

ADDENDUM NO. 4

TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

Renovate Mechanical / Electrical / Life-Safety / State Office Building
Jefferson State Office Building
205 Jefferson Street
Jefferson City, MO 65101
PROJECT NO. O1911-01

Bid Opening Date: 1:30 PM, Thursday, February 8, 2024 (Changed)

Bidders are hereby informed that the construction Plans and/or Specifications are modified as follows:

SPECIFICATION CHANGES:

1. Section 064116 – Plastic-Laminate-Clad Architectural Cabinets
 - a. Updated Section 1.5 Closeout Submittals – Text has been stricken and highlighted
 - b. Updated Section 1.6 – A.1 Manufacturer Certification – Test has been stricken and highlighted
 - c. Updated Section 1.6 – B. Installer Qualifications: **Manufacturer of products.**
 - d. Added Section 1.6 – C. Mockups
 - e. Updated Section 2.2 – A. – Test regarding AWI and Architectural Woodwork Standards has been stricken and highlighted; Added to reference General Notes: Millwork on Drawing A-502
 - f. Updated Section 3.3 – A. – Text regarding AWI quality certification, Architectural Woodwork Standards and report of inspection have been stricken and highlighted.
2. Section 070150 – Preparation For Reroofing
 - a. Updated Section 3.2 – C.1 - **Contractor to** engage a qualified testing agency to perform the following test:
 - b. **DELETE** Section 3.2 – C.3 through C.4
3. Section 075216 – Styrene-Butadiene-Styrene (SBS) Modified Bituminous Membrane Roofing
 - a. Updated Section 3.13 – A. Testing Agency: **Contractor to** engage a qualified testing agency to inspect substrate conditions, surface preparation.
4. Section 075323 – Ethylene-Propylene-Diene-Monomer (EPDM) Roofing
 - a. Updated Section 3.11 – A. Testing Agency: **Contractor to** engage a qualified testing agency to inspect substrate conditions, surface preparation, roof membrane application, sheet flashings, protection, and drainage components, and to furnish reports to Architect.
5. Section 075423 – Thermoplastic-Polyolefin (TPO) Roofing
 - a. Updated Section 3.11 – A. Testing Agency: **Contractor to** engage a qualified testing agency to perform tests and to inspect substrate conditions, surface preparation, roof membrane application, sheet flashings, protection, and drainage components, and to

furnish reports to Architect

6. Section 078413 – Penetration Firestopping
 - a. Updated Section 3.5 Field Quality Control – A. – added text **Contractor to provide results of test and inspections to Owner, Architect, and Engineer for review.**
7. Section 079200 – Joint Sealants
 - a. Updated Section 3.4 Field Quality Control – A – updated text **Contractor will engage a qualified testing agency to perform tests and inspections. Contractor to provide results of test and inspections to Owner, Architect, and Engineer for review.**
8. Section 083113 – Access Doors and Frames
 - a. Updated Section 3.3 Field Quality Control – A – updated text **Inspection Agency: Contractor to engage a qualified inspector to perform inspections and to furnish reports to Owner, Architect, and Engineer for review.**
9. Section 087111 – Door Hardware (Descriptive Specification)
 - a. Updated Section 2.1 Manufacturers – A.1 – stricken text **Manufacturers that perform electrical modifications and that are listed by a testing and inspecting agency acceptable to authorities having jurisdiction are acceptable.** Removed from scope.
 - b. Updated Section 2.3 – Hinges – removed information regarding “match existing” and reformatted manufacturers list.
 - c. Updated Section 2.8 – Mechanical Stops and Holders – removed information regarding “match existing” and reformatted manufacturers list.
10. Section 087113 – Power Door Operators
 - a. Updated Section 3.3 Field Quality Control – A – updated text Certified Inspector: **Contractor to engage a Certified Inspector to test and inspect components, assemblies, and installations, including connections.**
 - b. Updated Section 3.3 Field Quality Control – D – updated text **Certified Inspector to prepare test and inspection reports and distribute to Contractor, Owner, Architect, and Engineer for review.**
11. Section 090561 – Common Work Results for Flooring Preparation
 - a. Updated Section 1.5 Quality Assurance – A. Moisture and pH testing shall be performed by an independent testing agency employed and paid by **the** Contractor.
 - b. Updated Section 3.4 Moisture Vapor Emission Testing – F. Report: Report the information required by the test method **to the Contractor, Owner, Architect, and Engineer.**
 - c. Updated Section 3.5 – Internal Relative Humidity Testing – F. Report: Report the information required by the test method **to the Contractor, Owner, Architect, and Engineer.**
 - d. Added in Section 3.6 – PH Testing – F. **Report: Report the information required by the test method to the Contractor, Owner, Architect, and Engineer.**
12. Section 095123 – Acoustical Tile Ceilings
 - a. **DELETE** Section 3.5 Field Quality Control

13. Section 102239 – Folding Panel Partitions

- a. Updated Section 3.3 Field Quality Control – B. **Engage a factory-authorized service representative to prepare test and inspection reports.**

14. Section 123623.13 – Plastic-Laminate-Clad Countertops

- a. Updated Section 1.2 – C.3 – **Apply AWI Quality Certification Program label to Shop Drawings.**
- b. Updated Section 1.3 – B.3 - **Chemical resistant, high-pressure decorative laminate.**
- c. Updated Section 1.3 - C - **Quality Standard Compliance Certificates: AWI Quality Certification Program.**
- d. Updated Section 1.4 – A.1 - **Shop Certification: AWI's Quality Certification Program accredited participant.**
- e. Updated Section 1.4 – B - Installer Qualifications: **Manufacturer of products.**
- f. Updated Section 2.1 – A.1 - **Provide inspections of fabrication and installation together with labels and certificates from AWI certification program indicating that countertops comply with requirements of grades specified.**

15. Section 224300 – Plumbing Fixtures

Add the following to Part 2 2.3 Lavatories

E. Wall Hung Carrier:

Adjustable concealed arm lavatory carrier with rectangular steel uprights, block base anchor feet and extended arm supports. Josam 17100-67, J.R. Smith 0700-27-M31, MIFAB MC-42, Wade catalog no. W-520-M24-M36, Watts CA-411-WC or Zurn Z-1231-79.

DRAWING CHANGES:

1. Drawing A-140:

- a. UPDATE – Finish Legend – Window Film – WF-1, revised finish information schedule per further discussion with the State.

2. Drawing A-141:

- a. ADD – Finish Plan #1 – Existing glass wall and doors leading from room 102 to room 100L to receive window film (WF-1). Add finish elevation 13/A-200.

3. Drawing A-200:

- a. ADD – Elevation #13 – Lobby (100L), Window Film Typ. - window film at existing storefront.

4. Drawing A-700:

- a. UPDATE – Ceiling Plan General Note #1 to indicate floors 2-14.
- b. ADD – Ceiling Plan – Room 121B –missing existing gypsum soffit & keyed note C6.

5. Drawing S-1.0:

- a. **UPDATED** – Removable Slab Detail to correct location.

6. Drawing S-1.1:

- a. **UPDATED** – Removable Slab Detail to correct location.
7. Drawing S-1.2:
 - a. **CORRECTED** – drawing scales.
 - b. **CORRECTED** – floors associated with plans.
 8. Drawing M3.0:
 - a. **UPDATED** – to show correct pipe size.
 9. Drawing M3.1:
 - a. **ADDED** – Piping to FCU-C.
 - b. Clarified Riser Size.
 10. Drawing M3.1A:
 - a. **ADJUSTED**- Pipe Riser Size.
 11. Drawing M3.2:
 - a. **ADDED** – Piping to FCU-C.
 12. Drawing M3.14:
 - a. **ADDED** – House Keeping Pad
 13. Drawing M4.0:
 - a. **ADJUSTED** – Heat exchanger connection points.
 - b. **ADJUSTED** – Pipe Size.
 - c. **ADDED** – Housekeeping pads.
 14. Drawing M4.1:
 - a. **ADJUSTED** – Pump Tags.
 15. Drawing M5.1:
 - a. **ADJUSTED** – Pipe Sizes.
 16. Drawing M6.1:
 - a. **ADJUSTED** – Dry Cooler Design Conditions.
 17. Drawing M6.3:
 - a. **ADJUSTED** – Variable Air Volume Schedule.
 18. Drawing M6.4:
 - a. **ADDED** – DX Coil Schedule.
 1. Drawings: FP3.1, FP3.2, FP3.3, FP3.4, FP3.5, FP 3.6, FP3.7, FP3.8, FP3.9, FP3.10, FP3.11, FP3.12, FP3.13
 - a. **ADDED** – Replace Sprinkler heads throughout entire floor.

GENERAL:

1. Pre-Bid Questions:

- a. Wall section wall hung Lav and 2.5" stud. Concern if structurally.
Response: A Lavatory carrier will be required for support. See Addendum Narrative, Specification Changes, Item #1
- b. All the fire sprinklers that we observed the day of the job walk are one-piece escutcheons. This style escutcheons do not allow ceiling tile to be changed out without removing the head from the drop. (Per NFPA 13 you cannot reuse fire sprinkler heads after they have been removed, they must be replaced.) see attached picture.
Response: Fire Protection Drawings updated to include head replacement
- c. VAV1.21 is scheduled but not shown. Please advise.
Response: VAV1.21 Removed from schedule.
- d. VAV3.4 is on the plans but not scheduled. Please advise.
Response: VAV3.4 added to schedule.
- e. Sheet M3.1 Freight Elev Lobby 100f – Please confirm if BCU-B is required. There is an equipment tag shown, but no equipment or piping shown.
Response: Confirmed - There is only 1 BCU-B and it is located adjacent to elevator lobby see sheet M3.2
- f. Sheet M3.2 – There is no piping shown feeding two FCU-E's in the mechanical room adjacent to the loading dock.
Response: Plans updated to include piping to FCU-E.
- g. Can you provide a schedule for the dx coil located in the penthouse?
Response: Schedule has been added to sheet M6.4
- h. "In looking at sheet M4.0, enlarged basement mechanical room, the size callouts for the HHW show the main supply lines to be 4", however when looking at the flow diagram on M5.0, those supply/return lines should be 6". Which size do you want used?
Response: See updated sheets M4.0, M3.0 & M5.1
- Separately, on the chilled water lines, sheet M3.0 shows 2 risers coming out of the basement mechanical room (roughly located at gridline intersection E6. On M3.0, fan coil riser is called out to be 8" line but when referencing M4.0, the enlarged detail shows those risers to be 6". Which size is correct?"
Response: See updated sheets M4.0, M3.0 & M5.1
- i. One more item, again on M4.0, there appears to be a connection made between the campus chilled water supply and the building's heating water. Is this correct and if so, what size is this interconnection and are there any valves between the 2 systems?
Response: Interconnect is 3" associated with dry cooler HX - see flow diagrams for associated valving
- j. What is the 1" copper pressure line in the basement, referenced on M3.0, that appears to be coming up through the basement ceiling into the 1st floor around gridline intersection H7 and runs to something labeled S-2 carrying? Is it compressed air or domestic water?

Response: 1" Copper line is a building pressure reference line.

- k. Who is responsible for the cost to engage field quality control testing and inspections. Pertinent Spec Sections include but are not limited to 033000, 031200, 070150.19, 075216, 075323, 075423, 078413, 079200, 083113, 087111, 087113, 090561, 095123, 102239, 221119.

Response: Regarding inspections: Since the State is the authority having jurisdiction, it would be up to the state to elect to not conduct these inspections. Please see below:

- 033000 Cast in Place Concrete: Contractor shall be responsible for testing slump and air content specifically for hatch. Test by contractor, report submitted to AE/Owner.
 - Roofing: Testing is to be done by the contractor and must meet the requirements of the warranty. (070150.19, 075216, 075323, 075423)
 - 078413 Penetration Firestopping: Testing is the responsibility of the contractor, report submitted to AE/Owner.
 - 079200 Joint Sealants: Testing is the responsibility of the contractor, report submitted to AE/Owner.
 - 083113 Access Doors and Frames: Testing is the responsibility of the contractor, report submitted to AE/Owner.
 - 087111 Door Hardware: No testing required. Confirm product meets specification and works properly post installation.
 - 087113 Power Door Operators: Testing is the responsibility of the contractor, report submitted to AE/Owner.
 - 090561 Common Work Results for Flooring Preparation: Testing is the responsibility of the contractor, report submitted to AE/Owner.
 - 095123 Acoustical Tile Ceiling: No testing required.
 - 102239 Folding Panel Partitions: Testing and inspection by Factory-Authorized Representative.
 - 22111 Domestic Water Piping Specialties: Testing is the responsibility of the contractor, report submitted to AE/Owner.
- l. Spec. Section 064116 & 123623.13 Call out AWI quality certification program. This program carries a hefty fee to maintain for fabricators and installers which limits the volume of qualified bidders to comply with this program. The local area has a vast number of Fabricators that fabricate per the AWI standard but are not certified. Will the AWI certification be required for this project?

Response: The State does not require the AWI Quality Certification Program. This reference has been removed from the specification. See spec sections 06 41 16 & 12 36 23.13. The State is Requiring an approved mockup of the counter tops and FCU panel fronts to be produced and approved by the State prior to final fabrication. The mockup shall remain on site as a quality standard check.

- m. Spec. Section 090561 Specifies moister mitigation procedures. The relative humidity and PH are unknown conditions at the time should moisture mitigation procedures be included for 100% of the flooring or will an allowance be provided should this system be necessary?

Response: Will need to meet product warranties. Allot for dehumidification as needed.

- n. Sheet ED1.2 note #4 says to reuse existing FCU circuit. On sheet E2.2 shows a new circuit. Are we reusing existing circuits or installing new circuits? Please advise on how we should proceed.

Response: Wiring between the FCUs share circuits as noted on drawings. Wiring between FCUs will remain and new homeruns to the H Panels will be required.

- o. Most of the door hardware has multiple manufacturers listed but the basis of design is to match existing hardware. Please provide more information about what hardware is to be matched. Please provide specifications as a basis for “match the existing building standard”.

Response: Specifications have been updated for clarification.

- Specification Section 08711-5: 2.3 Hinges - A.1 **REMOVED** Basis of Design text and **REFORMATTED** list of manufacturers.
- Section 2.8 Mechanical Stops and Holders - A.1 **REMOVED** Basis of Design text and **REFORMATTED** list of manufacturers.

- p. Structural drawing S1.3 is missing operable wall #4 shown on Architectural drawings A-123 & A-503.

Response: This is an existing retractable wall that is being replaced. The existing structure above will be utilized to support the new wall system.

- q. Ceiling/Lighting RCP Additional Information

Response: **UPDATED** general note #1 on Sheet A700.

- r. Scale on structure drawing S1.2 is shown as 1/4" = 1.0'. It should be 1/2" = 1.0'.

Response: **UPDATED** Sheet S1.2 to show correct scales.

- s. Third floor plan 2/S1.2 applies to 3rd,5th,7th,9th,11th&13th floors.

Response: **UPDATED** drawing 2/S1.2 to show correct floors.

- t. Second floor plan 1/S1.2 applies to 2nd,4th,6th,8th,10th & 12th floors.

Response: **UPDATED** drawing 1/S1.2 to show correct floors.

- u. Should the 12'x9' basement opening shown on S1.0 be located between grid lines D and C as opposed to where it is shown being between grid lines E and D?

Response: **UPDATED** Sheet S1.0 & S1.1 to show correct location.

ATTACHMENTS:

1. Attachment A - Specifications

- a. Section 064116 – Plastic-Laminate-Clad Architectural Cabinets (5 Pages)
- b. Section 087111 – Door Hardware (Descriptive Specification) (14 Pages)
- c. Section 123623.13 – Plastic-Laminate-Clad Countertops (6 Pages)

2. Attachment B – Drawings

- a. Drawing A-140 (1 Page)
- b. Drawing A-141 (1 Page)
- c. Drawing A-200 (1 Page)
- d. Drawing A700 (1 Page)
- e. Drawing S-1.0 (1 Page)
- f. Drawing S-1.1 (1 Page)
- g. Drawing S-1.2 (1 Page)
- h. Drawing M3.0 (1 Page)

- i. Drawing M3.1 (1 Page)
- j. Drawing M3.1A (1 Page)
- k. Drawing M3.2 (1 Page)
- l. Drawing M3.14 (1 Page)
- m. Drawing M4.0 (1 Page)
- n. Drawing M4.1 (1 Page)
- o. Drawing M5.1 (1 Page)
- p. Drawing M6.1 (1 Page)
- q. Drawing M6.3 (1 Page)
- r. Drawing M6.4 (1 Page)
- s. *Drawing FP3.1 (1 Page)*
- t. *Drawing FP3.2 (1 Page)*
- u. *Drawing FP3.3 (1 Page)*
- v. *Drawing FP3.4 (1 Page)*
- w. *Drawing FP3.5 (1 Page)*
- x. *Drawing FP3.6 (1 Page)*
- y. *Drawing FP3.7 (1 Page)*
- z. *Drawing FP3.8 (1 Page)*
- aa. *Drawing FP3.9 (1 Page)*
- bb. *Drawing FP3.10 (1 Page)*
- cc. *Drawing FP3.11 (1 Page)*
- dd. *Drawing FP3.12 (1 Page)*
- ee. *Drawing FP3.13 (1 Page)*

GENERAL COMMENTS:

1. Bidders needing additional site inspection should contact Frank Cunningham at 573-395-6216 to schedule a time.
2. Please contact Paul Girouard, Contract Specialist, at 573-751-4797 or paul.girouard@oa.mo.gov for questions about bidding procedures and MBE\WBE\SDVE goals and submittal requirements.
3. **All bids shall be submitted on the bid forms without additional terms and conditions, modifications, or stipulations. Each space on the bid forms shall be properly filled including a bid amount for the alternate. Failure to do so will result in rejection of the bid.**
4. **MBE/WBE/SDVE participation requirements can be found in DIVISION 00. The MBE/WBE/SDVE participation goals are 10%/10%/3%, respectively. All MBE, WBE, and MBE/WBE contractors, subcontractors, and suppliers must be certified by the State of Missouri, Office of Equal Opportunity. No other certifications from other Missouri certifying agencies will be accepted. If a bidder is unable to meet a participation goal, a Good Faith Effort Determination Form must be completed. Failure to complete this process will result in rejection of the bid.**
5. The deadline for technical questions is January 31, 2024 at noon.
6. Changes to, or clarification of, the bid documents are only made as issued in the addenda.

7. All correspondence with respect to this project must include the State of Missouri project number as indicated above.
8. Prospective Bidders contact American Document Solutions, 1400 Forum Blvd., Suite 7A, Columbia MO 65203, 573-446-7768 to order official plans and specifications.

By the Order of:
Frank Cunningham
Division of Facilities Management,
Design and Construction
January 25, 2024

END ADDENDUM NO. 4

SECTION 064116 - PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS

1.1 SUMMARY

A. Section Includes:

1. Plastic-laminate-clad architectural cabinets.
2. Cabinet hardware and accessories.
3. Wood furring, blocking, shims, and hanging strips for installing plastic-laminate-clad architectural cabinets that are not concealed within other construction.
4. Plastic-laminate-clad cabinet fronts at Fan Coil Unit (FCU).

1.2 COORDINATION

- #### A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other Sections to support loads imposed by installed and fully loaded cabinets.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include data for fire-retardant treatment from chemical-treatment manufacturer and certification by treating plant that treated materials comply with requirements.

B. Shop Drawings:

1. Include plans, elevations, sections, and attachment details.
2. Show locations and sizes of furring, blocking, and hanging strips, including concealed blocking and reinforcement specified in other Sections.
3. Show locations and sizes of cutouts and holes for items installed in plastic-laminate architectural cabinets.
4. Apply AWI Quality Certification Program label to Shop Drawings.

- #### C. Samples: For each exposed product and for each color and texture specified, in manufacturer's or manufacturer's standard size.

D. Samples for Verification: For the following:

1. Exposed Cabinet Hardware and Accessories: One full-size unit for each type and finish.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer and Installer.
- B. Product Certificates: For each type of product.

~~1.5 CLOSEOUT SUBMITTALS~~

- ~~A. Quality Standard Compliance Certificates: AWI Quality Certification Program certificates.~~

1.6 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Employs skilled workers who custom fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.

- ~~1. Manufacturer's Certification: Licensed participant in AWI's Quality Certification Program.~~

- B. Installer Qualifications: **Manufacturer of products.**

- C. **Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.**

- 1. Build mockups of typical architectural cabinets as shown on Drawings.**
 - a. Include mockup of one base cabinet with drawer and door. Plastic laminate front, melamine interior, edgebanding and base. Include hinges, slides, hardware and accessories. Include countertop and backsplash.**
 - b. Include mockup of one Fan Coil Unit (FCU) laminate panel front.**
 - c. Approved mockups to be kept onsite and undisturbed until Substantial Completion.**

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver cabinets until painting and similar finish operations that might damage architectural cabinets have been completed in installation areas. Store cabinets in installation areas or in areas where environmental conditions comply with requirements specified in "Field Conditions" Article.

1.8 FIELD CONDITIONS

- A. Environmental Limitations with Humidity Control: Do not deliver or install cabinets until building is enclosed, wet-work is complete, and HVAC system is operating and maintaining temperature between 60 and 90 deg F (16 and 32 deg C) and relative humidity between 25 and 55 percent during the remainder of the construction period.

- B. Field Measurements: Where cabinets are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication, and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
1. Locate concealed framing, blocking, and reinforcements that support cabinets by field measurements before being enclosed/concealed by construction, and indicate measurements on Shop Drawings.

PART 2 - PRODUCTS

1. Basis-of-Design Product: Subject to compliance with requirements, provide Formica Corporation products or comparable product by one of the following:
 - a. Nevamar Company, LLC.
 - b. Wilsonart LLC

2.2 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS

- A. Quality Standard: Unless otherwise indicated, comply with the ~~Architectural Woodwork Standards for~~ grades of cabinets indicated for construction, finishes, installation, and other requirements.
1. ~~Provide labels and certificates from AWI certification program indicating that woodwork and installation complies with requirements of grades specified.~~
 - a. ~~This project has been registered with AWI as AWI Quality Certification Program Number.~~
 2. The Contract Documents contain requirements that are more stringent ~~than the referenced quality standard.~~ Comply with requirements of Contract Documents in addition to ~~those of the referenced quality standard~~ **General Notes: Millwork listed on Drawing A-502.**

2.3 PLASTIC-LAMINATE-CLAD CABINET FRONTS AT FAN COIL UNITS

- A. Quality Standard: Unless otherwise indicated, comply with the ~~Architectural Woodwork Standards for~~ grades of cabinets indicated for construction, finishes, installation, and other requirements.
1. ~~Provide labels and certificates from AWI certification program indicating that woodwork and installation complies with requirements of grades specified.~~
 - a. ~~This project has been registered with AWI as AWI Quality Certification Program Number.~~
 2. The Contract Documents contain requirements that are more stringent ~~than the referenced quality standard.~~ Comply with requirements of Contract Documents in

addition to ~~those of the referenced quality standard~~ **General Notes: Millwork listed on Drawing A-502.**

3. Substrate: Medium Density Overlay (MDO) plywood

PART 3 - EXECUTION

3.1 PREPARATION

- A. Before installation, condition cabinets to humidity conditions in installation areas for not less than 72 hours.

3.2 INSTALLATION

- A. Architectural Woodwork Standards Grade: Install cabinets to comply with quality standard grade of item to be installed.
- B. Assemble cabinets and complete fabrication at Project site to extent that it was not completed in the shop.
- C. Anchor cabinets to anchors or blocking built in or directly attached to substrates. Secure with wafer-head cabinet installation screws.
- D. Install cabinets level, plumb, and true in line to a tolerance of 1/8 inch in 96 inches (3 mm in 2400 mm) using concealed shims.
 1. Scribe and cut cabinets to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.
 2. Install cabinets without distortion so doors and drawers fit openings and are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation. Complete installation of hardware and accessory items as indicated.

3.3 FIELD QUALITY CONTROL

- A. Inspections: Provide inspection of installed Work ~~through AWI's Quality Certification Program certifying that woodwork~~, including installation, complies with requirements of ~~the Architectural Woodwork Standards~~ for the specified grade.

1. ~~Inspection entity shall prepare and submit report of inspection.~~

3.4 ADJUSTING AND CLEANING

- A. Repair damaged and defective cabinets, where possible, to eliminate functional and visual defects. Where not possible to repair, replace architectural cabinets. Adjust joinery for uniform appearance.
- B. Clean, lubricate, and adjust hardware.
- C. Clean cabinets on exposed and semi exposed surfaces.

END OF SECTION 064116

SECTION 087111 - DOOR HARDWARE (Descriptive Specification)

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Mechanical door hardware for: Swinging doors.
2. Field verification, preparation and modification of existing doors and frames to receive new hardware.
3. The intent of the hardware specification is to specify hardware for interior doors, while matching existing building standards. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specification.
4. Reuse existing door hardware where applicable. All new and existing to be reused hardware to comply with Accessibility requirements. Contractor to label and store hardware for possible reuse.

B. Exclusions: Unless specifically listed in hardware sets, hardware is not specified in this section for:

1. Cabinets (casework), including locks in cabinets
2. Toilet Partitions
3. Operable / Folding Partition egress doors

C. Related Requirements:

1. Section 081213 "Hollow Metal Frames" for astragals provided as part of labeled fire-rated assemblies and for door silencers provided as part of hollow-metal frames.
2. Section 081416 "Flush Wood Doors" for astragals and integral intumescent seals provided as part of labeled fire-rated assemblies.
3. Section 083113 "Aluminum-Framed Entrances" for entrance door hardware, cylinders.
4. Section 087113 "Power Door Operators" for low-energy power operators and low-energy power-assist operators.

1.2 COORDINATION

- A. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.
- B. Existing Openings: Where hardware components are scheduled for application to existing construction or where modifications to existing door hardware are required, field verify existing conditions and coordinate installation of door hardware to suit opening conditions and to provide proper door operation.

1.3 ACTION SUBMITTALS

- A. Product Data: Technical product data for each type of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
- B. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
 - 1. Wiring Diagrams: For power, signal, and control wiring and indicating:
 - a. Details of interface of electrified door hardware and building safety and security systems.
 - b. Schematic diagram of systems that interface with electrified door hardware.
 - c. Point-to-point wiring.
 - d. Risers.
- C. Samples for Verification: If requested by Architect, submit production sample of requested door hardware unit in finish indicated, and tagged with full description for coordination with schedule.
 - 1. Tag Samples with full product description to coordinate Samples with door hardware schedule.
- D. Door Hardware Schedule: Submit schedule with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule as published by the Door and Hardware Institute. Indicate complete designations of each item required for each door or opening, include:
 - 1. Quantity, type, style, function, size, and finish of each hardware item.
 - 2. Name and manufacturer of each item.
 - 3. Fastenings and other pertinent information.
 - 4. Explanation of all abbreviations, symbols, and codes contained in schedule.
 - 5. Mounting locations for hardware.
 - 6. Door and frame sizes, and materials.
 - 7. Operational Description of openings with any electrified hardware (locks, exits, electromagnetic locks, electric strikes, automatic operators, door position switches, and access control components). Operations description should include: egress, ingress (access), and fire / smoke alarm connections.
 - a. Submittal Sequence: Submit door hardware schedule concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work that is critical in Project construction schedule.
- E. Keying Schedule: Keyway Interchangeable Cores to be turned over to the owner (FMDC). FMDC with set cores and cut keys.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Architectural Hardware Consultant.
- B. Product Certificates: For each type of electrified door hardware.

1. Certify that door hardware for use on each type and size of labeled fire-rated doors complies with listed fire-rated door assemblies.

C. Sample Warranty: For special warranty.

1.5 CLOSEOUT SUBMITTALS

- A. Operations and Maintenance Data: Provide in accordance with Division 01 and include:
1. Factory order acknowledgement numbers (for warranty and service).
 2. Name, address, and phone number of local representative for each manufacturer.
 3. Parts list for each product.
 4. Final approved hardware schedule, edited to reflect conditions as-installed.

1.6 QUALITY ASSURANCE

- A. Supplier Qualifications and Responsibilities: Recognized architectural hardware supplier with record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this Project and that provides certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for door hardware delivered to Project site.
- B. Tag each item or package separately with identification coordinated with the final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package.
- C. Deliver keys and permanent cores to Owner by registered mail or overnight package service.

1.8 WARRANTY

- A. Warranty: Manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.
1. Failures include, but are not limited to, the following:
 - a. Structural failures including excessive deflection, cracking, or breakage.
 - b. Faulty operation of doors and door hardware.
 - c. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use.

2. Warranty Period: Three years from date of Substantial Completion unless otherwise indicated below:
 - a. Electromagnetic Locks: Five years from date of Substantial Completion.
 - b. Exit Devices: Two years from date of Substantial Completion.
 - c. Manual Closers: 10 years from date of Substantial Completion.
 - d. Concealed Floor Closers: Five years from date of Substantial Completion.

1.9 MAINTENANCE

- A. Maintenance Tools: Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain each type of door hardware from single manufacturer.
 1. Provide electrified door hardware from same manufacturer as mechanical door hardware unless otherwise indicated. ~~Manufacturers that perform electrical modifications and that are listed by a testing and inspecting agency acceptable to authorities having jurisdiction are acceptable.~~

2.2 PERFORMANCE REQUIREMENTS

- A. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that complies with requirements of assemblies tested in accordance with UL 1784 and installed in compliance with NFPA 105.
 1. Air Leakage Rate: Maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at the tested pressure differential of 0.3-inch wg (75 Pa) of water.
- B. Electrified Door Hardware: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- C. Means of Egress Doors: Latches do not require more than 15 lbf (67 N) to release the latch. Locks do not require use of a key, tool, or special knowledge for operation.
- D. Accessibility Requirements: For door hardware on doors in an accessible route, comply with ICC A117.1.
 1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf (22.2 N).
 2. Comply with the following maximum opening-force requirements:
 - a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf (22.2 N) applied perpendicular to door.

- b. Sliding or Folding Doors: 5 lbf (22.2 N) applied parallel to door at latch.
- c. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
3. Adjust door closer sweep periods so that, from an open position of 90 degrees, the door will take at least 5 seconds to move to a position of 12 degrees from the latch.

2.3 HINGES

A. Hinges: ANSI/BHMA A156.1. Provide template-produced hinges for hinges installed on hollow-metal doors and hollow-metal frames.

1. Allegion plc.
2. Hager Companies.
3. Ives Hinges.
4. Stanley Commercial Hardware; a division of Stanley Security Solutions.

B. Antifriction-Bearing Hinges:

1. Mounting: Full mortise (butts).
2. Bearing Material: Ball bearing.
3. Grade 1 (heavy weight).
4. Base and Pin Metal:
 - a. Interior Hinges: Brass with stainless steel pin body and brass protruding heads.
 - b. Hinges for Fire-Rated Assemblies: Steel with steel pin.
5. Pins: Non-rising loose unless otherwise indicated.
 - a. Outswinging Corridor Doors with Locks: Maximum security.
6. Tips: Flat button.
7. Corners: Square.
8. Features: Raised barrel.

2.4 ELECTROMAGNETIC LOCKS

A. Electromagnetic Locks: BHMA A156.23; electrically powered; with electromagnet attached to frame and armature plate attached to door; full-exterior or full-interior type, as required by application indicated.

1. Security Door Controls (SDC); 1570 Series.
2. Direct-Hold Type: Lock mounted on bottom of header.
3. Strength Ranking: 1200 lbf (5338 N).
4. Inductive Kickback Peak Voltage: Not more than 53 V.
5. Residual Magnetism: Not more than 4 lbf (18 N) to separate door from magnet.
6. Features:
 - a. Magnetic bond sensor.

2.5 EXIT DEVICES AND AUXILIARY ITEMS

A. Exit Devices and Auxiliary Items: BHMA A156.3.

1. Von Duprin; Allegion.
- B. Panic Exit Devices: Listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for panic protection, based on testing in accordance with UL 305.
- C. Rim Exit Devices: Grade 1.
 1. Type: 1, rim.
 2. Actuating Bar: Push pad.
 3. Material: Stainless steel.
- D. Concealed Vertical-Rod Exit Devices: Grade 1.
 1. Type: 7, for wood doors.
 2. Actuating Bar: Push pad.
 3. Material: Stainless steel.
 4. Configuration: Top and bottom rods.
- E. Exit Device Outside Trim: Lever with cylinder or Pull with cylinder as indicated; material and finish to match locksets unless otherwise indicated.
 1. Match design for lock trim unless otherwise indicated.

2.6 LOCK CYLINDERS

- A. Lock Cylinders:
 1. Building Standard:
 - a. Best Access Systems; Stanley Security Solutions, Inc. – 7KC Series
- B. Standard Lock Cylinders: BHMA A156.5; Grade 2 permanent cores; face finished to match lockset.
 1. Core Type: Interchangeable.
 2. Number of Pins: Seven.
 3. Lock Type: Rim type.
 4. Function: As indicated in hardware schedule.
 5. Finish: 626 – Satin Chromium Plated
 6. Strike Plate: 6KS3
 7. Keyway Type: Type L Interchangeable Cores (1C7L1626)
 - a. All interchangeable cores to be turned over to Owner (FMDC). FMDC will set cores and cut keys.

2.7 SURFACE CLOSERS

- A. Surface Closers: BHMA A156.4; rack-and-pinion hydraulic type with adjustable sweep and latch speeds controlled by key-operated valves and forged-steel main arm. Comply with manufacturer's written instructions for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to meet field conditions and requirements for opening force.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Corbin Russwin, Inc.; an ASSA ABLOY Group company.
 - b. Hager Companies.
 - c. Stanley Commercial Hardware; a division of Stanley Security Solutions.
- B. Surface Closer with Cover: Grade 1; Modern type with mechanism enclosed in cover.
 1. Mounting: Regular arm mounting.
 2. Type: Regular arm
 3. Backcheck: Factory preset and Adjustable, effective between 60 and 85 degrees of door opening.
 4. Cover Material: Molded plastic.
 5. Closing Power Adjustment: At least 15 percent more than minimum tested value.

2.8 MECHANICAL STOPS AND HOLDERS

- A. Floor-Mounted Stops: BHMA A156.16; polished cast brass, bronze, or aluminum base metal.
 1. Architectural Builders Hardware Mfg., Inc.
 2. Hager Companies.
 3. Rockwood Manufacturing Company; an ASSA ABLOY Group company.
- B. Dome-Type Floor Stop: Grade 1; with minimum 1-inch- (25-mm-) high bumper for doors without threshold and 1-3/8-inch- (35-mm-) high bumper for doors with threshold.

2.9 DOOR GASKETING

- A. Door Gasketing: BHMA A156.22; with resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.
 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Hager Companies.
 - b. National Guard Products, Inc.
 - c. Pemko; an ASSA ABLOY Group Company.
- B. Maximum Air Leakage: When tested in accordance with ASTM E283 with tested pressure differential of 0.3-inch wg (75 Pa), as follows:
 1. Smoke-Rated Gasketing: 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) of door opening.
 2. Gasketing on Single Doors: 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) of door opening.
 3. Gasketing on Double Doors: 0.50 cfm per ft. (0.000774 cu. m/s per m) of door opening.

- C. Adhesive-Backed Perimeter Gasketing: Silicone gasket material applied to frame rabbet with self-adhesive.

2.10 AUXILIARY ELECTRIFIED DOOR HARDWARE

- A. Boxed Power Supplies: Modular unit in NEMA ICS 6, Type 4 enclosure; filtered and regulated; voltage rating and type matching requirements of door hardware served; listed and labeled for use with fire-alarm systems.
- B. Door Position Switches: Magnetically operated reed switch designed for concealed mounting.
- C. Door and Frame Transfer Devices: Steel housing for mortise in hinge stile of door, with flexible tube for wiring bundle; accommodating doors that swing open to 120 degrees.

2.11 FABRICATION

- A. Base Metals: Produce door hardware units of base metal indicated, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18.
- B. Fasteners: Provide door hardware manufactured to comply with published templates prepared for machine, wood, and sheet metal screws. Provide screws that comply with commercially recognized industry standards for application intended, except aluminum fasteners are not permitted. Provide Phillips flat-head screws with finished heads to match surface of door hardware unless otherwise indicated.
 - 1. Concealed Fasteners: For door hardware units that are exposed when door is closed, except for units already specified with concealed fasteners. Do not use through bolts for installation where bolt head or nut on opposite face is exposed unless it is the only means of securely attaching the door hardware. Where through bolts are used on hollow door and frame construction, provide sleeves for each through bolt.

2.12 FINISHES

- A. Provide finishes complying with BHMA A156.18 as indicated in door hardware schedule.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance of the Work.
- B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Steel Doors and Frames: For surface-applied door hardware, drill and tap doors and frames in accordance with ANSI/SDI A250.6.
- B. Wood Doors: Comply with door and hardware manufacturers' written instructions.

3.3 INSTALLATION

- A. Mounting Heights: Mount door hardware units at heights to comply with the following unless otherwise indicated or required to comply with governing regulations.
 - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
 - 2. Custom Steel Doors and Frames: HMMA 831.
 - 3. Wood Doors: DHI's "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- B. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work. Do not install surface-mounted items until finishes have been completed on substrates involved.
 - 1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
 - 2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- C. Hinges: Install types and in quantities indicated in door hardware schedule, but not fewer than the number recommended by manufacturer for application indicated or one hinge for every 30 inches (750 mm) of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.
- D. Lock Cylinders: Install construction cores to secure building and areas during construction period.

1. Furnish permanent cores to Owner for installation.
- E. Key Control System:
 1. Key Control Cabinet: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.
 2. Key Lock Boxes: Install where indicated or approved by Architect to provide controlled access for fire and medical emergency personnel.
 3. Key Control System Software: Set up multiple-index system based on final keying schedule.
- F. Boxed Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings. Verify location with Owner (FMDC).
 1. Configuration: Provide [one power supply for each door opening] [least number of power supplies required to adequately serve doors] with electrified door hardware.
- G. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they will impede traffic.
- H. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
 1. Do not notch perimeter gasketing to install other surface-applied hardware.
- I. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- J. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.

3.4 FIELD QUALITY CONTROL

- A. Independent Architectural Hardware Consultant: Engage a qualified independent Architectural Hardware Consultant to perform inspections and to prepare inspection reports.
 1. Independent Architectural Hardware Consultant will inspect door hardware and state in each report whether installed work complies with or deviates from requirements, including whether door hardware is properly installed and adjusted.

3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
 1. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.

2. Spring Hinges: Adjust to achieve positive latching when door is allowed to close freely from an open position of 70 degrees and so that closing time complies with accessibility requirements of authorities having jurisdiction.

- B. Occupancy Adjustment: Approximately three months after date of Substantial Completion, Installer's Architectural Hardware Consultant shall examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors, door hardware, and electrified door hardware.

3.6 CLEANING AND PROTECTION

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

3.7 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

3.8 DOOR HARDWARE SCHEDULE

- A. Hardware items are referenced in the following hardware. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.
- B. Hardware Sets: Reference Door Schedules on sheet A-600 for additional information.

1. Hardware Group No. 1 – Single Door Office Lock Function
Provide each SGL door(s) with the following:
Hardware:
3-4 EA. Hinges with Bearings [Doors 7'-6" high or taller to receive (4) hinges.
Doors less than 7'-6" high to receive (3) hinges.]
1 EA. Lever Handle with AB-Entry function
1 EA. Floor Mounted Doorstop
3 EA. Door Silencers
2. Hardware Group No. 2 – Single Door Conference Passage Function
Provide each SGL door(s) with the following:
Hardware:
3-4 EA. Hinges with Bearings [Doors 7'-6" high or taller to receive (4) hinges.
Doors less than 7'-6" high to receive (3) hinges.]
1 EA. Lever Handle with N-Passage function

- 1 EA. Floor Mounted Doorstop
 - 3 EA. Door Silencers
3. Hardware Group No. 3 – Single Door Mechanical/Electrical/Data Locking Function
Provide each SGL door(s) with the following:
Hardware:
- 3-4 EA. Hinges with Bearings [Doors 7'-6" high or taller to receive (4) hinges.
Doors less than 7'-6" high to receive (3) hinges.]
 - 1 EA. Lever Handle with D-Storeroom function
 - 1 EA. Floor Mounted Doorstop
 - 3 EA. Door Silencers
4. Hardware Group No. 4 – Single Door Single Use Restroom/Wellness Room Locking Function
Provide each SGL door(s) with the following:
Hardware:
- 3-4 EA. Hinges with Bearings [Doors 7'-6" high or taller to receive (4) hinges.
Doors less than 7'-6" high to receive (3) hinges.]
 - 1 EA. Lever Handle with L-Privacy function
 - 1 EA. Floor Mounted Doorstop
 - 1 EA. Door Closer
 - 3 EA. Door Silencers
5. Hardware Group No. 5 – Single Café Door Locking Function
Provide each SGL door(s) with the following:
Hardware:
- 4 EA. Hinges with Bearings
 - 1 EA. Exit Device, On push side of door with optional pull.
 - 1 EA. Ladder Door Pull
 - 3 EA. Door Silencers
6. Hardware Group No. 6 – Single Door with Card Access
Provide each SGL door(s) with the following: Refer to Specification Section 281500 Integrated Access Control Hardware Devices for additional information.
Hardware:
- 3-4 EA. Hinges with Bearings [Doors 7'-6" high or taller to receive (4) hinges.
Doors less than 7'-6" high to receive (3) hinges.]
 - 1 EA. Exit Device, On push side of door with lever handle.
 - 1 EA. Magnetic Lock
 - 1 EA. Badge Reader - Proximity
 - 1 EA. Motion Rex
 - 1 EA. Push Button Rex
 - 1 EA. Door Contact
 - 1 EA. Power Supply
 - 1 EA. Floor Mounted Doorstop
 - 1 EA. Door Closer
 - 3 EA. Door Silencers
7. Hardware Group No. 7 – Double Door with Card Access

Provide each PR door(s) with the following: Refer to Specification Section 281500 Integrated Access Control Hardware Devices for additional information.

Hardware:

- 6 EA. Hinges with Bearings
- 2 EA. Lever Handle IDT-Dummy function
- 1 EA. Double Magnetic Lock
- 1 EA. Badge Reader - Proximity
- 1 EA. Motion Rex
- 1 EA. Push Button Rex
- 1 EA. Door Contact
- 1 EA. Power Supply
- 2 EA. Floor Mounted Doorstop
- 2 EA. Door Closer
- 6 EA. Door Silencers
- 2 EA. Smoke Seals (top, bottom, & sides)
- 2 EA. Dustproof Strike

8. Hardware Group No. 8 – Single RR Door with Automatic Opener

Provide each existing SGL door(s) with the following: Refer to Specification Section 087113 Power Operators for additional information.

Hardware:

- 1 EA. Automatic Door Opener
- 2 EA. Wall Mounted Push Paddle Actuators

9. Hardware Group No. 9 – Double Door with Passage Function

Provide each existing PR door(s) with the following:

Hardware:

- 6 EA. Hinges with Bearings
- 2 EA. Lever Handle with N-Passage function
- 2 EA. Exit Device, On push side of door
- 2 EA. Floor Mounted Doorstop
- 6 EA. Door Silencers

10. Hardware Group No. 10 – Double Door with Locking Function

Provide each existing PR door(s) with the following:

Hardware:

- 6 EA. Hinges with Bearings
- 1 EA. Lever Handle with D-Storeroom function
- 1 EA. Leven Handle IDT-Dummy function
- 2 EA. Floor Mounted Doorstop
- 6 EA. Door Silencers

11. Hardware Group No. 11 – Existing Double Door with Card Access

Provide each existing PR door(s) with the following:

Hardware:

- 1 EA. Double Magnetic Lock
- 1 EA. Badge Reader - Proximity
- 1 EA. Motion Rex
- 1 EA. Push Button Rex
- 1 EA. Door Contact

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- 1 EA. Power Supply
- 2 EA. Door Closer (if not existing)
- 2 EA. Dustproof Strike (if not existing)

END OF SECTION 087111

SECTION 123623.13 - PLASTIC-LAMINATE-CLAD COUNTERTOPS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Plastic-laminate-clad countertops.
2. Accessories.

1.2 ACTION SUBMITTALS

A. Product Data:

1. Plastic-laminate-clad countertops.
2. Accessories.

B. Sustainable Design Submittals:

1. GREENGUARD Certification.
2. Recycled Content.
3. TVOC (Total Volatile Organic Compounds).

C. Shop Drawings: For plastic-laminate-clad countertops.

1. Include plans, sections, details, and attachments to other work. Detail fabrication and installation, including field joints.
2. Show locations and sizes of cutouts and holes for items installed in plastic-laminate-clad countertops.
3. ~~Apply AWI Quality Certification Program label to Shop Drawings.~~

D. Samples: Plastic laminates in each type, color, pattern, and surface finish required in manufacturer's standard size.

E. Samples for Initial Selection: For plastic laminates.

F. Samples for Verification: As follows:

1. Plastic Laminates: For each type, color, pattern, and surface finish required, **8 by 10 inches** (200 by 250 mm) in size.

1.3 INFORMATIONAL SUBMITTALS

A. Qualification Data: For **Installer** and **fabricator**.

B. Product Certificates: For the following:

1. Composite wood products.
2. **High-pressure** decorative laminate.
3. ~~Chemical resistant, high pressure decorative laminate.~~
4. Adhesives.

~~C. Quality Standard Compliance Certificates: **AWI Quality Certification Program.**~~

D. Evaluation Reports: For fire-retardant-treated materials, from ICC-ES.

1.4 QUALITY ASSURANCE

A. Fabricator Qualifications: Shop that employs skilled workers who custom fabricate products similar to those required for this Project and whose products have a record of successful in-service performance.

1. ~~Shop Certification: **AWI's Quality Certification Program accredited participant.**~~

B. Installer Qualifications: **Manufacturer of products.**

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver countertops only after casework and supports on which they will be installed have been completed in installation areas.
- B. Store countertops in areas where environmental conditions comply with requirements specified in "Field Conditions" Article.
- C. Keep surfaces of countertops covered with protective covering during handling and installation.

1.6 FIELD CONDITIONS

- A. Environmental Limitations without Humidity Control: Do not deliver or install countertops until building is enclosed, wet-work is complete, and HVAC system is operating and maintaining temperature and relative humidity at levels planned for building occupants during the remainder of the construction period.
- B. Environmental Limitations with Humidity Control: Do not deliver or install countertops until building is enclosed, wet-work is complete, and HVAC system is operating and maintaining temperature between 75 deg F (24 deg C) and relative humidity between **45 to 55** percent during the remainder of the construction period.
- C. Field Measurements: Where countertops are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

- D. Established Dimensions: Where countertops are indicated to fit to other construction, establish dimensions for areas where countertops are to fit. Provide allowance for trimming at site, and coordinate construction to ensure that actual dimensions correspond to established dimensions.

PART 2 - PRODUCTS

2.1 PLASTIC-LAMINATE-CLAD COUNTERTOPS

- A. Quality Standard: Unless otherwise indicated, comply with the "Architectural Woodwork Standards" for grades of plastic-laminate-clad countertops indicated for construction, finishes, installation, and other requirements.

~~1. Provide inspections of fabrication and installation together with labels and certificates from **AWI** certification program indicating that countertops comply with requirements of grades specified.~~

- B. Laminate Grade: **Grade CC (HCS), 0.034 inches (0.86 mm).**

- C. **High-Pressure** Decorative Laminate: ISO 4586-3, **Grade HGP.**

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- a. **Formica Corporation.**
- b. **Nevamar Company, LLC.**
- c. **Wilsonart LLC.**

- D. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:

1. Basis of Design: As indicated by manufacturer's designations.
2. As selected by Architect from manufacturer's full range in the following categories:
 - a. Solid colors, **matte** finish.
 - b. Solid colors with core same color as surface, **matte** finish.

- E. Edge Treatment: **As indicated on Drawings.**

- F. Substrate Material: 45# density, industrial grad particleboard (CS 236-66; Type 1, Grade B, Class 2) or Medium Density Fiberboard (MDF).

1. Plywood, underlayment and solid lumber substrate not acceptable.

- G. Substrate Material at Sinks: **MDF made with exterior glue.**

- H. Substrate Thickness: 45# density, industrial grad particleboard (CS 236-66; Type 1, Grade B, Class 2) or

1. Build up countertop thickness to **1-1/2 inches** (38 mm) at front, back, and ends with additional layers of core material laminated to top.

I. Backer Sheet: Provide plastic-laminate backer sheet, ISO 4586-3, grade to match exposed surface, on underside of countertop substrate.

J. Paper Backing: Provide paper backing on underside of countertop substrate.

2.2 WOOD MATERIALS

A. Composite Wood Products: Provide materials that comply with requirements of referenced quality standard for each type of countertop and quality grade specified unless otherwise indicated.

1. MDF: Medium-density fiberboard, ANSI A208.2 [**Grade 130**]
2. Particleboard: ANSI A208.1 [**Grade M-2-Exterior Glue**].

2.3 ACCESSORIES

A. Trash Grommet: **12 inches** (305 mm) wide by **2-inch** (50.8 mm) deep; brushed stainless steel; trash ring with **1/4-inch** (6.4-mm) lip.

1. Color: Brushed Stainless Steel

2.4 MISCELLANEOUS MATERIALS

A. Adhesive for Bonding Plastic Laminate: **Type I, waterproof type** as selected by fabricator to comply with requirements.

B. Installation Adhesive:

1. Waterproof PVAc adhesive is preferred.
2. Contact Adhesive: Use a non-pigmented adhesive.

2.5 FABRICATION

A. Sand fire-retardant-treated wood lightly to remove raised grain on exposed surfaces before fabrication.

B. Fabricate countertops to dimensions, profiles, and details indicated. Provide front and end overhang of **1 inch** (25 mm) over base cabinets. Ease edges to radius indicated for the following:

1. Solid-Wood (Lumber) Members: **1/16 inch** (1.5 mm) unless otherwise indicated.

C. Complete fabrication, including assembly, to maximum extent possible before shipment to Project site. Disassemble components only as necessary for shipment and

installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.

- D. Shop cut openings to maximum extent possible to receive appliances, plumbing fixtures, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Before installation, condition countertops to average prevailing humidity conditions in installation areas.
- B. Before installing countertops, examine shop-fabricated work for completion and complete work as required, including removal of packing.

3.2 INSTALLATION

- A. Grade: Install countertops to comply with same grade as item to be installed.
- B. Assemble countertops and complete fabrication at Project site to the extent that it was not completed in the shop.
 - 1. Provide cutouts for appliances, plumbing fixtures, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.
- C. Field Jointing: Where possible, make in the same manner as shop jointing, using dowels, splines, adhesives, and fasteners recommended by manufacturer. Prepare edges to be joined in shop so Project-site processing of top and edge surfaces is not required. Locate field joints where shown on Shop Drawings.
 - 1. Secure field joints in countertops with concealed clamping devices located within **6 inches** (150 mm) of front and back edges and at **intervals not exceeding 24 inches** (600 mm). Tighten in accordance with manufacturer's written instructions to exert a constant, heavy-clamping pressure at joints.
- D. Scribe and cut countertops to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.
- E. Fire-Retardant-Treated Wood: Handle, store, and install fire-retardant-treated wood to comply with chemical-treatment manufacturer's written instructions, including those for adhesives used to install woodwork.

- F. Countertop Installation: Anchor securely by screwing through corner blocks of base cabinets or other supports into underside of countertop.
 - 1. Install countertops level and true in line. Use concealed shims as required to maintain not more than a **1/8-inch-in-96-inches** (3-mm-in-2400-mm) variation from a straight, level plane.

3.3 ADJUSTING AND CLEANING

- A. Repair damaged and defective countertops, where possible, to eliminate functional and visual defects. Where not possible to repair, replace countertops. Adjust joinery for uniform appearance.
- B. Clean countertops on exposed and semi exposed surfaces.
- C. Protection: Provide Kraft paper or other suitable covering over countertop surfaces, taped to underside of countertop at a minimum of **48 inches** (1220 mm) o.c. Remove protection at Substantial Completion.

END OF SECTION 123623.13

GENERAL NOTES: FINISH

- REFER TO PLANS, RCP, ELEVATIONS, FINISH LEGEND, DOOR SCHEDULE, AND DETAILS FOR FINISH INFORMATION AND LOCATIONS. REFER TO ELEVATIONS FOR ADDITIONAL FINISH INFORMATION OR WHERE MULTIPLE FINISHES ARE INDICATED ON PLAN FOR THE SAME WALL.
- REFER TO SHEET A-400 FOR RESTROOM FINISH INFORMATION.
- REFER TO F-SERIES DRAWINGS FOR COMMUNICATIONS RECEPTACLES AND ELECTRICAL OUTLETS LOCATIONS.
- IDENTIFY AND INFORM CONSTRUCTION TEAM OF ALL CRITICAL PATH ITEMS, CRITICAL DEADLINES, AND DATE OF SUBSTANTIAL COMPLETION.
- GO TO REVIEW AND SUBMIT TO ARCHITECT SAMPLES OF EACH MATERIAL IN FINISH LEGEND. REFER TO PLANS, RCP, ELEVATIONS, FINISH LEGEND, DOOR SCHEDULE, AND DETAILS FOR FINISH INFORMATION AND LOCATIONS. SAMPLES TO BE THE SPECIFIED COLOR AND FINISH FOR REVIEW. REFERENCE GENERAL NOTES: SUBMITTALS FOR MORE INFO AND PROTOCOL.
- THE FINISH NAME TAKES PRECEDENT OVER THE FINISH PRODUCT NUMBER WHEN ORDERING MATERIALS. CONTACT ARCHITECT WITH DISCREPANCIES BEFORE ORDERING MATERIALS.
- PATCH AND REPAIR EXISTING FINISHES AS REQUIRED WHERE DEMOLITION OR NEW CONSTRUCTION OCCURS. NEW FINISHES TO MATCH EXISTING IN MANUFACTURER, COLOR, FINISH, AND TEXTURE. WHERE MATERIALS ARE NOT AVAILABLE FOR EXACT MATCH, SUBMIT PROPOSED REPLACEMENT MATERIALS TO ARCHITECT FOR BEFORE PURCHASE OR INSTALLATION.
- PATCH AND REPAIR OR REPLACE ANY EXISTING FINISHES IN BUILDING COMMON AREAS OUTSIDE SCOPE OF WORK IF DAMAGE OCCURS RELATED TO THE CONSTRUCTION OF THE SCOPE OF WORK.
- MAINTAIN AND PROTECT EXISTING FLOORING AND FINISHES NOTED TO REMAIN FOR DURATION OF CONSTRUCTION.
- CLEAN AND PREPARE FLOOR AREA SCHEDULED TO RECEIVE NEW FLOORING SO THE AREAS ARE ABLE TO ACCEPT NEW FLOORING, AND MAINTAIN REQUIRED FLOOR ASSEMBLY RATINGS. TO BE FLUSH AND CONTINUOUS WITH ADJACENT FLOOR SURFACE, AS REQUIRED FOR NEW FINISH.
- INSTALL ALL FLOORING PER MANUFACTURER'S RECOMMENDATIONS AND ACCEPTED INDUSTRY PRACTICES, INCLUDING BUT NOT LIMITED TO MOISTURE TESTING, FLOOR PREPARATION, INSTALLATION METHOD, AND ADHESIVES. VERIFY WITH ALL MANUFACTURERS AND SUPPLIERS PRIOR TO INSTALLATION. ALL INTERIOR FINISHES TO MEET OR EXCEED APPLICABLE CODE REQUIREMENTS, INCLUDING BUT NOT LIMITED TO FLAME SPREAD AND SMOKE DEVELOPMENT.
- ALL INTERIOR FINISH AND SUNDRIES TO MEET OR EXCEED CLASS II FLAME SPREAD, 26 - 75 AND SMOKE DEVELOPMENT RATING LESS THAN 450 AND ALL OTHER APPLICABLE CODES.
- ALL IMPACT-RESISTANT PANELS TO BE CLASS 1 COMPONENTS. TESTED IN ACCORDANCE WITH UL-723 (ASTM E84) FLAME SPREAD 20 OR LESS. SMOKE DEVELOPED 400 OR LESS.
- ALL VINYL WALL COVERING FIRE HAZARD CLASSIFICATION (ASTM E-84) FLAME SPREAD 5, FUEL CONTRIBUTION 0, SMOKE DENSITY FACTOR 5.
- UNO ALL PAINTED SURFACES TO RECEIVE A MINIMUM OF ONE (1) PRIMER COAT AND THEN TWO (2) FINISH PAINT COATS. TINT PRIMER COAT PER MANUFACTURER'S SPECIFICATIONS.
- UNO ALL EXTERIOR WALLS AND COLUMNS TO RECEIVE PAINT (PT-1) AND BASE (WB-1).
- UNO ALL GLASS IN DOORS AND SIDELITES TO BE GLASS (GL-1).
- UNO ALL WOOD DOORS AND TRIM TO RECEIVE STAIN (WD-1). REFER TO DOOR SCHEDULE FOR ADDITIONAL INFORMATION.
- UNO ALL FLOORING TRANSITIONS TO BEGIN AT CENTERLINE UNDER DOOR. REFER TO TRANSITION DETAILS FOR ALL FLOORING CHANGES.
- UNO ALL RESILIENT AND TILE FLOORING TO EXTEND UNDER CABINETRY AND COUNTERTOPS.
- UNO ALL FLOORS TO RECEIVE CARPET (CPT-1).
- UNO ALL RESILIENT BASE TO BE RESILIENT BASE (WB-1), 4" STRAIGHT AT CARPET AND 4" COVE AT HARD SURFACE FLOORING.
- UNO ALL RESILIENT FLOORING TO BE LUXURY VINYL TILE (LVT-1).
- ALL COUNTERTOP EDGE PROFILES TO BE AN EASED EDGE.
- ALL LIGHT SWITCH AND OUTLET COVER PLATES TO MATCH EXISTING.

UNO ALL PAINTED SURFACES TO RECEIVE THE FOLLOWING FINISHES:
 GYP. BD. VERTICAL WALL SURFACES - EGGSHELL (SATIN)
 GYP. BD. CEILINGS, SOFFITS, BULKHEADS - EGGSHELL (SATIN)
 METAL SURFACES - SEMI-GLOSS
 WOOD SURFACES - EGGSHELL
 CONCRETE MASONRY UNIT - EGGSHELL

KEYED NOTES - FINISH

- F12 VINYL FLOOR TRANSITION FROM NEW RESILIENT FLOORING TO EXISTING RESILIENT/RAISED ACCESS FLOOR. GC TO CONFIRM EXISTING CONDITIONS
- F14 INSTALL VINYL FLOORING AT TOP STAIR LANDING, AND VINYL STRINGERS & RISERS; BASIS OF DESIGN: TARKETT - COLOR: TBD
- F15 FLOOR TRANSITION FROM EXISTING RESILIENT FLOORING TO NEW CARPET FLOOR; REFERENCE DETAIL 13/A-502

ROOM SCHEDULE - BASEMENT	
Number	Name
001	PRINT SHOP
002	OPEN OFFICE
003	OFFICE
004	OFFICE
005	OFFICE
006	OFFICE
007	OFFICE
008	STORAGE AREA
009	MECHANICAL/ELECTRICAL
010	STORAGE
011	MECHANICAL

FINISH LEGEND - INTERIOR

NOTE: ALL MANUFACTURERS AND PRODUCTS LISTED IN THIS LEGEND ARE BASIS OF DESIGN. REFERENCE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.

ACOUSTICAL CEILING

ACT-1 (GENERAL THROUGHOUT UNO)
 BASIS OF DESIGN:
 PRODUCT: CEILING TILE & GRID
 MFG: ARMSTRONG
 PRODUCT: CANYON
 TYPE: REGULAR
 SIZE: 24" X 24"
 GRID: 9/16"
 TILE COLOR: WHITE
 GRID COLOR: WHITE
 CAC: 35
 NRC: 0.60

ACT-2 (CAFÉ SOFT SEATING NICHE)
 BASIS OF DESIGN:
 PRODUCT: CEILING TILE & GRID
 MFG: ARMSTRONG
 PRODUCT: CIRRUS
 TYPE: ANGLED REGULAR
 SIZE: 24" X 24"
 GRID: 9/16"
 TILE COLOR: BLACK
 GRID COLOR: BLACK
 CAC: 35
 NRC: 0.35

CARPET
CPT-1 (GENERAL UNO)
 BASIS OF DESIGN:
 PRODUCT: CARPET TILE
 MFG: SHAW CONTRACT
 COLLECTION: SUITED
 PATTERN: CHECK TILE
 STYLE #: 57281
 COLOR: ANGORA
 COLOR #: 79596
 BACKING: ECOWOLUTION Q NYLON
 FIBER: TUFT WEIGHT: 28 OZ/SY
 SIZE: 18 x 36 INCHES
 INSTALLATION: BRICK LAY
 PER MANUFACTURER'S RECOMMENDATION
 ADHESIVE: HILARY LENZEN - HYPERLINK
 REP: hilary.lenzen@shawcontract.com
 aften.zurliene - HYPERLINK
 aften.zurliene@shawcontract.com

CPT-2 (ELEVATOR CAB)
 BASIS OF DESIGN:
 PRODUCT: WALK OFF CARPET TILE
 MFG: INTERFACE
 STEP REPEAT
 COLLECTION: SR899
 PATTERN: SR899
 COLOR: 10490 IRON
 INSTALL: MONOLITHIC
 NOTE: THIS IS AN ADD ALTERNATE ITEM - REFER TO LIST

GLASS
GL-1 (GLASS SIDELITES)
 PRODUCT: 1/4" TEMPERED GLASS
 COLOR: CLEAR
 NOTE: REFERENCE DOOR SCHEDULE

HARDWARE
HW-1 (CABINETS AT BREAK ROOMS & 1ST FL COPY; COUNTERTOP AT 1ST FL COPY)
 BASIS OF DESIGN:
 PRODUCT: CABINET PULL
 SHAPE: C-PULL
 SIZE: 4 INCH
 MFG: RICHELIEU (OR EQUAL)
 NUMBER: 2288
 COLOR: BLACK
 INSTALL: VERTICAL AT DOORS, HORIZONTAL AT DRAWERS

LUXURY VINYL TILE
LVT-1 (BREAK ROOMS; CORRIDOR 1ST FLOOR; ELEVATOR LOBBIES FLOORS 2 THRU 14)
 BASIS OF DESIGN:
 PRODUCT: LUXURY VINYL PLANK
 MFG: SHAW CONTRACT
 THICKNESS: 5MM
 WEAR LAYER: 20 MIL MINIMUM
 STYLE NAME: SOLITUDE
 STYLE #: 0649Y
 COLOR: SMOKE
 COLOR #: 48506
 SIZE: 6" X 48"
 INSTALL: ASHLAR, DIRECT GLUE
 REP: HILARY LENZEN - HYPERLINK
 hilary.lenzen@shawcontract.com
 AFTEN ZURLIENE - HYPERLINK
 aften.zurliene@shawcontract.com

PAINT
PT-1 (GENERAL PAINT THROUGHOUT UNO)
 MFG: SHERWIN WILLIAMS
 COLOR: ZURICH WHITE
 COLOR #: 7628
 FINISH: EGGSHELL

PT-2 (VERTICAL WOOD SLAT)
 MFG: SHERWIN WILLIAMS
 COLOR: TRICORN BLACK
 COLOR #: 6258
 FINISH: EGGSHELL

PT-3 (UNO: CLG. EXPOSED CONC. STRUCTURE/RELATED CLG. ELEMENTS AT ROOMS 133 THRU 140; SEE GENERAL NOTE #11/A-000)
 MFG: SHERWIN WILLIAMS
 COLOR: CEILING BRIGHT WHITE
 COLOR #: 7007
 FINISH: EGGSHELL

PT-4 (CLG. STRUCTURE IN EXISTING MULTI-STALL RESTROOMS)
 MFG: SHERWIN WILLIAMS
 COLOR: TO MATCH COLOR OF NEW ACOUSTICAL CEILING TILE
 FINISH: EGGSHELL

PT-5 (MULTI-STALL RESTROOMS: ACCESS PANEL)
 MFG: SHERWIN WILLIAMS
 COLOR: MATCH EXISTING
 FINISH: SEMI-GLOSS

PLASTIC LAMINATE
PL-1 (LOWER CABINETS & COUNTERTOPS AT BREAK ROOMS)
 BASIS OF DESIGN:
 PRODUCT: PLASTIC LAMINATE
 MFG: FORMICA COMMERCIAL GRADE
 COLOR: BLACK
 COLOR NO: 909-AN
 FINISH: INFINITI (THIS FINISH IS CRITICAL)
 TYPE: CC (COLOR CORE)
 THICKNESS: 0.034 INCH
 NOTE: CABINET INTERIORS CAN BE MELAMINE, BUT MUST BE BLACK IN COLOR
 REP: ANN YOUNG - HYPERLINK
 ann.young@amehart.com

PL-2 (UPPER CABINETS ONLY AT BREAK ROOMS)

BASIS OF DESIGN:
 PRODUCT: PLASTIC LAMINATE
 MFG: FORMICA COMMERCIAL GRADE
 COLOR: WHITE TWILL
 COLOR NO: 9255-58
 FINISH: MATTE
 THICKNESS: 0.035 INCH
 NOTE: CABINET INTERIORS CAN BE WHITE MELAMINE
 REP: ANN YOUNG - HYPERLINK
 ann.young@amehart.com

TILE
TL-1 (BREAK ROOM WALLS: ABOVE COUNTERTOP TO UNDERSIDE OF UPPER CABINETS)

BASIS OF DESIGN:
 PRODUCT: CERAMIC TILE
 NOTE: SCHLUTER SCHIENE TRIM
 MFG: ROCA
 PATTERN: MAJOLICA
 COLOR: WHITE
 COLOR #: MAIW081-78H
 SIZE: 7X8 HEX
 REP: RACHEL MAYES - HYPERLINK
 rachelmayes@sunderlands.com

GROUT FOR TL-1
 MFG: TBD
 COLOR: TBD
 COLOR NO: TBD
 GROUT LINE: 1/16" MAXIMUM
 NOTE: SEAL PER MANUF DIRECTIONS

TL-2 (TYPICAL AT RESTROOM WALLS: NEW INSET BEHIND LAVS & NEW DEMISING WALL)

BASIS OF DESIGN:
 PRODUCT: CERAMIC TILE
 NOTE: SCHLUTER DESIGNLINE BORDER PROFILE AT BOTH SIDES OF TRANSITION TO EXISTING GLAZED CMU WALL, AND ALSO AT TOP. TILE WILL EXTEND VERTICALLY TO FLOOR WITHOUT WALL BASE OR COVE.
 MFG: SONOMA
 PATTERN: MIRAZUR
 COLOR: MIRO METALLIC - COPA
 SHAPE: COPA (FLATTENED DIAMOND SHAPE)
 SIZE: 2.34" X 8.34"
 INSTALL: VERTICAL
 REP: RACHEL MAYES - HYPERLINK
 rachelmayes@sunderlands.com

GROUT FOR TL-2
 MFG: TBD
 COLOR: TBD
 COLOR NO: TBD
 GROUT LINE: 1/16" MAXIMUM
 NOTE: SEAL PER MANUF DIRECTIONS

TL-3 (NEW UNISEX RESTROOMS 1ST FLOOR)
 BASIS OF DESIGN:
 PRODUCT: PORCELAIN, CERAMIC OR QUARTZ BLEND TILE
 MFG: STONEPEAK
 PATTERN: URBAN 2.0
 COLOR: LAVA GREY
 SIZE: 12X24
 INSTALL: STACKED
 NOTE: RACHEL MAYES - HYPERLINK
 rachelmayes@sunderlands.com

GROUT FOR TL-3
 MFG: TBD
 COLOR: TBD
 COLOR NO: TBD
 GROUT LINE: 1/16" MAXIMUM
 NOTE: SEAL PER MANUF DIRECTIONS

TOILET PARTITIONS
TLP-1
 BASIS OF DESIGN:
 PRODUCT: POWDER-COATED METAL TOILET PARTITIONS
 MFG: ACCURATE (ASI)
 TYPE: FLOOR-ANCHORED OVERHEAD-BRACED
 NOTE: INTEGRATED PRIVACY SYSTEM
 COLOR: METALLIC SILVER
 COLOR #: 971

WALL BASE
WB-1
 BASIS OF DESIGN:
 PRODUCT: VINYL
 SHAPE: REFER TO GENERAL NOTES STRAIGHT AT CARPET COVE AT HARD FLOORING
 HEIGHT: 4"
 COLOR: BRONZE-BLACK TO MATCH EXISTING BLDG DOOR FRAMES

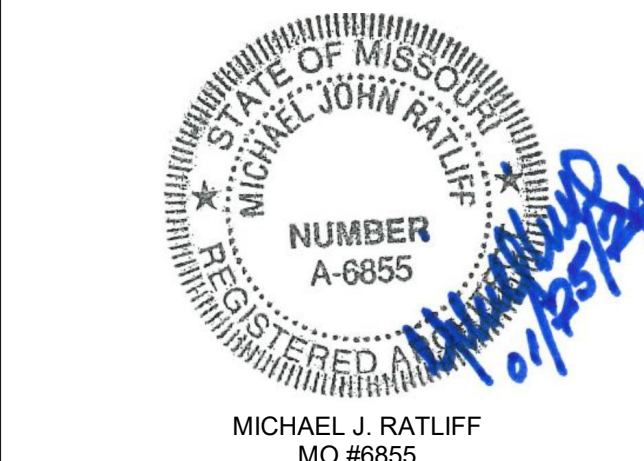
WALL PROTECTION
WP-1 (FUZZ-OUT AT RESTROOMS)
 BASIS OF DESIGN:
 PRODUCT: STAINLESS STEEL 304 ALLOY PANEL
 SIZE: 4X10 SHEETS CUT TO SIZE
 MFG: CONSTRUCTION SPECIALTIES (CS)
 TEXTURE: SMOOTH
 FINISH: LOW SHEEN
 GAUGE: 16
 THICKNESS: .0625"
 INSTALL: FULL HEIGHT (NO WALL BASE), BUTT JOINTS (NO OVERLAP). FASTENERS SHALL BE STAINLESS STEEL. INSTALL PER MANUFACTURER'S INSTRUCTIONS

WINDOW SHADE
WS-1 (1ST FLOOR BOARD ROOM / MULTIPURPOSE AREAS & ADD ALTERNATE CAFÉ)
 PRODUCT: SOLAR SHADE
 OPENNESS: 3%
 COLOR: BLACK
 OPERATION: MANUAL

WS-2 (TO MATCH BUILDING STANDARD)
 PRODUCT: VERIFY / MINI-BLIND
 COLOR: MATCH BUILDING STANDARD / TYPICAL

WOOD DOORS
WD-1
 PRODUCT: SOLID WOOD DOORS
 SPECIES: RED OAK (MATCH BUILDING STANDARD)
 GOLDEN OAK STAIN COLOR W/ POLYURETHANE / CLEAR COAT (MATCH BUILDING STANDARD)
 NOTE: IF POSSIBLE REUSE EXISTING DOORS

WINDOW FILM
WF-1
 PRODUCT: VINYL PRIVACY WINDOW FILM
 MFG: 3M
 STYLE: TBD
 CODE: TBD
 ADHESIVE: PRESSURE-SENSITIVE
 NOTE: PROVIDE SAMPLES FOR FMDC SELECTION WOULD LIKE TO SEE OPTIONS THAT ARE GEOMETRIC, PRISM, OR DOT AND GRADIENT FILMS



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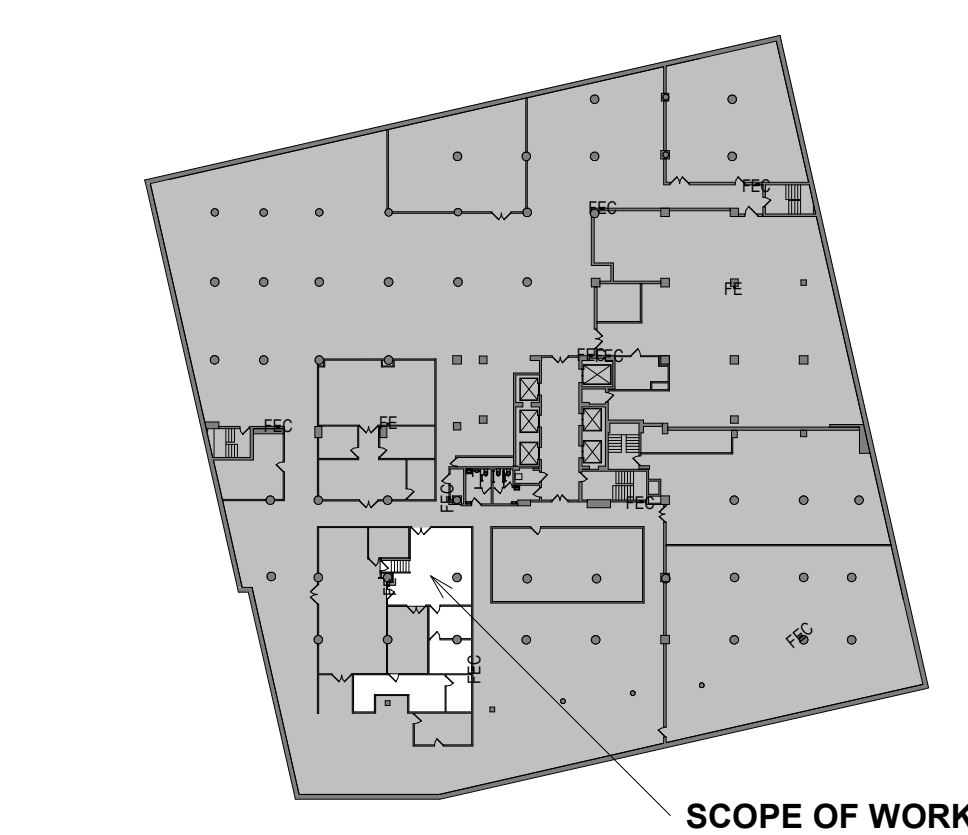
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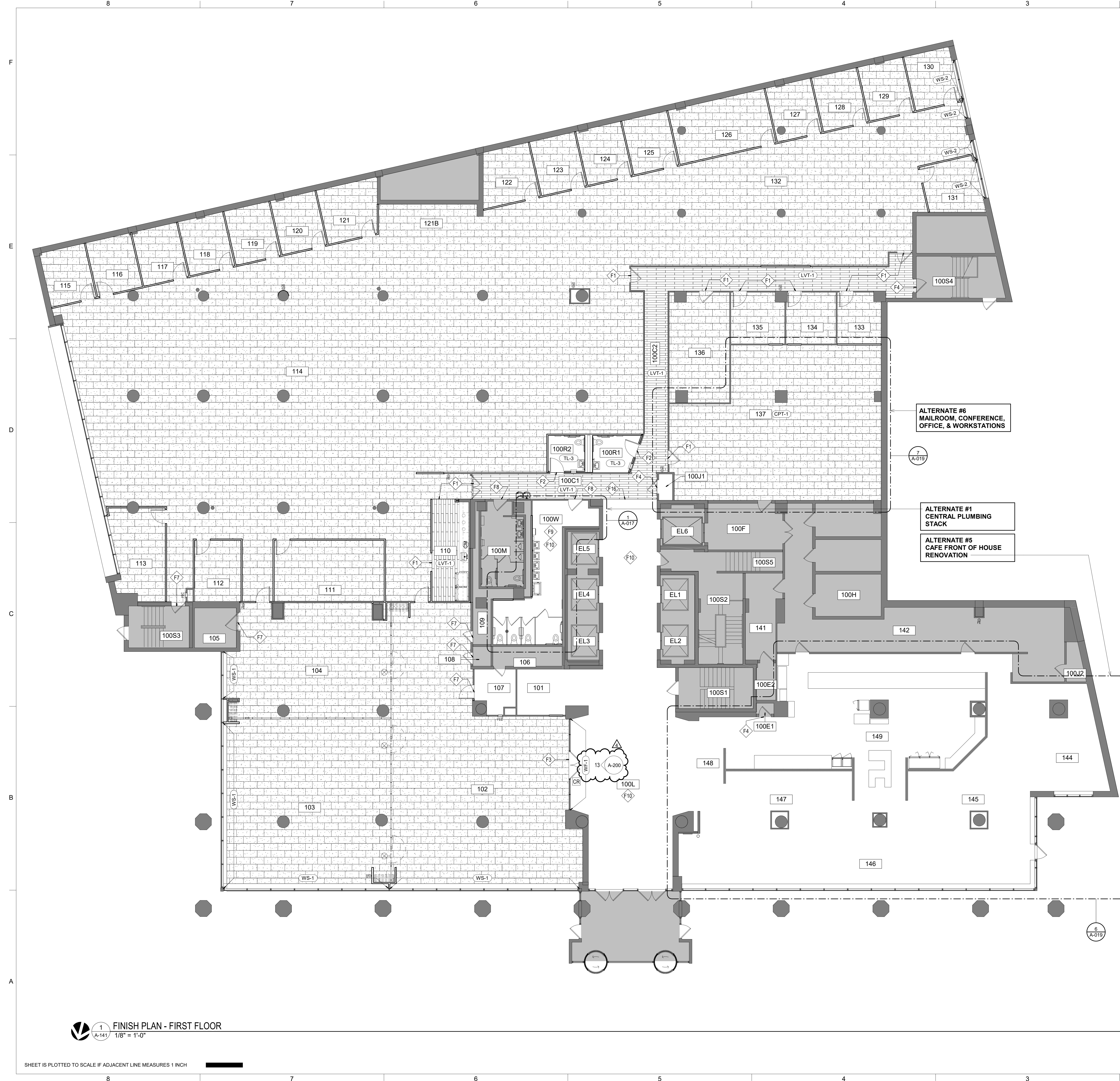
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DATE: 01/08/2024	_____
REVISION: Addendum 2	_____
DATE: 01/17/2024	_____
REVISION: Addendum 3	_____
DATE: 01/18/2024	_____
REVISION: Addendum 4	_____
DATE: 01/25/2024	_____
REVISION: _____	_____
DATE: _____	_____

ISSUE DATE: August 31, 2023
 CAD DWG FILE: A-140
 DRAWN BY: AR
 CHECKED BY: EA
 DESIGNED BY: JC

1 FINISH PLAN - BASEMENT
 1/4" = 1'-0"

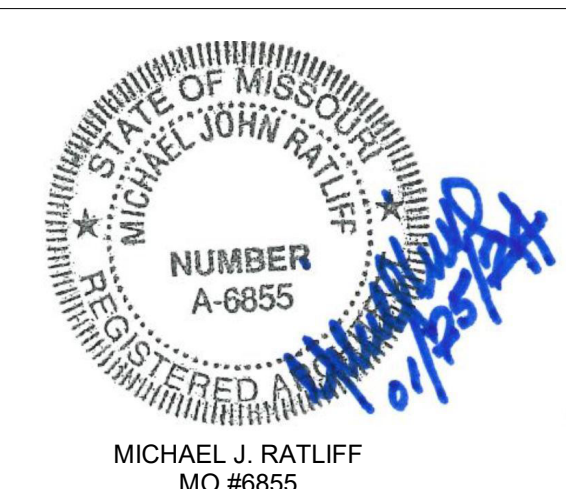


2 KEY PLAN - BASEMENT
 1" = 60'-0"



- KEYED NOTES - FINISH**
- F1 NO TRANSITION STRIP IS NEEDED REQUIRED WHERE NEW CARPET MEETS 5MM LVT
 - F2 FLOOR TRANSITION FROM NEW FLOOR LITE TO NEW 5MM LVT; REFERENCE DETAIL 12/A-502
 - F3 FLOOR TRANSITION FROM EXISTING TERRAZZO TO NEW CARPET; REFERENCE DETAIL 8/A-502
 - F4 FLOOR TRANSITION FROM EXISTING CONCRETE TO NEW 5MM LVT; REFERENCE DETAIL 10/A-502
 - F7 FLOOR TRANSITION FROM EXISTING CONCRETE TO NEW CARPET; REFERENCE DETAIL 9/A-502
 - F8 FLOOR TRANSITION FROM EXISTING CERAMIC TILE FLOORING TO NEW 5MM LVT; REFERENCE DETAIL 12/A-502
 - F9 STEAM CLEAN EXISTING GLAZED CMU MORTAR
 - F10 CLEAN AND RESTORE EXISTING TERRAZZO FLOORING/ INTEGRAL BASE
 - F16 TRANSITION FROM EXISTING TERRAZZO TO NEW 5MM LVT; REFERENCE DETAIL 14/A-502

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RENOVATE MECHANICAL/
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STATE OFFICE BUILDING

JEFFERSON STATE
OFFICE BUILDING
205 JEFFERSON STREET
JEFFERSON CITY, MO 65101

PROJECT # 01911-01
SITE # 1001
ASSET # 3101001057

REVISION: Addendum 1
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REVISION: Addendum 4
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REVISION:
DATE:

ISSUE DATE: August 31, 2023
CAD DWG FILE: A-141
DRAWN BY: AR
CHECKED BY: EA
DESIGNED BY: JC

SHEET TITLE:
FINISH PLAN - 1ST
FLOOR

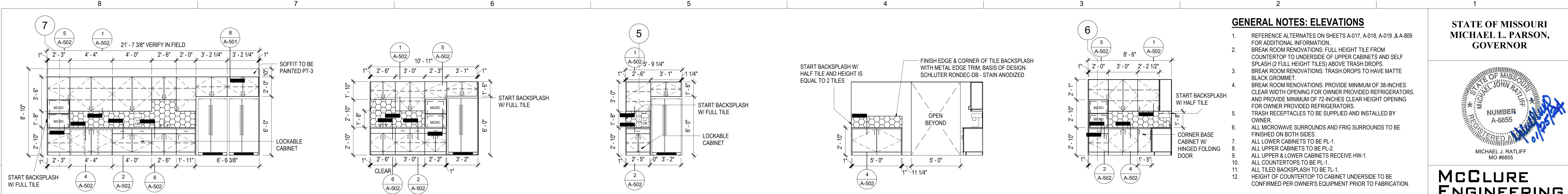
SHEET NUMBER:
A-141
51 OF 240
DATE: August 31, 2023

ROOM SCHEDULE - 1ST FLOOR	
Number	Name
100C1	CORRIDOR
100C2	CORRIDOR
100C3	CONFERENCE
100E1	ELEC CLOSET
100E2	DATA/ELECTRICAL
100F	FREIGHT ELEVATOR LOBBY
100H	MECHANICAL ROOM
100J1	JANITOR CLOSET
100J2	JANITOR CLOSET
100L	ELEVATOR LOBBY
100M	MEN'S RESTROOM
100R1	ADA RESTROOM
100R2	ADA RESTROOM
100S1	STAIRWELL
100S2	STAIRWELL
100S3	STAIRWELL
100S4	STAIRWELL
100S5	STAIRWELL
100W	WOMEN'S RESTROOM
101	VENDING ROOM
102	MULTI-PURPOSE
103	MULTI-PURPOSE
104	BOARD ROOM
105	ELECTRICAL
106	PLUMBING/ ELECTRICAL
107	ELECTRICAL
108	ELECTRICAL
109	PLUMBING/ ELECTRICAL
110	BREAK ROOM
111	CONFERENCE
112	OFFICE
113	FIRE COMMAND CENTER
114	OPEN OFFICE
115	OFFICE
116	OFFICE
117	OFFICE
118	OFFICE
119	OFFICE

ROOM SCHEDULE - 1ST FLOOR	
Number	Name
120	OFFICE
121	OFFICE
121B	PRINT/COPY BAR
122	OFFICE
123	OFFICE
124	OFFICE
125	OFFICE
126	CONFERENCE
127	OFFICE
128	OFFICE
129	OFFICE
130	OFFICE
131	OFFICE
132	OPEN OFFICE
133	DATA ROOM
134	WELLNESS ROOM
135	WELLNESS ROOM
136	VIDEO CONFERENCE
137	OPEN OFFICE
141	STORAGE
142	KITCHEN
EL1	ELEVATOR
EL2	ELEVATOR
EL3	ELEVATOR
EL4	ELEVATOR
EL5	ELEVATOR
EL6	SERVICE ELEVATOR

1 FINISH PLAN - FIRST FLOOR
A-141 1/8" = 1'-0"

SHEET IS PLOTTED TO SCALE IF ADJACENT LINE MEASURES 1 INCH



- GENERAL NOTES: ELEVATIONS**
- REFERENCE ALTERNATES ON SHEETS A-017, A-018, A-019, & A-809 FOR ADDITIONAL INFORMATION.
 - BREAK ROOM RENOVATIONS: FULL HEIGHT TILE FROM COUNTERTOP TO UNDERSIDE OF UPPER CABINETS AND SELF SPLASH (2 FULL HEIGHT TILES) ABOVE TRASH DROPS.
 - BREAK ROOM RENOVATIONS: TRASH DROPS TO HAVE MATTE BLACK GROMMET.
 - BREAK ROOM RENOVATIONS: PROVIDE MINIMUM OF 38-INCHES CLEAR WIDTH OPENING FOR OWNER PROVIDED REFRIGERATORS AND PROVIDE MINIMUM OF 72-INCHES CLEAR HEIGHT OPENING FOR OWNER PROVIDED REFRIGERATORS.
 - TRASH RECEPTACLES TO BE SUPPLIED AND INSTALLED BY OWNER.
 - ALL MICROWAVE SURROUNDS AND FRIG SURROUNDS TO BE FINISHED ON BOTH SIDES.
 - ALL LOWER CABINETS TO BE PL-1.
 - ALL UPPER CABINETS TO BE PL-2.
 - ALL UPPER & LOWER CABINETS RECEIVE HW-1.
 - ALL COUNTERTOPS TO BE PL-1.
 - ALL TILED BACKSPLASH TO BE TL-1.
 - HEIGHT OF COUNTERTOP TO CABINET UNDERSIDE TO BE CONFIRMED PER OWNER'S EQUIPMENT PRIOR TO FABRICATION.

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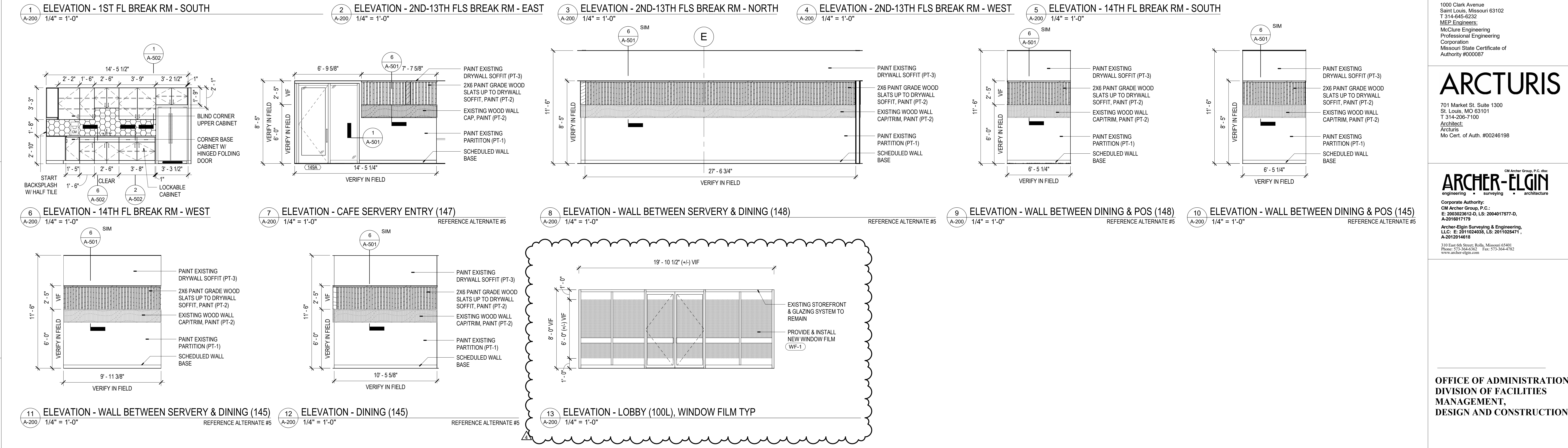
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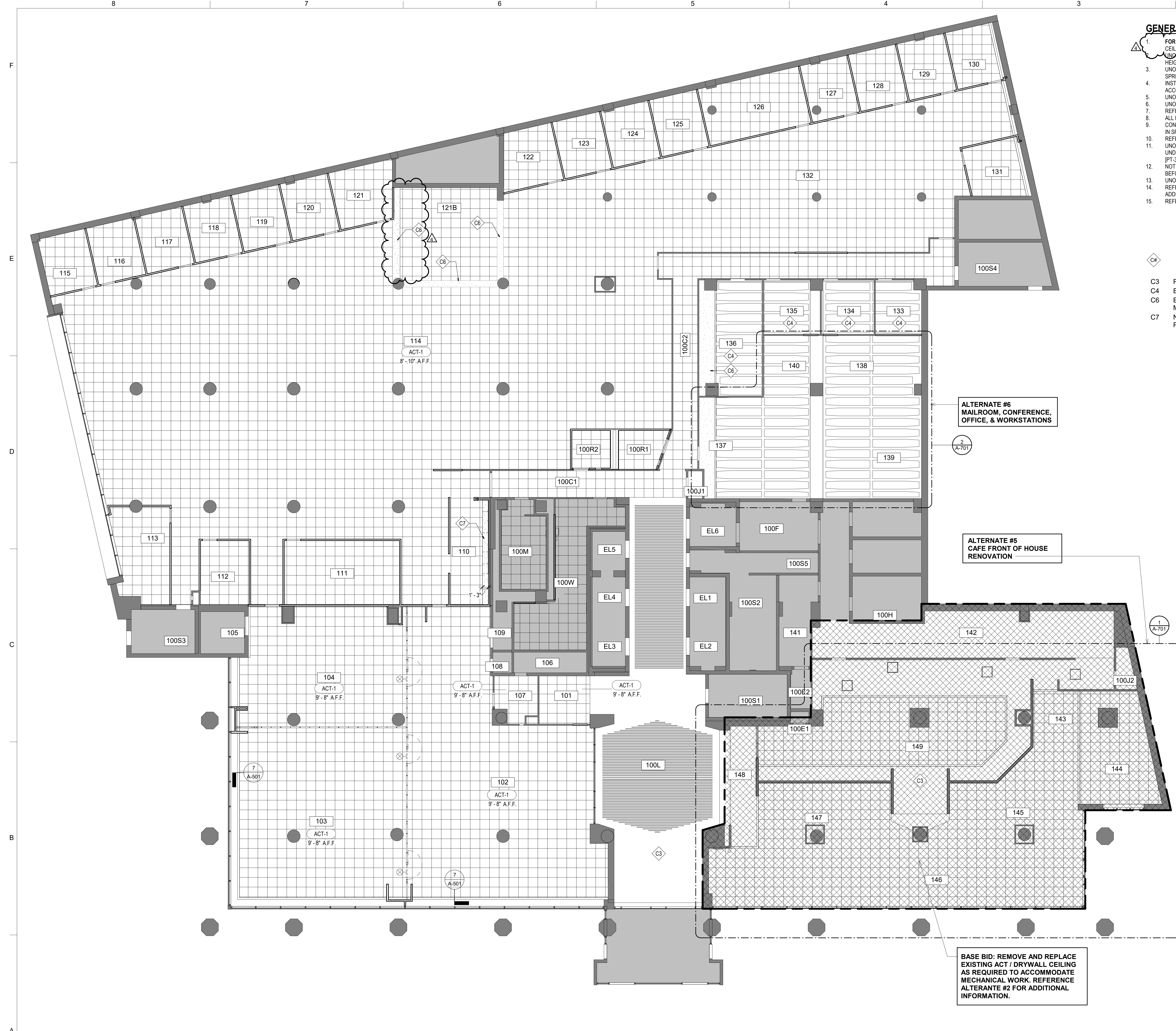
PROJECT # **01911-01**
 SITE # **1001**
 ASSET # **3101001057**

REVISION: Addendum 1
 DATE: 01/08/2024
 REVISION: Addendum 2
 DATE: 01/17/2024
 REVISION: Addendum 3
 DATE: 01/18/2024
 REVISION: Addendum 4
 DATE: 01/25/2024
 REVISION:
 DATE:

ISSUE DATE: August 31, 2023
 CAD DWG FILE: A-200
 DRAWN BY: AR/EA
 CHECKED BY: JC
 DESIGNED BY: JC

SHEET TITLE:
ELEVATIONS -
INTERIOR

SHEET NUMBER:
A-200
 59 OF 240
 DATE: August 31, 2023



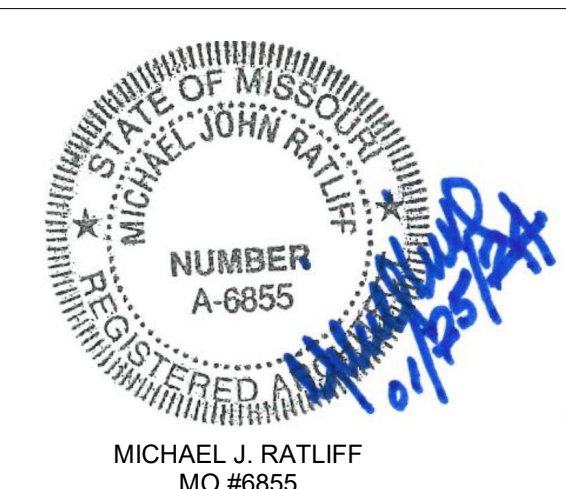
- GENERAL NOTES: CEILING PLAN ALL FLOORS**
- FOR FLOORS 2-4: REFERENCE MECHANICAL AND ELECTRICAL PLANS FOR LOCATIONS OF ALL CEILING MOUNTED DEVICES.
 - UNO ALL NEW CEILINGS TO MATCH EXISTING CEILING HEIGHT. REFER TO FINISH LEGEND FOR SPECIFICATION.
 - UNO ALL NEW CEILINGS TO ALIGN WITH EXISTING. IN ORDER TO MINIMIZE ANY RELOCATION OF SPRINKLER HEADS OR OTHER CEILING ELEMENTS.
 - INSTALL NEW CEILINGS TO COMPLY WITH ALL LOCAL BUILDING CODES.
 - UNO ALL EXISTING ELEVATOR LOBBY GYPSUM BOARD CEILINGS / SOFFITS TO REMAIN.
 - UNO ALL EXISTING ELEVATOR LOBBY WOOD SLAT CEILINGS TO REMAIN.
 - REFER TO ELECTRICAL DRAWINGS FOR DEVICE LOCATION INFORMATION.
 - ALL EXPOSED CEILING EDGES TO BE FINISHED.
 - CONTROL JOINTS IN GYP BD CEILING: PROVIDE CONTROL JOINTS ACCORDING TO ASTM C 840 AND IN SPECIFIC LOCATIONS APPROVED BY ARCHITECT FOR VISUAL EFFECT.
 - REFER TO FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
 - UNO PAINT ALL EXPOSED CEILING ELEMENTS INCLUDING BUT NOT LIMITED TO STRUCTURE, UNDERSIDE OF ROOF DECK, DUCTWORK, CONDUIT, PIPING, WIRING, AND SPRINKLER SYSTEMS (PT-3).
 - NOTIFY ARCHITECT OF ANY REQUIREMENTS FOR ACCESS PANELS NOT SHOWN ON DOCUMENTS BEFORE PROCEEDING WITH CONSTRUCTION.
 - UNO ALL GYP BD CEILINGS TO BE PAINTED (PT-3). REFER TO FINISH LEGEND FOR SPECIFICATION.
 - REFER TO MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
 - REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.

- KEYED NOTES - CEILING**
- C3 PAINT EXISTING DRYWALL CEILING / SOFFIT, (PT-3)
 - C4 EXPOSED STRUCTURE IN THIS AREA, PAINT (PT-3)
 - C6 EXISTING PREFINISHED GYP BOARD SOFFIT WITH METAL TRIM TO REMAIN
 - C7 NEW DRYWALL SOFFIT OVER UPPER CABINETS, PAINT (PT-3)

ROOM SCHEDULE - 1ST FLOOR	
Number	Name
100C1	CORRIDOR
100C2	CORRIDOR
100C3	CONFERENCE
100E1	ELEC CLOSET
100E2	DATA/ELECTRICAL
100F	FREIGHT ELEVATOR LOBBY
100H	MECHANICAL ROOM
100J1	JANITOR CLOSET
100J2	JANITOR CLOSET
100L	ELEVATOR LOBBY
100M	MENS RESTROOM
100R1	ADA RESTROOM
100R2	ADA RESTROOM
100S1	STAIRWELL
100S2	STAIRWELL
100S3	STAIRWELL
100S4	STAIRWELL
100S5	STAIRWELL
100W	WOMENS RESTROOM
101	VENDING ROOM
102	MULTI-PURPOSE
103	MULTI-PURPOSE
104	BOARD ROOM
105	ELECTRICAL
106	PLUMBING/ ELECTRICAL
107	ELECTRICAL
108	ELECTRICAL
109	PLUMBING/ ELECTRICAL
110	BREAK ROOM
111	CONFERENCE
112	OFFICE
113	FIRE COMMAND CENTER
114	OPEN OFFICE
115	OFFICE
116	OFFICE
117	OFFICE
118	OFFICE
119	OFFICE

ROOM SCHEDULE - 1ST FLOOR	
Number	Name
120	OFFICE
121	OFFICE
121B	PRINT/COPY BAR
122	OFFICE
123	OFFICE
124	OFFICE
125	OFFICE
126	CONFERENCE
127	OFFICE
128	OFFICE
129	OFFICE
130	OFFICE
131	OFFICE
132	OPEN OFFICE
133	DATA ROOM
134	WELLNESS ROOM
135	WELLNESS ROOM
136	VIDEO CONFERENCE
137	OPEN OFFICE
141	STORAGE
142	KITCHEN
EL1	ELEVATOR
EL2	ELEVATOR
EL3	ELEVATOR
EL4	ELEVATOR
EL5	ELEVATOR
EL6	SERVICE ELEVATOR

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PROJECT # 01911-01
SITE # 1001
ASSET # 3101001057

REVISION: Addendum 1
DATE: 01/08/2024
REVISION: Addendum 2
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DATE: 01/18/2024
REVISION: Addendum 4
DATE: 01/25/2024
REVISION: _____
DATE: _____

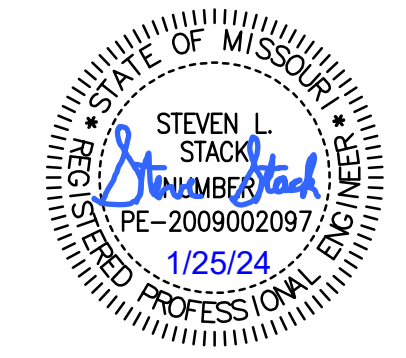
ISSUE DATE: August 31, 2023
CAD DWG FILE: A-700
DRAWN BY: EA
CHECKED BY: MR
DESIGNED BY: JC

SHEET TITLE:
REFLECTED CEILING
PLAN - FIRST FLOOR

SHEET NUMBER:
A-700
67 OF 240
DATE: August 31, 2023

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PROJECT # 0191101
SITE # 1001
ASSET # 310100157

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: ADDENDUM #4
DATE: 1-25-2024
ISSUE DATE:

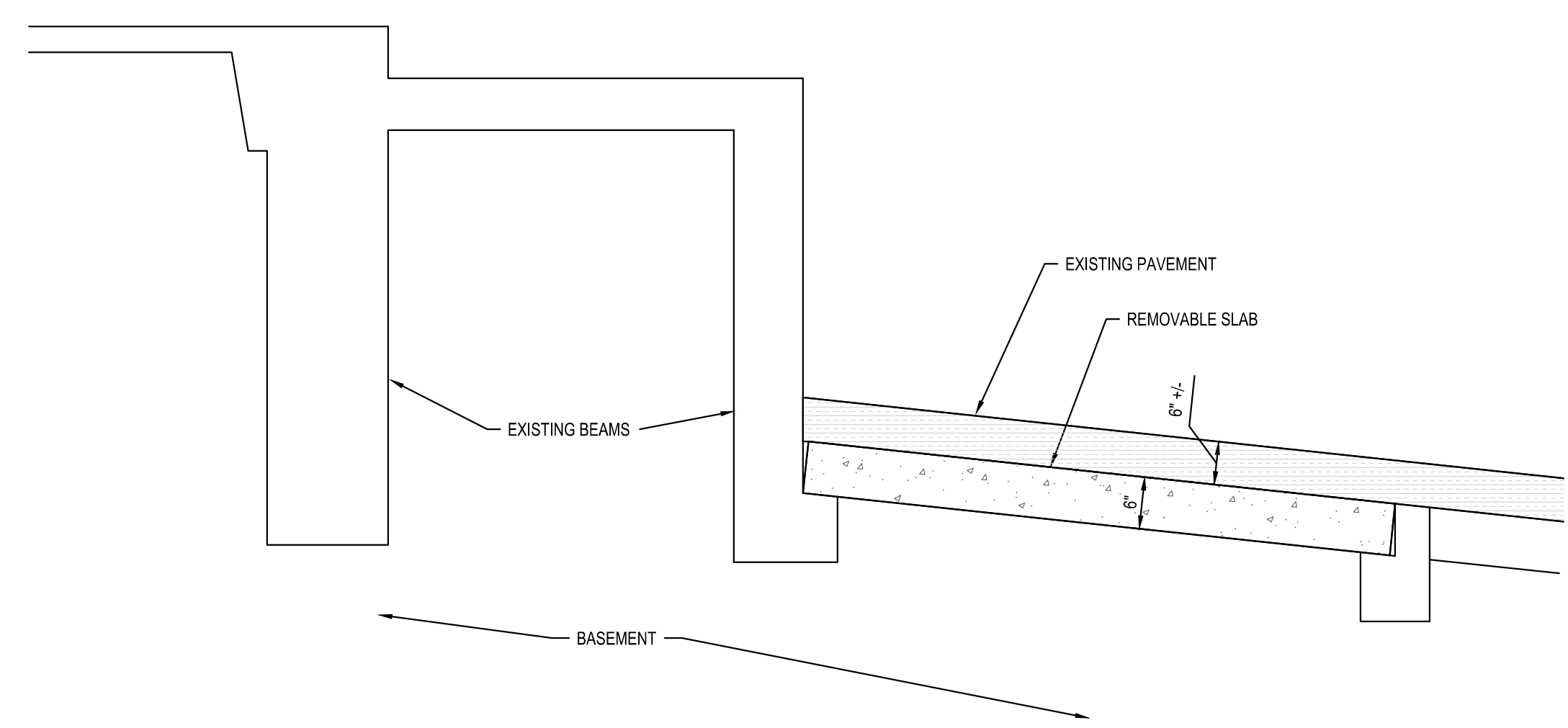
CAD DWG FILE: Jefferson Bldg structural base
DRAWN BY: SLS
CHECKED BY: SLS
DESIGNED BY: SLS

SHEET TITLE:
**REMOVABLE SLAB
DETAILS**

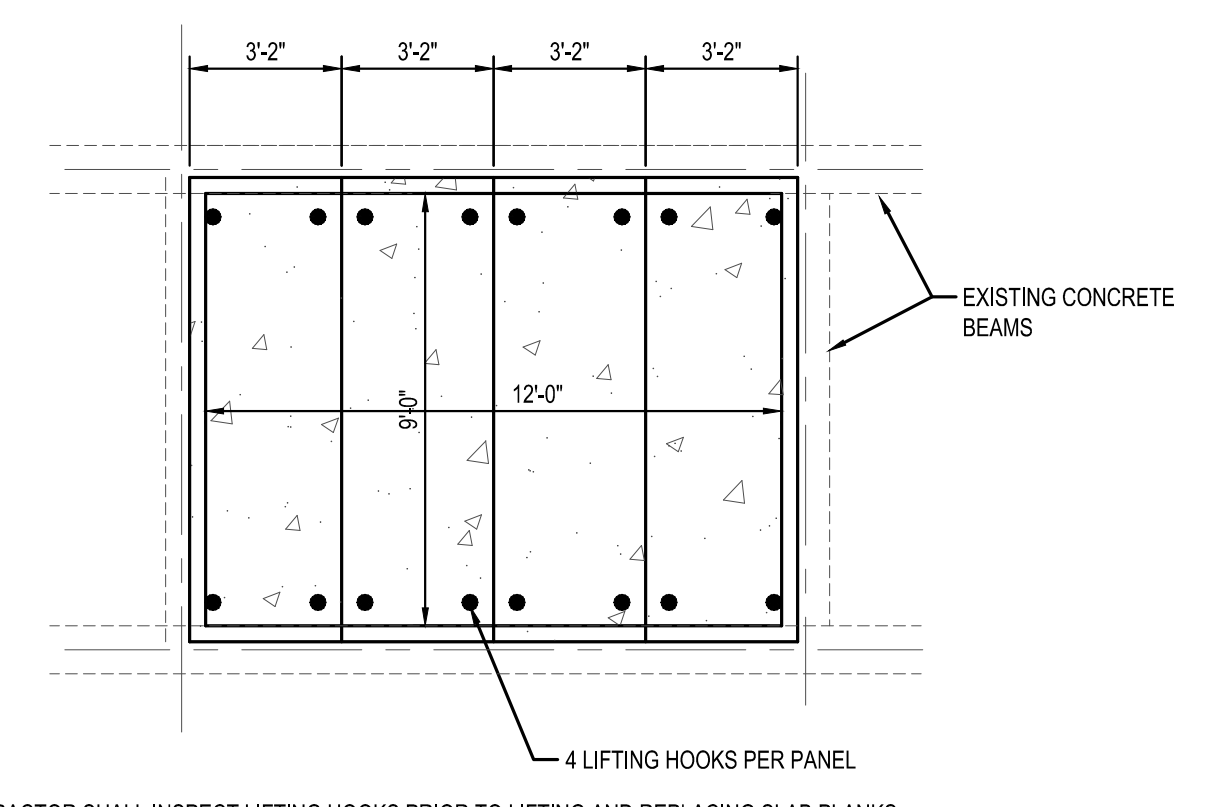
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78 OF 234 SHEETS

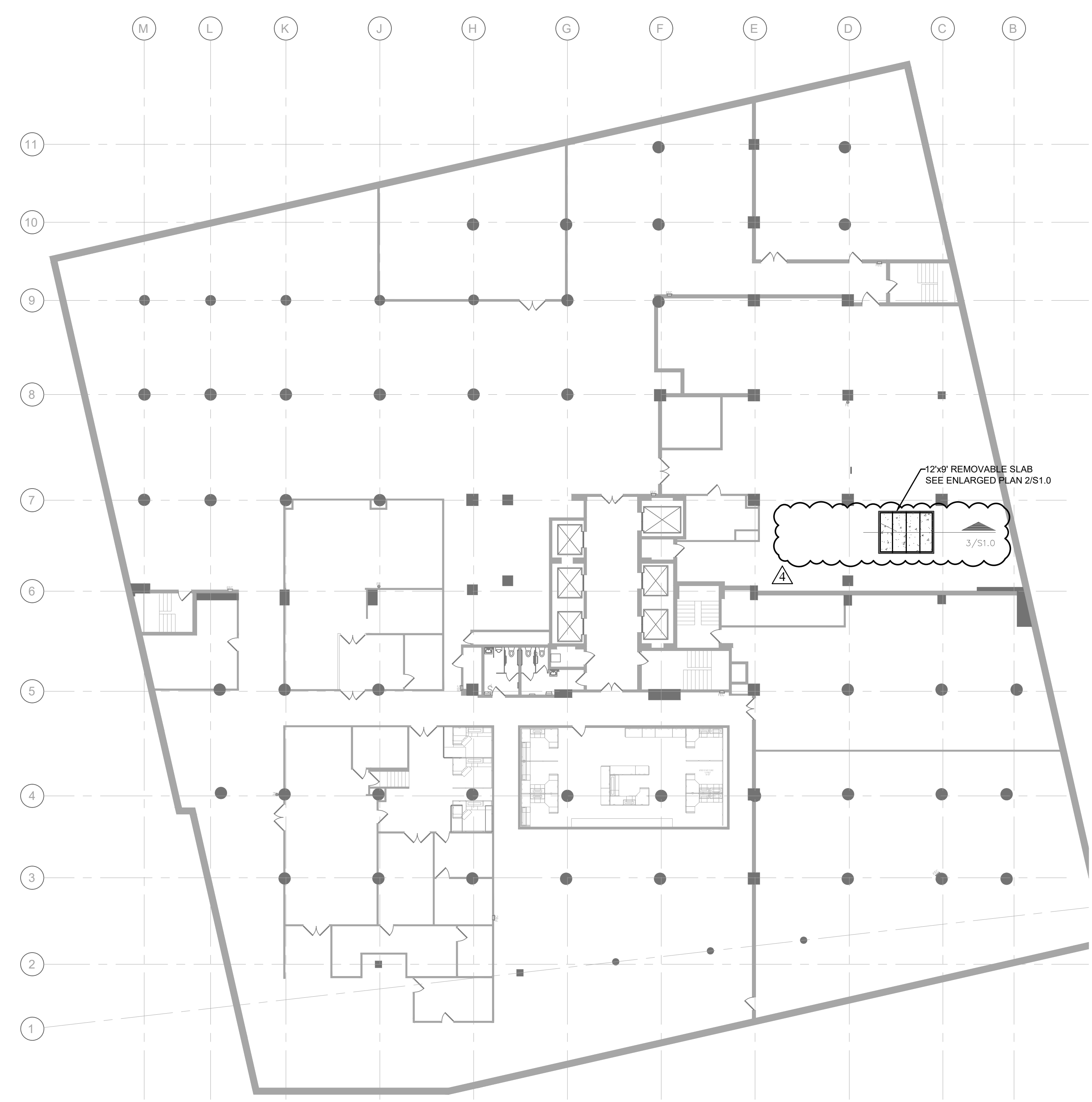
DATE : August 31, 2023



3 REMOVABLE SLAB SECTION
SCALE: 3/4" = 1'-0"



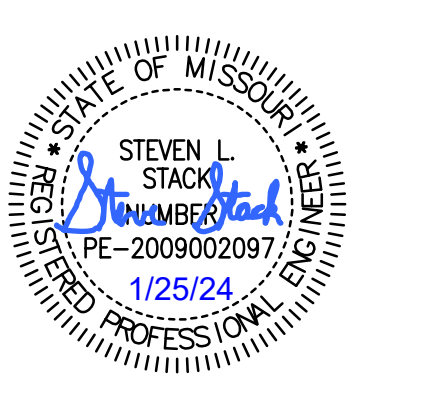
2 REMOVABLE SLAB PLAN
SCALE: 1/4" = 1'-0"



1 OVERALL BASEMENT PLAN
SCALE: 1/16" = 1'-0"

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PROJECT # 0191101
SITE # 1001
ASSET # 310100157

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: ADDENDUM #4
DATE: 1-25-2024
ISSUE DATE:

CAD DWG FILE: Jefferson Bldg structural base
DRAWN BY: SLS
CHECKED BY: SLS
DESIGNED BY: SLS

SHEET TITLE:
**BASEMENT MECH.
PENETRATION PLAN**

SHEET NUMBER:

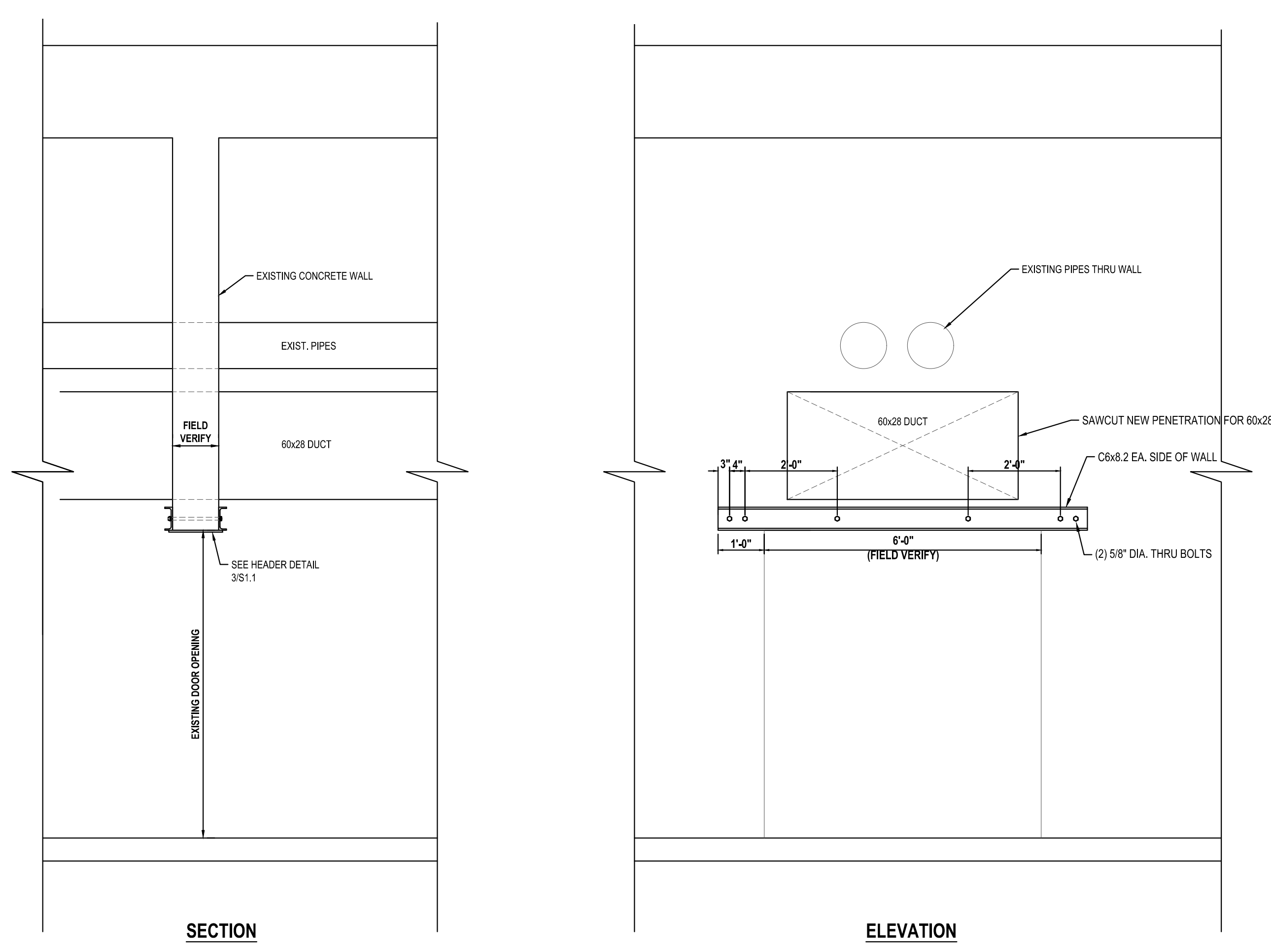
S1.1

79 OF 234 SHEETS

DATE: August 31, 2023



3 HEADER DETAIL
SCALE: 1/12" = 1'-0"



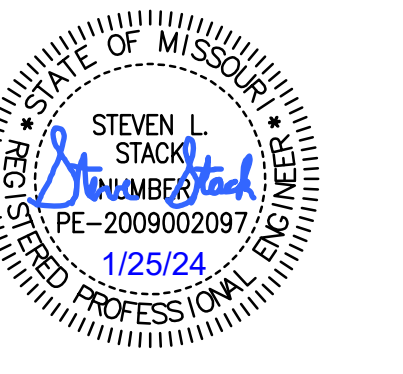
2 WALL PENETRATION REINFORCEMENT
SCALE: 1/2" = 1'-0"



1 OVERALL BASEMENT PLAN
SCALE: 1/16" = 1'-0"

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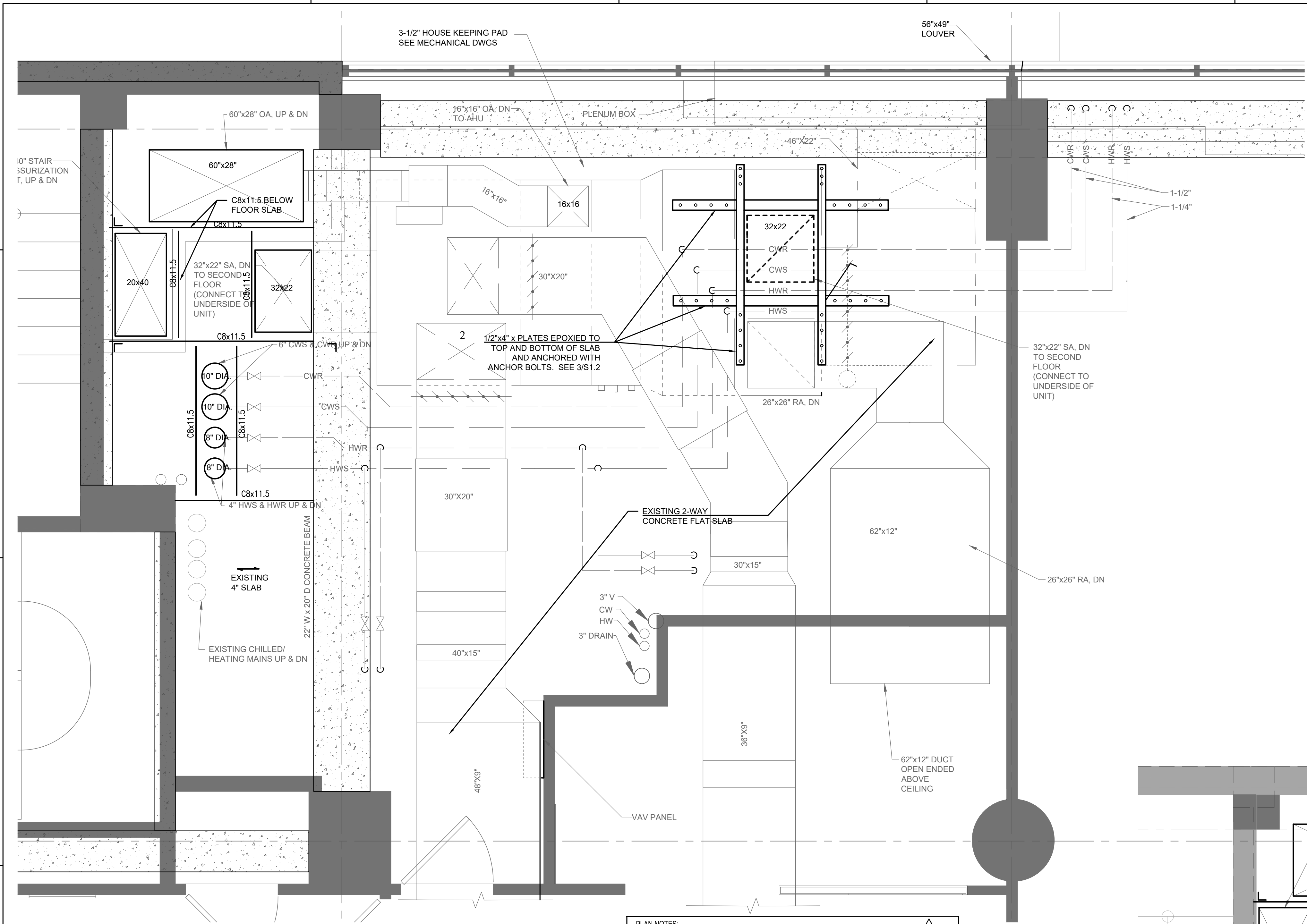
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REVISION: ADDENDUM #4
DATE: 1-25-2024
REVISION: ADDENDUM #2
DATE: 1-16-2024
ISSUE DATE:

CAD DWG FILE: Jefferson Bldg structural base
DRAWN BY: SLS
CHECKED BY: SLS
DESIGNED BY: SLS

SHEET TITLE:
MECHANICAL ROOM
STRUCTURAL PLAN

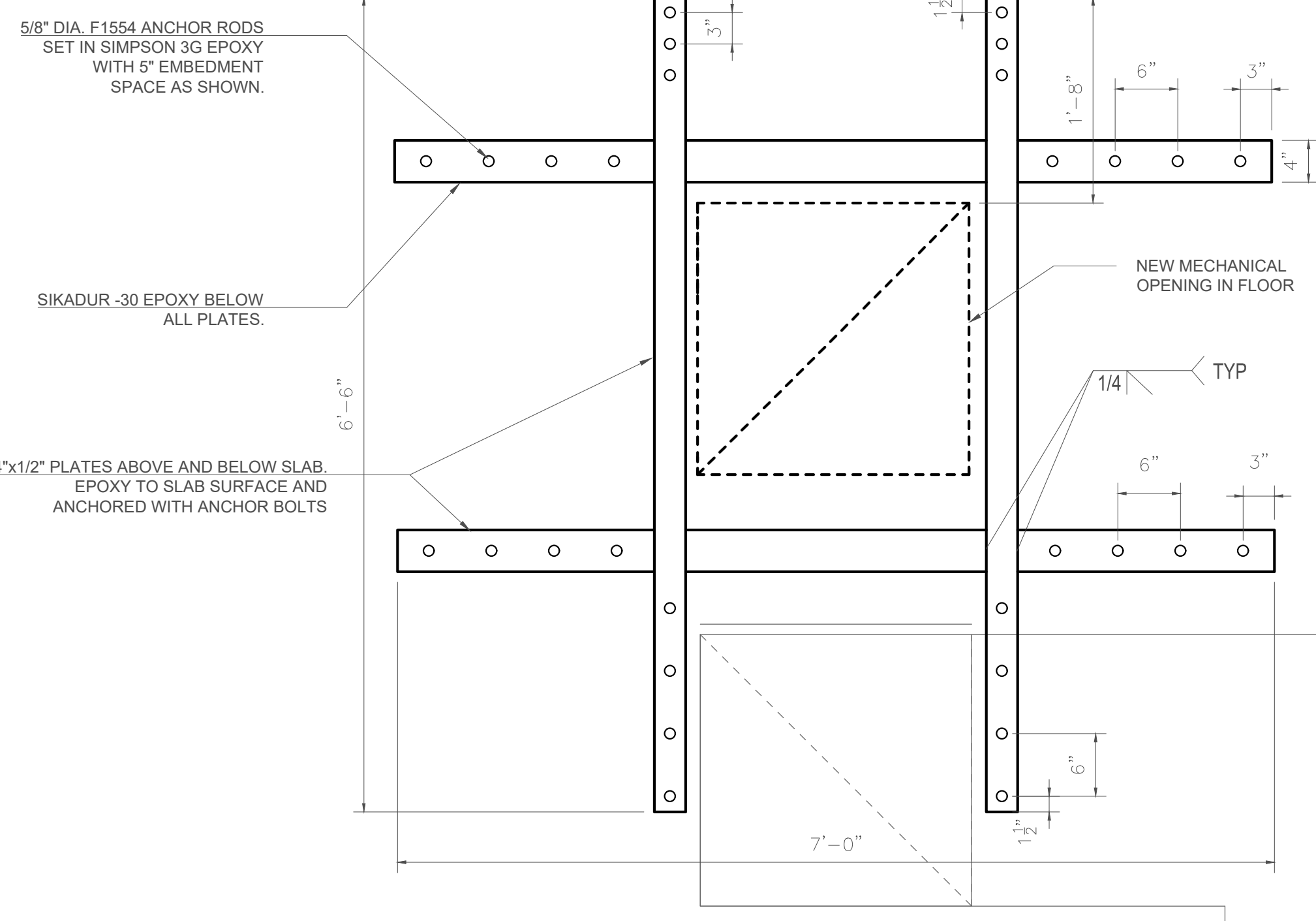
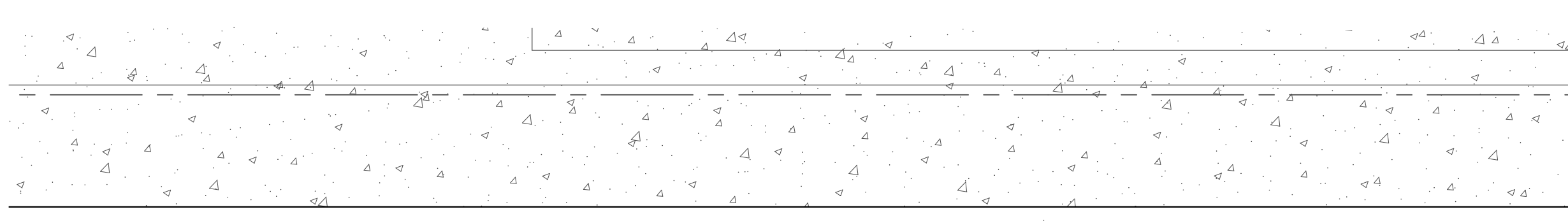
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S1.2
80 OF 234 SHEETS

DATE: August 31, 2023

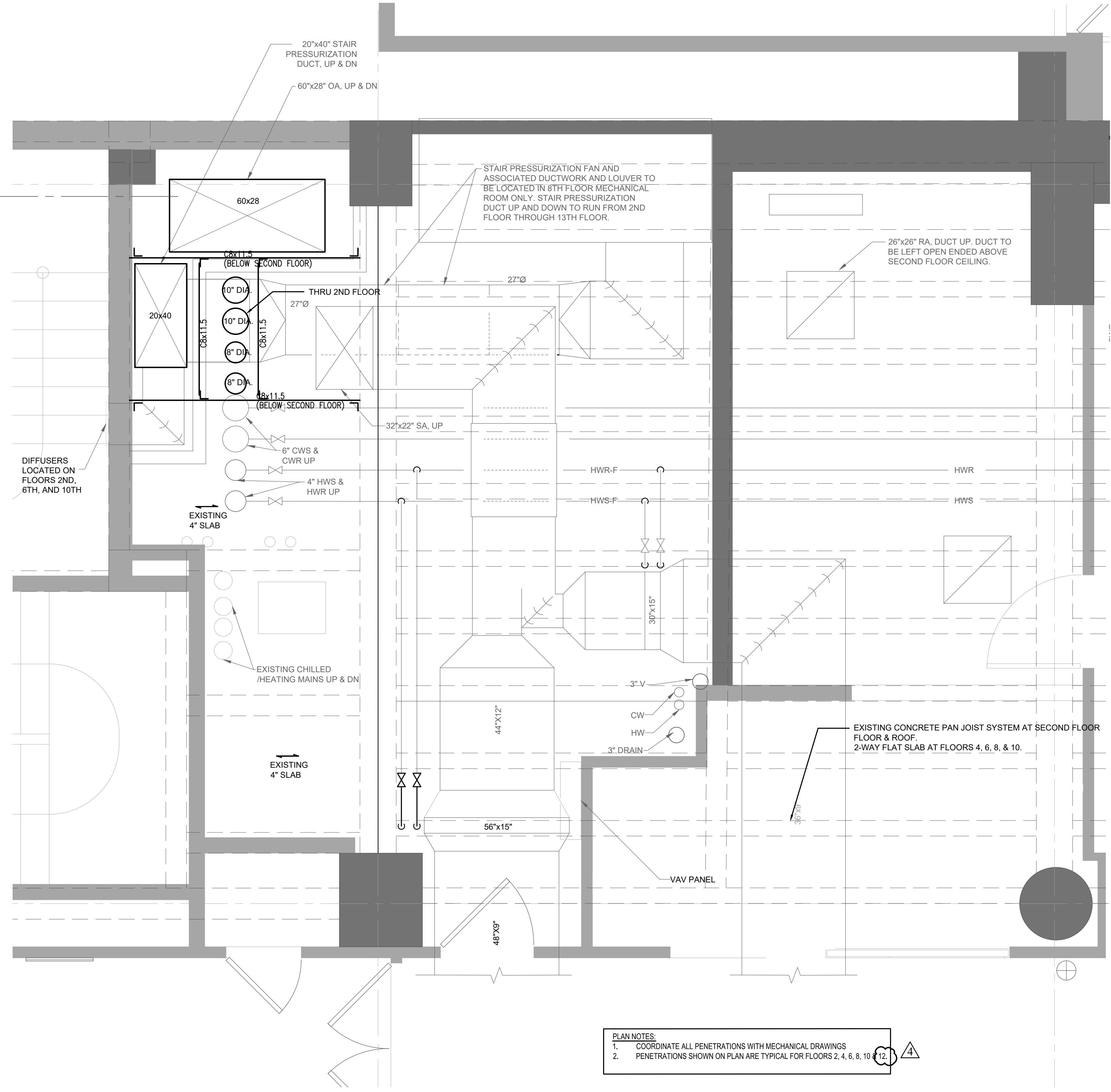


PLAN NOTES:
1. COORDINATE ALL PENETRATIONS WITH MECHANICAL DRAWINGS
2. PENETRATIONS SHOWN ON PLAN ARE TYPICAL FOR FLOORS 3, 5, 7, 9, 11 AND 13
3. EXISTING FLOOR FRAMING AT FLOORS 3 THRU 13 CONSISTS OF FLAT SLAB CONSTRUCTION.

2 ENLARGED THIRD FLOOR MECHANICAL ROOM PENETRATIONS
S1.2 SCALE: 1/2" = 1'-0"

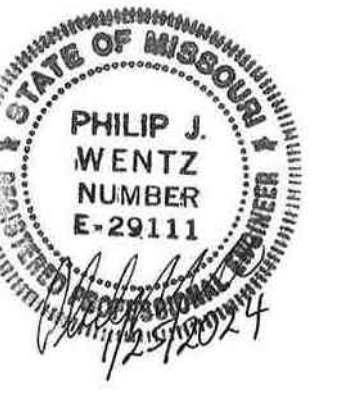


3 ENLARGED THIRD FLOOR MECHANICAL ROOM PENETRATIONS
S1.2 SCALE: 1" = 1'-0"



PLAN NOTES:
1. COORDINATE ALL PENETRATIONS WITH MECHANICAL DRAWINGS
2. PENETRATIONS SHOWN ON PLAN ARE TYPICAL FOR FLOORS 2, 4, 6, 8, 10

1 ENLARGED SECOND FLOOR MECHANICAL ROOM PENETRATIONS
S1.2 SCALE: 1/2" = 1'-0"



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PROJECT # 01911-01
SITE # 1001
ASSET # 3101001057

REVISION: 1-ADDENDUM 4
DATE: 01-23-2024
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE:
CAD DWG FILE: M3.0-075107.001
DRAWN BY: AM
CHECKED BY: EP
DESIGNED BY: JW

SHEET TITLE:
**BASEMENT
FLOOR PLAN
-MECHANICAL**

SHEET NUMBER:

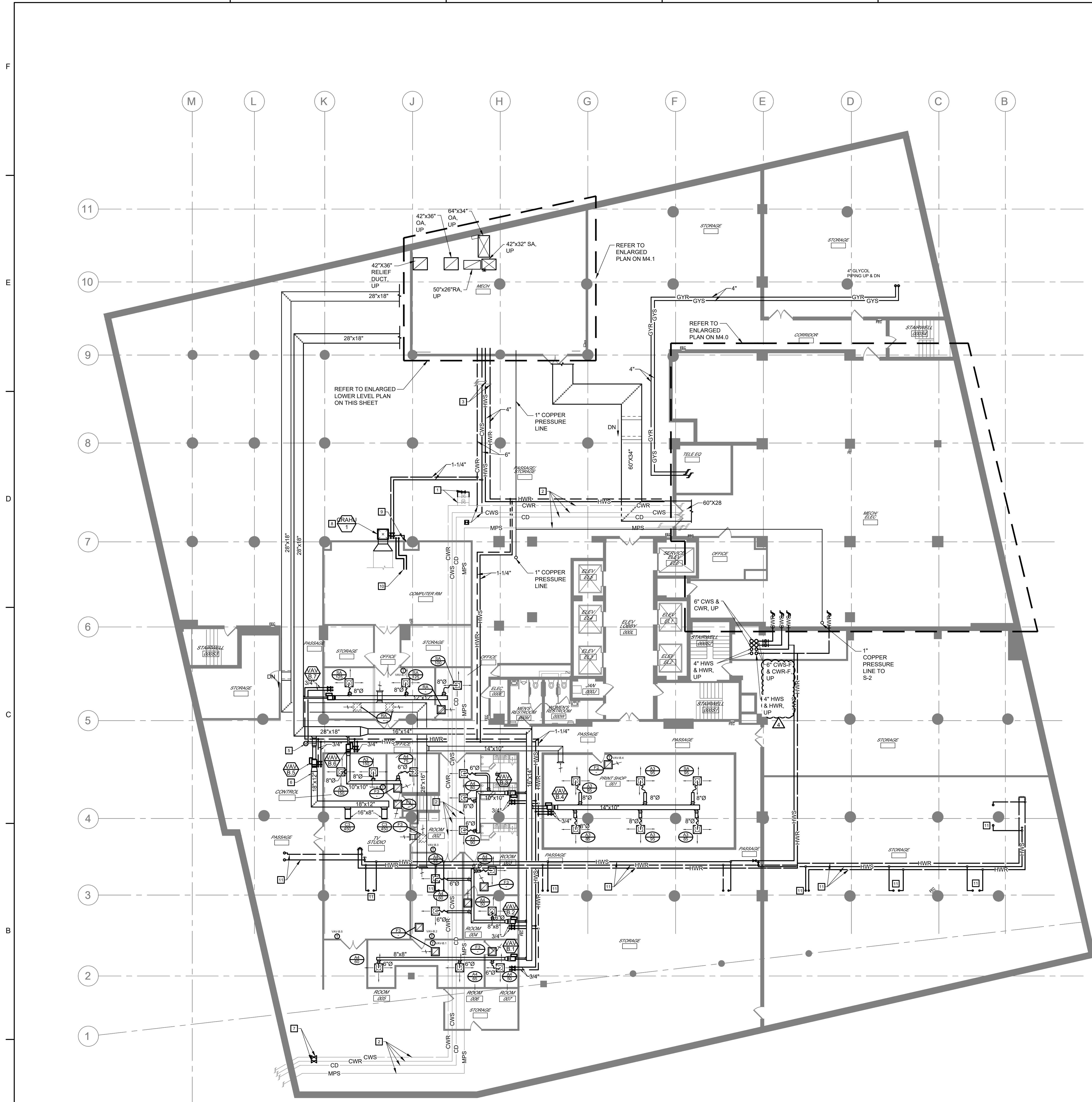
M3.0

94 OF 244 SHEETS

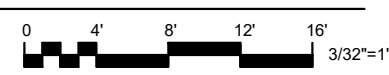
DATE : August 31, 2023

KEYED NOTES

- 1 RELOCATE EXISTING BUILDING CONTROL VALVE (6" VALVE) WITH 1 1/2" SPLIT. CONTRACTOR TO INSTALL NEW 3/4" BYPASS AT LOCATION SHOWN. REFER TO M3.0 FOR EXISTING LOCATION.
- 2 EXISTING CHILLED WATER, STEAM, AND CONDENSATE PIPING TO AND FROM CAMPUS SYSTEM TO REMAIN.
- 3 RECONNECT EXISTING HWS AND HWR LINES SERVING BASEMENT TO NEW HWS AND HWR MAINS.
- 4 NOT USED.
- 5 TEMPERATURE CONTROLS PROVIDE PUSH BUTTON SWITCH TO FULLY CLOSE DAMPER TO VAV-B.5 DURING RECORDING SESSIONS.
- 6 PROVIDE 1" INTERNALLY LINED DUCT DOWN STREAM OF VAV B.5.
- 7 CONTRACTOR TO INSTALL NEW SERVICE VALVES IN EXISTING CHILLED WATER SUPPLY AND RETURN LINES. CONTRACTOR TO INSTALL DRAIN AND AIR VENTS IN CHILLED WATER LINES ON BUILDING SIDE IN PHASE 1 OF CONSTRUCTION.
- 8 NEW CRAHU AT LOCATION OF EXISTING CRAHU BEING DEMOLISHED. CONTRACTOR TO MODIFY SUPPLY AND RETURN CONNECTIONS AS NECESSARY TO CONNECT TO NEW UNIT.
- 9 CONNECT NEW CRAHU CONDENSATE TO EXISTING CONDENSATE LINE. FIELD VERIFY EXACT CONNECTION POINT.
- 10 REFRIGERANT PIPING UP TO CONDENSING UNIT ON ROOF. REFER TO INSTALLATION INSTRUCTIONS FOR PIPE SIZES AND SLOPING INFORMATION.
- 11 CONTRACTOR TO INSTALL NEW HEATING WATER PIPING SERVING EXISTING FIN TUBE ON FIRST FLOOR. CONTRACTOR TO ROUTE 3/4" PIPING UP THROUGH FLOOR AND CONNECT TO EXISTING FIN TUBE HEATERS TO REMAIN.



BASEMENT FLOOR PLAN - MECHANICAL
3/32" = 1'-0"



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PROJECT # 01911-01
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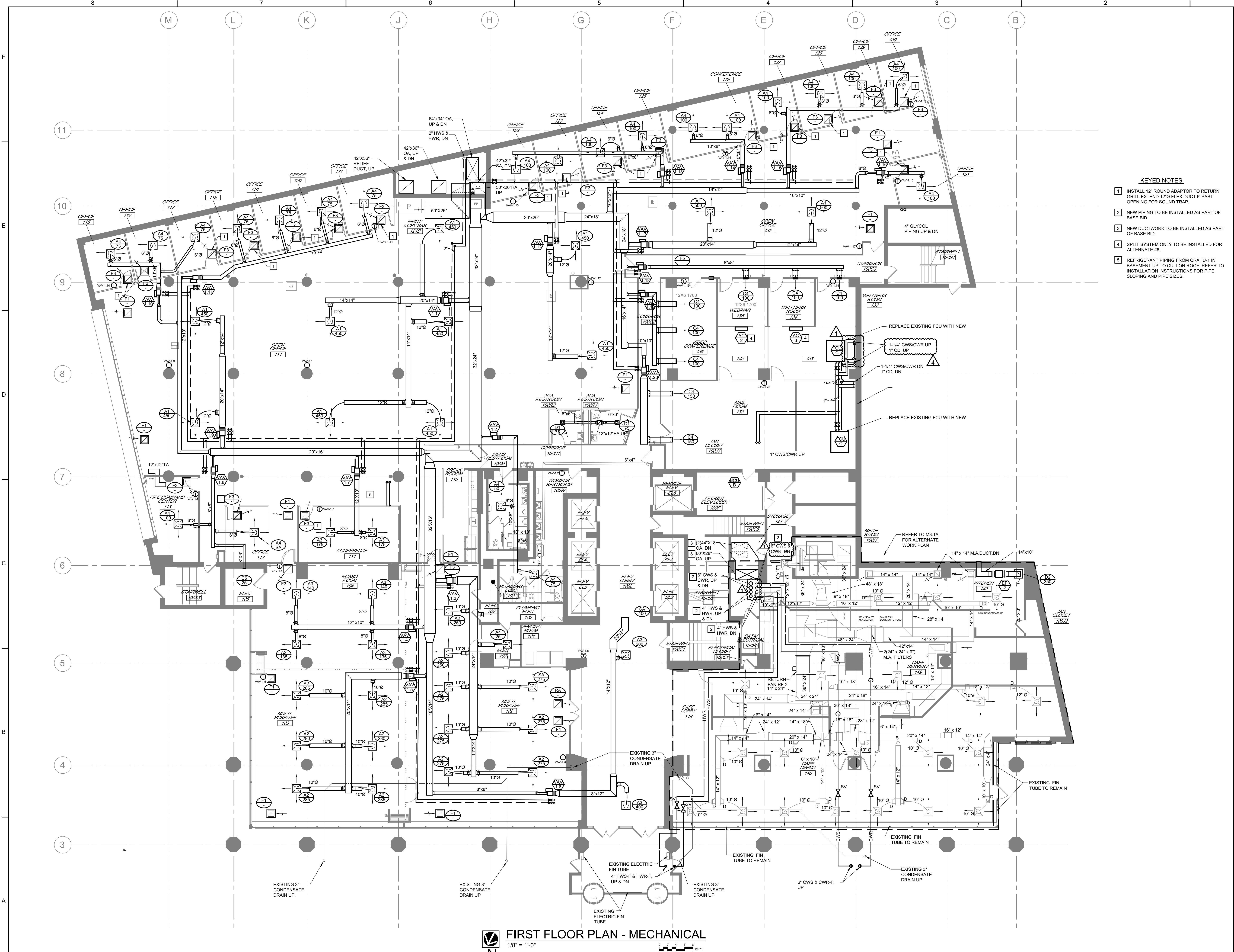
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REVISION: 1-ADDENDUM 4	DATE: 01-23-2024
REVISION:	DATE:
REVISION:	DATE:
REVISION:	DATE:
REVISION:	DATE:

ISSUE DATE:
CAD DWG FILE: M3-1-075107.001
DRAWN BY: AM
CHECKED BY: EP
DESIGNED BY: JW

**SHEET TITLE:
FIRST
FLOOR PLAN
-MECHANICAL**

SHEET NUMBER:
M3.1
95 OF 244 SHEETS

DATE : August 31, 2023



FIRST FLOOR PLAN - MECHANICAL
1/8" = 1'-0"

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STATE OFFICE BUILDING

JEFFERSON STATE
OFFICE BUILDING
205 JEFFERSON STREET
JEFFERSON CITY, MO 65101

PROJECT # O1911-01
SITE # 1001
ASSET # 3101001057

REVISION: 1-ADDENDUM 4
DATE: 01-23-2024
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

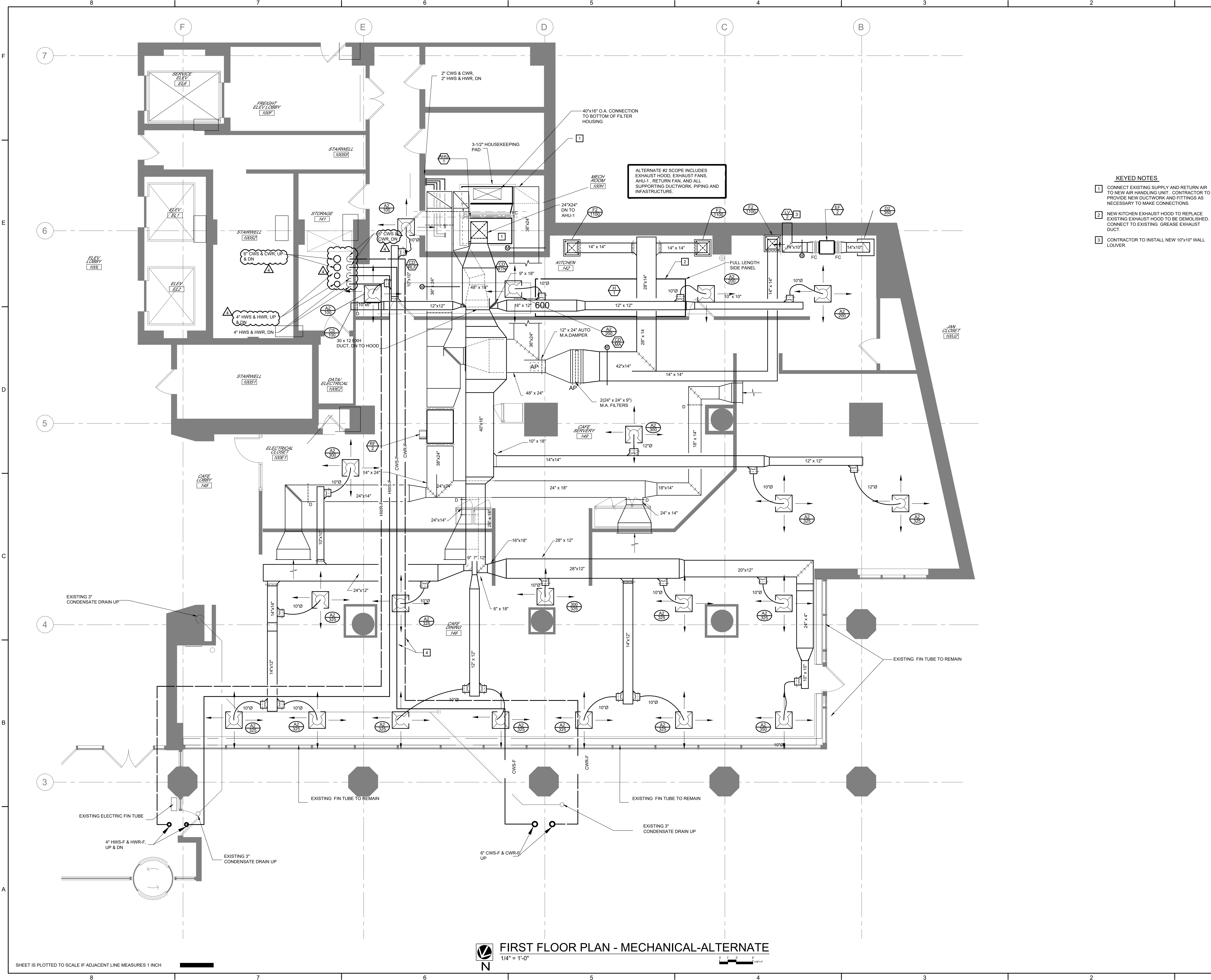
ISSUE DATE: _____
CAD DWG FILE: M3.1-075107.001
DRAWN BY: AM
CHECKED BY: EP
DESIGNED BY: JW

SHEET TITLE:
**FIRST
FLOOR PLAN
-MECHANICAL-ALT**

SHEET NUMBER:
M3.1A

96 OF 244 SHEETS

DATE: August 31, 2023

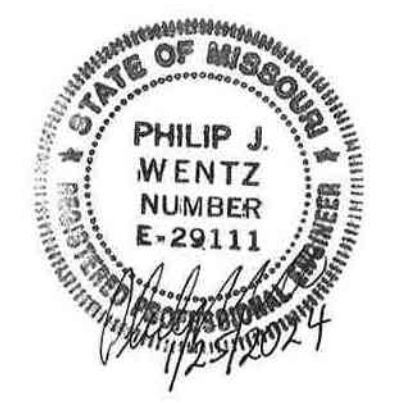


- KEYED NOTES**
- CONNECT EXISTING SUPPLY AND RETURN AIR TO NEW AIR HANDLING UNIT. CONTRACTOR TO PROVIDE NEW DUCTWORK AND FITTINGS AS NECESSARY TO MAKE CONNECTIONS.
 - NEW KITCHEN EXHAUST HOOD TO REPLACE EXISTING EXHAUST HOOD TO BE DEMOLISHED. CONNECT TO EXISTING GREASE EXHAUST DUCT.
 - CONTRACTOR TO INSTALL NEW 10"x10" WALL LOUVER.

FIRST FLOOR PLAN - MECHANICAL-ALTERNATE
1/4" = 1'-0"

SHEET IS PLOTTED TO SCALE IF ADJACENT LINE MEASURES 1 INCH

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JEFFERSON CITY, MO 65101

PROJECT # 01911-01
SITE # 1001
ASSET # 3101001057

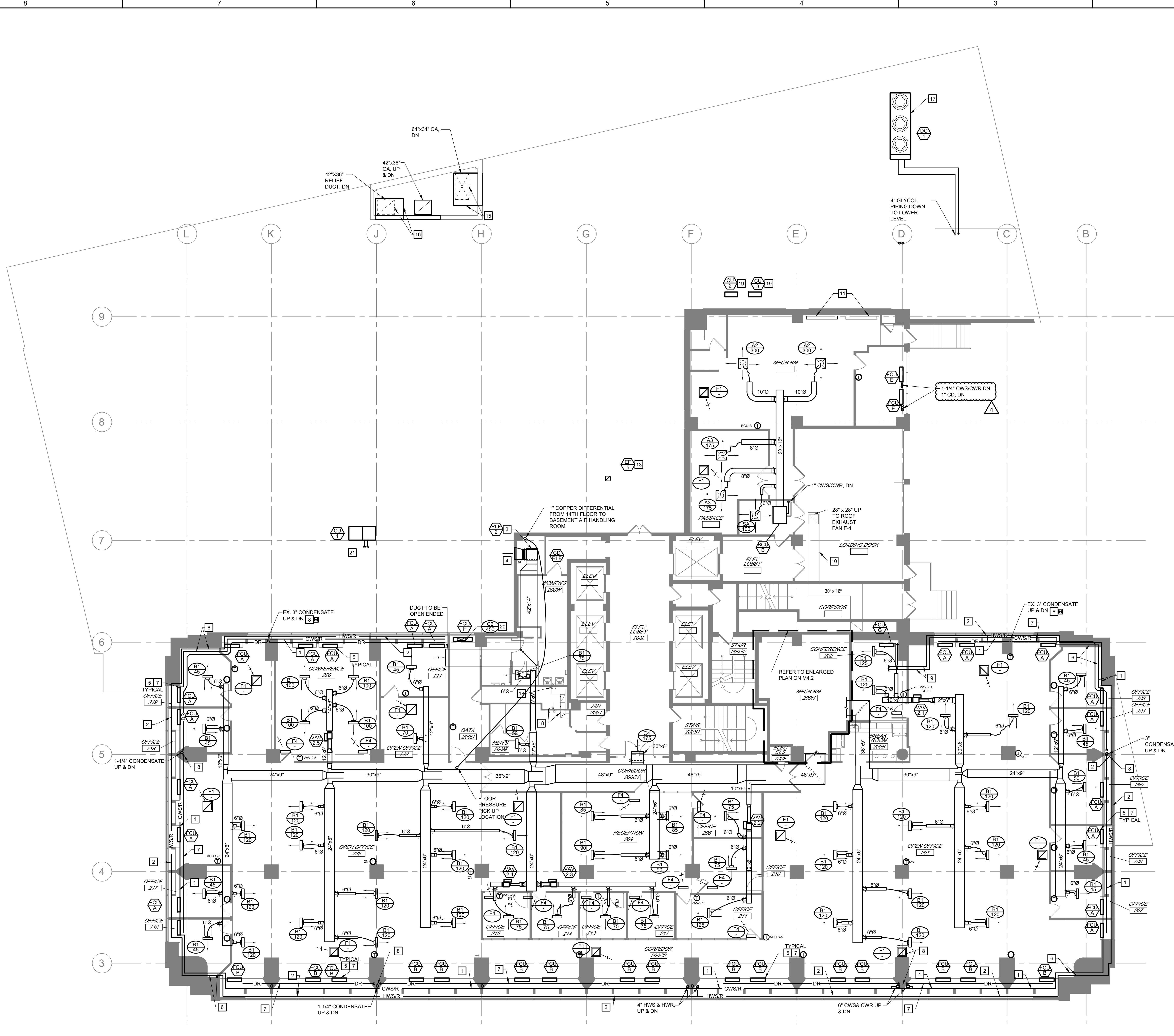
REVISION: 1-ADDENDUM 4
DATE: 01-23-2024
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE:
CAD DWG FILE: M3.2-075107.001
DRAWN BY: ADL
CHECKED BY: EP
DESIGNED BY: EP

SHEET TITLE:
**SECOND
FLOOR PLAN
- MECHANICAL**

SHEET NUMBER:
M3.2
97 OF 244 SHEETS

DATE: August 31, 2023



- KEYED NOTES**
- 1 CHILLED AND HEATING WATER LINES ROUTED IN CASEWORK. REFER TO SHEET M3.3 SECTION 1 FOR ADDITIONAL INFORMATION.
 - 2 INSULATE 5" TALL CAVITY IN INSULATED PANEL TO PROVIDE FREEZE PROTECTION FOR HYDRONIC PIPING.
 - 3 INSTALL RELIEF FAN ON THE FLOOR. DUCT TO DROP INTO TOP OF UNIT WITH A FLEX CONNECTION. INSTALL IN CONTROL DAMPER IN THE VERTICAL.
 - 4 CONTRACTOR TO ENLARGE EXISTING LOUVER TO 30"x36" AND CONNECT DUCT FROM RELIEF FAN TO NEW LOUVER.
 - 5 REMOVE LAMINATE FRONT REMOVABLE PANEL OF FAN COIL UNIT ENCLOSURE. REUSE TOP OF CASEWORK. REPLACE FOU FRONT PANEL. SEE A502 FOR DETAILS.
 - 6 CONTRACTOR TO DEMOLISH EXISTING GYPSUM PARTITION TO ROUTE HEATING AND CHILLED WATER LINES. CONTRACTOR TO INSTALL NEW GYPSUM PARTITION TO CONCEAL NEW LINES. LINES TO BE INSTALLED ON BUILDING SIDE OF INSULATION.
 - 7 CONTRACTOR TO REPAIR SOFFIT AS REQUIRED TO PIPE CONDENSATE FROM FAN COIL UNITS ON THIS FLOOR AND TO TIE-IN CONDENSATE FROM THE FAN COIL UNITS ABOVE.
 - 8 ROUTE 1" CONDENSATE DRAIN FROM NEARBY FAN COIL UNITS TO CONDENSATE RISER. RECONNECT INTO EXISTING 3" CONDENSATE DRAIN RISER.
 - 9 EXTEND CHILLED AND HEATING WATER SUPPLY AND RETURN LINES INTO MECHANICAL ROOM, REFER TO ENLARGED PLAN ON M4.1 FOR CONTINUATION.
 - 10 EXISTING KITCHEN EXHAUST DUCTWORK TO REMAIN.
 - 11 EXISTING FIN TUBE.
 - 12 RECONNECT INTO EXISTING CHILLED WATER AT THIS LOCATION.
 - 13 INSTALL NEW EXHAUST FAN (EF-5) ON NEW ROOF CURB OPENING. PATCH ROOF TO MATCH EXISTING CONDITIONS.
 - 14 NOT USED.
 - 15 CONNECT NEW 64"x34" OUTSIDE AIR TO EXISTING OUTSIDE AIR LOUVER AND PLENUM BOX. CONTRACTOR TO EXTEND PLENUM BOX AS NECESSARY FOR NEW DUCT.
 - 16 ROUTE NEW 42"x36" RELIEF DUCT TO EXISTING LOUVER. CONTRACTOR TO EXTEND PLENUM BOX AS NECESSARY FOR NEW DUCT.
 - 17 NEW DRY COOLER TO BE LOCATED AT LOCATION OF EXISTING GENERATOR BEING DEMOLISHED. CONTRACTOR TO COORDINATE FINAL LOCATION WITH STRUCTURAL DRAWINGS AND ENGINEER.
 - 18 EXISTING EXHAUST RISER, AND RUN OUTS TO RESTROOMS AND JANITOR CLOSET TO REMAIN.
 - 19 CONTRACTOR TO INSTALL CONDENSING UNIT AS PART OF ALTERNATE #6. CONTRACTOR TO PROVIDE ALL NECESSARY EQUIPMENT RAILS, REFRIGERANT PIPING, AND PIPE CURB.
 - 20 PROVIDE 12" TALL 22"x5" DUCT CAP. INSTALL DIFFUSER IN FRONT FACE OF DUCT.
 - 21 REFRIGERANT PIPING DOWN TO CRAHU IN LOWER LEVEL. CONTRACTOR TO INSTALL PIPE CURB AT ROOF PENETRATION AND SEAL WATER TIGHT.

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



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205 JEFFERSON STREET
JEFFERSON CITY, MO 65101

PROJECT # 01911-01
SITE # 1001
ASSET # 3101001057

REVISION: 1-ADDENDUM 4	DATE: 01-23-2024
REVISION:	DATE:
REVISION:	DATE:
REVISION:	DATE:
REVISION:	DATE:

ISSUE DATE:
CAD DWG FILE: M3.14-075107.001
DRAWN BY: AM
CHECKED BY: EP
DESIGNED BY: JW

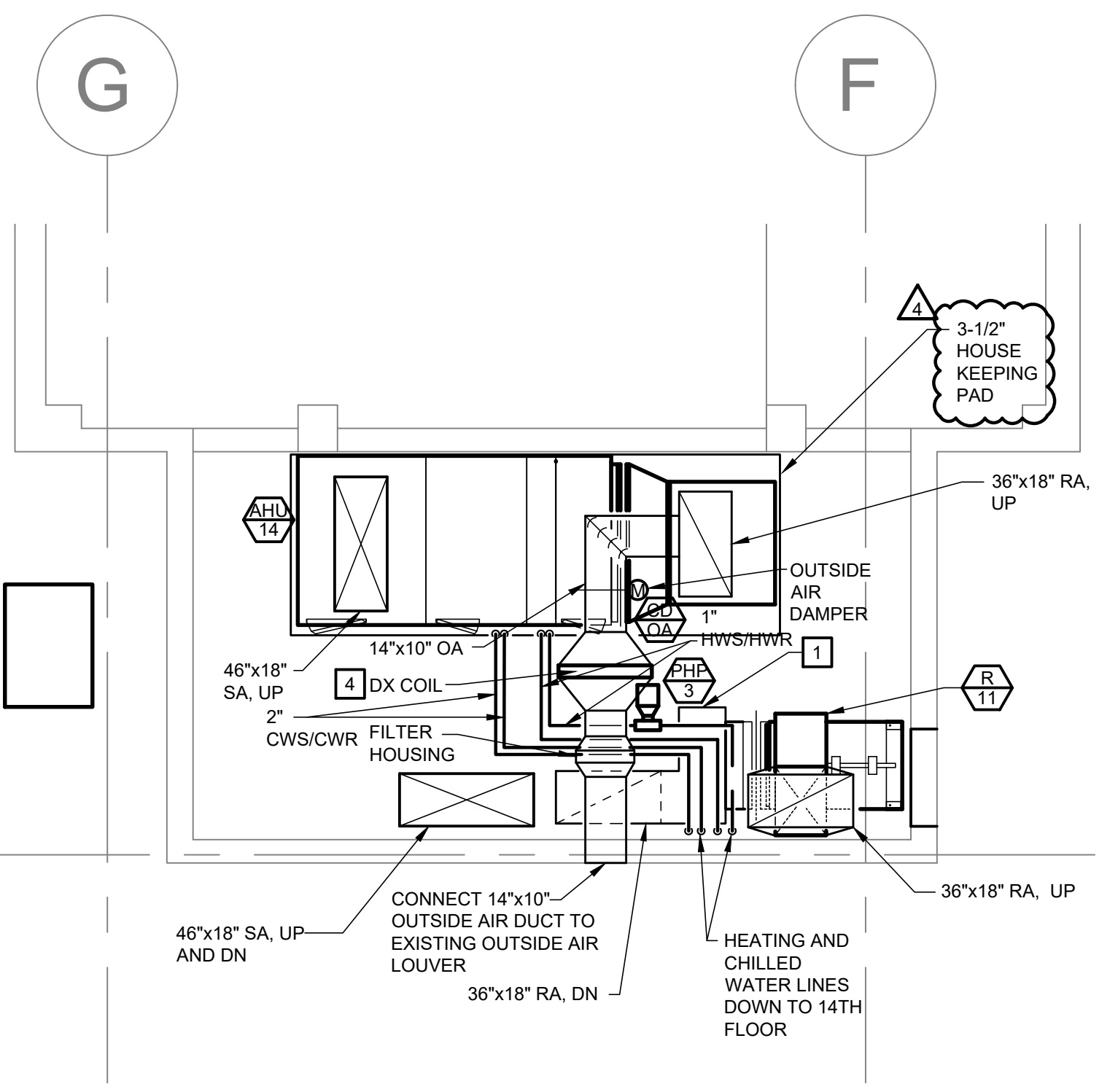
**SHEET TITLE:
FOURTEENTH
FLOOR PLAN
-MECHANICAL**

SHEET NUMBER:
M3.14
109 OF 244 SHEETS

DATE : August 31, 2023

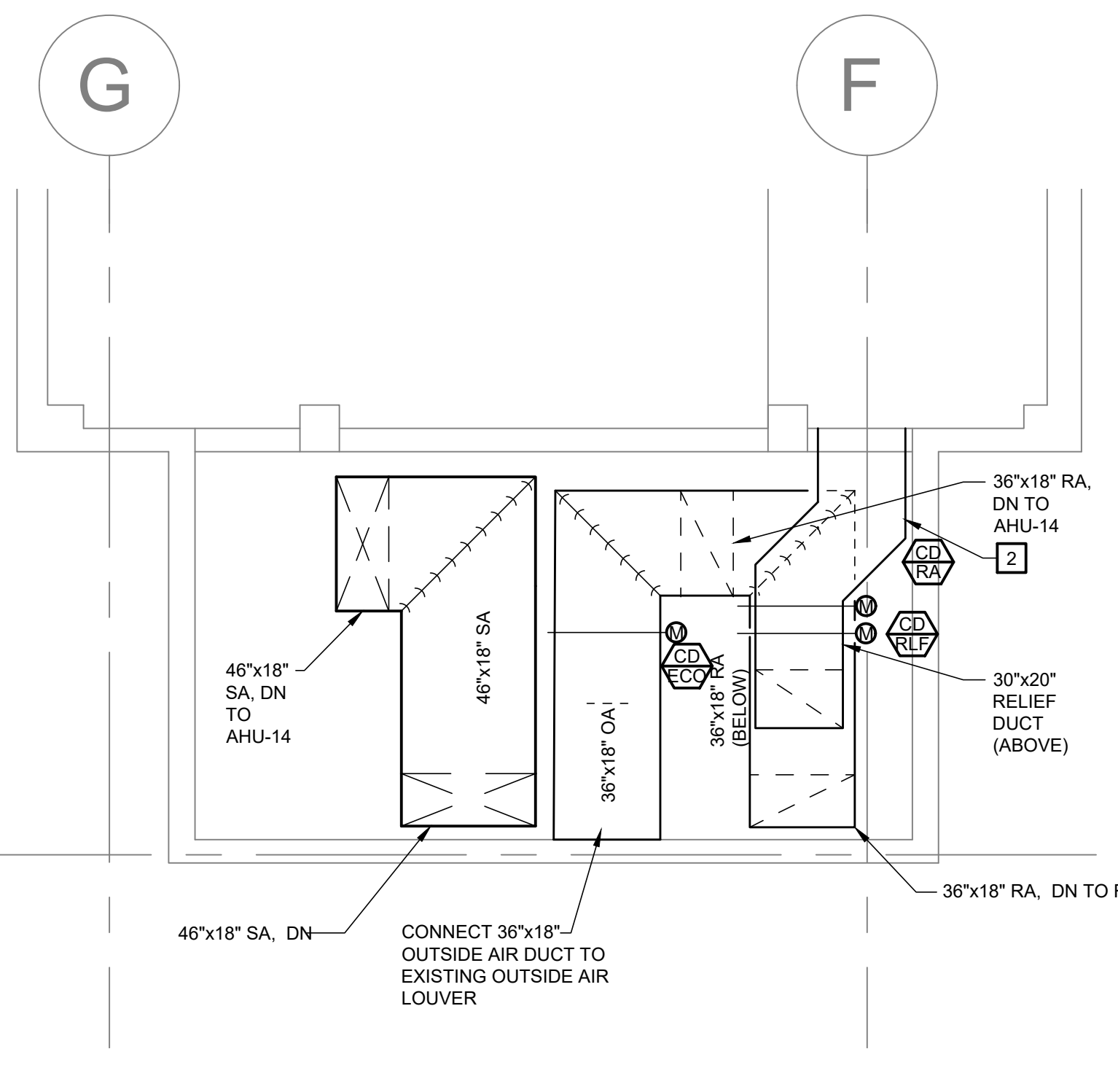
KEYED NOTES

- ROUTE 18"x36" RETURN DUCT ALONG FLOOR. EXTEND DUCT ENOUGH TO CONNECT 28"Ø INLET DUCT FOR R-11.
- CONNECT 30"x20" RELIEF AIR DUCT TO TOP SIDE OF RETURN AIR DUCT. ROUTE RELIEF AIR DUCT OUT THROUGH EXISTING OPENING IN WALL.
- REMOTE CONDENSING UNIT ON ROOF. CONTRACTOR TO PROVIDE EQUIPMENT RAIL AS NECESSARY. ROUTE REFRIGERANT PIPING TO COIL IN MECHANICAL ROOM. CONTRACTOR TO SEAL WALL PENETRATION WATER TIGHT.
- ROUTE CONDENSATE FROM DX COIL TO NEAREST FLOOR DRAIN.
- EXISTING EXHAUST RISER, AND RUN OUTS TO RESTROOMS AND JANITOR CLOSET TO REMAIN.
- CONTRACTOR TO PATCH WALL TO MATCH FINISHED CONDITIONS.
- BLOCK AND SEAL EXISTING AIR PATH FROM STAIRWELL TO 14TH FLOOR AT CEILING.
- INSTALL CONTROL DAMPER IN EXISTING DUCTWORK. DAMPER TO BE FAIL OPEN AND CONTROLLED BY FIRE ALARM SYSTEM.



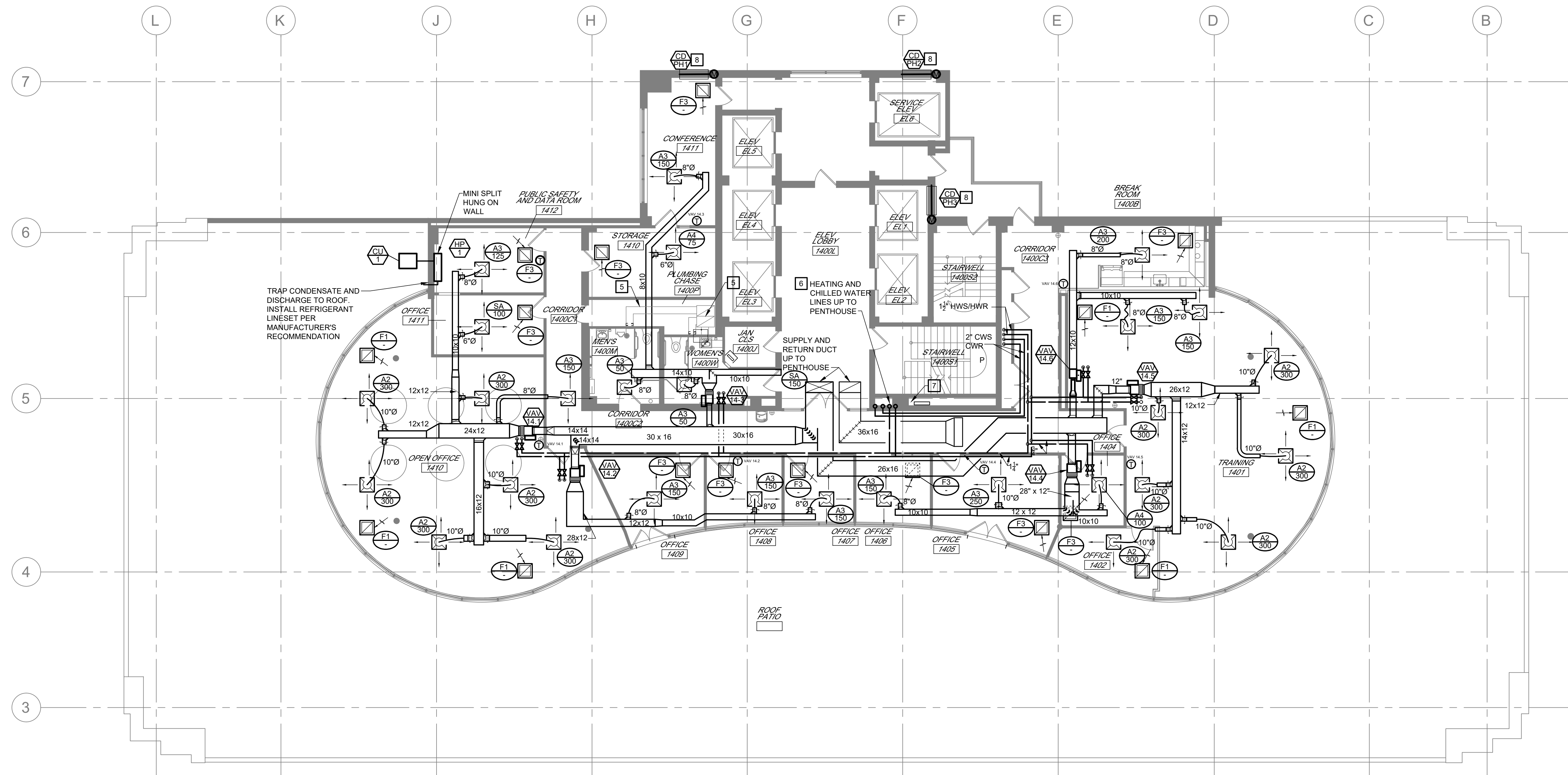
**PENTHOUSE FLOOR PLAN -
MECHANICAL - LOWER**

1/4" = 1'-0"
N



**PENTHOUSE FLOOR PLAN -
MECHANICAL - UPPER**

1/4" = 1'-0"
N



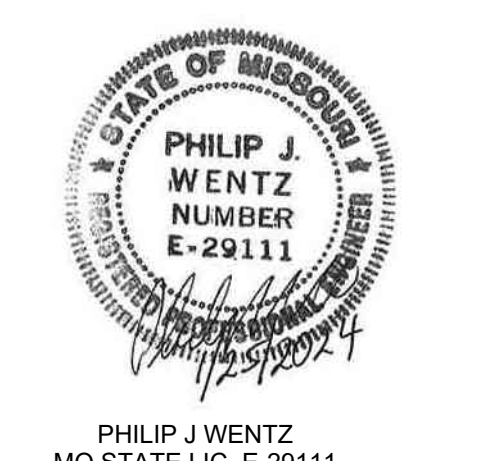
FOURTEENTH FLOOR PLAN - MECHANICAL

1/8" = 1'-0"
N

KEYED NOTES

- 1 NEW BUILDING HEATING WATER HEAT EXCHANGER TO BE INSTALLED AT LOCATION OF EXISTING EXCHANGER BEING DEMOLISHED. CONTRACTOR TO ROUTE NEW STEAM AND CONDENSATE PIPING AT LOCATION OF EXISTING PIPING BEING DEMOLISHED. REFER TO FLOW DIAGRAM ON M5.2 FOR SPECIALTIES.
- 2 EXISTING STEAM PIPING TO REMAIN.
- 3 EXISTING CONDENSATE PUMP AND CONDENSATE PIPING TO REMAIN.
- 4 EXISTING PLUMBING EQUIPMENT TO REMAIN.
- 5 NEW AIR HANDLING UNITS AND ELECTRICAL GEAR TO BE BROUGHT INTO BUILDING THROUGH HATCH FROM PAVED LOADING AREA ABOVE. SEE SHEET S.1 FOR SLAB REMOVAL AND REPLACEMENT.
- 6 CONNECTION TO CHILLED WATER WILL REQUIRE SHUT OFF OUTSIDE OF JEFFERSON BUILDING. CONTRACTOR TO COORDINATE WITH FACILITIES MANAGER.
- 7 EXISTING DOMESTIC HOT WATER HEAT EXCHANGER TO REMAIN.
- 8 REFER TO HEATING WATER FLOW DIAGRAM FOR NEW PIPING SPECIALTIES AND CONNECTION TO EXISTING HEAT EXCHANGER.
- 9 INSTALL (2) 44"x18" UP FROM THE TOP OF 60"x28" DUCT THRU WAFFLE SLAB OPENING.
- 10 1" CONDENSATE DOWN. ROUTE TO NEAREST FLOOR DRAIN.
- 11 EXISTING PUMPS AND HOUSEKEEPING PAD TO BE DEMOLISHED. LOCATION SHOWN FOR REFERENCE ONLY.
- 12 MAKE UP WATER CONNECT. REFER TO FLOW DIAGRAM ON M5.1 FOR DETAILS.
- 13 6" CWS/CWR DOWN TO HEAT EXCHANGER LOAD SIDE. REFER TO FLOW DIAGRAM ON M5.1 FOR ALL VALVING AND SPECIALTIES.
- 14 6" CWS/CWR DOWN TO HEAT EXCHANGER SOURCE SIDE. REFER TO FLOW DIAGRAM ON M5.1 FOR ALL VALVING AND SPECIALTIES.
- 15 NEW 3-1/2" HOUSE KEEPING PAD.

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PROJECT # 01911-01
SITE # 1001
ASSET # 3101001057

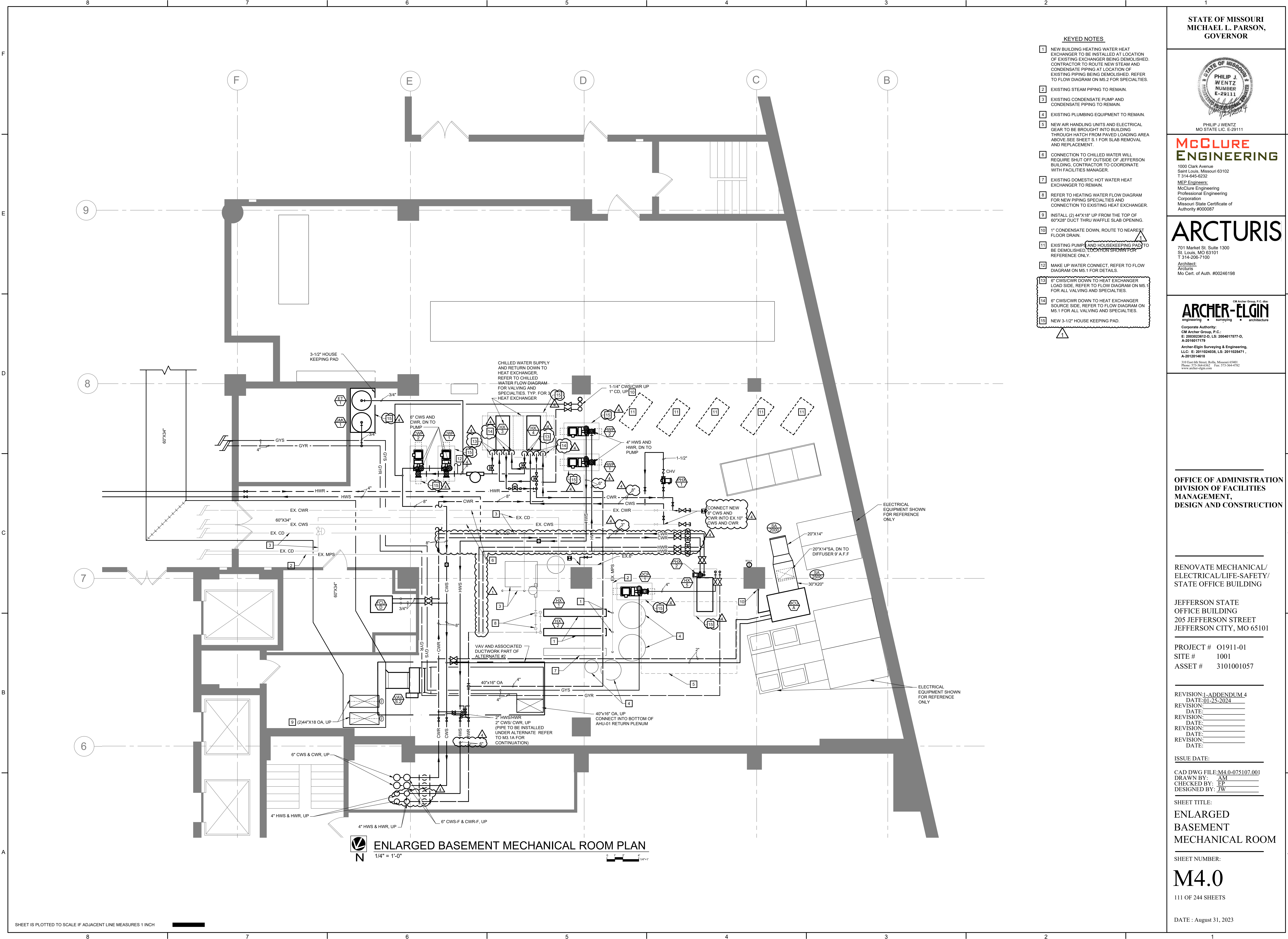
REVISION: 1-ADDENDUM 4
DATE: 01-23-2024
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REVISION: _____
DATE: _____

ISSUE DATE:
CAD DWG FILE: M4.0-075107.001
DRAWN BY: AM
CHECKED BY: EP
DESIGNED BY: JW

SHEET TITLE:
**ENLARGED
BASEMENT
MECHANICAL ROOM**

SHEET NUMBER:
M4.0
111 OF 244 SHEETS

DATE : August 31, 2023



ENLARGED BASEMENT MECHANICAL ROOM PLAN
1/4" = 1'-0"

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DATE: _____

ISSUE DATE: _____

CAD DWG FILE: M3.0-075107.001
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SHEET TITLE:
**BASEMENT
FLOOR PLAN
-MECHANICAL**

SHEET NUMBER:

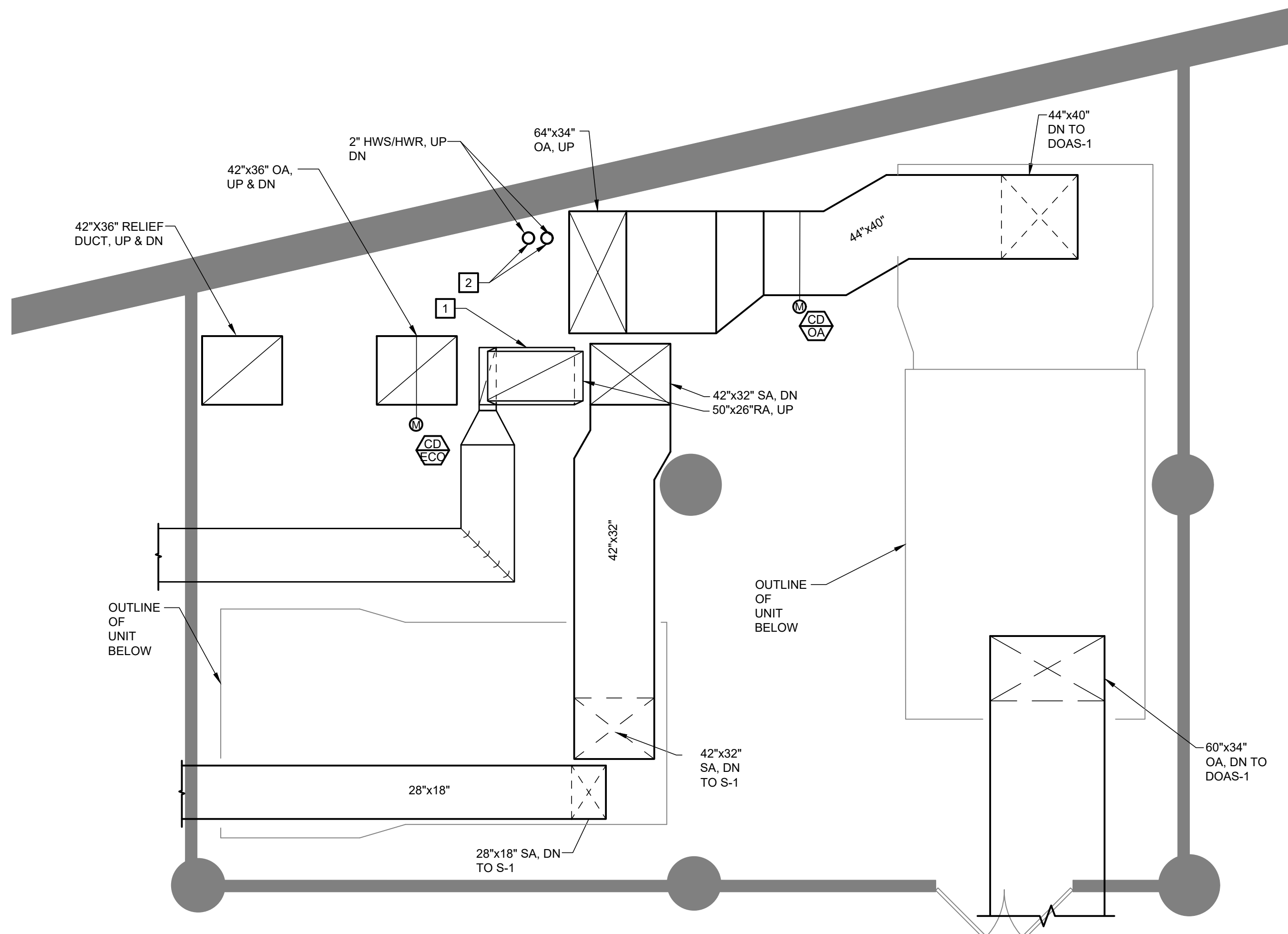
M4.1

112 OF 244 SHEETS

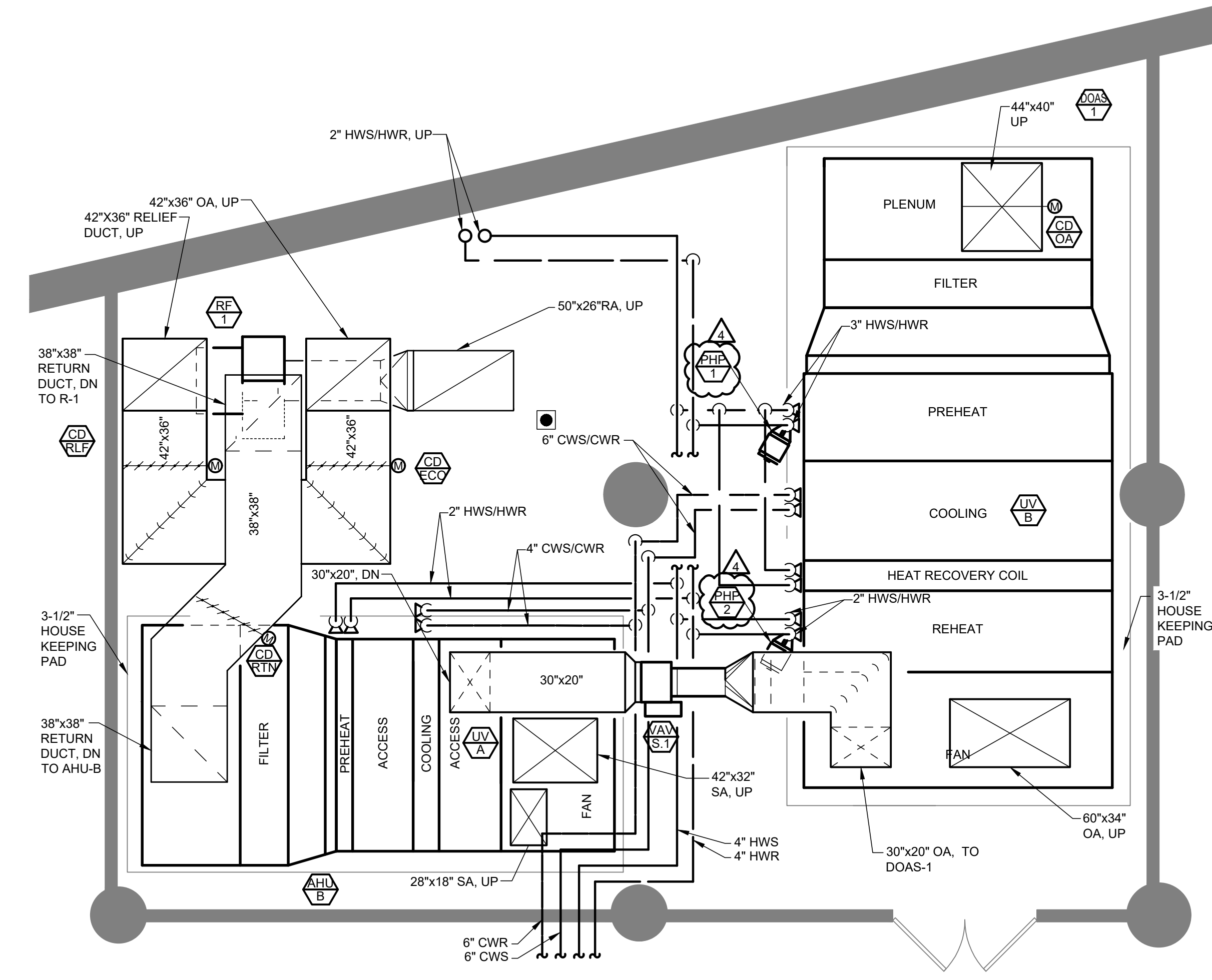
DATE : August 31, 2023

KEYED NOTES

- 1 50"x30" PROPORTIONAL SPLIT, SPLIT DUCT 9" AND TRANSITION TO 28"x18" TO SERVE BASEMENT. TRANSITION 41"x30" TO 50"x26" AND ROUTE DUCT UP TO FIRST FLOOR.
- 2 NEW 2" HWS AND HWR LINES UP TO 1ST FLOOR.

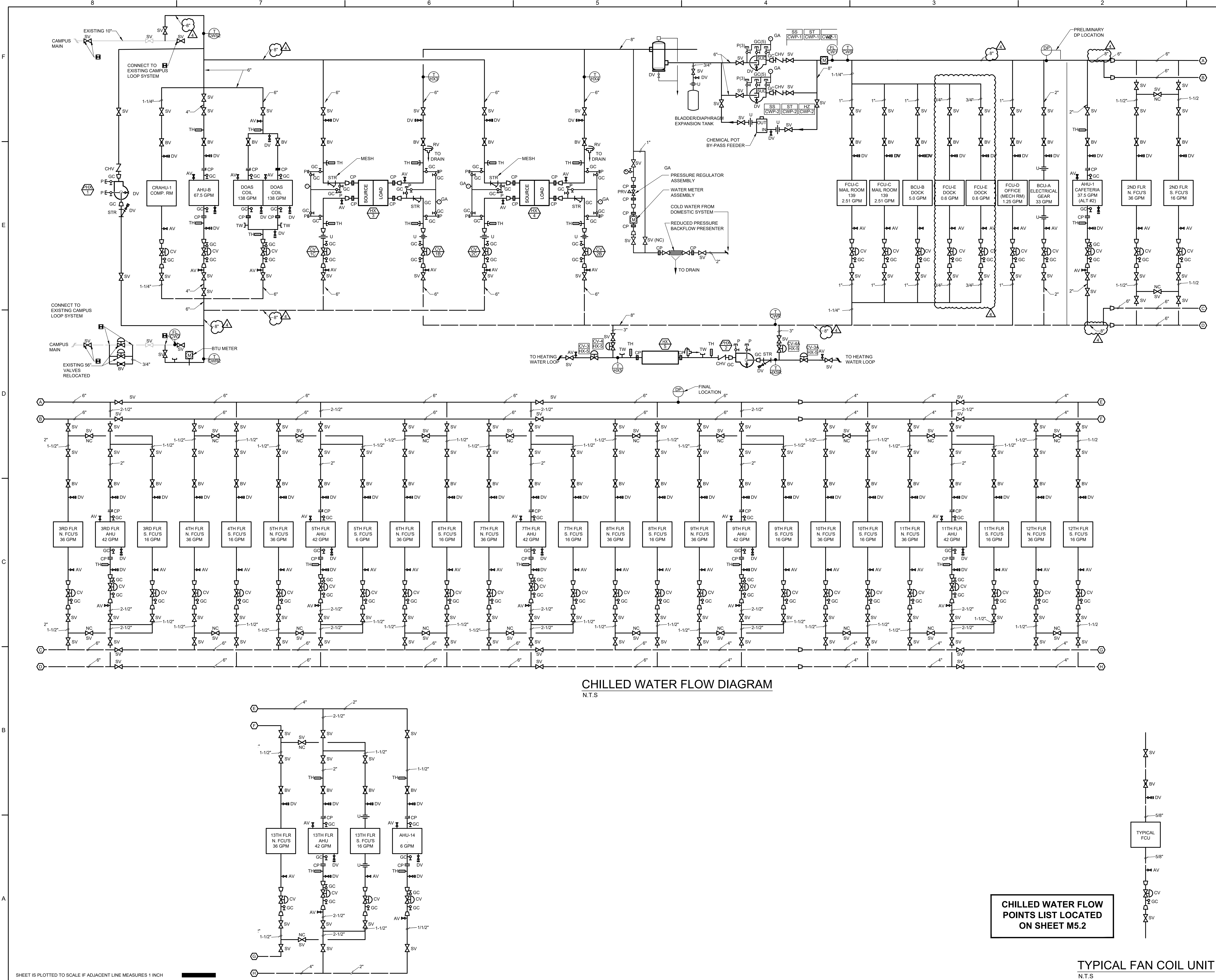


**BASEMENT AHU ROOM - ENLARGED
FLOOR PLAN - UPPER - MECHANICAL**
1/4" = 1'-0"



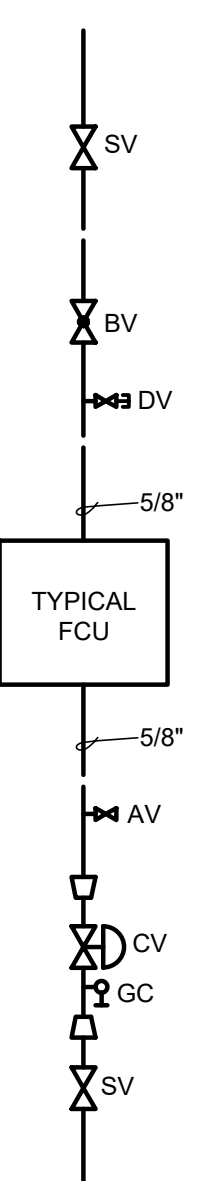
**BASEMENT AHU ROOM - ENLARGED
FLOOR PLAN - LOWER - MECHANICAL**
1/4" = 1'-0"

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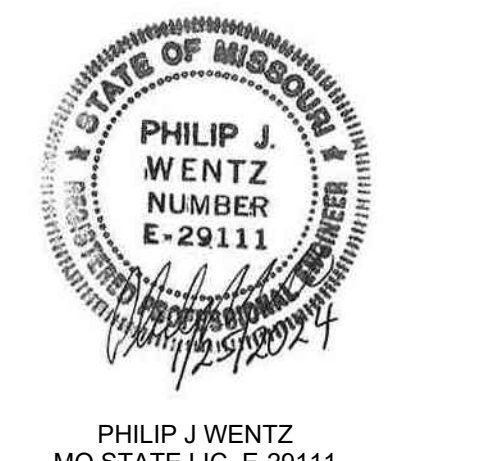
CHILLED WATER FLOW DIAGRAM
N.T.S

CHILLED WATER FLOW POINTS LIST LOCATED ON SHEET M5.2



TYPICAL FAN COIL UNIT
N.T.S

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ISSUE DATE:
CAD DWG FILE: M5.1-075107.001
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SHEET TITLE:
CHILLED WATER FLOW DIAGRAM

SHEET NUMBER:
M5.1
115 OF 244 SHEETS

DATE: August 31, 2023

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VARIABLE AIR VOLUME UNIT SCHEDULE																
UNIT DESIG.	AHU NO.	Room	MANUFACTURER & MODEL NO.	INLET SIZE (IN.)	DESIGN FLOW CONDITIONS				HEATING COIL DATA					NOTES		
					COOLING MAX. FLOW (CFM)	HEATING MAX. FLOW (CFM)	Minimum Max Flow (CFM)	MAX. APD (IN. W.C.)	HEATING FLOW (CFM)	EAT (°F)	LAT (°F)	EWT (°F)	MAX. FLOW (GPM)		MAX. WPD (FT.)	MIN. ROWS
VAV B.1	AHU-B	B1,B2,B3	PRICE SDV	6	175	100	75	0.4	100	55	81.8	140	0.5	5	1	1,2
VAV B.2	AHU-B	B4,B5,B6	PRICE SDV	6	225	125	100	0.4	125	55	78.6	140	0.5	5	1	1,2
VAV B.3	AHU-B	B8	PRICE SDV	6	250	125	100	0.4	125	55	78.6	140	0.5	5	1	1,2
VAV B.4	AHU-B	B10	PRICE SDV	8	550	250	225	0.4	250	55	75	140	0.6	5	1	1,2
VAV B.5	AHU-B	B7	PRICE SDV	10	900	375	275	0.4	375	55	75	140	2.4	5	1	1,2
VAV B.6	AHU-B	B9	PRICE SDV	4	75	50	50	0.4	50	55	92.7	140	0.5	5	1	1,2
VAV B.7	AHU-B	B11-B15	PRICE SDV	8	550	275	225	0.4	275	55	75	140	0.7	5	1	1,2
VAV 1.1	AHU-B	140	PRICE SDV	14	1,950	800	600	0.4	800	55	75.2	140	2.3	5	1	1,2
VAV 1.2	AHU-B	128, 127, 137, 136	PRICE SDV	6	125	120	120	0.4	120	55	79.2	140	0.5	5	1	1,2
VAV 1.3	AHU-B	135	PRICE SDV	14	2,200	1800	1650	0.4	1800	55	75.2	140	2.3	5	2	1,2
VAV 1.4	AHU-B	133	PRICE SDV	10	550	400	300	0.4	400	55	75	140	1.2	5	2	1,2
VAV 1.5	AHU-B	134	PRICE SDV	14	1,700	1500	1200	0.4	1500	55	75	140	2.2	5	2	1,2
VAV 1.6	AHU-B	138	PRICE SDV	6	225	100	75	0.4	100	55	81.8	140	0.4	5	1	1,2
VAV 1.7	AHU-B	129	PRICE SDV	6	350	150	125	0.4	195	55	76.2	140	0.4	5	1	1,2
VAV 1.8	AHU-B	130	PRICE SDV	4	75	50	50	0.4	50	55	92.7	140	0.4	5	2	1,2
VAV 1.9	AHU-B	140	PRICE SDV	12	975	400	300	0.4	400	55	75.5	140	0.8	5	2	1,2
VAV 1.10	AHU-B	101-103	PRICE SDV	6	300	250	150	0.4	250	55	75	140	1.2	5	1	1,2
VAV 1.11	AHU-B	104-107	PRICE SDV	8	400	300	200	0.4	300	55	75	140	0.9	5	2	1,2
VAV 1.12	AHU-B	140	PRICE SDV	10	975	400	300	0.4	400	55	75	140	1.2	5	1	1,2
VAV 1.13	AHU-B	108-111	PRICE SDV	8	400	300	200	0.4	300	55	75	140	0.9	5	2	1,2
VAV 1.14	AHU-B	112, 113	PRICE SDV	6	200	150	100	0.4	150	55	76.2	140	0.4	5	1	1,2
VAV 1.15	AHU-B	114-117	PRICE SDV	8	400	300	200	0.4	300	55	75	140	0.9	5	1	1,2
VAV 1.16	AHU-B	118	PRICE SDV	4	100	75	50	0.4	75	55	86.2	140	0.4	5	1	1,2
VAV 1.17	AHU-B	140	PRICE SDV	10	1,000	400	300	0.4	400	55	75	140	1.2	5	1	1,2
VAV 1.18	AHU-B	138	PRICE SDV	6	200	100	75	0.4	100	55	81.8	140	0.4	5	1	1,2
VAV 1.19	AHU-B	119-121	PRICE SDV	6	300	225	75	0.4	225	55	75	140	0.8	5	1	1,2
VAV 1.20	AHU-B	122	PRICE SDV	6	300	125	100	0.4	125	55	78.6	140	0.4	5	2	1,2
VAV 2N	AHU-3	Open Office	PRICE SRDV	36 X 12	3,500	2,500	1,200	0.1	2,500	70	70	-	-	-	-	1,2,3
VAV 2S	AHU-3	Open Office	PRICE SRDV	30 X 18	2,500	1,500	1,400	0.1	1,500	70	70	-	-	-	-	1,2,3
VAV 2.1	AHU-3	202 Conf.	PRICE SDV	6	250	100	75	0.4	100	70	70	-	-	-	-	1,2
VAV 2.2	AHU-3	208, 210, 211	PRICE SDV	6	275	150	75	0.4	150	70	70	-	-	-	-	1,2
VAV 2.3	AHU-3	212 - 214	PRICE SDV	6	225	150	95	0.4	150	70	70	-	-	-	-	1,2
VAV 2.4	AHU-3	215	PRICE SDV	4	75	50	25	0.4	25	70	70	-	-	-	-	1,2
VAV 2.5	AHU-3	220 Conf.	PRICE SDV	6	400	225	200	0.4	225	70	70	-	-	-	-	1,2
VAV 3N	AHU-3	Open Office	PRICE SRDV	30 X 20	3,500	2,500	1,200	0.1	2,500	70	70	-	-	-	-	1,2,3
VAV 3S	AHU-3	Open Office	PRICE SRDV	30 X 18	2,500	1,500	1,400	0.1	1,500	70	70	-	-	-	-	1,2,3
VAV 3.1	AHU-3	311	PRICE SDV	6	300	150	75	0.4	175	70	70	-	-	-	-	1,2
VAV 3.2	AHU-3	311	PRICE SDV	6	300	150	75	0.4	175	70	70	-	-	-	-	1,2
VAV 3.3	AHU-3	311	PRICE SDV	6	300	150	75	0.4	175	70	70	-	-	-	-	1,2
VAV 3.4	AHU-3	Conference 305	PRICE SDV	6	100	50	50	0.4	100	70	70	-	-	-	-	1,2
VAV 4N	AHU-5	Open Office	PRICE SRDV	36 X 12	3,500	2,500	1,200	0.1	2,500	70	70	-	-	-	-	1,2,3
VAV 4S	AHU-5	Open Office	PRICE SRDV	30 X 18	2,500	1,500	1,400	0.1	1,500	70	70	-	-	-	-	1,2,3
VAV 4.1	AHU-5	400 Open Reception	PRICE SDV	6	300	150	100	0.4	150	70	70	-	-	-	-	1,2
VAV 4.2	AHU-5	414, 417, 418	PRICE SDV	6	300	80	75	0.4	80	70	70	-	-	-	-	1,2
VAV 4.3	AHU-5	419, 420	PRICE SDV	6	250	60	55	0.4	60	70	70	-	-	-	-	1,2
VAV 4.4	AHU-5	416A Conf.	PRICE SDV	6	300	125	90	0.4	125	70	70	-	-	-	-	1,2
VAV 4.5	AHU-5	421, 422	PRICE SDV	6	250	55	50	0.4	130	70	70	-	-	-	-	1,2
VAV 4.6	AHU-5	416B Conf.	PRICE SDV	6	250	125	90	0.4	125	70	70	-	-	-	-	1,2
VAV 4.7	AHU-5	404 Conf.	PRICE SDV	6	280	125	100	0.4	125	70	70	-	-	-	-	1,2
VAV 5N	AHU-5	Open Office	PRICE SRDV	30 X 20	3,500	2,500	1,200	0.1	2,500	70	70	-	-	-	-	1,2,3
VAV 5S	AHU-5	Open Office	PRICE SRDV	30 X 18	2,500	1,500	1,400	0.1	1,500	70	70	-	-	-	-	1,2,3
VAV 5.1	AHU-5	509 Conf.	PRICE SDV	6	345	175	125	0.4	175	70	70	-	-	-	-	1,2
VAV 5.2	AHU-5	512, 513	PRICE SDV	6	200	100	100	0.4	100	70	70	-	-	-	-	1,2
VAV 5.3	AHU-5	510 Open Off.	PRICE SDV	6	375	150	100	0.4	150	70	70	-	-	-	-	1,2
VAV 5.4	AHU-5	514-516	PRICE SDV	6	325	225	150	0.4	225	70	70	-	-	-	-	1,2
VAV 5.5	AHU-5	511 Conf.	PRICE SDV	6	300	150	125	0.4	125	70	70	-	-	-	-	1,2
VAV 5.6	AHU-5	509 Conf.	PRICE SDV	6	230	125	100	0.4	125	70	70	-	-	-	-	1,2

NOTES:
 1. SEE SPECIFICATION FOR ROOM TEMPERATURE SENSOR TYPE.
 2. MAXIMUM AIR PRESSURE DROP IS FOR THE ENTIRE ASSEMBLY.
 3. SLIDE IN RETROFIT STYLE VAV BOX

VARIABLE AIR VOLUME UNIT SCHEDULE																
UNIT DESIG.	AHU NO.	Room	MANUFACTURER & MODEL NO.	INLET SIZE (IN.)	DESIGN FLOW CONDITIONS				HEATING COIL DATA					NOTES		
					COOLING MAX. FLOW (CFM)	HEATING MAX. FLOW (CFM)	Minimum Max Flow (CFM)	MAX. APD (IN. W.C.)	HEATING FLOW (CFM)	EAT (°F)	LAT (°F)	EWT (°F)	MAX. FLOW (GPM)		MAX. WPD (FT.)	MIN. ROWS
VAV 6N	AHU-7	Open Office	PRICE SRDV	36 X 12	3,500	2,500	1,200	0.1	2,500	70	70	-	-	-	-	1,2,3
VAV 6S	AHU-7	Open Office	PRICE SRDV	30 X 18	2,500	1,500	1,400	0.1	1,500	70	70	-	-	-	-	1,2,3
VAV 6.1	AHU-7	602, 603	PRICE SDV	6	125	85	50	0.4	85	70	70	-	-	-	-	1,2
VAV 6.2	AHU-7	610, 612, 613	PRICE SDV	6	250	125	100	0.4	125	70	70	-	-	-	-	1,2
VAV 6.3	AHU-7	614 CONF	PRICE SDV	6	200	175	60	0.4	175	70	70	-	-	-	-	1,2
VAV 6.4	AHU-7	615, 616	PRICE SDV	6	200	100	80	0.4	80	70	70	-	-	-	-	1,2
VAV 6.5A	AHU-7	617 Conf.	PRICE SDV	6	300	150	100	0.4	150	70	70	-	-	-	-	1,2
VAV 6.5B	AHU-7	617 Conf.	PRICE SDV	6	300	150	100	0.4	150	70	70	-	-	-	-	1,2
VAV 6.6	AHU-7	623 Conf.	PRICE SDV	6	300	125	100	0.4	125	70	70	-	-	-	-	1,2
VAV 6.7	AHU-7	618	PRICE SDV	6	100	50	40	0.4	50	70	70	-	-	-	-	1,2
VAV 7N	AHU-7	Open Office	PRICE SRDV	30 X 20	3,500	2,500	1,200	0.1	2,500	70	70	-	-	-	-	1,2,3
VAV 7S	AHU-7	Open Office	PRICE SRDV	30 X 18	2,500	1,500	1,400	0.1	1,500	70	70	-	-	-	-	1,2,3
VAV 7.1	AHU-7	709 Conf.	PRICE SDV	6	225	100	75	0.4	100	70	70	-	-	-	-	1,2
VAV 7.2	AHU-7	713, 714	PRICE SDV	6	190	100	70	0.4	100	70	70	-	-	-	-	1,2
VAV 7.3	AHU-7	712	PRICE SDV	6	175	85	50	0.4	85	70	70	-	-	-	-	1,2
VAV 7.4	AHU-7	710, 711	PRICE SDV	6	190	100	70	0.4	100	70	70	-	-	-	-	1,2
VAV 8N	AHU-9	Open Office	PRICE SRDV	36 X 12	3,500	2,500	1,200	0.1	2,500	70	70	-	-	-	-	1,2,3
VAV 8S	AHU-9	Open Office	PRICE SRDV	30 X 18	2,500	1,500	1,400	0.1	1,500	70	70	-	-	-	-	1,2,3
VAV 8.1	AHU-9	821-823	PRICE SDV	6	350	180	75	0.4	180	70	70	-	-	-	-	1,2
VAV 8.2	AHU-9	820	PRICE SDV	6	150	65	25	0.4	65	70	70	-	-	-	-	1,2
VAV 8.3	AHU-9	816, 819	PRICE SDV	6	250	100	50	0.4	100	70	70	-	-	-	-	1,2
VAV 8.4	AHU-9	813	PRICE SDV	6	450	200	155	0.4	200	70	70	-	-	-	-	1,2
VAV 8.5	AHU-9	812, 817	PRICE SDV	6	225	100	50	0.4	100	70	70	-	-	-	-	1,2
VAV 8.6	AHU-9	811, 816	PRICE SDV	6	225	100	50	0.4	100	70	70	-	-	-	-	1,2
VAV 9N	AHU-9	Open Office	PRICE SRDV	30 X 20	3,500	2,500	1,200	0.1	2,500	70	70	-	-	-	-	1,2,3
VAV 9S	AHU-9	Open Office	PRICE SRDV	30 X 18	2,500	1,500	1,400	0.1	1,500	70	70	-	-	-	-	1,2,3
VAV 9.1	AHU-9	912	PRICE SDV	6	250	150	100	0.4	150	70	70	-	-	-	-	1,2
VAV 9.2	AHU-9	908	PRICE SDV	6	150	75	50	0.4	50	70	70	-	-	-	-	1,2
VAV 9.3	AHU-9	907 Conf.	PRICE SDV	6	400	250	150	0.4	250	70	70	-	-	-	-	1,2
VAV 9.4	AHU-9	911 Conf.	PRICE SDV	6	200	125	75	0.4	125	70	70	-	-	-	-	1,2
VAV 9.5	AHU-9	910 Conf.														

CONDENSING UNIT SCHEDULE

UNIT DESIG.	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	AMBIENT DB (°F)	MIN. COOLING CAPACITY (MBH)	COMPRESSOR DATA			ELECTRICAL DATA					WEIGHT (LBS.)	NOTES
						QTY.	TYPE	REFRIGERANT TYPE	VOLTS/PH	FLA/R/LA	MCA	MOP	DISC INCLUDED		
CU-2	ROOF	S-11	TRANE TTA0724DA4	95	72.0	2	SCROLL	R-410A	480/3	11.4	14	15	N	307	1

NOTES:
1. UNIT TO BE SUPPLIED WITH HAIL GUARDS.

BLOWER COIL UNIT SCHEDULE

UNIT DESIG.	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	TOTAL COUNT	AIRFLOW (CFM)	UNIT CONFIGURATION	COOLING COIL				ELECTRIC HEAT				FAN DATA			ELECTRICAL	RETURN INLET LOCATION	SUPPLY DISCHARGE LOCATION	PIPING CONNECTION	FILTER	NOTES							
							TOTAL CAPACITY (BTUH)	SENS CAPACITY (BTUH)	EAT DB/WB (°F)	EWT (°F)	MAX. FLOW (GPM)	MAX WPD (FT.)	TOTAL CAPACITY KW	EAT (°F)	LAT (°F)	ESP (IN.)	MOTOR POWER (HP)							VOLTS/PH	MCA	MOCP				
BCU-A	BASEMENT	ELEC SERVICE	TRANE BCHE120	1	4,500	HORIZONTAL CONCEALED	198	183	87 / 65	47.5	33	16								4	5	480/3	9.75	15	FRONT	TOP DUCTED	SEE PLANS	2" MERV 8	1,3,4,5	
BCU-B	2ND FLOOR	DOCK SUPPORT	TRANE BCHE036	1	1,050	HORIZONTAL CONCEALED	25	23	75 / 62.5	47.5	5	5	5	68	83	.3	3/4	277/1	27.2	30						BACK DUCTED	FRONT DUCTED	SEE PLANS	2" MERV 8	1,2,3,4,5

NOTES:
1. PROVIDE DUCT FLANGES FOR RETURN.
2. PROVIDE DUCT FLANGES FOR SUPPLY.
3. PROVIDE FACTORY MOUNTED DISCONNECT.
4. ECM MOTOR
5. DDC CONTROLLER

TERMINAL REHEAT COIL SCHEDULE

UNIT DESIG.	AREA SERVED	HEATING COIL DATA											NOTES
		DESIGN AIRFLOW (CFM)	MIN. CAPACITY (MBH)	EAT (°F)	LAT (°F)	EWT (°F)	MAX. FLOW (GPM)	MAX. WPD (FT.)	APD @ MAX AIRFLOW (IN. W.C.)	SIZE W X H (IN.)	MIN. ROWS	MAX FPI	
RHC-2N	NORTH EVEN STACK FLOORS	3,500	40	65	75	140	2.0	4	0.11	44" X 18"	1	7	1.2
RHC-2S	SOUTH EVEN STACK FLOORS	2,500	27	65	75	140	1.5	4	0.12	30" X 18"	1	7	1.2
RHC-3N	NORTH ODD STACK FLOORS	3,500	38	65	75	140	2.0	4	0.12	32" X 24"	1	7	1.3
RHC-3S	SOUTH ODD STACK FLOORS	3,500	28	65	75	140	1.5	4	0.1	32" X 18"	1	7	1.3

NOTES:
1. .020" THICK 5/8" DIAMETER TUBE
2. COILS SERVING FLOORS 2,4,6,8,10,12
3. COILS SERVING FLOORS 3,5,7,9,11,13

AIR DEVICE SCHEDULE

UNIT DESIG.	SERVICE	MANUFACTURER & MODEL NO.	TYPE	THROW	NO. OF SLOTS	NECK SIZE (IN.)	FACE SIZE (IN.)	FINISH	NOTES
A1	SUPPLY	TITUS TDC	LOUVER	SEE PLANS	NA	12"	24"x24"	TBD BY ARCH	3
A2	SUPPLY	TITUS TDC	LOUVER	SEE PLANS	NA	10"	24"x24"	TBD BY ARCH	3
A3	SUPPLY	TITUS TDC	LOUVER	SEE PLANS	NA	8"	24"x24"	TBD BY ARCH	3
A4	SUPPLY	TITUS TDC	LOUVER	SEE PLANS	NA	6"	24"x24"	TBD BY ARCH	3
B1	SUPPLY	TITUS TBD-10	SLOT	SEE PLANS	2 @ 1"	6" Ø	24" x 6"	TBD BY ARCH	3
C1	SUPPLY	TITUS 1700	SIDEWALL	SEE PLANS	NA	16"x36"	18"x38"	TBD BY ARCH	
C2	SUPPLY	TITUS 1700	SIDEWALL	SEE PLANS	NA	14"x10"	16"x12"	TBD BY ARCH	
C3	SUPPLY	TITUS 1700	SIDEWALL	SEE PLANS	NA	16"x8"	18"x12"	TBD BY ARCH	
C4	SUPPLY	TITUS 1700	SIDEWALL	SEE PLANS	NA	12"x6"	14"x8"	TBD BY ARCH	
C5	SUPPLY	TITUS 1700	SIDEWALL	SEE PLANS	NA	8"x4"	8"x6"	TBD BY ARCH	
D1	EXHAUST	TITUS TDC	LOUVER	NA	NA	6"x6"	12"x12"	TBD BY ARCH	1,3
D2	EXHAUST	TITUS TDC	LOUVER	NA	NA	21"x21"	24"x24"	TBD BY ARCH	1,3
F1	RETURN	TITUS TDC	LOUVER	NA	NA	18"x18"	24"x24"	TBD BY ARCH	3
F2	RETURN	TITUS TDC	LOUVER	NA	NA	15"x15"	24"x24"	TBD BY ARCH	3
F3	RETURN	TITUS TDC	LOUVER	NA	NA	12" DIA.	24"x24"	TBD BY ARCH	3
F4	RETURN	TITUS TBR-80	SLOT	SEE PLANS	2-1"	-	24"x6"	TBD BY ARCH	3
F5	RETURN	TITUS 350RL	SIDEWALL	SEE PLANS	NA	12"x8"	14"x10"	TBD BY ARCH	

NOTES:
1. DIFFUSER SHALL BE ALUMINUM
2. PROVIDE BORDER FOR DRYWALL INSTALLATION
3. PROVIDE BORDER FOR LAY-IN INSTALLATION
4. GRILLE SHALL BE STAINLESS STEEL

STEAM TRAP SCHEDULE

UNIT DESIG.	LOCATION	SERVICE	MANUFACTURER MODEL NO.	SIZE (IN.)	TYPE	CONDENSATE (LBS./HR)	MAX. ALLOWABLE PRESSURE (PSIG)	OPERATING PRESSURE (PSIG)	DIFFERENTIAL PRESSURE (PSIG)	NOTES
T-1	HOT WATER PLANT	HEATING WATER	ARMSTRONG 30-A8	2	FT	10000	15	10	10	
T-2	HOT WATER PLANT	HEATING WATER	ARMSTRONG 30-A8	2	FT	10000	15	10	10	
T-3	HOT WATER PLANT	HEATING WATER	ARMSTRONG 30-A8	2	FT	12000	15	10	10	
T-4	HOT WATER PLANT	HEATING WATER	ARMSTRONG 30-A8	2	FT	12000	15	10	10	

TRAP TYPE
FT - FLOAT & THERMOSTATIC
IB - INVERTED BUCKET
TD - THERMOSTATIC
TH - THERMODYNAMIC

NOTES:

UV LIGHT SCHEDULE

UNIT DESIGNATION	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	BULB QTY AND LENGTH	VOLTS/PH	NOTES
UV-A	BASEMENT	S-1	STERIL-AIRE SE61, SE50	(4) 61, (4) 50	277/1	1
UV-B	BASEMENT	DOAS	STERIL-AIRE SE61	(8) 61	277/1	1
UV-C	STACK AHU'S	S5, S-6, S-7, S-8, S-9, S-10	STERIL-AIRE SE42	(8) 42"	277/1	1

NOTES:
1. PROVIDE FACTORY MODULAR RACK MOUNTING KIT AND POWER SUPPLY

DX COIL SCHEDULE

UNIT DESIG.	AREA SERVED	HEATING COIL DATA										
		DESIGN AIRFLOW (CFM)	MIN. CAPACITY (MBH)	EAT (°F)	LAT (°F)	SUC TEMP (°F)	LIQUID TEMP (°F)	APD @ MAX AIRFLOW (IN. W.C.)	SIZE W X H (IN.)	MIN. ROWS	NOTES	
RC-11	S-11 O.A.	800 CFM	67	95/78	55/54	45	115.0	0.5	18" X 18"	6	1,2	

1.) DUAL INTERTWINED CIRCUITS
2.) MANUFACTURER TO PROVIDE FIELD INSTALLED SPORLAN SDR VALVE

HEAT EXCHANGER SCHEDULE

UNIT DESIG.	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	TYPE	(SOURCE)				(SERVICE)				MINIMUM TRANSFER SURFACE AREA (SQ. FT.)	NOTES		
					EWT (°F)	LWT (°F)	FLOW (GPM)	STEAM SUPPLY (PSIG)	STEAM CAPACITY (LBS/HR)	MAX. PD (FT.)	EWT (°F)	LWT (°F)			FLOW (GPM)	MAX. PD (FT.)
HX-1	BASEMENT	BUILDING HEATING WATER	BELL AND GOSSETT SU-107-2	SHELL AND TUBE	-	-	-	10	4,648	N/A	110	140	300	6.0	103.1	
HX-2	BASEMENT	BUILDING HEATING WATER	BELL AND GOSSETT SU-107-2	SHELL AND TUBE	-	-	-	10	4,648	N/A	110	140	300	6.0	103.1	
HX-3	BASEMENT	1-14 FLOOR CHILLED WATER	BELL AND GOSSETT GPX	PLATE AND FRAME	45	57	355	-	-	18	58	48	400	23.0	1277	1
HX-4	BASEMENT	1-14 FLOOR CHILLED WATER	BELL AND GOSSETT GPX	PLATE AND FRAME	45	57	355	-	-	18	58	48	400	23.0	1277	1
HX-5	BASEMENT	DRY COOLER	BELL AND GOSSETT GPX	PLATE AND FRAME	58	64	130	-	-	18	67	61	130	23.0	1277	1

NOTES:
1. PROVIDE EXTENDED RAIL FOR SERVICE

FLOW METERS

FLOW DIAGRAM PLAN ID	SYSTEM	SIZE (IN)	FLUID TEMP (F)	MAX FLOW (GPM)	EXPECTED FLOW (GPM)	BI-DIRECTIONAL	ENERGY METER	TEMP SENSOR	PIPE MATERIAL	POWER (V)	MANUFACTURER/ MODEL NO.	REMARKS
FL-CW1	TERCIARY CHILLED WATER	8	45	800	400	NO	YES	INSERTION	CARBON STEEL	24	DYNASONICS TFX 5000	1,2,3
FL-CW2	CHILLED WATER FROM ECC	8	45	1200	600	NO	YES	INSERTION	CARBON STEEL	24	DYNASONICS TFX 5000	1,2,3
FL-HW	BUILDING HEATING WATER	4	180	500	300	NO	YES	INSERTION	CARBON STEEL	24	DYNASONICS TFX 5000	1,2,3

NOTES:
1. 24V FOR ALL FLOW METERS.
2. METERS ARE BACNET IP AND REQUIRE AN ETHERNET CONNECTION
3. METER PROVIDED BY AND INSTALLED BY TEMPERATURE CONTROLS CONTRACTOR, METER, DISPLAY, AND INSERTION WELLS (WHERE REQUIRED) LOCATION TO BE COORDINATED WITH MECHANICAL PRIOR TO PIPE FABRICATION.

GLYCOL MAKE UP UNIT

UNIT DESIG.	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	TYPE	PUMP DATA			MOTOR DATA			NOTES	
					FLOW (GPM)	HEAD (FT.)	BHP	HP	RPM	VOLTS/PH		UNIT CONTROL
GMU-1	BASEMENT	DRY COOLER	BELL AND GOSSETT GMU-30	END-SUCTION	10	68	0.3	1/2	3600	115/1	STARTER	1

NOTES:
1. 55 GALLON TANK, STRAINER, PRESSURE GAUGES, EXPANSION TANK, LOW WATER CUTOFF

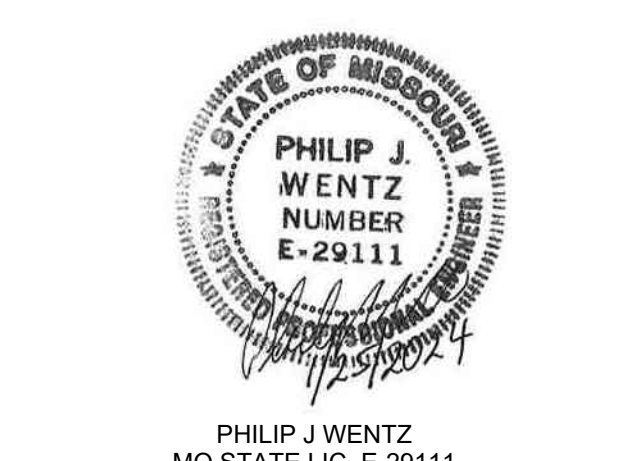
COMPUTER ROOM AIR CONDITIONING UNIT SCHEDULE

EXISTING UNIT DESIG.	LOCATION	SERVICE	MANUFACTURER & MODEL NO.	TOTAL AIRFLOW (CFM)	AHU TYPE	HUMIDIFIER CAPACITY (LB/HR)	COOLING COIL DATA							DX COOLING COIL				REHEAT		FAN DATA				INDOOR UNIT ELECTRICAL DATA				UNIT OUTDOOR CONDENSER ELECTRICAL DATA				NOTES			
							TOTAL (BTUH)	SENSIBLE (BTUH)	DESIGN TEMP (F)	DESIGN RH (%)	EWT (F)	GPM	WPD (FT)	TOTAL (BTUH)	SENSIBLE (BTUH)	DESIGN TEMP (F)	MIN. CAP. (KW)	FAN DISCHARGE	FAN TYPE	ESP (IN. W.C.)	HP	NUMBER OF FANS	FLA	VOLTS/PH	MCA	OCF	UNIT SCOR KA	FLA	VOLTS/PH	MCA	OCF				
CRAHU-1	LL COMPUTER ROOM	LL COMPUTER ROOM	LIEBERT PX018D21C80899	2,800	DOWNFLOW	7.7	68	60	75	45	45	15.7	7.8	63	57	75	12	BOTTOM-SIDE DISCHARGE RAISED FLOOR	PLENUM					1.5		30.5	480/3	36.8	40	65	1.4	480/3	1.8	15	1,2,3,4

GENERAL NOTES:
1. ECM SUPPLY FAN
2. LOW AMBIENT (20F)
3. FLOOR STAND
4. CU-1 ON LOWER ROOF TO SUPPORT CRAHU-1

KEYED NOTES:

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MICHAEL L. PARSON,
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OFFICE OF ADMINISTRATION
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RENOVATE MECHANICAL/
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STATE OFFICE BUILDING

JEFFERSON STATE
OFFICE BUILDING
205 JEFFERSON STREET
JEFFERSON CITY, MO 65101

PROJECT # 01911-01
SITE # 1001
ASSET # 3101001057

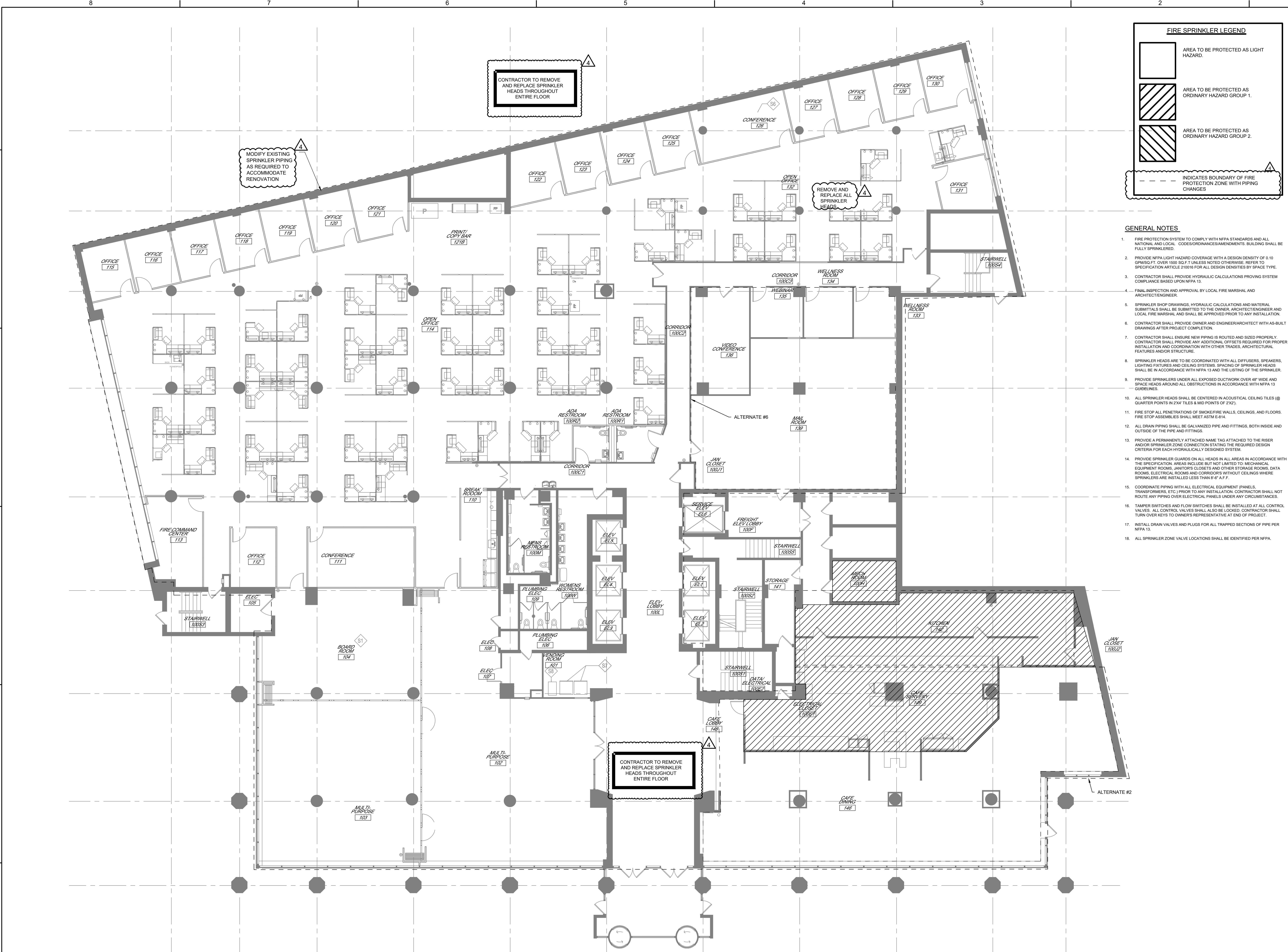
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ISSUE DATE:
CAD DWG FILE: M6.0-075107.001
DRAWN BY: AM
CHECKED BY: EP
DESIGNED BY: JW

SHEET TITLE:
MECHANICAL SCHEDULES

SHEET NUMBER:
M6.4
127 OF 244 SHEETS

DATE: August 31, 2023



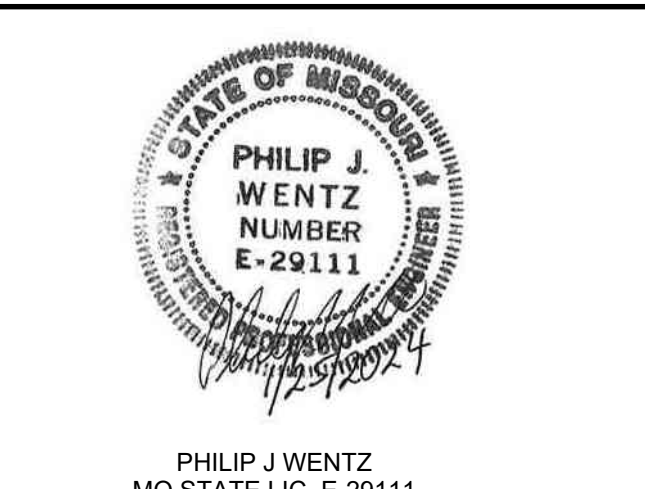
FIRE SPRINKLER LEGEND

- [White Box] AREA TO BE PROTECTED AS LIGHT HAZARD.
- [Diagonal Hatching] AREA TO BE PROTECTED AS ORDINARY HAZARD GROUP 1.
- [Cross-hatching] AREA TO BE PROTECTED AS ORDINARY HAZARD GROUP 2.
- [Dashed Line] INDICATES BOUNDARY OF FIRE PROTECTION ZONE WITH PIPING CHANGES

- GENERAL NOTES**
- FIRE PROTECTION SYSTEM TO COMPLY WITH NFPA STANDARDS AND ALL NATIONAL AND LOCAL CODES/ORDINANCES/AMENDMENTS. BUILDING SHALL BE FULLY SPRINKLERED.
 - PROVIDE NFPA LIGHT HAZARD COVERAGE WITH A DESIGN DENSITY OF 0.10 GPM/SQ.FT. OVER 1000 SQ.FT. UNLESS NOTED OTHERWISE, REFER TO SPECIFICATION ARTICLE 210016 FOR ALL DESIGN DENSITIES BY SPACE TYPE.
 - CONTRACTOR SHALL PROVIDE HYDRAULIC CALCULATIONS PROVING SYSTEM COMPLIANCE BASED UPON NFPA 13.
 - FINAL INSPECTION AND APPROVAL BY LOCAL FIRE MARSHAL AND ARCHITECT/ENGINEER.
 - SPRINKLER SHOP DRAWINGS, HYDRAULIC CALCULATIONS AND MATERIAL SUBMITTALS SHALL BE SUBMITTED TO THE OWNER, ARCHITECT/ENGINEER AND LOCAL FIRE MARSHAL AND SHALL BE APPROVED PRIOR TO ANY INSTALLATION.
 - CONTRACTOR SHALL PROVIDE OWNER AND ENGINEER/ARCHITECT WITH AS-BUILT DRAWINGS AFTER PROJECT COMPLETION.
 - CONTRACTOR SHALL ENSURE NEW PIPING IS ROUTED AND SIZED PROPERLY. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS REQUIRED FOR PROPER INSTALLATION AND COORDINATION WITH OTHER TRADES, ARCHITECTURAL FEATURES AND/OR STRUCTURE.
 - SPRINKLER HEADS ARE TO BE COORDINATED WITH ALL DIFFUSERS, SPEAKERS, LIGHTING FIXTURES AND CEILING SYSTEMS. SPACING OF SPRINKLER HEADS SHALL BE IN ACCORDANCE WITH NFPA 13 AND THE LISTING OF THE SPRINKLER.
 - PROVIDE SPRINKLERS UNDER ALL EXPOSED DUCTWORK OVER 4" WIDE AND SPRADE HEADS AROUND ALL OBSTRUCTIONS IN ACCORDANCE WITH NFPA 13 GUIDELINES.
 - ALL SPRINKLER HEADS SHALL BE CENTERED IN ACOUSTICAL CEILING TILES (@ QUARTER POINTS IN 2'x4' TILES & MID POINTS OF 2'x2').
 - FIRE STOP ALL PENETRATIONS OF SMOKE/FIRE WALLS, CEILINGS, AND FLOORS. FIRE STOP ASSEMBLIES SHALL MEET ASTM E-814.
 - ALL DRAIN PIPING SHALL BE GALVANIZED PIPE AND FITTINGS, BOTH INSIDE AND OUTSIDE OF THE PIPE AND FITTINGS.
 - PROVIDE A PERMANENTLY ATTACHED NAME TAG ATTACHED TO THE RISER AND/OR SPRINKLER ZONE CONNECTION STATING THE REQUIRED DESIGN CRITERIA FOR EACH HYDRAULICALLY DESIGNED SYSTEM.
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 - COORDINATE PIPING WITH ALL ELECTRICAL EQUIPMENT (PANELS, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. CONTRACTOR SHALL NOT ROUTE ANY PIPING OVER ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES.
 - TAMPER SWITCHES AND FLOW SWITCHES SHALL BE INSTALLED AT ALL CONTROL VALVES. ALL CONTROL VALVES SHALL ALSO BE LOCKED. CONTRACTOR SHALL TURN OVER KEYS TO OWNER'S REPRESENTATIVE AT END OF PROJECT.
 - INSTALL DRAIN VALVES AND PLUGS FOR ALL TRAPPED SECTIONS OF PIPE PER NFPA 13.
 - ALL SPRINKLER ZONE VALVE LOCATIONS SHALL BE IDENTIFIED PER NFPA.

FIRST FLOOR PLAN - FIRE PROTECTION
 1/8" = 1'-0"

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 MICHAEL L. PARSON,
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PROJECT # 01911-01
 SITE # 1001
 ASSET # 3101001057

REVISION: 1-ADDENDUM 4
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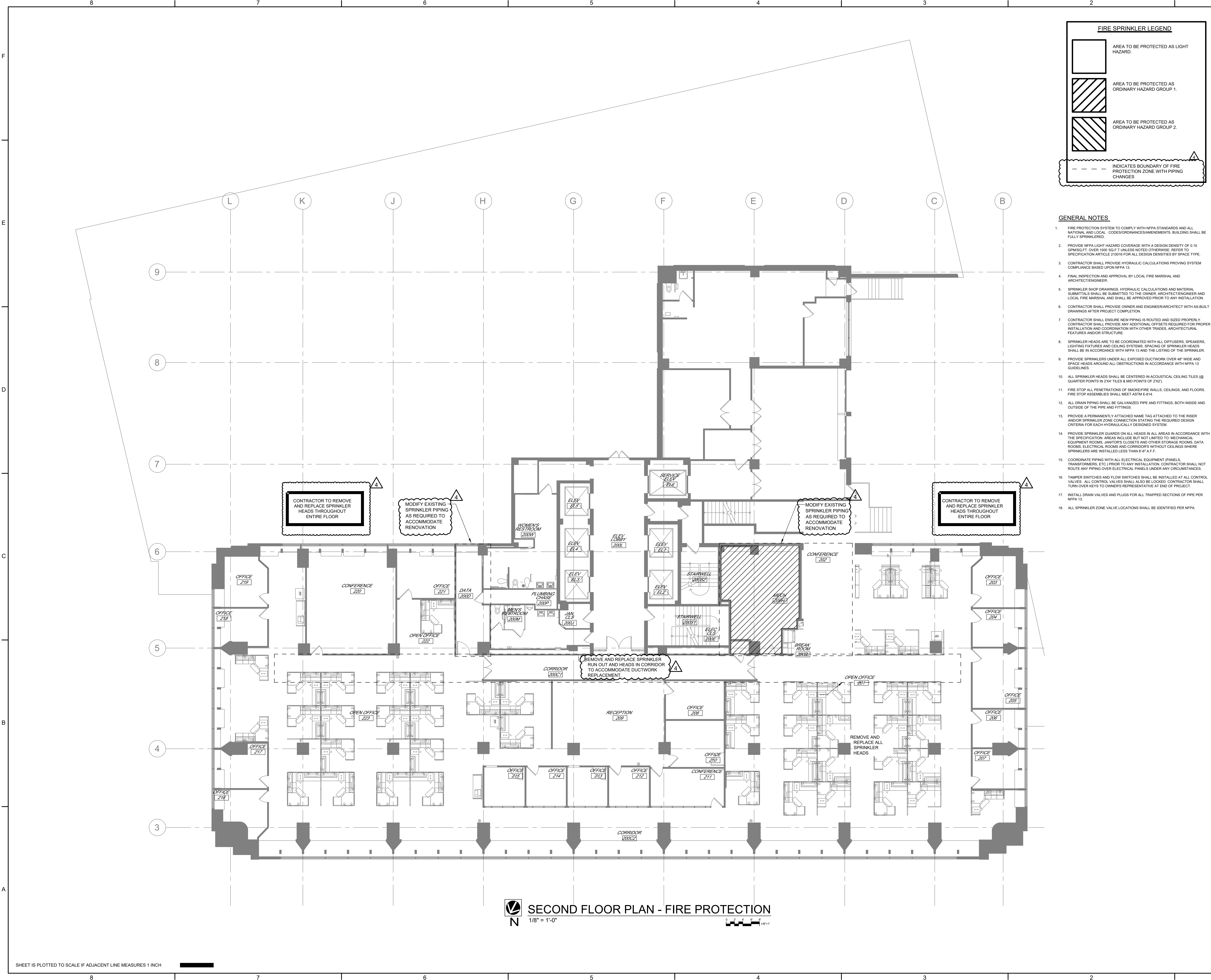
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 DRAWN BY: AM
 CHECKED BY: EP
 DESIGNED BY: JW

SHEET TITLE:
**FIRST
 FLOOR PLAN
 -FIRE PROTECTION**

SHEET NUMBER:
FP3.1
 147 OF 244 SHEETS

DATE : August 31, 2023

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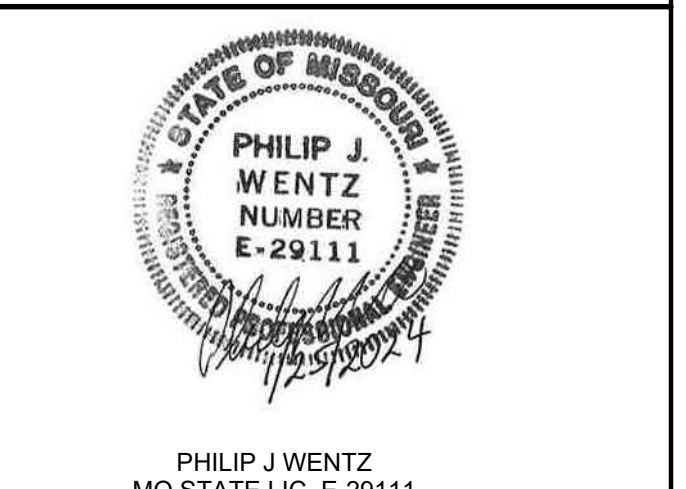
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- AREA TO BE PROTECTED AS ORDINARY HAZARD GROUP 1.
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SECOND FLOOR PLAN - FIRE PROTECTION
 1/8" = 1'-0"

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 MICHAEL L. PARSON,
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PROJECT # O1911-01
 SITE # 1001
 ASSET # 3101001057

REVISION: 1-ADDENDUM 4
 DATE: 01-23-2024
 REVISION: _____
 DATE: _____
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 DATE: _____
 REVISION: _____
 DATE: _____

ISSUE DATE:
 CAD DWG FILE: FP3.2-075107.001
 DRAWN BY: AM
 CHECKED BY: EP
 DESIGNED BY: JW

SHEET TITLE:
**SECOND
 FLOOR PLAN
 -FIRE PROTECTION**

SHEET NUMBER:
FP3.2
 148 OF 244 SHEETS

DATE : August 31, 2023

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JEFFERSON CITY, MO 65101

PROJECT # 01911-01
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ASSET # 3101001057

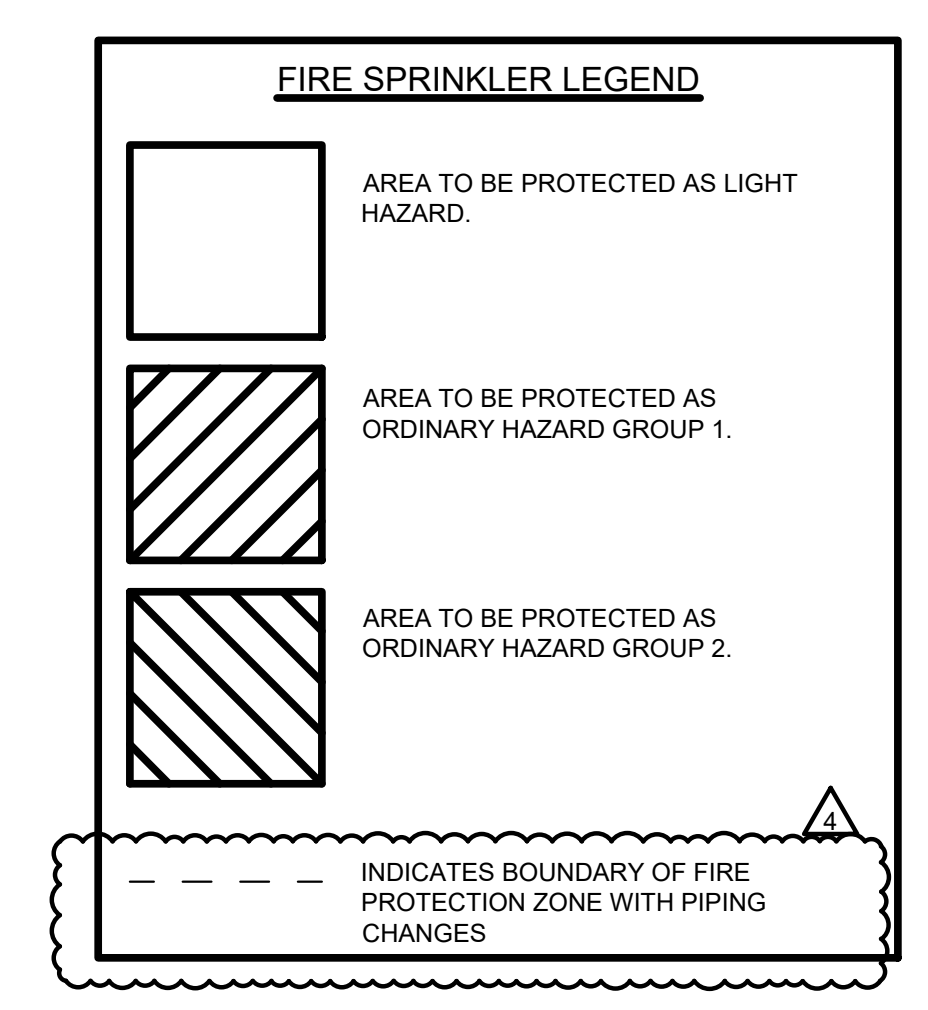
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SHEET TITLE:
**THIRD
FLOOR PLAN
-FIRE PROTECTION**

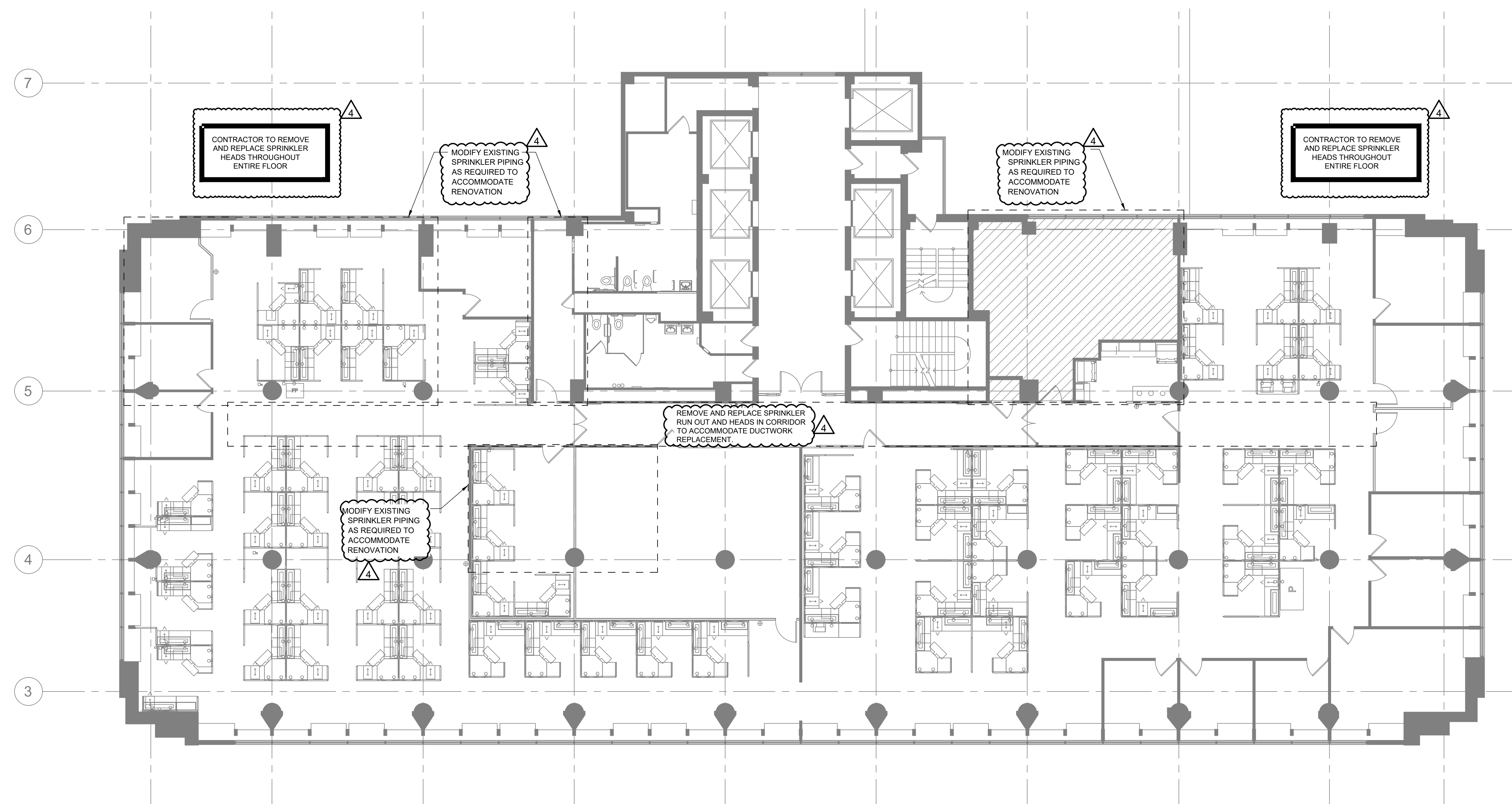
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FP3.3
149 OF 244 SHEETS

DATE : August 31, 2023



GENERAL NOTES

- FIRE PROTECTION SYSTEM TO COMPLY WITH NFPA STANDARDS AND ALL NATIONAL AND LOCAL CODES/ORDINANCES/AMENDMENTS. BUILDING SHALL BE FULLY SPRINKLERED.
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THIRD FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"



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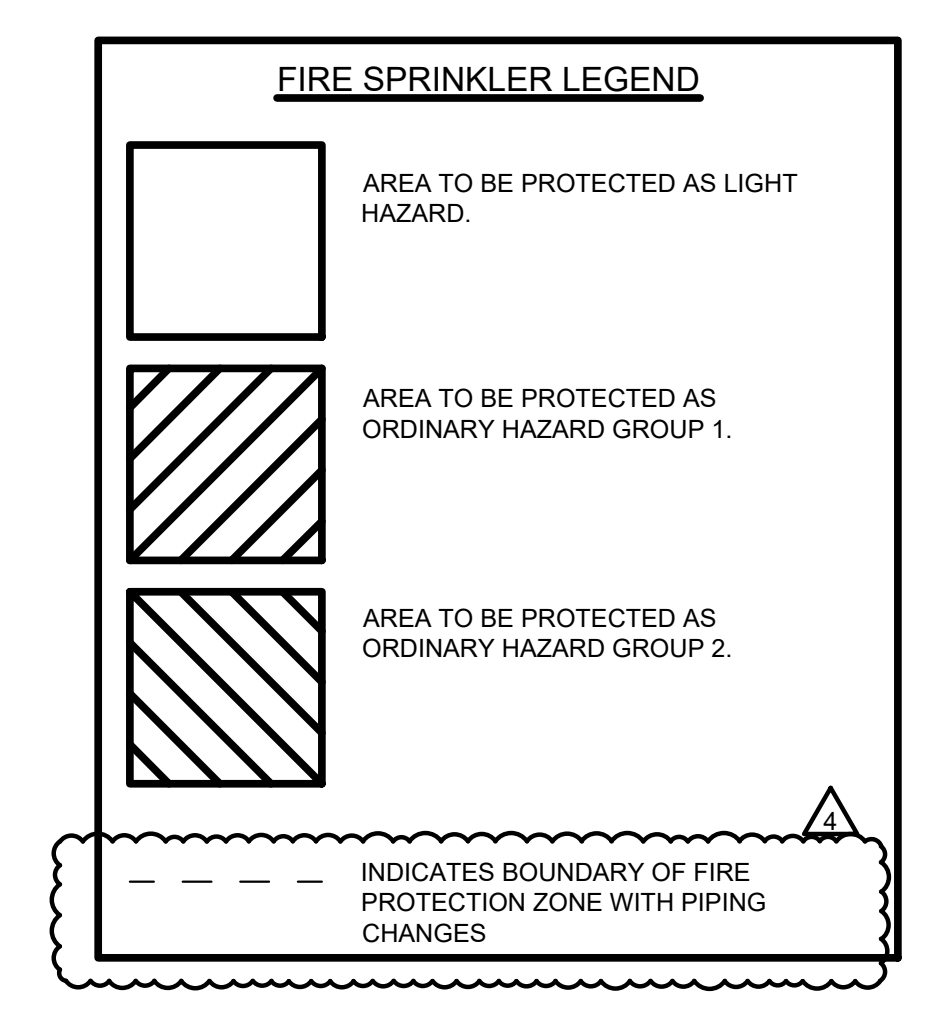
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REVISION: _____
DATE: _____
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DATE: _____

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CAD DWG FILE: FP3.4-075107.001
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DESIGNED BY: JW

SHEET TITLE:
**FOURTH
FLOOR PLAN
-FIRE PROTECTION**

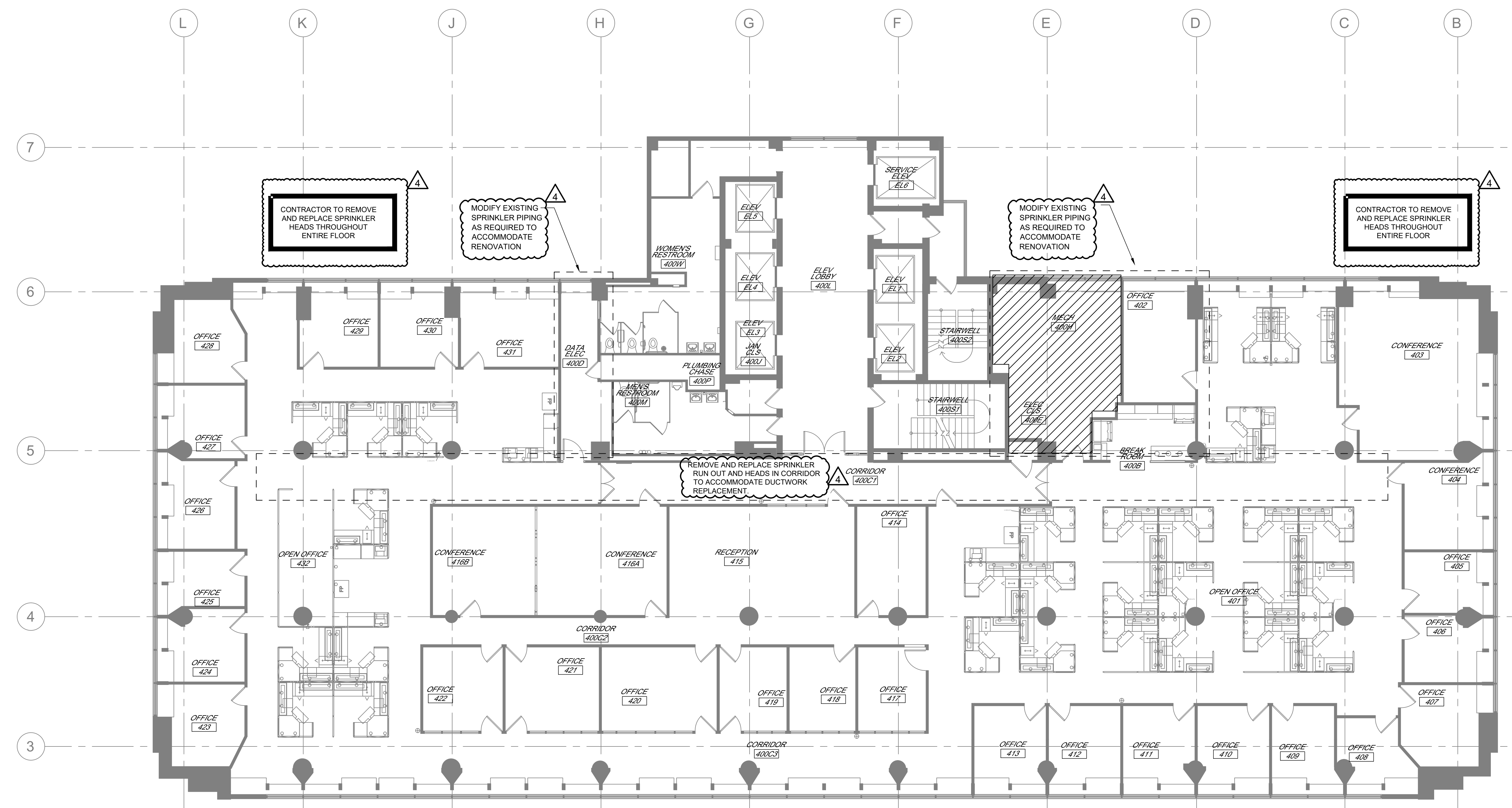
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FP3.4
150 OF 244 SHEETS

DATE : August 31, 2023

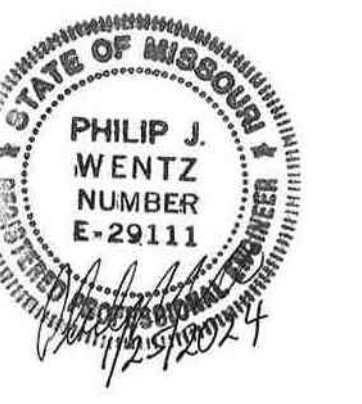


GENERAL NOTES

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FOURTH FLOOR PLAN - FIRE PROTECTION
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STATE OFFICE BUILDING

JEFFERSON STATE
OFFICE BUILDING
205 JEFFERSON STREET
JEFFERSON CITY, MO 65101

PROJECT # 01911-01
SITE # 1001
ASSET # 3101001057

REVISION: 1-ADDENDUM 4
DATE: 01-23-2024
REVISION: _____
DATE: _____
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REVISION: _____
DATE: _____

ISSUE DATE:

CAD DWG FILE: FP3.5-075107.001
DRAWN BY: AM
CHECKED BY: EP
DESIGNED BY: JW

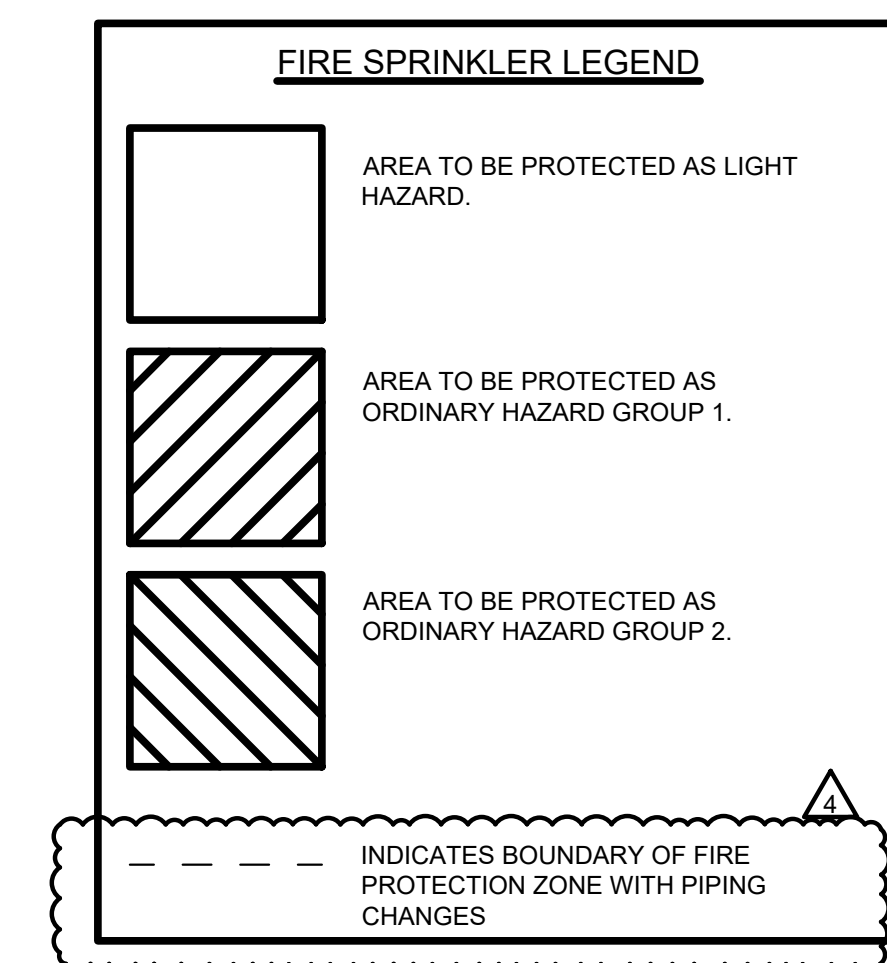
SHEET TITLE:
**FIFTH
FLOOR PLAN
-FIRE PROTECTION**

SHEET NUMBER:

FP3.5

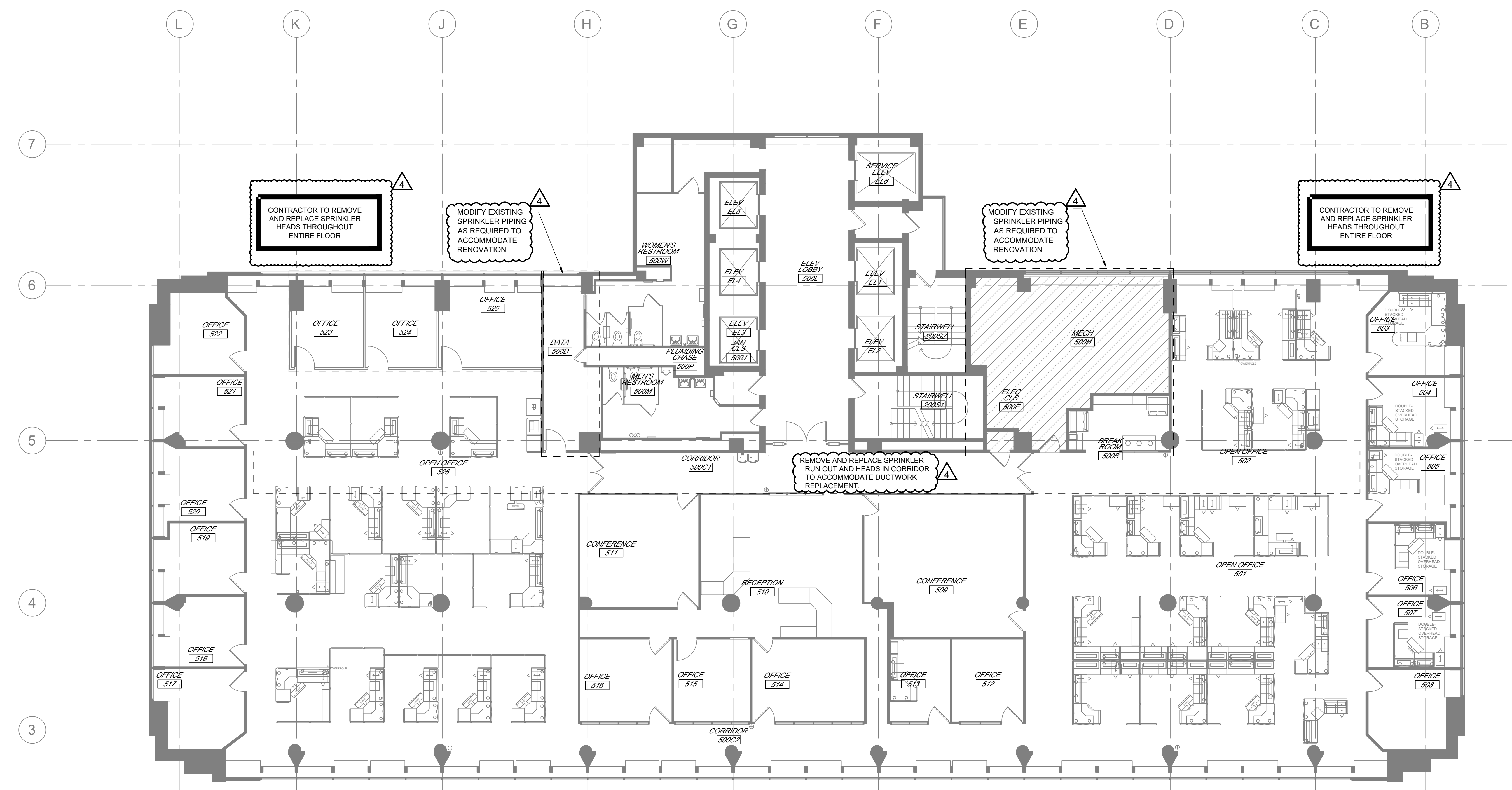
151 OF 244 SHEETS

DATE : August 31, 2023

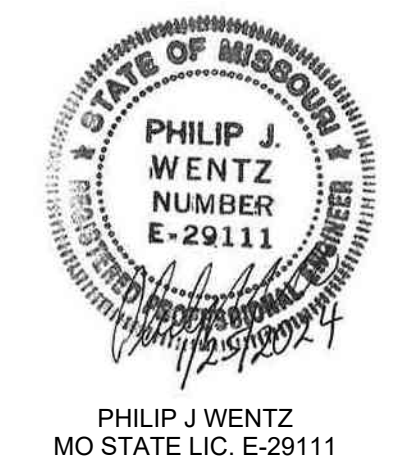


GENERAL NOTES

- FIRE PROTECTION SYSTEM TO COMPLY WITH NFPA STANDARDS AND ALL NATIONAL AND LOCAL CODES/ORDINANCES/AMENDMENTS. BUILDING SHALL BE FULLY SPRINKLERED.
- PROVIDE NFPA LIGHT HAZARD COVERAGE WITH A DESIGN DENSITY OF 0.10 GPM/SQ.FT. OVER 1500 SQ.FT. UNLESS NOTED OTHERWISE. REFER TO SPECIFICATION ARTICLE 21018 FOR ALL DESIGN IDENTIFIED BY SPACE TYPE.
- CONTRACTOR SHALL PROVIDE HYDRAULIC CALCULATIONS PROVING SYSTEM COMPLIANCE BASED UPON NFPA 13.
- FINAL INSPECTION AND APPROVAL BY LOCAL FIRE MARSHAL AND ARCHITECT/ENGINEER.
- SPRINKLER SHOP DRAWINGS, HYDRAULIC CALCULATIONS AND MATERIAL SUBMITTALS SHALL BE SUBMITTED TO THE OWNER, ARCHITECT/ENGINEER AND LOCAL FIRE MARSHAL, AND SHALL BE APPROVED PRIOR TO ANY INSTALLATION.
- CONTRACTOR SHALL PROVIDE OWNER AND ENGINEER/ARCHITECT WITH AS-BUILT DRAWINGS AFTER PROJECT COMPLETION.
- CONTRACTOR SHALL ENSURE NEW PIPING IS ROUTED AND SIZED PROPERLY. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS REQUIRED FOR PROPER INSTALLATION AND COORDINATION WITH OTHER TRADES, ARCHITECTURAL FEATURES AND/OR STRUCTURE.
- SPRINKLER HEADS ARE TO BE COORDINATED WITH ALL DIFFUSERS, SPEAKERS, LIGHTING FIXTURES AND CEILING SYSTEMS. SPACING OF SPRINKLER HEADS SHALL BE IN ACCORDANCE WITH NFPA 13 AND THE LISTING OF THE SPRINKLER.
- PROVIDE SPRINKLERS UNDER ALL EXPOSED DUCTWORK OVER 48" WIDE AND SPACE HEADS AROUND ALL OBSTRUCTIONS IN ACCORDANCE WITH NFPA 13 GUIDELINES.
- ALL SPRINKLER HEADS SHALL BE CENTERED IN ACoustICAL CEILING TILES @ QUARTER POINTS IN 2'x4' TILES & MID POINTS OF 2'x2'.
- FIRE STOP ALL PENETRATIONS OF SMOKE/FIRE WALLS, CEILINGS, AND FLOORS. FIRE STOP ASSEMBLIES SHALL MEET ASTM E-814.
- ALL DRAIN PIPING SHALL BE GALVANIZED PIPE AND FITTINGS, BOTH INSIDE AND OUTSIDE OF THE PIPE AND FITTINGS.
- PROVIDE A PERMANENTLY ATTACHED NAME TAG ATTACHED TO THE RISER AND/OR SPRINKLER ZONE CONNECTION STATING THE REQUIRED DESIGN CRITERIA FOR EACH HYDRAULICALLY DESIGNED SYSTEM.
- PROVIDE SPRINKLER GUARDS ON ALL HEADS IN ALL AREAS IN ACCORDANCE WITH THE SPECIFICATION. AREAS INCLUDE BUT NOT LIMITED TO: MECHANICAL EQUIPMENT ROOMS, JANITORS CLOSETS AND OTHER STORAGE ROOMS, DATA ROOMS, ELECTRICAL ROOMS AND CORRIDORS WITHOUT CEILINGS WHERE SPRINKLERS ARE INSTALLED LESS THAN 6" OF A.F.F.
- COORDINATE PIPING WITH ALL ELECTRICAL EQUIPMENT (PANELS, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. CONTRACTOR SHALL NOT ROUTE ANY PIPING OVER ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES.
- TAMPER SWITCHES AND FLOW SWITCHES SHALL BE INSTALLED AT ALL CONTROL VALVES. ALL CONTROL VALVES SHALL ALSO BE LOCKED. CONTRACTOR SHALL TURN OVER KEYS TO OWNER'S REPRESENTATIVE AT END OF PROJECT.
- INSTALL DRAIN VALVES AND PLUGS FOR ALL TRAPPED SECTIONS OF PIPE PER NFPA 13.
- ALL SPRINKLER ZONE VALVE LOCATIONS SHALL BE IDENTIFIED PER NFPA 13.



FIFTH FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"
N



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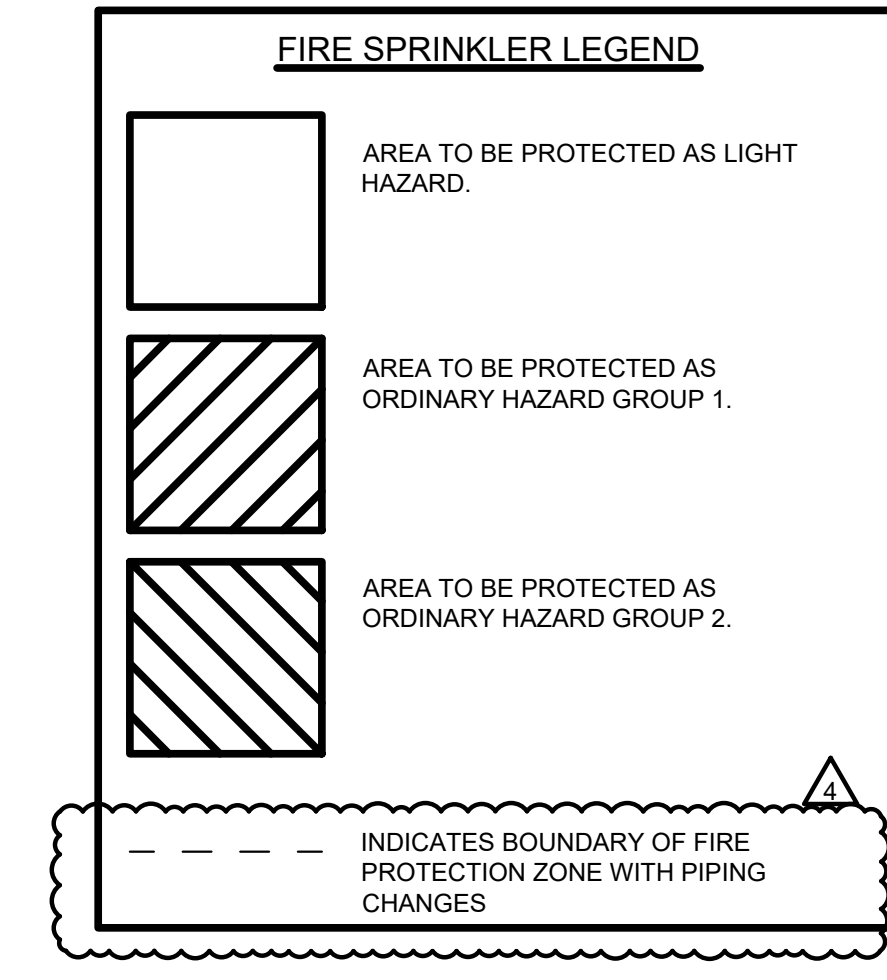
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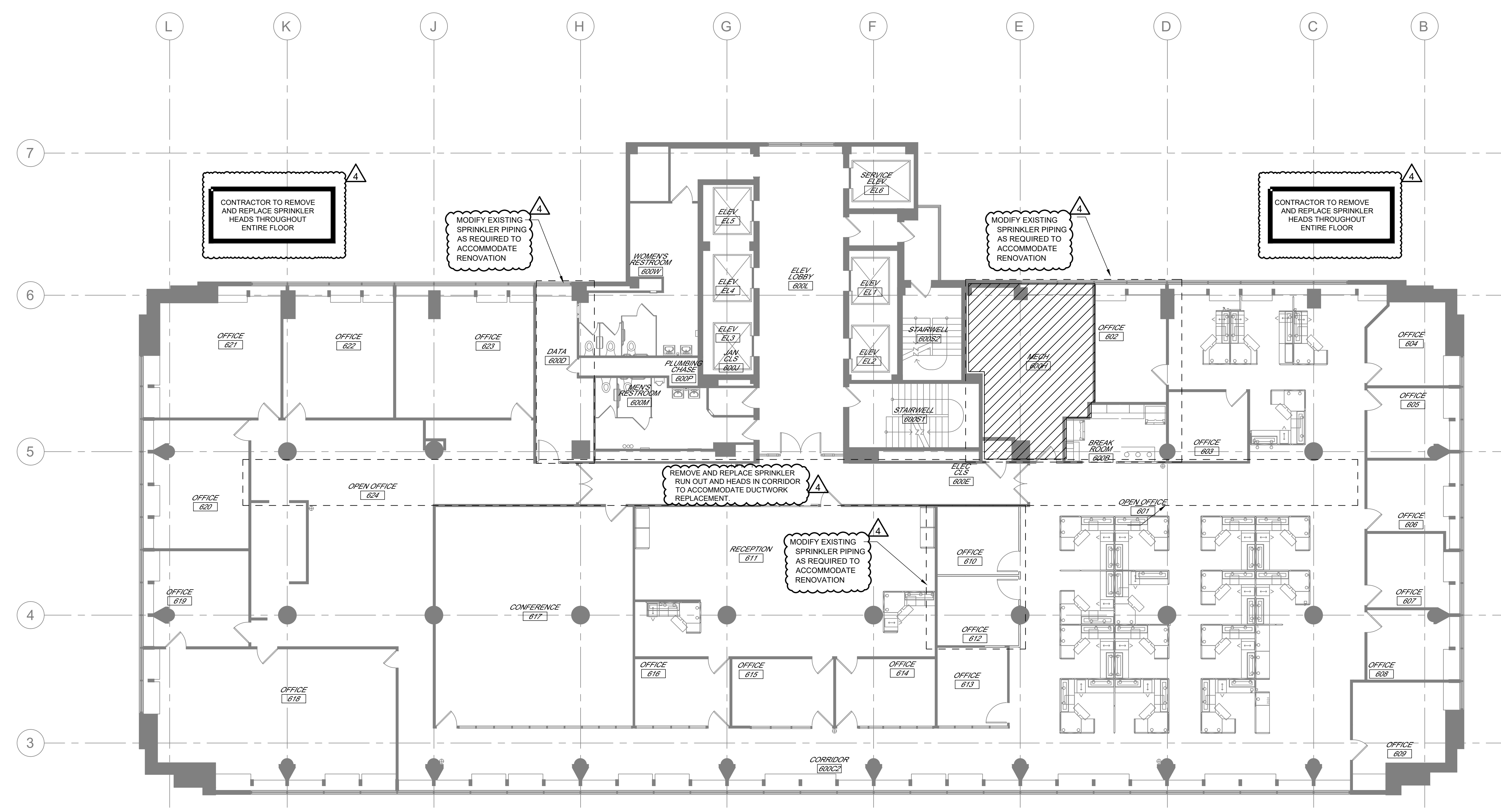
SHEET TITLE:
**SIXTH FLOOR PLAN
-FIRE PROTECTION**

SHEET NUMBER:
FP3.6

152 OF 244 SHEETS
DATE : August 31, 2023



- GENERAL NOTES**
- FIRE PROTECTION SYSTEM TO COMPLY WITH NFPA STANDARDS AND ALL NATIONAL AND LOCAL CODES/ORDINANCES/AMENDMENTS. BUILDING SHALL BE FULLY SPRINKLERED.
 - PROVIDE NFPA LIGHT HAZARD COVERAGE WITH A DESIGN DENSITY OF 0.10 GPM/SQ.FT. OVER 100 SQ.F.T. UNLESS NOTED OTHERWISE. REFER TO SPECIFICATION ARTICLE 21019 FOR ALL DESIGN DENSITIES BY SPACE TYPE.
 - CONTRACTOR SHALL PROVIDE HYDRAULIC CALCULATIONS PROVING SYSTEM COMPLIANCE BASED UPON NFPA 13.
 - FINAL INSPECTION AND APPROVAL BY LOCAL FIRE MARSHAL AND ARCHITECT/ENGINEER.
 - SPRINKLER SHOP DRAWINGS, HYDRAULIC CALCULATIONS AND MATERIAL SUBMITTALS SHALL BE SUBMITTED TO THE OWNER, ARCHITECT/ENGINEER AND LOCAL FIRE MARSHAL AND SHALL BE APPROVED PRIOR TO ANY INSTALLATION.
 - CONTRACTOR SHALL PROVIDE OWNER AND ENGINEER/ARCHITECT WITH AS-BUILT DRAWINGS AFTER PROJECT COMPLETION.
 - CONTRACTOR SHALL ENSURE NEW PIPING IS ROUTED AND SIZED PROPERLY. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS REQUIRED FOR PROPER INSTALLATION AND COORDINATION WITH OTHER TRADES, ARCHITECTURAL, FEATURES AND/OR STRUCTURE.
 - SPRINKLER HEADS ARE TO BE COORDINATED WITH ALL DIFFUSERS, SPEAKERS, LIGHTING FIXTURES AND CEILING SYSTEMS. SPACING OF SPRINKLER HEADS SHALL BE IN ACCORDANCE WITH NFPA 13 AND THE LISTINGS OF THE SPRINKLER.
 - PROVIDE SPRINKLERS UNDER ALL EXPOSED DUCTWORK OVER 48" WIDE AND SPACE HEADS AROUND ALL OBSTRUCTIONS IN ACCORDANCE WITH NFPA 13 GUIDELINES.
 - ALL SPRINKLER HEADS SHALL BE CENTERED IN ACOUSTICAL CEILING TILES @ QUARTER POINTS IN 2'x4' TILES & MID POINTS OF 2'x2'.
 - FIRE STOP ALL PENETRATIONS OF SMOKE/FIRE WALLS, CEILINGS, AND FLOORS. FIRE STOP ASSEMBLIES SHALL MEET ASTM E-814.
 - ALL DRAIN PIPING SHALL BE GALVANIZED PIPE AND FITTINGS, BOTH INSIDE AND OUTSIDE OF THE PIPE AND FITTINGS.
 - PROVIDE A PERMANENTLY ATTACHED NAME TAG ATTACHED TO THE RISER AND/OR SPRINKLER ZONE CONNECTION STATING THE REQUIRED DESIGN CRITERIA FOR EACH HYDRAULICALLY DESIGNED SYSTEM.
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 - COORDINATE PIPING WITH ALL ELECTRICAL EQUIPMENT (PANELS, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. CONTRACTOR SHALL NOT ROUTE ANY PIPING OVER ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES.
 - TAMPER SWITCHES AND FLOW SWITCHES SHALL BE INSTALLED AT ALL CONTROL VALVES. ALL CONTROL VALVES SHALL ALSO BE LOCKED. CONTRACTOR SHALL TURN OVER KEYS TO OWNER'S REPRESENTATIVE AT END OF PROJECT.
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 - ALL SPRINKLER ZONE VALVE LOCATIONS SHALL BE IDENTIFIED PER NFPA.



SIXTH FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"



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PROJECT # O1911-01
SITE # 1001
ASSET # 3101001057

REVISION: 1-ADDENDUM 4
DATE: 01-23-2024
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ISSUE DATE:

CAD DWG FILE: FP3.6-075107.001
DRAWN BY: AM
CHECKED BY: EP
DESIGNED BY: JW

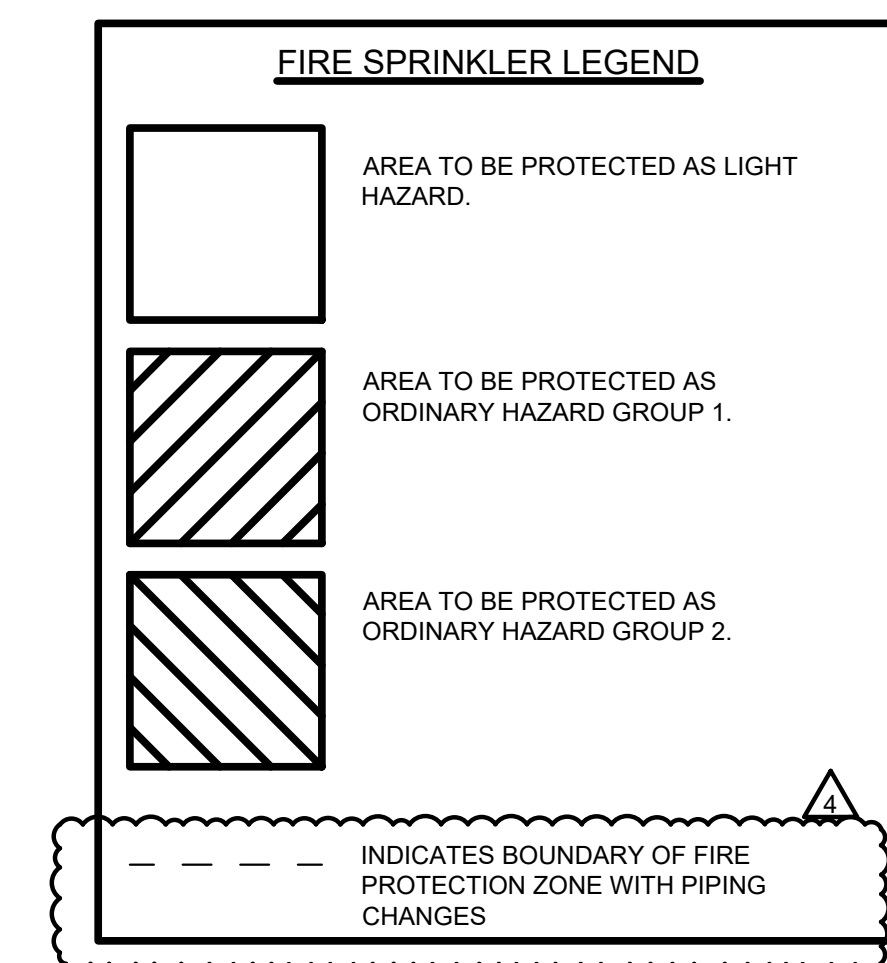
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**SEVENTH
FLOOR PLAN
-FIRE PROTECTION**

SHEET NUMBER:

FP3.7

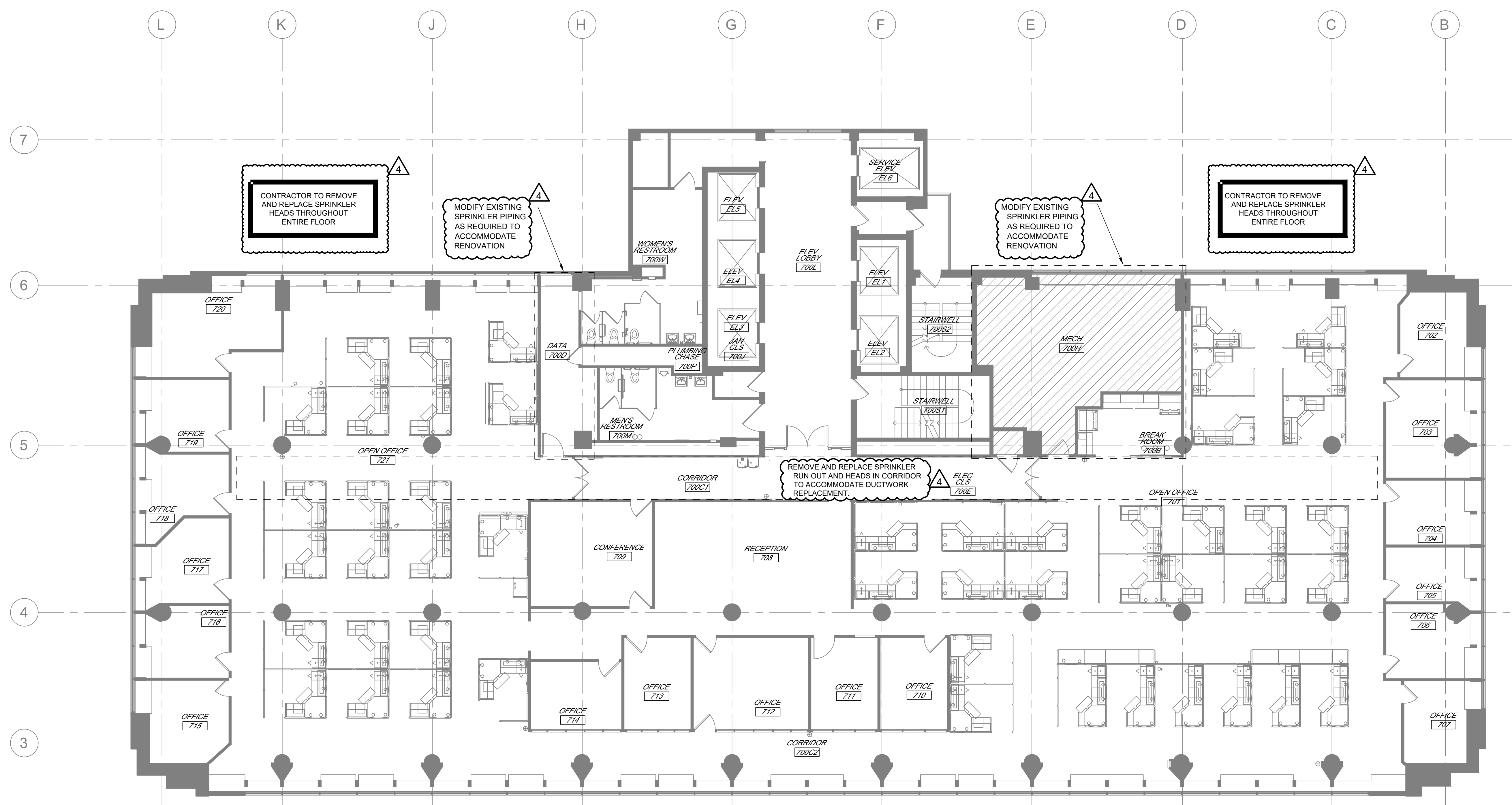
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DATE : August 31, 2023

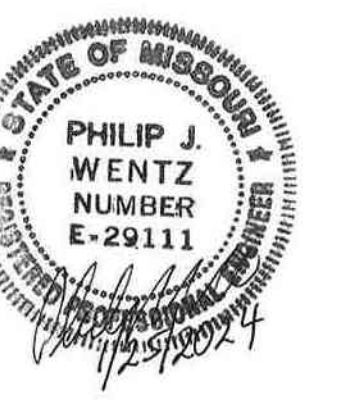


GENERAL NOTES

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- CONTRACTOR SHALL PROVIDE HYDRAULIC CALCULATIONS PROVING SYSTEM COMPLIANCE BASED UPON NFPA 13.
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- ALL SPRINKLER ZONE VALVE LOCATIONS SHALL BE IDENTIFIED PER NFPA.



SEVENTH FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"



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PROJECT # O1911-01
SITE # 1001
ASSET # 3101001057

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DATE: 01-23-2024
REVISION: _____
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CAD DWG FILE: FP3.8-075107.001
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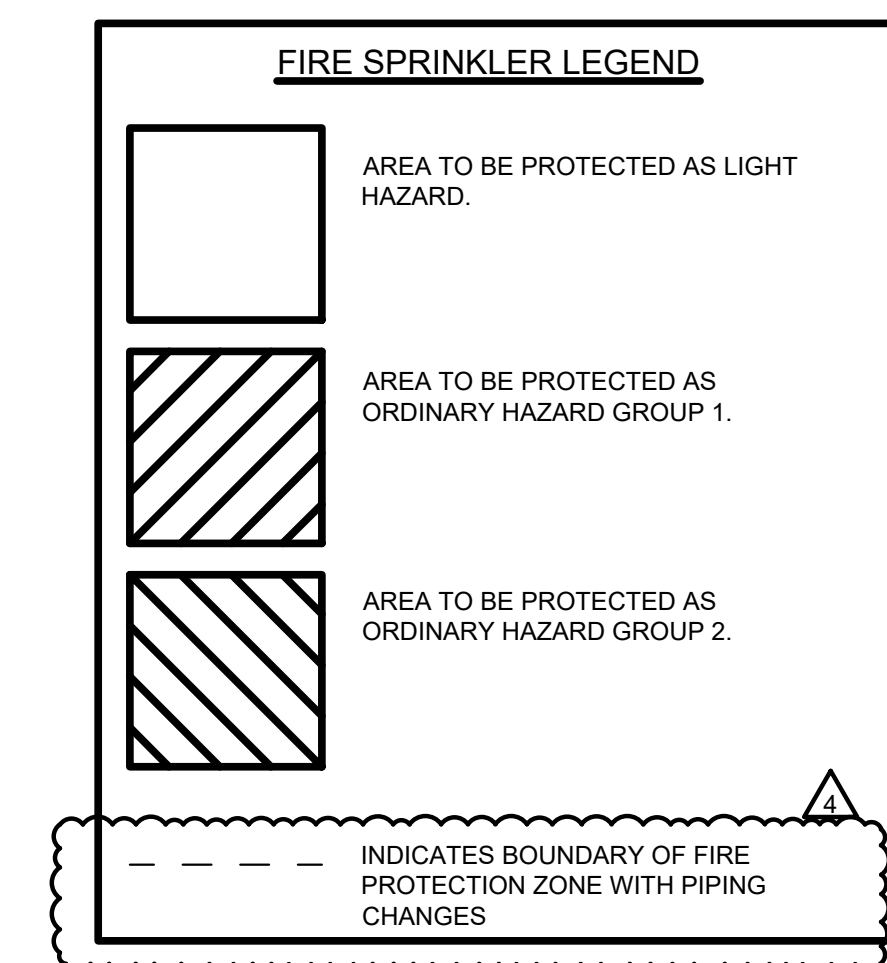
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**EIGHTH
FLOOR PLAN
-FIRE PROTECTION**

SHEET NUMBER:

FP3.8

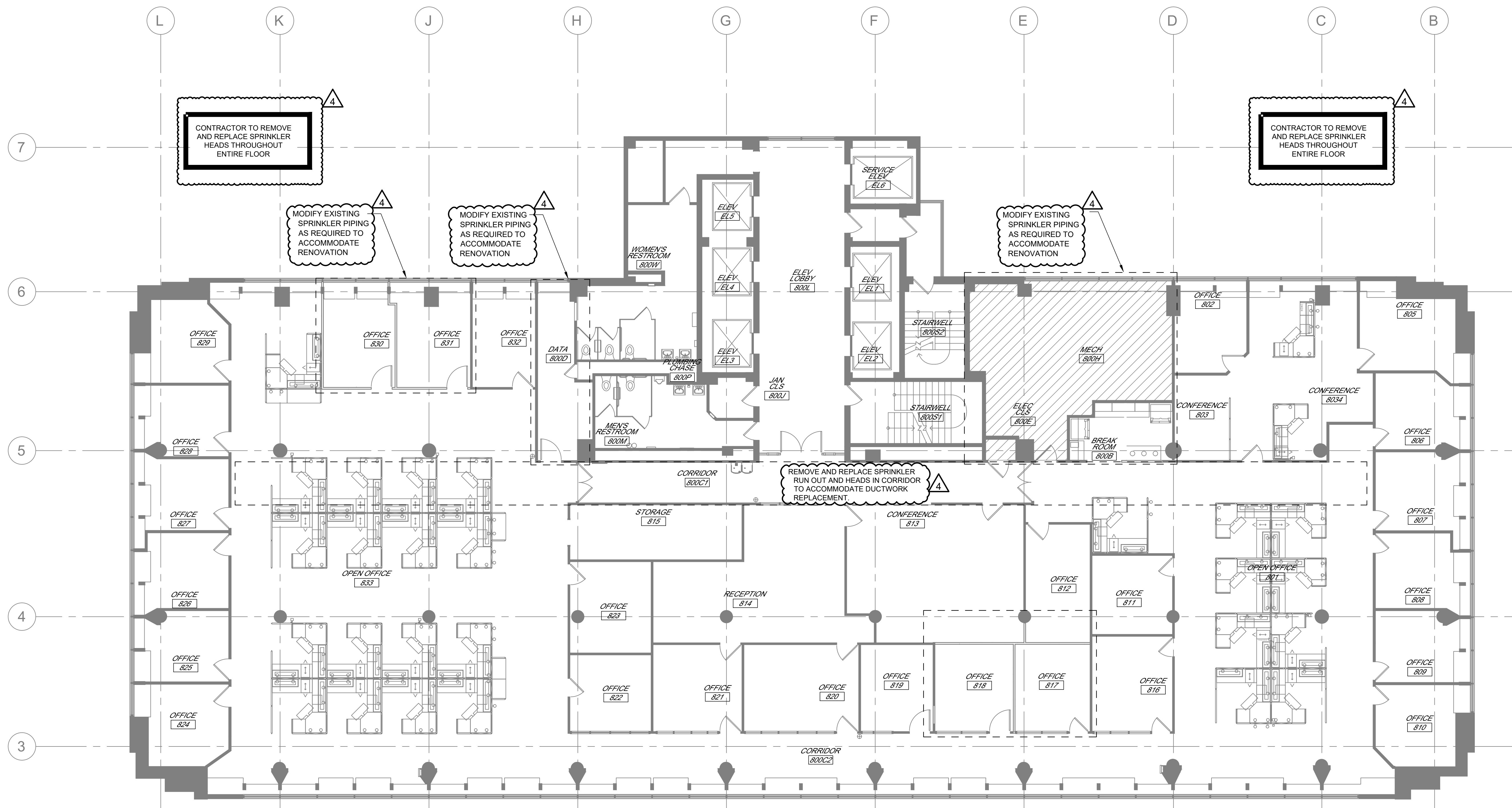
154 OF 244 SHEETS

DATE : August 31, 2023



GENERAL NOTES

1. FIRE PROTECTION SYSTEM TO COMPLY WITH NFPA STANDARDS AND ALL NATIONAL AND LOCAL CODES/ORDINANCES/AMENDMENTS. BUILDING SHALL BE FULLY SPRINKLERED.
2. PROVIDE NFPA LIGHT HAZARD COVERAGE WITH A DESIGN DENSITY OF 0.10 GPM/SQ.F.T. OVER 1500 SQ.F.T. UNLESS NOTED OTHERWISE. REFER TO SPECIFICATION ARTICLE 210106 FOR ALL DESIGN DENSITIES BY SPACE TYPE.
3. CONTRACTOR SHALL PROVIDE HYDRAULIC CALCULATIONS PROVING SYSTEM COMPLIANCE BASED UPON NFPA 13.
4. FINAL INSPECTION AND APPROVAL BY LOCAL FIRE MARSHAL AND ARCHITECT/ENGINEER.
5. SPRINKLER SHOP DRAWINGS, HYDRAULIC CALCULATIONS AND MATERIAL SUBMITTALS SHALL BE SUBMITTED TO THE DESIGN ARCHITECT/ENGINEER AND LOCAL FIRE MARSHAL AND SHALL BE APPROVED PRIOR TO ANY INSTALLATION.
6. CONTRACTOR SHALL PROVIDE OWNER AND ENGINEER/ARCHITECT WITH AS-BUILT DRAWINGS AFTER PROJECT COMPLETION.
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9. PROVIDE SPRINKLERS UNDER ALL EXPOSED DUCTWORK OVER 48" WIDE AND SPACE HEADS AROUND ALL OBSTRUCTIONS IN ACCORDANCE WITH NFPA 13 GUIDELINES.
10. ALL SPRINKLER HEADS SHALL BE CENTERED IN ACoustICAL CEILING TILES (@ QUARTER POINTS IN 2'x4' TILES & MD POINTS OF 2'x2').
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EIGHTH FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"

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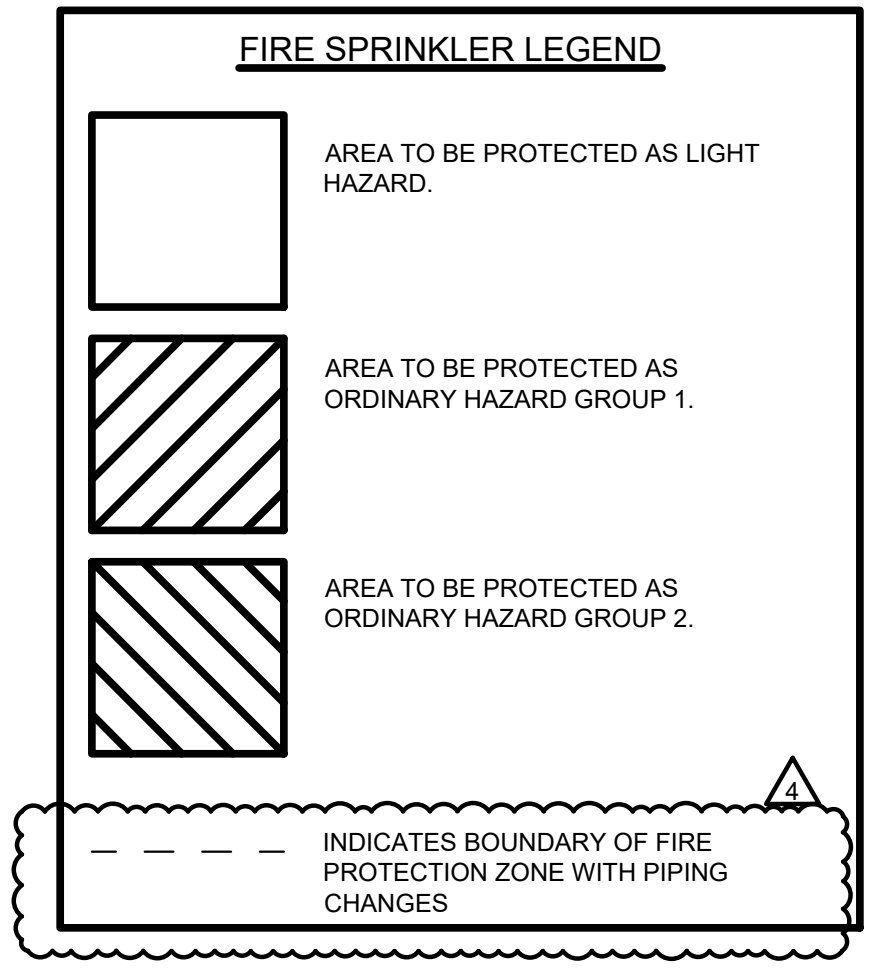
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DRAWN BY: AM
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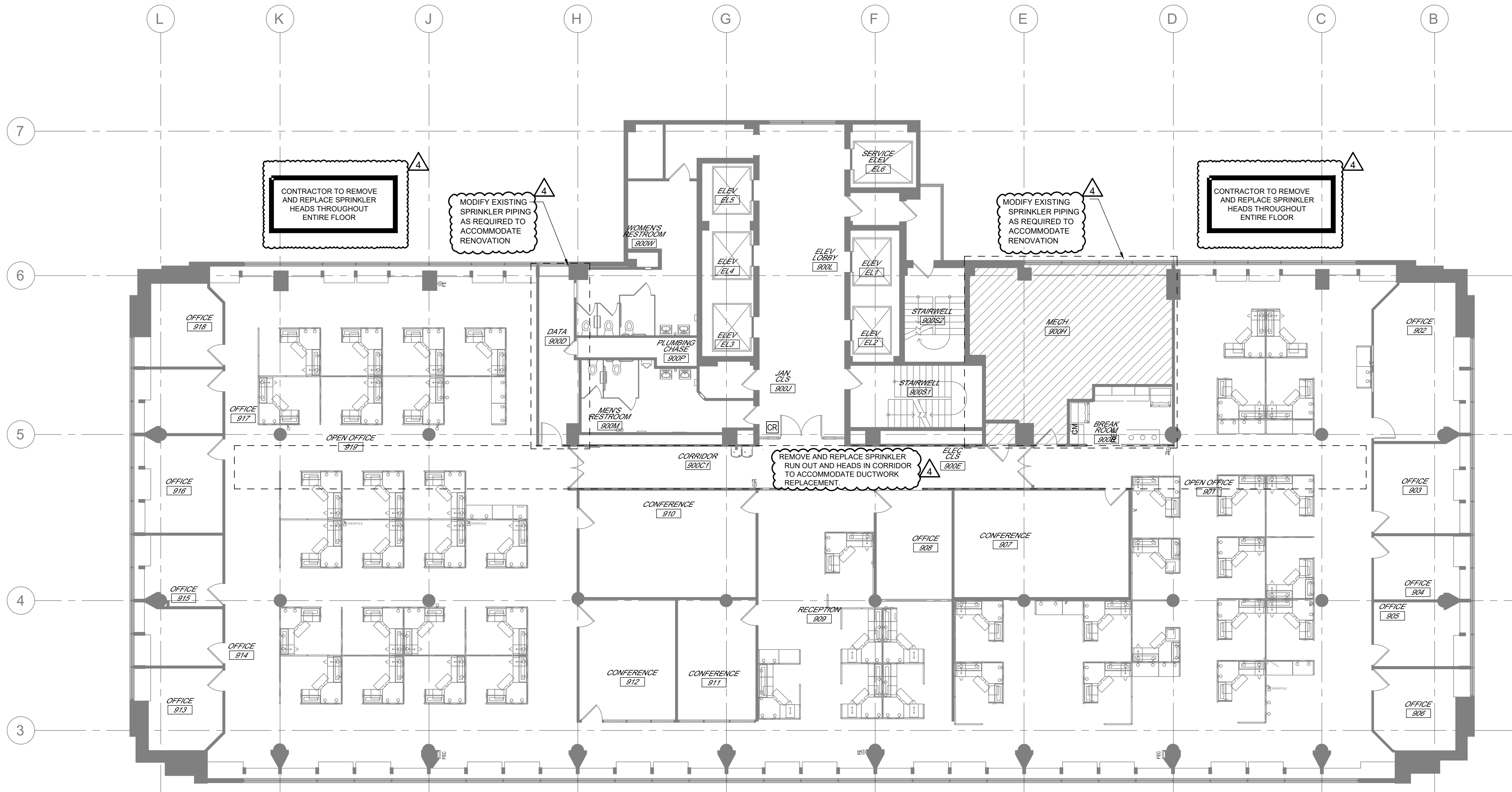
SHEET NUMBER:
FP3.9
155 OF 244 SHEETS

DATE : August 31, 2023



GENERAL NOTES

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- ALL DRAIN PIPING SHALL BE GALVANIZED PIPE AND FITTINGS, BOTH INSIDE AND OUTSIDE OF THE PIPE AND FITTINGS.
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- ALL SPRINKLER ZONE VALVE LOCATIONS SHALL BE IDENTIFIED PER NFPA 13.



NINTH FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"

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205 JEFFERSON STREET
JEFFERSON CITY, MO 65101

PROJECT # O1911-01
SITE # 1001
ASSET # 3101001057

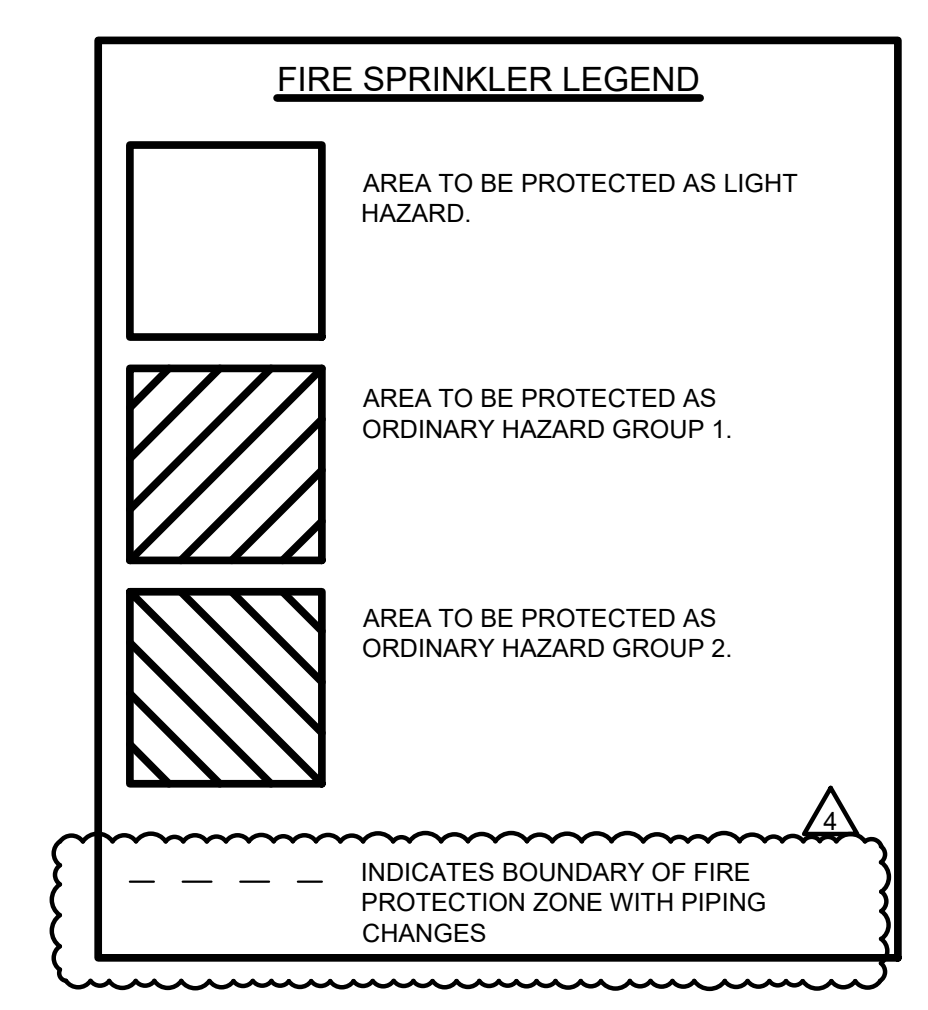
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ISSUE DATE:
CAD DWG FILE: FP3.10-075107.001
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CHECKED BY: EP
DESIGNED BY: JW

SHEET TITLE:
**TENTH
FLOOR PLAN
-FIRE PROTECTION**

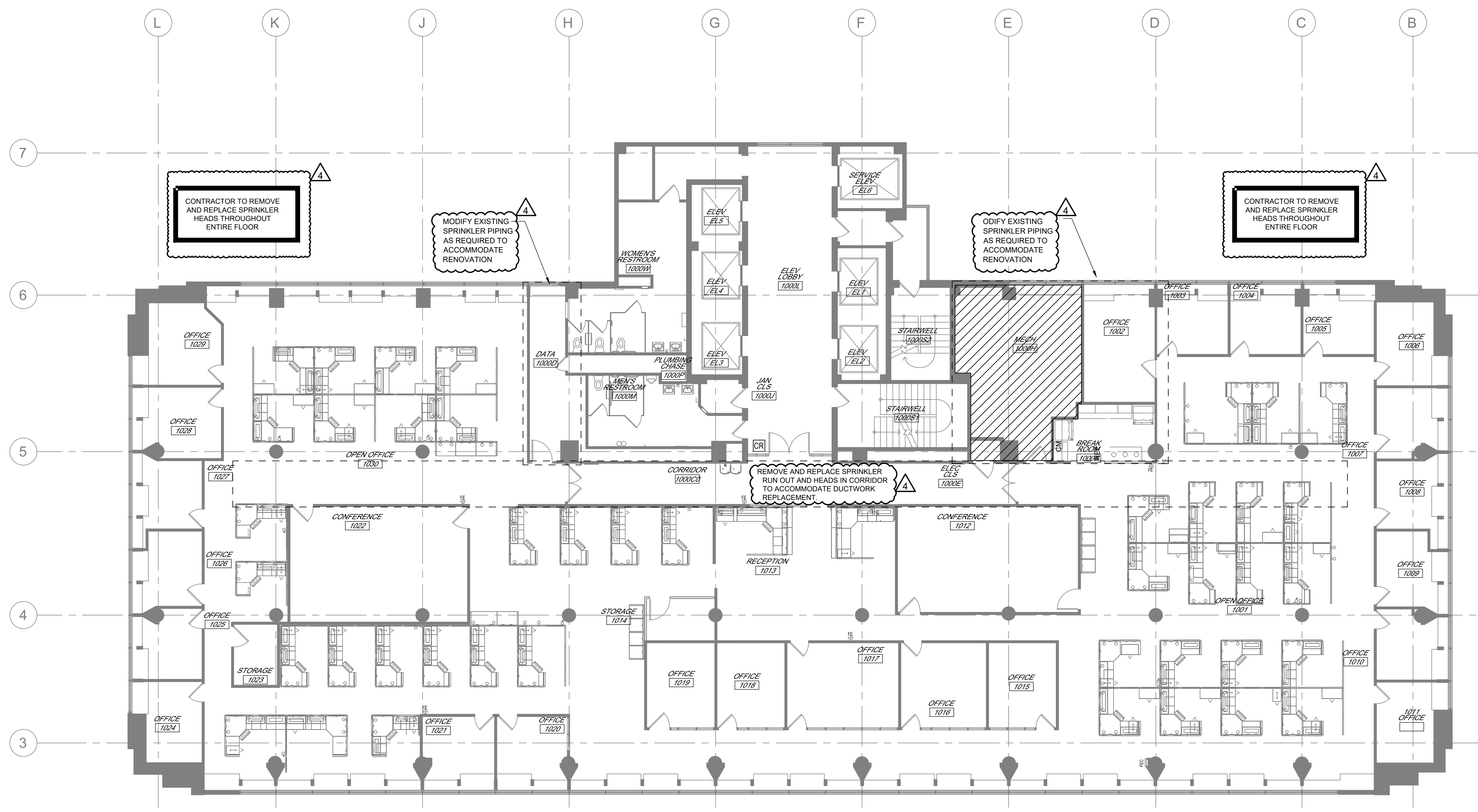
SHEET NUMBER:
FP3.10
156 OF 244 SHEETS

DATE : August 31, 2023

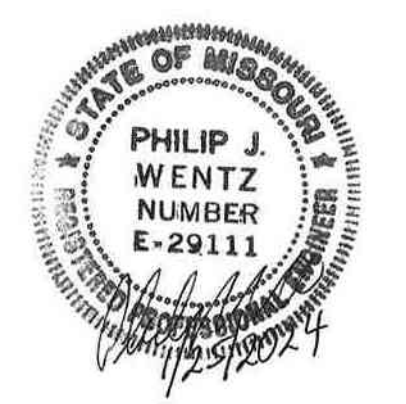


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TENTH FLOOR PLAN - FIRE PROTECTION
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PROJECT # 01911-01
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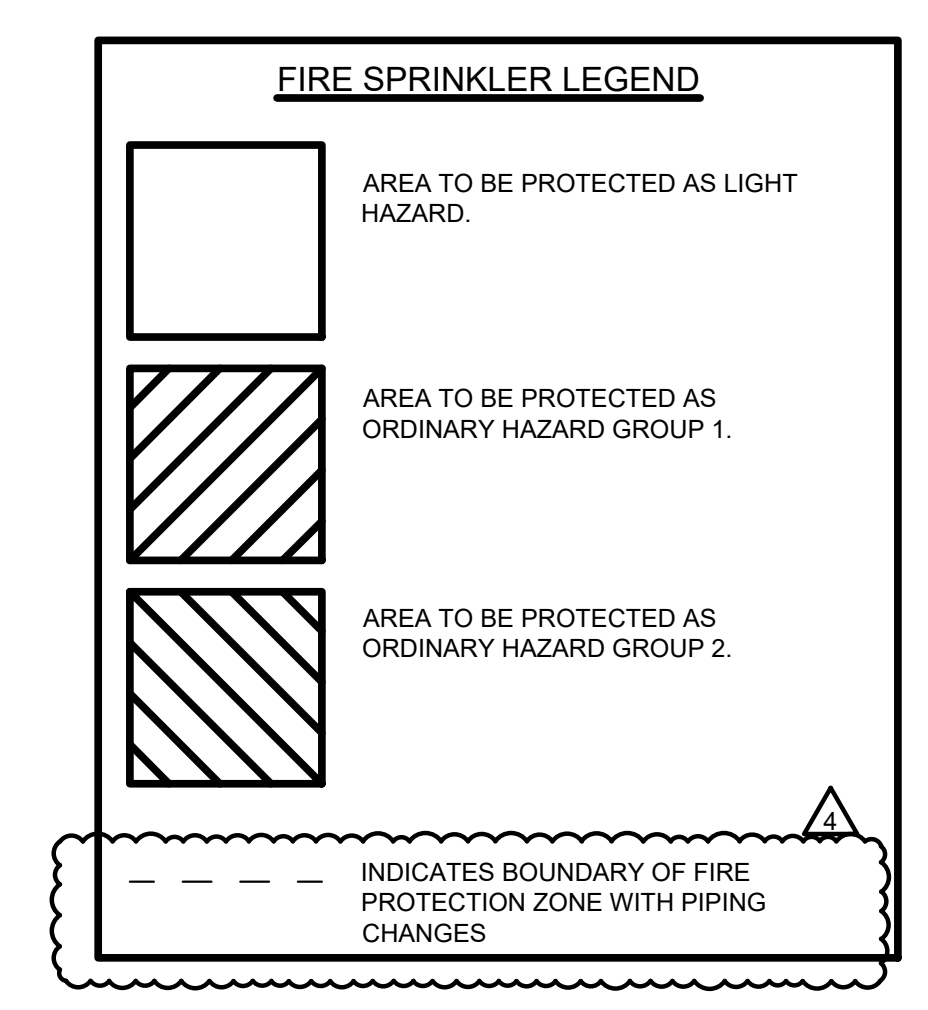
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CHECKED BY: EP
DESIGNED BY: JW

**SHEET TITLE:
ELEVENTH
FLOOR PLAN
-FIRE PROTECTION**

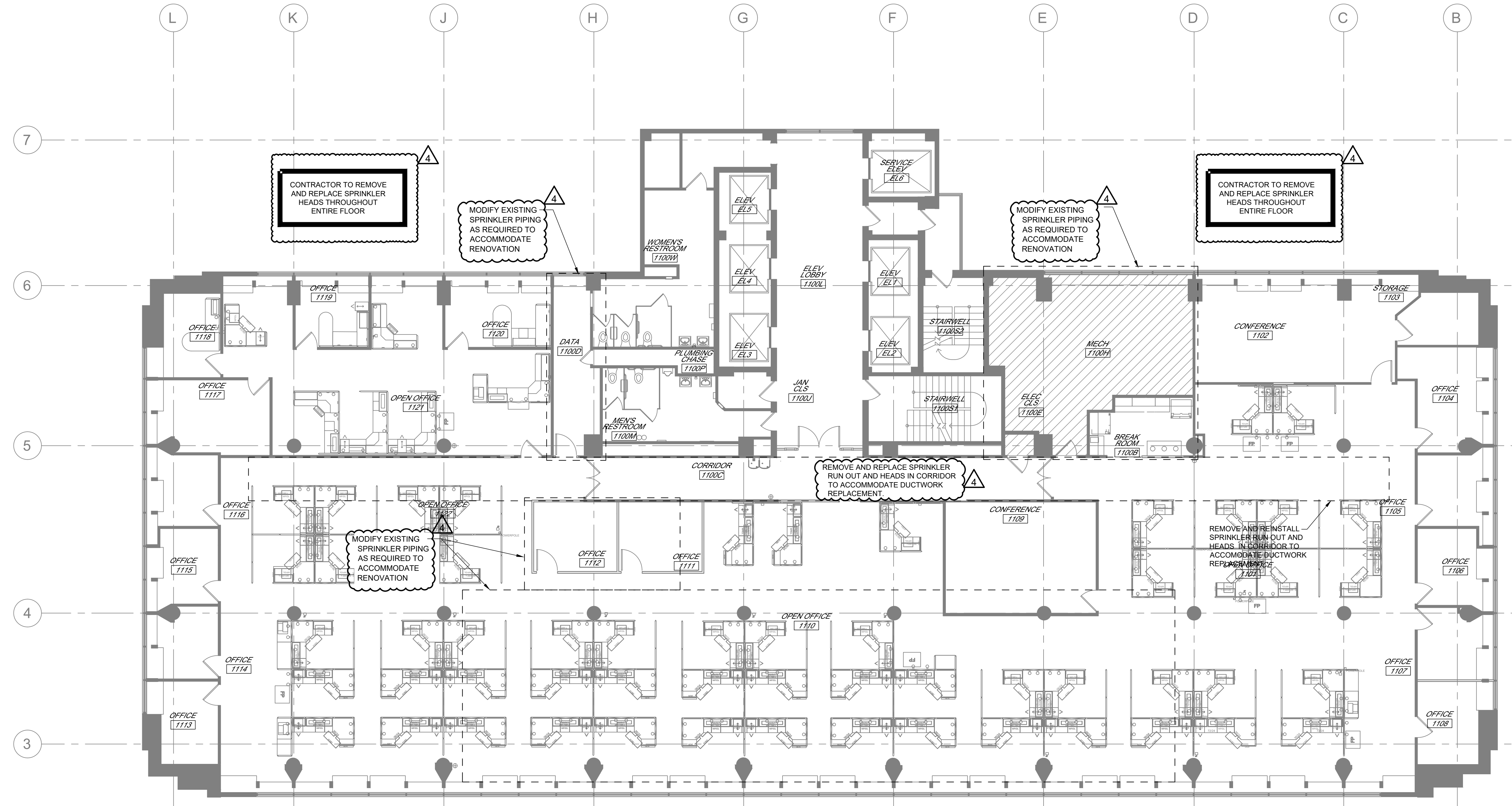
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FP3.11

157 OF 244 SHEETS
DATE : August 31, 2023



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ELEVENTH FLOOR PLAN - FIRE PROTECTION
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205 JEFFERSON STREET
JEFFERSON CITY, MO 65101

PROJECT # 01911-01
SITE # 1001
ASSET # 3101001057

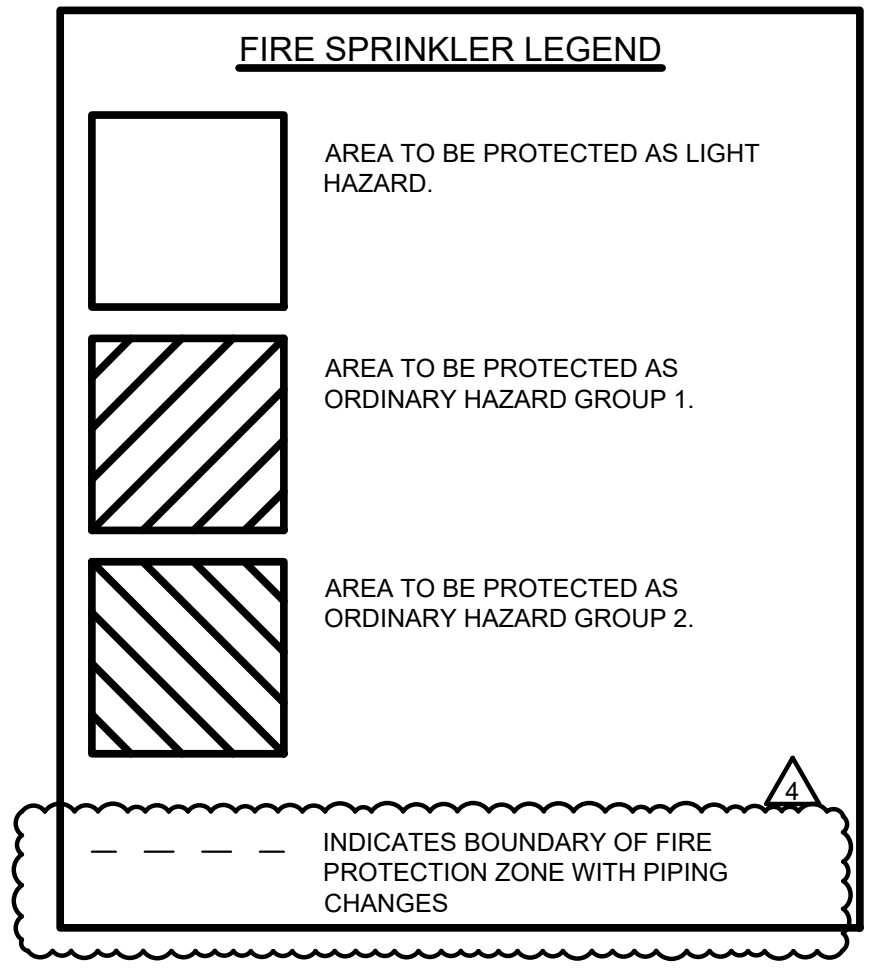
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DESIGNED BY: JW

SHEET TITLE:
**TWELFTH
FLOOR PLAN
-FIRE PROTECTION**

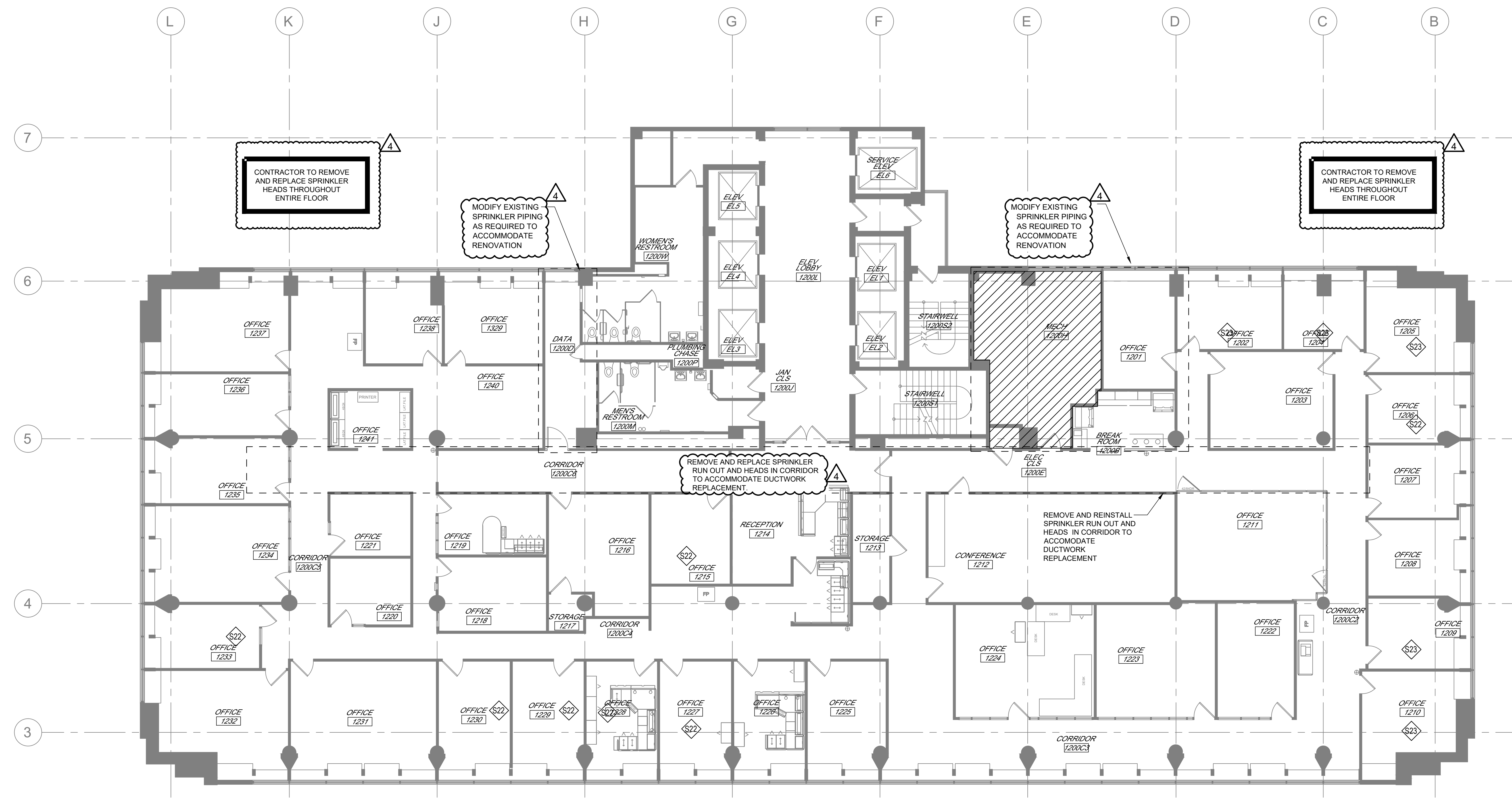
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FP3.12
158 OF 244 SHEETS

DATE : August 31, 2023



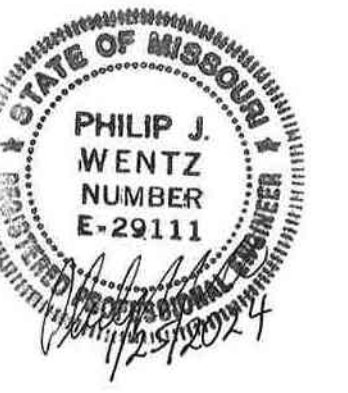
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TWELFTH FLOOR PLAN - FIRE PROTECTION
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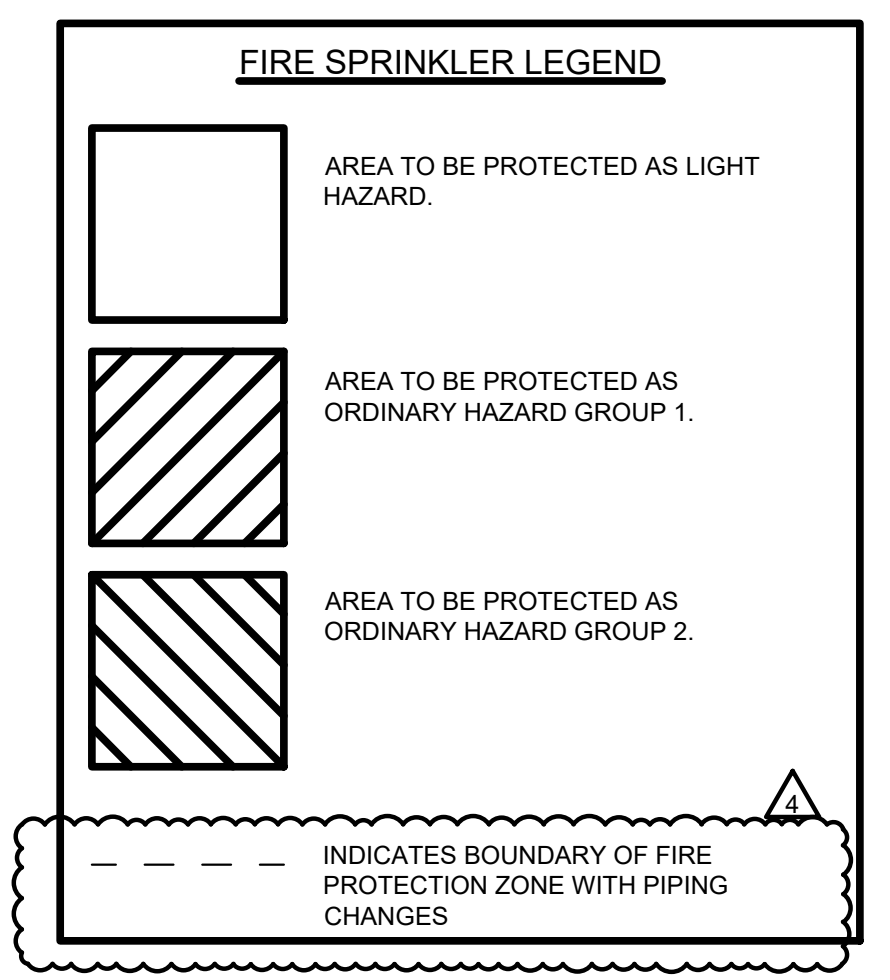
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FLOOR PLAN
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SHEET NUMBER:

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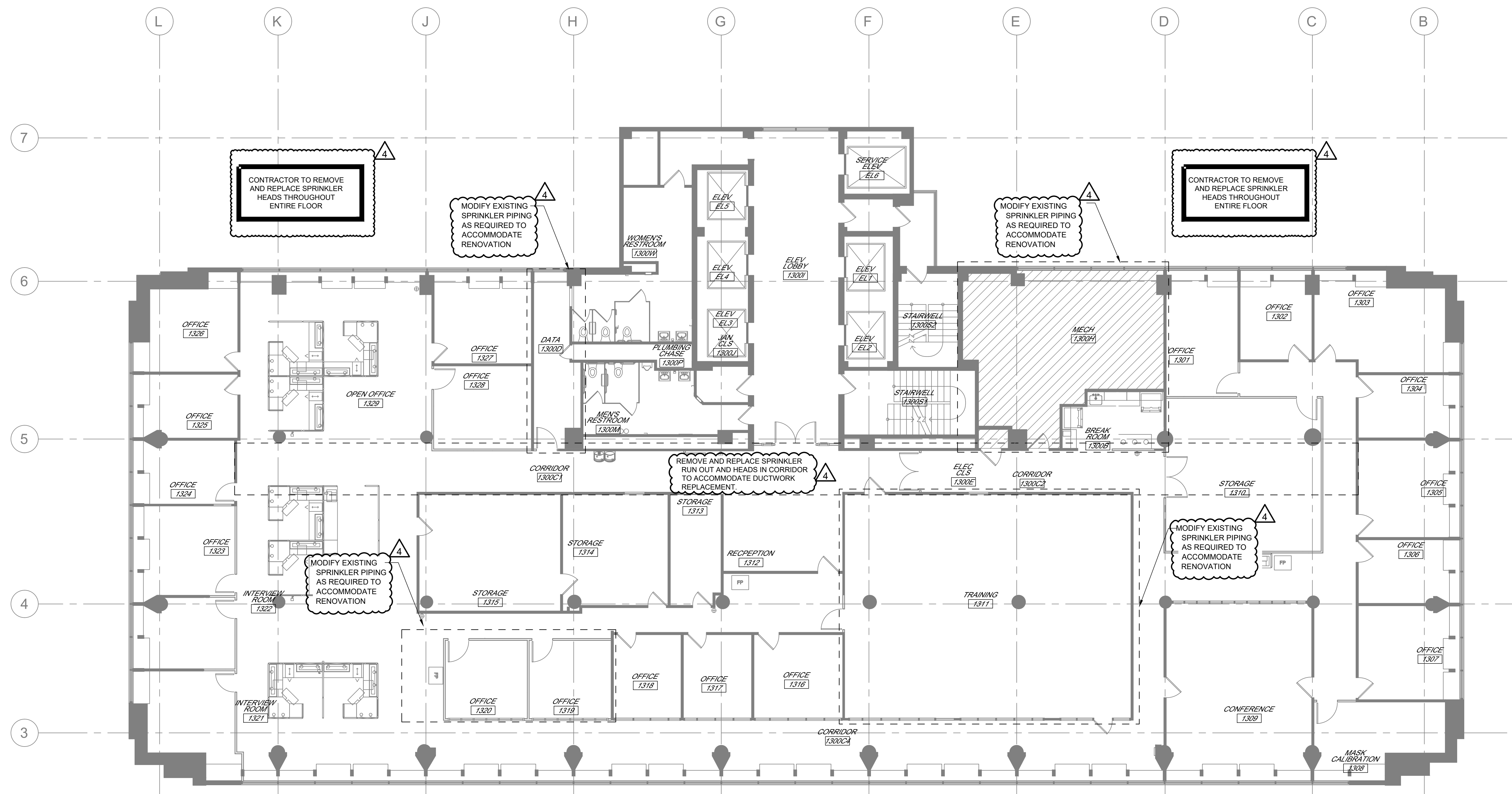
159 OF 244 SHEETS

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THIRTEENTH FLOOR PLAN - FIRE PROTECTION
1/8" = 1'-0"

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