

ADDENDUM #08

TO

INVITATION TO BID #01

ALTERATIONS TO

ACES at CHASE

565 CHASE PARKWAY, WATERBURY, CT

STATE PROJECT NO. 244-0044 MAG

DECEMBER 11, 2025

JANUARY 26, 2026

Bids are modified and/or supplemented as follows and should be included in the Subcontractor's lump sum bid as it relates to their Bid Package Scope of Work:

GENERAL INFORMATION

The following bid package will be **POSTPONED TO TUESDAY FEBRUARY 17, 2026 AT 2:00PM**

26.1	Electrical, Security & A/V	February 17, 2026 @2pm
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The following bid packages **REMAIN DUE ON THURSDAY JANUARY 29, 2026 AT 2:00PM**

BID PACKAGE NO.	DESCRIPTION	POSTPONED BID DUE DATE
2.1	Selective Demolition & Abatement	January 29, 2026 @2pm
4.1	Masonry	January 29, 2026 @2pm
6.1	Architectural Woodwork	January 29, 2026 @2pm
8.1	Doors Frames & Hardware (FO) (SMWBE)	January 29, 2026 @2pm
9.1	Gypsum Drywall	January 29, 2026 @2pm
10.1	Specialties & Equipment (SMWBE)	January 29, 2026 @2pm
22.1	Plumbing System	January 29, 2026 @2pm
23.1	HVAC System	January 29, 2026 @2pm
31.1	Sitework & Landscaping	January 29, 2026 @2pm

- ALL BIDS FOR ALL BID PACKAGES ARE TO BE SUBMITTED** in duplicate at the **ACES Staff Development Building** located 205 Skiff Street, Hamden, Connecticut 06517, Attention: **Downes Construction Company, LLC**. with the dates and times indicated above, after which time no further bids will be accepted. All bidders must include the Project Name and Bid Package Number & Description marked clearly on the envelope, for example, 'ACES at Chase – BP# 32.1 – Exterior Improvements'. Bids received will subsequently be opened publicly.

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2. It is the responsibility of all bidders to review the drawings received against the Drawing List. If any drawings are missing from the bidding documents notify the Construction Manager immediately.
3. ALL Bidding Requirements listed in the original bidding documents remain as is, unless revised by the contents of this Addendum.
4. **ALL Bidders** should note that any unanswered pre-bid RFI's up to this point will be answered in forthcoming addendum.
5. **ALL Bidders** should review and incorporate the **attached Bulletin #4 dated January 26, 2026** prepared by **S/P+A** and their consultants. This Addendum includes:
 - Changes to Drawings & Specifications
 - New drawings & New Specifications.
 Refer to the Bulletin for complete contents and how it may affect your Bid Package Scope.
6. **ALL Bidders** shall utilize the attached updated bid form.

REVISIONS AND/OR CLARIFICATION TO ALL BID PACKAGES. BIDDERS ARE RESPONSIBLE TO REVIEW ALL QUESTIONS & ANSWERS AS WELL AS SCOPE CLARIFICATIONS.

Question RFI #91 (General) Reference: Addendum 01 ITB 01 Aces at Chase 121825.pdf "ALL Bidders shall reference and incorporate the attached CHRO Good Faith Efforts Short Form Plan (GFE) which was formerly known as the Affirmative Action Plan (AAP)/ Set Aside Plan into the bid documents" **Question:** Is the expectation to complete and submit the GFE with the bid, on bid due date? **Answer:** No.

Bid Package #2.1 – Selective Demolition & Abatement

Revise item #96 Allowances This Subcontractor shall include the following allowances as indicated within **Specification Section 020800 Asbestos Abatement** in their lump sum bids. *(All allowances are to only be used when specifically indicated by the Construction Manager and it is this Subcontractors responsibility to document usage via T&M tickets submitted to the Field Superintendent. Allowance expenditure submissions are required to follow the same procedures as Change Order Requests/Proposals. However, overhead and profit for allowances shall be included in the base bid and cannot be added to expenditure submissions.)* Fill in and complete allowances in the appropriate spaces on the bid form.

Eagle Allowance Number	Location/Material	Estimated Quantity	Unit Price	Amount
1	B1 Cores through plaster walls	200 Cores up to 6" Diameter	Fill in on bid form	Fill in on bid form

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2	B1 Penetrations >3sf less than <20sf	Up to 10 Containments	Fill in on bid form	Fill in on bid form
3	B1 Thermal Insulation in wall chases	Up to 10 areas with 25lf insulation and 15sf of plaster ea.	Fill in on bid form	Fill in on bid form
4	B2 Main Level	Cores through plaster in areas of walls to remain	Fill in on bid form	Fill in on bid form

Add Item #109 RFI #131 (General) **Question:** How much of the existing furniture and other tenant debris will be left behind. Are you going to give an allowance to cover this? **Answer:** There will be furniture left behind after the school vacates each space. A CM allowance will be utilized to cover furniture removal and disposal.

Add Item #110 RFI #134 (General) **Question:** As to the scope of work about the total demo of the maintenance building. It is mentioned by name in the Site work Scope, but in the demo scope you call out building demolition. **Answer:** See clarification in Addendum #3.

Add Item #111 RFI #135 (General) **Question:** Please provide a detail and quantity of floor protection. **Answer:** See scope clarification in Addendum #4.

Add Item #112 RFI #136 (General) **Question:** Window removals, will the Window contractor be installing as we remove or will protection be required? **Answer:** In general, most windows are scheduled to remain in place with limited removal and infills. See building elevation and floor plans for further information.

Add Item #113 RFI #137 (General) **Question:** How are the Eagle allowances in the spec detailed on the bid form? **Answer:** See revised bid form issued with Addendum #8.

Add Item #114 RFI #147 (General) **Question:** Are these Sections a part of bid package #2.1 or #31.1: Underpinning and Shoring (Section 021500), Utility Demolition and Abandonment (Section 024113), Structure Demolition (Section 024116), and Control of Existing Flows (Section 024400)? **Answer:** They are applicable to each scope of work and as indicated within each bid package scope. 024116 Structure Demolition applies only to BP #2.1 Selective Demolition & Abatement.

Add Item #115 RFI #153 (General) **Question:** Is the ceiling and wall plaster considered toxic lead paint and to be disposed of as ACM, PCB and Lead waste in building 1 and 2? The Lead Paint Awareness specification indicates this material contains toxic levels of lead. **Answer:** Lead disposal requirements for purposes of bidding are defined in Section 020900 Part 1.2.L & .M. Plaster from Building 1 & 2 to be disposed of as asbestos, presumed PCB & non-hazardous lead waste.

Add Item #116 RFI #14 (Building 5) **Question:** Please confirm if the PCB Doors and windows listed within the table for Building 5 in the PCB Remediation Spec are to be abated and disposed of. **Answer:** Confirmed. Components scheduled for demolition are to be removed & disposed of per Section 021100 PCB Remediation. - Eagle

Add Item #117 RFI #148 (General) **Question:** Do the plumbing demolition plans fall under bid package #22.1? **Answer:** Plumbing Demolition is the responsibility of BP #2.1 Selective Demolition & Abatement

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Bid Package #3.1 – Concrete

Add Item #111 RFI #14 (Building 4) **Question:** Please provide footing elevations for the CIP stair at the side entrance of Building 4, referencing drawing C202 and Detail 5E/C702. This information is necessary to accurately quantify materials for the continuous footings, walls, and stair treads. **Answer:** The bottom of footing needs to be 42" (3.5') below grade. The bottom step landing grade is 501.32, therefore the bottom of footing will be 497.82. -Benesch

Bid Package #4.1 – Masonry

Add Item #114 RFI #170 (General) **Question:** In Buildings other than Building 1, wherever existing masonry partitions are scheduled to be fire rated or smoke rated, the actual condition at the top of wall is not indicated. It is unknown whether walls extend up tight to the deck and need to be modified in order to install firesafing, or whether they stop short of the deck and need to be extended up to install firesafing. Is it possible to include an allowance to deal with this non-quantifiable scope? **Answer:** Top of walls condition is unknown. Downes to establish an allowance for potential firesafing required once conditions are uncovered.

Bid Package #5.1 – Structural Steel/Misc. Metals

Add Item #88 RFI #90 (General) **Question:** On the bid form we must break out pricing across each building. For misc. items on the exterior between the buildings, do these fall under the sitework? **Answer:** No.

Bid Package #6.1 – Architectural Woodwork

Add Item #118 RFI #106 (General): Specific Scope Item #42

- **Question:** Plastic-laminate clad countertops are included in the scope but don't seem applicable. Please confirm or indicate locations. **Answer:** Not applicable.
- **Question:** Resin panels are included in the scope but don't seem applicable. Please confirm or indicate locations. **Answer:** Not applicable.
- **Question:** Closet shelving is included in the scope but doesn't seem applicable. Please confirm or indicate locations. **Answer:** Not applicable.
- **Question:** Drawings don't locate and/or quantify grommets. (See above.) **Answer:** Refer to RFI #74.
- **Question:** Post-formed p.lam sills/counters are included in the scope but don't seem applicable. Please confirm or indicate locations.
- **Question:** P.lam base is included in the scope but doesn't seem applicable. Please confirm or indicate locations. **Answer:** Not applicable.
- **Question:** Tackable surfaces are included in the scope but don't seem applicable. Please confirm or indicate locations. **Answer:** Not applicable.
- **Question:** Aluminum trims and reveals are included in the scope but don't seem applicable. Please confirm or indicate locations. (Aluminum reveal trim is used for WWP-1: Framed Decorative Panel Systems.) **Answer:** If there are none required within the contract documents disregard note.

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- **Question:** Glass and glazing is included in the scope but doesn't seem applicable. Please confirm or indicate locations. (Glass is used within Lab Casework.) **Answer:** Glazing of millwork is this packages responsibility as shown on the contract documents.
- **Question:** AWI certifications and QA/QC is included in the scope but not addressed in the spec. **Answer:** Not applicable.
- **Question:** Flooring underlayment is included in the scope; please explain as this doesn't seem applicable. **Answer:** For coordination and information purposes only.

Add Item #119 RFI #107 (General) **Question:** Spec Section 097716 Framed Decorative Panel System (WWP-1): Paragraph 2.3.D specifies reveal to be 1/4" narrow, yet Schedule of Finishes calls for WWP-1 to be Marlite Sieva product with 1/16" Slim Reveal trim. Also, what other trim options are to be used: perimeter edging, inside corners, outside corners, etc.? **Answer:** Section 090000 is correct. Refer to Bulletin #3 for revised Section 097716. Use all trims for a complete installation.

Add Item #120 RFI #109 (General) **Question:** Specific Scope item #38 describes rough carpentry items that are BP #6.1 responsibility. Most are obviously related to architectural woodwork, but: 1) Items such as cants and nailers appear to be the roofer's responsibility; please clarify. 2) What coordination is needed with flooring underlayment? **Answer:** Rough carpentry and flooring underlayment are in general for you to work with and coordinate around and is for referencing and to be made aware of.

- **Question:** Spec 061000 paragraph 2.2.D says to treat (wood-preservative) items indicated on drawings, but nothing is called out. **Answer:** Section 061000, 2.2.D also indicates "and the following" for locations to be provided.
- **Question:** Spec 061000 paragraph 2.3.E says to treat (fire-retardant) all rough carpentry unless noted otherwise, but drawings don't clarify any items that need to be treated. **Answer:** Per Section 0610000, all rough carpentry to be fire-retardant-treated.
- **Question:** Building #1 (Main School) and Building #4 (Music Hall) structural sheet S000 includes a section about wood framing, yet drawings don't seem to indicated any work involving wood framing. Please confirm. **Answer:** The wood framing notes are not required. Refer to Bulletin #4 for revised Drawings S000-1 & S000-4.

Add Item #121 RFI #110 (General) **Question:** Scope of work for BP #6.1 includes spec section 061600 Sheathing as limited. Please clarify what we're specifically responsible for. 1) Structural drawing S111 of Building #4 (Music Hall) calls for gypcrete on T&G sheathing for an extension of the 2nd floor; is BP #6.1 responsible for this?

Answer: No. This work is the responsibility of BP #9.1 Gypsum Drywall

Add Item #122 RFI #122 (General) **Question:** Regarding hole spacing inside casework – will the standard 32mm OC be accepted in lieu of 1" OC, as drawn? **Answer:** Yes.

Add Item #123 RFI #123 (General) **Question:** Is the expectation that Millwork would be refinishing any existing millwork? **Answer:** Yes.

Add Item #124 RFI #143 (General) **Question:** Please note that all cabinet backs will need to be 1/2" thick in lieu of 3/4" as specified as 3/4" is not durable enough. **Answer:** Understood.

Add Item #125 RFI #144 (General) **Question:** Refinishing existing Millwork may not match new Millwork – please reconsider taking pricing for all new Millwork/trim. **Answer:** Understood that refinishing may not match exactly but it is the Contractor's responsibility for it be as close as possible.

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Add Item #126 RFI #145 (General) **Question:** What is the accessibility for bringing materials to the upper floors of Buildings 1, 2, 4, and 6 such as welded locker banks, toilet partitions, casework, VDS, framing material, ductwork, etc.? Will elevator be available or are windows being removed for boom access? **Answer:** If required a window may be chosen for removal at each level for bringing in materials.

Add Item #127 RFI #169 (General) **Question:** Please confirm there are no requirements for wood door casings in any buildings except Building 1. **Answer:** Casings were added to Building 5 per Bulletin #2. Refer to details on Drawing A931-5 & refer to Door Schedule to see what doors are being given frame type SF2. -S/P+A-MES

Add Item #128 RFI #171 (General) **Question:** BP# 6.1's SOW mentions post-formed plam sills/counters. I cannot locate them. Where are they required? **Answer:** If there are none shown on the contract documents disregard note.

Add Item #129 RFI #28 (Building 1): Drawings related to p.lam architectural cabinets:

Question: a. Elev 2/A730: Shouldn't the detail key through sink/bubbler countertop be 2/A801? **Answer:** Correct. Refer to Bulletin #3 for revised Drawing A730. -S/P+A-KD

Question: b. Elev 9/A734: Should the detail key through 2'-10" high countertop be 2/A801 for sink/bubbler? **Answer:** Correct. Refer to Bulletin #3 for revised Drawing A734. -S/P+A-KD

Question: c. Elev 12/A734: Should the detail key through 2'-10" high countertop be 2/A801 for sink/bubbler? **Answer:** Correct. Refer to Bulletin #3 for revised Drawing A734. -S/P+A-KD

Question: d. Elev 9/A735: Please key in casework detail numbers. **Answer:** Refer to Bulletin #3 for revised Drawing A735. -S/P+A-KD

Question: e. Detail 1/A800 appears to be applicable to both Architectural Cabinets and Lab Casework; shouldn't material of countertop correspond as either solid surface or epoxy resin? **Answer:** Correct. Refer to Bulletin #3 for revised Drawing A800. -S/P+A-KD

Question: f. Detail 5/A800: If Rakks counter support is used, can apron stub be eliminated for a cleaner look? **Answer:** Yes this is acceptable. -S/P+A-KD

Add Item #130 RFI #38 (Building 1) **Question:** Elevation 14/A710-1 is called out at Rm 116-1 Assistant Principal but the elevation is of a restroom. Please advise the correct elevation # for this room. **Answer:** Disregard tag. Refer to Bulletin #3 for revised Drawing A120-1. -S/P+A-KD

Add Item #131 RFI #39 (Building 1) **Question:** A735-1 is called out in 117-1 Assembly/Dining but there is no elevation #. Please provide the correct elevation #. **Answer:** Disregard tag. Refer to Bulletin #3 for revised Drawing A120-1. -S/P+A-KD

Add Item #132 RFI #40 (Building 1) **Question:** SS-3 Countertop is called out at 4/A730-1 but there is no SS-3 on the Finish Schedule. Please confirm that the intended finish is SS-2 here. **Answer:** Confirmed. Refer to Bulletin #3 for revised Drawings A730-1 & A800-1. -S/P+A-KD

Add Item #133 RFI #41 (Building 1) **Question:** Please provide specifications for the "Metal Dividers for Microscope Storage" noted at 2/A733-1 **Answer:** Metal dividers for microscope storage are included as part of the lab casework model. Refer to RFI #4 & Bulletin #2. -S/P+A-KD

Add Item #134 RFI #42 (Building 1) **Question:** Is casework not required in SPED Classroom 301-1? Elevation 9/A734-1 is for typical SPED classrooms but it is not called out in 301-1 and casework is not drawn on the plan view. **Answer:** Casework is not required in SPED Classroom 301-1. -S/P+A-KD

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Add Item #135 RFI #44 (Building 1) **Question:** Is all wood shown on drawing A600-1 to be by Millwork? **Answer:** Yes.

Add Item #136 RFI #46 (Building 1) **Question:** Is the CM-1 Crown molding shown at 2/A251-1 ETR or new? **Answer:** New as indicated in project manual. Refer to Sections 062023 & 090000. -S/P+A-KD

Add Item #137 RFI #49 (Building 1) **Question:** The SOW for BP # 6.1 mentions mockups being required for most specs in the section, however, the spec. sections do not call out any mockups being required. Please advise which mockups are required for this bid package. **Answer:** There may be instances where trims, moldings, and a typical millwork elevation may require a mockup for Design Team review and shall be figured within the bid.

Add Item #138 RFI #7 (Building 5) **Question:** Building #5 – Lower School: Who's furnishing and installing the stainless steel recessed tray within solid surface counter shown in detail 11/A930 at Security Window? **Answer:** This is included with the Security Window system furnished and installed by others.

Add Item #139 RFI #8 (Building 5) **Question:** Elev 2/A712 and detail 11/A850 call for "heavy-duty support bracket", but nothing is specified. **Answer:** Refer to Section 123661.16, 2.3. -S/P+A-RSB

- **Question:** Title of elev 8/A712 is incorrect; should reference Isolation 134, reverse at 135. **Answer:** Correct. Refer to Bulletin #3 for revised Drawing A712-5 -S/P+A-KD
- **Question:** Likewise title of elev 10/A712 is incorrect; should reference Exam 139, reverse at 138. **Answer:** Correct. Refer to Bulletin #3 for revised Drawing A712-5. -S/P+A-KD
- **Question:** "In Storage 121: i. Are shelves to be plywood or plastic laminate? Detail 8/A850 is applicable to both. ii. Are all shelves to be 12" deep? iii. How wide are the shelves on elev 6/A713? iv. How wide are the shelves on elev 8/A713?". **Answer:** i. Shelves are to be plastic laminate on MDF core. Refer to Bulletin #3 for updated detail. ii. Yes. iii. Refer to Bulletin #3 for revised Drawing A713-5. iv. Refer to Bulletin #3 for revised Drawing A713-5. -S/P+A-KD
- **Question:** Is similar shelving to be provided in Storage 107? If so, provide elevation with dimensions. **Answer:** Yes. Refer to Bulletin #3 for revised Drawings A110-5 & A713-5. -S/P+A-KD
- **Question:** Some details on sheet A850 are reflective of Lab Casework; shouldn't these have epoxy resin countertop rather than solid surface? **Answer:** Refer to Interior Elevations for countertop material & Bulletin #3 for revised Drawing A850-5. -S/P+A-KD

Add Item #140 RFI #13 (Building 5) **Question:** Please note that all cabinet doors will need to be ¾" thick in lieu of ½" as specified. This is to prevent potential hardware failures and warping. Reference detail 1/A850-5. **Answer:** Understood. -S/P+A-KD

Add Item #141 RFI #16 (Building 5) **Question:** Do the Security window details shown on A930-5 apply to room 149-5 Security? This detail is not called out. **Answer:** The window details apply to the security window, called out on elevation 10/A930-5, Security Window - SEC-1. -S/P+A-MES

Add Item #142 RFI #15 (Building 6) **Question:** Please provide details of the solid surface bench seat, planter, and WWP-2 bench riser at 2/A733-6. Only rectangles are drawn. **Answer:** Refer to Bulletin #4 for revised drawings. Refer to RFI #108. -S/P+A-KD

Add Item #143 RFI #16 (Building 6) **Question:** Is there Millwork scope in 113-6 Boys, 112-6 Girls, 208-6 Boys, and/or 207-6 Girls or are these rooms ETR? There are no elevations of the vanities that show on the plan view. **Answer:** These are existing to remain. -S/P+A-KD

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Add Item #144 RFI #17 (Building 6) **Question:** Which bid package should carry the resurfacing of the planter, as noted at 1/A730-6 Corridor? If it is Millwork, please provide details. **Answer:** BP #6.1 Architectural Woodwork.

Add Item #145 RFI #12 (Building 6) **Question:** Is elev 4/A733 applicable to Classroom 139 and 142, reverse at 140, 143? And is key through taller base cabinets supposed to read 2/A801? **Answer:** Correct. No, Detail Tag to read 1/A800-6. Refer to Bulletin #3 for revised Drawing A733. -S/P+A-KD

- Elev 7/A733 has a floating detail key 9/A801 above the refrigerator. Is an upper cabinet to be provided? **Answer:** No. Refer to Bulletin #3 for revised Drawing A733. -S/P+A-KD
- Detail 1/A800 appears to be applicable to both Architectural Cabinets and Lab Casework; shouldn't material of countertop correspond as either solid surface or epoxy resin? **Answer:** Yes, refer to Bulletin #3 for revised Drawing A800. -S/P+A-KD
- Detail 1/A800 and 7/A800 apply to perimeter Lab Casework; depth of countertop at north elevation is 25" whereas south is 19". Also elev's 1/A732 and 3/A732 note that the vertical p.lam panel in detail 7/A800 is supposed to be removable. Please revise details. **Answer:** This detail is at the intersection of perimeter casework & lab table (depth of countertop varies as indicated in detail & indicated on floor plans.) This detail is shown accurately. A removable panel is not required. Refer to Bulletin #3 for revised Drawing A732. -S/P+A-KD
- Details 1, 2, and 3/A801 appear to be applicable to Lab Casework and Manufactured Solid Plastic Casework only; please clarify and revise details if necessary. **Answer:** Detail tags at Elevation 9/A733-6 are for countertop only. Refer to Bulletin #3 for revised Drawings A733-6 & A801-6. -S/P+A-RSB/KD
- Detail 4/A801 seems to only be applicable to Lab Casework and therefore should have epoxy resin countertop. Please confirm. **Answer:** Refer to Interior Elevations for countertop material designation & Bulletin #3 for revised Drawing A801. -S/P+A KD

Add Item #146 RFI #9 (Building 7) **Question:** Is there a view missing from 105-7 Stor.? There appears to be more casework that isn't drawn, opposite elevation 3/A731-7. **Answer:** This room contains existing casework to remain, shown in plan. -S/P+A KD

Add Item #147 RFI #10 (Building 7) **Question:** What is finish WPP-1, as called out at 4/A730-7? **Answer:** This is wall protection padding. Refer to Bulletin #4 for new Section 116623. -S/P+A KD

Add Item #148 RFI #11 (Building 7) **Question:** Please confirm that the vanity and countertop at 108-7 Women are ETR. Ref 1/A700-7 **Answer:** Confirmed. -S/P+A-KD

Add Item #149 RFI #12 (Building 7) **Question:** Regarding the Building 7 Locker Rooms, there are several benches in each room but only the ADA benches are drawn in black and the rest are gray. Are the gray ones ETR or do we need to carry them? **Answer:** Only ADA benches are in the project scope. -S/P+A-RSB

Add Item #150 RFI #108 (General) **Question:** Specific Scope item #51 mentions window stools, but doesn't seem applicable; please confirm. Or if window stools need to solid surface material, please indicate locations. Spec 123661.16 includes solid surface material bench per paragraph 1.2.A.5 and 2.2.C; is this at the lobby of building #6 (Upper School) per elevation 2/A733, nowhere else? Details/sections are needed. **Answer:** If there are no solid surface window stools shown on the contract documents. Disregard note. Correct. Refer to Bulletin #4 for revised drawing 2/A733-6 & A801-6 to show details/sections. -S/P+A-KD

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Add Item #151 RFI #160 (General) **Question:** What is the wood species of existing chair rail? Wood base? Crown molding? This is needed for the matching efforts. **Answer:** Contractor to verify in field to match existing. For bidding provide as specified.

Add Item #152 RFI #6 (Building 4) **Question:** Building #4 – Music Hall: It is understood that BP #6.1 is responsible for the wood trim and paneling shown on details 16/A422 and 19/A422 for the alternate stage work. But what about the very top edge trim? Is that furnished and installed by the wood flooring subcontractor? i. Likewise is the wood flooring contractor responsible for the front stage stairs (treads & risers)? ii. Is the front stage facing to be “5/8” furniture grade veneer plywood panel with ¾” edging” as noted here or WWP-1 (Framed Decorative Panel System) called out on Alternate Stage Elevation 1/A733? **Answer:** Yes. i. Yes.ii. Refer to Details 16 & 19 on A422 for front stage. Refer to Bulletin #2 for revised Drawing A733-4. -S/P+A-KD

Add Item #153 RFI #10 (Building 4) **Question:** Drawings related to WWP-1 : 1. Building #4 – Music Hall a. It appears under the base bid these panels are only located in Lobby 100 per Finish Schedule (sht A900), however: i. Lobby 100 Elevation 2/A730 shows WWP-1 extending to the far left which is actually Vestibule 100.2. Is the intent to include WWP-1 into the vestibule?

1. With storefront separating the vestibule from lobby, should vertical trim locations be adjusted?
 2. Is substrate for these new panels the existing masonry exterior wall?
 3. Installation may be very difficult with new steel tube columns so close. (2” clearance from face of column to existing masonry wall.)
 4. Are the panels to be installed down to floor level as shown with no rubber base?
 5. Is the panel system to wrap around the corner by column B-5? Returning to inside corner of new pilaster?
- ii. Elevation 1/A730 calls for WWP-1.

1. Should it extend further right so it abuts the vestibule storefront?
2. Where exactly should it stop at the left-hand side? Plan detail 7/A500 doesn’t indicate the panel system.
3. Are the panels supposed to wrap around the niche to elevator door? Including the head/soffit?
4. Please locate reveal trim.
5. Again, panels extend down to the floor without a base?

Answer: 1.a.i. Correct. Refer to Bulletin #4 for revised Drawing A900-4 and A260-4 to show the extent of WWP-1.

- .1. Yes. Refer to Bulletin #4 for revised Drawing A730-4.
 - .2. There are varying substrates (existing & new masonry & new gypsum board). Refer to floor plans for partition types.
 - .3. Refer to Bulletin #4 for revised Drawings A110-4 & A500-4.
 - .4. There is a wall base as scheduled. Refer to Bulletin #4 for revised Drawing A730-4.
 - .5. Refer to Bulletin #4 for revised drawings as noted above indicating WWP-1 to wrap around column.
- 1.a.ii.
- .1. Refer to Bulletin #4 for revised drawings as noted above indicating WWP-1 to wrap around column.
 - .2. Refer to Bulletin #4 for revised drawings as noted above indicating WWP-1.
 - .3. Yes.
 - .4. Refer to Bulletin #4 for revised Drawing A730-4.
 - .5. There is a wall base as scheduled. Refer to Bulletin #4 for revised Drawing A730-4.
- S/P+A-KD

Add Item #154 RFI #10b (Building 4) **Question:** b. Stage Elevation 1/A733 shows alternate work: i. The WWP-1 panel system on the walls flanking the proscenium seem straightforward, however what’s the detail at intersection of smaller bottom panel to full size panel? How does slim reveal between panels meet the

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perimeter edge cap? ii. Wood Wall Panel System WWP-1 is also called out for the face of stage, whereas stage edge detail 16/A442 calls for furniture-grade veneer plywood panels. Which is correct? Not sure if WWP-1 can be curved to coordinate with radius of alternate stage rebuild. **Answer:** i. It is per manufacturer's recommendations for trim details, essentially between (2) panels to be the slim reveal & the rest to receive an edge cap. -S/P+A-KD
 ii. Refer to RFI #6.

Add Item #155 RFI #15 (Building 4) **Question:** Which bid package should carry the Red Oak treads and risers for the Alternate Stage scope? Ref. A442-4. **Answer:** BP #9.3 Flooring & Tiling

Bid Package #8.1 – Doors, Frames & Hardware

Add Item #80 RFI #12 (Building 5) **Question:** Building 5: 104.1 missing hardware set. **Answer:** Refer to Bulletin #4 for revised hardware sets. -S/P+A-RSB

Add Item #81 RFI #32 (Building 1) **Question:** Building 1 opening 111.3 missing hardware set. **Answer:** Refer to Bulletin #4 for revised hardware sets. -S/P+A-RSB

Add Item #82 RFI #11 (Building 4) **Question:** Building 4: Missing hardware sets for openings S1.1, S1.3, S1.4, 100.5, 100.6, 100.7. **Answer:** Refer to Bulletin #4 for revised hardware sets. There is not S1.4. -S/P+A-RSB

Bid Package #9.1 – Gypsum Drywall

Add Item #110 RFI #86 (General) **Question:** Please confirm that BP #9.1 owns furnishing and maintaining of the temp chain link construction fence around the entirety of the project site. **Answer:** Furnishing and installing temporary chain link fence is the responsibility of BP #31.1 Sitework & Landscaping. See scope item #33 for further detail.

Add Item #111 RFI #110 (General) **Question:** Scope of work for BP #6.1 includes spec section 061600 Sheathing as limited. Please clarify what we're specifically responsible for. 1) Structural drawing S111 of Building #4 (Music Hall) calls for gypcrete on T&G sheathing for an extension of the 2nd floor; is BP #6.1 responsible for this? **Answer:** No. This work is the responsibility of BP #9.1 Gypsum Drywall

Add Item #112 RFI #168 (General) **Question:** Addenda 5, BP 9.1 Gypsum drywall Item 106, 107 to clarify the scope of work for BP9.1 A. Are the spec sections 074213.13 formed metal wall panels 074213.16 metal plate wall panels 074213.23 metal composite wall panels NOT in BP9.1 B. And only 074646 fiber cement siding is part of BP9.1 **Answer:** A. Correct. B. Correct

Add Item #113 RFI #173 (General) **Question:** Since you have a breakdown by building required then a general allowance. Should we add that allowance into the cost of each building proportionally? **Answer:** Yes.

Bid Package #9.3 – Flooring & Tiling

Add Item #75 RFI #15 (Building 4) **Question:** Which bid package should carry the Red Oak treads and risers for the Alternate Stage scope? Ref. A442-4. **Answer:** BP #9.3 Flooring & Tiling

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Bid Package #9.4 – Painting & Epoxy

Add Item #79 RFI #87 (General) **Question:** I see spray fireproofing notes on the project but I have not yet seen a spray fireproofing bid package nor spray fireproofing mentioned in any of the other bid packages. Are you looking for prices for applied fireproofing? **Answer:** If there is no spray on fireproofing shown on the documents then none will be required.

Add Item #80 RFI #16 (Building 2) **Question:** In the Library, some columns are noted as to have Intumescent Fireproofing. Which Bid Package Owns the Intumescent Fireproofing Coating? If the painting Bid Package owns this, will an intumescent Coating Spec be provided? Is this typical for all columns at all levels, or just for the columns noted (Construction Note 13) on the Lower & Main Levels? **Answer:** BP #9.4 Painting. Refer to Bulletin #4 for new Section 099647. Only where noted on the Drawings. -S/P+A-RSB

Add Item #81 RFI #15 (Building 5) **Question:** Can the Digital Wallcovering Locations be confirmed and Elevations Provided? Drawing A260-5 indicates DWG-1 in the Lobby 150-5 North Wall, and Corridor 152-5 West Wall. The Finish Schedule only Indicated DWG-1 on the North Wall in the Lobby, but not in the Corridor 152-5. **Answer:** Refer to Bulletin #4 for revised Drawings A260-5, A710-5 & A960-5. Height of wall graphic to go from top of wall base to ceiling height. -S/P+A-KD

Bid Package #10.1 – Specialties & Equipment

Add Item #88 RFI #96 (General) **Question:** Drawings indicate some fire cabinets as recessed. However, Specification 104413 only indicates semi recessed. Please advise. **Answer:** There are no recessed cabinets, only semi-recessed & surface mounted. Refer to Bulletin #3 for revised Drawings A110-2, A120-2, A121-2 & A130-2.

Add Item #89 RFI #97 (General) **Question:** Building 4 and 5 has multiple extinguishers called out as surface mount (101-4, 150-152-5). However, the drawing appears to show recessed or semi-recessed and 104413 only indicates semi-recessed. Please clarify. **Answer:** Buildings 4 & 5 have both semi-recessed & surface mounted as indicated by Construction Notes #1 & #2. Refer to Bulletin #3 for revised Section 104413 & Drawing A110-5.

Add Item #90 RFI #98 (General) **Question:** Specification 104300 indicates AED cabinets to be semi-recessed with baked/powder coated finish. Note the following discrepancies: Confirm all new cabinets are to receive a new AED Device. There are multiple locations that call for Strobe Alarm. Specification only makes reference to an alarm. Please advise if specification or drawing is to be followed. Room 102-2 calls for stainless steel semi recessed cabinet. Please confirm finish. Room 101-6 calls for surface mount. Please confirm mount. **Answer:** Confirmed. Specification is correct. Finish is per specification. Room 101-6 cabinet to be surface mounted, all others semi-recessed. Refer to Bulletin #3 for revised drawings.

Add Item #91 RFI #111 (General) **Question:** Regarding window shades, there is a General Note on the Finish Plans that call for shades at all exterior windows while the Construction Floor Plans have a specific Tag # for shades. Buildings 1, 4, 5, & 6 utilize the shade tags to identify locations however, Buildings 2 & 7 only have the general finish note and no tag to identify locations. Confirm that only Buildings 1, 4, 5, & 6 are to receive shades in locations identified on the floor plans with the respective Tag #. **Answer:** There are new shades at Building 2. Refer to Bulletin #3 for revised Drawings A110-2, A120-2, A121-2, A130-2, A260-2, A261-2, A262-2 & A263-2. There are no new shades at Building 7.

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Add Item #92 RFI #112 (General) **Question:** Regarding Enlarged Toilet Rooms: a. Confirm Tag 12 for Grab Bar Assemblies consists of one of each 18", 36", & 42" grab bar as some rooms have 3 Tag 12 while others only have 1 or 2 of this tag. b. Rooms 106-1, 206-1, & 305-1 show a partition panel without Tag 14. Confirm these are existing to remain. c. Room 316-1 shows a urinal screen between the paper towel and sanitary vendor. Please advise. d. Room 317-1 appears to show sanitary disposal however, there is no Tag 25. Please advise. e. Room 106-4 appears to show partition panels without Tag 14. Advise if these are new or existing. f. Room 106-4 shows a Tag 13 grab bar on the toilet partition. What size grab bar is for this tag? **Answer:** a. Confirmed, one (1) of each grab bar size 18", 36" & 42" length. b. Incorrect. These are all new partitions. Refer to Bulletin #3 for revised Drawing A700-1. c. This is correct a urinal/privacy panel is required here. Refer to Bulletin #3 for revised Drawing A700-1. d. To be included, refer to Bulletin #3 for revised Drawing A700-1. e. These are new partitions, refer to Bulletin #3 revised Drawing A700-4. f. Refer to Bulletin #3 for revised Drawing A700-4.

Add Item #93 RFI #126 (General) **Question:** Please note the following regarding lockers: a. Advise on depth. b. 7/A733-1 is only location that indicates height. Advise if this is height for all lockers in all buildings. c. Based on width of locker banks and counts per bank, it appears lockers are 1'-3" wide. Kindly confirm. d. Floor Plan of Room B32-1 calls for 66 lockers. However, counts and elevations add up to 60 lockers. Please advise. e. Floor Plan of Room 314-1 calls for 52 lockers. However, counts and elevations add up to 50 lockers. Please advise. **Answer:** a. 18" depth, typ. b. Correct. c. Confirmed, typ. d. 60 lockers is correct. Refer to Bulletin #3 for revised Drawing A110-1. e. 50 lockers is correct. Refer to Bulletin #3 for revised Drawing A140-1.

Add Item #94 RFI #127 (General) **Question:** Provide size and type (manual or motorized) for the two projection screens indicated on the drawings (Rooms 112-1 & 111-2). **Answer:** Room 112-1: Refer to Section 115213 for size of motorized projection screen. Room 111-2: Refer to RCP Construction Note #7 for size & operation. Screen to be mounted as high as possible.

Add Item #95 RFI #10 (Building 5) **Question:** A110-5 Rooms 132-5 & 126-5 each have a wall item with tag WB-1. There is no WB on the finish schedule or in the specification. Please advise on what these are and sizes. **Answer:** Refer to Bulletin #3 for revised Drawings A110-5, A713-5 & A960-5. -S/P+A-KD

Add Item #96 RFI #10 (Building 6) **Question:** Building 6 Floor Plan Construction Note 8 is located appears to be at all the exterior windows. However, Note 8 calls for installation of salvaged sliding marker boards. Please advise. **Answer:** Refer to Bulletin #3 for revised Drawings A111-6, A112-6 & A113-6. -S/P+A-KD

Add Item #97 RFI #159 (General) **Question:** Specification Section 108213 Exterior Grilles and Screens calls for RTU equipment Screens and Framing. None was found on drawings. Please provide locations. **Answer:** Equipment screens are not required. Refer to Bulletin #4 for Section removal. All rooftop equipment within 10 feet of roof edge to have roof edge guardrail per the Drawings & fastened to structure below.

Bid Package #22.1 – Plumbing System

Add Item #122 RFI #25 (Site) **Question:** We have been asked by our pipe suppliers for some clarification in regards to the sanitary force main from building 7 to San MH 2 at building 1; 1. What is the type of pipe that is required? Detail 3/P111-7 shows a 3" FM but does not note type of pipe. 2. Specification Section 221316 Sanitary Waste & Vent Piping is missing from bid documents. 3. Confirm that the only proposed work to be done at the existing pump station at building 6 (plan sheet C305) is the replacement of the sewage ejector pump and will be furnished and installed by Bid Package 22.1 Plumbing System. **Answer:** 1. Refer to Drawing P400-7 for

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pipng types. See Pipe & Fittings Schedule - Force Main Below Grade - PVC SCH 80. -S/P+A-JES 2. Refer to Bulletin #3 for specification. -S/P+A-RSB 3. Also refer to 3/P117-1 & P300-7, Duplex Sump Pump Detail. -SP+A-JES. All ejector pumps, controls, components, accessories and wiring from controllers to pumps, floats etc. shall be the responsibility of BP #22.1 Plumbing Systems.

Add Item #123 RFI #148 (General) **Question:** Do the plumbing demolition plans fall under bid package #22.1?

Answer: Plumbing Demolition is the responsibility of BP #2.1 Selective Demolition & Abatement.

Bid Package #26.1 – Electrical, Security & Audio/Visual

Add Item #123 RFI #164 (General) **Question:** Follow up to Addendum 5 Add item #114 RFI #82 I didn't find any I1 or I2 light fixtures on the lighting plans for building 1,2 or 4. Can you please clarify where these fixtures are located? **Answer:** I1 & I2 are inverters. Building 1 I1 is located in B01-1. Building 2 I2 is located in 006-2. Building 4 I2 is located in 208-4.

Add Item #124 RFI #166 (General) **Question:** VRF BMS Space Sensors Specification 230993 sections 2.3D, 3.4D & 4.3D state that each classroom zone shall have a combination Space Temp/CO2/Rh sensor Specification 230993 sections 2.3E, 3.4E & 4.3E state that each office zone shall have a combination Space Temp/Rh sensor Please confirm that any area not specifically labelled as a classroom or office will only require a BMS Space Temperature Sensor and VRF Factory provided sensor, not CO2 or Humidity. For example, Mechanical Note 1 on drawing M111-1 shows Temp & RH sensors required for Storage room and is labelled as "Typical". Please confirm if VRF wall sensors and BMS space sensors will all require protective covers or if that will only apply to the areas shown with Mechanical Note #9. On a previous ACES project all wall sensors required protective covers. **Answer:** a. Areas such as storage rooms, hallways, stairwells, locker rooms & toilet rooms are to be equipped with BMS space temperature sensors. Other areas such as cafeterias, library, etc. to be equipped with combination space temperatures as stated for classrooms. b. Provide at all.

Add Item #125 RFI #17 (Building 2) **Question:** Building 2 HW Finned Tube Radiation. It appears that the existing Library and Annex Finned Tube Radiation loops are associated with the two hot water pumps that are to remain. Please confirm if there are any existing control valves for these zones and if any new valves are required.

Answer: The existing pneumatic control valves are to be replaced. New valves are to be DDC. -S/P+A-WY

Add Item #126 RFI #7 (Building 5) **Question:** Building #5 – Lower School: Who's furnishing and installing the stainless steel recessed tray within solid surface counter shown in detail 11/A930 at Security Window? **Answer:** This is included with the Security Window system furnished and installed by others.

Add Item #127 RFI #11 (Building 5) **Question:** Drawing E210-5 in Room 147-5 referencing note 6 says trench to floor box but there is no floor box symbols at the tables, are we installing floor boxes or is this some type of furniture whip connection being shown? **Answer:** Power should be brought to the furniture as shown, the furniture will have integral receptacles in them which will need to be wired. -S/P+A-MTC

Add Item #128 RFI #26 (Site) **Question:** E101-0 indicates 1-4" conduit from Building 5 to 6 but doesn't say what it is for or where it needs to terminate in the buildings. Please clarify. **Answer:** The conduits shown on E100-0 & E101-0 leaving Building 2 & being distributed to all buildings is for the fiber service to the building. It was assumed the fiber could be run in the basement/crawl space of Building 5 & then go to Building 6. Refer to General RFI #85 for termination locations for conduits. -S/P+A-MTC

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Add Item #129 RFI #8 (Building 7) **Question:** Is there supposed to be PA equipment in Building 7 Gymnasium? There is a riser diagram but no devices on the drawings. **Answer:** A paging and local sound system is required in the gymnasium. Provide the following:

1. Install QTY (4) paging horns in the gymnasium. Secure horns to steel deck & aim for maximum coverage. Horns shall cable back to nearest paging amplifier & be configured on a dedicated zone. Include QTY (2) paging strobes in the gymnasium, on opposite walls, at 12' AFF. The strobes shall engage when an announcement is made in the gymnasium.
 2. In each supporting room, install QTY (1) ceiling speaker with integrated volume control, BOD Bogen #S86T752PG8WVK, QTY (14) total.
 3. Install public address head end equipment, amplifiers & rack in Storage 105-7.
 4. Include the following within the gym:
 - a. QTY (1) dual-channel wireless microphone system, include all required cabling, antennas & wireless receivers. Shure ULX series or equivalent.
 - b. QTY (2) handheld wireless microphones & body packs. Shure ULXD2/SM58 or equivalent.
 - c. QTY (2) XLR input jacks with faceplate, backbox & conduit, on opposite sides of the gym.
 - d. QTY (1) appropriately sized assisted listening system inclusive of all transmitters, receivers, neck-loops & ear pieces. Liten Technologies or equivalent.
 5. Within the paging rack in Storage 105-7:
 - a. Provide QTY (1) rackmount microphone mixer, Bogen or equivalent.
 - b. Provide QTY (1) rackmount feedback eliminator, DBX or equivalent.
 6. Configure system for paging broadcast & local sound system use via microphones.
 7. System shall be configured with Bogen server for a campus-wide paging solution.
- DA

Add Item #130 RFI #161 (General) **Question:** Specification 275116 Public Address System. On the symbols legend T-001 there are a few items that do not appear on any floor plans – Master Handset, Call Switches, Wireless Clocks, and PA Strobes. Are any of these devices required in the project and if so please clarify locations or quantities to include in bids. **Answer:** Not all devices shown on the symbol legend are required. Price on what is shown on the plans.

Add Item #131 RFI #162 (General) **Question:** On the electrical drawings there are many new receptacles indicated for “smart boards”. In building #1 the smart board outlets seem to correspond with the T series drawings and outlets denoted as “MON” for monitor with a chief wall TV type box to be installed. In many other buildings it seems like the E & T drawings do not line up in the same way. Please confirm “MON” boxes are not needed at these locations. **Answer:** Include a "MON" outlet for every location where the electrical plans show a "new receptacle for smart boards".

Add Item #132 RFI #165 (General) **Question:** VRF Zone Refrigerant Monitors. Please provide specification for VRF Zone Refrigerant Monitors with Horn/Strobe that are shown on in 230993 sections 2.4, 3.5 & 4.4. Please confirm whether all zones including Hallways, Lobbies, Storage Rooms, etc will need refrigerant monitors or if that only pertains to classrooms and offices. **Answer:** a. VRF Refrigerant Detector: (Must include start-up and calibration kits) R-32 Zones: MSA MGS-450 Series Model IP-41 (H6302-1155) or equivalent. R-454B Zones: MSA MGS-450 Series Model IP-41 (H6302-1171) or equivalent. Horn/Strobe for VRF Zones, Main Office, Custodian's Office: System Sensor model P2WL-P or equivalent (Must be white & no wording such as “Fire”) b. All zones with refrigerant equipment.

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Add Item #133 RFI #167 (General) **Question:** Separate Controls Upgrade in Progress: At walkthrough, it was mentioned that a project is currently underway to replace existing controls on existing equipment in building 5 & 6 with new Honeywell Controls. We were told that an addendum was coming out to clarify which existing equipment will already have new controls. The only information that was in an addendum in this regard was about JACEs but not existing equipment to remain. Building 6 Boilers and pumps RTU (Qty 1), MAU (Qty 1) & EF (Qty 5) are to remain. Should it be assumed that this existing equipment will already have new controls or will we be required to add controls to this existing equipment. For example, specification 230993 Section 6.1 shows controls for Hot Water System for Building 6. **Answer:** In addition to the JACE headend controls noted previously, the following are specifically being included in the other project scope & can be eliminated from the scope of this project: Upper School Building 6 - Boilers & associated pumps, (5) Exhaust Fans (EF-1, -3, -5, -6, & -8), (1) RTU shown on Drawing M140-6; Lower School Building 5 - (15) VAV boxes (shown on Drawings M100-5 & M110-5).

Add Item #134 RFI #172 (General) **Question:** I am trying to collect the pricing of the badging for this project to incorporate into our upcoming bid. **Answer:** Please contact Intellicorp direct to obtain the latest pricing. See General Scope Item #4 in the bid package scope of work.

Add Item #135 RFI #95 (General) **Question:** Per Specification Section Access Control System (Section 281300): "the selected manufacturer for the Security System shall be Millennium Group, Inc – Dix Hills, NY. Other manufacturers will NOT be considered." Per one of our Access Control suppliers, ACES has historically utilized Millenium Group, Inc, but they are based in Weston, MA. <https://mgiaccess.com/> Based on a Google search for Millennium Group in Dix Hills, we located a company called Millenium Systems Integration based in Melville, NY. They claim to be a Distributor of Millenium Groups' products. <https://millennium-integration.com/> Please confirm which is the correct company to be utilized for the supply of the Access Control System. **Answer:** All reference to Millenium in regard to access controls throughout the contract documents should be changed to Verkada. <https://www.verkada.com/> Refer to Bulletin #4 for revised Section 281300.

Add Item #136 RFI #16 (Building 4) **Question:** Addendum 5 Add Item #119 RFI #13 response refers to revised electrical drawing for more information. The only revised electrical drawings for Building #4 were provided in previous addendum and did not show any additional work for the alternate stage reconstruction. Is more information to be released or please clarify what is the electrical scope of work for alternate stage reconstruction. **Answer:** Refer to Bulletin #3 included in Addendum #6.

Bid Package #31.1 – Sitework & Landscaping

Add Item #135 RFI #87 (General) **Question Answer:** Please confirm that BP #9.1 owns furnishing and maintaining of the temp chain link construction fence around the entirety of the project site. **Answer:** Furnishing and installing temporary chain link fence is the responsibility of BP #31.1 Sitework & Landscaping. See scope item #33 for further detail.

Add Item #136 RFI #90 (General) **Question:** On the bid form we must break out pricing across each building. For misc. items on the exterior between the buildings, do these fall under the sitework? **Answer:** No.

Add Item #137 RFI #134 (General) **Question:** As to the scope of work about the total demo of the maintenance building. It is mentioned by name in the Site work Scope, but in the demo scope you call out building demolition. **Answer:** See clarification in Addendum #3.

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Add Item #138 RFI #18 (Site) **Question:** According to the Phasing Narrative it appears that buildings 1, 2 & Annex, 4 and 7 will be unoccupied and buildings 5 & 6 will be occupied during the construction. a. For the excavation and backfill of underslab utilities within each building what type of egress (i.e. wall openings, door widths, ceiling height, basement access etc.) restrictions will the trades have. Can equipment such as, mini excavators, loaders, skid steers be utilized? b. Confirm that ALL buildings (occupied or not) do not have work hour restrictions and will be normal 7:00am-5:00 pm Mon-Fri. **Answer:** a. This equipment may be utilized provided the methods are within OSHA compliance. b. correct.

Add Item #139 RFI #19 (Site) **Question:** Spec section 321420 Decorative Concrete Paving Part 1.2.C lists 3 alternates. Clarify how these pertain to this project. **Answer:** Delete paragraph. Refer to Bulletin #3 for revised Section 321420. -Benesch.

Add Item #140 RFI #21 (Site) **Question:** Spec section 323300 Bollards Part 2 lists products for 2.1 Steel Bollards and 2.2 Granite Bollards. Detail 4D on plan sheet C701 shows a decorative polyethylene thermoplastic bollard cover over a steel pipe. a. Spec section 323300 omits a manufacturer / model number / style for the decorative bollard cover. Please furnish b. Where on site are the granite bollards proposed to be installed? And, if they are to be installed a spec and detail would be required. c. Are bollards required at any of the transformer pads? **Answer:** a. Metro Bollard Covers as manufactured by BollardCompany.com are made from HDPE plastic, sized to fit over a 6" dia. pipe, come in a black color, & are sized to the 42" dimension listed on detail 4D/C700. b. No granite bollards are proposed on site. Refer to Bulletin #3 for revised Section 323300. c. Yes, bollards are required at the transformer east of Building #1 & at the transformer west of Building #4. Quantity as determined by the utility company. - Benesch

Add Item #141 RFI #22 (Site) **Question:** The specifications or detail 1E/C700 do not include a type, manufacturer, size, thickness of the unit pavers that are to be installed new or to replace the broken or damaged existing pavers that are to be removed and reinstalled on site. More info needed on the unit pavers. **Answer:** The legend on sheets C201 thru C203 say that any new pavers are to match the existing pavers. The existing pavers are a close if not exact match to pavers manufactured by Ideal Block or approved equal. Paver product to be used is their Yankee Cobble at 2-3/8 inches thick utilizing two (2) paver shapes: square (6-5/16" x 6-5/16") & large rectangle (6-5/16" x 9-7/16"). Color to match existing pavers. New pavers shall not be placed in areas next to or near existing reset pavers. Contractor shall reinstall existing pavers only in areas where sufficient quantities of reset pavers are available for the entire installation. Paver manufacturer to provide new pavers is subject to approval from Landscape Architect depending upon how closely the proposed pavers match the existing pavers. -Benesch

Add Item #142 RFI # 23 (Site) **Question:** BP 31.1 Sitework & Landscaping scope of work Item 74 lists bike racks, trash receptacles, benches, timber seat top with mounting brackets, etc. a. Details 5C & 5E Wood & Metal benches are missing a spec section and manufacturer with model number and sizes. Please furnish. b. Confirm that the benches in details 5C & 5E are the only site furnishings required for this project. **Answer:** a. Bench is the Arcata bench as manufactured by Landscapeforms. Options to be backless, armless, lpe wood slats, powder-coated frame & embedded mount. b. No bike racks, trash receptacles or timber seat top with mounting brackets are part of this project. -Benesch

Add Item #143 RFI #24 (Site) **Question:** Confirm that BP 5.1 Structural Steel & Misc Metals is responsible for furnishing and installing the site handrails and ornamental guardrailings shown on all details on plan sheets C700 – C704. Also note that a spec section with manufacturer or model is required for the guard railings. **Answer:**

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Confirmed. Refer to Bulletin #4 for new Section 055200. All exterior railings on this project are to be stainless steel. -Benesch

Add Item #144 RFI #25 (Site) **Question:** We have been asked by our pipe suppliers for some clarification in regards to the sanitary force main from building 7 to San MH 2 at building 1; 1. What is the type of pipe that is required? Detail 3/P111-7 shows a 3" FM but does not note type of pipe. 2. Specification Section 221316 Sanitary Waste & Vent Piping is missing from bid documents. 3. Confirm that the only proposed work to be done at the existing pump station at building 6 (plan sheet C305) is the replacement of the sewage ejector pump and will be furnished and installed by Bid Package 22.1 Plumbing System. **Answer:** 1. Refer to Drawing P400-7 for piping types. See Pipe & Fittings Schedule - Force Main Below Grade - PVC SCH 80. -S/P+A-JES 2. Refer to Bulletin #3 for specification. -S/P+A-RSB 3. Also refer to 3/P117-1 & P300-7, Duplex Sump Pump Detail. -SP+A-JES. All ejector pumps, controls, components, accessories and wiring from controllers to pumps, floats etc. shall be the responsibility of BP #22.1 Plumbing Systems.

Add Item #145 RFI #26 (Site) **Question:** E101-0 indicates 1-4" conduit from Building 5 to 6 but doesn't say what it is for or where it needs to terminate in the buildings. Please clarify. **Answer:** The conduits shown on E100-0 & E101-0 leaving Building 2 & being distributed to all buildings is for the fiber service to the building. It was assumed the fiber could be run in the basement/crawl space of Building 5 & then go to Building 6. Refer to General RFI #85 for termination locations for conduits. -S/P+A-MTC

Add Item #146 RFI #27 (Site) **Question:** For utilities and drainage shown as an existing condition on the site demolition plan with no callouts, what are we to assume for their proposed condition? Do they get abandoned, removed, or whether or not the structures associated with said utility / drainage get lowered, raised, removed, etc. Example...existing drainage at bldg's 4 & 5. **Answer:** All utilities not specifically called out to be removed shall be protected & left in place. The drainage infrastructure referred to in this RFI, as well as additional drainage infrastructure associated with Buildings 3 & 4, shall be removed. If drainage/utility infrastructure is called out to be removed, & it is within the limit of grading/excavation, it shall be removed. If it is outside the limits of grading/excavation, it shall be abandoned in place by cutting on the down gradient end, & filling with flowfill from the upgradient end. -Benesch

Add Item #147 RFI #28 (Site) **Question:** Are we to assume the new 6" DI water service is to be installed while the existing line that it's replacing remains active? Is it known how many facilities / site features this main supplies? **Answer:** Yes.

Add Item #148 RFI #29 (Site) **Question:** Reference dwg detail 3E/C700. The detail calls for cast iron detectable warning units. Specification Section **033200: 2.6 Detectable Warning Panel** specifies (2) types of detectable warning paver (plastic & cast iron). Please advise if plastic detectable warning pavers are required on this project. **Answer:** Cast iron is required. Refer to Bulletin #4 for revised Section 033200. -Benesch

Add Item #149 RFI #30 (Site) **Question:** Reference C304 & C305 (Civil Utility Plans). Regarding the water service(s) please answer the following: Are valves required at service locations and or along the main run? a. As a result of phasing, are bidders to assume existing services are to tie into the new main at PROPOSED locations or in proximity to their existing feed locations? b. Since the main is being done during the summer of 2026, can the new building services required at different phases be installed at the same time? c. The new main is in the exact location of the existing main at the connection point at the Oronoke Rd entrance. If the existing main and buildings must remain in service the proposed connection call-out cannot occur. Will an offset tap be required in this location in order not to disturb the exiting main and it's associated service feeds? d. What is the size of the existing main service that is to be replaced? **Answer:** The new 6" main is meant to replace the existing 6" main

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after the curb stop valve. New gate valves are required on each of the laterals after they come off the new site main. a. Several buildings have existing laterals that are to remain, as documented on the Drawings. These existing laterals to remain are to connect to the new main in the approximate location where they are near the new main. Several buildings have new laterals that are connecting to the new main & in those cases, the locations shall be as shown in the Drawing. b. While this may be possible depending on field conditions and schedule duration. Bidder shall assume connections, valves, testing, etc. to existing branch lines serving other buildings on campus for eventual replacement once subsequent phases are underway. c. An offset tap may be utilized provided it does not diminish water pressure levels for those buildings that will continue to be fed from the existing line. d. Existing main is 6".-Benesch

Add Item #150 RFI #20 (Site) **Question:** Plan sheet C700 has Detail 2D Decorative Concrete Pavement (Regular Duty).a. Where on site does is this work proposed? b. Confirm that the only area on site that is Decorative Concrete Pavement (heavy duty per detail 2E/C700) is at the proposed entry plaza to building 1. **Answer:** Delete detail 2D on sheet C700 from the plan set as there is no regular duty decorative concrete pavement on this project. Refer to Bulletin #4 for revised Drawing C700. -Benesch

ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE APPROPRIATE SPACE ON THE BID FORM
ATTACHMENTS AS INDICATED ABOVE
END ADDENDUM #08 – INVITATION TO BID #01

BID FORM

DATE: DECEMBER 11, 2025

REV. 1/15/16

REV. 1/26/26

PROJECT:

ALTERATIONS TO ACES AT CHASE

565 Chase Parkway

Waterbury, CT

State Project # 244-0044 MAG

TO:

CONSTRUCTION MANAGER:

DOWNES CONSTRUCTION COMPANY, LLC

200 STANLEY STREET

NEW BRITAIN, CT 06051

Pursuant to and in compliance with the "Invitation to Bid" dated: **December 11, 2025** the undersigned,

(Name of Bidding Firm)

having visited the site, familiarized him/ herself with the conditions present and carefully examined all Contract Documents (Invitation To Bid, Bid Package Scope of Work, Downes Construction's Supplemental Instructions, General Items – All Trade Packages, complete Specifications and Drawings together with all Addenda) issued and received prior to closing time for receipt of bids as prepared by Downes Construction (Construction Manager), the ACES (Owner), Silver Petrucelli & Associates (Architect), their consultants and hereby offers and agrees as follows:

To provide all labor, materials, equipment, tools, transportation, supervision, appurtenances and services required to diligently perform all work in connection with the above referenced project to the satisfaction of the Architect, Engineer Consultants, Construction Manager and Owner, specifically including the following Bid Package for the lump sum price as follows:

ACES AT CHASE	
BID PACKAGE # AND DESCRIPTION:	
The undersigned hereby states that all work will be completed for each of the following Building Breakout Costs:	
Building #1 Main School Cost	\$ (Bid in numbers)
Building #2 Library Cost	\$ (Bid in numbers)

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Building #4 Music Hall Cost	\$ (Bid in numbers)
Building #5 Lower School Cost	\$ (Bid in numbers)
Building #6 Upper School Cost	\$ (Bid in numbers)
Building #7 Gymnasium Cost	\$ (Bid in numbers)
Sitework & Civil Cost – Total and not by Phase	\$ (Bid in numbers)
The undersigned hereby states that all work will be completed for the lump sum of:	
Lump Sum Bid - Total from Above Buildings <u>in Words</u> (Including bonds):	(Bid in words)
Lump Sum Bid - Total from Above Buildings <u>Numerically</u> (Including bonds):	\$ (Bid in numbers)
<u>Breakout</u> cost for 100% Performance and Labor and Material Payment Bonds <u>Numerically</u>:	\$ (Bond breakout in numbers)

Use the following section for **COMBINED BIDS ONLY**. Indicate N/A or leave blank if submitting a bid on only one package above or are electing not to submit a combined bid. Combination bids for any combination of bid packages will be accepted, provided the Bidder submits a bid for the individual packages to be combined. Combination bids are allowed only for bids due at the same time. Bid Combination offers should be submitted by letter in separate envelope marked "Combination Bid for Bid Packages (BP No. & Description)". The letter must be on a business letterhead and bear the signature of the individual signing the bid. A separate bid bond is not required for the combination bid. Bid Bonds for the individual bids are required.

<u>COMBINED BIDS</u> FOR BID PACKAGE #(s) AND DESCRIPTION(s): (Fill in to right)	
The undersigned hereby states that all work for the above COMBINED bid packages will be completed for the lump sum of:	

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Lump Sum Bid <u>in words</u> (Including bonds):	
Lump Sum Bid <u>Numerically</u> (Including bonds):	\$ (Bid in numbers)
Breakout cost for 100% Performance and Labor and Material Payment Bonds <u>Numerically:</u>	\$ (Bond breakout in numbers)

We further agree that this price is all-inclusive and that all contract documents have been reviewed and that every question, conflict or issue has been addressed to our satisfaction. Therefore, no change orders will be issued unless unforeseen conditions are encountered or the owner or owner's representatives revise the scope of the work.

The following is a breakdown of our lump sum base bid as requested in the bid package scope of work:

Description	Unit	Qty	Value

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Lump Sum Bid			\$
Total Estimated <u>On-Site</u> Manhours:			

A. The bid includes the **Addenda** listed below:

Addendum #	Dated

Addendum #	Dated

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B. Alternate Bids are proposed as follows: Indicate N/A in any blank spaces. Alternate Bids are in addition to the base bid may affect the lowest responsible bidder. Alternates may be accepted in any order. (See Specifications Section 01 23 00 for full descriptions of alternates).

Alternate #	Description	Alternate Bid (Including Bonds)
1	ADD ALTERNATE #1 Stage 102-4 Reconstruction	
2	ADD ALTERNATE #2 Building 2 Annex & Associated Sitework	
3	ADD ALTERNATE #3 Student Parking Adjacent to Building #7	

C. Allowances are included in the base bid as follows as requested in the Bid Package Scope of Work. The undersigned bidder acknowledges that OH&P for these allowances are NOT included in the allowance but rather in the base bid separately. Unit Prices that may be used to arrive at allowances shall be valid for the life of the project. Un-used portions of allowances will be credited by deduct change order a project conclusion. Indicate N/A for those allowances that are not applicable to the bidders bid package or if none are requested in the bid package. Bidder to complete all calculations for allowances for their bid packages. Exclusion of allowances is NOT permissible. **(Refer to individual Bid Package Scopes of Work for allowances to be included in the lump sum bid)**

BP # 1.1 – Final Cleaning Allowance:				
Allowance				
1	Miscellaneous Final Cleaning			
	Description	Quantity	Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	120		
Total Allowance 1 included in Base Bid (Bidder to Calculate):				
BP # 1.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 2.1 – Selective Demolition & Abatement Allowances:				
Allowance				
1	Additional Selective Demolition			
	Description	Quantity	Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below

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	below)	below	below	
B	Labor Hours (Blended Rate)	360		
C	Material	1 LS	\$15,000.00	\$15,000.00
Total Allowance 1 included in Base Bid (Bidder to Calculate):				
Eagle Allowance Number	Location/Material	Estimated Quantity	Unit Price	Amount
1	B1 Cores through plaster walls	200 Cores up to 6" Diameter		
2	B1 Penetrations >3sf less than <20sf	Up to 10 Containments		
3	B1 Thermal Insulation in wall chases	Up to 10 areas with 25lf insulation and 15sf of plaster ea.		
4	B2 Main Level	Cores through plaster in areas of walls to remain		
BP # 2.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 3.1 – Concrete Allowances:				
Allowance 1	Misc. Existing Concrete Slab & Infill Repair			
	Description	Quantity	Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	120		
C	Material	1 LS	\$10,000.00	\$10,000.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
BP # 3.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 4.1 - Masonry Allowances:				
Allowance 1	Existing Building Masonry Cutting & Patching			
	Description	Quantity	Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate	Included in blended rate below	Included in blended rate	Included in blended rate below

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	below)		below	
B	Labor Hours (Blended Rate)	180		
C	Material & Equipment	1 LS	\$10,000.00	\$10,000.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
BP # 4.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 5.1 – Structural Steel / Misc. Metals Allowances:				
Allowance 1	Misc. Metals			
	Description	Quantity	Unit Price	Amount
A	Misc Steel Frames	1 LS	\$15,000	\$15,000.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				\$15,000.00
BP # 5.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 9.1 – Gypsum Drywall Allowances:				
Allowance 1	Patch Existing Finishes			
	Description	Quantity	Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	280		
B	Material & Equipment	1 LS	\$10,000.00	\$10,000.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
Allowance 2	Safety & Carpentry			
	Description	Quantity	Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	280		
C	Material & Equipment	1 LS	\$8,000.00	\$8,000.00
Total Allowance 2 Included in Base Bid (Bidder to calculate):				

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Allowance 3	Temporary Partitions & Enclosures			
	Description	Quantity	Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	160		
C	Material & Equipment	1 LS	\$15,600.00	\$15,600.00
Total Allowance 3 Included in Base Bid (Bidder to calculate):				
BP #9.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 9.2 – Acoustical Ceilings Allowances:				
Allowance 1	Temporary Ceilings			
	Description		Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	200		
C	Material & Equipment	1 LS	\$15,000.00	\$5,000.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
BP # 9.2 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 9.3 – Flooring Allowance:				
Allowance 1	Topical Moisture Control			
	Description	Quantity	Unit Price	Amount
A	Topical Moisture Control SOG/SOD (Square Foot)	30,000SF		
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
BP # 9.3 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 9.4 – Painting Allowances:				
Allowance	Painting Touch-up			

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1				
	Description		Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	200		
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
BP # 9.4 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 14.1 – Elevators Allowance:				
Allowance 1	Operator Run Time			
	Description		Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	40		
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
BP # 14.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 21.1 – Fire Suppression Allowances:				
Allowance 1	Maintain Occupancy (Unforeseen)			
	Description		Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	60		
C	Material & Equipment	1 LS	\$4,500.00	\$4,500.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
BP # 21.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 22.1 – Plumbing System Allowances:				

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Allowance 1	Maintain Occupancy (Unforeseen)			
	Description		Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	160		
C	Material & Equipment	1 LS	\$4,500.00	\$4,500.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
Allowance 2	Temporary Environmental Conditioning			
	Description		Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	80		
C	Material & Equipment	1 LS	\$5,000.00	\$5,000.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
BP # 22.1 – Confirm by checking the following box that all of the above allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 23.1 – HVAC System Allowance:				
Allowance 1	Maintain Occupancy (Unforeseen)			
	Description		Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	160		
C	Material & Equipment	1 LS	\$10,000.00	\$10,000.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
Allowance 2	Temporary Environmental Conditioning			
	Description		Unit Price	Amount

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A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	160		
C	Material & Equipment	1 LS	\$10,000.00	\$10,000.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
BP # 23.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 26.1 – Electrical, Security/AV Allowances:				
Allowance 1	Maintain Occupancy (Unforeseen)			
	Description		Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	160 HRS		
C	Material & Equipment	1 LS	\$4,500.00	\$4,500.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
Allowance 2	Temporary Environmental Conditioning (Unforeseen)			
	Description			
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	80 HRS		
C	Material & Equipment	1 LS	\$5,000.00	\$5,000.00
Total Allowance 2 Included in Base Bid (Bidder to calculate):				
BP # 26.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 27.1 – Communications Allowance				
Allowance 1	Maintain Occupancy (Unforeseen)			
	Description		Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below

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B	Labor Hours (Blended Rate)	120		
C	Material & Equipment	1 LS	\$5,000.00	\$5,000.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
BP # 27.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 28.1 – Fire Alarm Allowance				
Allowance 1	Maintain Occupancy (Unforeseen)			
	Description		Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	80		
C	Material & Equipment	1 LS	\$5,000.00	\$5,000.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				
BP # 28.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				
BP # 31.1 – Sitework & Landscaping Allowances:				
Allowance 1	Site Grounds Maintenance			
	Description		Unit Price	Amount
A	Maintenance	1 LS	25,000.00	25,000.00
Total Allowance 1 Included in Base Bid (Bidder to calculate):				\$25,000.00
Allowance 2	Snow Removal & Winter Conditions			
	Description		Unit Price	Amount
A	Maintenance	1 LS	25,000.00	25,000.00
Total Allowance 2 Included in Base Bid (Bidder to calculate):				\$25,000.00
Allowance 3	General Field Maintenance			
	Description		Unit Price	Amount
A	Foreman/Supervision (Included w/ blended rate below)	Included in blended rate below	Included in blended rate below	Included in blended rate below
B	Labor Hours (Blended Rate)	180		

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C	Material & Equipment	1 LS	\$10,000.00	\$10,000.00
Total Allowance 3 Included in Base Bid (Bidder to calculate):				
Allowance 4	Rock Excavation			
	Description		Unit Cost (CY)	Amount
A	100 cubic yards of Mass Rock Excavation			
B	250 cubic yards of Trench Rock Excavation			
Total Allowance 4 Included in Base Bid (Bidder to calculate):				
BP # 31.1 – Confirm by checking the following box that all of the <u>above</u> allowances are included in the Base Bid as directed. Confirmed ☐ Exclusion of allowances is NOT compliant with the bid documents.				

D. Unit pricing is proposed as follows: Unit Prices shall remain valid for the life of project. Include all costs for a complete installation and/or removal. All unit prices will be used for Adds or Deducts from the contract price and are to include all overhead, profit, insurance, bonds, etc. Indicate N/A in any blank spaces. (Refer to Bid Package Scope of Work for additional information and Specifications for specific requests for unit pricing)

Item No. 1 – ASBESTOS CONTAINING FLOORING MATERIALS AND ADHESIVES (All Layers to Substrate), REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____per square foot.

Item No. 2 – ASBESTOS CONTAINING MASTIC ON CONCRETE (All Layers to Substrate), REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____per square foot.

Item No. 3 – ASBESTOS CONTAINING MUDDIED PIPE FITTING INSULATION, REMOVAL AND DISPOSAL AS ASBESTOS WASTE.

\$_____each.

Item No. 4 – ASBESTOS CONTAINING MUDDIED PIPE FITTING INSULATION WITHIN MASONRY WALLS, REMOVAL AND DISPOSAL AS ASBESTOS WASTE.

\$_____each.

Item No. 5 – ASBESTOS CONTAINING THERMAL SYSTEM INSULATION, REMOVAL AND DISPOSAL AS ASBESTOS WASTE.

_____linear foot.

Item No. 6 – ASBESTOS CONTAINING THERMAL SYSTEM INSULATION WITHIN MASONRY WALLS, REMOVAL AND DISPOSAL AS ASBESTOS WASTE.

\$_____linear foot.

Item No. 7 – ASBESTOS CONTAINING INTERIOR CAULK, REMOVAL AND DISPOSAL AS

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ASBESTOS AND PCB WASTE >50 PPM.

\$ _____ per linear foot.

Item No. 8 – ASBESTOS CONTAINING INTERIOR PARTITION/TRANSOM/SIDELIGHT WINDOW SASH, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$ _____ per sash.

Item No. 9 – ASBESTOS CONTAINING SINK UNDERCOATING, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$ _____ per sink.

Item No. 10 – ASBESTOS CONTAINING CERAMIC FLOOR TILE, MUD BASE, GROUT (all layers to bare concrete), REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$ _____ per square foot.

Item No. 11 – ASBESTOS CONTAINING CERAMIC FLOOR TILE, MUD BASE, GROUT, CONCRETE AND VAPOR BARRIER, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$ _____ per square foot.

Item No. 12 – DOORS WITH ASBESTOS CONTAINING WINDOW GLAZING COMPOUND, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$ _____ each.

Item No. 13 – DOORS WITH ASBESTOS CONTAINING CORE INSULATION, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$ _____ each.

Item No. 14 – ASBESTOS CONTAINING PLASTER (all layers to bare substrate), REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$ _____ square foot.

Item No. 15 – ASBESTOS CONTAINING TEXTURED CEILING PAINT, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$ _____ square foot.

Item No. 16 – ASBESTOS CONTAINING JOINT COMPOUND AND ASSOCIATED SHEETROCK, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$ _____ square foot.

Item No. 17 – ASBESTOS CONTAINING GLUE DAUBS AND ASSOCIATED ACOUSTICAL CEILING TILES, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$ _____ square foot.

Item No. 18 – ASBESTOS CONTAINING FLEX CONNECTOR, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

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\$_____ each.

Item No. 19 – ASBESTOS CONTAINING CEMENT BOARD CHALK BOARD AND ASSOCIATED ADHESIVE, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____ square foot.

Item No. 20 – ASBESTOS CONTAINING CEMENT BOARD, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____ square foot.

Item No. 21 – ASBESTOS CONTAINING LIGHT FIXTURE PAPER, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____ square foot.

Item No. 22 – ASBESTOS CONTAINING DUCT INSULATION, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____ square foot.

Item No. 23 – ASBESTOS CONTAINING CHIMNEY FLUE CEMENT, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____ square foot.

Item No. 24 – ASBESTOS CONTAINING MIRROR ADHESIVE AND ASSOCIATED MIRROR, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____ square foot.

Item No. 25 – ASBESTOS CONTAINING CERAMIC WALL TILE ADHESIVE AND ASSOCIATED TILE, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____ square foot.

Item No. 26 – ASBESTOS CONTAINING EBONITE TABLE TOPS AND BACK SPLASH, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____ square foot

Item No. 27 – ASBESTOS CONTAINING INSULATION BEHIND RADIATORS, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____ square foot

Item No. 28 – ASBESTOS CONTAINING VALVE PACKING, REMOVAL AND DISPOSAL AS ASBESTOS WASTE.

\$_____ each.

Item No. 29 – ASBESTOS CONTAINING GASKETS AT BOLTED CONNECTIONS, REMOVAL AND DISPOSAL AS ASBESTOS WASTE.

\$_____ each.

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Item No. 30 – ASBESTOS CONTAINING EXTERIOR CAULKS, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____per linear foot.

Item No. 31 – ASBESTOS CONTAINING REGLET TAR, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____per square foot.

Item No. 32 – ASBESTOS CONTAINING ROOF FLASHING CEMENT (ALL LAYERS), REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____per square foot.

Item No. 33 – ASBESTOS CONTAINING ROOF FIELDS (ALL LAYERS), REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____per square foot.

Item No. 34 – ASBESTOS CONTAINING VAPOR BARRIER UNDER CERAMIC FLOOR TILES, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____per square foot.

Item No. 35 – ASBESTOS CONTAINING EXTERIOR METAL SILL/PANEL ADHESIVE, REMOVAL AND DISPOSAL AS ASBESTOS AND PCB WASTE >50 PPM.

\$_____square foot

Item No. 36 – SPOT REPAIR UTILIZING OSHA GLOVE BAG REMOVAL METHOD FOR LESS THAN 3 SQUARE FEET/LINEAR FEET OF ACM.

\$_____per glove bag.

Item No. 37 – PREPARATION OF A NEGATIVE PRESSURE ENCLOSURE INCLUDING SHOWER UNIT, WATER FILTRATION UNIT, HOT WATER HEATER.

\$_____per hour.

Item No. 38– DISPOSAL OF ASBESTOS AND PCB WASTE >50 PPM.

\$_____per ton.

Item No. 39 – DISPOSAL OF ASBESTOS AND PCB WASTE >1 PPM AND <50 PPM.

\$_____per ton

Item No. 40 – DISPOSAL OF PCB WASTE >50 PPM.

\$_____per ton.

Item No. 41 – DISPOSAL OF PCB WASTE >1 PPM AND <50 PPM.

\$_____per ton.

Item No. 42 – DOORS WITH NON-ASBESTOS WINDOW GLAZING COMPOUND, REMOVAL AND DISPOSAL AS PCB WASTE >50 PPM.

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\$_____ each.

Item No. 43 – WINDOWS WITH NON-ASBESTOS CONTAINING WINDOW GLAZING COMPOUND, REMOVAL AND DISPOSAL AS PCB WASTE >50 PPM.

\$_____ each.

Item No. 44 – INTERIOR NON-ASBESTOS CONTAINING CAULK, REMOVAL AND DISPOSAL AS PCB WASTE >50 PPM.

\$_____ per linear foot.

Item No. 45 – REMOVAL AND DISPOSAL OF PCB-CONTAINING LIGHT BALLAST.

\$_____ per ballast.

Item No. 46 – REMOVAL AND RECYCLING OF THERMOSTATIC CONTROL OR SWITCH WITH MERCURY AMPULE.

\$_____ each.

Item No. 478 – REMOVAL AND RECYCLING OF MERCURY VAPOR LIGHT TUBE.

\$_____ per linear foot.

\$_____ per round or U-shaped tube.

E. Labor rates are proposed as follows: Indicate N/A in any blank spaces. (Rates shall be valid for the life of the project and be inclusive of insurance, fringes, taxes & OH&P etc.) (Attach Separate Breakdown Sheet)

Labor Classification / Trade	Straight Time	Time & one half	Double Time
PROVIDE SEPARATE ATTACHMENT			

F. Equipment rates are proposed as follows: Indicate N/A in any blank spaces. (Rates shall be valid for the life of the project and be inclusive of insurance, fringes, taxes & OH&P etc.)

Equipment Rates	Straight Time	Time & one half	Double Time
PROVIDE SEPARATE ATTACHMENT			

TIME OF COMPLETION: We agree that the Work of the Contract shall begin within ten (10) calendar days after receipt of Notice of Intent to Award. Scheduling and allocation of manpower to accomplish the work shall be in conformance with the Phasing Diagrams, Site Logistics and the Contract Documents.

BID ACCEPTANCE: We agree that this proposal shall not be withdrawn for a period of 90 calendar days after the date of submittal. We understand that the Downes Construction and the owner reserve the right to accept or reject any or all bids and to waive any informality on the bidding process.

BID FORM

CONTRACT EXECUTION: Upon notification of acceptance of this proposal, we shall execute a formal contract (AIA) within seventy-two (72) hours of receipt of the contract via DocuSign electronic signature solution.

CHRO REQUIREMENTS: We agree and understand that the Subcontractors who are selected to perform this State project must comply with CONN. GEN. STAT. §§ 4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Special Session Public Act 15-5. An Affirmative Action Plan must be filed with and approved by the Commission on Human Rights and Opportunities prior to the commencement of construction. State law requires a minimum of twenty-five (25%) percent of the state-funded portion of the contract for award to subcontractors holding current certification from the Connecticut Department of Administrative Services ("DAS") under the provisions of CONN. GEN. STAT. § 4a-60g, as amended. (25% of the work with DAS certified Small and Minority owned businesses and 25% of that work with DAS certified Minority, Women and/or Disabled owned businesses.) The contractor must demonstrate good faith effort to meet the 25% set-aside goals. For municipal public works contracts and quasi-public agency projects, the contractor must file a written or electronic non-discrimination certification with the Commission on Human Rights and Opportunities. Forms can be found at http://www.ct.gov/opm/cwp/view.asp?a=2982&q=390928&opmNav_GID=1806

PERFORMANCE & PAYMENT BOND: We will provide a Performance Bond and Labor and Material Payment Bond in the full amount of the Contract with ten (10) days of receiving a notice to proceed/letter of intent if requested.

It is understood that Downes Construction and the Owner reserve the right to accept or reject any and all bids that is deemed to be in their best interests.

By submission of this proposal, the undersigned acknowledges that they have read their bid package scope of work, all drawings, all specifications, understand the schedule requirements and agrees to provide sufficient staff and organization and to select subcontractors and suppliers to comply with the requirements for submittals, delivery dates, work periods and completion dates as specified.

1. Provide the names of the Project Manager and Field Superintendent/Foreman the Contractor will use on this Project. (MUST HAVE 5 YEARS EXPERIENCE WITH THESE TITLES) On a separate sheet briefly summarize their experience.

Project Manager: _____

Field Superintendent/Foreman: _____

2. State the name of your insurance carrier and the A.M. Best & Company rating of your insurance carrier.

Insurance Carrier: _____

Rating: _____

3. State the general liability rate of your firm in the interstate and intrastate workers' compensation experience modification rate for your firm for the three (3) years.

General liability rate: _____

BID FORM

Workers' Compensation Experience Modification Rate: _____

ENCLOSURES: Included with this proposal are the following in this order:

- A. Bid Security in the amount of Ten Percent (10%) of the Base Bid Sum (Bid Bond or Certified Check) for any bid for work with an estimated value of at least Fifty Thousand Dollars (\$50,000.00) If the bidder is a small contractor or minority business enterprise pursuant to Connecticut General Statutes Section 4a-60g and further described in Appendix I, Administrative and Statutory Requirements, it may provide in lieu of a bid bond, a letter of credit in an amount equal to Ten Percent (10%) of the bid amount if the estimated value is less than one hundred thousand dollars and in an amount equal to Twenty-Five Percent (25%) of the bid amount, if the estimated value is one hundred thousand dollars or greater. – Obligee is Downes Construction.
- B. Substitution Listing (As Applicable);
- C. Workman's Compensation Experience Modification Factor (EMR) form from insurer;
- D. Non-Collusion Affidavit;
- E. Acknowledgement of Surety;
- F. Contractor's Qualification Statement (AIA Document A305, 2020 Edition), provide past experience with projects of a similar nature and scope within the past 5 years;
- G. Proof of Insurance in accordance with Contract Requirements on Sample Accord Form;
- H. CHRO Notification to Bidders Form.
- I. DAS Pre-qualification Certificate and Updated Statement (As Applicable);
- J. State DAS S/M/WBE Certification (As Applicable).

The undersigned hereby certifies that he/she is able to furnish all labor, material and equipment necessary to complete the work as directed and/or described in the Contract Documents and to work in harmony with all other elements of labor employed or to be employed on the work.

Business Address

Title

City, State, Zip

Signature

Date _____

The Bidder is a/an (individual)(partnership)(corporation). Names and titles of other officers or partners are:

(for corporation, give the State of Incorporation and affix the corporate seal)

ALTERATIONS

**ACES at CHASE
565 CHASE PARKWAY
WATERBURY, CT 06708
STATE PROJECT #244-0044 MAG**

S/P+A PROJECT #22.050

DATE: January 26, 2026

The following changes to the Drawings and Project Specifications shall become a part of the Drawings and Project Specifications; superseding previously issued Drawings and Project Specifications to the extent modified by Bulletin #4.

Changes to the Bulletin:

- Bulletin #3:
 - Changes to the Specifications, Section 283111, delete revision in its entirety. *(Per RFI #130)*
 - Changes to the Drawings:
 - Building 4:
 - DRAWING A110-4, BUILDING 4 – MAIN FLOOR PLAN, delete in its entirety. A new DRAWING A110-4 has been added and is attached as part of this bulletin.* *(Per RFI #10-4)*
 - Building 5:
 - DRAWING A960-5, BUILDING 5 – LOWER SCHOOL FINISH SCHEDULE, delete in its entirety. A new DRAWING A960-5 has been added and is attached as part of this bulletin.* *(Per RFI #15-5)*
 - Building 6:
 - The following ARCHITECTURAL drawings have been deleted in their entirety. New drawings (2) have been added and are attached as part of this bulletin*:
 - A733-6 BUILDING 6 – INTERIOR ELVATIONS *(Per RFI #108)*
 - A801-6 BUILDING 6 – CASEWORK DETAILS *(Per RFI #108)*
- Bulletin #2, Changes to the Drawings:
 - Building #2:
 - DRAWING A731-4, BUILDING 4 – INTERIOR ELEVATIONS, delete in its entirety. A new Drawing A731-4 has been added and is attached as part of this bulletin.* *(Per RFI #157)*
 - Building 4:
 - The following ARCHITECTURAL drawings have been deleted in their entirety. New drawings (2) have been added and are attached as part of this bulletin*:

- A260-4 BUILDING 4 – PATTERN & FINISH PLANS (*Per RFI #10-4*)
 - A900-4 BUILDING 4 – DOOR SCHEDULE, DETAILS, WALL TYPES & FINISH SCHED (*Per RFI #10-4 & Internal Review*)
- Building #5:
 - The following ARCHITECTURAL drawings have been deleted in their entirety. New drawings (2) have been added and are attached as part of this bulletin*:
 - A260-5 BUILDING 5 – LOWER SCHOOL FLOOR PATTERN & FINISH PLAN (*Per RFI #15-5*)
 - A710-5 BUILDING 5 – INTERIOR ELEVATIONS (*Per RFI #15-5*)

New Specifications:

- The following sections have been added and are attached as part of this bulletin.
 - 055200 Metal Railings (8) (*Per RFI #24-0*)
 - 099647 Intumescent Paint (4) (*Per RFI #16-2*)
 - 116623 Gymnasium Equipment (4) (*Per RFI #10-7*)

Changes to the Specifications:

- TABLE OF CONTENTS:
 - Page 2, Division 05 – Metals, add the following:

“Section 055200 Metal Railings 8 (*Per RFI #24-0*)”
 - Page 3:
 - Division 08 – Openings, Section 087100, Pages, revise “38” to read “37”. (*Per RFIs #32-1, #11-4 & #12-5 & Internal Review*)
 - Division 09 – Finishes, add the following:

“Section 099647 Intumescent Paint 4 (*Per RFI #16-2*)”
 - Page 4:
 - Division 10 – Specialties, Section 108213, Exterior Grilles and Screens, delete in its entirety. *Per RFI #159*)
 - Division 11 – Equipment, add the following:

“Section 116623 Gymnasium Equipment 4 (*Per RFI #10-7*)”
 - Page 6, Division 28 – Electronic Safety and Security, Section 281300, Pages, revise “18” to read “10”. (*Per Owner Request*)
- SECTION 033200, SITE CAST-IN-PLACE CONCRETE, Page 13, Article 2.6.A., delete in its entirety. (*Per RFI #29-0*)

- SECTION 087100, DOOR HARDWARE, Hardware Sets, delete in their entirety. New Hardware Sets are added and have been attached as part of this bulletin. (17) *(Per RFIs #32-1, #11-4 & #12-5 & Internal Review)*
- SECTION 090000, SCHEDULE OF FINISHES, Page 20, Miscellaneous:
 - WT-1, add the following:

“Manufacturer:	Ring’s End Lumber
Model:	WM390 Metrie
Size:	11/16-inch x 2½-inch” <i>(Per RFI #45-1)</i>
 - Add the following:

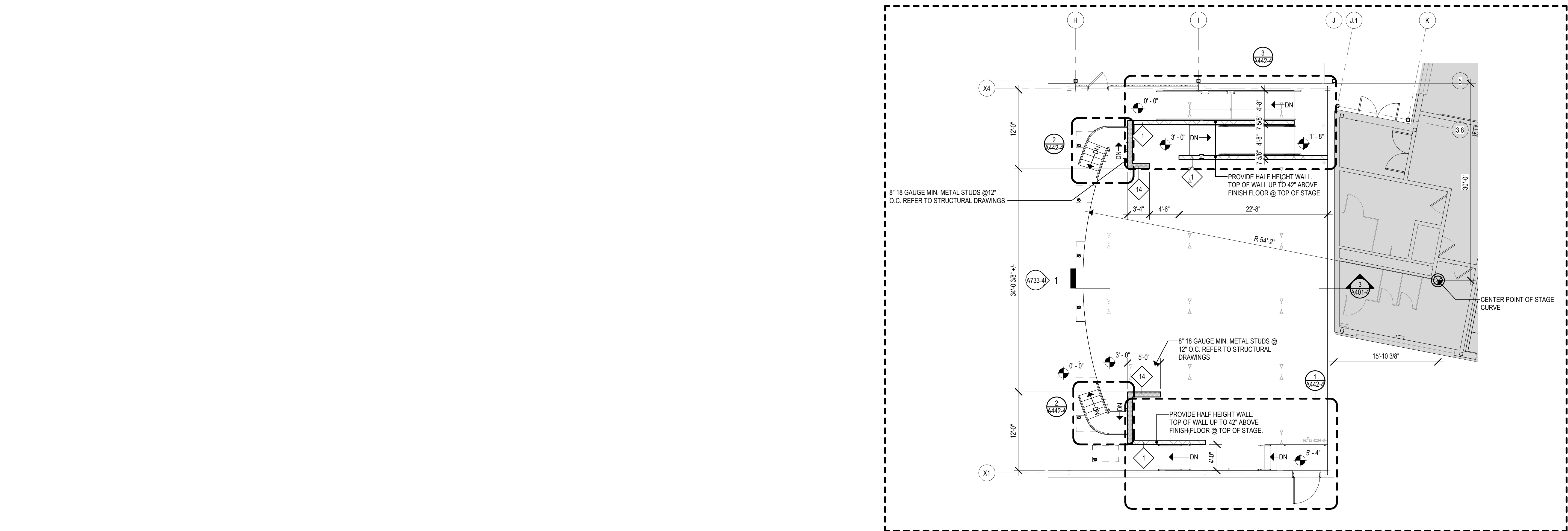
“WPP-1	
Item:	Wall Protection Padding
Manufacturer:	Draper
Style:	EcoVision Wall Pad
Color:	Navy Blue
Locations:	Gymnasium; Refer to Drawings
Notes:	Refer to Section 116623” <i>(Per RFI #10-7)</i>
- SECTION 108213, EXTERIOR GRILLES AND SCREENS, delete in its entirety. *(Per RFI #159)*
- SECTION 281300, ACCESS CONTROL, delete in its entirety. A new SECTION 281300 has been added and is attached as part of this bulletin. (10) *(Per Owner Request)*

Changes to the Drawings:

- Civil & Landscape:
 - The following SITE/CIVIL drawings have been deleted in their entirety. New drawings (4) have been added and are attached as part of this bulletin*:
 - C102 DEMOLITION & EROSION CONTROL PLAN *(Per RFI #27-0)*
 - C700 SITE DETAILS *(Per RFI #20-0)*
 - C901 PHOTOMETRIC PLAN *(Per Internal Review)*
 - C902 PHOTOMETRIC PLAN *(Per Internal Review)*
- Building 1:
 - The following STRUCTURAL drawings have been deleted in their entirety. New drawings (4) have been added and are attached as part of this bulletin*:
 - S000-1 GENERAL NOTES *(Per RFI #109)*
 - S120-1 BUILDING 1 – MAIN FLOOR FRAMING PLAN *(Per RFI #43-1)*
 - S130-1 BUILDING 1 – SECOND LEVEL FLOOR FRAMING PLAN *(Per RFI #43-1)*
 - S140-1 BUILDING 1 – THIRD LEVEL FLOOR FRAMING PLAN *(Per RFI #43-1)*
- Building 2:
 - DRAWING A730-2, BUILDING 2 – INTERIOR ELEVATIONS, delete in its entirety. A new DRAWING A730-2 has been added and is attached as part of this bulletin.* *(Per RFI #157)*

- Building 4:
 - DRAWING S000-4, GENERAL NOTES, delete in its entirety. A new DRAWING S000-4 has been added and is attached as part of this bulletin.* (*Per RFI #109*)
 - The following ARCHITECTURAL drawings have been deleted in their entirety. New drawings (3) have been added and are attached as part of this bulletin*:
 - A010-4 BUILDING 4 – DEMOLITION PLANS (*Per Internal Review*)
 - A500-4 BUILDING 4 – PLAN DETAILS (*Per RFI #10-4*)
 - A730-4 BUILDING 4 – INTERIOR ELEVATIONS (*Per RFI #10-4*)

The bulletin consists of forty-seven (47) pages of 8½" x 11" text and twenty-two (22) 30" x 42" drawings*.
End of Bulletin #4



2 ALTERNATE - STAGE PLAN
1/8" = 1'-0"

SYMBOL LEGEND	
	- NEW METAL STUD PARTITIONS
	- NEW MASONRY WALL
	- NEW CMU WALL
	- DOOR NUMBER
	- WINDOW TYPE
	- ROOM NAME
	- ROOM NUMBER
	- PARTITION TYPE
	- CONSTRUCTION NOTE
	- EXTERIOR ELEVATION NUMBER
	- SHEET NUMBER
	- INTERIOR ELEVATION NUMBER
	- SHEET NUMBER
	- BUILDING SECTION NUMBER
	- SHEET NUMBER
	- WALL SECTION NUMBER
	- SHEET NUMBER
	- FIRE EXTINGUISHER CABINET
	- FLOOR DRAIN - SLOPE TO DRAIN
	- HANDICAPPED DRINKING FOUNTAIN

GENERAL NOTES

- READ ALL GENERAL NOTES ON DRAWING A001.
- CONTRACTORS SHALL FIELD VERIFY ALL CONDITIONS AND DIMENSIONS. PATCH TO MATCH ALL EXISTING WALLS AND CEILINGS TO REMAIN AFFECTED BY NEW WORK.
- ALL DIMENSIONS ARE TO OUTSIDE FACE OF BRICK, CONCRETE MASONRY UNITS AND FINISH FACE OF GYP. UNLESS OTHERWISE NOTED.
- ALL NEW WALL AND PARTITION ASSEMBLIES SHALL EXTEND TO UNDERSIDE OF DECK UNLESS OTHERWISE NOTED.
- PROVIDE CMU WITH PRE-MANUFACTURED BULLNOSE AT ALL EXPOSED CORNERS.
- WHERE THE WORD "ALIGN" IS INDICATED IT SHALL MEAN TO ALIGN BOTH SIDES OF WALL.

CONSTRUCTION NOTES - PLAN

- PROVIDE FIRE EXTINGUISHER AND SEMI-RECESSED CABINET. SET BOTTOM OF CABINET AT 32" A.F.F. SEE PROJECT MANUAL.
- PROVIDE FIRE EXTINGUISHER AND SURFACE MOUNTED CABINET. SET BOTTOM OF CABINET AT 32" A.F.F. SEE PROJECT MANUAL.
- PROVIDE ROLLER SHADE AT WINDOW - VERIFY ALL EXISTING WINDOW DIMENSIONS PRIOR TO ORDERING SHADES - SEE PROJECT MANUAL.
- PROVIDE "HIGH-LOW" DOUBLE WATER COOLER UNIT WITH BOTTLE FILLER AT LOW ONE - SEE MEP DRAWINGS. SEE ALSO PROJECT MANUAL.
- PAINT ENTIRE EXISTING EXTERIOR CMU WALL AFTER CLEANING AND PREP'ING SURFACE. SEE PROJECT MANUAL.
- PAINT ENTIRE EXISTING EXTERIOR CORRUGATED METAL WALL AFTER CLEANING AND PREP'ING SURFACE. SEE PROJECT MANUAL.
- PROVIDE 12" X 18" METAL ACCESS PANEL. COORDINATE LOCATION WITH DRAIN LOCATIONS IN PLUMBING DRAWINGS. SEE ALSO PROJECT MANUAL.
- PROVIDE 18" X 18" METAL ACCESS PANEL. COORDINATE LOCATION WITH DRAIN LOCATIONS IN PLUMBING DRAWINGS. SEE ALSO PROJECT MANUAL.
- PROVIDE SEMI-RECESSED AED CABINET WITH BOTTLE FILLER AND AED DEVICE. SEE ALSO STRUCTURAL DRAWINGS.
- PROVIDE MOVEABLE PARTITION SECTIONS AND OVERHEAD TRACK. REFER TO DETAILS ON A220-4 AND INTERIOR ELEVATION 7/1A731-4. SEE PROJECT MANUAL. SEE ALSO STRUCTURAL DRAWINGS.
- SLAB CUT AND TRENCH INFILL - COORDINATE WITH MEP - APPROXIMATE EXTENT SHOWN WITH HATCH.

KEY PLAN
SCALE: NTS

Project Title:
**ALTERATIONS TO:
ACES at Chase**
565 Chase Parkway
Waterbury, Connecticut 06708



SILVER PETRUCELLI + ASSOCIATES
3190 WHITNEY AVENUE HAMDEN CT 06518
311 STATE STREET NEW LONDON CT 06320
203 230 9007 silverpetrucelli.com

Revision	Description	Date	Revised By
1	Bulletin #3	1/19/26	BJV
2	Bulletin #4	1/26/26	KD

Drawing Title:
BUILDING 4 - MAIN FLOOR PLAN
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

Date:
AUGUST 12, 2025
Scale:
As indicated
Drawn By:
MES
Project Number:
22.050
Drawing Number:
A110-4

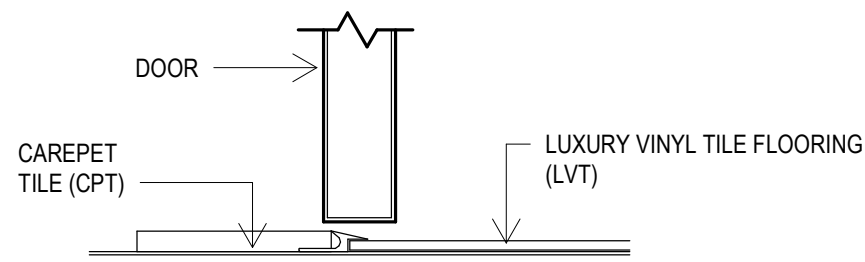
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FLOOR FINISH LEGEND			
FLOORING:		PWT	-PORCELAIN WALL TILE
CPT	-CARPET TILE	TGP	-TEXTURED GYPSUM PANEL
EPF	-EPOXY FLOOR PAINT	WC	-WALLCOVERING
EM	-ENTRANCE MAT	WM	-WALL MIRRORS
ETR	-EXISTING TO REMAIN	WWP	-WOOD WALL PANEL
KSF	-KITCHEN SAFETY FLOORING	MILLWORK:	
LVT	-LUXURY VINYL TILE	PL	-PLASTIC LAMINATE
PFT	-PORCELAIN FLOOR TILE	SAF	-SURFACING ARCHITECTURAL FILM
RBF	-RUBBER TILE FLOORING	SS	-SOLID SURFACE
RST	-RUBBER STAIR TREAD	CEILING:	
SOT	-STATIC DISSIPATIVE TILE	ACC	-ACOUSTIC CEILING CLOUD
SC	-SEALED CONCRETE	ACP	-ACOUSTIC CEILING PANEL
ST	-STONE	ACT	-ACOUSTIC CEILING TILE
WOM	-WALK OFF MAT	ES	-EXPOSED STRUCTURE
COATINGS:		MISCELLANEOUS:	
EPF	-EPOXY FLOOR PAINT	CURT	-CURTAIN
STN	-STAIN	CG	-CORNER GUARD
BASE:		CM	-CROWN MOULDING
CWB	-CERAMIC WALL BASE	DWF	-DIGITAL WINDOW FILM
DWB	-PORCELAIN WALL BASE	M/TB(X)	-MARKERBOARD/ TACKBOARD COMBO UNIT
RB	-RUBBER BASE	TS	-TACKBOARD
WB	-WOOD BASE	TS	-TACK SURFACE
WALLS:		MB	-MARKERBOARD
AWP	-ACOUSTIC WALL PANEL	MW	-MOVABLE WALL
CWT	-CERAMIC WALL TILE	RS	-ROLLER SHADE
DWG	-DIGITAL WALL GRAPHIC	FTS	-FLOOR TRANSITION
EP	-EPOXY PAINT	WT	-WOOD TRIM
IRP	-IMPACT RESISTANT PANEL		
PT	-PAINT		

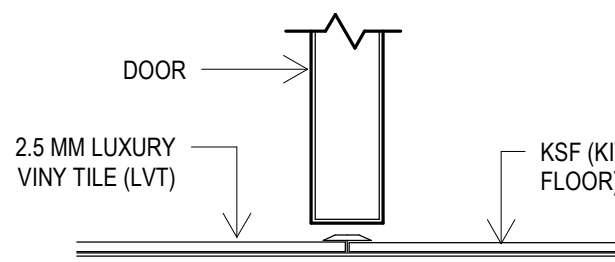
MARKERBOARD/ TACKBOARD/ PEGBOARD SCHEDULE (MB/TB/PB)		
TAG	DESCRIPTION	QUANTITY
MB/TB-1	MARKERBOARD/ TACKBOARD COMBO, SIZE 4'X 8'	SEE FLOOR PLANS FOR QUANTITY
MB/TB-2	MARKERBOARD/ TACKBOARD COMBO, SIZE 4'X 6'	SEE FLOOR PLANS FOR QUANTITY
MB-1	MARKERBOARD, SIZE 4'X 4'	SEE FLOOR PLANS FOR QUANTITY
MB-2	MARKERBOARD, SIZE 4'X 6'	SEE FLOOR PLANS FOR QUANTITY
MB-3	MARKERBOARD, SIZE 4'X 8'	SEE FLOOR PLANS FOR QUANTITY
MB-4	MARKERBOARD, SIZE 4'X 14'	SEE FLOOR PLANS FOR QUANTITY
TB-1	TACKBOARD, SIZE 4'X 6'	SEE FLOOR PLANS FOR QUANTITY
TB-2	TACKBOARD, SIZE 4'X 4'	SEE FLOOR PLANS FOR QUANTITY
PB-1	PEGBOARD, SIZE 4'X 4'	SEE FLOOR PLANS FOR QUANTITY
PB-2	PEGBOARD, SIZE 4'X 6'	SEE FLOOR PLANS FOR QUANTITY
GENERAL NOTES: -FOR LOCATIONS REFER TO DRAWINGS A110 THROUGH A140 -FOR TYPICAL MOUNTING HEIGHTS AND LOCATIONS, REFER TO INTERIOR ELEVATIONS -REFER TO SECTION 101100 AND 050000 SCHEDULE OF FINISHES FOR ADDITIONAL INFORMATION		

2 MB/TB/PB SCHEDULE

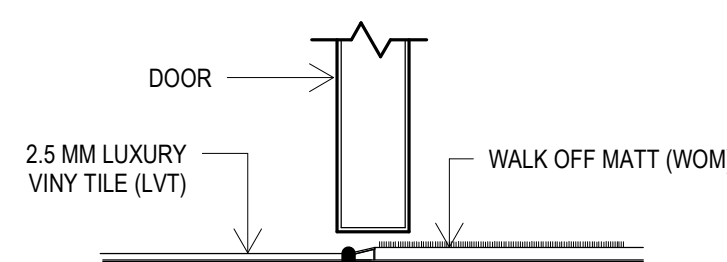
12" = 1'-0"



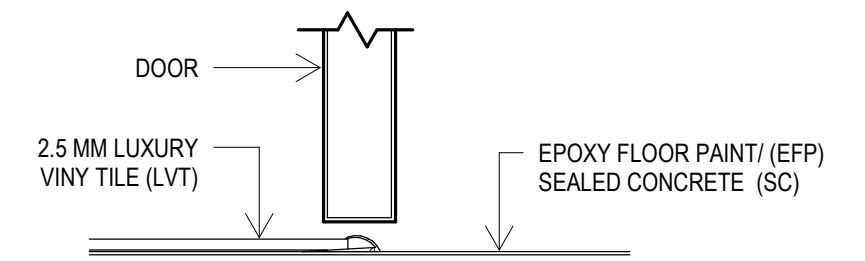
FTS-1



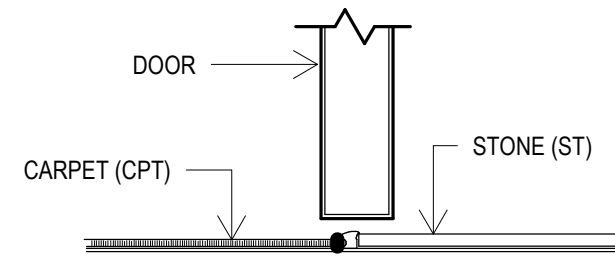
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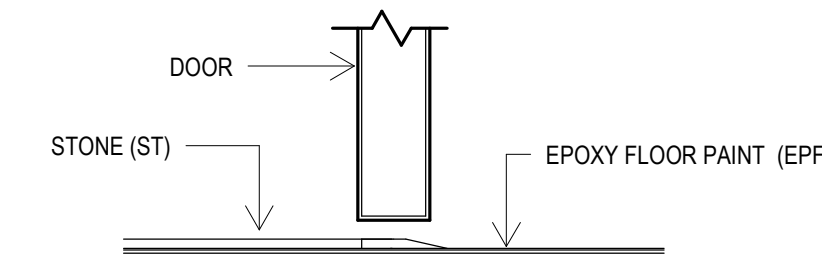
FTS-3



FTS-4



FTS-5



FTS-6

1 FLOOR TRANSITIONS

3" = 1'-0"

FINISH SCHEDULE										
No.	ROOM NAME	FLOOR FINISH	BASE FINISH	NORTH WALL FINISH	SOUTH WALL FINISH	EAST WALL FINISH	WEST WALL FINISH	CEILING FINISH	Remarks	
000	MECH.	EPF	-	PT	PT	PT	PT	-		
001	STOR.	EPF	-	PT	PT	PT	PT	-		
003	ELECTRICAL	EPF	-	PT	PT	PT	PT	-		
004	BOILERS	EPF	-	PT	PT	PT	PT	-		
006	MECH.	EPF	-	PT	PT	PT	PT	-		
100-5	VEST.	WOM-1	RB-1	PT-1	PT-1	PT-1	PT-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
101-5	MULTI-PURPOSE ROOM	CPT-2	RB-1	PT-2	PT-2	PT-2	PT-2	PT-11		
102-5	STOR.	CPT-2	RB-1	EP-1	EP-1	EP-1	EP-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
103-5	STOR.	CPT-2	RB-1	EP-1	EP-1	EP-1	EP-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
104-5	VEST.	WOM-1	RB-1	PT-2	PT-2	PT-2	PT-2	ETR		
105-5	COMPUTER SCIENCE FOR INNOVATORS	LVT-1,2,8	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1		
106-5	STORAGE	LVT-1	RB-1	EP-1	EP-1	EP-1	EP-1	ACT-1		
107-5	STORAGE	LVT-1	RB-1	EP-1	EP-1	EP-1	EP-1	ACT-1		
108-5	KILN ROOM	EPF-1	RB-1	EP-1	EP-1	EP-1	EP-1	ACT-1		
108-5	ELEC. CL.	EPF-1	RB-1	PT-1	PT-1	PT-1	PT-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
110-5	TOILET	ETR	ETR	EP-3	EP-3	EP-3	EP-3	ETR	SEE RCP FOR ADDITIONAL NOTES	
111-5	POTTERY/ CERAMICS CLASSROOM	LVT-1,2,8	RB-1	PT-1	PT-1	PT-1	PT-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
112-5	SCULPTURE CLASSROOM	LVT-1, 2,8	RB-1	PT-1	PT-1	PT-1	PT-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
113-5	GENERAL ART CLASSROOM	LVT-1, 2,8	RB-1	PT-1	PT-1	PT-1	PT-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
114-5	WOMEN'S TOILET	ETR	ETR	EP-2, EP-3	EP-2, EP-3	EP-2, EP-3	EP-2, EP-3	ETR	SEE RCP FOR ADDITIONAL NOTES, ETR WALL TILE TO BE PAINTED W/ EP-3; WALL ABOVE TILE TO BE PAINTED EP-2	
115-5	JAN.	EPF-1	RB-1	EP-1	EP-1	EP-1	EP-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
116-5	MEN'S TOILET	ETR	ETR	EP-2, EP-3	EP-2, EP-3	EP-2, EP-3	EP-2, EP-3	ETR	SEE RCP FOR ADDITIONAL NOTES, ETR WALL TILE TO BE PAINTED W/ EP-3; WALL ABOVE TILE TO BE PAINTED EP-2	
117-5	VESTIBULE	WOM-1	RB-1	PT-1	PT-1	PT-1	PT-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
118-5	DESIGN & MODELING CLASSROOM	LVT-1, 2,8	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1/ PT-11	SOFFIT TO BE PAINTED PT-11	
119-5	STORAGE	LVT-1	RB-1	EP-1	EP-1	EP-1	EP-1	ACT-1		
120-5	ROBOTICS CLASSROOM	LVT-1,2,8	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1		
121-5	STORAGE	LVT-1	RB-1	EP-1	EP-1	EP-1	EP-1	ACT-1		
122-5	VEST.	WOM-1	RB-1	PT-2	PT-2	PT-2	PT-2	ETR	SEE RCP FOR ADDITIONAL NOTES	
123-5	RECEPTION	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED		
124-5	SECT.	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1/ PT-11		
125-5	ASST. PRINC.	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1/ PT-11		
126-5	HUMAN BODY CLASSROOM	LVT-1,2,8	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1/ PT-11		
127-5	PREP. ROOM	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
128-5	WOMEN'S TOILET	ETR	ETR	EP-2, EP-3	EP-2, EP-3	EP-2, EP-3	EP-2, EP-3	ETR	SEE RCP FOR ADDITIONAL NOTES, ETR WALL TILE TO BE PAINTED W/ EP-3; WALL ABOVE TILE TO BE PAINTED EP-2	
129-5	JAN.	EPF-1	RB-1	EP-1	EP-1	EP-1	EP-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
130-5	TLT.	ETR	ETR	EP-3	EP-3	EP-3	EP-3	ETR	SEE RCP FOR ADDITIONAL NOTES	
131-5	MEN'S TOILET	ETR	ETR	EP-2, EP-3	EP-2, EP-3	EP-2, EP-3	EP-2, EP-3	ETR	SEE RCP FOR ADDITIONAL NOTES, ETR WALL TILE TO BE PAINTED W/ EP-3; WALL ABOVE TILE TO BE PAINTED EP-2	
132-5	WAITING	LVT-1,2,8	RB-1	PT-2	PT-2	PT-2	PT-2	ACT-2		
133-5	ALL-GENDER TOILET	PFT-1	CWB-1	CWT-1/EP-2	CWT-1/EP-2	CWT-1/EP-2	CWT-1/EP-2	ACT-2		
134-5	ISOLATION	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-2		
135-5	ISOLATION	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-2		
136-5	COTS	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-2		
137-5	ALL-GENDER TOILET	PFT-1	CWB-1	CWT-1/EP-2	CWT-1/EP-2	CWT-1/EP-2	CWT-1/EP-2	ACT-2		
138-5	EXAM	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-2		
139-5	EXAM	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-2		
140-5	NURSES' OFFICE	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-2		
141-5	MED. STORAGE	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1		
142-5	CORRIDOR	LVT-1,2,8	RB-1	PT-2	PT-2	PT-2	PT-2	ACT-2		
143-5	VESTIBULE	WOM-1	RB-1	PT-2	PT-2	PT-2	PT-2	ETR	SEE RCP FOR ADDITIONAL NOTES	
144-5	SPRINKLER	EPF-1	RB-1	EP-1	EP-1	EP-1	EP-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
145-5	INNOVATION	LVT-1,2,8	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1/ PT-11		
146-5	PREP. ROOM	LVT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1/ PT-11		
147-5	BIOMEDICAL SCIENCE CLASSROOM	LVT-1,2,8	RB-1	PT-1	PT-1	PT-1	PT-1	ACT-1/ PT-11		
148-5	CLOSET	LVT-1	RB-1	EP-1	EP-1	EP-1	EP-1	ETR	SEE RCP FOR ADDITIONAL NOTES	
149-5	SECURITY	CPT-1	RB-1	PT-1	PT-1	PT-1	PT-1	ETR/PT-11	SEE RCP FOR ADDITIONAL NOTES, PAINT INNER SKYLIGHTS PT-11	
150-5	LOBBY	PT-2, DWG-2	RB-1	PT-1	PT-2	PT-2	PT-2	ETR		
151-5	CORRIDOR	LVT-1, 2,7	RB-1	PT-2	PT-2, PT-8	PT-2	PT-2	ETR/ PT-11	REFER TO FLOOR PATTERN PLAN FOR ACCENT PAINT	
152-5	CORRIDOR	LVT-1, 2,7	RB-1	PT-2	PT-2	PT-2, PT-8	PT-2, PT-8, DWG-2	ETR	SEE RCP FOR ADDITIONAL NOTES, REFER TO FLOOR PATTERN PLAN FOR ACCENT PAINT	
153-5	CORRIDOR	ETR/ WOM-1	RB-1	PT-2	PT-2	PT-2	PT-2	ETR/ PT-11	SEE RCP FOR ADDITIONAL NOTES	
S1	STAIR	RST-1	RB-1	PT-1	PT-1	PT-1	PT-1	-		
GENERAL NOTE: • CONTRACTOR SHALL PATCH / REPAIR ALL EXISTING WALLS TO REMAIN TO PROVIDE SMOOTH FINISH • SUITABLE FOR LEVEL 4 PAINTABLE FINISH. • REFER TO FINISH SCHEDULE AND PROJECT MANUAL										

Project Title:
**ALTERATIONS TO:
ACES at Chase**
565 Chase Parkway
Waterbury, Connecticut 06708



SILVER PETRUCCELLI + ASSOCIATES
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311 STATE STREET NEW LONDON CT 06320
203 230 9007 silverpetrucci.com

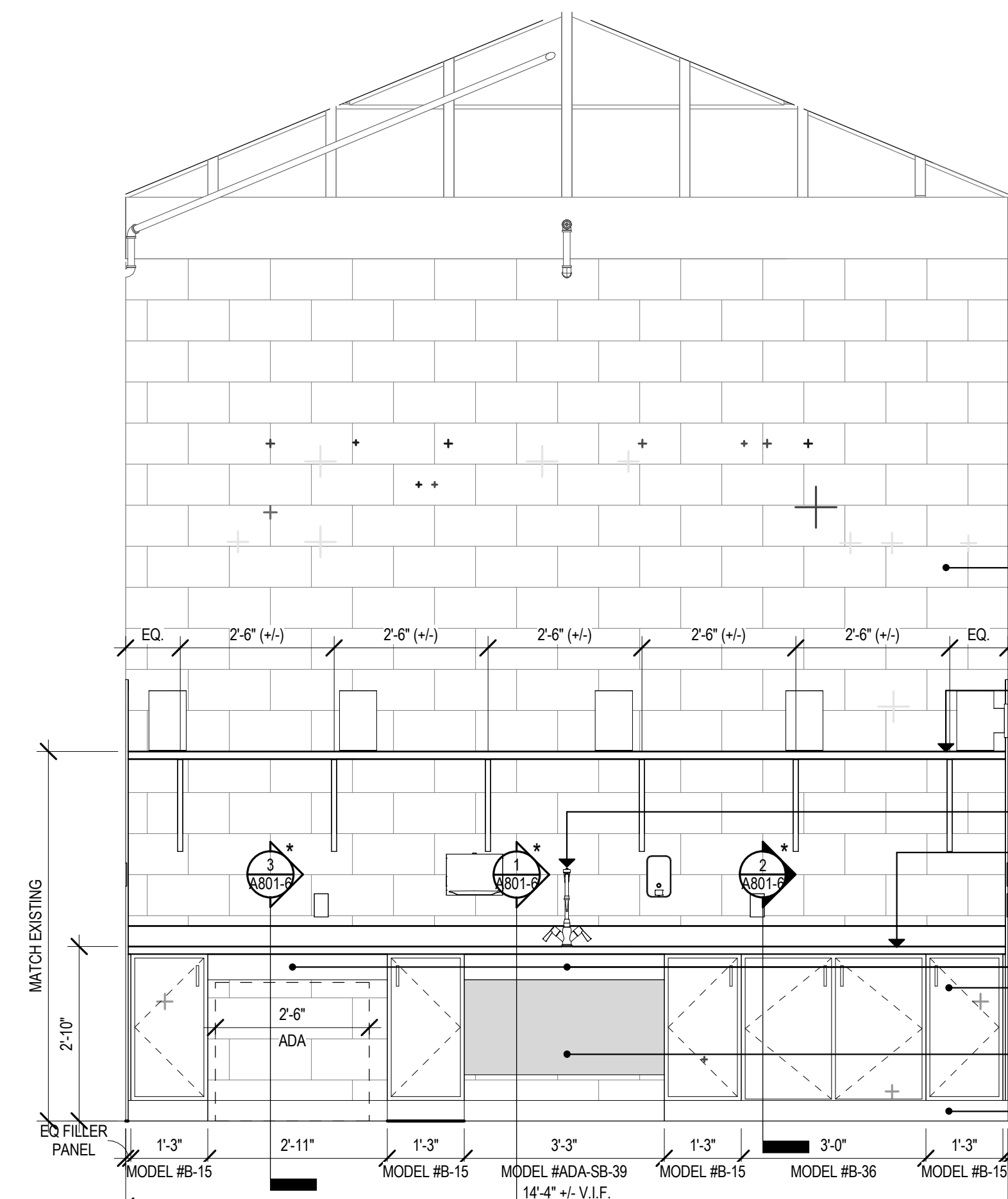
Revision:	Description:	Date:	Revised By:
1	Bulletin #3	1/19/26	KD
2	Bulletin #4	1/26/26	KD

Drawing Title:
**BUILDING 5 - LOWER SCHOOL FINISH
SCHEDULE**
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

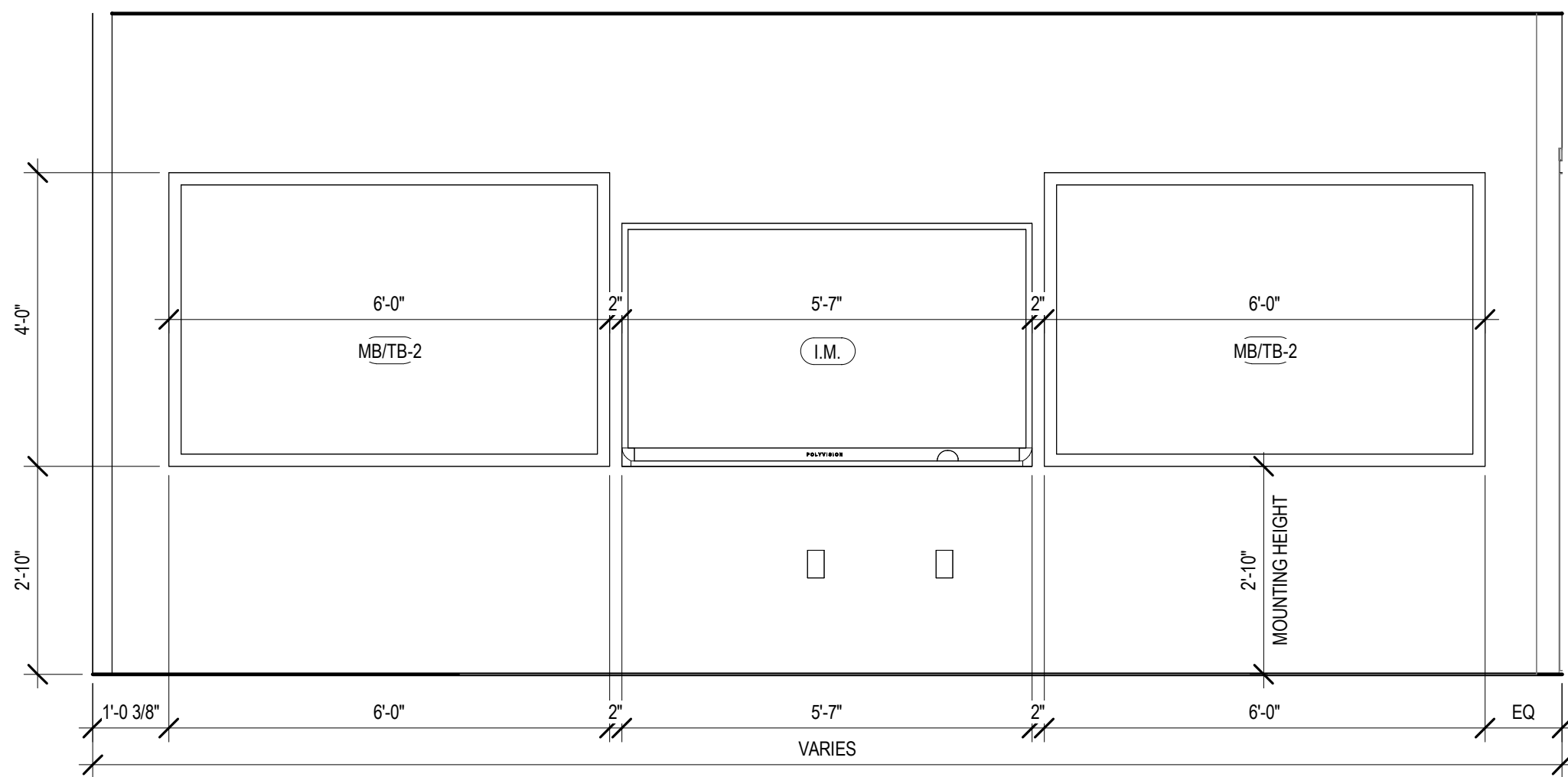
Date:
AUGUST 12, 2025
Scale:
As indicated
Drawn By:
KD
Project Number:
22.050

A960-5

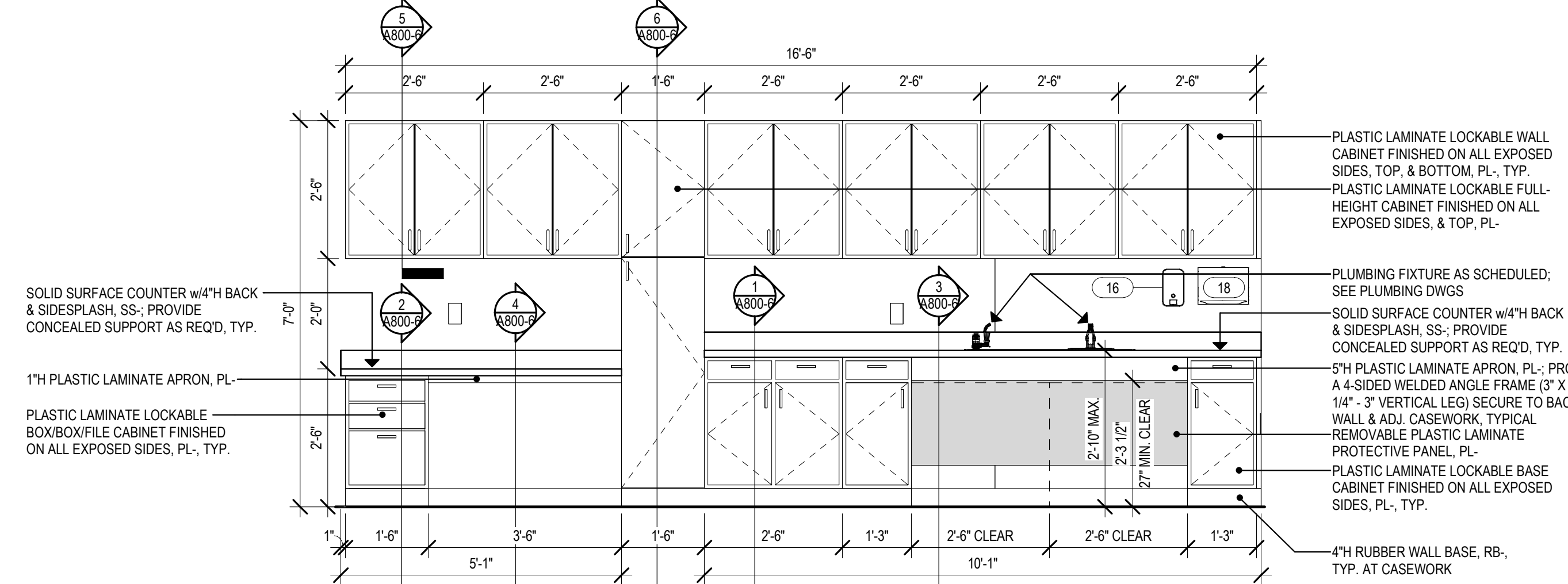
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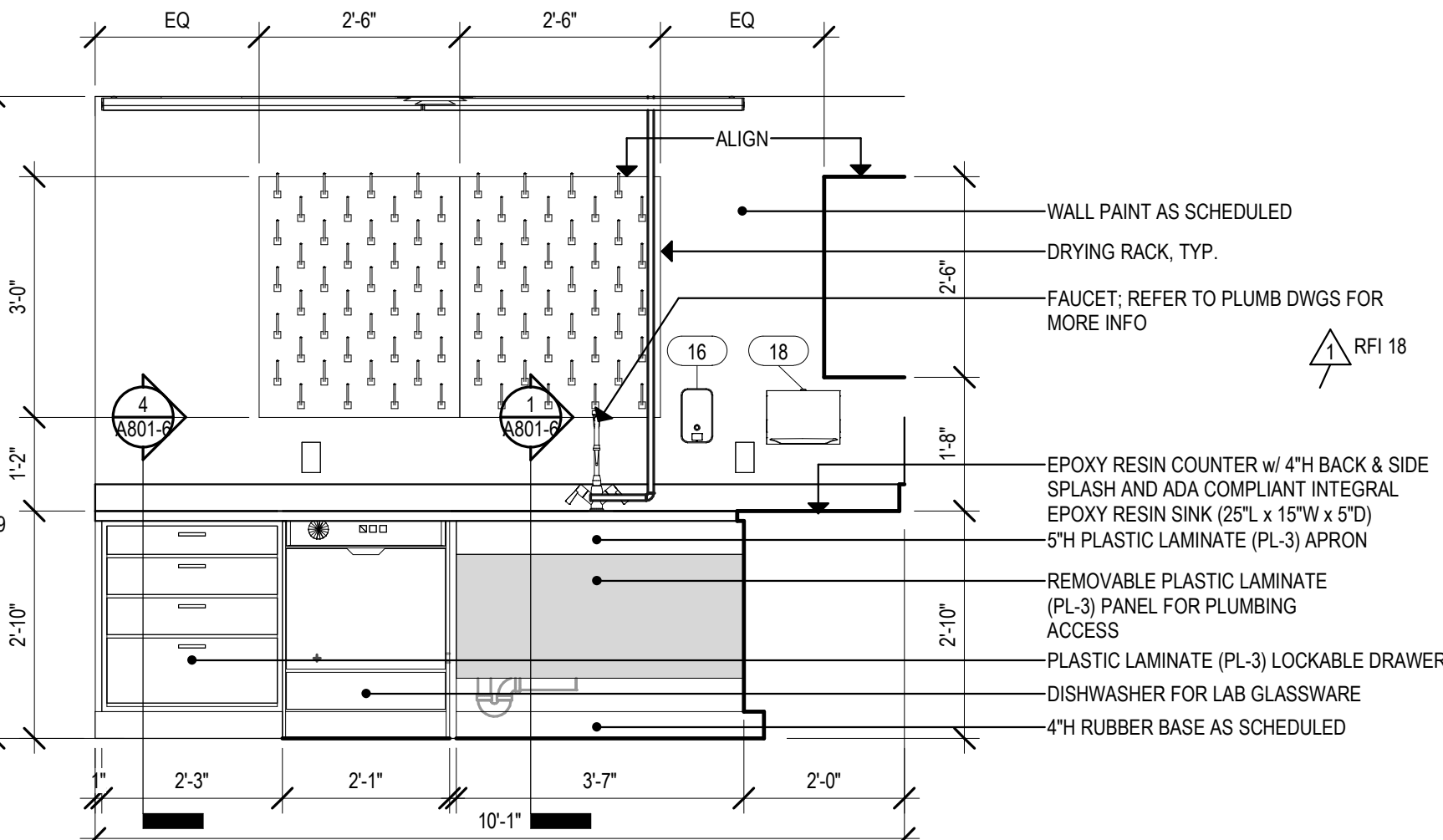
9 GREENHOUSE 105-6 - ELEVATION A
1/2" = 1'-0"



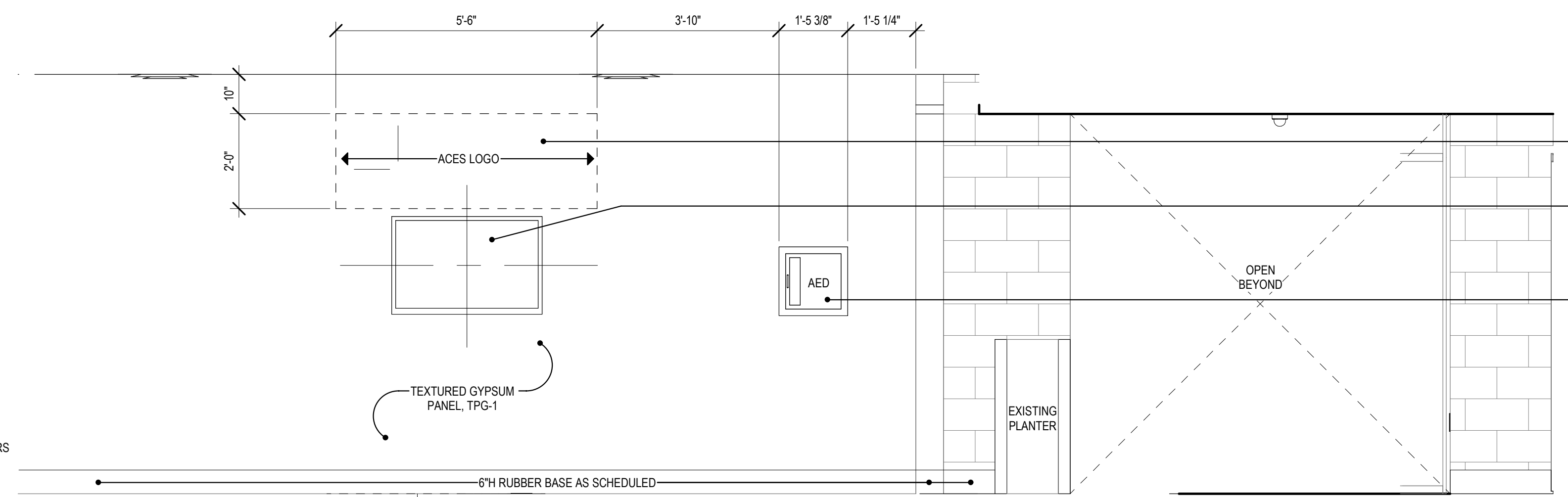
5 TYPICAL TEACHING WALL
1/2" = 1'-0"



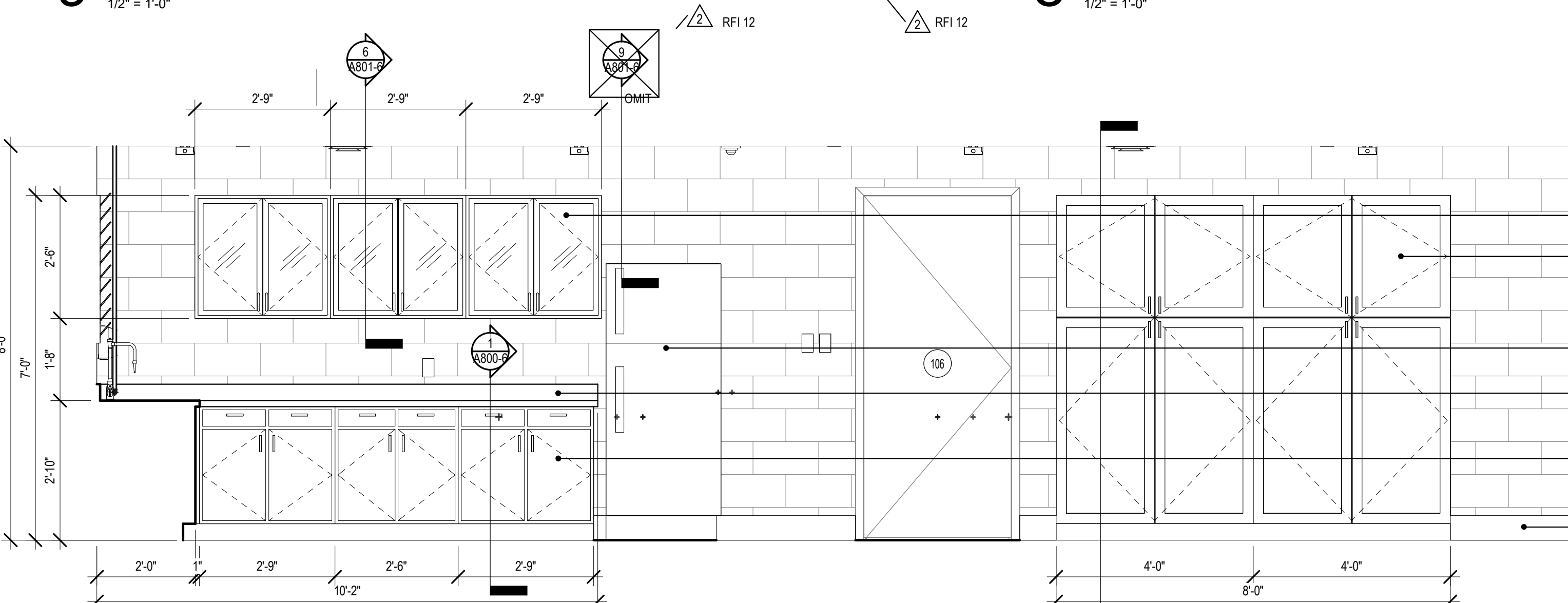
4 TYP. CLASSROOM CASEWORK WALL
1/2" = 1'-0"



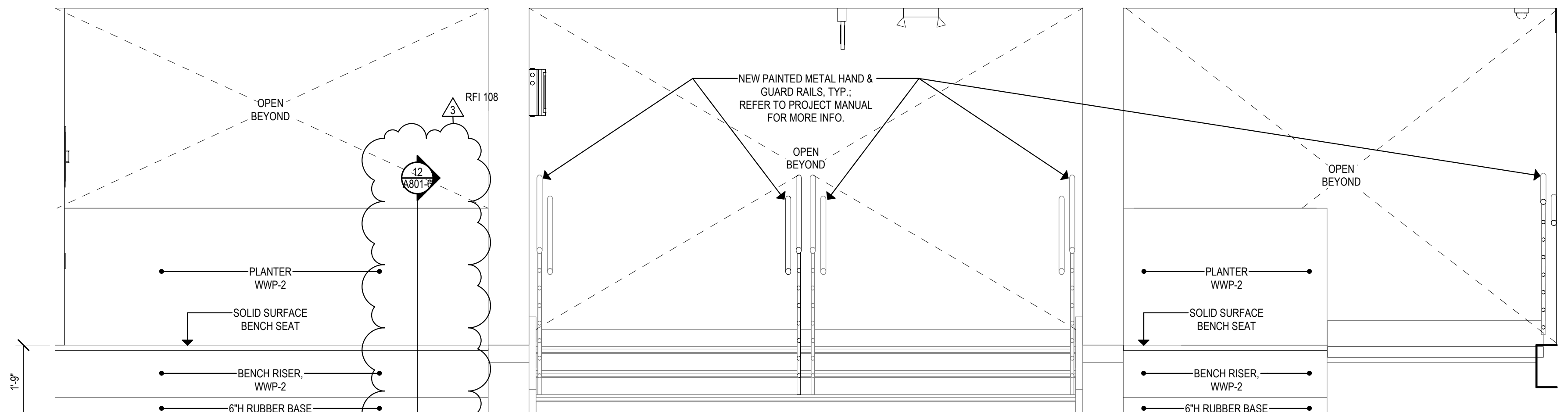
8 PREP ROOM 106-6 - ELEVATION B
1/2" = 1'-0"



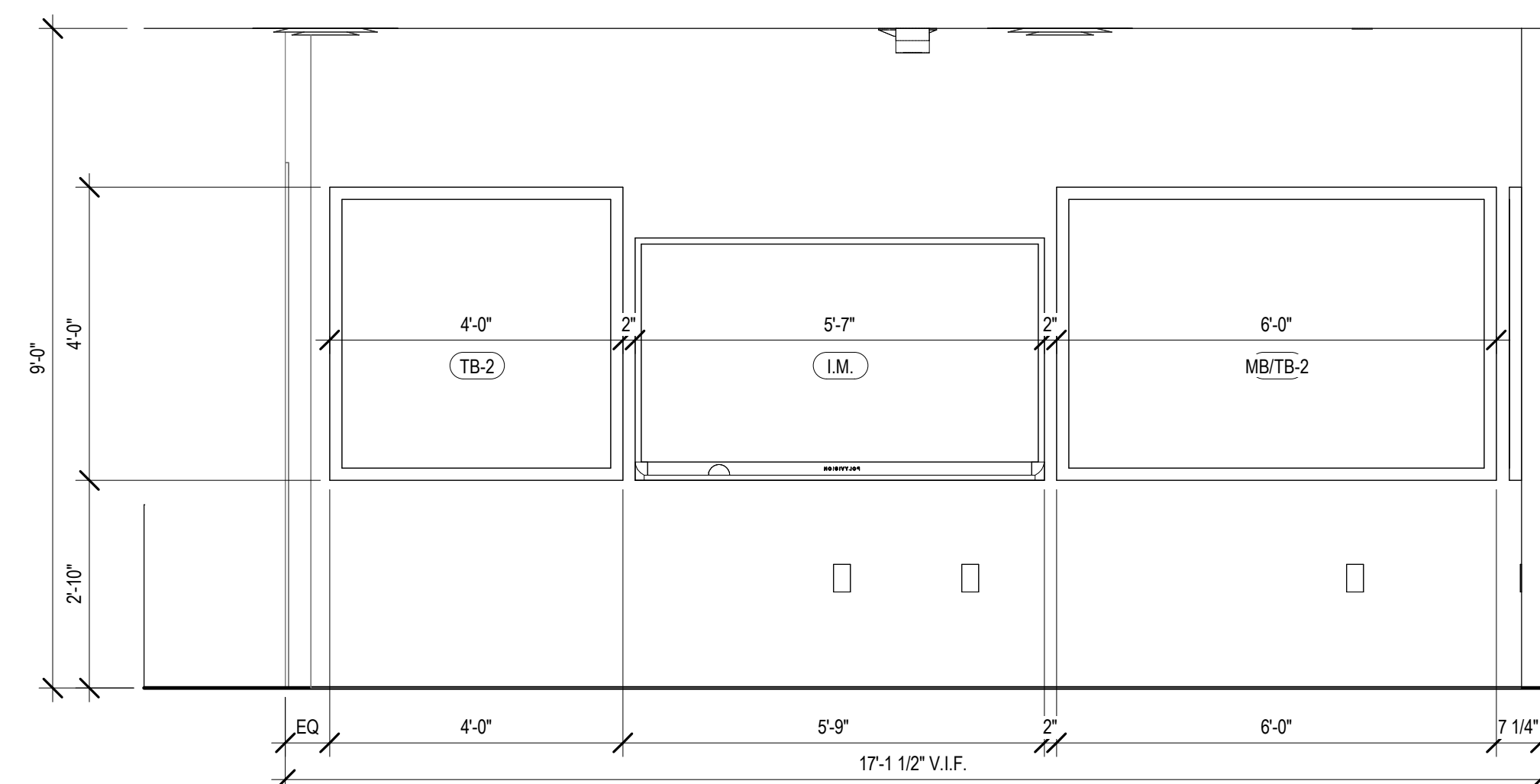
3 LOBBY 101-6 - ELEVATION C
1/2" = 1'-0"



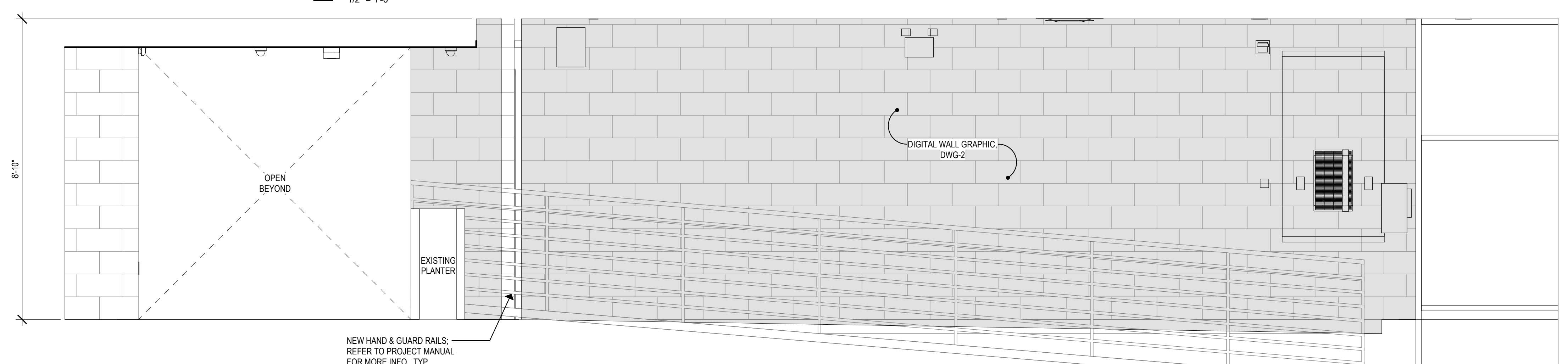
7 PREP ROOM 106-6 - ELEVATION A
1/2" = 1'-0"



2 LOBBY 101-6 - ELEVATION B
1/2" = 1'-0"



6 MATH 140-6 TEACHING WALL
1/2" = 1'-0"



1 LOBBY 101-6 - ELEVATION A
1/2" = 1'-0"

Project Title:
**ALTERATIONS TO:
ACES at Chase**
565 Chase Parkway
Waterbury, Connecticut 06708



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Revision	Description	Date	Revised By
1	Bulletin #2	10/9/26	KD
2	Bulletin #3	1/19/26	KD
3	Bulletin #4	1/28/26	KD

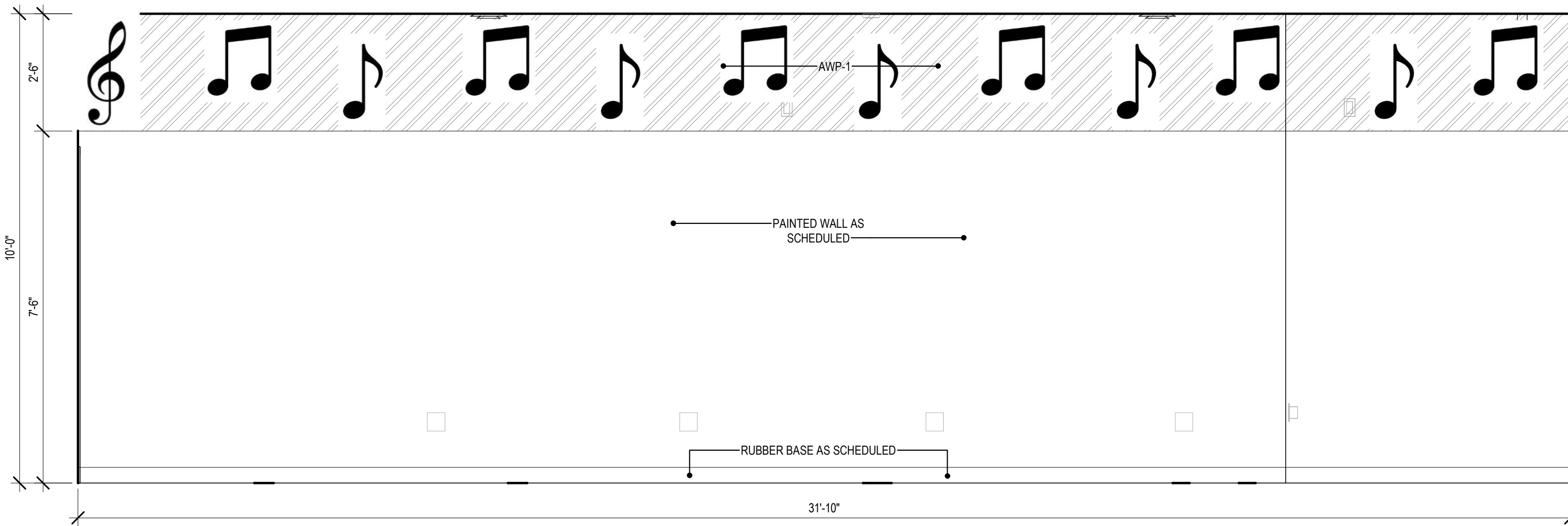
Drawing Title:
BUILDING 6 - INTERIOR ELEVATIONS
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

Date:
AUGUST 12, 2025
Scale:
1/2" = 1'-0"
Drawn By:
KD
Project Number:
22.050

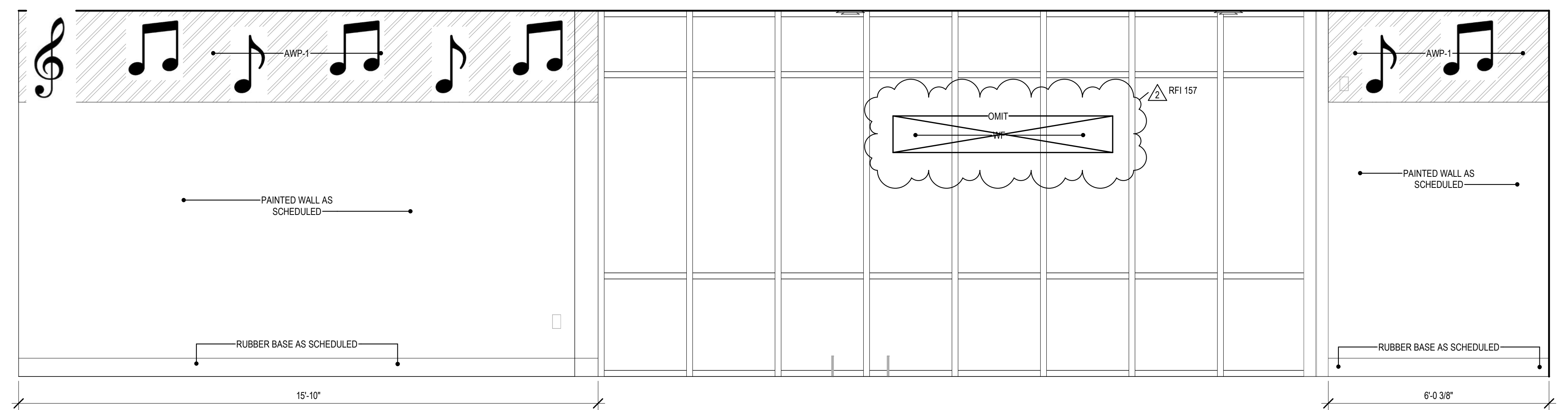
A733-6

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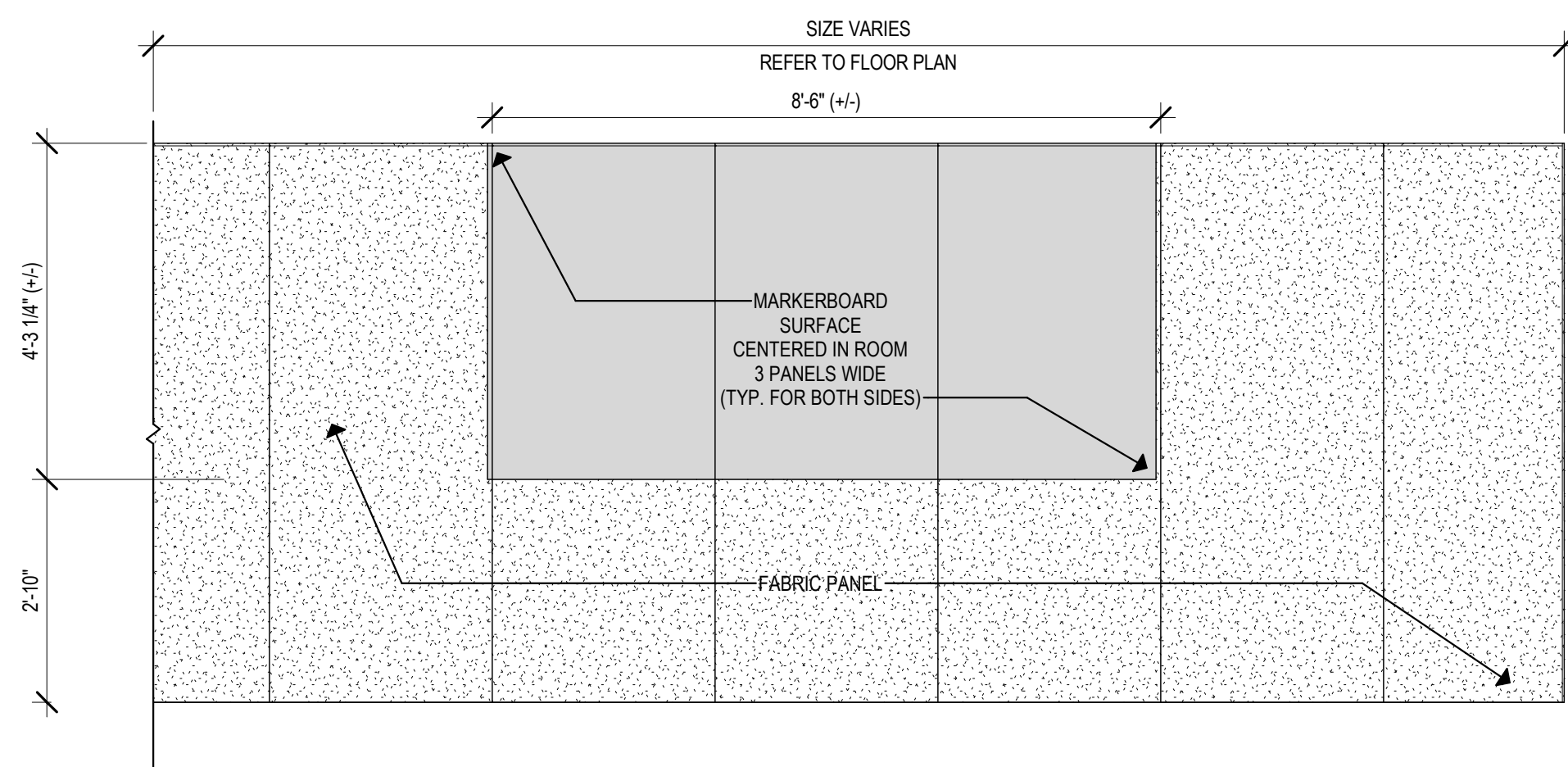




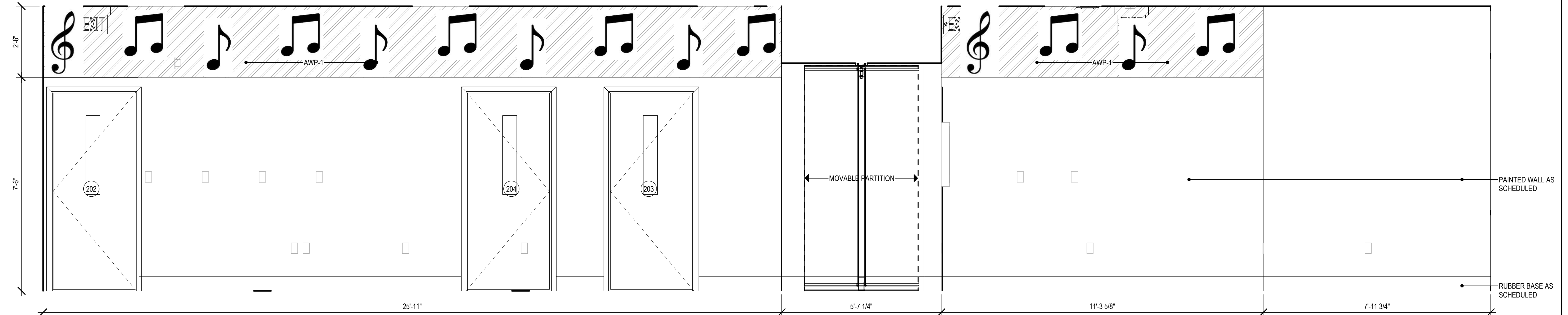
6 KEYBOARDING 202-4 - ELEVATION
1/2" = 1'-0"



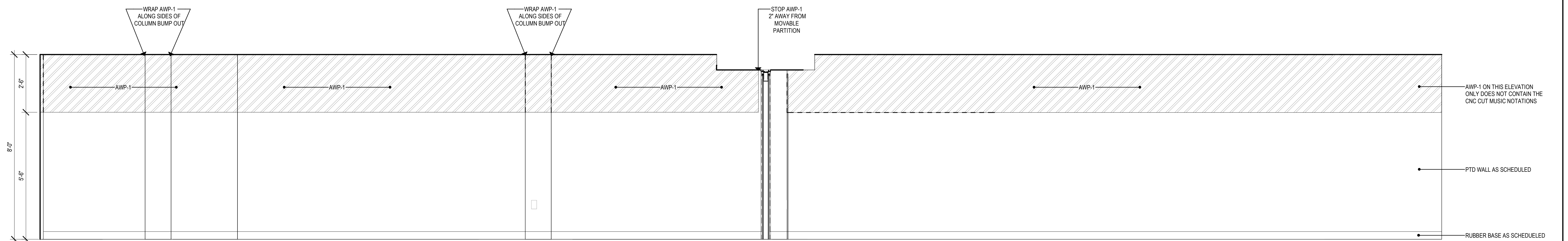
5 CHORUS 201-4 - ELEVATION
1/2" = 1'-0"



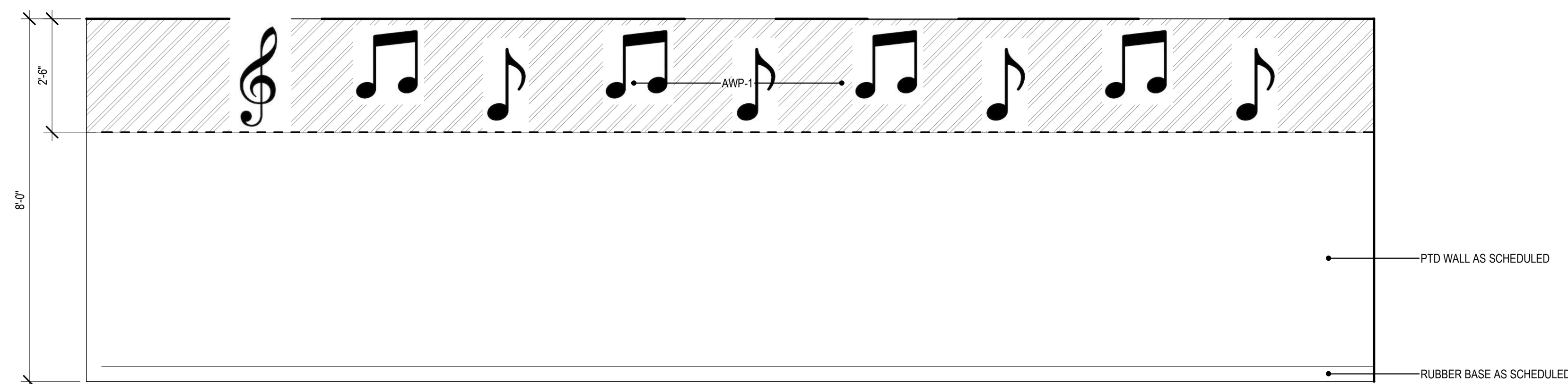
7 TYPICAL OPERABLE PARTITION ELEVATION
1/2" = 1'-0"



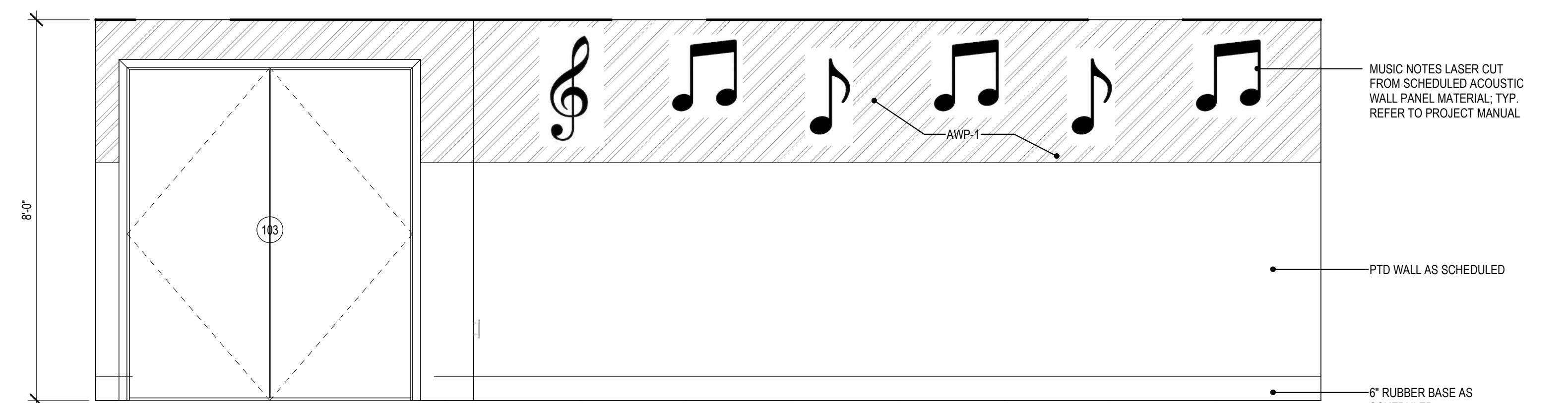
4 CHORUS 201-4 / KEYBOARDING 202-4 - ELEVATION A
1/2" = 1'-0"



3 BAND 103-4 / ORCHESTRA 104-4 - ELEVATION B
1/2" = 1'-0"



2 ORCHESTRA 104-4 - ELEVATION
1/2" = 1'-0"



1 BAND 103-4 - ELEVATION
1/2" = 1'-0"

Project Title:
ALTERATIONS TO:
ACES at Chase
565 Chase Parkway
Waterbury, Connecticut 06708



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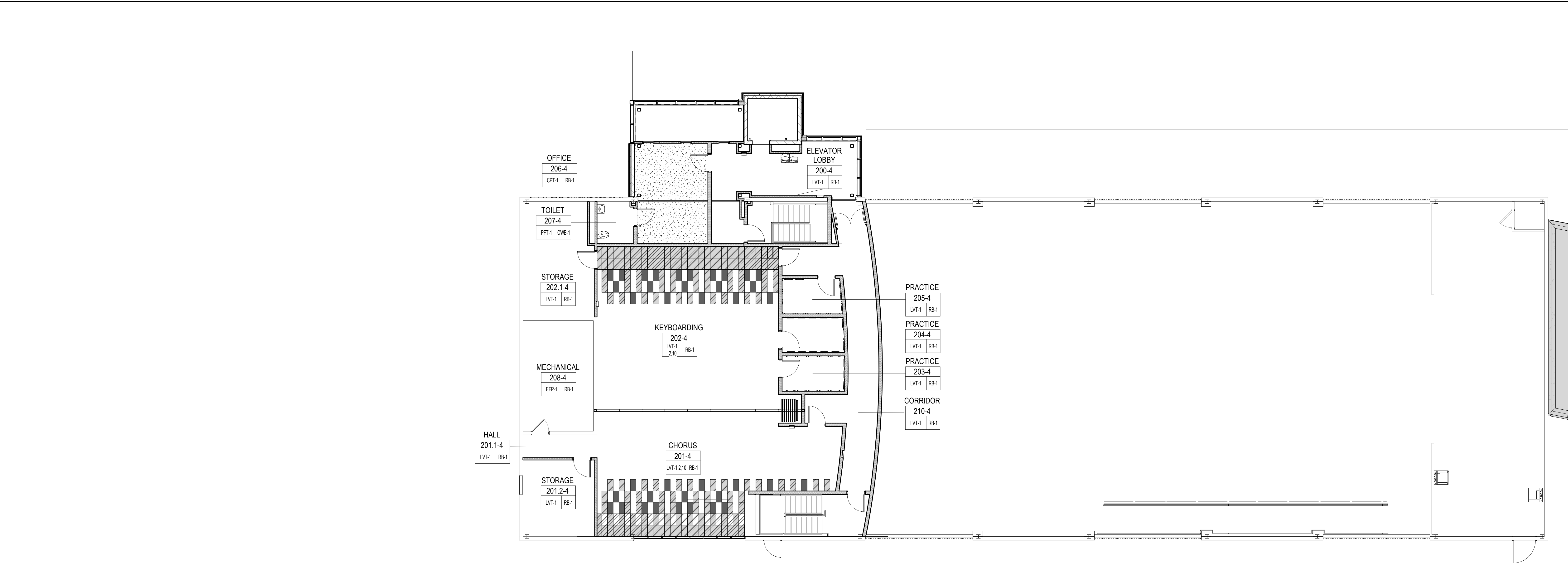
Revision	Description	Date	Revised By
1	Bulletin #2	1/09/26	KD
2	Bulletin #4	1/26/26	KD

Drawing Title:
BUILDING 4 - INTERIOR ELEVATIONS
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

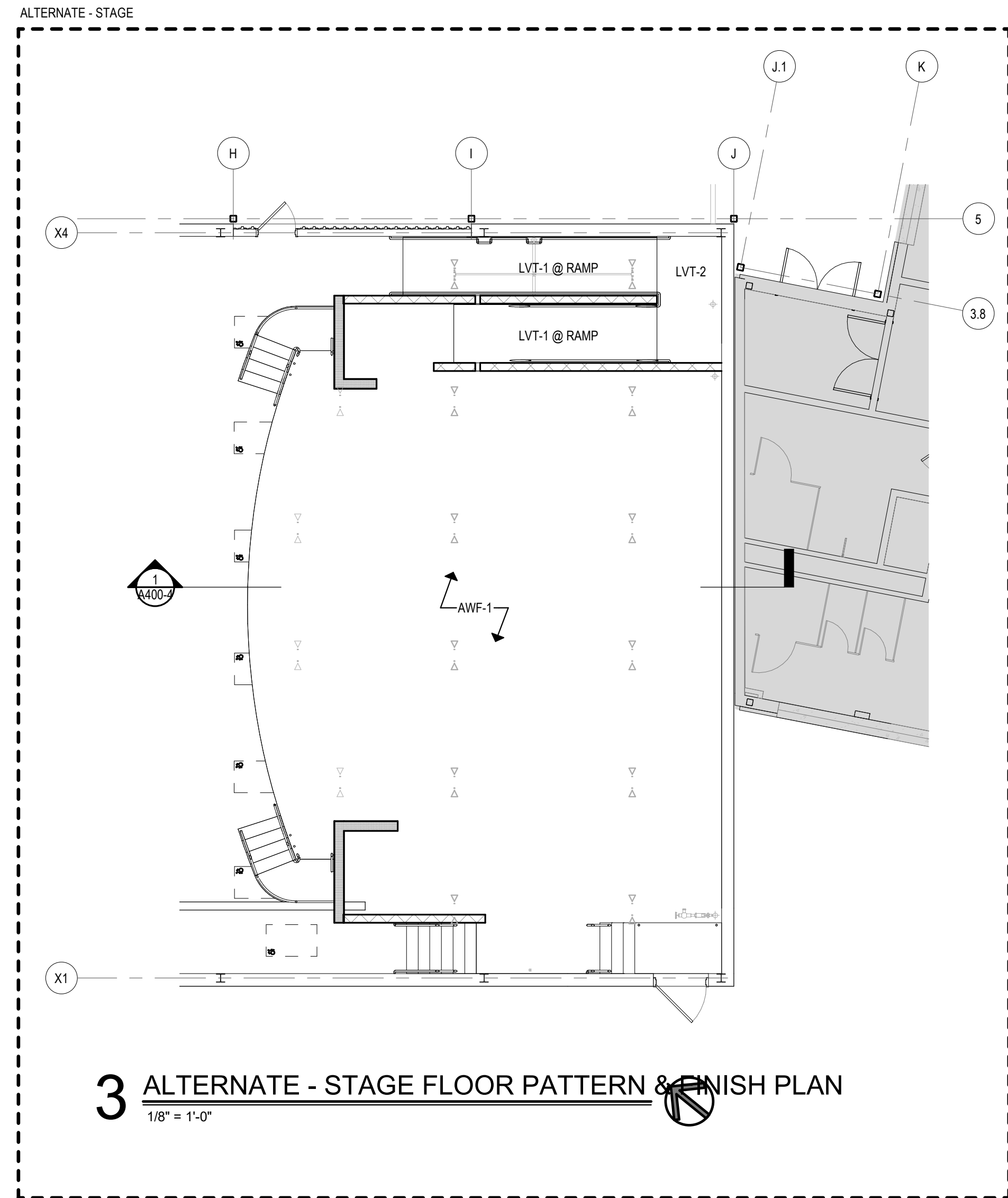
Date:
AUGUST 12, 2025
Scale:
1/2" = 1'-0"
Drawn By:
KD
Project Number:
22.050

A731-4

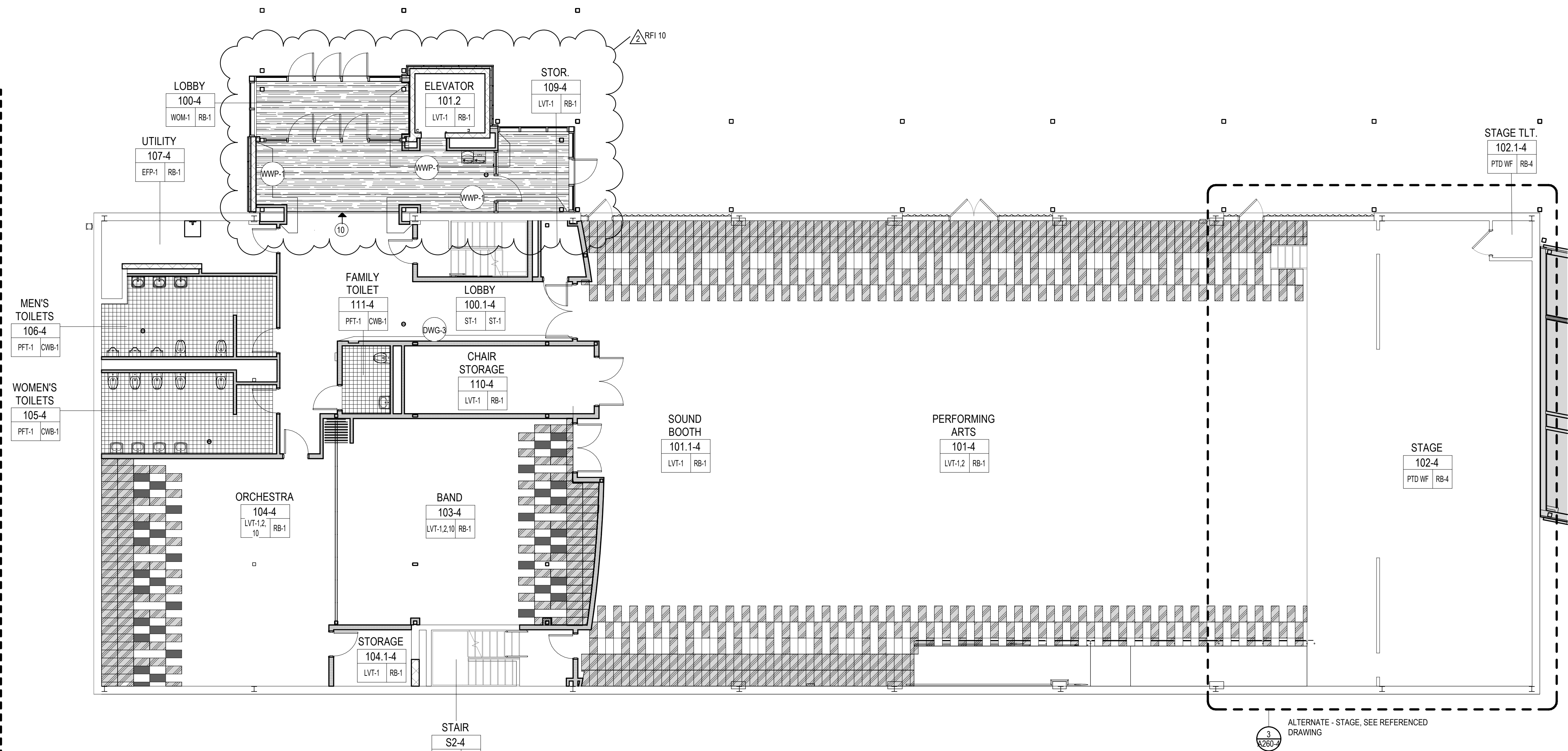
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2 SECOND FLOOR PATTERN & FINISH PLAN
1/8" = 1'-0"



3 ALTERNATE - STAGE FLOOR PATTERN & FINISH PLAN
1/8" = 1'-0"



1 MAIN LEVEL FLOOR PATTERN & FINISH PLAN
1/8" = 1'-0"

FLOOR FINISH LEGEND

GENERAL FINISH NOTES

A. PROVIDE WINDOW SHADES AT ALL EXTERIOR WINDOWS. SEE PROJECT MANUAL FOR MORE INFORMATION.

B. ALL EXPOSED PIPE COLUMNS TO BE PAINTED, U.O.N.

C. REFER TO FLOOR PATTERN & FINISH PLANS FOR CORRIDOR PAINT LOCATIONS.

D. PREPARE ALL SURFACES, INCLUDING BUT NOT LIMITED TO SUBFLOORS AND WALLS, FOR MATERIAL TO BE APPLIED BASED ON MANUFACTURER'S INSTALLATION INSTRUCTIONS.

E. CONTRACTOR IS RESPONSIBLE FOR MOISTURE TESTING ALL CONCRETE SUB FLOORS WHERE NEW FLOORING IS TO BE INSTALLED AND WILL REPORT ALL TEST RESULTS TO THE ARCHITECT AND OWNER PRIOR TO INSTALLATION.

F. CONTRACTOR TO CONFIRM COMPATIBILITY OF ALL FLOOR COVERING MATERIALS AND THEIR ADHESIVES WITH ALL SUB FLOORING WATERPROOFING SYSTEMS WHERE THESE SYSTEMS MAY EXIST.

G. ALL INTERIOR NEW AND EXISTING METAL GUARD RAILS, BALUSTERS, STAIR STRINGERS, AND STAIR PANS AND HANDRAILS TO BE PAINTED (PT-X), U.O.N.

H. ALL HOLLOW METAL DOOR FRAMES TO BE PAINTED, U.O.N.

I. REFER TO DETAIL 6/2734-1 FOR WAYFINDING GLASS SIGNAGE. REFER TO FLOOR PATTERN & FINISH PLANS FOR LOCATIONS.

J. PAINT ALL EXISTING WOOD SILLS ON SECOND AND THIRD LEVEL, U.O.N.

K. PAINT INSIDE WINDOW CASING THAT HAS BEEN PREVIOUSLY PAINTED OVER ON SECOND AND THIRD LEVEL.

L. WHERE EXISTING CHAIR RAIL OR WOOD BASE EXISTS PATCH IN TO MATCH EXISTING PROFILE AT NEW CONSTRUCTION WALLS OR WHERE MECH. UNITS HAVE BEEN REMOVED. REFER TO FINISH KEY NOTES FOR SPECIFIC FINISH NOTES PER ROOM.

M. CONTRACTOR SHALL PATCH REPAIR ALL EXISTING WALLS TO REMAIN TO PROVIDE SMOOTH FINISH SUITABLE FOR LEVEL 4 PAINTABLE FINISH. REFER TO FINISH SCHEDULE AND PROJECT MANUAL.

N. CONTRACTOR TO PROVIDE FLOORING FINISHES FOR ALL OPEN OR EXPOSED CASEWORK AND/OR WALL MOUNTED COUNTERS.

O. CONTRACTOR SHALL PATCH REPAIR ALL EXISTING FLOOR FINISHES TO REMAIN, MATCH EXISTING.

FINISH KEY NOTES

1. SHADING INDICATES AREA TO PATCH IN FLOOR TILE WITH EXISTING ATTIC STOCK PROVIDED BY OWNER OR MATCH EXISTING.

2. PROFESSIONALLY CLEAN EXISTING FLOOR TILE AND ASSOCIATED WALL BASE. PROVIDE A CLEAR SURFACE GLAZE PROTECTIVE COATING (EP-3). PATCH AND REPAIR MISSING TILE OR GROUT AS NEEDED (ASSUME 10% OF SURFACE AREA).

3. PROFESSIONALLY CLEAN EXISTING WALL TILE. PROVIDE A CLEAR SURFACE GLAZE PROTECTIVE COATING (EP-3). PATCH AND REPAIR MISSING TILE OR GROUT AS NEEDED (ASSUME 10% OF SURFACE AREA).

4. SAND AND REFINISH WOOD FLOORING AND RISER TO MATCH ARCHITECT'S SAMPLE.

5. SHADING INDICATES AREA TO PATCH IN FLOOR TILE FROM REMOVAL OF STEAM RADIATOR, MATCH EXISTING.

6. SAND AND PREP EXISTING WOOD SILL AND TRIM FOR NEW PAINTED FINISH, TO BE PAINTED PT-12.

7. PREP WALL FOR NEW PAINT FINISH. SKIM COAT EXISTING WALL WITH A LAYER OF PLASTER FOR A SMOOTH AND CLEAN SURFACE.

8. SHADING INDICATES AREA OF WOOD FLOORING TO BE REPAIRED.

9. PROVIDE WALL FINISHES TO MATCH EXISTING ADJACENT WALLS. REFER TO FINISH SCHEDULE FOR NEW FINISHES.

10. PROVIDE A FLOOR EXPANSION JOINT.

KEY PLAN
SCALE: NTS

Project Title:
**ALTERATIONS TO:
ACES at Chase**
565 Chase Parkway
Waterbury, Connecticut 06708

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3190 WHITNEY AVENUE HAMDEN CT 06518
311 STATE STREET NEW LONDON CT 06320
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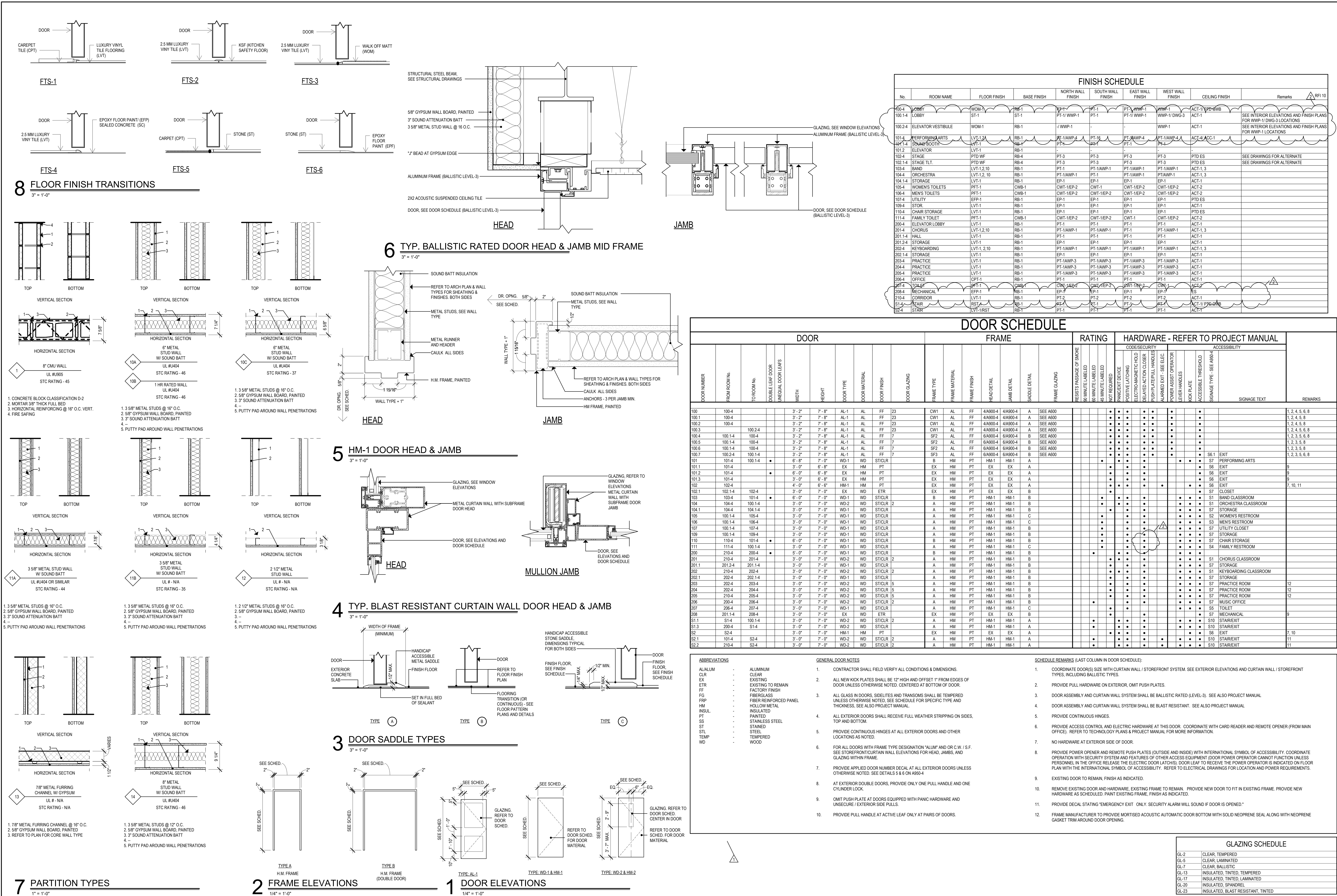
Revision:	Description:	Date:	Revised By:
1	Bulletin #2	10/9/26	KD
2	Bulletin #4	1/26/26	KD

Drawing Title:
BUILDING 4 - PATTERN & FINISH PLANS
Scale:
As indicated
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

Date:
AUGUST 12, 2025
Scale:
As indicated
Drawn By:
KD
Project Number:
22.050

Drawing Number:
A260-4

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ALTERATIONS TO:
ACES at Chase
565 Chase Parkway
Waterbury, Connecticut 06708

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203 230 9007
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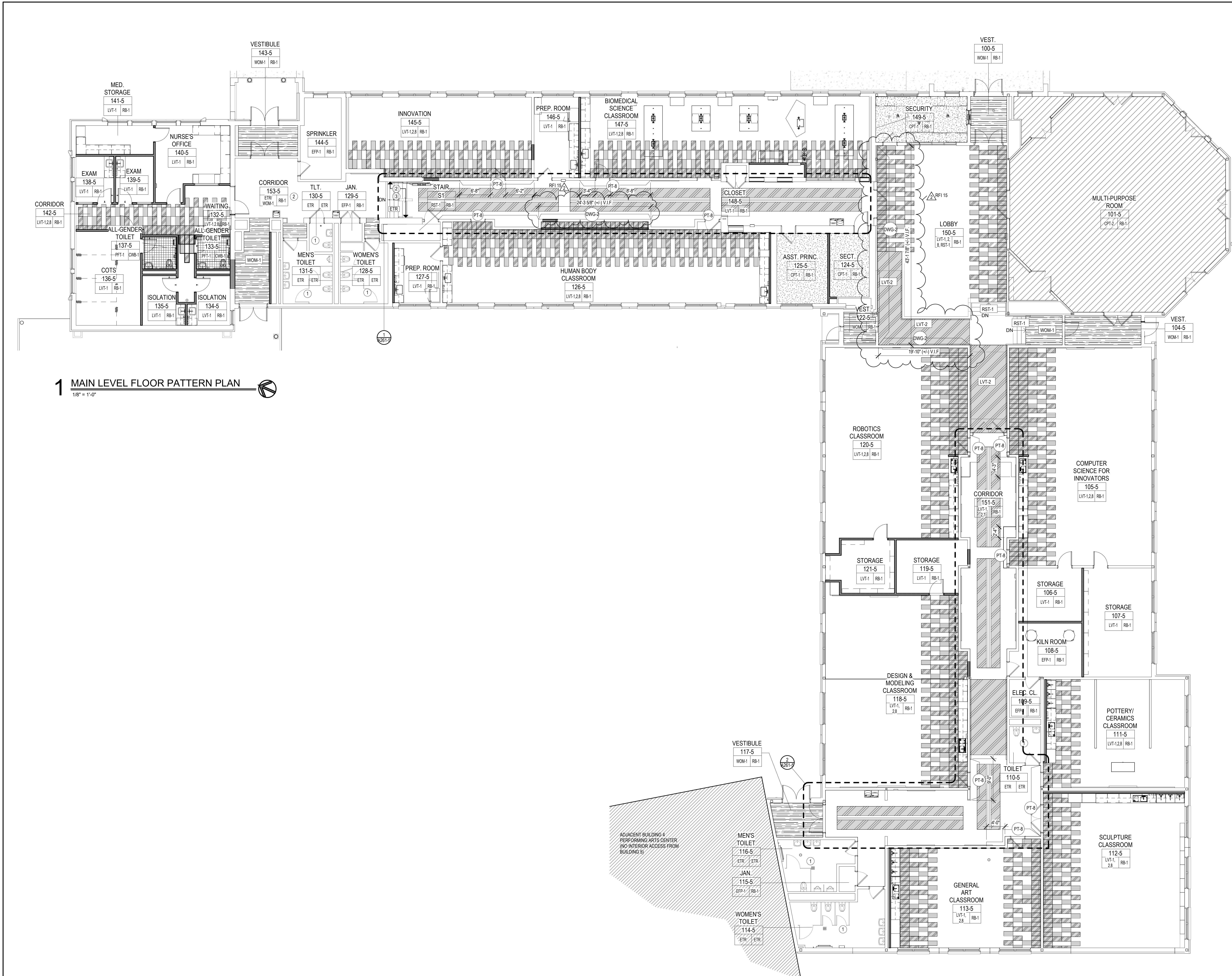
Revision	Description	Date	Revised By
1	Bulletin #2	10/26	BJV
2	Bulletin #4	1/26/26	KDB/BJV

Drawing Title:
BUILDING 4 - DOOR SCHEDULE,
DETAILS, WALL TYPES & FINISH SCHED.
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

Date:
AUGUST 12, 2025
Scale:
As indicated
Drawn By:
MES/ KD
Project Number:
22.050

A900-4

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1 MAIN LEVEL FLOOR PATTERN PLAN
1/8" = 1'-0"

FLOOR FINISH LEGEND

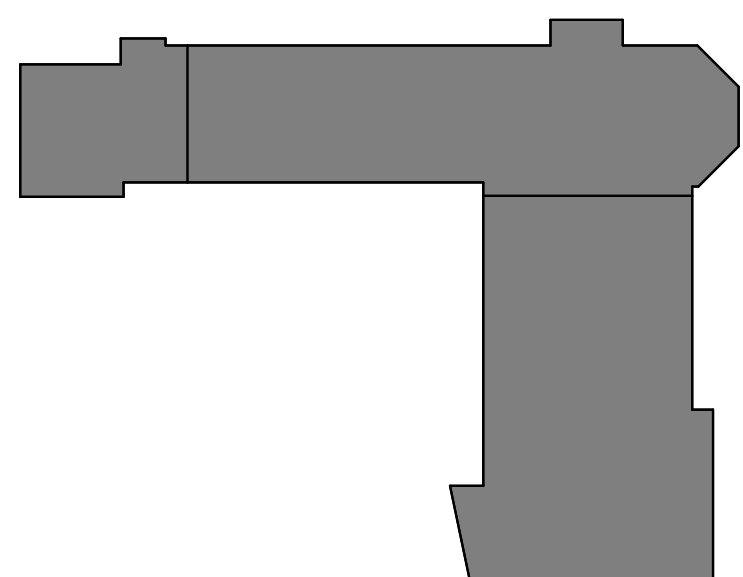
GENERAL FINISH NOTES

- A. PROVIDE WINDOW SHADES AT ALL EXTERIOR WINDOWS. SEE PROJECT MANUAL FOR MORE INFORMATION.
- B. ALL EXPOSED PIPE COLUMNS TO BE PAINTED, U.O.N. REFER TO FLOOR PATTERN & FINISH PLANS FOR CORRIDOR PAINT LOCATIONS.
- C. PREPARE ALL SURFACES, INCLUDING BUT NOT LIMITED TO SUBFLOORS AND WALLS, FOR MATERIAL TO BE APPLIED BASED ON MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- D. CONTRACTOR IS RESPONSIBLE FOR MOISTURE TESTING ALL CONCRETE SUB FLOORS WHERE NEW FLOORING IS TO BE INSTALLED AND WILL REPORT ALL TEST RESULTS TO THE ARCHITECT AND OWNER PRIOR TO INSTALLATION.
- E. CONTRACTOR TO CONFIRM COMPATIBILITY OF ALL FLOOR COVERING MATERIALS AND THEIR ADHESIVES WITH ALL SUB FLOORING WATERPROOFING SYSTEMS WHERE THESE SYSTEMS MAY EXIST.
- F. ALL INTERIOR NEW AND EXISTING METAL GUARD RAILS, BALUSTERS, STAIR STRINGERS, AND STAIR PANS AND HANDRAILS TO BE PAINTED (PT-X), U.O.N.
- G. ALL HOLLOW METAL DOOR FRAMES TO BE PAINTED, U.O.N. REFER TO DETAIL 6A7361 FOR WAINSCOTING CLASSROOM SIGNAGE. REFER TO FLOOR PATTERN & FINISH PLANS FOR LOCATIONS.
- H. PAINT ALL EXISTING WOOD SILLS ON SECOND AND THIRD LEVEL, U.O.N. PAINT INSIDE WINDOW CASING THAT HAS BEEN PREVIOUSLY PAINTED OVER ON SECOND AND THIRD LEVEL.
- I. WHERE EXISTING CHAIR RAIL OR WOOD BASE EXISTS PATCH IN TO MATCH EXISTING PROFILE AT NEW CONSTRUCTION WALLS OR WHERE MECH. UNITS HAVE BEEN REMOVED. REFER TO FINISH KEY NOTES FOR SPECIFIC FINISH NOTES PER ROOM.
- J. CONTRACTOR SHALL PATCH/REPAIR ALL EXISTING WALLS TO REMAIN TO PROVIDE SMOOTH FINISH SUITABLE FOR LEVEL 4 PAINTABLE FINISH. REFER TO FINISH SCHEDULE AND PROJECT MANUAL.
- K. CONTRACTOR TO PROVIDE FLOORING FINISHES FOR ALL OPEN OR EXPOSED CASEWORK AND/OR WALL MOUNTED COUNTERS.
- L. CONTRACTOR SHALL PATCH/REPAIR ALL EXISTING FLOOR FINISHES TO REMAIN, MATCH EXISTING.

FINISH KEY NOTES (X) →

1. PROFESSIONALLY CLEAN EXISTING FLOOR TILE AND ASSOCIATED WALL BASE. PROVIDE A CLEAR SURFACE GLAZE PROTECTIVE COATING (EP-3). PATCH AND REPAIR MISSING TILE OR GROUT AS NEEDED (ASSUME 10% OF SURFACE AREA).
2. REMOVE OLD WAX FROM NATURAL STONE FLOORING USING A COMMERCIAL-GRADE ALKALINE FLOOR STRIPPER, DEEP CLEAN AND POLISH (RE-SEAL) THE EXISTING NATURAL STONE FLOORING.
3. PAINT EXISTING BRICK RISERS, PT-X.

KEY PLAN
SCALE: NTS



Project Title:
**ALTERATIONS TO:
ACES at Chase**
565 Chase Parkway
Waterbury, Connecticut 06708



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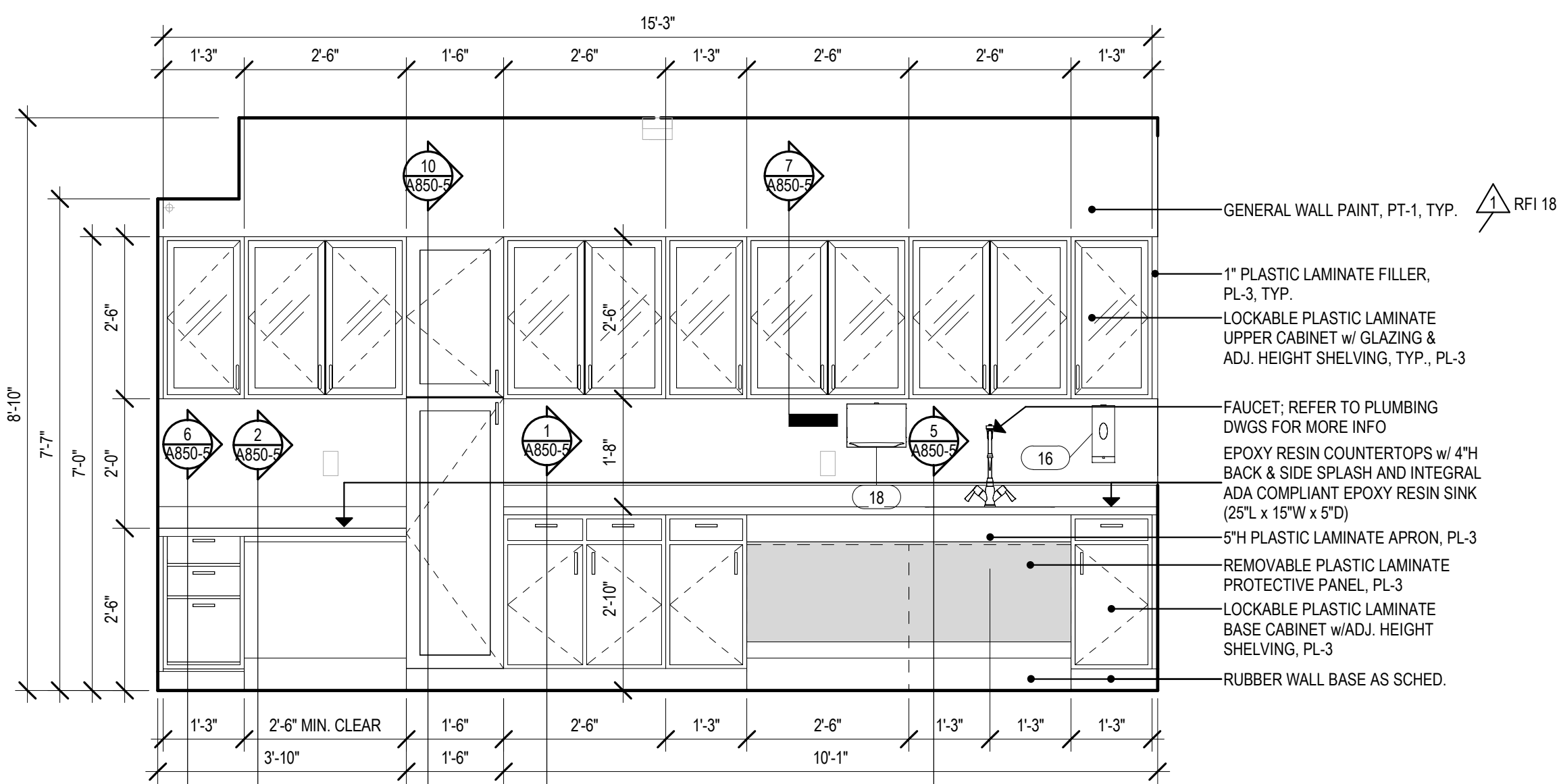
Revision:	Description:	Date:	Revised By:
1	Bulletin #2	1/09/26	KD
2	Bulletin #4	1/26/26	KD

Drawing Title:
**BUILDING 5 - LOWER SCHOOL FLOOR
PATTERN & FINISH PLAN**
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

Date:
AUGUST 12, 2025
Scale:
As indicated
Drawn By:
K.D./B.D.
Project Number:
22.050

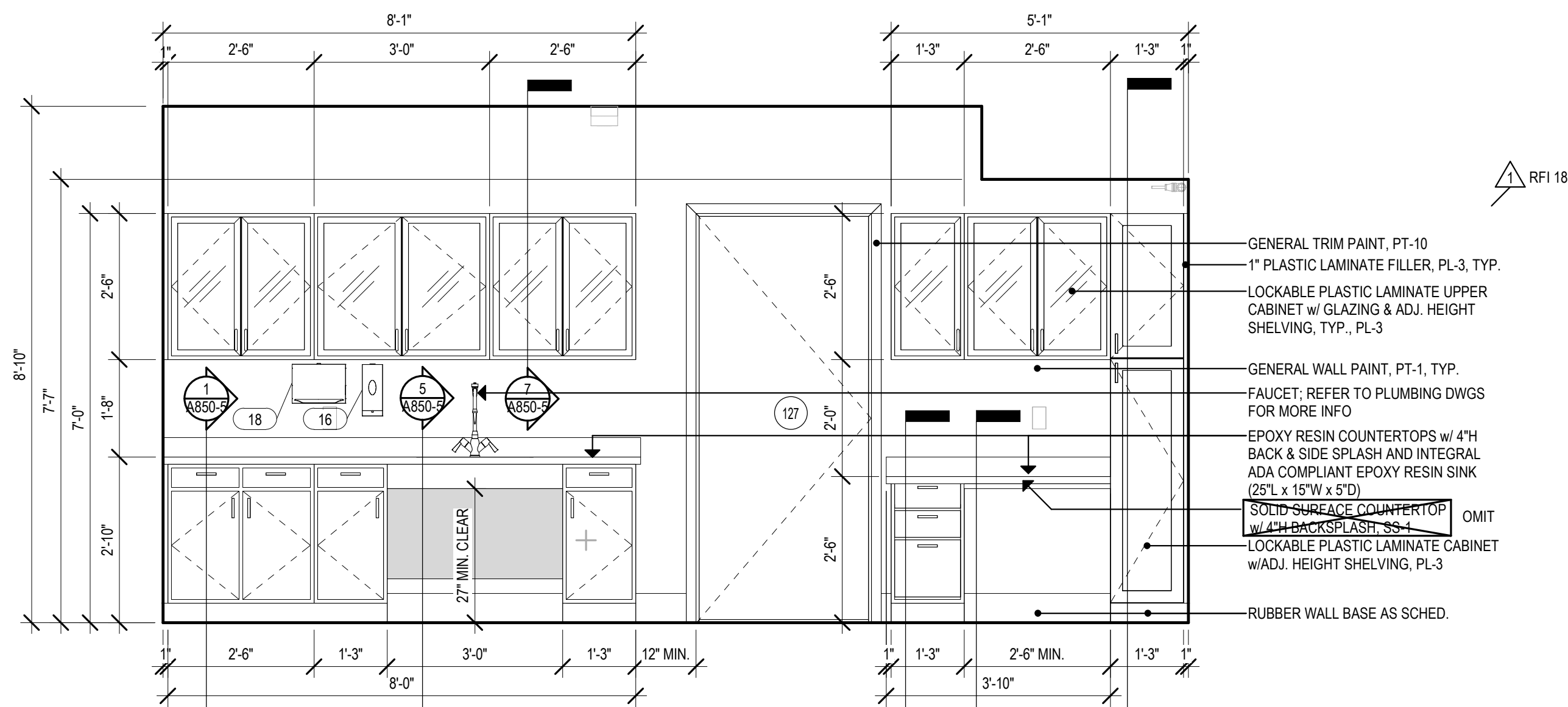
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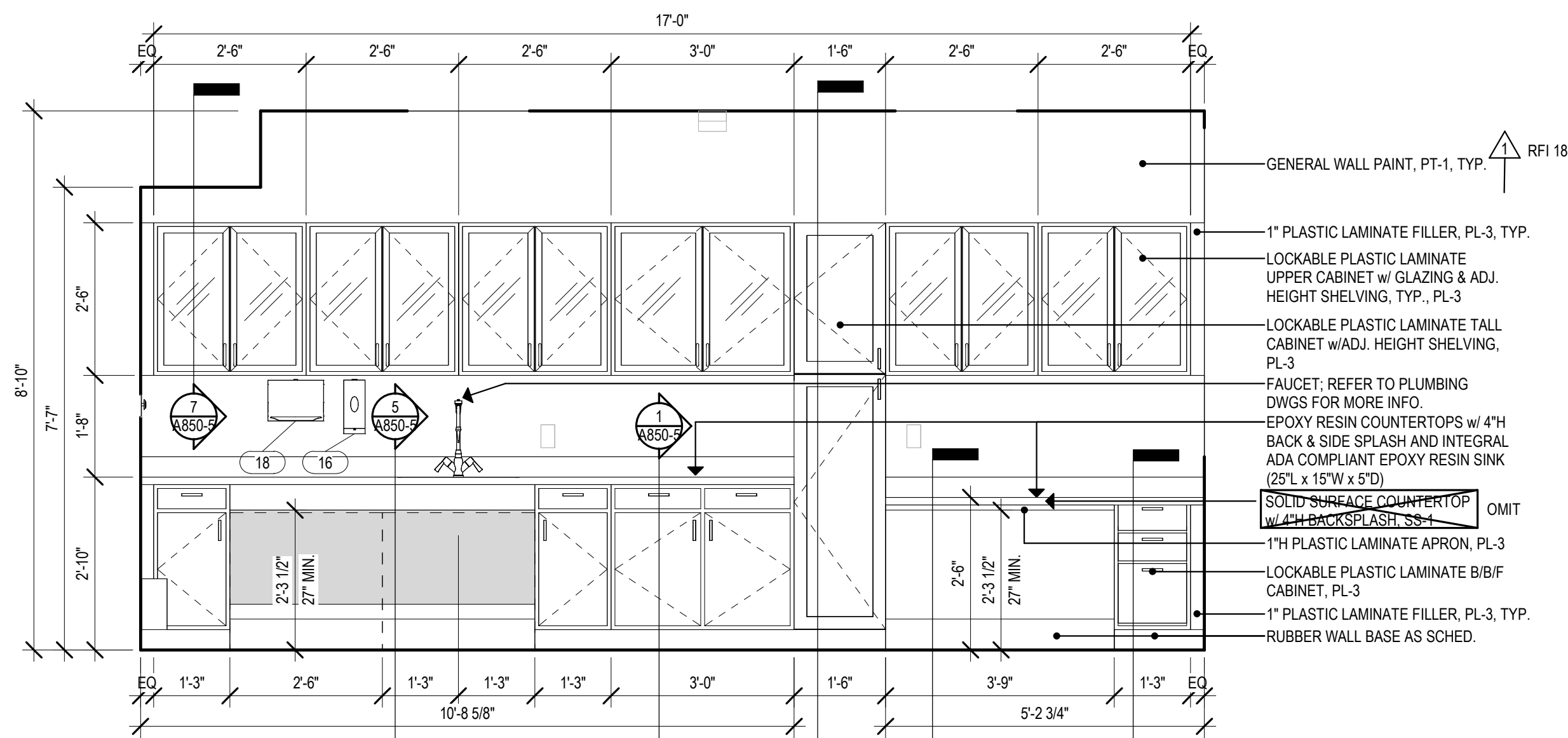
7 HUMAN BODY CLASS. 126-5 - ELEVATION B

1/2" = 1'-0"



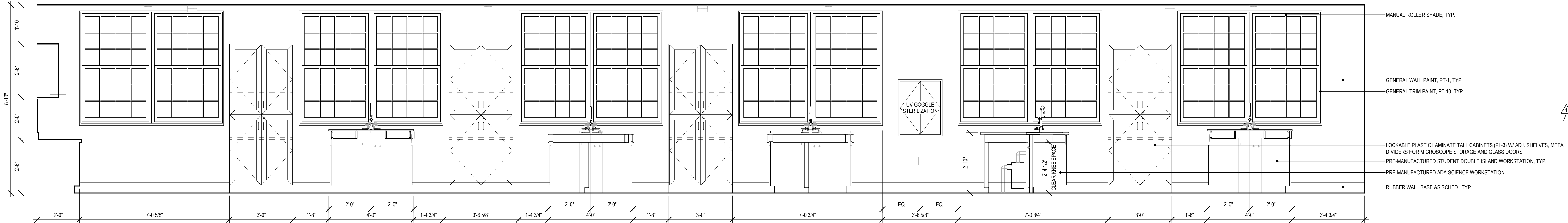
6 HUMAN BODY CLASS. 126-5 - ELEVATION A

1/2" = 1'-0"



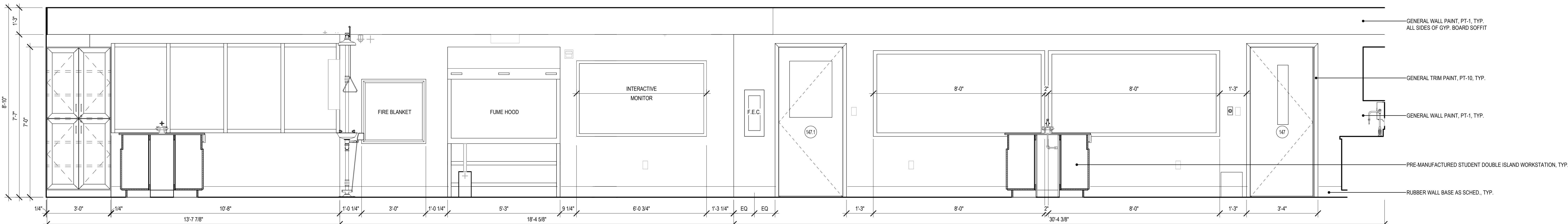
5 BIOMEDICAL SCIENCE 147-5 - ELEV. C

1/2" = 1'-0"



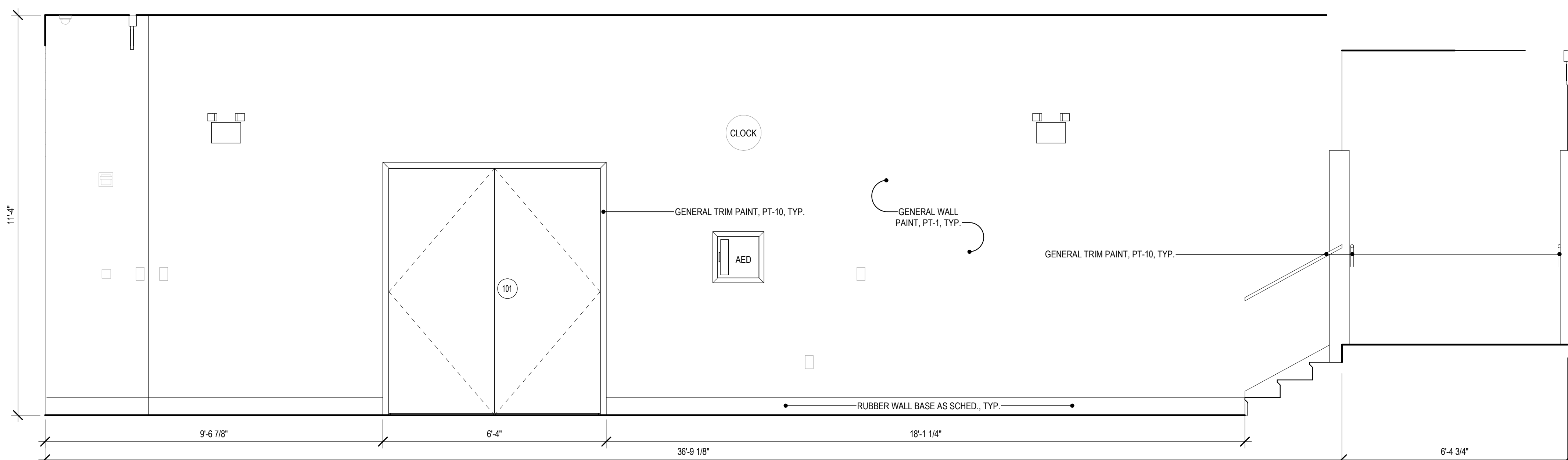
4 BIOMEDICAL SCIENCE 147-5 - ELEV. B

1/2" = 1'-0"



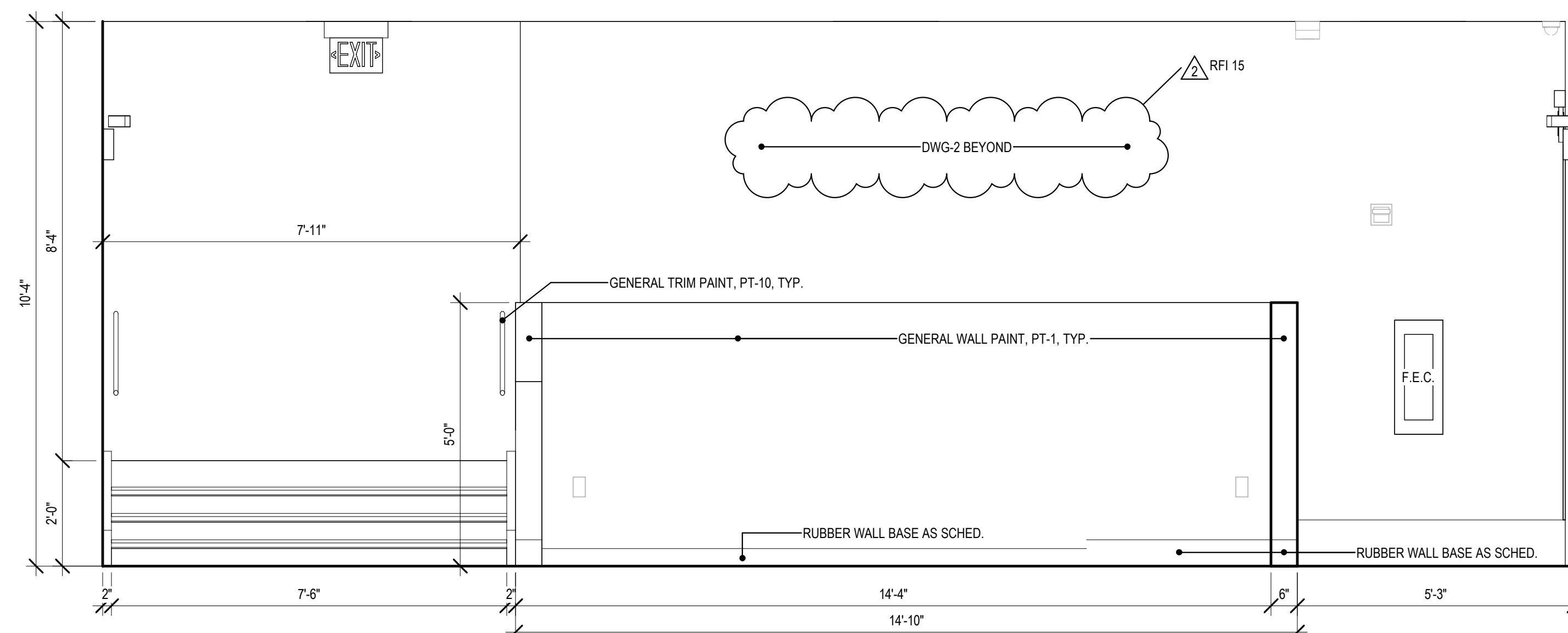
3 BIOMEDICAL SCIENCE 147-5 - ELEV. A

1/2" = 1'-0"



2 LOBBY 150-5 - ELEVATION B

1/2" = 1'-0"



1 LOBBY 150-5 - ELEVATION A

1/2" = 1'-0"

Project Title:
**ALTERATIONS TO:
ACES at Chase**
565 Chase Parkway
Waterbury, Connecticut 06708



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Revision:	Description:	Date:	Revised By:
1	Bulletin #2	1/09/26	KD
2	Bulletin #4	1/26/26	KD

Project Title:
BUILDING 5 - INTERIOR ELEVATIONS
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
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AUGUST 12, 2025
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SECTION 05 5200 – METAL RAILINGS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

- A. The Contractor, Subcontractors and/or suppliers providing goods or services referenced in or related to this Section shall also be bound by the Documents identified in Division 01 Section “Summary”, Paragraph 1.1A, entitled “Related Documents.”

1.2 SUMMARY

- A. Section Includes:
 - 1. Furnishing and installing steel pipe guard rails and handrails at ramps, steps, and other location indicated on the Drawings.
- B. Contractor shall coordinate work between all Contractors, sections, and trades required for the proper completion of the work.
- C. Contractor is responsible for all health and safety.

1.3 REFERENCE STANDARDS

- A. Reference herein to any technical society, organization, group or regulation are made in accordance with the following abbreviations and, unless otherwise noted or specified, all work under this Section shall conform to the latest edition as applicable.
- B. Code of Federal Regulations (CFR).
 - 1. 29 CFR 1926, Safety and Health Regulations for Construction.
- C. ASTM International (ASTM).
 - 1. ASTM A36 - Specification for Structural Steel.
 - 2. ASTM A123 - Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - 3. ASTM A143 - Recommended Practice for Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedure for Detecting Embrittlement.
 - 4. ASTM A153 - Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
 - 5. ASTM A269 - Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service.
 - 6. ASTM A307 - Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile.
 - 7. ASTM A384 Practice for Safeguarding Against Warpage and Distortion During Hot-Dip Galvanizing of Steel Assemblies.
 - 8. ASTM A385 - Practice for Providing High-Quality Zinc Coatings (Hot-Dip).
 - 9. ASTM A449 - Specification for Quenched and Tempered Steel Bolts and Studs.

10. ASTM A500 - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
 11. ASTM A563 - Specification for Carbon and Alloy Steel Nuts.
 12. ASTM A780 - Practice for Repair of Damaged Hot-Dip Galvanized Coatings.
 13. ASTM C1107 - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).
 14. ASTM D1640 - Standard Test Methods for Drying, Curing, or Film Formation of Organic Coatings at Room Temperature.
 15. ASTM D2092 - Practices for Preparation of Zinc-Coated Galvanized Steel Surfaces for Paint.
- D. National Association of Architectural Metal Manufacturers (NAAMM).
1. "Pipe Railing Manual, Including Round Tube"
- E. Society of Automotive Engineers (SAE)
1. Standard J404 200901, Chemical Compositions of SAE Alloy Steels.
- F. State of Connecticut
1. State Building Code, including all Amendments, Supplements, and Errata.
- G. American Welding Society
1. D1.1/D1.1M:2006, Structural Welding Code - Steel
- H. Master Painters Institute (MPI)
- I. Steel Structures Painting Council (SSPC).
1. SSPC-SP 1 Solvent Cleaning.
 2. SSPC-SP 3 Power Tool Cleaning.
 3. SSPC-SP 10 Near-White Blast Cleaning.
 4. SSPC-SP 11 Power Tool Cleaning to Bare Metal.
- 1.4 SYSTEM DESCRIPTION
- A. Provide guardrail and railing systems as indicated on the Drawings as complete systems in accordance with design intent, actual site conditions, and State Building Code.
- B. Performance Requirements
1. Structural Performance: Railings shall withstand all loads as required by State Building Code.
- C. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

1.5 SUBMITTALS

A. Shop Drawings

1. Submit shop drawings of metal guardrails, handrails, and railings, showing sizes, details of fabrication and construction, bends and radii, handrail brackets, locations of hardware, anchors, and accessories, and installation details. Shop Drawings shall be submitted to Engineer for approval prior to ordering materials.
2. Submit manufacturers' product data of railing system and railing components, handrails, and handrail brackets. Include corrosion-inhibitive shop coat painting system.

1.6 QUALITY ASSURANCE

- A. General: Use adequate numbers of skilled workmen who are trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and methods required for proper performance of the work in this Section.
- B. Installer Qualifications: Minimum of 3 years of experience on similar type projects / work; knowledge and understanding of standards referenced herein; skill necessary to perform in compliance with this specification. Contractors failing to demonstrate the required experience, knowledge, or skill shall be removed from the project.
- C. Source Limitations: Obtain each type of handrail and railing through one source from a single manufacturer. Railing materials must be supplied in consistent quality in appearance and physical properties.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Delivery and Storage

1. Transportation carrier shall use appropriate methods to ensure materials are properly packaged, stacked, and restrained during transport. Utilize protective packaging as required.
2. Protect materials during storage against moisture, soiling, staining, and physical damage.
3. Any railing or associated component showing manufacturing flaws upon receipt at the Project Site shall be referred to Engineer for determination as to whether it shall be repaired, rejected, or used.
4. Protect railing materials during storage to avoid damage from moisture, abrasion, and other construction activities.

B. Handling

1. Handle railing materials to prevent abrasion, chipping, marring, soiling and other damage.
2. Damaged equipment shall not be installed. Contractor shall bear responsibility for damage to equipment until final acceptance by Owner. Any installed equipment exhibiting damage shall be replaced or repaired to the satisfaction of Engineer, and Contractor shall assume all costs related thereto.

1.8 PROJECT CONDITIONS

- A. Field Measurements: Verify handrail and railing dimensions by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating handrails and railings without field measurements. Coordinate construction to ensure that actual dimensions correspond to established dimensions.

1.9 COORDINATION

- A. Coordinate installation of anchorages for handrails and railings. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

1.10 SCHEDULING

- A. Schedule installation so handrails and railings are mounted only on completed walls or associated with concrete stem wall installation / pour. Do not support temporarily by any means that does not satisfy structural performance requirements.

PART 2 PRODUCTS

2.1 STAINLESS STEEL TUBING HANDRAIL AND GUARDRAIL

- A. Stainless Steel Handrails: ASTM A 269, stainless steel tube: 304 or 316, welded ornamental tubing - (1.9 inches O.D. for guardrail and 1.5 inches O.D. for handrail). Special instructions shall be given the pipe manufacturer to provide Architectural Handrail Grade pipe.
- B. Stainless Steel Finishes
 - 1. Stainless steel pipe and tubing: #6 polish.
 - 2. Machined stainless steel fittings: # 8 polish.

2.2 FITTINGS, BRACKETS, AND PLATES

- A. Fittings, Brackets, Flanges, and Plates: Cast or formed metal of the same type of material and finish as rails unless otherwise indicated.
- B. Steel: Galvanized malleable iron, manufactured for the purpose, for anchorage to concrete.
- C. Stainless Steel: 304 or 316 stainless steel to match finish. Stainless steel fittings shall be used in all applications where stainless-steel railings are called-for.
- D. Plates: Steel plate shall be standard steel plate, ASTM A36, weldable quality.

2.3 ANCHORS, FASTENERS, AND ACCESSORIES

- A. Provide all required anchors, fasteners, miscellaneous components, and accessories as required for complete and finished railing installations.
 - 1. Bolts and studs, nuts, and washers: ASTM A307, A449, and A563, as applicable.
 - 2. Galvanizing: ASTM A153.

- B. Expansion Bolts: Where anchors are not included in the concrete construction, provide galvanized expansion type anchors with matching galvanized steel bolts or studs with nuts, of sizes as indicated or required. Provide washers under all bolt heads and nuts. Expansion bolts require approval of Engineer before they may be installed in post-tensioned slabs. Expansion bolts will not be permitted for use on concrete curbs or along the edge of concrete or a concrete joint.

2.4 FABRICATION

A. Rails

1. Metal handrails and railings shall be fabricated by firms or shops experienced and skilled in the custom fabrication of architectural metal handrails and railings, and shall meet the quality requirements of NAAMM's Pipe Railing Manual.
2. Bends in rails shall be precision-formed to a smooth continuous radius by skilled workers. Work quality and finish shall be true to detail. Butt joints shall have internal pipe sleeve or dowel. Ends shall be closed with similar materials, welded and ground smooth.
3. Steel welded connections shall be made in accordance with applicable requirements of the AWS Structural Welding Code. Welding shall be performed in the shop unless otherwise indicated. Welded joints of handrails and railings shall be ground and dressed smooth to match adjacent surfaces and so that the shape and profile of the item welded is maintained.
4. Metal handrails and railings shall be prefabricated and preassembled in the factory or shop as far as practicable.

- B. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.

- C. Form work true to line and level with accurate angles and surfaces.

- D. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
2. Obtain fusion without undercut or overlap.
3. Remove flux immediately.
4. At exposed connections, finish exposed surfaces smooth and blended so no roughness shows after finishing and welded surface matches contours of adjoining surfaces.

- E. Form changes in direction by bending or by inserting prefabricated elbow fittings.

- F. Bend members in jigs to produce uniform curvature without buckling or otherwise deforming exposed surfaces.

- G. Close exposed ends of railing members with prefabricated end fittings.

- H. Provide wall returns at ends of wall-mounted handrails unless otherwise indicated.

2.5 FINISHES

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.
- D. Provide exposed fasteners with finish matching appearance, including color and texture, of handrails and railings.

2.6 GROUT AND ANCHORING CEMENT

- A. Non-shrink, Nonmetallic Grout: Premixed, factory-packaged, non-staining, noncorrosive, nongaseous grout, ASTM C 1107. Provide grout specifically recommended by manufacturer for interior and exterior applications.
- B. Interior Anchoring Cement: Factory-packaged, non-shrink, non-staining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound. Use for interior applications only.
- C. Erosion-Resistant Anchoring Cement: Factory-packaged, non-shrink, non-staining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound. Provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended by manufacturer for exterior use.

PART 3 EXECUTION

3.1 GENERAL

- A. Install metal handrails and railings as indicated and in accordance with the approved Shop Drawings, using workers skilled and experienced in the installation of the type of work involved. Conform with installation requirements of NAAMM's Pipe Railing Manual, as applicable.
- B. Install metal handrails and railings with accessories furnished by the railing fabricator as required for complete and finished railing installations. The rail elements shall be erected to produce a smooth, continuous rail.
- C. Installation of handrails and railings shall be in accordance with approved Shop Drawings, true and horizontal, perpendicular, or at the required angle, as the case may be, level and square, with angles and edges parallel with related lines of the building or structure. Include all fittings and components, sleeves, hardware, backing plates, and accessories as required for complete and finished handrail installations.
- D. Fill vent and drain holes that will be exposed in finished Work, unless indicated to remain as weep holes, by plugging with zinc solder and filing off smooth.

3.2 INSTALLATION

- A. Concrete Mounting

1. Set railings accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.
2. Do not weld, cut, or abrade surfaces of railing components that have been coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
3. Set posts plumb within a tolerance of 1/16 inch in 3 feet.
4. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet.
5. Anchor posts in concrete by inserting into formed or core-drilled holes and grouting annular space.

B. Wall Mounting

1. Attach railings to wall with wall brackets. Use type of bracket with flange tapped for concealed anchorage to threaded hanger bolt.
2. Secure wall brackets and railing end flanges to building construction as follows:
 - a. For concrete and solid masonry anchorage, use drilled-in expansion shields and hanger or lag bolts.
 - b. For hollow masonry anchorage, use toggle bolts.
 - c. For steel-framed partitions, use hanger or lag bolts set into wood backing between studs.

C. Coordinate with stud installation to locate backing members.

3.3 CLEANING AND PAINTING

- A. Clean galvanized railings in accordance with ASTM D2092.
- B. Prior to site surface preparation and coating applications, remove, mask, or otherwise protect, finished work, hardware, hardware accessories, and other such items not to be coated. Restore surfaces contaminated by coating materials, to original condition and repair damaged items.
- C. All surfaces of metal handrails and railings shall be cleaned and treated to assure maximum paint adherence, prior to application of the shop prime coat, in accordance with SSPC-SP 1, SSPC-SP 3, SSPC-SP 10, SSPC-SP 11 as applicable for the type of substrate, exposure, and application.
- D. Ferrous metalwork shall be given a shop coat of rust-inhibitive metal primer, or other approved rust-inhibitive metal primer standard with the railing manufacturer.
- E. After installation, exposed painted surfaces, field welds, and other abraded or damaged primed surfaces shall be prepared as required and touched up with an additional coat of the same primers for ferrous and galvanized surfaces as hereinbefore specified for shop painting.
- F. Lightly sand and feather out such damaged surfaces so that paint touch-up becomes invisible.

3.4 ADJUSTING AND CLEANING

- A. Do not cut or abrade finishes that cannot be completely restored in the field. Return items with such finishes to the shop for required alterations, followed by complete refinishing, or provide new units as required.

END OF SECTION 05 5200

SECTION 099647 - INTUMESCENT PAINTING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Intumescent paint for interior items and surfaces.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.
 - 2. Indicate VOC content.
- B. Samples: For each type of coating system and each color and gloss of intumescent paint finish indicated.
 - 1. Submit Samples on rigid backing, not less than 8 inches square.
 - 2. Apply coats on Samples in steps to show each coat required for system.
 - 3. Label each coat of each Sample.
 - 4. Label each Sample for location and application area.
- C. Product List: Cross-reference to paint system and locations of application areas. Use same designations indicated on Drawings and in schedules. Include color designations.

1.4 INFORMATIONAL SUBMITTALS

- A. Material Test Reports: For each intumescent paint.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that are from same production run (batch mix) as materials applied and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Quantity: Furnish an additional five percent (5%) of each color applied, but not less than 1 gallon of each material and color applied.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
 - 1. Maintain containers in clean condition, free of foreign materials and residue.
 - 2. Remove rags and waste from storage areas daily.

1.7 FIELD CONDITIONS

- A. Apply waterborne intumescent paints only when temperatures of surfaces to be painted and ambient air temperatures are between 50 and 90 deg F.
- B. Do not apply intumescent paints in snow, rain, fog, or mist; when relative humidity exceeds eighty-five percent (85%); at temperatures of less than 5 deg F above the dew point; or to damp or wet surfaces.
- C. Allow wet surfaces to dry thoroughly and to attain temperature and conditions specified before starting or continuing coating operation.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Benjamin Moore
 - 2. FlameOFF Coatings, Inc.
 - 3. LRBG Chemicals, Inc.
 - 4. PPG Architectural
 - 5. Protek Paint Ltd.
 - 6. Sherwin-Williams Company (The)
 - 7. Substitutions: Under provisions of Section 012500 "Substitution Procedures".

2.2 INTUMESCENT PAINT

- A. MPI Standards: Products shall comply with MPI standards indicated and shall be listed in its "MPI Approved Products List."
- B. Surface-Burning Characteristics of Fire-Retardant Systems: As tested according to ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 25 or less.
 - 2. Smoke-Developed Index: 450 or less.
- C. Material Compatibility:
 - 1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
 - 2. For each material or coat, products and spreading rates shall be as recommended in writing by intumescent paint manufacturer for use on substrate indicated. Comply with requirements for fire-retardant coating classification and surface-burning characteristics indicated.
- D. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction and, for interior paints and coatings applied at Project site, the following VOC limits, exclusive of colorants added to a tint base, when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
 - 1. Flat Paints and Coatings: 50 g/L.

- E. Colors and Gloss: **PT**, as indicated in Section 090000 "Schedule of Finishes".

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with manufacturer's requirements for surface treatments, shop-primed surfaces, maximum moisture content, and other conditions affecting performance of the Work.
- B. Begin coating no sooner than twenty-eight (28) days after substrate is constructed and is visually dry on both sides.
- C. Verify suitability of substrates, including surface conditions, and compatibility with existing finishes and primers.
- D. Proceed with coating application only after unsatisfactory conditions have been corrected and surfaces are dry.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in the "MPI Architectural Painting Specification Manual" applicable to substrates and coating systems indicated.
- B. Remove hardware and hardware accessories, plates, machined surfaces, light fixtures, and similar items already installed that are not to be coated. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and coating.
 - 1. After completing coating operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of coatings, including dust, dirt, oil, grease, and incompatible paints and encapsulants. Do not coat surfaces if surface moisture content or alkalinity exceeds that permitted in manufacturer's written instructions.
 - 1. Remove incompatible primers, and reprime substrate with compatible primers as required to produce coating systems indicated.
 - 2. Perform cleaning and coating application so dust and other contaminants from cleaning process do not fall on wet, newly coated surfaces.
- D. Steel Substrates: Remove rust, loose mill scale, and shop primer, if any. Clean using methods recommended in writing by paint manufacturer but not less than the following:
 - 1. SSPC-SP 3, "Power Tool Cleaning."

3.3 INSTALLATION

- A. Apply intumescent paints according to manufacturer's written instructions and to comply with requirements for listing and labeling for surface-burning characteristics specified.
 - 1. Use equipment and techniques best suited for substrate and type of material being applied.
 - 2. Coat surfaces behind movable items the same as similar exposed surfaces.
 - 3. Apply each coat separately according to manufacturer's written instructions.

- B. Apply coatings to prepared surfaces as soon as practical after preparation and before subsequent surface soiling or deterioration.
- C. Apply coatings to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Produce sharp lines and color breaks.
 - 1. Pigmented Finishes: If undercoats or other conditions show through pigmented topcoat/overcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.

3.4 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing coating application, clean spattered surfaces. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from coating application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced coated surfaces.

3.5 INTERIOR INTUMESCENT PAINTING SCHEDULE

- A. Steel Substrates:
 - 1. Pigmented, Fire-Retardant, Water-Based System:
 - a. Prime Coat: As recommended in writing by topcoat manufacturer.
 - b. Intermediate Coat: As recommended in writing by topcoat manufacturer.
 - c. Topcoat: Fire-retardant coating, latex, interior, flat, **MPI #64**.

END OF SECTION 099647

SECTION 116623 - GYMNASIUM EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Safety pads.

1.3 PRE-INSTALLATION MEETINGS

- A. Pre-installation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include assembly, disassembly, and storage instructions for removable equipment.
- B. HPBS Submittals:
 - 1. Product Data for Section 16a-38k-5(d): For composite wood products, documentation indicating that products contain no urea formaldehyde.
- C. Shop Drawings: For gymnasium equipment.
 - 1. Include plans, elevations, sections, and attachment details.
 - 2. Include details of field assembly for removable equipment, connections, installation, mountings, floor inserts, and operational clearances.
- D. Samples: For the following products:
 - 1. Pad Fabric: Wall padding minimum 3 inches square, with specified treatments applied. Mark face of material.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer and Installer.
- B. Product Certificates: For each type of gymnasium equipment.
- C. Field quality-control reports.
- D. Sample Warranty: For special warranty.

1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For gymnasium equipment to include in operation and maintenance manuals.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

1.8 FIELD CONDITIONS

- A. Environmental Limitations: Do not install gymnasium equipment until spaces are enclosed and weatherproof, wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- B. Field Measurements: Verify position, elevation, and layout for gymnasium equipment.

PART 2 - PRODUCTS

2.1 MANUFACTURERS, GENERAL

- A. Source Limitations: Obtain each type of gymnasium equipment from single source from single manufacturer.

2.3 SAFETY PADS

- A. Basis-of-Design Product:
 - 1. Draper, Inc.; **EcoVision Wall Pad**
- B. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. ADP Lemco Inc.
 - 2. Jaypro Sports, LLC
 - 3. Performance Sports Systems
 - 4. Substitutions: Under provisions of Section 012500"Substitution Procedures".
- C. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 25 or less.
 - 2. Smoke-Developed Index: 450 or less.
- D. Pad Coverings: Provide safety pad fabric covering that is fabricated from puncture- and tear-resistant, PVC-coated polyester or nylon-reinforced PVC fabric, minimum 14-oz./sq. yd. and treated with fungicide for mildew resistance; with surface-burning characteristics indicated.
- E. Wall Safety Pads: Padded wall wainscot panels designed to be attached in a continuous row; each panel section consisting of fill laminated to backer board with visible surfaces fully covered by seamless fabric covering, free of sag and wrinkles and firmly attached to back of backer board.

1. Backer Board: Minimum 3/8-inch-thick plywood, mat formed, or composite panel.
2. Fill: Multiple-impact-resistant foam not less than 2-inch-thick polyurethane, 3.5-lb./cu. ft. density.
3. Size: Each panel section of manufacturer's standard dimensions.
4. Number of Modular Panel Sections: As required to fit locations indicated on Drawings.
5. Installation Method: Concealed mounting Z-clips.
6. Fabric Covering Color: **WPP-1**, as indicated in Section 090000 "Schedule of Finishes".

- F. Column Safety Pads: Pads covering exposed flange of columns to height indicated, consisting of minimum 1¼-inch-thick, multiple-impact-resistant, closed-cell, polyethylene-foam filler, covered on both sides and all edges by fabric covering with self-adhesive, hook-and-loop attachment to exposed face of column.

1. Length: Each pad matching length of wall safety pads.
2. Fabric Covering Color(s): Match color of wall safety pads.

- G. Cut-out Trim: Manufacturer's standard flanged cut-out trim kits for fitting pads around switches, receptacles, and other obstructions.

1. Color: As selected by Architect and Owner from manufacturer's entire range.

2.4 MATERIALS

- A. Softwood Plywood: DOC PS 1, exterior.
- B. Anchors, Fasteners, Fittings and Hardware: Gymnasium equipment manufacturer's standard corrosion-resistant or non-corrodible units; concealed; tamperproof, vandal- and theft-resistant design.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for play court layout, alignment of mounting substrates, installation tolerances, operational clearances, and other conditions affecting performance of the Work.
1. Verify critical dimensions.
 2. Examine wall assemblies, where reinforced to receive anchors and fasteners, to verify that locations of concealed reinforcements are clearly marked. Locate reinforcements and mark locations.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION, GENERAL

- A. Comply with manufacturer's written installation instructions and competition rules for each type of gymnasium equipment. Complete equipment field assembly, where required.
- B. Install gymnasium equipment after other finishing operations, including painting, have been completed unless otherwise indicated.
- C. Removable Gymnasium Equipment Components: Assemble in place to verify that equipment and components are complete and in proper working order. Disassemble removable

gymnasium equipment after assembled configuration has been approved by Architect, and store units in location indicated on Drawings.

3.3 INSTALLATION OF SAFETY PADS

- A. Mount with bottom edge at 4 inches above finished floor.
- B. Cutout Trim: Limit cuts in face of padding so that cuts are securely and fully concealed behind trim-kit flange.

3.4 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Perform the following tests and inspections with the assistance of a factory-authorized service representative:
 - 1. Perform visual inspections and operational tests as recommended by the equipment manufacturer.
- C. Gymnasium equipment will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.

3.5 CLEANING

- A. After completing gymnasium equipment installation, inspect components. Remove spots, dirt, and debris and touch up damaged shop-applied finishes according to manufacturer's written instructions.
- B. Replace gymnasium equipment and finishes that cannot be cleaned and repaired, in a manner approved by Architect, before time of Substantial Completion.

END OF SECTION 116623

1. RU - Corbin Russwin
2. SA - SARGENT
3. SU - Securitron

Hardware Sets

Set: 1.0

Description: Exterior/Vestibule Alum Entry Pair - Card Access; Auto

Door (Building 1): 103A

Door (Building 5): 100, 100.1, 153

Door (Building 6): 100, 141.1

2	Continuous Hinge	CFMxxSLF-HD1 PT Series		PE
1	Keyed Removable Mullion	L980S (12- if Fire-Rated)	PC	SA
1	SN Rim Exit Device	DG164 LD 56-SN200-8804 BIPS-0E 862	US32D	SA
1	Rim Exit Device, EL	LD 53 55 56 8810	US32D	SA
1	Mullion Cylinder	DG164 980C1	US26D	SA
2	Core	DG1 6300 VKC2 GMK	US15	SA
2	Automatic Opener	6061/6071	689	NO
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
1	Mullion Gasketing	5110BL		PE
2	Sweep	3452CNB		PE
2	Electric Power Transfer	EL-CEPT	630	SU
2	ElectroLynx Frame Harness	QC-CxxxP (Jamb to J-box)		MK
2	ElectroLynx Door Harness	QC-Cxxx LAR		MK
2	Position Switch (Coord w/Security)	DPS Series		SU
2	Door Switch	671		NO
1	Power Supply	AQL4-R8E1		SU

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer. Coordinate with Blast/Ballistic door manufacturer, where shown on Drawings (typ). Coordinate with plan and frame type/elevation and provide correct mullion (fixed vs removable) as required (typ).

Operation: Doors are normally closed and secured. Valid card at reader (or signal from remote switch where shown) retracts latches for momentary access, then enables outside actuator. Inside actuator retracts latch, then auto opens door. Monitoring by door position switches. During a loss of power the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Depressing pushrail will activate request-to-exit switch for appropriate monitor by EAC systems. Outside key override.

Set: 2.0

Description: Exterior Alum Entry Pair - Card Access

Door (Building 2): 004.2, 102.2E, 205.2A

Door (Building 5): 117.1, 143.1

2	Continuous Hinge	CFMxxSLF-HD1 PT Series		PE
1	Keyed Removable Mullion	L980S (12- if Fire-Rated)	PC	SA
1	SN Rim Exit Device	DG164 LD 56-SN200-8804 BIPS-0E 862	US32D	SA
1	Rim Exit Device, EL	LD 53 55 56 8810	US32D	SA
1	Mullion Cylinder	DG164 980C1	US26D	SA
2	Core	DG1 6300 VKC2 GMK	US15	SA
2	Conc Overhead Stop	1-X36 or 6-X36	630	RF
2	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
1	Mullion Gasketing	5110BL		PE
2	Sweep	3452CNB		PE
2	Electric Power Transfer	EL-CEPT	630	SU

2	ElectroLynx Frame Harness	QC-CxxxP (Jamb to J-box)		MK
2	ElectroLynx Door Harness	QC-Cxxx LAR		MK
2	Position Switch (Coord w/Security)	DPS Series		SU
1	Power Supply	AQL4-R8E1		SU
1	Wiring Diagram	Elevation; Point-to-Point		SA

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer.

Operation: Doors are normally closed and locked. Valid card at reader (or signal from remote switch where shown) retracts latch for momentary access. Monitoring by door position switches. During a loss of power the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Depressing pushrail will activate request-to-exit switch for appropriate monitor by EAC systems. Outside key override.

Set: 3.0

Description: Exterior Alum Entry Single - Card Access

Door (Building 1): B24

Door (Building 5): 104.1, 122.1

1	Continuous Hinge	CFMxxSLF-HD1 PT Series		PE
1	SN Rim Exit Device	DG164 LD 56-SN200-8804 BIPS-0E 862	US32D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Conc Overhead Stop	1-X36 or 6-X36	630	RF
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
1	Sweep	3452CNB		PE
1	Electric Power Transfer	EL-CEPT	630	SU
1	ElectroLynx Frame Harness	QC-CxxxP (Jamb to J-box)		MK
1	ElectroLynx Door Harness	QC-Cxxx LAR		MK
1	Position Switch (Coord w/Security)	DPS Series		SU
1	Power Supply	AQL4-R8E1		SU
1	Wiring Diagram	Elevation; Point-to-Point		SA

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer. Coordinate with Blast/Ballistic door manufacturer, where shown on Drawings (typ).

Operation: Door is normally closed and locked. Valid card at reader (or signal from remote switch where shown) retracts latch for momentary access. Monitoring by door position switch. During a loss of power the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Depressing pushrail will activate request-to-exit switch for appropriate monitor by EAC systems. Outside key override.

Set: 4.0

Description: Exterior Alum Entry Single - Card Access; Auto

Door (Building 1): 101

Door (Building 2): 101.2, 102.2A, 102.2B

Door (Building 4): 100, 100.3, 100.4, 100.7

Door (Building 7): 101-7A, 102-7A

1	Continuous Hinge	CFMxxSLF-HD1 PT Series		PE
1	SN Rim Exit Device	DG164 LD 56-SN200-8804 BIPS-0E 862	US32D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Automatic Opener	6061/6071	689	NO
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
1	Sweep	3452CNB		PE
1	Electric Power Transfer	EL-CEPT	630	SU
1	ElectroLynx Frame Harness	QC-CxxxP (Jamb to J-box)		MK
1	ElectroLynx Door Harness	QC-Cxxx LAR		MK

1	Position Switch (Coord w/Security)	DPS Series		SU
2	Door Switch	671		NO
1	Power Supply	AQL4-R8E1		SU
1	Wiring Diagram	Elevation; Point-to-Point		SA

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer. Coordinate with Blast/Ballistic door manufacturer, where shown on Drawings (typ).

Operation: Doors are normally closed and secured. Valid card at reader (or signal from remote switch where shown) retracts latches for momentary access, then enables outside actuator. Inside actuator retracts latch, then auto opens door. Monitoring by door position switches. During a loss of power the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Depressing pushrail will activate request-to-exit switch for appropriate monitor by EAC systems. Outside key override.

Set: 4.1

Description: Exterior/Vestibule Alum Entry Single – Auto, Remote Switch, Pull
Door (Building 4): 100.1, 100.2, 100.5, 100.6

1	Continuous Hinge	CFMxxSLF-HD1 PT Series		PE
1	Rim Exit Device, EL	LD 53 55 56 8810 862	US32D	SA
1	Automatic Opener	6061/6071	689	NO
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
1	Sweep	3452CNB		PE
1	Electric Power Transfer	EL-CEPT	630	SU
1	ElectroLynx Frame Harness	QC-CxxxP (Jamb to J-box)		MK
1	ElectroLynx Door Harness	QC-Cxxx LAR		MK
1	Position Switch (Coord w/Security)	DPS Series		SU
2	Door Switch	671		NO
1	Power Supply	AQL4-R8E1		SU
1	Wiring Diagram	Elevation; Point-to-Point		SA

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer. Coordinate with Blast/Ballistic door manufacturer, where shown on Drawings (typ).

Operation: Doors are normally closed and secured. Signal from remote switch where shown retracts latches for momentary access, then enables outside actuator. Inside actuator retracts latch, then auto opens door. Monitoring by door position switches. During a loss of power the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Depressing pushrail will activate request-to-exit switch for appropriate monitor by EAC systems.

Set: 4.2

Description: Exterior/Vestibule Alum Entry Single – Auto, Remote Switch
Door (Building 7): 101-7B, 102-7B

1	Continuous Hinge	CFMxxSLF-HD1 PT Series		PE
1	Rim Exit Device, EL	LD 53 55 56 8810	US32D	SA
1	Automatic Opener	6061/6071	689	NO
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
1	Sweep	3452CNB		PE
1	Electric Power Transfer	EL-CEPT	630	SU
1	ElectroLynx Frame Harness	QC-CxxxP (Jamb to J-box)		MK
1	ElectroLynx Door Harness	QC-Cxxx LAR		MK
1	Position Switch (Coord w/Security)	DPS Series		SU
2	Door Switch	671		NO
1	Power Supply	AQL4-R8E1		SU
1	Wiring Diagram	Elevation; Point-to-Point		SA

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer. Coordinate with Blast/Ballistic door manufacturer, where shown on Drawings (typ).

Operation: Doors are normally closed and secured. Signal from remote switch where shown retracts latches for momentary access, then enables outside actuator. Inside actuator retracts latch, then auto opens door. Monitoring by door position switches. During a loss of power the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Depressing pushrail will activate request-to-exit switch for appropriate monitor by EAC systems.

Set: 5.0 (Not Used)

Set: 6.0 (Not Used)

Set: 6.1

Description: Exterior Alum Single – Mechanical

Door (Building 2): 006.2B

1	Continuous Hinge	CFMxxSLF-HD1 Series		PE
1	Storeroom Lock	DG164 8204 LNMD	US26D	SA
2	Core	DG1 6300 VKC2 GMK	US15	SA
1	Conc Overhead Stop	1-X36 or 6-X36	630	RF
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
1	Sweep	3452CNB TKSP		PE
1	Position Switch (Coord w/Security)	DPS Series		SU

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer.

Set: 6.2

Description: Exterior Alum Single Digital Media – Card Access

Door (Building 2): 111.2A, 111.2B

1	Continuous Hinge	CFMxxSLF-HD1 Series		PE
1	Access Control Mort Lock	DG164 SN200-82271 BIPS-0E LNMD	US26D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Conc Overhead Stop	1-X36 or 6-X36	630	RF
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
1	Sweep	3452CNB		PE
1	Electric Power Transfer	EL-CEPT	630	SU
1	ElectroLynx Frame Harness	QC-CxxxP (Jamb to J-box)		MK
1	ElectroLynx Door Harness	QC-Cxxx LAR		MK
1	Position Switch (Coord w/Security)	DPS Series		SU
1	Power Supply	AQL4-R8E1		SU
1	Wiring Diagram	Elevation; Point-to-Point		SA

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer.

Operation: Doors are normally closed and locked. Valid card at reader unlocks outside lever for momentary access. Monitoring by door position switch. During a loss of power the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Rotating inside lever will activate request-to-exit switch for appropriate monitor by EAC systems. Outside key override.

Set: 7.0

Description: Alum Interior Pair - Card Access; Auto
Door (Building 6): 101

2	Continuous Hinge	CFMxxSLF-HD1 PT Series		PE
1	Keyed Removable Mullion	L980S (12- if Fire-Rated)	PC	SA
1	SN Rim Exit Device	DG164 LD 56-SN200-8804 BIPS-0E 862	US32D	SA
1	Rim Exit Device, EL	LD 53 55 56 8810	US32D	SA
1	Mullion Cylinder	DG164 980C1	US26D	SA
2	Core	DG1 6300 VKC2 GMK	US15	SA
2	Conc Overhead Stop	6-X36	630	RF
2	Automatic Opener	6011	689	NO
1	Threshold (Coord w/Details)	2716AK FHSL14SS		PE
1	Mullion Gasketing	5110BL		PE
2	Electric Power Transfer	EL-CEPT	630	SU
2	ElectroLynx Frame Harness	QC-CxxxP (Jamb to J-box)		MK
2	ElectroLynx Door Harness	QC-Cxxx LAR		MK
2	Position Switch (Coord w/Security)	DPS Series		SU
2	Door Switch	671		NO
1	Power Supply	AQL4-R8E1		SU

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer.

Operation: Doors are normally closed and secured. Valid card at reader (or signal from remote switch where shown) retracts latches for momentary access, then enables outside actuator. Inside actuator retracts latch, then auto opens door. Monitoring by door position switches. During a loss of power the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Depressing pushrail will activate request-to-exit switch for appropriate monitor by EAC systems. Outside key override.

Set: 8.0 (Not Used)**Set: 9.0**

Description: Alum Interior Pair
Door (Building 2): 205.2B
Door (Building 5): 117, 143

2	Continuous Hinge	CFMxxSLF-HD1 Series		PE
1	Keyed Removable Mullion	L980S (12- if Fire-Rated)	PC	SA
1	Rim Exit Device, NL, CD	DG164 16 8804 862	US32D	SA
1	Rim Exit Device, Pull	DG164 16 8810 862	US32D	SA
1	Mullion Cylinder	DG164 980C1	US26D	SA
4	Core	DG1 6300 VKC2 GMK	US15	SA
2	Conc Overhead Stop	1-X36 or 6-X36	630	RF
2	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Threshold (Coord w/Details)	2716AK FHSL14SS		PE
1	Mullion Gasketing	5110BL		PE

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer.

Set: 10.0

Description: Alum Interior Pair – Auto
Door (Building 6): 141

2	Continuous Hinge	CFMxxSLF-HD1 Series		PE
1	Keyed Removable Mullion	L980S (12- if Fire-Rated)	PC	SA
1	Rim Exit Device, NL,CD	DG164 16 8804 862	US32D	SA

DOOR HARDWARE

1	Rim Exit Device, Pull	DG164 16 8810 862	US32D	SA
1	Mortise Cylinder	DG164 42 x CAM	US32D	SA
1	Mullion Cylinder	DG164 980C1	US26D	SA
5	Core	DG1 6300 VKC2 GMK	US15	SA
2	Conc Overhead Stop	1-X36 or 6-X36	630	RF
2	Automatic Opener	6011	689	NO
1	Threshold (Coord w/Details)	2716AK FHSL14SS		PE
2	Door Switch	671		NO
1	Keyswitch	MKA		SU

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer. Exit devices must be dogged manually for auto operator to function. Key switch turns operator on/off.

Set: 11.0

Description: Alum Interior Single – Rated
Door (Building 5): 104, 122

1	Continuous Hinge	CFMxxSLF-HD1 Series		PE
1	Rim Exit Device, Passage	12 8815 ETMD 862	US32D	SA
1	Conc Overhead Stop	1-X36 or 6-X36	630	RF
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Threshold (Coord w/Details)	2716AK FHSL14SS		PE

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer. Coordinate all hardware with fire door assembly.

Set: 11.1 (Not Used)**Set: 12.0**

Description: Exterior FRP/Alum Pair - Roof Penthouse
Door (Building 1): 401

2	Continuous Hinge	CFMxxSLF-HD1 Series		PE
1	Dust Proof Strike	570	US26	RO
2	Flush Bolt	555	US26	RO
1	Storeroom Lock	DG164 8204 LNMD	US26D	SA
2	Conc Overhead Stop	1-X36 or 6-X36	630	RF
2	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
2	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
2	Sweep	3452CNB TKSP		PE
1	Astragal	355CPK		PE
2	Position Switch (Coord w/Security)	DPS Series		SU

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer. Door position switch monitors open/closed status. Free egress from roof.

Set: 13.0

Description: Exterior FRP/Alum Single Egress
Door (Building 1): B38.2

1	Continuous Hinge	CFMxxSLF-HD1 Series		PE
1	Rim Exit Device	DG164 LD (12-if Rated) 8846 ETMD	US32D	SA
1	Surface Closer (Heavy-Duty Stop)	DC6210 A11 (M71 Where Shown)	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO

1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2	PE
1	Sweep	3452CNB TKSP	PE
1	Position Switch (Coord w/Security)	DPS Series	SU

Notes: Perimeter gasketing shall be provided by aluminum frame manufacturer. Door position switch monitors open/closed status.

Set: 14.0

Description: Exterior Single Alum x EX - Card Access

Door (Building 1): 121.5

1	Continuous Hinge	CFMxxSLF-HD1 PT Series		PE
1	SN Rim Exit Device	DG164 LD 56-SN200-8804 BIPS-0E 862	US32D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Closer (Exterior, Heavy-Duty Stop)	DC8210 A11 (M71 Where Shown)	689	RU
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
1	Sweep	3452CNB		PE
1	Electric Power Transfer	EL-CEPT	630	SU
1	ElectroLynx Frame Harness	QC-CxxxP (Jamb to J-box)		MK
1	ElectroLynx Door Harness	QC-Cxxx LAR		MK
1	Position Switch (Coord w/Security)	DPS Series		SU
1	Power Supply	AQL4-R8E1		SU
1	Wiring Diagram	Elevation; Point-to-Point		SA

Notes: Perimeter gasketing shall be provided by aluminum frame manufacturer.

Operation: Doors are normally closed and locked. Valid card at reader retracts latch for momentary access. Monitoring by door position switches. During a loss of power the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Depressing pushrail will activate request-to-exit switch for appropriate monitor by EAC systems. Outside key override.

Set: 14.1

Description: Exterior Single Alum x EX - Card Access; Auto

Door (Building 1): 121.1

1	Continuous Hinge	CFMxxSLF-HD1 PT Series		PE
1	SN Rim Exit Device	DG164 LD 56-SN200-8804 BIPS-0E 862	US32D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Automatic Opener	6061/6071	689	RU
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
1	Sweep	3452CNB		PE
1	Electric Power Transfer	EL-CEPT	630	SU
1	ElectroLynx Frame Harness	QC-CxxxP (Jamb to J-box)		MK
1	ElectroLynx Door Harness	QC-Cxxx LAR		MK
1	Position Switch (Coord w/Security)	DPS Series		SU
1	Power Supply	AQL4-R8E1		SU
2	Door Switch	671		NO
1	Wiring Diagram	Elevation; Point-to-Point		SA

Notes: Perimeter gasketing shall be provided by aluminum frame manufacturer.

Operation: Doors are normally closed and secured. Valid card at reader (or signal from remote switch where shown) retracts latch for momentary access, then enables outside actuator. Inside actuator retracts latch, then auto opens door. Monitoring by door position switches. During a loss of power the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Depressing pushrail will activate request-to-exit switch for appropriate monitor by EAC systems. Outside key override.

Set: 15.0

Description: Exterior Single WD x WD

1	Continuous Hinge	CFMxxSLF-HD1 Series		PE
1	Rim Exit Device, NL, CD	DG164 16 8804 862	US32D	SA
2	Core	DG1 6300 VKC2 GMK	US15	SA
1	Closer (Exterior, Heavy-Duty Stop)	DC8210 A11 (M71 Where Shown)	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
1	Gasketing	2891AS TKSP x 290AS TKSP		PE
1	Sweep	3452CNB		PE

Set: 16.0 (Not Used)**Set: 17.0**

Description: Exterior HM Single - Exit Only

Door (Building 2): 011.2B, 015.2B

Door (Building 4): 102, S2

1	Continuous Hinge	CFMxxSLF-HD1 Series		PE
1	Rim Exit Device, Exit Only	LD 8810 EO	US32D	SA
1	Surface Closer (Heavy-Duty Stop)	DC6210 A11 (M71 Where Shown)	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Threshold (Coord w/Details)	278x292AFGPK Pemkote FHSL14SS-2		PE
1	Rain Guard	346C TKSP8 x OA Frame Width		PE
1	Gasketing	2891AS TKSP x 290AS TKSP		PE
1	Sweep	3452CNB		PE

Set: 18.0 (Not Used)**Set: 19.0 (Not Used)****Set: 20.0 (Not Used)****Set: 21.0 (Not Used)****Set: 22.0 (Not Used)****Set: 22.1**

Description: Alum Single – Security Office

Door (Building 6): 102

1	Continuous Hinge	CFMxxSLF-HD1 PT Series		PE
1	Classroom Security Intruder Lock	DG164 V11 8238 LNMD	US26D	SA
2	Core	DG1 6300 VKC2 GMK	US15	SA
1	Surface Closer (M71 Where Shown)	DC6210 A4	689	RU

Notes: Perimeter gasketing shall be provided by aluminum door/frame manufacturer.**Set: 23.0**

Description: Servery

Door (Building 1): 111.1, 111.2

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Classroom Security Intruder Lock	DG164 V11 8238 LNMD	US26D	SA

DOOR HARDWARE

2	Core	DG1 6300 VKC2 GMK	US15	SA
1	Surf Overhead Hold Open	9-X26	630	RF
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 23.1

Description: Kitchen

Door (Building 1): 111.3

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Classroom Security Intruder Lock	DG164 V11 8238 LNMD	US26D	SA
2	Core	DG1 6300 VKC2 GMK	US15	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 24.0

Description: Kitchenette

Door (Building 2): 104.2

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Passage Latch	8215 LNMD	US26D	SA
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
3	Silencer	608-RKW		RO

Set: 25.0 (Not Used)**Set: 25.1**

Description: Building Services; Storage Pair – No Closer

Door (Building 2): 002.2, 110.2

6	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Dust Proof Strike	570	US26	RO
2	Flush Bolt	555	US26	RO
1	Storeroom Lock	DG164 8204 LNMD	US26D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
2	Kick Plate	K1050 10" CSK BEV	US32D	RO
2	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE
1	Meeting Edge Seal	S772BL		PE
1	Astragal	357SP TKSP		PE

Set: 25.2

Description: Building Services; Storage Pair (> 100 SF)

Door (Building 4): 110

6	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Dust Proof Strike	570	US26	RO
1	Flush Bolts (Self-latching)	2845; 2945	US26D	RO
1	Storeroom Lock	DG164 8204 LNMD	US26D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA

DOOR HARDWARE

1	Coordinator	1700	Black	RO
2	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
2	Kick Plate	K1050 10" CSK BEV	US32D	RO
2	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE
1	Meeting Edge Seal	S772BL		PE
1	Astragal	357SP TKSP		PE

Set: 26.0

Description: Building Services; Storage

Door (Building 1): 207, 212, 303, B03, B04, B05.1, B06.2, B18, B37, B38.1

Door (Building 2): 005.2, 006.2A, 009.2, 012.2, 013.2, 105.2

Door (Building 4): 107, 109, 202.1

Door (Building 6): 145

Door (Building 7): 116-7

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Storeroom Lock	DG164 8204 LNMD	US26D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 26.1

Description: Building Services; Storage – No Closer

Door (Building 2): 014.2

Door (Building 5): 141

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Storeroom Lock	DG164 8204 LNMD	US26D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 27.0 (Not Used)**Set: 28.0**

Description: Electrical/Storage – Panic

Door (Building 1): B01

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Rim Exit Device	DG164 LD(12- if Fire-Rated) 8846 ETMD	US32D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 29.0 (Not Used)

Set: 30.0

Description: Practice Room

Door (Building 4): 203, 204, 205

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Classroom Lock	DG164 8237 LNMD	US26D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO

Notes: Gasketing and door bottom provided by door and frame manufacturer.

Set: 31.0

Description: Exam; Isolation

Door (Building 5): 134, 135, 138, 139

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Passage Latch w/Indicator	LB V21 8215 LNMD	US26D	SA
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
3	Silencer	608-RKW		RO

Set: 32.0

Description: Office; Conference

Door (Building 1): 110, B17.2, B19, B20.1, B21, B22, B23, B26, B27, B28, B29, B30

Door (Building 4): 206

Door (Building 5): 124

Door (Building 7): 106-7

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Office/Entry Lock	DG164 LB 8205 LNMD	US26D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; overhead as required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 32.1

Description: Main Office Pair

Door (Building 5): 132

6	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Dust Proof Strike	570	US26	RO
1	Flush Bolts (Self-latching)	2845; 2945	US26D	RO
1	Classroom Security Intruder Lock	DG164 V11 8238 LNMD	US26D	SA
2	Core	DG1 6300 VKC2 GMK	US15	SA
1	Coordinator	1700	Black	RO
2	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
2	Kick Plate	K1050 10" CSK BEV	US32D	RO
2	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE
1	Meeting Edge Seal	S772BL		PE
1	Astragal	357SP TKSP		PE

Set: 32.2

Description: Office; Conference – No Closer

Door (Building 2): 103.2

Door (Building 5): 140

Door (Building 7): 111-7, 118-7

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Office/Entry Lock	DG164 LB 8205 LNMD	US26D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; overhead as required	US26D	RO
3	Silencer	608-RKW		RO

Set: 33.0

Description: Science Prep Room; Classroom Storage; Workroom; Cots

Door (Building 1): 204, 222A, 311, 319A, B12, B17.1

Door (Building 4): 104.1, 201.1

Door (Building 7): 105-7

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Classroom Lock	DG164 8237 LNMD	US26D	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
3	Silencer	608-RKW		RO

Notes: Provide 10 Series overhead stop except at 90-degree wall conditions.**Set: 33.1**

Description: Storage; Cots – No Closer

Door (Building 5): 106, 107, 119, 121, 136

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Classroom Lock	DG164 8237 LNMD	US26D	SA
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Surf Overhead Stop	10-X36	630	RF
3	Silencer	608-RKW		RO

Notes: Provide 10 Series overhead stop except at 90-degree wall conditions.**Set: 34.0**

Description: Single Use Restroom

Door (Building 1): B02, B11

Door (Building 2): 008.2, 106.2, 107.2, 108.2, 109.2, 202.2

Door (Building 4): 111

Door (Building 5): 133, 137

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Privacy Lock w/Indicator	LB V21 8265 LNMD	US26	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 34.1

Description: Single Use Restroom – No Closer

Door (Building 4): 207

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Privacy Lock w/Indicator	LB V21 8265 LNMD	US26	SA
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 35.0

Description: Multi-Person Restroom

Door (Building 2): 007.2, 010.2

Door (Building 6): 144, 146

Door (Building 7): 108-7, 122-7

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Public Toilet Deadlock	DG164 4878	US26D	SA
2	Core	DG1 6300 VKC2 GMK	US15	SA
1	Push Pull (Prep for Deadbolt)	110x73C/73CL	US32D-MS	RO
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Mop Plate	K1050 4" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO

Set: 35.1

Description: Multi-Person Restroom – Rated

Door (Building 4): 105, 106

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Classroom Lock	DG164 8237 LNMD	US26D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Mop Plate	K1050 4" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 36.0

Description: Classroom (Student/Staff Areas)

Door (Building 1): 102, 115, 201, 202, 205.1, 209, 210.1, 213.1, 215, 216, 217, 221, 222, 301, 302, 304, 307, 309.2, 312.1, 315, 318, 319, B08.1, B09, B10.1, B33

Door (Building 2): 003.2, 011.2A, 015.2A

Door (Building 5): 147

Door (Building 6): 122

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Classroom Security Intruder Lock	DG164 V11 8238 LNMD	US26D	SA
2	Core	DG1 6300 VKC2 GMK	US15	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 36.1

Description: Classroom (Student/Staff Areas) – No Closer
 Door (Building 2): 112.2, 113.2

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Classroom Security Intruder Lock	DG164 V11 8238 LNMD	US26D	SA
2	Core	DG1 6300 VKC2 GMK	US15	SA
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 37.0 (Not Used)**Set: 38.0 (Not Used)****Set: 39.0**

Description: Assembly Pair – Hold Open
 Door (Building 1): 112.1

6	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Keyed Removable Mullion	L980S (12- if Fire-Rated)	PC	SA
2	Rim Exit Device, Intruder	DG164 LD (12- if Fire-Rated) 49 8816 ETMD	US32	SA
1	Mullion Cylinder	DG164 980C1	US26D	SA
5	Core	DG1 6300 VKC2 GMK	US15	SA
2	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
2	Kick Plate	K1050 10" CSK BEV	US32D	RO
2	Door Stop	401; 441CU; Overhead as Required	US26D	RO
2	Electromagnetic Holder	998M (or to Suit Conditions)	689	RF
1	Head & Jamb Gasketing	S88BL		PE
1	Mullion Gasketing	5110BL		PE
1	Meeting Edge Seal	S772BL		PE

Notes: Review hold open and removable mullion with code official. Some code officials do not allow mullions on doors that are held open. Interface with building fire alarm system to release door(s) from hold open.

Set: 39.1

Description: Assembly Pair
 Door (Building 4): 101, 103
 Door (Building 7): 103-7, 107-7

6	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Keyed Removable Mullion	L980S (12- if Fire-Rated)	PC	SA
2	Rim Exit Device, Intruder	DG164 LD (12- if Fire-Rated) 49 8816 ETMD	US32	SA
1	Mullion Cylinder	DG164 980C1	US26D	SA
5	Core	DG1 6300 VKC2 GMK	US15	SA
2	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
2	Kick Plate	K1050 10" CSK BEV	US32D	RO
2	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE
1	Mullion Gasketing	5110BL		PE
1	Meeting Edge Seal	S772BL		PE

Set: 39.2

Description: Assembly Single

Door (Building 4): 104, 201, 202

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Rim Exit Device, Intruder	DG164 LD (12- if Fire-Rated) 49 8816 ETMD	US32	SA
2	Core	DG1 6300 VKC2 GMK	US15	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 40.0

Description: Stair; Corridor Pair

Door (Building 4): 200

6	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
2	Surface Vert Rod Exit, Passage	12 NB8715 ETMD	US32D	SA
2	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
2	Kick Plate	K1050 10" CSK BEV	US32D	RO
2	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE
1	Meeting Edge Seal	S772BL		PE

Set: 41.0

Description: Stair; Corridor Pair - Hold Open

Door (Building 1): 121, 121.2, 121.4, 224.1, 224.2, B40, B41, B43, B44

Door (Building 2): 004.2B

6	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
2	Surface Vert Rod Exit, Passage	12 NB8715 ETMD	US32D	SA
2	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
2	Kick Plate	K1050 10" CSK BEV	US32D	RO
2	Electromagnetic Holder	998M (or to Suit Conditions)	689	RF
1	Head & Jamb Gasketing	S88BL		PE
1	Meeting Edge Seal	S772BL		PE

Notes: Interface with building fire alarm system to release door(s) from hold open.**Set: 42.0**

Description: Stair Single - Hold Open

Door (Building 1): 320.1, 320.2

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Rim Exit Device, Passage	12 8815 ETMD	US32D	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Electromagnetic Holder	998M (or to Suit Conditions)	689	RF
1	Head & Jamb Gasketing	S88BL		PE

Notes: Interface with building fire alarm system to release door(s) from hold open.

Set: 42.1

Description: Stair Single - Security Monitor

Door (Building 4): S2.1, S2.2

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Rim Exit Device, Passage	12 8815 ETMD	US32D	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE
1	Position Switch (Coord w/Security)	DPS Series		SU

Notes: Opening door will signal security alarm.**Set: 42.2**

Description: Stair Single

Door (Building 4): S1.1, S1.3

3	Hinge, Full Mortise, Heavy-Weight	T4A3786	US26D	MK
1	Rim Exit Device, Passage	12 8815 ETMD	US32D	SA
1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Door Stop	401; 441CU; Overhead as Required	US26D	RO
1	Head & Jamb Gasketing	S88BL		PE

Set: 43.0 (Not Used)**Set: 44.0 (Not Used)****Set: 45.0**

Description: Existing Exterior Door - New Card Access

Door (Building 1): B05.2

1	Continuous Hinge	CFMxxSLF-HD1 PT Series		PE
1	SN Rim Exit Device	DG164 LD 56-SN200-8804 BIPS-0E 862	US32D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Surface Closer (Heavy-Duty Stop)	DC6210 A11 (M71 Where Shown)	689	RU
1	Electric Power Transfer	EL-CEPT	630	SU
1	ElectroLynx Frame Harness	QC-CxxxP (Jamb to J-box)		MK
1	ElectroLynx Door Harness	QC-Cxxx LAR		MK
1	Position Switch (coord w/Security)	DPS Series		SU
1	Power Supply	AQL4-R8E1		SU
1	Wiring Diagram	Elevation; Point-to-Point		SA

Notes: Field verify existing conditions.

Operation: Doors are normally closed and locked. Valid card at reader (or signal from remote switch) retracts latch for momentary access. Monitoring by door position switch. During a loss of power the door will default to secure. Free egress at all times. Lock status will not change when the fire detection/suppression systems are activated. Depressing pushrail will activate request-to-exit switch for appropriate monitor by EAC systems. Outside key override.

Set: 46.0

Description: Existing Door - New Closer

Door (Building 1): 116, 118.1, 119.1, B10.2

Door (Building 4): 101.1, 101.2, 101.3, 208

1	Surface Closer (M71 Where Shown)	DC6210 A3; DC6200 A10; or to Suit	689	RU
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Notes: Provide (2) closers at double doors (VIF). Balance of hardware to remain.**Set: 47.0**

Description: Existing Door - New Smoke Seals

Door (Building 1): 104, 105, 106, 107, 113.1, 114.1, 120, 206, 218, 220, 305, 306, 310, 316, 317, B13, B14, B15, B16, B34

Door (Building 6): 104, 104.1, 107, 107.1, 108, 110, 112, 113, 114, 116, 119, 123, 124, 125, 126, 127, 127.1, 130, 132, 134, 134.1, 136, 136.1, 137, 138, 139, 140, 142, 143, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 211, 212, 213, B02, B04

1	Head & Jamb Gasketing	S88BL		PE
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Notes: Balance of hardware to remain.**Set: 48.0 (Not Used)****Set: 49.0**

Description: Greenhouse (VIF)

Door (Building 6): 105, 105.1

1	Continuous Hinge	CFMxxSLF-HD1 PT Series		PE
1	Classroom Lock	DG164 8237 LNMD	US26D	SA
1	Core	DG1 6300 VKC2 GMK	US15	SA
1	Surface Closer (M71 Where Shown)	DC6210 A4	689	RU
1	Kick Plate	K1050 10" CSK BEV	US32D	RO
1	Threshold (Coord w/Details)	2716AK FHSL14SS		PE
1	Gasketing	2891AS TKSP x 290AS TKSP		PE
1	Door Bottom	434ARL		PE

END OF SECTION 087100

SECTION 281300 - ACCESS CONTROL

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Access Control System, including software.
- B. Proximity Devices (Card Readers): HID
- C. Motion Detectors Request to Exit Devices (REX) (RTE).
- D. Door Contacts.
- E. Intercom/Door release with Video: AIPHONE.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Related Drawings
 - 1. "T" Drawings – Technology Plans
- C. Related Sections
 - 1. Section 271000 "Structured Cabling".
 - 2. Section 281600 "Intrusion Detection".

1.3 SUMMARY

- A. Section includes a network controlled; access control system consisting of Proximity Readers, REX's, and Door Contacts, with associated installation and configuration of the equipment.
- B. Section also includes an intercom – door release with video surveillance camera.
- C. The awarded contractor of this section shall furnish and install a network access-controlled system into this facility using electronic security devices. This integrated access control system shall incorporate a series of proximity card access readers, door contacts, REX motion detectors, and all associated monitoring and recording software, hardware, configuration, testing, and training.
 - 1. Installation and configuration of the VERKADA software shall be furnished and installed for this integration.
- D. All installation, peripheral devices, required licensing, and configurations are required as part of this specification to establish a coherent, functional system as described within this bid package.
- E. Security control and network cabling to/from the equipment rooms to the controlled doors, as described within the documents have been furnished and installed by other trades and shall be

coordinated with the Contractor awarded this section. These cables have been installed up to the junction box adjacent to every door.

- F. Any and all additional interconnection cabling required for a functional system shall be furnished and installed by the Contractor awarded this portion of work.
- G. Final terminations to all devices are required by the bidding integrator of this portion of work.
- H. The electric strikes and power devices for these strikes are furnished and installed by others; only the connectivity and configuration of these devices to a “fail-secure” state is required by the awarded Contractor of this portion of work.
- I. The Integrator awarded this portion of work shall provide and install a complete integrated security system and all associated, terminations, supporting devices, configuration of system, testing, and training in accordance with this Bid package.
- J. This specification is used to identify the requirements for an integrated access control system. The operator workstation(s) shall be used for database programming and storage of historical events and as a User interface with the Video Surveillance System.
- K. This system shall be integrated with the building’s fire alarm system for proper activation of “fail-secure” locking mechanisms.
- L. All interconnections required to the fire alarm system shall be terminated by the fire alarm installers and shall be coordinated with the contractor awarded this portion of work.

1.4 SYSTEM CONFIGURATIONS

- A. All system configuration(s) shall be included to attain a fully functional system and shall be within the Scope of work of the awarded contractor of this Bid package. This configuration shall include but not be limited to the following:
 - 1. Configuration of all controlled doors and devices.
 - 2. Configuration of all cameras shall be managed from this **VERKADA** Platform from the **VERKADA** Video Management software.
 - 3. Configuration of LAN switches – Active Electronics as required.
 - 4. Configuration of **VERKADA** platform shall allow for Web access into the Access Control system.

1.5 DEFINITIONS

- A. IP: Internet protocol.
- B. LAN: Local area network.
- C. WAN: Wide area network.
- D. As Necessary: Shall mean work which is required for completed construction, but is not necessarily shown or described in the Contract Documents.
- E. As Required: Shall mean work which is required for completed construction, but is not necessarily shown or described in the Contract Documents.
- F. Substantial Completion: Shall mean that the project is sufficiently complete to be utilized for its intended use as stated in the body of this written specification.

- G. Contractor/Integrator: Refers to the bidding/installation Contractor responsible for furnishing and installation of all work indicated within this specification.

1.6 PERFORMANCE REQUIREMENTS

- A. Environmental Conditions – System(s) shall withstand the environmental conditions without mechanical or electrical failure, damage or degradation of its operating capacity.

1.7 SUBMITTALS

- A. Product Data: Submit manufacturer's product specification sheets for every product to be used in this system within two (2) weeks of award of project. Product specification sheets must have the product being utilized and its part or model number visibly indicated. Product data shall include dimensions and data on features, performance, electrical characteristics, ratings, and finishes.
- B. Equipment and System Operation Description: Include the method of operation and supervision of each component and type of circuit. Show the sequence of operation for manually and automatically initiated system(s) or equipment inputs. Description must cover this specific project.
- C. Operation and Maintenance Data: For the intrusion/detection access control system, shall include the emergency, operation, and maintenance manuals and shall include the Central-Station control unit hardware and software data.
- D. Include an itemized bill of materials and a detailed description of the proposed system(s) within the bid response. Any appendices are only intended to assist the contractor to formulate a bid. Quantities are estimated and should be verified by contractor.
- E. A copy of the Contractors Certified Installers VERKADA Certificate MUST be supplied within the bid response.
- F. Shop Drawings: For access control system shall be provided within two (2) weeks of system substantial completion acceptance. Include plans, elevations, sections, details, and attachments to other work.
 - 1. Functional Block Diagram: Show single-line interconnections between components for signal transmission and control. Show cable types and sizes utilized.
- G. In the event that the installation contractor does not furnish or does not supply sufficient documentation, the Owner has the right to engage a separate contractor to attain any or all required documentation. All costs related with this event shall result in a back charge to the installation vendor via a change order.
- H. Warranty: Sample special warranty.

1.8 QUALITY ASSURANCE

- A. Installer Qualifications: Installer must be a certified, factory trained, accredited, and licensed installer for the manufacturers described within Article 1, 1.1 above.
- B. Installer Qualifications: A qualified manufacturer shall maintain a service center capable to provide training, parts, and emergency maintenance repairs for the overall systems described within this specification and drawings. This response time must not exceed 12-hour period.

- C. Electronic data exchange between video surveillance system with an access-control system shall comply with SIA TVAC.
- D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- E. Comply with NECA 1.
- F. Comply with NFPA 70.

1.9 PROJECT CONDITIONS

- A. Environmental Conditions: Capable of withstanding the following environmental conditions without mechanical or electrical damage or degradation of operating capability:
 - 1. Interior, Controlled Environment: System components installed in temperature-controlled interior environments shall be rated for continuous operation in ambient temperatures of 36 to 122 deg F dry bulb and twenty to ninety percent (20-90%) relative humidity, non-condensing. Use NEMA 250, Type 1 enclosures.
 - 2. Interior, Uncontrolled Environment: System components installed in non-temperature-controlled interior environments shall be rated for continuous operation in ambient temperatures of 0 to 122 deg F dry bulb and twenty to ninety percent (20-90%) relative humidity, non-condensing. Use NEMA 250, Type 3R enclosures.
 - 3. Exterior Environment: System components installed in locations exposed to weather shall be rated for continuous operation in ambient temperatures of minus 30 to plus 122 deg F dry bulb and twenty to ninety percent (20-90%) relative humidity, condensing. Rate for continuous operation when exposed to rain as specified in NEMA 250, winds up to 85 mph and snow cover up to 24 inches thick. Use sufficiently rated NEMA 250 enclosures.
 - 4. Hazardous Environment: System components located in areas where fire or explosion hazards may exist because of flammable gases or vapors, flammable liquids, combustible dust, or ignitable fibers shall be rated, listed, and installed according to NFPA 70.
 - 5. Corrosive Environment: System components subject to corrosive fumes, vapors, and wind-driven salt spray in coastal zones. Use sufficiently rated NEMA 250 enclosures.
 - 6. Security Environment: Camera housing for use in high-risk areas where surveillance equipment may be subject to physical violence.

1.10 WARRANTY

- A. The Integrator guarantees the Systems to be installed under this specification to be free from any defects in workmanship and materials for a period of one (1) year from the date of final completion/acceptance of the project by the Owner as evidenced by the date of final payment for the work. The Contractor shall promptly and at their own expense remedy any defects in the work and pay for any damage to other work resulting thereof, which shall appear during the period of time covered by this guarantee. Neither the final certificate of payment nor any provisions in this Agreement shall constitute an acceptance of work not done in accordance with this specification, or relieve the Contractor of liability with respect to any expressed warranties or guarantees or responsibility for faulty materials or workmanship.
- B. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of equipment related to the Access Control System, and control-station equipment that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: Three (3) years from date of Substantial Completion.

- C. The Integrator shall provide all services required to maintain the system in an operational state as specified by the manufacturer for a period of one (1) year after acceptance.
- D. Service response shall be within 24 hours of the initial request for service and shall be provided 24 hours per day, seven (7) days per week and three hundred sixty-five (365) days per year.
- E. Contractor shall include, as part of this warranty, a program for maintenance for each integrated system.
 - 1. Provide details of coverage, preventive maintenance schedules, exclusions, and service rates for all billable time and travel charges.
 - 2. Maintenance shall include two (2) semi-annual inspections and tests to verify the intended operation of the security system(s). System testing shall include but not be limited to the testing of all devices, fault modes, and batteries. A detailed test report indicating these results and any corrective measures shall be furnished to the Owner.
- F. The Contractor shall provide software and firmware upgrades as required and available to the Owner.
- G. Submit manufacturer's standard warranties.

PART 2 - PRODUCTS

2.1 ACCESS CONTROL NETWORK MANAGED SYSTEM

- A. Selected Manufacturer:
 - 1. The selected manufacturer shall be **VERKADA**. Other manufacturers will NOT be considered.
 - 2. The selected software model shall be **VERKADA** loaded and configured onto a 19-inch rack mountable, solid state network controller module that connects power, network, and VGA display.
 - 3. Certifications: UL 294 listed, ISO 9000 listed.
- B. General Overview:
 - 1. On-Line Electronic Access Control System: **VERKADA**.

2.2 PROXIMITY READERS

- A. The selected manufacturer shall be HID – USA in 15370 Barranca Pkwy, Irvine, CA. Other manufacturers will be considered, providing equipment meets or exceeds the quality and functionality specified.
- B. The selected model shall be:
 - 1. Refer to Division 08 for access control readers integrated into electric door latches.
 - 2. For wall mounted Readers utilize:
 - a. HID, **ThinLine II 5395**, Wall mounted 125 kHz Proximity Reader.
 - b. HID, **MiniProx 5365**, 125 kHz Mullion Mount Proximity Reader.
- C. Features:

1. Accepts 5- to 16-volts, meeting most voltage requirements.
2. Available with Wiegand or Clock-and-Data interface.
3. Allows easy upgrade from magstripe to a proximity reader; no rewiring or pulling of new cable required.
4. Offers high reliability, consistent read-range and low power consumption in an easy-to-install package.
5. Mounts directly onto metal with no change in read range performance.
6. Provides multi-color LED, compatibility with all standard access control systems and internal or host control of LED and beeper.
7. Includes multi-lingual installation manual.

D. Specifications:

1. Typical Maximum* Read Range
 - a. ProxCard® II card – up to 5.5 inches.
 - b. ISOProx® II card – up to 5 inches.
 - c. DuoProx® II card – up to 5 inches.
 - d. Smart ISOProx®/DuoProx® cards – up to 5 inches.
 - e. Proximity & MIFARE® card – up to 5 inches.
 - f. ProxCard® Plus card – up to 2 inches.
 - g. ProxKey® II keyfob – up to 2 inches.
 - h. MicroProx® Tag – up to 2.5 inches.
 - i. *Depending on local installation conditions.
2. Dimensions: 6.0 inches x 1.7 inches x 1.0-inch.
3. Material: Polycarbonate UL 94.
4. Power Supply:
 - a. Standard MiniProx: 5-16 VDC.
 - b. Haz. Loc. MiniProx: 5-16 VDC.
 - c. Linear power supplies are recommended.
5. Current Requirements:
 - a. Max Average 30 mA.
 - b. Typ Peak: 75 mA.
6. Operating Temperature: -22° to 150° F.
7. Operating Humidity: Zero to ninety-five percent (0-95%) relative humidity non-condensing.
8. Weight:
 - a. With Terminal Strip: 3.5 oz.
 - b. With Pigtail: 3.8 oz.
 - c. Haz. Loc. MiniProx: 3.8 oz.
9. Transmit Frequency: 125 kHz.
10. Excite Frequency: 125 kHz.
11. Cable Distance:
 - a. Wiegand Interface: 500 feet.
 - b. Clock-and-Data Interface: 50 feet.
 - c. Recommended cable is ALPHA 1295 (22 AWG) 5 conductor.

- d. Minimum stranded with overall shield or equivalent. Additional conductors may be required for LED or beeper control.

12. Environmental: IP55.

13. Certifications:

- a. UL294/cUL (US), FCC Certification (US), IC (Canada), CE (EU)
- b. C-tick (Australia, New Zealand)
- c. SRRC (China), MIC (Korea), NCC (Taiwan), MIC (Japan), iDA
- d. (Singapore), RoHS

2.3 RTE SENSOR

- A. Bosch DS160 or equivalent and compliant with **VERKADA** System.

2.4 POWER SUPPLY – LOW VOLTAGE FOR RTE

- A. Integrator shall furnish and install a remote Power Supply within the data rooms as indicated within the drawings.
- B. These power supplies shall support the RTE (REX) devices.

2.5 DOOR CONTACTS

- A. GE or equivalent and compliant with the **VERKADA** System.

2.6 DOOR CONTROL DEVICE:

- A. VERKADA **#AC62** – QTY A/R

2.7 I/O CONTROLLER

- A. VERKADA **AX11 IO Controller** – QTY A/R
- B. Access control system shall include all required licensing, servers, and mobile applications for a fully functional system.
- C. Include cloud licenses for every door and device on plans. License shall commence as substantial completion and shall support the school through the first year of occupancy.

2.8 INTERCOM DOOR RELEASE W/VIDEO SURVEILLANCE

- A. The selected manufacturer shall be AIPHONE CORPORATION, Bellevue WA – USA. Other manufacturers will be considered, providing equipment meets or exceeds the quality and functionality specified.
- B. The selected system shall be an IP based system sending audio and video over category rated cabling that has already been installed by others.
- C. The selected model shall be:
 - 1. AIPHONE **Series #IS-IP** as indicated on Drawings.
 - 2. AIPHONE **#IS-IPMV**, A/V/Door release, IP Master Station.
 - 3. AIPHONE **#IS-IPDVF-HID**, A/V, IP Door station with HID Proxi reader, flush mounted.

4. AIPHONE power supplies as required

- D. All interconnecting cabling is required as part of this bid. Control cabling called between the MER and the devices has been installed by others and is stated within the IT drawings. All remaining cable is the responsibility of the contractor awarded this section.

2.9 PANIC DURESS BUTTON

A. The selected model shall be:

1. Sentrol UL Rated #3050. Include bi-color latching LED and single pole, double throw contacts.
2. Panic/duress buttons must be configured to Owner requirements.

2.10 DOOR RELEASE BUTTONS

A. The selected model shall be:

1. Dortronics **#H276-HD29**
2. The door release button shall be labeled "*ASSOCIATED DOOR # Push to Release*".
3. The door release button shall be mounted to **FSR #DSKB_385** Single Gang Table Box.

2.11 ACCESS CONTROL KVM RACK DISPLAY

A. Manufacturer:

1. TRIPP-LITE **#B201-000-17** Rack Mounted KVM Display

2.12 SECURITY STROBLE LIGHT

A. The selected model shall be:

1. Edwards Signaling, **#117** or approved equal.
2. Contractor shall demonstrate that lamps are visible in direct sunlight prior to final installation and approval.
3. Include low voltage power supplies.
4. Lights shall be controlled through outputs of the Access Control Panel. Coordinate configuration and functionality with Security Consultant and Owner.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Device Locations: All device locations are to be field verified with the Owner prior to start of project. Architectural drawings are for approximation purposes only. Additional charges will not be allowed for outlet installation in areas not reviewed or approved by the Owner.
- B. Examine pathway elements intended for cables. Check raceways and other elements for compliance with space allocations, installation tolerance, hazards to camera installation, and other conditions affecting installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 WIRING

- A. Control and low-voltage has been provided and installed by others and is referenced within the Drawings. This cabling has been roughed in and is within the junction boxes adjacent to each door requiring access controls. Final terminations to all devices are required by the bidding integrator of this section.
- B. Final connections at both the device end and data closet and including any additional cable necessary for these connections is required as part of this bid.

3.3 INSTALLATION

- A. Install all devices and infrared illuminators level and plumb.
- B. Install power supplies and other auxiliary components at control stations unless otherwise indicated.
- C. Identify system components, wiring, cabling, and terminals according to ANSI/EIA/TIA standards.

3.4 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.
- B. Tests and Inspections:
 - 1. Inspection: Verify that units and controls are properly installed, connected, and labeled, and that interconnecting wires and terminals are identified.
 - 2. Pretesting: Align and adjust system and pretest components, wiring, and functions to verify that they comply with specified requirements.
 - 3. Test Schedule: Schedule tests after pretesting has been successfully completed and system has been in normal functional operation for at least fourteen (14) days. Provide a minimum of ten (10) days notice of test schedule.
 - 4. Operational Tests: Perform operational system tests to verify that system complies with Specifications. Include all modes of system operation. Test equipment for proper operation in all functional modes.
- C. Access Control System shall be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.

3.5 ADJUSTING

- A. Occupancy Adjustments: When requested within twelve (12) months of date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to two (2) visits to Project during other-than-normal occupancy hours for this purpose. Tasks shall include, but are not limited to, the following:
 - 1. Check cable connections.
 - 2. Check proper operation of access control devices.
 - 3. Provide a written report of adjustments and recommendations.

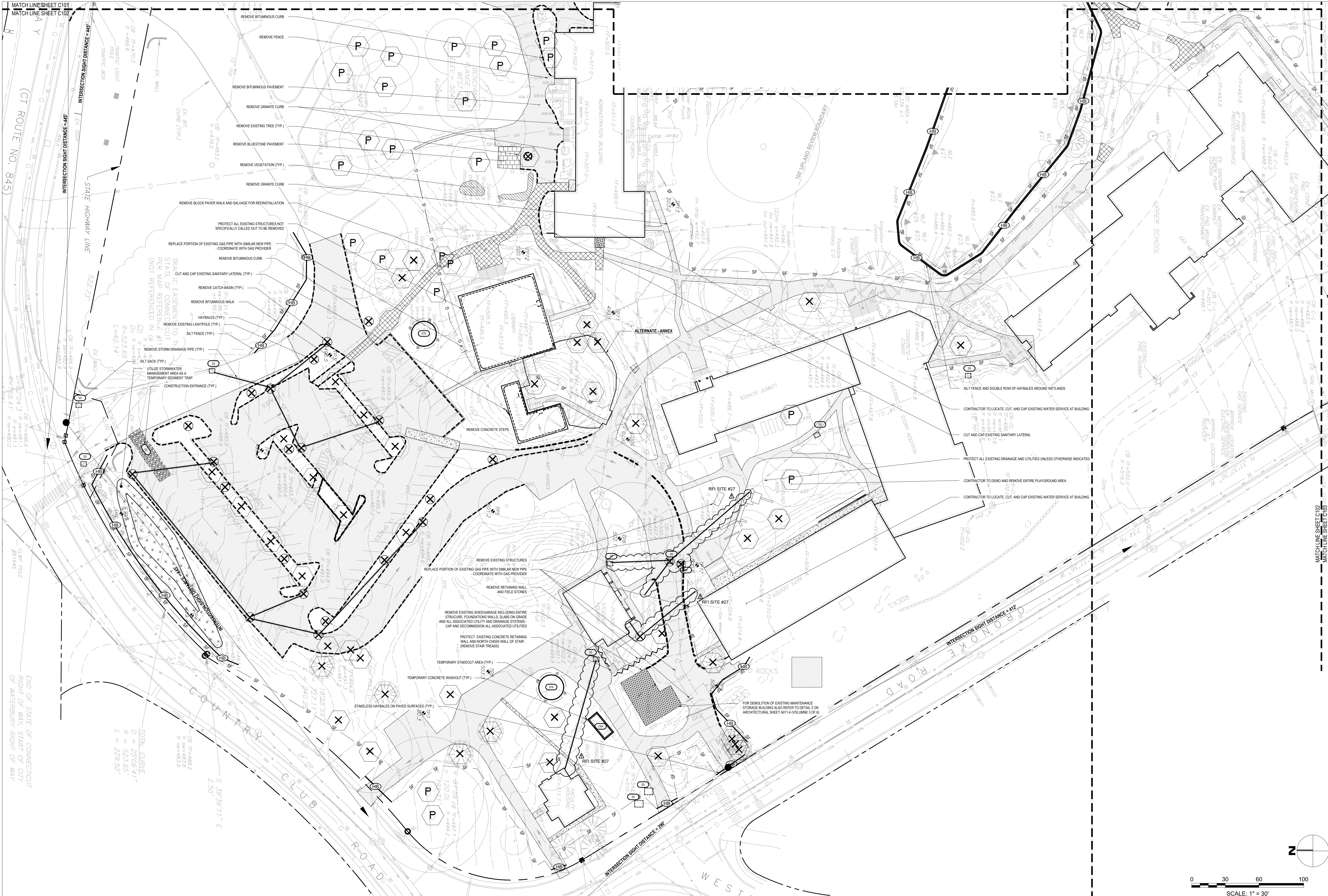
3.6 CLEANING

- A. Remove rubbish and debris: Installation contractor is not allowed you use the onsite dumpster and is responsible to discard their own debris off site.
- B. Clean installed items using methods and materials recommended in writing by manufacturer.

3.7 DEMONSTRATION – TRAINING

- A. Bidding contractor shall engage a factory-authorized service representative to train the Owner's maintenance personnel to adjust, operate, and maintain Access Control system.
- B. Sixteen hours of training shall be included as part of this specification.

END OF SECTION 281300



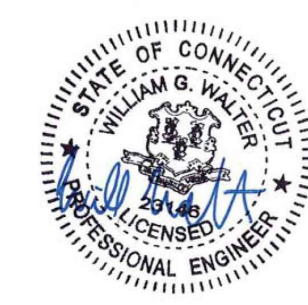
Project Title:
**ALTERATIONS TO:
ACES at Chase**
565 Chase Parkway
Waterbury, Connecticut 06708

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3190 WHITNEY AVENUE HAMDEN CT 06518
311 STATE STREET NEW LONDON CT 06320
203 230 9007 silverpetrucelli.com

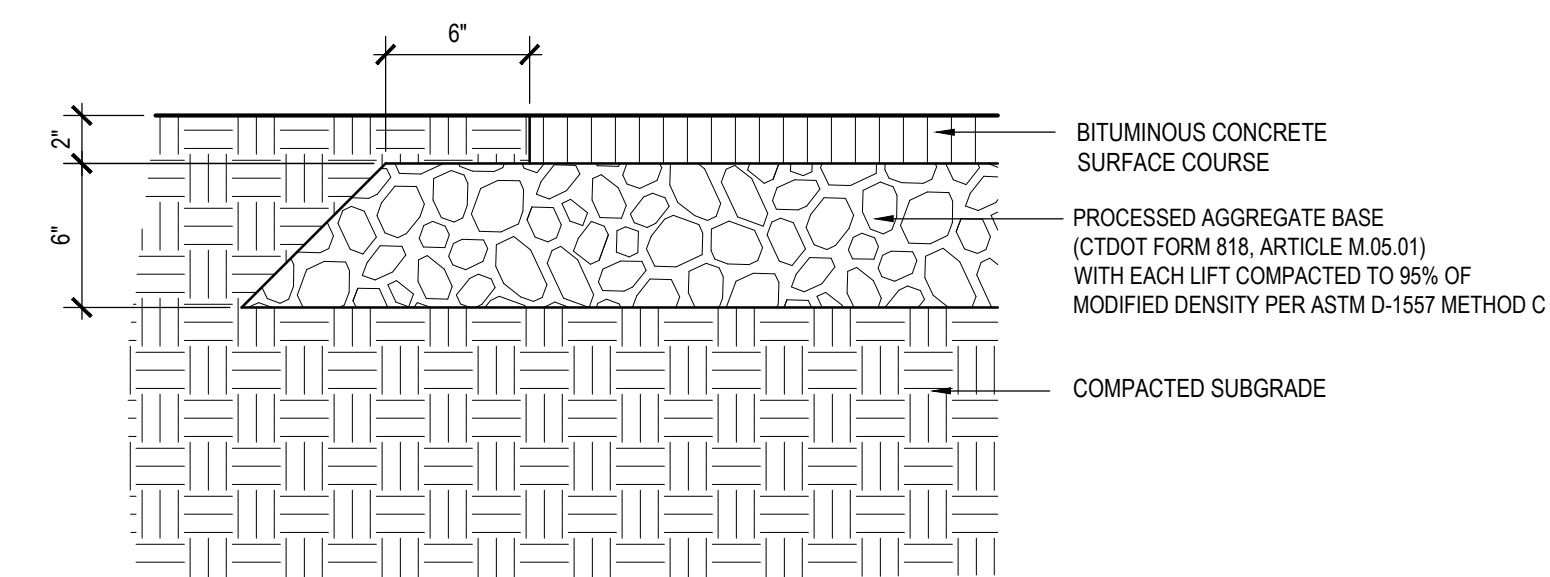
Revision:	Description:	Date:	Revised By:
1	Bulletin #4	01/26/2026	



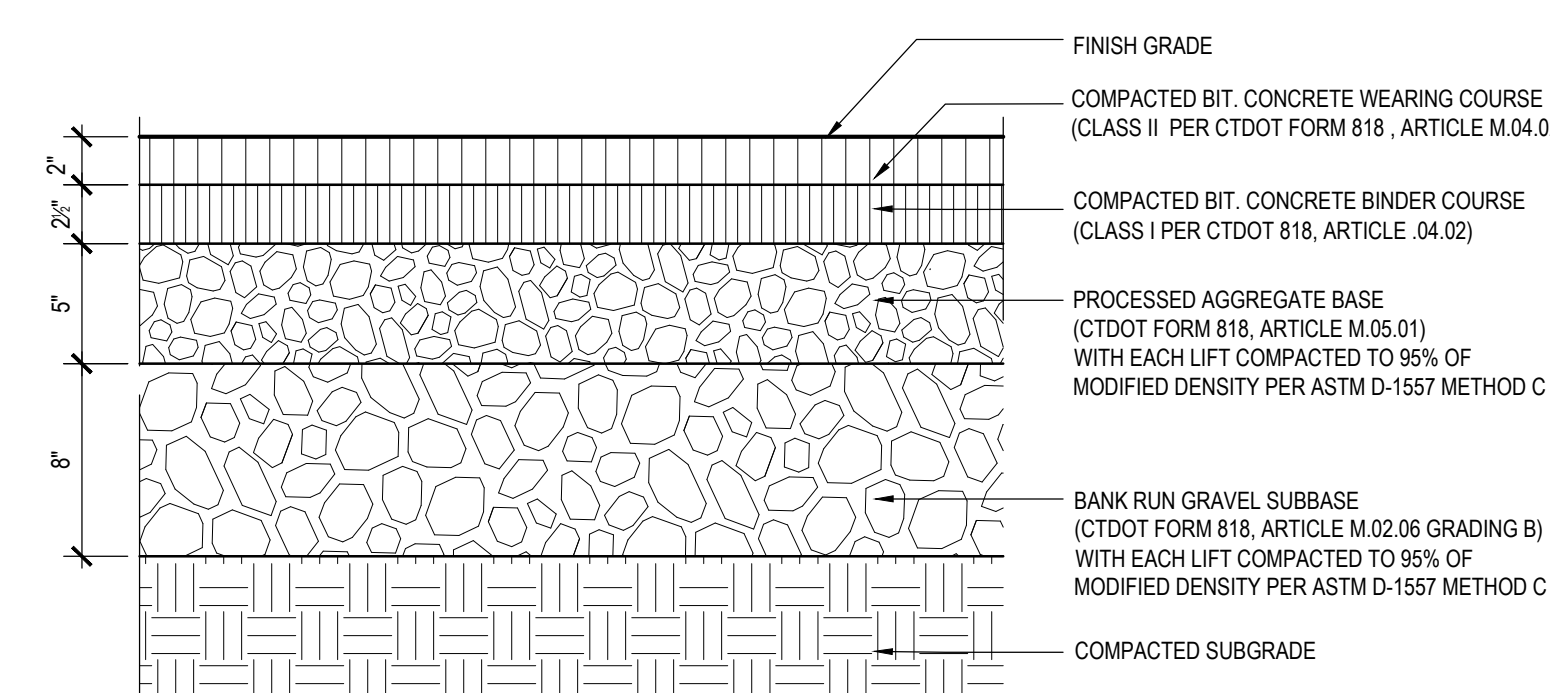
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Demolition & Erosion Control Plan
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

Date:
AUGUST 12, 2025
Scale:
AS SHOWN
Drawn By:
GSL
Project Number:
22.050

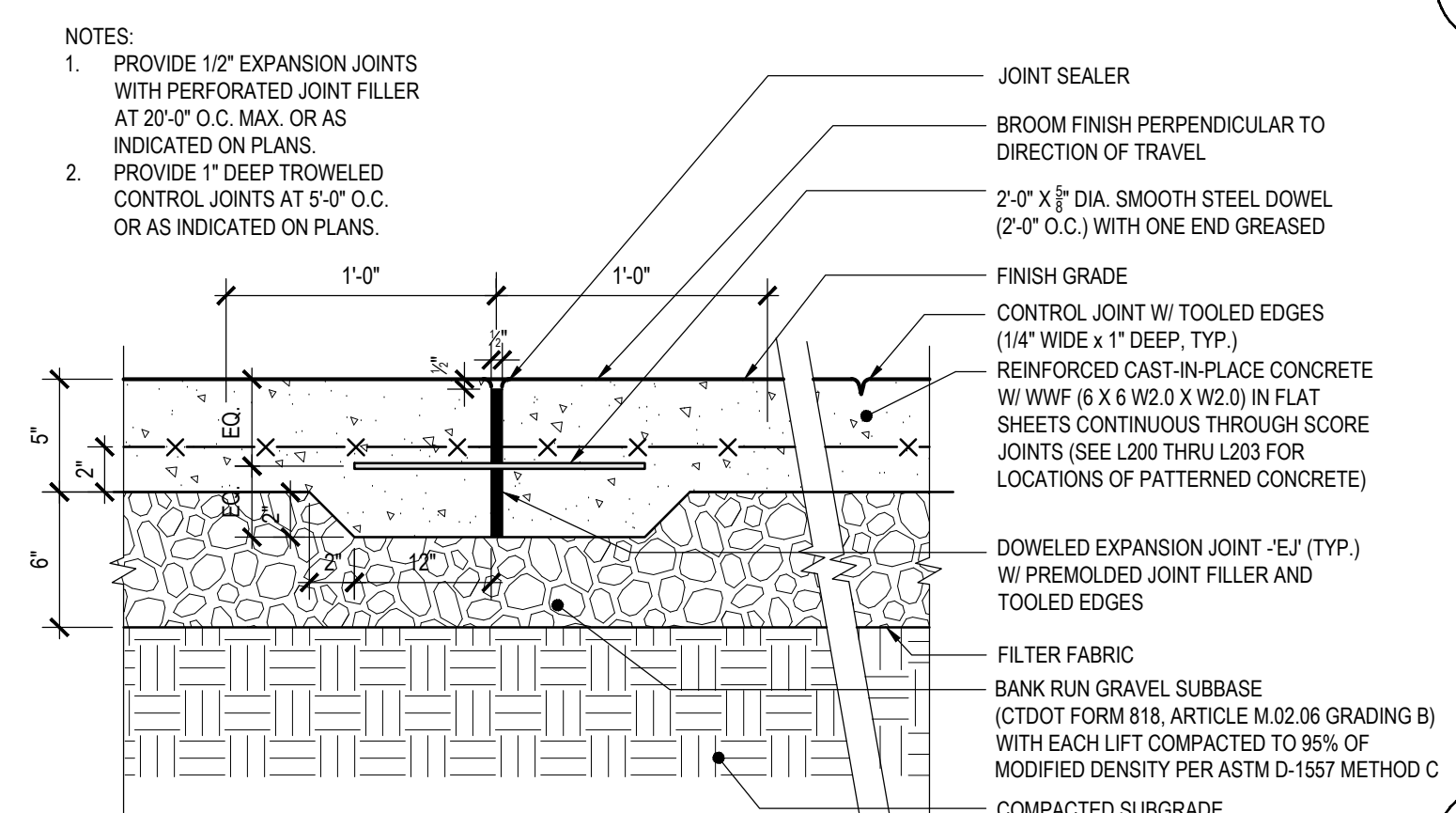
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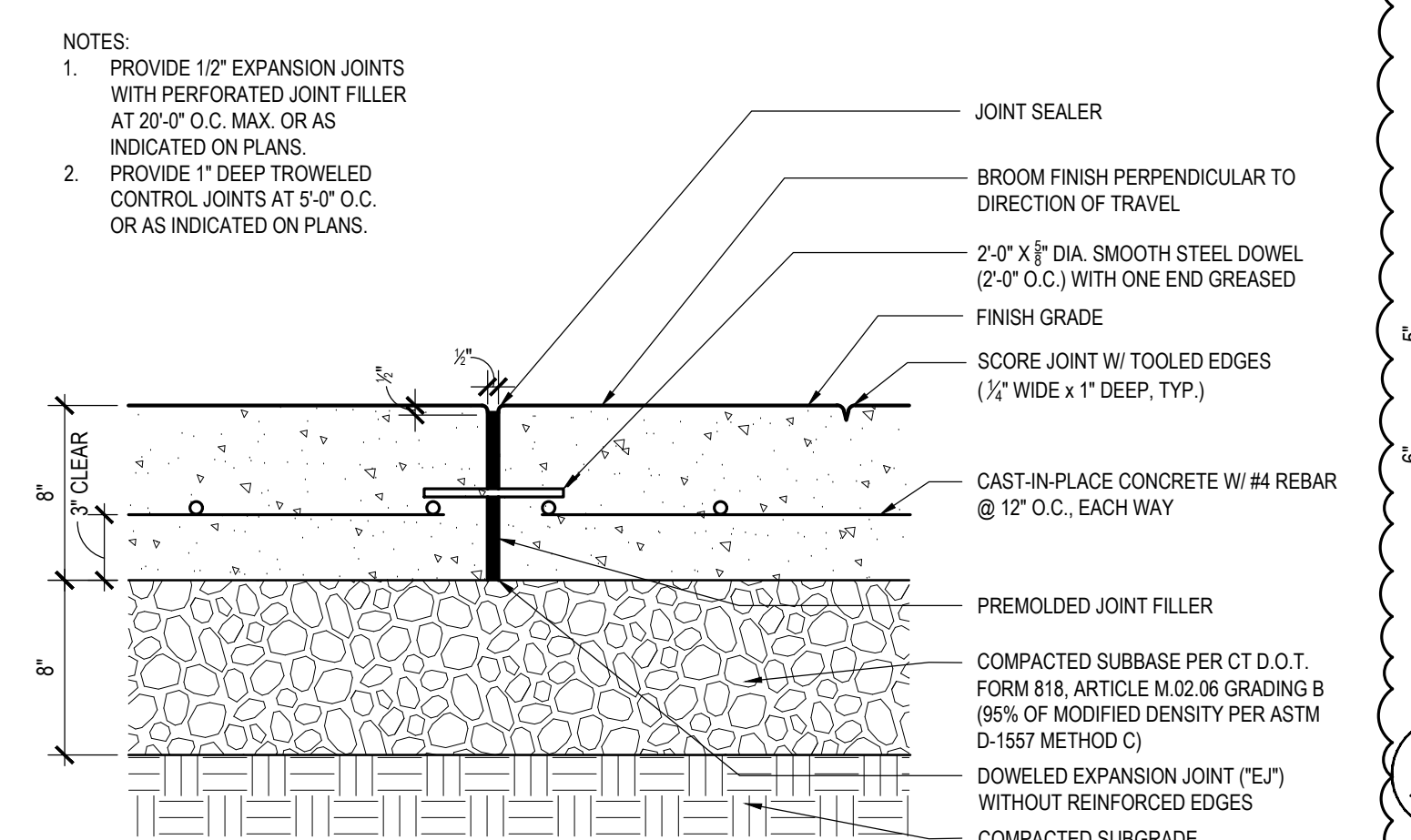
1A BITUMINOUS CONCRETE WALK
1 1/2" x 1/2"



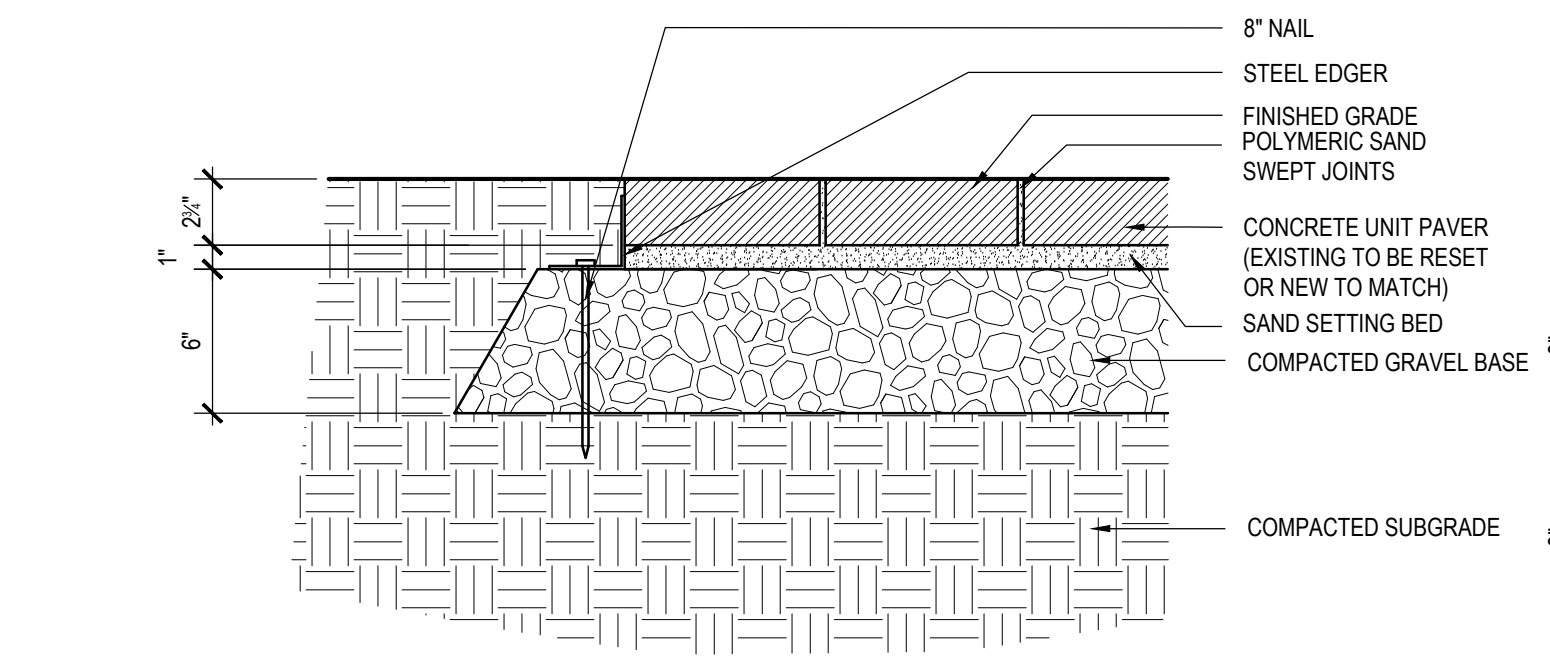
1B BITUMINOUS CONCRETE PAVEMENT
1 1/2" x 1/2"



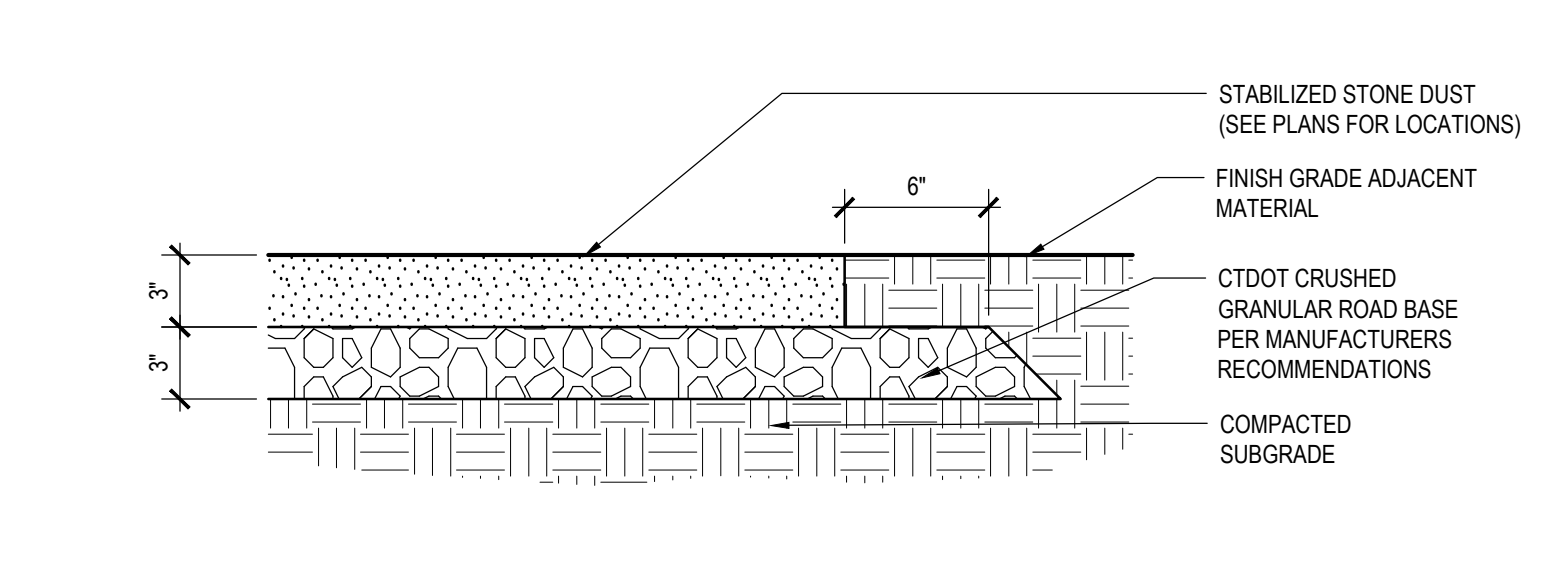
1C CONCRETE PAVEMENT (SIDEWALK)
1 1/2" x 1/2"



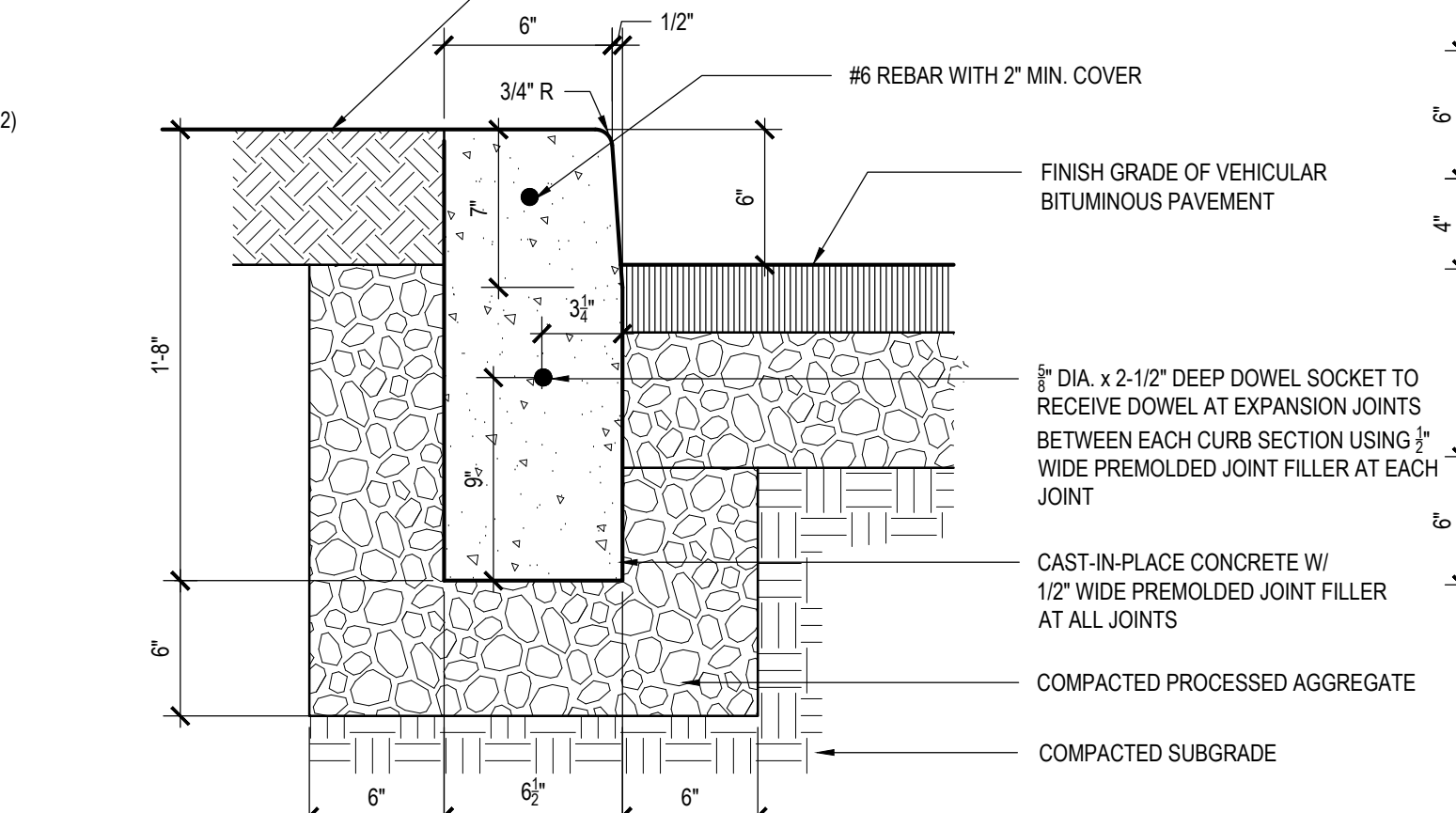
1D HEAVY DUTY CONCRETE PAVEMENT
1 1/2" x 1/2"



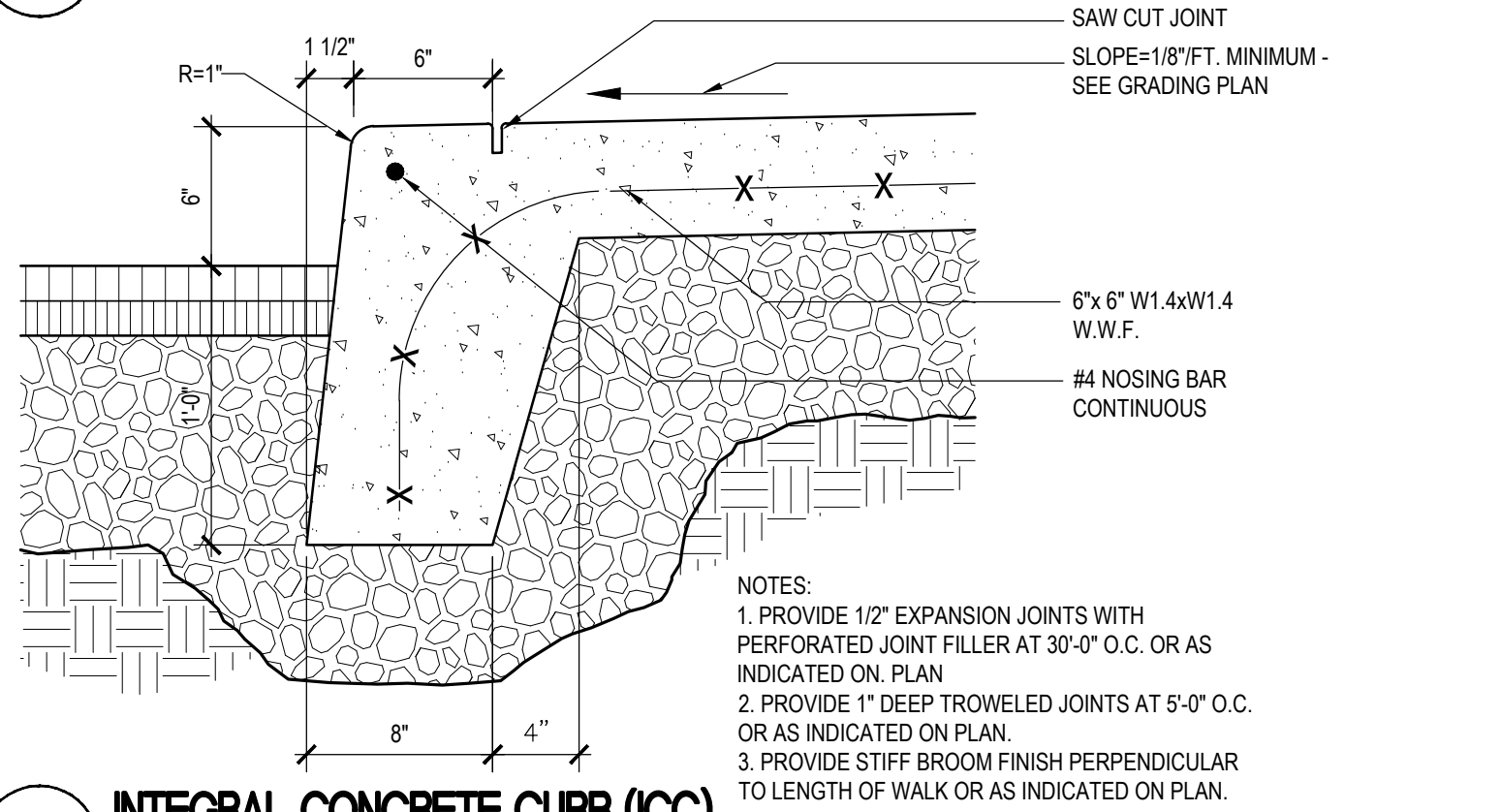
1E EXISTING CONCRETE UNIT PAVERS ON AGGREGATE BASE
1 1/2" x 1/2"



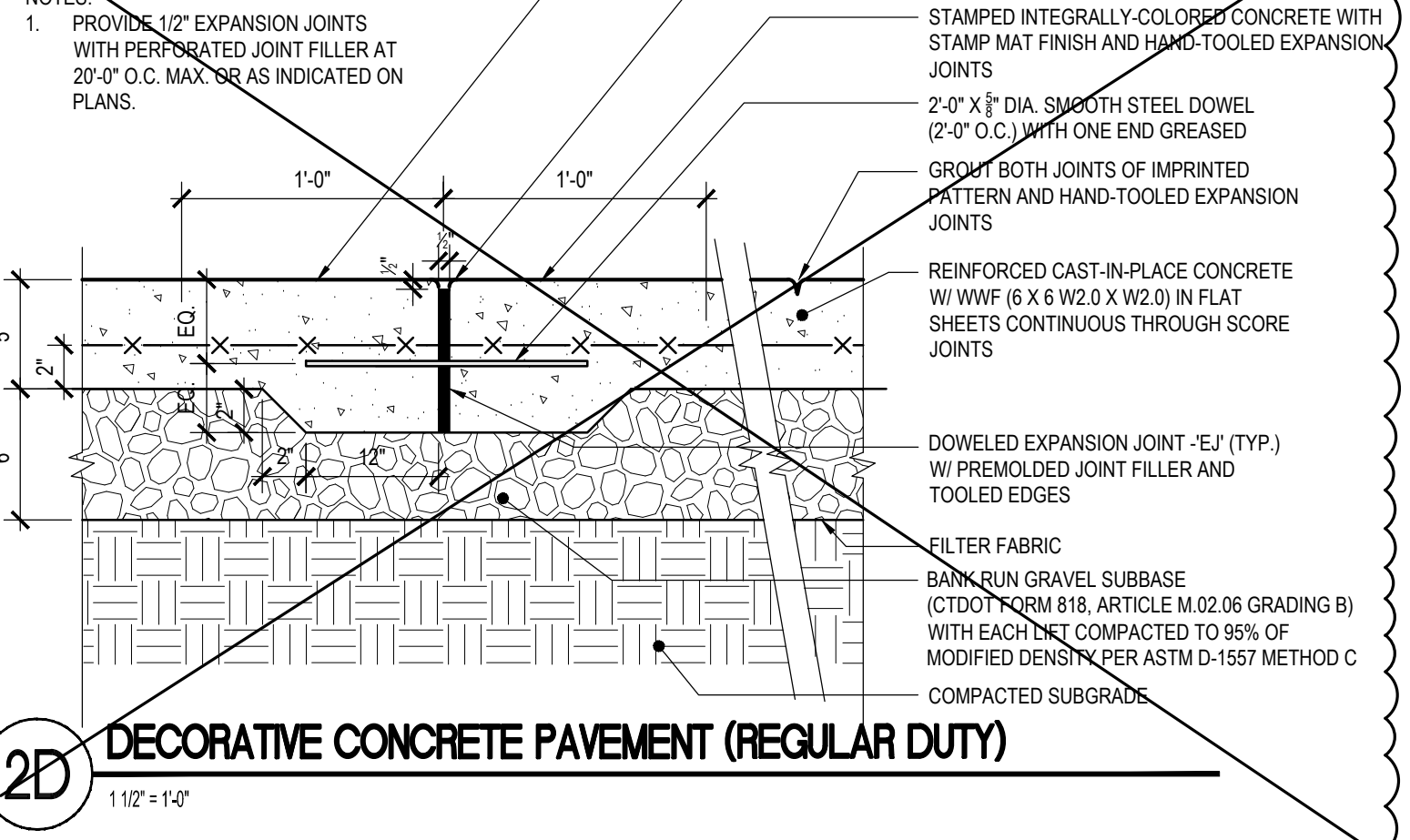
2A STABILIZED STONEDUST WALK
1 1/2" x 1/2"



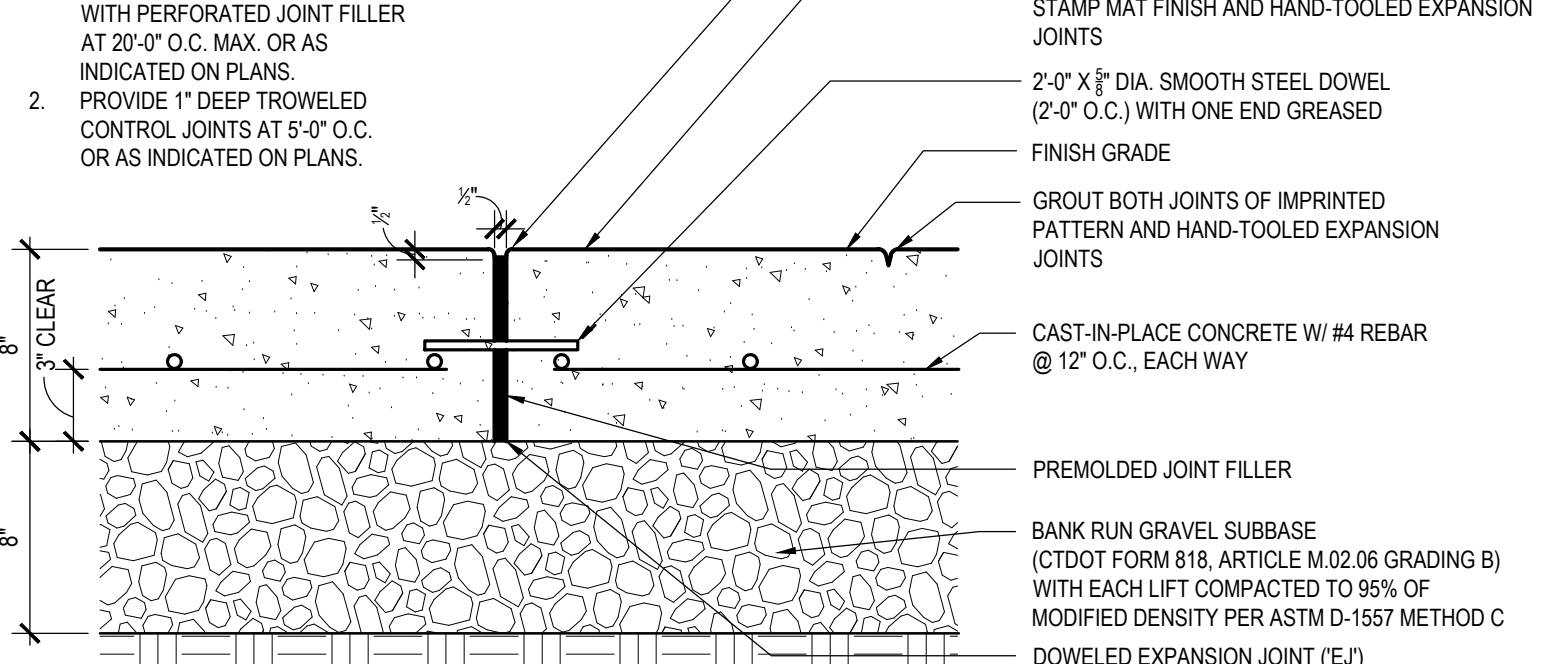
2B CAST IN PLACE CONCRETE CURB (CPCC)
1 1/2" x 1/2"



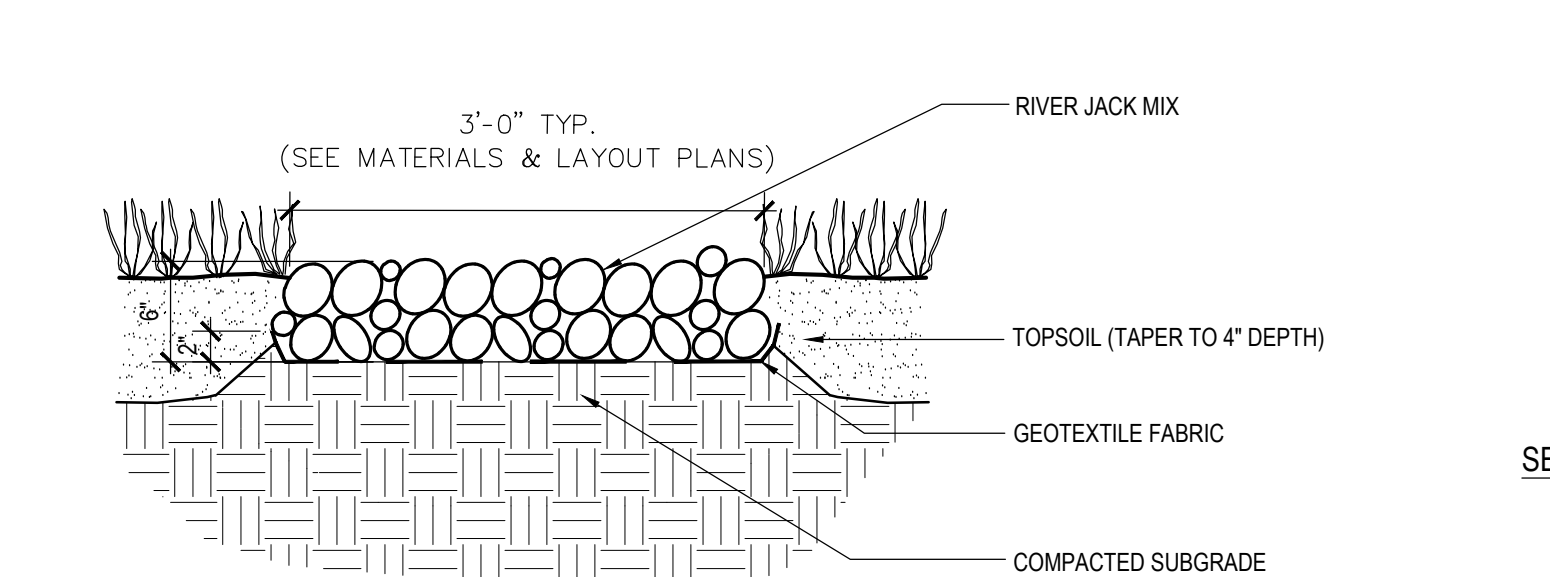
2C INTEGRAL CONCRETE CURB (ICC)
1 1/2" x 1/2"



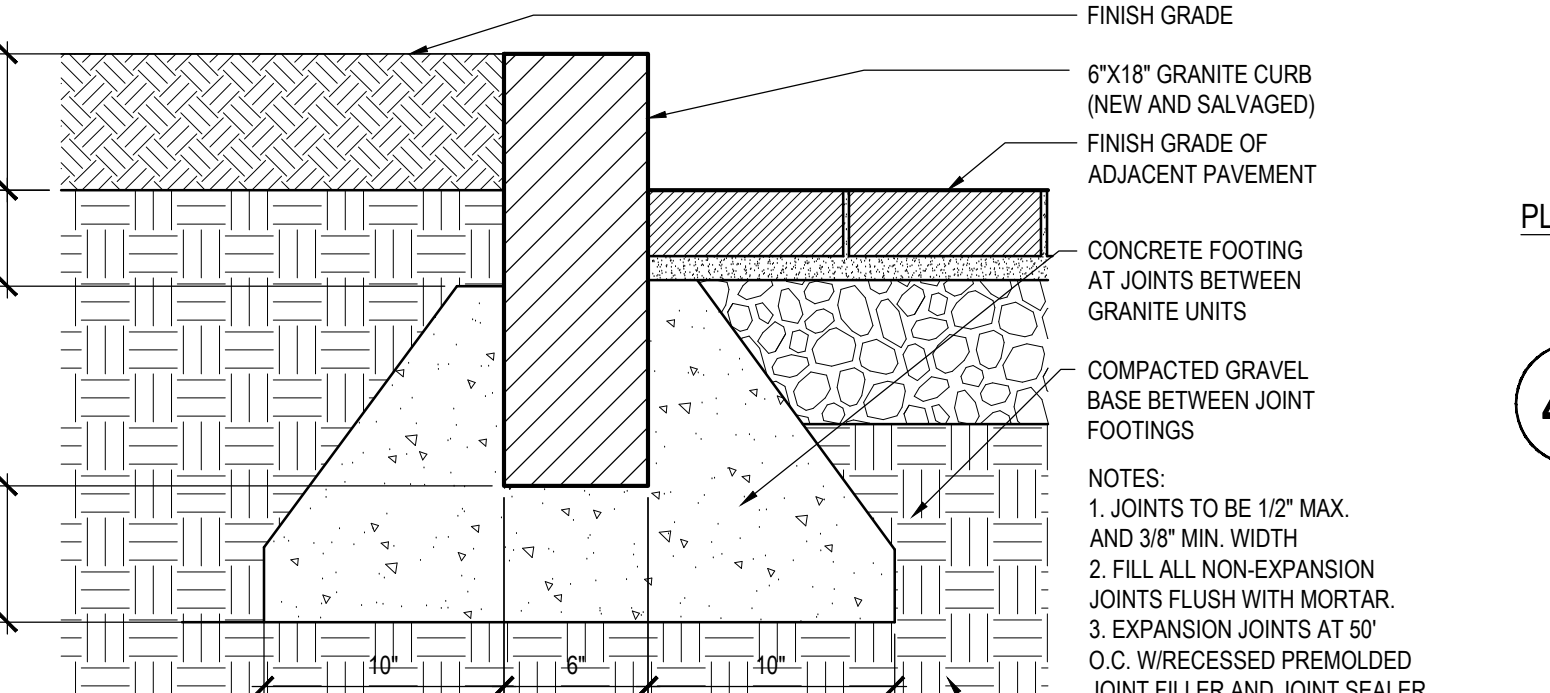
2D DECORATIVE CONCRETE PAVEMENT (REGULAR DUTY)
1 1/2" x 1/2"



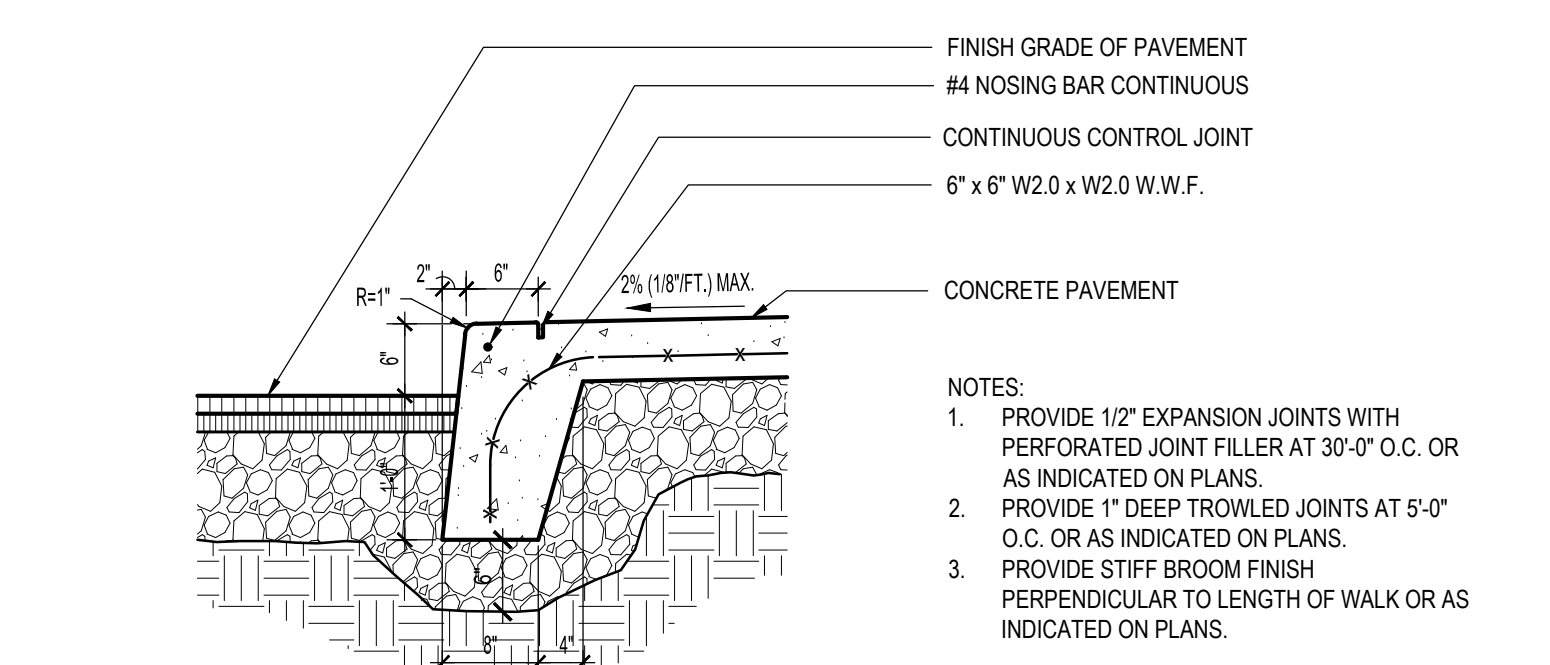
2E DECORATIVE CONCRETE PAVEMENT (HEAVY DUTY)
1 1/2" x 1/2"



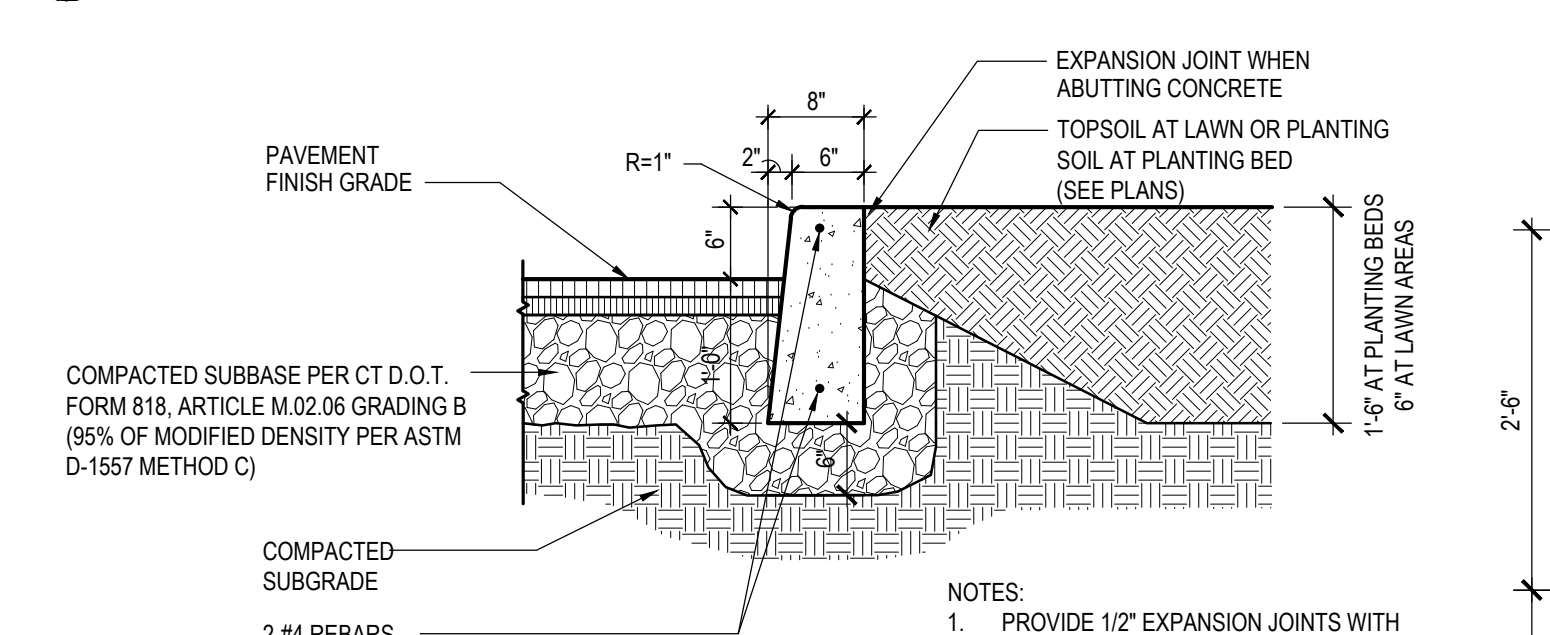
3A RIVER JACK SWALE
1 1/2" x 1/2"



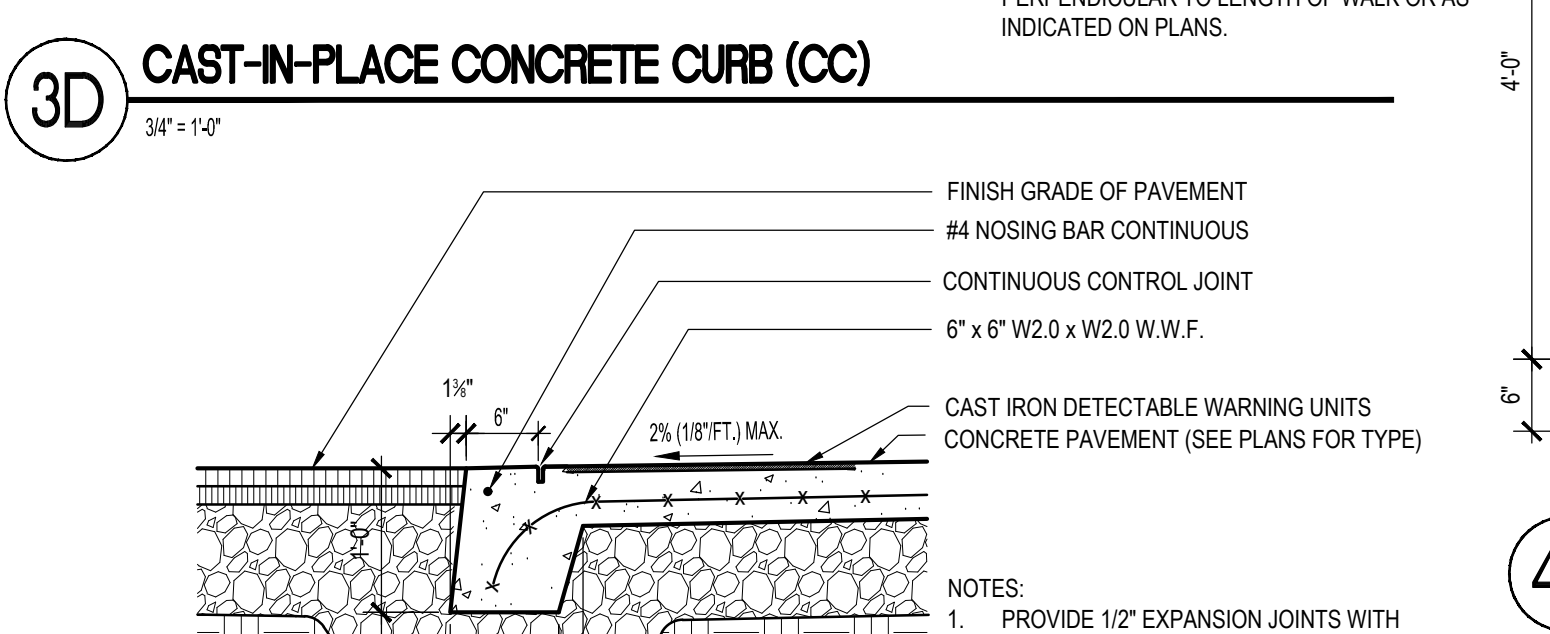
3B VERTICAL GRANITE CURB (GC)
1 1/2" x 1/2"



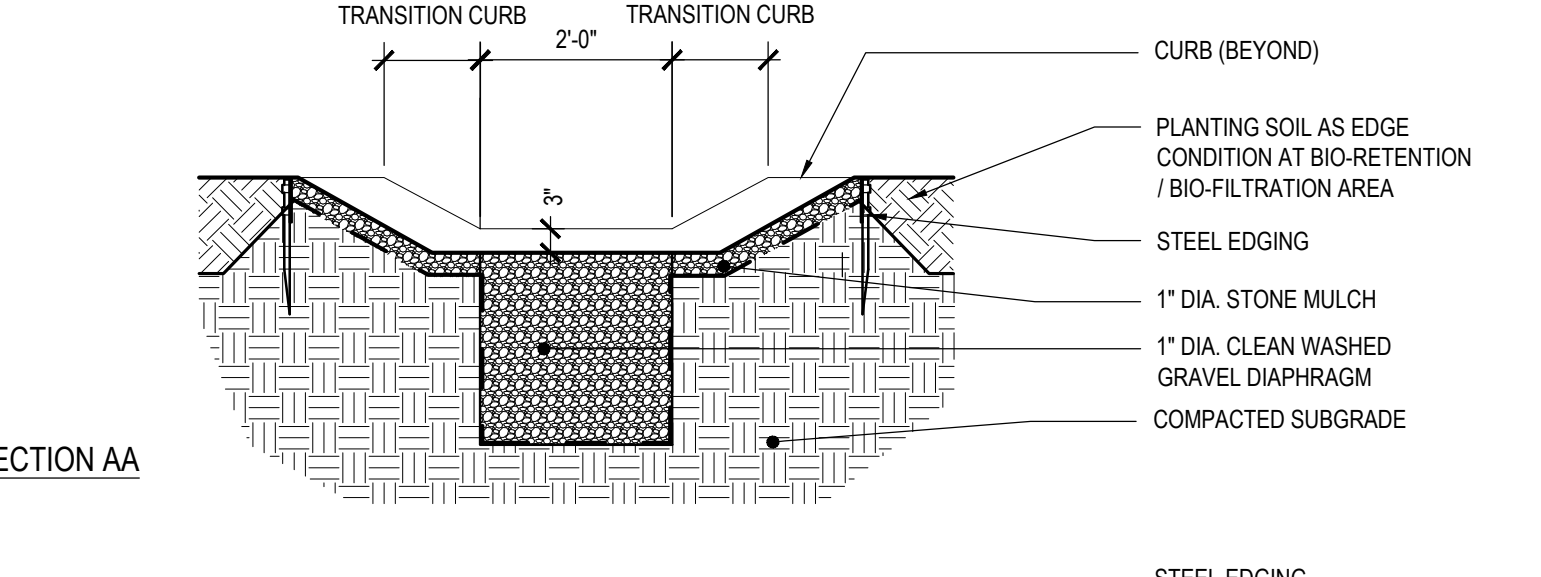
3C INTEGRAL CAST-IN-PLACE CONCRETE CURB (ICC)
3/4\"/>



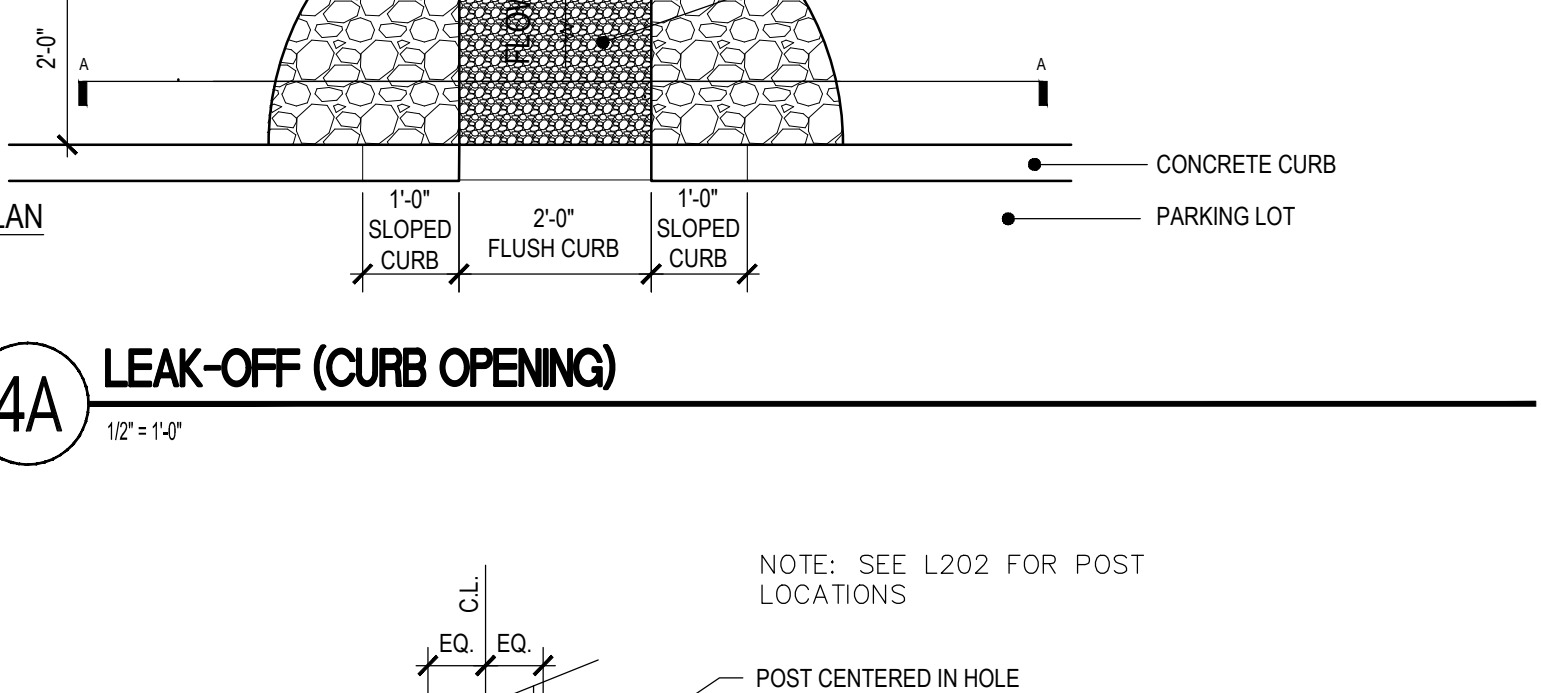
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3/4\"/>



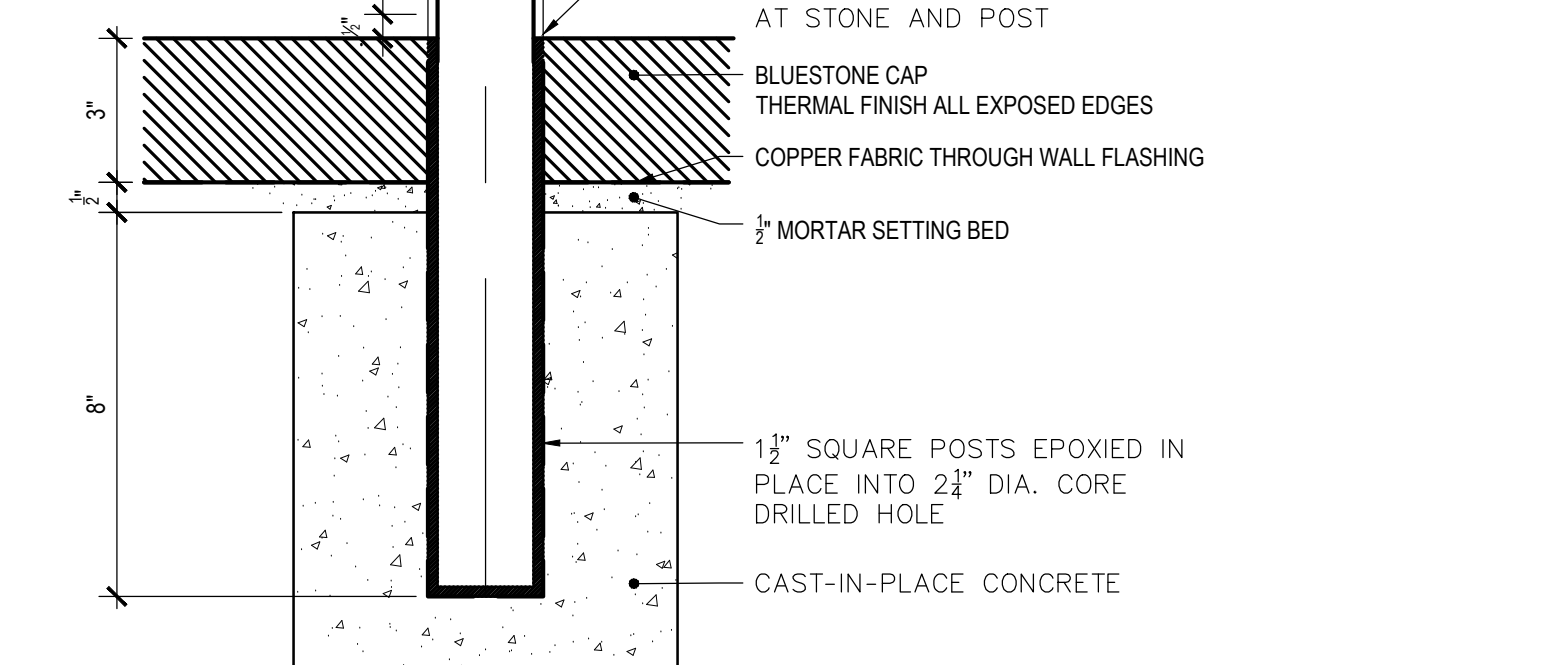
3E FLUSH INTEGRAL CAST-IN-PLACE CONCRETE CURB (FICC)
3/4\"/>



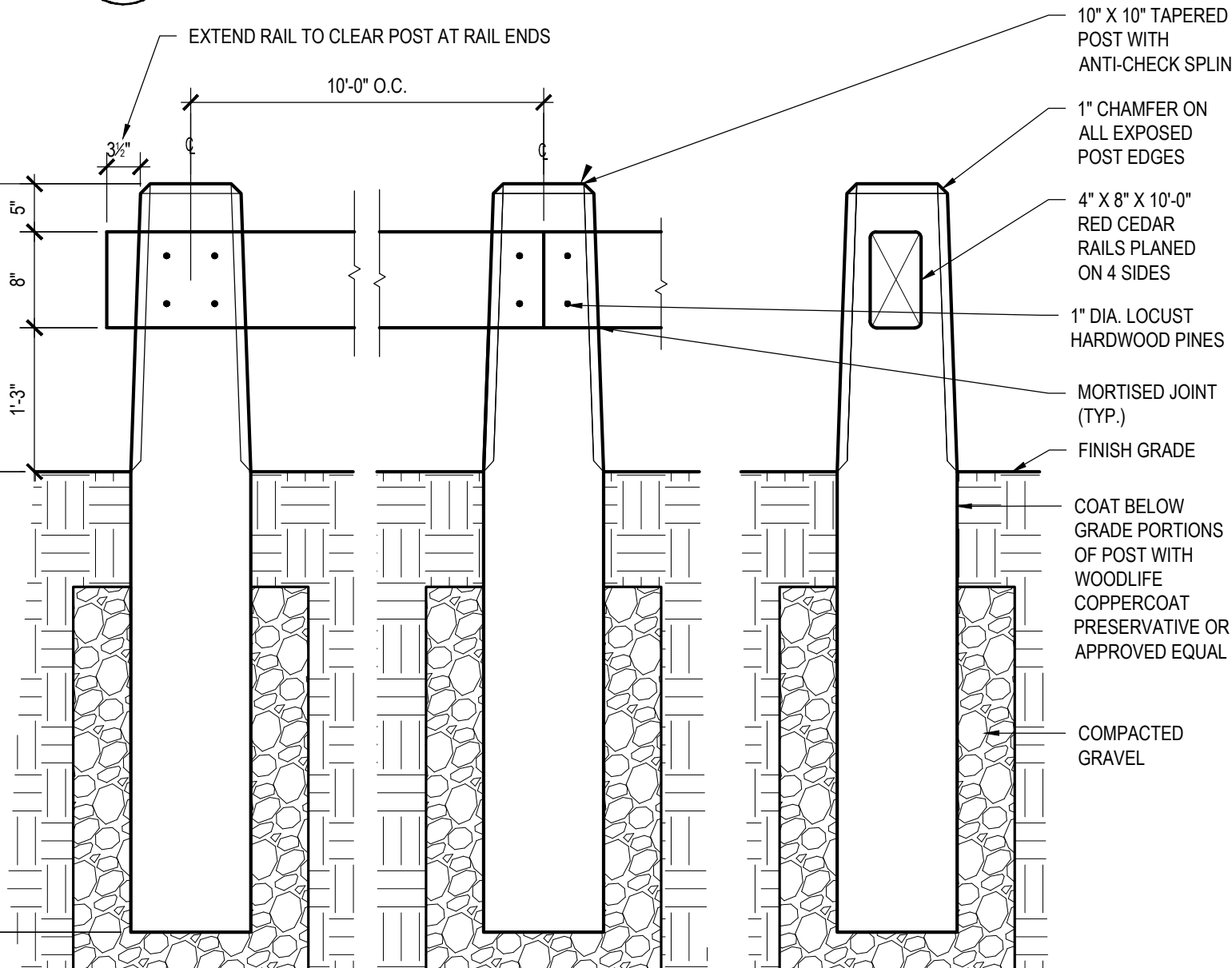
4A LEAK-OFF (CURB OPENING)
1/2\"/>



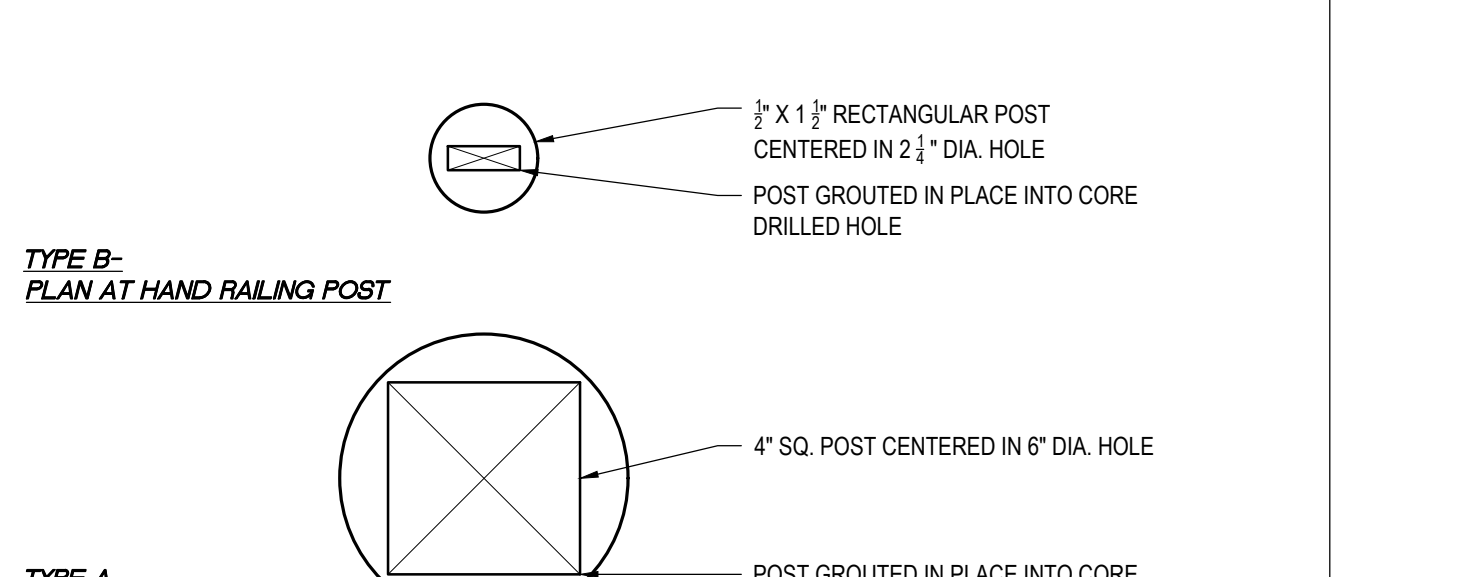
4B POST ATTACHMENT THROUGH STONE WALL CAP
3\"/>



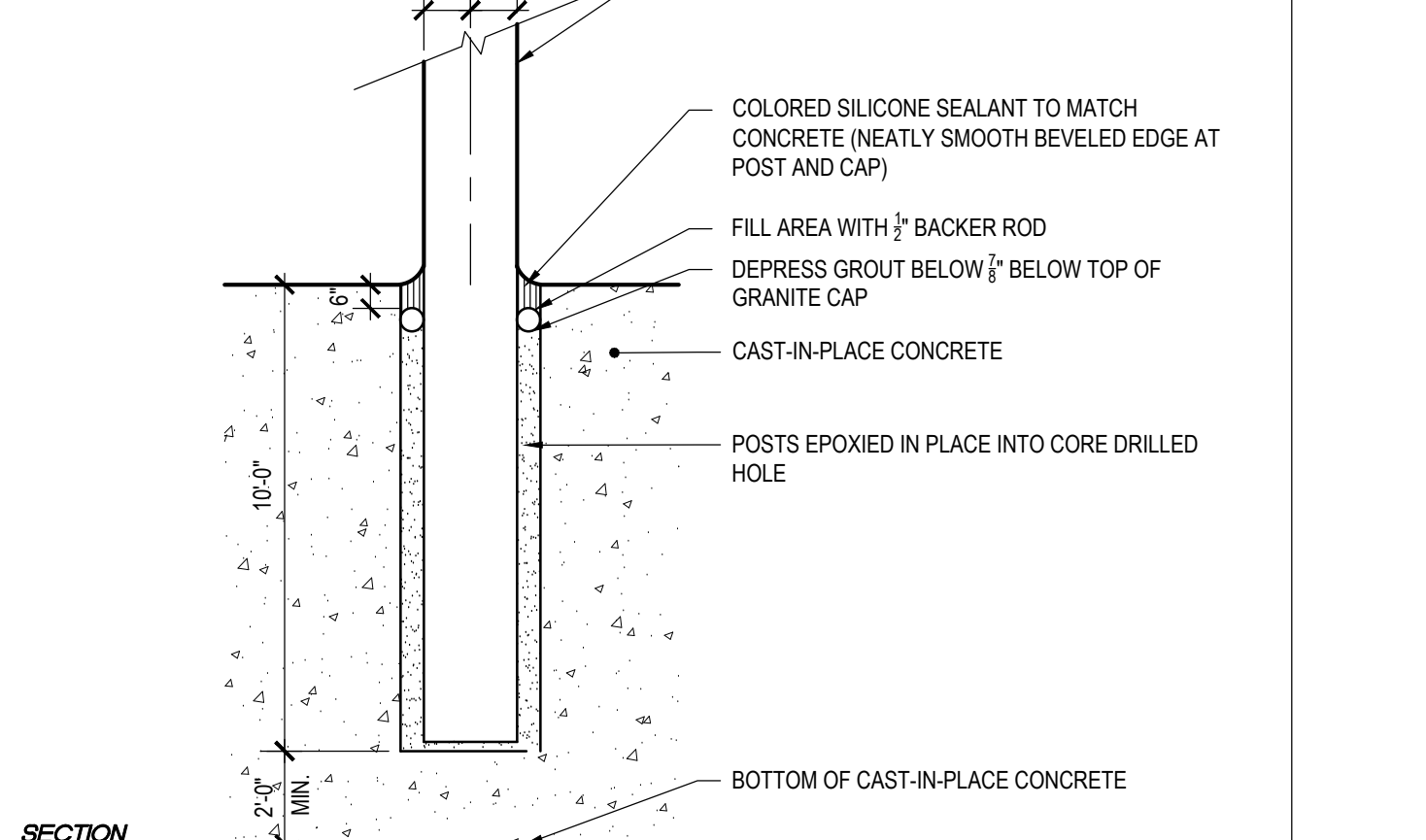
4C TIMBER GUIDE RAIL
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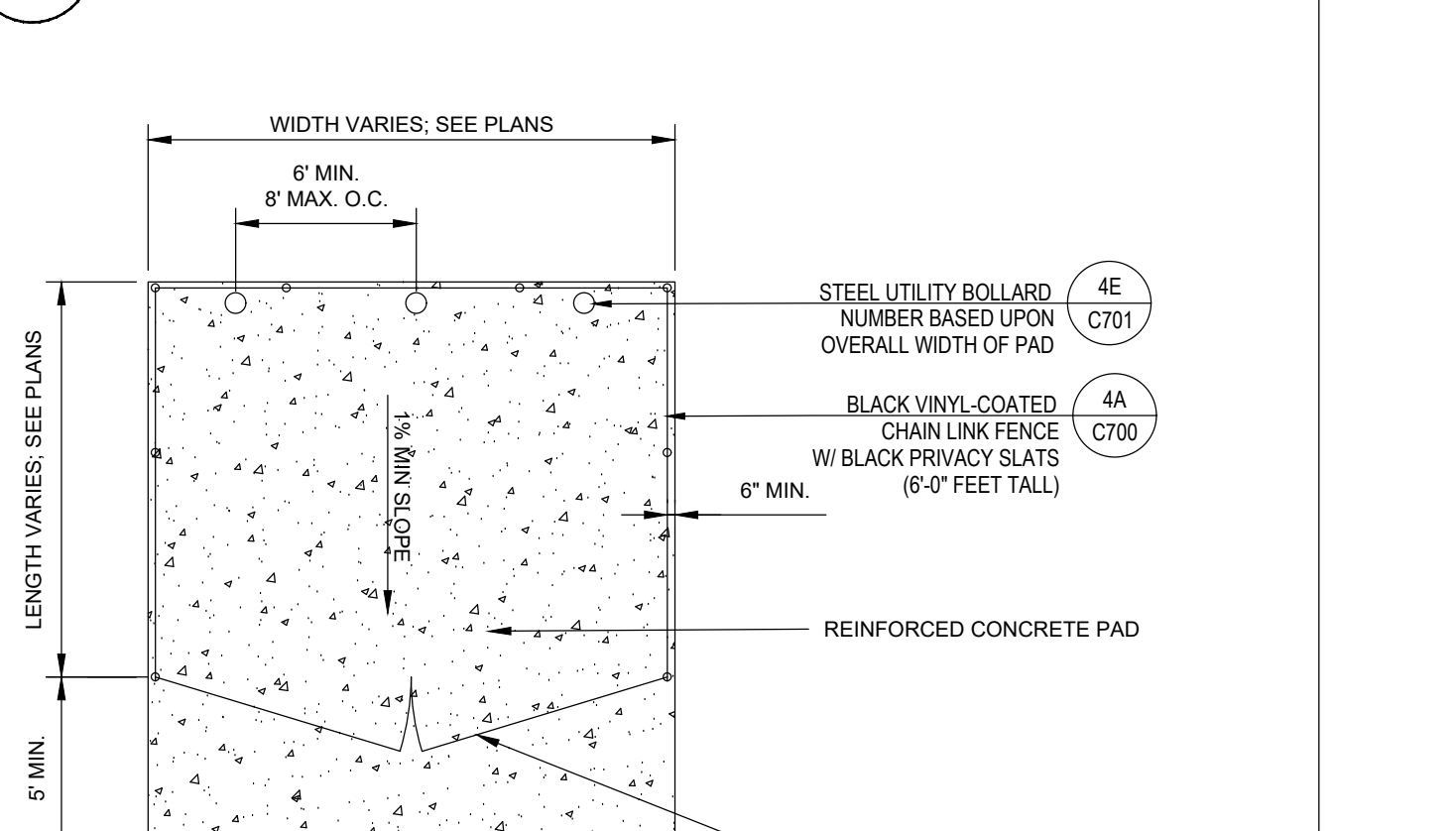
4A VINYL-COATED CHAIN LINK FENCE
3/8\"/>



5A POST ATTACHMENT AT CAST-IN-PLACE CONCRETE
3\"/>



5B DUMPSTER PAD
3\"/>



5C BREAKAWAY TRAFFIC SIGN SUPPORT (TYP.)
NOT TO SCALE

Project Title:
**ALTERATIONS TO:
ACES at Chase**
565 Chase Parkway
Waterbury, Connecticut 06708

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203 230 9007 silverpetrucelli.com

Revision:	Description:	Date:	Revised By:
1	Bulletin #4	01/26/2026	



Drawing Title:
Site Details
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

Date:
AUGUST 12, 2025
Scale:
AS SHOWN
Drawn By:
Project Number:
22.050

C700

Qty	Label	Arrangement	Lumens	Input Watts	LLF	BUD Rating	Description
43	B	Single	331	10.72	0.810	B0-U0-G0	FCL F06C-4W03-UNV-40-3K-3L-FINISH-LD
23	PT2A	Single	4376	52	0.900	B1-U0-G2	SUN VALLEY LBEV-YE-VLED-H-4LED-350mA-WW-120-PT-FINISH / MOUNTED TO 1060-10-320058
1	PT2AS	Single	3219	52	0.900	B1-U0-G1	SUN VALLEY LBEV-YE-VLED-H-4LED-350mA-WW-120-PT-FINISH-HS-PLD / MOUNTED TO 1060-10-320058
1	PT2B	Single	5861	75	0.900	B1-U0-G2	SUN VALLEY LBEV-YE-VLED-H-4LED-350mA-WW-120-PT-FINISH / MOUNTED TO 1060-10-320058
2	PT3A	Single	4365	52	0.900	B1-U0-G2	SUN VALLEY LBEV-YE-VLED-H-4LED-350mA-WW-120-PT-FINISH / MOUNTED TO 1060-10-320058
16	PT3B	Single	5975	75	0.900	B1-U0-G2	SUN VALLEY LBEV-YE-VLED-H-4LED-350mA-WW-120-PT-FINISH / MOUNTED TO 1060-10-320058
2	PT4A	Single	4943	52	0.900	B1-U0-G2	SUN VALLEY LBEV-YE-VLED-H-4LED-350mA-WW-120-PT-FINISH / MOUNTED TO 1060-10-320058
1	PT4AS	Single	3352	52	0.900	B1-U0-G1	SUN VALLEY LBEV-YE-VLED-H-4LED-350mA-WW-120-PT-FINISH-HS-PLD / MOUNTED TO 1060-10-320058
12	PT4B	Single	5535	75	0.900	B1-U0-G2	SUN VALLEY LBEV-YE-VLED-H-4LED-350mA-WW-120-PT-FINISH / MOUNTED TO 1060-10-320058
8	PT5A	Single	4694	52	0.900	B3-U0-G1	SUN VALLEY LBEV-YE-VLED-VSQ-4LED-350mA-WW-120-PT-FINISH / MOUNTED TO 1060-10-320058
1	PT5B	Single	6426	75	0.900	B3-U0-G1	SUN VALLEY LBEV-YE-VLED-VSQ-4LED-350mA-WW-120-PT-FINISH / MOUNTED TO 1060-10-320058
2	S2	Single	7159	55.7	0.900	B2-U0-G2	GARDOO ECF-5-32L-530-WW-G2AR-2-UNV-FINISH / MOUNTED TO SSS-CB-4-11-20-D1-DTS-FINISH
1	S3	Single	7055	55.7	0.900	B1-U0-G2	GARDOO ECF-5-32L-530-WW-G2AR-3-UNV-FINISH / MOUNTED TO SSS-CB-4-11-20-D1-DTS-FINISH
1	S3-4	GROUP	N.A.	N.A.	0.900	N.A.	GARDOO ECF-5-32L-530-WW-G2AR-3-4-UNV-FINISH / MOUNTED TO SSS-CB-4-11-20-D1-DTS-FINISH
3	S5	Single	7284	55.7	0.900	B3-U0-G2	GARDOO ECF-5-32L-530-WW-G2AR-5W-UNV-FINISH / MOUNTED TO SSS-CB-4-11-20-D1-DTS-FINISH
8	S5D	Back-Back	7284	55.7	0.900	B3-U0-G2	GARDOO ECF-5-32L-530-WW-G2AR-5W-UNV-FINISH / MOUNTED TO SSS-CB-4-11-20-D1-DTS-FINISH
2	S5D-8	Back-Back	7284	55.7	0.900	B3-U0-G2	GARDOO ECF-5-32L-530-WW-G2AR-5W-UNV-FINISH / MOUNTED TO SSS-CB-4-11-20-D1-DTS-FINISH ON TOP OF 36IN CONCRETE FOUNDATION
2	SOT	3 @ 90 Degrees	7284	55.7	0.900	B3-U0-G2	GARDOO ECF-5-32L-530-WW-G2AR-5W-UNV-FINISH / MOUNTED TO SSS-CB-4-11-20-D1-DTS-FINISH

Label	Grid Height	Avg	Max	Min	AvgMin	MaxMin
BLDG # BOLLARD WALK	0	1.25	4.9	0.1	12.59	49.00
CALCULATED	0	0.96	6.7	0.0	N.A.	N.A.
BLDG # PARKING LOT		1.16	2.3	0.3	3.87	7.67
BLDG # PARKING LOT		1.40	3.8	0.4	3.50	9.50
BLDG # PARKING LOT		1.12	1.6	0.5	2.24	3.20
BLDG # & 3 PARKING LOT		1.61	3.3	0.4	4.03	8.25
ROADWAY		1.43	3.4	0.2	7.15	17.00

IN ADDITION TO THE LIGHTING SCHEDULE, EACH FIXTURE ON THE PLAN HAS A FIXTURE DESIGNATION



Project Title:
**ALTERATIONS TO:
ACES at Chase**
565 Chase Parkway
Waterbury, Connecticut 06708

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Revision:	Description:	Date:	Revised By:
1	Bulletin #4	01/26/2026	

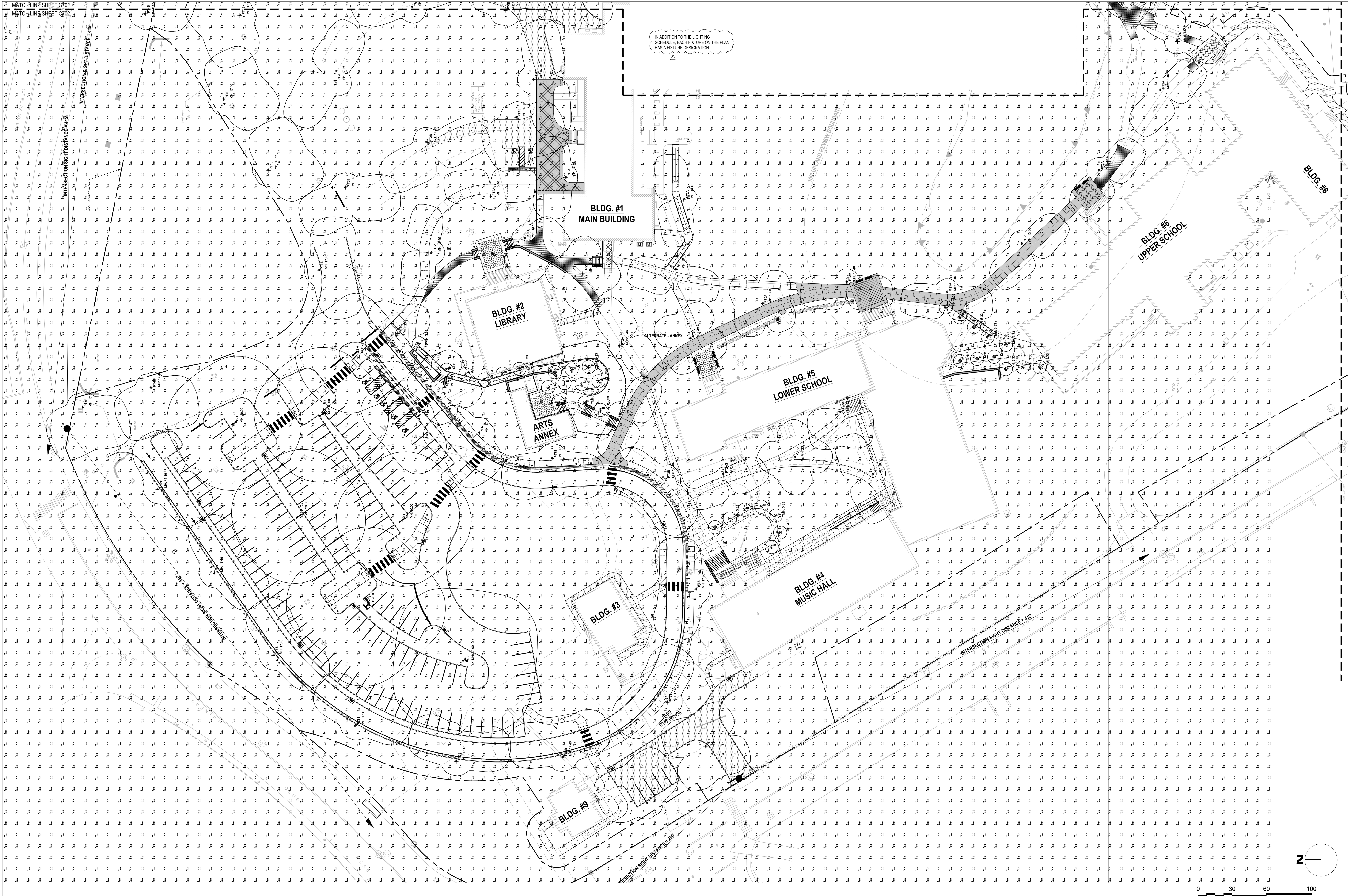


Drawing Title:
Photometric Plan

Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

Date:
AUGUST 12, 2025
Scale:
AS SHOWN
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C901

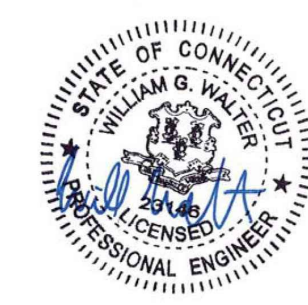


Project Title:
**ALTERATIONS TO:
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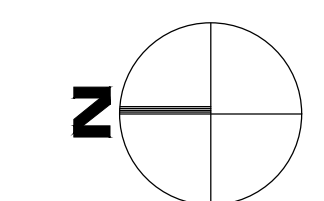
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C902

GENERAL NOTES

GENERAL

Governing Code: 2022 CONNECTICUT STATE BUILDING CODE, (2021 INTERNATIONAL BUILDING CODE)

Design Loads: CITY OF WATERBURY

Minimum Live Loads: CORRIDORS (FIRST): 100 PSF STAIRS: 80 PSF CORRIDORS (ABOVE FIRST): 80 PSF

Roof Load: ROOF SNOW LOAD CRITERIA: Pg = 30 PSF G = 1.0 Ss = 1.1 Q = 1.8 Ft = 23.1 PSF WITH INCREASES FOR SNOW DRIFTING, UNBALANCES AND SLIDING PER SECTION 1608 (2021 IBC). MINIMUM ROOF LIVE/SNOW LOAD = 30 PSF ROOF DEAD LOAD = 20 PSF

Wind Load Criteria: SECTION 1609 (2021 IBC) BASIC DESIGN WIND SPEED, V = 130 MPH ALLOWABLE STRESS DESIGN WIND, V50 = 101 MPH RISK CATEGORY III, IN = 1.0 EXPOSURE CLASSIFICATION 'D' MINIMUM WIND LOAD ON PRIMARY STRUCTURE = 16 PSF WIND LOADS ON SECONDARY ELEMENTS SHALL CONFORM WITH ASCE 7-16

Seismic Load Criteria: AS PER SECTION 1613 (2021 IBC) WITH: RISK CATEGORY = II SEISMIC IMPORTANCE FACTOR, Ie = 1.25 Ss = 0.240g, Si = 0.089g SOIL SITE CLASS = D (ASSUMED) SPECTRAL RESPONSE COEFFICIENTS, Sds = 0.256g, Sd1 = 0.109g SEISMIC DESIGN CATEGORY: B BASIC SEISMIC FORCE-RESISTING SYSTEM: STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC DESIGN BASE SHEAR, V = 0.107W RESPONSE MODIFICATION FACTOR, R = 3 ANALYSIS PROCEDURE USED: SIMPLIFIED ANALYSIS ASSUMED BEARING PRESSURE ON UNDISTURBED SOIL: 3000 PSF (ASSUMED)

1. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THE GENERAL STRUCTURAL NOTES, THE SPECIFICATIONS, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.

2. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE AND TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS WHICH MIGHT BE NECESSARY. SUCH MATERIAL SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER COMPLETION OF THE PROJECT.

THE CONTRACTOR SHALL PROVIDE SHORING CALCULATIONS AND SHORING DRAWINGS, INDICATING THE WORK TO BE PROVIDED, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT.

3. THE STRUCTURE UTILIZES SHEAR WALLS TO PROVIDE LATERAL STABILITY. THEREFORE, TEMPORARY BRACING, GUYS, ETC. MUST BE MAINTAINED UNTIL ALL MASONRY SHEAR WALLS HAVE BEEN ERECTED AND ATTACHED TO STEEL FRAMING.

4. LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO REQUIREMENTS OF OTHER (NON-STRUCTURAL) DISCIPLINES ARE SHOWN FOR BUILDING PURPOSES ONLY. THE CONTRACTOR SHALL OBTAIN PERMITS FOR THE HEATING AND VENTILATING, ELECTRICAL, PLUMBING AND OTHER SUBCONTRACTORS FOR THE FINAL APPROVED SIZE AND LOCATION OF ALL OPENINGS AND BE PROVIDED FOR THEIR TRADE IN ROOFS, FLOORS AND WALLS. WHETHER SHOWN OR NOT SHOWN ON STRUCTURAL DRAWINGS, CONTRACTOR SHALL BE RESPONSIBLE FOR TRANSMISSION OF REQUIREMENTS, LOCATIONS AND DETAILS TO STRUCTURAL SUBCONTRACTORS. EXCESS COST RELATED TO VARIATION IN MECHANICAL REQUIREMENTS ARE NOT TO BE BORNE BY THE OWNER.

5. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.

6. SHOP DRAWINGS ARE TO BE CHECKED BY THE CONTRACTOR AND SUBCONTRACTOR AND BEAR CHECKERS' INITIALS BEFORE BEING SUBMITTED TO THE ARCHITECT FOR APPROVAL.

7. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES AND EXISTING CONDITIONS BEFORE PROCEEDING WITH ANY WORK.

8. ALL SECTIONS AND DETAILS SHALL BE CONSIDERED TYPICAL AND APPLY FOR THE SAME AND SIMILAR SITUATIONS THROUGHOUT THE BUILDING, UNLESS OTHERWISE SPECIFICALLY NOTED.

9. CONTRACTOR SHALL REVIEW ALL ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO SUBMITTING THEIR BID FOR REFERENCE TO ALL NOTES ON ARCHITECTURAL DRAWINGS REFERRING TO ASSESS STRUCTURAL DRAWINGS. IF THE SET OF ELEMENTS AND DETAILING OF MEMBERS IS NOT INDICATED, THE CONTRACTOR SHALL CONTACT THE ARCHITECT TO REQUEST THE MISSING INFORMATION IN PREPARATION OF THEIR BID. THESE REFERENCED ITEMS SHALL BE PART OF THE BASE BID.

10. IN CASES OF DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND SUBMITTED SHOP DRAWINGS, THE CONTRACT DOCUMENTS SHALL GOVERN INSTALLATION OF MATERIALS.

CONTRACTOR'S DELEGATED DESIGN

1. CONTRACTOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CONNECTICUT TO PERFORM THE DESIGN OF THE FOLLOWING:

A. STRUCTURAL STEEL CONNECTIONS, INCLUDING BRACING AND MOMENT FRAMES

B. STAIR FRAMING, STRINGER, TREADS AND LANDING DESIGN INCLUDING HAND AND GUARD RAILS AND ATTACHMENT TO SUPERSTRUCTURE

C. TEMPORARY SHORING OF EXISTING STRUCTURAL MEMBERS

D. M/E/P EQUIPMENT/COMPONENT CURBS, ATTACHMENT TO CURBS AND CURB/EQUIPMENT ATTACHMENT TO EXISTING STRUCTURE

ALL CALCULATIONS SHALL BE SIGNED AND SEALED BY THE ENGINEER AND SUBMITTED FOR REVIEW.

FOUNDATIONS

1. BACKFILLING SHALL BE ACCOMPLISHED TO EQUAL HEIGHTS ON BOTH SIDES OF FOUNDATION WALLS TO PREVENT MOVEMENTS DUE TO UNBALANCED EARTH PRESSURE. WHERE EARTH IS ON ONE SIDE ONLY, BACKFILLING AND COMPACTION SHALL NOT START UNTIL FLOOR SLAB OR ADEQUATE BRACING IS PROVIDED FOR WALL SUPPORT (EXCEPT AT RETAINING WALLS).

2. ALL FOOTINGS ARE TO REST ON UNDISTURBED NATURAL SOIL, AS DEFINED IN THE SPECIFICATIONS, OR CONTROLLED COMPACTED FILL, REGARDLESS OF ELEVATIONS SHOWN ON DRAWINGS. FOOTING BOTTOM ELEVATIONS SHALL NOT BE HIGHER THAN INDICATED ON THE FOUNDATION PLAN, NOR LESS THAN 3'-6" BELOW FINISH GRADES.

3. IF FILL MATERIALS ARE ENCOUNTERED AT FOOTING BEARING ELEVATIONS, ALL FILL MATERIAL SHALL BE EXCAVATED AND DISPOSED OF LEGALLY OFF-SITE. THE OVER EXCAVATION SHALL BE BACKFILLED WITH CONTROLLED COMPACTED FILL TO THE BOTTOM OF FOOTING ELEVATION AS REQUIRED.

4. ALL CONTROLLED COMPACTED BACKFILL UNDER FOOTINGS AND WITHIN THE FOOTPRINT OF THE STRUCTURE SHALL BE COMPACTED TO 95% OF THE MODIFIED OPTIMUM DENSITY.

5. BOTTOM OF FOOTINGS SHALL BE AT LEAST 3'-6" BELOW FINISHED GRADE. PRIOR TO PROCEEDING WITH FOOTING EXCAVATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF FINISH GRADES AND BOTTOM OF EXTERIOR FOOTING ELEVATIONS TO MAINTAIN THE 3'-6" FROST PROTECTION.

6. ALL SOIL SURROUNDING AND UNDER ALL FOOTINGS SHALL BE PROTECTED FROM FREEZING AND FROST ACTION DURING THE COURSE OF CONSTRUCTION.

7. FOOTING BOTTOMS SHALL STEP AT THE RATE OF 1 UNIT VERTICAL TO 2 UNITS HORIZONTAL WITH A MAXIMUM VERTICAL STEP OF 2'-0".

8. WHERE SUBSURFACE PIPING PASSES THROUGH FOUNDATION WALLS, THE TOP OF THE FOOTINGS SHALL BE AT LEAST 8" BELOW THE INVERT ELEVATION OF THE PIPING AND CONDUITS. COORDINATE ALL INVERTS WITH MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, SITE AND SITE UTILITY DRAWINGS.

9. WHERE FOOTINGS ARE IN CLOSE PROXIMITY OF SUBSURFACE PIPING OR CONDUIT, BOTTOM OF FOOTINGS SHALL BE AT LEAST 8" BELOW INVERT ELEVATION OF PIPING OR CONDUITS.

10. KEEP FOUNDATION EXCAVATIONS FREE OF WATER AT ALL TIMES.

11. USE LEAN CONCRETE (f'c=1500) OR CONTROLLED COMPACTED FILL FOR OVER-EXCAVATION OF FOOTINGS.

12. PLACEMENT OF ALL COMPACTED FILL MATERIALS MUST BE UNDER SUPERVISION OF AN APPROVED TESTING LABORATORY (SEE SPECIFICATIONS). CONCRETE FOUNDATIONS SHALL NOT BE PLACED UNTIL SUBGRADE HAS BEEN CHECKED IN PLACE AND APPROVED BY TESTING LABORATORY.

13. EXISTING ON-SITE EXCAVATED MATERIALS SHALL NOT BE ACCEPTABLE BACKFILL MATERIAL BELOW BUILDING FOUNDATIONS, SLABS ON GRADE, OR FOR BACKFILLING OF FOUNDATION WALLS, OR WITHIN 2 FEET OF PAVEMENT GRADES UNLESS APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD.

14. CONTROL JOINT SPACING EXPOSED FOUNDATION RETAINING WALLS SHALL NOT EXCEED 30 FEET. 50% OF HORIZONTAL REINFORCEMENT SHALL EXTEND THROUGH JOINT AND HAVE A CLASS 'B' SPLICE (PER ACI 318). CONTROL JOINTS ARE NOT REQUIRED AT FROST WALLS UNLESS NOTED ON PLAN.

15. WHERE REQUIRED, CONSTRUCTION JOINTS SHALL BE KEVEYED AND OCCUR AT CONTROL JOINT INTERVALS. PROVIDE BENTONITE WATERSTOP FULL HEIGHT IN ALL WALL CONSTRUCTION JOINTS WHERE THERE IS A DIFFERENCE IN GRADE.

16. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF BRICK OR CONCRETE MASONRY BLOCK SHELF ELEVATIONS IN THE FOUNDATION WALLS.

17. PROVIDE CONTINUOUS BENTONITE WATERSTOPS BETWEEN THE TOP OF FOOTING AND BOTTOM OF ALL WALLS WHERE THE SLAB ON GRADE IS BELOW THE FINISH GRADE. PLACE THE WATERSTOP WITH A MINIMUM OF 2" CLEAR FROM THE FACE OF WALL, OR PER THE MANUFACTURER-S WRITTEN INSTALLATION INSTRUCTIONS. ATTACH WATERSTOP TO THE CONCRETE PER THE MANUFACTURER-S WRITTEN INSTALLATION INSTRUCTIONS.

SLAB ON GRADE

1. ALL SLABS ON GRADE SHALL BEAR ON A 15 MIL, CLASS A, VAPOR RETARDER OVER A MINIMUM OF 4 INCHES OF 3/4" COMPACTED PROCESSED AGGREGATE FILL, OVER A MINIMUM OF 6 INCHES OF COMPACTED GRAVEL FILL.

ALL JOINTS OF THE VAPOR RETARDER SHALL BE SEALED WITH TAPE, TURN THE VAPOR BARRIER UP AT ALL TERMINATIONS AGAINST FOUNDATION WALLS AND SEAL JOINT BY CONTINUOUSLY TAPING.

2. IF FILL MATERIALS ARE ENCOUNTERED SLAB SUBGRADE ELEVATIONS, ALL FILL MATERIAL SHALL BE EXCAVATED AND DISPOSED OF LEGALLY OFF-SITE. THE OVER EXCAVATION SHALL BE BACKFILLED WITH CONTROLLED COMPACTED FILL TO THE BOTTOM OF THE SLAB SUBGRADE AS REQUIRED. ALL CONTROLLED COMPACTED BACKFILL UNDER SLABS WITHIN THE FOOTPRINT OF THE STRUCTURE SHALL BE COMPACTED TO 95% OF THE MODIFIED OPTIMUM DENSITY.

3. EXISTING ON-SITE EXCAVATED MATERIALS SHALL NOT BE ACCEPTABLE BACKFILL MATERIAL BELOW BUILDING SLABS ON GRADE UNLESS APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD.

4. CONTROL JOINTS ARE TO BE CREATED IN SLABS ON GRADE. JOINTS SHALL BE SAW CUT 1/8" WIDE AND TO A DEPTH EQUAL TO 1/4 OF THE SLAB THICKNESS. LOCATE JOINTS A MAXIMUM OF 12'-0" ON CENTER IN EACH DIRECTION, IN ADDITION TO THOSE LOCATIONS INDICATED ON PLAN.

5. CONSTRUCTION JOINTS AS REQUIRED SHALL BE KEVEYED AND DOWELED AND LOCATED AT INTERVALS OF A MAXIMUM OF 75 FEET ON CENTER.

6. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND SIZE OF DEPRESSED AREAS IN CONCRETE SLABS AND FOR CONCRETE PADS. MAINTAIN FULL SLAB THICKNESS IN DEPRESSED AREAS, UNLESS OTHERWISE SHOWN.

7. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF ALL MASONRY WALLS FOR WHICH NO FOOTING IS SHOWN. SEE DETAILS FOR SLAB REINFORCING REQUIREMENTS AT ALL WALL LOCATIONS.

8. CONTRACTOR SHALL CONSOLIDATE ALL SLAB CONCRETE USING VIBRATIONAL METHODS IN CONFORMANCE WITH ACI 309, GUIDE FOR CONSOLIDATION OF CONCRETE.

CONCRETE

CONCRETE SHALL MEET THE REQUIREMENTS OF THE EXPOSURE CATEGORY LISTED BELOW PER ACI 318 CHAPTER 19, AND SHALL HAVE THE MAXIMUM WATER TO CEMENT RATIO, TARGET AIR CONTENT AND DEVELOP STRENGTH IN 28 DAYS AS FOLLOWS:

LOCATION EXPOSURE CATEGORY STRENGTH (PSI) MAXIMUM WATER TO CEMENT RATIO TARGET AIR CONTENT

FOUNDATIONS F2 4500 0.45 6%

SLABS ON GRADE F3 3000 N/A N/A

SLABS ON METAL DECK F0 3500 N/A N/A

* INCLUDES ANY EXTERIOR CONCRETE PADS, SLABS, ETC. NOTED ON THE STRUCTURAL DRAWINGS. REFER TO SITE CONCRETE SPECIFICATIONS FOR ALL OTHER EXTERIOR CONCRETE REQUIREMENTS.

1. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS MUST FOLLOW ACI 318-14.

2. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60.

3. NO TACK WELDING OF REINFORCING WILL BE PERMITTED.

4. UNLESS NOTED OTHERWISE, ALL LAP SPLICES SHALL BE CLASS B, IN ACCORDANCE WITH ACI 318-14.

5. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.

6. WIRE MESH REINFORCEMENT MUST LAP ONE MESH SIZE AT SIDES AND ENDS AND BE WIRED TOGETHER.

7. WELDED WIRE FABRIC SIDE LAPS SHALL BE STAGGERED TO AVOID FOUR MESH THICKNESS AT CONJOINDING END LAP AND SIDE LAP LOCATION.

8. NO CALCIUM CHLORIDE OR ADMIXTURES CONTAINING MORE THAN 0.1% CHLORIDE BY WEIGHT OF ADMIXTURE SHALL BE USED IN THE CONCRETE.

9. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE AT LEAST 3'-6" BELOW FINISHED GRADE. PRIOR TO PROCEEDING WITH FOOTING FORMWORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF BOTTOM OF EXTERIOR FOOTING ELEVATIONS WITH THE FINISH GRADES AND MAINTAINING THE 3'-6" FROST PROTECTION. WHERE SUBSURFACE PIPING PASSES THROUGH FOUNDATION WALLS, THE TOP OF FOOTINGS SHALL BE AT LEAST 8" BELOW THE INVERT ELEVATION OF THE PIPING AND CONDUITS. COORDINATE ALL INVERTS WITH MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, SITE AND SITE UTILITY DRAWINGS. PIPING OR CONDUITS SHALL NOT PASS THROUGH COLUMNS OR PIERS.

10. CONTRACTOR SHALL ANTICIPATE DEFLECTION OF STEEL MEMBERS AT SUPPORTED ELEVATED SLABS OF 1 INCH MAXIMUM, AND PROVIDE ADDITIONAL CONCRETE AS REQUIRED.

11. ALL HORIZONTAL STEEL SHOWN IN SECTIONS AND DETAILS SHALL BE CONTINUOUS, UNLESS OTHERWISE NOTED. ALL LAPS SHALL BE CLASS ABO SPLICES IN ACCORDANCE WITH ACI 318.

12. AT INTERSECTIONS OF REINFORCED CONCRETE WALLS, PROVIDE CORNER DOWELS OF SAME SIZE AND AT THE SAME SPACING AS THE SMALLER HORIZONTAL REINFORCING. DOWELS SHALL HAVE A CLASS B LAP WITH HORIZONTAL REINFORCING IN EACH DIRECTION.

13. PROVIDE DRILLED AND EPOXIED DOWELS OF SAME SIZE TO MATCH NEW REINFORCING WHERE NEW CONSTRUCTION ABUTS EXISTING CONCRETE CONSTRUCTION. LENGTH SHALL BE THE REQUIRED EMBEDMENT DEPTH PER THE ANCHOR BOLT/DOY RY MANUFACTURER PLUS A CLASS B LAP SPLICE FOR THE SIZE OF BAR.

14. PROVIDE CORROSION RESISTANT ACCESSORIES IN ALL EXPOSED CONSTRUCTION.

15. ALL KEYS IN CONCRETE WALLS SHALL BE 2 X 4 UNLESS NOTED OTHERWISE.

16. SEE ARCHITECTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, SITE, SITE UTILITY AND EQUIPMENT DRAWINGS FOR CONCRETE PADS, SLEEVES, OPENINGS, RECESSES, AND BUILT-IN WORK IN CONCRETE ELEMENTS.

17. THE CONTRACTOR SHALL FURNISH, LOCATE AND INSTALL ALL ACCESSORIES FOR PROPER ANCHORAGE OF WOOD AND METAL FRAMING, WOOD BLOCKING, BRICK WORK AND MASONRY UNITS. HE SHALL BE SOLELY RESPONSIBLE FOR FURNISHING, LOCATING AND ENSURING PROPER QUANTITY OF ALL FASTENING DEVICES.

18. ALL CONCRETE TO REMAIN EXPOSED TO VIEW SHALL RECEIVE A SMOOTH RUBBED FINISH (SEE SPECIFICATIONS).

19. ALL CONCRETE CORNERS WITH BOTH SIDES EXPOSED TO VIEW SHALL BE SQUARE UNLESS OTHERWISE SHOWN OR NOTED. THE EDGE SHALL BE RUBBED, PRODUCING A SMOOTH, DENSE SURFACE WITHOUT PITS OR IRREGULARITIES.

20. PROVIDE CONTINUOUS VERTICAL DOWEL SLOTS AT 16 INCH CENTERS HORIZONTALLY FOR ALL CONCRETE WALLS ABUTTING A MASONRY WALL OR MASONRY VENEER, UNLESS OTHERWISE NOTED.

21. PROVIDE CLEARANCE FROM EDGE OF REINFORCING TO EDGE OF CONCRETE AS FOLLOWS:

FOOTINGS (AGAINST EARTH) 3"

BEAMS (LONGITUDINAL REINFORCING) 2"

COLUMNS AND PIERS (VERTICAL REINFORCING) 1 1/2"

WALLS, EXTERIOR FACE (#3 AND SMALLER) 2"

WALLS, EXTERIOR FACE (#4 AND LARGER) 2"

SLABS (INTERIOR) 3/4"

SLABS (EXTERIOR) 1 1/2"

SLABS ON GRADE (W.I.F.) 1/4 X THE THICK TOP SURFACE

22. PROVIDE 2-#4 BARS IN TOP OF ALL CONCRETE BEAMS WITH STIRRUPS THAT DO NOT HAVE ANY OTHER TOP STEEL SPECIFIED.

23. NO SLEEVES, WELDS OR INSERTS SHALL BE PLACED IN SLABS WITHIN 2'-0" OF THE EDGE OF COLUMNS, OR ANYWHERE IN BEAMS, COLUMNS OR JOISTS WITHOUT APPROVAL OF THE ARCHITECT.

24. PROVIDE LENGTH OF BEARING ON MASONRY WALLS AS FOLLOWS, UNLESS NOTED OTHERWISE:

REINFORCED CONCRETE BEAMS: 8 INCHES

SOLID CONCRETE SLABS: 4 INCHES

25. CONCRETE COLUMNS SHALL BE PLACED AT LEAST TWO HOURS IN ADVANCE OF BEAMS, JOISTS AND SLABS.

26. JOINTS NOT INDICATED ON THE DRAWINGS SHALL BE MADE SO AS TO AT LEAST IMPAIR THE STRENGTH OF THE STRUCTURE. THERE SHALL BE NO HORIZONTAL JOINTS IN BEAMS OR SUSPENDED SLABS.

27. PROVIDE THE FOLLOWING AT OPENINGS IN ALL CONCRETE WALLS AND FRAMED SLABS, UNLESS OTHERWISE INDICATED:

1-#5 AT EACH FACE ON EACH SIDE OF OPENING, EXTENDING 2'-0" BEYOND OPENING.

1-#5 X 4'-0" LONG AT EACH FACE DIAGONALLY AT EACH CORNER.

28. REINFORCING STEEL SHOP DRAWINGS SHALL INDICATE THE SEQUENCE IN WHICH LAYERS OF CROSSING REINFORCING SHOULD BE PLACED, IN ORDER TO PRODUCE THE CORRECT OUTERMOST LAYER AS INDICATED ON THE DRAWINGS.

29. SHOP DRAWINGS SHALL INDICATE LOCATIONS OF ALL WALL CONTROL AND CONSTRUCTION JOINTS.

30. ALL REINFORCING, THREADED RODS OR BOLTS INDICATED TO BE DRILLED AND EPOXIED SHALL UTILIZE HILTI HIT-HY200 ADHESIVE OR APPROVED EQUAL.

25. CONCRETE COLUMNS SHALL BE PLACED AT LEAST TWO HOURS IN ADVANCE OF BEAMS, JOISTS AND SLABS.

26. JOINTS NOT INDICATED ON THE DRAWINGS SHALL BE MADE SO AS TO AT LEAST IMPAIR THE STRENGTH OF THE STRUCTURE. THERE SHALL BE NO HORIZONTAL JOINTS IN BEAMS OR SUSPENDED SLABS.

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STRUCTURAL STEEL

MATERIALS:

STRUCTURAL STEEL ASTM A 36

ALL W SHAPES ASTM A 992, GR50

STRUCTURAL STEEL TURNING ASTM A588, GRADE B

STRUCTURAL STEEL PIPE ASTM A525

BOLTS ASTM F1554, GRADE 36

ANCHOR BOLTS ASTM F70

WELDING ELECTRODE ASTM A706, GRADE 60

WELDABLE REBAR

1. DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION, AISC 360-10. ALL RECTIONS SHOWN ON PLAN HAVE BEEN DEVELOPED USING ALLOWABLE STRESS DESIGN.

2. WELDING SHALL CONFORM TO THE CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION OF THE AMERICAN WELDING SOCIETY. ALL WELDING SHALL BE DONE BY A CERTIFIED WELDER.

3. ALL LOOSE BEAM LINTELS SHALL HAVE 8" MINIMUM BEARING. SEE ARCHITECTURAL JAMB DETAILS FOR LENGTHS.

4. FOR MISCELLANEOUS STEEL NOT SPECIFICALLY DETAILED ON STRUCTURAL DRAWINGS, REFER TO ARCHITECTURAL DRAWINGS.

5. PROVIDE LEVELING NUTS ON ALL COLUMN BASE PLATES WITH FOUR (4) ANCHOR BOLTS AND PROVIDE 1 1/2" MINIMUM, 5000 PSI NON-SHRINK GROUT. PROVIDE TACK WELDED NUT AT THE BOTTOM OF THE ANCHOR BOLT EMBEDDED IN CONCRETE.

6. CONNECTIONS:

CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR AND CONSTRUCTED IN ACCORDANCE WITH AISC 360-10. CONNECTIONS SHALL BE PROVIDED TO CONFORM TO THE REQUIREMENTS OF SIMPLE CONNECTIONS UNLESS OTHERWISE DETAILED.

CONNECTIONS SHALL BE DESIGNED TO ACCOMMODATE THE REACTIONS SHOWN ON THE CONTRACT DOCUMENTS. IF NO REACTIONS ARE GIVEN THEN PROVIDE CONNECTION FOR ONE HALF THE ALLOWABLE UNIFORM LOAD BEAM TABLES, PER THE AISC MANUAL, FOR THE SPAN INDICATED ON THE DRAWINGS. MINIMUM CONNECTION DESIGN LOAD IS 6 KIPS.

MINIMUM CONNECTION ANGLE THICKNESS SHALL BE 5/16". MINIMUM SHEAR PLATE IS 3/8".

IN ADDITION TO PROVIDING ADEQUATE BOLTS TO ACCOMMODATE REACTIONS, THE FOLLOWING MINIMUM NUMBER OF BOLT ROWS SHALL BE USED:

MEMBER DEPTH MINIMUM BOLT ROWS

10' or Less 2

12' to 14' 3

16' to 18' 4

20' to 24' 5

24' to 28' 6

Over 30' 7

CONNECTIONS SHALL BE MADE USING 3/4" DIAMETER ASTM A325 BOLTS (SNUG TIGHT OR SLIP CRITICAL) OR WELDS, UNLESS NOTED OTHERWISE. IF TENSION CONTROL BOLTS ARE USED, CONNECTIONS SHALL BE DESIGNED FOR SLIP CRITICAL BOLT ALLOWABLE LOAD VALUES USING CLASS A PAVING SURFACE.

USE LARGER OF 1/4" FILLET WELDS OR MINIMUM SIZE PER AISC REQUIREMENTS WHERE NO WELD SIZE IS SHOWN ON DRAWINGS.

WELDS IN EXCESS OF 24" IN LENGTH SHALL BE 5" STITCH WELDS AT 8' ON CENTERS, UNLESS SPECIFICALLY SHOWN ON DRAWINGS TO BE CONTINUOUS.

MOMENT CONNECTIONS SHALL BE DESIGNED TO DEVELOP FULL MOMENT CAPACITY OF THE ELEMENTS CONNECTED, UNLESS SPECIFIC MOMENT IS INDICATED ON THE DRAWINGS.

7. NO WELDING OR FINAL BOLTING SHALL BE DONE UNTIL AS MUCH OF THE STRUCTURE THAT WILL BE STIFFENED THEREBY HAS BEEN PROPERLY ALIGNED.

8. SEQUENCE OF PLACING WELDS SHALL BE SUCH AS TO AVOID DISTORTION OF MEMBERS.

9. SUBSTITUTION OF STRUCTURAL STEEL MEMBERS IS PERMITTED TO FACILITATE DELIVERY AT NO ADDITIONAL COST TO THE OWNER. SUBSTITUTED MEMBERS MUST BE OF THE SAME NOMINAL DEPTH AS THE MEMBER ORIGINALLY INDICATED AND HAVE A WEIGHT GREATER THAN THAT INDICATED. BEAM FLANGES MUST NOT INFRINGE ON ADJACENT ARCHITECTURAL ELEMENTS.

10. ALL STRUCTURAL STEEL BEAMS AND COLUMNS ADJACENT TO MASONRY SHALL HAVE THE FOLLOWING MASONRY ANCHORAGE:

16 GAGE GALVANIZED CHANNEL SLOTS (DUR-O-WAL, INC. DIA 9/16) WELDED TO COLUMNS AND BEAMS WITH 1/4" GALVANIZED STRAP ANCHORS (DUR-O-WAL, INC. DIA 9/16) SPACED 1'-4" O.C. AT COLUMNS AND 1'-4" AT BEAMS (UNLESS OTHERWISE NOTED). INSTALL PER MANUFACTURER'S SPECIFICATIONS.

12. PROVIDE DEFORMED BAR ANCHORS ON THE TOP OF ALL BEAMS SUPPORTING CONCRETE MASONRY UNIT WALLS OR MULTI-WYTHE BRICK WALLS. THE ANCHORS SHALL BE WELDED AT 2' ON CENTER AND SHALL BE THE SAME SIZE AS THE WALL REINFORCING. DEFORMED BAR ANCHORS SHALL BE PLACED BY A TIMED STUD WELDING MACHINE.

13. STEEL MEMBERS SHOWN CONNECTED TO MASONRY WITH EXPANSION ANCHORS SHALL HAVE 3/4" DIAMETER EXPANSION ANCHORS AT 2'-0" ON CENTERS IN VERTICALLY SLOTTED HOLES, UNLESS OTHERWISE INDICATED.

14. BEAMS BEARING ON MASONRY SHALL HAVE ANGLE WALL ANCHORS WELDED TO THE BEAM, AS DETAILLED IN THE A.I.S.C. MANUAL OF STEEL CONSTRUCTION.

15. PROVIDE 8" X 8" X 5/8" BEARING PLATES FOR ALL WALL BEARING BEAMS UNLESS NOTED OTHERWISE. ALL PLATES SHALL HAVE A MINIMUM OF (2'-3/4" DIAMETER X 5' LONG WELDED STUDS ON THE BOTTOM TO SET IN CONCRETE OR MASONRY WALLS.

16. SPRAY-ON FIREPROOFING SHALL BE APPLIED TO ALL STRUCTURAL STEEL TO ACHIEVE REQUIRED FIRE RATING, UNLESS OTHER PROTECTIVE COATING IS INDICATED ON THE ARCHITECTURAL DRAWINGS.

21. ALL STEEL MEMBERS EXPOSED TO WEATHER OR IN CONTACT WITH PRESSURE TREATED LUMBER OR WOOD PRODUCTS IN THE COMPLETED CONSTRUCTION SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.

22. PROVIDE BUTASTATIC PROTECTION COATING FOR ALL STRUCTURAL STEEL BELOW GRADE.

23. EXISTING STEEL SURFACES TO RECEIVE FIELD WELDS SHALL BE THOROUGHLY CLEANED UNTIL FREE FROM PAINT, RUST, GREASE, ETC.

24. PROVIDE 1/4" CLOSURE PLATES WITH FULL SELL WELDS FOR ALL TUBE OR PIPE HOLLOW STEEL SECTIONS, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

25. PROVIDE AN ELEVATOR HOIST BEAM AT EACH ELEVATOR. THE BEAM SHALL BE A W8X24 MINIMUM. COORDINATE WITH THE ARCHITECTURAL DRAWINGS. THE BEARING PLATE ON MASONRY WALLS SHALL BE A PLATE 3/4"X8"X12" MINIMUM WITH (2'-3/4" DIAMETER ANCHOR BOLTS SET INTO GROUTED MASONRY.

26. CONTRACTOR IS RESPONSIBLE FOR PROVIDING NEW STEEL FRAMES, AS DETAILD ON THE STRUCTURAL DRAWINGS, AT ALL NEW FLOOR AND ROOF OPENINGS REQUIRED BY ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS IN BOTH NEW AND EXISTING STRUCTURES. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE CONTRACT DOCUMENTS AND INCLUDE THESE FRAMES IN THEIR BID PRICE. THESE NEW STEEL FRAMES FOR OPENINGS ARE IN ADDITION TO THE FRAMES SPECIFICALLY INDICATED ON THE DRAWINGS FOR SPECIFIC SUPPORT CONDITIONS.

27. CONSTRUCTION MANAGER IS RESPONSIBLE TO COORDINATE THE MECHANICAL CURB DIMENSIONS FOR MECHANICAL EQUIPMENT BETWEEN THE MECHANICAL CONTRACTOR AND STRUCTURAL STEEL FABRICATOR. THE STRUCTURAL STEEL SHALL BE LOCATED ON THE CENTERLINE OF MECHANICAL CURB.

28. STEEL CONTRACTOR SHALL PROVIDE SKETCHES FOR ALL CORRECTIVE FIELD WORK SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL. ALL SKETCHES SHALL BE SIGNED AND SEALED BY THE STEEL FABRICATOR'S CONNECTIONS ENGINEER.

29. ALL THREADED RODS OR BOLTS INDICATED TO BE DRILLED AND EPOXIED SHALL UTILIZE HILTI HIT-HY200 ADHESIVE OR APPROVED EQUAL.

METAL ROOF DECK

1. MATERIALS:

TYPICAL METAL DECK SHALL BE 1 1/2" GALVANIZED WIDE RIB TYPE WITH NESTING SIDE SEAMS OF GAGE INDICATED ON THE DRAWINGS.

DECK SHALL CONFORM TO "BASIC DESIGN SPECIFICATION" AS ADOPTED BY THE STEEL DECK INSTITUTE.

METAL ROOF DECK SHALL BE FURNISHED IN SHEET LENGTHS SUFFICIENT TO EXTEND OVER FOUR SUPPORTS (3 SPANS) WHEREVER POSSIBLE.

2. ATTACHMENT:

METAL DECK SHALL BE POWER ACTUATED FASTENED TO SUPPORTING STEEL WITH HILTI X-EDN19 OR EQUAL SPACED NOT MORE THAN 12" ON CENTER WITH A 36-4 FASTENING PATTERN, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

SCREEN METAL ROOF DECK TO STEEL MEMBERS PARALLEL TO SPAN OF DECK USING HILTI X-EDN19 FASTENERS SPACED AT 12" ON CENTER. WELDING OF THE ROOF DECK IS PROHIBITED.

INTERMEDIATE SIDE CONNECTIONS SHALL BE MADE WITH #10 SELF TAPPING SCREWS. THE MAXIMUM SPACING OF SIDE LAP CONNECTIONS SHALL BE 1'-6", WITH A MINIMUM OF (4) SCREWS PER SPAN. FOR 2' DECK USE A MINIMUM OF (8) SCREWS PER SPAN.

LONG SPAN ROOF DECK SHALL HAVE BUTTON PUNCHED SIDELAPS SPACED AT 3'-0" MAX.

CONCRETE MASONRY

MATERIALS:

HOLLOW LOAD BEARING UNITS: ASTM C 90 (NET AREA COMPRESSIVE STRENGTH OF CMU UNIT -- 2000PSI)

MORTAR: (TYPE S) ASTM C 770

CONCRETE STRENGTH OF MASONRY ASSEMBLY: f'm = 2000 PSI)

GROUT FOR REINFORCED MASONRY: ASTM C 476 (COMPRESSIVE STRENGTH AT 28 DAYS = 2500 PSI)

GROUT FOR REINFORCED MASONRY: ASTM C 476

SOLID LOAD BEARING UNITS: (GRADE N-H) ASTM C 145

CONCRETE BRICK: (GRADE I-H) ASTM C 335

1. WALLS INDICATED ON STRUCTURAL DRAWINGS ARE FOR REFERENCE ONLY. SEE ARCHITECTURAL DRAWINGS FOR LOCATION, THICKNESS AND COMPOSITION OF MASONRY WALLS.

2. ALL MASONRY WALLS SHALL CONTAIN THE FOLLOWING REINFORCING:

1-#5 VERTICAL BAR AT 32" ON CENTER.

2-#6 VERTICAL BARS AT BOTH SIDES OF DOOR, WINDOW AND MECHANICAL OPENINGS.

2-#5 HORIZONTAL BAR MINIMUM ABOVE AND BELOW ALL WINDOW AND MECHANICAL OPENINGS AND ABOVE ALL DOOR OPENINGS. PROVIDE ADDITIONAL BARS ABOVE DOORS, WINDOWS AND MECHANICAL OPENINGS AS REQUIRED IN ACCORDANCE WITH UNTEL SCHEDULE ON ARCHITECTURAL DRAWINGS.

2-#5 HORIZONTAL AT TOP OF ALL WALLS, AND AT BOND BEAMS CONNECTED TO FLOORS AND ROOFS, UNLESS OTHERWISE INDICATED.

2-#6 VERTICAL BARS AT ENDS OF ALL WALLS, AND EACH SIDE OF CONTROL JOINTS.

STANDARD LABOR TYPE DESIGN DUR-O-WAL HORIZONTAL REINFORCING @ 16" O.C. VERTICAL. SIDE WIRE SIZE SHALL BE #9 GAGE WIRE.

3. PROVIDE VERTICAL DOWELS FROM CONCRETE WALLS INTO ALL CMU WALLS. SIZE AND SPACING OF THE DOWELS SHALL MATCH THE VERTICAL REINFORCING AS SPECIFIED IN THESE GENERAL NOTES, UNLESS OTHERWISE NOTED ON THE DRAWINGS. DOWEL LENGTHS SHALL BE THE REQUIRED CONCRETE DEVELOPMENT LENGTH PLUS THE REQUIRED BAR LAP SPLICE LENGTH FOR MASONRY AS SPECIFIED IN THESE GENERAL NOTES.

4. ALL VERTICAL WALL REINFORCING SHALL BE CONTINUOUS FOR THE FULL HEIGHT OF MASONRY WALLS, INCLUDING THROUGH CONTINUOUS MASONRY BOND BEAMS UNLESS OTHERWISE INDICATED.

5. ALL GROUTING OF MASONRY WALLS SHALL BE ASSUMED TO BE COMPLETED BY LOW LIFT GROUTING METHODS. IF THE CONTRACTOR PROPOSES TO UTILIZE HIGH LIFT GROUTING METHODS THEY SHALL SUBMIT THEIR PROPOSED HIGH LIFT GROUTING PROCEDURE FOR REVIEW PRIOR TO STARTING ANY GROUTING ON THE PROJECT SITE.

6. REINFORCING ABOVE WINDOWS, DOORS AND MECHANICAL OPENINGS IN THE EXTERIOR WALLS SHALL BE IN A BOND BEAM COURSE ABOVE THE STEEL LINTELS PROVIDED AT THESE OPENINGS. BOND BEAMS SHALL EXTEND 2'-0" BEYOND THE OPENING.

7. BOND BEAM LINTELS SHALL BE CONSTRUCTED USING SOLID BOTTOM "U" BLOCK MASONRY UNITS.

8. CELLS CONTAINING REINFORCING BARS AND ALL CELLS BELOW GRADE SHALL BE GROUTED SOLID. ALL OTHER CELLS SHALL REMAIN HOLLOW EXCEPT WHERE NOTED. THE CONTRACTOR SHALL NOT RUN CONDUIT OR PIPE IN CELLS CONTAINING REINFORCING.

9. ALL BOLTS OR ANCHORS SHALL BE SOLIDLY EMBEDDED IN MORTAR OR GROUT. IF BOND BEAM IS NOT LOCATED AT BOLT OR ANCHOR ELEVATION, PROVIDE LATH AND FULL CELL LOCALLY TO PROVIDE SUBSTRATE FOR BOLT OR ANCHOR. GROUT CELL ABOVE ALL MASONRY ANCHORS.

10. ALL COLUMNS WITHIN SHEAR WALLS AND EXTERIOR WALLS SHALL BE SOLIDLY EMBEDDED IN GROUT.

11. GROUT SOLID MASONRY FOR FULL HEIGHT OF WALL BELOW EACH LOOSE LINTEL AND PROVIDE #4 VERTICAL IN NEW OR EXISTING CORE.

12. GROUT SOLID MASONRY FOR TWO COURSES BELOW EACH BEAM BEARING EXCEPT AS NOTED.

13. USE 1 COURSE (8") OF SOLID MASONRY OR GROUTED SOLID MASONRY BELOW EACH STEEL JOIST BEARING EXCEPT AS NOTED.

14. PROVIDE CONTINUOUS GROUTED BOND BEAM WHERE MASONRY ANCHORS CONNECT CONCRETE MASONRY TO STEEL FRAMING. GROUT CELL ABOVE ANCHOR.

15. HOLLOW UNITS SHALL BE LAD WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS, EXCEPT THAT WEBS SHALL ALSO BE BEDDED IN ALL COURSES OF BEARING AND SHEAR WALLS, PIERS, COLUMNS AND PILASTERS, AND IN THE STARTING COURSE ON FOOTINGS AND SOLID FOUNDATION WALLS, AND WHERE ADJACENT TO CELLS OR CAVITIES WHICH ARE TO BE REINFORCED AND/OR FILLED WITH GROUT.

16. MORTAR PROTRUSIONS EXTENDING INTO CELLS OR CAVITIES TO BE REINFORCED AND/OR GROUTED SHALL BE REMOVED.

17. ALL MASONRY WALLS SHALL BE BRACED AT THE TOP WHERE MASONRY ENDS AT THE UNDERSIDE OF FLOOR OR ROOF CONSTRUCTION. REFER TO TYPICAL DETAILS.

18. IN MASONRY WALLS, NO CHASES, RISERS, CONDUITS, OR TOOTHING OF MASONRY SHALL OCCUR WITHIN 17" OF CENTERLINE OF BEAM BEARING OR LOAD CONCENTRATION.

19. SOLID UNITS SHALL BE LAID WITH FULL HEAD AND BED JOINTS.

20. COLLAR VERTICAL LONGITUDINAL JOINTS BETWEEN THE FACING AND BACKING WYTHES IN WALLS SHALL BE COMPLETELY FILLED WITH MORTAR OR GROUT AND WORKED IN WITH A TROWEL.

21. ALL INTERSECTING LOAD BEARING WALLS SHALL BE TIED TOGETHER IN MASONRY BOND UNLESS NOTED OTHERWISE.

22. MINIMUM DEVELOPMENT LENGTH AND SPLICE LENGTH OF MASONRY REINFORCING SHALL BE AS FOLLOWS:

BAR SIZE DEVELOPMENT LENGTH SPLICE LENGTH

JOINT REINFORCING 9" 18" 12"

#4 24" 24"

#5 25" 30"

#6 27" 36"

#7 32"

IF EPOXY COATED REINFORCING IS SPECIFIED IN THE MASONRY SPECIFICATIONS, THEN ALL SPLICE LENGTHS SHALL BE INCREASED BY 50% PER THE ACI 309 MASONRY CODE.

24. SUBMIT SHOP DRAWINGS INDICATING THE PLACEMENT OF ALL REINFORCING REQUIRED IN MASONRY WALLS. REFER TO SPECIFICATIONS FOR SUBMITTAL REQUIREMENTS. SHOP DRAWINGS SHALL INDICATE THE LOCATION OF ALL CONTROL JOINTS, AND THE REQUIRED LAP SPLICES FOR ALL REINFORCING.

25. SUBMIT SHOP DRAWINGS INDICATING THE PLACEMENT OF TOP OF WALL PARTITION ANCHORS AT ALL INTERIOR CMU WALLS. COORDINATE LOCATIONS WITH ARCHITECTURAL DRAWINGS.

26. PROVIDE MASONRY CONTROL JOINTS AT A MAXIMUM SPACING OF 30 FEET ON CENTER. PROVIDE CONTROL JOINTS BETWEEN MAIN AND INTERSECTING WALLS, AT CHANGES IN WALL HEIGHT, CHANGES IN WALL THICKNESS AND NO GREATER THAN 4'-0" FROM CORNERS.

27. PROVIDE AN ELEVATOR HOIST BEAM AT EACH ELEVATOR. THE BEAM SHALL BE A W8X24 MINIMUM. COORDINATE WITH THE ARCHITECTURAL DRAWINGS. THE BEARING PLATE ON MASONRY WALLS SHALL BE A PLATE 3/4"X8"X12" MINIMUM WITH (2'-3/4" DIAMETER ANCHOR BOLTS SET INTO GROUTED MASONRY UNLESS NOTED OTHERWISE.

28. ALL REINFORCING, THREADED RODS OR BOLTS INDICATED TO BE DRILLED AND EPOXIED INTO HOLLOW CMU OR BRICK SHALL UTILIZE HILTI HIT-HY200 ADHESIVE OR APPROVED EQUAL.

29. ALL REINFORCING, THREADED RODS OR BOLTS INDICATED TO BE DRILLED AND EPOXIED INTO SOLID GROUTED CMU SHALL UTILIZE HILTI HIT-HY200 ADHESIVE OR APPROVED EQUAL.

WOOD FRAMING

1. MEMBERS INDICATED THUS: "LVL" SHALL BE LAMINATED VENER LUMBER WITH THE FOLLOWING MINIMUM MATERIAL PROPERTIES:

Fb = 2600 PSI

Ft (min) = 750 PSI

Fv (min) = 2510 PSI

Fv = 285 PSI

E = 2,000,000 PSI

2. ALL LUMBER IN CONTACT WITH MASONRY, CONCRETE, OR WITHIN 6" OF GRADE SHALL BE PRESSURE TREATED LUMBER.

3. CUTTING AND NOTCHING: IN BEAMS, JOISTS AND RAFTERS, CUTS SHALL NOT BE DEEPER THAN SHOWN ON DRAWINGS, AND IN NO CASE DEEPER THAN 1/6 THE DEPTH OF THE BEAM, JOIST OR RAFTER.

4. CONNECTIONS AND FASTENINGS: ALL MEMBERS SHALL BE FASTENED AT THEIR JUNCTIONS WITH APPROVED CONNECTORS, SPIKES, NAILS, STRAPS, OR OTHER DEVICES. ALL CONNECTORS AND FASTENERS FOR USE WITH PRESSURE TREATED WOOD SHALL BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL. ALL BOLTS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL.

5. PROVIDE A MINIMUM OF 1 1/2" X 3" COMMON WIRE NAIL FOR ALL FRAMING. NAILING SHALL BE IN ACCORDANCE WITH THE "FASTENING SCHEDULE," IN CHAPTER 23 OF THE 2021 IBC CODE PER THE STATE OF CONNECTICUT BUILDING CODE.

6. ALL OPENINGS SHALL BE FRAMED WITH DOUBLE POSTS, DOUBLE JOISTS OR DOUBLE RAFTERS AND HEADERS ON END (UPRIGHT), UNLESS OTHERWISE INDICATED.

7. CONNECT ALL WOOD SILL PLATES TO CONCRETE OR MASONRY WITH A MINIMUM OF (1)-5/8" DIAMETER ANCHOR BOLT WITH WASHERS AT 4'-0" ON CENTER MAXIMUM AND A MINIMUM OF 8" EMBEDMENT INTO CONCRETE OR MASONRY, AND BOLTS A MAXIMUM OF 6" FROM EACH END OF INDIVIDUAL WOOD PLATES AND ADJACENT TO PLATE LAPS, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

8. CONNECT RAFTERS, JOISTS AND HEADERS FRAMING INTO THE SIDES OF OTHER WOOD MEMBERS WITH FORMED "SADDLE" TYPE JOIST HANGERS, MADE FROM 18 GA. GALVANIZED STEEL PER ASTM A83. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

9. ALL PREFABRICATED STEEL CONNECTORS INDICATED ON THE DRAWINGS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE OR APPROVED EQUAL. ALL SUBSTITUTIONS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO PLACEMENT ON THE PROJECT. CONTRACTOR SHALL ANTICIPATE THE LEAD TIMES REQUIRED FOR OBTAINING THE CONNECTORS INDICATED ON THE DRAWINGS AND ALLOW SUFFICIENT TIME TO ORDER AND OBTAIN IN ORDER AS TO NOT DELAY THE WORK.

10. SIZE, SPACING AND DETAIL OF WOOD STUDS SHALL BE AS INDICATED ON THE ARCHITECTURAL.

GENERAL

RFI 109

Project Title:

Revised:

Description:

Date:

Reviewed By:

1

Bulletin #4

1/28/26

LVP

Project Phase:

ISSUED FOR BID - 11/03/2025

State Project Number:

#244-0044 MAG

Date:

AUGUST 12, 2025

Scale:

1/8" = 1'-0"

Drawn By:

AC

Project Number:

22 050

Drawing Number:

ALTERNATIONS TO:

ACES at Chase

565 Chase Parkway

Waterbury, Connecticut 06708

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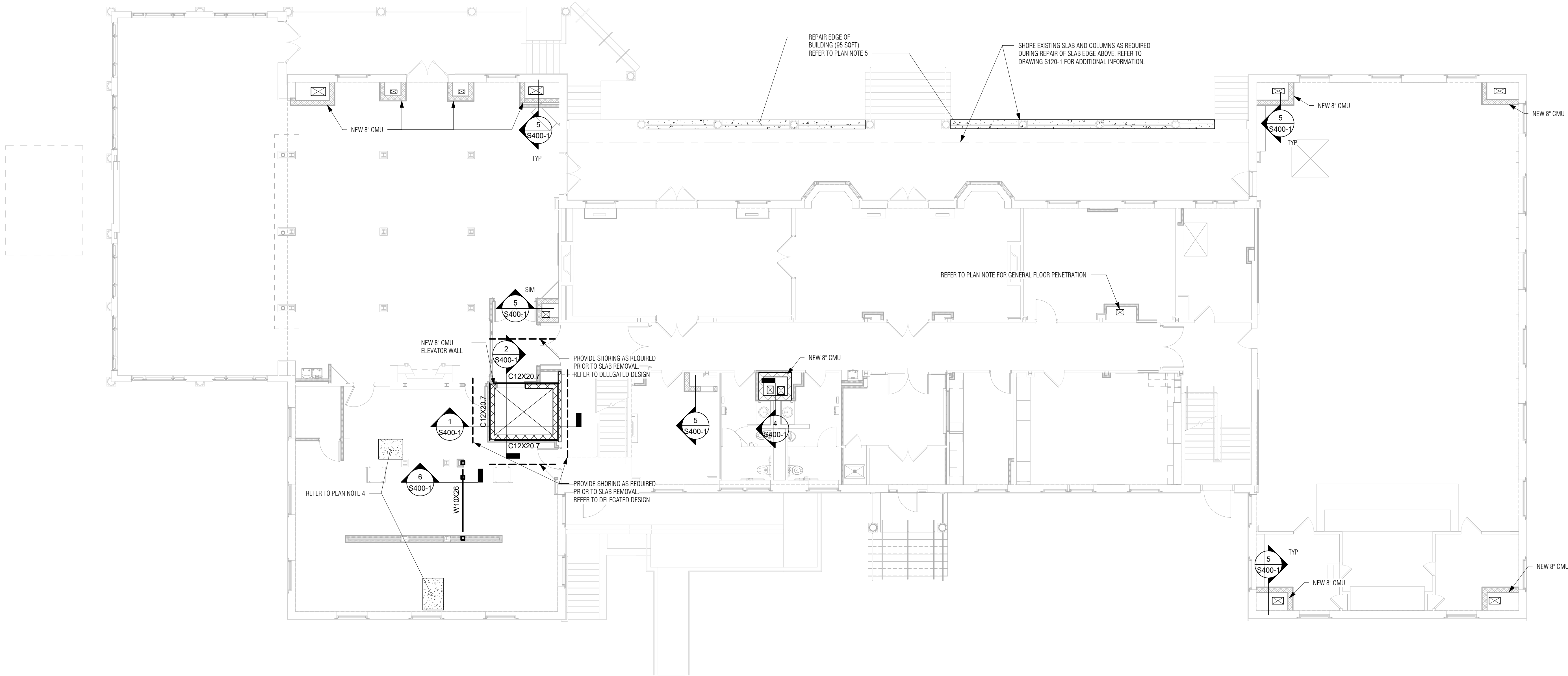
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GENERAL NOTES

S000-1

1/25/2026 4:11:51 PM



1 MAIN FLOOR FRAMING PLAN

1/8" = 1'-0"

FLOOR FRAMING NOTES

- CONTRACTOR TO FIELD VERIFY ALL EXISTING FRAMING SIZES, SPACING AND LOCATIONS PRIOR TO SUBMITTING SHOP DRAWINGS.
- REFER TO DRAWINGS S-601-1 FOR ALL ROOF FRAMES AT OPENINGS. COORDINATE ALL OPENING LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- REFER TO DETAIL 4S400-1 FOR TYPICAL STEEL LINTEL DETAIL AT EXISTING WALL PROPOSED OPENINGS. COORDINATE QUANTITY, LOCATION AND SIZES WITH ARCHITL. AND MEP DRAWINGS.
- HATCH REGION INDICATES GENERAL LOCATIONS OF SPALLED CONCRETE ON THE UNDERSIDE OF EXISTING FLOOR SYSTEM. THE AREA MUST BE CLEANED OF LOOSE MATERIAL AND DEBRIS. ALL EXPOSED REINFORCEMENT MUST NOT BE CUT AND SHALL BE CLEANED BY HANDHELD MECHANICAL WIRE BRUSH. ONCE CLEAN, A STRUCTURAL REPAIR GROUT SHALL BE UTILIZED (SUCH AS Sika Voh). A REPAIR GROUT MANUFACTURER MUST BE CONTACT TO RECOMMEND AN APPROPRIATE PRODUCT FOR THE CONDITION ONCE THE AREA IS CLEANED. SUBMIT THE PRODUCT TO THE DESIGN TEAM FOR REVIEW PRIOR TO APPLICATION.
- INDICATES EXISTING CONCRETE WHERE EXISTING RAILING WILL BE REMOVED AND REPAIRED. SPALLING AND REINFORCEMENT CORROSION HAS BEEN IDENTIFIED AND REQUIRES REPAIR/PATCHING. SCOPE INCLUDES REPAIR OF ASSOCIATED GUARD/HAND RAILS AS REQUIRED. CONDITIONS ARE BASED ON NON-DESTRUCTIVE LIMITED SITE INVESTIGATIONS. BIDS SHALL BE BASED ON SQUARE FOOTAGE NOTED ON PLANS. ALL BIDS SHALL HAVE A UNIT COST PER SQUARE FOOT IN THE EVENT FURTHER REPAIR/PATCHING IS REQUIRED BEYOND THE SQUARE FOOTAGE INDICATED ON THE DRAWINGS. REFER TO TYPICAL CONCRETE REPAIR DETAIL 04S600-1. RFI 43
- INDICATES FLOOR/ROOF OPENING WITHIN EXISTING STRUCTURE. COORDINATE ALL OPENING SIZES, CONFIGURATIONS, QUANTITIES AND LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS PRIOR TO WORK. REFER TO 12S600-1 FOR "TYPICAL OPENING IN EXISTING CONCRETE SLAB" DETAIL. COORDINATION IS REQUIRED WITH EXISTING BUILDING FRAMING PRIOR TO CONSTRUCTION. THE LOCATIONS DENOTED ON PLAN ARE DEPENDENT ON EXISTING FRAMING AND MUST BE REVIEWED PRIOR TO CUTTING TO ENSURE EXISTING STRUCTURAL COMPONENTS ARE NOT DAMAGED OR COMPROMISED.
- INDICATES CMU WALL. REFER TO GENERAL NOTES, TYPICAL DETAILS AND SCHEDULES FOR WALL REQUIREMENTS.
- INDICATES 2 HR FIRE WALL.

KEY PLAN

SCALE: NTS

Project Title:
ALTERATIONS TO:
ACES at Chase
565 Chase Parkway
Waterbury, Connecticut 06708



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Revision:	Description:	Date:	Reviewed By:
1	Bulletin #4	1/28/26	LVP

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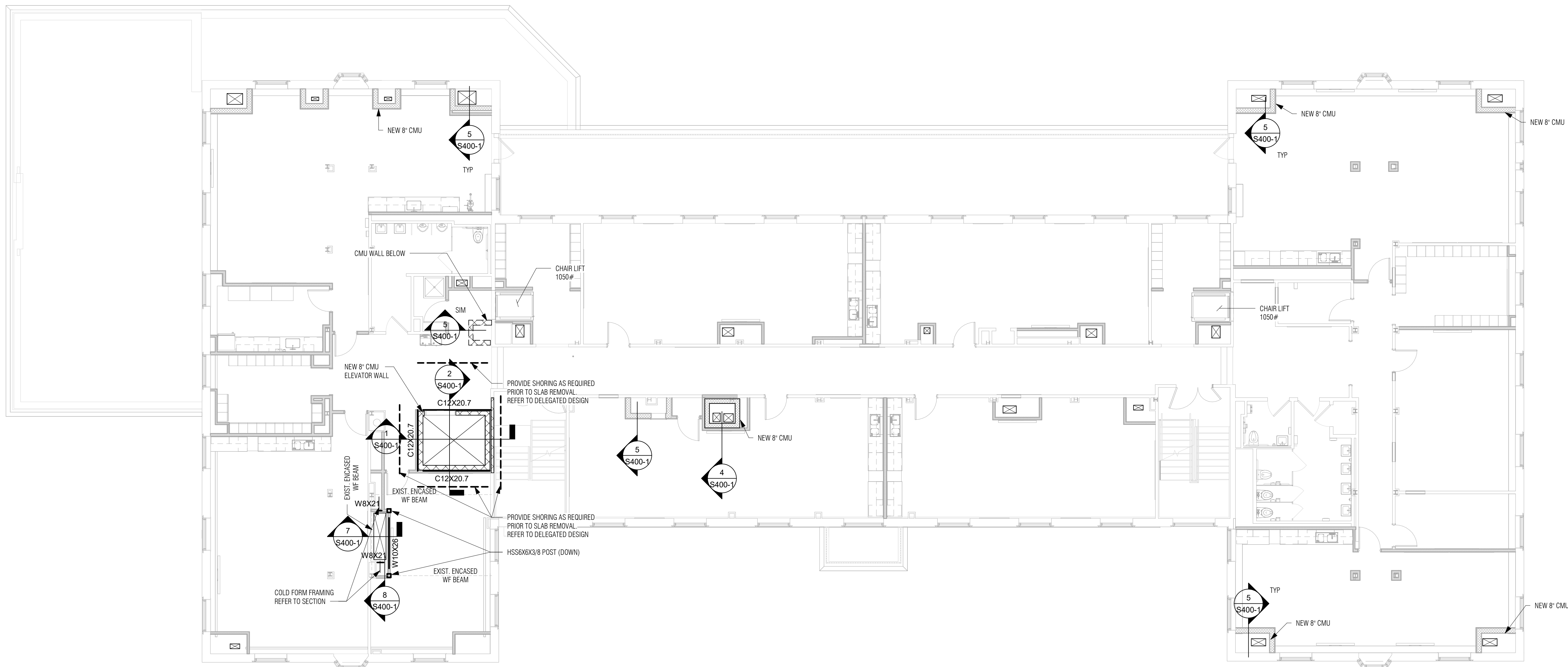
Drawing Title:
BUILDING 1 -MAIN FLOOR FRAMING
PLAN
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

Date:
AUGUST 12, 2025
Scale:
1/8" = 1'-0"
Drawn By:
AC
Project Number:
22 050

Drawing Number:

S120-1

1/25/2025 4:11:52 PM



1 SECOND FLOOR FRAMING PLAN
1/8" = 1'-0"

FLOOR FRAMING NOTES

- CONTRACTOR TO FIELD VERIFY ALL EXISTING FRAMING SIZES, SPACING AND LOCATIONS PRIOR TO SUBMITTING SHOP DRAWINGS.
- REFER TO DRAWING S-601-1 FOR ALL ROOF FRAMES AT OPENINGS. COORDINATE ALL OPENING LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- REFER TO DETAIL 4-S400-1 FOR TYPICAL STEEL LINTEL DETAIL AT EXISTING WALL PROPOSED OPENINGS. COORDINATE QUANTITY, LOCATION AND SIZES WITH ARCHITL AND MEP DRAWINGS.
- HATCH REGION INDICATES GENERAL LOCATIONS OF SPALLED CONCRETE ON THE UNDERSIDE OF EXISTING FLOOR SYSTEM. THE AREA MUST BE CLEANED OF LOOSE MATERIAL AND DEBRIS. ALL EXPOSED REINFORCEMENT MUST NOT BE CUT AND SHALL BE CLEANED BY HANDHELD MECHANICAL WIRE BRUSH. ONCE CLEAN, A STRUCTURAL REPAIR GROUT SHALL BE UTILIZED (SUCH AS SMA GROUT). A REPAIR GROUT MANUFACTURER MUST BE CONTACT TO RECOMMEND AN APPROPRIATE PRODUCT FOR THE CONDITION ONCE THE AREA IS CLEANED. SUBMIT THE PRODUCT TO THE DESIGN TEAM FOR REVIEW PRIOR TO APPLICATION.
- INDICATES EXISTING CONCRETE WHERE EXISTING RAILING WILL BE REMOVED AND REPAIRED. SPALLING AND REINFORCEMENT CORROSION HAS BEEN IDENTIFIED AND REQUIRES REPAIR/PATCHING. SCOPE INCLUDES REPAIR OF ASSOCIATED GUARD/RAND WALLS AS REQUIRED. CONDITIONS ARE BASED ON NON-DESTRUCTIVE LIMITED SITE INVESTIGATIONS. BIDS SHALL BE BASED ON SQUARE FOOTAGE NOTED ON PLANS. ALL BIDS SHALL HAVE A UNIT COST PER SQUARE FOOT IN THE EVENT FURTHER REPAIR/PATCHING IS REQUIRED BEYOND THE SQUARE FOOTAGE INDICATED ON THE DRAWINGS. REFER TO TYPICAL CONCRETE REPAIR DETAIL ON S600-1-1, RFI 43.
- INDICATES FLOOR/ROOF OPENING WITHIN EXISTING STRUCTURE. COORDINATE ALL OPENING SIZES, CONFIGURATIONS, QUANTITIES AND LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS PRIOR TO WORK. REFER TO 12-S600-1 FOR TYPICAL OPENING IN EXISTING CONCRETE SLAB DETAIL. COORDINATION IS REQUIRED WITH EXISTING BUILDING FRAMING PRIOR TO CONSTRUCTION. THE LOCATIONS DERIVED ON PLAN ARE DEPENDENT ON EXISTING FRAMING AND MUST BE REVIEWED PRIOR TO CUTTING TO ENSURE EXISTING STRUCTURAL COMPONENTS ARE NOT DAMAGED OR COMPROMISED.
- INDICATES CMU WALL. REFER TO GENERAL NOTES, TYPICAL DETAILS AND SCHEDULES FOR WALL REQUIREMENTS.
- INDICATES 2 HR FIRE WALL.

KEY PLAN
SCALE: NTS

Project Title:
**ALTERATIONS TO:
ACES at Chase**
565 Chase Parkway
Waterbury, Connecticut 06708



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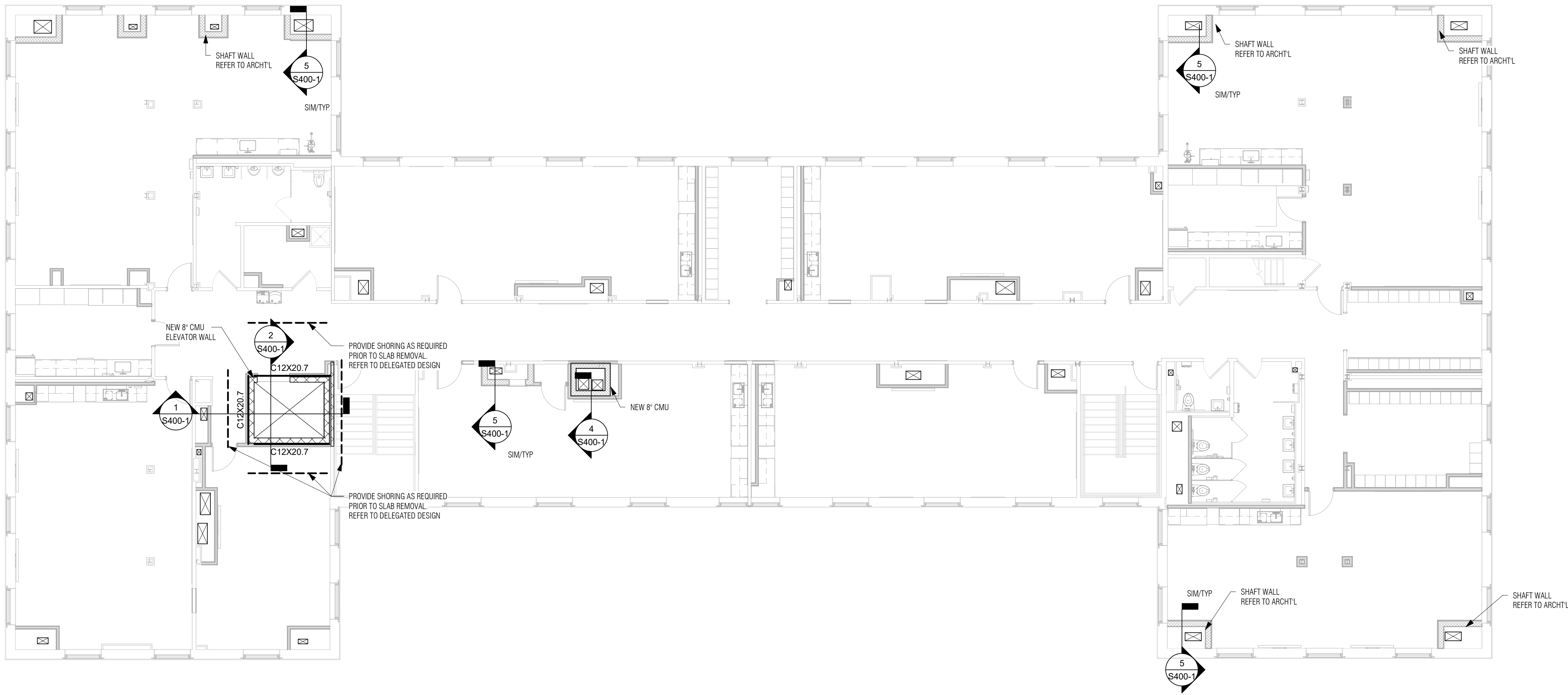
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1	Bulletin #4	1/28/26	LVP

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Drawing Title:
**BUILDING 1 - SECOND LEVEL FLOOR
FRAMING PLAN**
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

Date:
AUGUST 12, 2025
Scale:
1/8" = 1'-0"
Drawn By:
AC
Project Number:
22.050

Drawing Number:
S130-1



1 THIRD FLOOR FRAMING PLAN

1/8" = 1'-0"

FLOOR FRAMING NOTES

- CONTRACTOR TO FIELD VERIFY ALL EXISTING FRAMING SIZES, SPACING AND LOCATIONS PRIOR TO SUBMITTING SHOP DRAWINGS
- REFER TO DRAWING S-601-1 FOR ALL ROOF FRAMES AT OPENINGS. COORDINATE ALL OPENING LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
- REFER TO DETAIL 4/S400-1 FOR TYPICAL STEEL LINTEL DETAIL AT EXISTING WALL PROPOSED OPENINGS. COORDINATE QUANTITY, LOCATION AND SIZES WITH ARCHTL AND MEP DRAWINGS.
- HATCH REGION INDICATES GENERAL LOCATIONS OF SPALLED CONCRETE ON THE UNDERSIDE OF EXISTING FLOOR SYSTEM. THE AREA MUST BE CLEANED OF LOOSE MATERIAL AND DEBRIS. ALL EXPOSED REINFORCEMENT MUST NOT BE CUT AND SHALL BE CLEANED BY HANDHELD MECHANICAL WIRE BRUSH. ONCE CLEAN, A STRUCTURAL REPAIR GROUT SHALL BE UTILIZED (SUCH AS SRA VORU). A REPAIR GROUT MANUFACTURER MUST BE CONTACT TO RECOMMEND AN APPROPRIATE PRODUCT FOR THE CONDITION ONCE THE AREA IS CLEANED. SUBMIT THE PRODUCT TO THE DESIGN TEAM FOR REVIEW PRIOR TO APPLICATION.
- INDICATES EXISTING CONCRETE WHERE EXISTING RAILING WILL BE REMOVED AND REPAIRED. SPALLING AND REINFORCEMENT CORROSION HAS BEEN IDENTIFIED AND REQUIRES REPAIR/PATCHING. SCOPE INCLUDES REPAIR OF ASSOCIATED GUARDHAND RAILS AS REQUIRED. CONDITIONS ARE BASED ON NON-DESTRUCTIVE LIMITED SITE INVESTIGATIONS. BIDS SHALL BE BASED ON SQUARE FOOTAGE NOTED ON PLANS. ALL BIDS SHALL HAVE A UNIT COST PER SQUARE FOOT IN THE EVENT FURTHER REPAIR/PATCHING IS REQUIRED BEYOND THE SQUARE FOOTAGE INDICATED ON THE DRAWINGS. REFER TO TYPICAL CONCRETE REPAIR DETAIL 04/S600-1, RFI 43.

INDICATES FLOOR/ROOF OPENING WITHIN EXISTING STRUCTURE. COORDINATE ALL OPENING SIZES, CONFIGURATIONS, QUANTITIES AND LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS PRIOR TO WORK. REFER TO 10/S600-1 FOR TYPICAL OPENING IN EXISTING CONCRETE SLAB DETAIL. COORDINATION IS REQUIRED WITH EXISTING BUILDING FRAMING PRIOR TO CONSTRUCTION. THE LOCATIONS DENOTED ON PLAN ARE DEPENDENT ON EXISTING FRAMING AND MUST BE REVIEWED PRIOR TO CUTTING TO ENSURE EXISTING STRUCTURAL COMPONENTS ARE NOT DAMAGED OR COMPROMISED.

INDICATES CMU WALL. REFER TO GENERAL NOTES, TYPICAL DETAILS AND SCHEDULES FOR WALL REQUIREMENTS.

INDICATES 2 HR FIRE WALL

KEY PLAN

SCALE: NTS

Project Title:
ALTERATIONS TO:
ACES at Chase
565 Chase Parkway
Waterbury, Connecticut 06708



SILVER PETRUCELLI + ASSOCIATES
3190 WHITNEY AVENUE HAMDEN CT 06518
311 STATE STREET NEW LONDON CT 06320
203 230 9007 silverpetrucelli.com

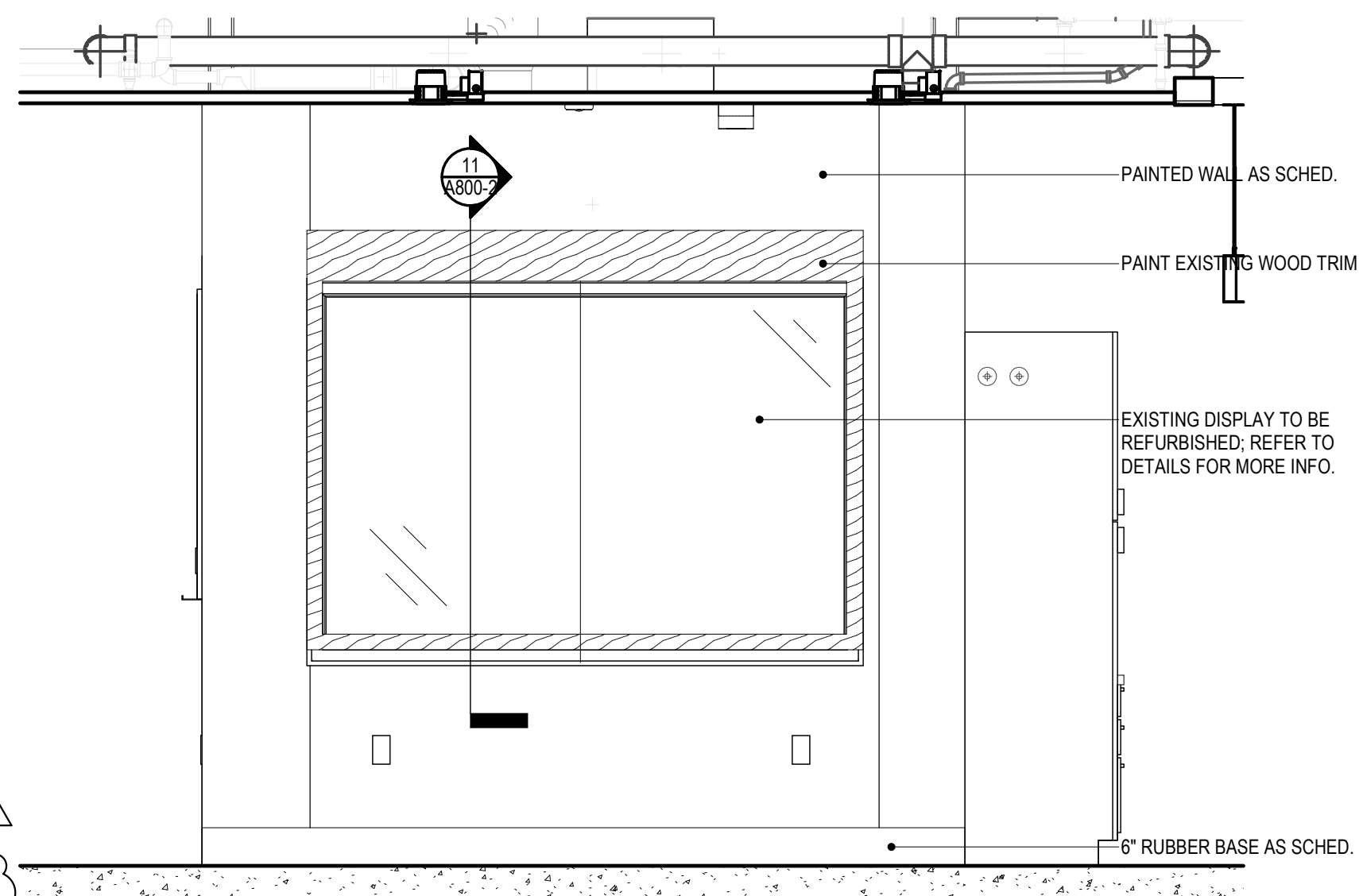
Revision:	Description:	Date:	Reviewed By:
1	Bulletin #4	1/28/26	LVP

MHAI
Michael Horton
Associates Inc.
Consulting Structural Engineers
700 East Main Street
Branford, Connecticut 06405
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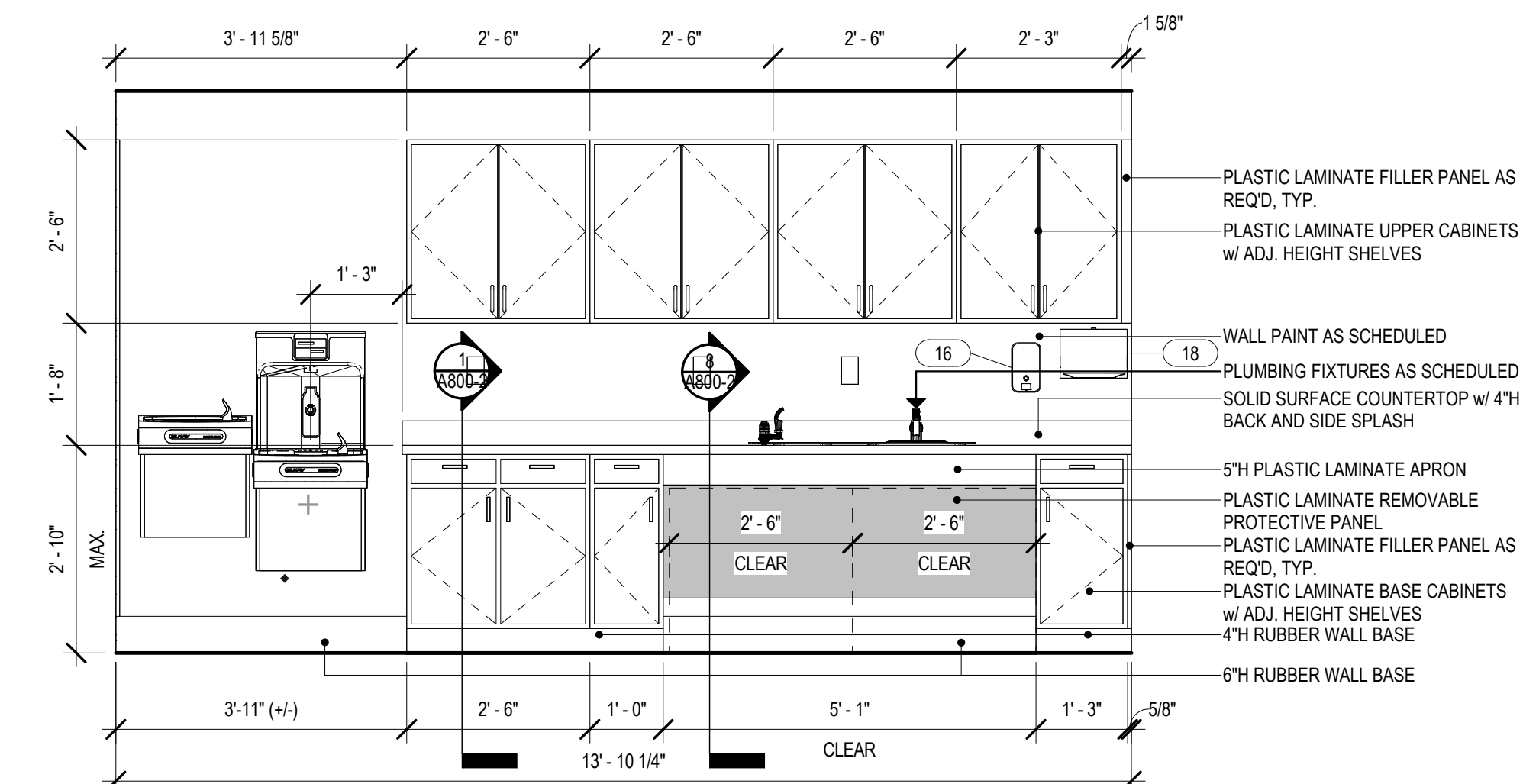
Drawing Title:
BUILDING 1- THIRD LEVEL FLOOR
FRAMING PLAN
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

Date:
AUGUST 12, 2025
Scale:
1/8" = 1'-0"
Drawn By:
LVP
Project Number:
22 050

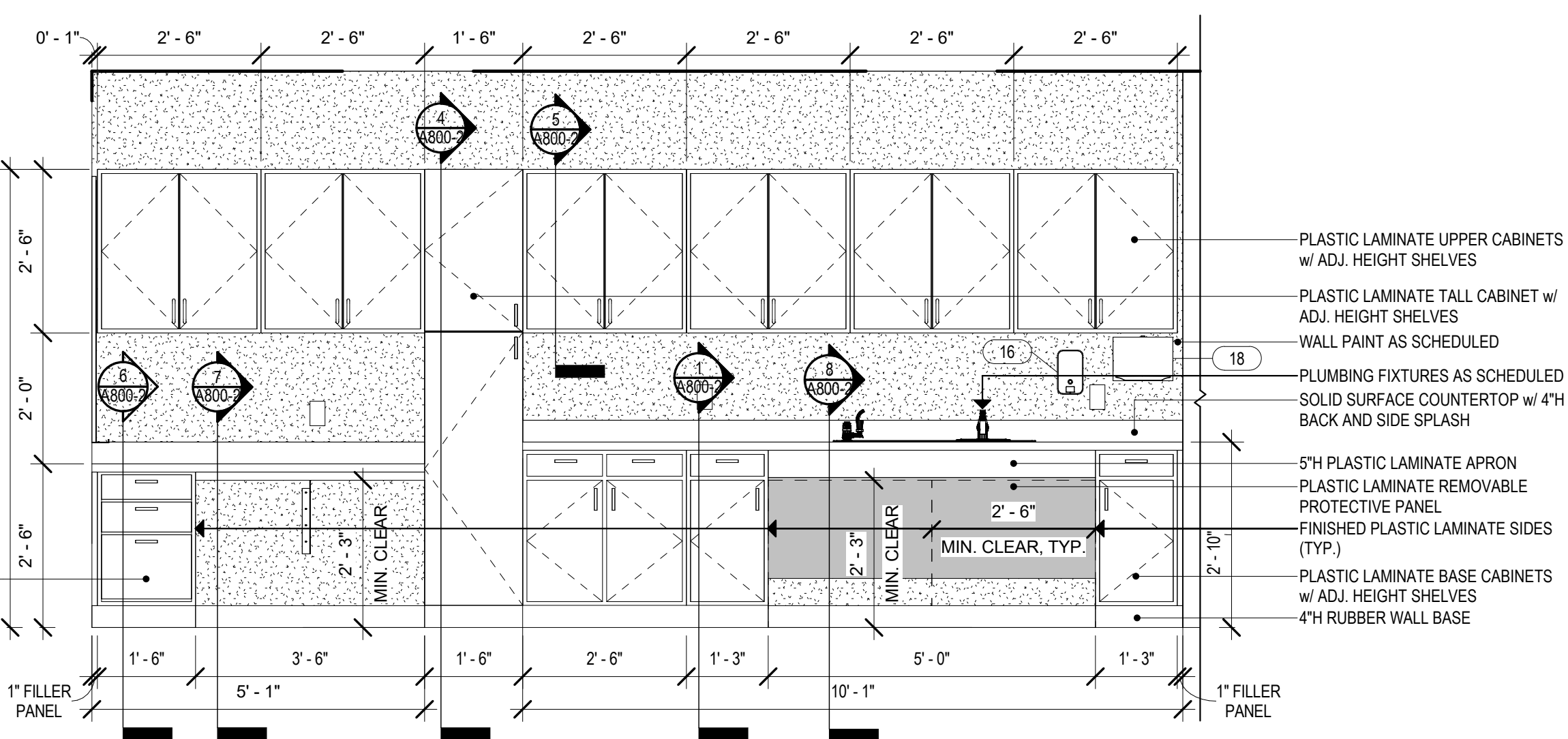
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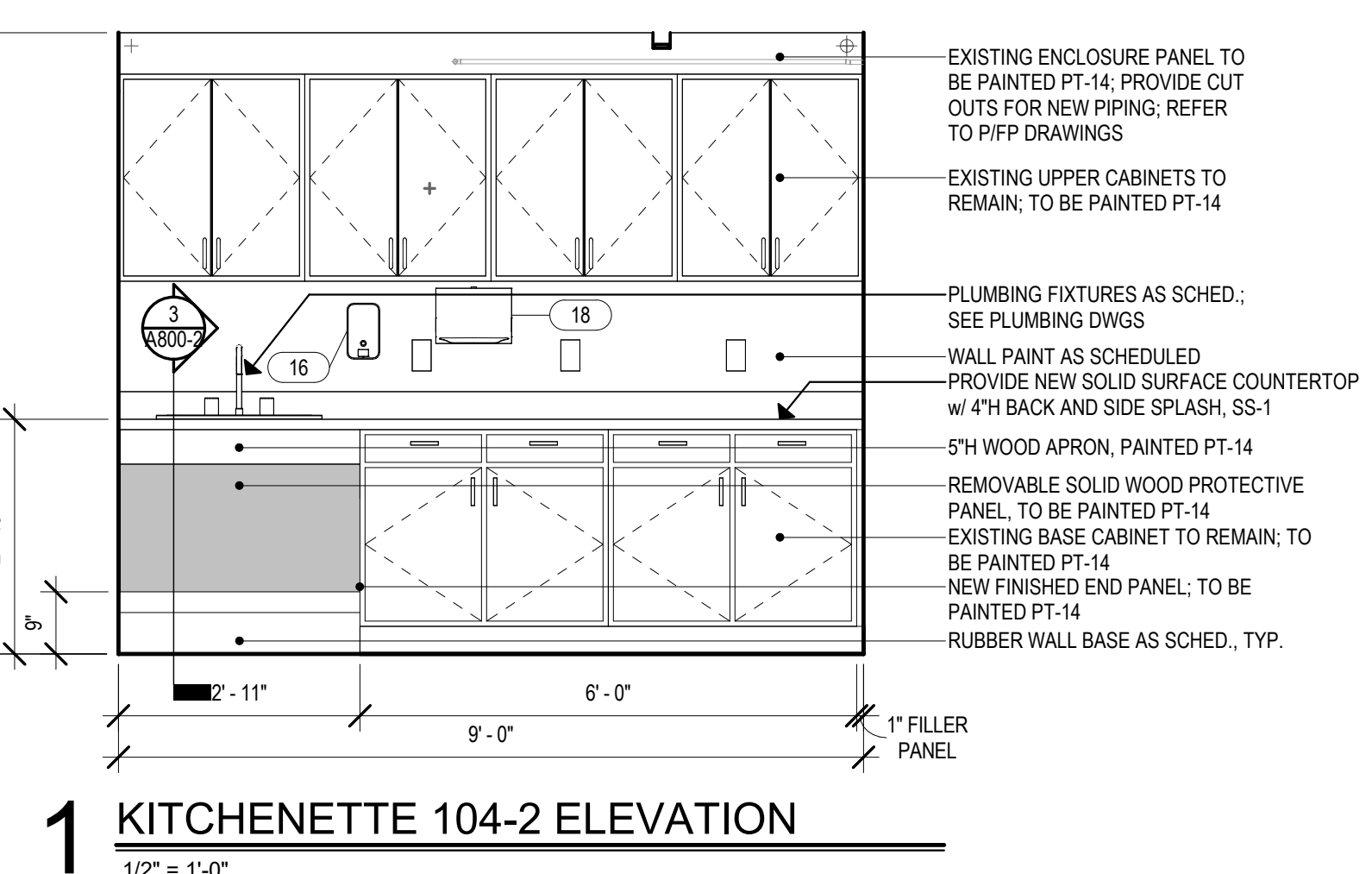
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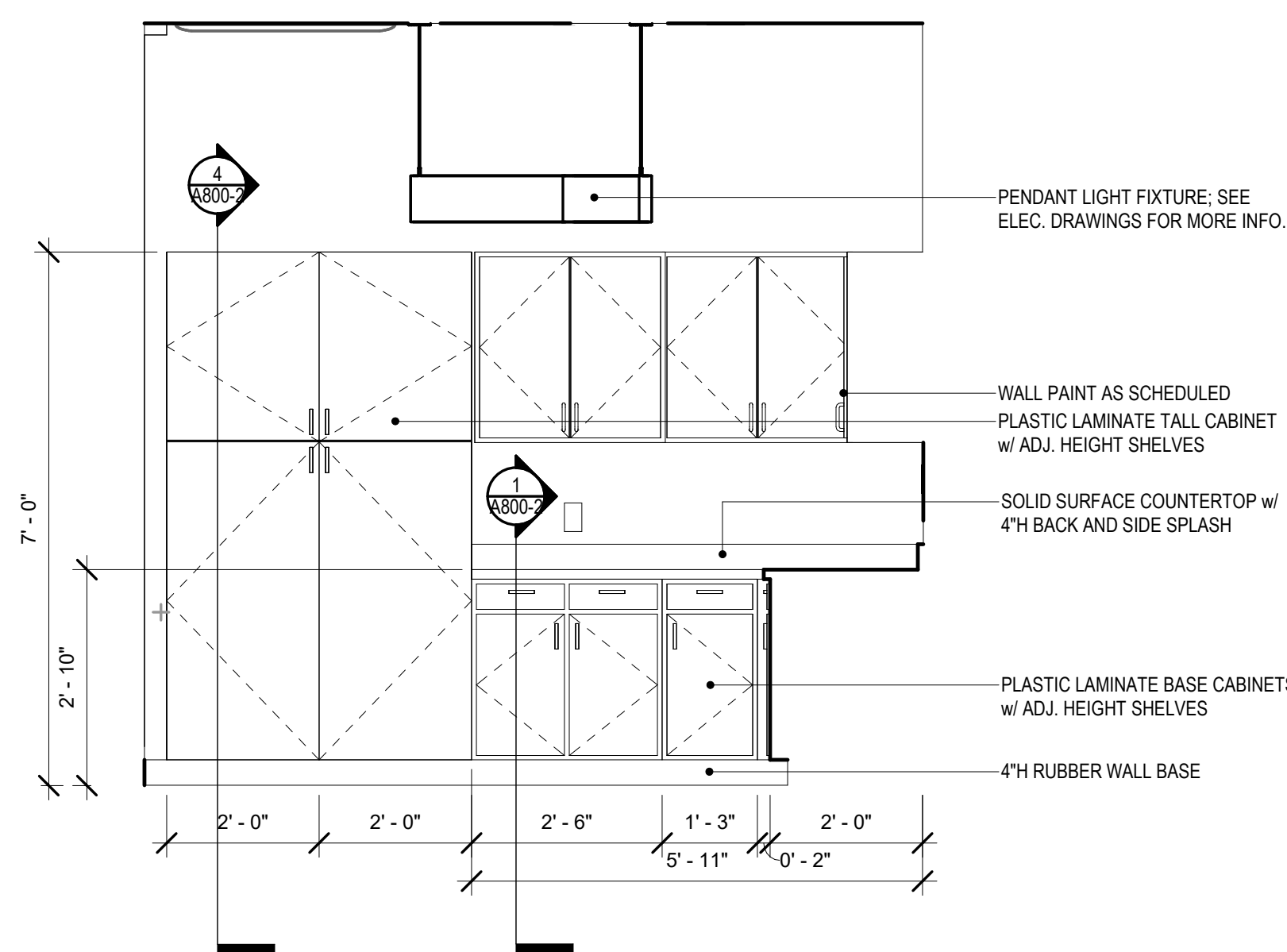
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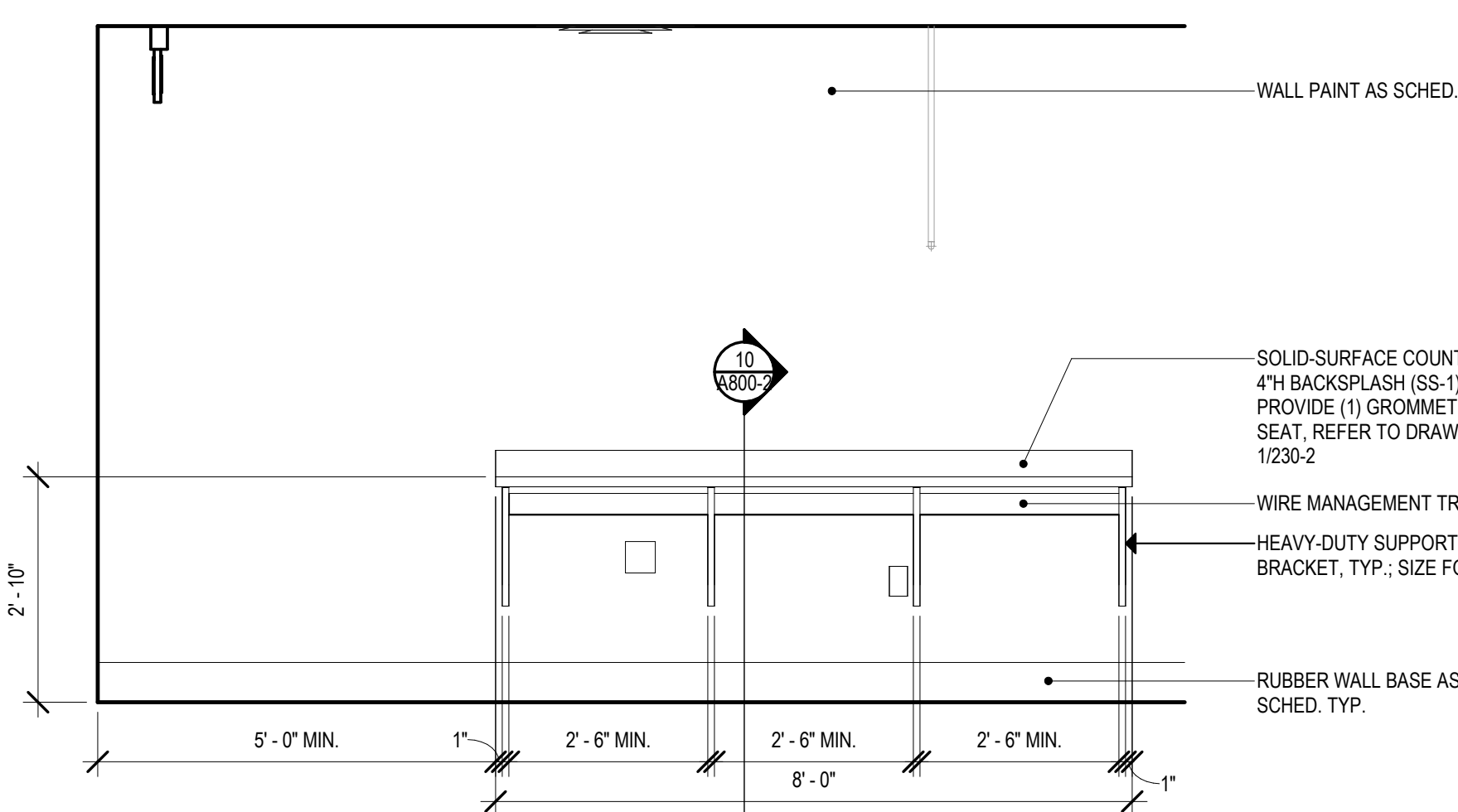
2 TYPICAL CLASSROOM CASEWORK ELEVATION



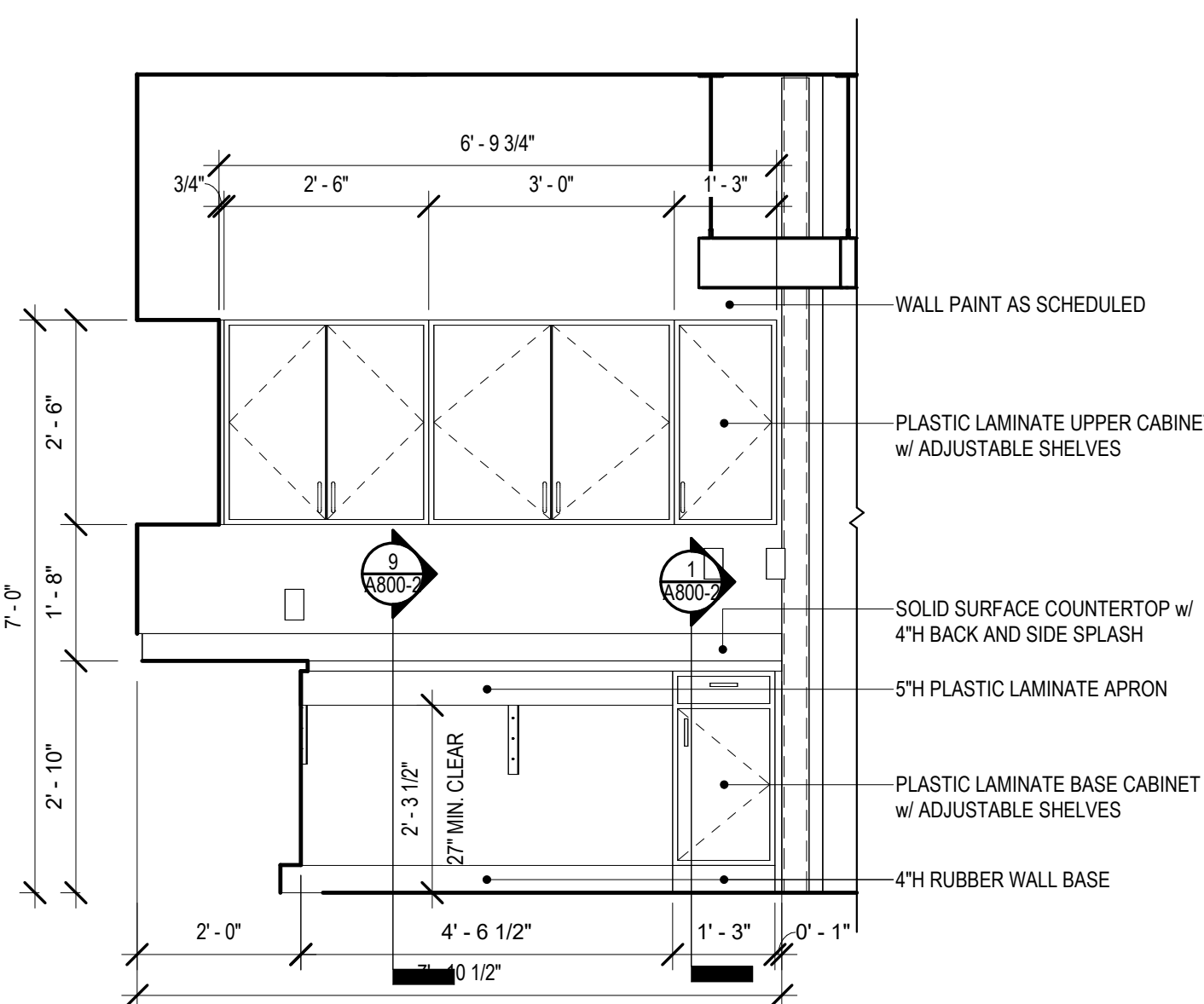
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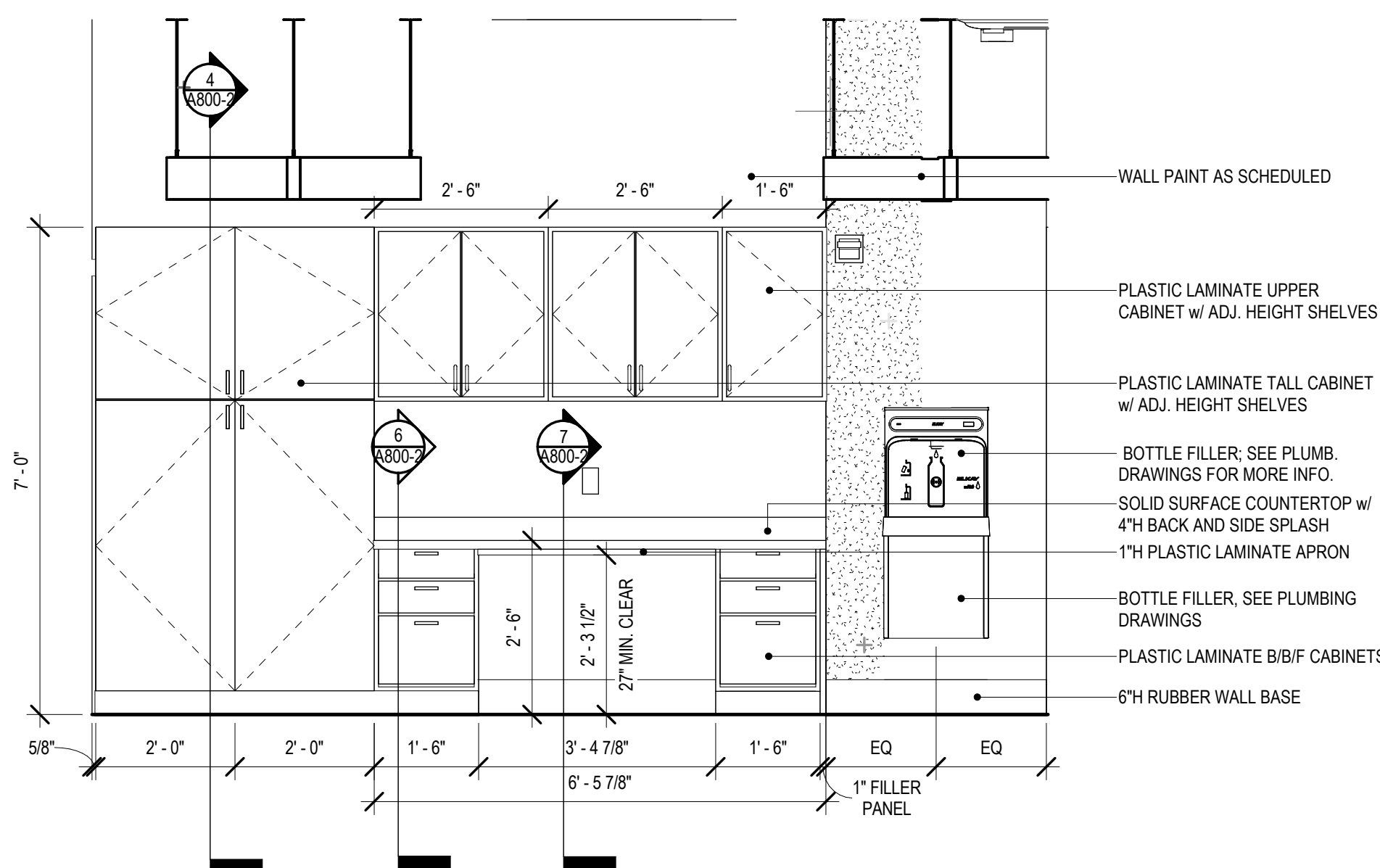
9 MAKERSPACE 201-2 CASEWORK PART B



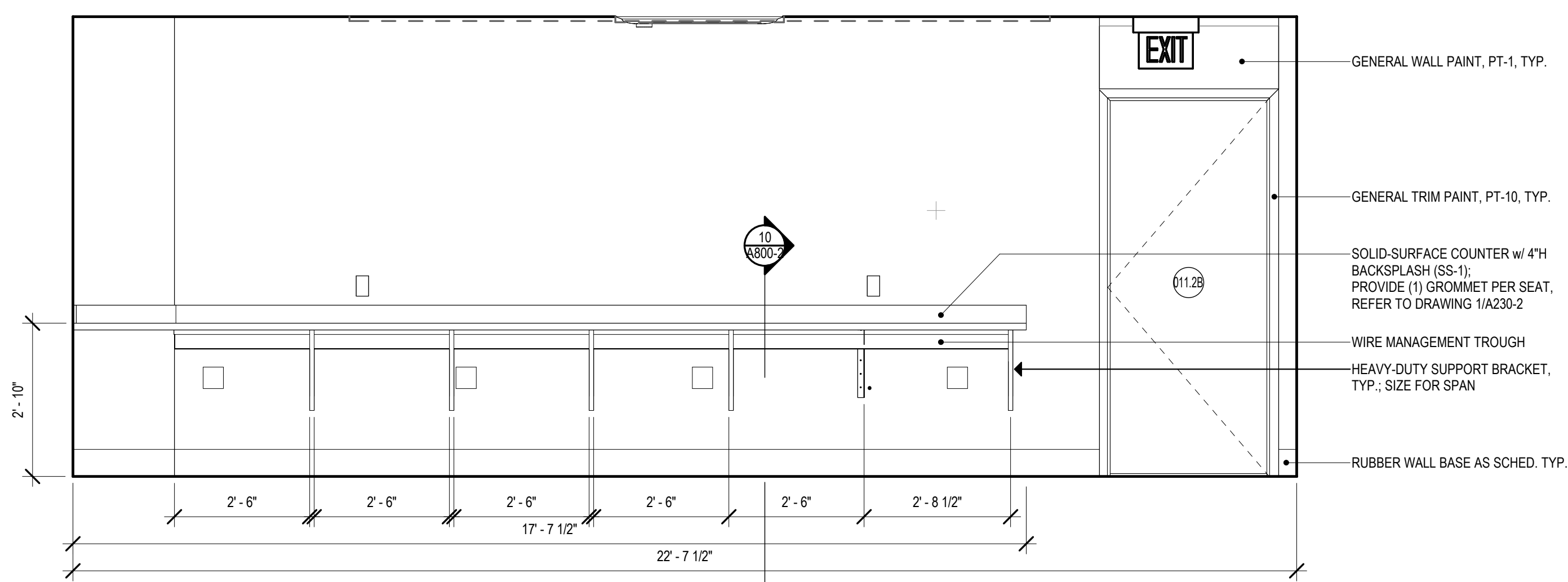
7 MEDIA 011-2 - ELEVATION B



6 MAKERSPACE 201-2 CASEWORK PART C



8 MAKERSPACE 201-2 CASEWORK PART A



5 MEDIA 011-2 - ELEVATION A

GENERAL NOTES		
GENERAL		
GOVERNING CODE: 2022 CONNECTICUT STATE BUILDING CODE, (2021 INTERNATIONAL BUILDING CODE)		
DESIGN LOADS: CITY OF WATERBURY		
MINIMUM LIVE LOADS:	CORRIDORS (FIRST):	100 PSF
	STAIRS:	100 PSF
	CORRIDORS (ABOVE FIRST):	80 PSF
ROOF LOAD:		
ROOF SNOW LOAD CRITERIA:		
$P_g = 30 \text{ PSF}$		
$C_e = 1.0$		
$I_s = 1.1$		
$C_d = 1.0$		
$P_f = 23.1 \text{ PSF}$		
WITH INCREASES FOR SNOW DRIFTING, UNBALANCES AND SLIDING PER SECTION 1608 (2021 IBC).		
MINIMUM ROOF LIVE/SNOW LOAD = 30 PSF		
ROOF DEAD LOAD = 20 PSF		
WIND LOAD CRITERIA: SECTION 1609 (2021 IBC)		
BASIC DESIGN WIND SPEED, $V = 130 \text{ MPH}$		
ALLOWABLE STRESS DESIGN WIND, $V_{ASD} = 101 \text{ MPH}$		
RISK CATEGORY II, $I_w = 1.0$		
EXPOSURE CLASSIFICATION 'B'.		
MINIMUM WIND LOAD ON PRIMARY STRUCTURE = 16 PSF		
WIND LOADS ON SECONDARY ELEMENTS SHALL CONFORM WITH ASCE 7-16.		
SEISMIC LOAD CRITERIA: AS PER SECTION 1613 (2021 IBC) WITH:		
RISK CATEGORY II		
SEISMIC IMPORTANCE FACTOR, $I_e = 1.25$		
$S_S = 0.240g$, $S_1 = 0.089g$		
SOIL SITE CLASS = D (ASSUMED)		
SPECTRAL RESPONSE COEFFICIENTS, $S_{ds} = 0.256g$, $S_{d1} = 0.109g$		
SEISMIC DESIGN CATEGORY B		
BASIC SEISMIC FORCE-RESISTING SYSTEM: STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC		
DESIGN BASE SHEAR, $V = 0.10W$		
RESPONSE MODIFICATION FACTOR, $R = 3$		
ANALYSIS PROCEDURE USED: SIMPLIFIED ANALYSIS		
ASSUMED BEARING PRESSURE ON UNDISTURBED SOIL: 3000 PSF (ASSUMED)		
1. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THE GENERAL STRUCTURAL NOTES, THE SPECIFICATIONS, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.		
2. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE AND TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS WHICH MIGHT BE NECESSARY. SUCH MATERIAL SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER COMPLETION OF THE PROJECT.		
THE CONTRACTOR SHALL PROVIDE SHORING CALCULATIONS AND SHORING DRAWINGS, INDICATING THE WORK TO BE PROVIDED, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT.		
3. THE STRUCTURE UTILIZES SHEAR WALLS TO PROVIDE LATERAL STABILITY. THEREFORE, TEMPORARY BRACING, GUYS, ETC. MUST BE MAINTAINED UNTIL ALL MASONRY SHEAR WALLS HAVE BEEN ERECTED AND ATTACHED TO STEEL FRAMING.		
4. LOADS, OPENINGS AND STRUCTURE IN ANY WAY RELATED TO REQUIREMENTS OF OTHER (NON-STRUCTURAL) DISCIPLINES ARE SHOWN FOR BIDDING PURPOSES ONLY. THE CONTRACTOR SHALL OBTAIN FROM THE HEATING AND VENTILATING, ELECTRICAL, PLUMBING AND OTHER SUBCONTRACTORS THE FINAL APPROVED SIZE AND LOCATION OF ALL OPENINGS AND WORK TO BE PROVIDED FOR THEIR TRADE IN ROOFS, FLOORS AND WALLS. WHETHER SHOWN OR NOT SHOWN ON STRUCTURAL DRAWINGS, CONTRACTOR SHALL BE RESPONSIBLE FOR TRANSMISSION OF REQUIREMENTS, LOCATIONS AND DETAILS TO STRUCTURAL SUBCONTRACTORS. EXCESS COST RELATED TO VARIATION IN MECHANICAL REQUIREMENTS ARE NOT TO BE BORNE BY THE OWNER.		
5. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.		
6. SHOP DRAWINGS ARE TO BE CHECKED BY THE CONTRACTOR AND SUBCONTRACTOR AND BEAR CHECKERS INITIALS BEFORE BEING SUBMITTED TO THE ARCHITECT FOR APPROVAL.		
7. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES AND EXISTING CONDITIONS BEFORE PROCEEDING WITH ANY WORK.		
8. ALL SECTIONS AND DETAILS SHALL BE CONSIDERED TYPICAL, AND APPLY FOR THE SAME AND SIMILAR SITUATIONS THROUGHOUT THE BUILDING, UNLESS OTHERWISE SPECIFICALLY NOTED.		
9. CONTRACTOR SHALL REVIEW ALL ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO SUBMITTING THEIR BID FOR REFERENCE TO ALL NOTES ON ARCHITECTURAL DRAWINGS REFERRING TO ASSE STRUCTURAL DRAWINGS. IF THE SIZE OF ELEMENTS AND DETAILING OF MEMBERS IS NOT INDICATED, THE CONTRACTOR SHALL CONTACT THE ARCHITECT TO REQUEST THE MISSING INFORMATION IN PREPARATION OF THEIR BID. THESE REFERENCED ITEMS SHALL BE PART OF THE BASE BID.		
10. IN CASES OF DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND SUBMITTED SHOP DRAWINGS, THE CONTRACT DOCUMENTS SHALL GOVERN INSTALLATION OF MATERIALS.		
CONTRACTOR'S DELEGATED DESIGN		
1. CONTRACTOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CONNECTICUT TO PERFORM THE DESIGN OF THE FOLLOWING:		
A. STRUCTURAL STEEL CONNECTIONS, INCLUDING BRACING AND MOMENT FRAMES		
B. STRAIN FRAMING, STRINGERS, TREADS AND LANDING DESIGN INCLUDING HAND AND GUARD RAILS AND ATTACHMENT TO SUPERSTRUCTURE		
C. TEMPORARY SHORING OF EXISTING STRUCTURAL MEMBERS		
D. SIGNAGE AND/OR DECORATIVE LETTERING ATTACHMENT, SUBSEQUENT SUPPORT FRAMING AND ATTACHMENT TO SUPERSTRUCTURE		
E. WINDOW AND DOOR SYSTEM ATTACHMENT TO SUPERSTRUCTURE		
F. FOLDING/MOVABLE PARTITION ATTACHMENT TO SUPERSTRUCTURE		
G. EQUIPMENT CURB AND ATTACHMENT TO STRUCTURE.		
ALL CALCULATIONS SHALL BE SIGNED AND SEALED BY THE ENGINEER AND SUBMITTED FOR REVIEW.		
FOUNDATIONS		
1. BACKFILLING SHALL BE ACCOMPLISHED TO EQUAL HEIGHTS ON BOTH SIDES OF FOUNDATION WALLS TO PREVENT MOVEMENTS DUE TO UNBALANCED EARTH PRESSURE. WHERE EARTH IS ON ONE SIDE ONLY, BACKFILLING AND COMPACTION SHALL NOT START UNTIL FLOOR SLAB OR ADEQUATE BRACING IS PROVIDED FOR WALL SUPPORT (EXCEPT AT RETAINING WALLS).		
2. ALL FOOTINGS ARE TO REST ON UNDISTURBED NATURAL SOIL, AS DEFINED IN THE SPECIFICATIONS, OR CONTROLLED COMPACTED FILL. REGARDLESS OF ELEVATIONS SHOWN ON DRAWINGS, FOOTING BOTTOM ELEVATIONS SHALL NOT BE HIGHER THAN INDICATED ON THE FOUNDATION PLAN, NOR LESS THAN 4'-6" BELOW FINISH GRADE.		
3. IF FILL MATERIALS ARE ENCOUNTERED AT FOOTING BEARING ELEVATIONS, ALL FILL MATERIAL SHALL BE DCAVATED AND DISPOSED OF LEGALLY OFF-SITE. THE OVER EXCAVATION SHALL BE BACKFILLED WITH CONTROLLED COMPACTED FILL TO THE BOTTOM OF FOOTING ELEVATION AS REQUIRED.		
4. ALL CONTROLLED COMPACTED BACKFILL UNDER FOOTINGS AND WITHIN THE FOOTPRINT OF THE STRUCTURE SHALL BE COMPACTED TO 95% OF THE MODIFIED OPTIMUM DENSITY.		
5. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE AT LEAST 3'-6" BELOW FINISHED GRADE. PRIOR TO PROCEEDING WITH FOOTING EXCAVATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF FINISH GRADES AND BOTTOM OF EXTERIOR FOOTING ELEVATIONS TO MAINTAIN THE 3'-6" FROST PROTECTION.		
6. ALL SOIL SURROUNDINGS AND UNDER ALL FOOTINGS SHALL BE PROTECTED FROM FREEZING AND FROST ACTION DURING THE COURSE OF CONSTRUCTION.		
7. FOOTING BOTTOMS SHALL STEP AT THE RATE OF 1' UNIT VERTICAL TO 2 UNITS HORIZONTAL, WITH A MAXIMUM VERTICAL STEP OF 2'-0".		
8. WHERE SUBSURFACE PIPING PASSES THROUGH FOUNDATION WALLS, THE TOP OF THE FOOTINGS SHALL BE AT LEAST 8" BELOW THE INVERT ELEVATION OF THE PIPING AND CONDUITS. COORDINATE ALL INVERTS WITH MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, SITE AND SITE UTILITY DRAWINGS.		
9. WHERE FOOTINGS ARE IN CLOSE PROXIMITY OF SUBSURFACE PIPING OR CONDUIT, BOTTOM OF FOOTINGS SHALL BE AT LEAST 8" BELOW INVERT ELEVATION OF PIPING OR CONDUITS.		
10. KEEP FOUNDATION EXCAVATIONS FREE OF WATER AT ALL TIMES.		
11. USE LEAN CONCRETE ($f_c = 1500$) OR CONTROLLED COMPACTED FILL FOR OVER-EXCAVATION OF FOOTINGS.		
12. PLACEMENT OF MATERIAL MUST BE UNDER SUPERVISION OF AN APPROVED TESTING LABORATORY (SEE SPECIFICATIONS). CONCRETE FOUNDATIONS SHALL NOT BE PLACED UNTIL SUBGRADE HAS BEEN CHECKED IN PLACE AND APPROVED BY TESTING LABORATORY.		
13. EXISTING ON-SITE EXCAVATED MATERIALS SHALL NOT BE ACCEPTABLE BACKFILL MATERIAL BEHIND BUILDING FOUNDATIONS, SLABS ON GRADE, OR ON BACKFILLING OF FOUNDATION WALLS, OR WITHIN 2 FEET OF PAVEMENT GRADES UNLESS APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD.		
14. CONTROL JOINT SPACING EXPOSED FOUNDATION RETAINING WALLS SHALL NOT EXCEED 30 FEET. 50% OF HORIZONTAL REINFORCEMENT SHALL EXTEND THROUGH JOINT AND HAVE A CLASS 'B' SPLICE (PER ACI 318). CONTROL JOINTS ARE NOT REQUIRED AT FROST WALLS UNLESS NOTED ON PLAN.		
15. WHERE REQUIRED, CONSTRUCTION JOINTS SHALL BE KEVED AND OCCUR AT CONTROL JOINT INTERVALS. PROVIDE BENTONITE WATERSTOP FULL HEIGHT IN ALL WALL CONSTRUCTION JOINTS WHERE THERE IS A DIFFERENCE IN GRADE.		
16. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF BRICK OR CONCRETE MASONRY BLOCK SHELF ELEVATIONS IN THE FOUNDATION WALLS.		
17. PROVIDE CONTINUOUS BENTONITE WATERSTOPS BETWEEN THE TOP OF FOOTING AND BOTTOM OF ALL WALLS WHERE THE SLAB ON GRADE IS BELOW THE FINISH GRADE. PLACE THE WATERSTOP WITH A MINIMUM OF 2" CLEAR FROM THE FACE OF WALL, OR PER THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. ATTACH WATERSTOP TO THE CONCRETE PER THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.		

SLAB ON GRADE			
1.	ALL SLABS ON GRADE SHALL BEAR ON A 15 MIL, CLASS A, VAPOR RETARDER OVER A MINIMUM OF 4 INCHES OF 3/4" COMPACTED PROCESSED AGGREGATE FILL, OVER A MINIMUM OF 6 INCHES OF COMPACTED GRAVEL FILL.		
	ALL JOINTS OF THE VAPOR RETARDER SHALL BE SEALED WITH TAPE, TURN THE VAPOR BARRIER UP AT ALL TERMINATIONS AGAINST FOUNDATION WALLS AND SEAL JOINT BY CONTINUOUSLY TAPING.		
2.	IF FILL MATERIALS ARE ENCOUNTERED SLAB SUBGRADE ELEVATIONS, ALL FILL MATERIAL SHALL BE EXCAVATED AND DISPOSED OF LEGALLY OFF-SITE. THE OVER EXCAVATION SHALL BE BACKFILLED WITH CONTROLLED COMPACTED FILL TO THE BOTTOM OF THE SLAB SUBGRADE AS REQUIRED. ALL CONTROLLED COMPACTED BACKFILL UNDER SLABS WITHIN THE FOOTPRINT OF THE STRUCTURE SHALL BE COMPACTED TO 95% OF THE MODIFIED OPTIMUM DENSITY.		
3.	EXISTING ON-SITE EXCAVATED MATERIALS SHALL NOT BE ACCEPTABLE BACKFILL MATERIAL BEHIND BUILDING SLABS ON GRADE UNLESS APPROVED BY THE GEOTECHNICAL ENGINEER OF RECORD.		
4.	CONTROL JOINTS ARE TO BE CREATED IN SLABS ON GRADE. JOINTS SHALL BE SAW CUT 1/8" WIDE AND TO A DEPTH EQUAL TO 1/4 OF THE SLAB THICKNESS. LOCATE JOINTS A MAXIMUM OF 12'-0" ON CENTER IN EACH DIRECTION, IN ADDITION TO THOSE LOCATIONS INDICATED ON PLAN.		
5.	CONSTRUCTION JOINTS AS REQUIRED SHALL BE KEVED AND DOWELED AND LOCATED AT INTERVALS OF A MAXIMUM OF 75 FEET ON CENTER.		
6.	SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND SIZE OF DEPRESSED AREAS IN CONCRETE SLABS AND FOR CONCRETE PADS. MAINTAIN FULL 3/4" AS THICKNESS IN DEPRESSED AREAS, UNLESS OTHERWISE SHOWN.		
7.	SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF ALL MASONRY WALLS FOR WHICH NO FOOTING IS SHOWN. SEE DETAILS FOR SLAB REINFORCING REQUIREMENTS AT ALL WALL LOCATIONS.		
8.	CONTRACTOR SHALL CONSOLIDATE ALL SLAB CONCRETE USING VIBRATIONAL METHODS IN CONFORMANCE WITH ACI 309. A GUIDE FOR CONSOLIDATION OF CONCRETE.		

CONCRETE				
MATERIALS:				
CONCRETE SHALL MEET THE REQUIREMENTS OF THE EXPOSURE CATEGORY LISTED BELOW PER ACI 318 CHAPTER 19, AND SHALL HAVE THE MAXIMUM WATER TO CEMENT RATIO, TARGET AIR CONTENT AND DEVELOP STRENGTH IN 28 DAYS AS FOLLOWS:				
LOCATION	EXPOSURE CATEGORY	STRENGTH (PSI)	MAXIMUM WATER TO CEMENT RATIO	TARGET AIR CONTENT
FOUNDATIONS	F2	4000	0.45	6%
SLABS ON GRADE	F3	3000	N/A	N/A
SLABS ON METAL DECK	F3	3000	N/A	N/A
* INCLUDES ANY EXTERIOR CONCRETE PADS, SLABS, ETC. NOTED ON THE STRUCTURAL DRAWINGS. REFER TO SITE CONCRETE SPECIFICATIONS FOR ALL OTHER EXTERIOR CONCRETE REQUIREMENTS.				

1.	ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS MUST FOLLOW ACI 318-14.		
2.	REINFORCING STEEL SHALL BE ASTM A615, GRADE 60.		
3.	NO TACK WELDING OF REINFORCING WILL BE PERMITTED.		
4.	UNLESS NOTED OTHERWISE, ALL LAP SPLICES SHALL BE CLASS B, IN ACCORDANCE WITH ACI 318-14.		
5.	WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185.		
6.	WIRE MESH REINFORCEMENT MUST LAP ONE MESH SIZE AT SIDES AND ENDS AND BE WIRED TOGETHER.		
7.	WELDED WIRE FABRIC SLAP SPLICES SHALL BE STAGGERED TO AVOID FOUR MESH THICKNESS AT CONJOINING END LAP AND SIDE LAP LOCATION.		
8.	NO CALCIUM CHLORIDE OR ADMIXTURES CONTAINING MORE THAN 0.1% CHLORIDE BY WEIGHT OF ADMIXTURE SHALL BE USED IN THE CONCRETE.		
9.	BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE AT LEAST 3'-6" BELOW FINISHED GRADE. PRIOR TO PROCEEDING WITH FOOTING FORMWORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF BOTTOM OF EXTERIOR FOOTING ELEVATIONS WITH THE FINISH GRADES AND MAINTAINING THE 3'-6" FROST PROTECTION. WHERE SUBSURFACE PIPING PASSES THROUGH FOUNDATION WALLS, THE TOP OF FOOTINGS SHALL BE AT LEAST 8" BELOW THE INVERT ELEVATION OF THE PIPING AND CONDUITS. COORDINATE ALL INVERTS WITH MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, SITE AND SITE UTILITY DRAWINGS. PIPING OR CONDUITS SHALL NOT PASS THROUGH COLUMNS OR PIERS.		
10.	CONTRACTOR SHALL ANTICIPATE DEFLECTION OF STEEL MEMBERS AT SUPPORTED ELEVATED SLABS OF 1" INCH MAXIMUM, AND PROVIDE ADDITIONAL CONCRETE AS REQUIRED.		
11.	ALL HORIZONTAL STEEL SHOWN IN SECTIONS AND DETAILS SHALL BE CONTINUOUS, UNLESS OTHERWISE NOTED. ALL LAPS SHALL BE CLASS AB@ SPLICES IN ACCORDANCE WITH ACI 318.		
12.	AT INTERSECTIONS OF REINFORCED CONCRETE WALLS, PROVIDE CORNER DOWELS OF SAME SIZE AND AT THE SAME SPACING AS THE SMALLER HORIZONTAL REINFORCING. DOWELS SHALL HAVE A CLASS B LAP WITH HORIZONTAL REINFORCING IN EACH DIRECTION.		
13.	PROVIDE DRILLED AND EPOXYED DOWELS OF SAME SIZE TO MATCH NEW REINFORCING WHERE NEW CONSTRUCTION ABUTS EXISTING CONSTRUCTION. LENGTH SHALL BE THE REQUIRED EMBEDMENT DEPTH PER THE ANCHOR BOLT PERFORM MANUFACTURER PLUS A CLASS B LAP SPLICE FOR THE SIZE OF BAR.		
14.	PROVIDE CORROSION RESISTANT ACCESSORIES IN ALL EXPOSED CONSTRUCTION.		
15.	ALL KEYS IN CONCRETE WALLS SHALL BE 2 X 4 UNLESS NOTED OTHERWISE.		
16.	SEE ARCHITECTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, ELECTRICAL, SITE, SITE UTILITY AND EQUIPMENT DRAWINGS FOR CONCRETE PADS, SLEEVES, OPENINGS, RECESSES, AND BUILT-IN WORK IN CONCRETE ELEMENTS.		
17.	THE CONTRACTOR SHALL FURNISH, LOCATE AND INSTALL ALL ACCESSORIES FOR PROPER ANCHORAGE OF WOOD AND METAL FRAMING, WOOD BLOCKING, BRICK WORK AND MASONRY UNITS. HE SHALL BE SOLELY RESPONSIBLE FOR PURCHASING, LOCATING AND ENSURING PROPER QUANTITY OF ALL FASTENING DEVICES.		
18.	ALL CONCRETE TO REMAIN EXPOSED TO VIEW SHALL RECEIVE A SMOOTH RUBBED FINISH (SEE SPECIFICATIONS).		
19.	ALL CONCRETE CORNERS WITH BOTH SIDES EXPOSED TO VIEW SHALL BE SQUARE UNLESS OTHERWISE SHOWN OR NOTED. THE EDGE SHALL BE RUBBED, PRODUCING A SMOOTH, DENSE SURFACE WITHOUT PITS OR IRREGULARITIES.		
20.	PROVIDE CONTINUOUS VERTICAL DOVETAIL SLOTS AT 16 INCH CENTERS HORIZONTALLY FOR ALL CONCRETE WALLS ABUTTING A MASONRY WALL OR MASONRY VENEER, UNLESS OTHERWISE NOTED.		
21.	PROVIDE CLEARANCE FROM EDGE OF REINFORCING TO EDGE OF CONCRETE AS FOLLOWS:		
	FOOTINGS (AGAINST EARTH)	3"	
	BEAMS (LONGITUDINAL REINFORCING)	2"	
	COLUMNS AND PIERS (VERTICAL REINFORCING)	1 1/2"	
	WALLS, EXTERIOR FACE (#5 AND SMALLER)	2"	
	WALLS, EXTERIOR FACE (#6 AND LARGER)	3/4"	
	SLABS (INTERIOR)	1 1/2"	
	SLABS (EXTERIOR)	1 1/2"	
	SLABS ON GRADE (W.F.)	1/3 X 1/4 IN. FROM TOP SURFACE	

22.	PROVIDE 2 - #4 BARS IN TOP OF ALL CONCRETE BEAMS WITH STIRRUPS THAT DO NOT HAVE ANY OTHER TOP STEEL SPECIFIED.		
23.	NO SLEEVES, HOLES OR INSERTS SHALL BE PLACED IN SLABS WITHIN 2'-0" OF THE EDGE OF COLUMNS, OR ANYWHERE IN BEAMS, COLUMNS OR JOISTS WITHOUT APPROVAL OF THE ARCHITECT.		
24.	PROVIDE LENGTH OF BEARING ON MASONRY WALLS AS FOLLOWS, UNLESS NOTED OTHERWISE:		
	REINFORCED CONCRETE BEAMS:	8 INCHES	
	SOLID CONCRETE SLABS:	4 INCHES	
25.	CONCRETE COLUMNS SHALL BE PLACED AT LEAST TWO HOURS IN ADVANCE OF BEAMS, JOISTS AND SLABS.		
26.	JOINTS NOT INDICATED ON THE DRAWINGS SHALL BE MADE SO AS TO LEAST IMPAIR THE STRENGTH OF THE STRUCTURE. THERE SHALL BE NO HORIZONTAL JOINTS IN BEAMS OR SUSPENDED SLABS.		
27.	PROVIDE THE FOLLOWING AT OPENINGS IN ALL CONCRETE WALLS AND FRAMED SLABS, UNLESS OTHERWISE INDICATED:		
	1-#5 AT EACH FACE ON EACH SIDE OF OPENING, EXTENDING 2'-0" BEYOND OPENING.		
	1-#5 X 4'-0" LONG AT EACH FACE DIAGONALLY AT EACH CORNER.		
28.	REINFORCING STEEL SHOP DRAWINGS SHALL INDICATE THE SEQUENCE IN WHICH LAYERS OF CROSSING REINFORCING SHOULD BE PLACED, IN ORDER TO PRODUCE THE CORRECT OUTERMOST LAYER AS INDICATED ON THE DRAWINGS.		
29.	SHOP DRAWINGS SHALL INDICATE LOCATIONS OF ALL WALL CONTROL AND CONSTRUCTION JOINTS.		
30.	ALL REINFORCING, THREADED RODS OR BOLTS INDICATED TO BE DRILLED AND EPOXYED SHALL UTILIZE HILTI HIT-HY200 ADHESIVE OR APPROVED EQUAL.		

STRUCTURAL STEEL	
MATERIALS:	
STRUCTURAL STEEL	ASTM A 36
ALL W SHAPES	ASTM A 992, GR. 50
STRUCTURAL STEEL TUBING	ASTM A500, GRADE C
STRUCTURAL STEEL PIPE	ASTM A53, GRADE B
BOLTS	ASTM A325
ANCHOR BOLTS	ASTM F1554, GRADE 36
WELDING ELECTRODE	ASTM E 70
WELDABLE REBAR	ASTM A706, GRADE 60
1.	DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATION, AISC 360-10. ALL REACTIONS SHOWN ON PLAN HAVE BEEN DEVELOPED USING ALLOWABLE STRESS DESIGN.
2.	WELDING SHALL CONFORM TO THE CODE FOR 'ARC AND GAS WELDING IN BUILDING CONSTRUCTION' OF THE AMERICAN WELDING SOCIETY. ALL WELDING SHALL BE DONE BY A CERTIFIED WELDER.
3.	ALL LOOSE BEAM LINTELS SHALL HAVE 8" MINIMUM BEARING. SEE ARCHITECTURAL JAMB DETAILS FOR LENGTHS.
4.	FOR MISCELLANEOUS STEEL NOT SPECIFICALLY DETAILED ON STRUCTURAL DRAWINGS, REFER TO ARCHITECTURAL DRAWINGS.
5.	PROVIDE LEVELING NUTS FOR ALL COLUMN BASE PLATES WITH FOUR (4) ANCHOR BOLTS AND PROVIDE 1 1/2" MINIMUM, 5000 PSI NON-SHRINK GROUT. PROVIDE TACK WELDED NUT AT THE BOTTOM OF THE ANCHOR BOLT EMBEDDED IN CONCRETE.
6.	CONNECTIONS:

CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR AND CONSTRUCTED IN ACCORDANCE WITH AISC 360-10. CONNECTIONS SHALL BE PROVIDED TO CONFORM TO THE REQUIREMENTS OF SIMPLE CONNECTIONS UNLESS OTHERWISE DETAILLED.	
CONNECTIONS SHALL BE DESIGNED TO ACCOMMODATE THE REACTIONS SHOWN ON THE CONTRACT DOCUMENTS. IF NO REACTIONS ARE GIVEN THEN PROVIDE CONNECTION FOR ONE HALF THE ALLOWABLE UNIFORM LOAD BEAM TABLES, PER THE ASCE MANUAL, FOR THE SPAN INDICATED ON THE DRAWINGS. MINIMUM CONNECTION DESIGN LOAD IS 6 KIPS.	
MINIMUM CONNECTION ANGLE THICKNESS SHALL BE 5/16". MINIMUM SHEAR PLATE IS 3/8".	
IN ADDITION TO PROVIDING ADEQUATE BOLTS TO ACCOMMODATE REACTIONS, THE FOLLOWING MINIMUM NUMBER OF BOLT ROWS SHALL BE USED:	
MEMBER DEPTH	MINIMUM BOLT ROWS
10' or Less	2
12' to 14'	3
16' to 18'	4
21' to 24'	5
27' to 30'	6
Over 30'	7

7.	NO WELDING OR FINAL BOLTING SHALL BE DONE UNTIL AS MUCH OF THE STRUCTURE THAT WILL BE STIFFENED THEREBY HAS BEEN PROPERLY ALIGNED.
8.	SEQUENCE OF PLACING WELDS SHALL BE SUCH AS TO AVOID DISTORTION OF MEMBERS.
9.	SUBSTITUTION OF STRUCTURAL STEEL MEMBERS IS PERMITTED TO FACILITATE DELIVERY AT NO ADDITIONAL COST TO THE OWNER. SUBSTITUTED MEMBERS MUST BE OF THE SAME NOMINAL DEPTH AS THE MEMBER ORIGINALLY INDICATED AND HAVE A WEIGHT GREATER THAN THAT INDICATED. BEAM FLANGES MUST NOT INFRINGE ON ADJACENT ARCHITECTURAL ELEMENTS.
10.	ALL STRUCTURAL STEEL BEAMS AND COLUMNS ADJACENT TO MASONRY SHALL HAVE THE FOLLOWING MASONRY ANCHORAGE: 16 GAGE GALVANIZED CHANNEL SLOTS (DUR-O-WAL, INC. D/A 910) WELDED TO COLUMNS AND BEAMS WITH 1/4" GALVANIZED STRAP ANCHORS (DUR-O-WAL, INC. D/A 914) SPACED 1'-4" O.C. AT COLUMNS AND 1'-4" AT BEAMS (UNLESS OTHERWISE NOTED). INSTALL PER MANUFACTURER'S SPECIFICATIONS.
12.	PROVIDE DEFORMED BAR ANCHORS ON THE TOP OF ALL BEAMS SUPPORTING CONCRETE MASONRY UNIT WALLS OR MULTI-WYTHE BRICK WALLS. THE ANCHORS SHALL BE WELDED AT 24" ON CENTER AND SHALL BE THE SAME SIZE AS THE WALL REINFORCING. DEFORMED BAR ANCHORS SHALL BE PLACED BY A TIED STUD WELDING MACHINE.
13.	STEEL MEMBERS SHOWN CONNECTED TO MASONRY WITH EXPANSION ANCHORS SHALL HAVE 3/4" DIAMETER EXPANSION ANCHORS AT 2'-8" ON CENTERS IN VERTICALLY SLOTTED HOLES, UNLESS OTHERWISE INDICATED.
14.	BEAMS BEARING ON MASONRY SHALL HAVE ANGLE WALL ANCHORS WELDED TO THE BEAM, AS DETAILED IN THE A.I.S.C. MANUAL, OF STEEL CONSTRUCTION.
15.	PROVIDE 8" X 8" X 5/8" BEARING PLATES FOR ALL WALL BEARING BEAMS UNLESS NOTED OTHERWISE. ALL PLATES SHALL HAVE A MINIMUM OF (2) 3/4" DIAMETER X 5' LONG WELDED STUDS ON THE BOTTOM TO SET IN CONCRETE OR MASONRY WALLS.
16.	SPRAY ON FIREPROOFING SHALL BE APPLIED TO ALL STRUCTURAL STEEL TO ACHIEVE REQUIRED FIRE RATING, UNLESS OTHER PROTECTIVE COATING IS INDICATED ON THE ARCHITECTURAL DRAWINGS.
17.	ALL STEEL MEMBERS EXPOSED TO WEATHER OR IN CONTACT WITH PRESSURE TREATED LUMBER OR WOOD PRODUCTS IN THE COMPLETED CONSTRUCTION SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.
18.	PROVIDE BUTIMASTIC PROTECTION COATING FOR ALL STRUCTURAL STEEL BELOW GRADE.
19.	EXISTING STEEL SURFACES TO RECEIVE FIELD WELDS SHALL BE THOROUGHLY CLEANED UNTIL FREE FROM PAINT, RUST, GREASE, ETC.
20.	PROVIDE 1/4" CLOSURE PLATES WITH FULL SEAL WELDS FOR ALL TUBE OR PIPE HOLLOW STEEL SECTIONS, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
21.	PROVIDE AN ELEVATOR-HOIST BEAM AT EACH ELEVATOR. THE BEAM SHALL BE A WBX24 MINIMUM. COORDINATE WITH THE ARCHITECTURAL DRAWINGS. THE BEARING PLATE ON MASONRY WALLS SHALL BE A PLATE 3/4"X6"X12" MINIMUM WITH (2) 3/4" DIAMETER ANCHOR BOLTS SET INTO GROUTED MASONRY.
22.	CONTRACTOR IS RESPONSIBLE FOR PROVIDING NEW STEEL FRAMES, AS DETAILED ON THE STRUCTURAL DRAWINGS, AT ALL NEW FLOOR AND ROOF OPENINGS REQUIRED BY ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS IN BOTH NEW AND EXISTING STRUCTURES. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE CONTRACT DOCUMENTS AND INCLUDE THESE FRAMES IN THEIR BID PRICE. THESE NEW STEEL FRAMES FOR OPENINGS ARE IN ADDITION TO THE FRAMES SPECIFICALLY INDICATED ON THE DRAWINGS FOR SPECIFIC SUPPORT CONDITIONS.
23.	CONSTRUCTION MANAGER IS RESPONSIBLE TO COORDINATE THE MECHANICAL CURB DIMENSIONS FOR MECHANICAL EQUIPMENT BETWEEN THE MECHANICAL CONTRACTOR AND STRUCTURAL STEEL FABRICATOR. THE STRUCTURAL STEEL SHALL BE LOCATED ON THE CENTERLINE OF MECHANICAL CURB.
24.	STEEL CONTRACTOR SHALL PROVIDE SKETCHES FOR ALL CORRECTIVE FIELD WORK WHICH SHALL BE SUBMITTED TO THE ENGINEER OR RECORD FOR APPROVAL. ALL SKETCHES SHALL BE SIGNED AND SEALED BY THE STEEL FABRICATORS CONNECTIONS ENGINEER.
25.	ALL THREADED RODS OR BOLTS INDICATED TO BE DRILLED AND EPOXYED SHALL UTILIZE HILTI HIT-HY200 ADHESIVE OR APPROVED EQUAL.

METAL ROOF DECK	
MATERIALS:	
TYPICAL METAL DECK SHALL BE 1 1/2" GALVANIZED WIDE RIB TYPE WITH NESTING SIDE SEAMS OF GAGE INDICATED ON THE DRAWINGS.	
DECK SHALL CONFORM TO 'BASIC DESIGN SPECIFICATION' AS ADOPTED BY THE STEEL DECK INSTITUTE.	
METAL ROOF DECK SHALL BE FURNISHED IN SHEET LENGTHS SUFFICIENT TO EXTEND OVER FOUR SUPPORTS (3 SPANS) WHEREVER POSSIBLE.	
2.	ATTACHMENT:
METAL DECK SHALL BE POWER ACTUATED FASTENED TO SUPPORTING STEEL WITH HILTI X-EDN19 OR EQUAL SPACED NOT MORE THAN 12" ON CENTER WITH A 364 FASTENING PATTERN, UNLESS OTHERWISE NOTED ON THE DRAWINGS.	
SCREW METAL ROOF DECK TO STEEL MEMBERS PARALLEL TO SPAN OF DECK USING HILTI X-EDN19 FASTENERS SPACED AT 12" ON CENTER. WELDING OF THE ROOF DECK IS PROHIBITED.	
INTERMEDIATE SIDE CONNECTIONS SHALL BE MADE WITH #10 SELF TAPPING SCREWS. THE MAXIMUM SPACING OF SIDE LAP CONNECTIONS SHALL BE 1'-0", WITH A MINIMUM OF (4) SCREWS PER SPAN. FOR 3' DECK USE A MINIMUM OF (8) SCREWS PER SPAN.	
LONG SPAN ROOF DECK SHALL HAVE BUTT JUNCTION PUNCHED SIDE LAPS SPACED AT 3'-0" MAX.	

CONCRETE MASONRY

MATERIALS:

HOLLOW LOAD BEARING UNITS: ASTM C 90
(NET AREA COMPRESSIVE STRENGTH OF CMU UNIT = 2000PSI)
MORTAR (TYPE S) ASTM C 270
(COMPRESSIVE STRENGTH OF MASONRY ASSEMBLY: 1" = 2000 PSI)
GROUT FOR REINFORCED MASONRY: ASTM C 476
(COMPRESSIVE STRENGTH AT 28 DAYS = 2600 PSI)
GROUT FOR REINFORCED MASONRY: ASTM C 476
SOLID LOAD BEARING UNITS (GRADE N-I) ASTM C 145
CONCRETE BRICK (GRADE N-I) ASTM C 55

1. WALLS INDICATED ON STRUCTURAL DRAWINGS ARE FOR REFERENCE ONLY. SEE ARCHITECTURAL DRAWINGS FOR LOCATION, THICKNESS AND COMPOSITION OF MASONRY WALLS.

2. ALL MASONRY WALLS SHALL CONTAIN THE FOLLOWING REINFORCING:

1-#5 VERTICAL BAR AT 24" ON CENTER.

2-#6 VERTICAL BARS AT BOTH SIDES OF DOOR, WINDOW AND MECHANICAL OPENINGS.

2-#5 HORIZONTAL BAR MINIMUM ABOVE AND BELOW ALL WINDOW AND MECHANICAL OPENINGS AND ABOVE ALL DOOR OPENINGS. PROVIDE ADDITIONAL BARS ABOVE DOORS, WINDOWS AND MECHANICAL OPENINGS AS REQUIRED IN ACCORDANCE WITH LINTEL SCHEDULE ON ARCHITECTURAL DRAWINGS.

2-#5 HORIZONTAL, AT TOP OF ALL WALLS, AND AT BOND BEAMS CONNECTED TO FLOORS AND ROOFS, UNLESS OTHERWISE INDICATED.

2-#6 VERTICAL BARS AT ENDS OF ALL WALLS, AND EACH SIDE OF CONTROL JOINTS.

STANDARD LAJOR TYPE DESIGN DUR-O-WAL HORIZONTAL REINFORCING @ 16" O.C. VERTICAL. SIDE WIRE SIZE SHALL BE #9 GAGE WIRE.

3. PROVIDE VERTICAL DOWELS FROM CONCRETE WALLS INTO ALL CMU WALLS. SIZE AND SPACING OF THE DOWELS SHALL MATCH THE VERTICAL REINFORCING AS SPECIFIED IN THESE GENERAL NOTES, UNLESS OTHERWISE NOTED ON THE DRAWINGS. DOWEL LENGTHS SHALL BE THE REQUIRED CONCRETE DEVELOPMENT LENGTH PLUS THE REQUIRED BAR LAP SPLICE LENGTH FOR MASONRY AS SPECIFIED IN THESE GENERAL NOTES.

4. ALL VERTICAL WALL REINFORCING SHALL BE CONTINUOUS FOR THE FULL HEIGHT OF MASONRY WALLS, INCLUDING THROUGH CONTINUOUS MASONRY BOND BEAMS UNLESS OTHERWISE INDICATED.

5. ALL GROUTING OF MASONRY WALLS SHALL BE ASSUMED TO BE COMPLETED BY LOW LIFT GROUTING METHODS. IF THE CONTRACTOR PROPOSES TO UTILIZE HIGH LIFT GROUTING METHODS THEY SHALL SUBMIT THEIR PROPOSED HIGH LIFT GROUTING PROCEDURE FOR REVIEW PRIOR TO STARTING ANY GROUTING ON THE PROJECT SITE.

6. REINFORCING ABOVE WINDOWS, DOORS AND MECHANICAL OPENINGS IN THE EXTERIOR WALLS SHALL BE IN A BOND BEAM COURSE ABOVE THE STEEL LINTELS PROVIDED AT THESE OPENINGS. BOND BEAMS SHALL EXTEND 2'-0" BEYOND THE OPENING.

7. BOND BEAM LINTELS SHALL BE CONSTRUCTED USING SOLID BOTTOM "U" BLOCK MASONRY UNITS.

8. CELLS CONTAINING REINFORCING BARS AND ALL CELLS BELOW GRADE SHALL BE GROUTED SOLID. ALL OTHER CELLS SHALL REMAIN HOLLOW EXCEPT WHERE NOTED. THE CONTRACTOR SHALL NOT RUN CONDUIT OR PIPE IN CELLS CONTAINING REINFORCING.

9. ALL BOLTS OR ANCHORS SHALL BE SOLIDLY EMBEDDED IN MORTAR OR GROUT. IF BOND BEAM IS NOT LOCATED AT BOLT OR ANCHOR ELEVATION, PROVIDE LATH AND FILL CELL LOCALLY TO PROVIDE SUBSTRATE FOR BOLT OR ANCHOR. GROUT CELL ABOVE ALL MASONRY ANCHORS.

10. ALL COLUMNS WITHIN SHEAR WALLS AND EXTERIOR WALLS SHALL BE SOLIDLY EMBEDDED IN GROUT.

11. GROUT SOLID MASONRY FOR FULL HEIGHT OF WALL BELOW EACH LOOSE LINTEL AND PROVIDE #4 VERTICAL IN NEW OR EXISTING CORE.

12. GROUT SOLID MASONRY FOR TWO COURSES BELOW EACH BEAM BEARING EXCEPT AS NOTED.

13. USE 1 COURSE (8") OF SOLID MASONRY OR GROUTED SOLID MASONRY BELOW EACH STEEL JOIST BEARING EXCEPT AS NOTED.

14. PROVIDE CONTINUOUS GROUTED BOND BEAM WHERE MASONRY UNITS CONNECT CONCRETE MASONRY TO STEEL FRAMING. GROUT CELL ABOVE ANCHOR.

15. HOLLOW UNITS SHALL BE LAID WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SILLS. EXCEPT THAT WEBS SHALL ALSO BE BEDDED IN ALL COURSES OF BEARING AND SHEAR WALLS. PIERS, COLUMNS AND PLASTERS, AND IN THE STARTING COURSE ON FOOTINGS AND SOILD FOUNDATION WALLS, AND WHERE ADJACENT TO CELLS OR CAVITIES WHICH ARE TO BE REINFORCED AND/OR FILLED WITH GROUT.

16. MORTAR PROTRUSIONS EXTENDING INTO CELLS OR CAVITIES TO BE REINFORCED AND/OR GROUTED SHALL BE REMOVED.

17. ALL MASONRY WALLS SHALL BE BRACED AT THE TOP WHERE MASONRY ENDS AT THE UNDERSIDE OF FLOOR OR ROOF CONSTRUCTION. REFER TO TYPICAL DETAILS.

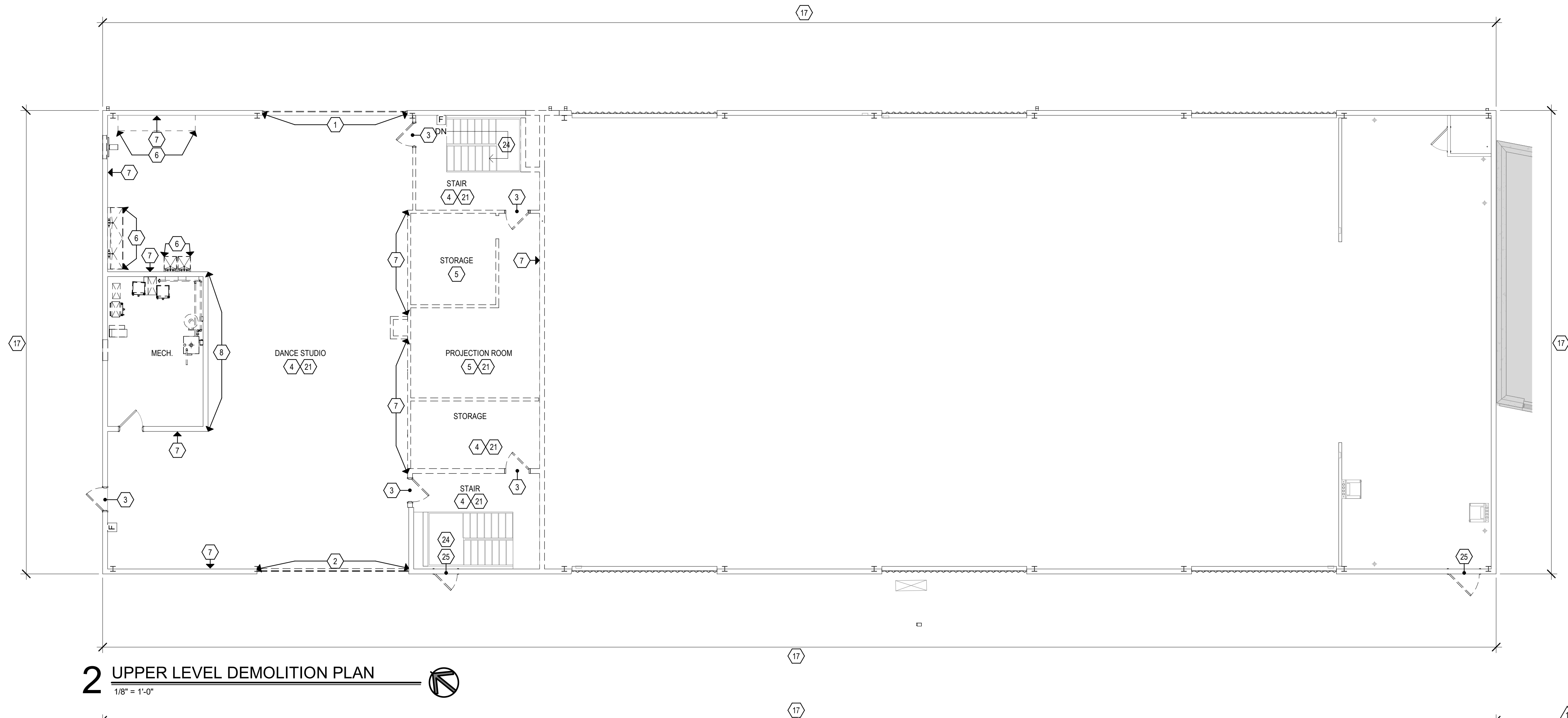
18. IN MASONRY WALLS, NO CHASES, RISERS, CONDUITS, OR TIGHTING OF MASONRY SHALL OCCUR WITHIN 17" OF CENTERLINE OF BEAM BEARING OR LOAD CONCENTRATION.

19. SOLID WALLS SHALL BE LAID WITH FULL HEAD AND BED JOINTS.

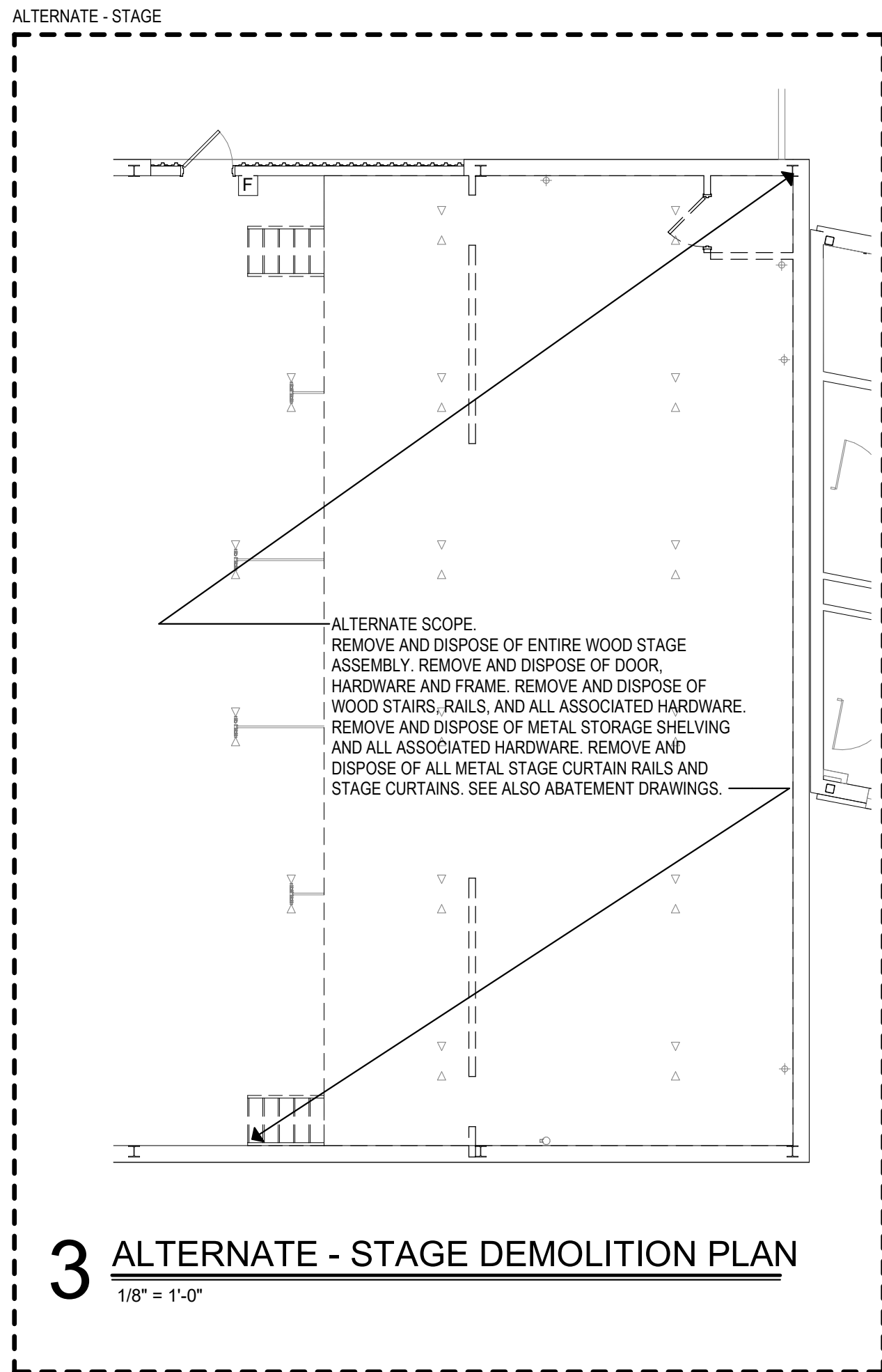
20. COLLAR (VERTICAL LONGITUDINAL) JOINTS BETWEEN THE FACING AND BACKING WYTHES IN WALLS SHALL BE COMPLETELY FILLED WITH MORTAR OR GROUT AND WORKED IN WITH A TROWEL.

21. ALL INTERSECTING LOAD BEARING WALLS SHALL BE TIED TOGETHER IN MASONRY BOND UNLESS NOTED OTHERWISE.

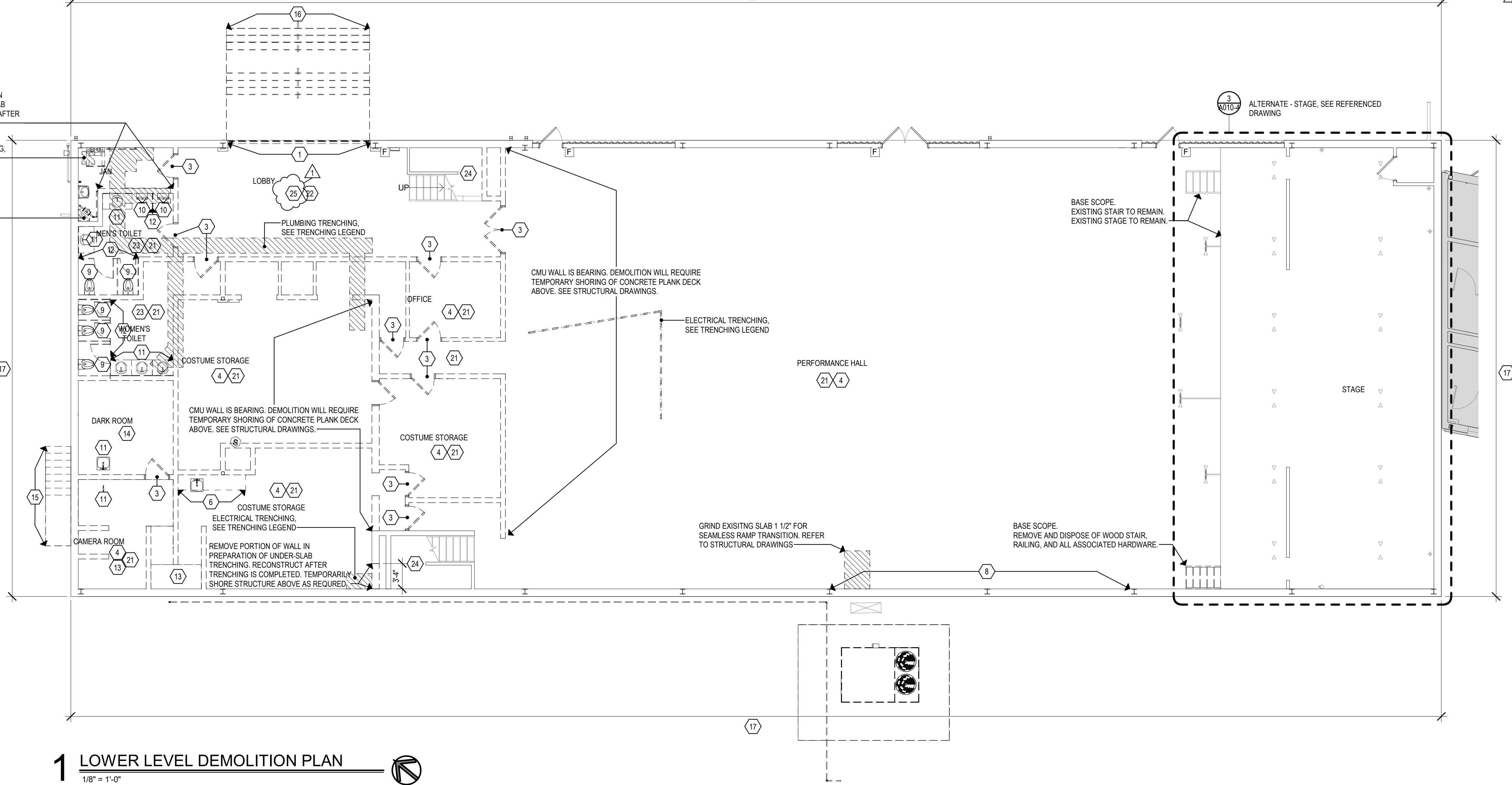
22. MINIMAL DEVELOPMENT LENGTH AND SPLICE LENGTH OF MASONRY REINFORCING SHALL BE AS FOLLOWS:



2 UPPER LEVEL DEMOLITION PLAN
1/8" = 1'-0"



3 ALTERNATE - STAGE DEMOLITION PLAN
1/8" = 1'-0"



1 LOWER LEVEL DEMOLITION PLAN
1/8" = 1'-0"

DEMOLITION GENERAL NOTES	
1.	REFER TO ABATEMENT DRAWINGS AND PROJECT MANUAL PRIOR TO ANY REMOVALS. FOLLOW ALL PROCEDURES DESCRIBED IN ABATEMENT DOCUMENTS FOR REMOVAL OF HAZARDOUS MATERIALS.
2.	COORDINATE ARCHITECTURAL DEMOLITION WORK WITH ALL OTHER TRADES, INCLUDING HAZARDOUS MATERIAL ABATEMENT DRAWINGS. REFER TO ME/PFP DRAWINGS FOR ADDITIONAL DEMOLITION SCOPE. COORDINATE ALL REQUIRED WALL & FLOOR PENETRATIONS/PATCHING WITH ME/PFP DRAWINGS.
3.	WHERE INCONSISTENCIES OCCUR, NOTIFY THE DESIGN TEAM AND ASSUME THE GREATER VALUE FOR BIDDING PURPOSES.
4.	CONTRACTORS SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. SAW CUT AND REMOVE CONCRETE SLAB & GRAVEL IN ALL AREAS AS NECESSARY TO ALLOW FOR NEW UNDERSLAB PIPING, CONDUIT, RACON PITS & UTILITIES. COORDINATE W/ ME/PIS/PFP DRAWINGS.
5.	PATCH TO MATCH EXISTING WALLS AND OTHER EXISTING SURFACES AFFECTED BY NEW WORK.
6.	TYPICAL DEMOLITION DESIGNATION

TRENCHING LEGEND	
	DASHED OUTLINE AND SHADED AREAS INDICATE WHERE EXISTING SLAB WILL NEED TO BE CUT OUT AND INFILLED WITH NEW CONCRETE FLUSH WITH EXISTING. SAW CUT NECESSARY WIDTH AS REQUIRED TO ACCOMMODATE UTILITY PIPING OR CONDUIT TO BE INSTALLED. COORDINATE LENGTH OF TRENCHING WITH DESIGN LAYOUT INDICATED ON ME/P DRAWINGS.
	SEE STRUCTURAL DRAWINGS FOR TYPICAL TRENCHING DETAILS. PROVIDE CORE DRILLING THROUGH EXISTING SLAB ABOVE TUNNEL TO ACCOMMODATE NEW PIPING AS INDICATED IN ME/P DRAWINGS.

DEMOLITION NOTES	
1	REMOVE AND DISPOSE OF ENTIRE CURTAIN WALL GLAZING SYSTEM, DOORS, FRAMES AND ALL ASSOCIATED HARDWARE. SEE ALSO ABATEMENT DRAWINGS.
2	REMOVE AND DISPOSE OF WOOD WINDOW GLAZING, FRAMES, INTERIOR SILL, AND ALL ASSOCIATED HARDWARE. SEE ALSO ABATEMENT DRAWINGS.
3	REMOVE AND DISPOSE OF WOOD DOOR, HARDWARE AND HOLLOW METAL FRAME.
4	REMOVE AND DISPOSE OF WALL BASE, VOT FLOORING AND CLEAN SUBSTRATE TO ACCEPT NEW SCHEDULED FINISH. SEE ALSO ABATEMENT DRAWINGS.
5	REMOVE AND DISPOSE OF WALL BASE, CARPET FLOORING AND CLEAN SUBSTRATE TO ACCEPT NEW SCHEDULED FINISH. SEE ALSO ABATEMENT DRAWINGS.
6	REMOVE AND DISPOSE OF BASE AND TOP OF CASWORK, COUNTER TOPS, CUBICLES, SINKS, AND ALL ASSOCIATED HARDWARE. SEE ALSO ME/P DRAWINGS.
7	REMOVE AND DISPOSE OF MARKERTACK BOARDS AND ALL ASSOCIATED HARDWARE AND/OR WALL ADHESIVES FLUSH TO WALL SURFACE. SEE ALSO ABATEMENT DRAWINGS.
8	REMOVE AND DISPOSE OF LARGE MIRRORS AND ALL ASSOCIATED HARDWARE AND/OR WALL ADHESIVES FLUSH TO WALL SURFACE. SEE ALSO ABATEMENT DRAWINGS.
9	REMOVE AND DISPOSE OF WATER CLOSET FIXTURE, PLUMBING HARDWARE, GRAB BARS AND ACCESSORIES. SEE ALSO PLUMBING DRAWINGS.
10	REMOVE AND DISPOSE OF URINAL FIXTURE, PLUMBING HARDWARE, GRAB BARS AND ACCESSORIES. SEE ALSO PLUMBING DRAWINGS.
11	REMOVE AND DISPOSE OF LAVATORY FIXTURE, COUNTER TOPS, PLUMBING HARDWARE, MIRRORS AND ACCESSORIES. SEE ALSO PLUMBING DRAWINGS.
12	REMOVE AND DISPOSE OF TOILET PARTITIONS, DOORS, BRACES AND ALL ASSOCIATED HARDWARE.
13	REMOVE AND DISPOSE OF WOOD RAMP AND RAISED FLOOR PLATFORM.
14	REMOVE AND DISPOSE OF WALL BASE AND CLEAN SUBSTRATE TO ACCEPT NEW SCHEDULED FINISH. SEE ALSO ABATEMENT DRAWINGS.
15	REMOVE AND DISPOSE OF REINFORCED CONCRETE STAIR, CONCRETE COLUMN, METAL RAIL, AND ALL ASSOCIATED HARDWARE.
16	REMOVE AND DISPOSE OF CONCRETE STAIR, METAL HANDRAIL, AND ALL ASSOCIATED HARDWARE. SEE ALSO CIVIL DRAWINGS.
17	REMOVE AND DISPOSE OF PEELING PAINT. CLEAN SUBSTRATE TO ACCEPT NEW PAINT FINISH. SEE ALSO ABATEMENT DRAWINGS.
18	REMOVE AND DISPOSE OF METAL GUTTERS, METAL DOWNSPOUTS AND ALL ASSOCIATED HARDWARE. SEE ALSO PLUMBING DRAWINGS.
19	REMOVE AND DISPOSE OF METAL SNOW GUARDS AND ALL ASSOCIATED HARDWARE. SEE ALSO ABATEMENT DRAWINGS.
20	REMOVE AND REPLACE DAMAGED METAL TRIM. CLEAN AND REPLACE FOAM INSULATION. SEE ALSO ABATEMENT DRAWINGS.
21	REMOVE AND DISPOSE OF SUSPENDED ACT CEILING SYSTEM AND GWB SOFFITS (ALONG WITH CEILING MOUNTED LIGHTS, FIXTURES AND DEVICES) INCLUDING GRID, FRAMING, SUSPENSION WIRES AND ALL ASSOCIATED HARDWARE.
22	REMOVE AND DISPOSE OF ADHERED CEILING SYSTEM AND GWB SOFFITS. SEE ALSO ABATEMENT DRAWINGS.
23	REMOVE AND DISPOSE OF WALL BASE AND CERAMIC TILE FLOOR. CLEAN SUBSTRATE TO ACCEPT NEW SCHEDULED FINISH.
24	REMOVE AND DISPOSE OF METAL HANDRAIL SYSTEM AND ALL ASSOCIATED HARDWARE.
25	REMOVE AND DISPOSE OF NATURAL STONE FLOORING AND CLEAN SUBSTRATE TO ACCEPT NEW SCHEDULED FINISH. SEE ALSO ABATEMENT DRAWINGS.

KEY PLAN
SCALE: NTS

Project Title:
**ALTERATIONS TO:
ACES at Chase**
565 Chase Parkway
Waterbury, Connecticut 06708



SILVER PETRUCELLI + ASSOCIATES
3190 WHITNEY AVENUE HAMDEN CT 06518
311 STATE STREET NEW LONDON CT 06320
203 230 9007 silverpetrucelli.com

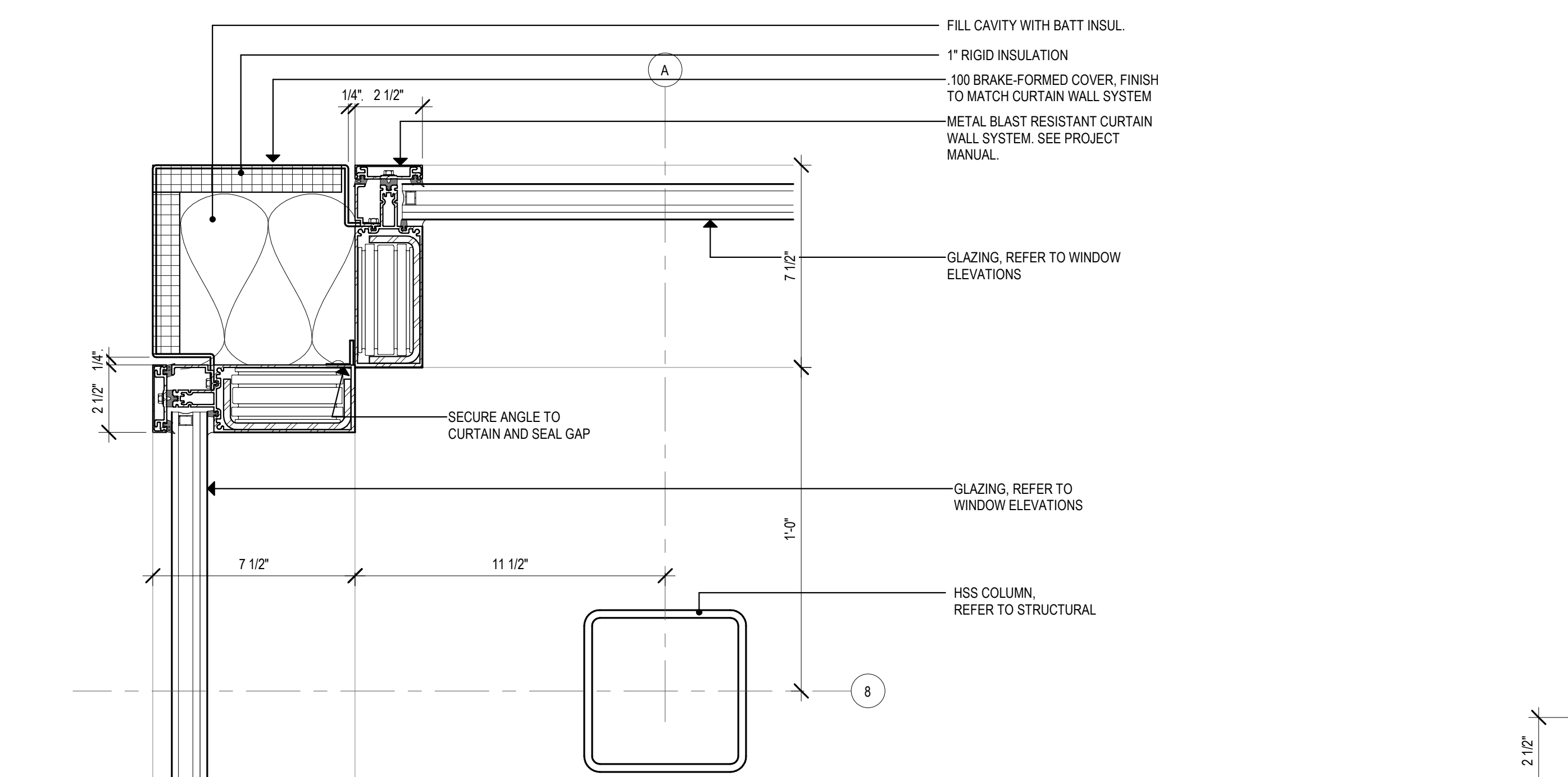
Revision	Description	Date	Revised By
1	Bulletin #4	12/26	KD

Drawing Title:
BUILDING 4 - DEMOLITION PLANS
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

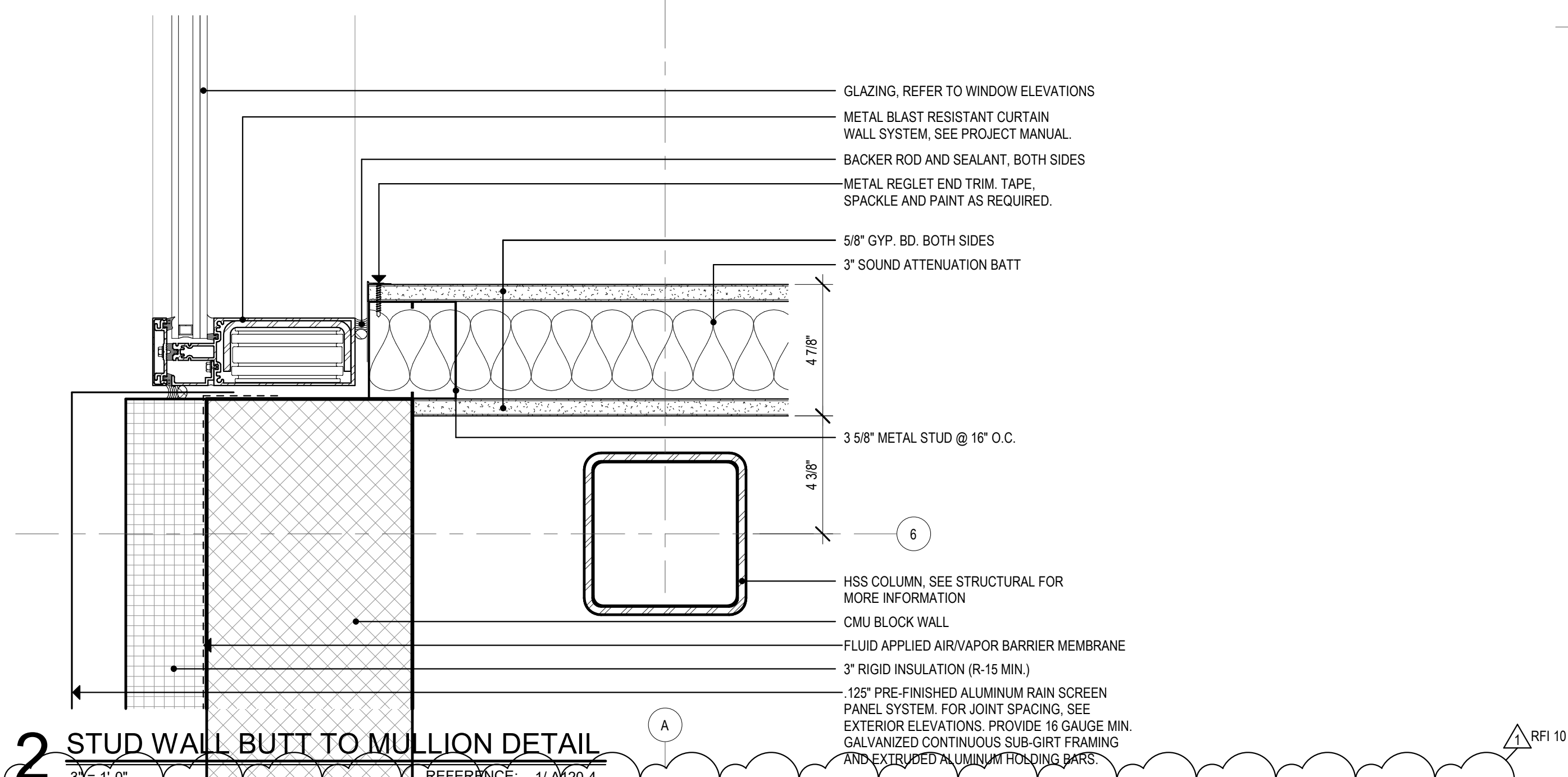
Date:
AUGUST 12, 2025
Scale:
As indicated
Drawn By:
MES
Project Number:
22.050

A010-4

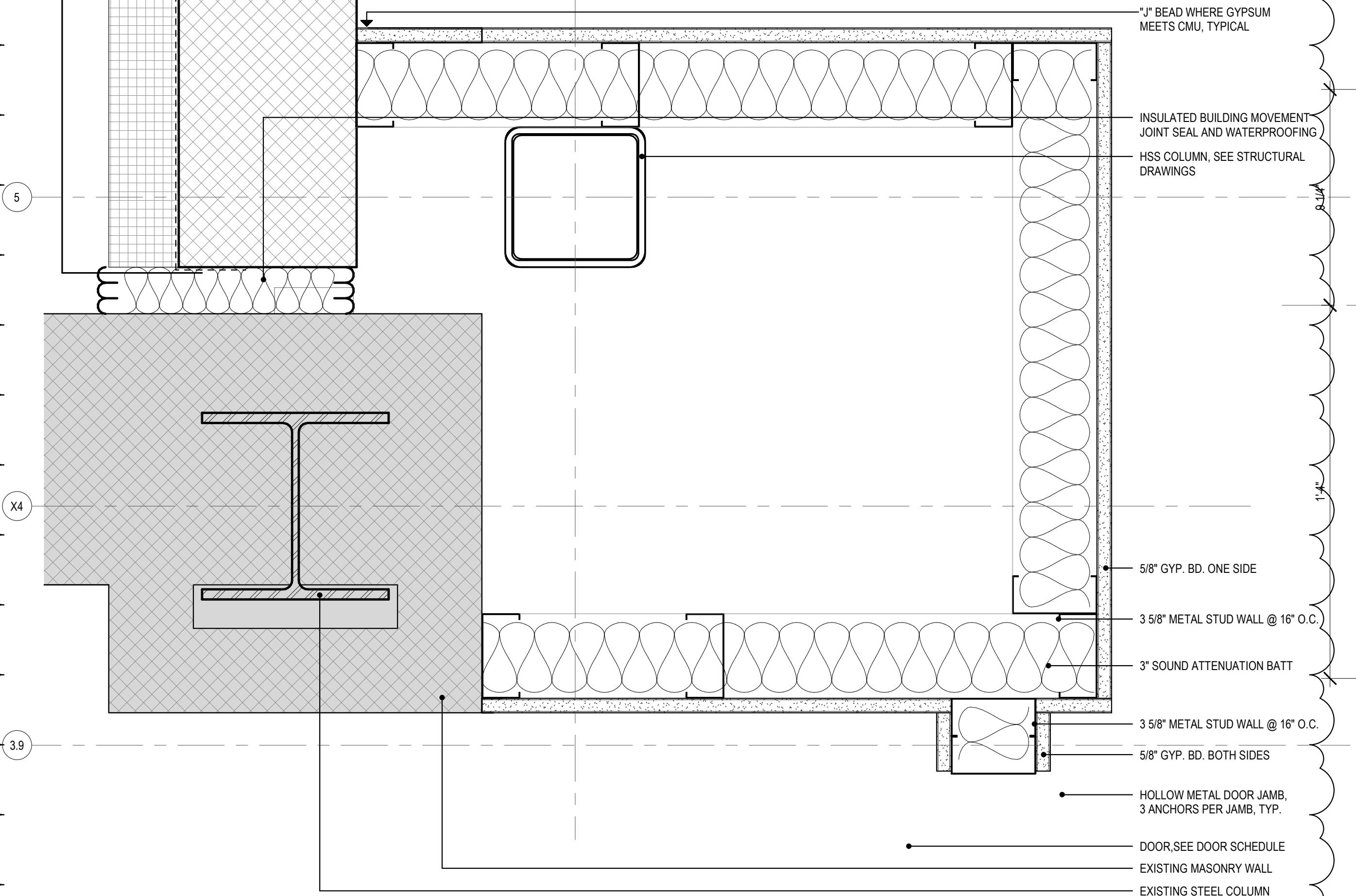
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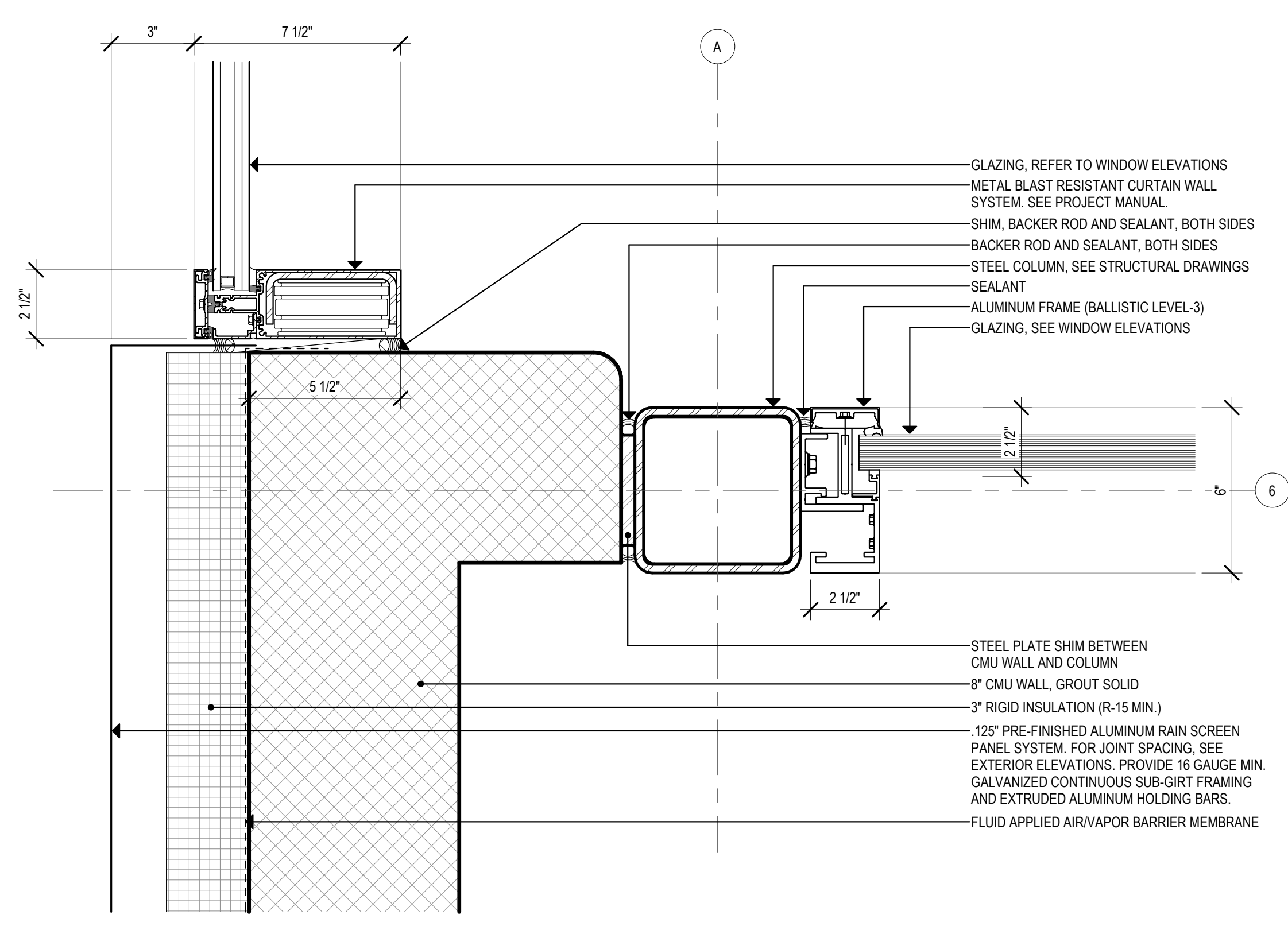
1 CURTAIN WALL CORNER DETAIL
3" = 1'-0" REFERENCE: 1/A110-4



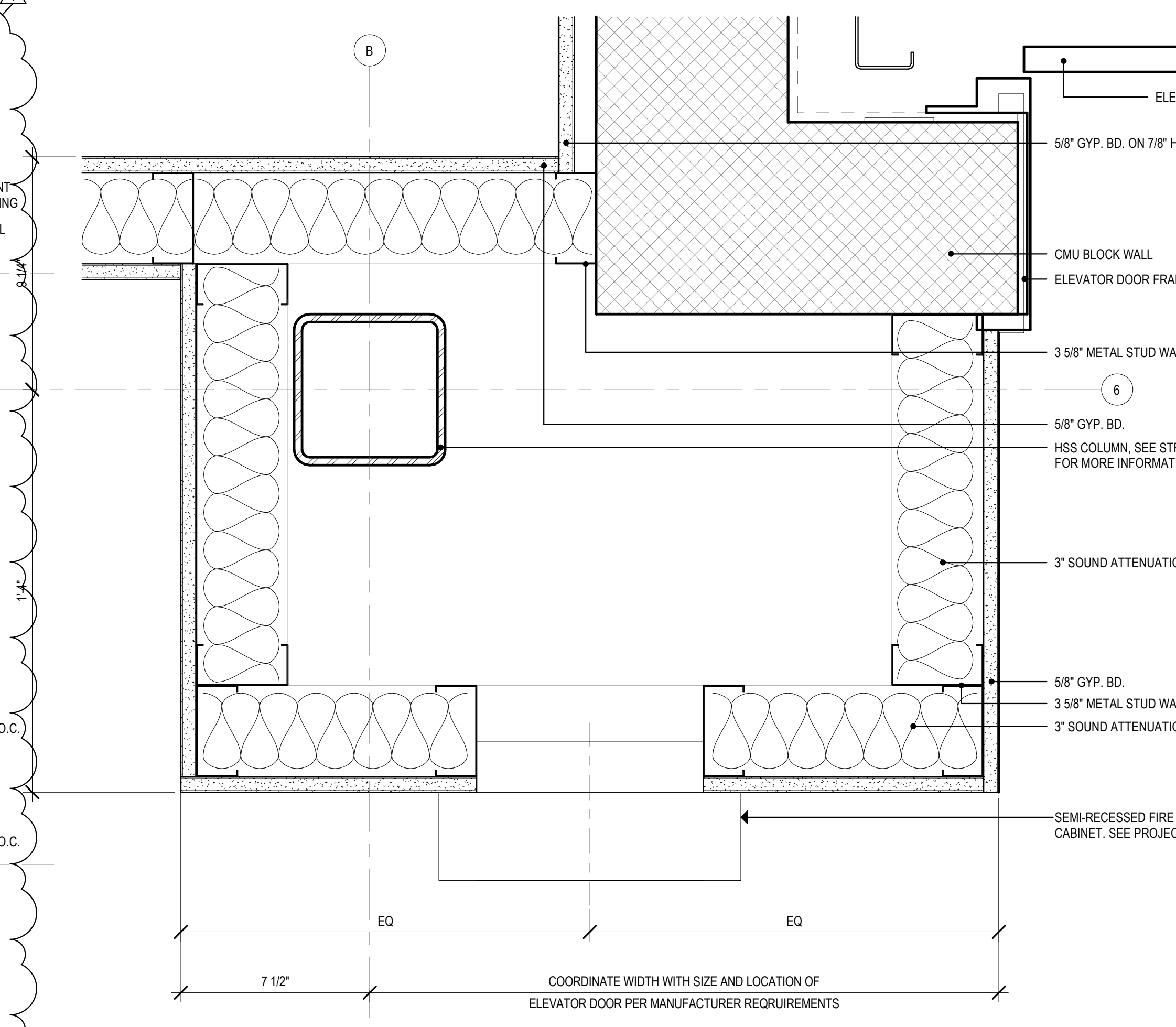
2 STUD WALL BUTT TO MULLION DETAIL
3" = 1'-0" REFERENCE: 1/A120-4



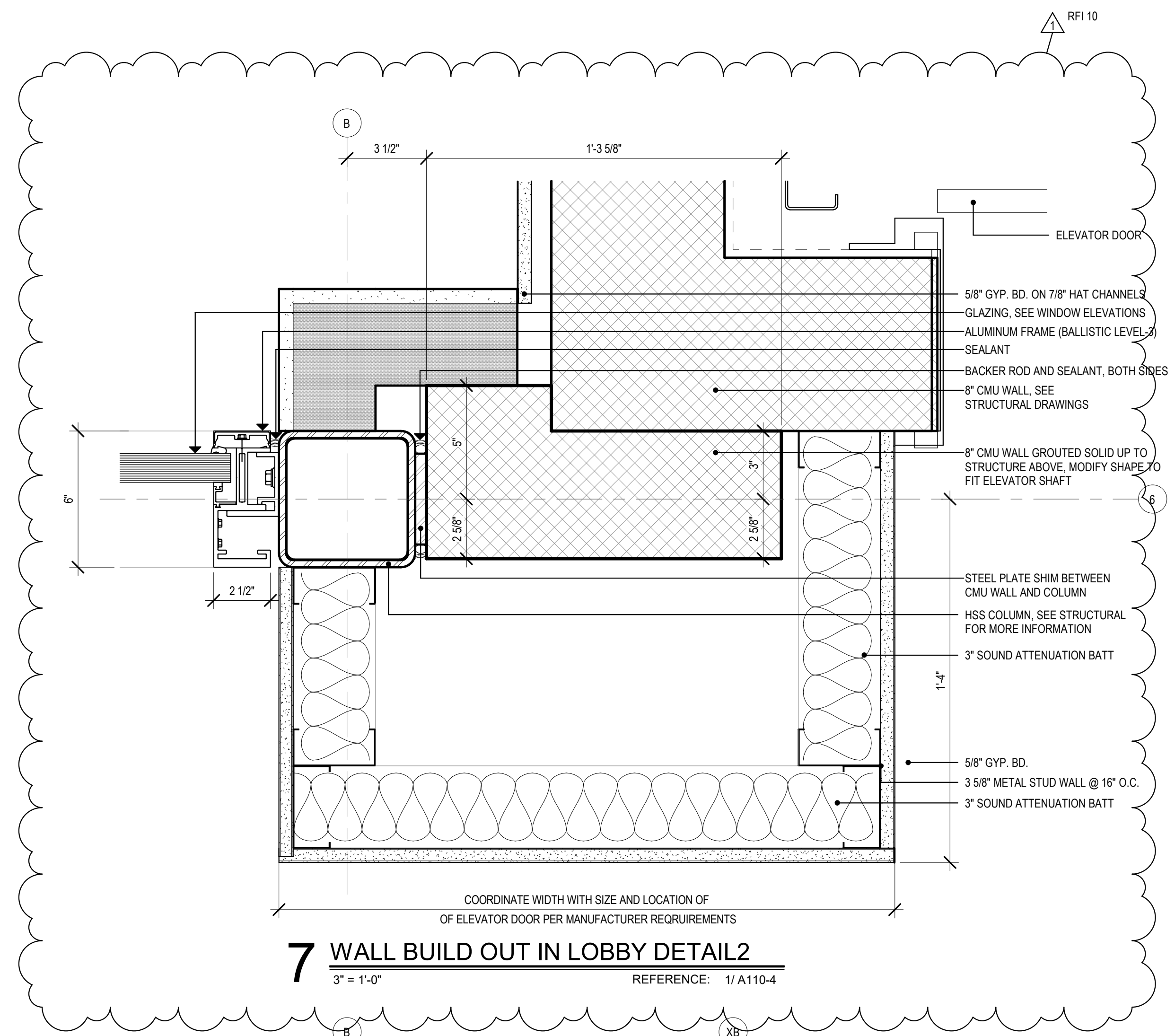
3 WALL BUILD OUT IN LOBBY DETAIL
3" = 1'-0" REFERENCE: 1/A110-4



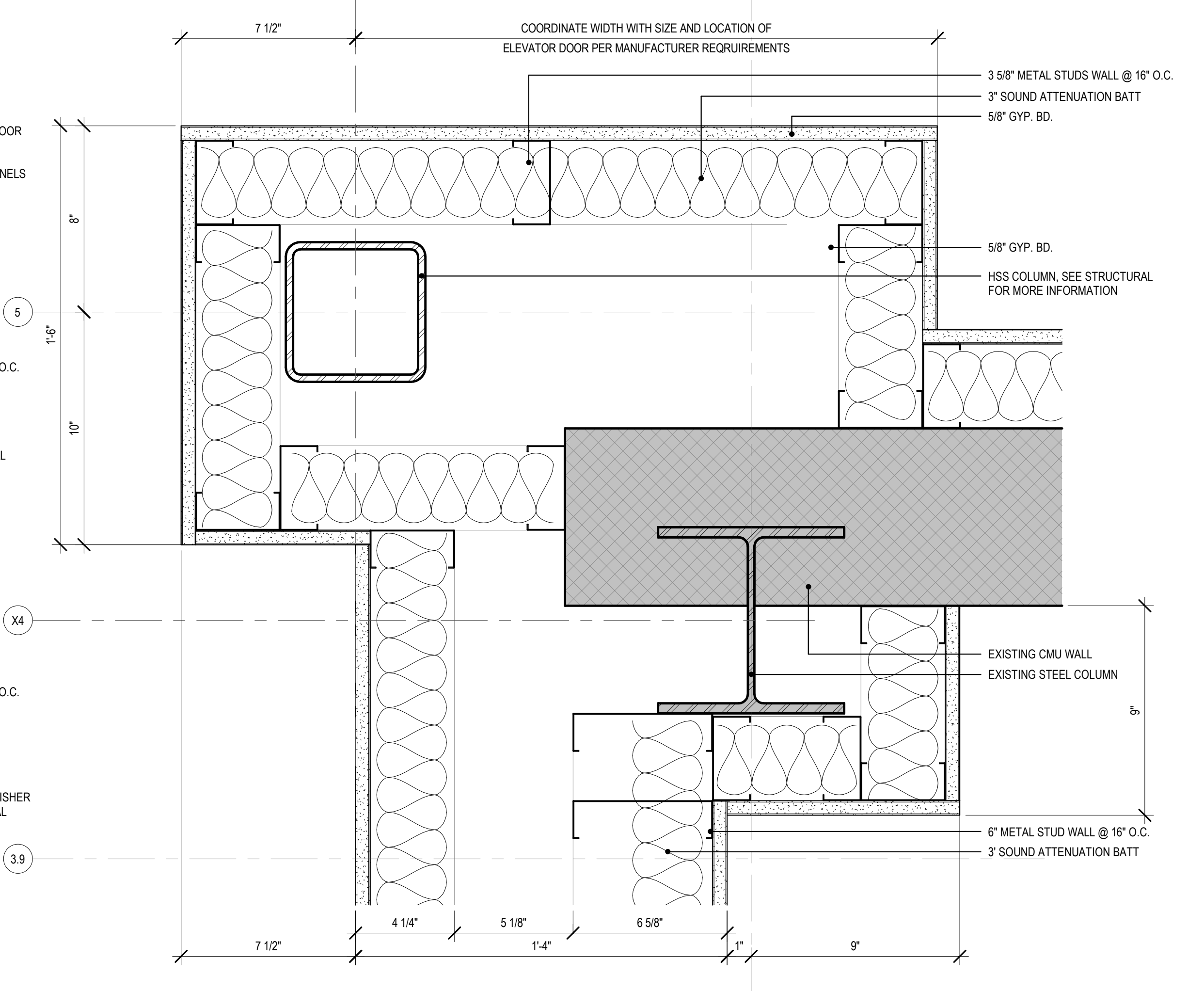
6 WALL BUILD OUT IN LOBBY DETAIL 1
3" = 1'-0" REFERENCE: 1/A110-4



4 COLUMN ENCLOSURE IN OFFICE DETAIL
3" = 1'-0" REFERENCE: 1/A120-4



7 WALL BUILD OUT IN LOBBY DETAIL 2
3" = 1'-0" REFERENCE: 1/A110-4



5 COLUMN CHASE ENCLOSURE IN OFFICE DETAIL
3" = 1'-0" REFERENCE: 1/A120-4

Project Title:
**ALTERATIONS TO:
ACES at Chase**
565 Chase Parkway
Waterbury, Connecticut 06708



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3190 WHITNEY AVENUE HAMDEN CT 06518
311 STATE STREET NEW LONDON CT 06320
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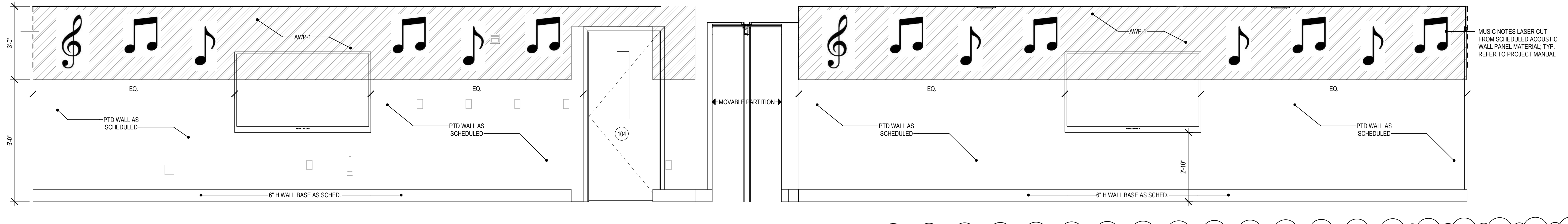
Revision	Description	Date	Revised By
1	Bulletin #4	12/26	KD

Drawing Title:
BUILDING 4 - PLAN DETAILS
Project Phase:
ISSUED FOR BID - 11/03/2025
State Project Number:
#244-0044 MAG

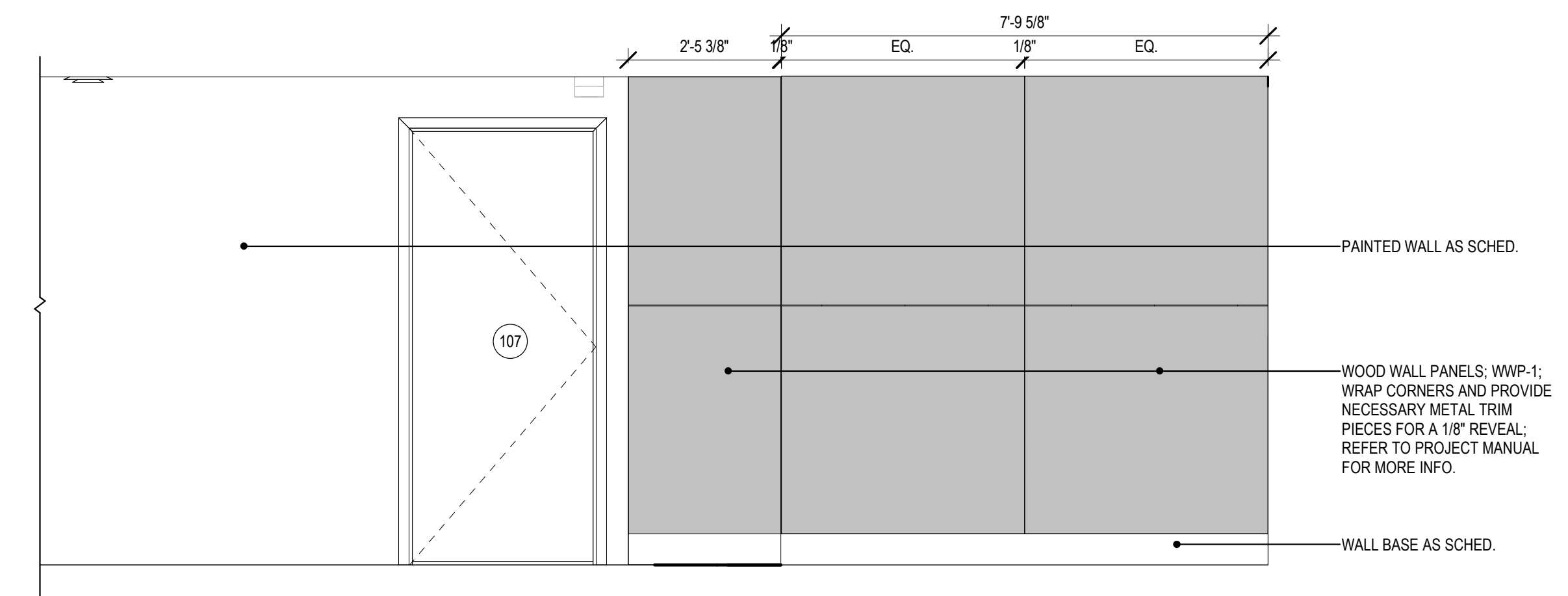
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Scale:
3" = 1'-0"
Drawn By:
MES/IMG
Project Number:
22.050

A500-4

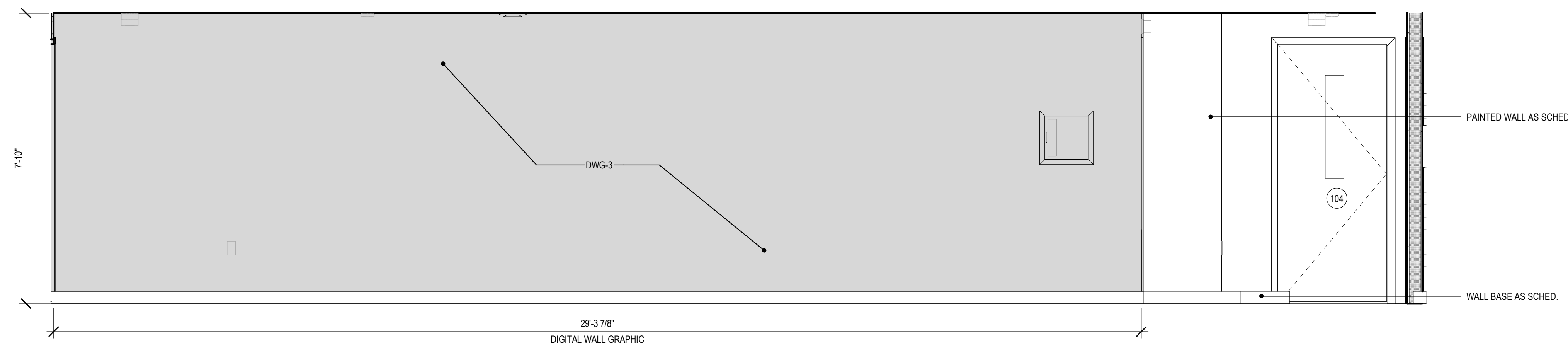
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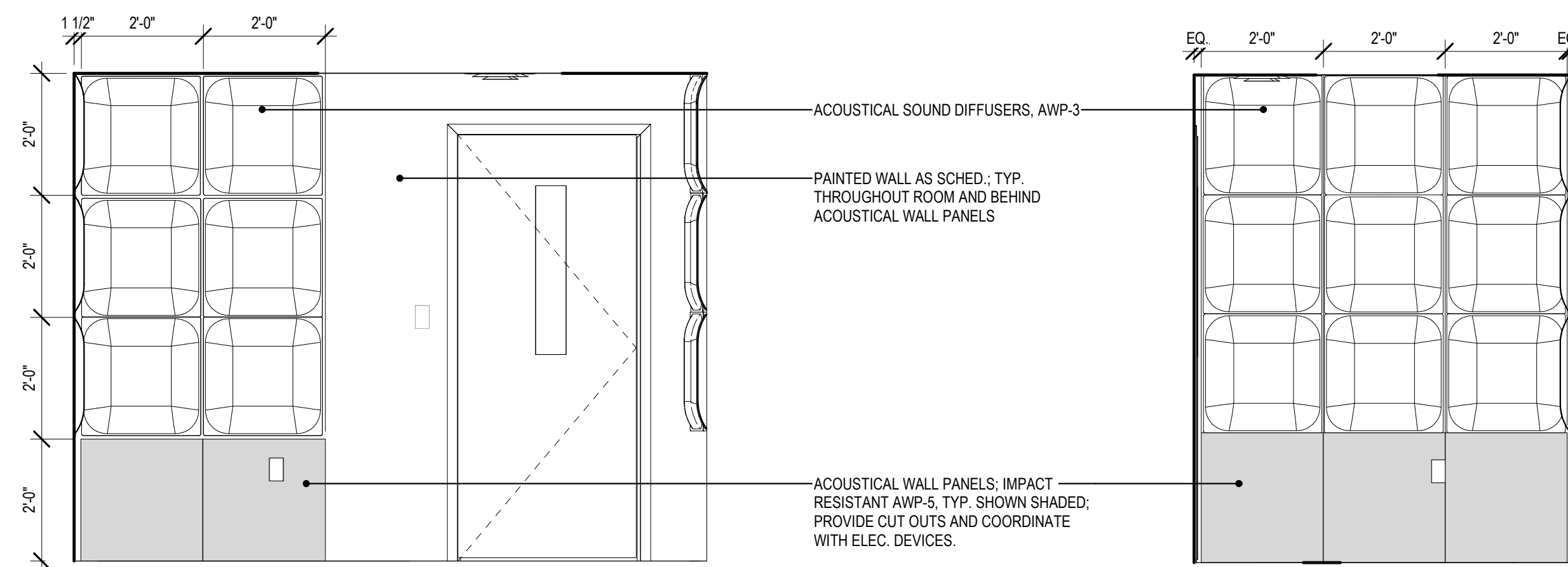
4 BAND 103-4 / ORCHESTRA 104-4 - ELEVATION A
1/2" = 1'-0"



3 LOBBY 100.1-4 - ELEVATION C
1/2" = 1'-0"

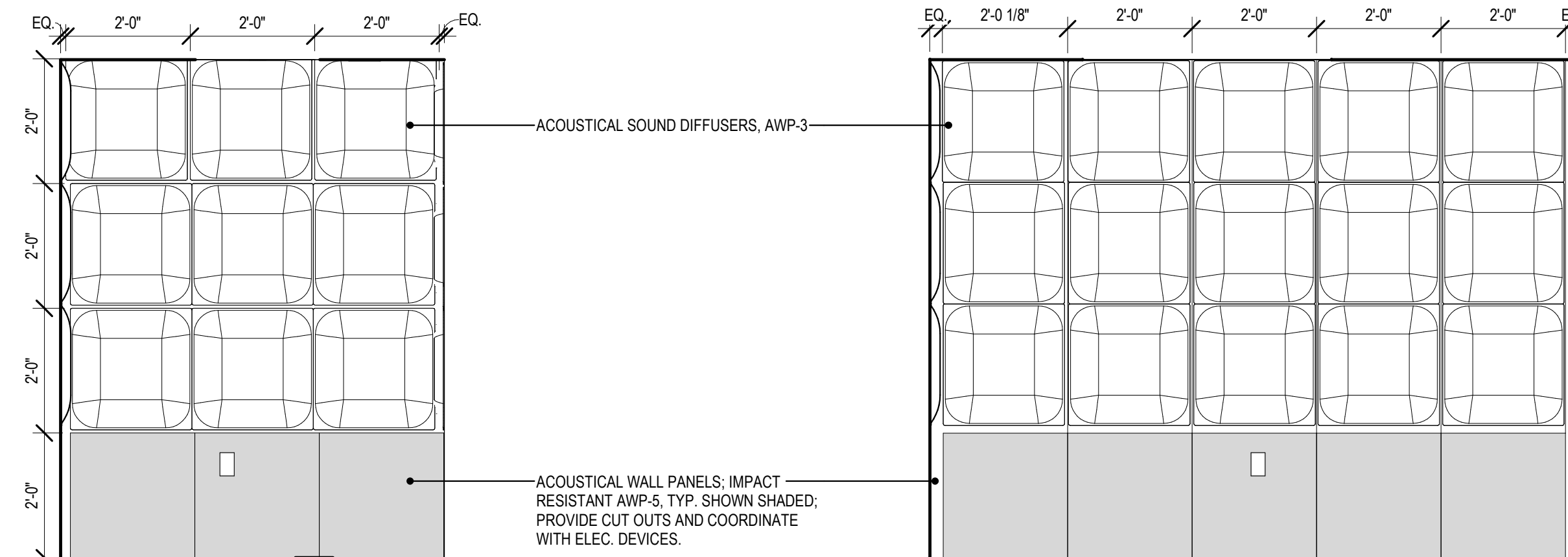


7 LOBBY 100.1-4 - ELEVATION B
1/2" = 1'-0"



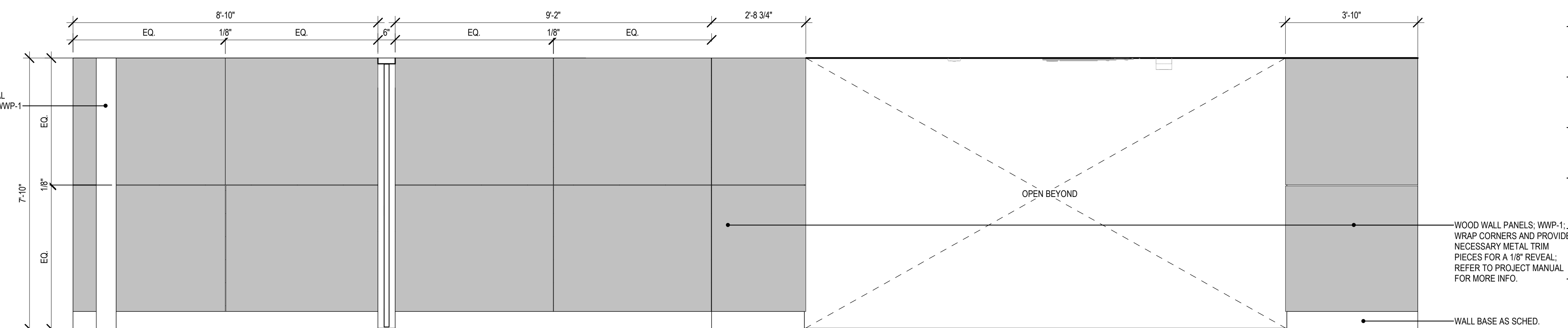
9 PRACTICE ROOM ELEV. D
1/2" = 1'-0"

6 PRACTICE ROOM ELEV. B
1/2" = 1'-0"

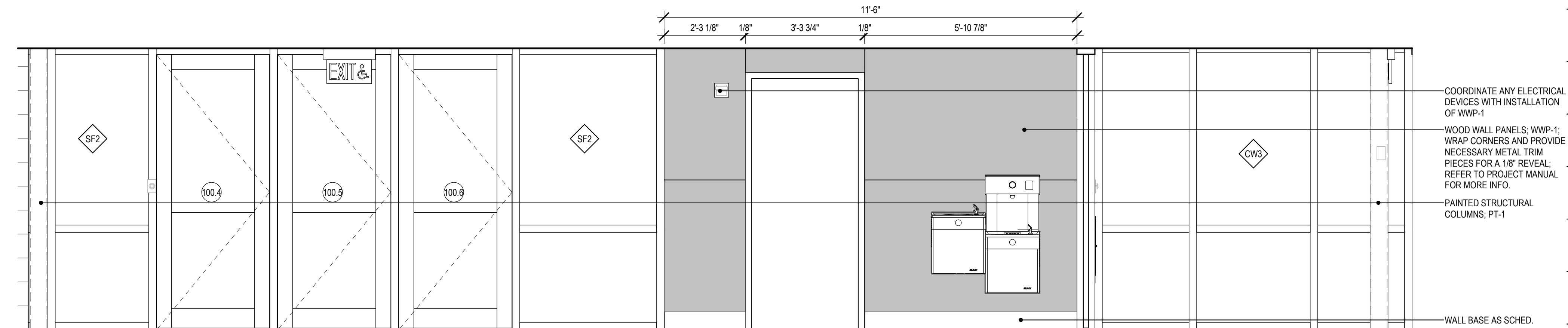


8 PRACTICE ROOM ELEV. C
1/2" = 1'-0"

5 PRACTICE ROOM ELEV. A
1/2" = 1'-0"



2 LOBBY 100.1-4 - ELEVATION D
1/2" = 1'-0"



1 LOBBY 100.1-4 - ELEVATION A
1/2" = 1'-0"