



COUNTY OF FLUVANNA, VIRGINIA
(IFB) #2021-01
FLUVANNA COUNTY – BASEMENT RENOVATION

ADDENDUM # 2:

Reference – Invitation for Bid: IFB #2021-01
Title of Request for Proposal: FLUVANNA COUNTY – BASEMENT RENOVATION
Issue Date: September 21, 2020
Original Bid Due Date and Time: September 23, 2020 at 2 pm
Bid Due Date and Time: September 28, 2020 at 2pm (as revised by Addendum #1)

The above IFB #2020-01 is hereby amended and modified as follows:

1. Addendum No 2 entitled “Fluvanna County Multipurpose Room Additions and Renovations CRA Project No. 3430” attached hereto and incorporated herein attached hereto modifies and supplements that Exhibit 1 attached to Addendum No.1 to IFB #2021-01 (the “IFB). As used in the IFB “Exhibit 1” and “Plans” shall now refer to same as modified by Addendum #1, and as further modified by this Addendum #2. Any modifications below in the body of this Addendum #2 control over Addendum No. 2 entitled “Fluvanna County Multipurpose Room Additions and Renovations CRA Project No. 3430” including the specifications Sections included therewith.
2. Addendum No. 2 entitled “Fluvanna County Multipurpose Room Additions and Renovations CRA Project No. 3430” is modified as follows:
 - a. 2(a) and 2(b), including subparts 2(b)(i) through 2(b)(xlvi), of Addendum #1 issued September 16, 2020, related to general language modifications, are incorporated herein.
 - b. 3 and 4 of Addendum #1 issued September 16, 2020, are incorporated herein.

Note: A signed acknowledgment of this addendum must be received at the location indicated on the IFB either prior to the bid due date and hour or attached to your bid. Signature on this addendum does not substitute for your signature on the original bid document. The original bid document must be signed.

Very truly yours,

Cyndi Toler, Purchasing Officer
Fluvanna County, Virginia
132 Main Street
Palmyra, VA 22963
(434) 591-1930

Name of Firm: _____

BY: _____

Signature of duly authorized representative

Title: _____

Date: _____



Crabtree, Rohrbaugh & Associates - Architects

401 East Winding Hill Road
Mechanicsburg, PA 17055
Maryland • Pennsylvania • Virginia • West Virginia

ADDENDUM NO. 2

September 21, 2020

Fluvanna County
Multipurpose Room Additions and Renovations
CRA Project No. 3430

TO: All Perspective Bidders and Other Recipients of Contract Drawings and Specifications

This Addendum is hereby made a part of the Contract Document, which will be the basis of the Contract. The Addendum is issued to modify and/or correct the original Contract Documents dated August 28, 2020. Attach this Addendum to your Contract Documents. Receipt of this Addendum must be acknowledged on the Proposal Form. Failure to do so may subject the bidder to disqualification.

SPECIFICATIONS:

SECTION 034900 – FIBERGLASS REINFORCED COLUMN ENCLOSURES (Column Wraps)

1. ADD the following specification:

- A. Basis-of-Design Product: Subject to compliance with requirements, provide the following Pacific Columns, Inc product:
 - 1. Material: Fiberglass Reinforced Polymer (FRP)
 - 2. Series: Endura-Stone columns
 - 3. Style: Non-Tapered Round with capital and base.
 - 4. Color: To be painted, color to be selected by architect.
 - 5. Size: 18” diameter x length coordinated in field.
 - 6. Base and Cap Style: Tuscan
 - 7. Store, Install and finish per manufacturers written requirements.

SECTION 083113 – ACCESS DOORS AND FRAMES

1. ADD the following specification:

- A. Basis-of-Design Product: Subject to compliance with requirements, provide the following Milcor product:
 - 1. Material: Galvanized steel.
 - 2. Series: M – Architectural grade flush door
 - 3. Style: Lockable latch.
 - 4. Color: Galvanized
 - 5. Size: 30” x 30”
 - 6. Store, Install and finish per manufacturers written requirements.

SECTION 101550 – TOILET COMPARTMENTS

1. ADD Section 101550 Toilet Compartments in its entirety.

SECTION 102226 – OPERABLE PARTITIONS

1. ADD Section 102226 Operable Partitions in its entirety.

SECTION 108000 – TOILET ACCESSORIES

1. ADD Section 108000 Toilet Accessories in its entirety.

SECTION 270610 – VOICE DATA

1. DELETE reference to DAS system.

DRAWINGS:

DRAWING D1.0 – DEMOLITION PLAN, ALTERATION NOTES AND LEGEND

1. Floor Plan 1/D1.0 Sub-Basement Demolition Plan.
 - a. ADD a note to the area of slab removal in future Conference Room A that reads “coordinate final path of slab removal with sanitary line requirements on plumbing drawings”.
 - b. At demolished door between future Meeting Room 110 and Corridor 112, ADD a note that reads “Remove existing door lintel and prepare existing masonry wall to receive a new lintel to accommodate the new scheduled door and frame, and the raised concrete slab.

DRAWING A1.1 – SUB-BASEMENT FLOOR PLAN

1. Floor Plan 1/A1.1 Sub-Basement Floor Plan
 - a. CLARIFICATION, new concrete slab over pour as detailed in Corridor 106, Corridor 109 and Meeting Room 110 is to extend into Corridor 112, Women 111 and Men 113. Prepare slab as detailed on structural drawings.
 - b. Provide for 2 semi-recessed fire extinguishers and cabinets. Coordinate final location with architect.

DRAWING A2.1 – EXTERIOR ELEVATIONS

1. Elevation Legend
 - a. Add a note to Tag No. 1, Brick Veneer that reads “Align new brick coursing with existing”.

DRAWING A3.1 – BUILDING SECTIONS

1. ADD a general note that reads “Shim all brick veneer with solid masonry units to align new brick coursing with existing”.

DRAWING A4.1 – LARGE SCALE PLANS, SECTIONS AND DETAILS

1. REPLACE this sheet in its entirety with the attached sheet.
 - a. Added wall section with access panel.

DRAWING A6.2 – DOOR SCHEDULE, HOLLOW METAL FRAME ELEVATIONS AND DETAILS

1. Door Schedule.
 - a. All door heights to be 7’-0”.
2. Detail 8/A6.2 HM Interior Head.

- a. At door 112, provide a new lintel in the existing masonry wall. Lintel to be raised to accommodate scheduled door and frame, and new raised concrete floor slab.

DRAWING M-100 – MECHANICAL NEW WORK PLAN

1. REPLACE this sheet in its entirety with the attached sheet.
 - a. V-1 ductwork was straightened.
 - b. Added new 8"Ø Exhaust Air to connect to existing Elevator Machine Room.

DRAWING M-200 – MECHANICAL SCHEDULES, DETAILS AND CONTROLS

1. REPLACE this sheet in its entirety with the attached sheet.
 - a. Updated EF-1 to add machine room exhaust.
 - b. Updated EF-1 Control Sequence.
 - c. Updated velocity on L-1.

DRAWING E-200 – POWER/SYSTEMS PLAN

1. REPLACE this sheet in its entirety with the attached sheet.
 - a. Updated tagged note E43 to read "EXISTING ELECTRICAL LINES LOCATED UNDER NEW ADDITION BASED ON SURVEY. OWNER TO CONTACT AND PAY DOMINION DIRECT FOR ALL WORK ASSOCIATED WITH RELOCATING THESE LINES OUTSIDE OF NEW ADDITION FOOTPRINT."
 - b. Added note H under 'Electrical Power Notes' to read "WHERE NEW RECEPTACLES ARE SHOWN, PROVIDE IN NEW STEEL STUD FRAMED WALLS. FOR ANY LOCATION BEING EXTENDED FROM EXISTING CMU, PROVIDE EXTENSION RINGS AND EXTEND TO NEW FACE OF WALL."
 - c. For clarification there are no new fire alarm devices. The existing building does not have a fire alarm system. No new fire alarm devices will be installed.
 - d. For clarification, tagged note E32 that is on E-201 will be added to E-200 for panel MP1 feeder connection.

DRAWING T-001 – COMMUNICATIONS LEGEND

1. Touchpanel basis of design is Kramer KT-107.
2. Video teleconference camera basis of design is Vaddio Conference Shot 10.

End of Addendum No. 2

Attachments:

Specifications:

SECTION 101550	TOILET COMPARTMENTS
SECTION 102226	OPERABLE PARTITIONS
SECTION 108000	TOILET ACCESSORIES

Drawings:

DRAWING A4.1	LARGE SCALE PLANS, SECTIONS AND DETAILS
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DRAWING M-100 MECHANICAL NEW WORK PLAN
DRAWING M-200 MECHANICAL SCHEDULES, DETAILS AND CONTROLS

DRAWING E-200 POWER/SYSTEMS PLAN

SECTION 101550 TOILET COMPARTMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Solid-polymer toilet compartments configured as toilet enclosures and urinal screens.
- B. Related Sections:
 - 1. Division 10 Section "Toilet Accessories" for grab bars and similar accessories.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: For toilet compartments. Include plans, elevations, sections, details, and attachments to other work.
 - 1. Show locations of cutouts for compartment-mounted toilet accessories.
 - 2. Show locations of reinforcements for compartment-mounted grab bars.
 - 3. Show locations of centerlines of toilet fixtures, except where minimum clear stall dimensions are required.
- C. Samples for Initial Selection: For each type of unit indicated. Include Samples of hardware and accessories involving material and color selection.
- D. Samples for Verification: For the following products, in manufacturer's standard sizes unless otherwise indicated:
 - 1. Each type of material, color, and finish required for units, prepared on 6-inch-square Samples of same thickness and material indicated for Work.
 - 2. Each type of hardware and accessory.

1.4 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For each type of toilet compartment, from manufacturer.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For toilet compartments to include in maintenance manuals.

1.6 QUALITY ASSURANCE

- A. Comply with requirements in GSA's CID-A-A-60003, "Partitions, Toilets, Complete."
- B. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84, or another standard acceptable to authorities having jurisdiction, by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 50 or less.
 - 2. Smoke-Developed Index: 450 or less.
- C. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities" and ICC/ANSI A117.1 for toilet compartments designated as accessible.

1.7 PROJECT CONDITIONS

- A. Field Measurements: Verify actual locations of toilet fixtures, walls, columns, ceilings, and other construction contiguous with toilet compartments by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Aluminum Castings: ASTM B 26.
- B. Aluminum Extrusions: ASTM B 221.
- C. Stainless-Steel Sheet: ASTM A 666, Type 304, stretcher-leveled standard of flatness.
- D. Zamac: ASTM B 86, commercial zinc-alloy die castings.

2.2 SOLID-POLYMER UNITS

- A. Basis-of-Design Product: Subject to compliance with requirements, provide Scranton Products (Santana/Comtec/Capitol) or comparable product by one of the following:
 - 1. Partition Systems Incorporated of South Carolina.
 - 2. Sanymetal; a Crane Plumbing company.

- B. Toilet-Enclosure Style: Floor mounted & overhead braced.
- C. Door, Panel, and Pilaster Construction: Solid, high-density polyethylene (HDPE) panel material, not less than 1 inch thick, seamless, with eased edges, and with homogenous color and pattern throughout thickness of material.
 - 1. Color and Pattern: One color and pattern in each as selected by Architect from manufacturer's full range.
- D. Urinal-Screen Style: Continuous bracket - wall hung with floor mounted vertical floor bracing post.
- E. Pilaster Shoes and Sleeves (Caps): Manufacturer's standard design; stainless steel.
- F. Brackets (Fittings):
 - 1. Full height (continuous), clear anodized aluminum.

2.3 ACCESSORIES

- A. Hardware and Accessories: Manufacturer's standard design, heavy-duty operating hardware and accessories.
 - 1. Material: Clear-anodized aluminum.
 - 2. Hinges: Manufacturer's standard wrap-around paired, self-closing type that can be adjusted to hold doors open at any angle up to 90 degrees.
 - 3. Latch and Keeper: Manufacturer's standard surface-mounted latch unit designed for emergency access and with combination rubber-faced door strike and keeper. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible.
 - 4. Coat Hook: Manufacturer's standard combination hook and rubber-tipped bumper, sized to prevent in-swinging door from hitting compartment-mounted accessories.
 - 5. Door Bumper: Manufacturer's standard rubber-tipped bumper at out-swinging doors.
 - 6. Door Pull: Manufacturer's standard unit at out-swinging doors that complies with regulatory requirements for accessibility. Provide units on both sides of doors at compartments designated as accessible.
- B. Overhead Bracing: Manufacturer's standard continuous, extruded-aluminum head rail with antigrip profile and in manufacturer's standard finish.
- C. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless steel or chrome-plated steel or brass, finished to match the items they are securing, with theft-resistant-type heads. Provide sex-type bolts for through-bolt applications. For concealed anchors, use stainless steel, hot-dip galvanized steel, or other rust-resistant, protective-coated steel.

2.4 FABRICATION

- A. Floor Mounted & Overhead-Braced Units: Provide manufacturer's standard corrosion-resistant supports, leveling mechanism, and anchors at pilasters to suit floor conditions. Provide shoes at pilasters to conceal supports and leveling mechanism.
- B. Door Size and Swings: Unless otherwise indicated, provide 24-inch- wide, in-swinging doors for standard toilet compartments and 36-inch- wide, out-swinging doors with a minimum 32-inch- wide, clear opening for compartments designated as accessible.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions. Install units rigid, straight, level, and plumb. Secure units in position with manufacturer's recommended anchoring devices.
 - 1. Maximum Clearances:
 - a. Pilasters and Panels: 1/2 inch.
 - b. Panels and Walls: 1 inch.
 - 2. Stirrup Brackets: Secure panels to walls and to pilasters with no fewer than two brackets attached near top and bottom of panel.
 - a. Locate wall brackets so holes for wall anchors occur in masonry or tile joints.
 - b. Align brackets at pilasters with brackets at walls.
- B. Overhead-Braced Units: Secure pilasters to floor and level, plumb, and tighten. Set pilasters with anchors penetrating not less than 1-3/4 inches into structural floor unless otherwise indicated in manufacturer's written instructions. Secure continuous head rail to each pilaster with no fewer than two fasteners. Hang doors to align tops of doors with tops of panels, and adjust so tops of doors are parallel with overhead brace when doors are in closed position.
- C. Urinal Screens: Install continuous wall bracket/angle and vertical floor bracing. Attach with anchoring devices to suit supporting structure. Set units level and plumb, rigid, and secured to resist lateral impact.

3.2 ADJUSTING

- A. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold doors open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors to return doors to fully closed position.

SECTION 102226 OPERABLE PARTITIONS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Manually operated, paired panel operable partitions.
- B. Related Sections include the following:
 - 1. Division 3 Sections for concrete tolerances required.
 - 2. Division 5 Sections for primary structural support, including pre-punching of support members by structural steel supplier per operable partition supplier's template.
 - 3. Division 6 Sections for wood framing and supports, and all blocking at head and jambs as required.
 - 4. Division 9 Sections for wall and ceiling framing at head and jambs.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who is certified in writing by the operable partition manufacturer, as qualified to install the manufacturer's partition systems for work similar in material, design, and extent to that indicated for this Project.
- B. Acoustical Performance: Test operable partitions in an independent acoustical laboratory in accordance with ASTM E90 test procedure to attain no less than the STC rating specified. Provide a complete and unedited written test report by the testing laboratory upon request.
- C. Preparation of the opening shall conform to the criteria set forth per ASTM E557 "Standard Practice for Architectural Application and Installation of Operable Partitions."

1.4 SUBMITTALS

- A. Product Data: Material descriptions, construction details, finishes, installation details, and operating instructions for each type of operable partition, component, and accessory specified.
- B. Shop Drawings: Show location and extent of operable partitions. Include plans, sections, details, attachments to other construction, and accessories. Indicate dimensions, weights, conditions at openings, and at storage areas, and required installation, storage, and operating clearances. Indicate location and installation requirements for hardware and track, including floor tolerances required and direction of travel. Indicate blocking to be provided by others.
- C. Setting Drawings: Show imbedded items and cutouts required in other work, including support beam punching template.
- D. Samples: Color samples demonstrating full range of finishes available by architect. Verification samples will be available in same thickness and material indicated for the work.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Clearly mark packages and panels with numbering systems used on Shop Drawings. Do not use permanent markings on panels.

- B. Protect panels during delivery, storage, and handling to comply with manufacturer's direction and as required to prevent damage.

1.6 WARRANTY

- A. Provide written warranty by manufacturer of operable partitions agreeing to repair or replace any components with manufacturing defects.
- B. Partition Warranty period: Two (2) years from date of shipment.
- C. Suspension System Warranty: Five (5) years from date of shipment.

PART 2 - PRODUCTS

2.1 MANUFACTURERS, PRODUCTS, AND OPERATIONS

- A. Manufacturers: Subject to compliance with requirements, provide products by but not limited to the following:
 - 1. Modernfold, Inc. (basis of design)
 - 2. Panelfold, Inc.

- B. Products: Subject to compliance with the requirements, provide the following product:
 - 1. Acousti-Seal #932 manually operated paired panel operable partition.

2.2 OPERATION

- A. Acousti-Seal #932: Series of paired flat panels hinged together in pairs, manually operated, top supported with operable floor seals.

- B. Final Closure:
 - 1. OP-01: Horizontally expanding panel edge with removable crank

2.3 PANEL CONSTRUCTION

- A. Nominal 3-inch (76mm) thick panels in manufacturer's standard 48-inch (1220mm) widths. All panel horizontal and vertical framing members fabricated from minimum 18-gage formed steel with overlapped and welded corners for rigidity. Top channel is reinforced to support suspension system components. Frame is designed so that full vertical edges of panels are of formed steel and provide concealed protection of the edges of the panel skin.
- B. Panel skin shall be:
 - 1. Roll-formed steel wrapping around panel edge. Panel skins shall be lock formed and welded directly to the frame for unitized construction. Acoustical ratings of panels with this construction minimum:
 - a. 50 STC
- C. Hinges for Panels, Closure Panels, Pass Doors, and Pocket Doors shall be:
 - 1. Full leaf butt hinges, attached directly to the panel frame with welded hinge anchor plates within panel to further support hinge mounting to frame. Lifetime warranty on hinges. Hinges mounted into panel edge or vertical astragal are not acceptable.
- D. Panel Trim: No vertical or horizontal trim required or allowed on edges of panels; minimal groove appearance at all panel joints.
- E. Panel Weights:
 - 1. 50 STC - 8 lbs./square foot

2.4 PANEL FINISH

- A. Panel finish shall be:
 - 1. Reinforced vinyl with woven backing weighing not less than 21 ounces (595 grams) per lineal yard.
- B. Panel Trim: Exposed panel trim of one consistent color:
 - 1. To Be Advised

2.5 SOUND SEALS

- A. Vertical Interlocking Sound Seals between panels: Roll-formed steel astragals, with reversible tongue and groove configuration in each panel edge for universal panel operation. Rigid plastic astragals or astragals in only one panel edge are not acceptable.
- B. Horizontal Top Seals: Continuous contact extruded vinyl bulb shape with pairs of non-contacting vinyl fingers to prevent distortion without the need for mechanically operated parts.
- C. Horizontal bottom floor seals shall be:
 - 1. Modernfold IA2 Bottom seal. Automatic operable seals providing nominal 2-inch (51mm) operating clearance with an operating range of +0.50-inch (13mm) to -1.50-inch (38mm) which automatically drop as panels are positioned, without the need for tools or cranks.

2.6 SUSPENSION SYSTEM

- A. #17 Suspension System
 - 1. Suspension Tracks: Minimum 11-gauge, 0.12-inch (3.04mm) roll-formed steel track, suitable for either direct mounting to a wood header or supported by adjustable steel hanger brackets, supporting the load-bearing surface of the track, connected to structural support by pairs of 0.38-inch (10mm) diameter threaded rods. Aluminum track is not acceptable.
 - a. Exposed track soffit: Steel, integral to track, and pre-painted off-white.
 - 2. Carriers: One all-steel trolley with steel tired ball bearing wheels per panel (except hinged panels). Non-steel tires are not acceptable.

PART 3: EXECUTION

3.1 INSTALLATION

- A. General: Comply with ASTM E557, operable partition manufacturer's written installation instructions, Drawings and approved Shop Drawings.
- B. Install operable partitions and accessories after other finishing operations, including painting have been completed.
- C. Match operable partitions by installing panels from marked packages in numbered sequence indicated on Shop Drawings.
- D. Broken, cracked, chipped, deformed or unmatched panels are not acceptable.

3.2 CLEANING AND PROTECTION

- A. Clean partition surfaces upon completing installation of operable partitions to remove dust, dirt, adhesives, and other foreign materials according to manufacturer's written instructions.

- B. Provide final protection and maintain conditions in a manner acceptable to the manufacturer and installer that insure operable partitions are without damage or deterioration at time of Substantial Completion.

3.3 ADJUSTING

- A. Adjust operable partitions to operate smoothly, easily, and quietly, free from binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Lubricate hardware and other moving parts.

3.4 EXAMINATION

- A. Examine flooring, structural support, and opening, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of operable partitions. Proceed with installation only after unsatisfactory conditions have been corrected.

3.5 DEMONSTRATION

- A. Demonstrate proper operation and maintenance procedures to Owner's representative.
- B. Provide Operation and Maintenance Manual to Owner's representative.

END OF SECTION 102226

SECTION 108000 TOILET ACCESSORIES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Work of this Section includes the following:
 - 1. Supply and install Toilet and Bath Accessory items as scheduled.
 - 2. Installation of Owner supplied Toilet and Bath accessories as scheduled.
- B. Toilet compartments and related accessories are specified in another Division 10 Section.

1.3 SUBMITTALS

- A. General: Submit the following according to Conditions of the Contract and Division 1 Specification Sections.
- B. Product data for each toilet accessory item specified, including construction details relative to materials, dimensions, gages, profiles, mounting method, specified options, and finishes.
- C. Schedule indicating types, quantities, sizes, and installation locations (by room) for each toilet accessory item to be provided for project.
- D. Setting drawings where cutouts are required in other work, including templates, substrate preparation instructions, and directions for preparing cutouts and installing anchorage devices.
- E. Maintenance instructions including replaceable parts and service recommendations.

1.4 QUALITY ASSURANCE

- A. Inserts and Anchorages: Furnish accessory manufacturers' standard inserts and anchoring devices that must be set in concrete or built into masonry. Coordinate delivery with other work to avoid delay.
- B. Single-Source Responsibility: Provide products of same manufacturer for each type of accessory unit and for units exposed to view in same areas, unless otherwise acceptable to Architect.

1.5 PROJECT CONDITIONS

- A. Coordination: Coordinate accessory locations, installation, and sequencing with other work to avoid interference with and ensure proper installation, operation, adjustment, cleaning, and servicing of toilet accessory items.

1.6 WARRANTY

- A. Warranty: Submit a written warranty executed by mirror manufacturer, agreeing to replace any mirrors that develop visible silver spoilage defects within warranty period.
- B. Warranty Period: 5 years from date of Substantial Completion.
- C. The warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering toilet accessories that may be incorporated in the Work include, but are not limited to, the following:
 - 1. Toilet Accessories
 - a. Bobrick Washroom Equipment, Inc.
 - b. American Specialties, Inc.
 - c. Bradley Corporation

2.2 MATERIALS, GENERAL

- A. Stainless Steel: AISI Type 302/304, with polished No. 4 finish, 0.034-inch (22-gage) minimum thickness.
- B. Sheet Steel: Cold-rolled, commercial quality ASTM A366, 0.04-inch (20-gage) minimum. Surface preparation and metal pretreatment as required for applied finish.
- C. Galvanized Steel Sheet: ASTM A 527, G60.
- D. Chromium Plating: Nickel and chromium electro-deposited on base metal, ASTM B 456, Type SC 2.
- E. Mirror Glass: Nominal 6.0-mm (0.23-inch) thick, conforming to ASTM C 1036, Type I, Class 1, Quality q2, and with silvering, electro-plated copper coating, and protective organic coating.

- F. Galvanized Steel mounting Devices: ASTM A 153, hot-dip galvanized after fabrication.
- G. Fasteners: Screws, bolts, and other devices of same material as accessory unit, or of galvanized steel where concealed.

2.3 TOILET ACCESSORY SCHEDULE

- A. A Toilet Accessory Schedule on the drawings lists the types of accessories required. The schedule includes model numbers of specific items as manufactured by Bobrick. The inclusion of these model numbers is to provide a guide as to the quality, function, size, and materials of the intended products, not to be exclusionary or proprietary. Equal products by other manufacturers specified are acceptable.

2.4 FABRICATION

- A. General: Only a maximum 1-1/2-inch-diameter, unobtrusive stamped manufacturer logo, as approved by Architect, is permitted on exposed face of toilet or bath accessory units. On either interior surface not exposed to view or back surface, provide additional identification by either a printed, waterproof label or a stamped nameplate, indicating manufacturer's name and product model number.
- B. Surface-Mounted Toilet Accessories, General: Except where otherwise indicated, fabricate units with tight seams and joints, exposed edges rolled. Hang doors or access panels with continuous stainless steel piano hinge. Provide concealed anchorage wherever possible.
- C. Framed Mirror Units, General: Fabricate frames for glass mirror units to accommodate wood, felt, plastic, or other glass edge protection material. Provide mirror backing and support system that will permit rigid, tamperproof glass installation and prevent moisture accumulation.
- D. Mirror Unit Hangers: Provide system for mounting mirror units that will permit rigid, tamperproof, and theft proof installation, as follows:
 - 1. One-piece, galvanized-steel, wall-hanger device with spring-action locking mechanism to hold mirror unit in position with no exposed screws or bolts.

PART 3 - EXECUTION

3.1 INSTALLATION

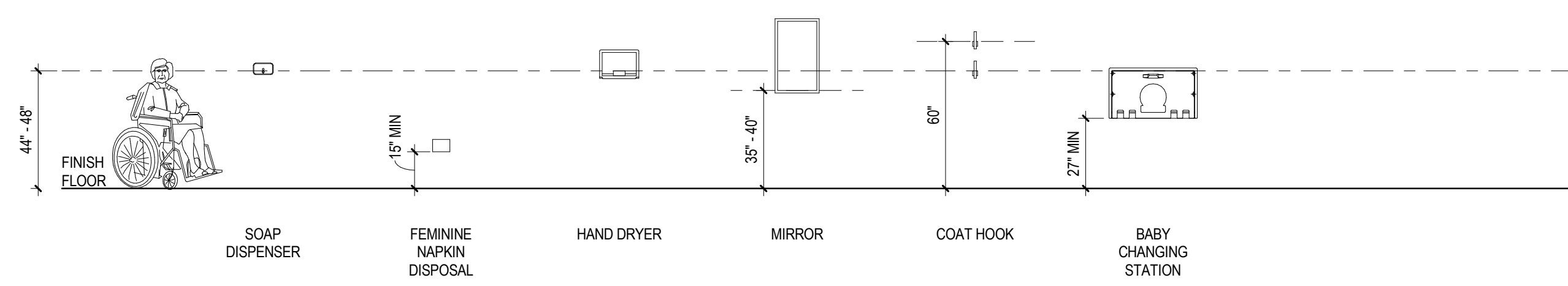
- A. Install toilet accessory units according to manufacturers' instructions, using fasteners appropriate to substrate as recommended by unit manufacturer. Install units plumb and level, firmly anchored in locations and at heights indicated.

- B. Secure mirrors to walls in concealed, tamperproof manner with special hangers, toggle bolts, or screws. Set units plumb, level, and square at locations indicated, according to manufacturer's instructions for type of substrate involved.
- C. Install grab bars to withstand a downward load of at least 250 lbf, complying with ASTM F 446.

3.2 ADJUSTING AND CLEANING

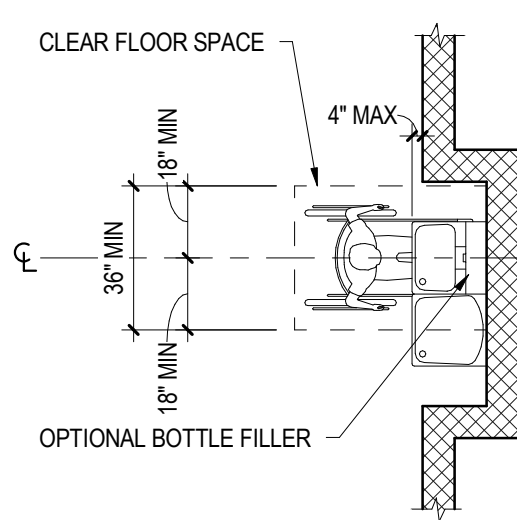
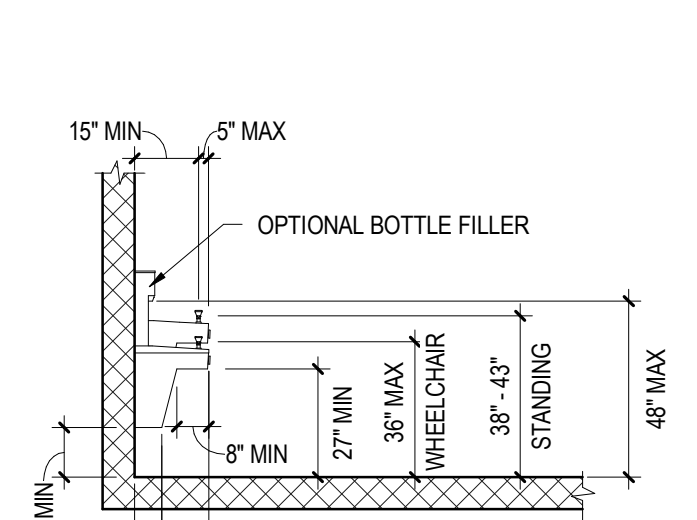
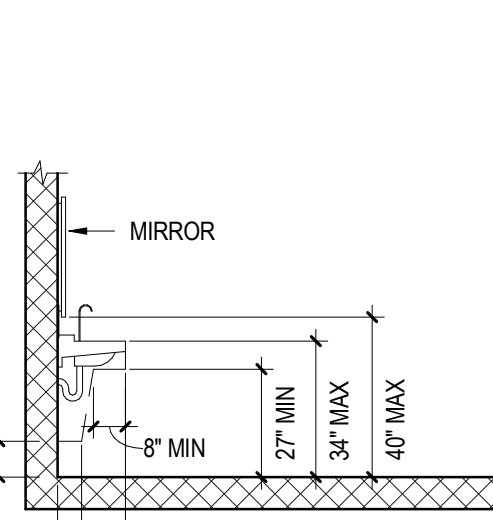
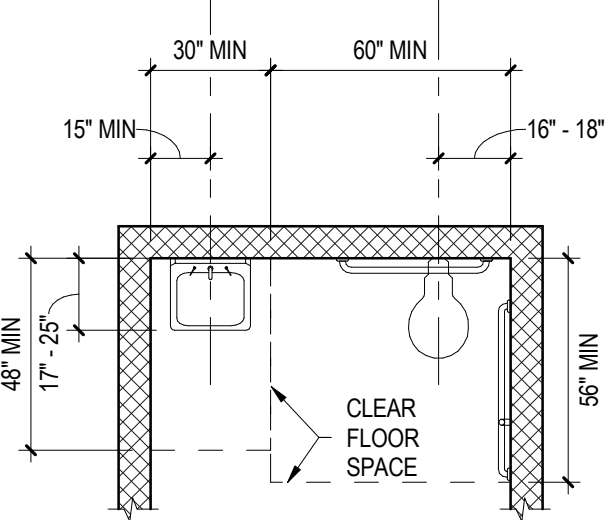
- A. Adjust toilet accessories for proper operation and verify that mechanisms function smoothly. Replace damaged or defective items.
- B. Clean and polish all exposed surfaces strictly according to manufacturer's recommendations after removing temporary labels and protective coatings.

END OF SECTION 108000



NOTE: OTHER FIXTURES NOT ALLOWED WITHIN CLEAR FLOOR SPACE

NOTE: THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES OR SINKS. DASHED LINE INDICATED DIMENSIONAL CLEARANCE OF OPTIONAL UNDER FIXTURE ENCLOSURE

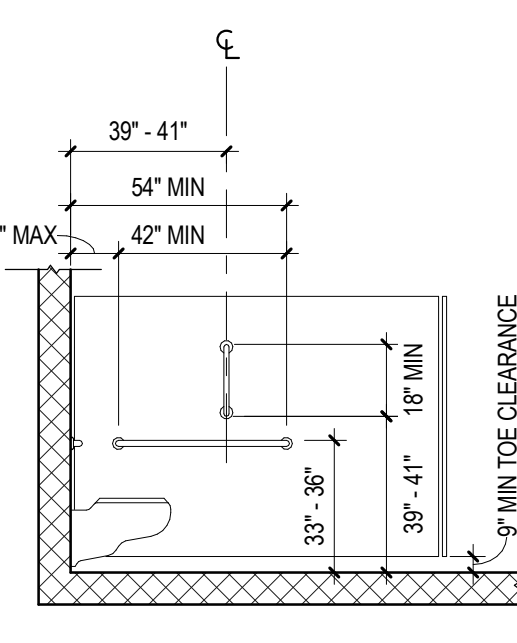
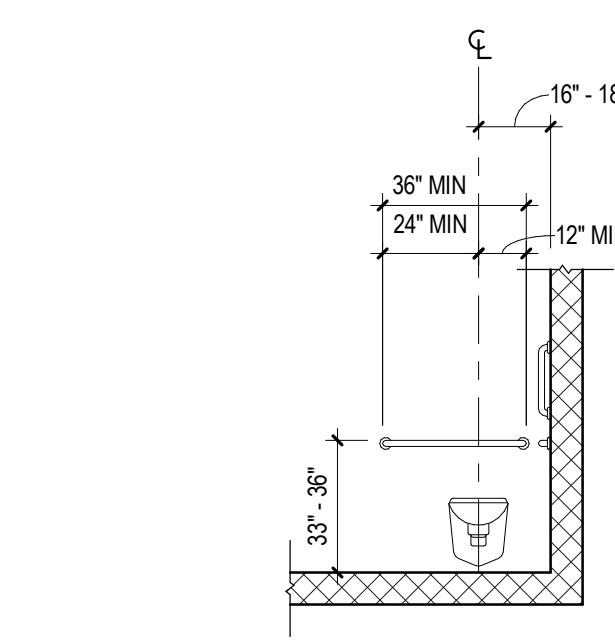
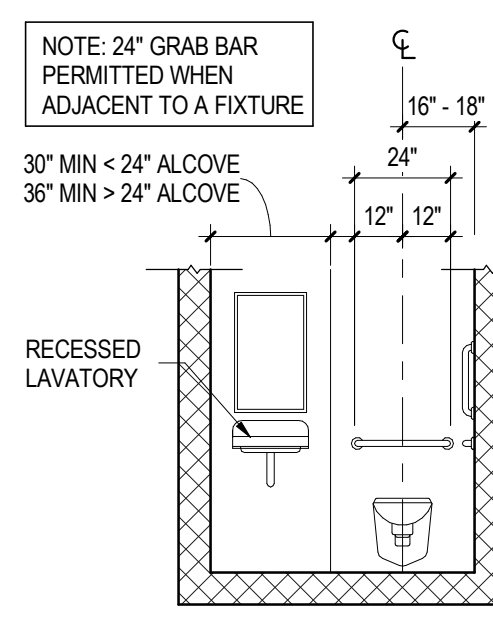
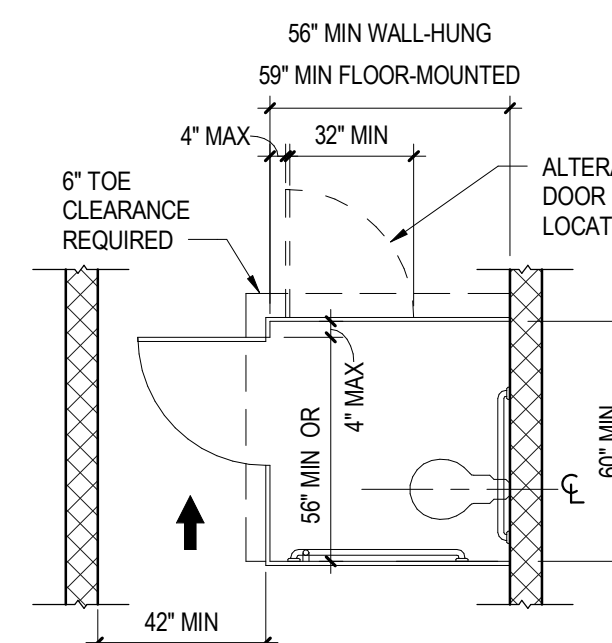


CLEAR FLOOR AT WALL HUNG WATER CLOSET AND LAVATORY

LAVATORY HEIGHT AND LEG CLEARANCE

DRINKING FOUNTAIN HEIGHT AND LEG CLEARANCE

CLEAR FLOOR AT DRINKING FOUNTAIN

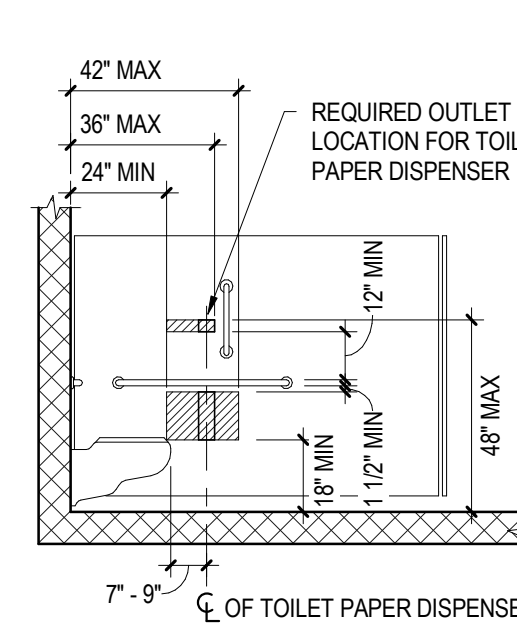
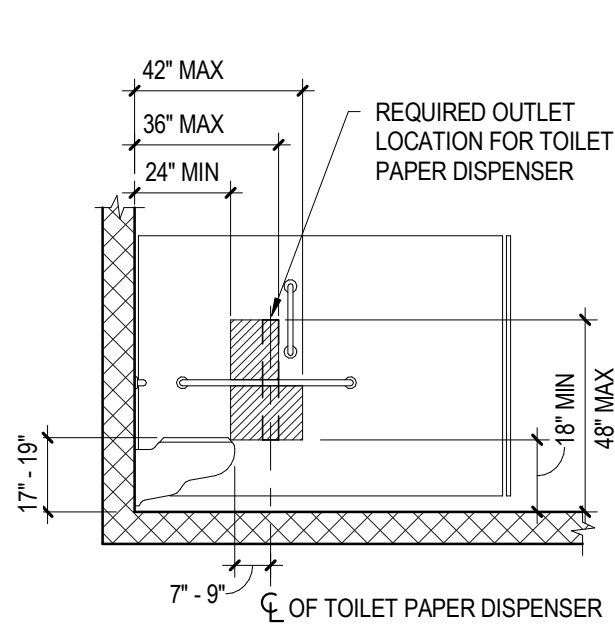
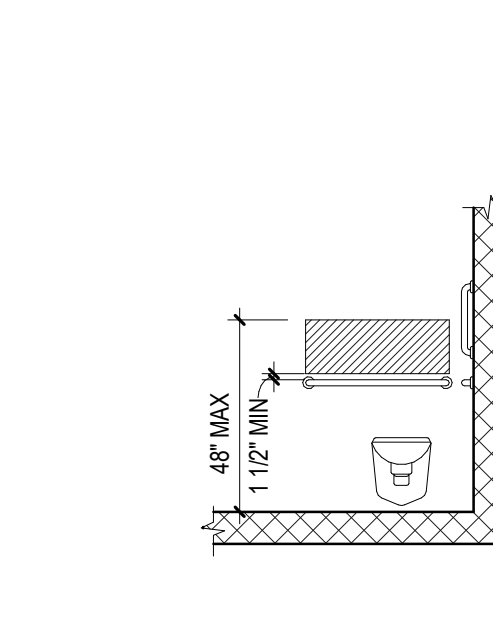
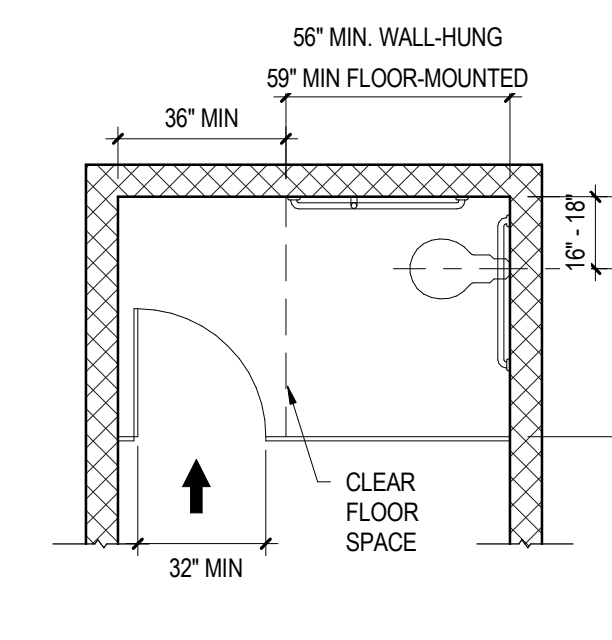


PLAN FOR WATER CLOSET

REAR WALL FOR WATER CLOSET ADJACENT TO RECESSED LAVATORY

REAR WALL FOR WATER CLOSET

SIDE WALL FOR WATER CLOSET

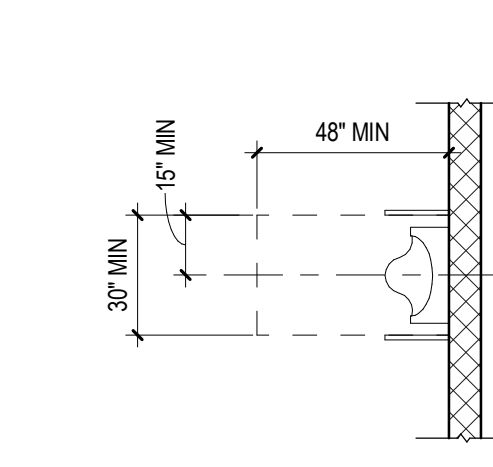
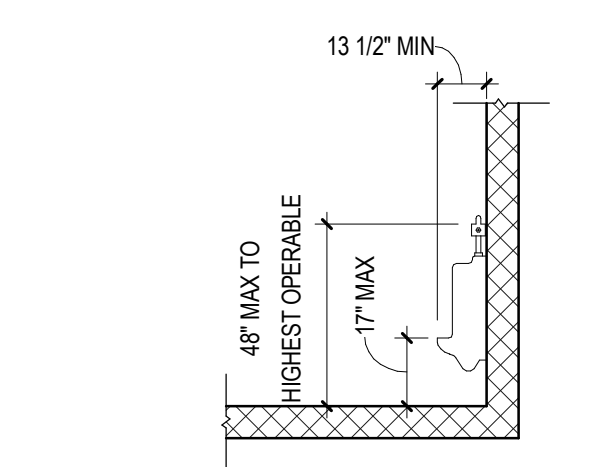


ALTERNATE PLAN FOR WATER CLOSET

REAR WALL RECESSED DISPENSERS

SIDE WALL RECESSED DISPENSERS

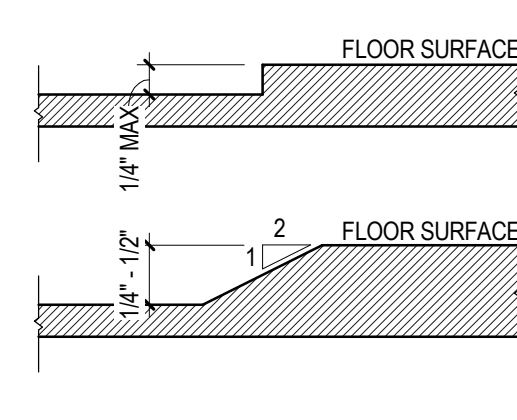
SIDE WALL PROTRUDING DISPENSERS



WALL HUNG URINAL CLEARANCES

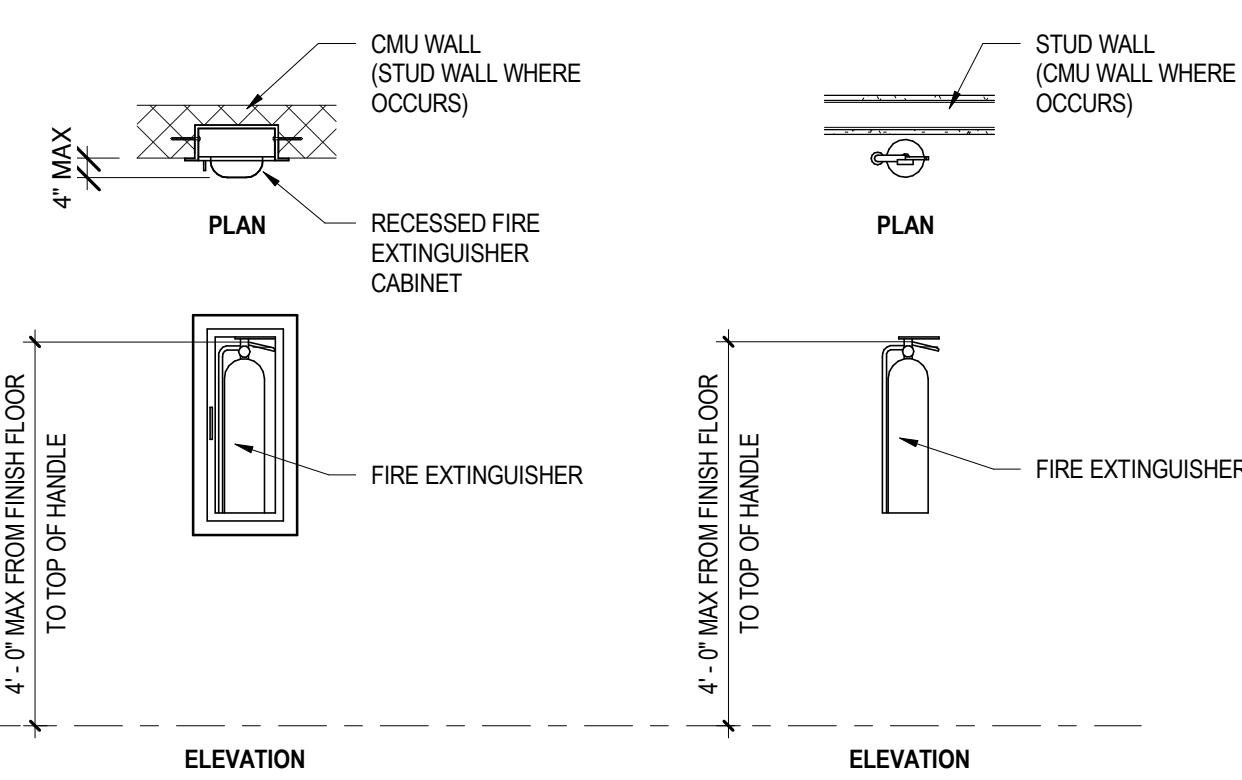
WALL HUNG URINAL CLEARANCES

NOTE: ALL FLOOR SURFACES SHALL BE STABLE, FIRM, AND SLIP RESISTANT

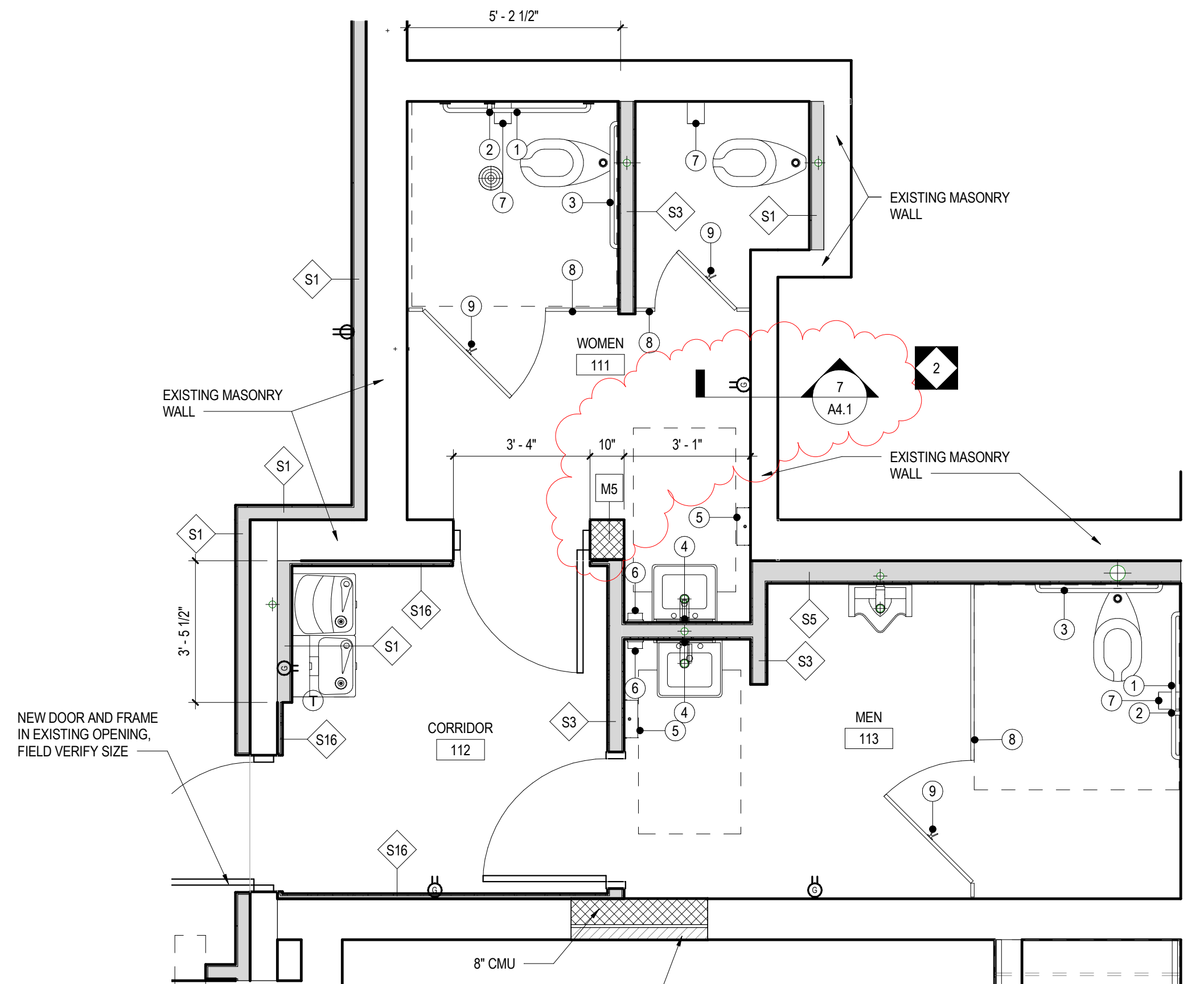


CHANGES IN FLOOR LEVEL

4 ACCESSIBILITY STANDARDS 1/4" = 1'-0"

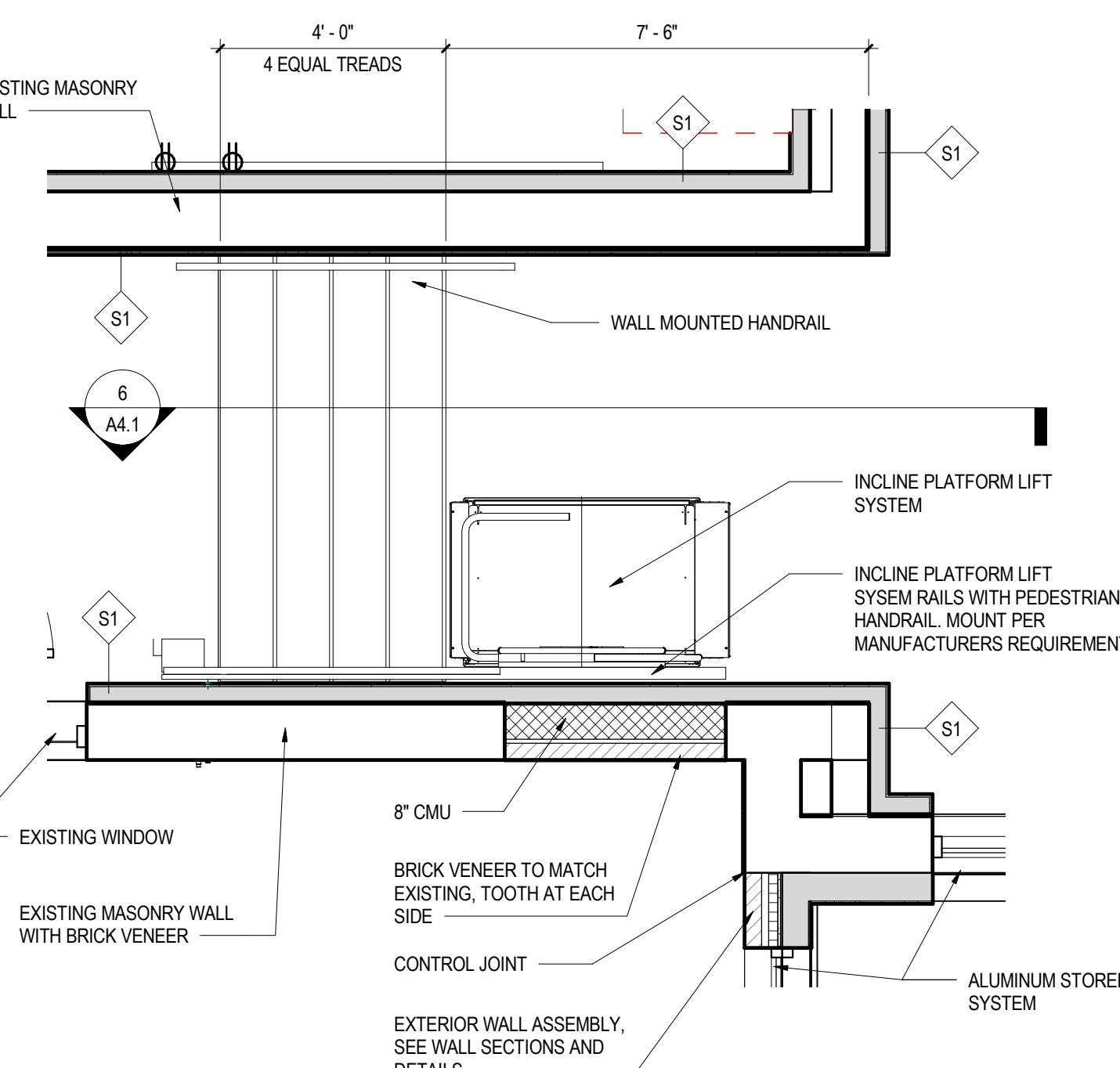


5 FIRE EXTINGUISHER DETAILS 1/2" = 1'-0"

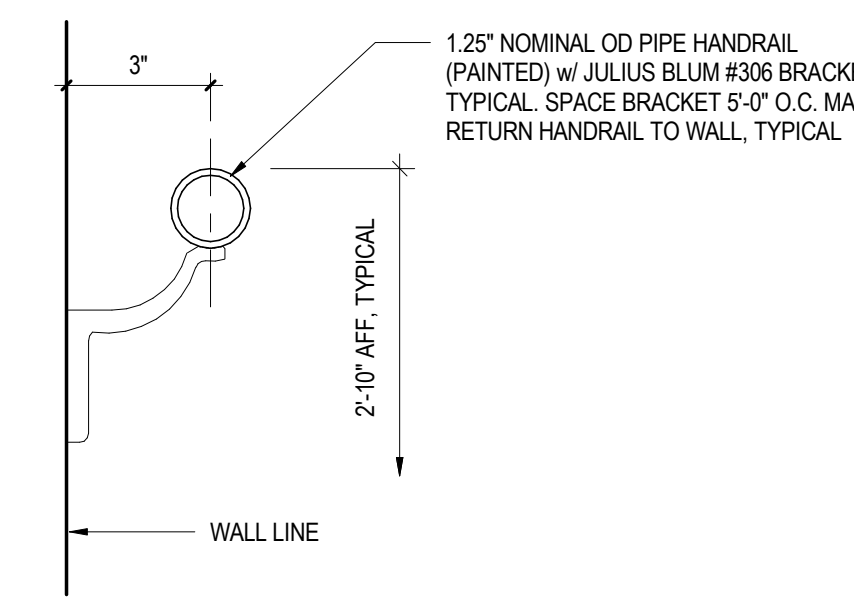


1 ENLARGED TOILET ROOM PLAN 3/8" = 1'-0"

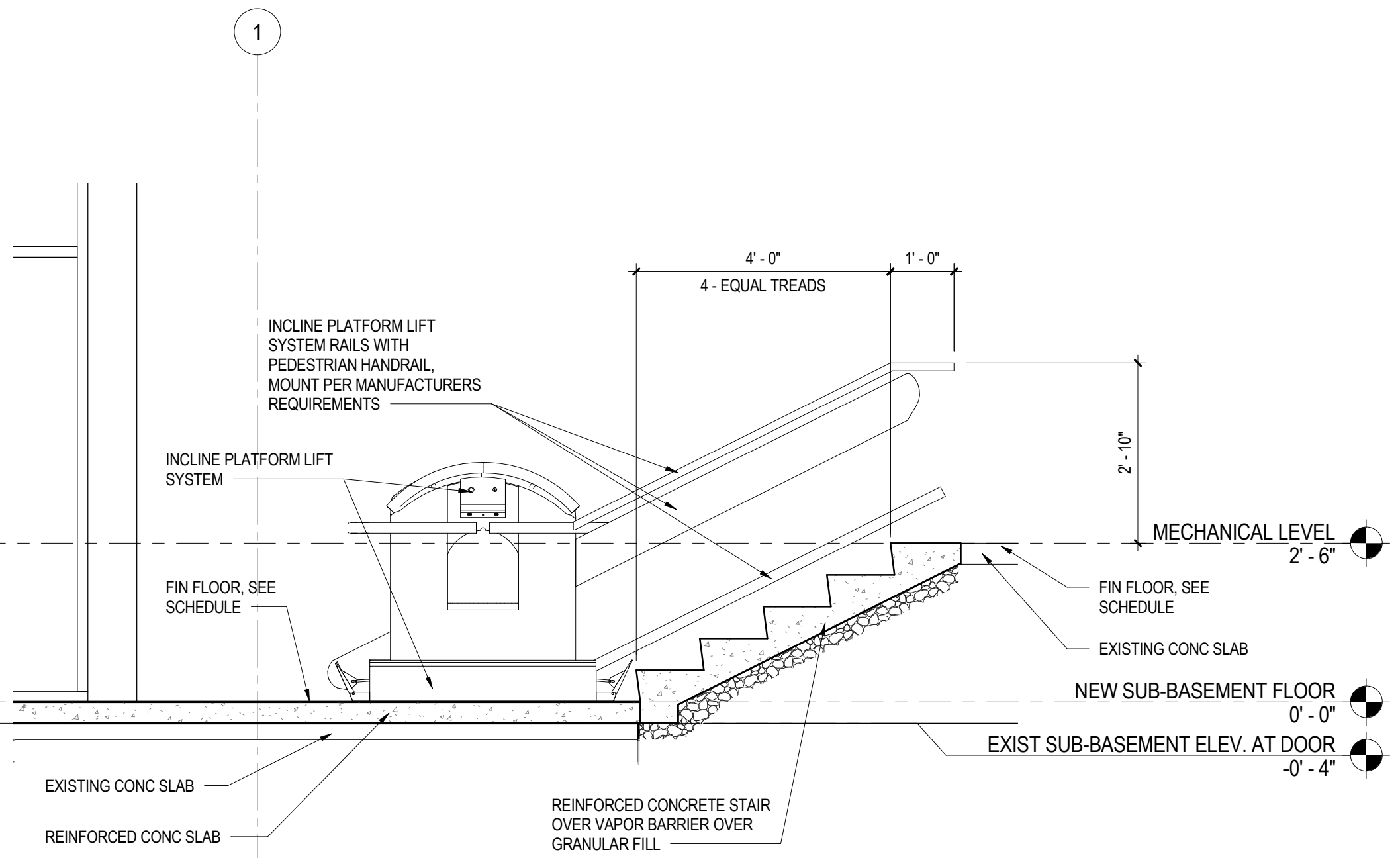
No.	DESCRIPTION	MOUNTING	MANUFACTURER	MODEL
1	42" GRAB BAR (HORIZONTAL)	33" MIN - 36" MAX AFF TO TOP OF GRIPPING SURFACE	BOBRICK	B-5806 x 42
2	18" GRAB BAR (VERTICAL)	39" MIN - 41" MAX AFF TO BOTTOM OF GRAB BAR	BOBRICK	B-5806 x 18
3	36" GRAB BAR (HORIZONTAL)	33" MIN - 36" MAX AFF TO TOP OF GRIPPING SURFACE	BOBRICK	B-5806 x 36
4	MIRROR 18" x 30" w/ SS FRAME	40" AFF TO BOTTOM EDGE OF REFLECTING SURFACE	BOBRICK	B-165 (1830)
5	SURFACE MOUNTED PAPER TOWEL DISPENSER	48" MAX TO OUTLET OF DISPENSER	BOBRICK	B-2960
6	SURFACE MOUNTED SOAP DISPENSER	PUSH BUTTON @ 44" MAX AFF	BOBRICK	B-2111
7	TOILET PARTITION w/ COAT HOOK & BUMPER	AS SPECIFIED	AS SPECIFIED	-
8	SURFACE MTD. S.S. COAT HOOK	48" AFF TO TOP	BOBRICK	B-6827



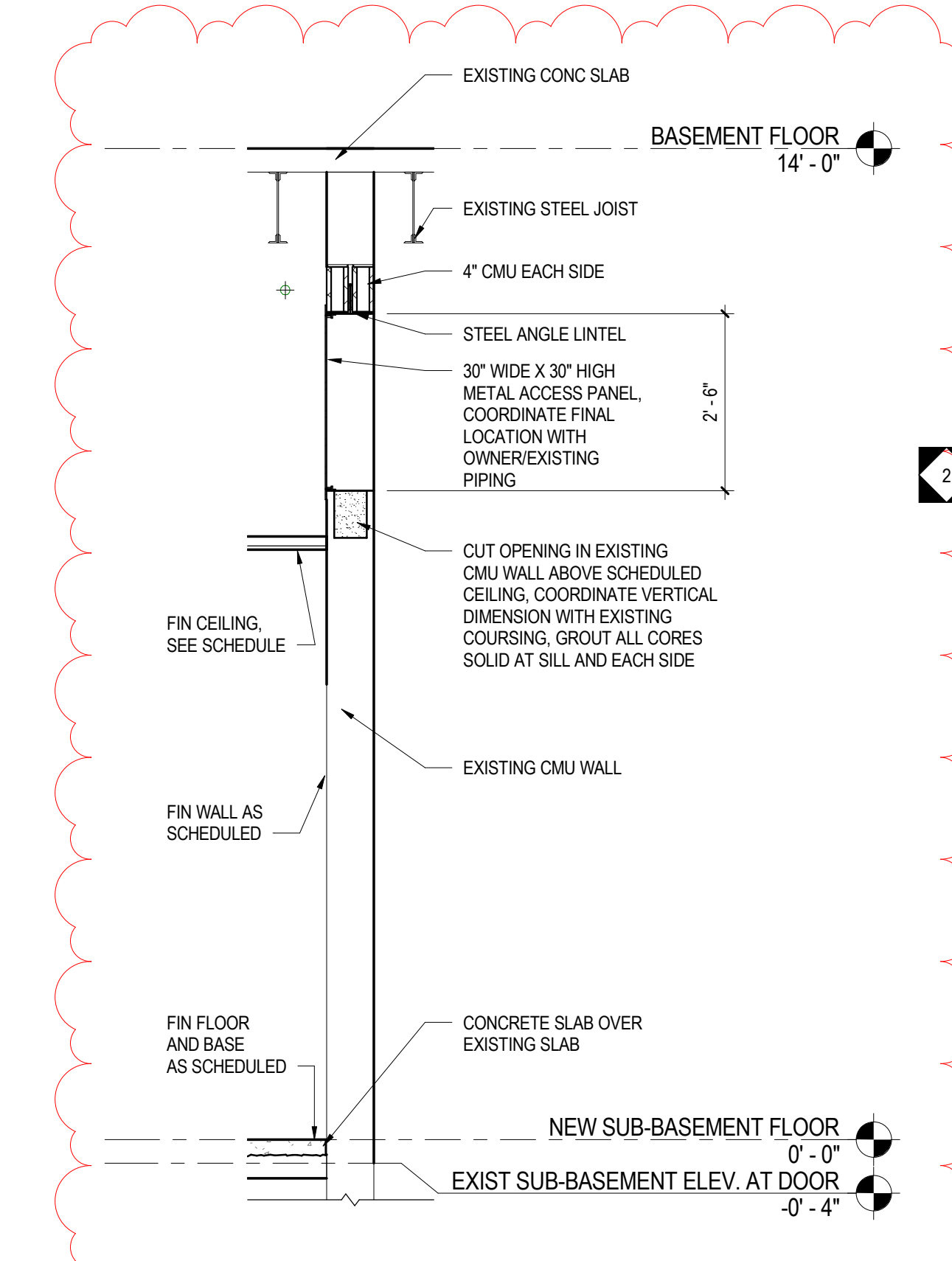
2 ENLARGED STAIR PLAN 3/8" = 1'-0"



3 INTERIOR WALL MOUNTED HANDRAIL DETAIL 3/8" = 1'-0"



6 STAIR SECTION 1/2" = 1'-0"



7 SECTION AT CRAWL SPACE ACCESS 1/2" = 1'-0"

- GENERAL NOTES:**
- ACCESSIBLE FIXTURES ARE INDICATED WITH THE REQUIRED CLEAR FLOOR SPACE CLEARANCES FOR ALL ACCESSIBLE ROUTES & MANEUVERING CLEARANCES.
 - PLUMBING FIXTURE ROUGH-IN DIMENSIONS & TOILET PARTITION LAYOUT DIMENSIONS ARE FROM THE WALL FINISH MATERIAL.
 - PROVIDE WOOD BLOCKING IN STUD WALLS FOR ALL TOILET ACCESSORIES.
 - TOILET PARTITION DIMENSIONS ARE TO THE PANEL CENTERLINE UNLESS NOTED OTHERWISE. MINIMUM CLEAR DIMENSIONS MUST BE PROVIDED WHERE NOTED.
 - COORDINATE ALL WALL FINISHES WITH THE ROOM FINISH SCHEDULE.
 - CONTRACTOR TO CONFIRM WITH THE OWNER'S REPRESENTATIVE THE LOCATION OF ALL SURFACE-MOUNTED TOILET ROOM ACCESSORIES PRIOR TO INSTALLATION.
 - URINAL PARTITIONS SHALL BEGIN AT A HEIGHT NO MORE THAN 12" FROM AND EXTEND NOT LESS THAN 60" ABOVE THE FINISHED FLOOR SURFACE. URINAL PARTITIONS SHALL EXTEND FROM THE WALL SURFACE AT EACH SIDE OF THE URINAL A MINIMUM OF 18".
 - ACCESSIBLE LOCKERS ARE INDICATED AS " " AT DOUBLE TIER LOCKERS. ONLY THE BOTTOM TIER IS REQUIRED TO BE ACCESSIBLE. FOR FOUR TIER LOCKERS, ONLY THE BOTTOM TWO TIERS ARE REQUIRED TO BE ACCESSIBLE.

REVISIONS

NO.	DATE	NAME	DESCRIPTION OF CHANGES
1	MM/DD/YY		
2	9/21/20		Addendum 2

CRABTREE ROHRBAUGH & ASSOCIATES - ARCHITECTS
 MECHANICSBURG, PENNSYLVANIA
 TOWSON, MARYLAND
 WHITE SULPHUR SPRINGS, WEST VIRGINIA
 www.cra-architects.com

**ADDITION AND RENOVATIONS
 MULTIPURPOSE ROOM
 FLUVANNA COUNTY
 132 MAIN STREET
 PALMYRA, VA 22963**

**250 WEST MAIN STREET, SUITE 200
 CHARLOTTEVILLE VA 22902
 434-975-7262**

CR

LARGE SCALE PLANS, SECTIONS AND DETAILS

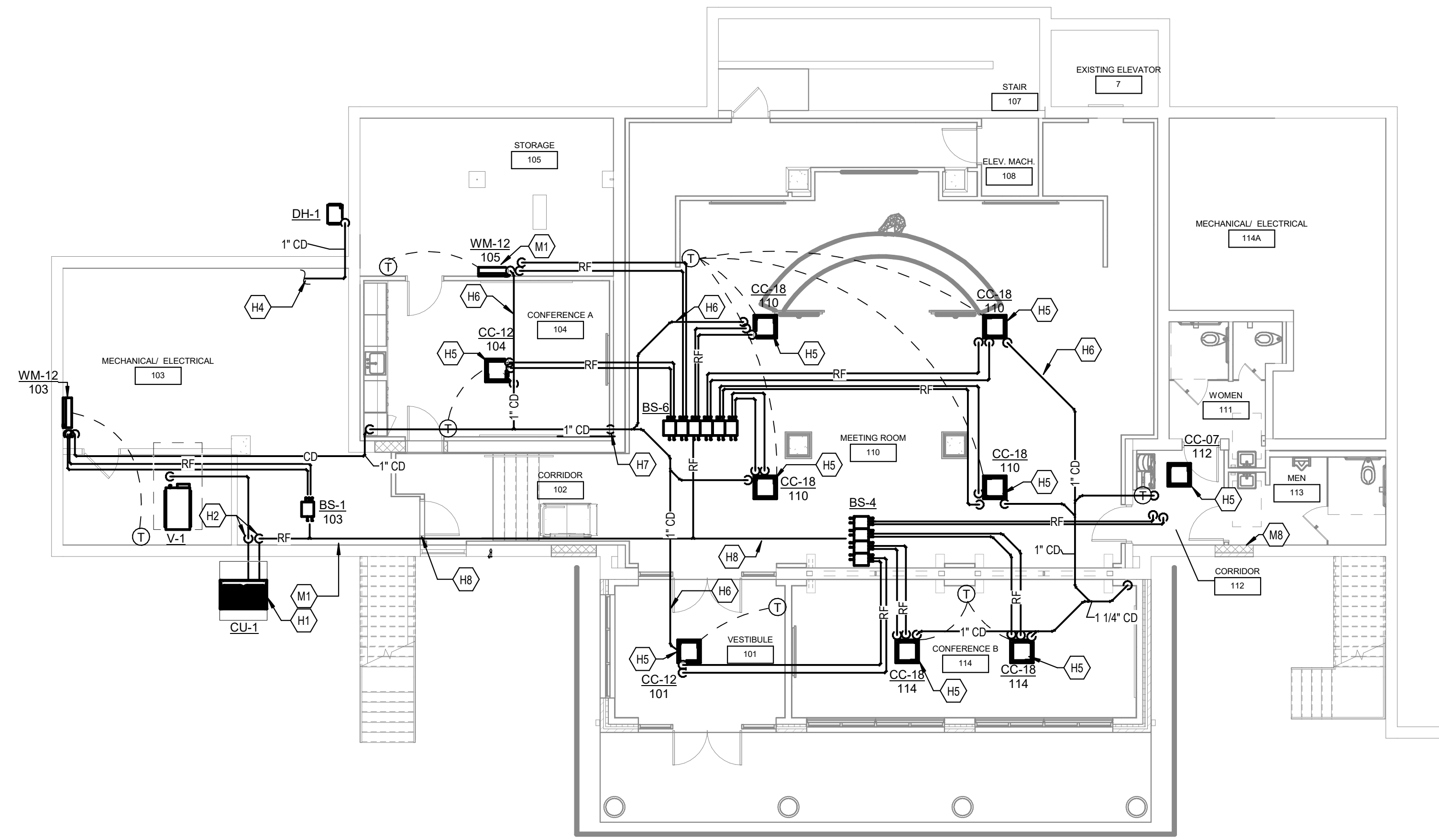
PROJECT 3430

As indicated

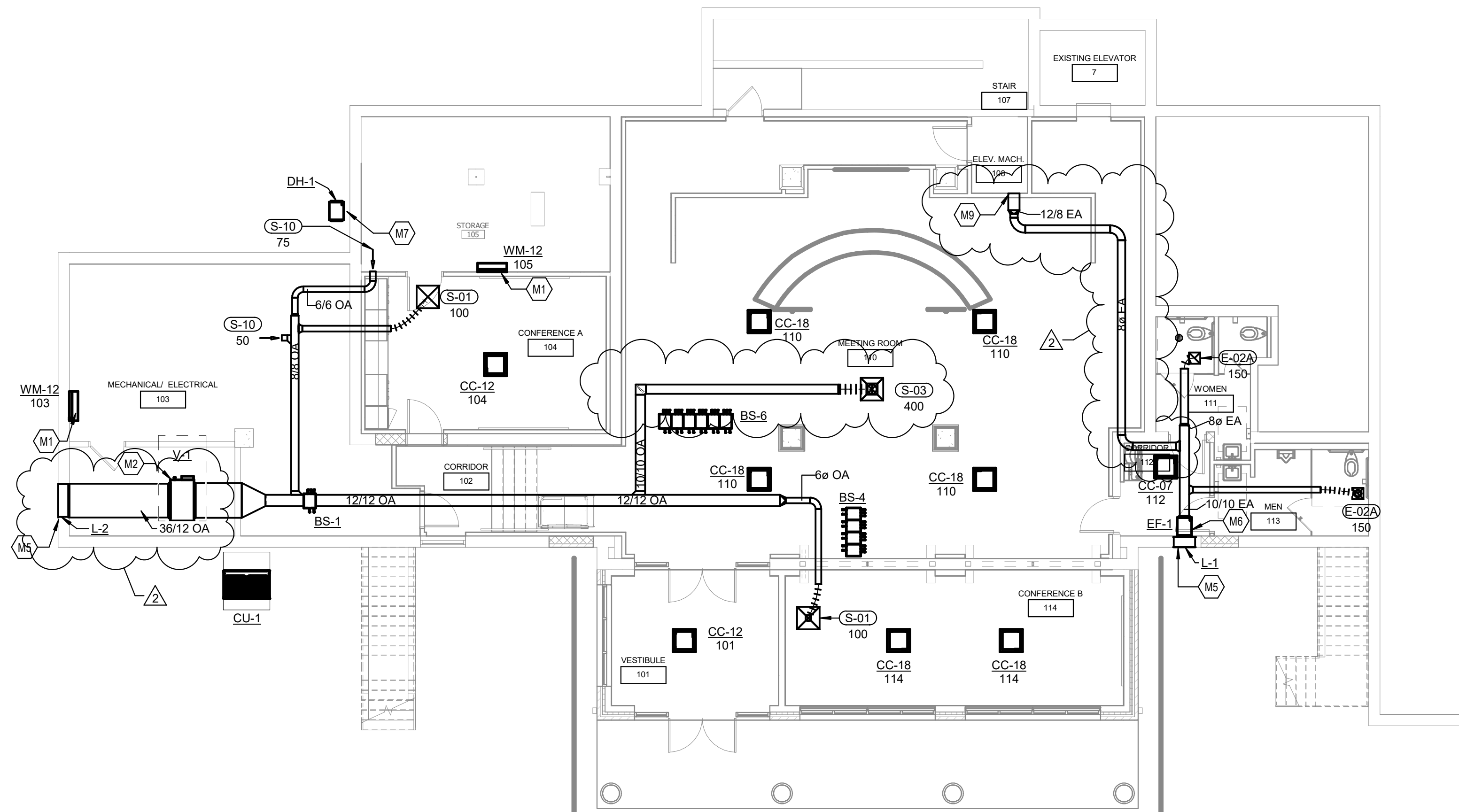
CR PROJECT No. 3430

AUGUST 28, 2020

A4.1



1 FIRST FLOOR HYDRONICS NEW WORK
1/8" = 1'-0"



2 FIRST FLOOR AIR DISTRIBUTION NEW WORK
1/8" = 1'-0"

TAGGED NOTES

- H1 MOUNT NEW VRF CONDENSING UNIT ON EXISTING CONCRETE PAD. EXPAND EXISTING CONCRETE PAD AS REQUIRED TO FIT NEW CONDENSING UNIT. PIPING TO RUN THROUGH EXISTING PENETRATION IN WALL. SEAL AIRTIGHT AROUND PIPING. MOUNT DISCONNECT ON WALL.
- H2 REFRIGERANT PIPING TO BE ROUTED UP WALL TO 10'-6" TO BE ABOVE NEW CEILING.
- H4 ROUTE 1" CONDENSATE PIPING THRU MECHANICAL ROOM WALL AND DRAIN TO FLOOR DRAIN. SEAL WALL PENETRATION AIR TIGHT.
- H5 MOUNT CASSETTE IN NEW CEILING. REFER TO VRF CASSETTE PIPING SCHEMATIC FOR DETAILS.
- H6 ROUTE CONDENSATE PIPING IN BETWEEN JOISTS AS HIGH AS POSSIBLE.
- H7 CONDENSATE PIPING TO CONNECT TO EXISTING PIPE. DROP IN CORNER.
- H8 VRF MANUFACTURER TO SPECIFY PIPE SIZE. NOT ALL REFRIGERANT PIPES ARE SHOWN. REFER TO VRF MANUFACTURERS INSTALL DRAWINGS.
- M1 MOUNT NEW WALL MOUNTED UNIT 8'-6" ABOVE FINISHED FLOOR.
- M2 NEW DOAS-1 UNIT TO BE MOUNTED FROM THE STRUCTURE ABOVE.
- M5 NEW LOUVER TO BE INSTALLED IN EXTERIOR WALL. REFER TO LOUVER SCHEDULE.
- M6 EXHAUST FAN TO BE MOUNTED TIGHT TO LOUVER.
- M7 PROVIDE NEW DEHUMIDIFIER IN CRAWL SPACE. MOUNT DEHUMIDIFIER TO STRUCTURE. PIPE CONDENSATE OUTSIDE. REFER TO DEHUMIDIFIER SCHEDULE.
- M8 DEMOLISH EXISTING ABANDONED DUAL TEMPERATURE CONNECTION FROM DEMOLISHED CORNELL FAN COIL UNIT. PATCH AND PAINT WALL PER ARCHITECTURAL REQUIREMENTS.
- M9 CONNECT NEW EXHAUST AIR DUCTWORK TO EXISTING EXHAUST GRILLE. PROVIDE TRANSITION AS REQUIRED.

R,G,D RUNOUT SCHEDULE

MARK	DUCT BRANCH SIZE
E-02A	8"Ø
S-01	6"Ø
S-03	10"Ø
S-10	6"X6"

REVISIONS

NO.	DATE	NAME	DESCRIPTION OF CHANGES
1	9/14/20		Addendum 1
2	9/21/20		Addendum 2

CRABTREE ROHRBAUGH & ASSOCIATES - ARCHITECTS
 250 WEST MAIN STREET, SUITE 200
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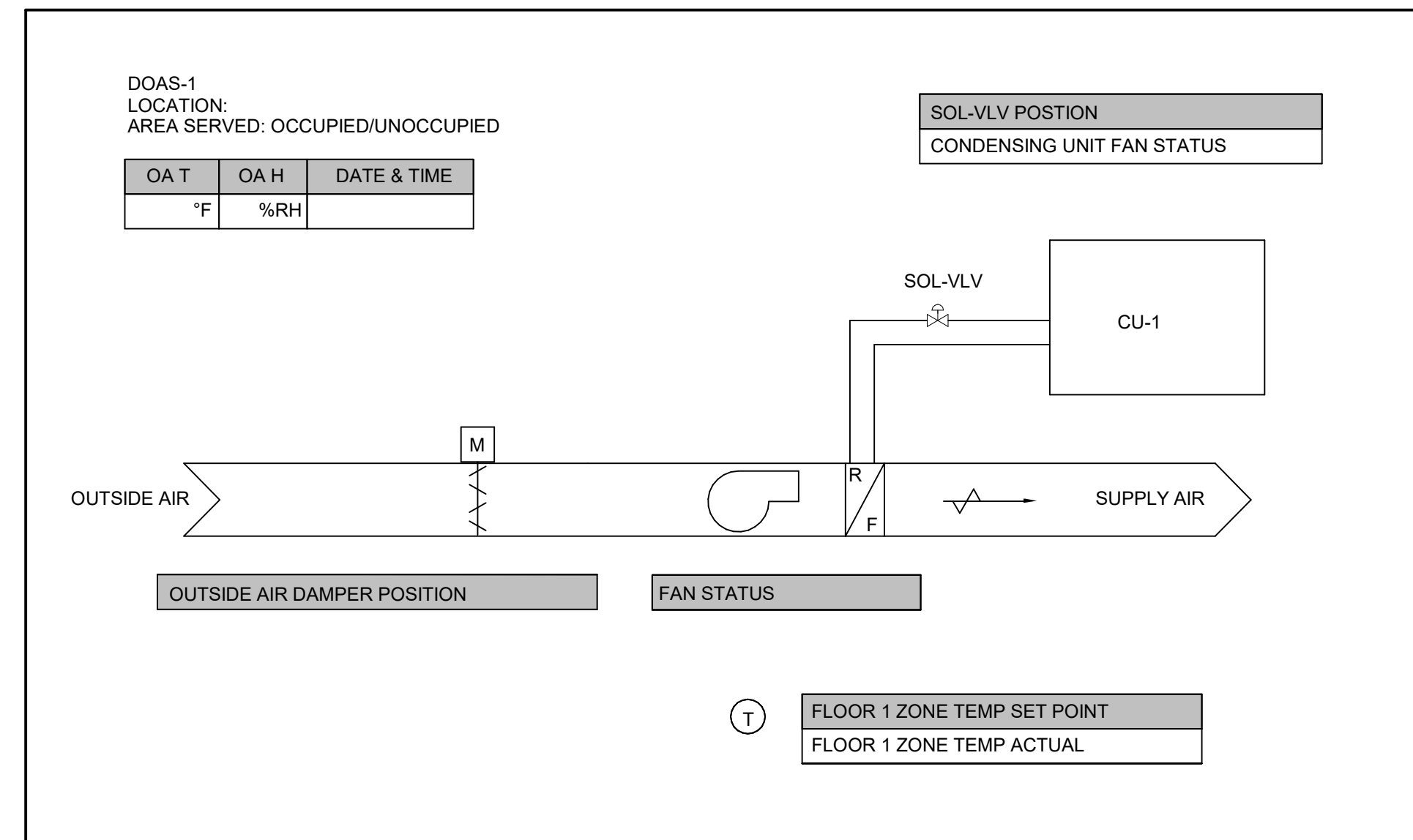
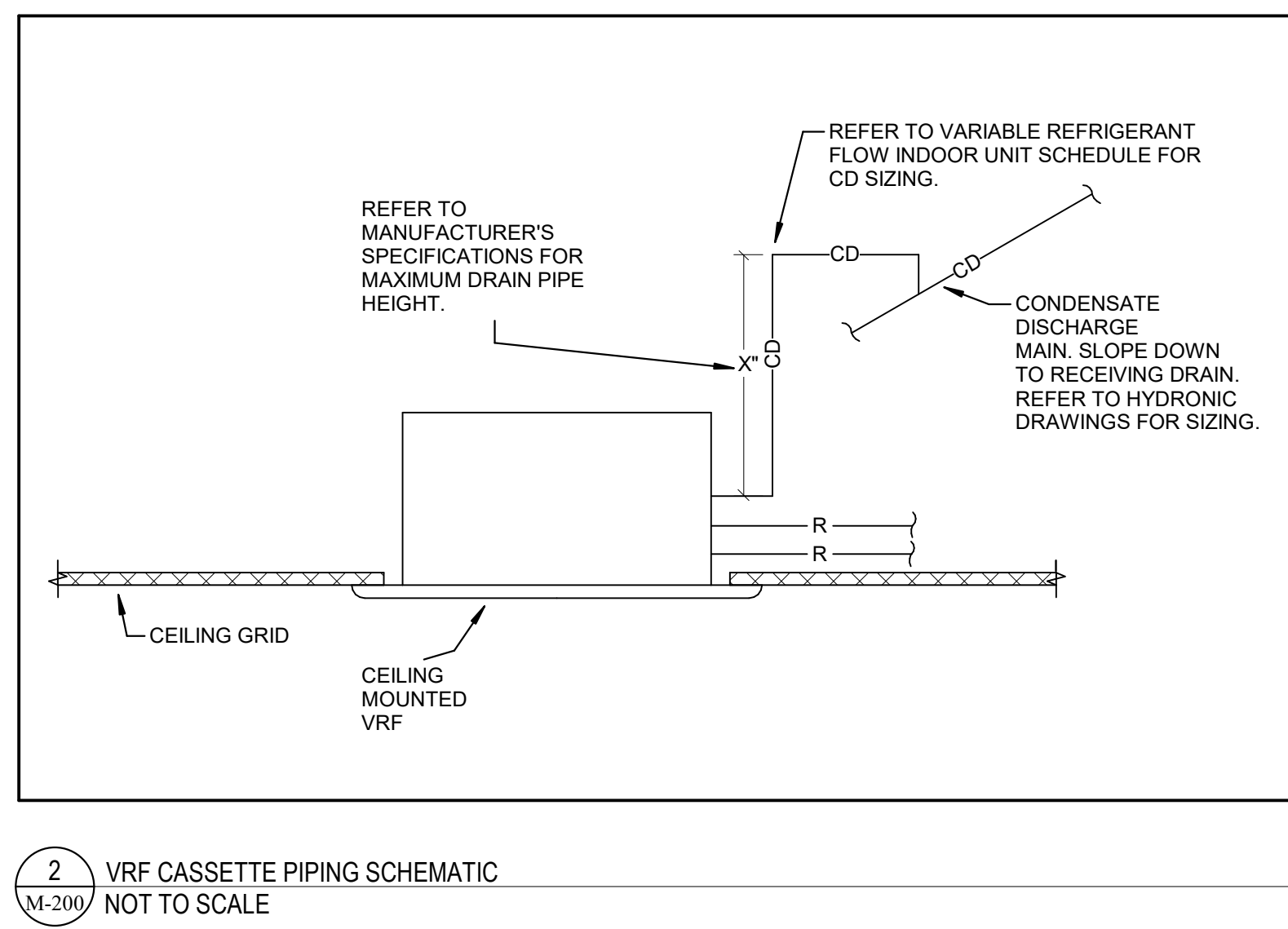
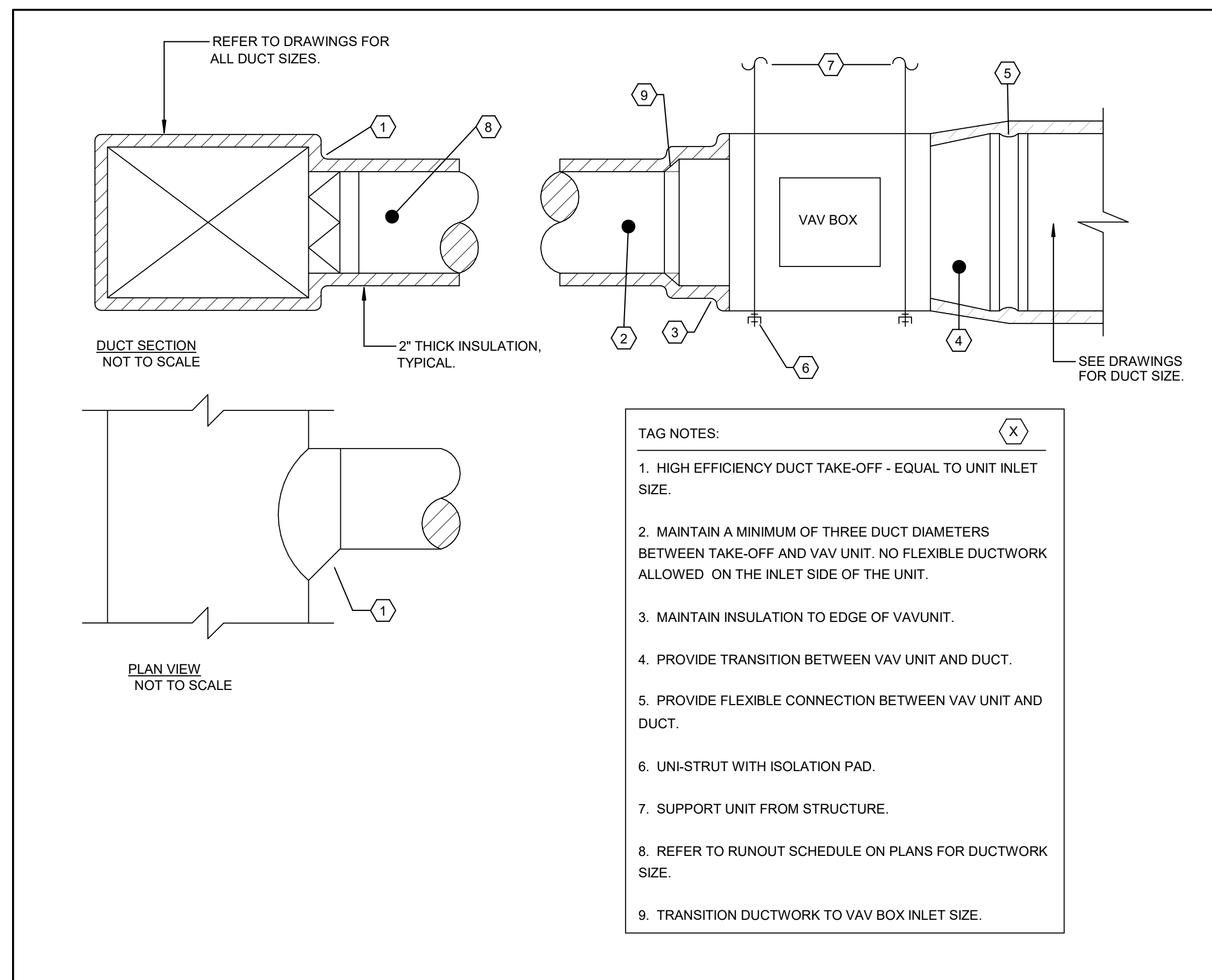
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ADDITION AND RENOVATIONS
 MULTIPURPOSE ROOM
 FLUVANNA COUNTY
 132 MAIN STREET
 PALMYRA, VA 22963

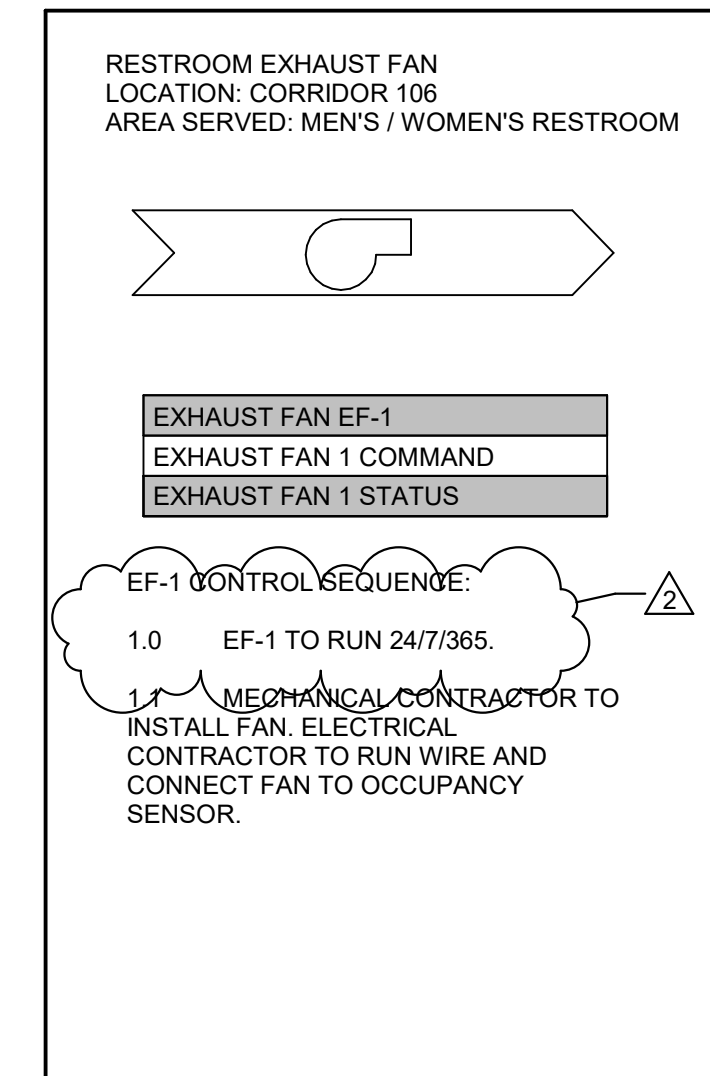


MECHANICAL NEW WORK PLAN
 PLOT SCALE: 1/8" = 1'-0"
 FILENAME:
 DATE: AUGUST 28, 2020

PROJECT
 Fluvanna Co.
M-100



- DOAS-1
 - These units shall be provided with factory controls. The DOAS-1 unit shall run when based on occupancy, schedule shall be fully adjustable. The DOAS-1 unit shall provide room neutral outside air when the building is occupied. The unit will shall activate electric auxiliary heating when outside air temperature is below 40 deg F.



1 VAV BRANCH DUCT CONNECTION DETAIL NOT TO SCALE

INDOOR MECHANICAL DEHUMIDIFICATION UNITS										
MARK	MODEL	MANUFACTURER	CAPACITY	VOLTAGE	PHASE	MCA	MOCP	COMMENTS		
DH-1	QUEST 70	QUEST	70 PT/DAY	120 V	1	12 A	15	PROVIDE NEC COMPLIANT MEANS OF DISCONNECTION. REMOTE HUMIDITY SENSOR LOCATION TO BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.		

VENTILATION UNIT SCHEDULE																							
MARK	MANUFACTURER	MODEL #	SERVICE	LOCATION	PHYSICAL DATA				TOTAL SA CFM	MIN. OA CFM	SUPPLY FAN		COOLING CAPACITY TOTAL (MBH)	HEATING CAPACITY (MBH)	SUPPLY FAN			ELECTRICAL			REMARKS		
					WIDTH (IN.)	LENGTH (IN.)	HEIGHT (IN.)	WEIGHT (LBS)			FAN MOTOR TYPE	# OF FANS			FAN RPM	E.S.P. ("WC)	VOLT.	PH.	FLA	MCA		MOCP	
V-1	DAIKIN	FXM8	MEETING ROOM	EXTERIOR	45	30	19	190	635	635	ECM DIRECT	1	1750	0.88	48.0	30.0	380.0	208 V	3	2 A	2 A	15	ALL

VENTILATION UNIT SCHEDULE - AUXILIARY ELECTRIC HEATER SCHEDULE									
MARK	CFM	HEATING CAPACITY ELECTRIC	EAT ELECTRIC	LAT ELECTRIC	INPUT (KW)	ELECTRICAL			REMARKS
						VOLTAGE	PHASE	FLA	
V-1	700	61434.0	15	70	18 W	208 V	3	50 A	ALL

- REMARKS:
- CONTRACTOR SHALL COORDINATE TO ENSURE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES ARE MAINTAINED.
 - PROVIDE GFI OUTLET.
 - PROVIDE SINGLE POINT CONNECTION.
 - PROVIDE INTEGRAL DISCONNECT. FIELD-INSTALLED DISCONNECTS ARE ACCEPTABLE, AND SHALL BE PROVIDED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.
 - PROVIDE WITH OPTIONAL AIR FILTER. STATIC SHALL BE MODELED AT HALF LIFE OF FILTER.

VARIABLE REFRIGERANT FLOW INDOOR UNIT SCHEDULE																		
MARK	MANUFACTURER	MODEL #	TYPE	MINIMUM NOMINAL COOLING (MBH)	SENSIBLE COOLING (MBH)	MINIMUM NOMINAL HEATING (MBH)	AIRFLOW (CFM)	SOUND (dB)	CD PIPE SIZE	DIMENSIONS (IN.)			WEIGHT (LBS)	ELECTRICAL				REMARKS
										LENGTH	WIDTH	HEIGHT		VOLTAGE	PHASE	MCA	MOCP	
CC-07	DAIKIN	FXZQ7TAVJU	CONCEALED CEILING CASSETTE UNIT	7.5	5.5	8.5	300	30	3/4	24	24	11	34	208 V	1	1 A	15	ALL
CC-12	DAIKIN	FXZQ12TAVJU	CONCEALED CEILING CASSETTE UNIT	12.0	7.8	13.5	350	30	3/4	24	24	11	36	208 V	1	1 A	15	ALL
CC-18	DAIKIN	FXZQ18TAVJU	CONCEALED CEILING CASSETTE UNIT	18.0	13.0	20.0	500	32	3/4	24	24	11	41	208 V	1	1 A	15	ALL
WM-12	DAIKIN	FXAQ12PVJU	WALL MOUNTED UNIT	12.0	8.9	13.5	290	38	1	31	12	10	26	208 V	1	1 A	15	ALL

- REMARKS:
- COOLING PERFORMANCE IS FOR 95 DEG. F. OUTDOOR, 70 DEG. F. DB / 61 DEG. F. WB INDOOR.
 - HEATING PERFORMANCE IS FOR 6 DEG. F. OUTDOOR, 68 DEG. F. INDOOR.
 - CONTRACTOR SHALL COORDINATE TO ENSURE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES ARE MAINTAINED.
 - TEMPERATURE SENSOR FOR UNIT TO BE MOUNTED IN THE SPACE.
 - PROVIDE SINGLE POINT CONNECTION.
 - PROVIDE INTEGRAL DISCONNECT. FIELD-INSTALLED DISCONNECTS ARE ACCEPTABLE, AND SHALL BE PROVIDED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.
 - PROVIDE CONDENSATE PUMP.

VARIABLE REFRIGERANT FLOW OUTDOOR UNIT SCHEDULE																	
MARK	MANUFACTURER	MODEL #	TYPE	TOTAL COOLING CAPACITY (MBH)	MINIMUM NOMINAL HEATING (MBH)	SOUND (dB)	NOMINAL SIZE (IN.)			WEIGHT (LBS)	VOLTAGE	PHASE	MCA	MOCP	REMARKS		
							LENGTH	WIDTH	HEIGHT								
CU-1	DAIKIN	REYQ192TTJU	VRV-UV-HEAT RECOVERY	153.0	106.0	65	31	86	67	1210	208 V	3	43 A	50	31 A	35	ALL

- REMARKS:
- COOLING PERFORMANCE IS FOR 95 DEG. F. OUTDOOR, 70 DEG. F. DB / 61 DEG. F. WB INDOOR.
 - HEATING PERFORMANCE IS FOR 6 DEG. F. OUTDOOR, 68 DEG. F. INDOOR.
 - CONTRACTOR SHALL COORDINATE TO ENSURE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES ARE MAINTAINED.
 - OUTDOOR UNIT HEATING CAPACITY IS BASED ON FULLY HEATING INDOOR UNITS. OUTDOOR UNIT COOLING CAPACITY IS BASED ON FULLY COOLING INDOOR UNITS.
 - UNIT WILL HAVE SINGLE POINT CONNECTION.
 - PROVIDE INTEGRAL WALL MOUNTED DISCONNECT.
 - PROVIDE LOW AMBIENT HEATING ACCESSORY.

REGISTERS, GRILLES, AND DIFFUSERS												
MARK	MANUFACTURER	MODEL #	TYPE	GRILLE SIZE	PANEL SIZE	DUCT INLET SIZE	DUCT BRANCH SIZE	MAX CFM	P.D.	NOISE CRITERIA	THROW PATTERN	REMARKS
E-02A	TITUS	TDC-AA	ALUMINUM LOUVERED FACE DIFFUSER	10"x10"	12"x12"	8"Ø	8"Ø	225	0.05	25	-	ALL
S-01	TITUS	TDC-AA	ALUMINUM LOUVERED FACE DIFFUSER	22"x22"	24"x24"	6"Ø	6"Ø	100	0.05	25	4-WAY	ALL
S-03	TITUS	TDC-AA	ALUMINUM LOUVERED FACE DIFFUSER	22"x22"	24"x24"	10"Ø	10"Ø	400	0.05	25	4-WAY	ALL
S-10	TITUS	359FL	ALUMINUM SIDEWALL GRILLE	6"x6"	6"x6"	6"x6"	6"x6"	75	0.09	25	SINGLE DEFLECTION	ALL

- REMARKS:
- ARCHITECT TO SELECT COLOR. PROVIDE FULL COLOR OPTIONS.
 - REFER TO ARCHITECTURAL PLANS FOR MOUNTING TYPE (LAY-IN, GYP, ETC.)

VARIABLE REFRIGERANT CONTROLLER UNIT SCHEDULE													
MARK	MANUFACTURER	MODEL #	SERVICE	TYPE	AIRFLOW (CFM)	E.S.P.	DRIVE	RPM	FAN HP	ELECTRICAL DATA			REMARKS
										VOLTAGE	PHASE	HZ	
BS-1	DAIKIN	BSQ36TVJ	15	12	8	27	208 V	1	1 A	15	ALL	ALL	
BS-4	DAIKIN	BSQ64TVJ	19	15	12	49	208 V	1	1 A	15	ALL	ALL	
BS-6	DAIKIN	BSQ64TVJ	19	23	12	68	208 V	1	1 A	15	ALL	ALL	

- REMARKS:
- PROVIDE SINGLE POINT CONNECTION.
 - CONTRACTOR SHALL COORDINATE TO ENSURE MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES ARE MAINTAINED.
 - PROVIDE INTEGRAL DISCONNECT.

EXHAUST FAN SCHEDULE														
MARK	MANUFACTURER	MODEL #	SERVICE	TYPE	AIRFLOW (CFM)	E.S.P.	DRIVE	RPM	FAN HP	ELECTRICAL DATA			SONES	REMARKS
										VOLTAGE	PHASE	HZ		
EF-1	GREENHECK	CSP-A700	RESTROOMS	SQUARE INLINE CENTRIFUGAL FAN	450	1.00	DIRECT	1350	0	208 V	1	60	2.5	ALL

- REMARKS:
- PROVIDE SINGLE POINT CONNECTION.
 - FAN TO BE MOUNTED UP AGAINST LOUVER.
 - REFER TO EXHAUST FAN CONTROLS FOR CONTROLS.

LOUVER SCHEDULE													
MARK	MANUFACTURER	MODEL #	SERVICE	DEPTH (IN.)	CFM	WIDTH (IN.)	HEIGHT (IN.)	FREE AREA	VELOCITY (FPM)	APD (IN. WG.)	BIRD SCREEN	DRAINABLE	REMARKS
L-1	GREENHECK	EDK-402	EF-1	4	450	16	16	0.6	650	0.08	Yes	Yes	ALL
L-2	GREENHECK	EDK-402	V-1	4	700	36	12	0.6	450	0.08	Yes	Yes	ALL

- REMARKS:
- ARCHITECT TO SELECT COLOR. PROVIDE FULL COLOR PALETTE.
 - PROVIDE GRAVITY BACKDRAFT DAMPER.

REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGES
1	9/14/20	Addendum 1
2	9/21/20	Addendum 2

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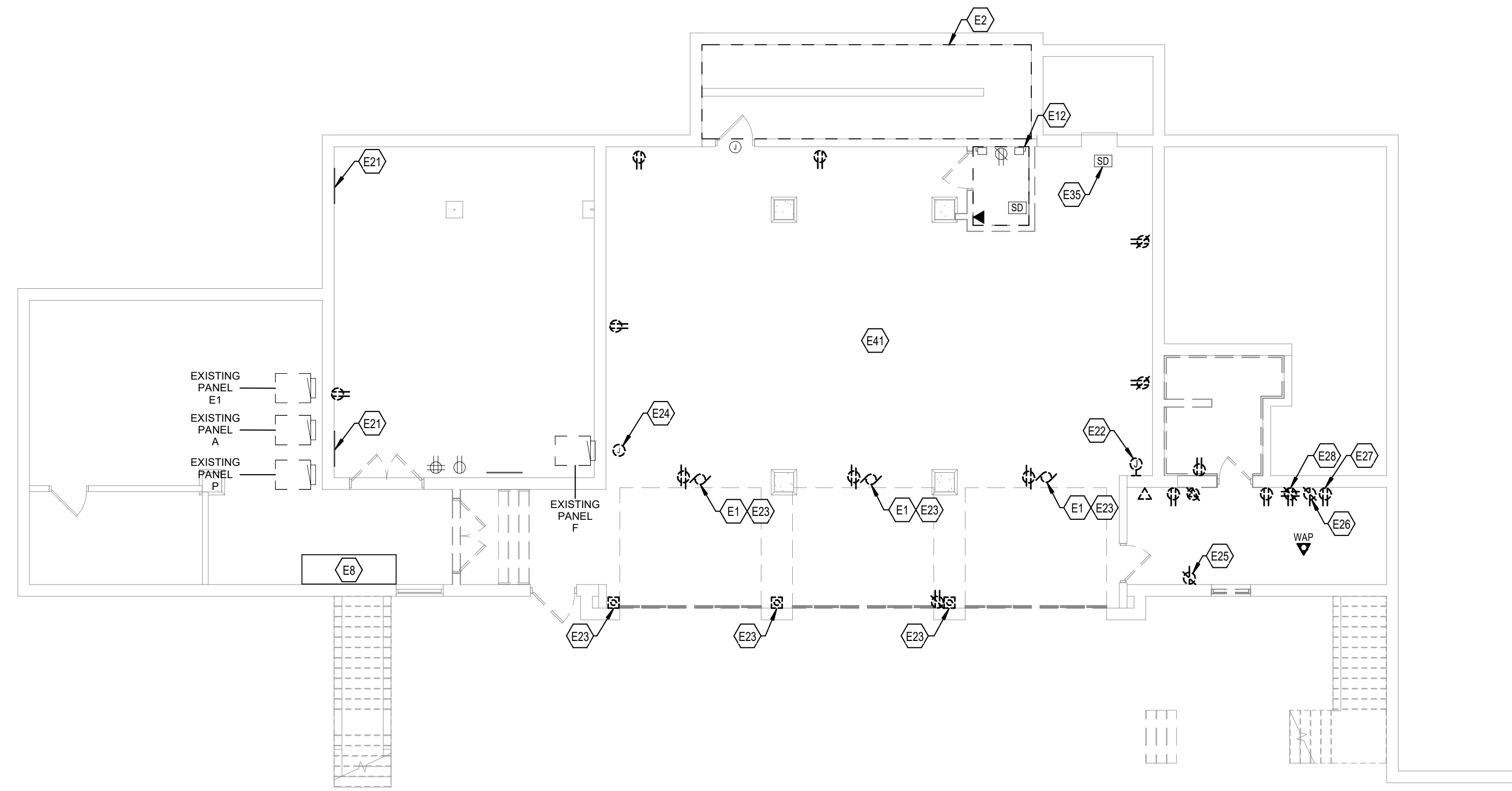
MECHANICAL SCHEDULES, DETAILS, AND CONTROLS

PROJECT
 Fluvanna Co.

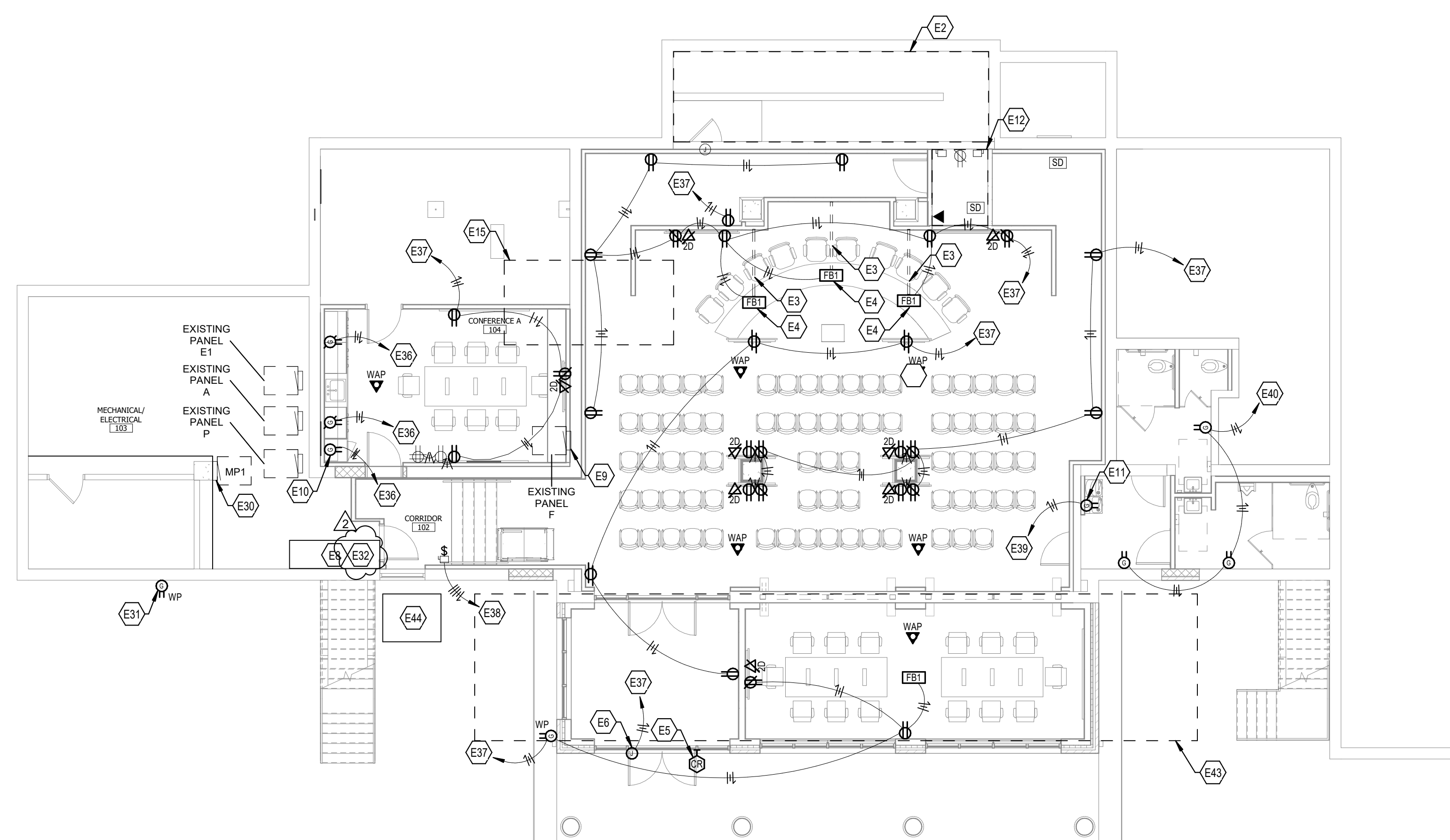
SCALE
 1/8" = 1'-0"

FILENAME:
 M-200

DATE:
 AUGUST 28, 2020



1 POWER/SYSTEMS DEMOLITION PLAN
SCALE: 1/8" = 1'-0"
0 2' 4' 8' 16' 24' 32'



2 POWER/SYSTEMS NEW WORK PLAN
SCALE: 1/8" = 1'-0"
0 2' 4' 8' 16' 24' 32'

ELECTRICAL POWER NOTES

- A REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.
- B CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.
- C IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.
- D RECEPTACLES THAT ARE CONTROLLED BY AN AUTOMATIC MEANS SUCH AS OCCUPANCY SENSORS OR ENERGY MANAGEMENT SYSTEM SHALL BE MARKED IN ACCORDANCE WITH NEC 406.3(E).
- E LOCATIONS OF ELECTRICAL CONNECTIONS AND LOCAL DISCONNECTS SHALL BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC. NOTIFY OTHER TRADES OF REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL ELECTRICAL EQUIPMENT OVER EQUIPMENT NAMEPLATES OR ACCESS PANELS OR THROUGH ACCESS/MAINTENANCE CLEARANCES OF EQUIPMENT BY OTHER TRADES.
- F PANEL B2 LOCATED IN STORAGE ROOM ON FLOOR ABOVE.
- G PROVIDE JUNCTION BOX COVERS FOR ALL EXISTING JUNCTION BOXES ABOVE CEILING WITHOUT COVERS. PROVIDE SUPPORTS FOR ALL EXISTING CONDUITS ABOVE CEILING.
- H WHERE NEW RECEPTACLES ARE SHOWN, PROVIDE IN NEW STEEL STUD FRAMED WALLS. FOR ANY LOCATION BEING EXTENDED FROM EXISTING CMU, PROVIDE EXTENSION RINGS AND EXTEND TO NEW FACE OF WALL.

ELECTRICAL SYSTEMS NOTES

- A REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.
- B CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.
- C IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.
- D REFER TO "SYSTEM INSTALLATION MATRIX" (ON SYSTEMS LEGEND SHEET) AND SPECIFICATIONS FOR CONTRACTOR REQUIREMENTS OF EACH SYSTEM.
- E THE CONTRACTOR SHALL ROUTE ALL "SYSTEM CONDUIT STUB-UPS" TO THE NEAREST CORRIDOR CABLING PATH (SEE "STUB-UP" DETAILS). REFER TO CABLING PATH INSTALLATION DETAIL FOR ADDITIONAL REQUIREMENTS.
- F CONTRACTOR SHALL PAINT ALL SYSTEMS CONDUIT STUB-UPS LIGHT BLUE FOR SYSTEMS CABLING INTO THE CORRIDOR CABLING PATH. PROVIDE PULL STRINGS IN ALL NEW CONDUIT RUNS FOR SYSTEM CABLING INSTALLATION.
- G ALL DATA DROPS ARE TO BE TERMINATED IN THE IT CLOSET ON THE SECOND FLOOR IN A NEW PATCH PANEL.

TAGGED NOTES

- E1 DEMO EXISTING OVERHEAD DOOR CONTROLS AND POWER INFRASTRUCTURE BACK TO THE SOURCE.
- E2 NO NEW ELECTRICAL WORK IN THIS AREA.
- E3 TRENCH SLAB AND PROVIDE FLOORBOX FOR POWER, DATA AND AUDIOVISUAL CONNECTIONS.
- E4 PROVIDE FLOORBOX (WIREMOLD EVOLUTION OR EQUAL) FLUSH WITH FLOOR WITH THE FOLLOWING CONNECTIONS: (2) DUPLEX RECEPTACLES, (4) DATA DROPS IN 2" CONDUIT AND 1-1/2" CONDUIT TO AV RACK STUBBED OUT ADJACENT TO RACK.
- E5 MULTIMOUNT CARD READER BY OWNER, CABLING AND ROUGH IN BY CONTRACTOR.
- E6 PROVIDE POWER AT DOOR FOR ACCESS CONTROL POWER SUPPLY.
- E8 EXISTING ELECTRICAL EQUIPMENT TO REMAIN.
- E9 PANEL BOARD IS EXISTING TO REMAIN. FACE OF PANEL SHALL BE FLUSH WITH NEW WALL. PROVIDE ALL PANEL ACCESSORIES TO ACCOMMODATE THIS WORK, INCLUDING CONDUIT SUPPORTS, FITTINGS, EXTENSIONS, ETC.
- E10 PROVIDE GFI RECEPTACLE FOR UNDER-COUNTER REFRIGERATOR.
- E11 PROVIDE GFI BREAKER FOR DRINKING FOUNTAIN/BOTTLE FILLER. COORDINATE EXACT LOCATION WITH APPROVED WATER COOLER SHOP DRAWINGS PRIOR TO ROUGH-IN.
- E12 EXISTING ELECTRICAL EQUIPMENT IN ELEVATOR MACHINE ROOM TO REMAIN.
- E15 SERVER ROOM ON FLOOR ABOVE ROUTE ALL DATA CABLING TO THIS LOCATION ABOVE. PROVIDE 4" EZ PATH FIRE RATED SLEEVES AS NECESSARY.
- E21 DEMOLISH ABANDONED TELEPHONE BOARD. REMOVE CABLES BACK TO SOURCE.
- E22 DEMOLISH ABANDONED JUNCTION BOX AND COMMUNICATIONS CABLE.
- E23 DEMOLISH GARAGE DOOR PUSH BUTTON AND CONNECTIONS TO MOTOR.
- E24 DEMOLISH ABANDONED CONDUIT AND WIRE.
- E25 DEMOLISH EXISTING CIRCUITS 31 & 33 IN PANEL B2 BACK TO SOURCE.
- E26 DEMOLISH EXISTING CIRCUIT 10 IN PANEL B2 BACK TO SOURCE.
- E27 DEMOLISH EXISTING RECEPTACLE, BUT REUSE EXISTING CIRCUIT B2-12 FOR NEW GENERAL PURPOSE RECEPTACLE IN AREA.
- E28 DEMOLISH EXISTING RECEPTACLE, BUT REUSE EXISTING CIRCUIT F-27 FOR NEW DRINKING FOUNTAIN.
- E30 PROVIDE NEW EATON/CUTLER-HAMMER 120/208/3 PHASE/4 WIRE 200A MAIN BREAKER PANEL MP1. UTILIZE FOR ALL NEW HVAC CONNECTIONS.
- E31 PROVIDE NEW WEATHERPROOF GFI RECEPTACLE AND CONNECT TO RECEPTACLE CIRCUIT IN MECHANICAL ROOM. PROVIDE 2#12, 1#12 GROUND IN 3/4" CONDUIT.
- E32 UTILIZE 200A FUSIBLE SWITCH TURNED OFF PREVIOUSLY SERVING CHILLER FOR NEW PANEL MP1 TO SERVE HVAC LOADS. PROVIDE (3) NEW 200A FUSES AND EXTEND 4#30, 1#6 GROUND IN 2.5" CONDUIT.
- E35 REINSTALL EXISTING TO REMAIN SMOKE DETECTOR IN NEW CEILING.
- E36 UTILIZE SPACE IN EXISTING EATON/CUTLER-HAMMER PANEL BOARD F FOR NEW CIRCUIT. PROVIDE 20A 1P BREAKER IN PANEL AND EXTEND 2#12, 1#12 GROUND IN 3/4" CONDUIT.
- E37 UTILIZE SPACE IN EXISTING EATON/CUTLER-HAMMER PANEL BOARD A FOR NEW CIRCUIT. PROVIDE 20A 1P BREAKER IN PANEL AND EXTEND 2#12, 1#12 GROUND IN 3/4" CONDUIT.
- E38 REMOVE 3P BREAKER TURNED OFF IN PANEL F AND PROVIDE NEW 20A 2P BREAKER AND SPACE FILLER AS REQUIRED FOR CONNECTION TO NEW MOTORIZED LIFT. PROVIDE 3#12, 1#12 GROUND IN 3/4" CONDUIT FROM PANEL TO LIFT.
- E39 UTILIZE EXISTING CIRCUIT F-27 FOR NEW DRINKING FOUNTAIN CHILLER FOR NEW PANEL MP1. PROVIDE 2#12, 1#12 GROUND IN 3/4" CONDUIT AS REQUIRED.
- E40 UTILIZE EXISTING CIRCUIT B-12 FOR NEW CONNECTION IN SPACE. PROVIDE 2#12, 1#12 GROUND IN 3/4" CONDUIT AS REQUIRED.
- E41 DEMOLISH ALL ELECTRICAL CONNECTIONS BACK TO SOURCE FROM REMOVED HVAC/PLUMBING EQUIPMENT. REFER TO HVAC AND PLUMBING DEMOLITION PLANS FOR DEMOLISHED EQUIPMENT LOCATIONS.
- E43 EXISTING ELECTRICAL LINES LOCATED UNDER NEW ADDITION BASED ON SURVEY. OWNER TO CONTACT AND PAY DOMINION DIRECT FOR ALL WORK ASSOCIATED WITH RELOCATING THESE LINES OUTSIDE OF NEW ADDITION FOOTPRINT.
- E44 EXISTING PAD MOUNT TRANSFORMER TO REMAIN.

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REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGES
1	9/14/20	Addendum 1
2	9/21/20	Addendum 2

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**ADDITION AND RENOVATIONS
 MULTIPURPOSE ROOM
 FLUVANNA COUNTY
 132 MAIN STREET
 PALMYRA, VA 22963**



POWER/SYSTEMS PLANS	PROJECT Fluvanna Co.
PLOT SCALE: 1/8" = 1'-0"	E-200
FILENAME:	
DATE: AUGUST 28, 2020	