PROJECT: 22812 - GENETIC SCIENCES LEARNING CENTER
PROJECT ADDRESS: 295 CHIPETA WAY
SLC, UT 84108

TO: University of Utah:

This revision forms a part of and modifies the Contract Documents for the subject Prime, dated "10.30.2024 – CONSTRUCTION DOCUMENTS."

I. BID QUESTION RESPONSES

1. Q: On page D100- The plan notes "remove carpet and flooring throughout", "patch and repair holes as needed". Please clarify if the intent is to patch the existing holes in the raised access floor or the slab beneath.
   A: The contractor is to patch existing holes in the raised floor. See attached drawings.

2. Q: Sheet D100 demolition note 6 indicates "protect shades and pull cords, coordinate replacement of damaged shades with Owner". For bidding purposes please indicate the currently assumed quantity of shades that need to be replaced.
   A: (1) shade missing. (1) shade cloth is damaged. All others are currently functioning properly. (4) shades require shortening where new walls at Conference room 4S130 and Director office 4S155 are to be constructed.

3. Q: Sheet A200 provides details for the Wall Type B1. Wall type B1 shows suspended sound absorbing ceiling supports on what appears to be the ceiling of the Video Production 4S100 room. On A100 RCP plan page it shows the ceiling as gypsum board. Please confirm the following rooms do not receive a suspended ceiling system: Video Office 4S105, Sound Studio 4S120A, Video Production 4S100, Storage 4S100A, Storage 4S100B.
   A: The suspended ceiling has been removed as part of Addendum-01. See updated wall types and wall tags on 1/A200 for clarification on the wall/ceiling configuration in these rooms.

4. Q: Please indicate if the "Backdrop" shown on 1/A200 and 18/A200 is OFOI. If contractor furnished and/or installed please specify material.
   A: Backdrop shown is OFOI. Contractor to provide blocking at top of wall for mounting. Coordinate size and location with owner.

5. Q: On sheet MH101 general sheet notes 11 & 20 indicate that the general contractor is to hire a 3rd party Test & Balance and Commissioning Agent. Please confirm that it is acceptable for the Test & Balance and Commissioning Agent to be a sub-tier subcontractor under the mechanical contractor.
   A: University of Utah to contract the Commissioning Agent. Contractor is to provide the TAB. Owner has confirmed it is acceptable for TAB agent to be sub-tier under the mechanical contractor.

6. Q: Please indicate the floor to deck height for the tenant improvement areas affected.
   A: 15'-0" floor to deck, raised floor measures approx. 6".

7. Q: Please confirm that the Sanitary Sewer (SS) piping shown on PL101 is to be installed in the Level 3 Ceiling even though it is shown on the Level 4 Water plan.
   A: Yes, the sanitary sewer for the fixtures on level 4 will be run in the ceiling of level 3.

8. Q: For the new Sanitary Sewer piping in the Level 3 Ceiling, what will the working conditions be? Will this work be off-hours or weekends?
   A: Contractor to provide notice to owner as indicated in specifications prior to commencing work.

Work in this area is expected to be performed before 8am/after 5pm.

9. Q: For the new Sanitary Sewer piping in Level 3 Ceiling serving new Level 4 fixtures, there will be 3 or 4 Core Drills. What will the working conditions be for the Core Drills?
A: Contractor to provide notice to owner as indicated in specifications prior to commencing work. Disruptive work is expected to be performed before 8am/after 5pm.

10. Q: Spec 233113 Paragraphs 3.7 and 3.8 require Duct Cleaning of new and existing ducts. Please provide marked-up plans clearly showing the extents of which ducts do and don't need to be cleaned
A: Existing ductwork between gridline C & D and Between 5 & 9 on the 4th floor needs to be cleaned

11. Q: Please provide an HVAC Duct Insulation Spec.
A: See attached Duct Insulation Spec.

12. Q: Are there any approved/restricted Control Wiring Subcontractors for the Thermostat replacements identified by Sheet Note 6/MH101?
A: Approved: Johnson Controls

13. Q: Controls Schematics and/or Specs have not been provided. Please provide a model number for the desired Thermostats that shall be used to replace the existing Thermostats identified by Sheet Note 6/MH101.
A: Provide Johnson Controls TEC3000 series thermostats

14. Q: Can a spec for the raised access floor spec please be provided?
A: No manufacturer or model is specified in record drawings. Based on labels on existing salvaged tiles, we believe the product is: Maxcess RWC-200, R2F2.

15. Q: Can a shelving track spec please be provided?
A: We believe the product required is: Eagle Group SDFT-18. Contractor is to verify with owner.

16. Q: Can flat file storage spec please be provided?
A: Basis of Design (or approved equal): Olpin Group, Flat file cabinet. Size and base as indicated in updated addendum-01 documents. Color: #90 Pure White.

17. Q: Can a metal privacy curtain spec please be provided?
A: See spec section 122200 - Curtains and Drapes

18. Q: Can a spec please be provided for the custom glass print that is wanted per 1/201?
A: See spec section 101100 - Visual Display Units, 2.2,A

19. Q: Can a specs for ALT #1 doors that are to be replaced please be provided?
A: See spec section 081416

20. Q: Please advise if the contractor is responsible for devices and cabling for data audio visual and security?
A: Contractor is responsible for all raceways only. Refer to associated riser diagrams in drawings.

21. Q: Please advise if the contractor is to provide the backdrop called out per 18/A200. If so can spec for the backdrop please be provided?
A: See question 4 response.

22. Q: Plans call for a markerboard and glass board but there is only a glass board in the specs. Please advise if the contractor is to provide markerboards. If so, can a spec for the markerboards please be provided?
A: See spec section 101100 - Visual Display Units, 2.2,A & 2.2,B for items noted GW1 and GW2 and section 2.3,A for items noted MB1.

23. Q: Please advise if the contractor is tying into the existing sewer line under existing access floor or if the contractor is to core drill to level 3 to tie into the existing?
A: See question 7 response.

24. Q: On A200 there is a light grade grid around the walls. Please advise what this is, and if the contractor is responsible to do anything with it?
    A: Hatch indicates where raised floor is to be patched at new walls that run floor to deck. See wall type B1 for more info.

25. Q: A supplier of the fire treated material has ½ inch fire treated not 5/8 as called out on the plans. Please advise if the contractor can use ½ inch instead of 5/8 inch
    A: ½" fire treated material is acceptable so long as required alignments outlined in the construction documents are met.

26. Q: In talking with a subcontractor about modifying existing blinds. The sub proposes that the owner go with new blinds as it will be cheaper then removing, storing, modifying and reinstalling the old blinds. Please advise if the blinds called out to be modified and reinstalled can be replaced with new?
    A: New blinds are acceptable so long as they are an exact match to the existing blinds.

27. Q: Please provide fixture type identification for what appears to be recess fixtures in room 4S130.
    A: Refer to attached EL101 sheet. Recessed can light fixture ID is (D4).

28. Q: Please provide location of fixture type WM14 on drawing.
    A: Fixture WM14 is located in the booth. Refer to sheet EL101 in drawings.

29. Q: Please provide manufacturer and AIC rating of panel 4EE for proper breaker pricing.
    A: See attached sheet EP601 for updated AIC rating. AIC rating is 10,000. Contractor to field verify and provide as required in bid.

30. Q: Please provide manufacturer and AIC rating of panel UL17B for proper breaker pricing.
    A: Refer to panel schedules on EP601 in drawings. AIC rating is 22,000. Contractor to field verify and provide as required in bid.

II. SPECIFICATIONS

ARCHITECTURAL

1. 085673 — Sound Control Windows spec added

MECHANICAL

1. 230713 — Duct Insulation spec added

II. DRAWINGS

A. The following sheet(s) are Reissued and, designated ___ADDENDUM-01__12/20/2024____:

ARCHITECTURAL

1.	G102	Construction barrier and staging area noted, general notes added
2.	D100	1 / patch and repair holes in raised floor as needed for new floor finish Noted to remove wallpaper under exterior windows
3.	A100	2 / new ceiling detail 14 noted on drawings Added B2 and B3 top of wall versions to wall type B1. Suspended sound absorbing ceiling removed from wall type B1.
4.	A120	FF&E Schedule: modified Flat File Storage, updated identifier to PN-1
	A200	Added B2 and B3 top of wall versions to wall type B1. Suspended sound absorbing ceiling removed from wall type B1. Updated wall tags at Video Office, Sound Studio, Sound Office and Video production.
5.	A201	Added TD (Towel Dispenser) and SD (Soap Dispenser) to legend, owner provided, contractor to provide blocking in walls 8, 15, 20 / dimensioned seams added to felt wall panels 25 / dimensioned seams added to textured felt wall panel

		35, 39 / noted for contractor to provide blocking for paper towel and soap dispensers, dimensions added
6.	A500	3 / Millwork door bid alternate clarification and door thickness dimension provided
7.	A501	14 / SOFFIT DETAIL - ACT / GYP added
8.	A515	8 / plywood noted, align material 9 / Plan detail callout added 11, 12, 13 / plywood noted 14 / M3 – SNACK BAR PLAN DETAIL added
9.	A516	1, 3 / Millwork adjustments 10 / additional adjustable shelves to upper and lower cabinets
10.	A517	3, 4, 5/ counter height adjustment, flat file storage dimension update, added center support for island
11.	A601	13 / Door-mounted blackout shade added to detail 14 / Updated acoustic window STC requirement
12.	A900	Updated renderings

MECHANICAL

1.	M101	Relocated thermostat from Touchdown 4S110 to Booth 4S115
2.	ME501	Clarification on detail naming

ELECTRICAL

1.	EP101	Relocation of receptacles and data devices
2.	EP601	Updated AIC value for panel 4EE
3.	EL101	Relocation of light switch in Booth room and updated light fixture tag
4.	EL602	Update lighting fixture schedule
5.	EY101	Added/relocated fire alarm devices and updated candela ratings

END OF ADDENDUM-01

SECTION 085673 - ALUMINUM SOUND CONTROL WINDOWS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Aluminum sound control windows and accessories for installation.

1.2 REFERENCES

A. American Society for Testing and Materials (ASTM)

1. ASTM E90: Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.

1.3 COORDINATION

A. Finish Matching: Coordinate all exposed exterior aluminum components and trim to ensure uniform and consistent color and appearance. Use products specified in this Section as a benchmark. Architect's decision will be final as to whether a proposed product matches.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, glazing and fabrication methods, dimensions of individual components and profiles, hardware, and finishes.

B. Shop Drawings:

1. Plans, elevations, sections, hardware, accessories, insect screens, operational clearances, and details of installation, including anchor, flashing, and sealant installation.

C. Samples for Initial Selection: Manufacturer's standard color sheets, showing full range of available colors for each type of exposed finish.

D. Samples for Verification: Actual sample of finished products for each type of exposed finish:

1. Exposed Aluminum Finishes: Manufacturers' standard size.
2. Exposed Hardware: Full-size units.

E. Product Schedule: For aluminum windows. Use same designations indicated on Drawings.

1.5 INFORMATIONAL SUBMITTALS

A. Test and Evaluation Reports:

1. Product Test Reports: For each aluminum window, for tests performed by qualified testing agency.

B. Field Quality-Control Reports: For aluminum windows.

C. Qualification Statements: For manufacturer and Installer.

D. Sample warranties.

1.6 CLOSEOUT SUBMITTALS

A. Warranty Documentation:

1. Manufacturers' special warranties.

1.7 QUALITY ASSURANCE

A. Manufacturer Qualifications: A manufacturer capable of fabricating aluminum sound control windows that meet or exceed performance requirements indicated and of documenting this performance by test reports and calculations.

B. Installer Qualifications: Authorized representative who is trained and approved by aluminum window manufacturer.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver aluminum windows to Project site in original, unopened packages and store them in accordance with manufacturer's written instructions. Protect aluminum windows against damage from moisture, humidity, temperature extremes, direct sunlight, surface contamination, and other causes.

B. Handle aluminum windows in a manner that prevents damage before, during, and after installation.

1.9 FIELD CONDITIONS

A. Environmental Limitations: Do not install aluminum windows outside of limits recommended in writing by manufacturer.

1.10 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace aluminum windows that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

    a. Failure to meet performance requirements.
    b. Structural failures, including excessive deflection, water leakage, condensation, and air infiltration.
    c. Faulty operation of movable sash and hardware.
    d. Deterioration of materials and finishes beyond normal weathering.
    e. Failure of insulating glass.

2. Warranty Period:

    a. Window: Five years from date of Substantial Completion.
    b. Glazing Units: Five years from date of Substantial Completion.
    c. Hardware: Three years from date of Substantial Completion.
    d. Aluminum Finish: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SOURCE LIMITATIONS

A. Obtain aluminum sound control windows from single source from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. Performance Class and Grade: AAMA/WDMA/CSA 101/I.S.2/A440 as follows:

1. Minimum Performance Class: CW.
2. Minimum Performance Grade: 30.

B. Performance Requirements:

1. Acoustical Characteristics: Acoustical panels to perform as specified when tested in accordance with ASTM E90.

2.3 ALUMINUM SOUND CONTROL WINDOWS

A. Basis-of-Design: Product subject to compliance with requirements, provide Acoustical Surfaces inc., Noise S.T.O.P. Studio 6 soundproof window or comparable product.

B. Provide manufacturer's standard aluminum window assemblies consisting of frames, sashes, glass, hardware, fasteners, and all components and accessories as required for a complete installation.

C. Glazing System: 1” clear insulated glass (I.G.) unit made from two pieces of ¼” tempered-laminated glass with ½” airspace, with additional 3/8” clear tempered-laminated glass.

D. Glazing Angle: Standard – 4 degrees

E. Window size: as indicated in drawings.

F. Window Frame:
   1. Frame Composition: Anodized Aluminum
   2. Frame size: 6-3/8”
   3. Frame Finish: Powder coat - white.
   4. Acoustical Insert: Sound Silencer – Class A Fire Rated

G. Window Performance:
   1. Acoustical Performance
      a. Sound Transmission Class (STC) per ASTM E90 – 55

H. Fasteners: Noncorrosive and compatible with window members, trim, hardware, anchors, and other components.

   1. Exposed Fasteners: Avoid exposed fasteners to greatest extent possible. For application of hardware, use fasteners that match finish hardware being fastened.

2.4 ACCESSORIES

A. Attachment hardware for windows as specified by manufacturer for installation.

2.5 FABRICATION

A. Fabricate aluminum windows in sizes indicated. Include a complete system for assembling components and anchoring windows.

B. Glaze aluminum windows in the factory.

C. Complete fabrication, assembly, finishing, hardware application, and other work in the factory to greatest extent possible. Disassemble components only as necessary for shipment and installation.

2.6 GENERAL FINISH REQUIREMENTS

A. Comply with NAAMM/NOMMA AMP 500 "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: Noticeable variations in same piece are unacceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.7 ALUMINUM FINISHES

A. Baked-Enamel or Powder-Coat Finish: AAMA 2603 except with a minimum dry film thickness of 1.5 mils (0.04 mm). Comply with coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.

1. Color and Gloss: As selected by Architect from manufacturer's full range.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Verify rough opening dimensions, levelness of sill plate, and operational clearances.

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

3.2 INSTALLATION

A. Comply with manufacturer's written instructions for installing windows, hardware, accessories, and other components. For installation procedures and requirements not addressed in manufacturer's written instructions, comply with installation requirements in ASTM E2112.

B. Install windows level, plumb, square, true to line, without distortion or impeding thermal movement, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction to produce weathertight construction.

3.3 CLEANING AND PROTECTION

A. Clean exposed surfaces immediately after installing windows using manufacturer's written instructions. Avoid damaging finishes. Remove excess sealants, glazing materials, dirt, and other substances.

B. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction period.

C. Protect window surfaces from contact with contaminating substances resulting from construction operations. If contaminating substances do contact window surfaces, remove contaminants immediately in accordance with manufacturer's written instructions.

END OF SECTION 085673

SECTION 230713 - DUCT INSULATION

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 insulating the following duct services:
   1. Indoor, concealed supply and outdoor air.
   2. Indoor, exposed supply and outdoor air.

B. Related Sections:
   1. Section 230719 "HVAC Piping Insulation."
   2. Section 233113 "Metal Ducts" for duct liners.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product indicated. Include thermal conductivity, water-vapor permeance thickness, and jackets (both factory- and field-applied if any).
   1. For adhesives and sealants, documentation including printed statement of VOC content.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For qualified Installer.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Skilled mechanics who have successfully completed an apprenticeship program or another craft training program certified by the Department of Labor, Bureau of Apprenticeship and Training.

B. Surface-Burning Characteristics: For insulation and related materials, as determined by testing identical products according to ASTM E 84, by a testing agency acceptable to authorities having jurisdiction. Factory label insulation and jacket materials and adhesive, mastic, tapes, and cement material containers, with appropriate markings of applicable testing agency.
   1. Insulation Installed Indoors: Flame-spread index of 25 or less, and smoke-developed index of 50 or less.
   2. Insulation Installed Outdoors: Flame-spread index of 75 or less, and smoke-developed index of 150 or less.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Packaging: Insulation material containers shall be marked by manufacturer with appropriate ASTM standard designation, type and grade, and maximum use temperature.

1.7 COORDINATION

A. Coordinate sizes and locations of supports, hangers, and insulation shields specified in Section 230529 "Hangers and Supports for HVAC Piping and Equipment."

B. Coordinate clearance requirements with duct Installer for duct insulation application. Before preparing ductwork Shop Drawings, establish and maintain clearance requirements for installation of insulation and field-applied jackets and finishes and for space required for maintenance.

C. Coordinate installation and testing of heat tracing.

1.8 SCHEDULING

A. Schedule insulation application after pressure testing systems and, where required, after installing and testing heat tracing. Insulation application may begin on segments that have satisfactory test results.

B. Complete installation and concealment of plastic materials as rapidly as possible in each area of construction.

PART 2 - PRODUCTS

2.1 INSULATION MATERIALS

A. Comply with requirements in "Duct Insulation Schedule, General," "Indoor Duct and Plenum Insulation Schedule," articles for where insulating materials shall be applied.

B. Products shall not contain asbestos, lead, mercury, or mercury compounds.

C. Products that come in contact with stainless steel shall have a leachable chloride content of less than 50 ppm when tested according to ASTM C 871.

D. Insulation materials for use on austenitic stainless steel shall be qualified as acceptable according to ASTM C 795.

E. Foam insulation materials shall not use CFC or HCFC blowing agents in the manufacturing process.

F. Provide fiberglass faced duct wrap Type IV with factory applied flame retardant foil reinforced Kraft facing FRK-25, U.L. Label.

G. Glass-Fiber Blanket: Glass fibers bonded with a thermosetting resin; suitable for maximum use temperature up to 450 deg F in accordance with ASTM C411. Comply with ASTM C553, Type II, and ASTM C1290, Type III with factory-applied FSK jacket. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article.

H. Glass-Fiber Board Insulation: Glass fibers bonded with a thermosetting resin; suitable for maximum use temperature between 35 deg F and 250 deg F for jacketed and between 35 deg F and 450 deg F for unfaced in accordance with ASTM C411. Comply with ASTM C612, Type IA or Type IB. For duct and plenum applications, provide insulation unfaced

2.2 ADHESIVES

A. Materials shall be compatible with insulation materials, jackets, and substrates and for bonding insulation to itself and to surfaces to be insulated unless otherwise indicated.

B. ASJ Adhesive, and FSK Jacket Adhesive: Comply with MIL-A-3316C, Class 2, Grade A for bonding insulation jacket lap seams and joints.
   1. Products: Subject to compliance with requirements, provide one of the following:
      a. Childers Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; CP-82.
      b. Eagle Bridges - Marathon Industries; 225.
      c. Foster Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; 85-50.Mon-Eco Industries, Inc.; 22-25.
   2. For indoor applications, adhesive shall have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

2.3 MASTICS

A. Materials shall be compatible with insulation materials, jackets, and substrates; comply with MIL-PRF-19565C, Type II.
   1. For indoor applications, use mastics that have a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

B. Vapor-Barrier Mastic: Water based; suitable for indoor use on below ambient services.
   1. Products: Subject to compliance with requirements, provide one of the following:
      a. Foster Brand, Specialty Construction Brands, Inc., a business of H. B. Fuller Company; 30-80/30-90.
      b. Vimasco Corporation; 749..
   2. Water-Vapor Permeance: ASTM E 96/E 96M, Procedure B, 0.013 perm at 43-mil dry film thickness.
   3. Service Temperature Range: Minus 20 to plus 180 deg F.
   4. Solids Content: ASTM D 1644, 58 percent by volume and 70 percent by weight.
   5. Color: White.

2.4 FACTORY-APPLIED JACKETS

A. Insulation system schedules indicate factory-applied jackets on various applications. When factory-applied jackets are indicated, comply with the following:
   1. ASJ: White, kraft-paper, fiberglass-reinforced scrim with aluminum-foil backing; complying with ASTM C 1136, Type I.
   2. FSK Jacket: Aluminum-foil, fiberglass-reinforced scrim with kraft-paper backing; complying with ASTM C1136, Type II.

2.5 TAPES

A. ASJ Tape: White vapor-retarder tape matching factory-applied jacket with acrylic adhesive, complying with ASTM C 1136.
   1. Products: Subject to compliance with requirements, provide one of the following:
      a. ABI, Ideal Tape Division; 428 AWF ASJ.
      b. Avery Dennison Corporation, Specialty Tapes Division; Fasson 0836.
      c. Compac Corporation; 104 and 105.
      d. Venture Tape; 1540 CW Plus, 1542 CW Plus, and 1542 CW Plus/SQ.
   2. Width: 3 inches.
   3. Thickness: 11.5 mils.
   4. Adhesion: 90 ounces force/inch in width.
   5. Elongation: 2 percent.
   6. Tensile Strength: 40 lbf/inch in width.
   7. ASJ Tape Disks and Squares: Precut disks or squares of ASJ tape.

B. Aluminum-Foil Tape: Vapor-retarder tape with acrylic adhesive.
   1. Products: Subject to compliance with requirements, provide one of the following:
      a. ABI, Ideal Tape Division; 488 AWF.
      b. Avery Dennison Corporation, Specialty Tapes Division; Fasson 0800.
      c. Compac Corporation; 120.
      d. Venture Tape; 3520 CW.
   2. Width: 2 inches.
   3. Thickness: 3.7 mils.
   4. Adhesion: 100 ounces force/inch in width.
   5. Elongation: 5 percent.
   6. Tensile Strength: 34 lbf/inch in width.

2.6 SECUREMENTS

A. Bands:
   1. Products: Subject to compliance with requirements, provide one of the following:
      a. ITW Insulation Systems; Gerrard Strapping and Seals.
      b. RPR Products, Inc.; Insul-Mate Strapping, Seals, and Springs.
   2. Stainless Steel: ASTM A 167 or ASTM A 240/A 240M, Type 304 or Type 316; 0.015 inch thick, 3/4 inch wide with wing seal or closed seal.
   3. Aluminum: ASTM B 209, Alloy 3003, 3005, 3105, or 5005; Temper H-14, 0.020 inch thick, 3/4 inch wide with wing seal or closed seal.
   4. Springs: Twin spring set constructed of stainless steel with ends flat and slotted to accept metal bands. Spring size determined by manufacturer for application.

B. Insulation Pins and Hangers:
   1. Capacitor-Discharge-Weld Pins: Copper- or zinc-coated steel pin, fully annealed for capacitor-discharge welding, 0.135-inch- diameter shank, length to suit depth of insulation indicated.
      a. Products: Subject to compliance with requirements, provide one of the following:
         1) AGM Industries, Inc.; CWP-1.
         2) GEMCO; CD.

3) Midwest Fasteners, Inc.; CD.
4) Nelson Stud Welding; TPA, TPC, and TPS.

2. Cupped-Head, Capacitor-Discharge-Weld Pins: Copper- or zinc-coated steel pin, fully annealed for capacitor-discharge welding, 0.135-inch- diameter shank, length to suit depth of insulation indicated with integral 1-1/2-inch galvanized carbon-steel washer.
   a. Products: Subject to compliance with requirements, provide one of the following:
      1) AGM Industries, Inc.; CHP-1.
      2) GEMCO; Cupped Head Weld Pin.
      3) Midwest Fasteners, Inc.; Cupped Head.
      4) Nelson Stud Welding; CHP.
3. Metal, Adhesively Attached, Perforated-Base Insulation Hangers: Baseplate welded to projecting spindle that is capable of holding insulation, of thickness indicated, securely in position indicated when self-locking washer is in place. Comply with the following requirements:
   a. Products: Subject to compliance with requirements, provide one of the following:
      1) AGM Industries, Inc.; Tactoo Perforated Base Insul-Hangers.
      2) GEMCO; Perforated Base.
      3) Midwest Fasteners, Inc.; Spindle.
   b. Baseplate: Perforated, galvanized carbon-steel sheet, 0.030 inch thick by 2 inches square.
   c. Spindle: Copper- or zinc-coated, low-carbon steel, aluminum, or stainless steel, fully annealed, 0.106-inch- diameter shank, length to suit depth of insulation indicated.
   d. Adhesive: Recommended by hanger manufacturer. Product with demonstrated capability to bond insulation hanger securely to substrates indicated without damaging insulation, hangers, and substrates.
4. Nonmetal, Adhesively Attached, Perforated-Base Insulation Hangers: Baseplate fastened to projecting spindle that is capable of holding insulation, of thickness indicated, securely in position indicated when self-locking washer is in place. Comply with the following requirements:
   a. Products: Subject to compliance with requirements, provide one of the following:
      1) GEMCO; Nylon Hangers.
      2) Midwest Fasteners, Inc.; Nylon Insulation Hangers.
   b. Baseplate: Perforated, nylon sheet, 0.030 inch thick by 1-1/2 inches in diameter.
   c. Spindle: Nylon, 0.106-inch- diameter shank, length to suit depth of insulation indicated, up to 2-1/2 inches.
   d. Adhesive: Recommended by hanger manufacturer. Product with demonstrated capability to bond insulation hanger securely to substrates indicated without damaging insulation, hangers, and substrates.
5. Self-Sticking-Base Insulation Hangers: Baseplate welded to projecting spindle that is capable of holding insulation, of thickness indicated, securely in position indicated when self-locking washer is in place. Comply with the following requirements:
   a. Products: Subject to compliance with requirements, provide one of the following:
      1) AGM Industries, Inc.; Tactoo Self-Adhering Insul-Hangers.
      2) GEMCO; Peel & Press.
      3) Midwest Fasteners, Inc.; Self Stick.
   b. Baseplate: Galvanized carbon-steel sheet, 0.030 inch thick by 2 inches square.

c. Spindle: Copper- or zinc-coated, low-carbon steel, aluminum, or stainless steel, fully annealed, 0.106-inch- diameter shank, length to suit depth of insulation indicated.
d. Adhesive-backed base with a peel-off protective cover.

6. Insulation-Retaining Washers: Self-locking washers formed from 0.016-inch- thick, galvanized-steel, aluminum, or stainless-steel sheet, with beveled edge sized as required to hold insulation securely in place but not less than 1-1/2 inches in diameter.
   a. Products: Subject to compliance with requirements, provide one of the following:
      1) AGM Industries, Inc.; RC-150.
      2) GEMCO; R-150.
      3) Midwest Fasteners, Inc.; WA-150.
      4) Nelson Stud Welding; Speed Clips.
   b. Protect ends with capped self-locking washers incorporating a spring steel insert to ensure permanent retention of cap in exposed locations.
7. Nonmetal Insulation-Retaining Washers: Self-locking washers formed from 0.016-inch-thick nylon sheet, with beveled edge sized as required to hold insulation securely in place but not less than 1-1/2 inches in diameter.
   a. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
      1) GEMCO.
      2) Midwest Fasteners, Inc.

C. Staples: Outward-clinching insulation staples, nominal 3/4-inch- wide, stainless steel or Monel.

D. Wire: 0.062-inch soft-annealed, stainless steel.
   1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
      a. C & F Wire.

2.7 CORNER ANGLES

A. PVC Corner Angles: 30 mils thick, minimum 1 by 1 inch, PVC according to ASTM D 1784, Class 16354-C. White or color-coded to match adjacent surface.

B. Aluminum Corner Angles: 0.040 inch thick, minimum 1 by 1 inch, aluminum according to ASTM B 209, Alloy 3003, 3005, 3105, or 5005; Temper H-14.

C. Stainless-Steel Corner Angles: 0.024 inch thick, minimum 1 by 1 inch, stainless steel according to ASTM A 167 or ASTM A 240/A 240M, Type 304 or Type 316.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions for compliance with requirements for installation tolerances and other conditions affecting performance of insulation application.
   1. Verify that systems to be insulated have been tested and are free of defects.

2. Verify that surfaces to be insulated are clean and dry.

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

3.2 PREPARATION

A. Surface Preparation: Clean and dry surfaces to receive insulation. Remove materials that will adversely affect insulation application.

3.3 GENERAL INSTALLATION REQUIREMENTS

A. Duct insulation wrap in exposed corridors shall be canvas covered and painted to match existing duct insulation.

B. Install insulation materials, accessories, and finishes with smooth, straight, and even surfaces; free of voids throughout the length of ducts and fittings.

C. Install insulation materials, vapor barriers or retarders, jackets, and thicknesses required for each item of duct system as specified in insulation system schedules.

D. Install accessories compatible with insulation materials and suitable for the service. Install accessories that do not corrode, soften, or otherwise attack insulation or jacket in either wet or dry state.

E. Install insulation with longitudinal seams at top and bottom of horizontal runs.

F. Install multiple layers of insulation with longitudinal and end seams staggered.

G. Keep insulation materials dry during application and finishing.

H. Install insulation with tight longitudinal seams and end joints. Bond seams and joints with adhesive recommended by insulation material manufacturer.

I. Install insulation with least number of joints practical.

J. Where vapor barrier is indicated, seal joints, seams, and penetrations in insulation at hangers, supports, anchors, and other projections with vapor-barrier mastic.
1. Install insulation continuously through hangers and around anchor attachments.
2. For insulation application where vapor barriers are indicated, extend insulation on anchor legs from point of attachment to supported item to point of attachment to structure. Taper and seal ends at attachment to structure with vapor-barrier mastic.
3. Install insert materials and install insulation to tightly join the insert. Seal insulation to insulation inserts with adhesive or sealing compound recommended by insulation material manufacturer.

K. Apply adhesives, mastics, and sealants at manufacturer's recommended coverage rate and wet and dry film thicknesses.

L. Install insulation with factory-applied jackets as follows:

1. Draw jacket tight and smooth.
2. Cover circumferential joints with 3-inch- wide strips, of same material as insulation jacket. Secure strips with adhesive and outward clinching staples along both edges of strip, spaced 4 inches o.c. Adhere insulation with 4" strips of Insulation Bonding Adhesive at 8" on center.
3. Overlap jacket longitudinal seams at least 2 inches. Clean and dry surface to receive self-sealing lap. Staple laps with outward clinching staples along edge at 4 inches o.c. Adhere insulation with 4" strips of Insulation Bonding Adhesive at 8" on center. Cover longitudinal joints with 3-inch wide strips, of same material as insulation jacket.
   a. For below ambient services, apply vapor-barrier mastic over staples.
4. Cover joints and seams with tape, according to insulation material manufacturer's written instructions, to maintain vapor seal.
5. Where vapor barriers are indicated, apply vapor-barrier mastic on seams and joints and at ends adjacent to duct flanges and fittings.

M. Cut insulation in a manner to avoid compressing insulation more than 75 percent of its nominal thickness.

N. Finish installation with systems at operating conditions. Repair joint separations and cracking due to thermal movement.

O. Repair damaged insulation facings by applying same facing material over damaged areas. Extend patches at least 4 inches beyond damaged areas. Adhere, staple, and seal patches similar to butt joints.

3.4 PENETRATIONS

A. Insulation Installation at Roof Penetrations: Install insulation continuously through roof penetrations.
1. Seal penetrations with flashing sealant.
2. For applications requiring only indoor insulation, terminate insulation above roof surface and seal with joint sealant. For applications requiring indoor and outdoor insulation, install insulation for outdoor applications tightly joined to indoor insulation ends. Seal joint with joint sealant.
3. Extend jacket of outdoor insulation outside roof flashing at least 2 inches below top of roof flashing.
4. Seal jacket to roof flashing with flashing sealant.

B. Insulation Installation at Aboveground Exterior Wall Penetrations: Install insulation continuously through wall penetrations.
1. Seal penetrations with flashing sealant.
2. For applications requiring only indoor insulation, terminate insulation inside wall surface and seal with joint sealant. For applications requiring indoor and outdoor insulation, install insulation for outdoor applications tightly joined to indoor insulation ends. Seal joint with joint sealant.
3. Extend jacket of outdoor insulation outside wall flashing and overlap wall flashing at least 2 inches.
4. Seal jacket to wall flashing with flashing sealant.

C. Insulation Installation at Interior Wall and Partition Penetrations (That Are Not Fire Rated): Install insulation continuously through walls and partitions.

D. Insulation Installation at Fire-Rated Wall and Partition Penetrations: Terminate insulation at fire damper sleeves for fire-rated wall and partition penetrations. Externally insulate damper sleeves to match adjacent insulation and overlap duct insulation at least 2 inches.
   1. Comply with requirements in Section 078413 "Penetration Firestopping" for firestopping and fire-resistive joint sealers.

E. Insulation Installation at Floor Penetrations:
   1. Duct: For penetrations through fire-rated assemblies, terminate insulation at fire damper sleeves and externally insulate damper sleeve beyond floor to match adjacent duct insulation. Overlap damper sleeve and duct insulation at least 2 inches.
   2. Seal penetrations through fire-rated assemblies. Comply with requirements in Section 078413 "Penetration Firestopping."

3.5 INSTALLATION OF FLEXIBLE ELASTOMERIC INSULATION

A. Seal longitudinal seams and end joints with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.

3.6 INSTALLATION OF MINERAL-FIBER INSULATION

A. Blanket Insulation Installation on Ducts and Plenums: Secure with adhesive and insulation pins.

   1. Apply adhesives according to manufacturer's recommended coverage rates per unit area, for 100 percent coverage of duct and plenum surfaces.
   2. Apply adhesive to entire circumference of ducts and to all surfaces of fittings and transitions.
   3. Install either capacitor-discharge-weld pins and speed washers or cupped-head, capacitor-discharge-weld pins on sides and bottom of horizontal ducts and sides of vertical ducts as follows:

      a. On duct sides with dimensions 18 inches (450 mm) and smaller, place pins along longitudinal centerline of duct. Space 3 inches (75 mm) maximum from insulation end joints, and 16 inches (400 mm) o.c.
      b. On duct sides with dimensions larger than 18 inches (450 mm), place pins 16 inches (400 mm) o.c. each way, and 3 inches (75 mm) maximum from insulation joints. Install additional pins to hold insulation tightly against surface at cross bracing.
      c. Pins may be omitted from top surface of horizontal, rectangular ducts and plenums.
      d. Do not over-compress insulation during installation.
      e. Impale insulation over pins and attach speed washers.

f. Cut excess portion of pins extending beyond speed washers or bend parallel with insulation surface. Cover exposed pins and washers with tape matching insulation facing.

4. For ducts and plenums with surface temperatures below ambient, install a continuous unbroken vapor barrier. Create a facing lap for longitudinal seams and end joints with insulation by removing 2 inches (50 mm) from one edge and one end of insulation segment. Secure laps to adjacent insulation section with 1/2-inch (13-mm) outward-clinching staples, 1 inch (25 mm) o.c. Install vapor barrier consisting of factory- or field-applied jacket, adhesive, vapor-barrier mastic, and sealant at joints, seams, and protrusions.

a. Repair punctures, tears, and penetrations with tape or mastic to maintain vapor-barrier seal.
b. Install vapor stops for ductwork and plenums operating below 50 deg F (10 deg C) at 18-foot (5.5-m) intervals. Vapor stops shall consist of vapor-barrier mastic applied in a Z-shaped pattern over insulation face, along butt end of insulation, and over the surface. Cover insulation face and surface to be insulated a width equal to two times the insulation thickness, but not less than 3 inches (75 mm).

5. Overlap unfaced blankets a minimum of 2 inches (50 mm) on longitudinal seams and end joints. At end joints, secure with steel bands spaced a maximum of 18 inches (450 mm) o.c.
6. Install insulation on rectangular duct elbows and transitions with a full insulation section for each surface. Install insulation on round and flat-oval duct elbows with individually mitered gores cut to fit the elbow.
7. Insulate duct stiffeners, hangers, and flanges that protrude beyond insulation surface with 6-inch- (150-mm-) wide strips of same material used to insulate duct. Secure on alternating sides of stiffener, hanger, and flange with pins spaced 6 inches (150 mm) o.c.

B. Board Insulation Installation on Ducts and Plenums: Secure with adhesive and insulation pins.

1. Apply adhesives according to manufacturer's recommended coverage rates per unit area, for 100 percent coverage of duct and plenum surfaces.
2. Apply adhesive to entire circumference of ducts and to all surfaces of fittings and transitions.
3. Install either capacitor-discharge-weld pins and speed washers or cupped-head, capacitor-discharge-weld pins on sides and bottom of horizontal ducts and sides of vertical ducts as follows:

a. On duct sides with dimensions 18 inches (450 mm) and smaller, place pins along longitudinal centerline of duct. Space 3 inches (75 mm) maximum from insulation end joints, and 16 inches (400 mm) o.c.
b. On duct sides with dimensions larger than 18 inches (450 mm), space pins 16 inches (400 mm) o.c. each way, and 3 inches (75 mm) maximum from insulation joints. Install additional pins to hold insulation tightly against surface at cross bracing.

c. Pins may be omitted from top surface of horizontal, rectangular ducts and plenums.
d. Do not over-compress insulation during installation.
e. Cut excess portion of pins extending beyond speed washers or bend parallel with insulation surface. Cover exposed pins and washers with tape matching insulation facing.

4. For ducts and plenums with surface temperatures below ambient, install a continuous unbroken vapor barrier. Create a facing lap for longitudinal seams and end joints with insulation by removing 2 inches (50 mm) from one edge and one end of insulation segment. Secure laps to adjacent insulation section with 1/2-inch (13-mm) outward-clinching staples, 1 inch (25 mm) o.c. Install vapor barrier consisting of factory- or field-applied jacket, adhesive, vapor-barrier mastic, and sealant at joints, seams, and protrusions.

a. Repair punctures, tears, and penetrations with tape or mastic to maintain vapor-barrier seal.
b. Install vapor stops for ductwork and plenums operating below 50 deg F (10 deg C) at 18-foot (5.5-m) intervals. Vapor stops shall consist of vapor-barrier mastic applied in a Z-shaped pattern over insulation face, along butt end of insulation, and over the surface. Cover insulation face and surface to be insulated a width equal to two times the insulation thickness, but not less than 3 inches (75 mm).

5. Install insulation on rectangular duct elbows and transitions with a full insulation section for each surface. Groove and score insulation to fit as closely as possible to outside and inside radius of elbows. Install insulation on round and flat-oval duct elbows with individually mitered gores cut to fit the elbow.
6. Insulate duct stiffeners, hangers, and flanges that protrude beyond insulation surface with 6-inch- (150-mm-) wide strips of same material used to insulate duct. Secure on alternating sides of stiffener, hanger, and flange with pins spaced 6 inches (150 mm) o.c.

3.7 FIELD-APPLIED JACKET INSTALLATION

A. Where glass-cloth jackets are indicated, install directly over bare insulation or insulation with factory-applied jackets.

1. Draw jacket smooth and tight to surface with 2-inch (50-mm) overlap at seams and joints.
2. Embed glass cloth between two 0.062-inch- (1.6-mm-) thick coats of lagging adhesive.
3. Completely encapsulate insulation with coating, leaving no exposed insulation.

B. Where FSK jackets are indicated, install as follows:

1. Draw jacket material smooth and tight.
2. Install lap or joint strips with same material as jacket.
3. Secure jacket to insulation with manufacturer's recommended adhesive.

4. Install jacket with 1-1/2-inch (38-mm) laps at longitudinal seams and 3-inch- (75-mm-) wide joint strips at end joints.
5. Seal openings, punctures, and breaks in vapor-retarder jackets and exposed insulation with vapor-barrier mastic.

C. Where PVC jackets are indicated, install with 1-inch (25-mm) overlap at longitudinal seams and end joints; for horizontal applications, install with longitudinal seams along top and bottom of tanks and vessels. Seal with manufacturer's recommended adhesive.

1. Apply two continuous beads of adhesive to seams and joints, one bead under lap and the finish bead along seam and joint edge.

D. Where metal jackets are indicated, install with 2-inch (50-mm) overlap at longitudinal seams and end joints. Overlap longitudinal seams arranged to shed water. Seal end joints with weatherproof sealant recommended by insulation manufacturer. Secure jacket with stainless-steel bands 12 inches (300 mm) o.c. and at end joints.

3.8 FIRE-RATED INSULATION SYSTEM INSTALLATION

A. Where fire-rated insulation system is indicated, secure system to ducts and duct hangers and supports to maintain a continuous fire rating.

B. Insulate duct access panels and doors to achieve same fire rating as duct.

C. Install firestopping at penetrations through fire-rated assemblies. Fire-stop systems are specified in Section 078413 "Penetration Firestopping."

3.9 FINISHES

A. Insulation with ASJ, Glass-Cloth, or Other Paintable Jacket Material: Paint jacket with paint system identified below and as specified in Section 099113 "Exterior Painting" and Section 099123 "Interior Painting."

1. Flat Acrylic Finish: Two finish coats over a primer that is compatible with jacket material and finish coat paint. Add fungicidal agent to render fabric mildew proof.

a. Finish Coat Material: Interior, flat, latex-emulsion size.

B. Flexible Elastomeric Thermal Insulation: After adhesive has fully cured, apply two coats of insulation manufacturer's recommended protective coating.

C. Color: Final color as selected by Architect. Vary first and second coats to allow visual inspection of the completed Work.

D. Do not field paint aluminum or stainless-steel jackets.

3.10 FIELD QUALITY CONTROL

A. Perform tests and inspections.

B. Tests and Inspections:
1. Inspect ductwork, randomly selected by Engineer, by removing field-applied jacket and insulation in layers in reverse order of their installation. Extent of inspection shall be limited to one location(s) for each duct system defined in the "Duct Insulation Schedule, General" Article.

C. All insulation applications will be considered defective Work if sample inspection reveals noncompliance with requirements.

3.11 DUCT INSULATION SCHEDULE, GENERAL

A. Plenums and Ducts Requiring Insulation:
1. Indoor, supply, return, and transfer air.

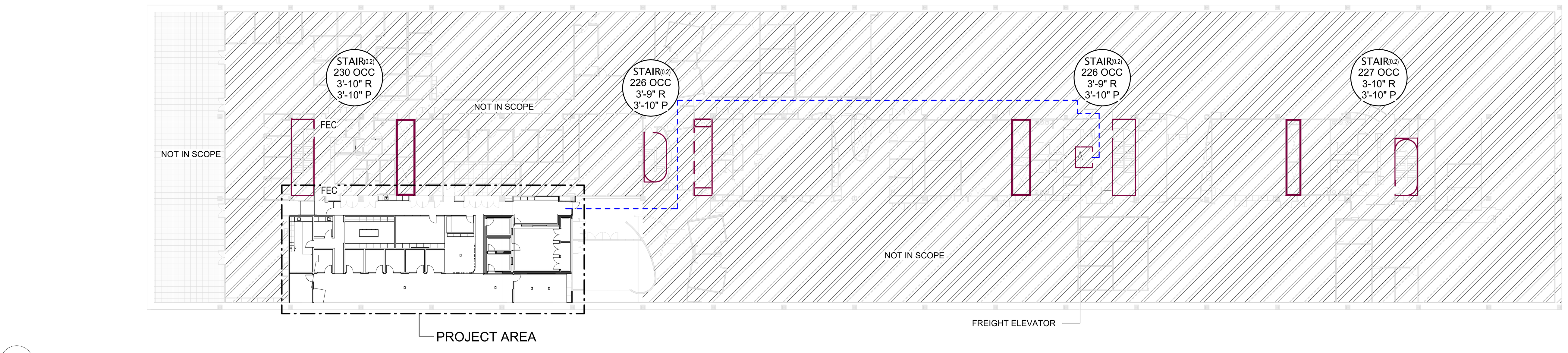
B. Items Not Insulated:
1. Metal ducts with duct liner of sufficient thickness to comply with energy code and ASHRAE/IESNA 90.1.
2. Factory-insulated flexible ducts.
3. Flexible connectors.
4. Vibration-control devices.
5. Factory-insulated access panels and doors.

3.12 INDOOR DUCT AND PLENUM INSULATION SCHEDULE

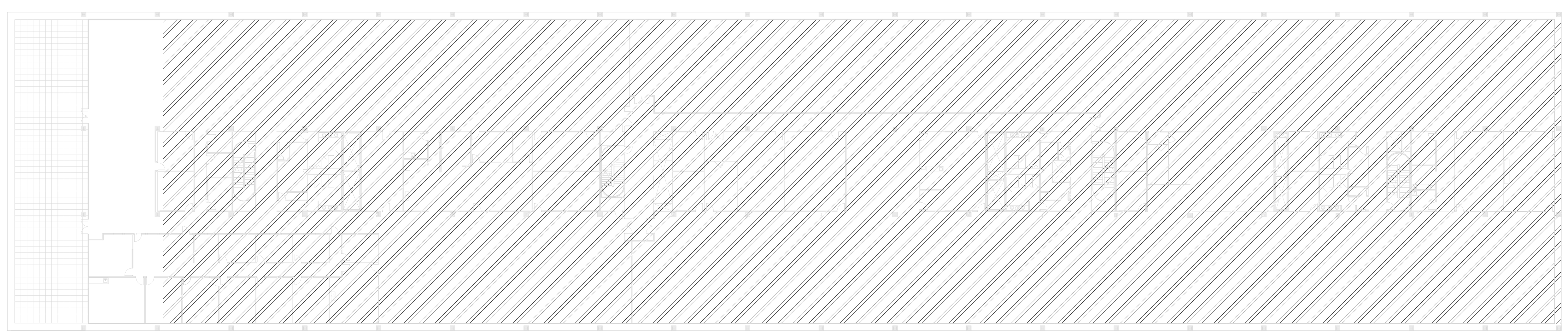
A. Concealed, round, supply-air duct insulation shall be the following:
1. Mineral-Fiber Blanket Wrap: 1-1/2 inches thick and 0.75-lb/cu. ft. nominal density.

B. Concealed, rectangular, return-air duct insulation shall be the following:
1. Liner: Glass-Fiber Board: 1-1/2 inches thick and 2 lb/cu. ft.

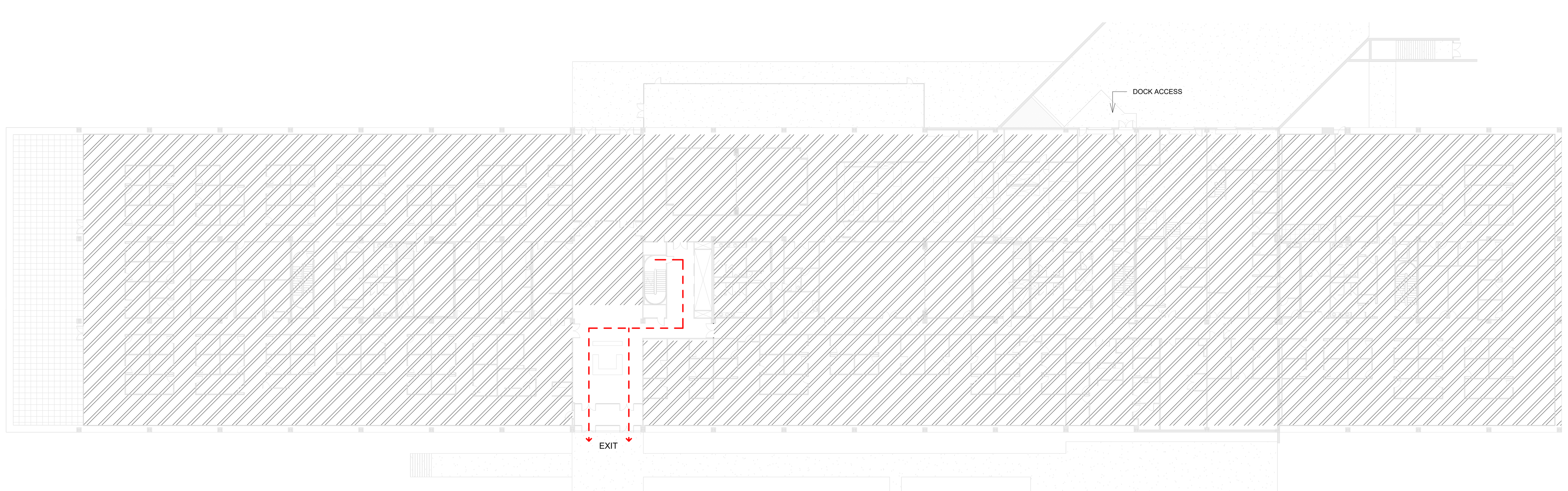
END OF SECTION 230713



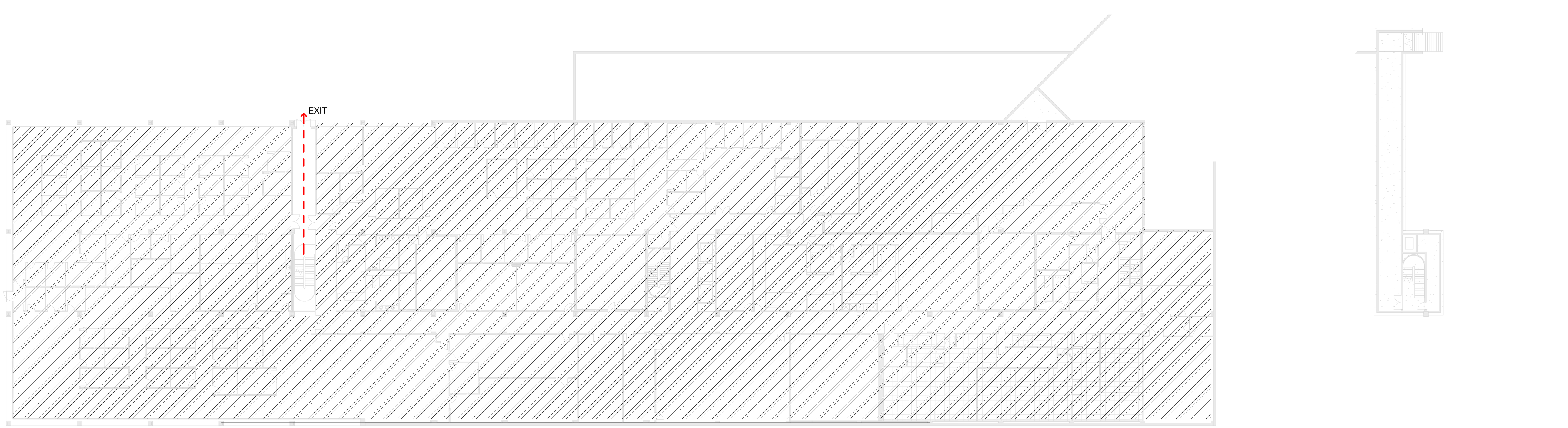
5 G102 LEVEL 4 CODE PLAN
1/32" = 1'-0"



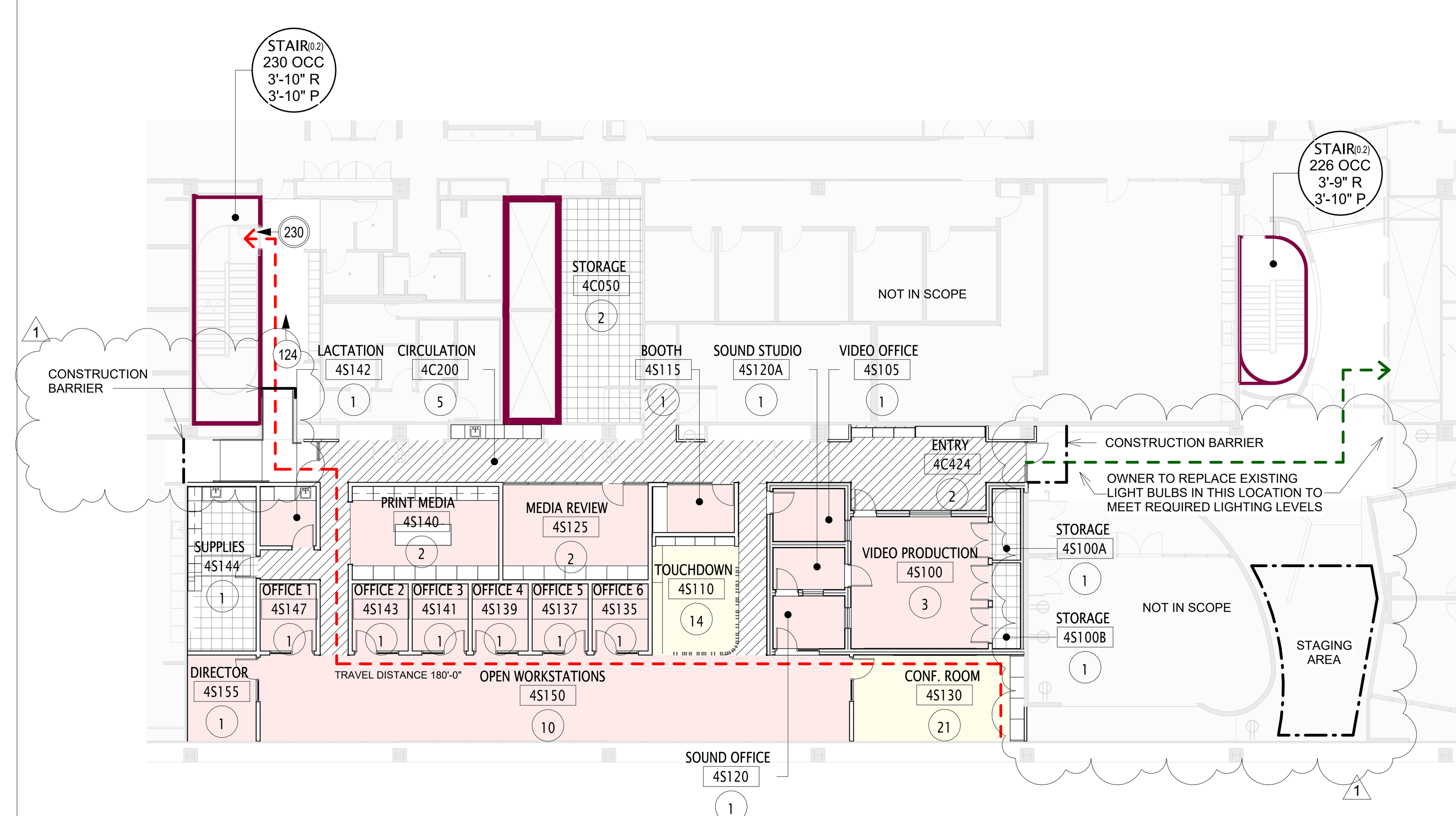
4 G102 LEVEL 3 CODE PLAN - FOR REFERENCE ONLY
1/32" = 1'-0"



3 G102 LEVEL 2 CODE PLAN - FOR REFERENCE ONLY
1/32" = 1'-0"



2 G102 LEVEL 1 CODE PLAN - FOR REFERENCE ONLY
1/32" = 1'-0"



1 G102 LEVEL 4 OCCUPANCY CODE PLAN
1/16" = 1'-0"

CODE PLAN LEGEND

○	NO. OF OCCUPANTS
◄○	TOTAL NO. OF OCCUPANTS AT EXIT
STAIR(0.2) XX OCC X'-X" R X'-X" P	LOCATION (EXIT WIDTH FACTOR) OCCUPANT NUMBER REQUIRED STAIR WIDTH PROVIDED STAIR WIDTH
red dashed line	EXITING PATH OF TRAVEL
green dashed line	ACCESSIBLE TRAVEL PATH
blue dashed line	FREIGHT ELEVATOR ACCESS
FEC	FIRE EXTINGUISHER (EXISTING)
solid bar	2 HR. RATED WALL

OCC LOAD/FUNCTION

- BUSINESS
- ASSEMBLY (UNCONCENTRATED)
- ACCESSORY STORAGE, EQUIP ROOM
- CIRCULATION
- NOT IN SCOPE

OCCUPANCY IS TYPE B UNLESS NOTED OTHERWISE

1

GENERAL NOTES

1. BUILDING IS OCCUPIED DURING CONSTRUCTION. IT IS CONTRACTOR'S RESPONSIBILITY TO PROVIDE A SAFE CONSTRUCTION BARRIER AND EXIT THROUGH THE BUILDING AS NEEDED.
2. STAGING AREA IS ADJACENT TO OWNER FURNITURE STORAGE AREA, FURNITURE TO BE PROTECTED DURING CONSTRUCTION.

STUDIO LP
331 S RIO GRANDE ST
SUITE 307
SLC, UT 84101
PH: 8017395569
BAYLEE@STUDIOLPARCH.COM

STATE OF UTAH
BAYLEE RUSHTON
10536737-0301
EXPIRES: 05.31.26
LICENSED ARCHITECT

GENETIC SCIENCE LEARNING CENTER

CONSTRUCTION DOCUMENTS

DFCM SEAL

No	Description	Date
1	ADDENDUM 1	12/20/2024

THE UNIVERSITY OF UTAH

GSLC
295 CHIPETA WAY
SALT LAKE CITY, UT 84108

22812

10.30.2024

CODE PLANS

NORTH

G102

Scale As indicated


COMM RM CIRCULATION


BEHIND BREAKROOM


ENTRANCE HALLWAY, FACING EAST

EXISTING OFFICES, FACING EAST

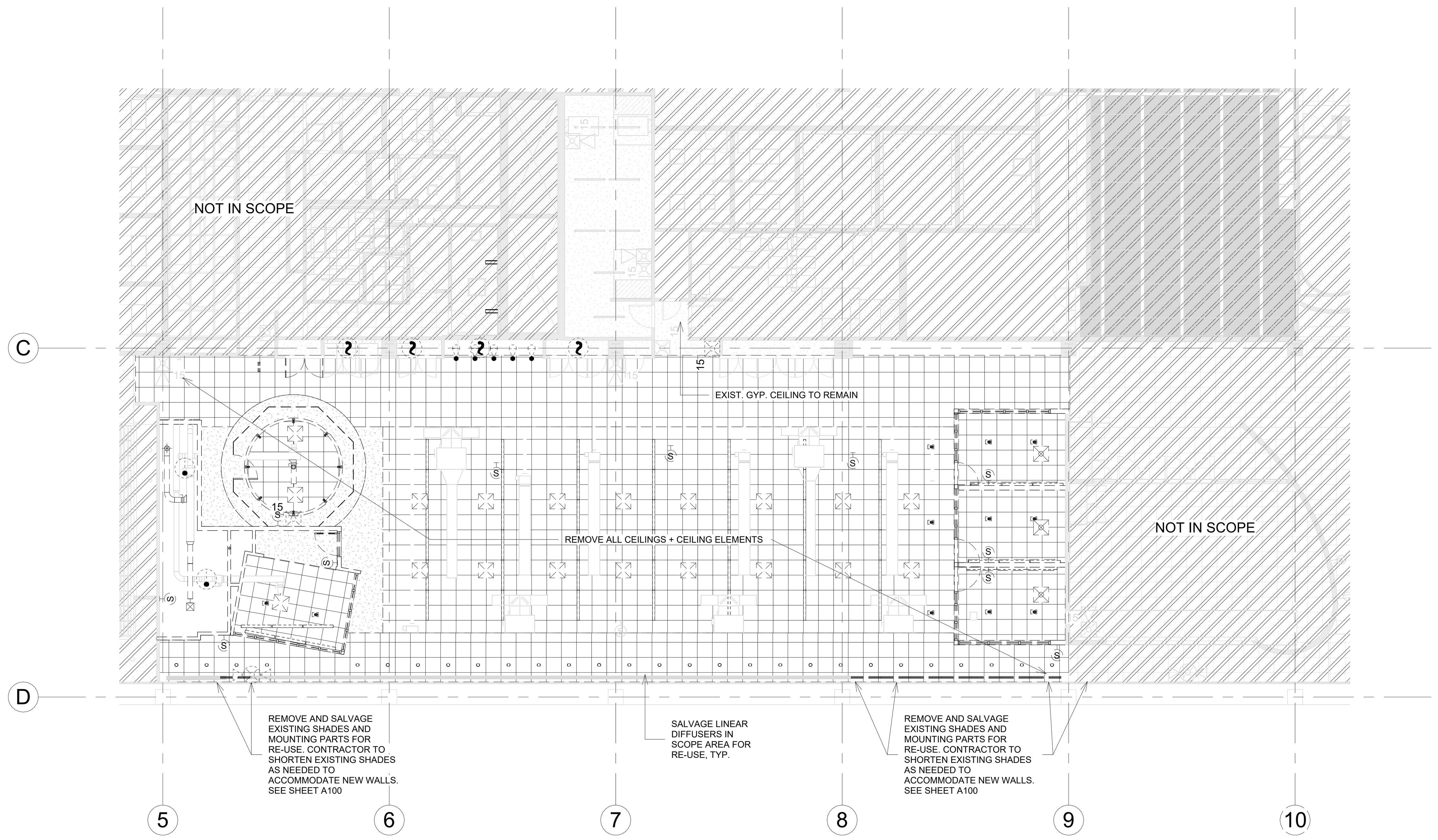
HALLWAY FROM BREAK ROOM, FACING EAST

STORAGE AND BAR, FACING NORTH

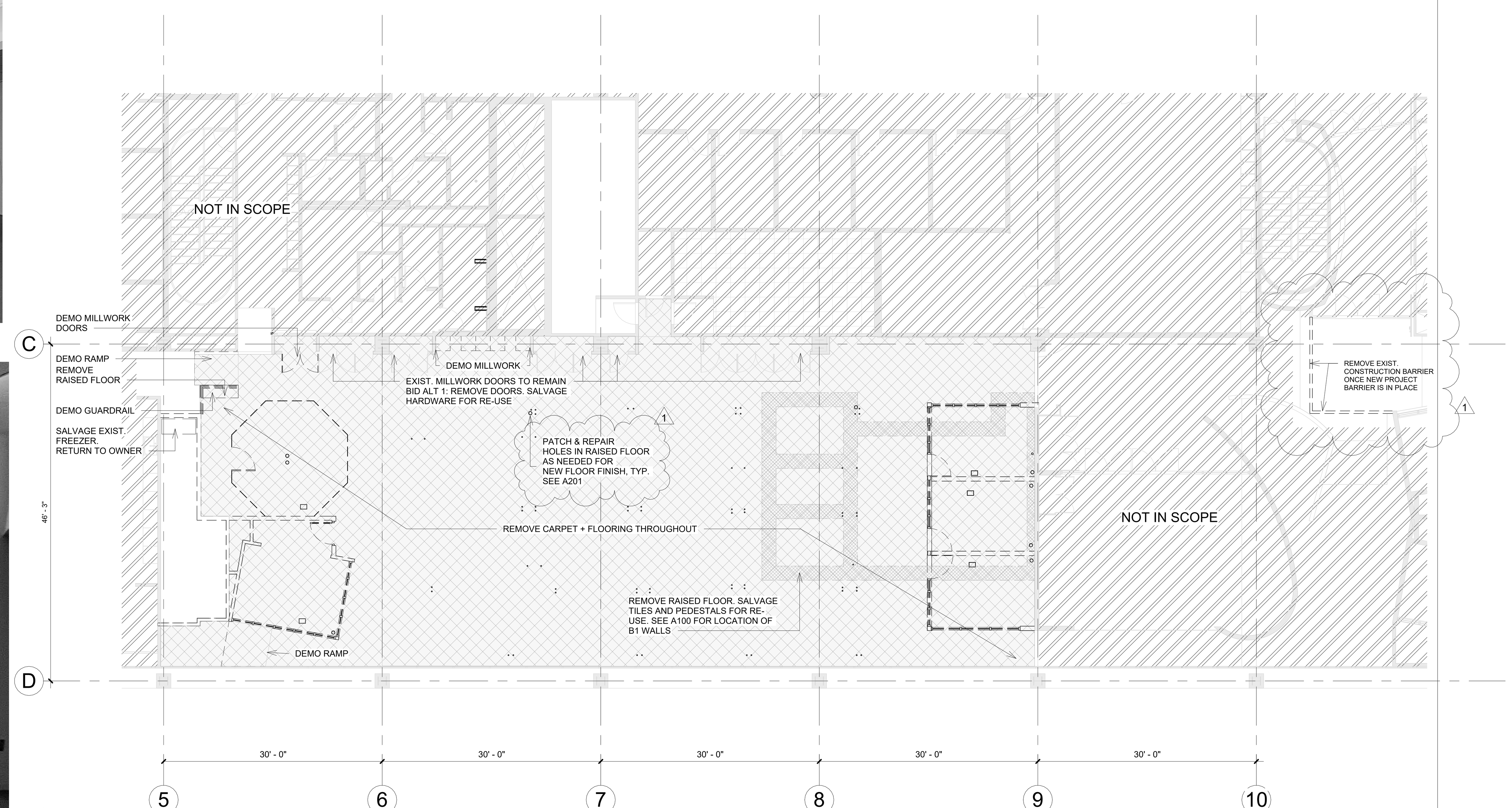

GLASS OFFICE , FACING WEST

EXISTING OFFICES, FACING WEST

OPEN SPACE WINDOWS, FACING SOUTH



2 D100 FOURTH FLOOR DEMO RCP
3/32" = 1'-0"



1 D100 LEVEL 4 DEMO PLAN
3/32" = 1'-0"

BASE BID / BID ALTERNATE 1

NORTH

DEMOLITION LEGEND

- TO BE REMOVED
- DOOR & FRAME TO BE REMOVED
- EXISTING TO REMAIN
- ACCESS FLOOR TO BE REMOVED
- CARPET TILE TO BE REMOVED
- NOT IN SCOPE

DEMOLITION NOTES

1. PROTECT EXISTING WALLS AND FLOORING THAT WILL REMAIN.
2. FIRE SPRINKLER PIPE TO REMAIN.
3. PATCH AND REPAIR EXISTING CONDITIONS DAMAGED DURING CONSTRUCTION.
4. BUILDING IS OCCUPIED DURING CONSTRUCTION. IT IS CONTRACTOR'S RESPONSIBILITY TO PROVIDE A SAFE CONSTRUCTION BARRIER AND EXIT THROUGH BUILDING AS NEEDED.
5. ALL EXISTING BUILDING PRIMARY STRUCTURE TO REMAIN.
6. PROTECT SHADES AND PULL CORDS, COORDINATE REPLACEMENT OF DAMAGED SHADES WITH OWNER.
7. ALL CONDUIT, PIPES, AND MECHANICAL ELEMENTS THAT ARE NO LONGER IN USE TO BE REMOVED. TRACE +TRACK ALL ELEMENTS PRIOR TO REMOVAL TO VERIFY THAT THEY AREN'T BEING USED BY OTHER ROOMS/ AREAS.
8. BUILDING IS OCCUPIED DURING CONSTRUCTION. IT IS CONTRACTOR'S RESPONSIBILITY TO PROVIDE A SAFE CONSTRUCTION BARRIER AND EXIT THROUGH THE BUILDING AS NEEDED.

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DFCM SEAL

No	Description	Date
1	ADDENDUM 1	12/20/2024

THE UNIVERSITY OF UTAH

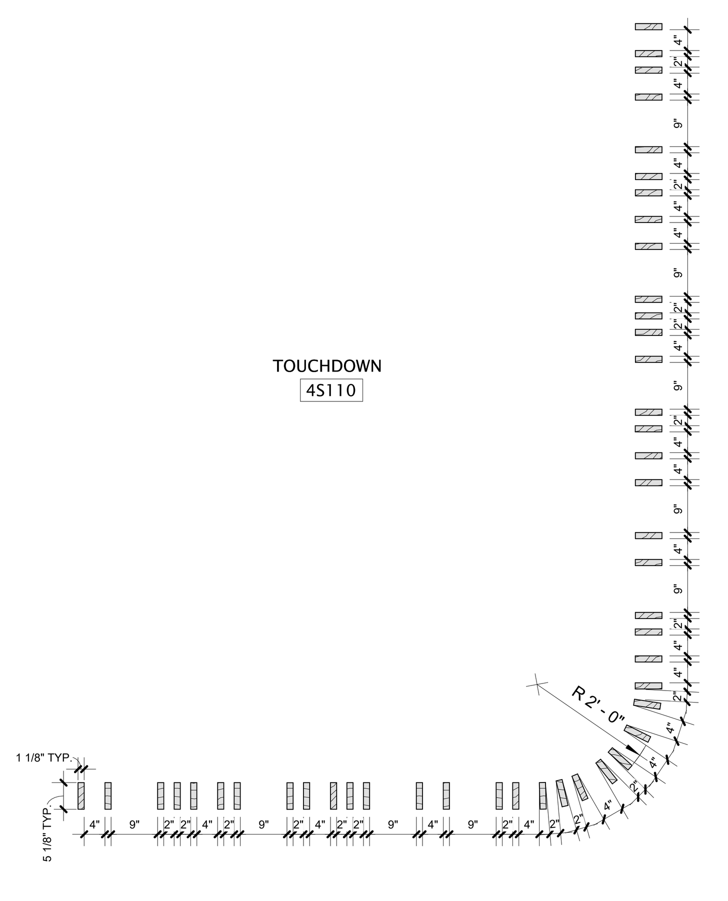
GSLC
295 CHIPETA WAY
SALT LAKE CITY, UT 84108

22812
10.30.2024

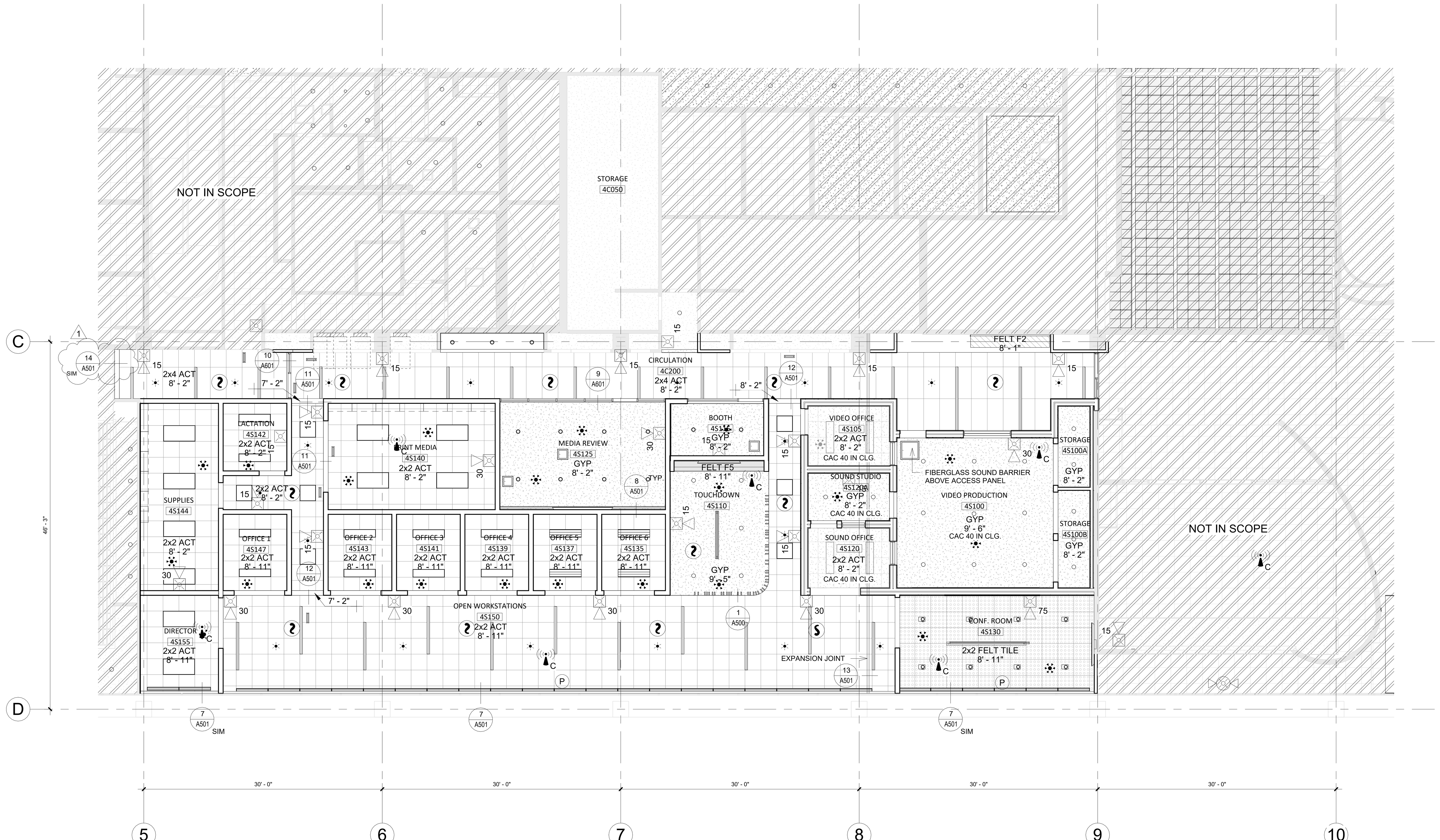
DEMOLITION PLANS

D100

Scale As indicated

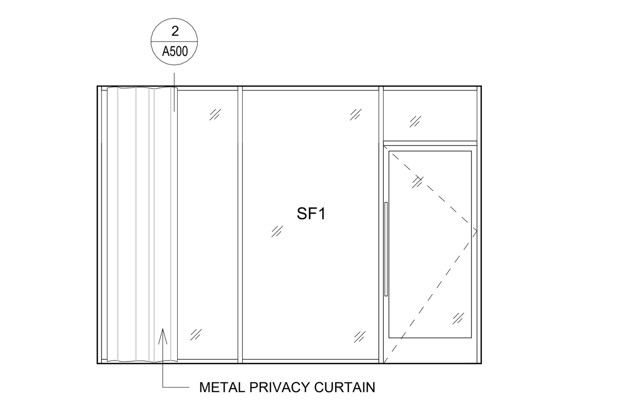


6 TOUCHDOWN WOOD SCREEN (S1)
A100 1/2" = 1'-0"

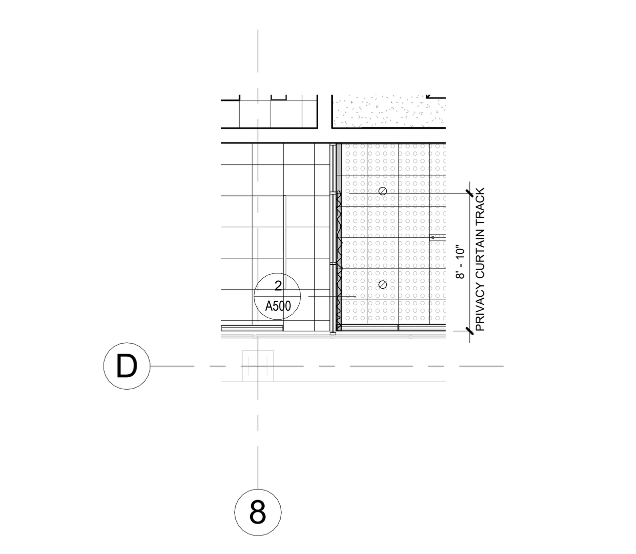


2 FOURTH FLOOR RCP
A100 1/8" = 1'-0"

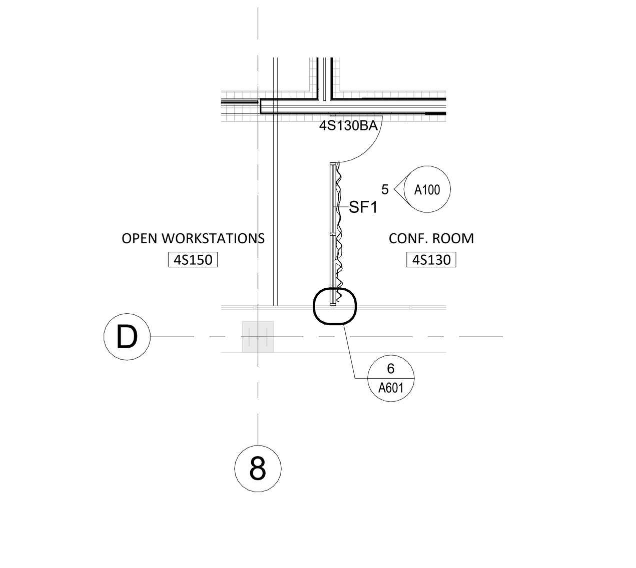
BID ALTERNATE 2



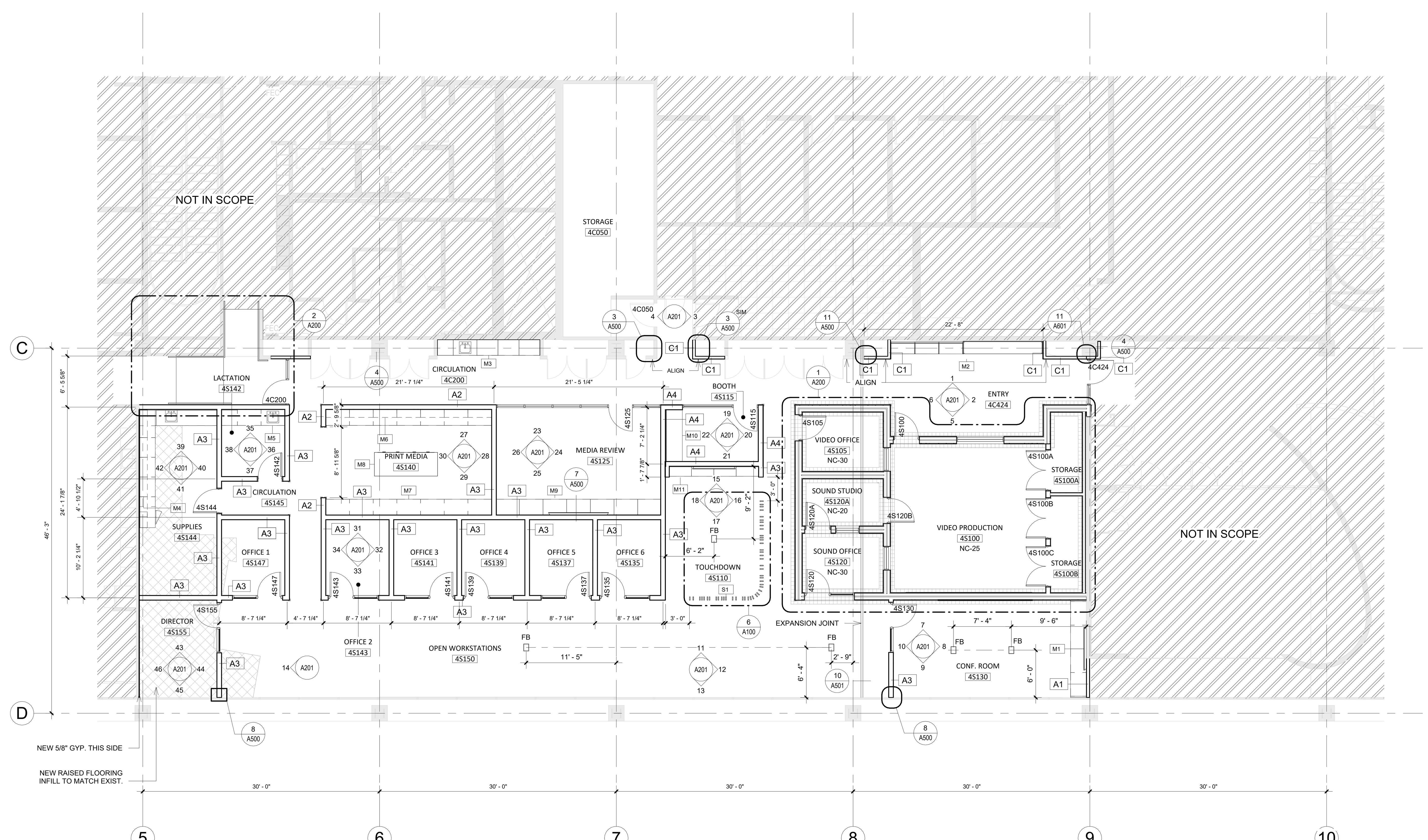
5 CONF. ROOM WEST ELEV. - BID ALTERNATE 2
A100 1/4" = 1'-0"



4 RCP CONF. ROOM - BID ALTERNATE 2
A100 1/8" = 1'-0"

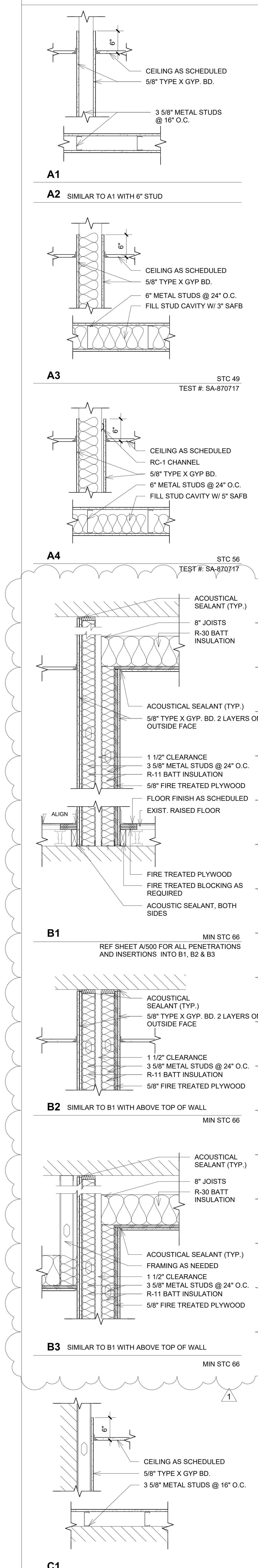


3 CONF. ROOM - BID ALTERNATE 2
A100 1/8" = 1'-0"



1 FOURTH FLOOR PLAN
A100 1/8" = 1'-0"

WALL TYPES



A1
A2 SIMILAR TO A1 WITH 6" STUD
A3 STC 49 TEST #: SA-870717
A4 STC 56 TEST #: SA-870717
B1 MIN STC 66
REF SHEET A/500 FOR ALL PENETRATIONS AND INSERTIONS INTO B1, B2 & B3
B2 SIMILAR TO B1 WITH ABOVE TOP OF WALL MIN STC 66
B3 SIMILAR TO B1 WITH ABOVE TOP OF WALL MIN STC 66
C1

PLAN LEGEND

- EXISTING TO REMAIN
- NOT IN SCOPE
- APPROX. AREA OF NEW RAISED FLOOR TO MATCH EXISTING
- PATCH RAISED FLOOR AT NEW FLOOR TO DECK WALLS
- FB - FLOOR BOX
- CG CORNER GUARD

PLAN NOTES

ARCHITECTURAL NOTES:
1. VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK
2. CONTRACTOR TO BECOME FAMILIAR WITH ALL DRAWINGS + EXISTING CONDITIONS, BRING DISCREPANCIES TO ARCHITECT IN A TIMELY FASHION PRIOR TO PROCEEDING WITH WORK
3. PROVIDE TEMPORARY DUST PROTECTION @ ALL AREAS OF CONSTRUCTION.
4. PROTECT SHADES AND PULL CORDS, COORDINATE REPLACEMENT OF DAMAGED SHADES WITH OWNER

CEILING LEGEND

- GYPSUM BOARD CEILING
- AP1/MS1 - 2' x 2' ACOUSTIC CEILING
- AP2/MS1 - 2' x 4' ACOUSTIC CEILING
- AP3 / MS1 - 2' x 2' HIGH CAC ACOUSTIC CEILING
- AF1/MS2 - 2'X2' FELT CEILING IN T-GRID
- 2X2 LIGHT FIXTURE
- ACCESS PANEL
- 2X4 LIGHT FIXTURE
- 1X4 LIGHT FIXTURE
- LINEAR LIGHT FIXTURE
- RECESSED CAN LIGHT FIXTURE
- FELT - F2 - COLOR: PINK
- FELT - F4 - COLOR: ORANGE

CEILING NOTES

ARCHITECTURAL:
1. FIELD VERIFY ALL CONDITIONS PRIOR TO COMMENCING WORK
2. ALL CEILING HEIGHTS MEASURED FROM FINISHED FLOOR

MECHANICAL NOTES:
1. ALIGN ALL DIFFUSERS AS SHOWN
2. REFER TO MECH. DRAWINGS

ELECTRICAL:
1. ALIGN ALL LIGHT FIXTURES AND CEILING ELEMENTS AS SHOWN
2. REFER TO ELEC. DRAWINGS

NORTH

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331 S RIO GRANDE ST
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BAYLEE@STUDIOLPARCH.COM

STATE OF UTAH
BAYLEE RUSHTON
10536737-0301
EXPIRES: 05.31.26
LICENSED ARCHITECT

GENETIC SCIENCE LEARNING CENTER

CONSTRUCTION DOCUMENTS

DFCM SEAL

No	Description	Date
1	ADDENDUM 1	12/20/2024

THE UNIVERSITY OF UTAH

GSLC
295 CHIPETA WAY
SALT LAKE CITY, UT 84108

22812
10.30.2024

PLAN + RCP

A100
Scale As indicated

FF & E SCHEDULE

Identifier	Quantity	Type	Dimensions	Installation	Notes
CIRCULATION					
CN-1	1	Water & Ice Machine		Contractor Furnished, Contractor Installed	Quench 965-16
CONFERENCE					
COE-1	1	TV - 75" Conference	62.5" L x 12" W x 38" tall	Owner Furnished, Owner Installed	
MEDIA REVIEW					
MN-1	1	TV - 98" Media Review	89" L x 4" W x 50" tall	Owner Furnished, Owner Installed	
PRINT MEDIA					
PE-1	1	Xerox Versalink C405	17" L x 19" W x 24"tall	Owner Furnished, Owner Installed	
PE-2	1	HP DesignJet T630	50" x 20.5 W x 36" tall	Owner Furnished, Owner Installed	
PE-3	1	Sharp MX- 5141	38"L x 28" W x 49" tall	Owner Furnished, Owner Installed	
PN-1	4	Flat File Storage Cabinets	29.5" D x 41.5" W x 15.5" H	Contractor Furnished, Contractor Installed	(2) Cabinet units stacked with matching 4" base
SOUND OFFICE					
SOE-1	1	Keyboard	62" L X 11" W X 5" H	Owner Furnished, Owner Installed	
SOE-2	2	Standing Speakers	16" L X 14" W X 2'5" H	Owner Furnished, Owner Installed	
STORAGE					
STE-1	10	Existing Compact Shelving		Owner Furnished, Owner Installed	
STN-1	1	Shelving Track	18' L	Contractor Furnished, Contractor Installed	Contractor to coordinate w/ owner on compatible track. Install per manufacturer's recommendation
SUPPLIES					
SE-1	1	Mini Fridge		Owner Furnished, Owner Installed	
SE-2	1	Steel Lab Table	72" L x 30" W x 39" tall	Owner Furnished, Owner Installed	
SE-3	1	Chemical Cabinet		Owner Furnished, Owner Installed	
TOUCHDOWN SPACE					
TE-1	1	TV - 75" Touchdown	62.5" L x 12" W x 38" tall	Owner Furnished, Owner Installed	

1

1 FF&E FLOOR PLAN - FOR REFERENCE ONLY
A120 1/8" = 1'-0"

NORTH

STUDIO LP
331 S RIO GRANDE ST
SUITE 307
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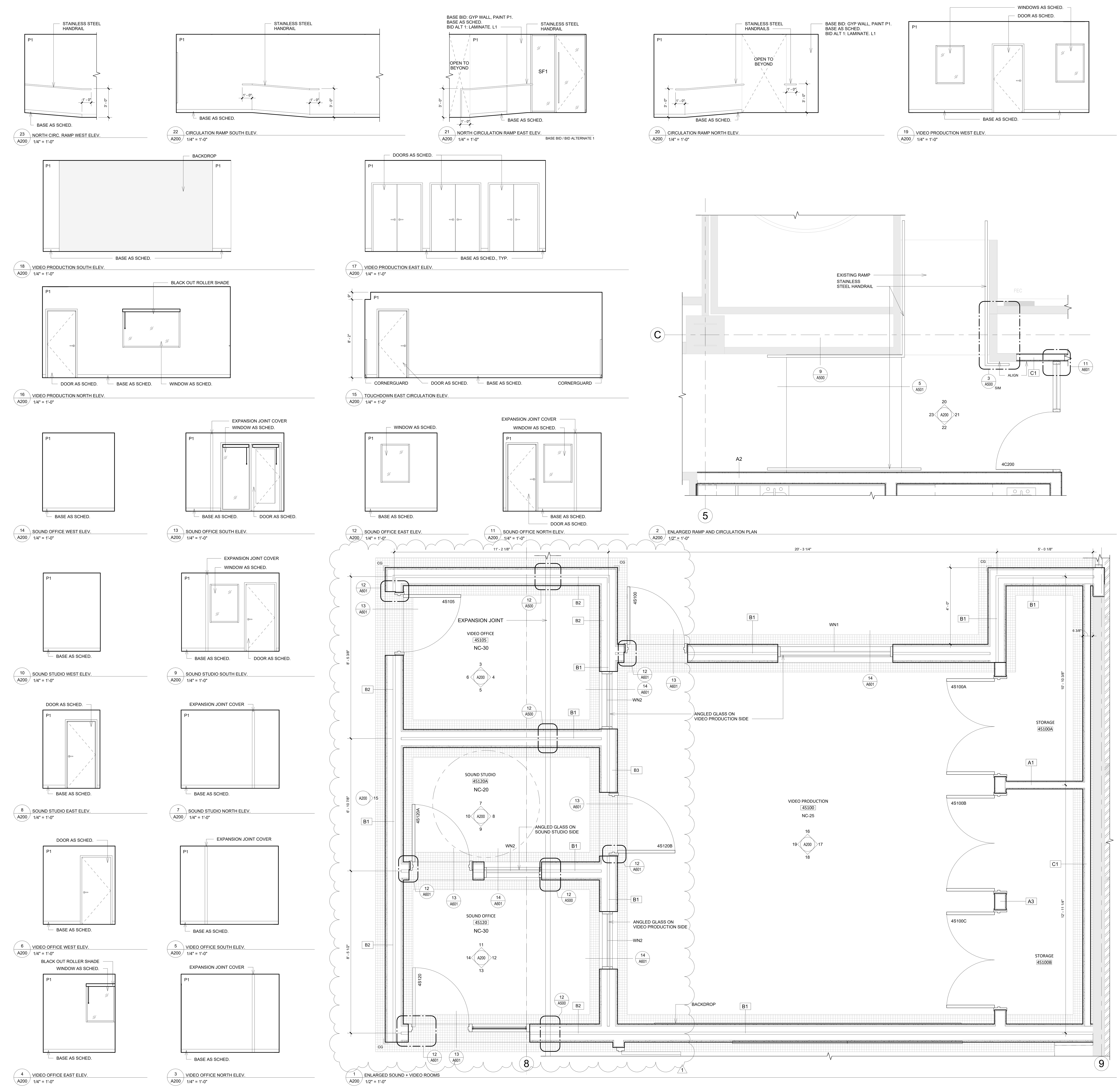
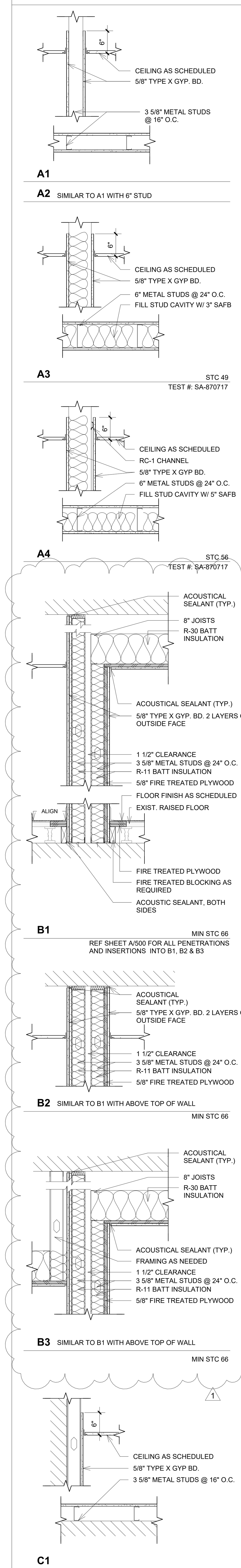
FF&E PLAN

A120
Scale 1/8" = 1'-0"



WALL TYPES



PLAN LEGEND

EXISTING TO REMAIN

NOT IN SCOPE

APPROX. AREA OF NEW RAISED FLOOR TO MATCH EXISTING

PATCH RAISED FLOOR AT NEW FLOOR TO DECK WALLS

FB — FB - FLOOR BOX

CG — CORNER GUARD

PLAN NOTES

ARCHITECTURAL NOTES:
1. VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK
2. CONTRACTOR TO BECOME FAMILIAR WITH ALL DRAWINGS + EXISTING CONDITIONS, BRING DISCREPANCIES TO ARCHITECT IN A TIMELY FASHION PRIOR TO PROCEEDING WITH WORK
3. PROVIDE TEMPORARY DUST PROTECTION @ ALL AREAS OF CONSTRUCTION.
4. PROTECT SHADES AND PULL CORDS, COORDINATE REPLACEMENT OF DAMAGED SHADES WITH OWNER

CEILING LEGEND

GYPSUM BOARD CEILING

AP1/MS1 - 2' x 2' ACOUSTIC CEILING

AP2/MS1 - 2' x 4' ACOUSTIC CEILING

AP3 / MS1 - 2' x 2' HIGH CAC ACOUSTIC CEILING

AF1/MS2 - 2'X2' FELT CEILING IN T-GRID

2X2 LIGHT FIXTURE

ACCESS PANEL

2X4 LIGHT FIXTURE

1X4 LIGHT FIXTURE

LINEAR LIGHT FIXTURE

RECESSED CAN LIGHT FIXTURE

FELT - F2 - COLOR: PINK

FELT - F4 - COLOR: ORANGE

CEILING NOTES

ARCHITECTURAL:

1. FIELD VERIFY ALL CONDITIONS PRIOR TO COMMENCING WORK
2. ALL CEILING HEIGHTS MEASURED FROM FINISHED FLOOR

MECHANICAL NOTES:

1. ALIGN ALL DIFFUSERS AS SHOWN
2. REFER TO MECH. DRAWINGS

ELECTRICAL:

1. ALIGN ALL LIGHT FIXTURES AND CEILING ELEMENTS AS SHOWN
2. REFER TO ELEC. DRAWINGS

ELEV. LEGEND

P1	= PAINT, COLOR: 7566 WESTHIGHLAND WHITE
P2	= PAINT, COLOR: 6494 LAKESHORE
F1	= FELT, COLOR: GREEN
F2	= FELT, COLOR: PINK
F3	= FELT, COLOR: PURPLE
F4	= FELT, COLOR: ORANGE
RP1	= RESIN PANEL, COLOR: KILT + WHITE OUT
L1	= LAMINATE, COLOR: AGED ASH
L2	= LAMINATE, COLOR: HUNTER GREEN
TL1	= LAMINATE TEXTURED PANEL, FINISH: FILA, SALINAS OAK
TF1	= FELT TEXTURED PANEL, FINISH: BOLLA, MIDNIGHT
WS1	= WOOD SCREEN, SPECIES/FINISH: AMERICAN OAK / NATURAL
SS1	= SOLID SURFACE COUNTERTOP, COLOR: FROSTY WHITE MIRAGE
UP1	= UPHOLSTERY, COLOR: NICO 016 POSH
RB1	= RUBBER BASE, COLOR: TG2 SHARK FIN
RB2	= RUBBER BASE, COLOR: GREY WG
GW1	= GLASS WALL, SEE SPEC.
GW2	= GLASS WALL, SEE SPEC.
MB1	= MARKER BOARD 4'X6', SEE SPEC.
TD	= TOWEL DISPENSER BY OWNER, PROVIDE BLOCKING IN WALLS
SD	= SOAP DISPENSER BY OWNER, PROVIDE BLOCKING IN WALLS

NORTH

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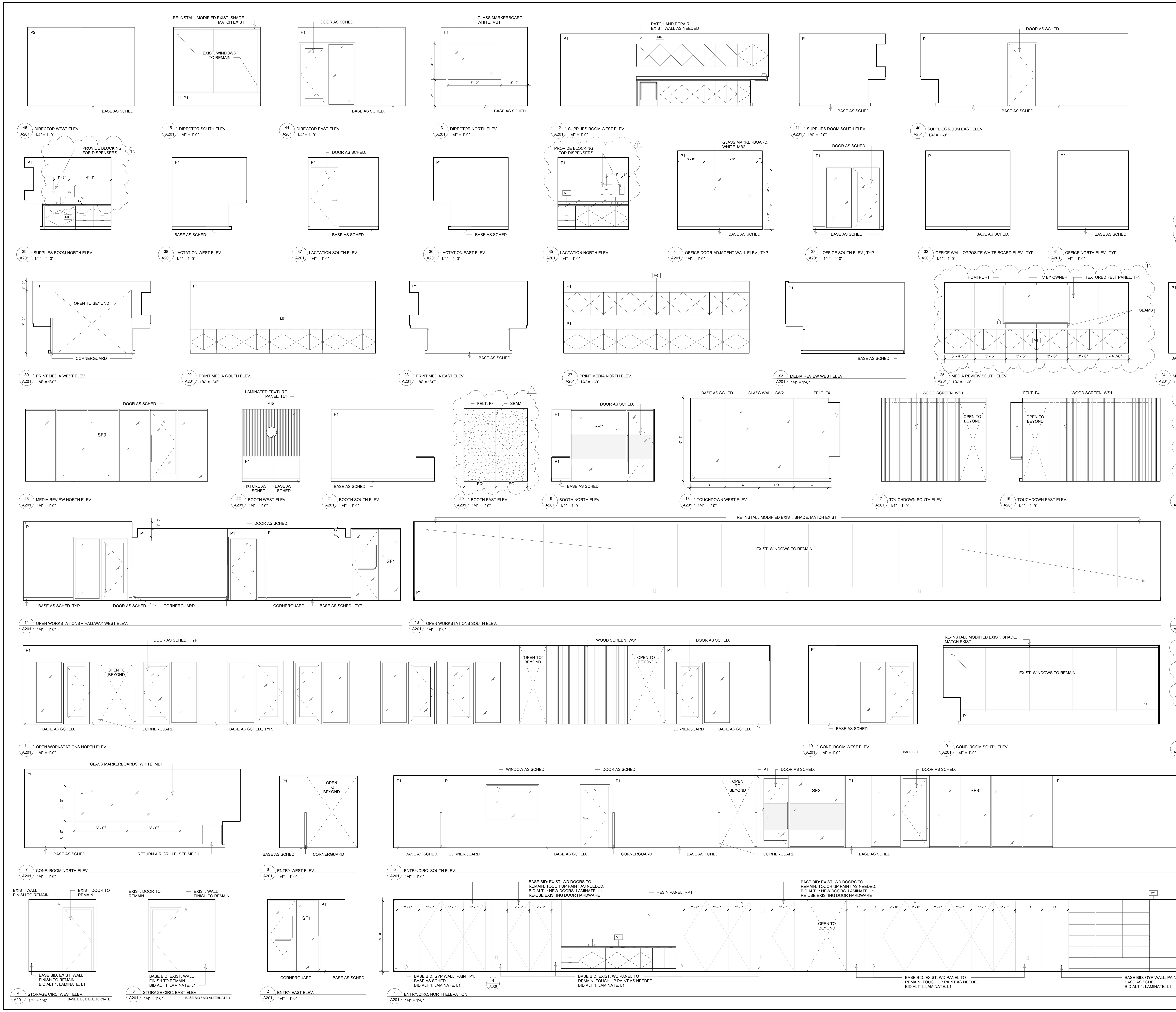
22812

10.30.2024

ENLARGED PLAN + ELEVATIONS

A200

Scale As indicated



ELEV. LEGEND

P1	= PAINT, COLOR: 7566 WESTHIGHLAND WHITE
P2	= PAINT, COLOR: 6494 LAKESHORE
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GW1	= GLASS WALL, SEE SPEC.
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MB1	= ~~MARKER BOARD 4'X6', SEE SPEC.~~
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22812

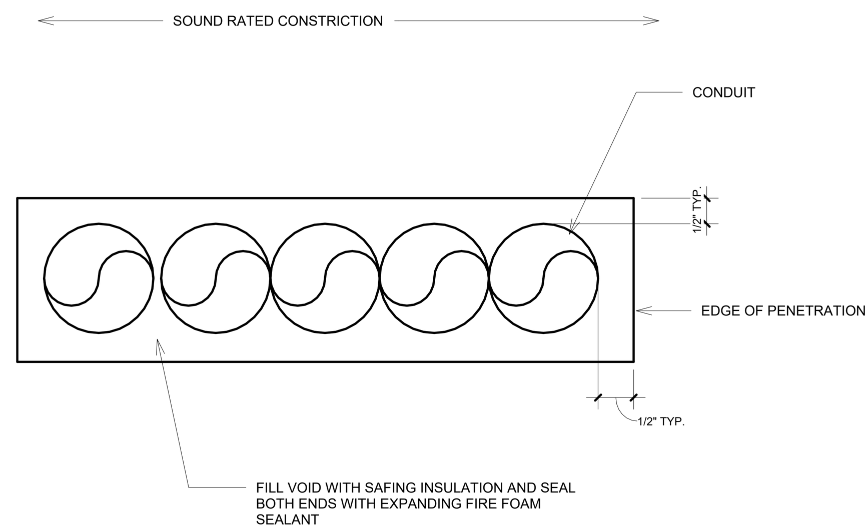
10.30.2024

INTERIOR ELEVATIONS

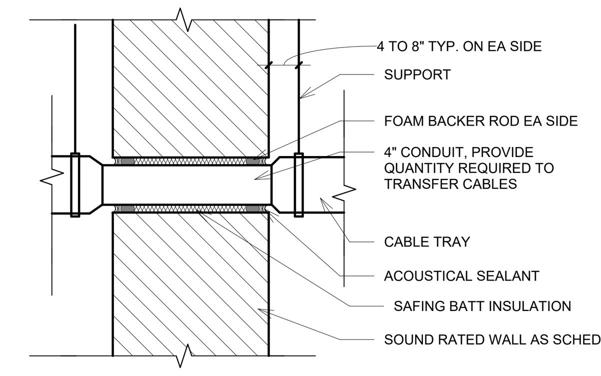
NORTH

A201

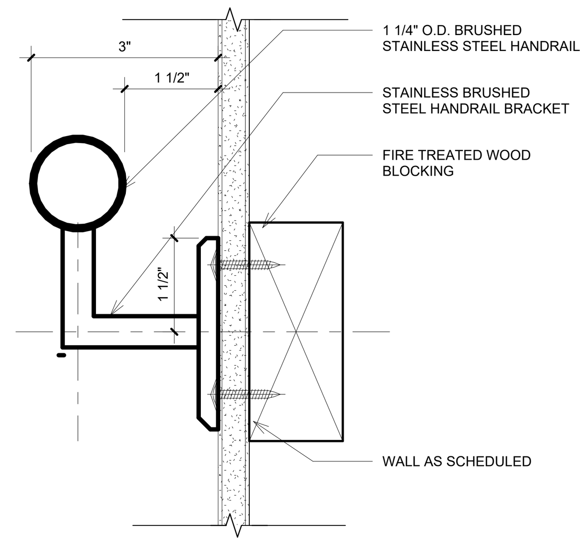
Scale 1/4" = 1'-0"



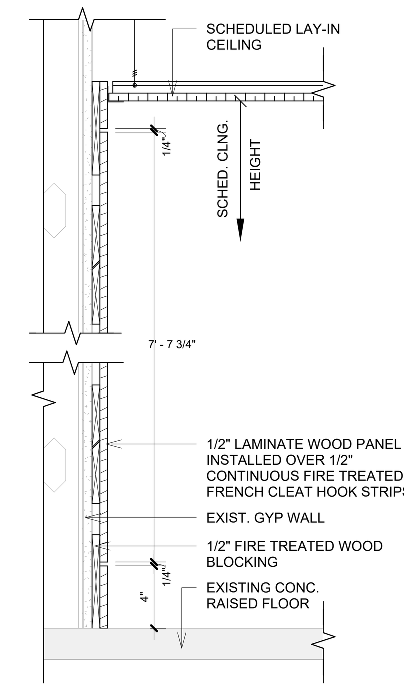
18 / A500 TYPICAL MULTIPLE PIPE OR CONDUIT PENETRATION THROUGH SOUND-RATED CONSTRUCTION
3" = 1'-0"



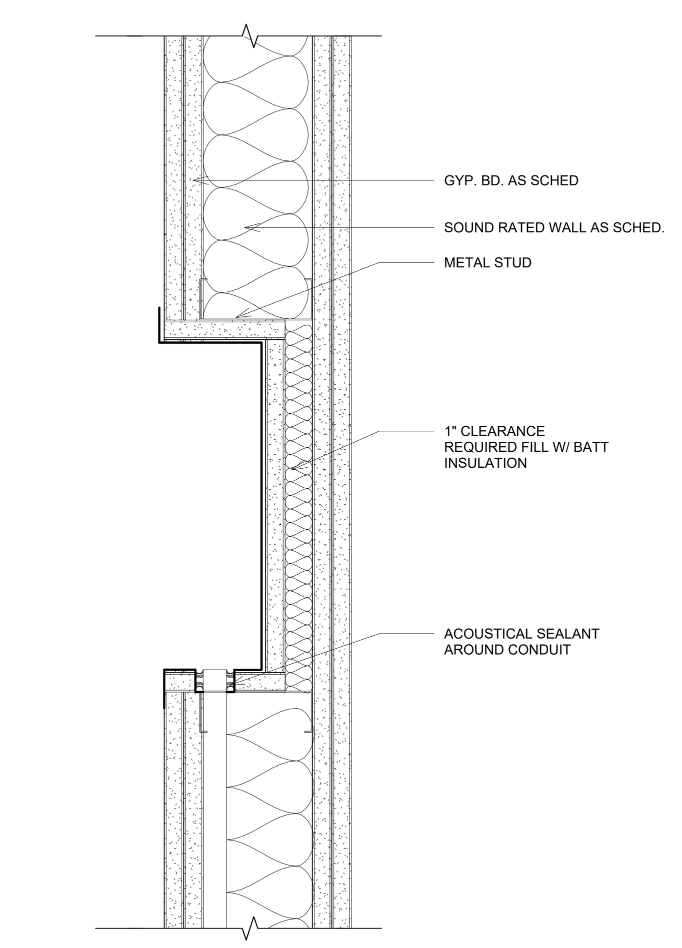
14 / A500 TYP. CABLE TRAY AT SOUND RATED WALL
3" = 1'-0"



9 / A500 HANDRAIL DETAIL - FRAMED
6" = 1'-0"

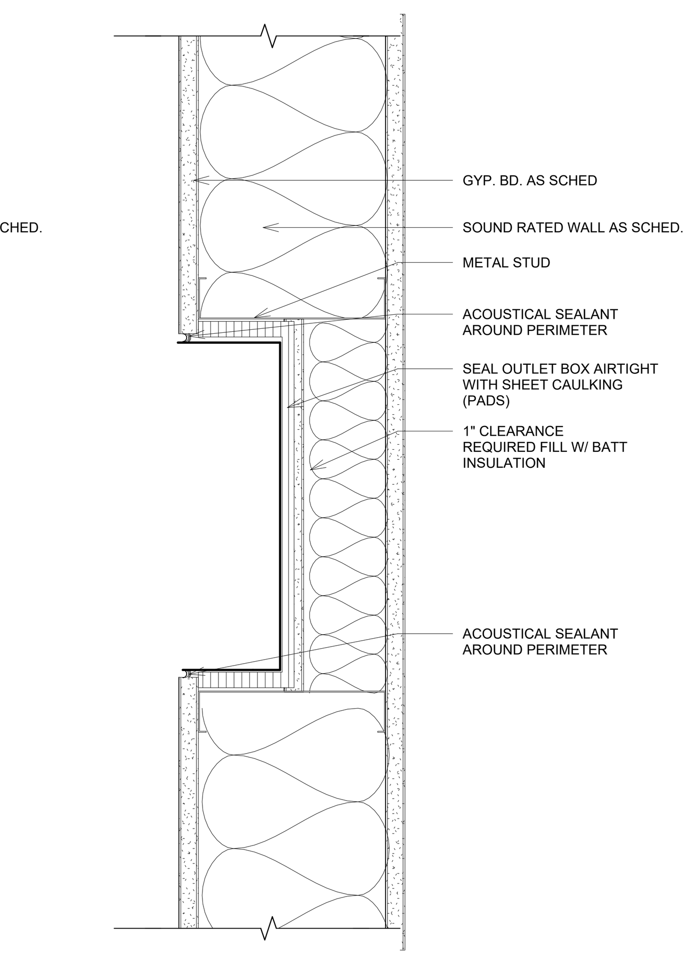


4 / A500 LAMINATE WALL PANEL
1 1/2" = 1'-0"
BID ALTERNATE 1



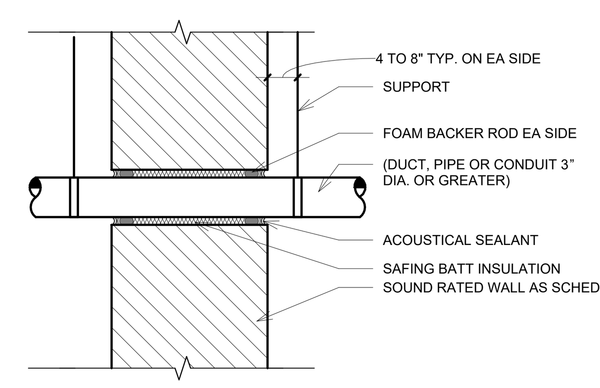
NOTES:
1. LINE TOP, BOTTOM, BACK, AND SIDES WITH ONE LAYER 5" GYPSUM BOARD OR 2 psf SHEET LEAD.
2. APPLICABLE AT ALL SOUND-RATED CONSTRUCTION INCLUDING INTERIOR INSULATED ASSEMBLIES

17 / A500 RECESSED PANELS AND FIXTURES IN SOUND-RATED CONSTRUCTION
3" = 1'-0"

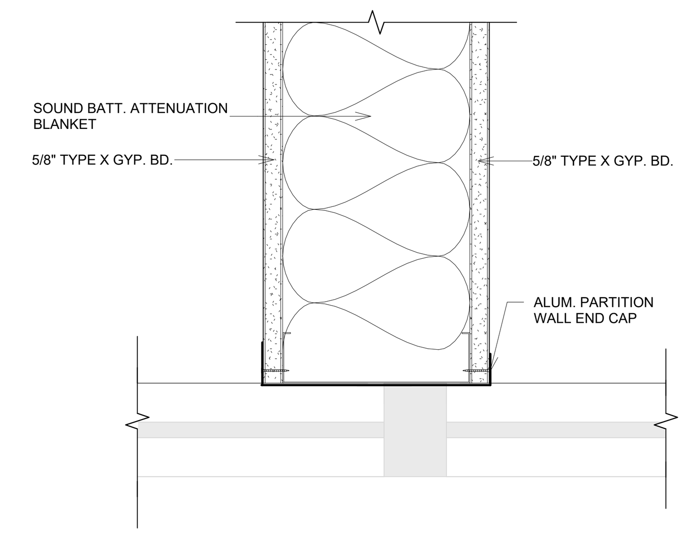


NOTES:
1. LINE TOP, BOTTOM, BACK, AND SIDES WITH ONE LAYER 5" GYPSUM BOARD OR 2 psf SHEET LEAD.
2. APPLICABLE AT ALL SOUND-RATED CONSTRUCTION INCLUDING INTERIOR INSULATED ASSEMBLIES

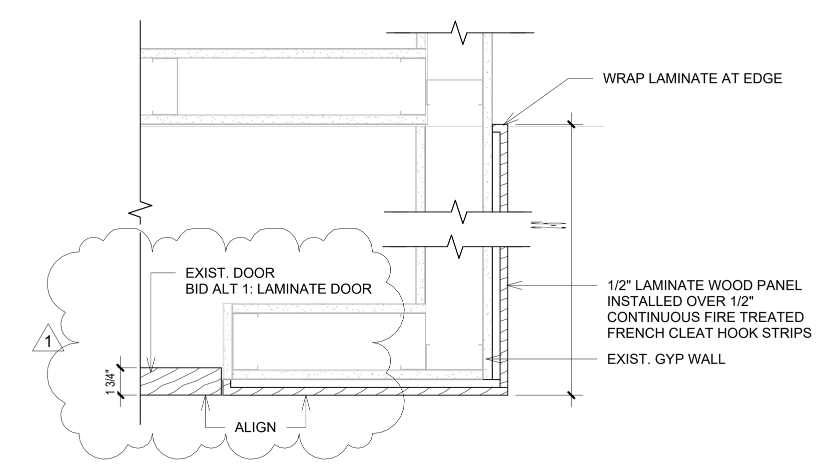
16 / A500 JUNCTION BOX ISOLATION IN SOUND-RATED CONSTRUCTION
3" = 1'-0"



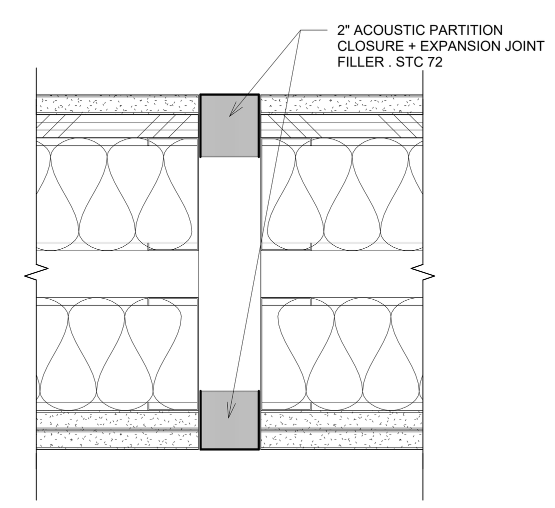
13 / A500 TYP.CONDUIT OR DUCT THROUGH SOUND RATED WALL
3" = 1'-0"



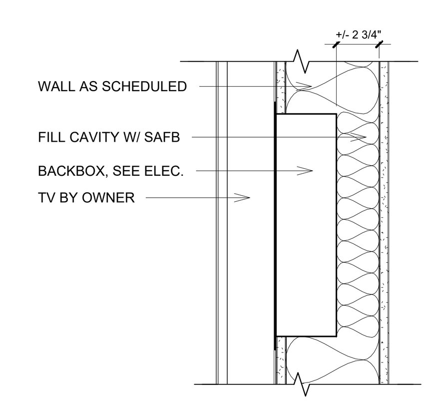
8 / A500 WALL AT EXTERIOR STOREFRONT
3" = 1'-0"



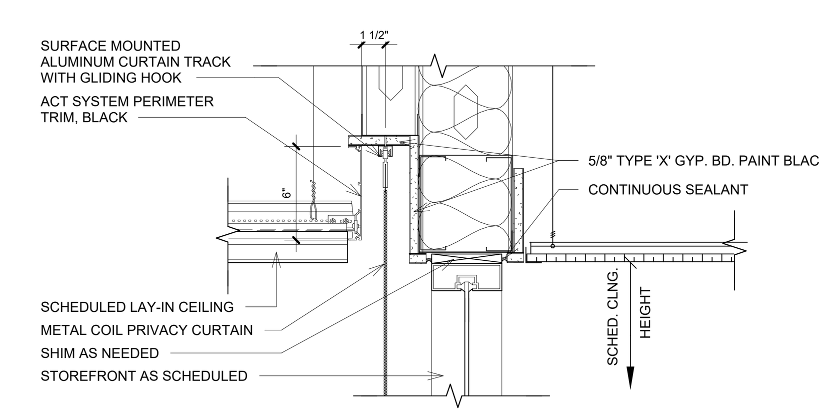
3 / A500 LAMINATE CORNER/DOOR
1 1/2" = 1'-0"
BID ALTERNATE 1



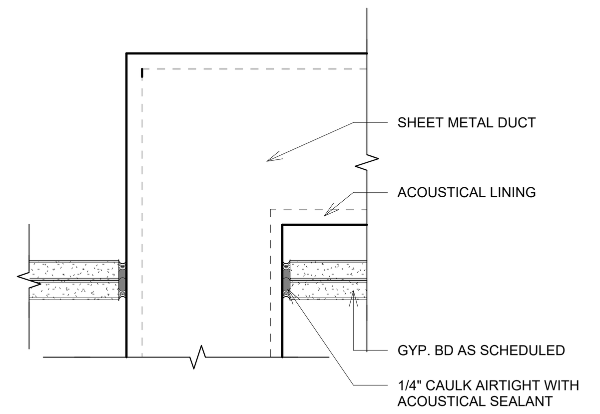
12 / A500 ACOUSTIC EXPANSION JOINT FILLER (WJ2, CJ2 SIM)
3" = 1'-0"



7 / A500 TV BACKBOX
1 1/2" = 1'-0"

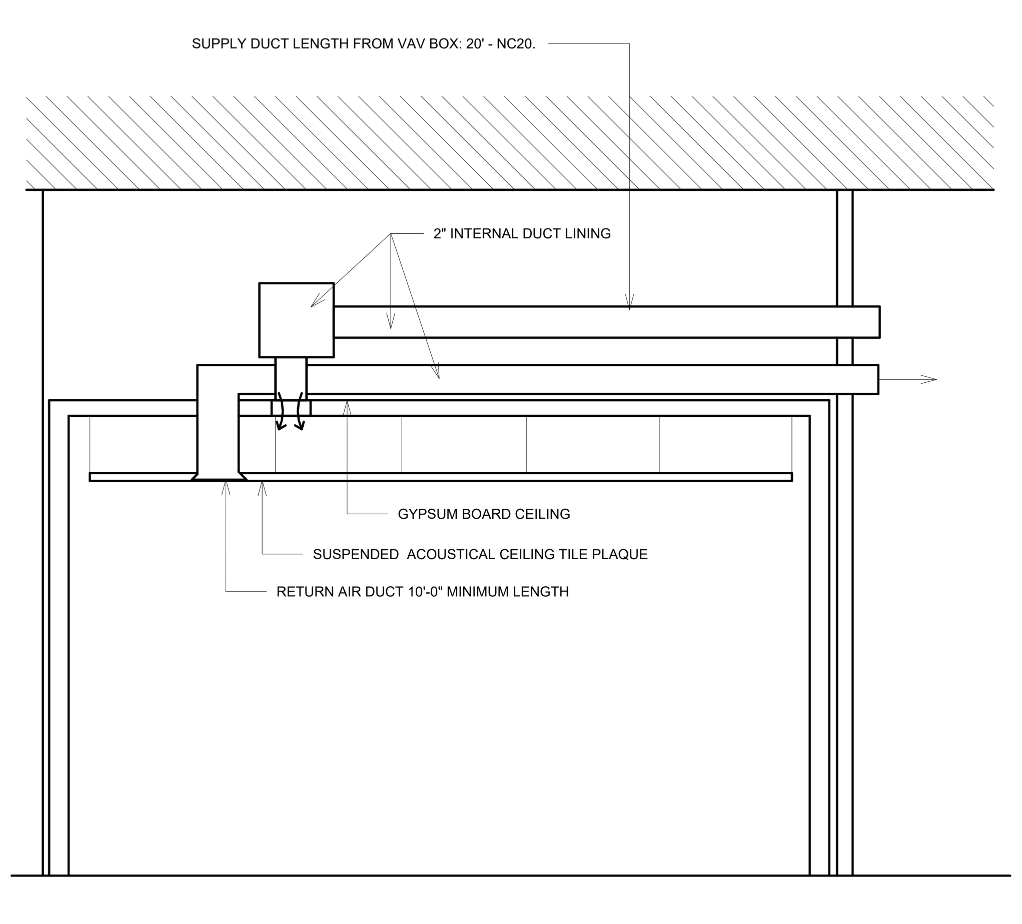


2 / A500 CONF. PRIVACY CURTAIN
1 1/2" = 1'-0"
BID ALTERNATE 2

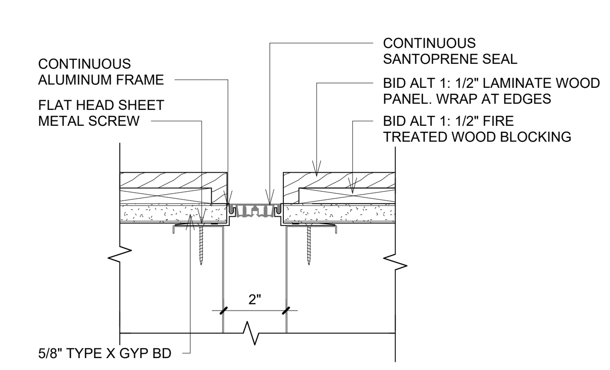


NOTES:
1. FOR CEILING TYPE, SEE PLANS
2. DUCTS WITHIN TEN FEET OF THE CEILING PENETRATION SHALL BE INTERNALLY LINED SHEET METAL

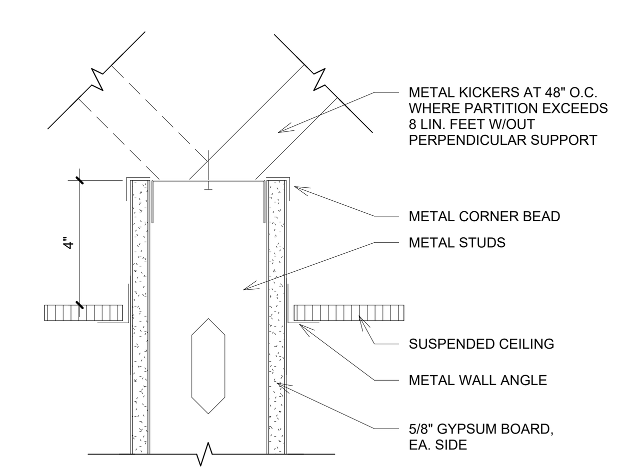
19 / A500 DUCT PENETRATION AT SOUND WALL
3" = 1'-0"



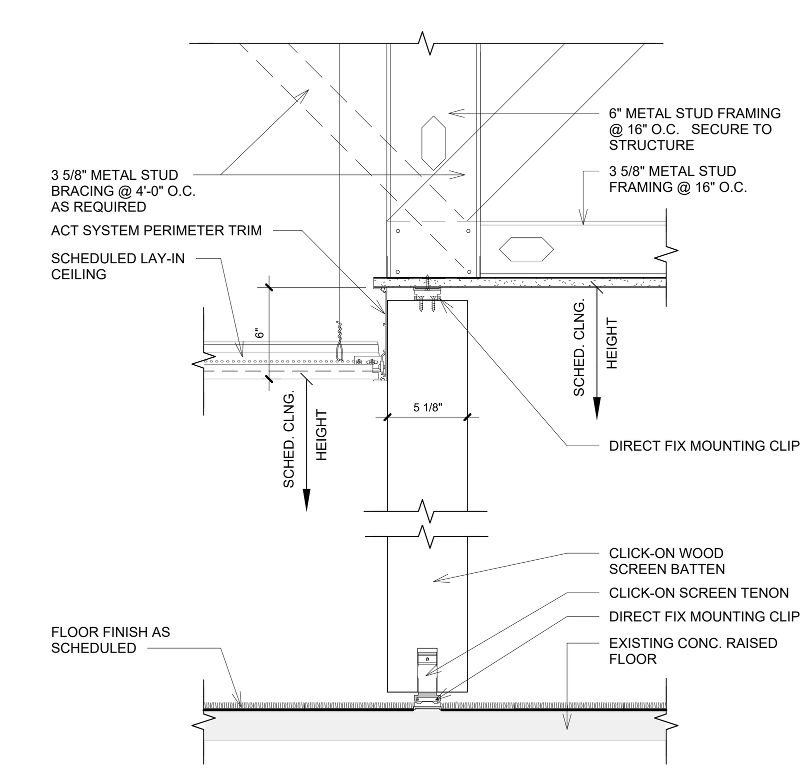
15 / A500 SUPPLY AIR PLAQUE AT LIDDED CONSTRUCTION
3" = 1'-0"



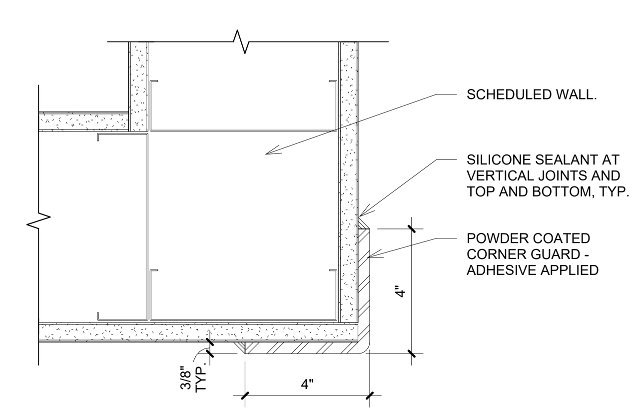
11 / A500 LAMINATE EXPANSION JOINT
3" = 1'-0"
BASE BID / BID ALTERNATE 1



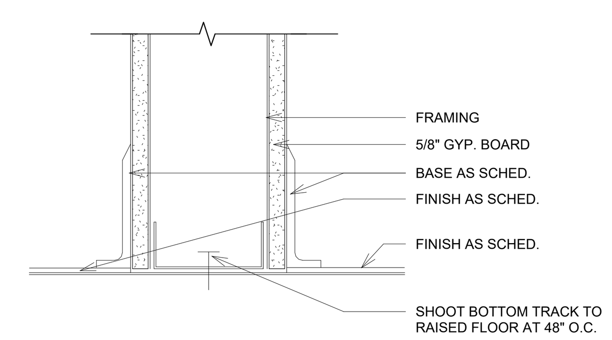
6 / A500 TYPICAL TOP OF WALL
3" = 1'-0"



1 / A500 WOOD SCREEN DETAIL
1 1/2" = 1'-0"



10 / A500 STANDARD-CORNER GUARD DTL
3" = 1'-0"



5 / A500 TYP. BOTTOM OF WALL
3" = 1'-0"

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SUITE 307
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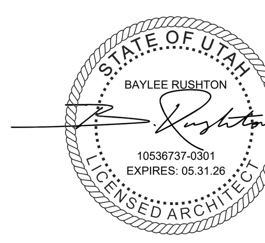

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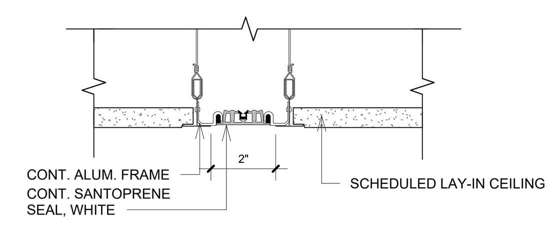
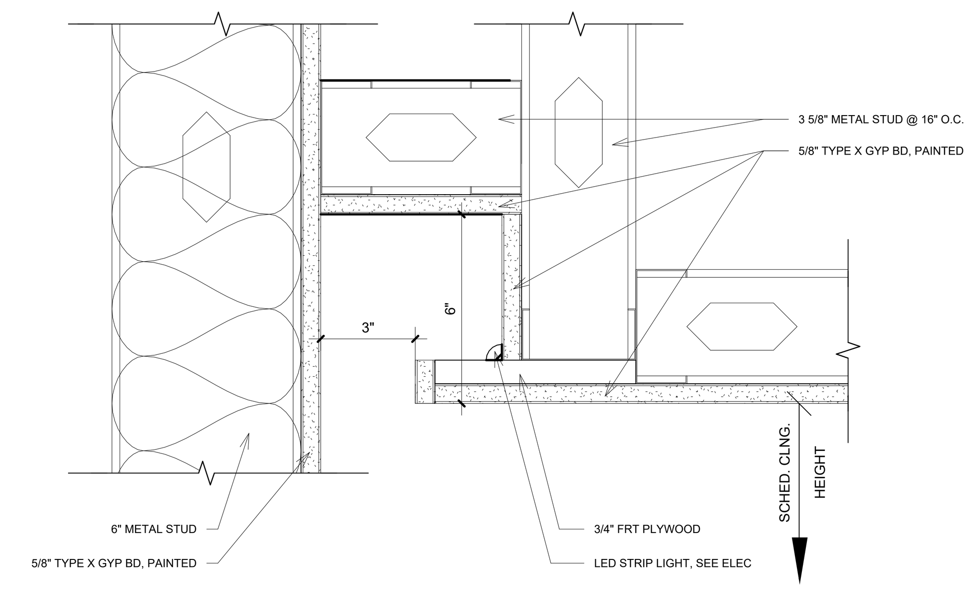
DETAILS

A500

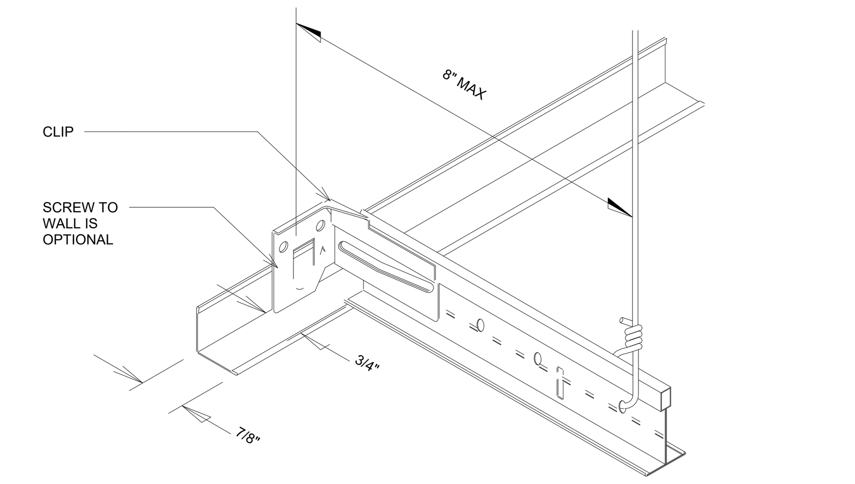
Scale As indicated



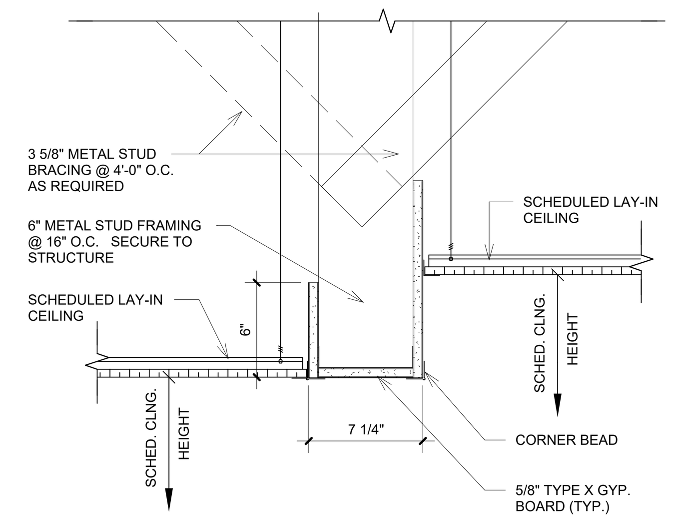
13 A501 ACT CEILING EXPANSION JOINT (CJ1)
3" = 1'-0"



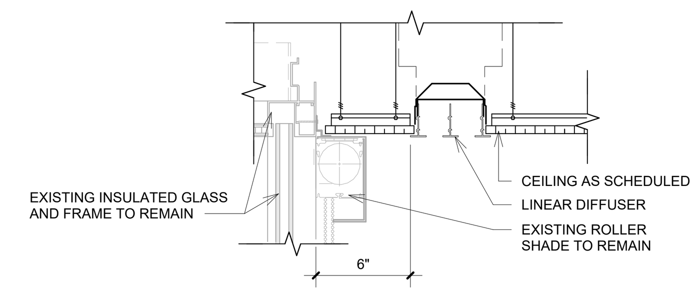
8 A501 MEDIA REVIEW LIGHT COVE
3" = 1'-0"



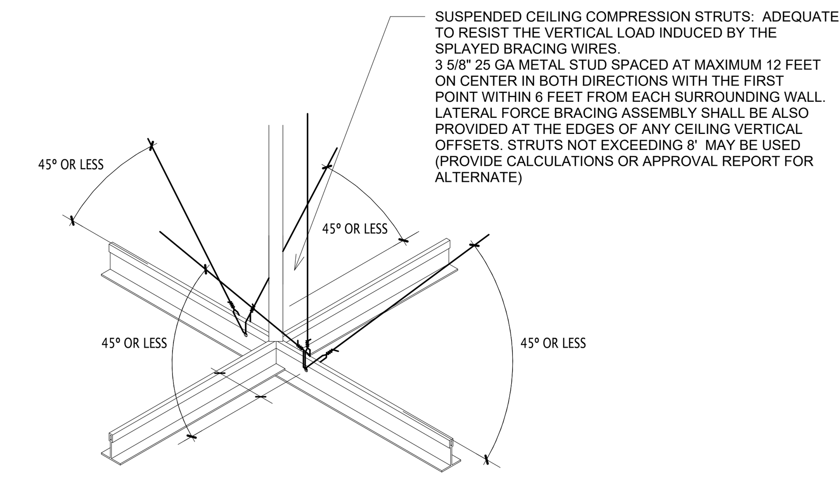
3 A501 SEISMIC CLIP DETAIL
12" = 1'-0"



12 A501 SOFFIT DETAIL - ACT / ACT
1 1/2" = 1'-0"

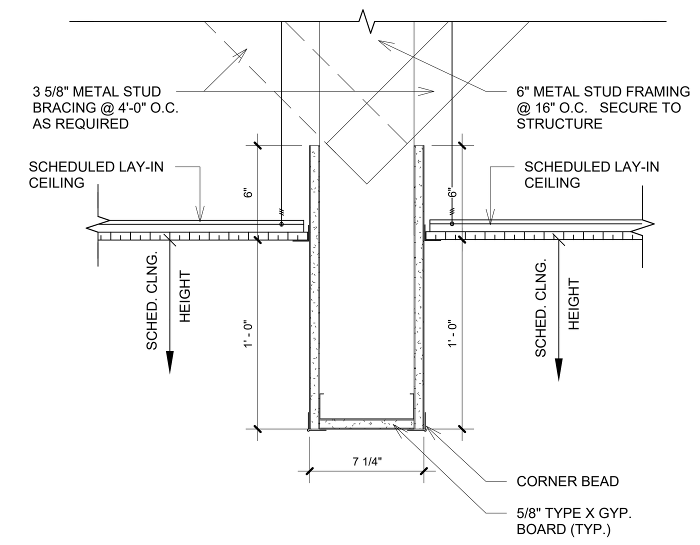


7 A501 LINEAR DIFFUSER AT EXTERIOR STOREFRONT
1 1/2" = 1'-0"

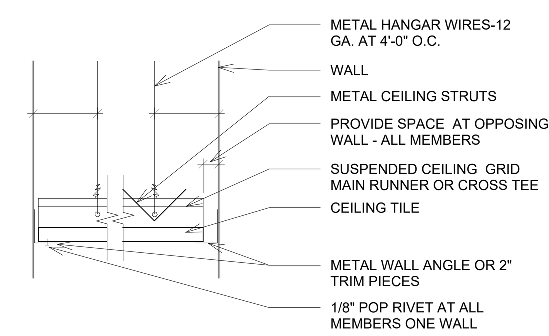


SEISMIC CEILING BRACING NOTES:

1. ALL SPLAY WIRES TO BE IN LINE WITH ATTACHED COMPONENT.
2. ALL SPLAY WIRES TO BE TAUT AND TIED BOTH ENDS WITH MINIMUM OF THREE TURNS IN 1" OF RUN.
3. COMPLY WITH IBC 2018 - 2506.2.1, CISCA 3-4, ASCE 7 13.5.6 & ASTM C635.
4. SPLAY WIRES SHALL ATTACH TO STRUCTURAL GIRDER OR JOIST ONLY, DO NOT ATTACH TO ROOF DECK.
5. METAL STRUT FASTENED TO THE MAIN RUNNER SHALL BE EXTENDED TO AND FASTENED TO THE STRUCTURAL MEMBERS SUPPORTING THE ROOF OR FLOOR ABOVE. THE STRUT SHALL BE ADEQUATE TO RESIST THE VERTICAL COMPONENT INDUCED BY THE BRACING WIRES.
6. ALL LIGHT FIXTURES SHALL BE POSITIVELY ATTACHED TO THE SUSPENDED CEILING SYSTEM. WHEN HEAVY SYSTEMS ARE USED, ATTACH NO. 12 GAGE HANGERS TO THE GRID MEMBERS WITHIN 3" OF EACH CORNER OF EACH FIXTURE. LIGHT FIXTURES WEIGHING LESS THAN 56 LBS. SHALL HAVE TWO NO. 12 GAGE HANGERS CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE. COMPLY WITH IBC STANDARDS.
7. ALL LIGHT FIXTURES SHALL BE POSITIVELY ATTACHED TO THE SUSPENDED CEILING SYSTEM. WHEN HEAVY SYSTEMS ARE USED, ATTACH NO. 12 GAGE HANGERS TO THE GRID MEMBERS WITHIN 3" OF EACH CORNER OF EACH FIXTURE. LIGHT FIXTURES WEIGHING LESS THAN 56 LBS. SHALL HAVE TWO NO. 12 GAGE HANGERS CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE. COMPLY WITH IBC STANDARDS.
8. CEILING-MOUNTED AIR TERMINALS WEIGHING LESS THAN 20 LBS. SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION MAIN RUNNERS. TERMINALS OR SERVICES WEIGHING 20 LBS., BUT NOT MORE THAT 56 LBS., SHALL IN ADDITION HAVE TWO NO.12 GAGE HANGERS CONNECTED TO THE CEILING SYSTEM HANGERS OR TO THE STRUCTURE ABOVE. TERMINALS OR SERVICES WEIGHING MORE THAN 56 LBS. SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY APPROVED HANGERS. COMPLY WITH IBC STANDARDS

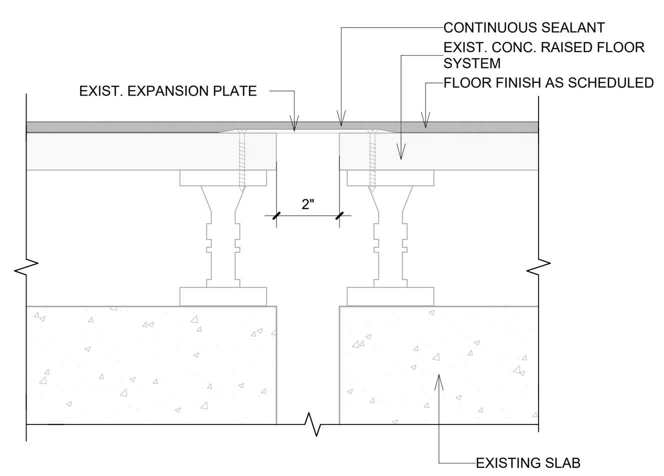


11 A501 SOFFIT DETAIL - ACT / ACT
1 1/2" = 1'-0"

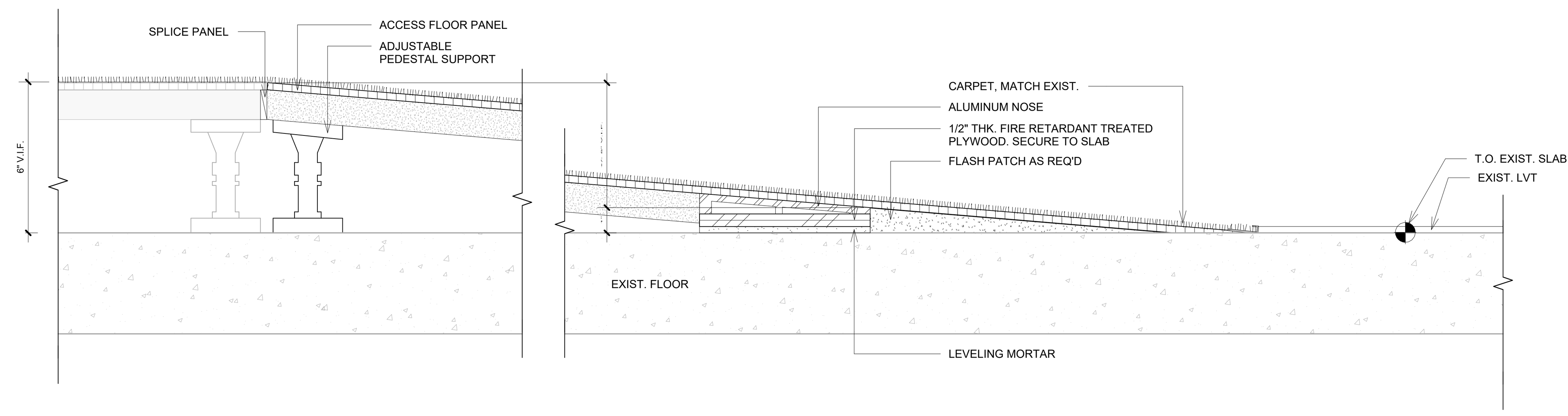


6 A501 SEISMIC BRACING DETAIL
3" = 1'-0"

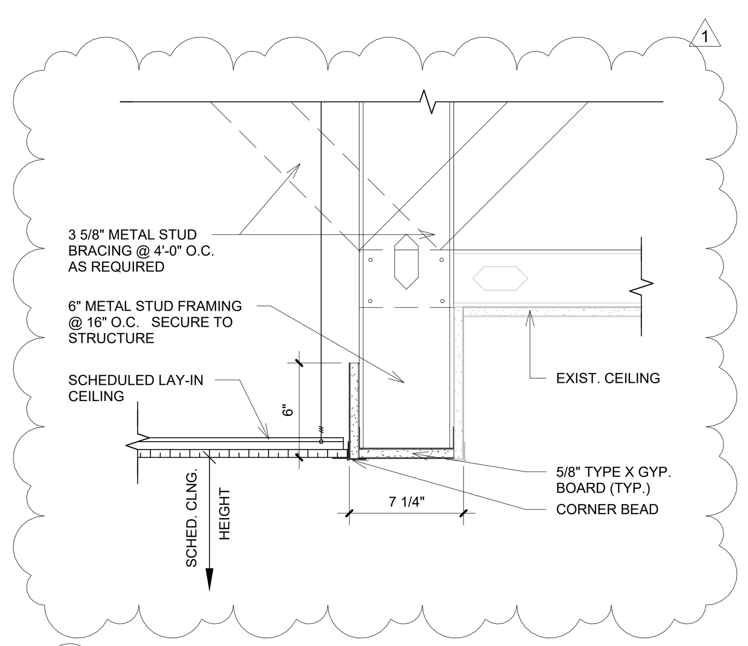
2 A501 SEISMIC CEILING BRACING
1 1/2" = 1'-0"



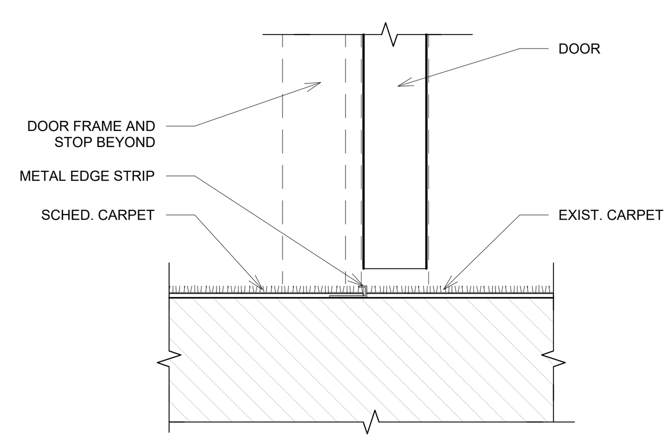
10 A501 FLOOR EXPANSION JOINT (FJ1)
3" = 1'-0"



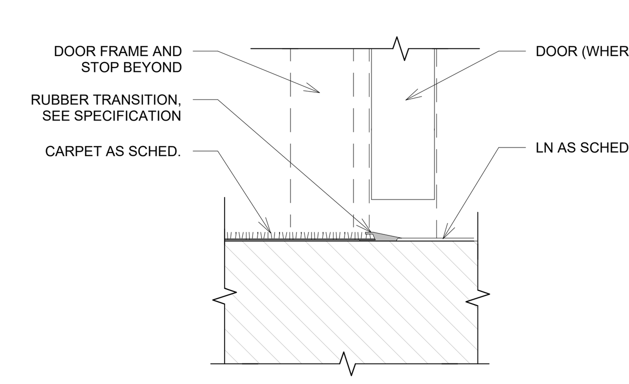
5 A501 RAMP DETAIL
3" = 1'-0"



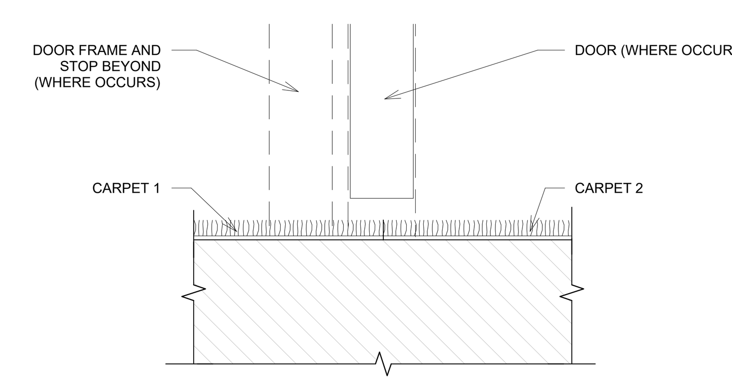
14 A501 SOFFIT DETAIL - ACT / GYP
1 1/2" = 1'-0"



9 A501 CARPET - EXISTING CARPET @ DOOR
3" = 1'-0"



4 A501 CARPET - LN @ DOOR
3" = 1'-0"



1 A501 CARPET - CARPET @ DOOR
3" = 1'-0"

STUDIO LP
331 S RIO GRANDE ST
SUITE 307
SLC, UT 84101
PH: 801.364.0503
BAYLEE@STUDIOLPARCH.COM

WELLNESS GYM & RESILIENCY CENTER

No	Description	Date
1	ADDENDUM 1	12/20/2024

THE UNIVERSITY OF UTAH

CONSTRUCTION DOCUMENTS

295 CHIPETA WAY
SALT LAKE CITY, UT 84108

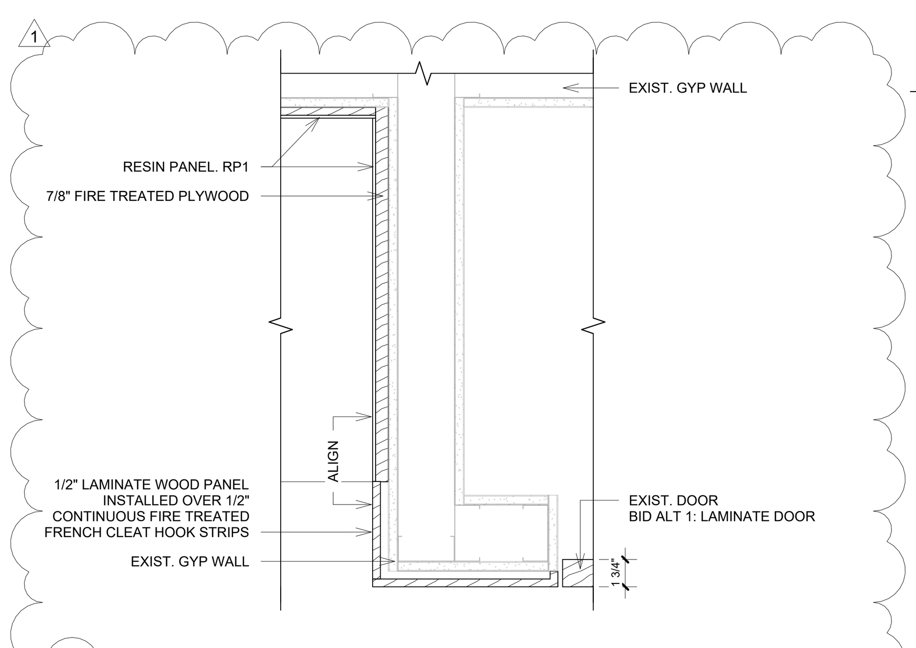
22735

10.30.2024

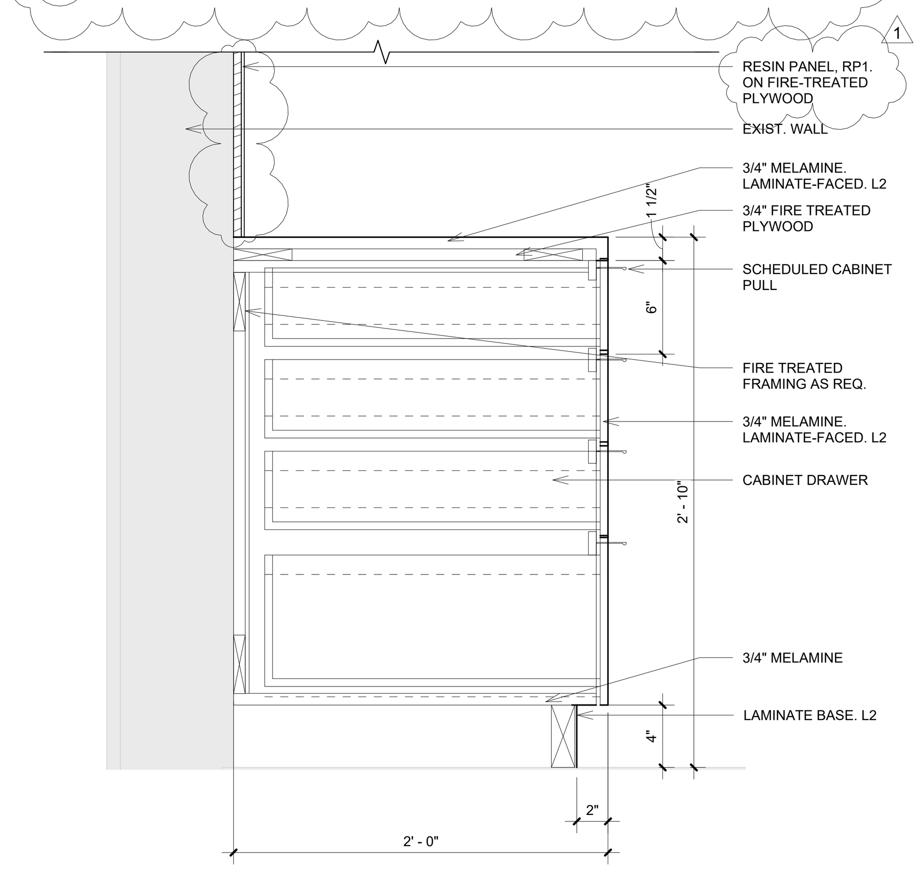
FLOOR + CEILING DETAILS

A501

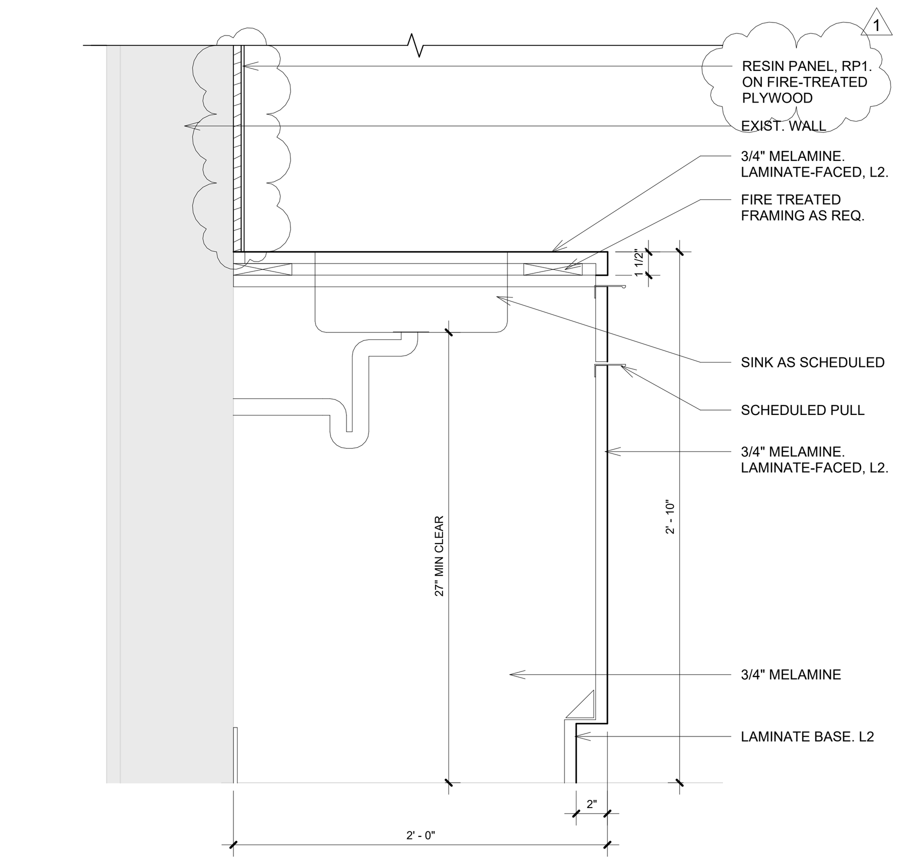
Scale As indicated



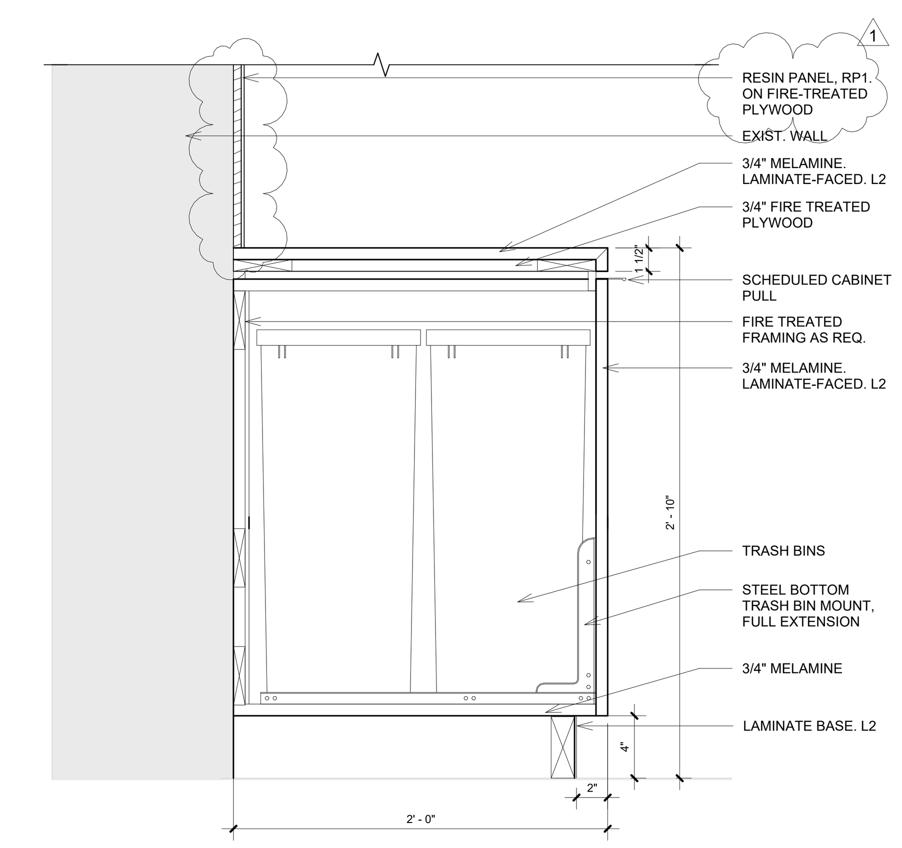
14 A515 M3 - SNACK BAR PLAN DETAIL
1 1/2" = 1'-0"



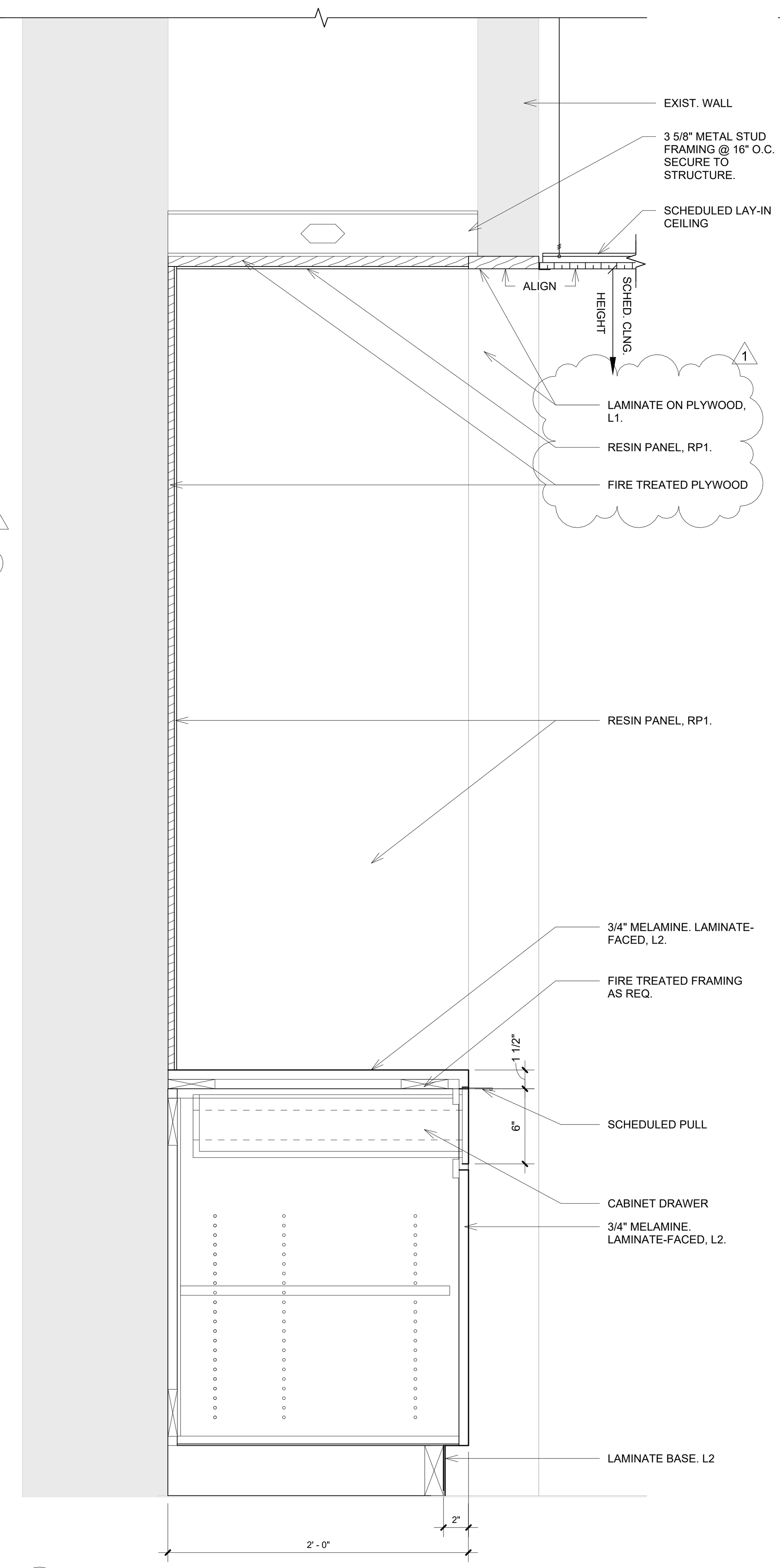
13 A515 M3 - SNACK BAR LOWER DRAWERS
1 1/2" = 1'-0"



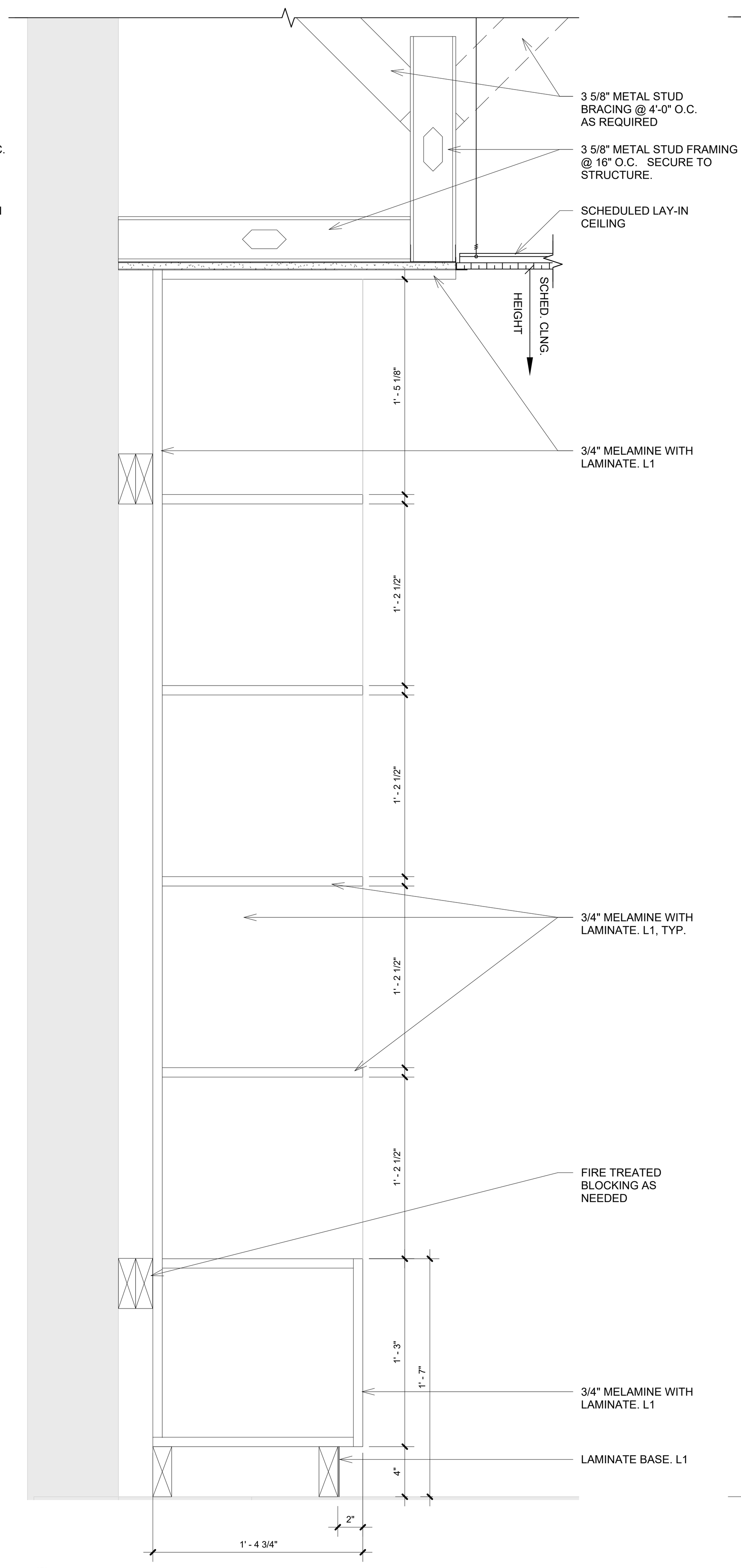
12 A515 M3 - SNACK BAR ADA SINK
1 1/2" = 1'-0"



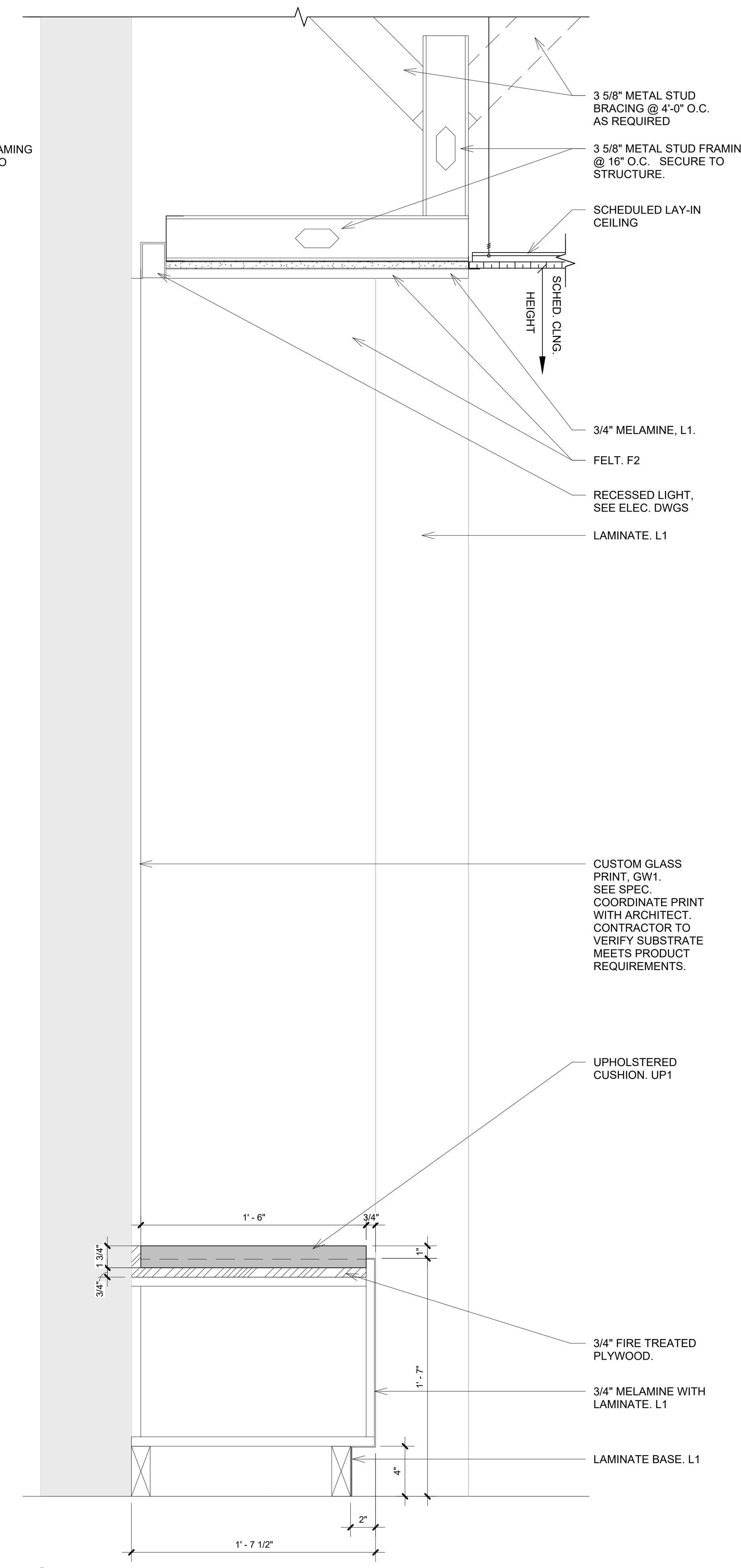
11 A515 M3 - SNACK BAR TRASH DRAWER
1 1/2" = 1'-0"



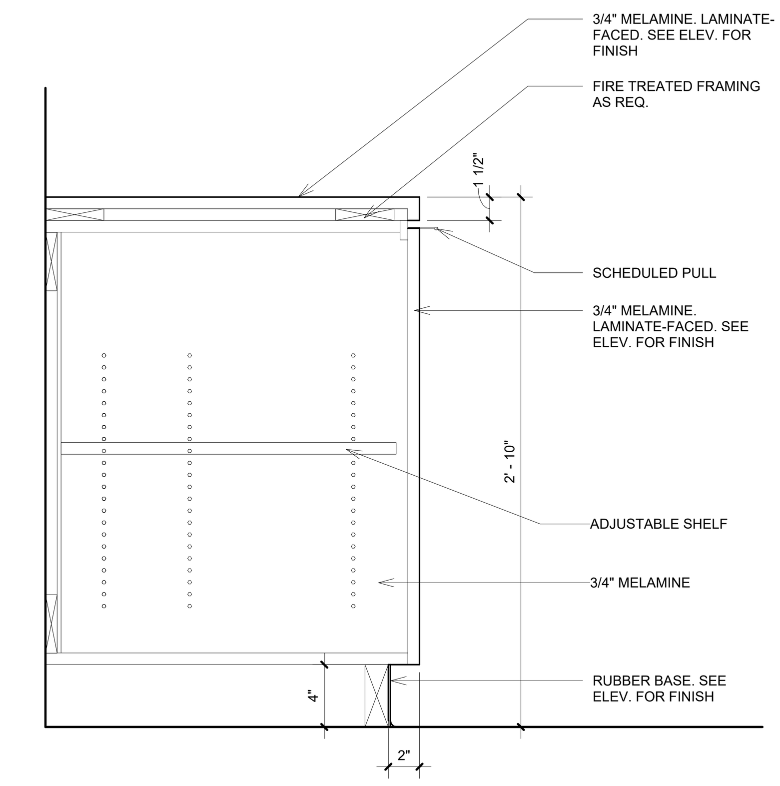
8 A515 M3 - SNACK BAR CABINET AND CEILING DETAIL
1 1/2" = 1'-0"



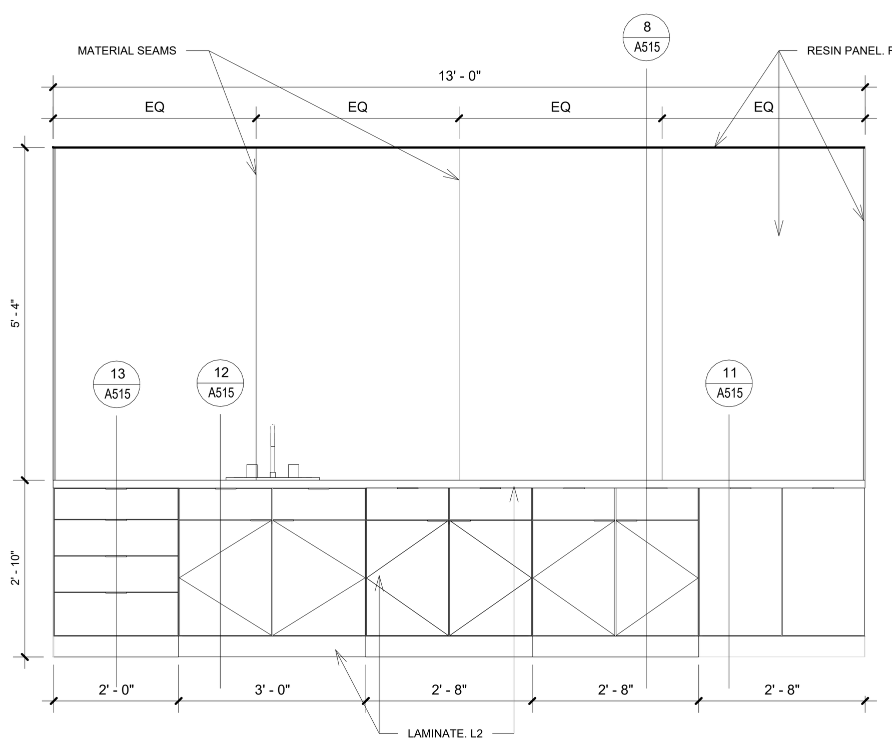
7 A515 M2 - ENTRY SHELVES
1 1/2" = 1'-0"



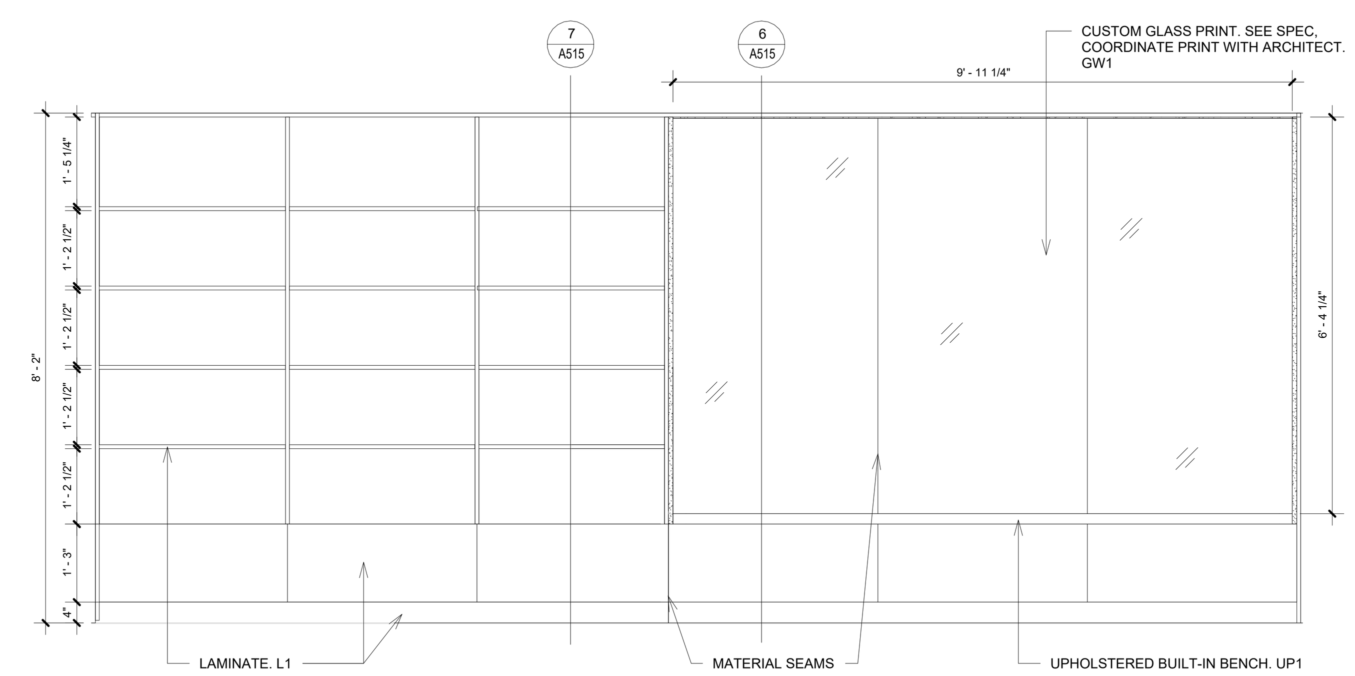
6 A515 M2 - ENTRY BENCH
1 1/2" = 1'-0"



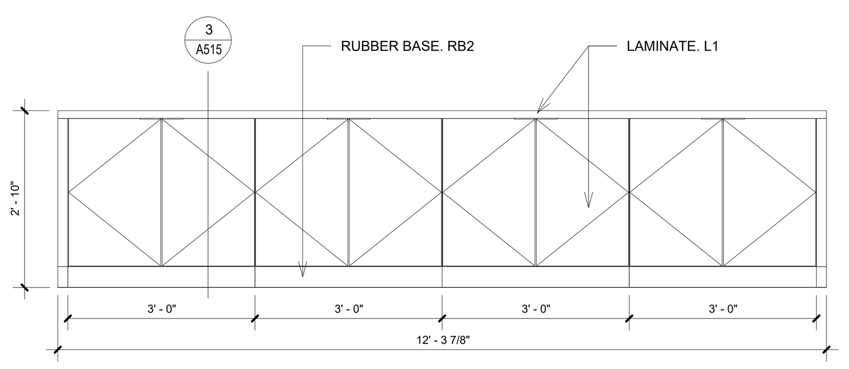
3 A515 LOWER CABINET W/DRAWER
1 1/2" = 1'-0"



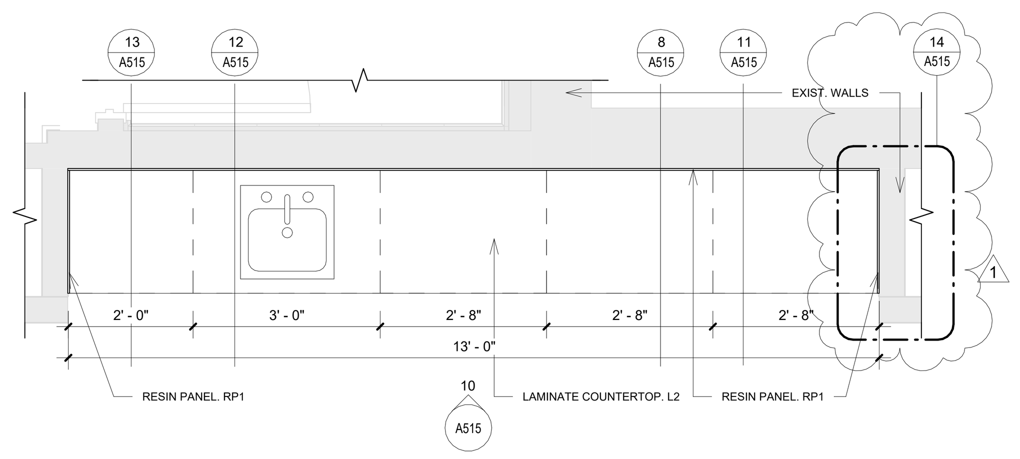
10 A515 M3 - SNACK BAR ELEV.
1/2" = 1'-0"



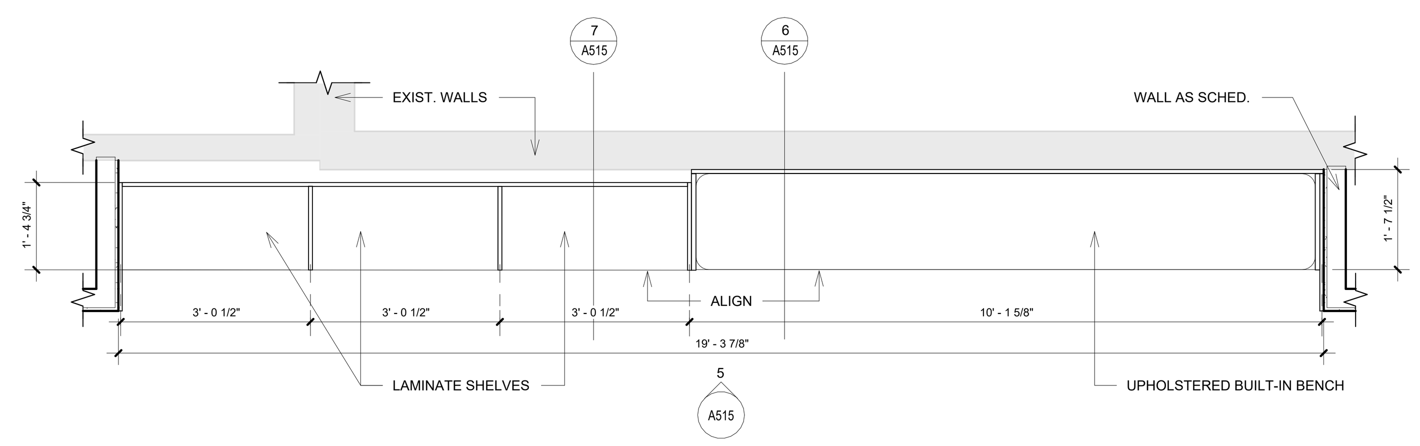
5 A515 M2 - ENTRY BENCH & SHELVES ELEV.
1/2" = 1'-0"



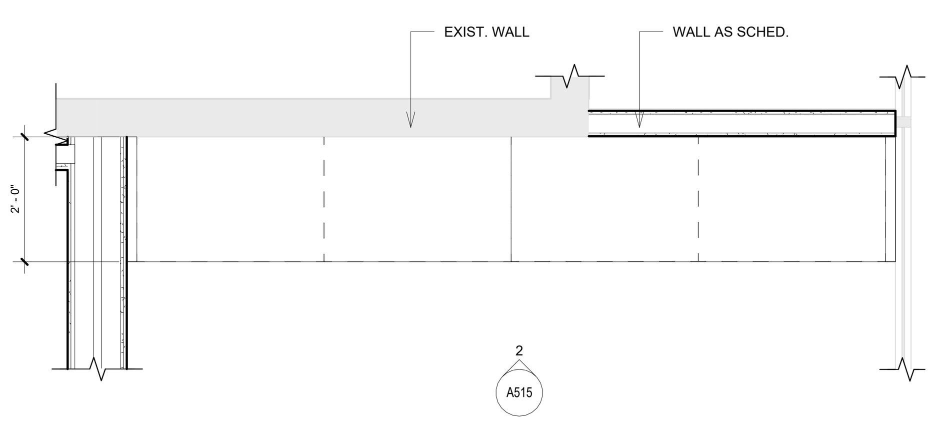
2 A515 M1 - CONFERENCE MILLWORK ELEV.
1/2" = 1'-0"



9 A515 M3 - SNACK BAR PLAN
1/2" = 1'-0"



4 A515 M2 - ENTRY BENCH & SHELVES PLAN
1/2" = 1'-0"



1 A515 M1 - CONFERENCE ROOM MILLWORK PLAN
1/2" = 1'-0"

ELEV. LEGEND

P1	= PAINT, COLOR: 7566 WESTHIGHLAND WHITE
P2	= PAINT, COLOR: 6494 LAKESHORE
F1	= FELT, COLOR: GREEN
F2	= FELT, COLOR: PINK
F3	= FELT, COLOR: PURPLE
F4	= FELT, COLOR: ORANGE
RP1	= RESIN PANEL, COLOR: KILT + WHITE OUT
L1	= LAMINATE, COLOR: AGED ASH
L2	= LAMINATE, COLOR: HUNTER GREEN
TL1	= LAMINATE TEXTURED PANEL, FINISH: FILA, SALINAS OAK
TF1	= FELT TEXTURED PANEL, FINISH: BOLLA, MIDNIGHT
WS1	= WOOD SCREEN, SPECIES/FINISH: AMERICAN OAK / NATURAL
SS1	= SOLID SURFACE COUNTERTOP, COLOR: FROSTY WHITE MIRAGE
UP1	= UPHOLSTERY, COLOR: NICO 016 POSH
RB1	= RUBBER BASE, COLOR: TG2 SHARK FIN
RB2	= RUBBER BASE, COLOR: GREY WG
GW1	= GLASS WALL, SEE SPEC.
GW2	= GLASS WALL, SEE SPEC.
MB1	= MARKER BOARD 4'X6', SEE SPEC.
TD	= TOWEL DISPENSER BY OWNER, PROVIDE BLOCKING IN WALLS
SD	= SOAP DISPENSER BY OWNER, PROVIDE BLOCKING IN WALLS

STUDIO LP
331 S RIO GRANDE ST
SUITE 307
SLC, UT 84101
PH: 8017395569
BAYLEE@STUDIOLPARCH.COM

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BAYLEE RUSHTON
10536737-0301
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GENETIC SCIENCE LEARNING CENTER

CONSTRUCTION DOCUMENTS

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1	ADDENDUM 1	12/20/2024

THE UNIVERSITY OF UTAH

GSLC
295 CHIPETA WAY
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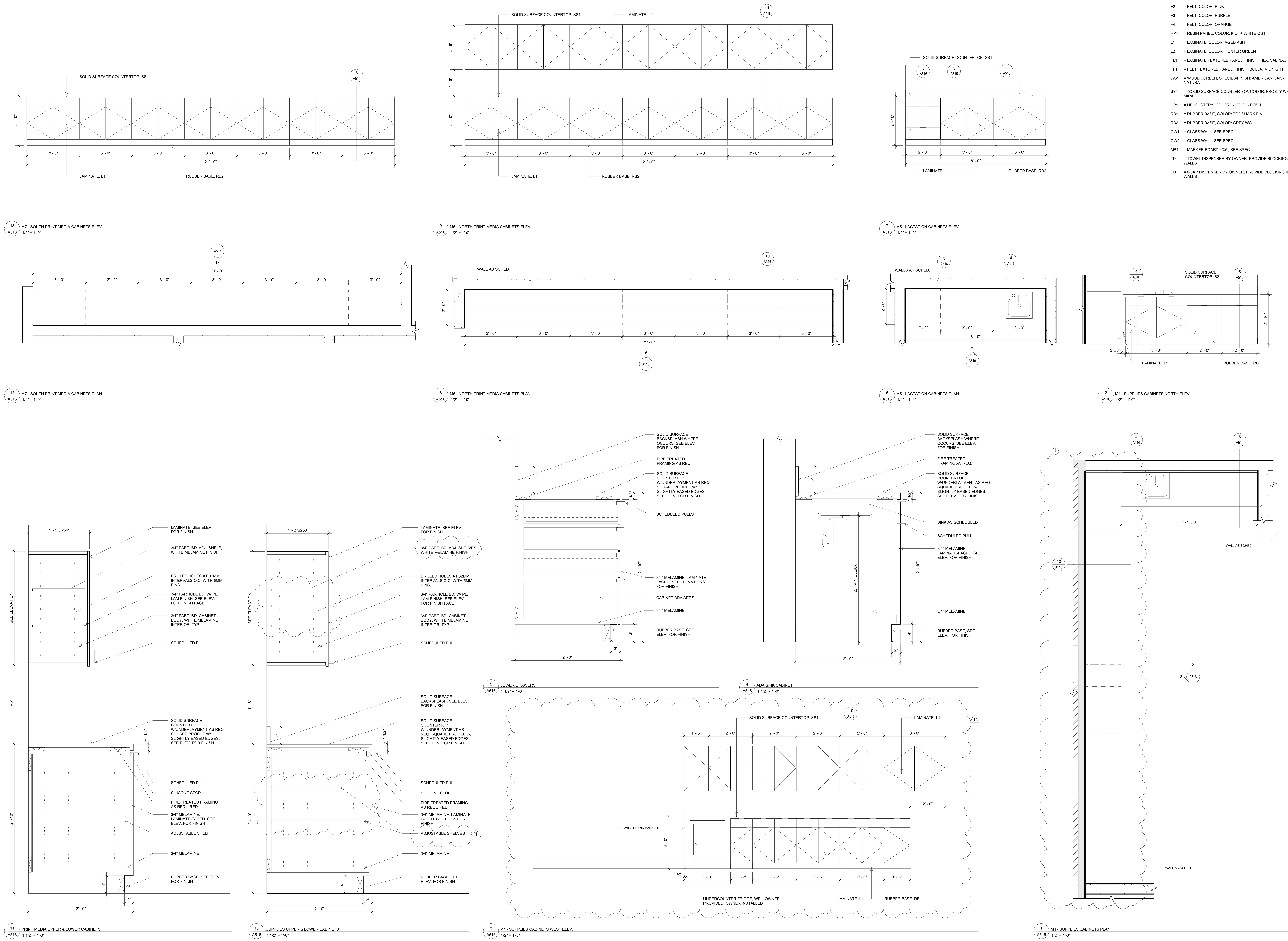
22812

10.30.2024

MILLWORK

A515

Scale As indicated



ELEV. LEGEND

P1	= PAINT, COLOR: 7566 WESTHIGHLAND WHITE
P2	= PAINT, COLOR: 6494 LAKESHORE
F1	= FELT, COLOR: GREEN
F2	= FELT, COLOR: PINK
F3	= FELT, COLOR: PURPLE
F4	= FELT, COLOR: ORANGE
RP1	= RESIN PANEL, COLOR: KILT + WHITE OUT
L1	= LAMINATE, COLOR: AGED ASH
L2	= LAMINATE, COLOR: HUNTER GREEN
TL1	= LAMINATE TEXTURED PANEL, FINISH: FILA, SALINAS OAK
TF1	= FELT TEXTURED PANEL, FINISH: BOLLA, MIDNIGHT
WS1	= WOOD SCREEN, SPECIES/FINISH: AMERICAN OAK / NATURAL
SS1	= SOLID SURFACE COUNTERTOP, COLOR: FROSTY WHITE MIRAGE
UP1	= UPHOLSTERY, COLOR: NICO 016 POSH
RB1	= RUBBER BASE, COLOR: TG2 SHARK FIN
RB2	= RUBBER BASE, COLOR: GREY WG
GW1	= GLASS WALL, SEE SPEC.
GW2	= GLASS WALL, SEE SPEC.
MB1	= MARKER BOARD 4'X6', SEE SPEC.
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SLC, UT 84101
PH: 8017395569
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THE UNIVERSITY OF UTAH

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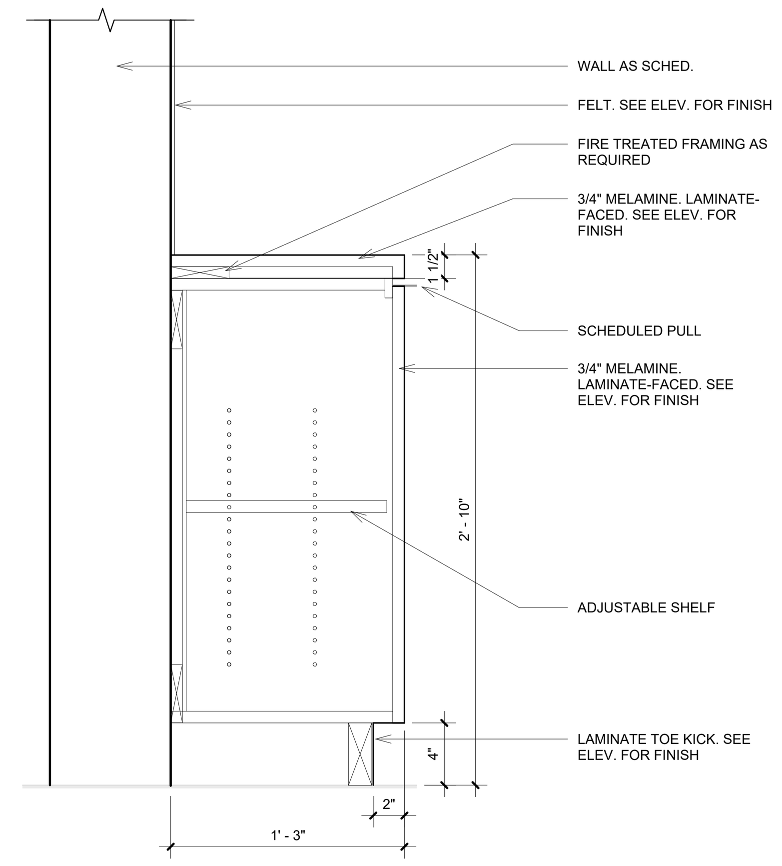
SALT LAKE CITY, UT 84108

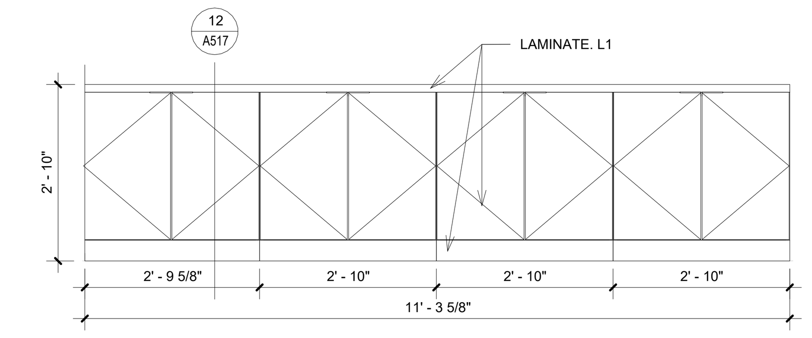
22812
10.30.2024

MILLWORK

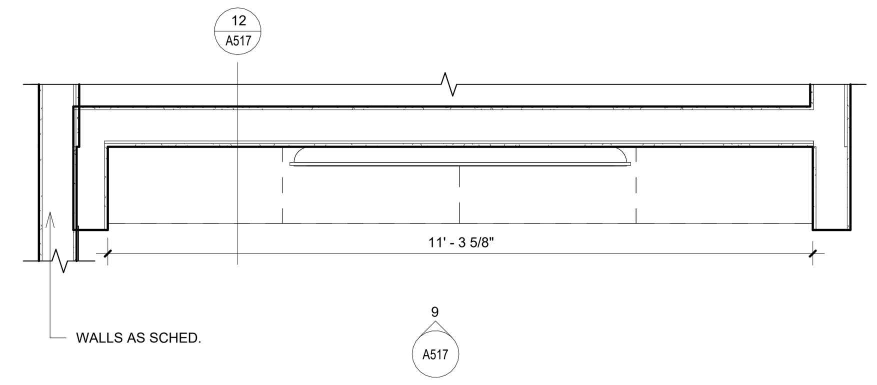
A516
Scale As indicated



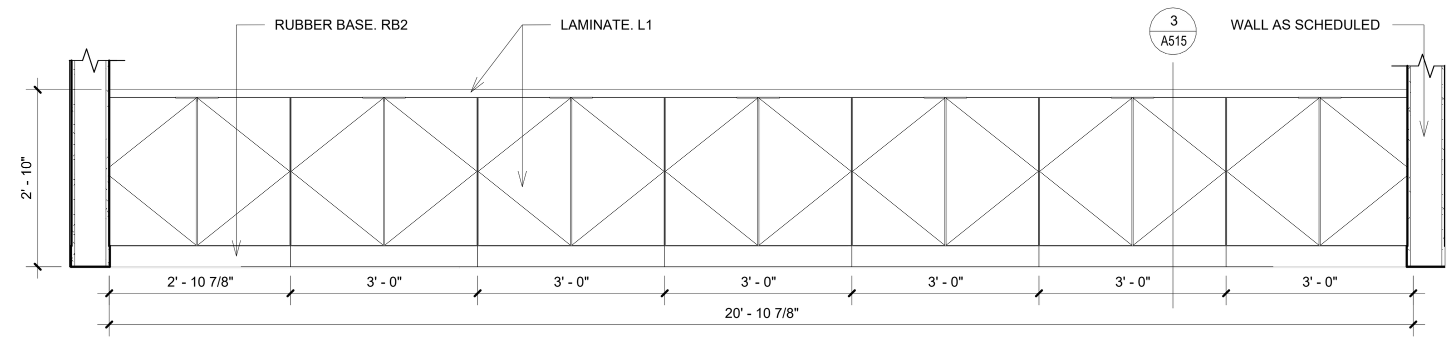
12 A517 M11 - TOUCHDOWN CABINETS DETAIL
1 1/2" = 1'-0"



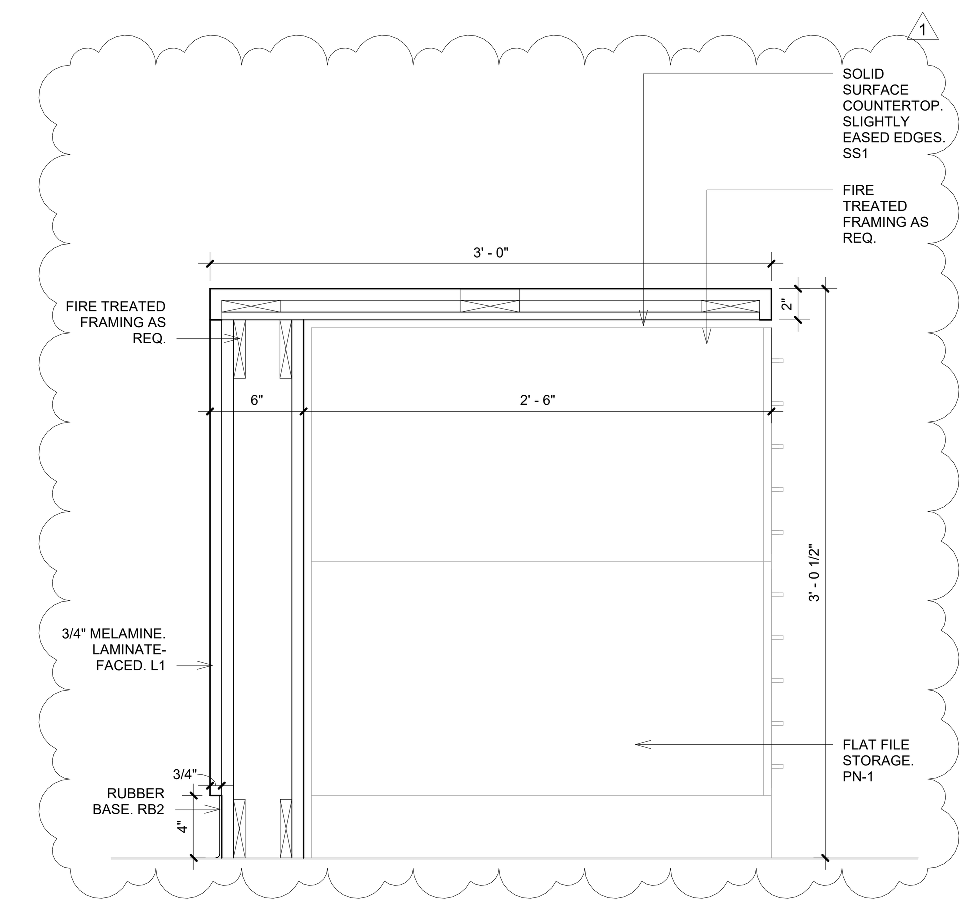
9 A517 M11 - TOUCHDOWN CABINETS ELEV.
1/2" = 1'-0"



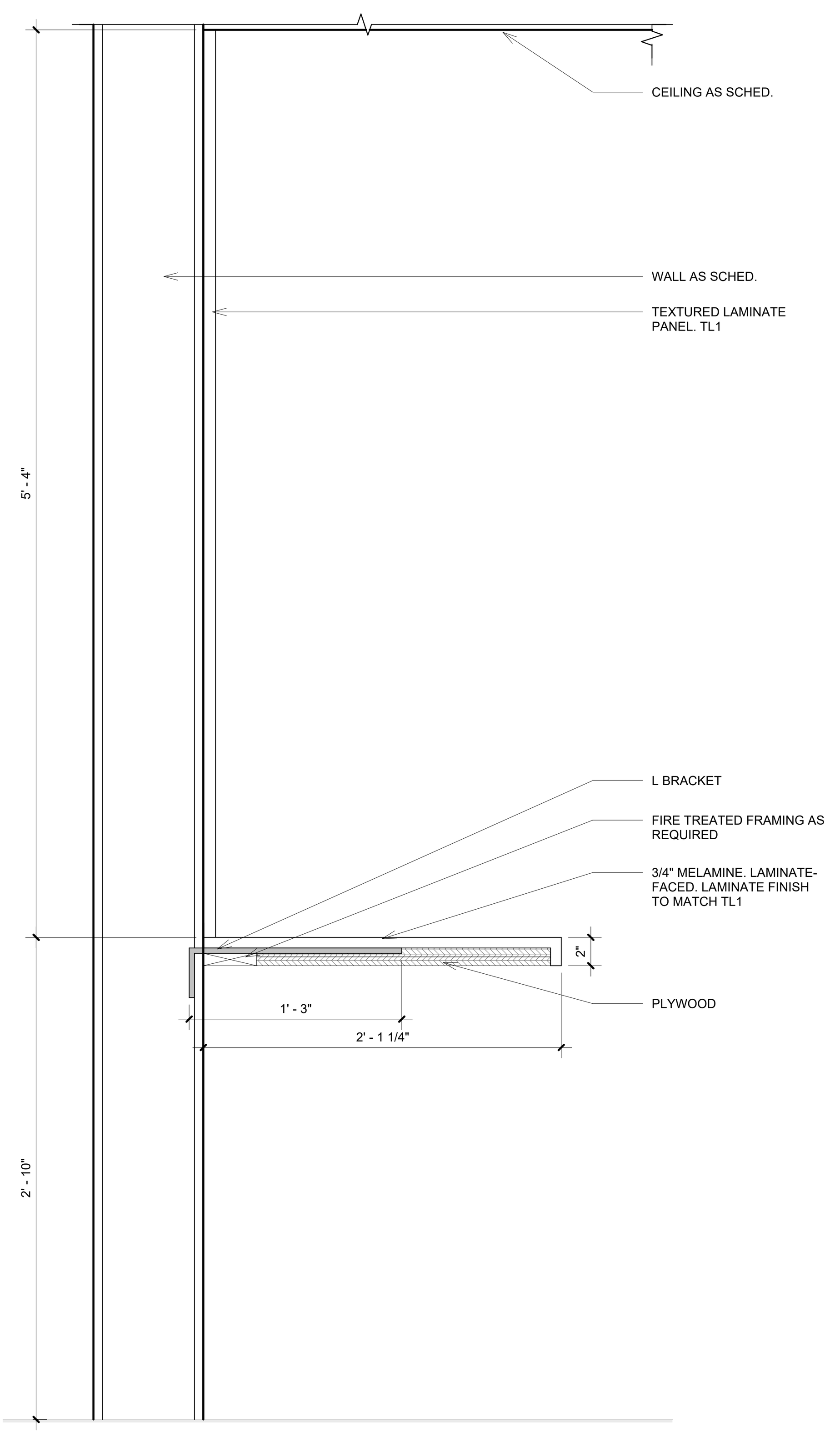
8 A517 M11 - TOUCHDOWN CABINETS PLAN
1/2" = 1'-0"



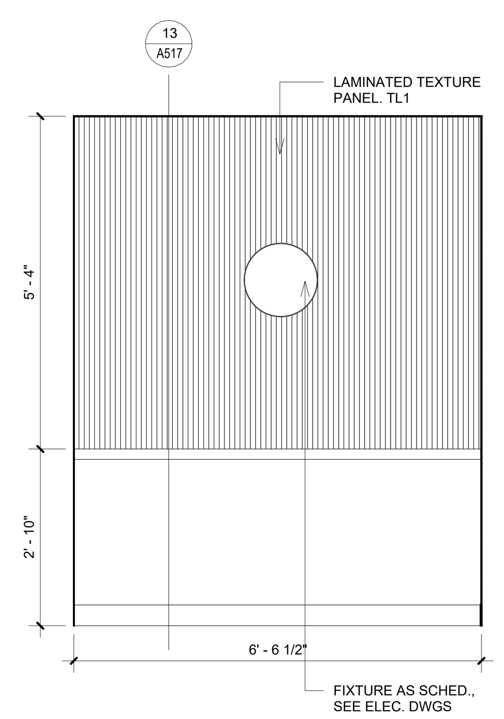
7 A517 M9 - MEDIA REVIEW CABINETS ELEV.
1/2" = 1'-0"



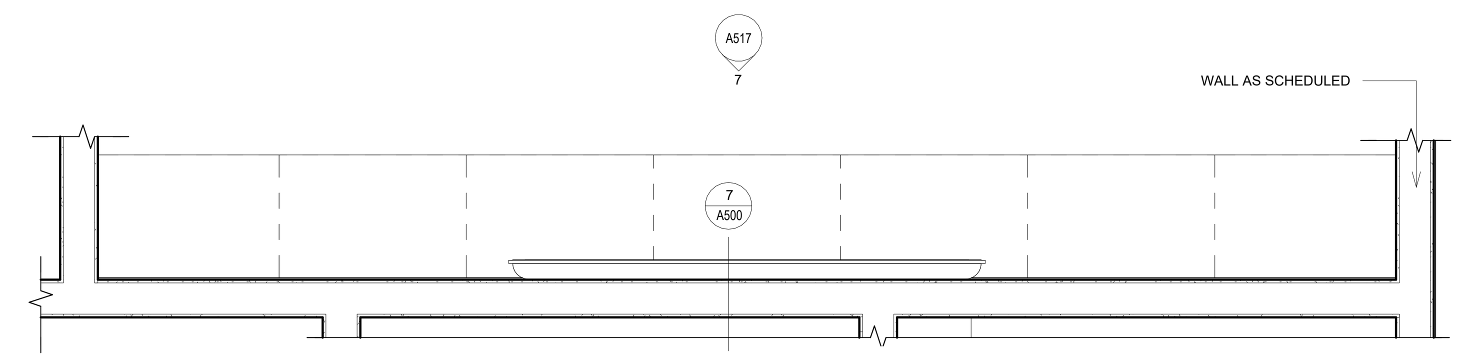
4 A517 M8 - PRINT MEDIA ISLAND DETAIL 1
1 1/2" = 1'-0"



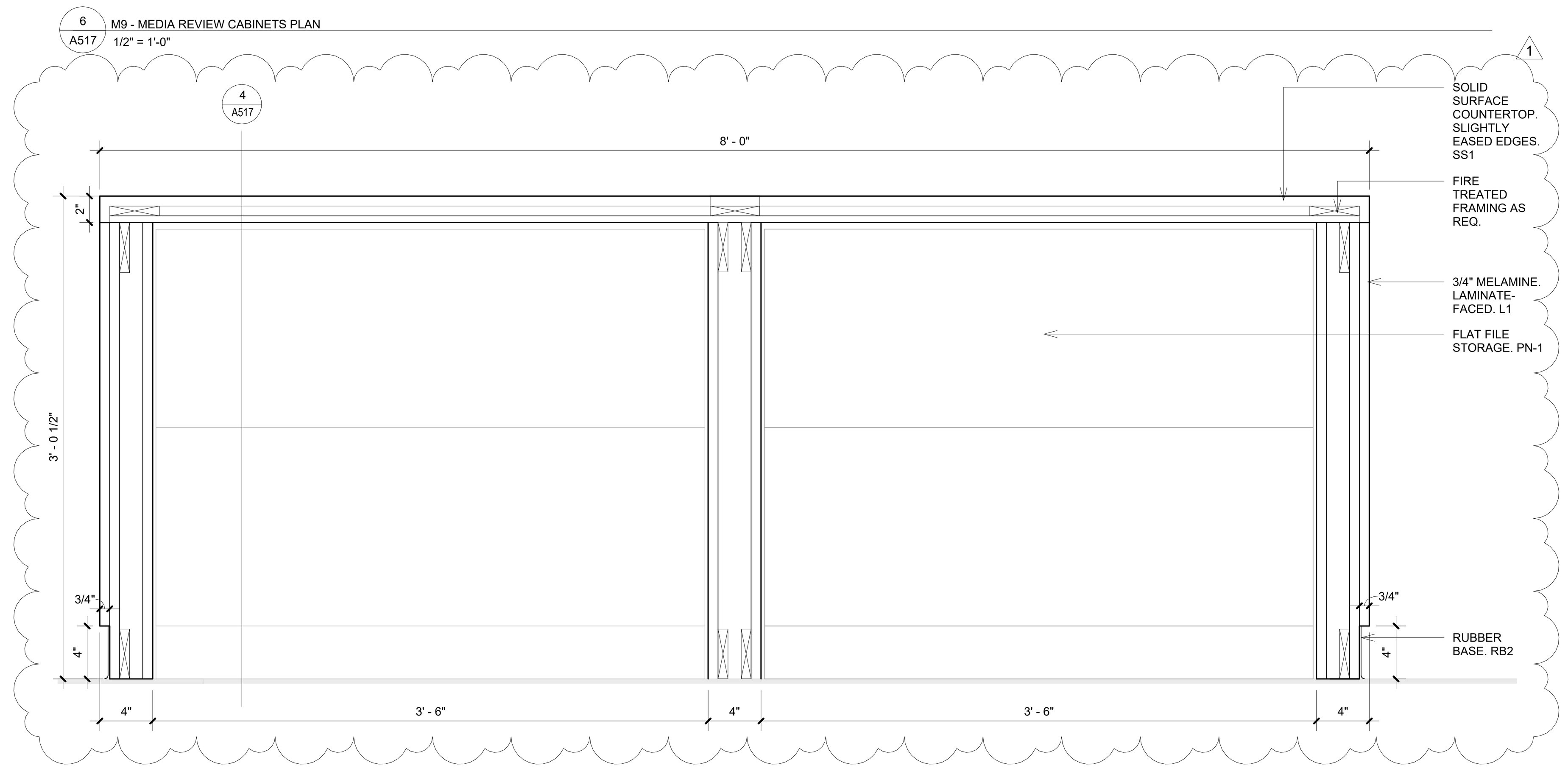
13 A517 M10 - PHONE BOOTH DESK DETAIL
1 1/2" = 1'-0"



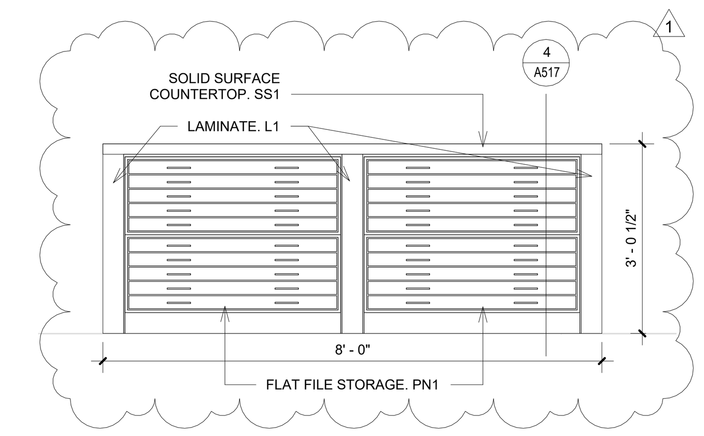
11 A517 M10 - PHONE BOOTH DESK ELEV.
1/2" = 1'-0"



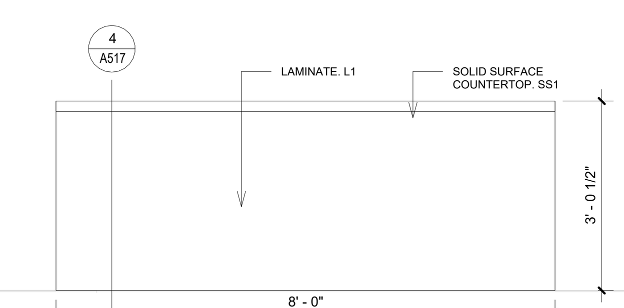
6 A517 M9 - MEDIA REVIEW CABINETS PLAN
1/2" = 1'-0"



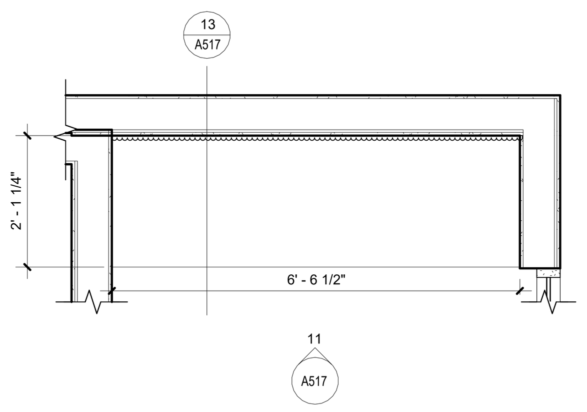
5 A517 M8 - PRINT MEDIA ISLAND DETAIL 2
1 1/2" = 1'-0"



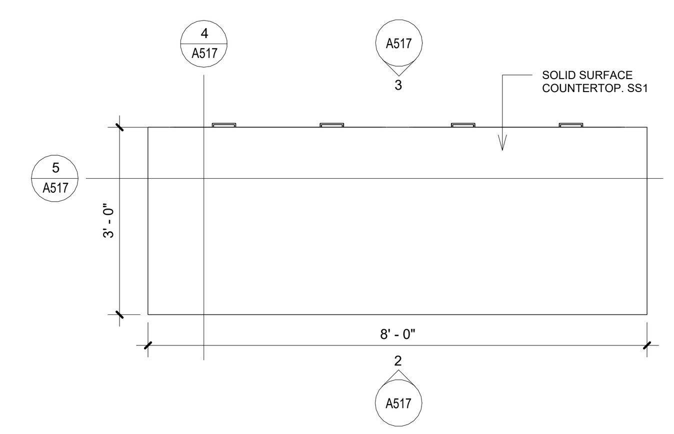
3 A517 M8 - MEDIA ISLAND SOUTH ELEV.
1/2" = 1'-0"



2 A517 M8 - PRINT MEDIA ISLAND NORTH ELEV.
1/2" = 1'-0"



10 A517 M10 - PHONE BOOTH DESK PLAN
1/2" = 1'-0"



1 A517 M8 - PRINT MEDIA ISLAND PLAN
1/2" = 1'-0"

ELEV. LEGEND

P1	= PAINT, COLOR: 7566 WESTHIGHLAND WHITE
P2	= PAINT, COLOR: 6494 LAKESHORE
F1	= FELT, COLOR: GREEN
F2	= FELT, COLOR: PINK
F3	= FELT, COLOR: PURPLE
F4	= FELT, COLOR: ORANGE
RP1	= RESIN PANEL, COLOR: KILT + WHITE OUT
L1	= LAMINATE, COLOR: AGED ASH
L2	= LAMINATE, COLOR: HUNTER GREEN
TL1	= LAMINATE TEXTURED PANEL, FINISH: FILA, SALINAS OAK
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SS1	= SOLID SURFACE COUNTERTOP, COLOR: FROSTY WHITE MIRAGE
UP1	= UPHOLSTERY, COLOR: NICO 016 POSH
RB1	= RUBBER BASE, COLOR: TG2 SHARK FIN
RB2	= RUBBER BASE, COLOR: GREY WG
GW1	= GLASS WALL, SEE SPEC.
GW2	= GLASS WALL, SEE SPEC.
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331 S RIO GRANDE ST
SUITE 307
SLC, UT 84101
PH: 8017395569
BAYLEE@STUDIOLPARCH.COM

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10536737-0301
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1	ADDENDUM 1	12/20/2024

THE UNIVERSITY OF UTAH

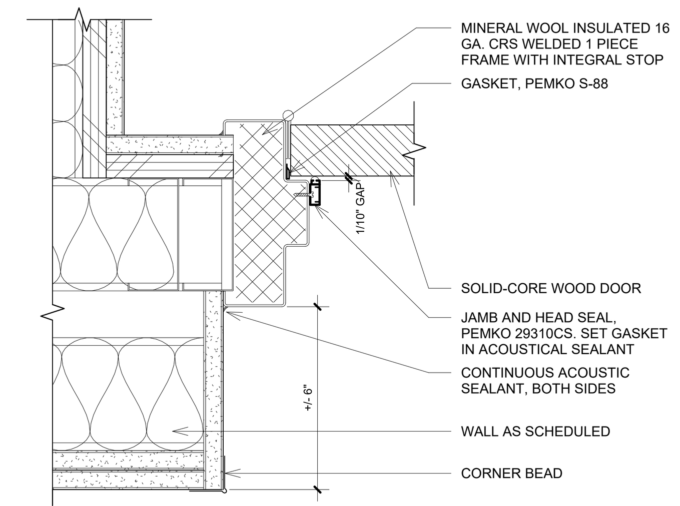
GSLC
295 CHIPETA WAY
SALT LAKE CITY, UT 84108

22812
10.30.2024

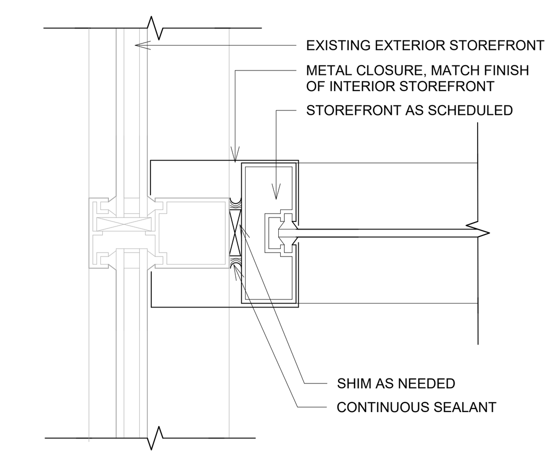
MILLWORK

A517

Scale As indicated

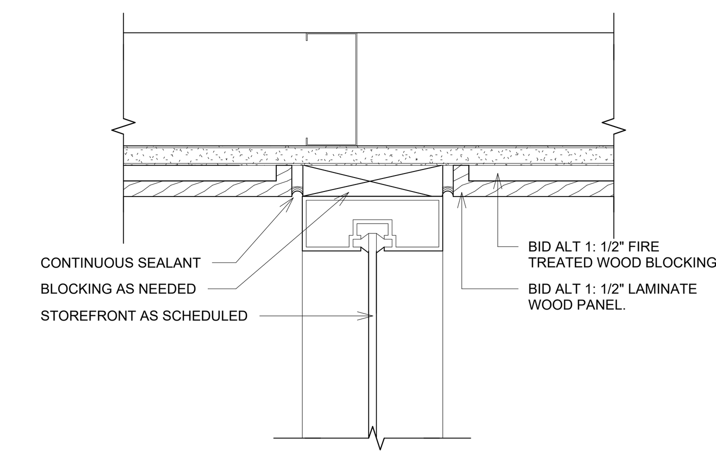


12 A601 DOOR FRAME AT ACOUSTICAL DOOR
3" = 1'-0"



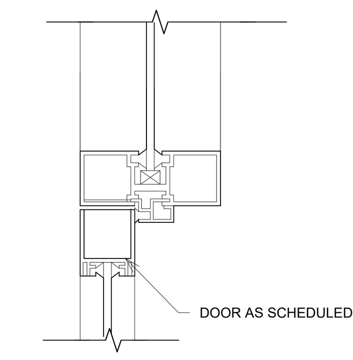
6 A601 STOREFRONT JAMB @ EXTERIOR STOREFRONT
3" = 1'-0"

BID ALTERNATE 2

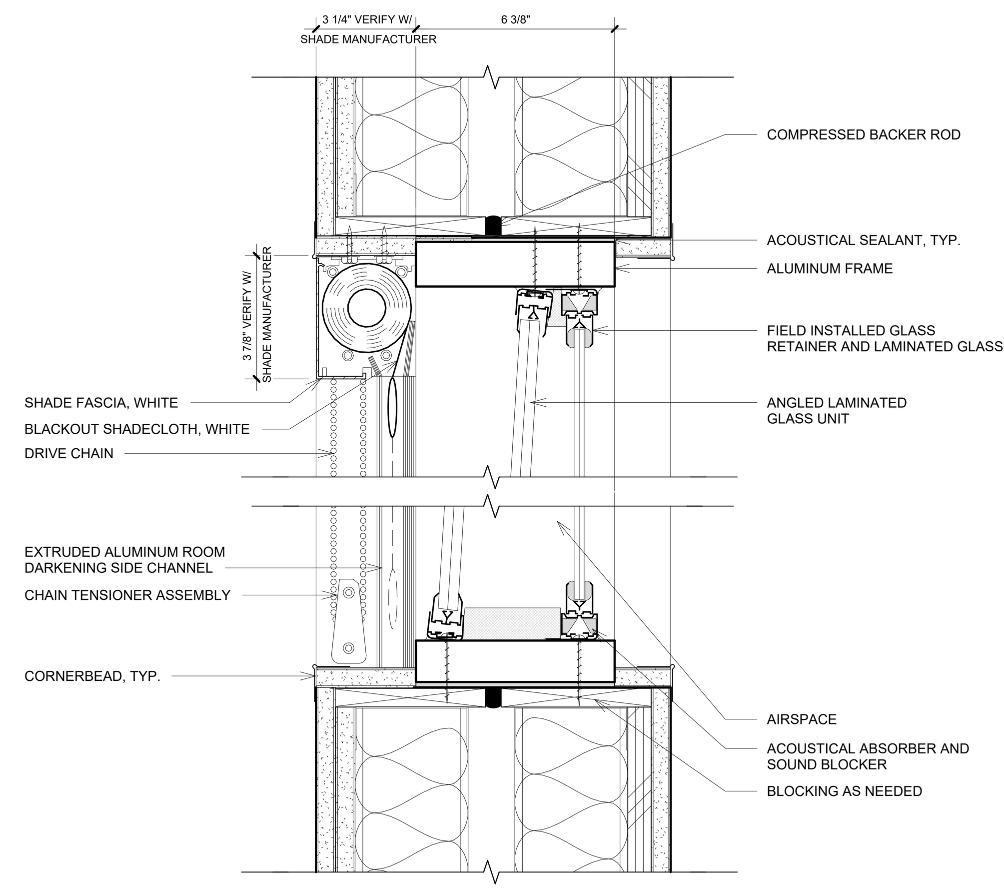


11 A601 STOREFRONT JAMB AT LAMINATE
3" = 1'-0"

BID ALTERNATE 1

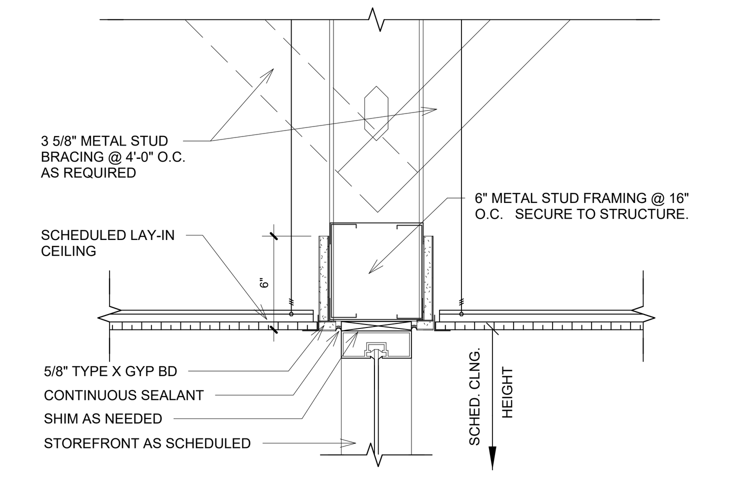


5 A601 STOREFRONT DOOR HEAD
3" = 1'-0"

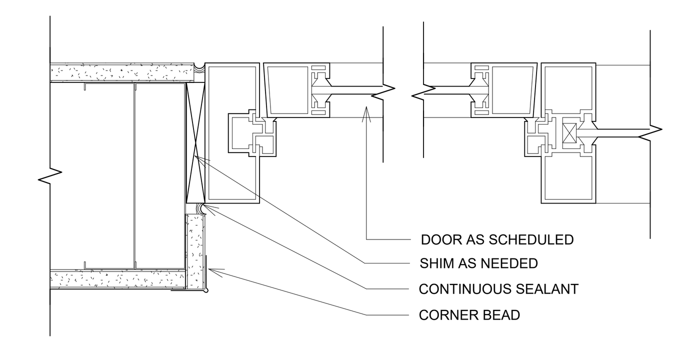


14 A601 ACOUSTIC WINDOW
3" = 1'-0"

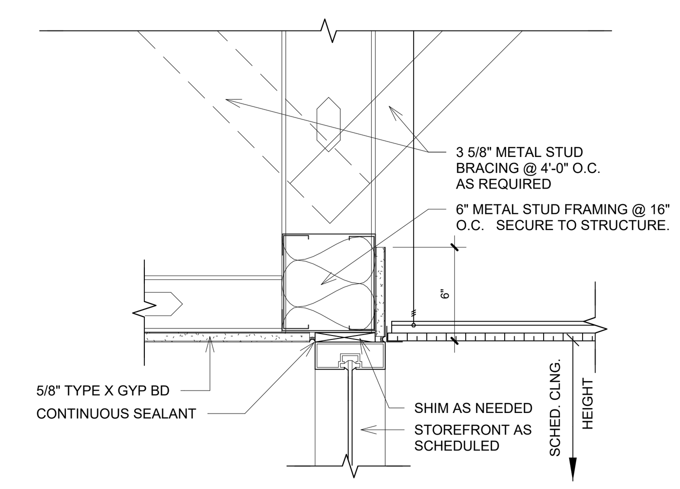
1 STC 55



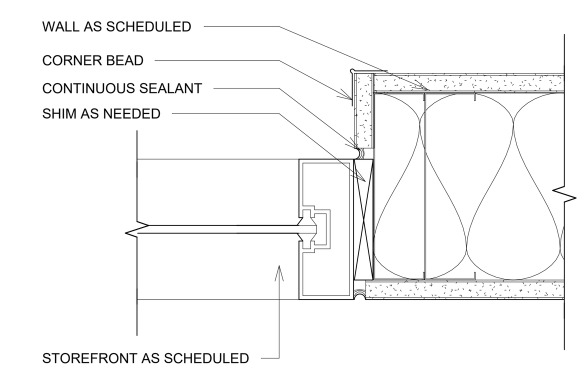
10 A601 STOREFRONT @ ACT
1 1/2" = 1'-0"



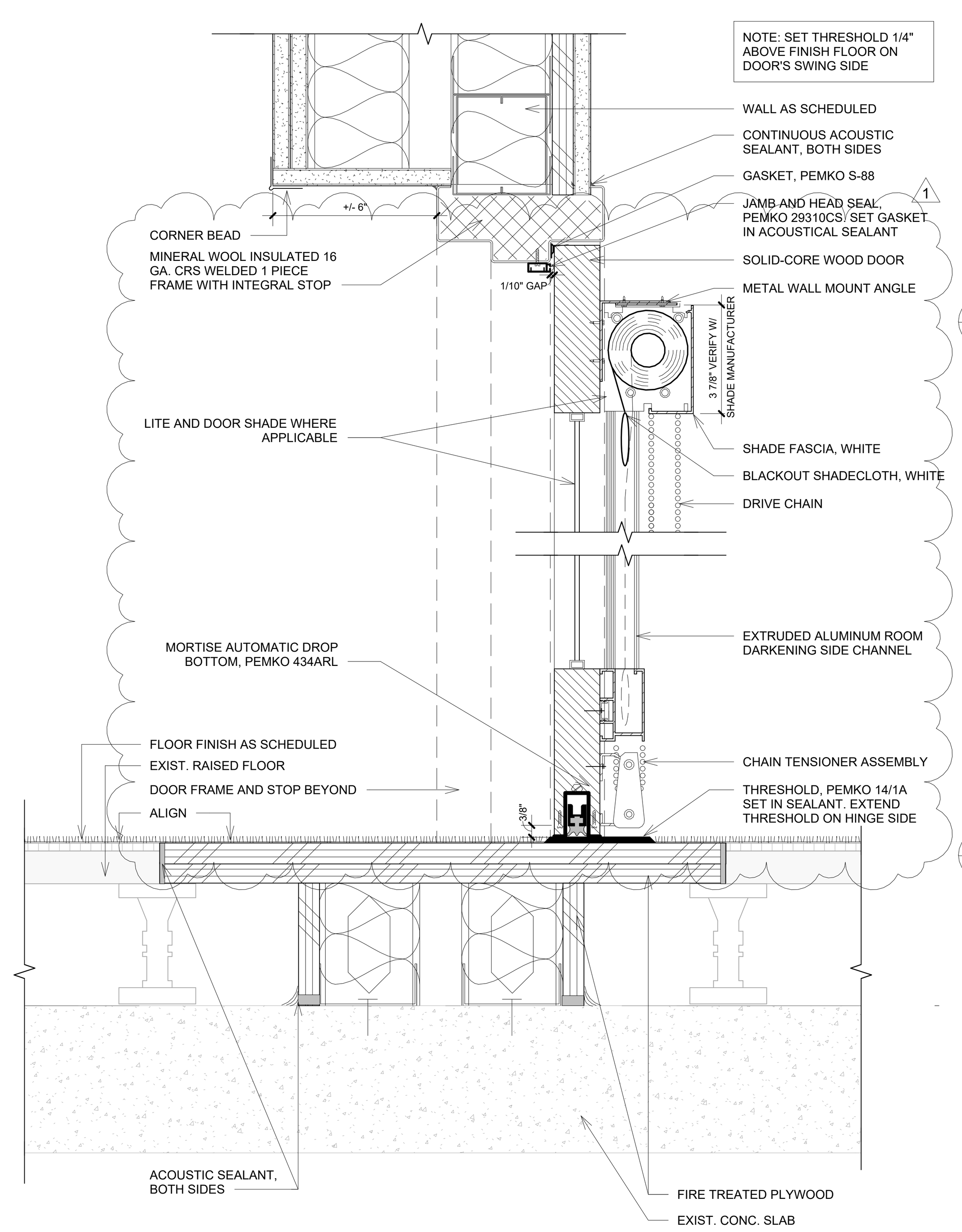
4 A601 STOREFRONT DOOR JAMB
3" = 1'-0"



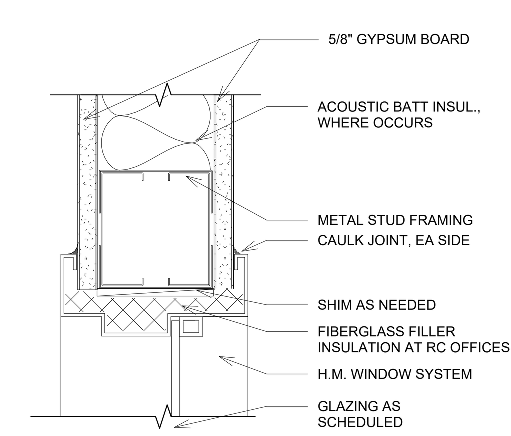
9 A601 STOREFRONT @ ACT & GYP
1 1/2" = 1'-0"



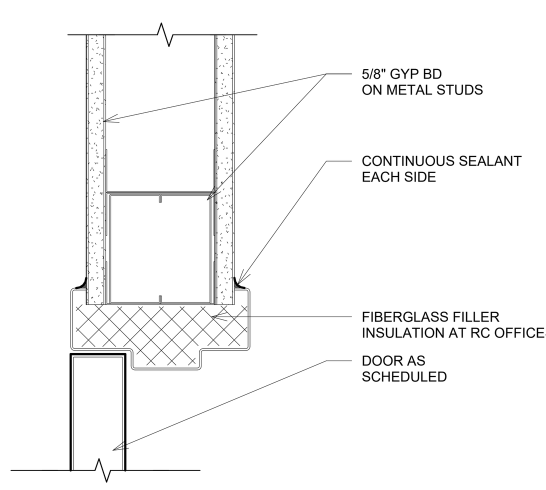
3 A601 TYPICAL STOREFRONT JAMB
3" = 1'-0"



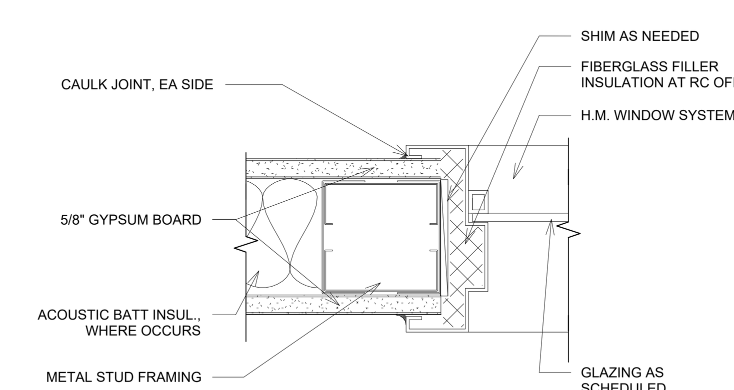
13 A601 ACOUSTIC DOOR HEAD/THRESHOLD
3" = 1'-0"



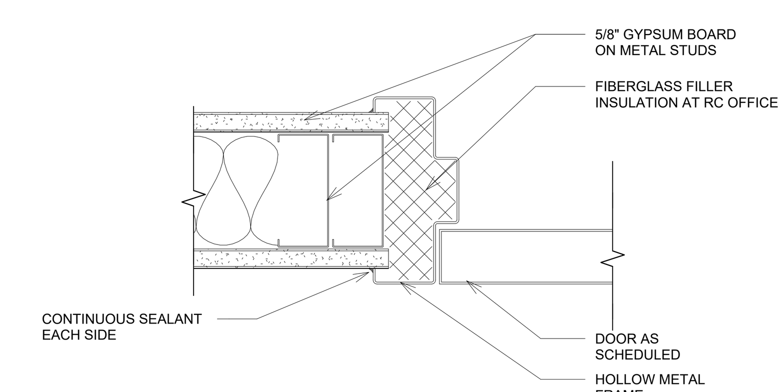
8 A601 H.M. WINDOW HEAD @ GYP BD.
3" = 1'-0"



2 A601 HM HEAD @ GYP. BD.
3" = 1'-0"



7 A601 H.M. WINDOW JAMB @ GYP. BD.
3" = 1'-0"



1 A601 HM DOOR JAMB @ GYP. BD.
3" = 1'-0"

STUDIO LP
331 S RIO GRANDE ST
SUITE 307
SLC, UT 84101
PH: 8017395569
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GENETIC SCIENCE LEARNING CENTER

CONSTRUCTION DOCUMENTS

DFCM SEAL

No	Description	Date
1	ADDENDUM 1	12/20/2024

THE UNIVERSITY OF UTAH

GSLC
295 CHIPETA WAY
SALT LAKE CITY, UT 84108

22812

10.30.2024

DOOR + WINDOW DETAILS

A601

Scale As indicated

ENTRY

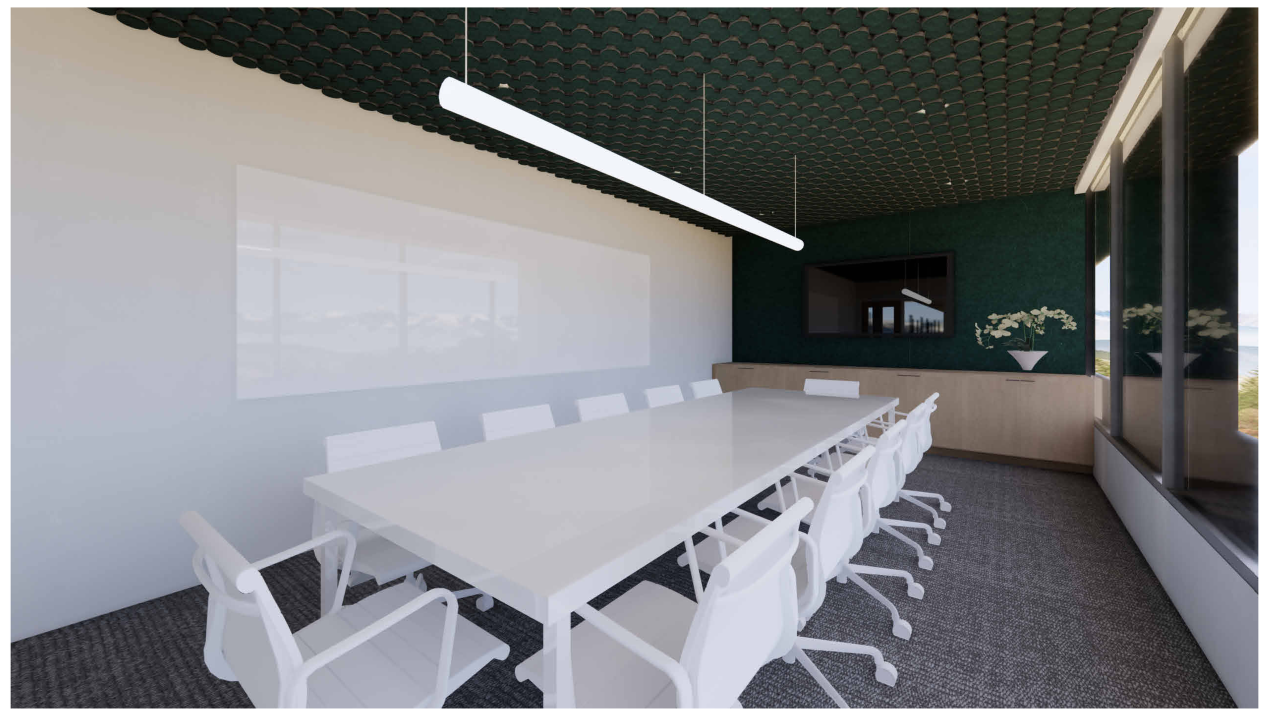
ENTRY

TOUCHDOWN SPACE

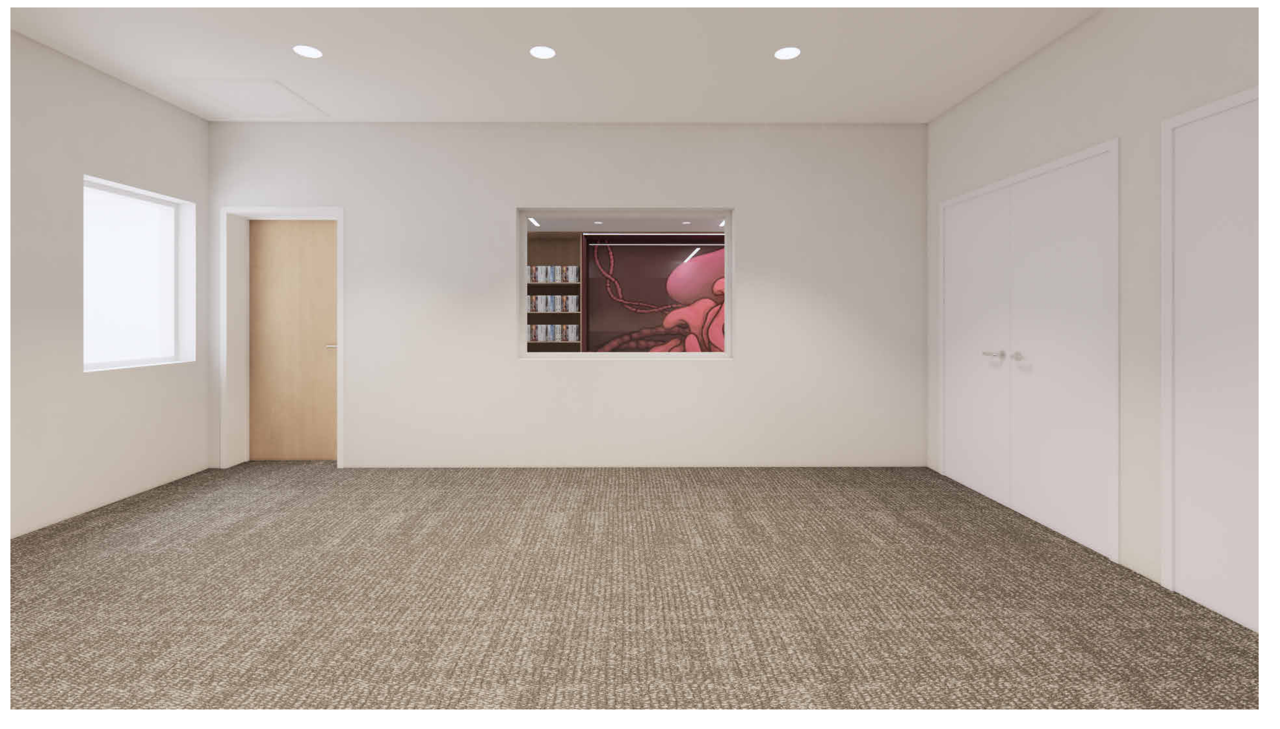
ART GALLERY HALLWAY

OPEN WORKSTATIONS

OPEN WORKSTATIONS



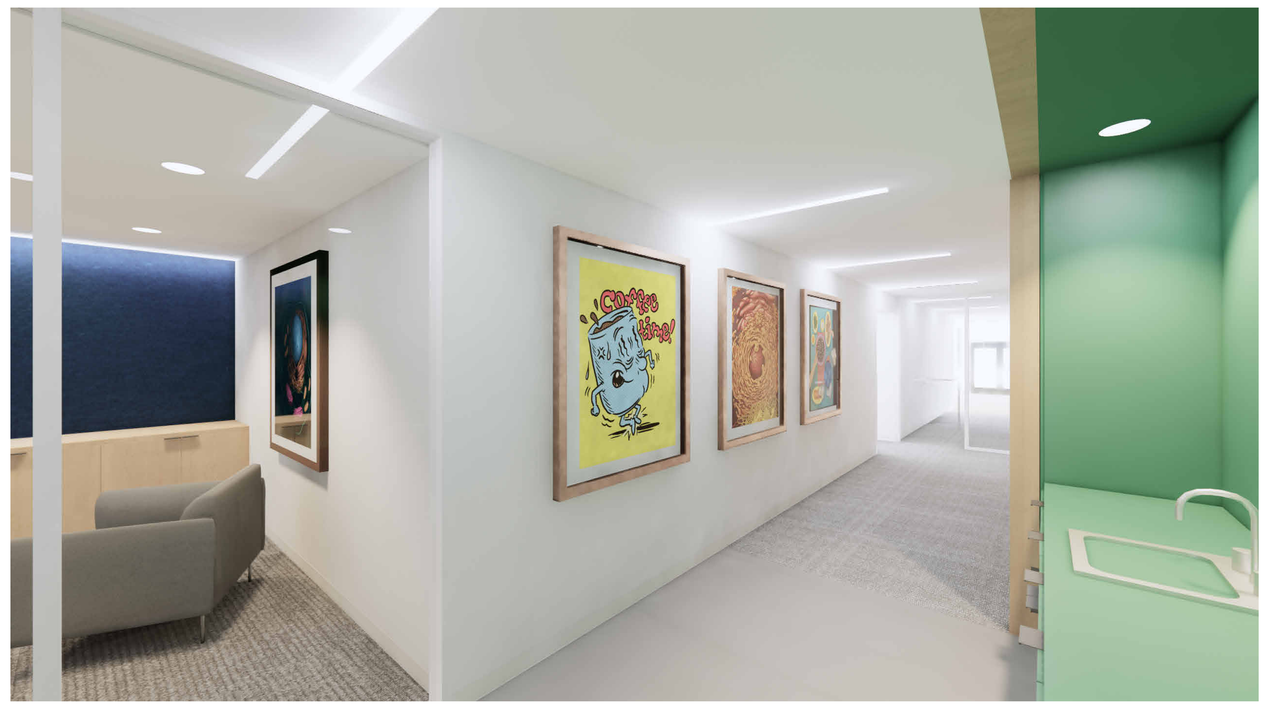
CONFERENCE ROOM



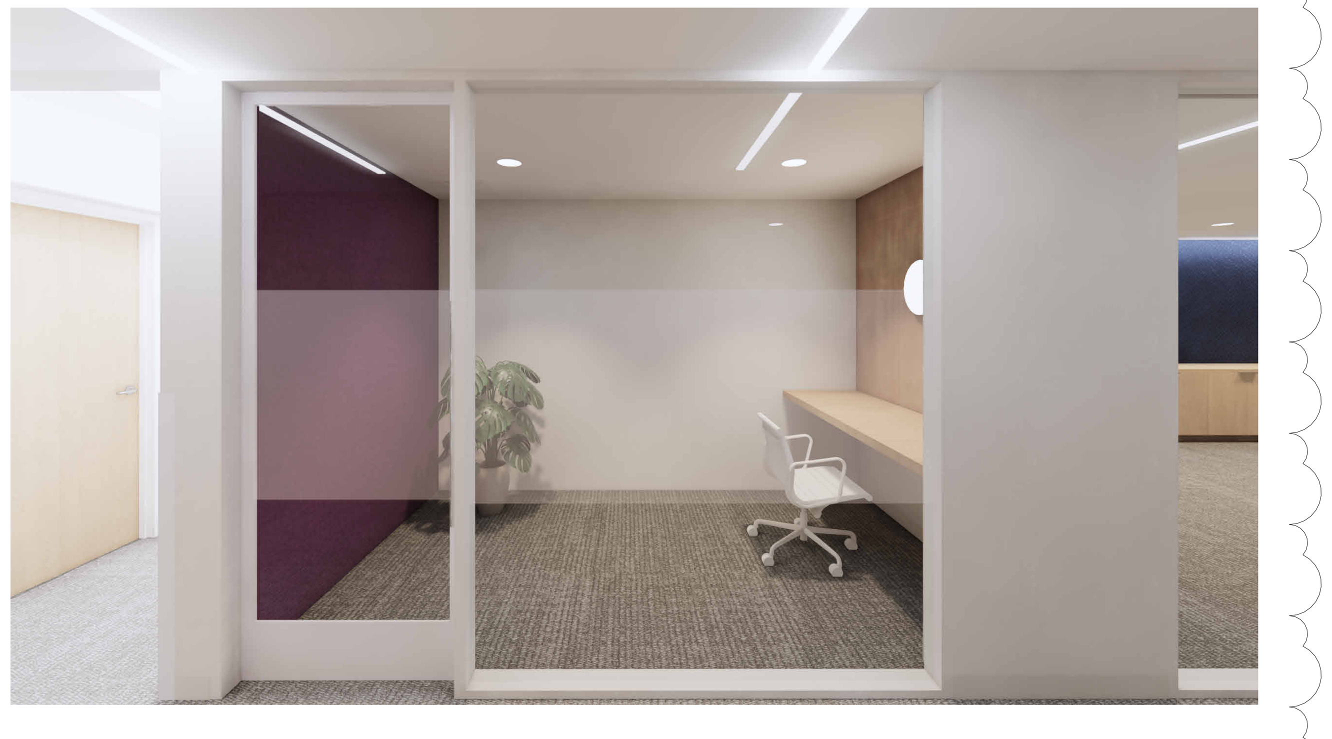
VIDEO PRODUCTION STUDIO

MEDIA REVIEW ROOM

SNACK BAR



ART GALLERY HALLWAY



PHONE BOOTH

STUDIO LP

331 S RIO GRANDE ST
SUITE 307
SLC, UT 84101
PH: 8017395569
BAYLEE@STUDIOLPARCH.COM

STATE OF UTAH
BAYLEE RUSHTON
10536737-0301
EXPIRES: 05.31.26
LICENSED ARCHITECT

GENETIC SCIENCE LEARNING CENTER

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1	ADDENDUM 1	12/20/2024

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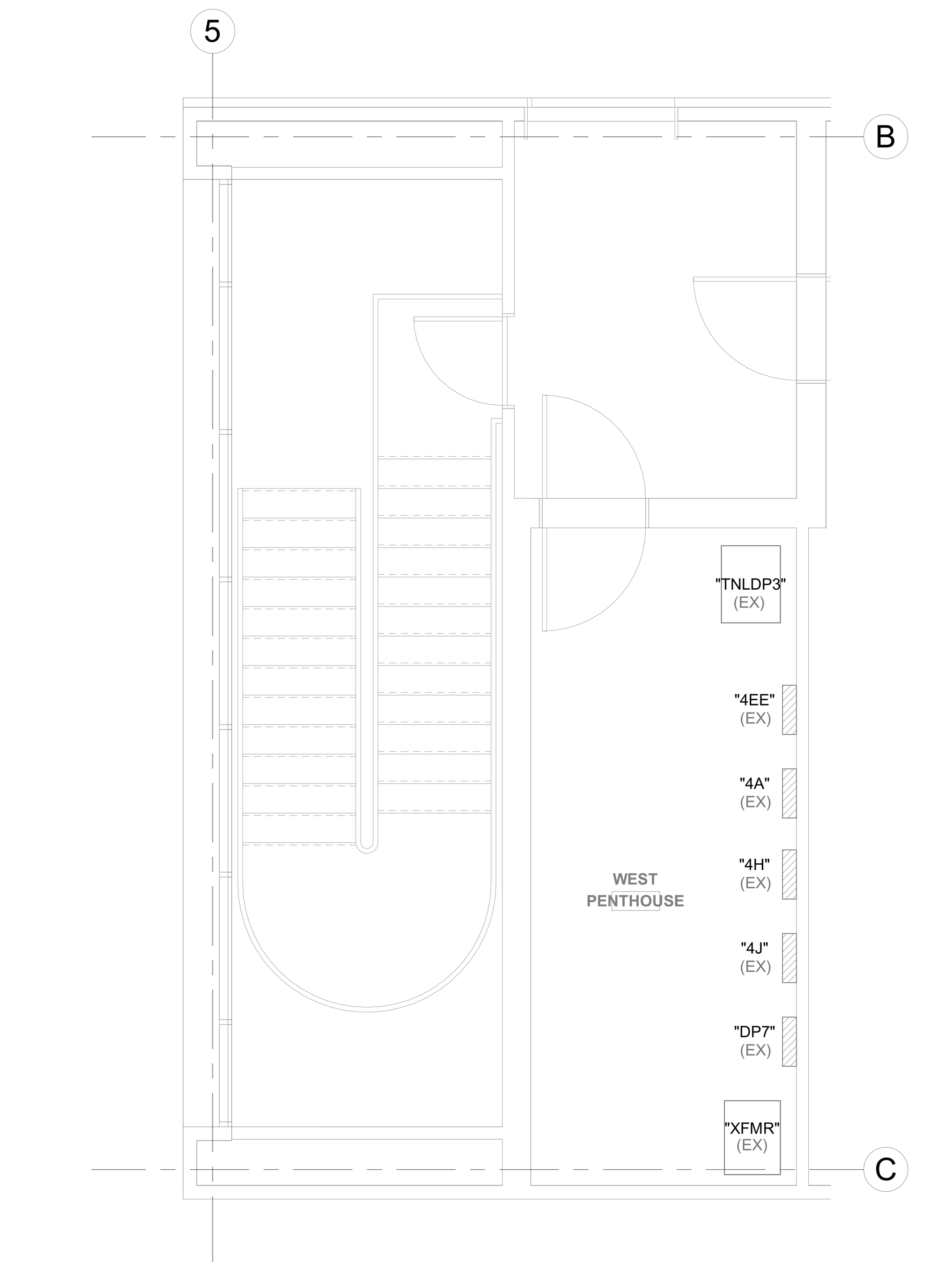
22812
10.30.2024

INTERIOR RENDERINGS

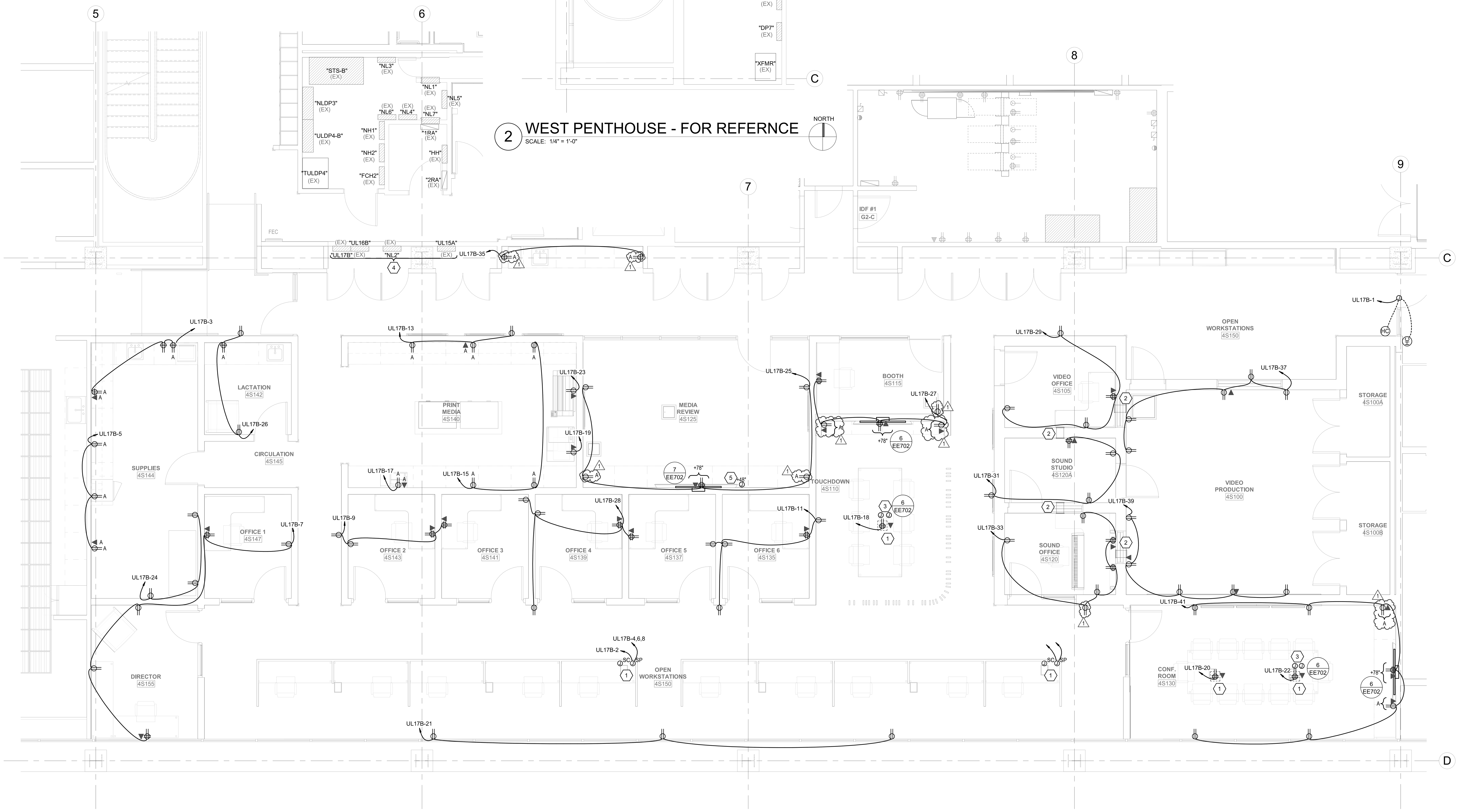
A900

Scale



2 WEST PENTHOUSE - FOR REFERNCE
SCALE: 1/4" = 1'-0"

NORTH



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

NORTH

⬡ SHEET KEYNOTES

1. CONTRACTOR TO PROVIDE FLOOR BOX COVER FRS FL-500P-PLP-BLK-C OR EQUAL. ARCHITECT TO SELECT FINISH AND FLANGING DEPTH. CONTRACTOR TO COORDINATE WITH ARCHITECT AND FURNITURE PRIOR TO INSTALLING FLOOR BOX COVER.
2. CONTRACTOR TO PROVIDE EZ-PATH SERIES 33 FIRE-RATED PATHWAY. CATALOG NUMBER EZDP33FWS WITH EXTENSION CATALOG NUMBER EZD33E OR EQUAL. +18" ABOVE RAISED FLOOR.
3. CONTRACTOR TO INSTALL HUBBELL HBL260 OR EQUAL TO SLAB UNDER RAISED FLOOR UNDER FLOOR BOX COVER. CONTRACTOR TO COORDINATE WITH ARCHITECT AND FURNITURE PRIOR TO INSTALLING JUNCTION BOX. JUNCTION BOX IS FOR AV CONNECTION TO TV. REFER TO CALLOUT DETAIL.
4. CONTRACTOR TO UPDATE PANEL SCHEDULES.
5. JUNCTION BOX FOR AV CONNECTION TO TV. REFER TO CALLOUT DETAIL.

GENERAL SHEET NOTES

1. UNLESS NOTED OTHERWISE, ELECTRICAL ITEMS SHOWN IN DARK AND SOLID LINES ARE NEW AND THE CONTRACTOR SHALL PROVIDE THEM. ITEMS SHOWN IN SOLID LIGHT LINES ARE TO REMAIN.
2. CONTRACTOR SHALL UPDATE ALL NEW AND EXISTING PANEL SCHEDULES WITH NEW CIRCUIT DATA. SCHEDULE SHALL BE ON A CARD STOCK TYPE OF MATERIAL AND TYPED WITH THE UPDATED INFORMATION.
3. PROVIDE BLANK FACEPLATES AT ALL LOCATIONS WHERE DEVICES WERE DEMOLISHED BUT RACEWAY WAS LEFT TO REMAIN AND NO NEW DEVICES ARE BEING INSTALLED AT THAT LOCATION.
4. CONTRACTOR SHALL PROVIDE DEMOLITION AND PATCH AND REPAIR OF ANY WALLS, CEILINGS, FLOORS, ETC TO ROUTE RACEWAYS AND EQUIPEMNT.

STUDIO LP
331 S RIO GRANDE ST
SUITE 307
SLC, UT 84101
PH: 8013640503
BAYLEE@STUDIOLPARCH.COM

SPECTRUM ENGINEERS
324 S. State St., Suite 400
Salt Lake City, UT 84111
800-678-7077
801-328-5151
fax: 801-328-5155
www.spectrum-engineers.com

LICENSED PROFESSIONAL ENGINEER
No. 5497590-2202
Christopher Kelly Kobayashi
STATE OF UTAH
10.30.2024

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GSLC
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22812
10.30.2024

FOURTH FLOOR POWER PLAN

EP101

Scale 1/4" = 1'-0"

(EX) PANEL: "UL17B"

VOLTS/PHASE/WIRE:	PANEL SIZE & TYPE:	MAIN SIZE AND TYPE:	FED FROM:	CABINET:	LOCATION:	NOTES:
120/208V, 3 PH 4 WIRE	22" W x 6" D, BOLT-ON	250 AMPERE MAIN LUGS		SURFACE		

ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR — AIC RATING: 22,000

CKT	OCP			LOAD (kVA)				PHASE LOAD							LOAD (kVA)			OCP			CKT
NO	AMP	POLE	BKR	LTG	PWR	CO	DESCRIPTION	A		B		C		DESCRIPTION	CO	PWR	LTG	BKR	POLE	AMP	NO
1	20	1	EB	0.0	0.2	0.0	EAST DOOR ADA	0.2	0.4					OPEN WORKSTATIONS FURNITURE	0.0	0.4	0.0	EB	1	20	2
3	20	1	EB	0.0	0.0	0.5	LACTATION/SUPPLIES OUTLETS			0.5	0.1			OPEN WORKSTATIONS FURNITURE	0.0	0.4	0.0	NB	3	20	4
5	20	1	EB	0.0	0.0	0.5	SUPPLIES OUTLETS					0.5	0.1	--	--	--	--	--	--	--	6
7	20	1	EB	0.0	0.0	1.3	OFFICE/DIRECTOR OUTLETS	1.3	0.1					--	--	--	--	--	--	--	8
9	20	1	EB	0.0	0.0	1.1	OFFICES OUTLETS			1.1	0.4			OPEN WORKSTATIONS FURNITURE	0.0	0.4	0.0	EB	1	20	10
11	20	1	EB	0.0	0.0	1.1	OFFICES OUTLETS					1.1	0.1	OPEN WORKSTATIONS FURNITURE	0.0	0.4	0.0	NB	3	20	12
13	20	1	EB	0.0	0.0	0.5	PRINT MEDIA OUTLETS	0.5	0.1					--	--	--	--	--	--	--	14
15	20	1	EB	0.0	0.0	0.5	CO PRINT MEDIA 4S140			0.5	0.1			--	--	--	--	--	--	--	16
17	20	1	EB	0.0	0.0	0.2	PRINTER					0.2	0.4	TOUCHDOWN FLOOR POWER	0.4	0.0	0.0	EB	1	20	18
19	20	1	EB	0.0	0.0	0.2	PRINTER	0.2	0.4					CONFERENCE RM. FLOOR POWER	0.4	0.0	0.0	EB	1	20	20
21	20	1	EB	0.0	0.0	0.5	SOUTH CO OUTLETS			0.5	0.4			CONFERENCE RM. FLOOR POWER	0.4	0.0	0.0	EB	1	20	22
23	20	1	EB	0.0	0.0	0.2	PRINTER					0.2	0.5	SUPPLIES OUTLETS	0.5	0.0	0.0	EB	1	20	24
25	20	1	EB	0.0	0.0	1.1	MEDIA REVIEW OUTLETS	1.1	0.5					LACTATION OUTLETS	0.5	0.0	0.0	EB	1	20	26
27	20	1	EB	0.0	0.0	1.3	BOOTH/TOUCHDOWN OUTLETS			1.3	1.3			OFFICE OUTLETS	1.3	0.0	0.0	EB	1	20	28
29	20	1	EB	0.0	0.0	0.9	VIDEO OFFICE OUTLETS					0.9	0.0	SPARE	0.0	0.0	0.0	--	1	20	30
31	20	1	EB	0.0	0.0	0.7	SOUND STUDIO OUTLETS	0.7	0.0					SPARE	0.0	0.0	0.0	--	1	20	32
33	20	1	EB	0.0	0.0	1.4	SOUND OFFICE OUTLETS			1.4	0.0			SPARE	0.0	0.0	0.0	--	1	20	34
35	20	1	EB	0.0	0.0	0.4	SNACK BAR OUTLETS					0.4	0.0	SPARE	0.0	0.0	0.0	--	1	20	36
37	20	1	EB	0.0	0.0	0.9	VIDEO PRODUCTION OUTLETS	0.9	0.0					SPARE	0.0	0.0	0.0	--	1	20	38
39	20	1	EB	0.0	0.0	0.9	VIDEO PRODUCTION OUTLETS			0.9	0.0			SPARE	0.0	0.0	0.0	--	1	20	40
41	20	1	EB	0.0	0.0	1.4	CONFRENCE ROOM OUTLETS					1.4	0.0	SPARE	0.0	0.0	0.0	--	1	20	42

TOTALS: CONNECTED kVA PER PHASE **6** **9** **6** — CONNECTED TOTAL kVA = **21**
CONNECTED AMPS PER PHASE **54** **72** **49** — AVERAGE CONNECTED AMPS PER PHASE = **58**

NEC DIVERSIFIED LOAD CALCULATIONS

LIGHTING & CONTINUOUS LOADS: - 100% CONNECTED LOAD PLUS 25% — DIVERSIFIED TOTAL kVA = **16**
RECEPTACLES: **19.1 kVA @ 76% = 14.5 kVA** - FIRST 10kVA @ 100%, REMAINDER @ 50% — AVERAGE AMPS PER PHASE = **45**
ALL OTHER LOADS @ 100% : **1.7 kVA** - MOTOR TOTALS INCLUDED IN ALL OTHER LOADS WITH LARGEST MOTOR CALCULATED @ 125% PER NEC

BKR: GF=GFCI, GF3=30mA GFCI CAPABLE OF BEING LOCKED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AFCI, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GFCI, EB=EXISTING BREAKER, NB=NEW BREAKER

(EX) PANEL: "NH2"

VOLTS/PHASE/WIRE:	PANEL SIZE & TYPE:	MAIN SIZE AND TYPE:	FED FROM:	CABINET:	LOCATION:	NOTES:
480/277 V, 3 PH 4 WIRE	22" W x 6" D, BOLT-ON	125 AMPERE MAIN LUGS		SURFACE		

ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR — AIC RATING: 22,000

CKT	OCP			LOAD (kVA)				PHASE LOAD							LOAD (kVA)			OCP			CKT
NO	AMP	POLE	BKR	LTG	PWR	CO	DESCRIPTION	A		B		C		DESCRIPTION	CO	PWR	LTG	BKR	POLE	AMP	NO
1	20	1	--	0.0	0.0	0.0	(EX) SPARE	0.0	0.0					(EX) SPARE	0.0	0.0	0.0	--	1	20	2
3	20	1	--	0.0	0.0	0.0	(EX) SPARE			0.0	0.0			(EX) SPARE	0.0	0.0	0.0	--	1	20	4
5	20	1	--	0.0	0.0	0.0	(EX) SPARE					0.0	0.0	(EX) SPARE	0.0	0.0	0.0	--	1	20	6
7	20	1	--	0.0	0.0	0.0	(EX) SPARE	0.0	0.0					(EX) SPARE	0.0	0.0	0.0	--	1	20	8
9	20	1	--	0.0	0.0	0.0	(EX) SPARE			0.0	0.0			(EX) SPARE	0.0	0.0	0.0	--	1	20	10
11	20	1	--	0.0	0.0	0.0	(EX) SPARE					0.0	0.0	(EX) SPARE	0.0	0.0	0.0	--	1	20	12
13	20	1	--	0.0	0.0	0.0	(EX) SPARE	0.0	0.0					(EX) SPARE	0.0	0.0	0.0	--	1	20	14
15	20	1	--	0.0	0.0	0.0	(EX) SPARE			0.0	0.0			(EX) SPARE	0.0	0.0	0.0	--	1	20	16
17	20	1	--	0.0	0.0	0.0	(EX) SPARE					0.0	0.0	(EX) SPARE	0.0	0.0	0.0	--	1	20	18
19	20	1	--	0.0	0.0	0.0	(EX) SPARE	0.0	0.0					(EX) SPARE	0.0	0.0	0.0	--	1	20	20
21	20	1	--	0.0	0.0	0.0	(EX) SPARE			0.0	0.0			(EX) SPARE	0.0	0.0	0.0	--	1	20	22
23	20	1	--	0.0	0.0	0.0	(EX) SPARE					0.0	3.1	GENETICS LTG	0.0	0.0	3.0	EB	1	20	24
25	20	1	--	0.0	0.0	0.0	(EX) SPARE	0.0	0.0					(EX) SPARE	0.0	0.0	0.0	--	1	20	26
27	20	1	--	0.0	0.0	0.0	(EX) SPARE			0.0	0.0			(EX) SPARE	0.0	0.0	0.0	--	1	20	28
29	20	1	--	0.0	0.0	0.0	SPARE					0.0	0.0	SPARE	0.0	0.0	0.0	--	1	20	30
31	20	1	--	0.0	0.0	0.0	(EX) SPARE	0.0	0.0					(EX) SPARE	0.0	0.0	0.0	--	1	20	32
33	20	1	--	0.0	0.0	0.0	SPARE			0.0	0.0			SPARE	0.0	0.0	0.0	--	1	20	34
35	20	1	--	0.0	0.0	0.0	SPARE					0.0	0.0	SPARE	0.0	0.0	0.0	--	1	20	36
37	20	1	--	0.0	0.0	0.0	(EX) SPARE	0.0	0.0					SPARE	0.0	0.0	0.0	--	1	20	38
39	20	1	--	0.0	0.0	0.0	SPARE			0.0	0.0			SPARE	0.0	0.0	0.0	--	1	20	40
41	20	1	--	0.0	0.0	0.0	SPARE					0.0	0.0	SPARE	0.0	0.0	0.0	--	1	20	42

TOTALS: CONNECTED kVA PER PHASE **0** **0** **3** — CONNECTED TOTAL kVA = **3**
CONNECTED AMPS PER PHASE **0** **0** **11** — AVERAGE CONNECTED AMPS PER PHASE = **4**

NEC DIVERSIFIED LOAD CALCULATIONS

LIGHTING & CONTINUOUS LOADS: **3.0 kVA @ 125% = 3.8 kVA** - 100% CONNECTED LOAD PLUS 25% — DIVERSIFIED TOTAL kVA = **4**
RECEPTACLES: - FIRST 10kVA @ 100%, REMAINDER @ 50% — AVERAGE AMPS PER PHASE = **5**
ALL OTHER LOADS @ 100% : **0.0 kVA** - MOTOR TOTALS INCLUDED IN ALL OTHER LOADS WITH LARGEST MOTOR CALCULATED @ 125% PER NEC

BKR: GF=GFCI, GF3=30mA GFCI CAPABLE OF BEING LOCKED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AFCI, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GFCI, EB=EXISTING BREAKER

(EX) PANEL: "4EE"

VOLTS/PHASE/WIRE:	PANEL SIZE & TYPE:	MAIN SIZE AND TYPE:	FED FROM:	CABINET:	LOCATION:	NOTES:
480/277 V, 3 PH 4 WIRE	22" W x 6" D, BOLT-ON	100 AMPERE MAIN LUGS		SURFACE		

ACCESSORIES: PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR — AIC RATING: 10,000 1

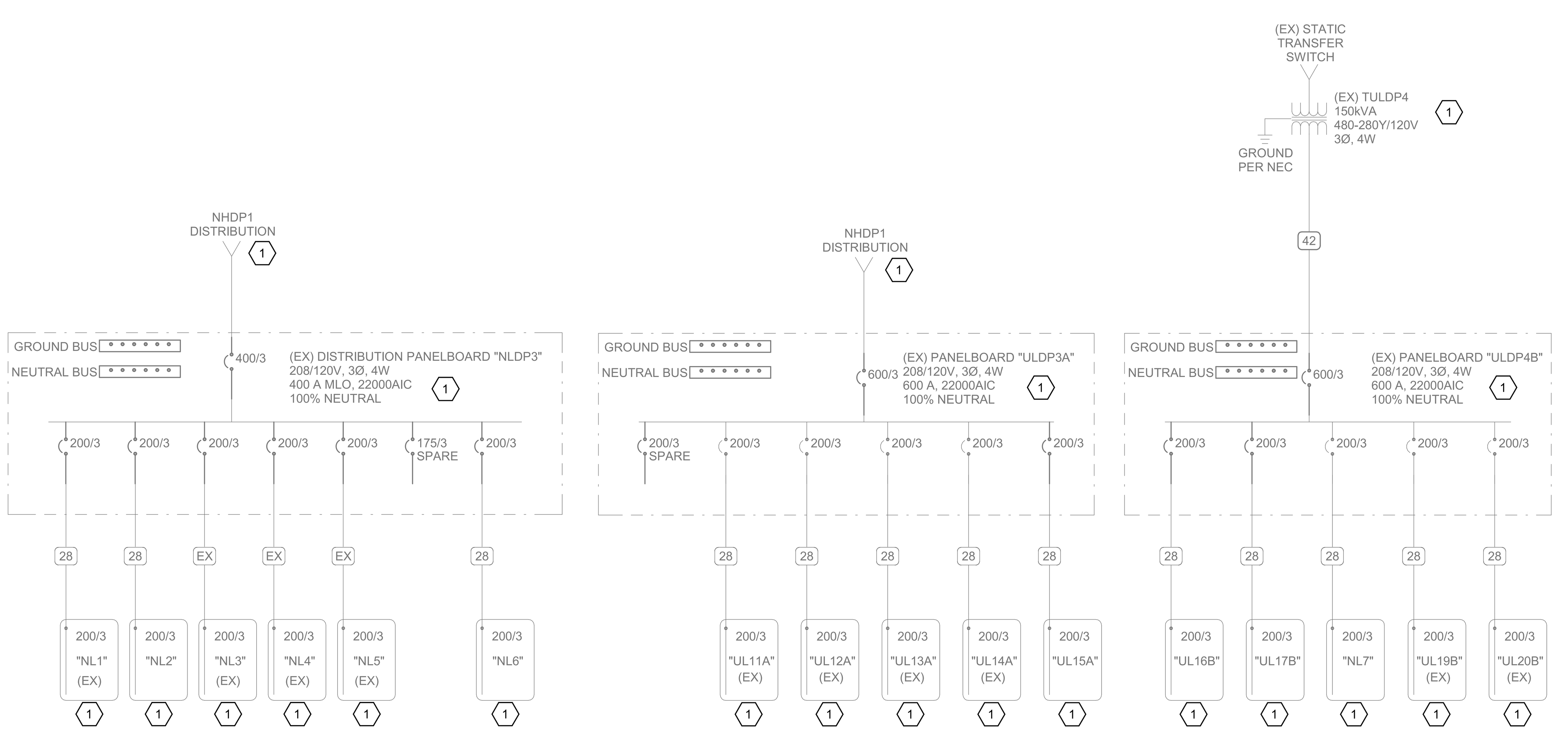
CKT	OCP			LOAD (kVA)				PHASE LOAD							LOAD (kVA)			OCP			CKT
NO	AMP	POLE	BKR	LTG	PWR	CO	DESCRIPTION	A		B		C		DESCRIPTION	CO	PWR	LTG	BKR	POLE	AMP	NO
1	20	1	--	0.0	0.0	0.0	(EX) LOAD	0.0	0.0					(EX) LOAD	0.0	0.0	0.0	--	1	20	2
3	20	1	--	0.0	0.0	0.0	(EX) LOAD			0.0	0.0			(EX) LOAD	0.0	0.0	0.0	--	1	20	4
5	20	1	--	0.0	0.0	0.0	(EX) LOAD					0.0	0.0	(EX) LOAD	0.0	0.0	0.0	--	1	20	6
7	20	3	--	0.0	0.0	0.0	(EX) LOAD	0.0	0.0					(EX) LOAD	0.0	0.0	0.0	--	3	20	8
9	--	--	--	--	--	--	--			0.0	0.0			--	--	--	--	--	--	--	10
11	--	--	--	--	--	--	--					0.0	0.0	--	--	--	--	--	--	--	12
13	20	1	NB	0.6	0.0	0.0	LIGHTING	0.6	0.0					(EX) LOAD	0.0	0.0	0.0	--	3	20	14
15	--	1	--	0.0	0.0	0.0	SPACE			--	0.0			--	--	--	--	--	--	--	16
17	--	1	--	0.0	0.0	0.0	SPACE					--	0.0	--	--	--	--	--	--	--	18
19	--	1	--	0.0	0.0	0.0	SPACE	--	--					SPACE	0.0	0.0	0.0	--	1	--	20
21	--	1	--	0.0	0.0	0.0	SPACE			--	--			SPACE	0.0	0.0	0.0	--	1	--	22
23	--	1	--	0.0	0.0	0.0	SPACE					--	--	SPACE	0.0	0.0	0.0	--	1	--	24
25	--	1	--	0.0	0.0	0.0	SPACE	--	--					SPACE	0.0	0.0	0.0	--	1	--	26
27	--	1	--	0.0	0.0	0.0	SPACE			--	--			SPACE	0.0	0.0	0.0	--	1	--	28
29	--	1	--	0.0	0.0	0.0	SPACE					--	--	SPACE	0.0	0.0	0.0	--	1	--	30

TOTALS: CONNECTED kVA PER PHASE **1** **0** **0** — CONNECTED TOTAL kVA = **1**
CONNECTED AMPS PER PHASE **2** **0** **0** — AVERAGE CONNECTED AMPS PER PHASE = **1**

NEC DIVERSIFIED LOAD CALCULATIONS

LIGHTING & CONTINUOUS LOADS: **0.6 kVA @ 125% = 0.7 kVA** - 100% CONNECTED LOAD PLUS 25% — DIVERSIFIED TOTAL kVA = **1**
RECEPTACLES: - FIRST 10kVA @ 100%, REMAINDER @ 50% — AVERAGE AMPS PER PHASE = **1**
ALL OTHER LOADS @ 100% : **0.0 kVA** - MOTOR TOTALS INCLUDED IN ALL OTHER LOADS WITH LARGEST MOTOR CALCULATED @ 125% PER NEC

BKR: GF=GFCI, GF3=30mA GFCI CAPABLE OF BEING LOCKED OUT IN OPEN POSITION, IG=ISOLATED GROUND, AF=AFCI, ST=SHUNT TRIP, RED=PROVIDE RED COLORED BREAKER, AF=ARC FAULT CURRENT INTERRUPTER, GA=COMBINATION OF GROUND FAULT AND ARC FAULT CIRCUIT INTERRUPTER, GS=COMBINATION OF SHUNT TRIP WITH GFCI, NB=NEW BREAKER



1 PARTIAL DEMOLITION ONE-LINE DIAGRAM
SCALE: NTS

GENERAL SHEET NOTES

1 PROVIDE NEMA 3R ENCLOSURES FOR EQUIPMENT LOCATED OUTDOORS. REFER TO PLANS FOR EQUIPMENT LOCATIONS.

2 REFER TO PLANS FOR CONSTRAINTS ON PHYSICAL DIMENSIONS AND CLEARANCE REQUIREMENTS OF EQUIPMENT. PROVIDE EQUIPMENT DIMENSIONS THAT FALL WITHIN THE CONSTRAINTS OF EACH SPECIFIC LOCATION.

3 ALL EQUIPMENT SHALL BE CONSTRUCTED AND BRACED FOR THE SEISMIC CONDITIONS OF THE PROJECT. REFER TO ELECTRICAL SPECIFICATIONS FOR REQUIREMENTS.

4 PROVIDE PERFORMANCE TESTING FOR GROUND-FAULT PROTECTION SYSTEMS ON SITE WITH A WRITTEN RECORD OF THIS TEST SUBMITTED TO THE AUTHORITY HAVING JURISDICTION PER NEC 230.95(C).

SHEET KEYNOTES

1 PROTECT AND MAINTAIN EXISTING GEAR/EQUIPMENT.

COPPER CONDUCTOR AND CONDUIT SCHEDULE

** — SCHEDULE NUMBER
* — SUBSCRIPT (NOTE 5)
(E.G. 5 IG)

SYM	AMP	HH AMPS	CONDUIT SIZE	CONDUCTOR (NOTE 1) QTY	SIZE	G	IG/HH	SE	NOTES
1	20	-	.75	2	12	12	12	8	2
2	20	-	.75	3	12	12	12	8	2,3
3	20	24	.75	4	12	12	12	8	2,3
4	30	-	.75	2	10	10	10	8	2
5	30	-	.75	3	10	10	10	8	2
6	30	32	.75	4	10	10	10	8	2
7	40	-	1	2	8	10	8	6	2
8	40	-	1	3	8	10	8	6	2
9	40	44	1	4	8	10	8	6	2
10	55	-	1	2	6	10	8	4	2
11	55	-	1	3	6	10	8	4	2
12	55	60	1.25	4	6	10	8	4	2
13	70	-	1	2	4	8	4	2	2
14	70	-	1.25	3	4	8	4	2	2
15	70	76	1.25	4	4	8	4	2	2
16	85	-	1.25	2	3	8	3	2	2
17	85	-	1.25	3	3	8	3	2	2
18	85	92	1.25	4	3	8	3	2	2
19	95	-	1.25	3	2	8	2	2	2
20	95	104	1.50	4	2	8	2	2	2
21	130	-	1.50	3	1	6	2	2	2
22	130	116	1.50	4	1	6	2	2	2
23	150	-	2	3	1/0	6	2	1/0	2
24	150	136	2	4	1/0	6	2	1/0	2
25	175	-	2	3	2/0	6	2	2/0	2
26	175	156	2	4	2/0	6	2	2/0	2
27	200	-	2	3	3/0	6	2	2/0	2
28	200	180	2.50	4	3/0	6	2	2/0	2
29	230	-	2.50	3	4/0	4	2	2/0	2
30	230	208	2.50	4	4/0	4	2	2/0	2
31	255	-	2.50	3	250	4	1	2/0	2
32	255	232	2.50	4	250	4	1	2/0	2
33	310	-	3	3	350	3	1/0	3/0	2
34	310	280	3	4	350	3	1/0	3/0	2
35	380	-	3.50	3	500	3	3/0	3/0	2
36	380	344	4	4	500	3	3/0	3/0	2
37	400	-	2 EA 2	3	3/0	3	3/0	3/0	2
38	400	360	2 EA 2.50	4	3/0	3	3/0	3/0	2
39	510	-	2 EA 2.50	3	250	1	4/0	3/0	2
40	510	464	2 EA 3	4	250	1	4/0	3/0	2
41	620	-	2 EA 3	3	350	1/0	4/0	3/0	2,4
42	620	560	2 EA 3	4	350	1/0	4/0	3/0	2,4
43	760	-	2 EA 3.50	3	500	1/0	4/0	3/0	2,4
44	760	688	2 EA 4	4	500	1/0	4/0	3/0	2,4
45	855	-	3 EA 3	3	300	2/0	4/0	3/0	2,4
46	855	768	3 EA 3	4	300	2/0	4/0	3/0	2,4
47	1000	-	3 EA 3.50	3	400	2/0	4/0	3/0	4
48	1000	912	3 EA 3.50	4	400	2/0	4/0	3/0	4
49	1140	-	3 EA 4	3	500	3/0	4/0	3/0	4
50	1140	1032	3 EA 4	4	500	3/0	4/0	3/0	4
51	1240	-	4 EA 3	3	350	3/0	4/0	3/0	4
52	1240	1120	4 EA 3	4	350	3/0	4/0	3/0	4
53	1675	1520	5 EA 4	4	400	4/0	4/0	4/0	4
54	2010	1824	6 EA 4	4	400	250	250	250	4
55	2660	2408	7 EA 4	4	500	350	350	350	4
56	3040	2752	8 EA 4	4	500	500	500	500	4
57	4180	3784	11 EA 4	4	500	500	500	500	4
58	1200	-	5 EA 4	-	-	-	-	-	6
59	3000	-	10 EA 6	-	-	-	-	-	6
60	-	-	10 EA 4	-	-	-	-	-	6

CONDUCTOR AND CONDUIT SCHEDULE NOTES

1. CONDUCTORS SHOWN ARE SHOWN FOR EACH CONDUIT WITH MODIFICATIONS AS NOTED IN NOTE 5. ALL CONDUCTORS SHOWN ARE THWN UNLESS OTHERWISE NOTED.
2. PROVIDE EQUIPMENT GROUND CONDUCTORS PER TABLE 250-122 WHEN CIRCUIT BREAKERS ARE SIZED GREATER THAN AMPERE RATING SHOWN IN TABLE.
3. PROVIDE #10 NEUTRALS FOR MULTIWIRE BRANCH CIRCUITS SERVING COMPUTERS.
4. GROUND (G) CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS.
5. SYMBOL SUBSCRIPTS:
   - "2N": INCLUDE TWO NEUTRAL CONDUCTORS SIZED AS SCHEDULED FOR PHASE AND NEUTRAL CONDUCTORS WHERE THE CONDUCTOR IS #1/0 OR LARGER. INCLUDE A SINGLE 200% RATED CONDUCTOR THAT IS TWICE THE AMPACITY OF THE SCHEDULED PHASE AND NEUTRAL CONDUCTOR WHERE THE CONDUCTOR IS BELOW #1/0 IN SIZE.
   - "CI": PROVIDE CIRCUIT INTEGRITY CABLE; TYPE TWO-HOUR FIRE RESISTIVE CABLES IN CONDUIT OR PROVIDE FEEDER ENCASED IN CONCRETE.
   - "FG" FULL SIZE GROUND, SIZE EQUIPMENT GROUNDING CONDUCTOR TO BE SAME SIZE AS THE PHASE CONDUCTORS.
   - "HH": NEUTRAL CURRENTS EXIST DUE TO HIGH HARMONIC "NONLINEAR" LOADS. CURRENT CARRYING CONDUCTORS DERATED ACCORDINGLY. PROVIDE THE IG/HH SIZE FOR THE EQUIPMENT GROUNDING CONDUCTOR.
   - "IG": INCLUDE IG (INSULATED/ISOLATED GROUND CONDUCTOR) SCHEDULED ALONG WITH THE GROUND OF EQUIPMENT GROUND CONDUCTOR.
   - "MC": PROVIDE FEEDER IN METAL-CLAD CABLE; TYPE MC IN PLACE OF SINGLE CONDUCTORS IN CONDUIT.
   - "SE": SUBSTITUTE "SE" CONDUCTOR FOR "G" CONDUCTOR SHOWN, WHICH IS SIZED FOR THE GROUNDING OF THE SECONDARY OF THE SEPARATELY DERIVED SYSTEM.
   - "SER": PROVIDE SERVICE-ENTRANCE CABLE; TYPE SE OR SER IN PLACE OF SINGLE CONDUCTORS IN CONDUIT.
6. RACEWAY ONLY. CONDUCTORS PROVIDED BY UTILITY.

STUDIO LP
331 S RIO GRANDE ST
SUITE 307
SLC, UT 84101
PH: 8013640503
BAYLEE@STUDIOLPARCH.COM

SPECTRUM ENGINEERS
324 S. State St., Suite 400
Salt Lake City, UT 84111
800-678-7077
801-328-5151
fax: 801-328-5155
www.spectrum-engineers.com

LICENSED PROFESSIONAL ENGINEER
No. 5497590-2202
Christopher Kelly Kobayashi
STATE OF UTAH
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ONE-LINE DIAGRAM & SCHEDULES

EP601

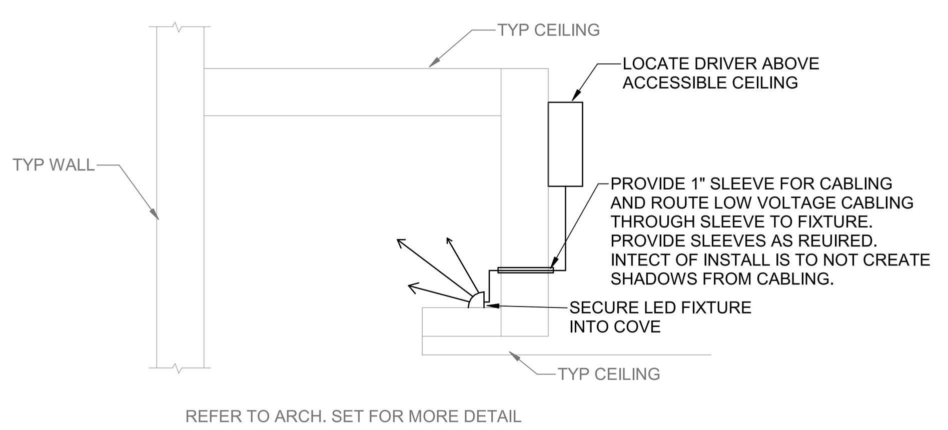
Scale NTS

SHEET KEYNOTES

1 CONFIRM MOUNTING TYPE WITH ARCHITECT PRIOR TO ROUGH-IN.

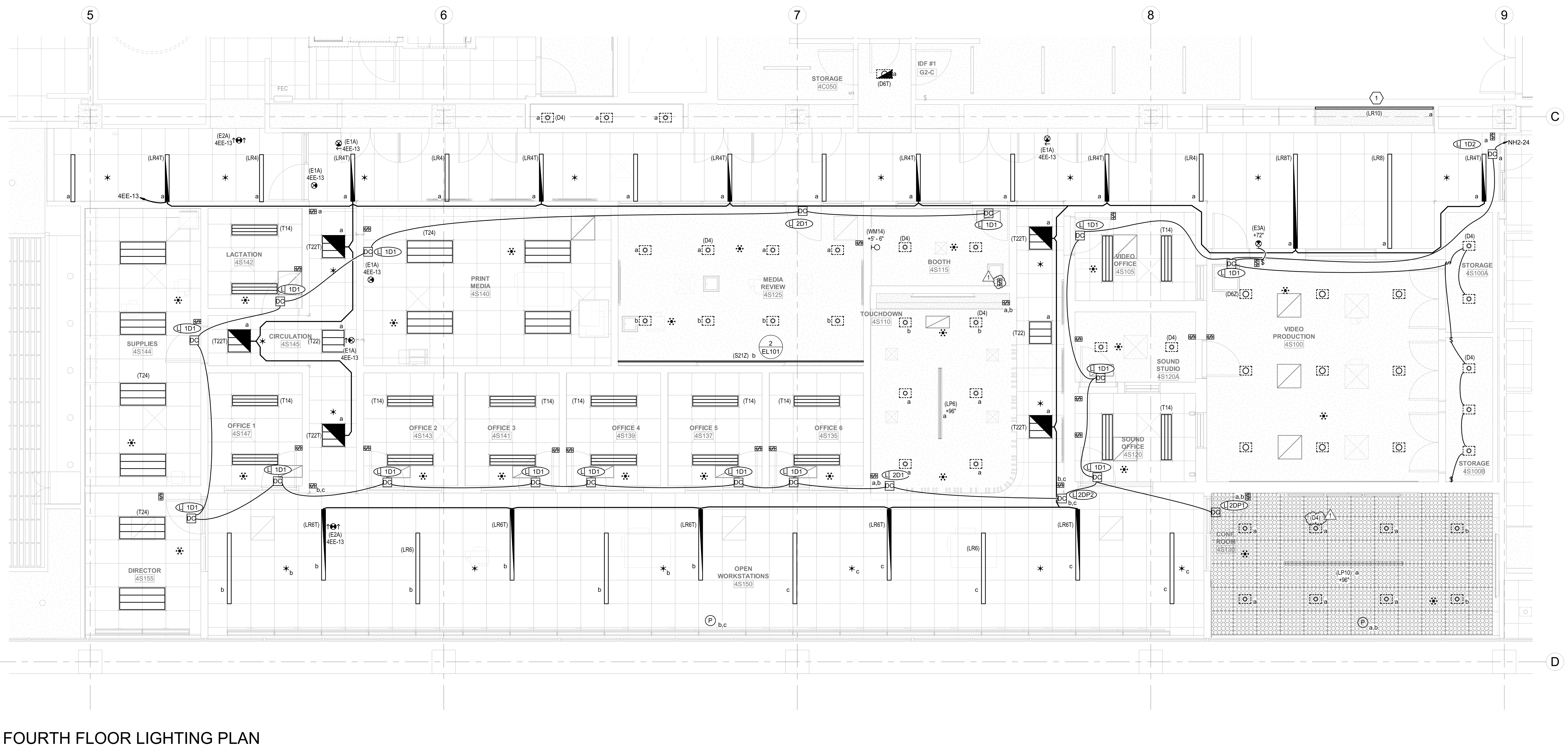
GENERAL SHEET NOTES

1. UNLESS NOTED OTHERWISE, ELECTRICAL ITEMS SHOWN IN DARK AND SOLID LINES ARE NEW AND THE CONTRACTOR SHALL PROVIDE THEM. ITEMS SHOWN IN SOLID LIGHT LINES ARE TO REMAIN.
2. COORDINATE LOCATIONS AND MOUNTING HEIGHTS OF ALL LIGHT FIXTURES ON THIS LEVEL WITH MECHANICAL EQUIPMENT, DUCT, PIPE, PLUMBING, ETC. PRIOR TO ROUGH-IN.
3. CONTRACTOR SHALL UPDATE PANEL SCHEDULES WITH NEW CIRCUIT DATA TYPED ON CARD STOCK TYPE MATERIAL.
4. ALL CEILING MOUNTED DEVICES LOCATED IN LAY-IN GRID CEILINGS SHALL BE INSTALLED CENTERED IN CEILING TILES AND/OR ALIGNED WITH OTHER FIXTURES WITHIN THE SAME PLANE AND CEILING SPACE.
5. LIGHTING CONTROL DIMMING AND ROOM CONTROLLER SHALL BE LOCATED AS FOLLOWS WHERE POSSIBLE UNLESS NOTED OTHERWISE. LOCATE ABOVE ACCESSIBLE CEILING NEAR THE DOOR THAT CONTROLLER SERVES BUT OUT OF THE PATH OF EGRESS, REFER TO DETAIL FOR ADDITIONAL INFORMATION.
6. PROVIDE UNSWITCHED HOT CIRCUIT TO ALL LIGHT FIXTURES WITH EMERGENCY TRANSFERS TO ALLOW FOR POWER LOSS SENSING.
7. REFER TO EE701 FOR TYPICAL MOUNTING AND ALIGNMENT OF ELECTRICAL DEVICES.
8. CONTRACTOR SHALL BE REQUIRED TO PROVIDE ALL MOUNTING HARDWARE ALONG WITH REQUIRED SEISMIC BRACING FOR EACH FIXTURE.
9. ALL PATHWAYS FOR LOW VOLTAGE CABLING NOT REQUIRED TO BE IN CONDUITS SHALL BE ROUTED IN J-HOOK PATHWAYS. CONCEAL ALL PATHWAYS ABOVE ACCESSIBLE CEILING SPACES. DO NOT RUN CABLES IN EXPOSED AREAS. WHERE CONCEALMENT IS NOT POSSIBLE IN EXPOSED AREAS, CONTRACTOR SHALL PROVIDE CONDUIT TO ROUTE CABLING WHERE VISIBLE.



2 MEDIA REVIEW STRIP LIGHT

SCALE: NTS



1 FOURTH FLOOR LIGHTING PLAN

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

STUDIO LP
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SUITE 307
SLC, UT 84101
PH: 8013640503
BAYLEE@STUDIOLPARCH.COM

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Salt Lake City, UT 84111
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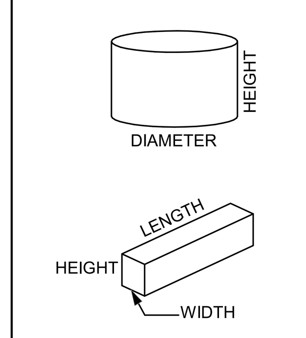
FOURTH FLOOR LIGHTING PLAN

EL101

Scale 1/4" = 1'-0"

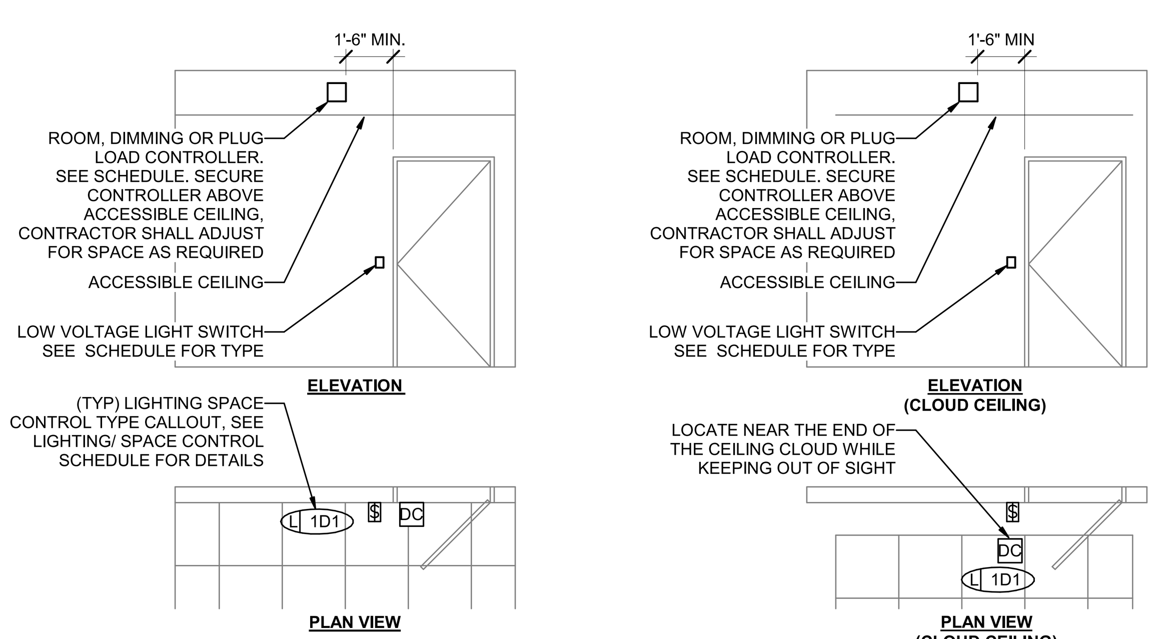
INTERIOR LIGHTING FIXTURE SCHEDULE

GENERAL NOTES

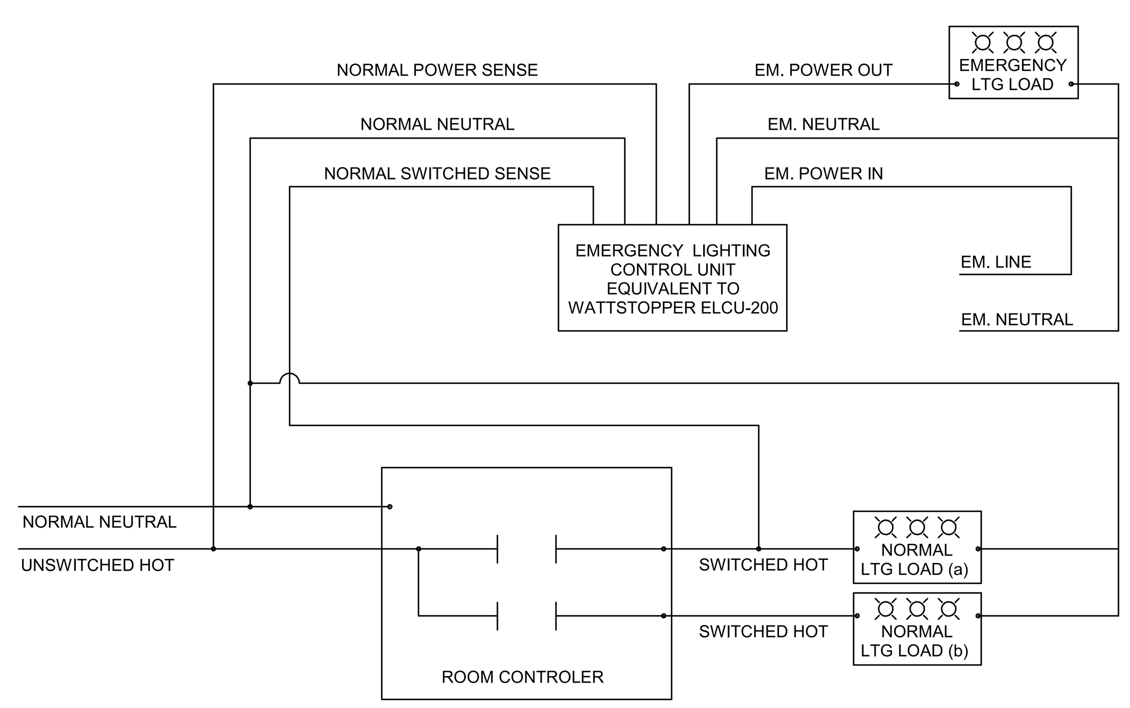


1. SUBSTITUTIONS AND/OR EQUAL FIXTURES MUST RECEIVE APPROVAL PRIOR TO BIDDING, THEY MUST BE SUBMITTED TO THE ENGINEER NO LESS THAN 2 WEEKS PRIOR TO BID OPENING.
2. SAMPLES MUST BE PROVIDED FOR ANY AND ALL FIXTURES UPON A/E REQUEST PRIOR TO RELEASING FIXTURES.
3. ALL FIXTURES SHALL BE LISTED AND APPROVED FOR THEIR INTENDED USE AND LOCATION.
4. VERIFY THE PROPER MOUNTING KITS OR ACCESSORIES TO FACILITATE INSTALLATION AS SHOWN AT EACH LOCATION ON THE DRAWINGS.
5. COMPLY WITH THE "INTERIOR LIGHTING" SECTION OF THE SPECIFICATIONS.
6. ALL LIGHT FIXTURES TO BE EITHER "DLC" OR "LIGHTING FACTS" LISTED OR TO BE APPROVED BY ARCHITECT/ENGINEER AND OWNER.
7. CONTRACTOR ALLOWANCE PRICES ARE ACCURATE WHEN THIS JOB WAS SPECIFIED, CONTRACTOR AND ELECTRICAL DISTRIBUTOR SHALL VERIFY THIS ALLOWANCE AND REPORT ANY PROBLEMS TO THE ENGINEER BEFORE THE BID. ALLOWANCE PRICE MAY OR MAY NOT INCLUDE LAMP(S) OR FREIGHT AS NOTED, AND DO NOT INCLUDE ANY TAXES.

			LUMINAIRE				DRIVER			
ID	DESCRIPTION	SIZE (NOMINAL)	DELIVERED DIRECT LUMENS	DELIVERED INDIRECT LUMENS	COLOR TEMP	CRI	TYPE	VOLTAGE	WATTS	MANUFACTURER (CATALOG SERIES)
(D4)	DESCRIPTION: 4" DOWNLIGHT MOUNTING: RECESSED, CEILING FINISH: SCBA OPTICS: 65° BEAM, CLEAR REFLECTOR, MATTE DIFFUSE EM: NONE	LENGTH: 12" WIDTH: 9" HEIGHT: 8" DIAMETER: 4"	1,500		4000K	80	LED (0-10V DIMMING) 1%	120/277V	15	GOTHAM (ICO4) PORTFOLIO (LD4D) WILLIAMS (4DR-TL)
(D6T)	DESCRIPTION: 6" DOWNLIGHT MOUNTING: RECESSED, CEILING FINISH: SCBA OPTICS: 35° BEAM, CLEAR REFLECTOR, MATTE DIFFUSE OPTIONS: EM: EMERGENCY TRANSFER	LENGTH: 16" WIDTH: 11" HEIGHT: 9" DIAMETER: 6"	2,000		4000K	80	LED (0-10V DIMMING) 1%	120/277V	27	GOTHAM (ICO6) PORTFOLIO (LD6D) WILLIAMS (6DR-TL)
(D6Z)	DESCRIPTION: 6" DOWNLIGHT MOUNTING: RECESSED, CEILING FINISH: OPTICS: MEDIUM, EZB DRIVER EM: NONE	LENGTH: 12" WIDTH: 9" HEIGHT: 8" DIAMETER: 4"	3,000		4000K	80	ELOD 0-10V LOGARITHMIC DIMMING <1%	120/277V	30	GOTHAM (EVO6) PORTFOLIO (LD6D) WILLIAMS (6DR-TL)
(E1A)	DESCRIPTION: EXIT SIGN, EDGE LIT, SINGLE SIDED MOUNTING: CEILING FINISH: SCBA OPTICS: OPTIONS: EM: EMERGENCY TRANSFER 1	LENGTH: 11" WIDTH: 3" HEIGHT: 10"			GREEN		LED	120/277V	5	ISOLITE (UEL) SURE-LITES (SCX) EXITRONIX (S900U)
(E2A)	DESCRIPTION: EXIT SIGN, EDGE LIT, DOUBLE SIDED MOUNTING: CEILING FINISH: SCBA OPTICS: OPTIONS: EM: EMERGENCY TRANSFER 1	LENGTH: 11" WIDTH: 3" HEIGHT: 10"			GREEN		LED	120/277V	5	ISOLITE (UEL) SURE-LITES (SCX) EXITRONIX (S900UM)
(E3A)	DESCRIPTION: EDGE LIT, SINGLE SIDED MOUNTING: WALL FINISH: SCBA OPTICS: OPTIONS: USER/ARCHITECT TO CHOOSE CUSTOM WORDING ON SIGN EM: NONE	LENGTH: 13" WIDTH: 3" HEIGHT: 10"			SCBA		LED	120/277V	5	ISOLITE (TLCG2) EVENLITE (SOVCGII) EXITRONIX (402EX)
(LP6)	DESCRIPTION: CYLINDRICAL PENDANT MOUNTING: PENDANT FINISH: SCBA OPTICS: OPTIONS: EM: NONE	LENGTH: 72" DIAMETER: 3.5"	3,144		4000K	90	LED (0-10V DIMMING) 1%	120/277V	36	CORONET (FLRD) LUMINII (SCT-JOIN-HR) AYO (OPT)
(LP10)	DESCRIPTION: CYLINDRICAL PENDANT MOUNTING: PENDANT FINISH: SCBA OPTICS: OPTIONS: EM: NONE	LENGTH: 120" DIAMETER: 3.5"	5,240		4000K	90	LED (0-10V DIMMING) 1%	120/277V	60	CORONET (FLRD) LUMINII (SCT-JOIN-HR) AYO (OPT)
(LR4)	DESCRIPTION: FLUSH LENS LINEAR MOUNTING: GRID CEILING, RECESSED FINISH: SCBA OPTICS: OPTIONS: EM: NONE	LENGTH: 48" WIDTH: 3" HEIGHT: 4"	2,400		4000K	80	LED (0-10V DIMMING) 1%	120/277V	26	MARK (SL2L) NEORAY (S122DR) BETACALCO (BLKR)
(LR4T)	DESCRIPTION: FLUSH LENS LINEAR MOUNTING: GRID CEILING, RECESSED FINISH: SCBA OPTICS: OPTIONS: EM: EMERGENCY TRANSFER	LENGTH: 48" WIDTH: 3" HEIGHT: 4"	2,400		4000K	80	LED (0-10V DIMMING) 1%	120/277V	26	MARK (SL2L) NEORAY (S122DR) BETACALCO (BLKR)
(LR6)	DESCRIPTION: FLUSH LENS LINEAR MOUNTING: GRID CEILING, RECESSED FINISH: SCBA OPTICS: OPTIONS: EM: NONE	LENGTH: 72" WIDTH: 3" HEIGHT: 4"	3,600		4000K	80	LED (0-10V DIMMING) 1%	120/277V	40	MARK (SL2L) NEORAY (S122DR) BETACALCO (BLKR)
(LR6T)	DESCRIPTION: FLUSH LENS LINEAR MOUNTING: GRID CEILING, RECESSED FINISH: SCBA OPTICS: OPTIONS: EM: EMERGENCY TRANSFER	LENGTH: 72" WIDTH: 3" HEIGHT: 4"	3,600		4000K	80	LED (0-10V DIMMING) 1%	120/277V	40	MARK (SL2L) NEORAY (S122DR) BETACALCO (BLKR)
(LR8)	DESCRIPTION: FLUSH LENS LINEAR MOUNTING: GRID CEILING, RECESSED FINISH: SCBA OPTICS: OPTIONS: EM: NONE	LENGTH: 96" WIDTH: 3" HEIGHT: 4"	4,800		4000K	80	LED (0-10V DIMMING) 1%	120/277V	53	MARK (SL2L) NEORAY (S122DR) BETACALCO (BLKR)
(LR8T)	DESCRIPTION: FLUSH LENS LINEAR MOUNTING: GRID CEILING, RECESSED FINISH: SCBA OPTICS: OPTIONS: EM: EMERGENCY TRANSFER	LENGTH: 96" WIDTH: 3" HEIGHT: 4"	4,800		4000K	80	LED (0-10V DIMMING) 1%	120/277V	53	MARK (SL2L) NEORAY (S122DR) BETACALCO (BLKR)
(LR10)	DESCRIPTION: FLUSH LENS LINEAR MOUNTING: RECESSED FINISH: SCBA OPTICS: OPTIONS: EM: NONE	LENGTH: 120" WIDTH: 2" HEIGHT: 4"	4,630		4000K	80	LED (0-10V DIMMING) 1%	120/277V	50	PAL (MLR2) NEORAY (S122DR) BETACALCO (BLKR)
(S21Z)	DESCRIPTION: INDOOR WHITE LIGHT TAPE MOUNTING: MOUNTING CLIP WITH WHITE ROUND LENS FINISH: SCBA OPTICS: OPTIONS: EM: NONE	LENGTH: 252" WIDTH: .5"	2,100		4000K	80	LED (0-10V DIMMING)	120/277V	96	KELVIX (UN1-WL) QT (SW-HE24/1.5) OMNILIGHT (GENESIS 2.0)
(T14)	DESCRIPTION: VOLUMETRIC TROFFER MOUNTING: GRID CEILING FINISH: SCBA OPTICS: OPTIONS: EM: NONE	LENGTH: 48" WIDTH: 12" HEIGHT: 4"	4,000		4000K	80	LED (0-10V DIMMING) 1%	120/277V	39	LITHONIA (ALL4) CORELITE (D3X) DAY-BRITE (1CAX)
(T22)	DESCRIPTION: VOLUMETRIC TROFFER MOUNTING: GRID CEILING, RECESSED FINISH: SCBA OPTICS: OPTIONS: EM: NONE	LENGTH: 24" WIDTH: 24" HEIGHT: 4"	2,000		4000K	80	LED (0-10V DIMMING) 1%	120/277V	17	LITHONIA (2ALL2) CORELITE (D3X) DAY-BRITE(CAX)
(T22T)	DESCRIPTION: VOLUMETRIC TROFFER MOUNTING: GRID CEILING, RECESSED FINISH: SCBA OPTICS: OPTIONS: EM: EMERGENCY TRANSFER	LENGTH: 24" WIDTH: 24" HEIGHT: 4"	2,000		4000K	80	LED (0-10V DIMMING) 1%	120/277V	17	LITHONIA (2ALL2) CORELITE (D3X) DAY-BRITE(CAX)
(T24)	DESCRIPTION: VOLUMETRIC TROFFER MOUNTING: GRID CEILING, RECESSED FINISH: SCBA OPTICS: OPTIONS: EM: NONE	LENGTH: 48" WIDTH: 24" HEIGHT: 4"	4,000		4000K	80	LED (0-10V DIMMING) 1%	120/277V	32	LITHONIA (2ALL4) CORELITE (D3X) DAY-BRITE(CAX)
(WM14)	DESCRIPTION: 14" CIRCLE MOUNTING: WALL FINISH: SCBA OPTICS: OPTIONS: EM: NONE	HEIGHT: 3" DIAMETER: 14"	1,490		4000K	90	LED (0-10V DIMMING) 1%	120/277V	16	BROWNLEE (PENNY-ID) PRUDENTIAL LTG (GAZE-RDS) LIGHTNET (1B)



1 TYPICAL ROOM CONTROLLER MOUNTING DETAILS
SCALE: NTS



*BASIS OF DESIGN IS WATTSTOPPER
**CONTRACTOR IS RESPONSIBLE TO PROVIDE FULLY FUNCTIONAL EQUIVALENT SYSTEMS TO WHAT IS INDICATED HERE.

2 TYPICAL EMERGENCY LIGHTING TRANSFER DEVICE DETAIL
SCALE: NTS

STUDIO LP
331 S RIO GRANDE ST
SUITE 307
SLC, UT 84101
PH: 8013640503
BAYLEE@STUDIOLPARCH.COM

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Salt Lake City, UT 84111
800-678-7077
801-328-5151
fax: 801-328-5155
www.spectrum-engineers.com

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LIGHTING FIXTURE SCHEDULE & DETAILS

EL602

Scale NTS

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GENERAL SHEET NOTES

1. FIRE ALARM NOTIFICATION DEVICES SHALL BE ADJUSTED AS REQUIRED TO PROVIDE PROPER COVERAGE AND SOUND LEVELS.
2. ALL FIRE ALARM DEVICES SHALL BE MOUNTED SUCH THAT THEY ARE VISIBLE FROM THE GROUND AND EASILY ACCESSIBLE FOR MAINTENANCE.
3. TYPICAL: CORRIDOR SMOKE DETECTOR SPACING SHALL NOT EXCEED 30FT ON CENTER.
4. ALL PATHWAYS FOR LOW VOLTAGE CABLING NOT REQUIRED TO BE IN CONDUITS SHALL BE ROUTED IN J-HOOK PATHWAYS. CONCEAL ALL PATHWAYS ABOVE ACCESSIBLE CEILING SPACES. DO NOT RUN CABLES IN EXPOSED AREAS. WHERE CONCEALMENT IS NOT POSSIBLE IN EXPOSED AREAS, CONTRACTOR SHALL PROVIDE CONDUIT TO ROUTE CABLING WHERE VISIBLE. ALL CONDUIT SHALL BE PAINED TO MATCH CEILING AND PROVIDED WITH PROTECTIVE BUSHINGS.

STUDIO LP
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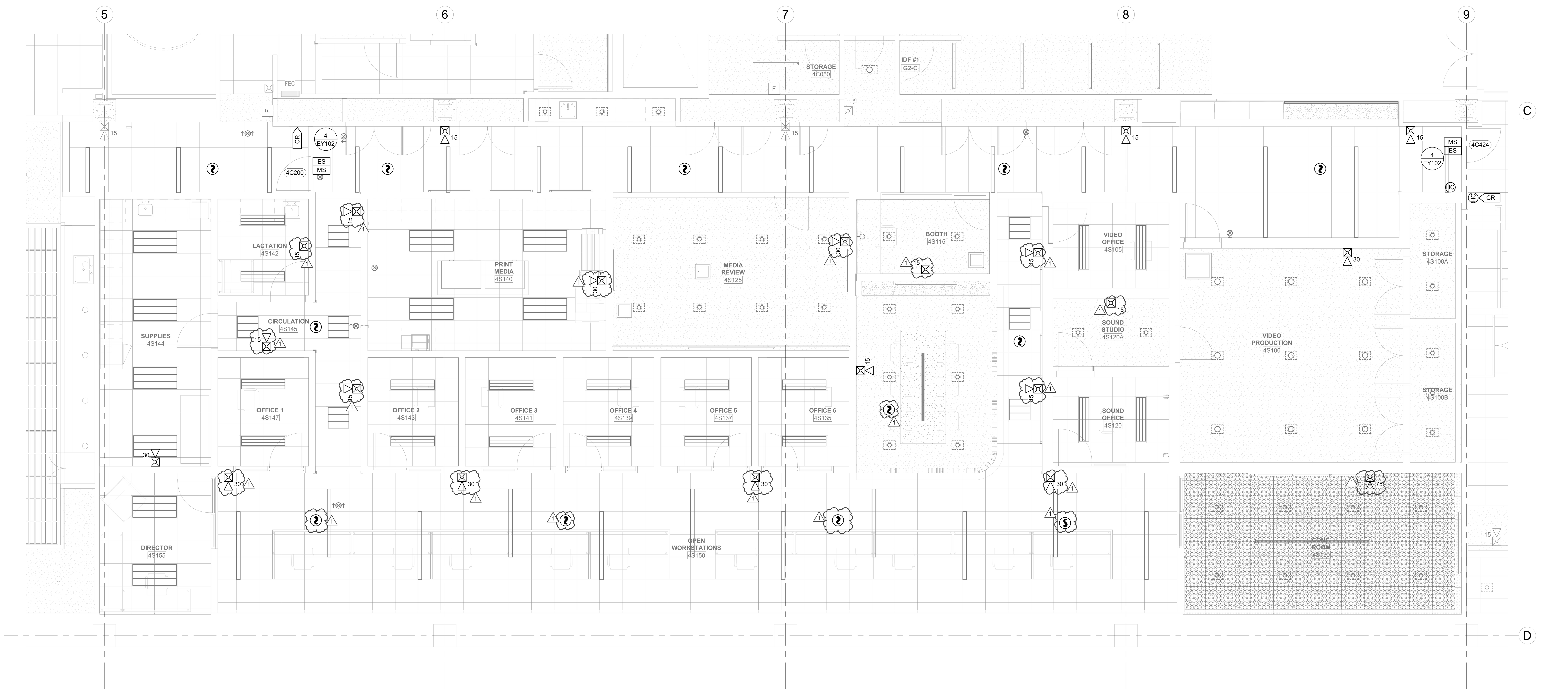

1 FOURTH FLOOR AUXILIARY PLAN
SCALE: 1/4" = 1'-0"

NORTH

GENETIC SCIENCE LEARNING CENTER

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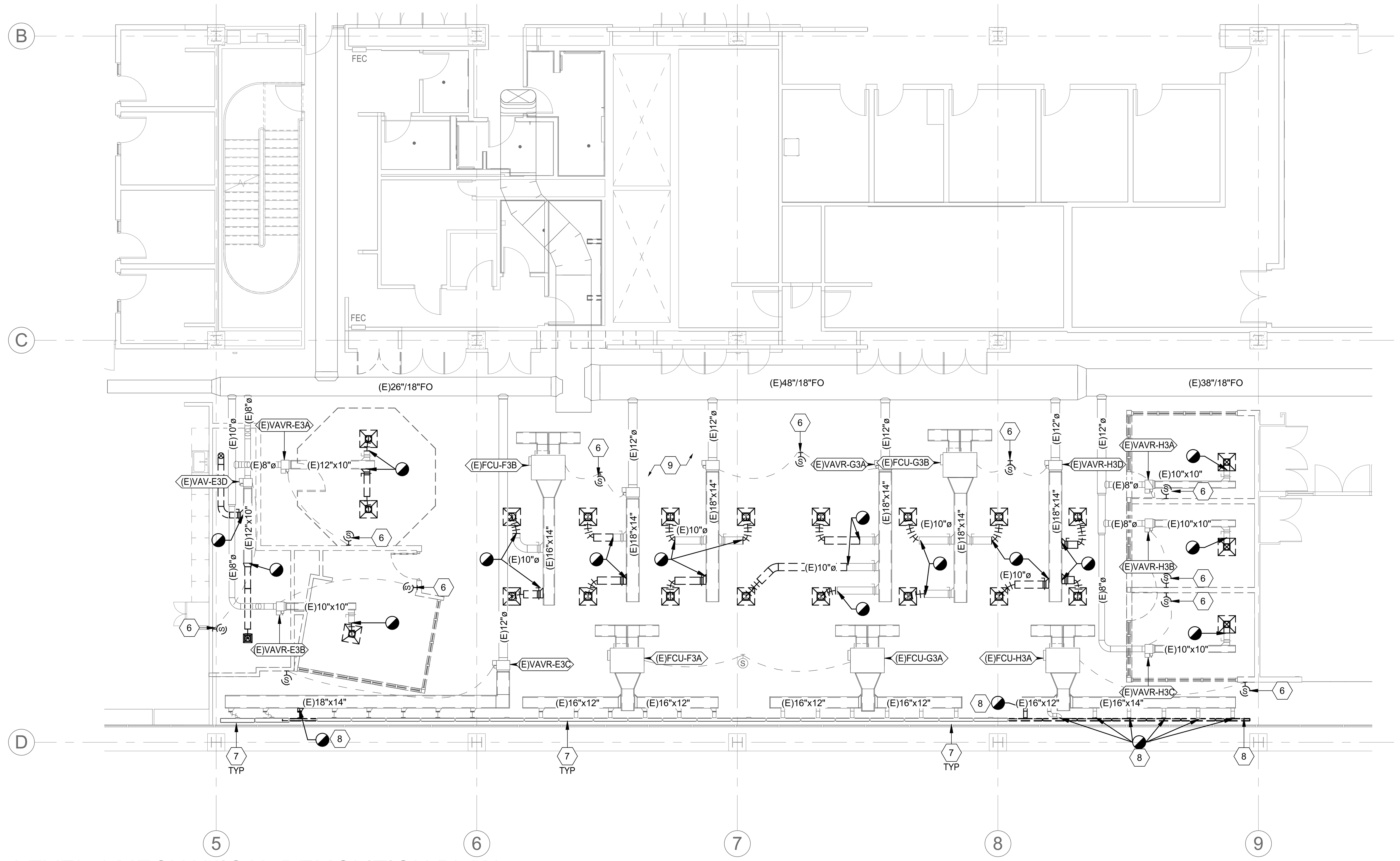
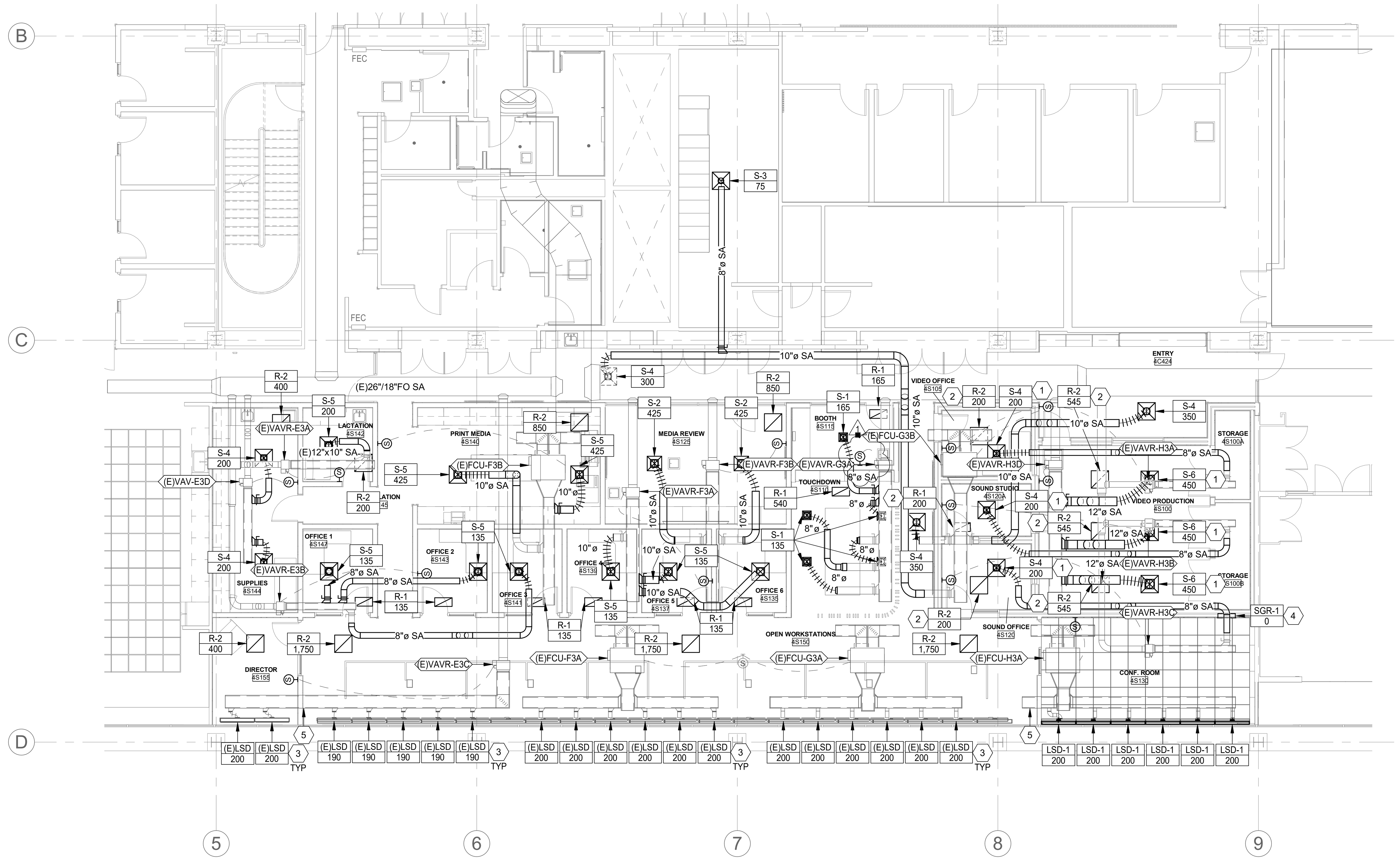
FOURTH FLOOR AUXILIARY PLAN

EY101

Scale 1/4" = 1'-0"



2 LEVEL 4 MECHANICAL DEMOLITION PLAN
SCALE: 1/8" = 1'-0"



1 LEVEL 4 MECHANICAL PLAN
SCALE: 1/8" = 1'-0"

NORTH

GENERAL SHEET NOTES

MECHANICAL GENERAL NOTES:

2. THIS CONTRACTOR SHALL CLOSELY COORDINATE MECHANICAL AND PLUMBING WITH ELECTRICAL, ARCHITECTURAL, AND BUILDING STRUCTURE.
3. ALL LOW PRESSURE RECTANGULAR DUCTWORK TO BE LINED WITH INSULATION WITH AN R-VALUE OF R-6. ALL LOW PRESSURE ROUND DUCTWORK TO BE WRAPPED WITH INSULATION WITH AN R-VALUE OF R-6.
4. ALL MEDIUM PRESSURE DUCTWORK TO BE 1" ACOUSTICAL DOUBLE WALL WITH PERFORATED INTERIOR DUCTWORK. NO DUCT LINER IN OUTSIDE AIR DUCTWORK OR DUCTWORK WITH IN DUCT HUMIDIFIERS.
5. ALL DUCT DIMENSIONS ARE INSIDE CLEAR DIMENSIONS.
6. FLEXIBLE DUCT MAY BE USED AT FINAL TERMINATION OF DUCT TO DIFFUSER OR GRILLE. MAXIMUM FLEXIBLE DUCT LENGTH IS 5'-0". PROVIDE DUCT SUPPORTS EVERY 3 FEET. FLEX DUCT SHALL NOT BE COMPRESSED OR KINKED BY ANY OBJECTS SUCH AS STRUCTURE, PIPING, ETC.
7. GRILLES AND DUCTWORK ARE SIZED INDEPENDENTLY. THE NECK SIZE OF GRILLES MAY NOT MATCH THE ASSOCIATED DUCT SIZE. PROVIDE TRANSITION TO GRILLES AS NECESSARY.
8. PROVIDE BALANCING DAMPER WITH LOCKING QUADRANT IN EACH DUCT BRANCH OF SUPPLY AND EXHAUST DUCTWORK.
9. PROVIDE REMOTE CABLE OPERATED DAMPER SYSTEM FOR ALL DUCTWORK ABOVE HARD LID CEILINGS OR WHERE DAMPER IS INACCESSIBLE OR PROVIDE OPPOSED BLADE DAMPER WITH NYLON BUSHINGS AT GRILLE.
10. PROVIDE ACCESS DOORS FOR ALL SERVICEABLE EQUIPMENT OR VALVES ABOVE HARD LID CEILINGS OR IN WALLS. ALL ACCESS PANELS ARE TO BE PAINTED TO MATCH ADJACENT SURFACES.
11. GC TO HIRE NEBB OR AABC CERTIFIED THIRD PARTY TEST AND BALANCE (TAB) CONTRACTOR. TAB CONTRACTOR SHALL ADJUST SHEAVES, BELTS, DAMPERS, ETC AS NECESSARY TO BALANCE SYSTEM TO AIRFLOWS REQUIRED AT LOWEST POSSIBLE SPEEDS. TAB CONTRACTOR SHALL VERIFY THE OUTSIDE AIR AT EACH RTU IS AS SCHEDULED. FOLLOW PROCEDURES AS LAID FORTH IN THE CURRENT VERSION OF "PROCEDURAL STANDARDS FOR TESTING ADJUSTING AND BALANCING OF ENVIRONMENTAL SYSTEMS" BY NEBB. PROVIDE REPORT ON NEBB FORMS TO ENGINEER FOR REVIEW.
12. ALL MATERIALS WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL BE LISTED AND LABELED AS HAVING A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723.
13. THIS CONTRACTOR SHALL ENGAGE A FIRE PROTECTION DESIGN BUILD CONTRACTOR TO MODIFY THE EXISTING FIRE SPRINKLER SYSTEM. DESIGNER SHALL BE NICET LEVEL III TECHNICIAN. WORKING PLANS AND CALCULATIONS SHALL BE PREPARED ACCORDING TO NFPA 13, AND BE APPROVED BY AUTHORITIES HAVING JURISDICTION, INCLUDING HYDRAULIC CALCULATIONS IF APPLICABLE.
14. PROVIDE NEW QUICK RESPONSE FIRE SPRINKLER HEADS IN ALL AREAS OF WORK. SPRINKLER HEADS TO BE ON FLEXIBLE BRAIDED STAINLESS DROPS. SPRINKLER HEAD TO BE CENTER IN HALF OF TILE.
15. CONTROLS TO MATCH EXISTING JOHNSON METASYS CONTROLS. TIE INTO EXISTING JOHNSON CONTROLS DDC SYSTEM AND UPDATED GRAPHICS. PROVIDE ENGINEER WITH 2 WEEKS OF TRENDS SHOWING PROPER OPERATION OF EQUIPMENT UPON COMPLETION OF PROJECT. TRENDING DATA SHALL INCLUDE THE FOLLOWING DATA AT A MINIMUM: SPACE TEMPERATURE, SPACE SET POINT, HEATING OR COOLING MODE, AIR FLOW (FOR VAV SYSTEMS), & VALVE POSITION (FOR VAV SYSTEMS). SEE SEQUENCE OF OPERATIONS AND CONTROLS REQUIREMENTS ON SCHEDULE SHEET/SPECIFICATIONS.
16. COORDINATE EXACT THERMOSTAT LOCATIONS WITH FURNITURE AND OWNER. FAILURE TO DO SO MAY REQUIRE MOVING THERMOSTATS AT CONTRACTORS COST.
17. ALL CONTROLS WIRING SHALL BE INSTALLED IN RACEWAYS AND BE THE RESPONSIBILITY OF THE CONTROLS CONTRACTOR. RACEWAYS SHALL CONFORM TO THE FOLLOWING ELECTRICAL SPECIFICATIONS; HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS, RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS AND SEISMIC CONTROLS FOR ELECTRICAL SYSTEMS.
18. CONTRACTOR SHALL FIELD VERIFY EXISTING FIELD CONDITIONS PRIOR TO ORDERING OR FABRICATING. ADDITIONAL COST WILL NOT BE ALLOWED FOR CONTRACTOR'S FAILURE TO BECOME FAMILIAR WITH EXISTING SITE CONDITIONS.
19. PROVIDE SOUND BOOT ON ALL RETURN GRILLES. SOUND BOOT TO BE SHEET METAL WITH ACOUSTICAL DUCT LINER. DUCT BOARD IS NOT AN APPROVED MATERIAL FOR SOUND BOOTS. SEE SOUND BOOT DETAIL.
20. GENERAL CONTRACTOR SHALL HIRE A 3RD PARTY COMMISSIONING AGENT TO COMMISSION NEW HVAC EQUIPMENT. COMMISSIONING AGENT SHALL BE LICENSED MECHANICAL ENGINEER. COMMISSIONING AGENT TO PROVIDE COMMISSIONING PLAN LISTING EQUIPMENT AND TEST TO BE PERFORMED TO ENGINEER FOR REVIEW. COMMISSIONING AGENT SHALL PROVIDE REPORT STATING ANY SYSTEM DEFICIENCIES AND LISTING ANY DEFERRED TESTS.
21. PROVIDE OPERATION AND MAINTENANCE MANUALS (O&M) WITHIN 30 DAYS OF CERTIFICATE OF OCCUPANCY FOR ALL EQUIPMENT IN DIGITAL FORMAT TO ENGINEER FOR REVIEW. O&M'S SHALL INCLUDE DOCUMENTATION OF ALL WARRANTIES, REPORTS AND TESTS, RECORD DRAWINGS, CONTROLS SEQUENCE OF OPERATIONS WITH DIAGRAMS, & EQUIPMENT INFORMATION. EQUIPMENT INFORMATION INCLUDES MAKE & MODEL, WIRING, PIPING, STARTUP, SHUTDOWN, TROUBLE SHOOTING SYSTEM BALANCING REPORT, FINAL COMMISSIONING REPORT AND MAINTENANCE PROCEDURES.
22. PIPING AND DUCTWORK SHALL NOT BE SUPPORTED FROM THE ROOF DECK, JOIST BRIDGING OR OTHER PIPES. HANG PIPES FROM BEAMS, JOIST OR SUPPLEMENTARY STRUCTURAL MEMBERS. WHERE POSSIBLE INSTALL ALL PIPING AND DUCTWORK WITHIN 12" FROM SUPPORTING STRUCTURE.
23. WHERE JURISDICTION REQUIRES, CONTRACTOR IS RESPONSIBLE FOR PROVIDING SEISMIC RESTRAINT AND SUPPORT ENGINEERED BY A LICENSED STRUCTURAL ENGINEER. PROVIDE DESIGN DRAWINGS TO AUTHORITY HAVING JURISDICTION AND MECHANICAL ENGINEER FOR REVIEW.

SHEET KEYNOTES

1 GRILLES AND DIFFUSERS SELECTED FOR A MAXIMUM NC OF 15 FOR SPECIFIED AIRFLOW.

2 PROVIDE EXTENDED SOUND BOOT ON RETURN GRILLE.

3 REUSE EXISTING LINEAR SLOT DIFFUSER. SHIFT TO MATCH NEW CEILING GRID.

4 LOW SIDEWALL RETURN. USE WALL CAVITY FOR RETURN AIR PATH UP TO CEILING PLENUM. MAINTAIN A MINIMUM FREE AREA IN WALL OF 8"X24" UP TO CEILING PLENUM.

5 CAP DUCT IN THIS APPROXIMATE LOCATION.

6 REMOVE EXISTING SENSOR/THERMOSTAT AND PROVIDE NEW.

7 EXISTING LINEAR SLOT DIFFUSER TO BE REMOVED, CLEANED, AND REINSTALLED.

8 DEMOLISH EXISTING LINEAR SLOT DIFFUSER.

9 DEMOLISH EXISTING DIFFUSERS AND GRILLES IN THIS AREA UNLESS NOTED OTHERWISE.

STUDIO LP
331 S RIO GRANDE ST
SUITE 307
SLC, UT 84101
PH: 8017395569
BAYLEE@STUDIOLPARCH.COM

PROFESSIONAL ENGINEER
12-17-24
RYAN
BOOGAARD
NO. 8677128
STATE OF UTAH

GENETIC SCIENCE LEARNING CENTER

CONSTRUCTION DOCUMENTS

DFCM SEAL

No	Description	Date
1	ADDENDUM 1	12/20/24

THE UNIVERSITY OF UTAH

GSLC
295 CHIPETA WAY
SALT LAKE CITY, UT 84108

22812

10.30.2024

LEVEL 4
MECHANICAL
PLAN

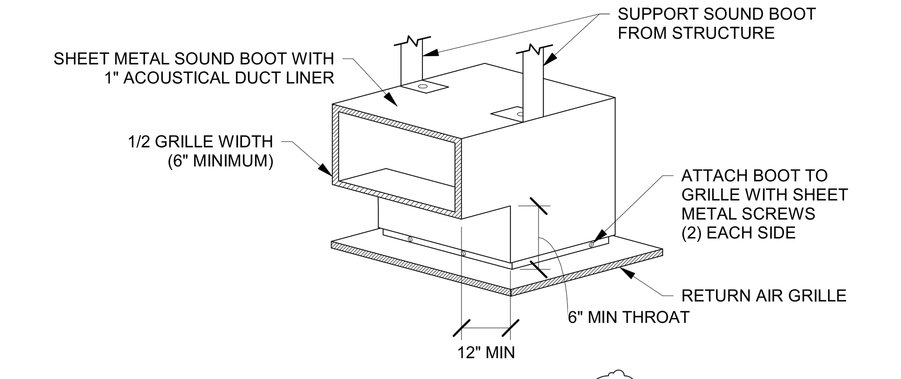
MH101

Scale As indicated

STUDIO LP

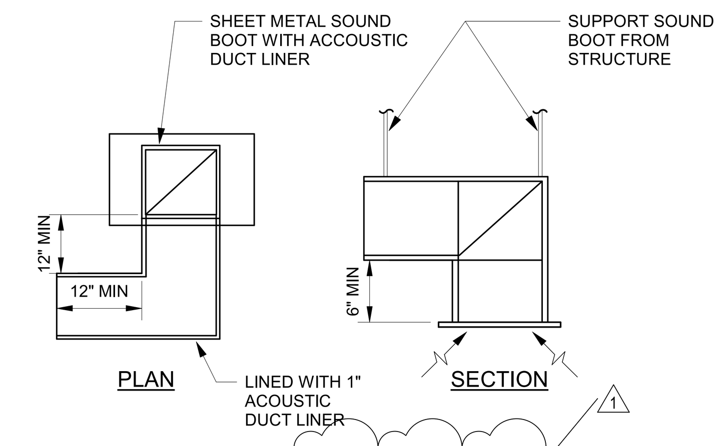
331 S RIO GRANDE ST
SUITE 307
SLC, UT 84101
PH: 8017395569
BAYLEE@STUDIOLPARCH.COM

PROFESSIONAL ENGINEER
12-19-24
RYAN
BOOGAARD
NO. 8677128
STATE OF UTAH



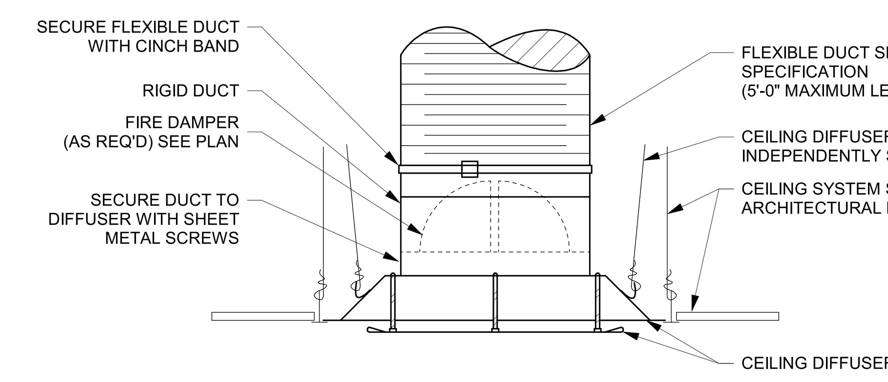
5 RETURN AIR GRILLE WITH SOUND BOOT

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



4 R.A. GRILLE WITH EXTENDED SOUND BOOT

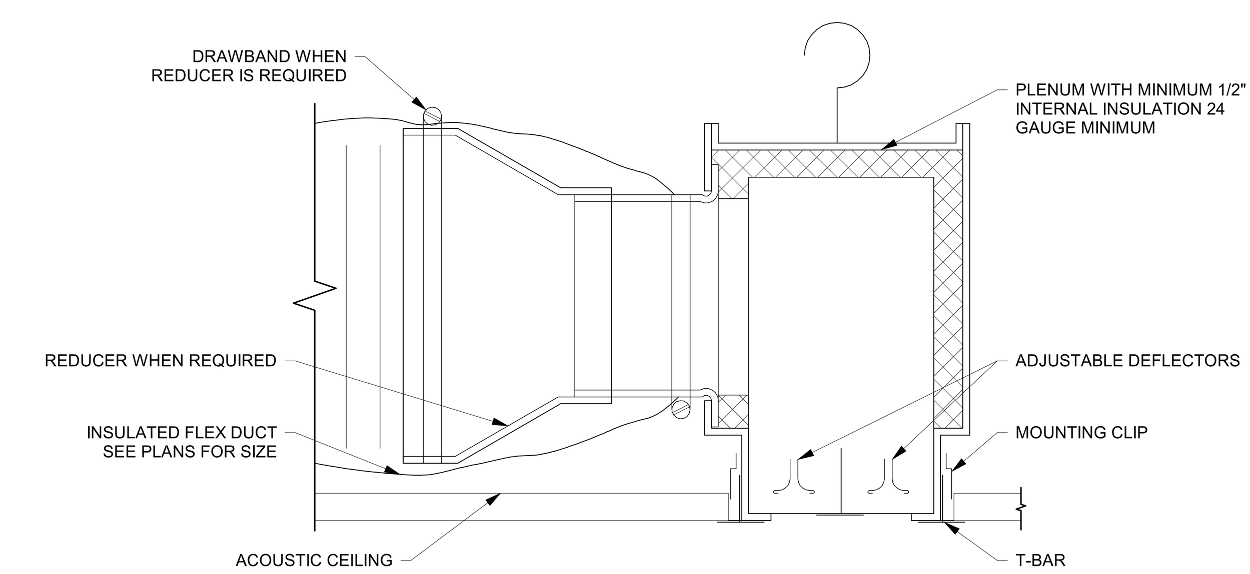
SCALE: 1/8" = 1'-0"



NOTE: CEILING INLETS AND OUTLETS SHALL BE INDEPENDENTLY SUPPORTED

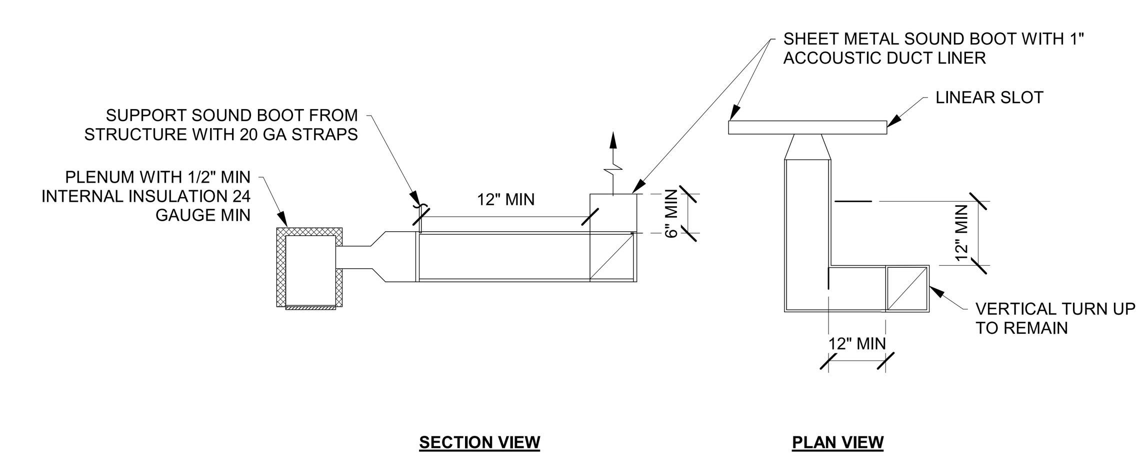
3 CEILING DIFFUSER DETAIL

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



2 LINEAR SLOT DIFFUSER DETAIL

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



1 LINEAR SLOT RETURN BOOT DETAIL

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

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SALT LAKE CITY, UT 84108

22812
10.30.2024

MECHANICAL DETAILS

ME501

Scale 1/8" = 1'-0"