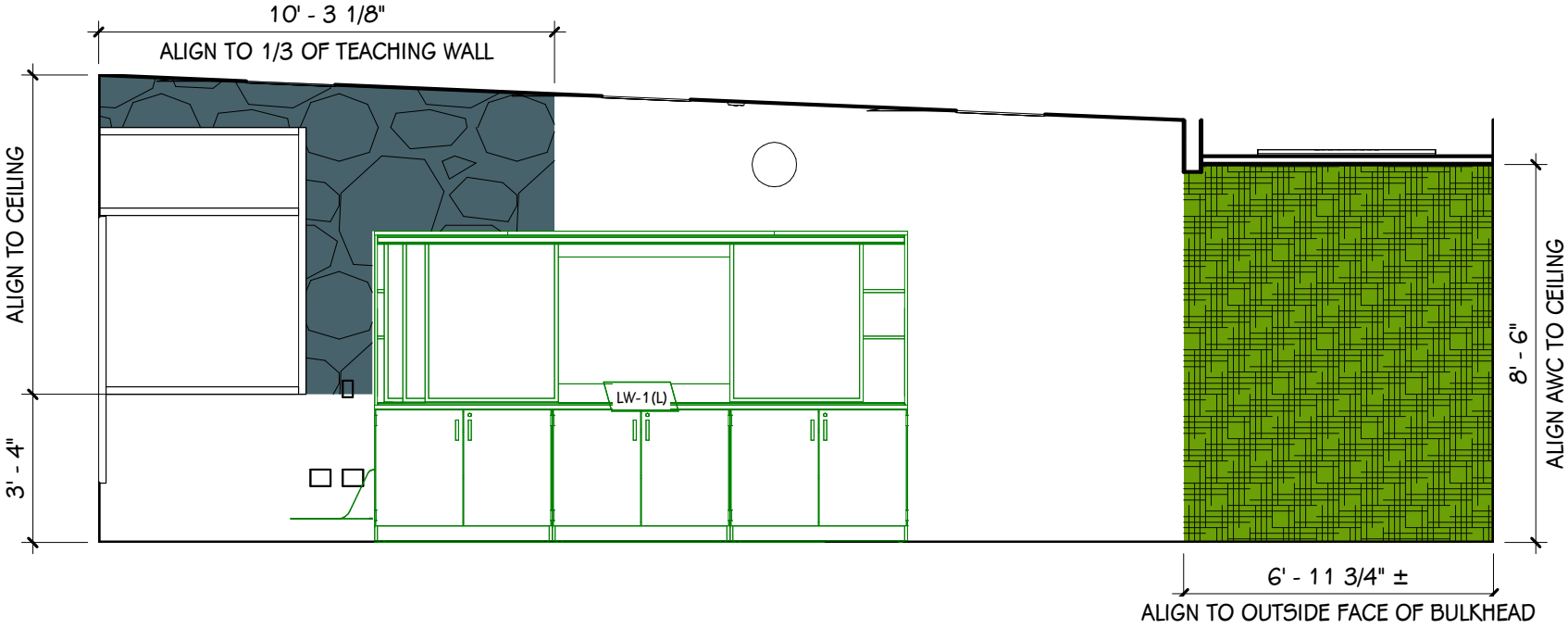
68 LEARNING STUDIO 232 - SOUTHWEST
1/4" = 1'-0"



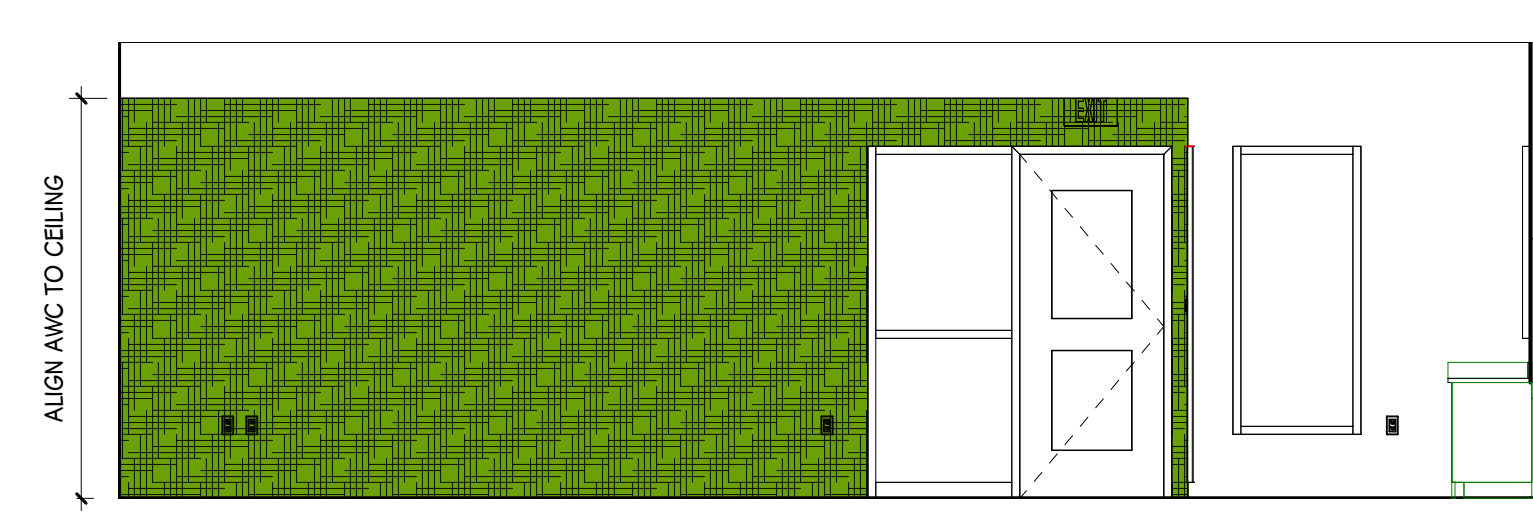
69 LEARNING STUDIO 232 - WEST
1/4" = 1'-0"



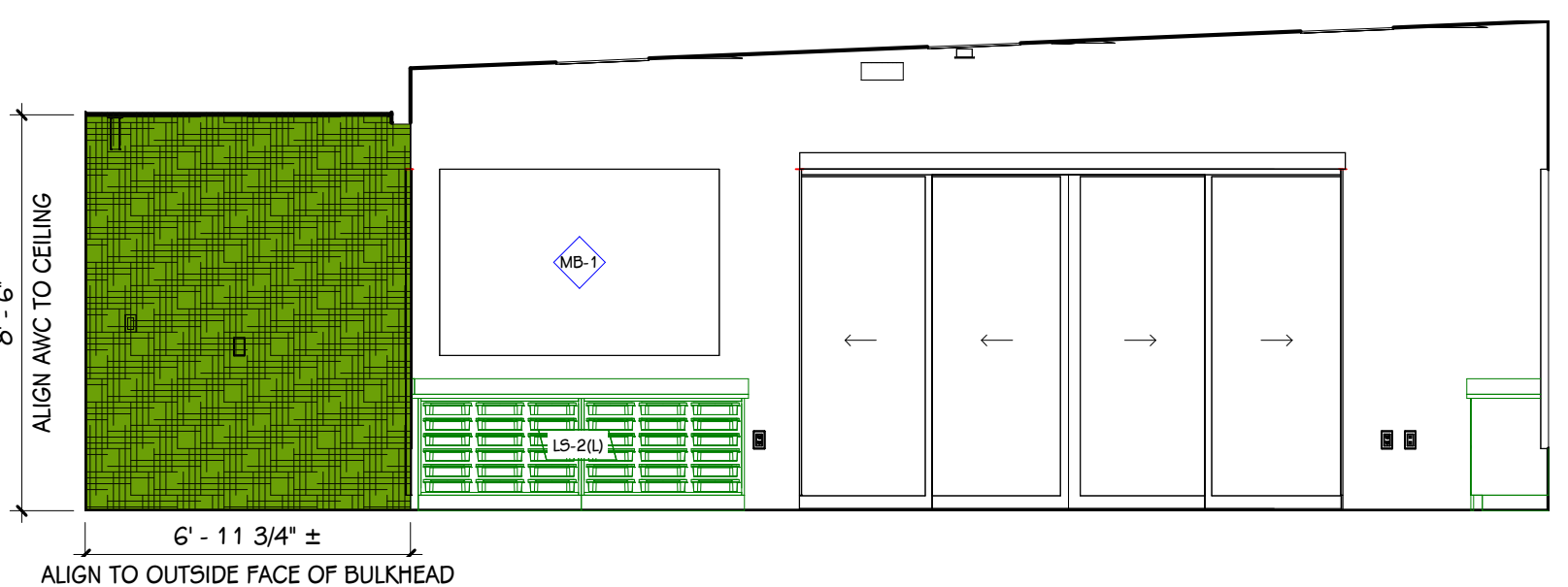
70 LEARNING STUDIO 234 - NORTH
1/4" = 1'-0"



71 LEARNING STUDIO 234 - EAST
1/4" = 1'-0"



72 LEARNING STUDIO 234 - SOUTH
1/4" = 1'-0"



73 LEARNING STUDIO 234 - WEST
1/4" = 1'-0"

ADD. No. 2 AUG 2, 2023
ISSUED FOR DATE

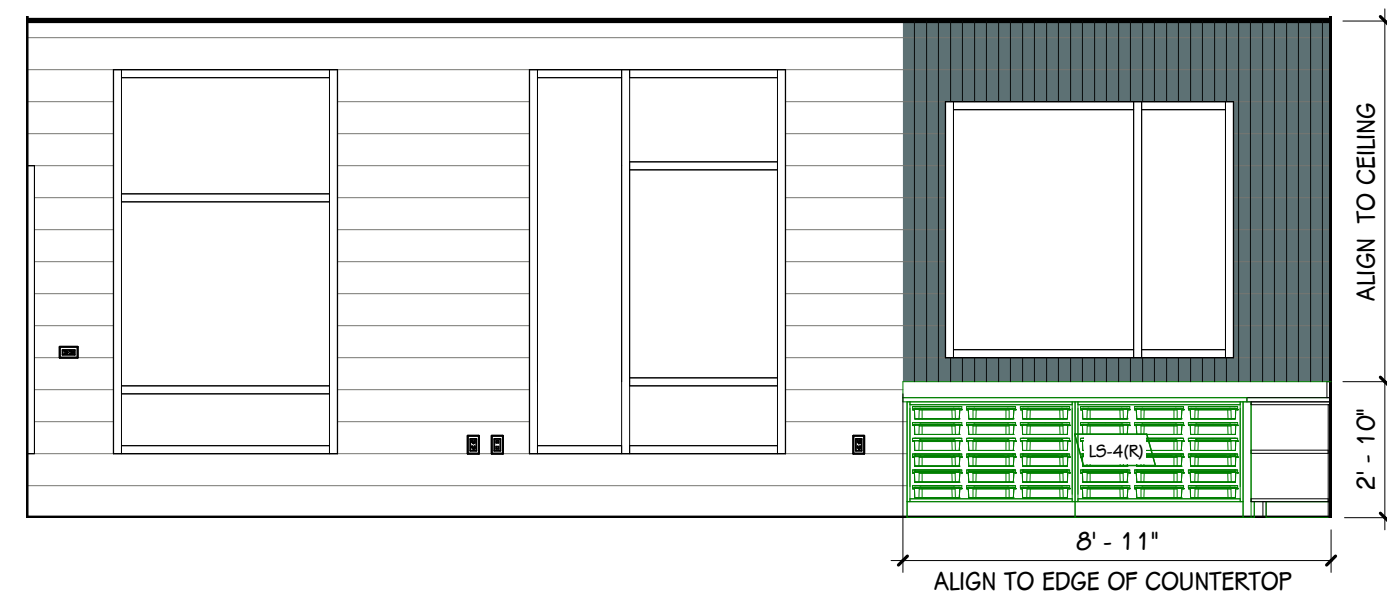
PROJECT TITLE
HAVERHILL ELEMENTARY SCHOOL
BID PACKAGE 6: CONSTRUCTION

OWNER
PORTAGE PUBLIC SCHOOLS
Portage, Michigan

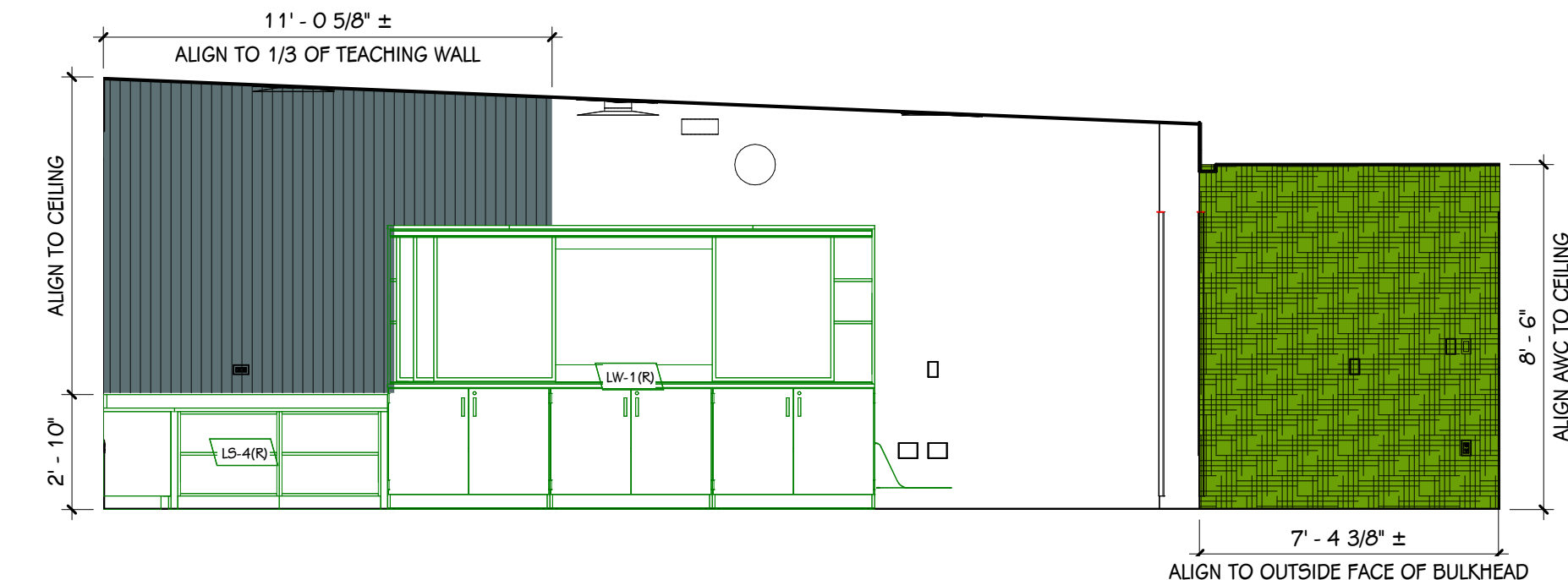
SHEET TITLE
PATTERN ELEVATIONS

SHEET NUMBER
1226
DATE
JUNE 30, 2023
21-237.20

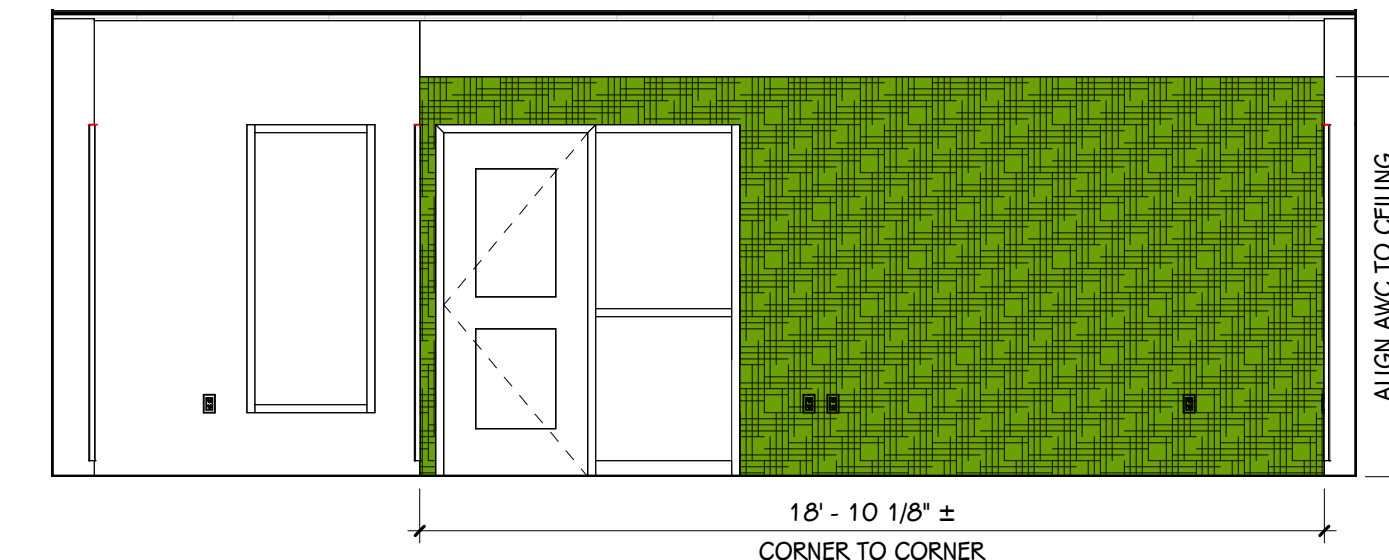
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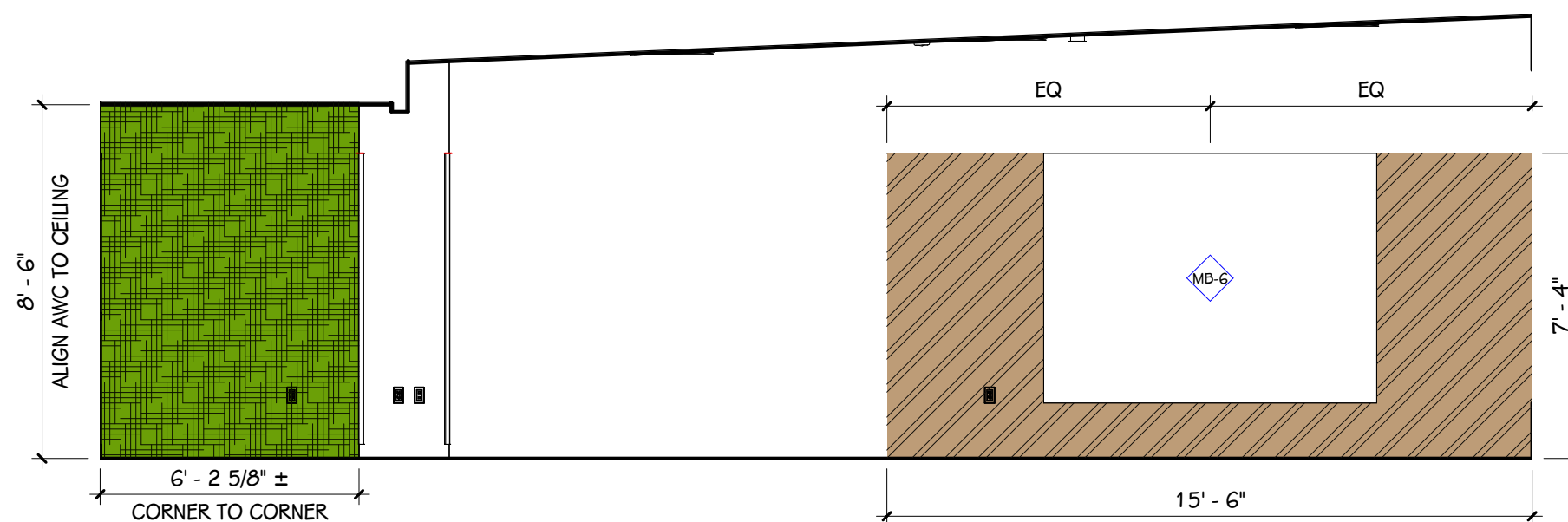
74 LEARNING STUDIO 236 - NORTH
1/4" = 1'-0"



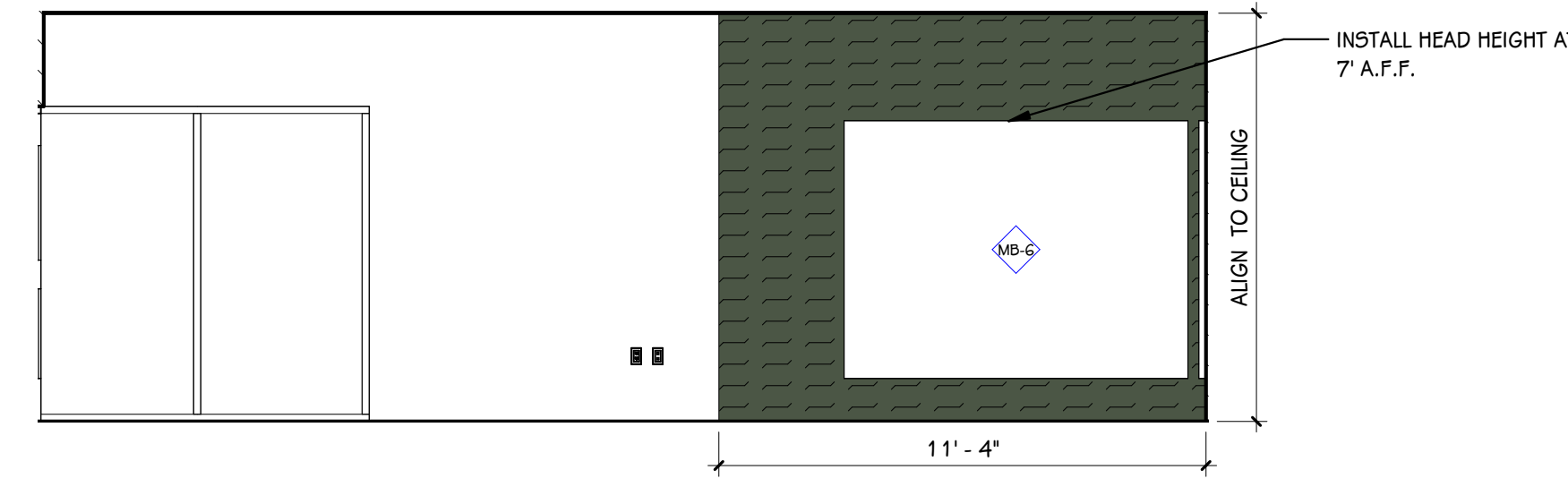
75 LEARNING STUDIO 236 - EAST
1/4" = 1'-0"



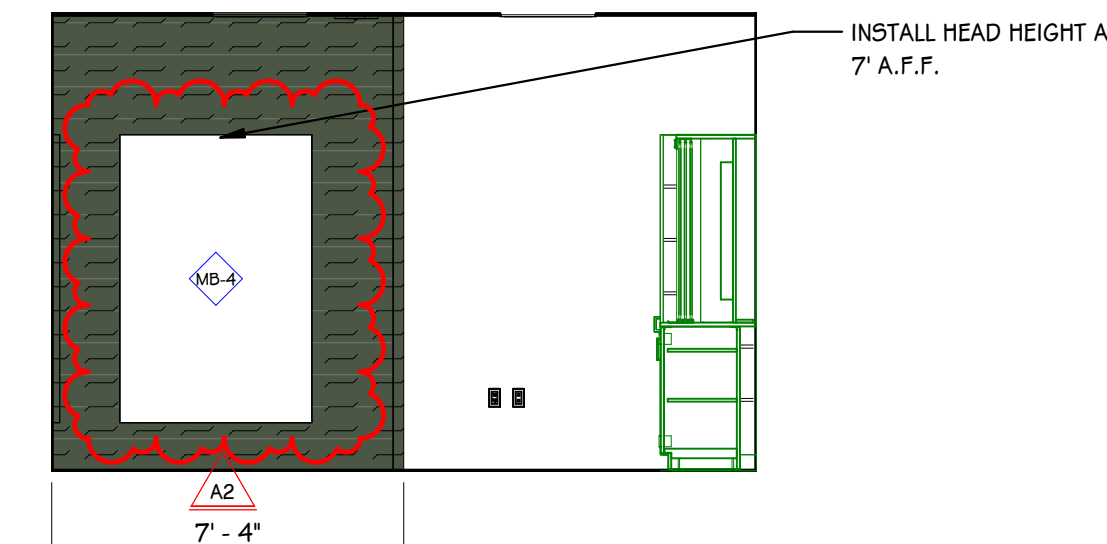
76 LEARNING STUDIO 236 - SOUTH
1/4" = 1'-0"



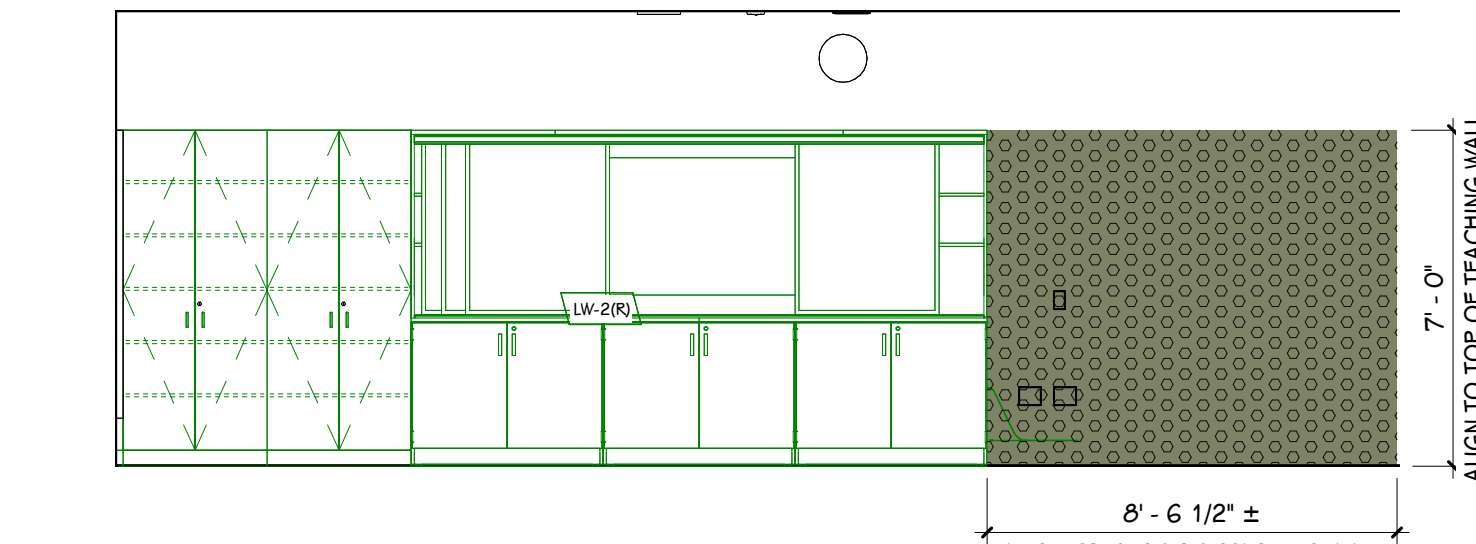
77 LEARNING STUDIO 236 - WEST
1/4" = 1'-0"



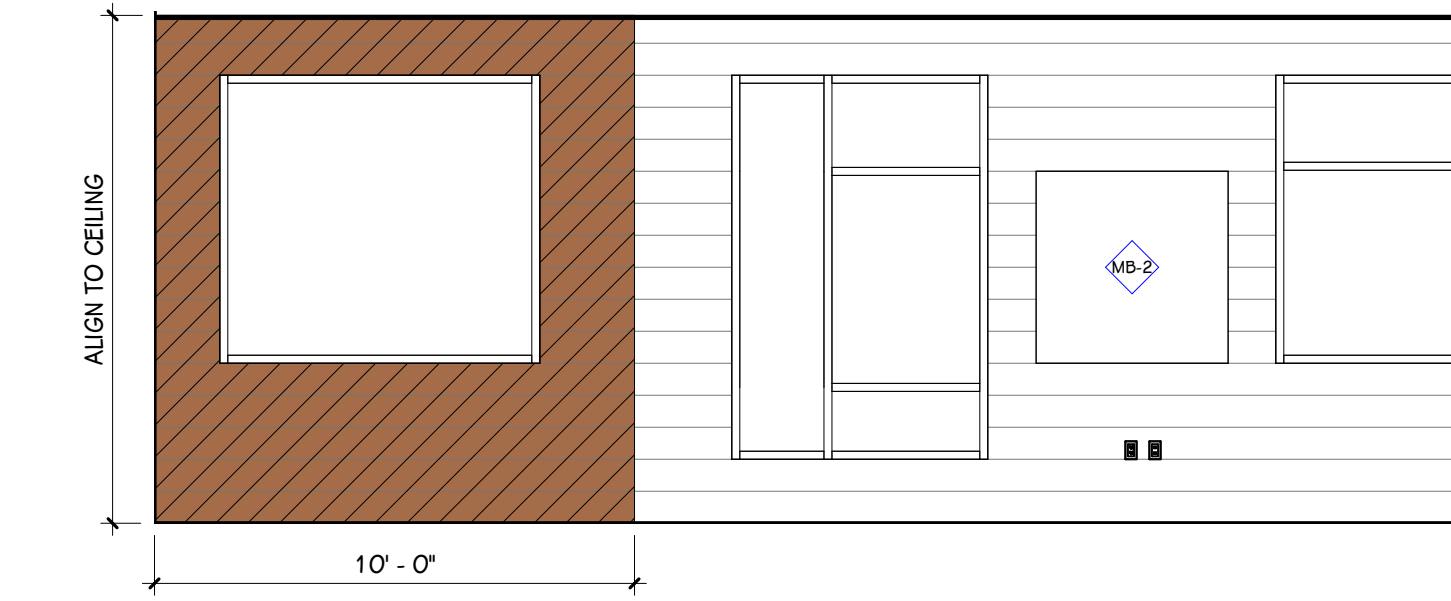
78 ESI STUDIO 237 - NORTH
1/4" = 1'-0"



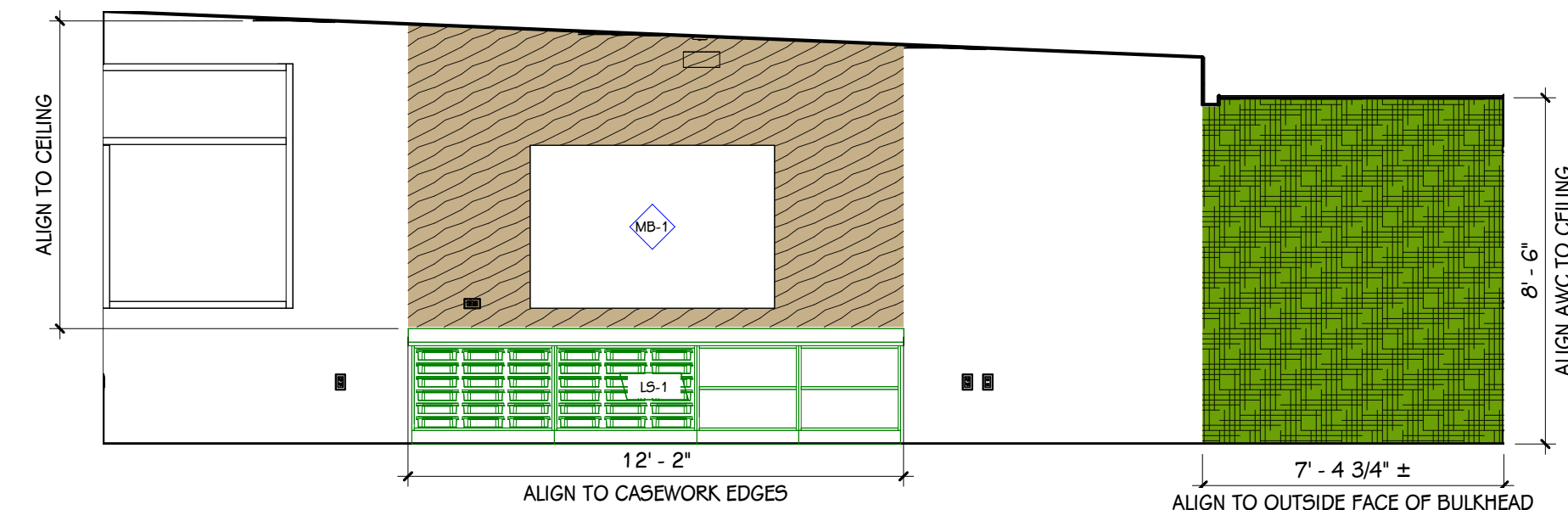
79 ESI STUDIO 237 - EAST
1/4" = 1'-0"



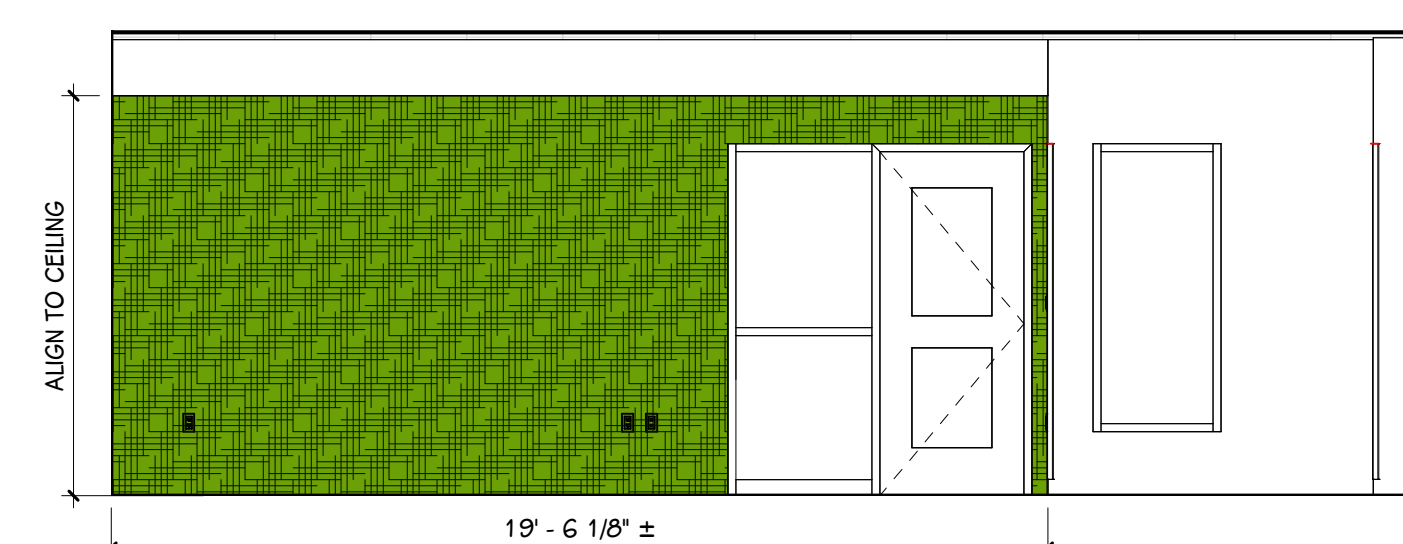
80 ESI STUDIO 237 - SOUTH
1/4" = 1'-0"



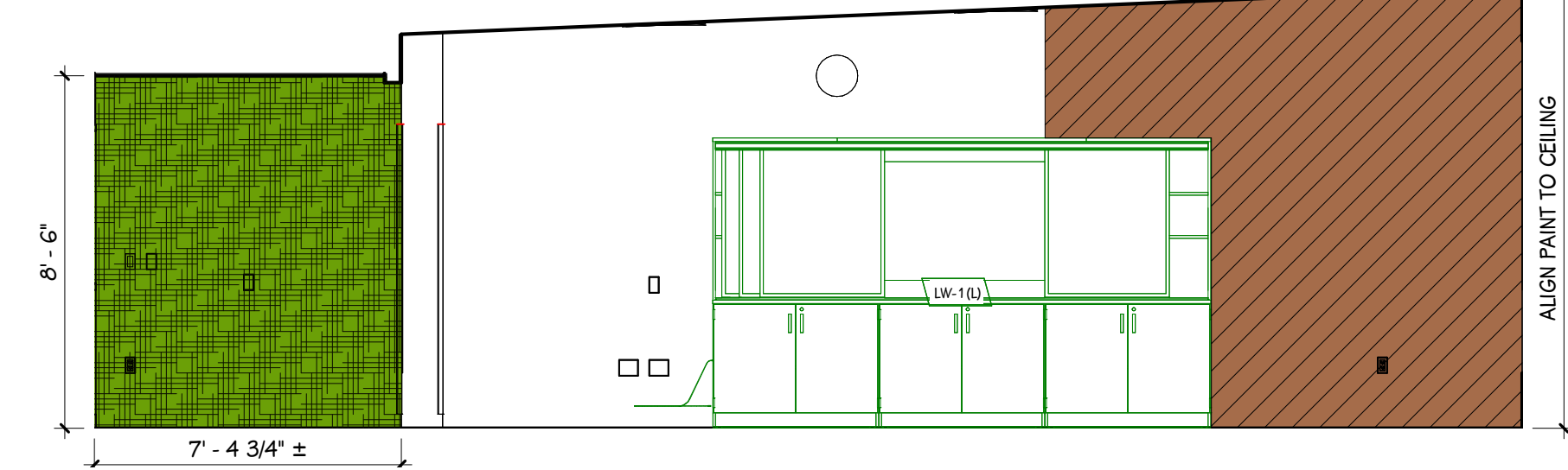
81 LEARNING STUDIO 242 - NORTH
1/4" = 1'-0"



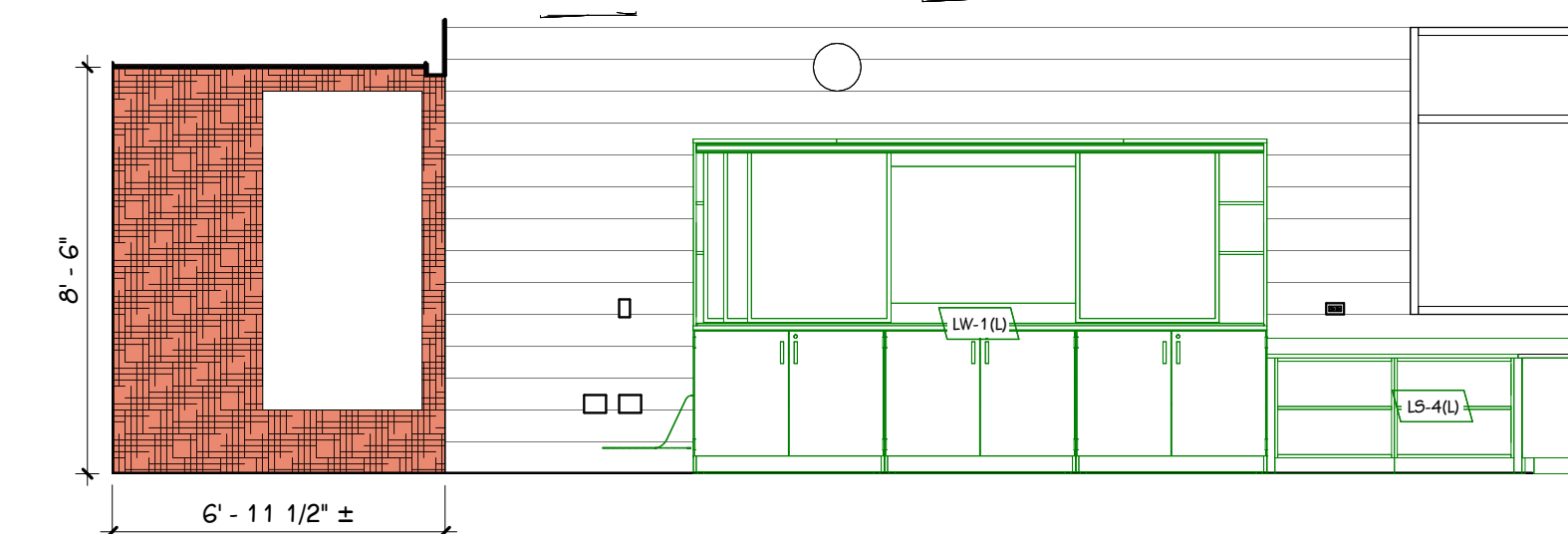
82 LEARNING STUDIO 242 - EAST
1/4" = 1'-0"



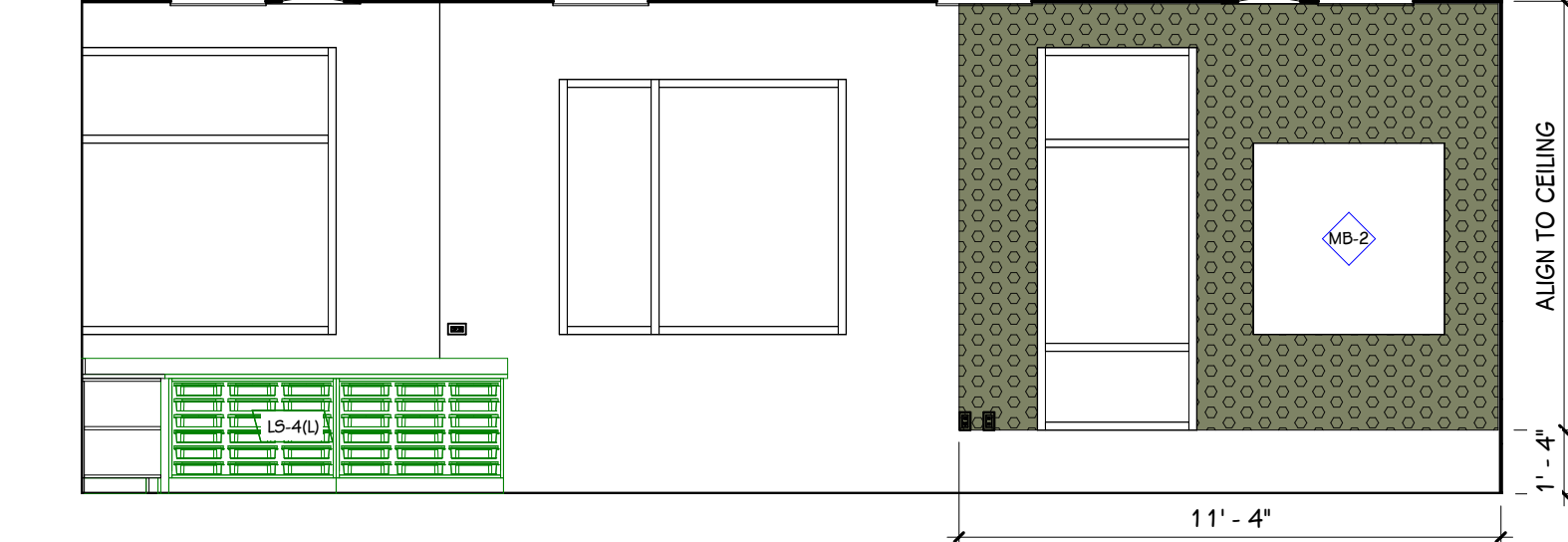
83 LEARNING STUDIO 242 - SOUTH
1/4" = 1'-0"



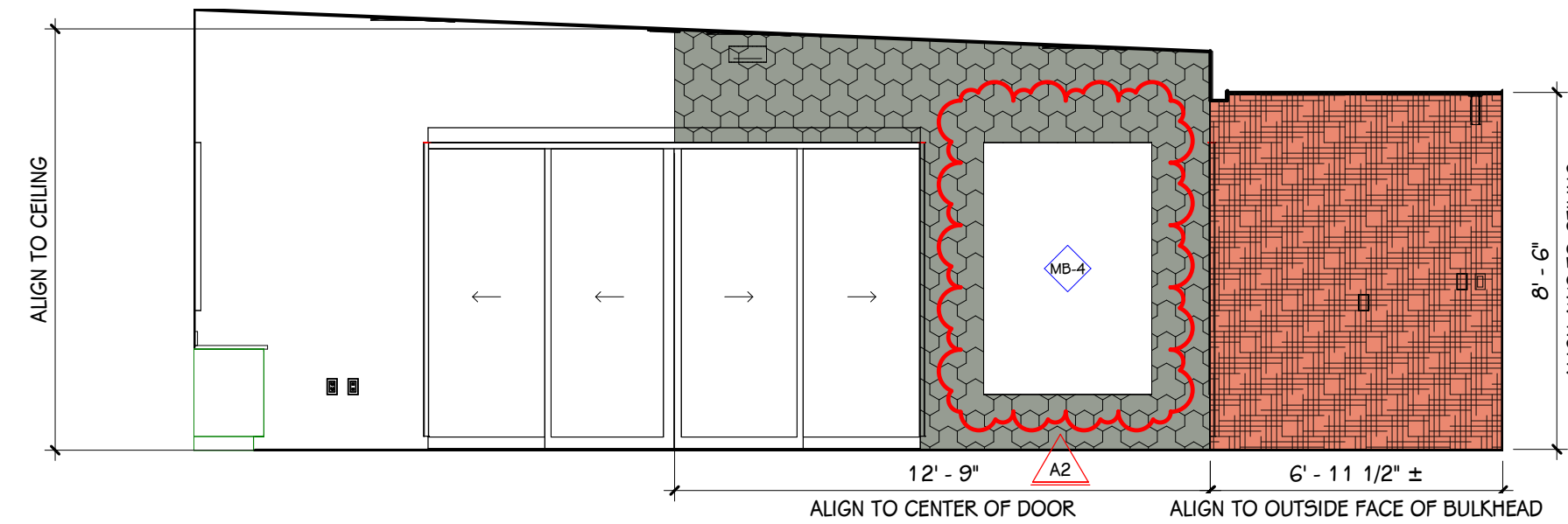
84 LEARNING STUDIO 242 - WEST
1/4" = 1'-0"



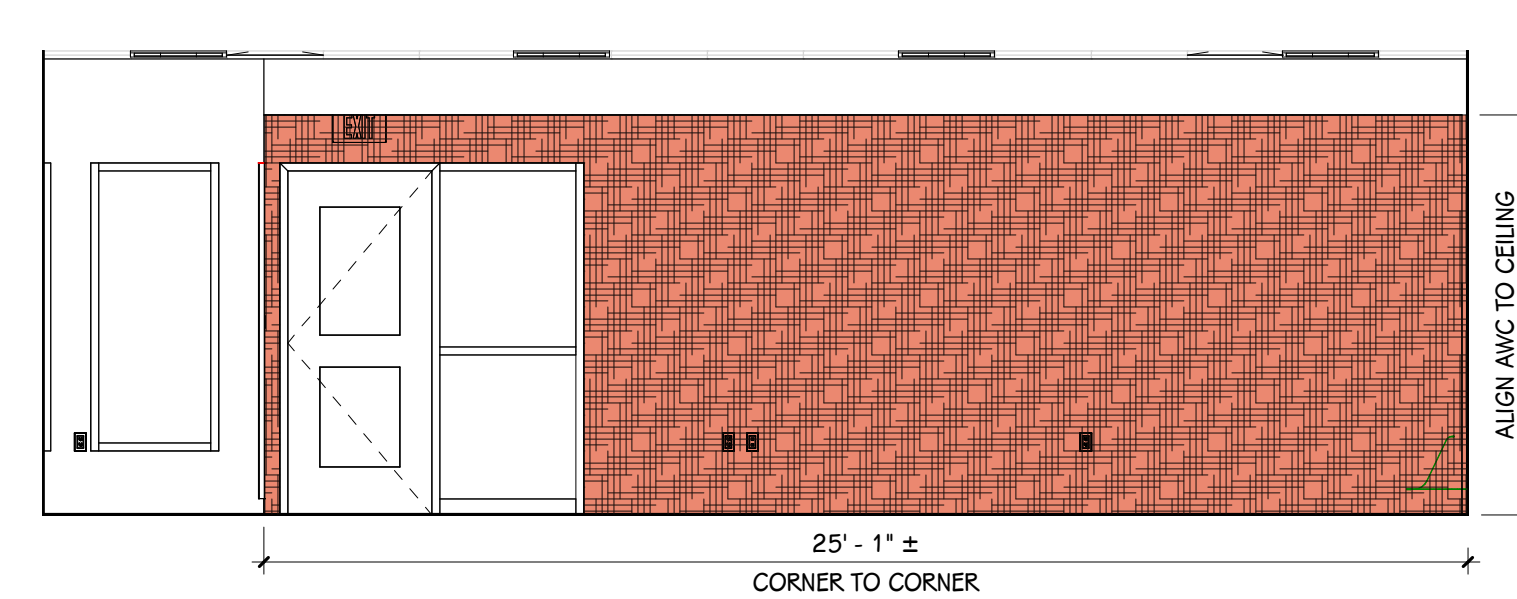
85 LEARNING STUDIO 244 - NORTH
1/4" = 1'-0"



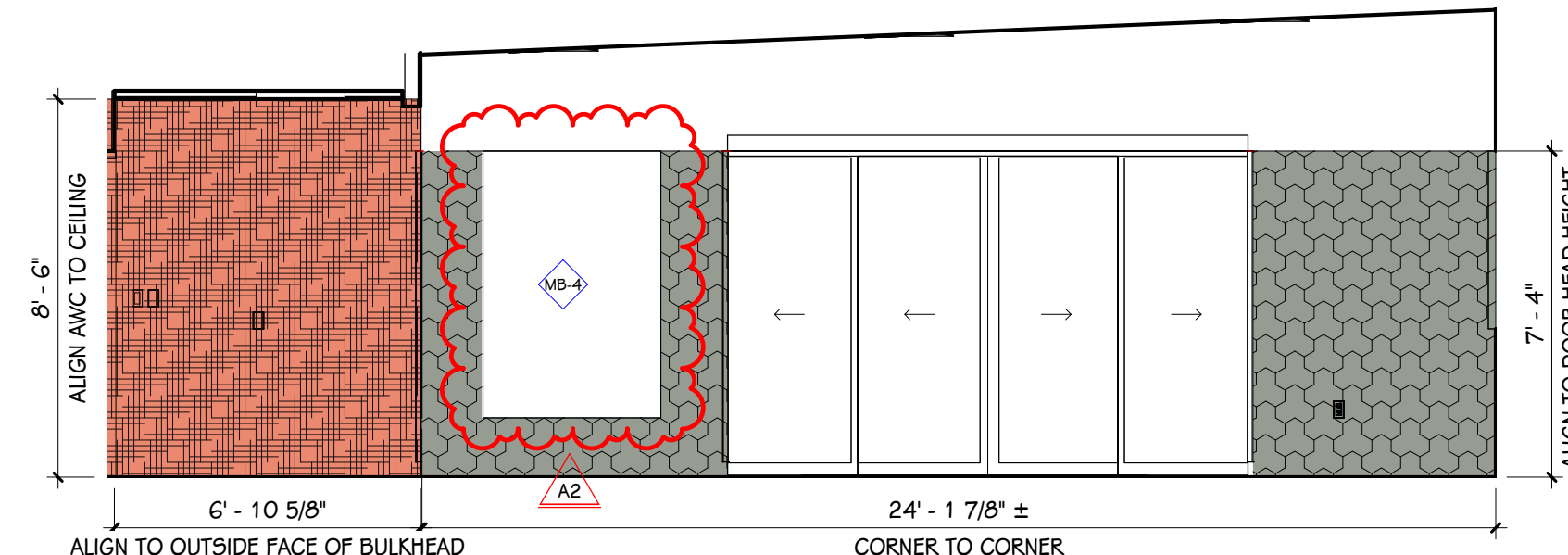
86 LEARNING STUDIO 244 - EAST
1/4" = 1'-0"



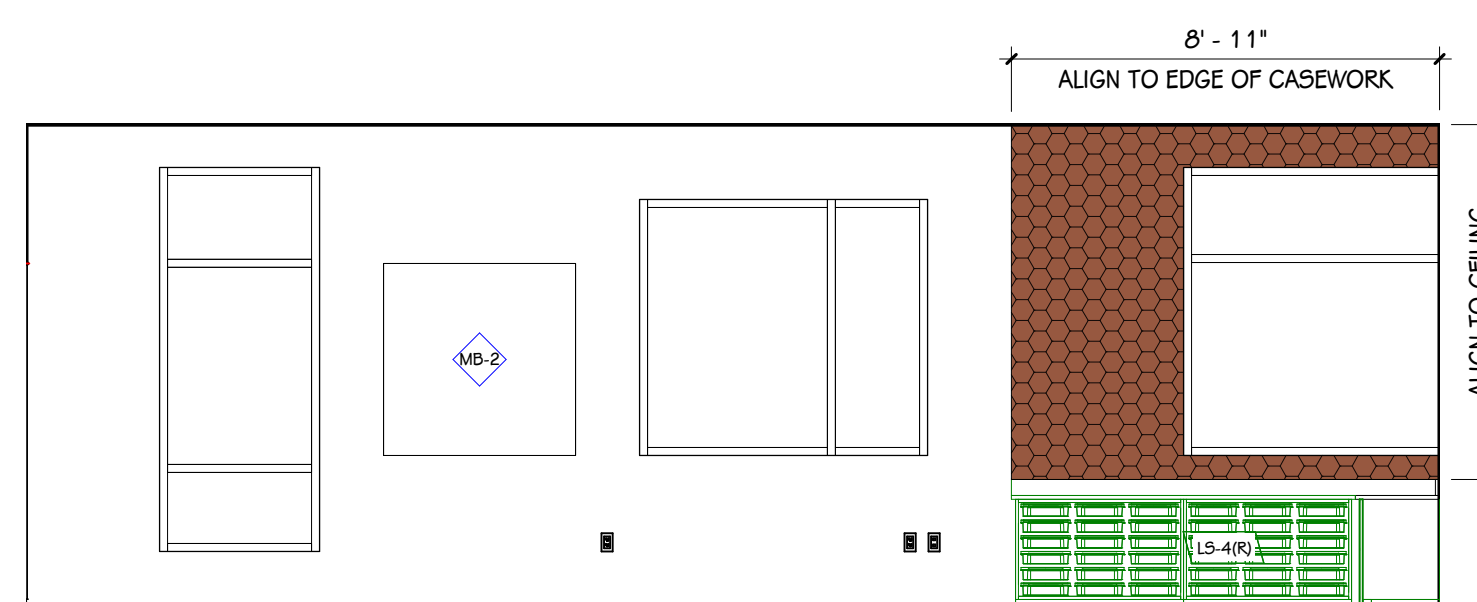
87 LEARNING STUDIO 244 - SOUTH
1/4" = 1'-0"



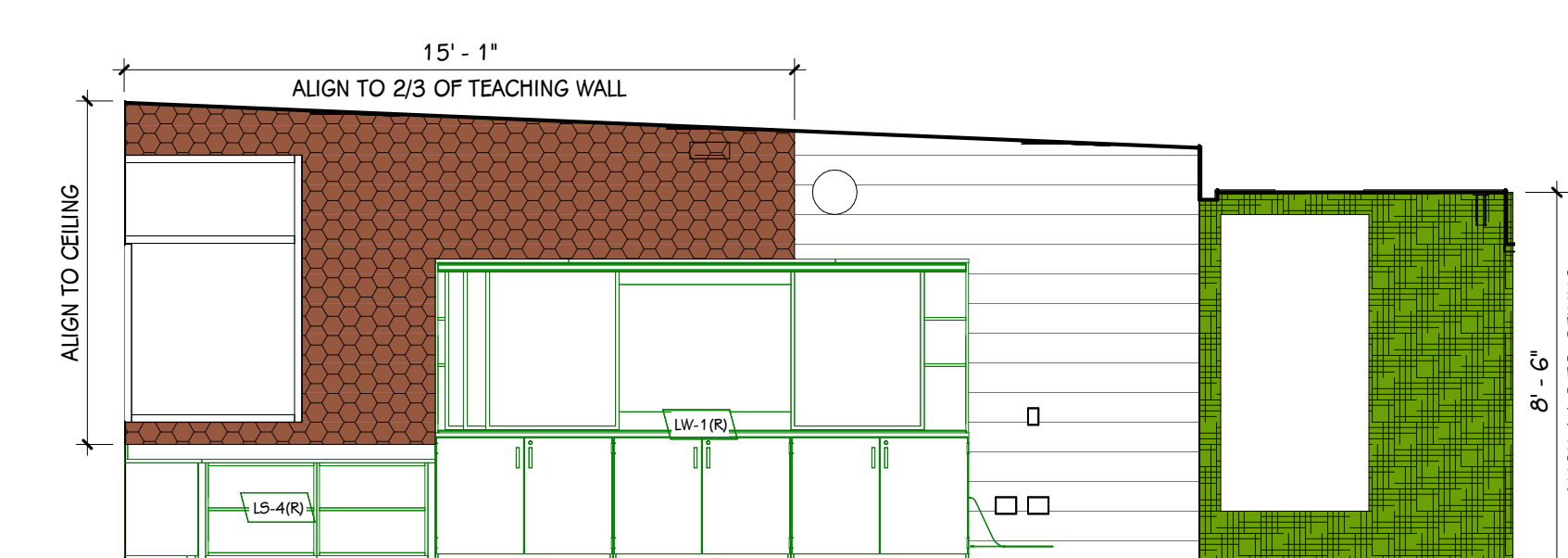
88 LEARNING STUDIO 244 - WEST
1/4" = 1'-0"



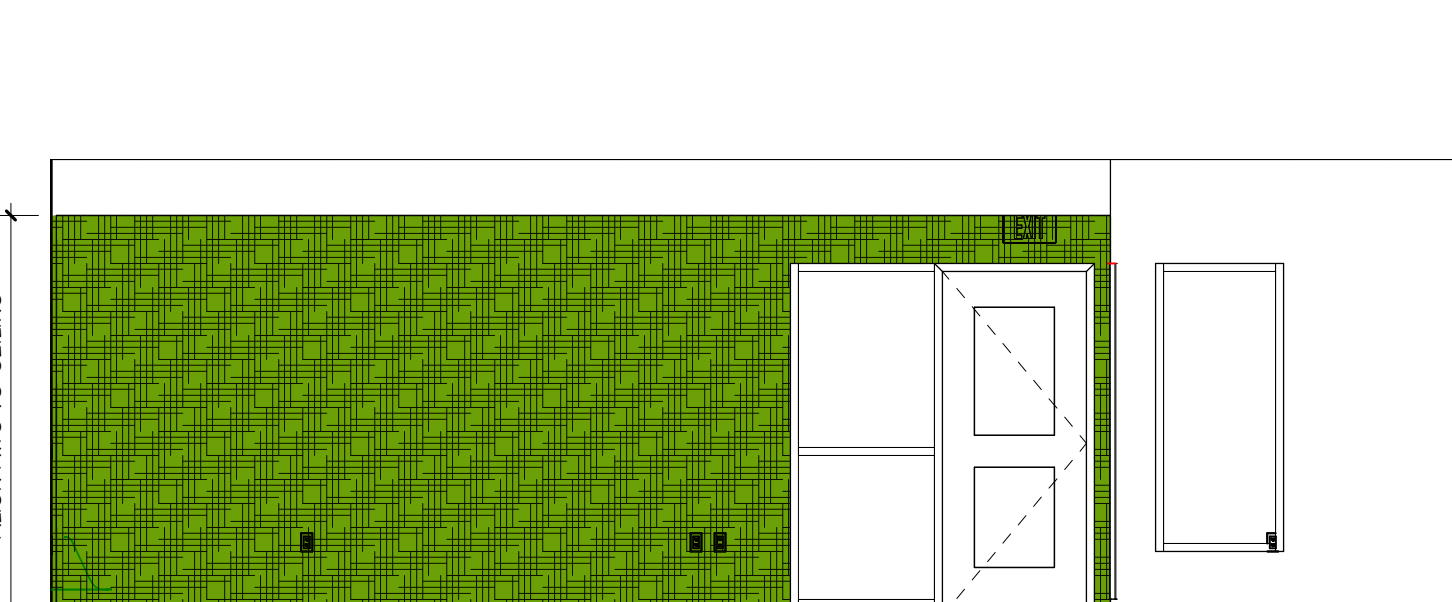
89 LEARNING STUDIO 246 - NORTH
1/4" = 1'-0"



90 LEARNING STUDIO 246 - EAST
1/4" = 1'-0"



91 LEARNING STUDIO 246 - SOUTH
1/4" = 1'-0"



92 LEARNING STUDIO 246 - WEST
1/4" = 1'-0"

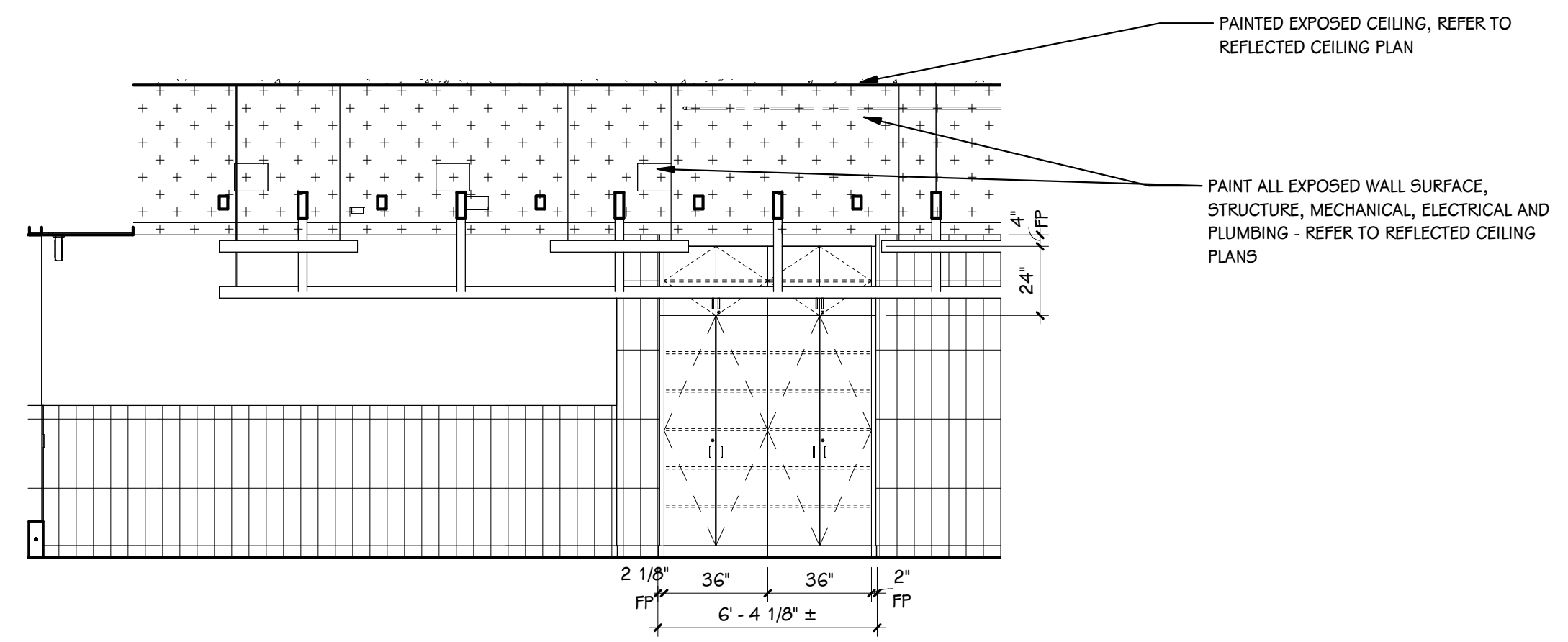
GENERAL NOTES - PATTERN ELEVATIONS

- 1 REFER TO FINISH PLANS FOR INTERIOR ELEVATIONS OF CASEWORK AND NON-PATTERNED FINISH DETAILS.
- 2 REFER TO MATERIAL SELECTION SCHEDULE, FINISH PLANS, AND SPECIFICATION FOR ADDITIONAL FINISH INFORMATION.
- 3 REFER TO REFLECTED CEILING PLANS FOR CEILING AND BULKHEAD HEIGHTS AND FINISHES.
- 4 NOT ALL MATERIALS ARE ILLUSTRATED. REFER TO FINISH PLANS AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION. (E. RUBBER BASE NOT INDICATED, INSTALL PER FINISH PLAN)
- 5 ALIGN PATTERN TO NEAREST HORIZONTAL MASONRY JOINT, UNLESS NOTED OTHERWISE.
- 6 WHERE PATTERNS ARE INDICATED TO ALIGN TO CASEWORK OR SHELVING, COORDINATE WITH APPROVED SHOP DRAWINGS.

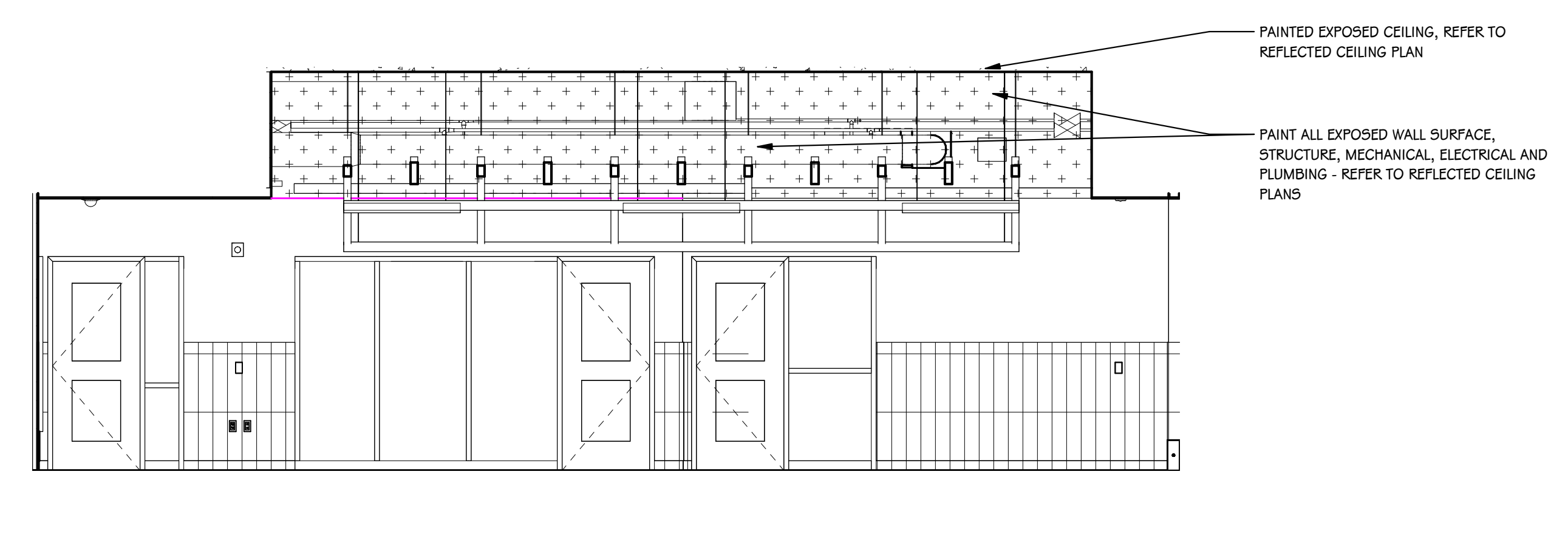
COLOR LEGEND - PATTERN ELEVATIONS

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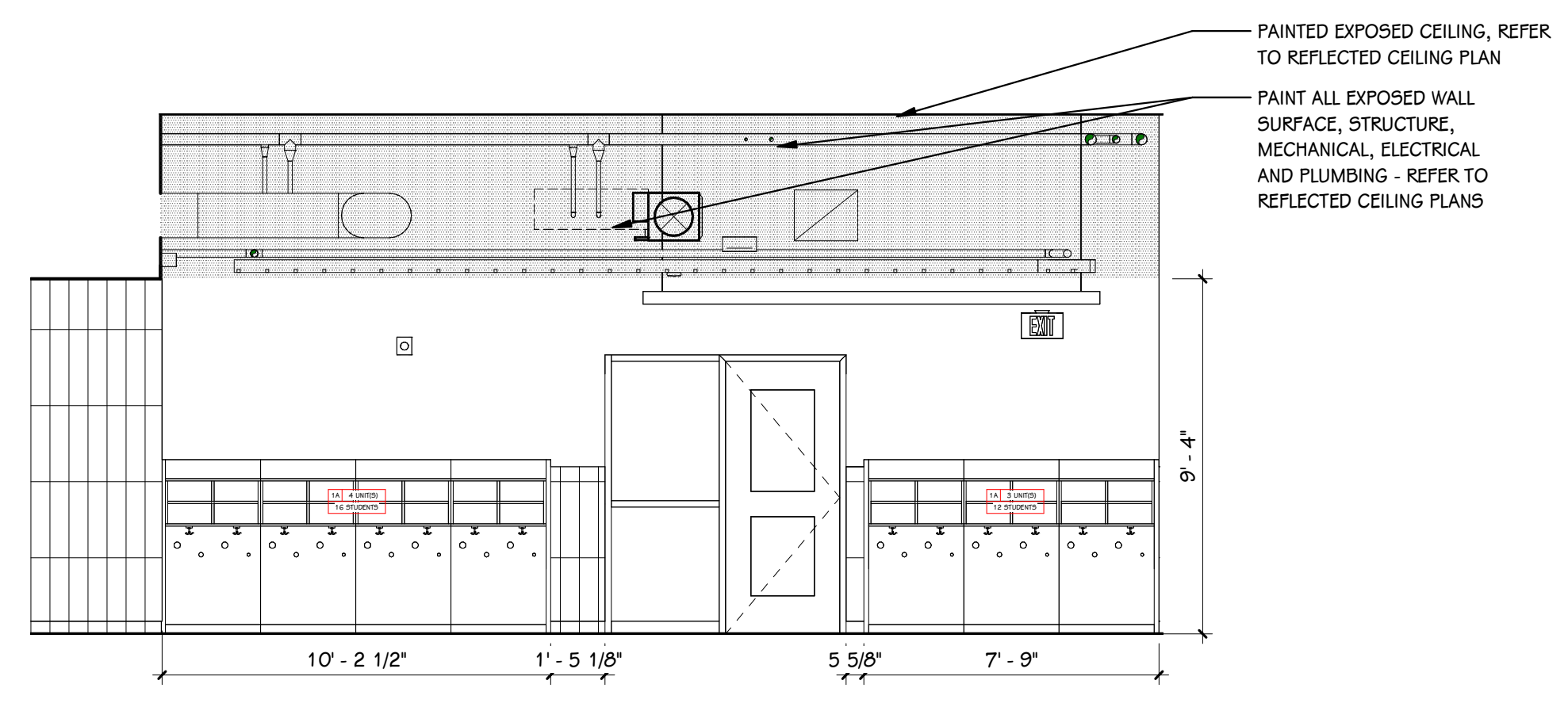
GENERAL NOTES - INTERIOR ELEVATIONS			
1.	REFER TO FINISH PLANS FOR CALLOUTS OF MILLWORK OR ENLARGED FINISH PLANS FOR SCOPE NOT COVERED WITHIN INTERIOR ELEVATIONS.		
2.	REFER TO PATTERN ELEVATIONS FOR COLOR-BLOCKING AND PATTERNED INSTALLATION DETAILS OF PAINT AND ACOUSTICAL WALL PANELS.		
3.	REFER TO FINISH PLANS AND SPECIFICATION FOR EDUCATIONAL CASEGOODS NOT INCLUDED WITHIN CASEWORK PACKAGE.		
4.	REFER TO FINISH PLANS FOR VISUAL DISPLAY BOARD AND CORNER GUARD TAGS.		
5.	NOT ALL MATERIALS ARE ILLUSTRATED, REFER TO FINISH PLANS AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION.		
6.	AT AREAS OF EXPOSED CEILING, WALL SURFACE SHALL BE PAINTED TO MATCH CEILING ABOVE HEIGHT INDICATED, REFER TO REFLECTED CEILING PLAN KEY FOR PAINT COLOR.		
GENERAL NOTES - CASEWORK			
1.	VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION.		
2.	FILLER PANELS SHALL BE NO LESS THAN 2" WIDE, UNLESS NOTED OTHERWISE.		
3.	REFER TO FLOOR FINISH PLANS FOR CASEWORK AND COUNTERTOP FINISHES BY ROOM.		
4.	FINISH ANY EXPOSED END PANELS, UNDERSIDE OF CABINETS OR OPEN CABINETS, WITH PLASTIC LAMINATE SPECIFIED FOR FRONTS IN THAT ROOM.		
5.	ALL VERTICAL AND HORIZONTAL EXPOSED AND SEMI-EXPOSED SURFACES TO BE FINISHED WITH BODY PLASTIC LAMINATE.		
6.	SUPPORT BRACKETS ARE REQUIRED EVERY 36" O.C. AT AREAS WHERE COUNTERTOP IS OPEN UNDERNEATH. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING BRACKETS APPROPRIATELY SIZED BASED ON DEPTH OF COUNTERTOP.		
7.	PATTERN OR GRAIN DIRECTION TO BE VERTICAL ON DOORS AND HORIZONTAL ON DRAWERS - PER AIA STANDARDS, UNLESS NOTED OTHERWISE.		
8.	LOCKS SHALL BE PROVIDED WHERE ILLUSTRATED, KEYS ALIKE BY ROOM, OR BY EACH GROUPING / RUN OF CUBBIES.		
9.	GROMMET LOCATIONS SHALL BE VERIFIED IN THE FIELD WITH THE OWNER PRIOR TO INSTALLATION - COORDINATE WITH POWER & DATA LOCATIONS FOR ANY ADDITIONAL WIRE MANAGEMENT REQUIREMENTS.		
10.	'SLABSMITHING' WILL BE REQUIRED IN INSTANCES WHERE A PATTERNED SOLID SURFACE IS SPECIFIED.		
11.	WHERE CASEWORK IS INDICATED TO RECEIVE RESIDENTIAL APPLIANCES OR OWNER-FURNISHED EQUIPMENT, COORDINATE WITH FINAL OWNER-PROVIDED SELECTIONS.		
STANDARD ABBREVIATIONS - CASEWORK			
ADJ	ADJUSTABLE	FP	FILLER PANEL
BF	BARRIER FREE	RP	REMOVABLE PANEL
EP	END PANEL	P/O	PULL OUT TRASH DRAWER
HARDWARE AND ACCESSORY SELECTIONS - CASEWORK			
PULLS: BENTWIRE - NICKEL FINISH, OR SIMILAR			
COUNTERTOP EDGES: PLASTIC LAMINATE - 3MM PVC EDGE, MATCHING SURFACE LAMINATE. SOLID SURFACE - 1-1/2" BUILT-UP EDGE WITH PENCIL PROFILE.			
SUPPORT BRACKETS: METAL STUD WALL CONSTRUCTION - AIA CONCEALED FLAT BRACKETS, OR A 4 M HEAVY-DUTY HYBRID BRACKETS (SIZE A5 REQ'D.) CMU WALL CONSTRUCTION - AIA HEAVY-DUTY HYBRID BRACKETS (SIZE A5 REQ'D.)			
PULL-OUT TRASH DRAWERS: RICHELIEU 53WC SERIES RECYCLING CENTER IN SILVER GRAY (INCLUDE 2 BINS), OR SIM.			



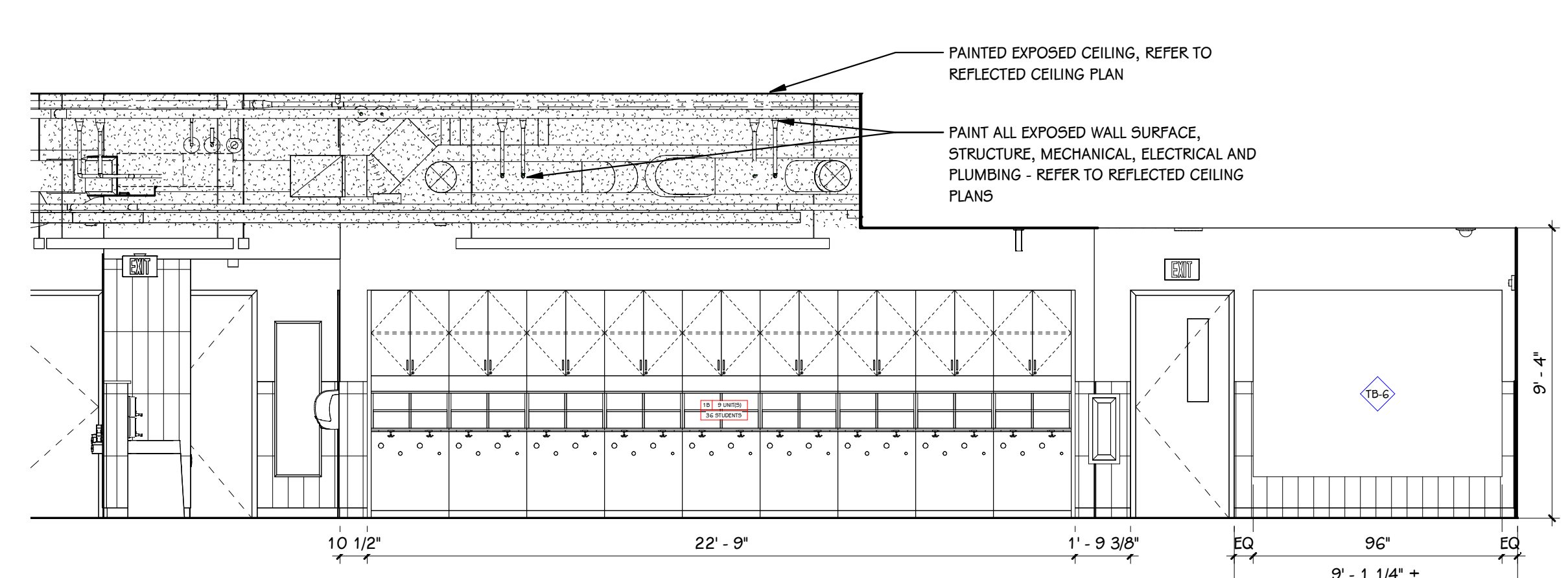
23 COMMONS 120 - EAST
1/4" = 1'-0"



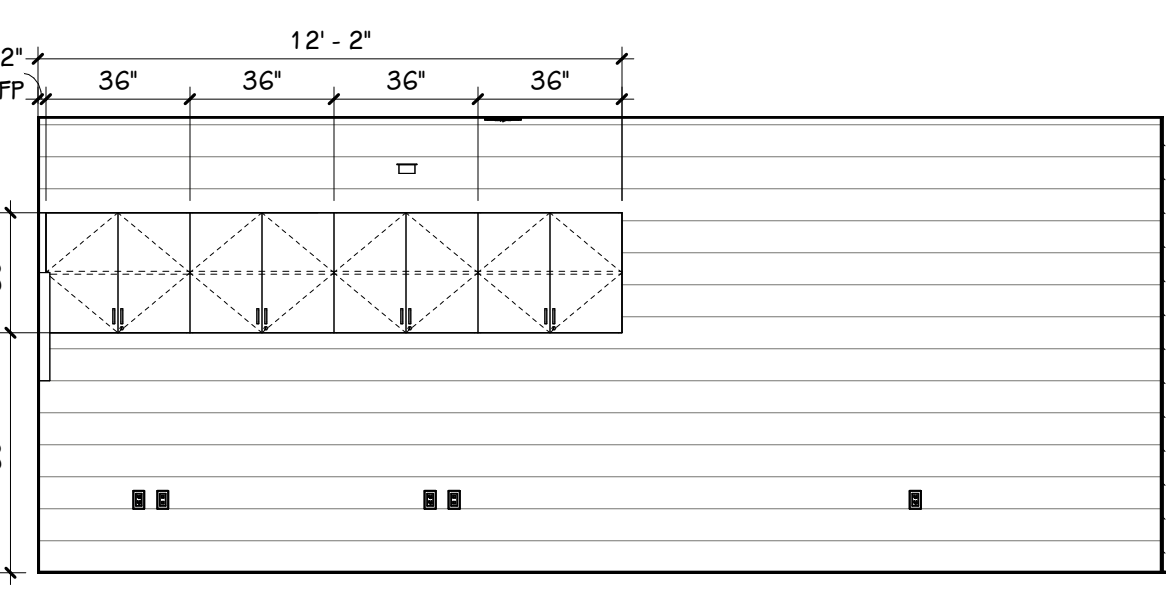
24 COMMONS 120 - WEST
1/4" = 1'-0"



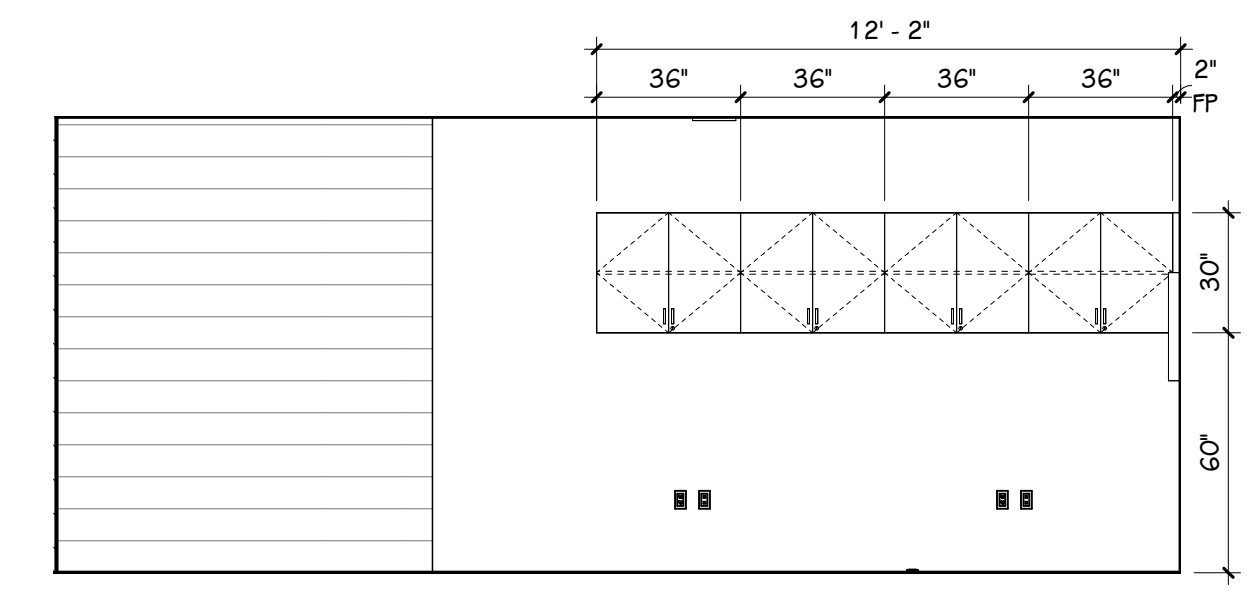
25 PASSAGEWAY 120H - NORTH
1/4" = 1'-0"



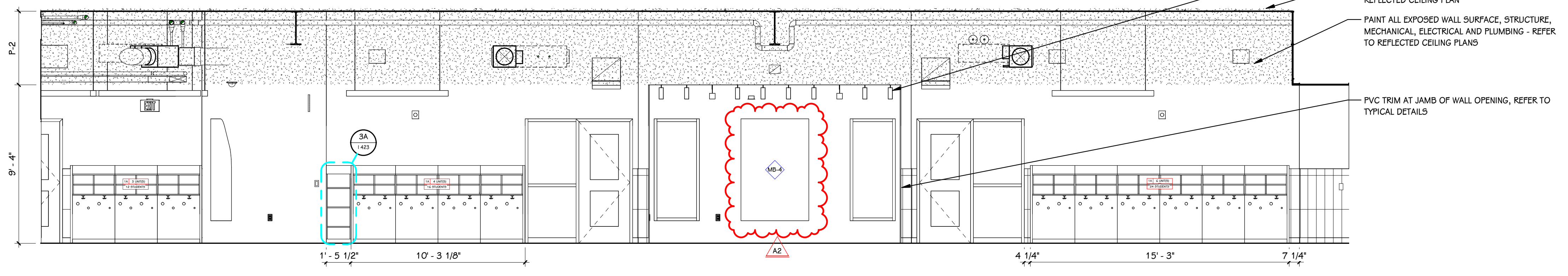
26 PASSAGEWAY 120H - SOUTH
1/4" = 1'-0"



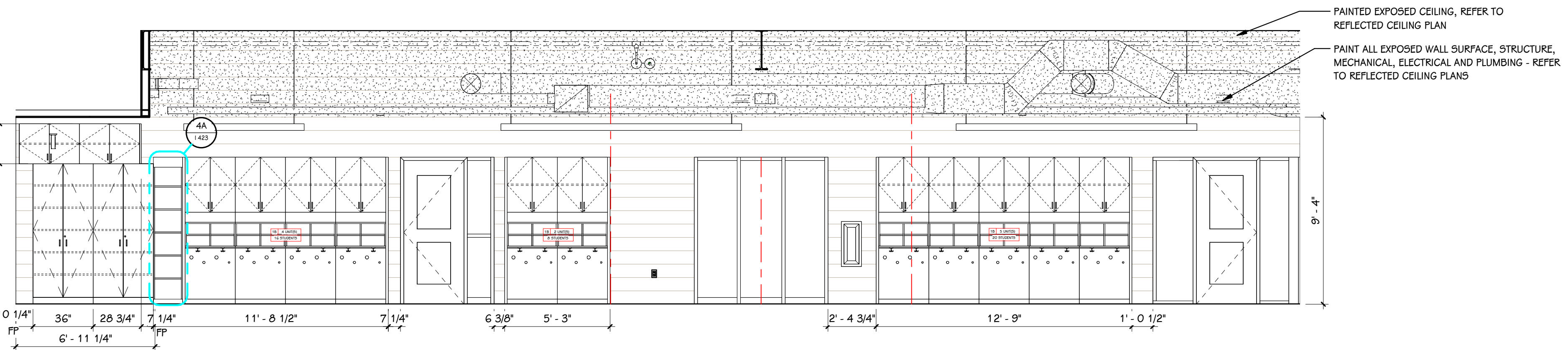
27 EDUC WORKSHOP 123 - NORTH
1/4" = 1'-0"



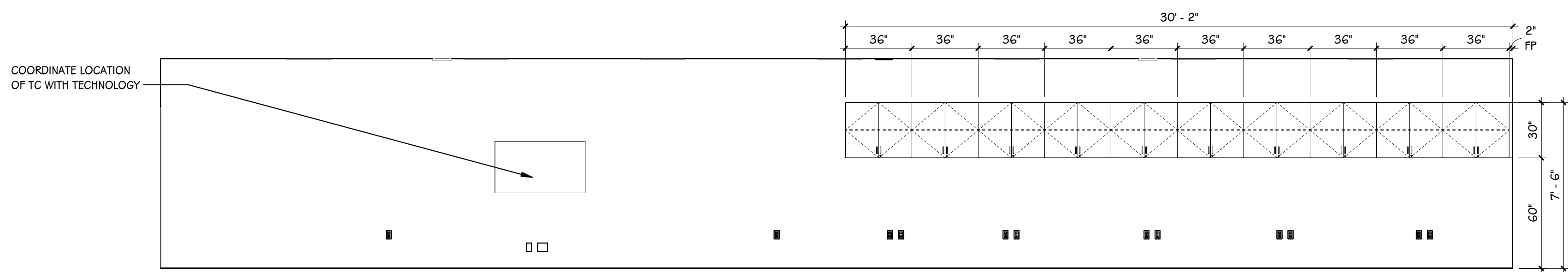
28 EDUC WORKSHOP 123 - SOUTH
1/4" = 1'-0"



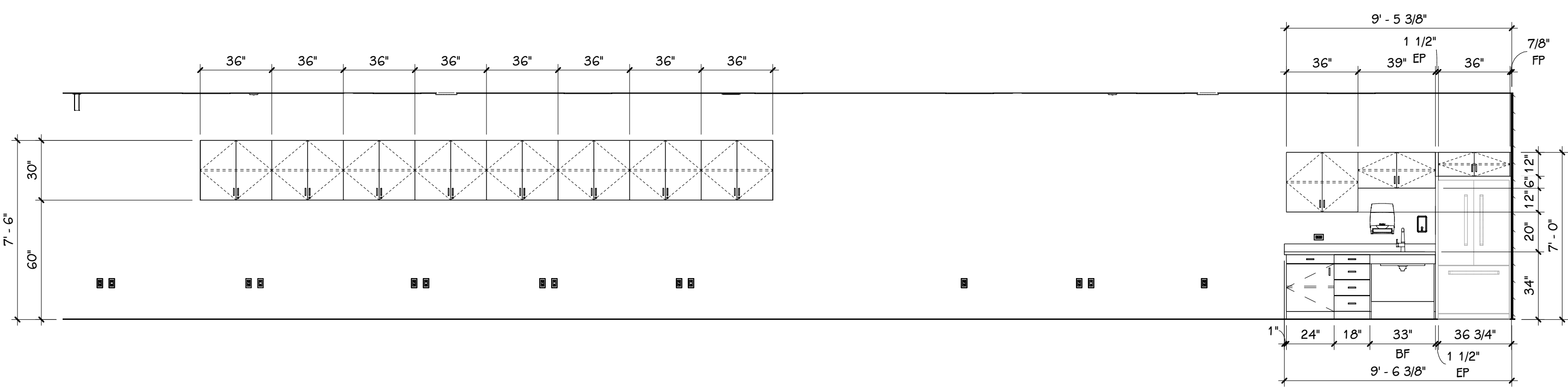
29 PASSAGEWAY 130H - NORTH
1/4" = 1'-0"



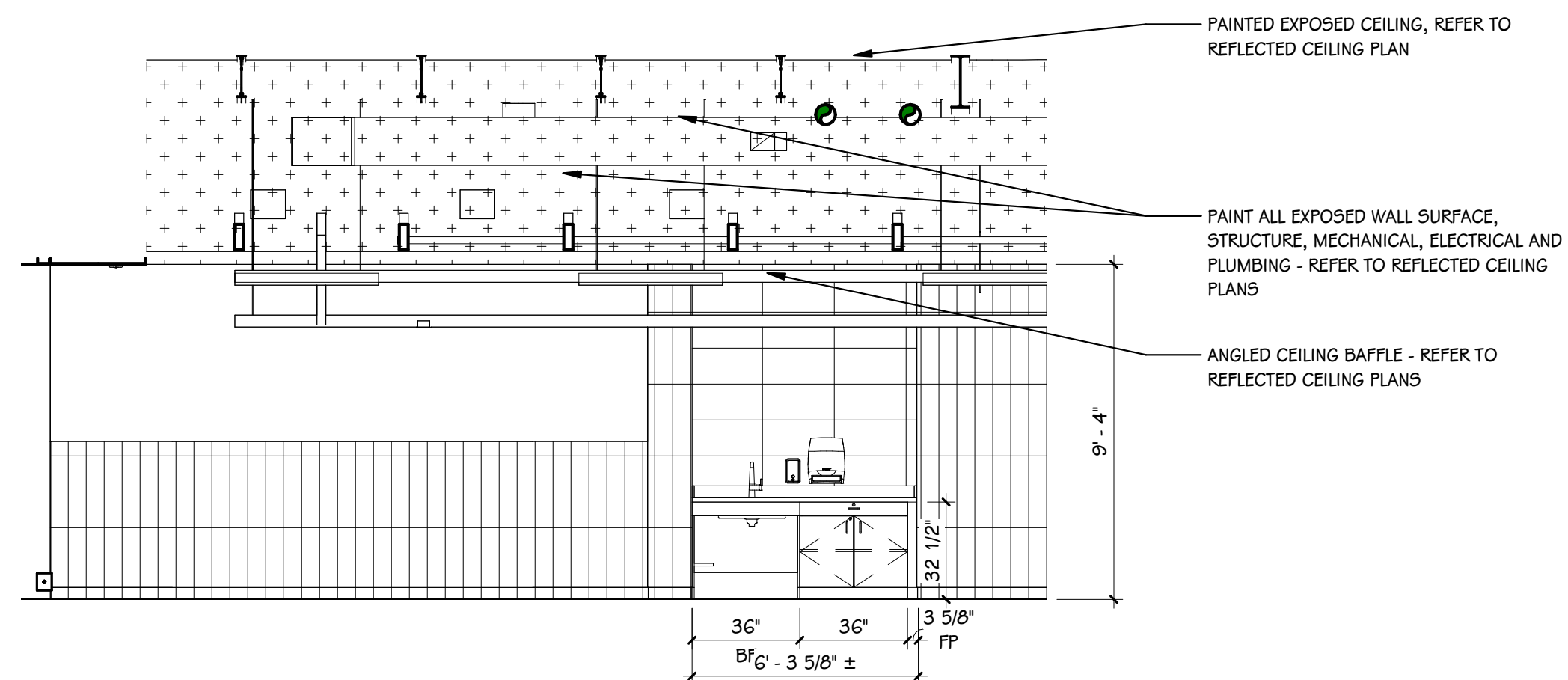
30 PASSAGEWAY 130H - SOUTH
1/4" = 1'-0"



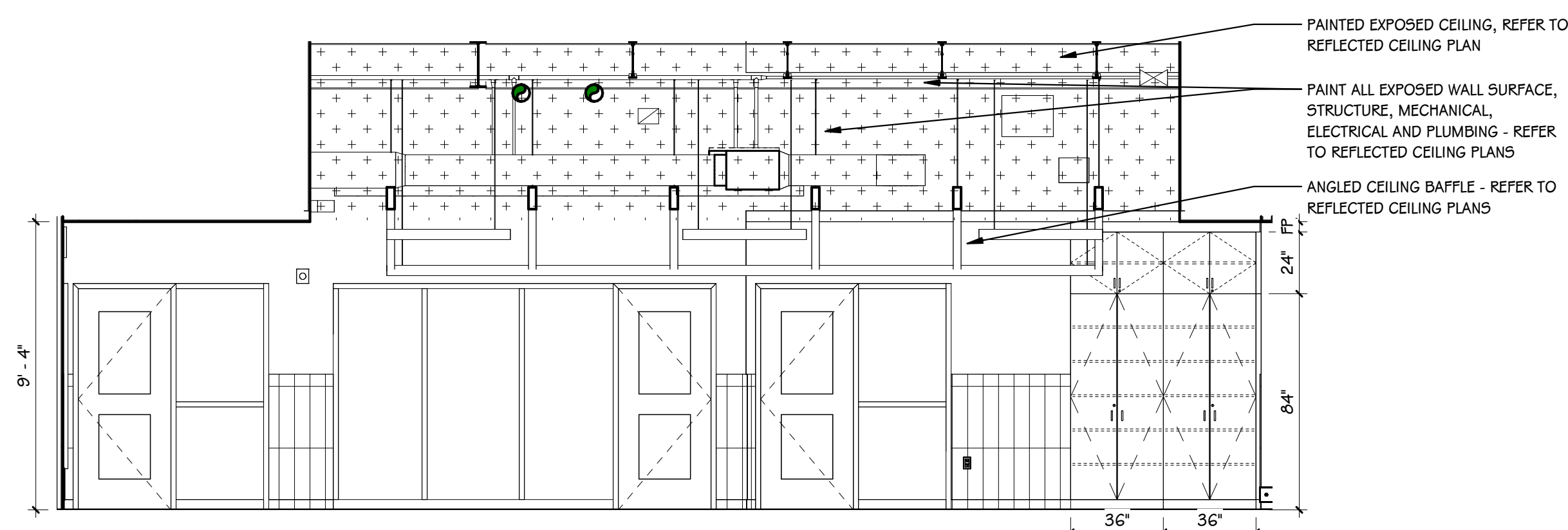
56 ESI HUB 219 - NORTH
1/4" = 1'-0"



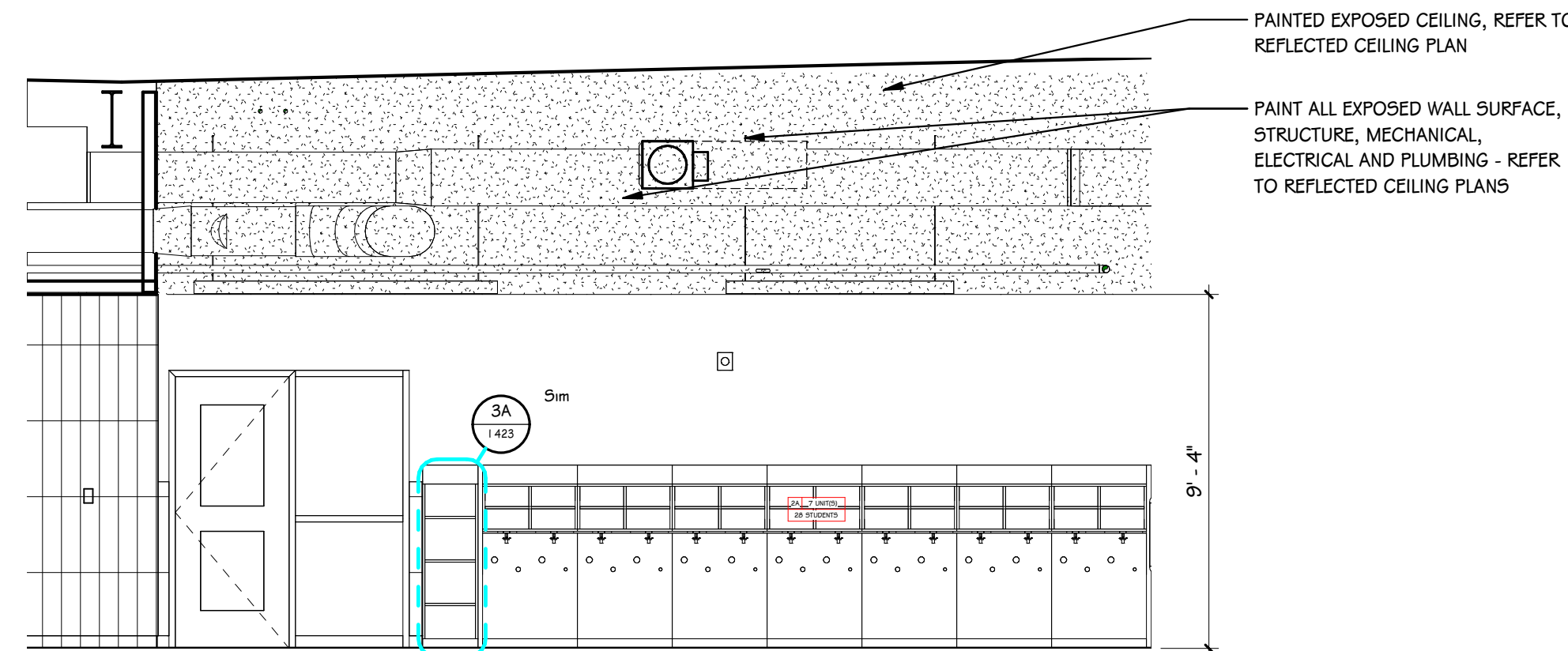
57 ESI HUB 219 - SOUTH
1/4" = 1'-0"



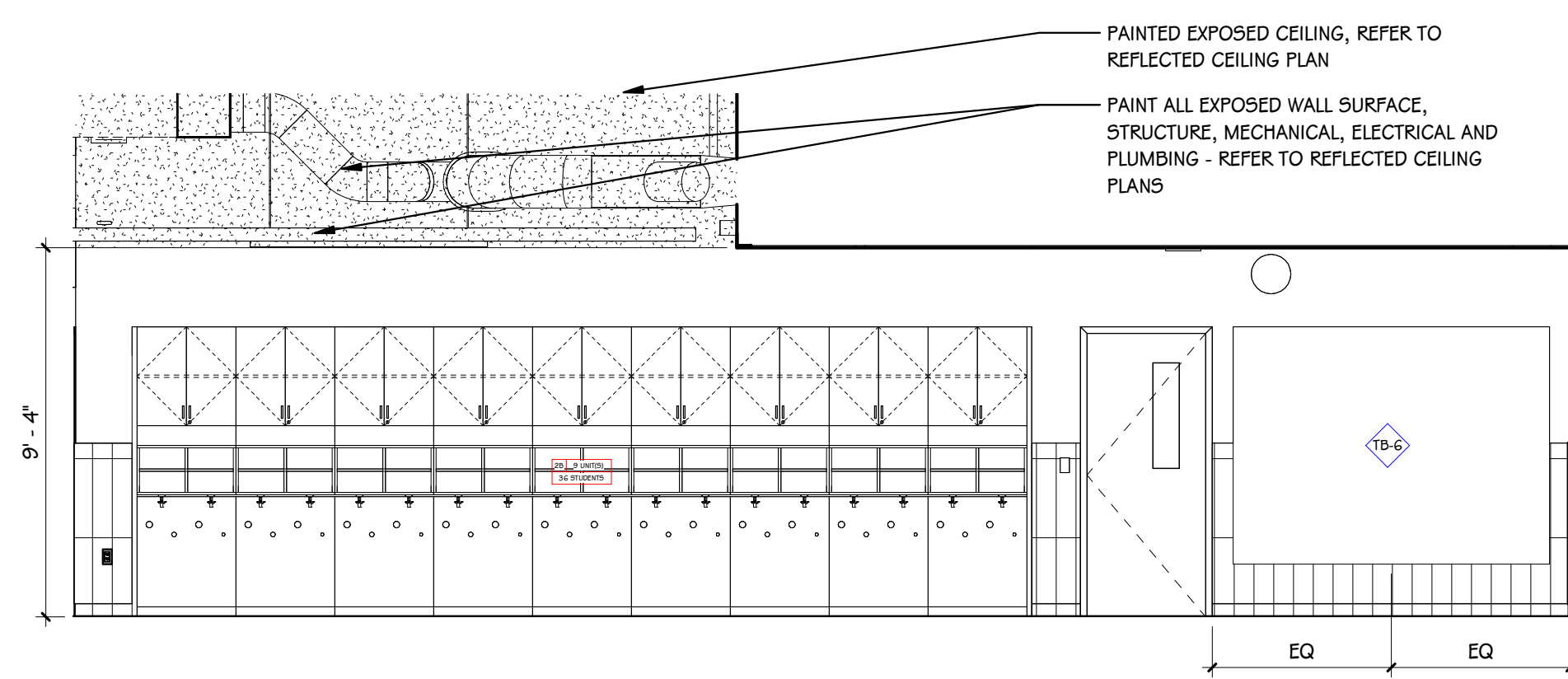
58 COMMONS 220 - EAST
1/4" = 1'-0"



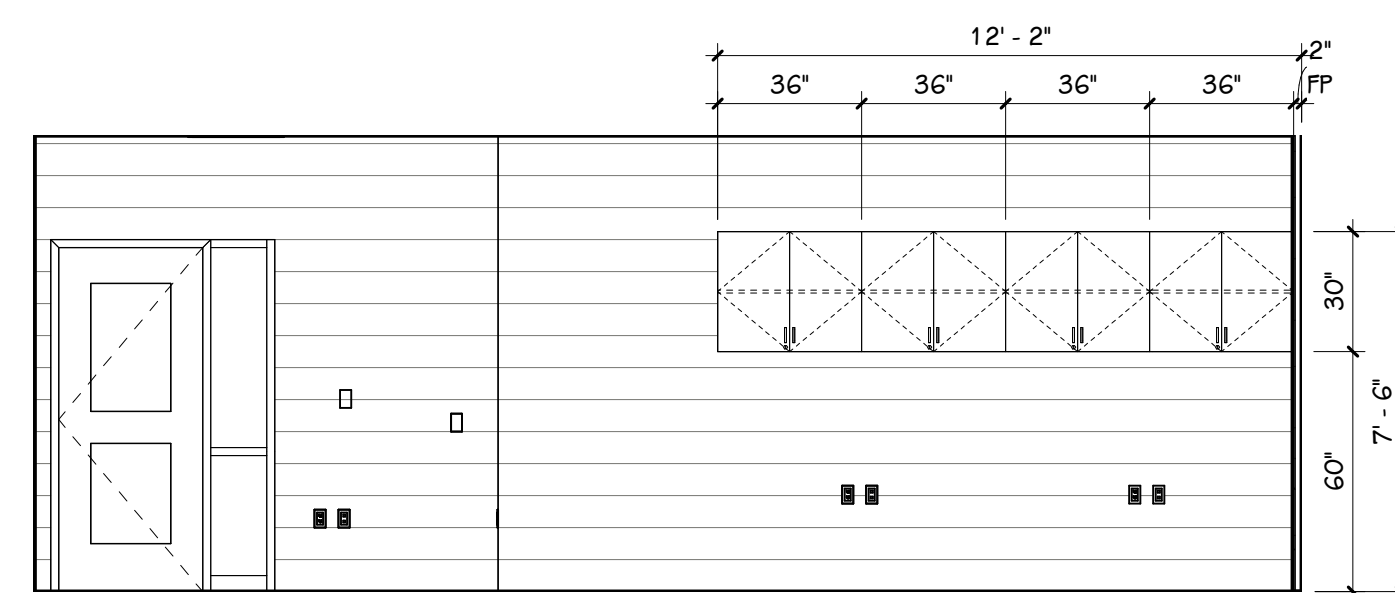
59 COMMONS 220 - WEST
1/4" = 1'-0"



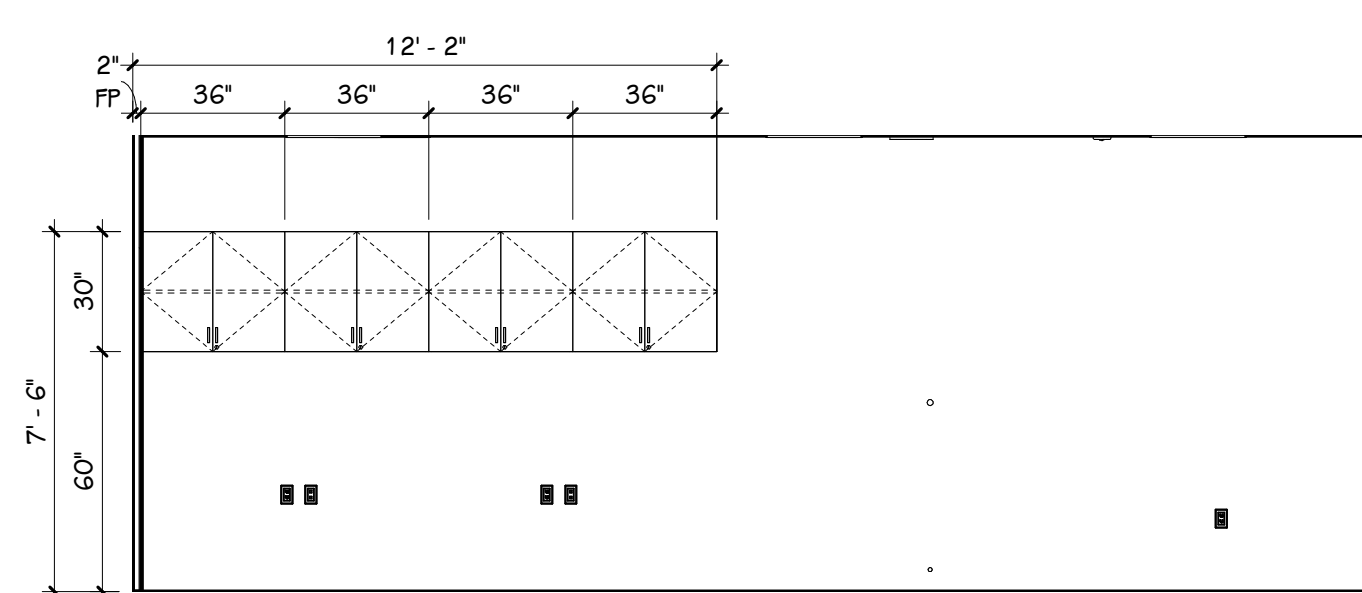
60 PASSAGEWAY 220H - NORTH
1/4" = 1'-0"



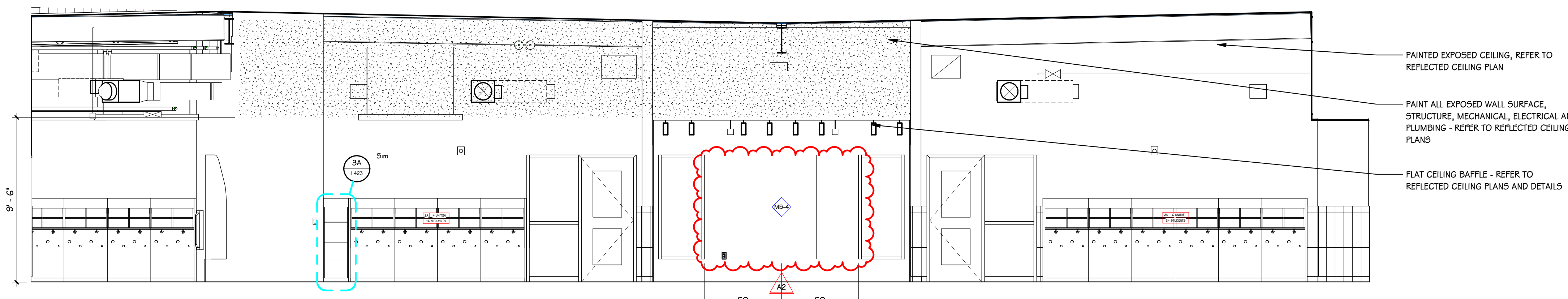
61 PASSAGEWAY 220H - SOUTH
1/4" = 1'-0"



62 EDUC WORKSHOP 221 - EAST
1/4" = 1'-0"



63 EDUC WORKSHOP 221 - WEST
1/4" = 1'-0"



64 PASSAGEWAY 230H - NORTH
1/4" = 1'-0"

GENERAL NOTES - INTERIOR ELEVATIONS

1. REFER TO FINISH PLANS FOR CALLOUTS OF MILLWORK OR ENLARGED FINISH PLANS FOR SCOPE NOT COVERED WITHIN INTERIOR ELEVATIONS.
2. REFER TO PATTERN ELEVATIONS FOR COLOR-BLOCKING AND PATTERNED INSTALLATION DETAILS OF PAINT AND ACOUSTICAL WALL PANELS.
3. REFER TO FINISH PLANS AND SPECIFICATION FOR EDUCATIONAL CASEGOODS NOT INCLUDED WITHIN CASEWORK PACKAGE.
4. REFER TO FINISH PLANS FOR VISUAL DISPLAY BOARD AND CORNER GUARD TAGS.
5. NOT ALL MATERIALS ARE ILLUSTRATED, REFER TO FINISH PLANS AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION.
6. AT AREAS OF EXPOSED CEILING, WALL SURFACE SHALL BE PAINTED TO MATCH CEILING ABOVE HEIGHT INDICATED, REFER TO REFLECTED CEILING PLAN KEY FOR PAINT COLOR.

GENERAL NOTES - CASEWORK

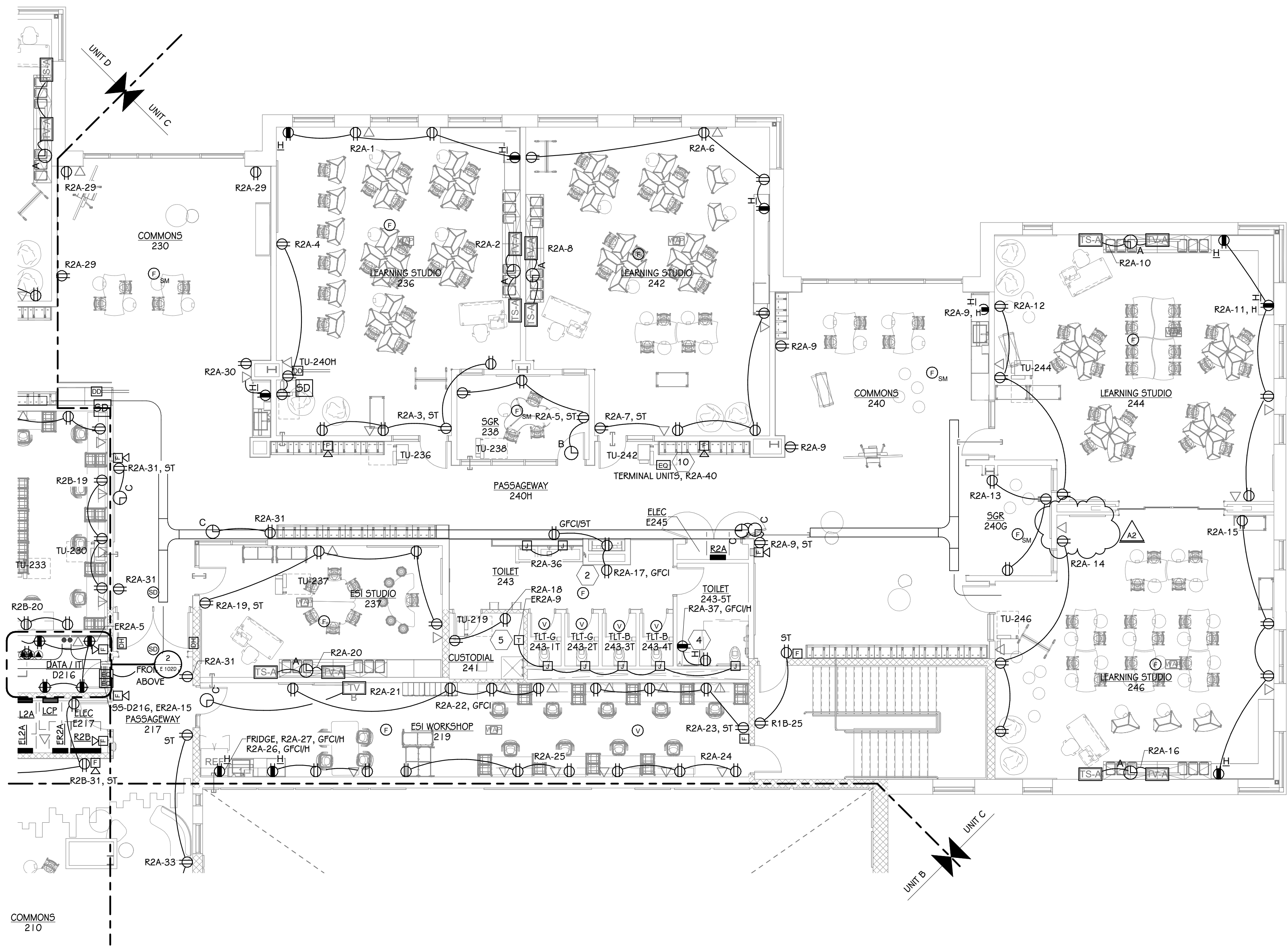
1. VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION.
2. FILLER PANELS SHALL BE NO LESS THAN 2" WIDE, UNLESS NOTED OTHERWISE.
3. REFER TO FLOOR FINISH PLANS FOR CASEWORK AND COUNTERTOP FINISHES BY ROOM.
4. FINISH ANY EXPOSED END PANELS, UNDERSIDE OF CABINETS OR OPEN CABINETS, WITH PLASTIC LAMINATE SPECIFIED FOR FRONTS IN THAT ROOM.
5. ALL VERTICAL AND HORIZONTAL EXPOSED AND SEMI-EXPOSED SURFACES TO BE FINISHED WITH BODY PLASTIC LAMINATE.
6. SUPPORT BRACKETS ARE REQUIRED EVERY 36" O.C. AT AREAS WHERE COUNTERTOP IS OPEN UNDERNEATH. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING BRACKETS APPROPRIATELY SIZED BASED ON DEPTH OF COUNTER.
7. PATTERN OR GRAIN DIRECTION TO BE VERTICAL ON DOORS AND HORIZONTAL ON DRAWERS - PER AIA STANDARDS, UNLESS NOTED OTHERWISE.
8. LOCKS SHALL BE PROVIDED WHERE ILLUSTRATED, KEYS ALIKE BY ROOM, OR BY EACH GROUPING / RUN OF CUBBIES.
9. GROMMET LOCATIONS SHALL BE VERIFIED IN THE FIELD WITH THE OWNER PRIOR TO INSTALLATION - COORDINATE WITH POWER & DATA LOCATIONS FOR ANY ADDITIONAL WIRE MANAGEMENT REQUIREMENTS.
10. 'SLABSMITHING' WILL BE REQUIRED IN INSTANCES WHERE A PATTERNED SOLID SURFACE IS SPECIFIED.
11. WHERE CASEWORK IS INDICATED TO RECEIVE RESIDENTIAL APPLIANCES OR OWNER-FURNISHED EQUIPMENT, COORDINATE WITH FINAL OWNER-PROVIDED SELECTIONS.

STANDARD ABBREVIATIONS - CASEWORK

ADJ	ADJUSTABLE	FP	FILLER PANEL
BF	BARRIER FREE	RP	REMOVABLE PANEL
EP	END PANEL	P/O	PULL OUT TRASH DRAWER

HARDWARE AND ACCESSORY SELECTIONS - CASEWORK

- PULLS:
BENTWIRE - NICKEL FINISH, OR SIMILAR
- COUNTERTOP EDGES:
PLASTIC LAMINATE - 3MM PVC EDGE, MATCHING SURFACE LAMINATE.
SOLID SURFACE - 1-1/2" BUILT-UP EDGE WITH PENCIL PROFILE.
- SUPPORT BRACKETS:
METAL STUD WALL CONSTRUCTION - 1MM CONCEALED FLAT BRACKETS, OR A 4 M HEAVY-DUTY HYBRID BRACKETS (SIZE A5 REQ'D.)
CMU WALL CONSTRUCTION - 1MM HEAVY-DUTY HYBRID BRACKETS (SIZE A5 REQ'D.)
- PULL-OUT TRASH DRAWERS:
RICHELIEU 53WC SERIES RECYCLING CENTER IN SILVER GRAY (INCLUDE 2 BINS), OR SIM.



SECOND FLOOR POWER PLAN - UNIT C
1/8" = 1'-0"

- ELECTRICAL KEYED NOTES**
- BACKBOARD CONTROLS SHALL HAVE RAISE/LOWER SWITCH AND HEIGHT ADJUSTMENT CONTROLS.
 - EWG OUTLETS TO BE SERVED FROM LOAD SIDE OF GFCI OUTLET OR BREAKER.
 - REFER TO GENERAL NOTES: PROVIDE 4" HOUSEKEEPING PADS FOR MDF, ALL TRANSFORMERS, AND ALL FLOOR MOUNTED EQUIPMENT. PROVIDE FLEXIBLE CONNECTION TO TRANSFORMERS AND SIMILAR EQUIPMENT PER SPECIFICATIONS. AREAS WITHOUT KEYNOTE DO NOT ALLEVIATE CONTRACTOR FROM GENERAL NOTE REQUIREMENTS.
 - CONCEAL SINK SENSOR RECEPTACLES BEHIND LAV SHIELD. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF UNDER SINK RECEPTACLES WITH MECHANICAL PLUMBING CONTRACTOR PRIOR TO INSTALLATION. FEED FROM LOAD SIDE OF ABOVE COUNTER GFCI RECEPTACLE.
 - LOW VOLTAGE TRANSFORMER AND BACKBOXES FOR FLUSH VALVES. COORDINATE EXACT LOCATION AND ADDITIONAL INSTALLATION REQUIREMENTS WITH MECHANICAL CONTRACTOR.
 - ELECTRIC ELEVATOR: CONNECT TO FIRE ALARM SYSTEM AND TELEPHONE SYSTEM WITH DEDICATED PHONE LINE. ALL DISCONNECTS SHALL HAVE AUX CONTACTS. COORDINATE FUSE SIZE FOR ELEVATOR POWER CIRCUIT WITH SHOP DRAWINGS. COORDINATE ALL INSTALLATION REQUIREMENTS WITH ELEVATOR CONTRACTOR. CONCEAL MAIN POWER DISCONNECT IN LOCKABLE CABINET.
 - MOUNT DEVICE(S) IN THE KICK AREA OF CASEWORK; CONCEAL ALL CONDUIT IN CAVITIES OF CASEWORK. COORDINATE WITH GENERAL TRADES.
 - FLOOR BOX SHALL BE WIREMOLD #EFB85-06 PROVIDE WITH TWO DUPLEX RECEPTACLES AND TWO DATA PLATES. PROVIDE DIVIDER AS REQUIRED FOR ONE SIDE. PROVIDE TUNNEL AS REQUIRED. PROVIDE WHITE DEVICES AND WHITE COVER PLATES AS REQUIRED. COVER SHALL BE #EFB61 0BTCGY.
 - IF ALTERNATE No. 3 IS ACCEPTED, PROVIDE 120V/1P CONNECTION TO INLINE PUMP FROM PANEL ER1B.
 - PROVIDE CIRCUIT TO TERMINAL UNIT TRANSFORMERS, TRANSFORMERS AND LV CABLING BY MECHANICAL CONTRACTOR. COORDINATE LOCATION AND QUANTITY WITH MECHANICAL CONTRACTOR.

FIRE ALARM NOTES:

THE FIRE ALARM CONTRACTOR SHALL SUBMIT FINAL FIRE ALARM SHOP DRAWINGS AS A DELEGATED DESIGN SUBMITTAL TO THE AUTHORITY HAVING JURISDICTION

FIRE ALARM DEVICES SHOWN ON PLANS ARE INDICATED TO ILLUSTRATE GENERAL DESIGN INTENT TO ASSIST THE CONTRACTOR IN SCOPING, PRICING, AND COORDINATION WITH OTHER SYSTEMS

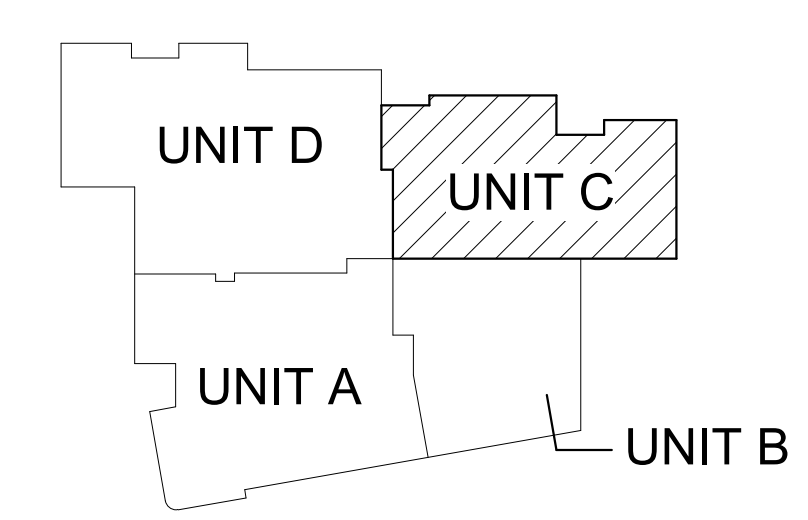
FIRE ALARM DEVICES SHOWN ARE NOT INTENDED TO REPRESENT A COMPLETE ENGINEERED FIRE ALARM DESIGN

THE FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL NECESSARY DEVICES AND ACCESSORIES FOR A COMPLETE SYSTEM, COMPLIANT WITH APPLICABLE CODES AND JURISDICTIONAL REQUIREMENTS, EVEN IF SUCH DEVICES ARE NOT INDICATED IN THESE DOCUMENTS

THE FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH MECHANICAL CONTRACTOR AND ALL OTHER TRADES NECESSARY FOR DOOR HOLDS, SMOKE DAMPERS, DUCT DETECTORS, FLOW / TAMPER SWITCHES AND ANY OTHER DEVICES

NOTE:
REFER TO TECHNOLOGY DRAWINGS AND MECHANICAL DRAWINGS FOR MORE SCOPE OF CONDUIT, ROUGH-IN LOCATIONS AND DETAILS THAT MAY NOT BE INDICATED ON THESE PLANS.

HAVERHILL ELEMENTARY



TRUE NORTH
KEY PLAN
SCALE: NO SCALE

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ADD. No. 2 AUG 2, 2023

ISSUED FOR DATE

PROJECT TITLE
HAVERHILL ELEMENTARY SCHOOL
BID PACKAGE 6: CONSTRUCTION

OWNER
PORTAGE PUBLIC SCHOOLS

Portage, Michigan

SHEET TITLE
SECOND FLOOR POWER PLAN - UNIT C

DATE
JUNE 30, 2023

SHEET NUMBER
E 102C
21-237.20



Building Since 1891
Owen-Ames-Kimball Co.

Printed on Thu Aug 3, 2023 at 03:38 pm EDT

Job #: 1090-B PPS - B - Haverhill Elementary School
6633 Haverhill Ave
Portage, Michigan 49024
2693236200

RFI Response Report

#	Subject	Question	Official Response
ADD 1 - BP 6 - Prebid RFI 001	Substitution Request 001	Please see attached substitution request form regarding the sheet waterproofing scope for your review and consideration. I have also attached Polyglass Mapethene HT/LT60(60mil Sheet Waterproofing) and our Mapeproof AL Pro(HDPE Fully Bonded Underslab Waterproofing) submittal packages which includes technical data sheets, detail drawings, and testing. Caleb Lloyd, Polyglass USA, clloyd@polyglass.com	Provide as a Voluntary Alternate. M. Rossio 7/25/23
ADD 1 - BP 6 - Prebid RFI 002	AISC Certification	Specs for steel call for both steel fabricator and erector to be AISC certified. Will this requirement be waived? Ron Paridee, Division 5 Metalworks, rparidee@d4m.net	No, this requirement will not be waived. Fabricator and erector to be AISC certified. MA / M. Rossio 7/18/2023
ADD 1 - BP 6 - Prebid RFI 003	Access Control Clarification	S2 Inel is specified in the access control portion of the bid. Can you please clarify if this is S2 OnGuard or S2 Netbox? Diane Giovannini, Sonitrol Great Lakes, DGiovannini@solucientsecurity.com	S2 Netbox.
ADD 1 - BP 6 - Prebid RFI 004	Visual Display Boards	Porcelain Steel (the face of the markerboard material) is only available up to 5'-0" Polyvision, the manufacturer of this surface offers 4'-0" and 5'-0" material; On the drawings there are 6'-0" x 6'-0" and 8'-0" x 6'-0" Markerboards indicated 2.3 A.4 in the specifications call for 6'-0" oversized boards heights shall be produced without joints regardless of width The 4'-0" w x 6'-0" h Markerboards can be fabricated in one piece; however the 6'-0" x 6'-0" and 8'-0" x 6'-0" cannot be fabricated in one piece. Please advise direction. Ceil Ann Tomalis, Midwest Architectural Division, ctomalis@pvsusa.com	all 8'-0" wide by 6'-0" high boards shall have center vertical seam.all 4'-0" wide by 6'-0" high boards shall remain as specified without seam.all 6'-0" wide by 6'-0" high boards shall be revised to one of the above sizes and will be captured in forthcoming Addendum 2.
ADD 1 - BP 6 - Prebid RFI 005	Substitution Request 002	Request to have Playcraft Playground Equipment approved as an equal. Karmen Posthumus, Play Environments Design, Karmenp@playenviro.com	Yes, approved as equal.
ADD 1 - BP 6 - Prebid RFI 006	Toilet Accessories	1. What is the stall depth for the toilet partitions in men's 157 and women's 153 on A401? It appears they may be drawn to 58" clear which is not accounting for proper plumbing code. 2. I can not find any elevations in the bathrooms for the toilet partitions in room 153 and 157. Nor do the specs mention a standard size or privacy. What are the toilet partitions height? 3. What is the height of the urinal screen? Andrew Crimmins, D10USA, andrewc@d10usa.com	1. Clear depth from finished wall to inside face of partition is 60". 2. Refer to manufacturers standard sizing. 3. Refer to manufacturers standard sizing. M. Rossio 7/25/23
ADD 1 - BP 6 - Prebid RFI 007	Toilet Accessories Clarifications	1. The mirror is listed in the spec as an 18"x36", which is an odd size. Is this correct? More of a stock size would be likely be easier to replace. 2. Please confirm the model number for the mop and broom holder in the spec is correct. It is listed as B-223 which is just the holders. 3. There is no elevation in the men's and women's restrooms for architectural, but was able to find an elevation on the interiors 9C on I403. They show a mirror above all 3 sinks in the women's bathroom but not in the men's. Should a mirror be provided at the men's ADA sink? 4. The bathrooms with sinks/ soap/paper towels/mirrors outside the bathroom, areas 143/243/127/227. Please advise on the mirror sizes and the paper towel dispensers. It appears that there are two paper towel dispensers, but they are labeled #8 as in Soap Dispensers, and then the mirrors are labeled #11 as the 18"x36" mirrors however in some interior elevations you can see they are shown as full-length mirrors. Please advise. 5. The spec mentions a curved shower rod. Can you please confirm this is correct? Is a straight shower rod acceptable? Andrew Crimmins, D10USA, andrewc@d10usa.com	1. The mirror shown on A 401 and section 10 2800 page 3 is 18 x 34 inches. 2. Drawing 2 on A401 shows just a mop and broom holder with no shelf, so B-223 is correct. 3. No. The mirror at Mens 157 ADA sink is intentionally omitted due to sight line concerns. 4. There are no mirrors in these rooms, walls are partial height. Soap and paper towel dispersers are labeled correctly, they are owner provided. 5. A straight shower curtain rod is acceptable. -D Heaton 7/26/2023



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Job #: 1090-B PPS - B - Haverhill Elementary School
 6633 Haverhill Ave
 Portage, Michigan 49024
 2693236200

#	Subject	Question	Official Response
ADD 1 - BP 6 - Prebid RFI 009	FERO Brackets	Detail 4/S605 shows FERO thermal release brackets and undefined brick ledger. Please confirm who is responsible for these. Scott Bruce, Van Dellen Steel, sbruce@vandellensteel.com	BC 10 Masonry is responsible for the FERO brackets and BC 11 Metals is responsible for the angle. BC 10 Masonry is responsible to install the bracket and angle.
ADD 1 - BP 6 - Prebid RFI 015	BC 18 -Aluminum Glass & Glazing Scope Clarification	1. Please confirm which Bid Category needs to supply glass and glazing for the material listed below. · Hollow Metal Doors · Hollow Metal Sidelite Frames · Hollow Metal Borrowed Lites · Wood Doors 2. Please confirm Bid Category 18 will supply the RFP Doors. Mike Blanford, S.A. Morman & Co., mblanford@samorman.com	1. BC 18 - Aluminum glass and glazing will supply glazing for the hollow metal doors, hollow metal sidelite frames, hollow metal borrowed lites and wood doors. 2. BC 18 - Aluminum glass and glazing is to supply the RFP doors.
ADD 2 - BP 6 - Prebid RFI 008	Fire Extinguisher Cabinet Clarification	1. The fire extinguisher cabinet specified which is housing a 10lb ABC and projecting 2.5 inches appears to not work in at least 1 of the walls. Can you approve quoting cabinets with a 3-inch rolled trim for this job to alleviate this issue? See below for technical example and specific project/ solution. Spec sections that specify extinguisher size and cabinet projection as it currently stands: spec section 10 4416-2 2.2 B.....and in spec section 10 4413-2....2.2 B. 3... The location of example cabinet not working: Cabinet outside of room E217 which from drawing A 102C shows is a 4k wall and in drawing G 102 show it to be fire rated. Wall detail image for 4k walls at the top of page G 003 seem to show a cabinet can only recess the depth of the metal stud and one layer of gypsum board, which would be 3-4/8" + 5/8" which would be a 4-1/8" depth. A 2.5" projecting fire rated cabinet from Larsen's for example will need a 4-7/8" depth...3/4 of an inch deeper than is available in this wall. The 3-inch rolled trim from Activar for their fire rated cabinets only need a 4-inch depth and would work for this job in its entirety if the architect will approve 3-inch rolled trim projection as an acceptable product. Andrew Crimmins, D10USA, andrewc@d10usa.com	Wall type 4K is a 6" depth frame. Refer to G003 METAL STUD/FURRING KEY on the right side of the sheet. Please provide extinguisher cabinets as spec'd. Extinguisher cabinets that are in fire rated walls will be relocated to non-rated walls of sufficient depth in upcoming addendum. SIC 07/27/23
ADD 2 - BP 6 - Prebid RFI 011	Metal Wall Panel System Clarification	The drawings do not appear to show underlayment behind the metal panels. The metal panel system is a rainscreen and should have a weather barrier behind it. Please confirm if this is supposed to be included. (see attached photo) Alex Santiago, Metal Tech, alex@metaltch.com	Apply NONBITUMINOUS SHEET AIR BARRIER to the exterior face of all wall sheathing. Refer to section 07 2715 Nonbituminous Self-Adhering Sheet Air Barriers. D Heaton 8/2/2023
ADD 2 - BP 6 - Prebid RFI 012	Waterplace Fireplace Specification	Is there a specification for the waterplace fireplace shown on sheet I-322. Matt Hazelhoff, Hazelhoff Builders Inc, matt@hazelhoffbuilders.com	Basis of Design: NZWP60B - Netzero Waterplace Platinum Burner (AA-11-05162) with NZW72F - Netzero Single-Sided Firebox (AA-11-05375), Media: "black glass" Liner: "black glass " with Safety Screen (AA-11-05197) https://netzerofire.com/netzero-resources/ (SIC 7/31/2023) Retailer: BUILDER'S FIREPLACE COMPANY - 521 West Main St., Lowell, MI, 49331 - 616-897-0848HEAT N SWEEP - 2041 W Grand River Avenue, Okemos, MI, 48864 - 517-349-2555
ADD 2 - BP 6 - Prebid RFI 016	Masonry Winter Conditions	Will O-A-K provide a winter allowance for all masons to carry in their bids? Joe Wiseman, JK Masonry, Inc., joe@jkmasonryinc.com	No, O-A-K will carry the winter allowance.
ADD 2 - BP 6 - Prebid RFI 017	DCMU Color Clarification	I see DCMU noted on the interior finish floor plan. Can you clarify what color 1,2, or 3. I do not see the DCMU called out on the material selection schedule. Joe Wiseman, JK Masonry, Inc., joe@jkmasonryinc.com	THE COLOR FOR ALL INTERIOR DCMU IS TO BE PERMAGRIND LATTE. THIS CLARIFICATION WILL BE ADDED TO THE SPEC. (SIC 08/01/2023)
ADD 2 - BP 6 - Prebid RFI	Dumpster Brick Clarification	The dumpster elevation on sheet A111 does not match the wall section right next to it for brick numbers. Please clarify what brick is to be used below brick #1 on the dumpster. Joe Wiseman, JK Masonry, Inc., joe@jkmasonryinc.com	BRICK 2 IS TO BE USED BELOW BRICK 1 ON THE DUMPSTER ENCLOSURE. (SIC 08/01/2023)



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Job #: 1090-B PPS - B - Haverhill Elementary School

6633 Haverhill Ave

Portage, Michigan 49024

2693236200

#	Subject	Question	Official Response
018			
ADD 2 - BP 6 - Prebid RFI 019	Mirror Clarifications	1. On A401 it looks like image #3 and #4 show two mirrors in each bathroom labeled with tag #11 for 18*34 mirrors. However, on I402/7 it appears to only show one mirror. It also appears to be missing in toilet 127-5T. Please clarify. 2. Can you clarify if the mirror shown on I402/7E is a full length mirror? The elevation appears to show a full length however on A401 it is listed as an 18*34. Is the intent to have one full length mirror and one 18*34 mirror in each restroom? (Ref A401 detail 3/4/5/6) 3. Is the intent to only have one mirror for toilet room 143 on A401? 4. Is the intent to not have any mirrors in toilet room 243 as shown on A401? Andrew Crimmins, D10USA, andrewc@d10usa.com	Toilet Rooms 127, 143, 227, 243: Architectural sheet is incorrect. There should be(1) Full Length 24" x 60" Mirror per restroom listed (in position noted by keynote 9 on I402)Toilet Room(s) 100T, 107T, 127-5T, 143-5T, 169T, 211T, 227-5T, 243-5T : Provide(1) 18x36" mirror each room listedToilet Room 153: Provide (3) 18x36" mirrors and (1) 24" x 60" mirror Toilet Room 157: Provide (2) 18x36" mirrors and (1) 24" x 60" mirror
ADD 2 - BP 6 - Prebid RFI 020	Substitution Request 003	Request to approve 50 or 60 mil Duro-Tuff PVC membrane by Duro-Last. Nick Prezato, Superior Services RSH, Inc. nick@superiorservicesrsh.com	60 mil Duro-Tuff PVC may be bid as an Voluntary Alternate. Provide a gray color for lower roofs that can be seen from second floor windows. Higher roofs may be white. - D Heaton 8/2/2023
ADD 2 - BP 6 - Prebid RFI 021	BC 19 - LPDA Scope Clarification	Which bid category is to supply and install AWP-10 sound absorbing perforated metal wall panels inside condenser screen walls? Curtis Sebright, Bouma-Betten Construction, Inc., CSebright@boumabetten.com	BC 19 - Lath, Plaster, Drywall and Acoustical (LPDA) is to supply and install the AWP-10.
ADD 2 - BP 6 - Prebid RFI 023	Z Girts Clarification	What bid category is to supply and install 5 1/2" Z girts as shown in detail 14 on A322? Curtis Sebright, Bouma-Betten Construction, Inc., CSebright@boumabetten.com>	1. BC 19 - LPDA is responsible for Z girt and 5/8" sheathing as shown in detail 7, on A322, detail 8 on A322, detail 14 on A322 and similar.
ADD 2 - BP 6 - Prebid RFI 024	Z girts Sheathing Clarification	Is the 5/8" sheathing on Z girts to be densglass or plywood as referenced on A322? Curtis Sebright, Bouma-Betten Construction, Inc., CSebright@boumabetten.com	EXTERIOR SHEATHING IS TO BE GLASS-MAT GYPSUM SHEATHING. REFER TO SPEC SECTION 06 1600. (SIC 08/01/2023)
ADD 2 - BP 6 - Prebid RFI 025	Exit Passageways	Please refer to specification 08 14 16 - Flush Wood Doors - 2.1 - A - 1. This section notes that Temperature Rise doors are needed at vertical exit enclosures and exit passageways. Please let us know which openings are considered exit passageways. Mike Blanford, S.A. Morman & Co., mblanford@samorman.com	TEMPERATURE RISE DOORS ARE NEEDED AT DOORS ST4A, ST4C, ST5A, ST5B, ST5D, ST5E. SIC 08/01/23
ADD 2 - BP 6 - Prebid RFI 026	Automatic Door Operators & Electric Strike	1. Line item 6 notes Automatic Door Operators. Will Bid Category No.18 - Aluminum, Glass and Glazing furnish automatic door operators that will be used on Aluminum & FRP openings? 2. Line item 8 says to furnish electric strike and power supplies for openings covered under this category. However, the specified hardware sets indicate that the power supplies will be provided by the security contractor. Will the power supplies be provided by the security contractor?	1. BC 16 - Doors, Frames & Hardware is supplying all automatic door operators. 2. BC 16 - Doors, Frames & Hardware will supply the electric strike and power supplies for openings covered in this category.
ADD 2 - BP 6 - Prebid RFI 027	Electric Strike & Power Supplies Clarification	The Instructions to Bidders Line item 8 says to furnish electric strike and power supplies for openings covered under this category. However, the specified hardware sets indicate that the power supplies will be provided by the security contractor. Will the power supplies be provided by the security contractor? If not, please provide a manufacturer and model number for the power supplies in each hardware set. Mike Blanford, S.A. Morman & Co., mblanford@samorman.com	The electric strikes will use power supplies provided by the Security Contractor (BC 41 - Access Control & Intercom Entry Systems) as part of the access control system as called out in spec section 28 1400 and 28 1500.



Building Since 1891

Owen-Ames-Kimball Co.

Printed on Thu Aug 3, 2023 at 03:38 pm EDT

Job #: 1090-B PPS - B - Haverhill Elementary School
6633 Haverhill Ave
Portage, Michigan 49024
2693236200

#	Subject	Question	Official Response
ADD 2 - BP 6 - Prebid RFI 028	Concrete Scope	1. The pad for ACCU-1 is the responsibility of BC 7 - Concrete. Are we to follow the detail on 3/S211 similar to the generator or pour it at 5" per note on C503? 2. Could you confirm that all slabs on grade will be 5" with #4 @ 12" O.C.? The reinforcing is well over what we typically see with schools. Ryan Weber - Schepers Concrete, Estimator@schepersconcrete.com	(1) Please follow 3/S211 for all exterior housekeeping pads. (2) This is confirmed. (MA / SIC 7-31-23)
ADD 2 - BP 6 - Prebid RFI 029	Concrete/ Polished Concrete Scope of Work	1. For the alternate #3 regarding the radiant heat. Will work category 33 Mechanical/Plumbing be supplying and installing the under slab insulation? 2. The schedule refers to sidewalks and curb going in 2029. Is this work part of this bid package or are we to assume all sidewalks/ curbs shown on the drawings are to be completed in 2024? 3. Item #10 of work category #7 has us furnishing all stainless steel toe treads in metal stairs. All exposed metal stair pans are polished so should these be furnish/installed by work category #8 Polished Concrete? All covered metal stair pans have a rubber stair nosing. 4. Will the foundation for the dumpster enclosure be responsibility of WC 7 since it was not in the original bid drawings for WC 6 Foundations? 5. The screen wall shown below was also not in the original bid drawings for WC 6 Foundations. Will this be picked up via change order or should it be included by WC 7 in this bid package? Ryan Weber - Schepers Concrete Construction - Estimator@schepersconcrete.com	1. No. Perimeter foundation, slab and all insulation under flatwork is by BC 07 - Concrete. 2. All sidewalk and curbs shown on the drawings will be completed in 2024/2025. 3. Regarding all polished stairs, the metal stair pans are to be by BC 08 - Polished Concrete. 4. The dumpster enclosure foundation will be by BC 06 - Concrete (Footings & Foundation) 5. The screen wall will be by BC 06 - Concrete (Footings & Foundation)
ADD 2 - BP 6 - Prebid RFI 031	Substitution Request 005	Request for Scranton Products to be approved as equal for metal lockers. Courtney Smith, Scranton Products, courtney.smith@azekco.com	substitution approved - make submittals in accordance with specification substitution procedures.
ADD 2 - BP 6 - Prebid RFI 033	Type A(Category 6 Cabling) Scope	Who is responsible for all Type A (Category 6) cabling? Thomas Weissert, SVT, tweissert@gosvt.com	All type A (Category 6) Cabling is by BC 40 - Structured Cabling Systems.
ADD 2 - BP 6 - Prebid RFI 034	BC 40 Structured Cabling - Ceiling Heights & Cable Distance	1. Regarding BC 40 Structured Cabling - Need to ascertain the length of the single mode fiber and the approximate distance to the telecom room in the existing facility. No print shows that location in the existing documentation. 2. Note on plan TS 101 states the a conduit will be ran to Telecom room D159 in the new facility. Will a conduit also be placed all the way to the Telecom room in the existing facility? 3. The reflective ceiling plans do not show ceiling (deck) heights listed. Please clarify how high the exposed ceiling spaces are. 4. What is the proposed cable tray height in the exposed hallways and open areas? Dave Taylor, MOSS, dave.taylor@mosstele.com	1. Total distance from the closet in the existing building to the closet in the new building can be estimated at 600 feet for bidding purposes. 2. The path through the existing building will not be within conduit. The horizontal travel distance in the existing building is approximately 45 feet. 3. Refer to the structural drawings for heights of exposed deck. 4. The cable tray is mostly set at 9'-6" to the bottom of the tray. It can go higher as needed to get around structure, HVAC, and/or lighting. Where cable tray supports touch the wall, they cannot go below 9'-6" due to the wall finishes and paint scheme. Supports that go above the tray should be used, or the cable tray mounted high enough to keep the wall supports entirely above 9'-6".
ADD 2 - BP 6 - Prebid RFI 039	Fire Alarm Spec Allowance	28 3100 Calls for Fire Alarm Device Allowance - Please confirm if contractor is to carry this allowance. Rob Kraus, Allied Electric, rkraus@alliedelectricinc.com	No - O-A-K will carry the allowance mentioned in Fire Detection and Alarm Spec 38 3100.
ADD 2 - BP 6 - Prebid RFI 040	BC 13 Metal Wall Panels & BC 15 Joint Sealants Scope Update	Please clarify who is responsible for Spec Section 07 2715 Nonbituminous Self-Adhering Sheet Air Barriers.	Spec section 07 2715 Nonbituminous Self-Adhering Sheet Air Barriers is to be removed from BC 15 - Joint Sealants. Spec section 07 2715 Nonbituminous Self-Adhering Sheet Air Barriers is to be added to BC 13 - Metal Wall Panels.
ADD 2 - BP 6 -	BC 13 Metal Wall Panel & BC 19 LPDA	Who is responsible for spray foam insulation in Z girts and stud cavity.	BC 13 Metal Wall Panel is responsible for any spray foam insulation required between sheathing/framing and metal wall panels. BC 19 LPDA is responsible for foam in place insulation between z girts, sheathing and cold form metal stud framing.



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Owen-Ames-Kimball Co.

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Job #: 1090-B PPS - B - Haverhill Elementary School
 6633 Haverhill Ave
 Portage, Michigan 49024
 2693236200

#	Subject	Question	Official Response
Prebid RFI 041	Scope Clarification		Reference Detail 14 on A322, Detail 22 on A322, Detail 28 on A 323, etc., and similar.
ADD 2 - BP 6 - Prebid RFI 042	FRP-1 Clarification	Is Bid Category #12 General Trades responsible for the supply and installation of FRP-1? If so, is Bid Category #12 General Trades also responsible for skim coating the CMU wall per key note #7 on the finish plans? Kyle McDowell, Schweitzer, kmcowell@schweitzerinc.com	No, BC 19 - LPDA is responsible for supply and install of FRP-1. BC 19 - LPDA is also responsible for skim coating the CMU wall.
ADD 2 - BP 6 - Prebid RFI 043	FRP Doors	Please confirm who is supply the FRP doors? Mike Blanford, S.A. Morman & Co., mblanford@samorman.com	BC 18 - Aluminum, Glass and Glazing is responsible for supplying and installing the FRP doors.

**Portage Public Schools - Haverhill Elementary -
BP 6 Construction
Post Bid Interview Schedule**

BC 25	Food Service Equipment	Wednesday, August 9th	9:00am
BC 26	Gymnasium Equipment	Wednesday, August 9th	9:20am
BC 27	Playground Equipment	Wednesday, August 9th	9:40am
BC 14	Roofing	Wednesday, August 9th	10:00am
BC 17	Overhead Doors	Wednesday, August 9th	10:20am
BC 13	Metal Wall Panels	Wednesday, August 9th	10:40am
BC 32	DDC Control System	Wednesday, August 9th	11:00am
BC 31	Fire Protection	Wednesday, August 9th	11:20am
BC 33	Mechanical/Plumbing	Wednesday, August 9th	11:40am
BC 12	General Trades	Wednesday, August 9th	12:30pm
BC 18	Aluminum, Glass & Glazing	Wednesday, August 9th	1:00pm
BC 07	Concrete	Wednesday, August 9th	1:20pm
BC 09	Pre-Cast Structural Concrete	Wednesday, August 9th	1:40pm
BC 10	Masonry	Wednesday, August 9th	2:00pm
BC 11	Metals	Wednesday, August 9th	2:20pm
BC 24	Signage	Wednesday, August 9th	2:40pm
BC 28	Window Shades	Thursday, August 10th	8:00am
BC 37	Audio Visual Systems	Thursday, August 10th	8:20am
BC 23	Visual Display Units	Thursday, August 10th	8:40am
BC 30	Elevator	Thursday, August 10th	9:00am
BC 36	Electrical	Thursday, August 10th	9:30am
BC 34	Testing & Balancing	Thursday, August 10th	10:00am
BC 38	Clock Systems	Thursday, August 10th	10:20am
BC 39	Public Address System	Thursday, August 10th	10:40am
BC 40	Structured Cabling System	Thursday, August 10th	11:00am
BC 16	Doors, Frames and Hardware	Thursday, August 10th	11:20am
BC 29	Educational Caseloads	Thursday, August 10th	11:40am
BC 19	Lath, Plaster, Drywall & Acousti	Thursday, August 10th	12:00pm
BC 08	Polished Concrete	Thursday, August 10th	12:40pm
BC 15	Joint Sealants	Thursday, August 10th	1:00pm
BC 20	Painting	Thursday, August 10th	1:20pm
BC 21	Flooring	Thursday, August 10th	1:40pm
BC 22	Resilient Athletic Flooring	Thursday, August 10th	2:00pm