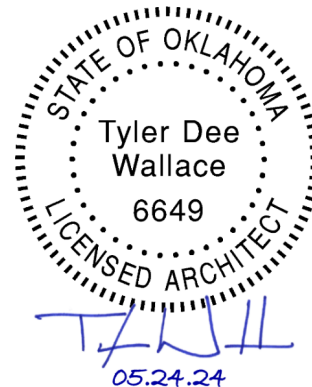


Addendum 1

To: Bidding Documents
Plan-Holders of Record
Project File

Date: 05/24/2024
Addendum Number: One
Architect's Project #: 20230239
Project Name: Owasso PS
Enrollment and IT
Center

From: GH2 ARCHITECTS, LLC
320 South Boston, Suite 100
Tulsa, Oklahoma 74103
Tel 918.587.6158
Fax 918.587.0357



NOTICE.....

This Addendum supplements and amends the original Bidding Documents, shall be taken into account in preparing proposals, and shall become a part of the Construction Documents. The bidder shall indicate receipt of this addendum and all previously issued addenda on the Bid/Proposal Form.

PRIOR ADDENDA

None

Changes / Clarifications To Specifications:

1. Specification Section 081113 – Hollow Metal Doors and Frames
 - a. Section 081113 added to specifications.
2. Specification Section 087100 – Door Hardware
 - a. Section 087100 added to specifications.

Changes / Clarifications To Drawings:

1. Sheet CS, Cover Sheet
 - a. Sheet Index has been updated to reflect additional sheets

2. Sheet AS101, Site Plan
 - a. Sheet has been added to the set.
3. Sheet AD101, Demolition Plan – First Floor
 - a. Demolition Plan has been updated.
 - b. Demolition keynote added.
4. Sheet A101, Floor Plan
 - a. Storefront D has been added to the set.
 - b. Interior Finish Schedule has been updated.
 - c. Finish Legend has been updated.
5. Sheet A121, Reflected Ceiling Plan – First Floor
 - a. Detail B/A121 has been updated.
 - b. Reflected Ceiling Plan Legend has been updated.
 - c. RCP A/A121 ACT grids have been updated.
 - d. RCP A/A121 has been updated to show mechanical systems.
6. Sheet A401, Details
 - a. Detail A/A401 has been updated.
 - b. Detail B/A401 has been updated.
 - c. Detail E/A401 has been updated to include an ice machine.
 - d. Detail F/A401 has been added.
 - e. Detail G/A401 has a title update.
 - f. Detail H/A401 has a title update.
 - g. Detail J/A401 has been added.
 - h. Details K, L, M, N, and P/A401 have a title change.
 - i. Detail Q/A401 has been updated.
 - j. Exterior Aluminum Storefront System D has been added.
 - k. Frame Types have been updated.
 - l. Door schedule has been updated.
 - m. Glazing Types schedule has been updated to include GL-2.
 - n. Toilet Accessories Schedule has been updated.
 - o. Specialty Equipment Notes have been updated.
 - p. Toilet Accessories General Notes has been updated.
7. Sheet M100, Mechanical Plans
 - a. Mechanical plan has been revised.
8. Sheet M200, Mechanical Schedules & Details
 - a. Schedule and Details have been updated.

9. Sheet P100, Plumbing Waste & Vent Plan
 - a. Plans have been updated.
10. Sheet P101, Plumbing Supply Plans
 - a. Plans have been updated.
11. Sheet P200, Plumbing Schedules
 - a. Schedules have been updated.
12. Sheet E200, Power Plan
 - a. Plan has been updated.

LIST OF ATTACHMENTS

1. SPECIFICATION SECTION 081113 – HOLLOW METAL DOORS AND FRAMES
2. SPECIFICATION SECTION 087100 – DOOR HARDWARE
3. CS – COVER SHEET
4. AS101 – SITE PLAN
5. AD101 – DEMOLITION PLAN – FIRST FLOOR
6. A101 – FLOOR PLAN
7. A121 – REFLECTED CEILING PLAN – FIRST FLOOR
8. A401 – DETAILS
9. M100 – MECHANICAL PLANS
10. M200 – MECHANICAL SCHEDULES & DETAILS
11. P100 – PLUMBING WASTE & VENT PLAN
12. P101 – PLUMBING SUPPLY PLANS
13. P200 – PLUMBING SCHEDULES
14. E200 – POWER PLAN

END OF ADDENDUM

SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

1. Standard and custom hollow metal doors and frames.
2. Steel sidelight, borrowed lite and transom frames.
3. Louvers installed in hollow metal doors.
4. Light frames and glazing installed in hollow metal doors.

B. Related Sections:

1. Division 01 Section "General Conditions".
2. Division 04 Section "Unit Masonry" for embedding anchors for hollow metal work into masonry construction.
3. Division 08 Section "Flush Wood Doors".
4. Division 08 Section "Glazing" for glass view panels in hollow metal doors.
5. Division 08 Section "Door Hardware".
6. Division 09 Sections "Exterior Painting" and "Interior Painting" for field painting hollow metal doors and frames.

C. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI/SDI A250.8 - Recommended Specifications for Standard Steel Doors and Frames.
2. ANSI/SDI A250.4 - Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors, Frames, Frames Anchors and Hardware Reinforcing.
3. ANSI/SDI A250.6 - Recommended Practice for Hardware Reinforcing on Standard Steel Doors and Frames.
4. ANSI/SDI A250.10 - Test Procedure and Acceptance Criteria for Prime Painted Steel Surfaces for Steel Doors and Frames.
5. ANSI/SDI A250.11 - Recommended Erection Instructions for Steel Frames.
6. ASTM A1008 - Standard Specification for Steel Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability.
7. ASTM A653 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
8. ASTM A924 - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.

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9. ASTM C 1363 - Standard Test Method for Thermal Performance of Building Assemblies by Means of a Hot Box Apparatus.
10. ANSI/BHMA A156.115 - Hardware Preparation in Steel Doors and Frames.
11. ANSI/SDI 122 - Installation and Troubleshooting Guide for Standard Steel Doors and Frames.
12. ANSI/NFPA 80 - Standard for Fire Doors and Fire Windows; National Fire Protection Association.
13. ANSI/NFPA 105: Standard for the Installation of Smoke Door Assemblies.
14. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies; National Fire Protection Association.
15. UL 10C - Positive Pressure Fire Tests of Door Assemblies.
16. UL 1784 - Standard for Air Leakage Tests of Door Assemblies.

1.3 QUALITY ASSURANCE

- A. Source Limitations: Obtain hollow metal doors and frames through one source from a single manufacturer wherever possible.
- B. Quality Standard: In addition to requirements specified, furnish SDI-Certified manufacturer products that comply with ANSI/SDI A250.8, latest edition, "Recommended Specifications for Standard Steel Doors and Frames".
- C. Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to UL10C (neutral pressure at 40" above sill) or UL 10C.
 1. Oversize Fire-Rated Door Assemblies Construction: For units exceeding sizes of tested assemblies, attach construction label certifying doors are built to standard construction requirements for tested and labeled fire rated door assemblies except for size.
 2. Temperature-Rise Limit: Where indicated and at vertical exit enclosures (stairwell openings) and exit passageways, provide doors that have a maximum transmitted temperature end point of not more than 450 deg F (250 deg C) above ambient after 30 minutes of standard fire-test exposure.
 3. Smoke Control Door Assemblies: Comply with NFPA 105.
 - a. Smoke "S" Label: Doors to bear "S" label, and include smoke and draft control gasketing applied to frame and on meeting stiles of pair doors.
- D. Fire-Rated, Borrowed-Light Frame Assemblies: Assemblies complying with NFPA 80 that are listed and labeled, by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire-protection ratings indicated, based on testing according to NFPA 257. Provide labeled glazing material.
- E. Storm Shelter Openings: Provide complete door systems for hurricane or tornado storm shelters, and other areas of refuge, complying and tested according to ICC 500 (2014/2020), ICC/NSSA Standard for the Design and Construction of Storm Shelters.
 1. Each unit to bear third party permanent label indicating compliance with the referenced testing standards.

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- F. Pre-Submittal Conference: Conduct conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier, Installer, and Contractor to review proper methods and procedures for installing hollow metal doors and frames and to verify installation of electrical knockout boxes and conduit at frames with electrified or access control hardware.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver hollow metal work palletized, wrapped, or crated to provide protection during transit and Project site storage. Do not use non-vented plastic.
- B. Deliver welded frames with two removable spreader bars across bottom of frames, tack welded to jambs and mullions.
- C. Store hollow metal work under cover at Project site. Place in stacks of five units maximum in a vertical position with heads up, spaced by blocking, on minimum 4-inch high wood blocking. Do not store in a manner that traps excess humidity.
 - 1. Provide minimum 1/4-inch space between each stacked door to permit air circulation. Door and frames to be stacked in a vertical upright position.

1.5 PROJECT CONDITIONS

- A. Field Measurements: Verify actual dimensions of openings by field measurements before fabrication.

1.6 COORDINATION

- A. Coordinate installation of anchorages for hollow metal frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors. Deliver such items to Project site in time for installation.
- B. Building Information Modeling (BIM) Support: Utilize designated BIM software tools and obtain training needed to successfully participate in the Project BIM processes. All technical disciplines are responsible for the product data integration and data reliability of their Work into the coordinated BIM applications.

1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace doors that fail in materials or workmanship within specified warranty period.
- B. Warranty includes installation and finishing that may be required due to repair or replacement of defective doors.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide steel doors and frames from a SDI Certified manufacturer:
 - 1. CECO Door Products (C).
 - 2. Curries Company (CU).

2.2 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications.
- B. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B; with minimum G60 (Z180) or A60 (ZF180) metallic coating.
- C. Frame Anchors: ASTM A 653/A 653M, Commercial Steel (CS), Commercial Steel (CS), Type B; with minimum G60 (Z180) or A60 (ZF180) metallic coating.

2.3 HOLLOW METAL DOORS

- A. General: Provide 1-3/4 inch doors of design indicated, not less than thickness indicated; fabricated with smooth surfaces, without visible joints or seams on exposed faces unless otherwise indicated. Comply with ANSI/SDI A250.8 and ANSI/NAAMM HMMA 867.
- B. Exterior Doors: Face sheets fabricated of commercial quality hot-dipped zinc coated steel that complies with ASTM A 653/A 653M, Coating Designation A60. Provide doors complying with requirements indicated below by referencing ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical performance level:
 - 1. Design: Flush panel.
 - 2. Core Construction: Manufacturer's standard polystyrene. Where indicated, provide doors fabricated as thermal-rated assemblies with a minimum R-value of 2.8 or better.
 - 3. Level/Model: Level 3 and Physical Performance Level A (Extra Heavy Duty), Minimum 16 gauge (0.053-inch - 1.3-mm) thick steel, Model 2.
 - 4. Top and Bottom Edges: Reinforce tops and bottoms of doors with a continuous steel channel not less than 16 gauge, extending the full width of the door and welded to the face sheet. Doors with an inverted top channel to include a steel closure channel, screw attached, with the web of the channel flush with the face sheets of the door. Plastic or composite channel fillers are not acceptable.
 - 5. Hinge Reinforcement: Minimum 7 gauge (3/16") plate 1-1/4" x 9" or minimum 14 gauge continuous channel with pierced holes, drilled and tapped.
 - 6. Hardware Reinforcements: Fabricate according to ANSI/SDI A250.6 with reinforcing plates from same material as door face sheets.
- C. Interior Doors: Face sheets fabricated of commercial quality cold rolled steel that complies with ASTM A 1008/A 1008M. Provide doors complying with requirements indicated below by

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referencing ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical performance level:

1. Design: Flush panel.
2. Core Construction: Manufacturer's standard kraft-paper honeycomb, or one-piece polystyrene core, securely bonded to both faces.
 - a. Fire Door Core: As required to provide fire-protection and temperature-rise ratings indicated.
3. Level/Model: Level 2 and Physical Performance Level B (Heavy Duty), Minimum 18 gauge (0.042-inch - 1.0-mm) thick steel, Model 2.
4. Top and Bottom Edges: Reinforce tops and bottoms of doors with a continuous steel channel not less than 16 gauge, extending the full width of the door and welded to the face sheet.
5. Hinge Reinforcement: Minimum 7 gauge (3/16") plate 1-1/4" x 9" or minimum 14 gauge continuous channel with pierced holes, drilled and tapped.
6. Hardware Reinforcements: Fabricate according to ANSI/SDI A250.6 with reinforcing plates from same material as door face sheets.

D. Manufacturers Basis of Design:

1. Curries Company (CU) - Polystyrene Core - 707 Series.

2.4 HOLLOW METAL FRAMES

A. General: Comply with ANSI/SDI A250.8 and with details indicated for type and profile.

B. Exterior Frames: Fabricated of hot-dipped zinc coated steel that complies with ASTM A 653/A 653M, Coating Designation A60.

1. Fabricate frames with mitered or coped corners. Profile as indicated on drawings.
2. Frames: Minimum 16 gauge (0.053-inch -1.3-mm) thick steel sheet.
3. Manufacturers Basis of Design:

a. Curries Company (CU) – M Series.

C. Interior Frames: Fabricated from cold-rolled steel sheet that complies with ASTM A 1008/A 1008M.

1. Fabricate frames with mitered or coped corners. Profile as indicated on drawings.
2. Frames: Minimum 16 gauge (0.053-inch -1.3-mm) thick steel sheet.
3. Manufacturers Basis of Design:

a. Curries Company (CU) - M Series.

D. Fire rated frames: Fabricate frames in accordance with NFPA 80, listed and labeled by a qualified testing agency, for fire-protection ratings indicated.

E. Hardware Reinforcement: Fabricate according to ANSI/SDI A250.6 Table 4 with reinforcement plates from same material as frames.

2.5 FRAME ANCHORS

- A. Jamb Anchors:
 - 1. Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size, formed from A60 metallic coated material, not less than 0.042 inch thick, with corrugated or perforated straps not less than 2 inches wide by 10 inches long; or wire anchors not less than 0.177 inch thick.
 - 2. Stud Wall Type: Designed to engage stud and not less than 0.042 inch thick.
 - 3. Compression Type for Drywall Slip-on (Knock-Down) Frames: Adjustable compression anchors.
- B. Floor Anchors: Floor anchors to be provided at each jamb, formed from A60 metallic coated material, not less than 0.042 inches thick.
- C. Mortar Guards: Formed from same material as frames, not less than 0.016 inches thick.

2.6 LOUVERS

- A. Metal Louvers: Unless otherwise indicated provide louvers to meet the following requirements.
 - 1. Blade Type: Vision proof inverted V or inverted Y.
 - 2. Metal and Finish: Galvanized steel, 0.040 inch thick, factory primed for paint finish with baked enamel or powder coated finish. Match pre-finished door paint color where applicable.
- B. Louvers for Fire Rated Doors: Metal louvers with fusible link and closing device, listed and labeled for use in doors with fire protection rating of 1-1/2 hours and less.
 - 1. Manufacturers: Subject to compliance with requirements, provide louvers to meet rating indicated.
 - 2. Metal and Finish: Galvanized steel, 0.040 inch thick, factory primed for paint finish with baked enamel or powder coated finish. Match pre-finished door paint color where applicable.

2.7 LIGHT OPENINGS AND GLAZING

- A. Stops and Moldings: Provide stops and moldings around glazed lites where indicated. Form corners of stops and moldings with butted or mitered hairline joints at fabricator's shop. Fixed and removable stops to allow multiple glazed lites each to be removed independently. Coordinate frame rabbet widths between fixed and removable stops with the type of glazing and installation indicated.
- B. Moldings for Glazed Lites in Doors and Loose Stops for Glazed Lites in Frames: Minimum 20 gauge thick, fabricated from same material as door face sheet in which they are installed.
- C. Fixed Frame Moldings: Formed integral with hollow metal frames, a minimum of 5/8 inch (16 mm) high unless otherwise indicated. Provide fixed frame moldings and stops on outside of exterior and on secure side of interior doors and frames.

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- D. Preformed Metal Frames for Light Openings: Manufacturer's standard frame formed of 0.048-inch-thick, cold rolled steel sheet; with baked enamel or powder coated finish; and approved for use in doors of fire protection rating indicated. Match pre-finished door paint color where applicable.

2.8 ACCESSORIES

- A. Mullions and Transom Bars: Join to adjacent members by welding or rigid mechanical anchors.
- B. Grout Guards: Formed from same material as frames, not less than 0.016 inches thick.

2.9 FABRICATION

- A. Fabricate hollow metal work to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's plant. When shipping limitations so dictate, frames for large openings are to be fabricated in sections for splicing or splining in the field by others.
- B. Tolerances: Fabricate hollow metal work to tolerances indicated in ANSI/SDI A250.8.
- C. Hollow Metal Doors:
 - 1. Exterior Doors: Provide optional weep-hole openings in bottom of exterior doors to permit moisture to escape where specified.
 - 2. Glazed Lites: Factory cut openings in doors with applied trim or kits to fit. Factory install glazing where indicated.
 - 3. Astragals: Provide overlapping astragals as noted in door hardware sets in Division 08 Section "Door Hardware" on one leaf of pairs of doors where required by NFPA 80 for fire-performance rating or where indicated. Extend minimum 3/4 inch beyond edge of door on which astragal is mounted.
 - 4. Continuous Hinge Reinforcement: Provide welded continuous 12 gauge strap for continuous hinges specified in hardware sets in Division 08 Section "Door Hardware".
- D. Hollow Metal Frames:
 - 1. Shipping Limitations: Where frames are fabricated in sections due to shipping or handling limitations, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.
 - 2. Welded Frames: Weld flush face joints continuously; grind, fill, dress, and make smooth, flush, and invisible.
 - a. Welded frames are to be provided with two steel spreaders temporarily attached to the bottom of both jambs to serve as a brace during shipping and handling. Spreader bars are for bracing only and are not to be used to size the frame opening.
 - 3. Sidelight and Transom Bar Frames: Provide closed tubular members with no visible face seams or joints, fabricated from same material as door frame. Fasten members at crossings and to jambs by butt welding.

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4. High Frequency Hinge Reinforcement: Provide high frequency hinge reinforcements at door openings 48-inches and wider with mortise butt type hinges at top hinge locations.
 5. Continuous Hinge Reinforcement: Provide welded continuous 12 gauge straps for continuous hinges specified in hardware sets in Division 08 Section "Door Hardware".
 6. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated for removable stops, provide security screws at exterior locations.
 7. Mortar Guards: Provide guard boxes at back of hardware mortises in frames at all hinges and strike preps regardless of grouting requirements.
 8. Floor Anchors: Weld anchors to bottom of jambs and mullions with at least four spot welds per anchor.
 9. Jamb Anchors: Provide number and spacing of anchors as follows:
 - a. Masonry Type: Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches on-center and as follows:
 - 1) Two anchors per jamb up to 60 inches high.
 - 2) Three anchors per jamb from 60 to 90 inches high.
 - 3) Four anchors per jamb from 90 to 120 inches high.
 - 4) Four anchors per jamb plus 1 additional anchor per jamb for each 24 inches or fraction thereof above 120 inches high.
 - b. Stud Wall Type: Locate anchors not more than 18 inches from top and bottom of frame. Space anchors not more than 32 inches o.c. and as follows:
 - 1) Three anchors per jamb up to 60 inches high.
 - 2) Four anchors per jamb from 60 to 90 inches high.
 - 3) Five anchors per jamb from 90 to 96 inches high.
 - 4) Five anchors per jamb plus 1 additional anchor per jamb for each 24 inches or fraction thereof above 96 inches high.
 - 5) Two anchors per head for frames above 42 inches wide and mounted in metal stud partitions.
 10. Door Silencers: Except on weatherstripped or gasketed doors, drill stops to receive door silencers. Silencers to be supplied by frame manufacturer regardless if specified in Division 08 Section "Door Hardware".
 11. Bituminous Coating: Where frames are fully grouted with an approved Portland Cement based grout or mortar, coat inside of frame throat with a water based bituminous or asphaltic emulsion coating to a minimum thickness of 3 mils DFT, tested in accordance with UL 10C and applied to the frame under a 3rd party independent follow-up service procedure.
- E. Hardware Preparation: Factory prepare hollow metal work to receive template mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping according to the Door Hardware Schedule and templates furnished as specified in Division 08 Section "Door Hardware."
1. Locate hardware as indicated, or if not indicated, according to ANSI/SDI A250.8.
 2. Reinforce doors and frames to receive non-template, mortised and surface mounted door hardware.
 3. Comply with applicable requirements in ANSI/SDI A250.6 and ANSI/DHI A115 Series specifications for preparation of hollow metal work for hardware.

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4. Coordinate locations of conduit and wiring boxes for electrical connections with Division 26 Sections.

2.10 STEEL FINISHES

- A. Prime Finishes: Doors and frames to be cleaned, and chemically treated to insure maximum finish paint adhesion. Surfaces of the door and frame exposed to view to receive a factory applied coat of rust inhibiting shop primer.
 1. Shop Primer: Manufacturer's standard, fast-curing, lead and chromate free primer complying with ANSI/SDI A250.10 acceptance criteria; recommended by primer manufacturer for substrate; and compatible with substrate and field-applied coatings.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. General Contractor to verify the accuracy of dimensions given to the steel door and frame manufacturer for existing openings or existing frames (strike height, hinge spacing, hinge back set, etc.).
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove welded in shipping spreaders installed at factory. Restore exposed finish by grinding, filling, and dressing, as required to make repaired area smooth, flush, and invisible on exposed faces.
- B. Prior to installation, adjust and securely brace welded hollow metal frames for square, level, twist, and plumb condition.
- C. Tolerances shall comply with SDI-117 "Manufacturing Tolerances Standard Steel Doors and Frames."
- D. Drill and tap doors and frames to receive non-template, mortised, and surface-mounted door hardware.
- E. Verify tolerances against manufacturers installations instructions for tornado and hurricane storm shelter openings.

3.3 INSTALLATION

- A. General: Install hollow metal work plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.

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- B. Hollow Metal Frames: Install hollow metal frames of size and profile indicated. Comply with ANSI/SDI A250.11 and NFPA 80 at fire rated openings.
 - 1. Set frames accurately in position, plumbed, leveled, aligned, and braced securely until permanent anchors are set. After wall construction is complete and frames properly set and secured, remove temporary braces, leaving surfaces smooth and undamaged. Shim as necessary to comply with installation tolerances.
 - 2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with post-installed expansion anchors.
 - 3. Masonry Walls: Coordinate installation of frames to allow for solidly filling space between frames and masonry with mortar.
 - 4. Grout Requirements: Do not grout head of frames unless reinforcing has been installed in head of frame. Do not grout vertical or horizontal closed mullion members.
- C. Hollow Metal Doors: Fit hollow metal doors accurately in frames, within clearances specified below. Shim as necessary.
 - 1. Non-Fire-Rated Standard Steel Doors:
 - a. Jamb and Head: 1/8 inch plus or minus 1/16 inch.
 - b. Between Edges of Pairs of Doors: 1/8 inch plus or minus 1/16 inch.
 - c. Between Bottom of Door and Top of Threshold: Maximum 3/8 inch.
 - d. Between Bottom of Door and Top of Finish Floor (No Threshold): Maximum 3/4 inch.
 - 2. Fire-Rated Doors: Install doors with clearances according to NFPA 80.
- D. Field Glazing: Comply with installation requirements in Division 08 Section "Glazing" and with hollow metal manufacturer's written instructions.

3.4 ADJUSTING AND CLEANING

- A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow metal work that is warped, bowed, or otherwise unacceptable.
- B. Remove grout and other bonding material from hollow metal work immediately after installation.
- C. Prime-Coat and Painted Finish Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat, or painted finishes, and apply touchup of compatible air drying, rust-inhibitive primer, zinc rich primer (exterior and galvanized openings) or finish paint.

3.5 FIELD QUALITY CONTROL

- A. Field Inspection (Punch Report): Reference Division 01 Sections "Closeout Procedures". Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.

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1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

END OF SECTION 081113

SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes commercial door hardware for the following:
1. Swinging doors.
- B. Door hardware includes, but is not necessarily limited to, the following:
1. Mechanical door hardware.
 2. Electromechanical door hardware.
 3. Automatic operators.
- C. Related Sections:
1. Division 08 Section "Hollow Metal Doors and Frames".
 2. Division 08 Section "Flush Wood Doors".
 3. Division 08 Section "Aluminum-Framed Entrances and Storefronts".
- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
 2. ICC/IBC - International Building Code.
 3. NFPA 70 - National Electrical Code.
 4. NFPA 80 - Fire Doors and Windows.
 5. NFPA 101 - Life Safety Code.
 6. NFPA 105 - Installation of Smoke Door Assemblies.
 7. UL/ULC and CSA C22.2 - Standards for Automatic Door Operators Used on Fire and Smoke Barrier Doors and Systems of Doors.
 8. State Building Codes, Local Amendments.
- E. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:
1. ANSI/BHMA Certified Product Standards - A156 Series.
 2. UL10C - Positive Pressure Fire Tests of Door Assemblies.

3. ANSI/UL 294 - Access Control System Units.
4. UL 305 - Panic Hardware.
5. ANSI/UL 437- Key Locks.

1.3 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing, fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
 3. Content: Include the following information:
 - a. Type, style, function, size, label, hand, and finish of each door hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.
 - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.
 - h. Warranty information for each product.
 4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. Shop Drawings: Details of electrified access control hardware indicating the following:
 1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

- a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
 - b. Complete (risers, point-to-point) access control system block wiring diagrams.
 - c. Wiring instructions for each electronic component scheduled herein.
2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.
- D. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.
- E. Informational Submittals:
1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.
- F. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

1.4 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
- B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).
- C. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

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- E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.
 - 1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
 - 2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.
- F. Each unit to bear third party permanent label indicating compliance with the referenced testing standards.
- G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
 - 1. Function of building, purpose of each area and degree of security required.
 - 2. Plans for existing and future key system expansion.
 - 3. Requirements for key control storage and software.
 - 4. Installation of permanent keys, cylinder cores and software.
 - 5. Address and requirements for delivery of keys.
- H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.
 - 1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
 - 2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
 - 3. Review sequence of operation narratives for each unique access controlled opening.
 - 4. Review and finalize construction schedule and verify availability of materials.
 - 5. Review the required inspecting, testing, commissioning, and demonstration procedures
- I. At completion of installation, provide written documentation that components were applied according to manufacturer's instructions and recommendations and according to approved schedule.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.6 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.7 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
 - 1. Structural failures including excessive deflection, cracking, or breakage.
 - 2. Faulty operation of the hardware.
 - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - 4. Electrical component defects and failures within the systems operation.
- C. Warranty Period: Unless otherwise indicated, warranty shall be one year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
- B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:

1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.

- C. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 BUTT HINGES

- A. Hinges: ANSI/BHMA A156.1 butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.

1. Quantity: Provide the following hinge quantity:
 - a. Two Hinges: For doors with heights up to 60 inches.
 - b. Three Hinges: For doors with heights 61 to 90 inches.
 - c. Four Hinges: For doors with heights 91 to 120 inches.
 - d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.
2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
 - a. Widths up to 3'0": 4-1/2" standard or heavy weight as specified.
 - b. Sizes from 3'1" to 4'0": 5" standard or heavy weight as specified.
3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:
 - a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
 - b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.
4. Hinge Options: Comply with the following:
 - a. Non-removable Pins: With the exception of electric through wire hinges, provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.
5. Manufacturers:
 - a. McKinney (MK) - TA/T4A Series, 5-knuckle.

2.3 CONTINUOUS HINGES

- A. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 continuous geared hinge. with minimum 0.120-inch thick extruded 6063-T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.
1. Where specified, provide modular continuous geared hinges that ship in two or three pieces and form a single continuous hinge upon installation.
 2. Manufacturers:
 - a. Pemko (PE).

2.4 POWER TRANSFER DEVICES

- A. Concealed Quick Connect Electric Power Transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified door hardware. Furnish with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.
1. Manufacturers:
 - a. Pemko (PE) - EL-CEPT Series.
 - b. Securitron (SU) - EL-CEPT Series.
- B. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.
1. Provide one each of the following tools as part of the base bid contract:
 - a. McKinney (MK) - Electrical Connecting Kit: QC-R001.
 - b. McKinney (MK) - Connector Hand Tool: QC-R003.
 2. Manufacturers:
 - a. McKinney (MK) - QC-C Series.

2.5 DOOR OPERATING TRIM

- A. Door Push Plates and Pulls: ANSI/BHMA A156.6 door pushes and pull units of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.
1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
 2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
 3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
 4. Pulls, where applicable, shall be provided with a 10" clearance from the finished floor on the push side to accommodate wheelchair accessibility.
 5. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.
 6. Manufacturers:
 - a. Rockwood (RO).

2.6 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
1. Manufacturers:
 - a. Sargent Manufacturing (SA).
 - b. No Substitution – Facility Standard.
- B. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:
1. Threaded mortise cylinders with rings and cams to suit hardware application.
 2. Rim cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
 3. Bored or cylindrical lock cylinders with tailpieces as required to suit locks.
 4. Tubular deadlocks and other auxiliary locks.
 5. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
 6. Keyway: Match Facility Standard.
- C. Keying System: Each type of lock and cylinders to be factory keyed.
1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.
 2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
 3. Existing System: Field verify and key cylinders to match Owner's existing system.

D. Key Quantity: Provide the following minimum number of keys:

1. Change Keys per Cylinder: Two (2)
2. Master Keys (per Master Key Level/Group): Five (5).
3. Construction Keys (where required): Ten (10).

E. Construction Keying: Provide construction master keyed cylinders.

F. Key Registration List (Bitting List):

1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
2. Provide transcript list in writing or electronic file as directed by the Owner.

2.7 KEY CONTROL

A. Key Control Cabinet: Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 150% of the number of locks required for the project.

1. Manufacturers:
 - a. Lund Equipment (LU).
 - b. MMF Industries (MM).
 - c. Telkee (TK).

2.8 MORTISE LOCKS AND LATCHING DEVICES

A. Mortise Locksets, Grade 1 (Heavy Duty): Provide ANSI/BHMA A156.13, Series 1000, Operational Grade 1 Certified Products Directory (CPD) listed mortise locksets. Listed manufacturers shall meet all functions and features as specified herein.

1. Manufacturers:
 - a. Sargent Manufacturing (SA) - 8200 Series.
 - b. No Substitution – Facility Standard.

2.9 CYLINDRICAL LOCKS AND LATCHING DEVICES

A. Tubular Locksets, Grade 1 (Extra Heavy Duty): ANSI/BHMA A156.2, Series 4000, Operational Grade 1 Certified Products Directory (CPD) listed tubular locksets. Listed manufacturers shall meet all functions and features as specified herein.

1. Manufacturers:
 - a. Sargent Manufacturing (SA) - 11 Line.
 - b. No Substitution – Facility Standard.

2.10 LOCK AND LATCH STRIKES

- A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:
1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
 2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
 3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
 4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.
- B. Standards: Comply with the following:
1. Strikes for Mortise Locks and Latches: BHMA A156.13.
 2. Strikes for Bored Locks and Latches: BHMA A156.2.
 3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
 4. Dustproof Strikes: BHMA A156.16.

2.11 ELECTRIC STRIKES

- A. Standard Electric Strikes: Electric strikes conforming to ANSI/BHMA A156.31, Grade 1, for use on non-rated or fire rated openings. Strikes shall be of stainless steel construction tested to a minimum of 1500 pounds of static strength and 70 foot-pounds of dynamic strength with a minimum endurance of 1 million operating cycles. Provide strikes with 12 or 24 VDC capability, fail-secure unless otherwise specified. Where specified provide latchbolt and latchbolt strike monitoring indicating both the position of the latchbolt and locked condition of the strike.
1. Manufacturers:
 - a. HES (HS) - 1500/1600 Series.
- B. Provide electric strikes with in-line power controller and surge suppressor by the same manufacturer as the strike with the combined products having a five year warranty.

2.12 CONVENTIONAL EXIT DEVICES

- A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:
1. Exit devices shall have a five-year warranty.
 2. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.

3. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
 4. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
 5. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
 6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.
 - a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
 - b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.
 7. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
 8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
 9. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
 10. Rail Sizing: Provide exit device rails factory sized for proper door width application.
 11. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.
- B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed exit devices. Listed manufacturers shall meet all functions and features as specified herein.
1. Electromechanical exit devices shall have the following functions and features:
 - a. Universal Molex plug-in connectors that have standardized color-coded wiring and are field configurable in fail safe or fail secure and operate from 12vdc to 24vdc regulated.
 - b. EcoFlex or equivalent technology that reduces energy consumption up to 92% as certified by GreenCircle.
 - c. Options to be available for request-to-exit or enter signaling, latchbolt and touchbar monitoring.
 - d. Field configurable electrified trim to fail-safe or fail-secure that operates from 12-24VDC.
 - e. Five-year limited warranty for electromechanical features.
 2. Manufacturers:
 - a. Sargent Manufacturing (SA) - 80 Series.
 - b. No Substitution – Facility Standard.

2.13 DOOR CLOSERS

- A. All door closers specified herein shall meet or exceed the following criteria:
1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.
 2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
 3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.
 4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
 5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
 6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.
- B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.
1. Heavy duty surface mounted door closers shall have a 30-year warranty.
 2. Manufacturers:
 - a. Sargent Manufacturing (SA) - 351 Series – Exterior Doors.
 - b. No Substitution – Facility Standard.
- C. Door Closers, Surface Mounted (Commercial Duty): ANSI/BHMA 156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, institutional grade door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck, closing sweep, and latch speed control valves. Provide non-handed units standard.
1. Manufacturers:
 - a. Sargent Manufacturing (SA) - 1431 Series – Interior Doors.
 - b. No Substitution – Facility Standard.

2.14 ELECTROHYDRAULIC DOOR OPERATORS

- A. Electrohydraulic Door Operators (High Traffic): Provide ANSI/BHMA A156.19 Certified Products Directory (CPD) listed low energy operators that meet ANSI/BHMA A156.4 requirements and are UL listed for use on fire rated doors and UL10C certified that comply with requirements for the Americans with Disabilities Act (ADA). Operators shall be verified by GreenCircle to offer energy savings of 19% when compared to similar products to accommodate openings up 250 pounds and 48" wide.
1. Provide operators with features as follows:
 - a. Non-handed with push and pull side mounting.
 - b. Operates as mechanical surface closer during close cycles, when door is opened manually or if power is off.
 - c. Activation by push button, hands-free or radio frequency devices.
 - d. On board electronics to collect usage and cycle count data to facilitate preventative maintenance/diagnostics.
 - e. Two-year limited warranty.
 - f. Wi-Fi interface.
 - g. Mounting backplate to simplify and speed up installation.
 2. Operators shall have the following functionality:
 - a. Adjustable Hold Open: Amount of time a door will stay in the full open position after an activation.
 - b. Blow Open for Smoke Ventilation: Door opens when signal is received from alarm system allowing air or smoke to flow through opening. Door will stay open until signal from alarm system is stopped.
 - c. Infinite Hold Open: Door will hold open at set position until power is turned off.
 - d. Obstruction Detection: Door closes if it hits an obstruction while opening; door will reverse to open position if it hits an obstruction while closing. Door will stop once it hits an obstruction and will rest against the obstruction until removed.
 - e. Open Delay: Delays operator opening for locking hardware.
 - f. Overload Safety Shut-Off: After two minutes of receiving a door activation signal, inverter times out and door closes to prevent motor/inverter damage.
 - g. Presence Detector Input: Input for external sensor to detect presence at door open or close position only.
 - h. Push & Go: As the door is manually opened, the operator "senses" movement and opens door to the full-open position.
 - i. Selector Mode Switch: Off disables the signal inputs unless Blow Open is activated, on activates the signal inputs, hold open activates the unit (unless Blow Closed is activated) to the hold open position.
 - j. Vestibule Delay: When the wall switch is pressed, first door in vestibule will open. Second door will open once vestibule door delay has expired. Delay is adjustable.
 3. Manufacturers:
 - a. Norton Rixson (NO) - 6000 Series.

2.15 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1" LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
3. Where plates are applied to fire rated doors with the top of the plate more than 16" above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer's catalog and template book for specific requirements for size and applications.
4. Protection Plates: ANSI/BHMA A156.6 protection plates (kick, armor, or mop), fabricated from the following:
 - a. Stainless Steel: 300 grade, 050-inch thick.
5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
6. Manufacturers:
 - a. Rockwood (RO).

2.16 DOOR STOPS AND HOLDERS

- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
- B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.
 1. Manufacturers:
 - a. Rockwood (RO).
- C. Overhead Door Stops and Holders: ANSI/BHMA A156.8, Grade 1 Certified Products Directory (CPD) listed overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.
 1. Manufacturers:
 - a. Norton Rixson (RF).

- b. Sargent Manufacturing (SA).

2.17 ARCHITECTURAL SEALS

- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
- B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.
 - 1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.
- C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.
 - 1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NFPA 252, Standard Methods of Fire Tests of Door Assemblies.
- D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.
- E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
- F. Manufacturers:
 - 1. Pemko (PE).

2.18 ELECTRONIC ACCESSORIES

- A. Push-Button Switches: Industrial grade momentary or alternate contact, back-lighted push buttons with stainless-steel switch enclosures. 12/24 VDC bi-color illumination suitable for either flush or surface mounting.
 - 1. Manufacturers:
 - a. Alarm Controls (AK) - TS Series.
 - b. Securitron (SU) - PB Series.
- B. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.

1. Manufacturers:

- a. Sargent Manufacturing (SA) - 3280 Series.
- b. Securitron (SU) - DPS Series.

2.19 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.20 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

- A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.
- B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.

1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
 2. DHI TDH-007-20: Installation Guide for Doors and Hardware.
 3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
 4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- C. Retrofitting: Install door hardware to comply with manufacturer's published templates and 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 specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
- D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."
- E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

- A. Field Inspection (Punch Report): Reference Division 01 Sections "Closeout Procedures". Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.
 1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

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.

3.6 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.
- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

- A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SETS

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

- 1. Quantities listed are for each pair of doors, or for each single door.
- 2. The supplier is responsible for handing and sizing all products.
- 3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.
- 4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.

- B. Manufacturer's Abbreviations:

- 1. MK - McKinney
- 2. PE - Pemko
- 3. MR - Markar
- 4. SU - Securitron
- 5. RO - Rockwood
- 6. SA - SARGENT
- 7. HS - HES
- 8. RF - Rixson
- 9. NO - Norton

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- 10. OT - Other
- 11. AK - Alarm Controls

Hardware Sets

Set: 1.0

Doors: 100A

1 Continuous Hinge	KCFM83-HD1 PT x Height Required		PE
1 Electric Power Transfer	EL-CEPT	630	SU
1 Rim Exit Device, Storeroom	55 56 8804 Less Pull	US32D	SA
1 Pull	RM201 Mtg-Type 1XHD	US32D	RO
1 Conc Overhead Stop	1-x36	630	RF
1 Door Operator (Single)	6061	689	NO
1 Gasketing	Provided by Alum. Door Supplier		OT
1 Sweep	3452CNB TKSP8		PE
1 Threshold	253x3AFG		PE
1 ElectroLynx Harness	QC-C1500P (Frame - EPT to Power/Controller)		MK
1 ElectroLynx Harness	QC-CxxxP (Door - EPT to Elec. Exit Device)		MK
1 Position Switch	DPS-M / W		SU
1 Card Reader	Provided by Security Contractor		OT
2 Actuator, Jamb Mount	503		NO
1 Power Supply	Provided by Security Contractor		OT

Notes: Door normally closed, latched and secured.
Entry by pull when door electrically dogged open by access control system, valid card read or key override.
Entry by actuator as programmed by access control system.
Free egress at all times.

Set: 2.0

Doors: 100B, 100C

1 Continuous Hinge	KCFM83-HD1 x Height Required		PE
1 Storeroom Lock	11G04 LL	US26D	SA
1 Electric Strike	1600-CLB	630	HS
1 Conc Overhead Stop	1-x36	630	RF
1 Door Operator (Single)	6061	689	NO

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1 Position Switch	DPS-M / W		SU
2 Actuator, Jamb Mount	503		NO
1 Remote Door Release	TS-18		AK
1 Power Supply	Provided by Security Contractor		OT

Notes: Door normally closed, latched and secured.
Entry by remote release or key override.
Entry by actuator as programmed by access control system.
Free egress at all times.

Set: 3.0

Doors: 100D

1 Continuous Hinge	KCFM83-HD1 x Height Required		PE
1 Storeroom Lock	11G04 LL	US26D	SA
1 Conc Overhead Stop	6-x36	630	RF
1 Surface Closer	1431 O	EN	SA

Set: 4.0

Doors: 111B, 121

1 Continuous Hinge	CFM83HD1-M PT x Height Required		PE
1 Electric Power Transfer	EL-CEPT	630	SU
1 Fail Secure Exit Device	55 8876 ETL	US32D	SA
1 Surf Overhead Stop	9-x36	630	RF
1 Surface Closer	351 PD10	EN	SA
1 Gasketing	2891APK TKSP8		PE
1 Sweep	3452CNB TKSP8		PE
1 Threshold	253x3AFG		PE
1 ElectroLynx Harness	QC-C1500P (Frame - EPT to Power/Controller)		MK
1 ElectroLynx Harness	QC-CxxxP (Door - EPT to Elec. Exit Device)		MK
1 Position Switch	DPS-M / W		SU
1 Card Reader	Provided by Security Contractor		OT
1 Power Supply	Provided by Security Contractor		OT

Notes: Door normally closed, latched and secured.
Entry by valid card read or key override.
Free egress at all times.

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Install gasketing prior to soffit mounted hardware. Do not notch gasketing for soffit mounted hardware.

Set: 5.0

Doors: 101A

1 Continuous Hinge	CFM83HD1-M PT x Height Required		PE
1 Electric Power Transfer	EL-CEPT	630	SU
1 Fail Secure Exit Device	12 55 8876 ETL	US32D	SA
1 Surf Overhead Stop	9-x36	630	RF
1 Surface Closer	351 PD10	EN	SA
1 Gasketing	2891APK TKSP8		PE
1 Sweep	3452CNB TKSP8		PE
1 Threshold	253x3AFG		PE
1 ElectroLynx Harness	QC-C1500P (Frame - EPT to Power/Controller)		MK
1 ElectroLynx Harness	QC-CxxxP (Door - EPT to Elec. Exit Device)		MK
1 Position Switch	DPS-M / W		SU
1 Card Reader	Provided by Security Contractor		OT
1 Power Supply	Provided by Security Contractor		OT

Notes: Door normally closed, latched and secured.
Entry by valid card read or key override.
Free egress at all times.

Install gasketing prior to soffit mounted hardware. Do not notch gasketing for soffit mounted hardware.

Set: 6.0

Doors: 112

6 Hinge, Full Mortise, Hvy Wt	T4A3786 4-1/2" x 4-1/2"	US26D	MK
2 Push Plate	70C-RKW	US32D	RO
2 Pull Plate	BF 111x70C	US32D	RO
2 Surface Closer	1431 P10	EN	SA
2 Kick Plate	K1050 10" x 1" LDW CSK BEV	US32D	RO
2 Wall Stop	400 / 403	US26D	RO
2 Silencer	608-RKW		RO

Set: 7.0

Doors: 110

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3 Hinge, Full Mortise, Hvy Wt	T4A3786 4-1/2" x 4-1/2"	US26D	MK
1 Storeroom Lock	11G04 LL	US26D	SA
1 Surface Closer	1431 O	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK BEV	US32D	RO
1 Wall Stop	400 / 403	US26D	RO
1 Gasketing	S88BL		PE

Set: 8.0

Doors: 104, 105, 109

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Classroom Lock	11G37 LL	US26D	SA
1 Wall Stop	400 / 403	US26D	RO
3 Silencer	608-RKW		RO

Set: 9.0

Doors: 111A

3 Hinge, Full Mortise, Hvy Wt	T4A3786 4-1/2" x 4-1/2"	US26D	MK
1 Classroom Lock	11G37 LL	US26D	SA
1 Surface Closer	1431 P10	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK BEV	US32D	RO
1 Wall Stop	400 / 403	US26D	RO
3 Silencer	608-RKW		RO

Set: 10.0

Doors: 102, 117, 120A, 120B

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Storeroom Lock	11G04 LL	US26D	SA
1 Wall Stop	400 / 403	US26D	RO
3 Silencer	608-RKW		RO

Set: 11.0

Doors: 106, 113, 114, 115, 116, 118, 119

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Office Lock	11G05 LL	US26D	SA
1 Wall Stop	400 / 403	US26D	RO
3 Silencer	608-RKW		RO

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Set: 12.0

Doors: 101B, 101C

2 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Passage Set	11U15 LL	US26D	SA
1 Door Stop	400 / 442	US26D	RO
2 Silencer	608-RKW		RO

Set: 13.0

Doors: 103, 107, 108

3 Hinge, Full Mortise, Hvy Wt	T4A3786 4-1/2" x 4-1/2"	US26D	MK
1 Privacy Set w/ Indicator	V21 EMB 8265 LNL	US26D	SA
1 Surface Closer	1431 O	EN	SA
1 Kick Plate	K1050 10" x 2" LDW CSK BEV	US32D	RO
1 Wall Stop	400 / 403	US26D	RO
3 Silencer	608-RKW		RO

Set: 14.0

Doors: 111C

1 Hardware supplied with door	00
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Mark	Hardware
100A	1.0
100B	2.0
100C	2.0
100D	3.0
101A	5.0
101B	12.0
101C	12.0
102	10.0
103	13.0
104	8.0

105	8.0
106	11.0
107	13.0
108	13.0
109	8.0
110	7.0
111A	9.0
111B	4.0
111C	14.0
112	6.0
113	11.0

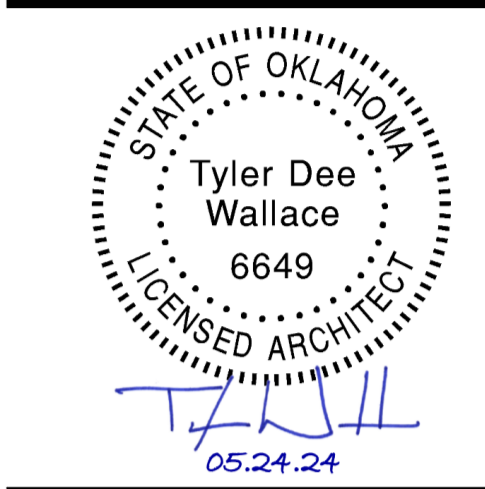
114	11.0
115	11.0
116	11.0
117	10.0
118	11.0
119	11.0
120A	10.0
120B	10.0
121	4.0

END OF SECTION 087100

OWASSO PUBLIC SCHOOLS ENROLLMENT AND IT CENTER

CONSTRUCTION DOCUMENTS

04/29/2024

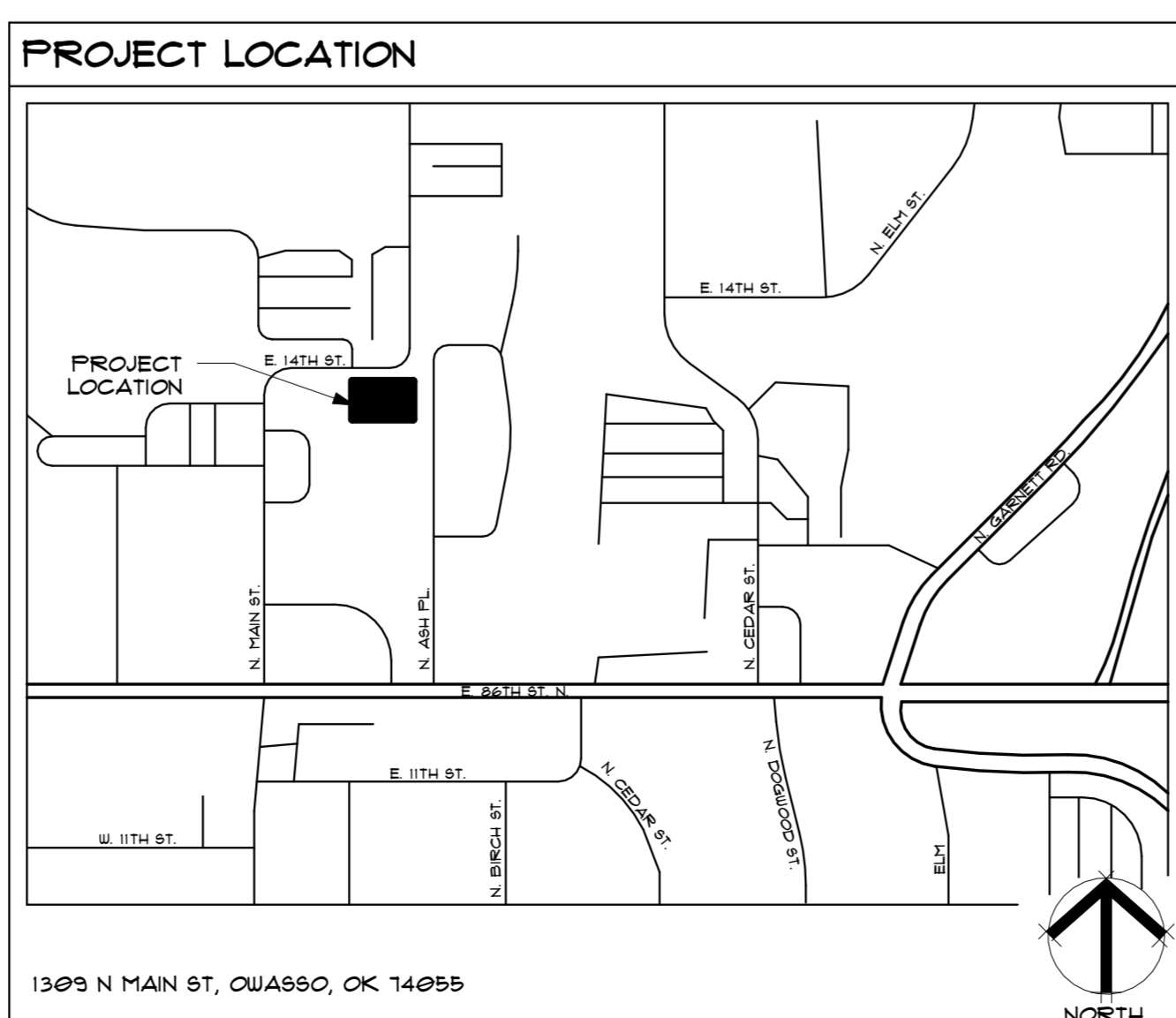


3-D REPRESENTATION FOR ILLUSTRATIVE PURPOSES ONLY, REFER TO DRAWINGS AND DETAILS

NO.	DESCRIPTION	DATE
1	Addendum 01	05.24.2024

PROJECT CONTACTS	
OWNER: OWASSO PUBLIC SCHOOLS 1501 N ASH ST OWASSO, OKLAHOMA 74055 P(918) 272-5367	CONTRACTOR: LOWRY CONSTRUCTION SERVICES INC. 1729 S BOSTON AVE. TULSA, OKLAHOMA 74119 P(918) 592-2442
ARCHITECT: GH2 ARCHITECTS, LLC 330 SOUTH BOSTON AVENUE SUITE 1100 TULSA, OKLAHOMA 74103 P(918) 597-6156	

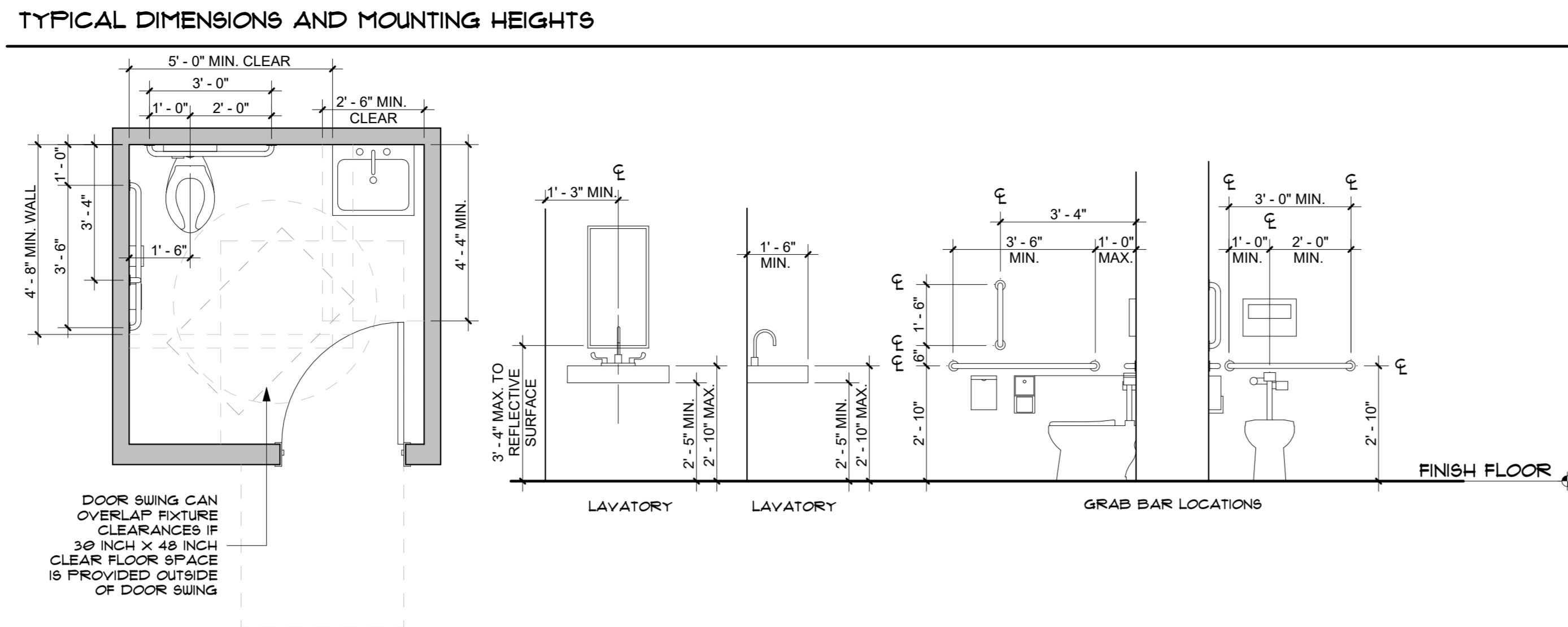
CONSULTANT CONTACTS	
MEP CONSULTANT: PRECISION ENGINEERING GROUP, LLC 5800 E SKELLEY DR SUITE 1100 TULSA, OKLAHOMA 74135 P(918) 143-3000	



SHEET INDEX	
SHEET NUMBER	SHEET NAME
GENERAL	
CS	COVER SHEET
G001	PROJECT INFORMATION AND ADAAG INFO AND GUIDELINES
G002	LIFE SAFETY PLAN
ARCHITECTURAL	
A0101	SITE PLAN
AD101	DEMOLITION PLAN - FIRST FLOOR
AD121	DEMOLITION CEILING PLAN - FIRST FLOOR
A101	FLOOR PLAN
A121	REFLECTED CEILING PLAN - FIRST FLOOR
A401	DETAILS
MECHANICAL	
MF101	MECHANICAL & PLUMBING DEMOLITION PLAN
M001	MECHANICAL GENERAL NOTES, LEGENDS, & SYMBOLS
M100	MECHANICAL PLANS
M200	MECHANICAL SCHEDULES & DETAILS
PLUMBING	
P001	PLUMBING GENERAL NOTES, LEGENDS, & SYMBOLS
PF10	PLUMBING WASTE & VENT PLAN
PI01	PLUMBING SUPPLY CHAINS
SHEET INDEX	
SHEET NUMBER	SHEET NAME
GENERAL	
E200	PLUMBING SCHEDULES
ELECTRICAL	
ED100	ELECTRICAL DEMOLITION
E001	ELECTRICAL GENERAL NOTES & SYMBOLS
E100	LIGHTING PLAN
E200	POWER PLAN
E300	ONE-LINE DIAGRAM & PANEL SCHEDULES
E401	ELECTRICAL SPECIFICATION
E402	ELECTRICAL SPECIFICATION
FIRE PROTECTION	
FP100	FIRE PROTECTION PLAN
FP200	FIRE PROTECTION NOTES & DETAILS

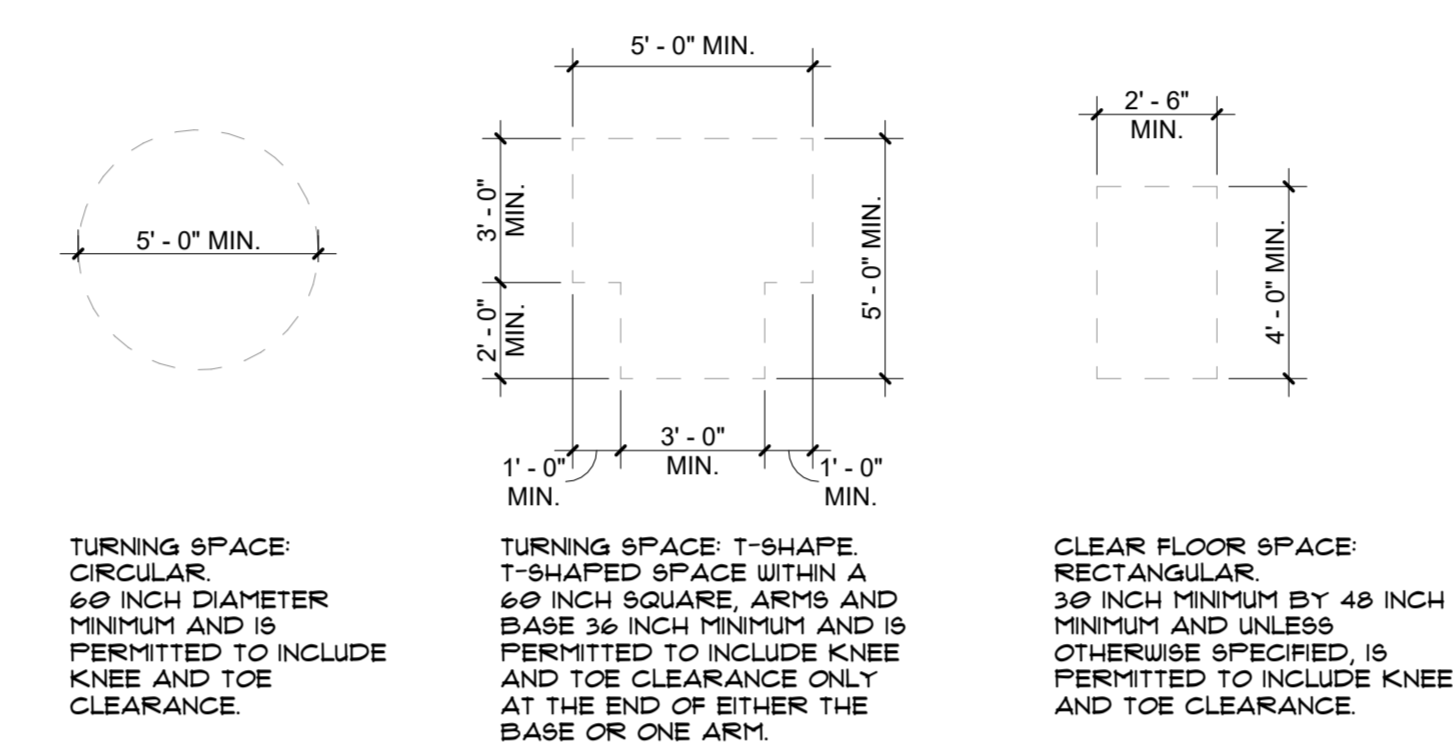
DOOR NOTES

- DOORS SHALL NOT REQUIRE A KEY OR SPECIAL KNOWLEDGE FOR OPERATION.
- DOORS SHALL MEET ALL ACCESSIBILITY REQUIREMENTS OF ICC A117.1 - 2009 FOR OPERATIONS
- DOORS SHALL ALLOW FOR UNLATCHING WITHOUT MORE THAN ONE OPERATION.
- EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
- EXISTING HARDWARE TO BE REPLACED AS NEEDED TO MEET ALL ACCESSIBILITY REQUIREMENTS.



DOOR SWING CAN OVERLAP FIXTURE CLEARANCES IF 36 INCH X 48 INCH CLEAR FLOOR SPACE IS PROVIDED OUTSIDE OF DOOR SWING

TURNING RADIUS AND CLEAR SPACE



TURNING SPACE CIRCULAR 60 INCH DIAMETER MINIMUM AND IS PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE.

TURNING SPACE T-SHAPE T-SHAPE SPACE WITHIN A 60 INCH SQUARE ARMS AND BASE 36 INCH MINIMUM AND IS PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE ONLY AT THE END OF EITHER THE BASE OR ONE ARM.

CLEAR FLOOR SPACE RECTANGULAR 36 INCH MINIMUM BY 48 INCH MINIMUM AND UNLESS OTHERWISE SPECIFIED, IS PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE.

SYMBOLS LEGEND

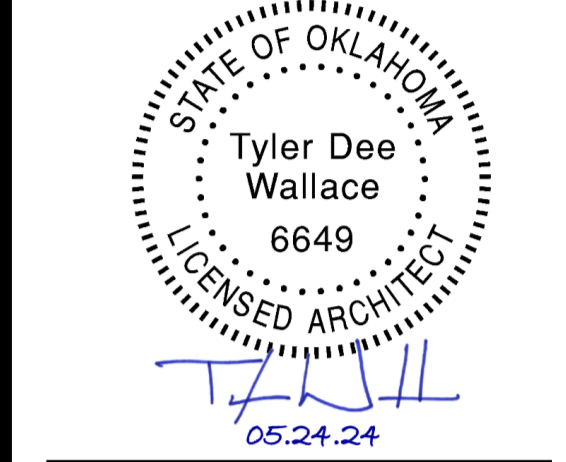
VIEW TITLE	A TITLE 1/8" = 1'-0"
VIEW TITLE WITH REFERENCE	A TITLE 1/8" = 1'-0" REF FROM: R / R101
WALL SECTION SYMBOL	
ENLARGED FLOOR PLAN OR PLAN DETAIL REFERENCE	
MATCHLINE & REFERENCES	
INTERIOR ELEVATION	
ROOM NAME ROOM NUMBER	ROOM NAME 101
AREA NAME AREA SQUARE FEET AREA OCCUPANCY	AREA NAME 150 SF 150
PARTITION TYPE SYMBOL	
DOOR TAG & RATING	101 20
WINDOW / STOREFRONT TAG	
MATERIAL TAG	
EQUIPMENT TAG	
PLAN NORTH ARROW	
GRAPHIC SCALE	
ELEVATION OR HEIGHT SYMBOL	
FLOORING TRANSITION	
CENTERLINE	
OPEN TO STRUCTURE	
ALIGN FINISHES	
REVISION EXTENTS & TAG	

GENERAL DEFINITIONS

ALIGN	TO ACCURATELY LOCATE FACE BASED ON ADJACENT ITEMS OR CONSTRUCTION.
CLEAR	MINIMUM DIMENSION BETWEEN FINISHED CONDITION, SHALL BE TREATED AS A PRIORITY TO HOLD BEFORE OTHER DIMENSIONS.
MAXIMUM	THE CONDITION MAY NOT VARY TO A DIMENSION GREATER THAN THAT SHOWN WITHOUT THE APPROVAL OF THE ARCHITECT.
MINIMUM	THE CONDITION MAY NOT VARY TO A DIMENSION SMALLER THAN THAT SHOWN WITHOUT THE APPROVAL OF THE ARCHITECT.
SIMILAR	NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES. DETAILS AND NOTES ARE TYPICAL. SIMILAR DETAILS AND NOTES APPLY IN SIMILAR CONDITIONS. THE WORD "SIMILAR" MEANS THAT ITEMS IN EACH CASE ARE TO BE SEPARATELY WORKED OUT TO SUIT CONDITIONS IN A MANNER LIKE OR SIMILAR TO THE EXAMPLE REFERRED TO AND DOES NOT MEAN IDENTICAL.
TYPICAL	THE CONDITION APPLIES TO THE SAME CONDITIONS THROUGHOUT UNLESS NOTED OTHERWISE.

GENERAL PROJECT NOTES

- GENERAL NOTES ARE TYPICAL FOR AREAS OF WORK.
- REFER TO COMPLETE SET OF CONSTRUCTION DOCUMENTS FOR ALL PROJECT NOTES.
- THE CONTRACT DOCUMENTS IN THEIR ENTIRETY ARE THE RESPONSIBILITY OF ALL TRADES. WHERE REQUIREMENTS ARE SHOWN IN ONE SECTION OR THE SPECIFICATIONS OR DRAWINGS BUT NOT ANOTHER, THE CONTRACTOR IS NOT RELIEVED FROM PROVIDING COMPLETELY FINISHED, COORDINATED AND FUNCTIONAL SYSTEMS.
- ANY MISCELLANEOUS ITEMS OR MATERIALS NOT SPECIFICALLY NOTED, BUT REQUIRED FOR THE PROPER EXECUTION, INSTALLATION, OR PERFORMANCE OF THE WORK, SHALL BE PROVIDED BY THE CONTRACTOR.
- CONTRACTOR IS RESPONSIBLE FOR THE LAYOUT AND COORDINATION OF DIMENSIONS IN THE FIELD.
- THE PRESENCE OF THE ARCHITECT OR AN ARCHITECT'S REPRESENTATIVE ON THE JOB SITE DOES NOT IMPLY CONSENT OR APPROVAL OF THE WORK. THE CONTRACTOR SHALL CALL SPECIFIC ITEMS TO THE ATTENTION OF THE ARCHITECT IF THE CONTRACTOR WISHES TO OBTAIN THE ARCHITECT'S REVIEW.
- IF DISCREPANCIES OCCUR BETWEEN DRAWINGS OR BETWEEN THE DRAWINGS AND SPECIFICATIONS, NOTIFY THE ARCHITECT FOR RESOLUTION PRIOR TO PROCEEDING.
- DO NOT SCALE THE DRAWINGS. WRITTEN DIMENSIONS GOVERN. IF CRITICAL DIMENSIONS DO NOT APPEAR ON CONSTRUCTION DOCUMENTS, OR CONFLICT WITH DIMENSIONS ON OTHER DETAILS, NOTIFY THE ARCHITECT.
- VERIFY EQUIPMENT ROUGH-IN DIMENSIONS WITH MANUFACTURER FOR EQUIPMENT THAT IS EXISTING, REUSED OR FURNISHED BY OWNER.
- ALL PENETRATIONS THROUGH FLOORS, WALLS AND RATED ASSEMBLIES AS WELL AS ALONG SLAB PERIMETERS AND SEPARATION WALL PERIMETERS, SHALL BE SEALED AND PROTECTED WITH U.L. APPROVED ASSEMBLIES AND / OR PROTECTIVE DEVICES HAVING THE SAME OR GREATER TESTED RATING AS THAT REQUIRED FOR THE ASSEMBLY BEING PENETRATED. ALL PENETRATIONS TO BE PROTECTED TO MAINTAIN FIRE RATED ASSEMBLY INTEGRITY.
- PROVIDE ELECTROLYTIC PROTECTION / ISOLATION BETWEEN ALL DISSIMILAR METALS, WHERE THEY OCCUR TO PREVENT ELECTROLYTIC REACTION AND / OR CORROSION.
- PROVIDE ADEQUATE BLOCKING, BACKING OR STRUCTURAL SUPPORT AS REQUIRED TO PROPERLY INSTALL ALL MOUNTED ASSEMBLIES, INCLUDING ALL ATTACHED EQUIPMENT (OWNER AND CONTRACTOR FURNISHED ITEMS), PLUMBING FIXTURES, MILLWORK, AND CASEWORK.
- PROVIDE ALL TEMPORARY BRACING AND SHORING AS REQUIRED FOR CONTRACT WORK.
- PROTECT ALL NEWLY INSTALLED MATERIALS AND FINISHES UNTIL WORK IS FORMALLY ACCEPTED BY THE ARCHITECT OR THE OWNER'S REPRESENTATIVE AND TRANSFERRED TO THE OWNER.
- THE CONSTRUCTION SITE IS TO BE KEPT CLEAN AND FREE OF DEBRIS. THE CONTRACTOR IS RESPONSIBLE FOR ALL PHASING, SECURING, HANDLING, TRANSPORTING AND DISPOSING OF DEBRIS.
- COORDINATE STAGING AND STORAGE AREAS, AND LOCATIONS OF TEMPORARY FACILITIES WITH OWNER.
- COORDINATE LOCATIONS OF CONSTRUCTION DUMPSTER ON SITE AND ACCESS TO BUILDINGS WITH OWNER.
- PROVIDE DUST PROTECTION OF THE AREA OUTSIDE OF CONSTRUCTION AND DEMOLITION LIMITS.
- PROVIDE TEMPORARY BARRICADES AND OTHER PROTECTION AS REQUIRED.
- LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. UTILITIES DISTURBED BY THE CONTRACTOR SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR REPAIR ACCORDING TO THE OWNER'S SPECIFICATIONS AND REQUIREMENTS AT NO COST TO THE OWNER.
- SUBMIT A REQUEST TO INTERRUPT ANY SERVICES TO OWNER IN WRITING, 36 HOURS IN ADVANCE OF PROPOSED INTERRUPTION. REQUEST SHALL STATE REASON, DATE, EXACT TIME OF, AND APPROXIMATE DURATION OF SUCH INTERRUPTION.
- VERIFY THE EXISTENCE AND LOCATION OF UTILITIES PRIOR TO STARTING WORK.
- MAINTAIN UTILITY SERVICES AND PROTECT THEM AGAINST DAMAGE DURING CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE UTILITIES - KNOWN AND UNKNOWN (OVERHEAD AND BURIED) WHICH MAY OCCUR DUE TO THEIR ACTION OR LACK OF ACTION ON THE PROJECT SITE DURING CONSTRUCTION OPERATIONS. CONTRACTOR SHALL SEEK ASSISTANCE OF LOCAL UTILITIES IN LOCATING THE UTILITIES PRIOR TO PERFORMING OPERATIONS IN ANY AREA.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE OWNER'S SECURITY REQUIREMENTS FOR THE AREA OF CONSTRUCTION.
- INSTALL ALL NEW MATERIALS AND EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS.
- ALL NEW BUILDING MATERIALS AND PRODUCTS SHALL NOT CONTAIN LEAD, CADMIUM, OR ASBESTOS.
- KEYNOTES WHERE INDICATED ARE FOR REFERENCE ONLY AND MAY NOT BE AT ALL LOCATIONS THAT CORRESPOND TO THAT NOTE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITY OF MATERIALS REQUIRED FOR DEMOLITION AND NEW CONSTRUCTION.
- REPAIR ANY DAMAGE DUE TO CONSTRUCTION TRAFFIC OR OPERATIONS.
 - RETURN ALL DISTURBED LANDSCAPE AREAS DUE TO CONSTRUCTION ACTIVITY TO ORIGINAL CONDITION.
 - FINAL GRADE AND SOIL AREAS DISTURBED BY CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY APPROVALS, PERMITS AND INSPECTION PAYING REQUIRED FEES AND POSTING ANY REQUIRED BONDS, PRIOR TO BEGINNING ANY DEMOLITION OR CONSTRUCTION.
- FINAL COLOR SELECTIONS TO BE MADE BY OWNER / ARCHITECT UPON RECEIPT OF ALL MATERIAL SUBMITTALS. REVIEW CANNOT BEGIN UNTIL ALL MATERIALS HAVE BEEN RECEIVED.
- FINISH GRADE TO SLOPE AWAY FROM BUILDING, TYPICAL GRADE TO FACILITATE DRAINAGE.
- THE LOCATION OF DUCTS, PIPE AND EQUIPMENT, AS SHOWN ON THE DRAWINGS, ARE DIAGNOSTIC AND SCHEMATIC AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES BEFORE PERFORMING ANY WORK. LIGHT FIXTURE LOCATIONS SUPERSEDE HVAC DUCTWORK, GRILLES AND DIFFUSERS.
- CLEAN INTERIOR AND EXTERIOR OF ALL WINDOW GLAZING.
- PROVIDE NEW ESCUTCHEONS AT ALL PLUMBING PENETRATION AREAS AND FASTEN IN PLACE WITH JOINT SPACERS.
- NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE DRAWINGS. IN THE EVENT OF CONFLICT BETWEEN THE DRAWINGS OR BETWEEN A DRAWING AND SPECIFICATION ITEM, THE DRAWING OR SPECIFICATION REQUIRING THE GREATER EXTENT, LARGER NUMBER, OR HIGHER QUALITY SHALL GOVERN. NOTIFY ARCHITECT OF ANY DISCREPANCIES IN WRITING FOR RESOLUTION BEFORE PROCEEDING.
- COORDINATE ENVIRONMENTAL REMEDIATION REQUIREMENTS AND PROCEDURES WITH OWNER AND OWNER'S ENVIRONMENTAL CONSULTANT IF AND WHEN SITE CONDITIONS ARE PRESENT THAT REQUIRE ENVIRONMENTAL REMEDIATION. ARCHITECT'S CONSTRUCTION DOCUMENTS ARE NOT INTENDED TO PROVIDE REMEDIATION OR SATISFY REMEDIATION REQUIREMENTS AND SHALL NOT BE USED AS SUCH.
- SAND-BLASTING IS NOT PERMITTED.
- CONTRACTOR SHALL MAINTAIN A CURRENT RECORD SET OF ALL CONTRACT DOCUMENTS AND RETURNED SUBMITTALS ON SITE FOR THE DURATION OF THE PROJECT. ANY CHANGES MADE TO THE CONTRACT DOCUMENTS SHALL BE PROMPTLY INCORPORATED INTO THE CURRENT RECORD SET.
- WHEN IN DOUBT, SUBMIT A REQUEST FOR INFORMATION (RFI) TO THE ARCHITECT IN WRITING FOR ALL QUESTIONS, INCLUDING BUT NOT LIMITED TO CLARIFICATIONS, INTERPRETATIONS, OR WHERE FIELD CONDITIONS MAY IMPACT DESIGN INTENT, PRIOR TO PROCEEDING WITH THE WORK.



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G001 PROJECT INFORMATION AND ADAAG INFO AND GUIDELINES

GH2 ARCHITECTS

GH2.COM

GH2 PROJECT NUMBER:
20230239

ISSUE DATE:
04/29/2024

ISSUE:
CONSTRUCTION DOCUMENTS

OTHER ISSUE DATES:
NO. DESCRIPTION DATE

SHEET NAME:
PROJECT INFORMATION AND ADAAG INFO AND GUIDELINES

SHEET NUMBER:
G001

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DETAILED CODE INFORMATION

USE OR OCCUPANCY

309.1.2 SHALL ASSEMBLY SPACE CLASSIFIED AS PART OF B OCCUPANCY
 302.1 BUSINESS GROUP
 509.3 SINGLE USE, NO SEPARATION REQUIRED

GENERAL BUILDING HEIGHTS AND AREAS

NON-SEPARATED USE GROUPS: B: TYPE IIB NON-COMBUSTIBLE FULLY-SPRINKLERED

TABLE 504.3 ALLOWABLE BUILDING HEIGHT 15 FEET ACTUAL HEIGHT: 14 FEET

TABLE 504.2 ALLOWABLE NUMBER OF STORIES 4 STORIES ACTUAL STORIES: 1

TABLE 506.2 ALLOWABLE BUILDING AREA 32,000 SF ACTUAL AREA: 6,378 SQUARE FEET

TABLE 506.2.1 AREA LIMITATIONS
 AGGREGATE ACCESSORY OCCUPANCIES SHALL NOT OCCUPY MORE THAN 10 PERCENT OF THE BUILDING AREA OF THE STORY IN WHICH THEY ARE LOCATED AND SHALL NOT EXCEED THE TABULAR VALUES IN TABLE 503, WITHOUT AREA INCREASES IN ACCORDANCE WITH SECTION 506 FOR SUCH ACCESSORY OCCUPANCIES.

TYPE OF CONSTRUCTION

TABLE 602.3 TYPE IIB FULLY-SPRINKLERED

TABLE 601 STRUCTURAL ELEMENT FIRE RESISTANCE RATING

TABLE 602 FIRE RESISTANCE RATING REQUIRED FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE

FIRE AND SMOKE PROTECTION

1013.0 FIRE AREAS

TABLE 1013.10 FIRE-RESISTANT RATING REQUIREMENTS FOR FIRE BARRIERS - 2 HOURS
 15.1 FIRE-RESISTANT JOINT SYSTEMS

TABLE 116.5 FIRE DOOR AND FIRE SHUTTER FIRE PROTECTION RATINGS
 FIRE BARRIER (1 HR)

INTERIOR FINISHES

TABLE 903.11 INTERIOR FINISH REQUIREMENTS: TYPE IIB

EXIT ENCLOSURES / EXIT PASSAGEWAYS CLASS B MATERIALS
 CORRIDORS PROVIDING EXIT ACCESS CLASS C MATERIALS
 ROOMS OR ENCLOSED SPACES CLASS C MATERIALS
 NOTE: CLASS C MATERIALS PERMITTED IN PLACES OF ASSEMBLY WITH AN OCCUPANT LOAD OF 300 PERSONS OR LESS

FIRE PROTECTION SYSTEMS

506 PORTABLE FIRE EXTINGUISHERS PER NFPA 10 - 3 PROVIDED

901.2 FIRE ALARM AND DETECTION SYSTEM
 AN APPROVED FIRE ALARM SYSTEM INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF THIS CODE AND NFPA 72 SHALL BE PROVIDED IN NEW BUILDINGS AND STRUCTURES AND PROVIDE OCCUPANT NOTIFICATION.

901.2.2 EXCEPTION
 MANUAL FIRE ALARM BOXES ARE NOT REQUIRED WHERE THE BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED AND THE OCCUPANT NOTIFICATION APPLIANCES WILL ACTIVATE THROUGHOUT THE NOTIFICATION ZONES UPON SPRINKLER WATER FLOW

MEANS OF EGRESS

1005.3.2 OTHER EGRESS WIDTH / OCCUPANT 0.15 INCHES / OCCUPANT
 42 X 0.2 = 8.4" REQUIRED

TABLE 1006.2.1 SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY: FULLY-SPRINKLERED
 OCCUPANCY B
 MAX OCC LOAD / SPACE 49 OCC
 MAX COMMON PATH OF EGRESS TRAVEL DISTANCE 100 FEET

TABLE 1012.2 SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY FOR GROUP B CANNOT EXCEED AN OCCUPANT LOAD OF 49.

TABLE 1011.2 EXIT ACCESS TRAVEL DISTANCE
 OCCUPANCY B, WITH SPRINKLER 300 FEET

1020.4 DEAD END CORRIDOR EXCEPTIONS
 2. IN OCCUPANCIES IN GROUPS B, WHERE THE BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM, THE LENGTH OF THE DEAD-END CORRIDORS SHALL NOT EXCEED 50 FEET

TABLE 1004.1.1 STORAGE, MECHANICAL EQUIPMENT ROOMS 300 GSF / OCCUPANT
 386 GSF / 300"
 BUSINESS 150 GSF / OCCUPANT
 5,916 GSF / 150" = 40 OCCUPANTS

TOTAL OCCUPANT LOAD = 42 OCCUPANTS

NOTE: ALL LIFE SAFETY AND CODE COMPLIANCE INFORMATION PROVIDED SHALL BE INCORPORATED INTO THE PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INCLUDE CODE COMPLIANCE MEASURES INDICATED AND SPECIFIED AS PART OF THE PROJECT COST. SOME PROVISIONS MAY BE IN EXCESS OF MINIMUM CODE REQUIREMENTS.

SUMMARY AND APPLICABLE CODES

SUMMARY:
 THE BUILDING DEPICTED IN THESE CONSTRUCTION DOCUMENTS IS A SPRINKLERED SINGLE STORY OFFICE BUILDING.

TOTAL SQUARE FOOTAGE: 6,378 SQUARE FEET

OCCUPANCY TYPE: BUSINESS

NUMBER OF STORIES: ONE

FULLY SPRINKLERED: YES

APPLICABLE CODES:
 2018 INTERNATIONAL BUILDING CODE (IBC)
 2018 INTERNATIONAL EXISTING BUILDING CODE (IEBC)
 2018 INTERNATIONAL PLUMBING CODE (IPC)
 2011 NATIONAL ELECTRIC CODE (NEC)
 2018 INTERNATIONAL FIRE CODE (IFC)
 2018 INTERNATIONAL MECHANICAL CODE (IMC)

LIFE SAFETY HATCH LEGEND

BUSINESS

STORAGE

PLUMBING FIXTURE COUNT

MINIMUM NUMBER OF PLUMBING FACILITIES PER FLOOR (B)

TABLE 2902.1

TOTAL OCCUPANTS: 42 OCCUPANTS: 21 MEN, 21 WOMEN

FIXTURE TYPE	IBC REQ'D	PROVIDED
WATER CLOSETS	M/W: 1/25	M: 1 W: 2
LAVATORIES	M/W: 1/40	M/W: 3
DRINKING FOUNTAIN	1/100	1
SERVICE SINK	1 REQ'D	1

CODE PLAN LEGEND

- LINE OF TRAVEL
- TRAVEL DISTANCE TO EXITS = MAX 300' (IBC 1011.2)
- COMMON PATH OF TRAVEL = 100' MAX (IBC 1006.2.1)
- DEAD ENDS = 50' MAX (IBC 1020.4)
- FIRE EXTINGUISHER = 75' MAX TRAVEL DISTANCE TO EXTINGUISHER (NFPA 10, 3-2.1)
- EXIT SIGN REFER TO ELECTRICAL AND REFLECTED CEILING PLANS FOR EXIT SIGN LOCATIONS. PROVIDE 3 ADDITIONAL EXIT SIGNS TO BE LOCATED AS DIRECTED BY ARCHITECT.
- EXIT

DOOR EXIT WIDTH

42 OCC • 0.15" = 6.3" REQ'D
 3' - 0" PROVIDED

DOOR MARK DOOR WIDTH CALCULATION
 3' - 0" REQUIRED DOOR WIDTH
 3' - 0" PROVIDED

PARTITION TYPES GRAPHICS CONVENTION

TYPICAL PARTITION WITH NO SPECIAL MATERIALS OR RATINGS

EXISTING PARTITION

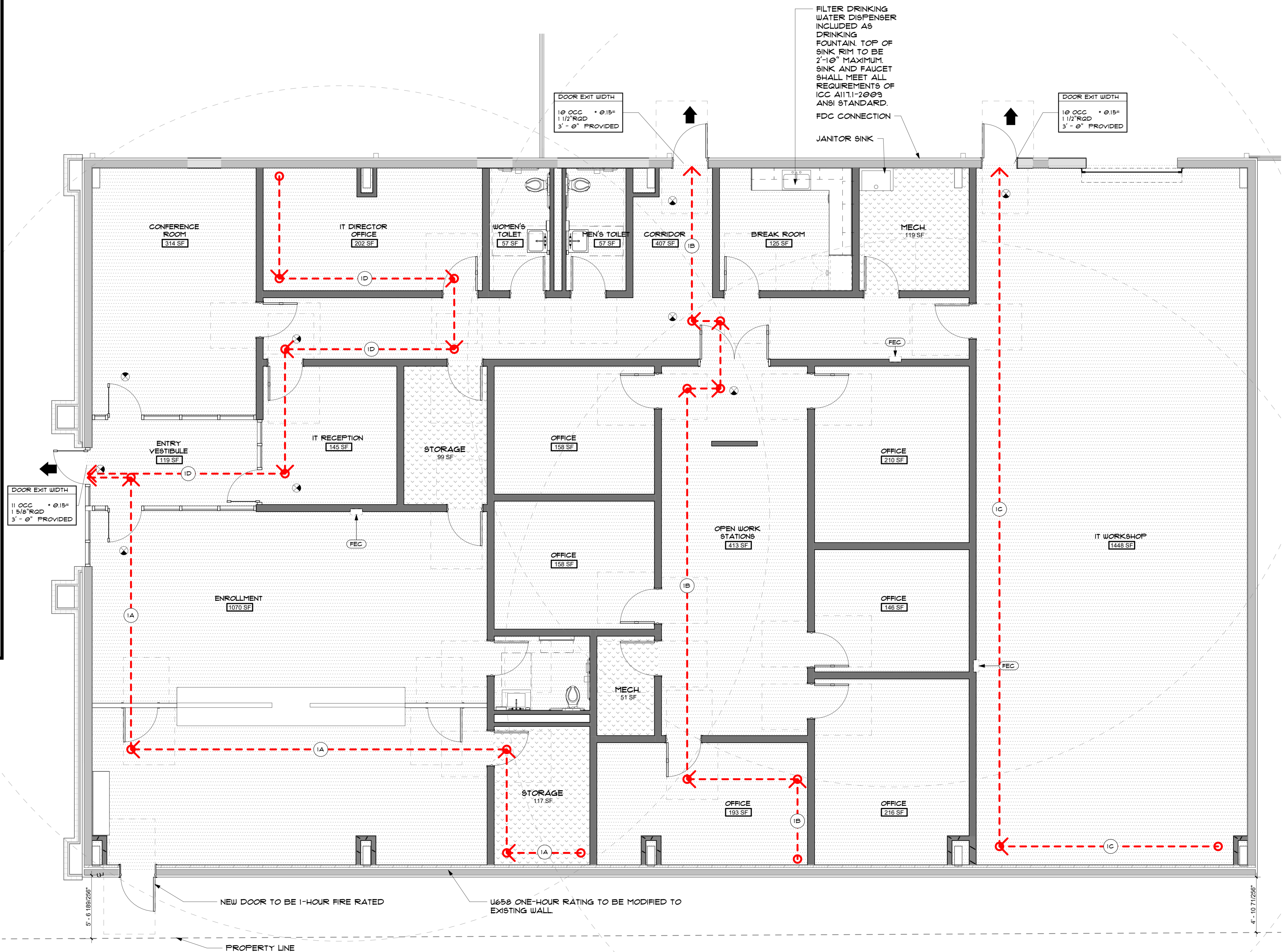
NEW PARTITION

FIRE RATED PARTITIONS USE STRIPES TO CONVEY 1-HR FIRE RATING

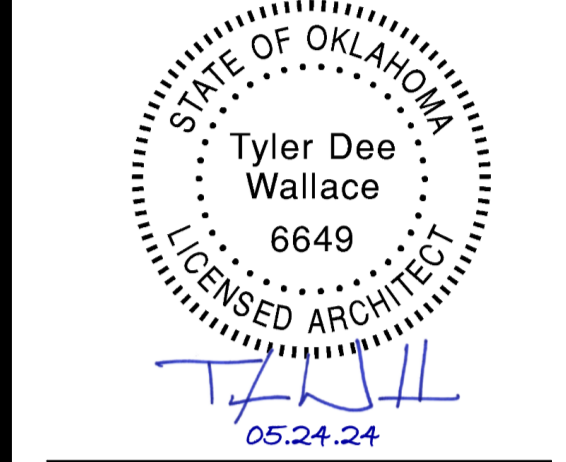
TRAVEL DISTANCE

PER IBC 2018, TABLE 1011.2, 300' MAXIMUM

PATH ID	TRAVEL DISTANCE
A	76' - 1 5/8"
B	75' - 0"
C	78' - 1 1/2"
D	73' - 6 3/8"



A FIRST FLOOR CODE PLAN
 1/4" = 1'-0"



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G002
 LIFE SAFETY PLAN

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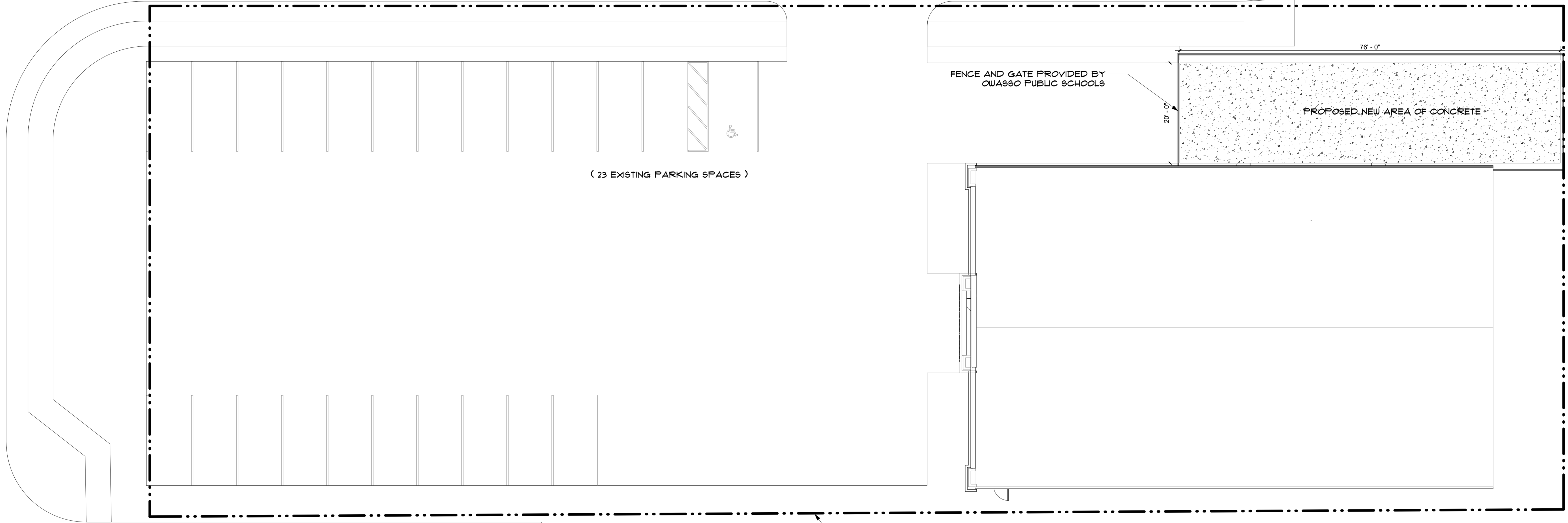
SHEET NAME:
LIFE SAFETY PLAN

SHEET NUMBER:
G002

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NORTH MAIN STREET

EAST 14TH STREET



(23 EXISTING PARKING SPACES)

FENCE AND GATE PROVIDED BY
OWASSO PUBLIC SCHOOLS

PROPOSED NEW AREA OF CONCRETE

PROPERTY LINE

GH2
ARCHITECTS



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AS101
SITE PLAN

GH2 ARCHITECTS

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GH2 PROJECT NUMBER:

20230239

ISSUE DATE:

04/29/2024

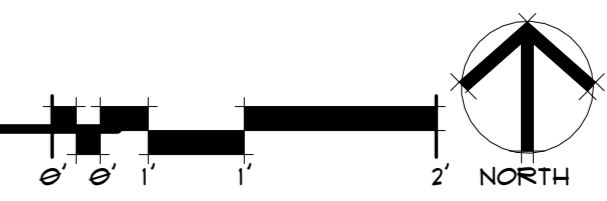
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**CONSTRUCTION
DOCUMENTS**

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NO.	DESCRIPTION	DATE
1	Addendum 01	05.24.2024

A SITE PLAN
1" = 10'-0"



SHEET NAME:
SITE PLAN

SHEET NUMBER:
AS101

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DEMOLITION GENERAL NOTES

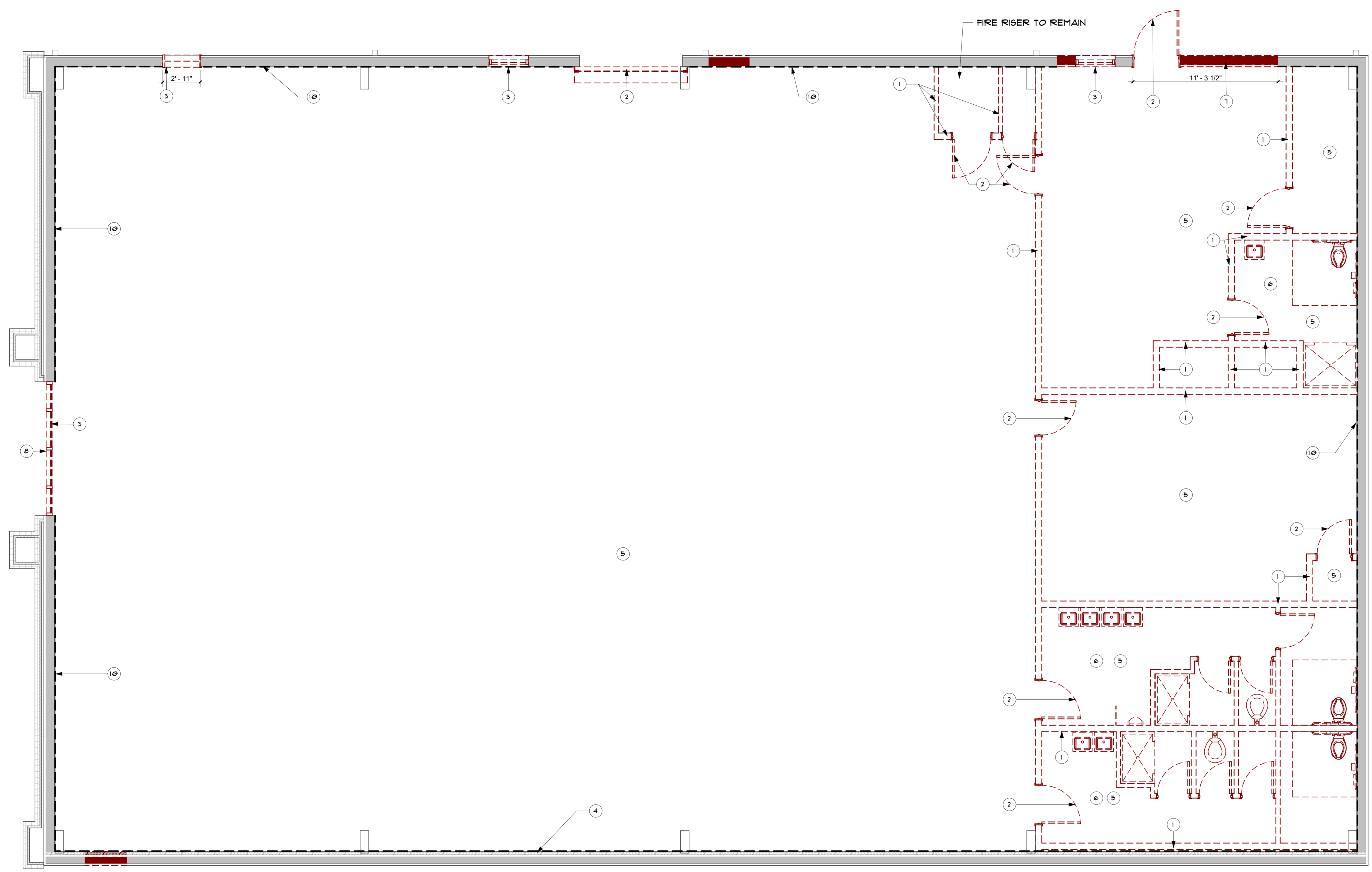
1. COORDINATE ALL DEMOLITION WITH NEW CONSTRUCTION AND RENOVATION WORK PRIOR TO START. EXTENT AND LOCATION OF BUILDING, SITE AND MECHANICAL, ELECTRICAL AND PLUMBING SYSTEM DEMOLITION IS APPROXIMATE. VERIFY AND COORDINATE EXACT EXTENTS AND START AND STOP POINTS WITH NEW WORK.
2. ITEMS SHOWN ON DEMOLITION PLANS WITH DASHED LINEWORK ARE TO BE REMOVED. SEE ADDITIONAL NOTES ON FLOOR PLAN.
3. VERIFY QUANTITY OF MATERIALS REQUIRED FOR DEMOLITION AND NEW CONSTRUCTION.
4. DISPOSE OF ALL ITEMS IN A LEGAL MANNER.
5. LOCATE AND PROTECT ANY STRUCTURAL COMPONENTS THAT ARE WITHIN WALLS, CEILINGS OR FLOORS, UNLESS SPECIFICALLY IDENTIFIED TO BE REMOVED.
6. REMOVE EXISTING INTERIOR PARTITIONS AS INDICATED ON PLAN TO ACCOMMODATE NEW CONSTRUCTION. COORDINATE WITH MECHANICAL AND ELECTRICAL DRAWINGS FOR REUSED OR RELOCATED DEVICES OR FIXTURES. CORRECT IF A WALL IS OR IS NOT LOAD BEARING PRIOR TO REMOVING ANY PORTION. IF A WALL IS FOUND TO BE LOAD BEARING, AND IS NOT ADDRESSED IN THE DRAWINGS, CONTACT THE ARCHITECT FOR DIRECTION TO RETAIN THE STRUCTURAL INTEGRITY OF THE SUPPORTED STRUCTURE.
7. ALL EXISTING WALLS, FLOORS AND CEILINGS TO REMAIN SHALL BE PATCHED AND REPAIRED IF DAMAGE OCCURS DURING DEMOLITION OR CONSTRUCTION. PATCH AND REPAIR EXISTING SUBSTRATES THAT ARE TO REMAIN AS REQUIRED TO PREPARE THEM FOR NEW WORK AND FINISHES AS DENIED ELSEWHERE IN THE DOCUMENTS. REPAIR CRACKS AND / OR STRUCTURAL DAMAGE RESULTING FROM DEMOLITION SHALL BE TO THE SATISFACTION OF THE OWNER AND THE ARCHITECT.
8. DUST WALLS SHALL BE INSTALLED AS REQUIRED TO ISOLATE DEMOLITION AREA FROM OCCUPIED AREA. COORDINATE WITH OWNER. MAINTAIN FIRE EXITS AT ALL TIMES.
9. REMOVE EXISTING LIGHT FIXTURES AND CEILING IN THEIR ENTIRETY, UNLESS NOTED OTHERWISE. LOCATIONS OF EXISTING FIXTURES ARE BASED ON GENERAL FIELD OBSERVATIONS. CONTRACTOR TO FIELD VERIFY EXACT LOCATIONS OF FIXTURES AND REPORT ANY DISCREPANCIES TO THE ARCHITECT. DE-ENERGIZE CIRCUITS UNTIL READY FOR NEW LIGHTING. COORDINATE WITH ELECTRICAL DRAWINGS TO DETERMINE IF CIRCUITS WILL BE REUSED, RELOCATED, OR ABANDONED. REMOVE CONDUCTORS AND CONDUIT BACK TO SOURCE FOR CIRCUITS THAT WILL BE ABANDONED.
10. REMOVE ALL ABANDONED AND NON-OPERATIONAL CABLING ABOVE CEILING IN AREA OF WORK. TAKE CARE TO NOT CUT EXISTING DATA OR FIBER THAT IS TO REMAIN FOR THE FUNCTIONING IT ROOM / SERVER. REMOVE ELECTRICAL PARTITIONS, TELEPHONE / DATA OUTLETS, LIGHT SWITCHES, AND OTHER DEVICES IN PARTITIONS TO BE DEMOLISHED. REMOVE WIRING BACK TO CLOSEST WALL TO REMAIN AND TERMINATE IN NEW JUNCTION BOX. ALL ELECTRICAL, TELEPHONES, DATA, AND PLUMBING ITEMS NOT REUSED SHALL BE REMOVED IN THEIR ENTIRETY.
11. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL DEMOLITION INFORMATION.
12. REMOVE ITEMS IDENTIFIED AS SALVAGED OR SCHEDULED FOR RE-USE. STORE IN PROTECTED AREA UNTIL REINSTALLATION. REPAIR DAMAGE CAUSED BY CARELESS REMOVAL OR IMPROPER STORAGE OR REPLACE SUCH ITEMS TO THE OWNER'S SATISFACTION.
13. REMOVE AND DISPOSE OF EXISTING FLOORING IN AREAS SHOWN TO BE REPLACED. REMOVE TO SUBSTRATE, LEAVING SURFACE READY FOR THE INSTALLATION OF NEW FINISH AS SCHEDULED. PATCH HOLES AND IMPERFECTIONS IN SUBSTRATE AS REQUIRED.
14. CONTACT ARCHITECT BEFORE REMOVING OR DEMOLISHING ANY EXISTING CONSTRUCTION OR ITEMS NOT SHOWN TO BE REMOVED.
15. REMOVE FIXTURES, RECEPTACLES, DEVICES, ETC. AS REQUIRED TO FACILITATE DEMOLITION. STORE DEVICES AND REINSTALL WHERE DIRECTED.
16. REMOVE ALL ITEMS FROM WALLS WITHIN AREAS OF WORK AND PREPARE FOR NEW WORK.
17. CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND FINAL CONDITION OF ALL EXISTING ADJACENT FINISHES TO REMAIN.
18. CONTACT ARCHITECT FOR ANY UNSEEN CONDITIONS OR UNCERTAIN AREAS THAT ARE NOT CLEARLY DENIED BY THE DOCUMENTS.
19. REMOVE ALL PLUMBING LINES TO A POINT BELOW THE FINISH SLAB. PLUG AND CAP ALL LINES TO ENSURE A LEAK FREE CONDITION, INCLUDING SEWER GASES.
20. COMPLY WITH REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION. DO NOT USE WATER WHEN IT MAY CREATE HAZARDOUS OR OBJECTIONABLE CONDITIONS SUCH AS FLOODING AND POLLUTION.
21. EXISTING BUILDINGS TO REMAIN IN WATERTIGHT CONDITION.
22. ANY MATERIALS TO BE RECLAIMED SHALL BE AT THE DISCRETION OF THE CONTRACTOR IF NOT INDICATED OR REQUIRED TO BE SALVAGED AND TURNED OVER TO THE OWNER.
23. VISIT THE EXISTING FACILITY TO DETERMINE THE EXTENT AND NATURE OF THE WORK AND THE CONDITIONS WITHIN WHICH THE WORK MUST BE ACCOMPLISHED. SUBMISSION OF BID WILL CONSTITUTE ACCEPTANCE OF EXISTING CONDITIONS.
24. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE CONSTRUCTION DOCUMENTS.
25. CONTRACTOR IS RESPONSIBLE FOR TESTING FOR LEAD BASED PAINT, AND MEETING LOCAL CODES GOVERNING METHODS OF REMOVING TOXIC MATERIALS AND TOXIC RESIDUE.
26. PROTECT ADJACENT SURFACES AND FEATURES FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO RESTORE ORIGINAL CONDITION ITEMS OR AREAS DAMAGED DURING CONSTRUCTION.

DEMOLITION LEGEND

- EXISTING TO REMAIN
- EXISTING TO BE REMOVED

DEMOLITION KEYNOTES

KEY NOTE NUMBER	KEY NOTE TEXT
1	REMOVE PARTITION IN ITS ENTIRETY, INCLUDING ALL ELECTRICAL DEVICES.
2	REMOVE DOOR, HARDWARE, AND FRAME ASSEMBLY IN ITS ENTIRETY.
3	REMOVE WINDOW SYSTEM.
4	REMOVE EXISTING METAL PANEL, PREPARE FOR 1-HOUR RATING.
5	REMOVE ALL ROOM FINISHES INCLUDING CEILING AND FLOORING, UNLESS NOTED OTHERWISE.
6	REMOVE ALL RESTROOM PLUMBING FIXTURES AND ACCESSORIES, INCLUDING TOILET PARTITIONS, MIRRORS, HAND WASHING ACCESSORIES, AND FLOOR DRAINS.
7	REMOVE PORTION OF EXTERIOR WALL - PREPARE AREA FOR NEW DOOR OR WALL OPENING.
8	REMOVE EXISTING EXTERIOR SIGNAGE AND RETURN TO OWNER.
9	REMOVE INTERIOR CEILING IN ITS ENTIRETY.
10	REMOVE EXISTING INTERIOR METAL PANEL IN ITS ENTIRETY.



A

FIRST FLOOR DEMOLITION PLAN

1/4" = 1'-0"

FLOOR PLAN GENERAL NOTES

- NEW WALL / PARTITION
- EXISTING WALL / PARTITION
- TYPICAL DOOR PLACEMENT, UNLESS NOTED OTHERWISE APPLIES TO SINGLE AND DOUBLE DOORS
- ALIGN FINISHED EDGES, UNLESS NOTED OTHERWISE
- FLOORING TRANSITION

- ALL INTERIOR DIMENSIONS ARE TO THE FACE OF STUD, UNLESS NOTED OTHERWISE. DO NOT SCALE DRAWINGS. CONTACT ARCHITECT FOR CLARIFICATION.
- ALL EXTERIOR DIMENSIONS ARE FROM FACE OF EXTERIOR FINISH, UNLESS NOTED OTHERWISE.
- UNLESS DIMENSIONED OTHERWISE, ALIGN PARTITIONS ON GRIDLINES WITH CENTERLINE OF STUD.
- INTERIOR PARTITIONS ARE TYPE PA0 UNLESS NOTED OTHERWISE. REFER TO SHEET A601 FOR PARTITION TYPES.
- WHEN WALL PARTITIONS OF DIFFERENT FIRE OR SOUND RATINGS INTERSECT, THE HIGHEST RATED PARTITION SHALL TAKE PRECEDENCE.
- WHERE EQUIPMENT IS SHOWN IN DASHED AND / OR HALFTONE, IT SHALL BE OWNER FURNISHED, OWNER INSTALLED, UNLESS NOTED OTHERWISE. EQUIPMENT, WHERE SHOWN, IS FOR COORDINATION AND BACKING PURPOSES ONLY. CONFIRM MAKES AND MODELS WITH OWNER. VERIFY EQUIPMENT ROUGH-IN DIMENSIONS WITH MANUFACTURER. COORDINATE UTILITIES FOR EQUIPMENT WITH OWNER'S EQUIPMENT AND MEP DOCUMENTS. CONTRACTOR TO VERIFY AND COORDINATE ALL EQUIPMENT WITH OWNER INCLUDING BUT NOT LIMITED TO WEIGHT, LOCATION, BACKING REQUIREMENTS, FLOORING AND CLEARANCES.
- ALL INTERIOR PARTITIONS TO BE PAINTED PT-1, UNLESS NOTED OTHERWISE.
- PROVIDE BLOCKING AT LOCATIONS INDICATED. PROVIDE BLOCKING. REFER TO TECHNOLOGY DRAWINGS FOR SIZES.
- EXPOSED SURFACES OF CABINETS FINISHED TO MATCH FACE.
- ALL COUNTERTOPS SHALL HAVE BUSHED EDGE CORNERS AT ALL EXPOSED EXTERIOR CORNERS.
- ALL EXPOSED PIPES UNDER RESTROOM SINKS TO HAVE INSULATION WRAP.
- REFER TO SHEET A401 FOR WINDOW AND DOOR SCHEDULE AND DETAILS.

FINISH FLOOR PLAN GENERAL NOTES

PAINT

- ALL NEW DOORS, MATERIALS AND PRODUCTS SHALL NOT CONTAIN LEAD, CADMIUM, OR ASBESTOS.
- RECYCLE ALL ELIGIBLE FINISH MATERIALS PER MANUFACTURER'S RETURN OR RECLAMATION PROGRAM.
- REFER TO ROOM FINISH SCHEDULE FOR ADDITIONAL INFORMATION AT NON-ELEVATED AREAS.
- PROVIDE CORNER AND END-WALL GUARDS AT OUTSIDE GYPSUM BOARD CORNERS.
- WALL FINISHES TO HAVE MINIMUM CLASS "A" RATING FOR FLAME SPREAD AND SMOKE DEVELOPMENT.
- FINISH HATCHES AND PATTERNS ARE FOR GRAPHIC PURPOSES ONLY, AND ARE NOT INTENDED TO SHOW EXACT PATTERN OR SIZES OF FINISHES.
- PROVIDE TILE BACKER BOARD AT ALL WALLS SHOWN TO RECEIVE TILE.
- PROVIDE SEALANT AT ALL TILE INSIDE CORNERS AND AT DOOR FRAMES. COLOR TO MATCH ADJACENT GROUT COLOR.

TILE

- LEVEL LINE OF TILE INSTALLATION TO BE TAKEN AT THE LOW POINT OF THE FLOOR SLAB TO ALLOW TILE TO BE FLUSH WITH VARIATION IN FLOOR SLAB.
- USE SCHLUTER QUADREC TRANSITION STRIP FOR ALL OUTSIDE CORNERS OF TILE CONDITIONS AND UNFINISHED EXPOSED EDGES OF TILE INSTALLATION. HITER OUTSIDE CORNERS OF TRIM. BUTT JOINTS ARE NOT ALLOWED. FINISH SATIN NICKEL.
- TILE SOFT JOINTS TO MATCH GROUT COLOR. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. INSTALL TILE AT WALLS WITH FULL PIECE AT FLOOR CUTS TO OCCUR AT CEILING IF NEEDED, UNLESS NOTED OTHERWISE.

CABINETS

- CONTRACTOR TO FIELD MEASURE AND VERIFY ALL DIMENSIONS PRIOR TO FABRICATION AND INSTALLATION OF CABINETS.
- REFER TO FLOOR PLANS AND INTERIOR ELEVATIONS FOR EXACT LOCATIONS OF CABINETS.
- COUNTERTOPS AND BACKSPASHES TO RECEIVE CLEAR SEALANT AT WALL.
- ALL SOLID SURFACE COUNTERTOPS TO BE SS-1, UNLESS NOTED OTHERWISE.
- PROVIDE SIDE, TOP, AND BOTTOM FILLER PIECES AS REQUIRED TO COMPLETE THE CABINETS, AS INDICATED ON THE PLANS AND INTERIOR ELEVATIONS.
- PROVIDE FINISHED END PANELS AT ALL EXPOSED CABINET ENDS, KNEE SPACES, AND BANQUETTE ENDS.
- PROVIDE FILLER STRIPS TO MATCH ADJACENT CABINETS AT ALL NOTED LOCATIONS. MAXIMUM FILLER WIDTH 3 INCHES.

PARTITION TYPES NAMING CONVENTION

STRUCTURE

B 1 5/8" METAL STUD
D 3 5/8" METAL STUD
F 6" METAL STUD

SUB-TYPE

A 6" ABOVE CEILING, BRACED HEAD OR STR TO STRUCTURE ABOVE (IF UNDER 24")
B 1/2" UNDERSIDE OF STRUCTURE ABOVE
F FURRING 6" ABOVE CEILING
P PARTIAL HEIGHT
S SOUND PARTITION

FIRE RESISTANCE RATING

0 NON-RATED
1 1 HOUR

EXAMPLE

D 3 5/8" METAL STUD
S = SOUND PARTITION
1 = 1 HR FIRE RESISTANCE RATING
X = SMOKE RATED PARTITION
FIRE RATING

PARTITION TYPES GRAPHICS CONVENTION

TYPICAL PARTITION WITH NO SPECIAL MATERIALS OR RATINGS

EXISTING PARTITION

NEW PARTITION

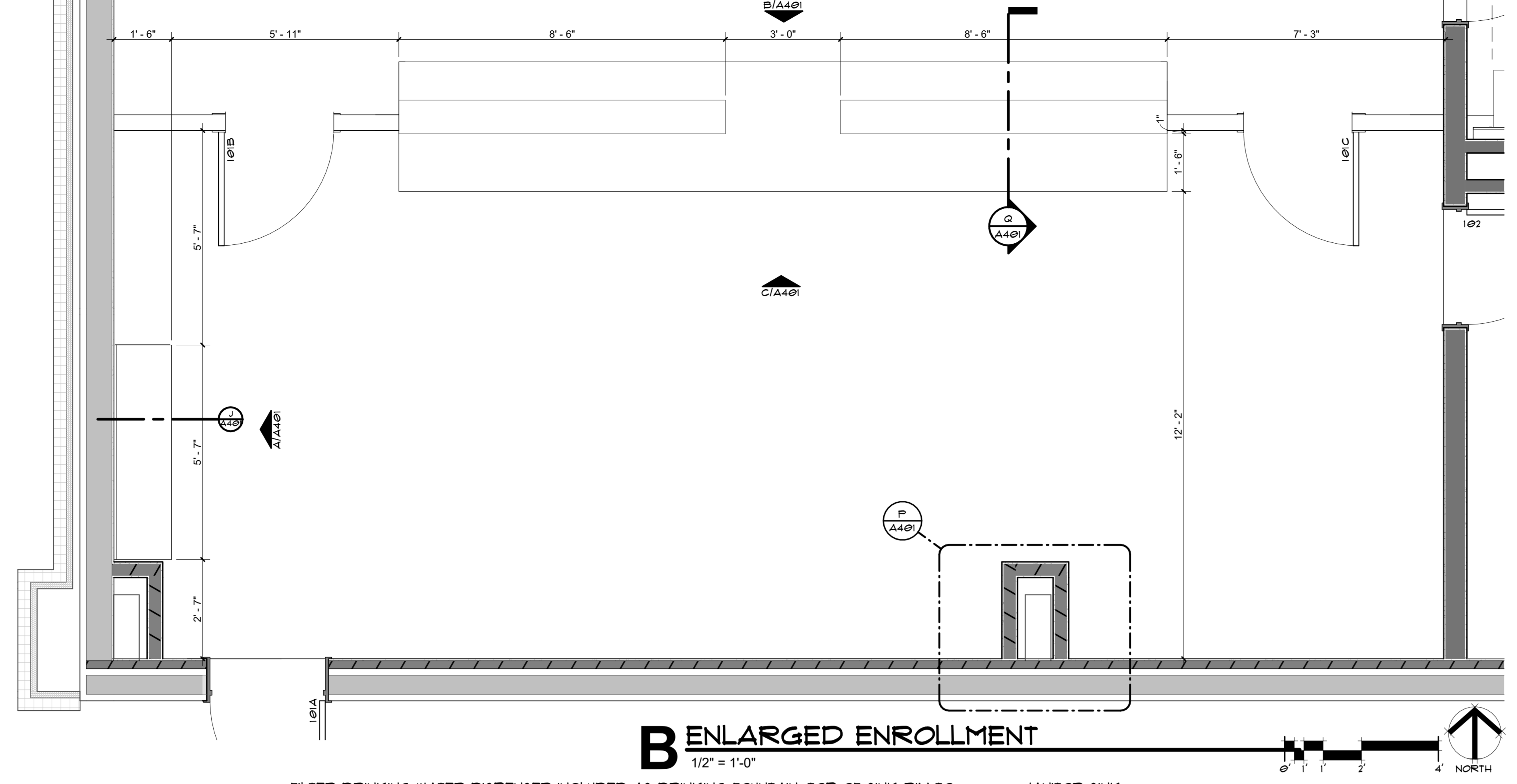
FIRE RATED PARTITIONS USE STRIPES TO CONVEY 1-HR FIRE RATING

INTERIOR FINISH SCHEDULE

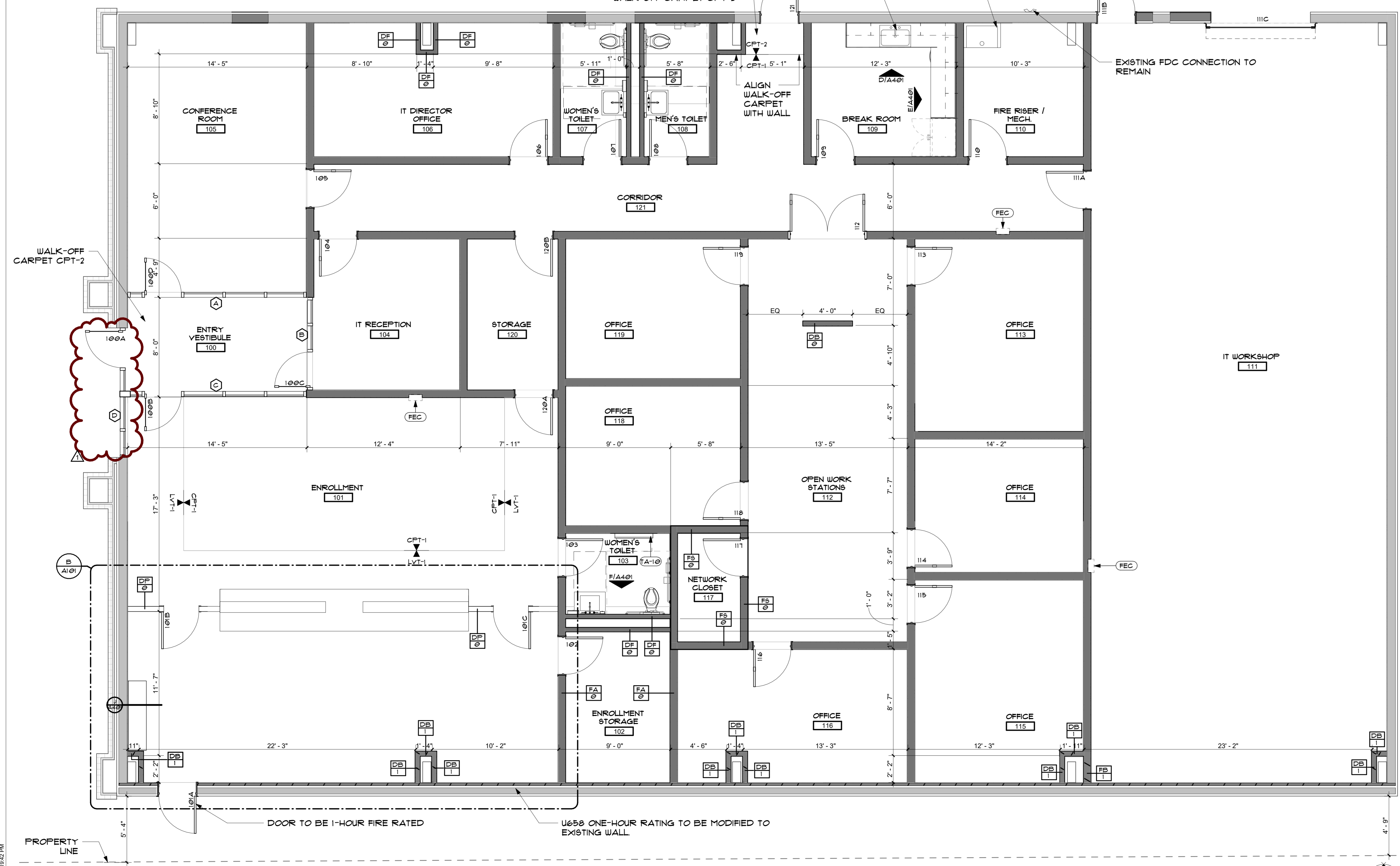
ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	CEILING FINISH	COMMENTS
009	ENTRY VESTIBULE	CPT-2	RB-1	ACT-1	
01	ENROLLMENT	CPT-1	RB-1	ACT-1	
02	ENROLLMENT STORAGE	CONC-1	RB-1	ACT-1	
03	WOMEN'S TOILET	TL-1	TB-1	PT-3	
04	IT RECEPTION	CPT-1	RB-1	ACT-1	
05	CONFERENCE ROOM	CPT-1	RB-1	ACT-1	
06	IT DIRECTOR OFFICE	CPT-1	RB-1	ACT-1	
07	WOMEN'S TOILET	TL-1	TB-1	PT-3	
08	MEN'S TOILET	TL-1	TB-1	PT-3	
09	BREAK ROOM	LVT-1	RB-1	ACT-1	
10	FIRE RISER / MECH	CONC-1	RB-1	OT8	
11	IT WORKSHOP	CONC-1	RB-1	OT8	
12	OPEN WORK STATIONS	CPT-1	RB-1	ACT-1	
13	OFFICE	CPT-1	RB-1	ACT-1	
14	OFFICE	CPT-1	RB-1	ACT-1	
15	OFFICE	CPT-1	RB-1	ACT-1	
16	OFFICE	CPT-1	RB-1	ACT-1	
17	OFFICE	CPT-1	RB-1	ACT-1	
18	OFFICE	CPT-1	RB-1	ACT-1	
19	OFFICE	CPT-1	RB-1	ACT-1	
20	STORAGE	CONC-1	RB-1	OT8	
21	CORRIDOR	CPT-1	RB-1	ACT-1	

FINISH LEGEND

FLOOR FINISH	WALL FINISH
CPT-1 CARPET TILE MANUF: SHAW CONTRACT STYLE: PURE WHITE SIZE: 18" X 18" COLOR: PURE WHITE	PT-1 GENERAL WALL PAINT MANUF: SHERWIN WILLIAMS SHEEN: EGG SHELL COLOR: PURE WHITE
CPT-2 WALK OFF CARPET TILE MANUF: PATCRAFT STYLE: WALK RIGHT IN 1 SIZE: 24" X 24" THICKNESS: 9/16" MM COLOR: SHERWIN WILLIAMS INSTALL: MONOLITHIC	PT-2 DOOR PAINT (QM ONLY) MANUF: SHERWIN WILLIAMS SHEEN: SEMI-GLOSS COLOR: EVENING SHADOW
CONC-1 SEALED CONCRETE MANUF: REFER TO SPECIFICATIONS COLOR: ARCHITECT TO SELECT COLOR FROM MANUFACTURER'S FULL RANGE NOTE: TOILET ROOMS TO HAVE SLIP RESISTANT COATING	PT-3 GENERAL WALL PAINT MANUF: SHERWIN WILLIAMS SHEEN: EGG SHELL COLOR: COLOR TO MATCH FANTASY/1809 SWATCH TO BE SUBMITTED TO OWNER AND ARCHITECT FOR FINAL APPROVAL
LVT-1 LUXURY VINYL TILE MANUF: PATCRAFT STYLE: TRUE SPECIES COLOR: ARBOR ASH 9" X 19" V'S	PT-4 DOOR FRAME PAINT MANUF: SHERWIN WILLIAMS SHEEN: SEMI-GLOSS COLOR: PURE WHITE
TL-1 PORCELAIN TILE MANUF: METRO SURFACES STYLE: WALES COLOR: PALLADIUM FINISH: MATTIE SIZE: 12" X 24" INSTALL: MONOLITHIC	CEILING FINISH ACT-1 ACOUSTICAL CEILING TILE MANUF: ARYSTROG STYLE: CALLA COLOR: WHITE SIZE: 24" X 24" GRID: SQUARE LAY-IN 15/16"
RB-1 RESILIENT BASE MANUF: TARKETT STYLE: THERYCORET RUBBER COLOR: BURNT UMBER SIZE: 4" WITH TOE	MISCELLANEOUS PL-1 PLASTIC LAMINATE MANUF: FORMICAR COLOR: WALNUT REFWOOD TEXTURE: NATURAL GRAIN FINISH G2-1 QUARTZ STONE (COUNTER) MANUF: CORIAN COLOR: ASHEN GRAY LEATHERED
TB-1 TILE BASE MANUF: METRO SURFACES STYLE: WALES COLOR: PALLADIUM FINISH: MATTIE SIZE: 3X24 BULLNOSE	UV-1 WOOD VENEER MANUF: ACRODYN COLOR: 1397 FOSSIL TEAK WOOD



FILTER DRINKING WATER DISPENSER INCLUDED AS DRINKING FOUNTAIN. TOP OF SINK RIM TO BE 2'-10" MAXIMUM. SINK AND FAUCET SHALL MEET ALL REQUIREMENTS OF ICC A1111-2009 ANSI STANDARD.



REFLECTED CEILING PLAN NOTES

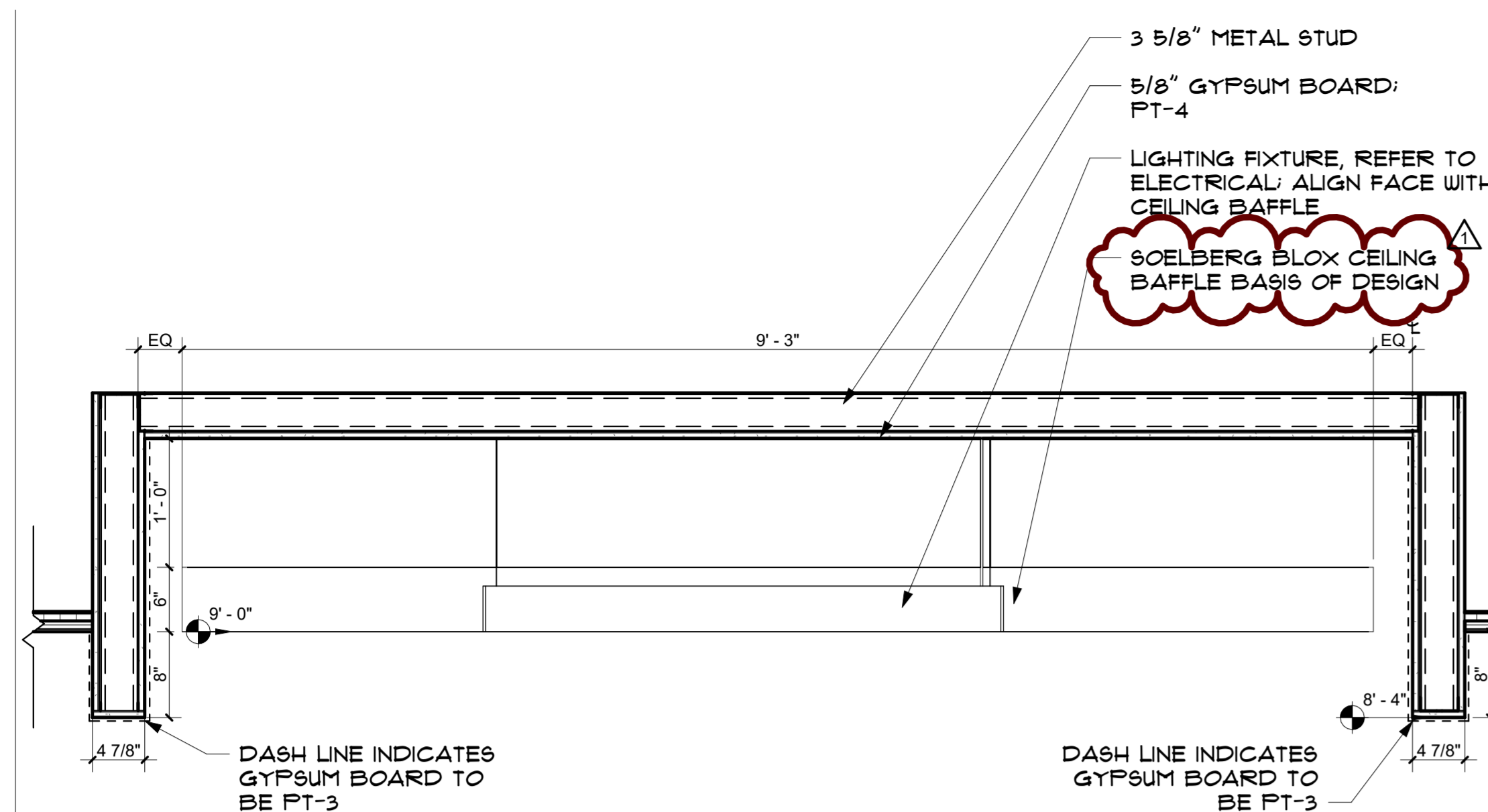
- ALL CEILING SHALL BE 8' - 6" AFF, UNLESS NOTED OTHERWISE.
- ALL CEILING FINISHES TO BE ACT-1, UNLESS NOTED OTHERWISE. ALL CEILING GRIDS TO BE CENTERED IN ROOM, UNLESS NOTED OTHERWISE.
- REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR MOUNTING LOCATIONS OF ITEMS WHERE NO CEILING IS REQUIRED OR INDICATED.
- IN THE CASE OF MINOR DISCREPANCIES BETWEEN MECHANICAL, ELECTRICAL, PLUMBING AND ARCHITECTURAL DOCUMENTS IN THE LOCATION OF CEILING MOUNTED COMPONENTS THE ARCHITECTURAL DRAWINGS SHALL GOVERN. IN THE CASE OF MAJOR DISCREPANCIES, THE ARCHITECT SHALL BE NOTIFIED AS SOON AS THE DISCREPANCY IS DISCOVERED PRIOR TO PROCEEDING WITH THE WORK.
- LIGHTS, EXIT SIGNS, SMOKE DETECTORS, SPEAKERS, DIFFUSERS, STROBES, AND MISCELLANEOUS DEVICES SHALL BE CENTERED IN THE CEILING TILE IN WHICH THEY OCCUR, UNLESS NOTED OTHERWISE.
- CENTER, ALIGN AND / OR LOCATE LIGHT FIXTURES, MECHANICAL GRILLES, LIFE SAFETY DEVICES, OCCUPANCY SENSORS, SECURITY AND DATA FIXTURES AND OTHER MISCELLANEOUS COMPONENTS IN A UNIFORM AND ORDERLY FASHION, UNLESS ALTERNATE ARRANGEMENT IS SPECIFICALLY DIMENSIONED AND NOTED. INSTALL TRUE AND SQUARE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE FIT OF ALL WORK AND TO PROVIDE A UNIFORM AND ORDERLY PLACE AND APPEARANCE, WHETHER EXPOSED TO VIEW OR CONCEALED BY FINISHES.
- ALL SPRINKLER HEADS SHALL BE ALIGNED IN THE SAME CEILING LOCATION PARALLEL TO THE WALL WITH EACH SPECIFIC CEILING CONSTRUCTION.
- CENTER EXIT SIGNS ABOVE DOORS, UNLESS ALTERNATE ARRANGEMENT IS SPECIFICALLY DIMENSIONED AND NOTED.
- CENTER, ALIGN AND LOCATE ACCESS PANELS IN ACCORDANCE WITH DESIGN CRITERIA FOR OTHER DEVICES. SUBMIT SHOP DRAWINGS THAT INDICATE EXACT SIZE, TYPE AND LOCATION OF CEILING AND WALL ACCESS PANELS FOR REVIEW AND ACCEPTANCE BEFORE INSTALLATION. ALL ACCESS PANELS SHALL BE PAINTED, UNLESS NOTED OTHERWISE AND EXTERIOR GRADE WHERE REQUIRED.
- PROVIDE GYPSUM BOARD BULKHEADS WHERE CEILING OF DIFFERENT HEIGHTS OR ORIENTATION ADJ. DO NOT BUILD BULKHEADS OF ACOUSTICAL CEILING MATERIAL.
- ALIGN ALL SPPRITS AND / OR BULKHEADS WITH ADJACENT WALLS, UNLESS NOTED OTHERWISE.
- PROVIDE SUFFICIENT SUPPORT AND GRID SYSTEMS TO SUPPORT ALL CEILING MOUNTED DEVICES. ALL FIXTURES SHALL BE SUPPORTED AT EACH CORNER.
- ALL OUTLETS, RECEPTACLES, DEVICES AND COVER PLATES SHALL BE INSTALLED PLUMB AND LEVEL. CROOKED INSTALLATION IS NOT ALLOWED.
- MISALIGNED MEP FIXTURES OF ANY TYPE OR AT ANY LOCATION EXPOSED TO VIEW ARE NOT ALLOWED. MISALIGNED FIXTURES SHALL BE ADJUSTED OR REMOVED AND REPLACED IF REQUIRED FOR PROPER ALIGNMENT AT NO ADDITIONAL COST.
- ALL RECESSED LIGHTING TO BE SEALED AIR-TIGHT, ICC-RATED AND SEALED TO GYPSUM BOARD OR FINISH MATERIAL AS REQUIRED BY THE IECC (INTERNATIONAL ENERGY CONSERVATION CODE). ALL MECHANICAL, ELECTRICAL AND PLUMBING FIXTURES SHALL BE IECC COMPLIANT.
- CONTRACTOR TO COORDINATE ALL OUTLETS, SWITCHES AND POWER FEED WITH CASEWORK, PARTITIONS, FINISHES, FIXTURES AND EQUIPMENT.
- SPRINKLER HEAD TYPES AND FINISHES:
 - EXPOSED SPRINKLER HEADS: CHROME
 - FINISHED CEILING OR WALLS: FULLY RECESSED AND CONCEALED WITH WHITE COVER PLATE, FLAT AND FLUSH WITH CEILING OR WALL.
 - PRE-FINISHED METAL CEILING OR WALL FEATURES: FULLY RECESSED AND CONCEALED WITH COVER PLATE, FLAT AND FLUSH TO MATCH ADJACENT FINISH. CUSTOM COLOR MAY BE REQUIRED IF MANUFACTURER'S RANGE DOES NOT PROVIDE MATCH, IN THE OPINION OF THE ARCHITECT.
 - PROVIDE SPRINKLER GUARDS WHERE REQUIRED BY CODE.
- PROVIDE SPRINKLER HEADS AND COVERS IN ACCORDANCE WITH SPECIFIED LEVEL OF EXPOSURE TO VIEW, DESIGN CRITERIA AND AS INDICATED. PROVIDE BRAIDED METAL FLEXIBLE SPRINKLER DROPS AT ALL FINISHED CEILING OR WALLS WHERE REQUIRED FOR SPECIFIED PLACEMENT, CENTER AND ALIGN PIPES WITH ARCHITECTURAL FEATURES. PROVIDE ADDITIONAL HEADS BEYOND THAT REQUIRED FOR MINIMUM COVERAGE AS REQUIRED TO COMPLY WITH ARCHITECTURAL LAYOUT, AND UNIFORM ALIGNMENT WITH OTHER FIXTURES. SUBMIT LAYOUT FOR REVIEW PRIOR TO A4H REVIEW OR INSTALLATION.
- PROVIDE PRE-FINISHED GRAY ELECTRICAL DEVICES AND STAINLESS STEEL COVER PLATES AT ALL WALLS IN PROJECT. AT ALL OTHER LOCATIONS, SUCH AS CASEWORK, RECEPTACLES AND COVER PLATES SHALL MATCH ADJACENT FINISHES, AS DETERMINED AND SELECTED BY THE ARCHITECT FROM MANUFACTURER'S FULL RANGE FIELD PAINT WHERE REQUIRED.
- MAINTAIN CONTINUOUS FIRE RATED ENCLOSURES AS REQUIRED AT RATED WALLS AND CEILING. PROVIDE FIRE RATED FIXTURE COVERS, J-BOXXES OR CONSTRUCT GYPSUM BOARD ENCLOSURES WHERE REQUIRED FOR FIXTURE OR MEP RUNS TO MAINTAIN CONTINUOUS FIRE RATING.
- REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION FOR DIFFUSERS AND GRILLE TYPES. REFER TO ELECTRICAL DRAWINGS FOR FIXTURE SCHEDULES AND ADDITIONAL INFORMATION. DESIGN INTENT FOR APPEARANCE, TYPE, ARRANGEMENT AND LOCATION IS INDICATED ON ARCHITECTURAL DRAWINGS. REPORT DISCREPANCIES TO ARCHITECT FOR CLARIFICATION PRIOR TO ORDERING MATERIALS OR THE START OF ROUGH-IN.
- LIFE SAFETY DEVICE COLORS: GRAY (UNLESS RED IS SPECIFICALLY REQUIRED BY CODE)
 - WHITE AT WHITE CEILING OR WHERE EXPOSED STRUCTURES.
 - OTHER CEILING: NOT ALLOWED, USE WALL MOUNTED.
 - INTERIOR / EXTERIOR WALLS: GRAY.
- EXPOSED METAL DUCTWORK: ALL METAL DUCTWORK EXPOSED TO VIEW SHALL HAVE UNIFORM AND NEAT SEALANT AND BEANS. CLEAN EXCESS SEALANT. PROVIDE 12 FOOT BY 12 FOOT MOCK-UP TO ILLUSTRATE ALL BEANS AND SEALANT TYPES IN PROJECT.
- EXPOSED STRUCTURE WHEN NOT DIMENSIONED, BUT OCCURS ON OR ADJACENT TO EXPOSED STRUCTURE. LOCATE ITEMS LIGHT FIXTURES, SPRINKLER PIPING / HEADS, MECHANICAL DUCTS, PIPES, PLUMBING DEVICES, AND ALL ASSOCIATED MOUNTING BRACKETS AND FASTENERS) CENTERED WITH SPACE BETWEEN OR ON STRUCTURAL ELEMENTS. MATCH ORIENTATION OF STRUCTURE, UNLESS A SPECIFIC ALTERNATE ARRANGEMENT IS DIMENSIONED AND NOTED. CHANGE ORIENTATION OF ITEMS IN ACCORDANCE WITH DESIGN CRITERIA FOR PLACEMENT, TO MATCH CHANGES IN ORIENTATION OF STRUCTURE. WHERE MULTIPLE SYSTEMS NEED TO SHARE THE SAME SPACE, CENTER ONE SYSTEM AND ALIGN ADJACENT SYSTEMS IN A UNIFORM AND ORDERLY FASHION.
- COORDINATION: ALL DEVICES REQUIRED FOR PROJECT MAY NOT BE SHOWN ON ARCHITECTURAL DRAWINGS. REFER TO MECHANICAL, ELECTRICAL, PLUMBING AND TECHNOLOGY DRAWINGS FOR ADDITIONAL DEVICES. ALL DEVICES IN PROJECT SHALL FOLLOW DESIGN CRITERIA FOR PLACEMENT, AS INDICATED, WHETHER OR NOT SHOWN ON ARCHITECTURAL DRAWINGS. REPORT DISCREPANCIES TO ARCHITECT FOR CLARIFICATION PRIOR TO INSTALLATION.
- COORDINATION DRAWINGS - PROVIDE THE FOLLOWING: PREPARE COORDINATION DRAWINGS TO A SCALE OF 1/4" INCH = 1'-0" OR LARGER, DETAILING MAJOR ELEMENTS, COMPONENTS, AND SYSTEMS OF FIRE PROTECTION EQUIPMENT AND MATERIALS IN RELATIONSHIP WITH OTHER SYSTEMS, INSTALLATIONS, AND BUILDING COMPONENTS. INDICATE LOCATIONS WHERE SPACE IS LIMITED FOR INSTALLATION AND ACCESS AND WHERE SEQUENCING AND COORDINATION OF INSTALLATION ARE IMPORTANT TO THE EFFICIENT FLOW OF THE WORK, INCLUDING, BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:
 - INDICATE THE PROPOSED LOCATIONS OF PIPING, EQUIPMENT, HANGERS, HEAD TYPES AND LOCATIONS, AND MATERIALS.
 - CLEARANCES FOR INSTALLING AND MAINTAINING INSULATION.
 - CLEARANCES FOR SERVICING AND MAINTAINING EQUIPMENT, INCLUDING TUBE REMOVAL, FILTER REMOVAL, AND SPACE FOR EQUIPMENT DISASSEMBLY REQUIRED FOR PERIODIC MAINTENANCE.
 - EQUIPMENT CONNECTIONS AND SUPPORT DETAILS.
 - EXTERIOR AND FOUNDATION PENETRATIONS, FIRE-RATED WALL AND FLOOR PENETRATIONS.
 - UNDERGROUND PIPING.
 - SIZES AND LOCATIONS OF REQUIRED CONCRETE PADS AND BASES.
- ABOVE ALL NEW CEILING, PROVIDE R-21 BATT INSULATION.

REFLECTED CEILING PLAN LEGEND

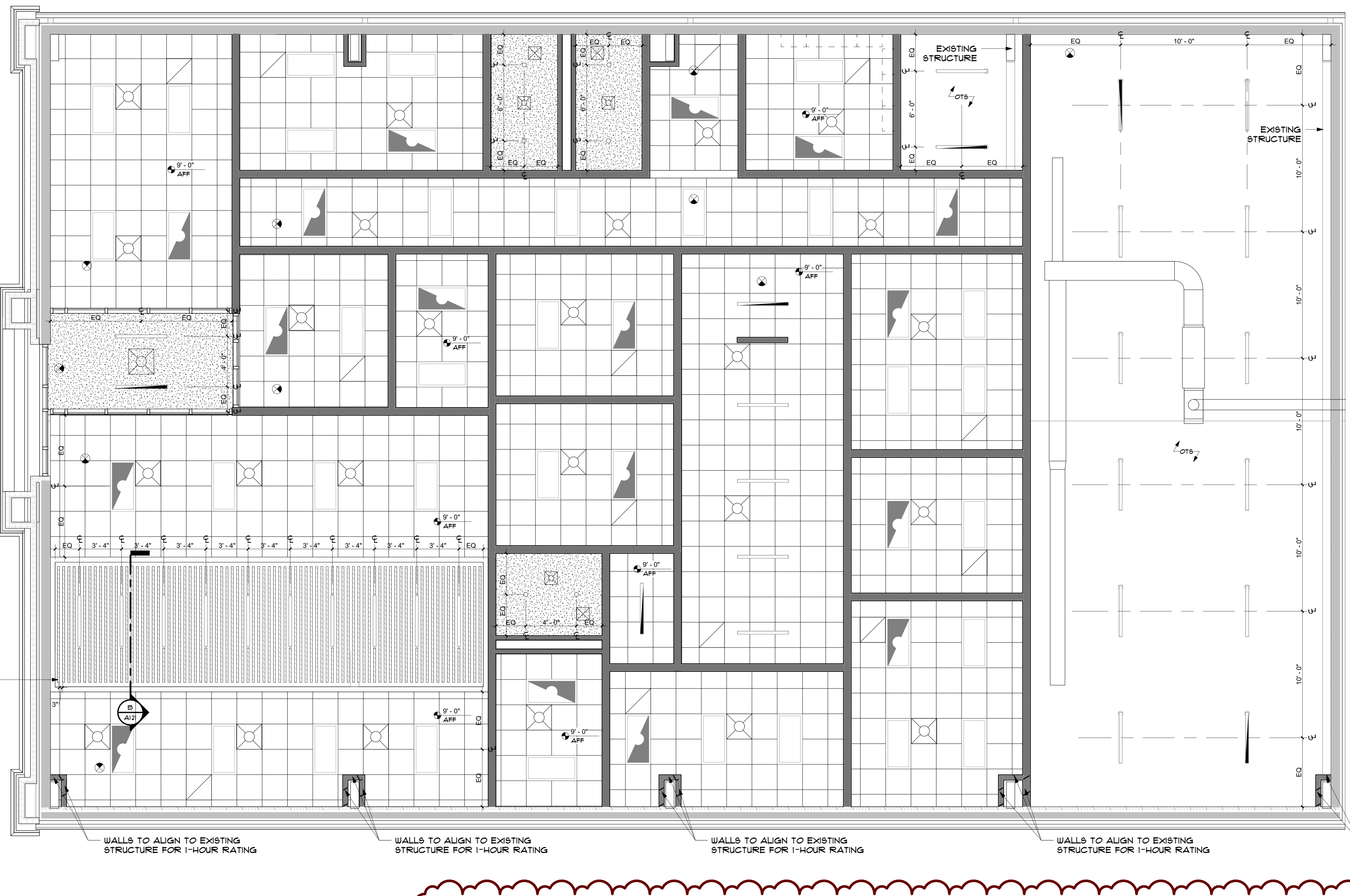
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- NOTE: REFER TO STRUCTURAL, ELECTRICAL AND MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

REFLECTED CEILING PLAN DIAGRAMS

- THE FOLLOWING DESIGN CRITERIA APPLIES UNLESS SPECIFICALLY NOTED AND DIMENSIONED OTHERWISE.
- DIMENSIONS:** WHEN COMPLETELY DIMENSIONED ON CEILING PLAN, LOCATE ITEMS AS INDICATED WHEN SHOWN DIMENSIONED BY A REFLECTED CEILING PLAN. SPECIFIC DIMENSIONS SHOWN BY REFLECTED CEILING PLANS TAKE PRECEDENCE OVER TYPICAL LOCATIONS.
 - CENTERING:** WHEN NOT DIMENSIONED BUT SHOWN CENTERED, LOCATE ITEMS CENTERED IN SPACE OR SPACE CREATED BETWEEN TWO ELEMENTS WHEN NOT DIMENSIONED, BUT SHOWN CENTERED.
 - SYMMETRY:** LOCATE FEATURES SYMMETRICALLY. LOCATE ITEMS ALIGNED WITH OTHER ITEMS SHOWN DIMENSIONED ELSEWHERE IN SPACE.
 - EXPOSURE IN ACOUSTICAL CEILING TILE:** WHEN NOT DIMENSIONED BUT OCCURS ON ACT / SQUARE GRID-TYPE CEILING, LOCATE ITEMS (LIGHT FIXTURES, SPRINKLER HEADS, AND OTHER DEVICES) AT CENTER OF PANEL ON ACT / SQUARE GRID-TYPE CEILING.
 - ACOUSTICAL CEILING TILE PLACEMENT:** ACT / SQUARE AND / OR RECTANGULAR GRID-TYPE CEILING TO BE EVENLY SPACED. CUT TO FIT IRREGULAR GRID AND PERIMETER EDGE TRIM. MAKE FIELD CUT EDGES OF SAME PROFILE AS FACTORY EDGES. DOUBLE CUT AND FIELD PAINT EXPOSED REVEAL EDGES.
 - CONDUIT:** CONCEAL ALL WIRE IN CONDUIT WHERE EXPOSED TO VIEW. INCLUDES:
 - ALL ELECTRICAL WIRING.
 - ALL DATA / IT / SECURITY WIRING; PROVIDE CONDUIT. CABLE TRAYS ARE ONLY ALLOWED WHERE CONCEALED BY ACT, DROP CEILING / CLOUDS AND WHERE WIRE IS FULLY CONCEALED FROM VIEW. EXPOSED UNDERSIDES OF CABLE TRAYS ARE ONLY ALLOWED WHERE MATERIAL IS PLACED SIMILAR TO MECHANICAL DUCTWORK. EXPOSED RANDOMLY PLACED CABLE TRAYS ARE NOT ALLOWED.
 - MC CABLE IS NOT ALLOWED AT EXPOSED LOCATIONS.



B SECTION DETAIL
1" = 1'-0"



A FIRST FLOOR REFLECTED CEILING PLAN
1/4" = 1'-0"

TOILET ACCESSORIES GENERAL NOTES

- REFER TO ACCESSIBLE MOUNTING HEIGHTS AND CLEARANCES INDICATED ON SHEET G004. REFER TO SPECIFICATION 020800 - TOILET, BATH AND LAUNDRY ACCESSORIES FOR ADDITIONAL INFORMATION. COORDINATE AND VERIFY ALL OFCI AND OFCI ITEMS WITH OWNER.
- TOILET PAPER DISPENSER, OFCI. LOCATIONS NOT SHOWN. PROVIDE ONE PER WATER CLOSET. COORDINATE MOUNTING WITH TOILET PARTITION DOOR SWEIG.
- SOAP DISPENSER, OFCI, ONE PER LAVATORY.
- GRAB BARS, OFCI. PROVIDE 18 INCH, 36 INCH AND 42 INCH GRAB BARS AS INDICATED ON SHEET G001 AND AS REQUIRED BY CODE AT ALL WATER CLOSETS.
- SANITARY NAPKIN DISPOSAL UNIT, OFCI. LOCATIONS NOT SHOWN. PROVIDE ONE PER WATER CLOSET IN WOMEN'S TOILET ROOMS. PROVIDE ONE PER SINGLE OCCUPANCY TOILET ROOMS.
- DOOR AND STALL DOOR HOOKS, OFCI. LOCATIONS NOT SHOWN. PROVIDE ONE HOOK PER ENTRY DOOR AT SINGLE OCCUPANCY WATER CLOSETS. RE SPECIFICATION SECTION 091000 - DOOR HARDWARE. PROVIDE ONE HOOK PER STALL DOOR. RE SPECIFICATION 020115 - PLASTIC TOILET COMPARTMENTS.
- MIRRORS, OFCI. PROVIDE SIZES AS INDICATED, RE SPECIFICATION SECTION 083000 - MIRRORS.
- HORIZONTAL DIAPER CHANGING STATION, CONTRACTOR FURNISHED, CONTRACTOR INSTALLED. LOCATIONS AS INDICATED.

INTERIOR ELEVATION GENERAL NOTES

- PROVIDE BLOCKING AT ALL WALL CABINETS AND ALL WALL MOUNTED EQUIPMENT.
- EQUIPMENT SHOWN IN DASH AND/OR HALFTONE SHALL BE OWNER FURNISHED, CONTRACTOR INSTALLED. EQUIPMENT IS SHOWN HERE FOR COORDINATION AND BACKING PURPOSES ONLY. TYPES AND MODELS SHALL BE CONFIRMED WITH OWNER.
- EXPOSED SURFACES OF CABINETS FINISHED TO MATCH FACE.
- ALL COUNTERTOPS SHALL HAVE EASED EDGE CORNERS AT ALL EXPOSED EXTERIOR CORNERS.
- ALL EXPOSED PIPES UNDER RESTROOM SINKS TO HAVE INSULATION WRAP.

SPECIALTY EQUIPMENT NOTES

- TELEVISIONS TO BE OWNER FURNISHED, CONTRACTOR INSTALLED.
- WHITEBOARDS TO BE OWNER FURNISHED, CONTRACTOR INSTALLED.
- ICE MACHINE TO BE OWNER FURNISHED, CONTRACTOR INSTALLED.
- REFRIGERATOR TO BE OWNER FURNISHED, OWNER INSTALLED.

TOILET ACCESSORY SCHEDULE

TA#	DESCRIPTION	MANUFACTURER	MODEL	NOTES
TA-1	TOILET DISPENSER/HAND DRYERS			OWNER FURNISHED, CONTRACTOR INSTALLED
TA-2	SURFACE MOUNTED SOAP DISPENSER			OWNER FURNISHED, CONTRACTOR INSTALLED
TA-3	GLASS MIRROR WITH STAINLESS STEEL ANGLE FRAME	BOBRICK	B-750 & SERIES	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
TA-4	MULTI-ROLL TOILET TISSUE DISPENSER			OWNER FURNISHED, CONTRACTOR INSTALLED
TA-5	SURFACE MOUNTED SANITARY NAPKIN DISPOSAL			OWNER FURNISHED, CONTRACTOR INSTALLED
TA-6	CLASSIC SERIES SURFACE MOUNTED SEAT COVER DISPENSER	BOBRICK	B-721	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
TA-7	GRAB BARS	BRADLEY CORPORATION	812	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
TA-8	GRAB BARS	BRADLEY CORPORATION	812	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
TA-9	GRAB BARS	BRADLEY CORPORATION	812	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
TA-10	SURFACE MOUNTED STAINLESS STEEL BABY CHANGING STATION	BRADLEY CORPORATION	962-11	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED

DOOR SCHEDULE GENERAL NOTES

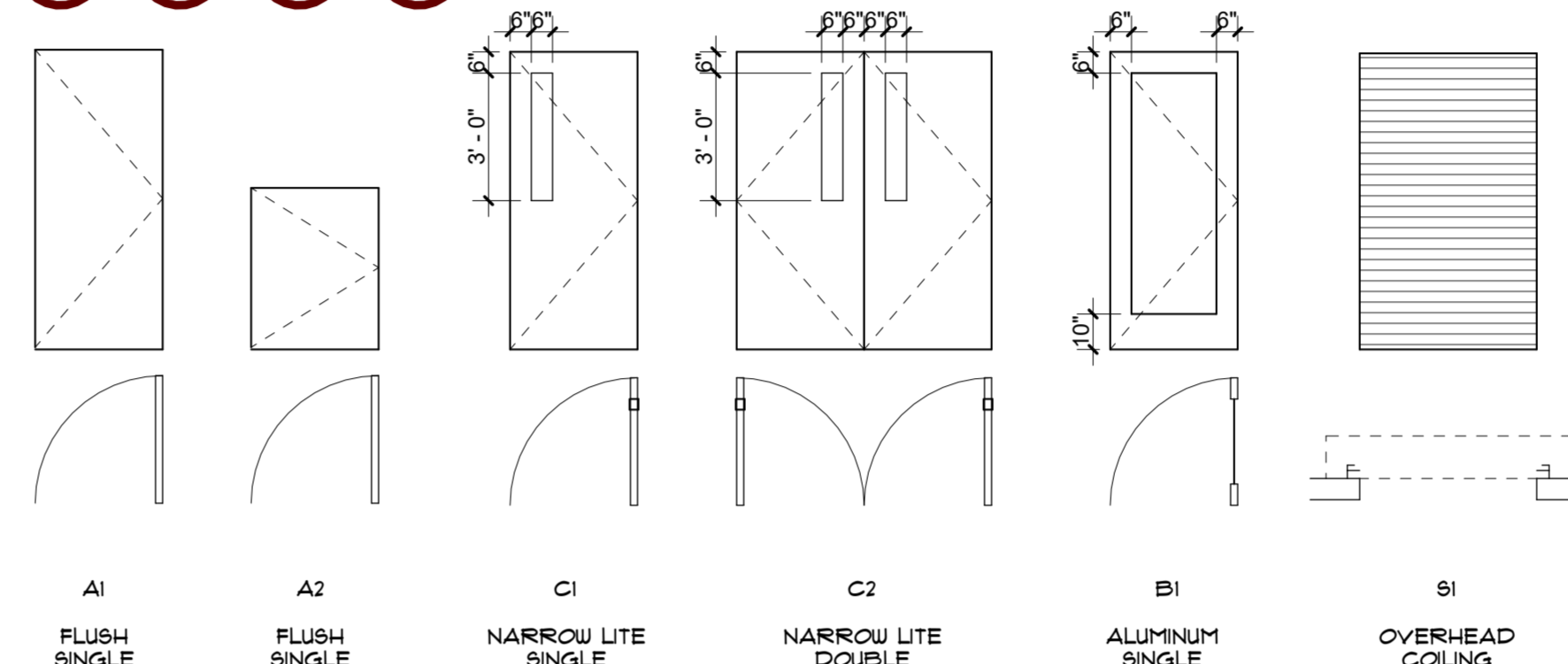
- SEE SPECIFICATIONS FOR HARDWARE GROUPS.
- PAINT ALL HOLLOW METAL DOORS AND FRAMES, UNLESS NOTED OTHERWISE.
- COORDINATE ALL DETAILS WITH PARTITION TYPES, INTERIOR / EXTERIOR FINISHES AND CEILING CONDITIONS AS INDICATED ON FLOOR PLANS, CEILING PLANS, AND OTHER DRAWINGS.
- ALL DOORS, FRAMES AND HARDWARE SHALL COMPLY WITH ACCESSIBILITY REQUIREMENTS, AS INDICATED.
- PROVIDE CONTINUOUS SEALANT AT JOINTS BETWEEN DOOR / LITE FRAMES AND ADJACENT SURFACES EACH SIDE OF ALL HEADS / JAMBS / SILLS AND AROUND THE BASE OF ALL DOOR FRAMES.
- ALL EXTERIOR HOLLOW METAL DOORS AND FRAMES TO BE INSULATED WITH THERMAL BREAKS.

DOOR SCHEDULE ABBREVIATIONS

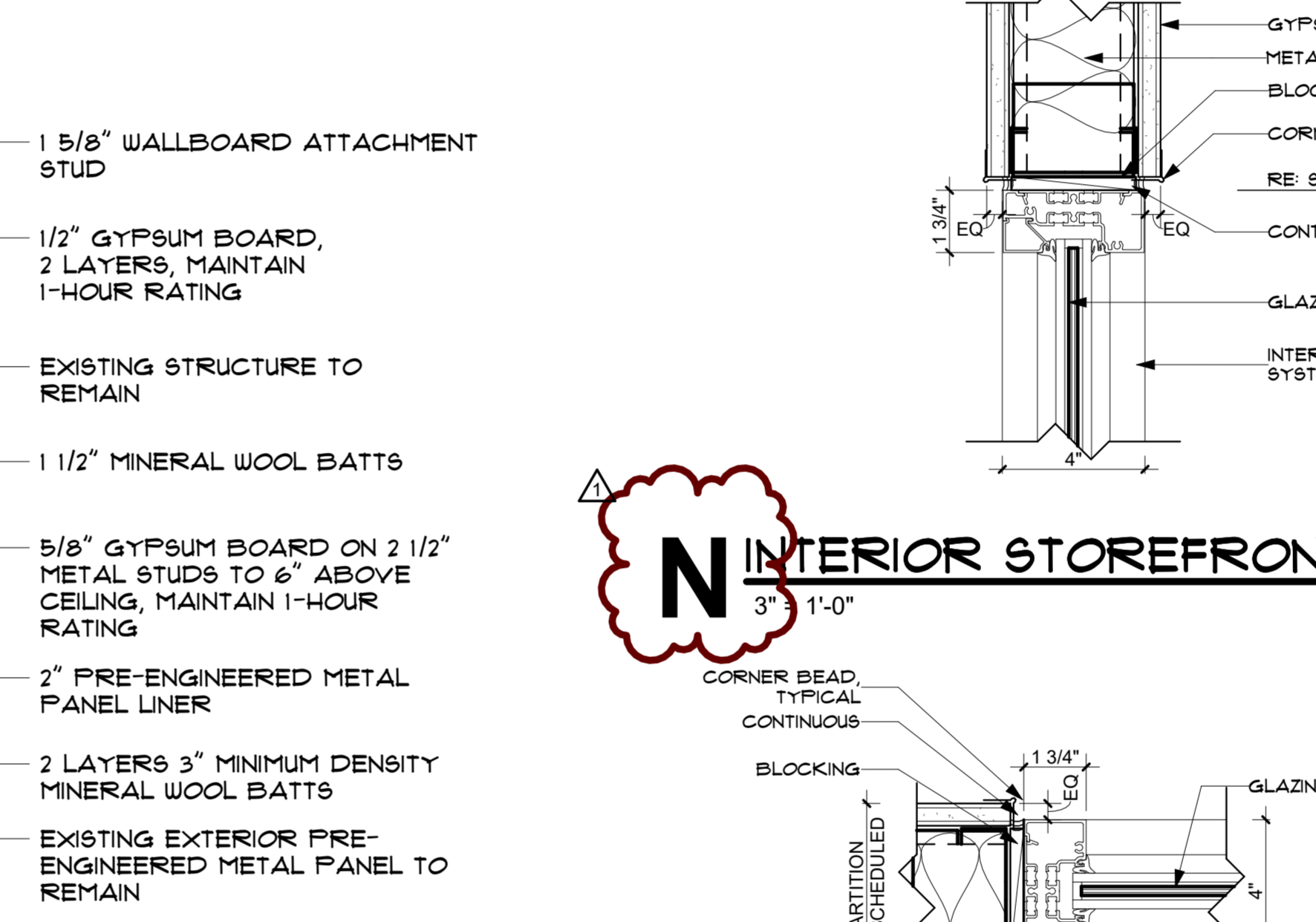
AL	ALUMINUM	OH	OVERHEAD
HM	HOLLOW METAL	WD	WOOD

GLAZING TYPES

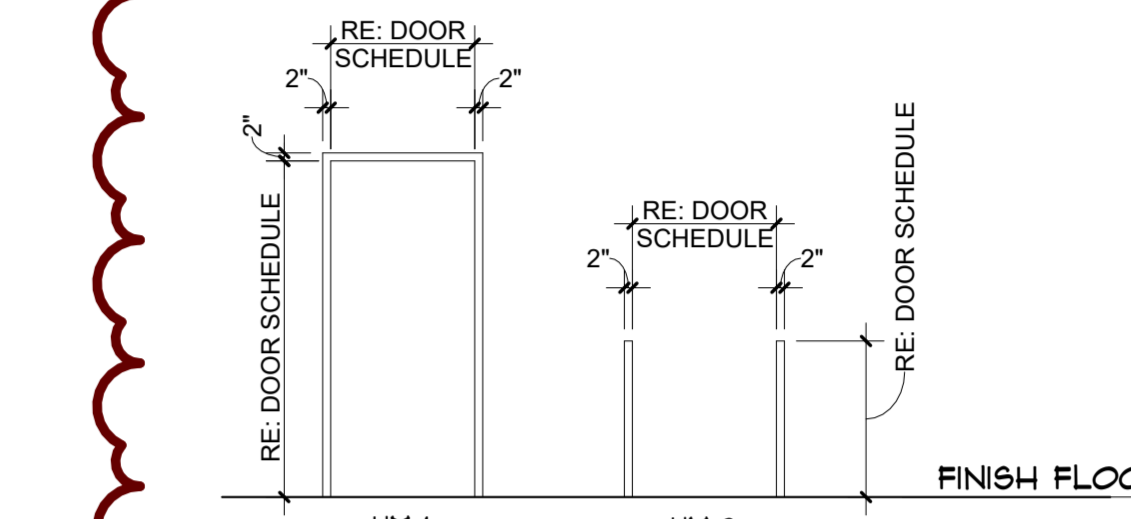
- GL-1 1/2" CLEAR GLASS, TEMPERED
 - GL-2 1" INSULATED GLASS, TEMPERED
- NOTE: PROVIDE SAFETY GLAZING WHERE REQUIRED PER CODE.



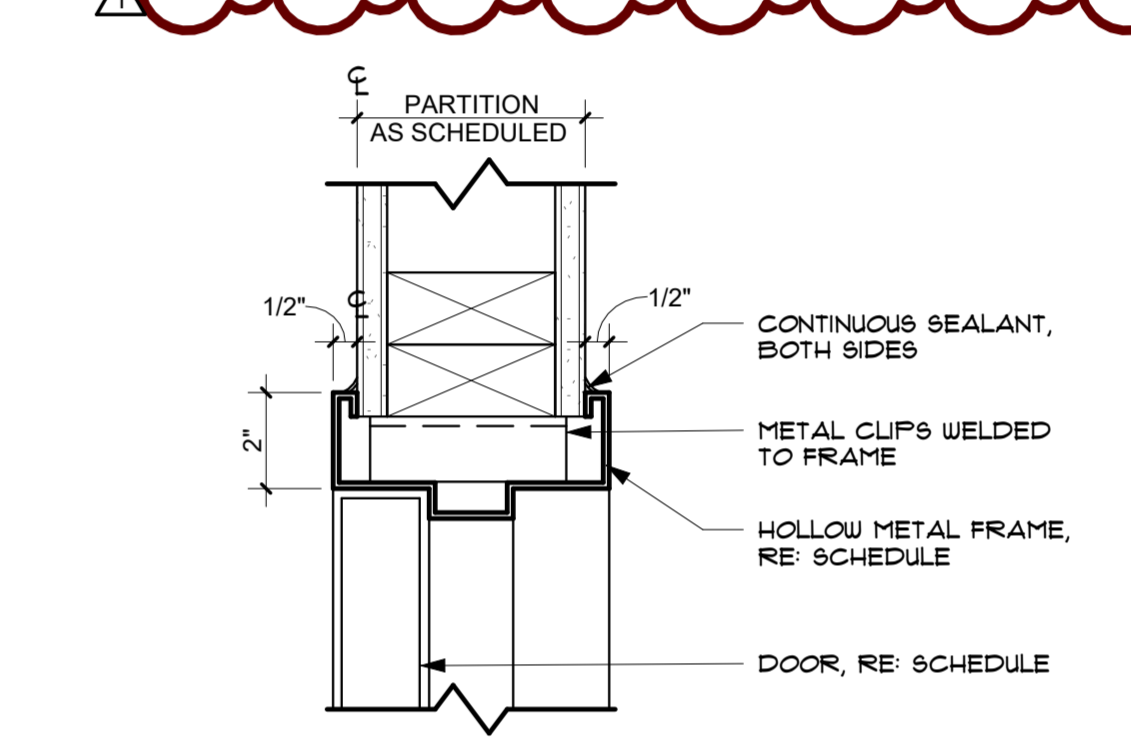
NOTES: REFER TO DOOR SCHEDULE FOR HEIGHT AND WIDTH DIMENSIONS



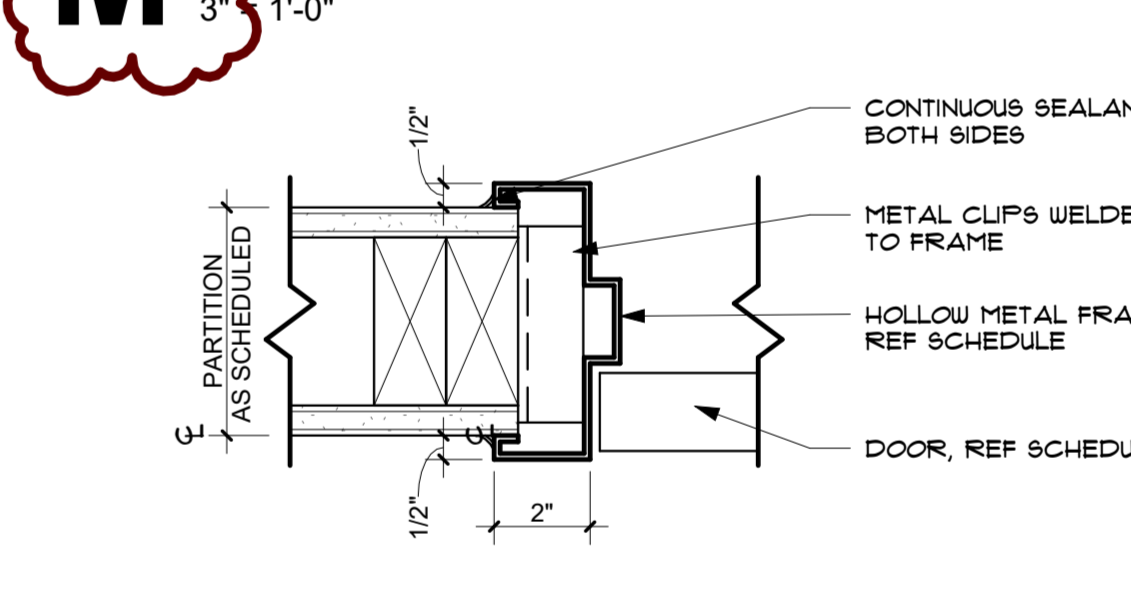
N INTERIOR STOREFRONT HEAD
3" = 1'-0"



FRAME TYPES
NTS



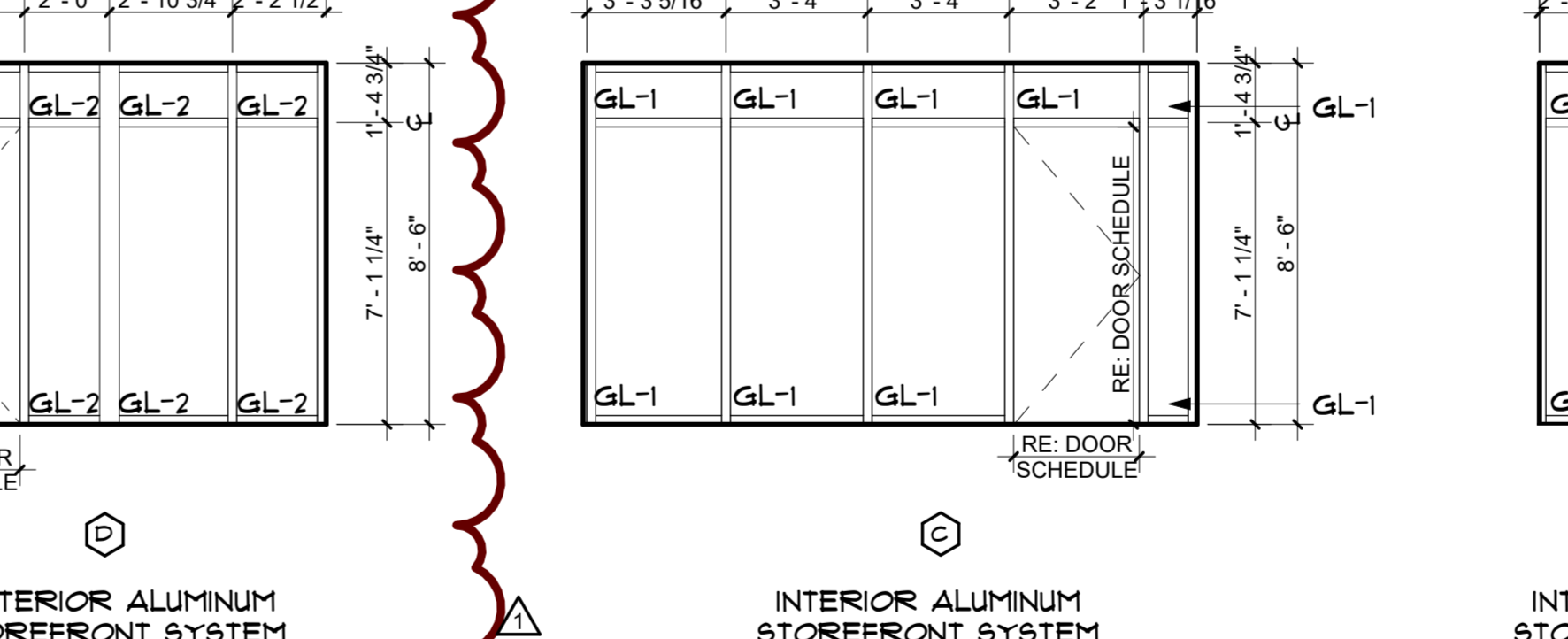
M TYPICAL H.M. DOOR HEAD DETAIL
3" = 1'-0"



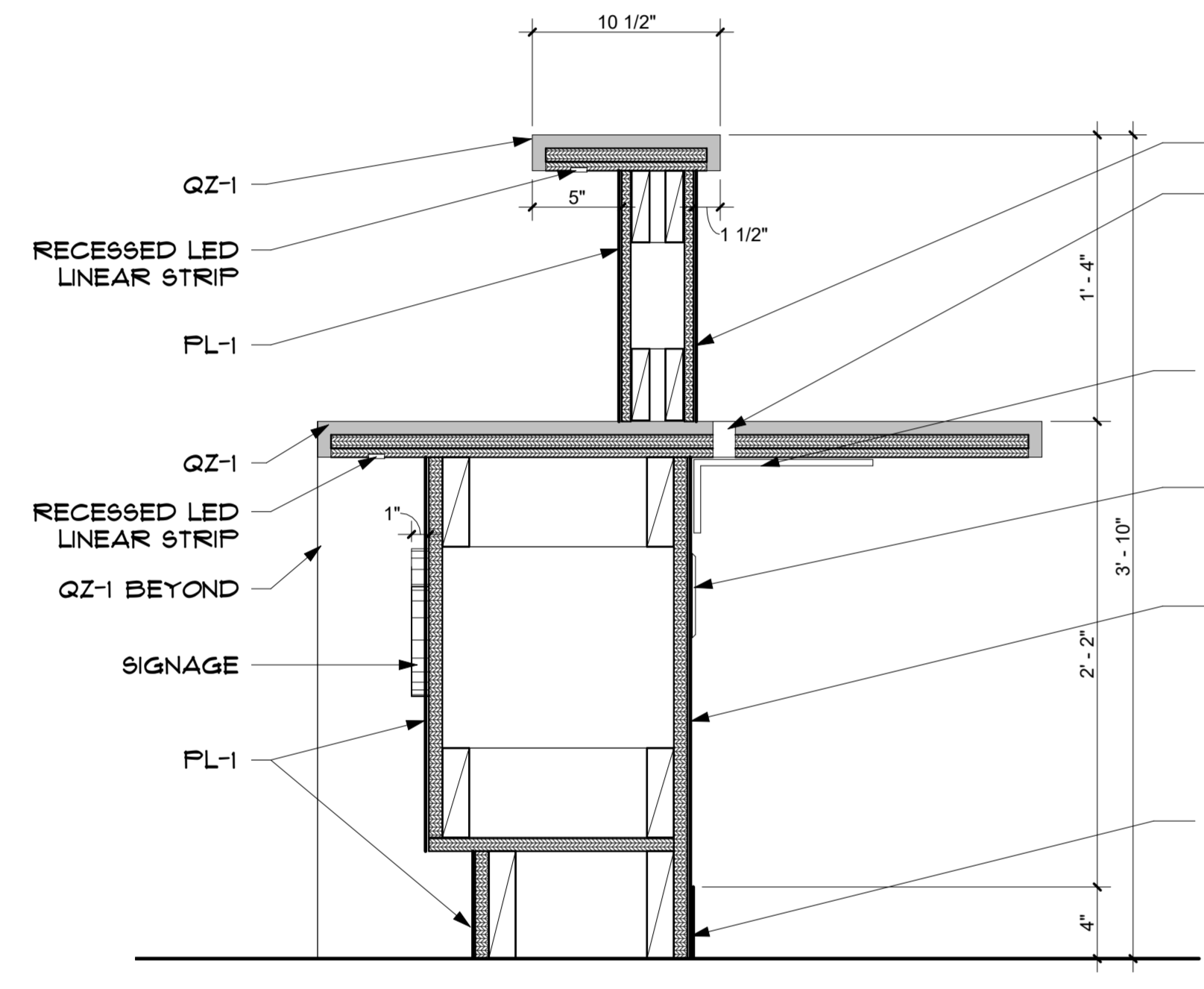
K TYPICAL H.M. DOOR JAMB DETAIL
3" = 1'-0"



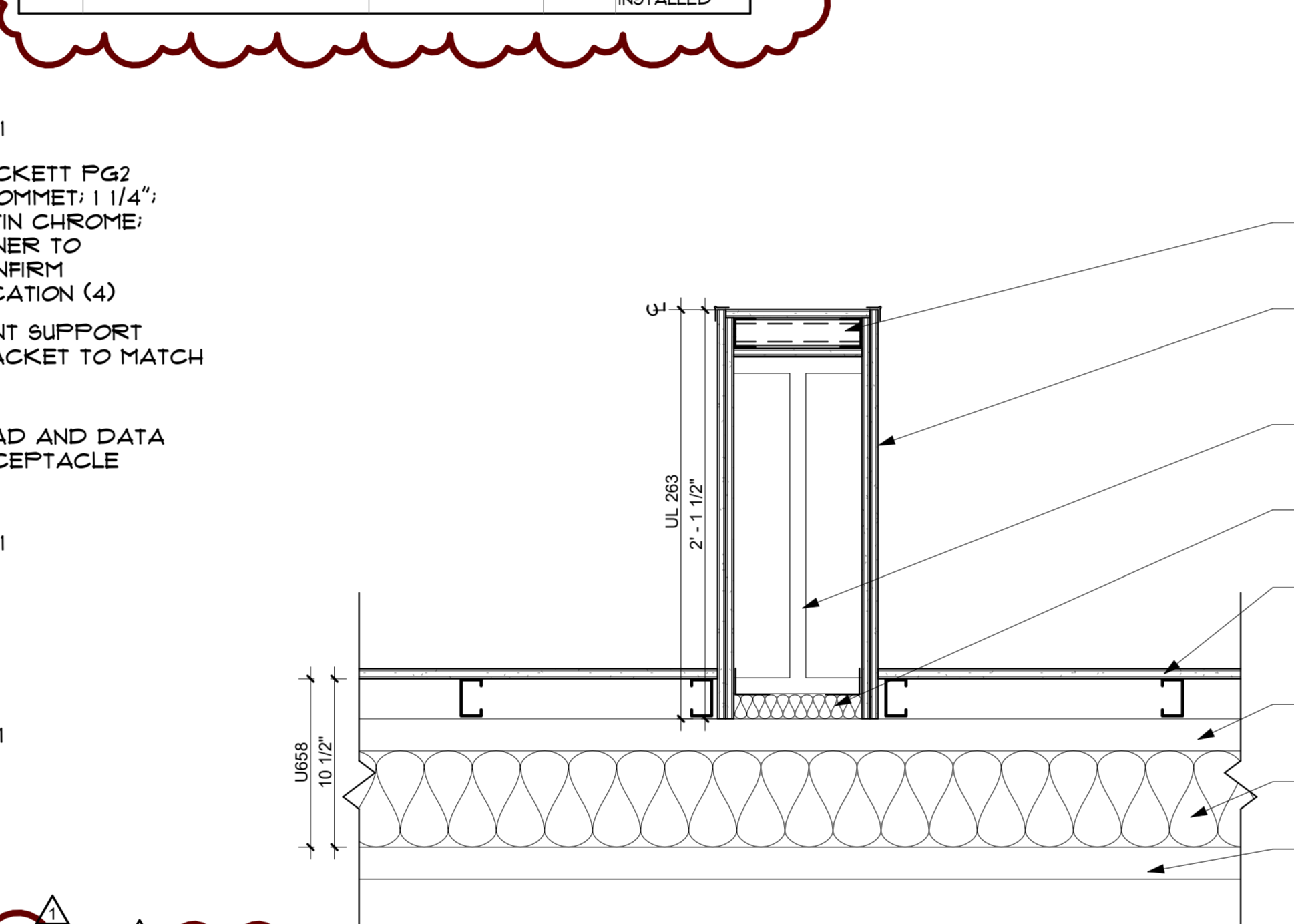
L INTERIOR STOREFRONT JAMB
3" = 1'-0"



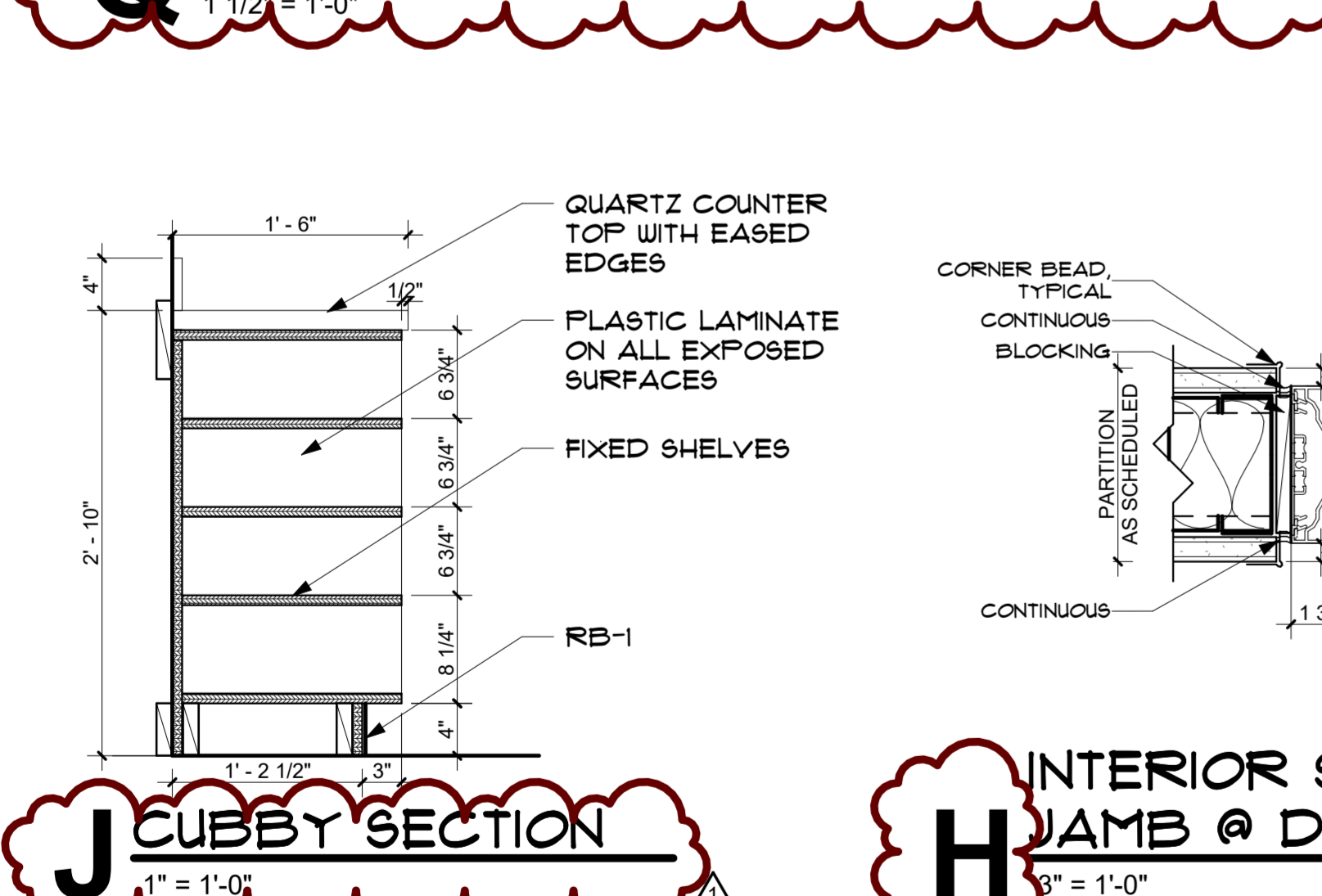
G EXTERIOR ALUMINUM STOREFRONT SYSTEM
H INTERIOR ALUMINUM STOREFRONT SYSTEM
I INTERIOR ALUMINUM STOREFRONT SYSTEM
J INTERIOR ALUMINUM STOREFRONT SYSTEM



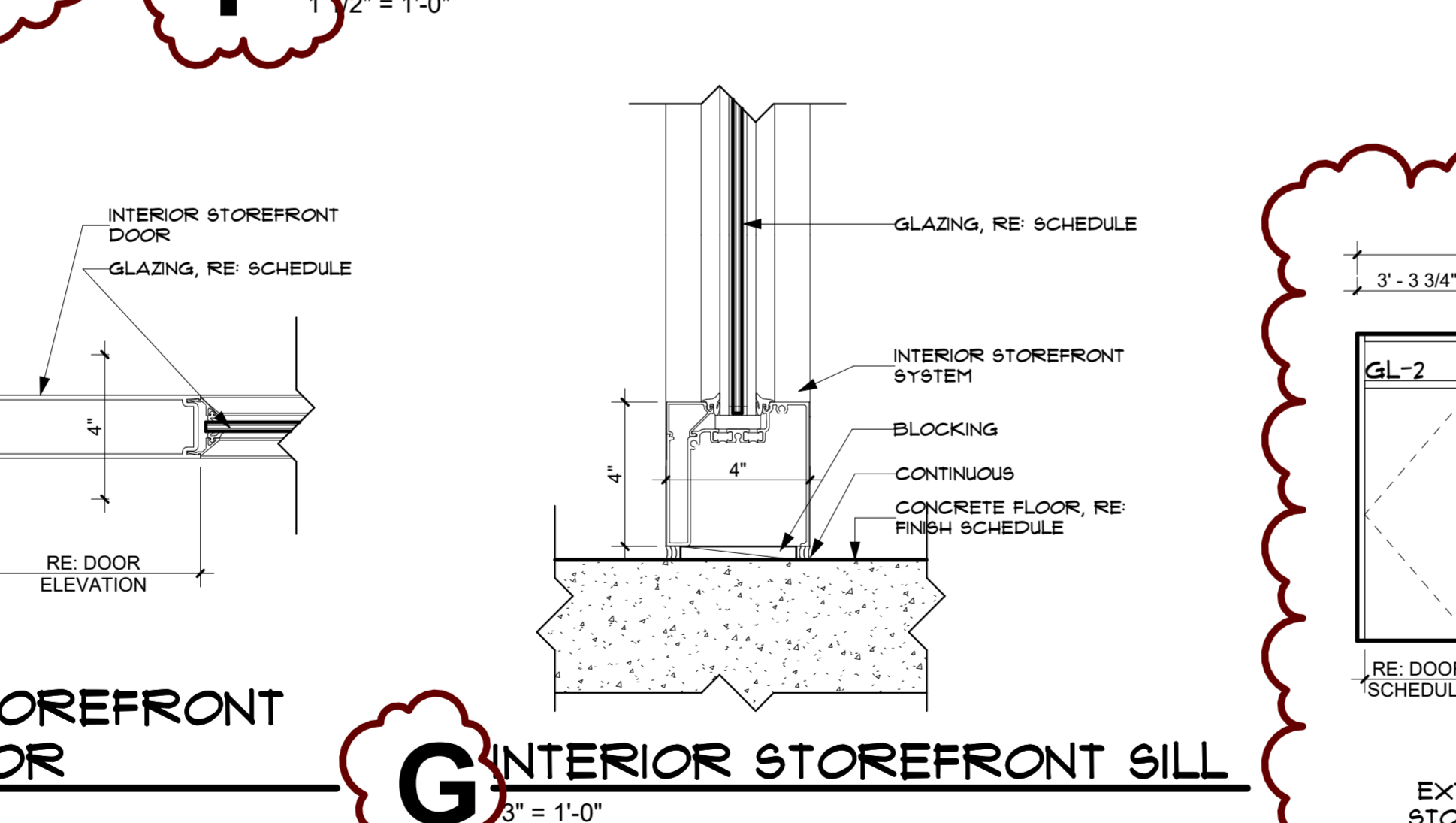
Q DESK SECTION DETAIL
1 1/2" = 1'-0"



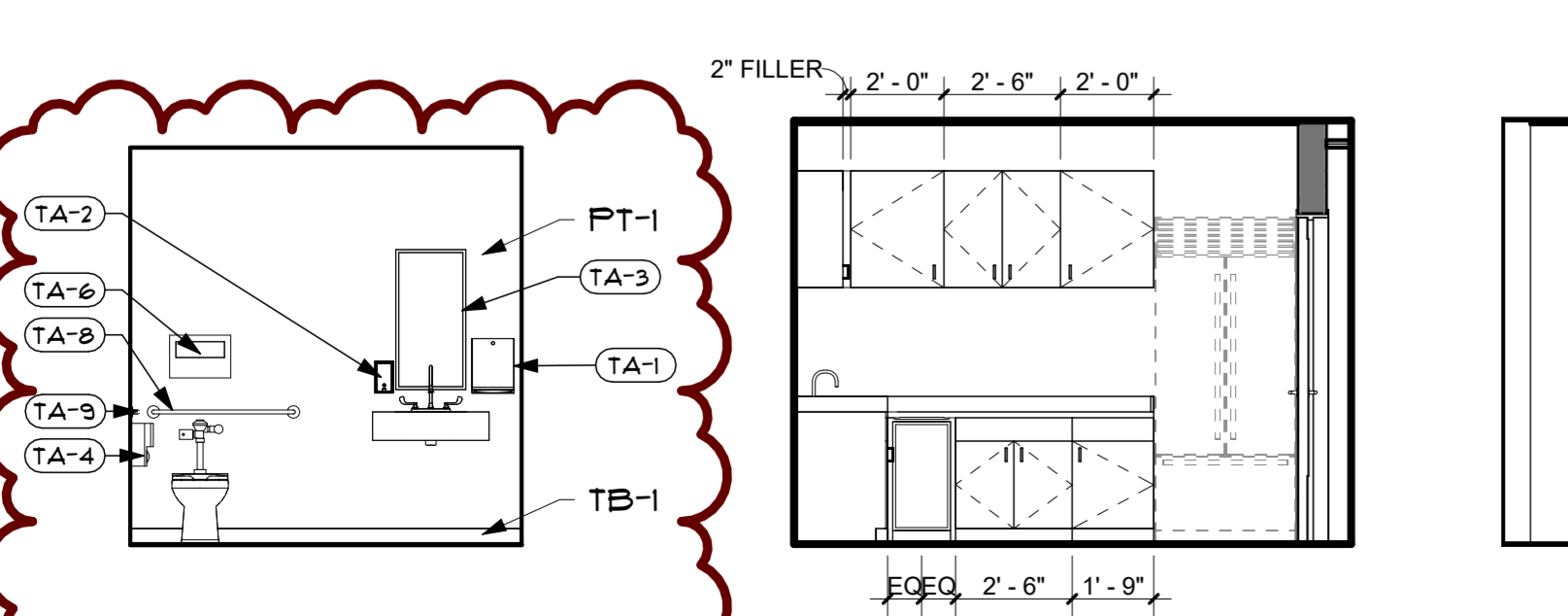
P PLAN DETAIL
1 1/2" = 1'-0"



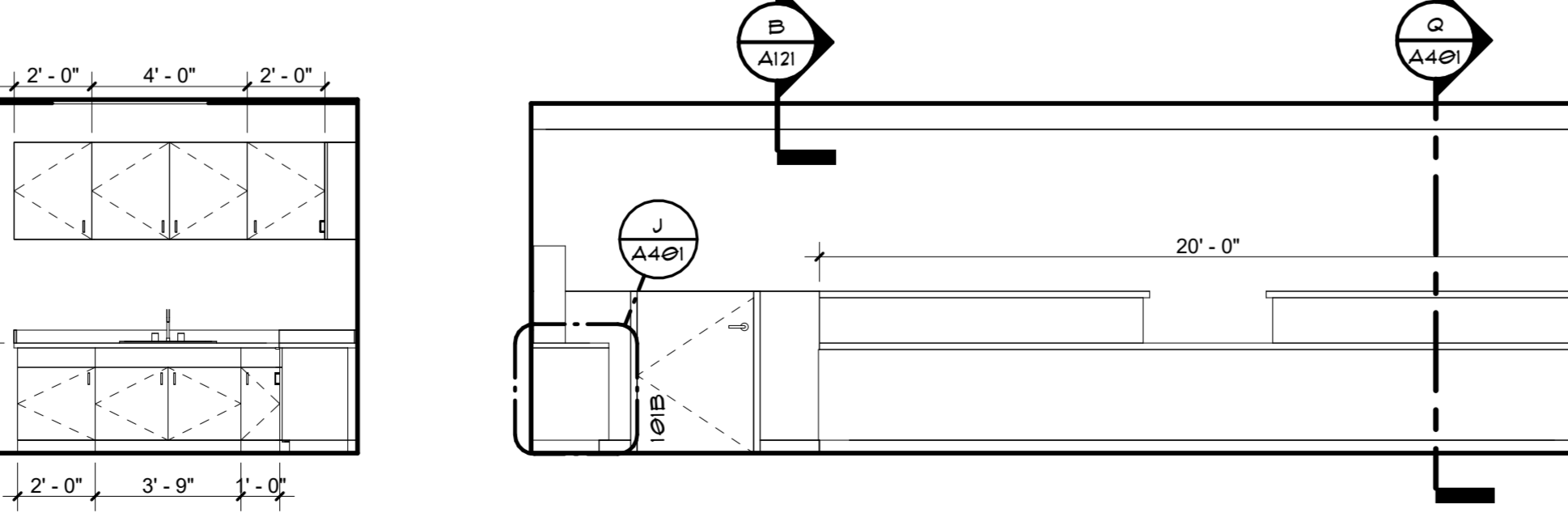
J CUBBY SECTION
1" = 1'-0"



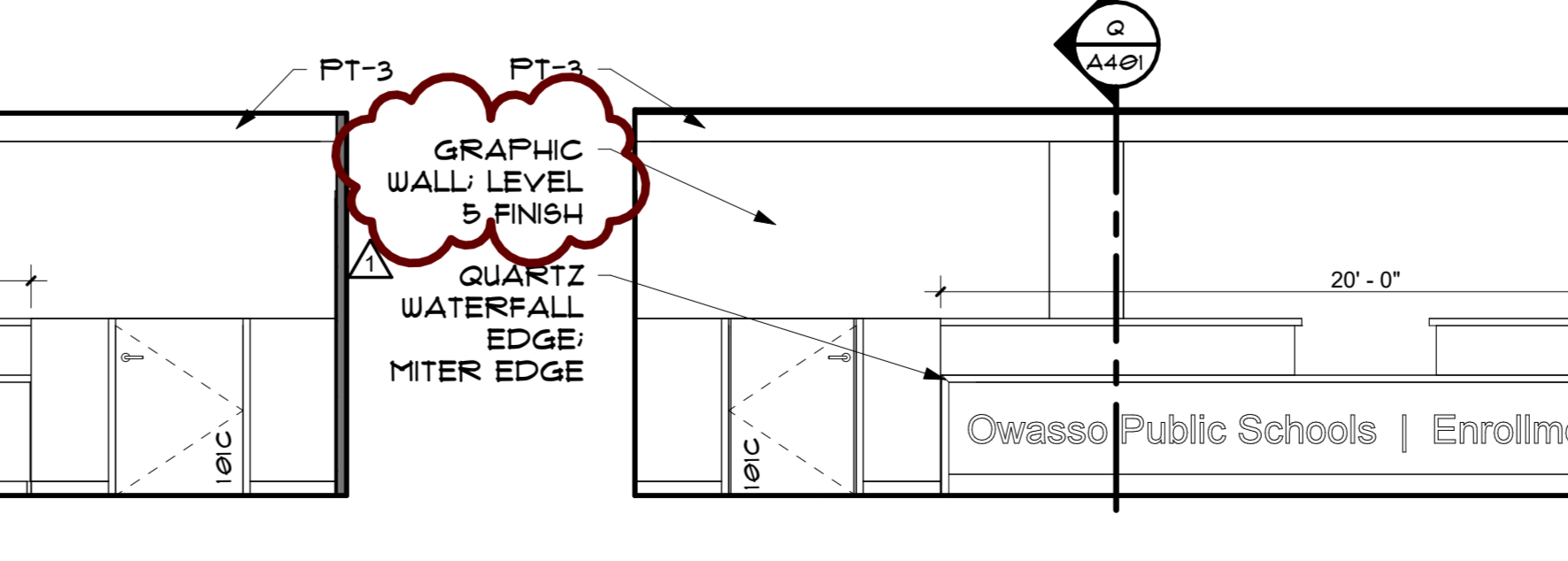
H INTERIOR STOREFRONT JAMB @ DOOR
3" = 1'-0"



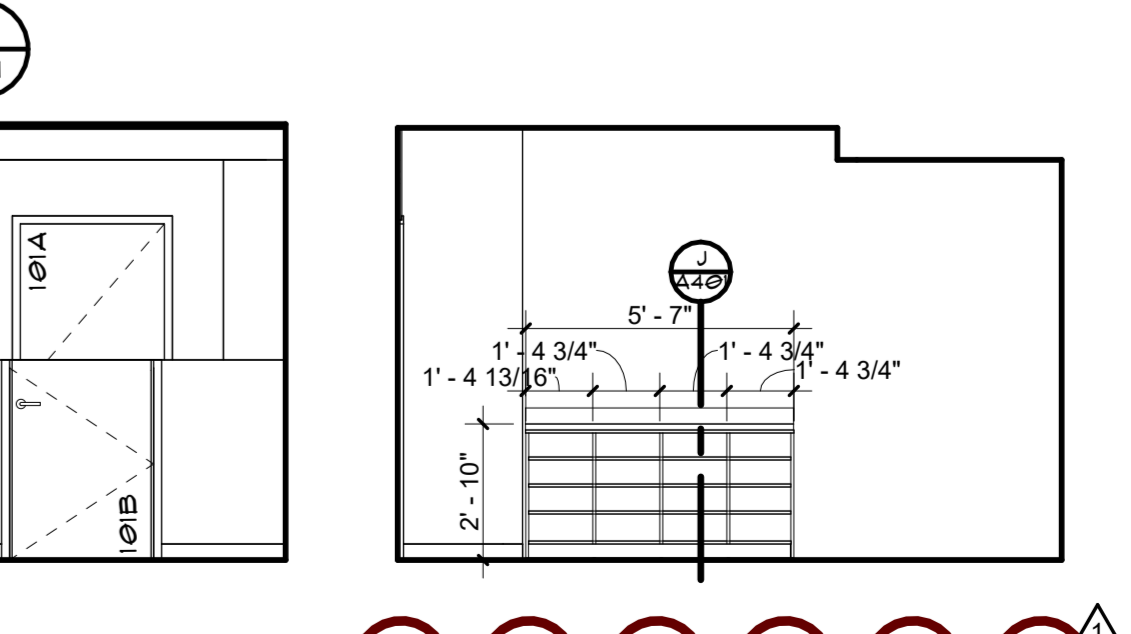
F TOILET 1/4" = 1'-0"
E BREAK ROOM 1/4" = 1'-0"



D BREAK ROOM 1/4" = 1'-0"
C ENROLLMENT 1/4" = 1'-0"



B ENROLLMENT 1/4" = 1'-0"



A ENROLLMENT 1/4" = 1'-0"



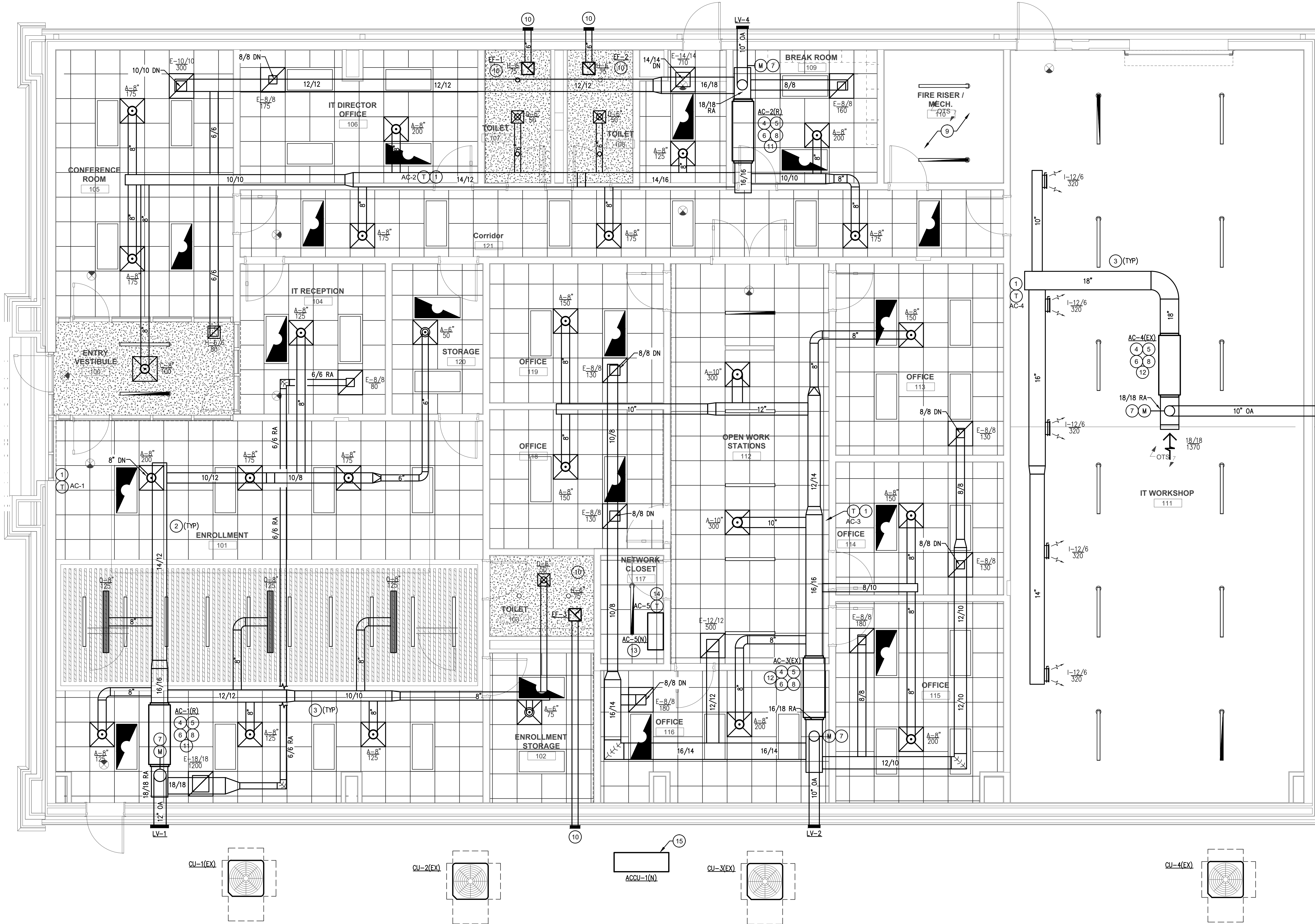
KEYNOTES

1. RELOCATE AND RECONNECT EXISTING PROGRAMMABLE THERMOSTAT. MOUNT TOP OF THERMOSTAT AT 48" A.F.F. COORDINATE EXACT LOCATION WITH OWNER.
2. SUPPLY/RETURN/EXHAUST AIR DUCTWORK ROUTED ABOVE SUSPENDED CEILING. COORDINATE WITH NEW CEILING AND EXISTING STRUCTURE. (TYPICAL)
3. ALL EXPOSED SPIRAL DUCTWORK TO BE INTERNALLY LINED WITH MINIMUM 1" (R-6 INSTALLED MIN) LONG TEXTILE FIBER TYPE DUCT LINER WITH COATING ON THE AIR STREAM SIDE CONFORMING TO NFPA 80A. DUCT LINER ADHESIVE SHALL BE AS RECOMMENDED BY DUCT LINER MANUFACTURER AND SHALL COMPLY WITH ASTM C-916. CONCEALED DUCTWORK TO BE EITHER INTERNALLY LINED AS LISTED ABOVE OR WRAPPED WITH R-6 INSTALLED MINIMUM WRAP.
4. HEAT PUMPS TO BE SUSPENDED FROM STRUCTURE WITH VIBRATION ISOLATION ANGERS. FIELD VERIFY EXACT LOCATION WITH EXISTING CONDITIONS
5. ROUTE REFRIGERANT PIPING TO ASSOCIATED CONDENSING UNIT. ROUTE CONDENSATE PIPES TO NEAREST AHJ APPROVED RECEPTOR
6. NO WIRING, PIPING OR DUCTWORK TO RUN ABOVE HEAT PUMP MAINTENANCE CLEARANCE.
7. PROVIDE MOTORIZED DAMPER INTERLOCKED WITH TIME OF DAY THERMOSTAT. DAMPER SHALL OPEN TO PROVIDE OUTDOOR AIR DURING OCCUPIED HOURS AND CLOSE DURING UNOCCUPIED HOURS. PROVIDE MANUAL BALANCE DAMPER FOR BALANCING OF OUTDOOR AIR.
8. ALL NEW AND EXISTING EXTERIOR REFRIGERANT PIPING SHALL BE INSULATED WITH AN OUTDOOR RATED UV RESISTANT INSULATION (ARMACELL ARMAFLEX SHIELD OR EQUAL). ALL INDOOR REFRIGERANT PIPING SHALL BE INSULATED WITH MINIMUM 1" INSULATION.
9. REFER TO ELECTRICAL AND FIRE ALARM PLAN FOR SMOKE DETECTION REQUIREMENTS.
10. ROUTE 6" EXHAUST DUCT FROM EXHAUST FAN AND DISCHARGE TO WALL CAP.
11. EXISTING UNITS AC-1 & AC-2 IS TO BE RELOCATED AND RETROFITTED WITH NEW DUCTWORK.
12. EXISTING UNITS AC-3 & AC-4 TO BE ELEVATED TO COORDINATE WITH NEW CEILING OR LIGHTING IN STORAGE, AND RETROFITTED WITH NEW DUCTWORK.
13. MOUNT DUCTLESS AC UNIT ON WALL AS HIGH AS POSSIBLE BELOW CEILING. VERIFY EXACT ROUTING OF LIQUID AND SUCTION LINES TO GROUND MOUNTED CONDENSING UNIT. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
14. MOUNT TOP OF THERMOSTAT AT 48" A.F.F.
15. PROVIDE 4" CONCRETE HOUSE KEEPING PAD

NOTE: BALANCE DAMPERS ARE REQUIRED FOR BALANCING THE HVAC SYSTEM. CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH AND INSTALL EVEN IF NOT SHOWN ON THE AIR OUTLET SCHEDULE OR PLANS. ALL DAMPERS SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION OR REMOTE ADJUSTMENT PROVIDED.

WHERE DAMPERS ARE INSTALLED ABOVE A HARD LID CEILING A YOUNG REGULATOR CABLE INSIDE OR OUTSIDE AIR STREAM AIR CONTROL DAMPER (OR EQUAL) SHALL BE PROVIDED WITH CONCEALED CEILING REGULATOR REMOTE CONTROL KIT 270-301.

NOTE: EXISTING BUILDING SLAB IS A POST-TENSION SLAB. COORDINATE ALL FLOOR PENETRATIONS WITH LOCATIONS OF TENSORS. SLAB PENETRATIONS SHALL BE RELOCATED IF CONFLICTING WITH TENSOR LOCATIONS. UNDER NO CIRCUMSTANCES SHALL THE TENSORS BE CUT. CONTRACTOR SHALL SCAN SLAB AND LOCATE TENSORS PRIOR TO ANY UNDER SLAB MODIFICATION.

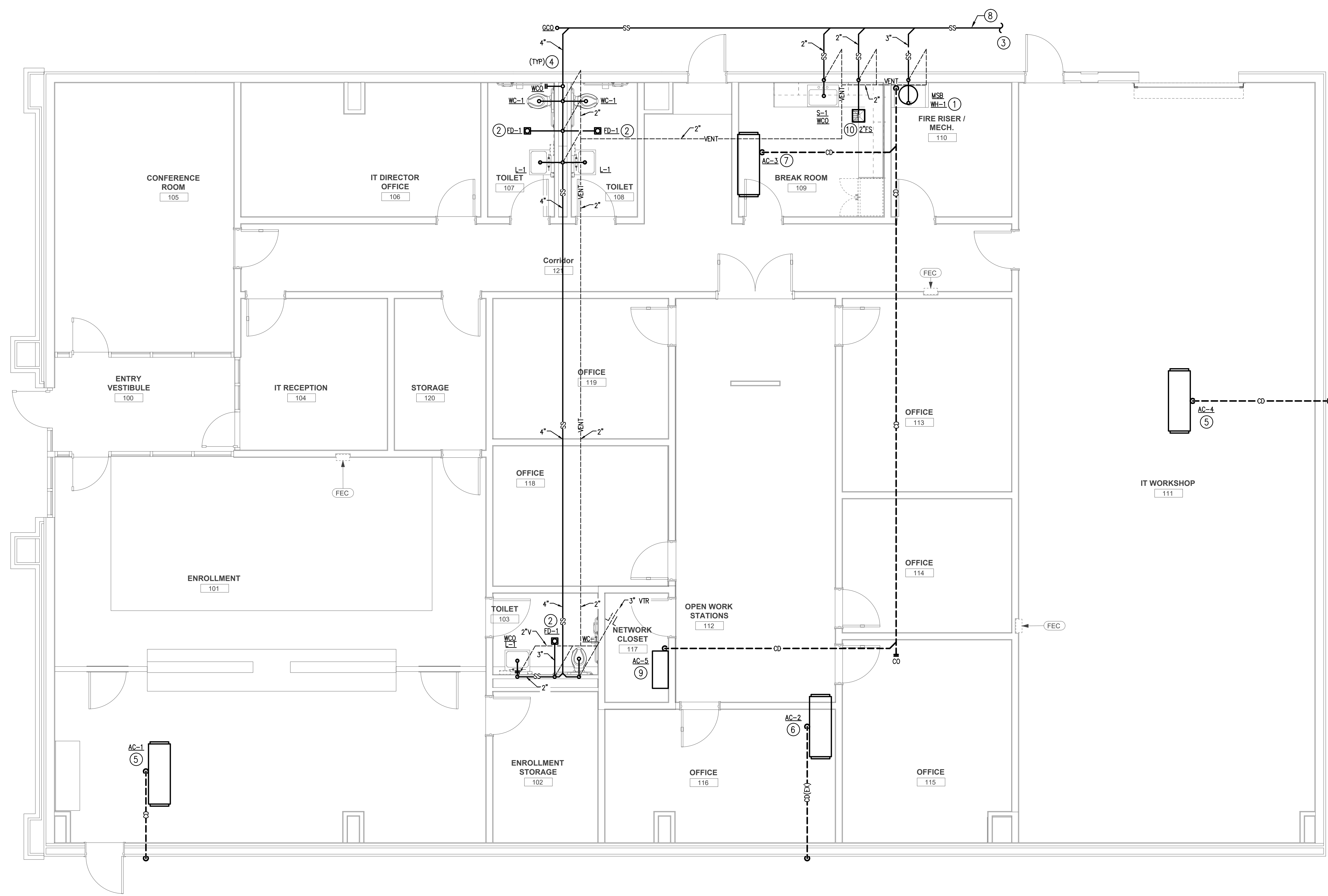


MECHANICAL FLOOR PLANS
SCALE: 1/4" = 1'-0"
NORTH

NOTE:
EXISTING BUILDING SLAB IS A POST-TENSION SLAB. COORDINATE ALL FLOOR PENETRATIONS WITH LOCATIONS OF TENONS. SLAB PENETRATIONS SHALL BE RELOCATED IF CONFLICTING WITH TENON LOCATIONS. UNDER NO CIRCUMSTANCES SHALL THE TENONS BE CUT. CONTRACTOR SHALL SCAN SLAB AND LOCATE TENON PRIOR TO ANY UNDER SLAB MODIFICATION.

KEYNOTES

1. ROUTE DRAIN PAN AND T&P RELIEF PIPING DOWN FROM WH-1 TO MOP SINK AND DISCHARGE SEPARATELY WITH A MINIMUM 2" AIR GAP.
2. PROVIDE "TRAP GUARD" OR SIMILAR BARRIER-TYPE TRAP SEAL PROTECTION DEVICE FOR FLOOR DRAIN/SINK.
3. CONNECT NEW SANITARY PIPING TO MINIMUM 4" EXISTING SANITARY PIPING. ALL EXISTING SANITARY SHALL BE FIELD VERIFIED PRIOR TO START OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO: CONNECTION POINT, INVERT, DIRECTION OF FLOW, AND LOCATION.
4. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING STRUCTURAL FOOTINGS PRIOR TO CONSTRUCTION AND MODIFY ROUTING AS REQUIRED. (TYPICAL)
5. PROVIDE NEW 3/4" CONDENSATE PIPING. INSULATE WITH 1/2" CLOSE CELL INSULATION. DRAIN TO EXTERIOR ABOVE GRADE.
6. EXISTING CONDENSATE PIPING. INSULATE WITH 1/2" CLOSE CELL INSULATION. FIELD VERIFY EXACT ROUTING.
7. ROUTE CONDENSATE PIPING TO MOP SINK. TERMINATE WITH MINIMUM 2" GAP. INSULATE WITH 1/2" CLOSE CELL INSULATION. SLOPE LINE MINIMUM 1/8" PER FOOT.
8. COORDINATE ROUTING WITH EXISTING FIRE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING/BACKFILL/NEW CONCRETE.
9. 3/4" CONDENSATE FROM WALL MOUNTED AC UNIT TO BE ROUTED ABOVE OFFICE CEILING LEVEL VIA CONDENSATE PUMP (CCP-1). ROUTE TO MOP SINK AND DISCHARGE WITH MIN 1" AIR GAP. ENSURE MINIMUM 1/8" SLOPE PER FOOT. INSULATE WITH 1/2" CLOSE CELL INSULATION.
10. LOCATE FLOOR SINK 1/2" EXPOSED WITH COUNTER. COORDINATE EXACT LOCATION WITH ARCHITECTURAL PLAN. ROUTE ICE MACHINE BIN AND COOLING COIL TO FLOOR SINK AND TERMINATE WITH MINIMUM 1" AIR GAP.



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05/10/2024
ISSUE:
PERMIT SET

OTHER ISSUE DATES:		
NO.	DESCRIPTION	DATE
1	ADD #1	5-24-24

SHEET NAME:
PLUMBING WASTE & VENT PLAN

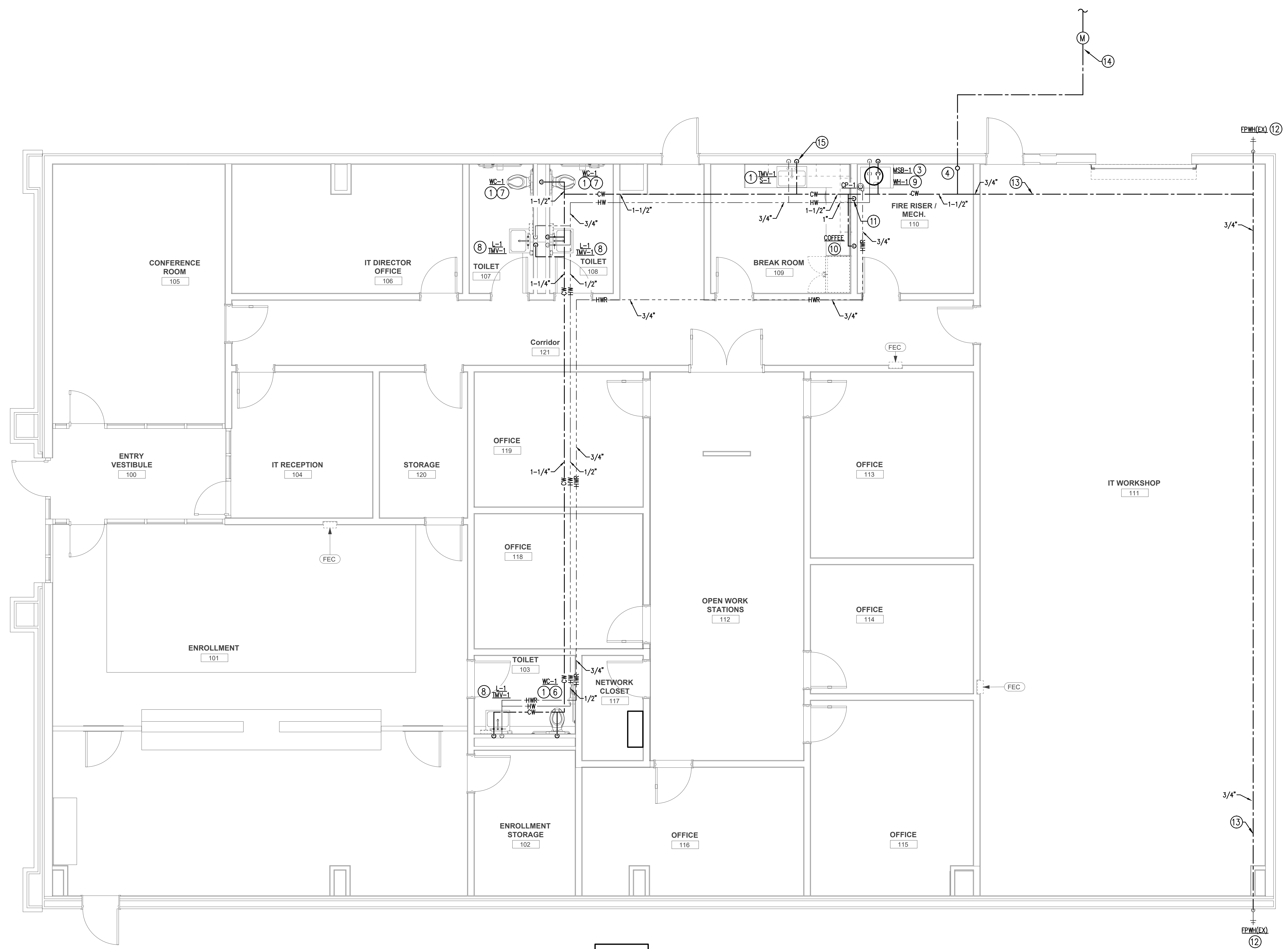
SHEET NUMBER:
P100

1 PLUMBING DWV PLANS
SCALE: 1/4" = 1'-0"

NOTE: EXISTING BUILDING SLAB IS A POST-TENSION SLAB. COORDINATE ALL FLOOR PENETRATIONS WITH LOCATIONS OF TENDONS. SLAB PENETRATIONS SHALL BE RELOCATED IF CONFLICTING WITH TENDON LOCATIONS. UNDER NO CIRCUMSTANCES SHALL THE TENDONS BE CUT. CONTRACTOR SHALL SCAN SLAB AND LOCATE TENDON PRIOR TO ANY UNDER SLAB MODIFICATION.

KEYNOTES

1. PROVIDE WATER HAMMER ARRESTER ON ALL FLUSH VALVES, DISHWASHER AND ICE MAKERS PER PDI #WH-201, ASSE #1010 AND ANSI #A112.26.1M (TYPICAL)
2. STUB UP NEW 1-1/2" CW SUPPLY IN BUILDING AND PROVIDE SHUT-OFF VALVE. PROVIDE PRESSURE REDUCING VALVE SET AT 70 PSI IF PRESSURE EXCEEDS 75PSI AT LOW DEMAND TIMES.
3. ROUTE 3/4" HW & CW DOWN IN WALL TO MOP SINK.
4. COORDINATE EXACT WATER SUPPLY STUB-UP LOCATION WITH EXISTING FIRE RISER AND PIPING. WATER PIPING ROUTED BELOW SLAB TO BE TYPE K SOFT COPPER WITH NO JOINTS.
5. COORDINATE NEW DOMESTIC WATER SERVICE WITH LOCAL UTILITY COMPANY AND LOCAL AHI. COORDINATE METER AND BACKFLOW PREVENTION REQUIREMENTS AND PROVIDE AND INSTALL AS NECESSARY.
6. PROVIDE 1-1/4"CW TO WATER CLOSET FLUSH VALVE.
7. PROVIDE 1-1/2"CW TO BACK-TO-BACK WATER CLOSET FLUSH VALVES.
8. 1/2"CW AND 1/2"HW TO HAND SINK OR LAVATORY. PROVIDE THERMOSTATIC MIXING VALVE (TMV). THERMOSTATIC MIXING VALVE TO BE SET TO 105F.
9. PROVIDE NEW 1"CW & 1"HW DOWN TO WATER HEATER. ROUTE WATER HEATER T&P TO FLOOR DRAIN AND TERMINATE WITH AIR GAP.
10. EXTEND 1/2" CW TO COFFEE MACHINE. PROVIDE INLINE BACKFLOW WATTS 3/8" SD3-FN PER ASSE-1022
11. 1/2" CW TO ICE MACHINE. PROVIDE INLINE FILTER (IF NOT PROVIDED WITH UNIT), SHUT-OFF VALVE AND FINAL TERMINATION.
12. RECONNECT EXISTING HOSE BIBS TO NEW WATER LINES. FIELD VERIFY EXACT LOCATIONS.
13. ROUTE EXPOSED WATER LINES AS HIGH AS POSSIBLE.
14. RETROFIT EXISTING WATER DOWNSTREAM OF EXISTING METER WITH 1-1/2" LINE AND ROUTE TO NEW ENTRY.
15. PROVIDE FAUCET MOUNT FILTRATION SYSTEM TO BREAKROOM SINK. REFER TO ARCHITECTURAL FLOOR PLAN (SHEET A101) FOR REQUIREMENTS.



PLUMBING SUPPLY PLAN
SCALE: 1/4" = 1'-0"

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1	ADD #1	5-24-24

SHEET NAME:
PLUMBING SUPPLY PLANS

SHEET NUMBER:
P101

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POST-TENSION SLAB NOTE

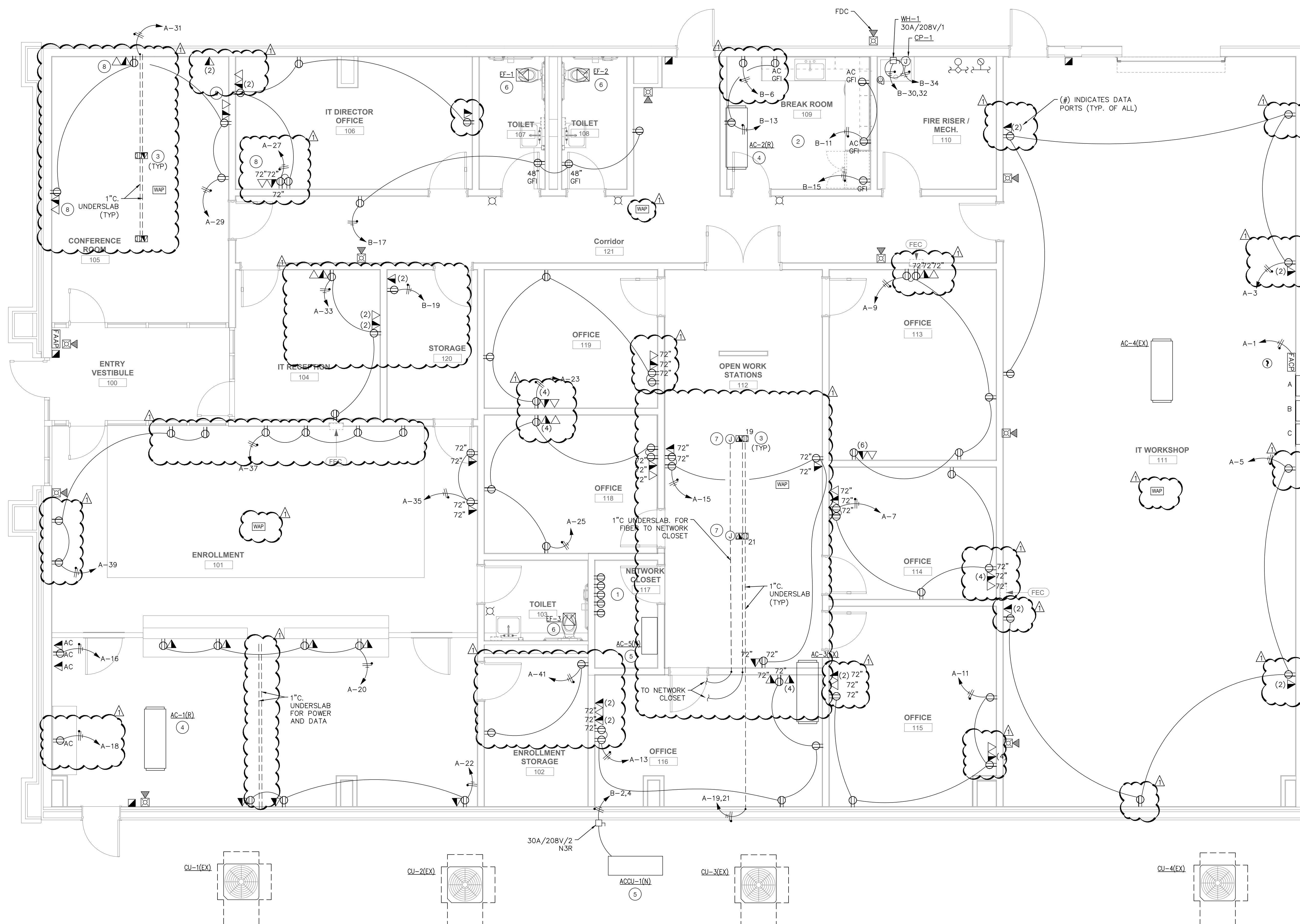
EXISTING BUILDING SLAB IS A POST-TENSION SLAB. BEFORE ANYWORK, THE CONTRACTOR SHALL X-RAY THE SLAB TO IDENTIFY THE LOCATIONS OF POST-TENSION TENDONS WITHIN THE SLAB. UNDER NO CIRCUMSTANCES TENDONS SHALL BE CUT.

KEY NOTES

1. PROVIDE FIVE DEDICATED DUPLEX RECEPTACLES 48" AFF FOR NETWORK RACK. REFER TO PANEL SCHEDULES ON SHEET E300 FOR HOMERUNS.
2. PROVIDE A GFI CIRCUIT BREAKER IN LIEU OF A GFCI OUTLET IF THE OUTLET LOCATION IS NOT READILY ACCESSIBLE.
3. PROVIDE (1) 4-GANG FLOOR BOX (LEGRAND EFB45S OR EQUAL), WITH (2) 20AMP DUPLEX RECEPTACLES AND (2) DATA PORTS. COORDINATE WITH ARCHITECT FOR COVER FINISH.
4. RELOCATED MECHANICAL UNIT. EXTEND AND RECONNECT AS REQUIRED.
5. INTERLOCK INDOOR UNIT WITH OUTDOOR UNIT AS REQUIRED. COORDINATE WITH MECHANICAL PLANS.
6. POWER AND CONTROL EXHAUST FAN WITH RESTROOM LIGHTS.
7. 2 KEYSTONE JACK FOR FIBER (LC) UNDER TABLE.
8. 1-1/2"C. FOR HDMI FROM BEHIND DISPLAY TO DESK.

POWER GENERAL NOTES

1. ALL WORK SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH GOOD INSTALLATION PRACTICES, SPECIFICATIONS, AND THE LATEST EDITIONS OF ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES. ALL COMPONENTS SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS.
2. PLANS SHOWN ARE DIAGRAMMATICAL IN NATURE AND DO NOT INDICATE EVERY FITTING, TRANSITION, BOX, ETC REQUIRED. THEREFORE, CONTRACTOR IS TO COORDINATE ALL ELECTRICAL REQUIREMENTS WITH OTHER TRADES PRIOR TO INSTALLATION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING COMPLETE AND OPERATIONAL SYSTEMS SHOWN ON PLAN.
4. ALL CONDUIT, POWER WIRES, RECEPTACLE BOXES, RECEPTACLES, AND OVERLOAD PROTECTION DEVICES SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
5. ALL CONDUIT SIZES SHALL BE DETERMINED BY ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED.
6. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR GROUNDING OF ALL ELECTRICAL EQUIPMENT.
7. WIRING DEVICES:
 - a. SWITCHES +48"
 - b. RECEPTACLES +18"
 - c. VOICEDATA +18"
8. WIRING SHALL INCLUDE FINAL CONNECTION TO ALL EQUIPMENT IN CONFORMANCE WITH EQUIPMENT SUPPLIER WIRING DIAGRAMS.
9. UPON COMPLETION OF ELECTRICAL INSTALLATION AND PRIOR TO ENERGIZING CIRCUIT:
 - a. INSPECT WIRE AND CABLE FOR PHYSICAL DAMAGE. PERFORM CONTINUITY TEST.
 - b. VERIFY PROPER PHASING CONNECTION TO ALL THREE PHASE MOTOR LOADS.
10. CONTRACTOR IS RESPONSIBLE FOR PROVIDING COMPLETE PANELBOARD TYPED IDENTIFICATION SCHEDULES.
11. WHERE BRANCH CIRCUITS ARE GROUPED, SIZE CONDUIT AND DERATE CURRENT CARRYING CONDUCTORS PER NEC.
12. WHERE EQUIPMENT NAMEPLATE PROTECTIVE DEVICE RATING DIFFERS FROM SIZE PROVIDED, CHANGE OUT BRANCH CIRCUIT WIRING AND OVERCURRENT DEVICE TO APPROPRIATE RATING PER NEC.
13. NO ALUMINUM WIRE CONDUCTORS SHALL BE USED FOR INSTALLATION OF BRANCH CIRCUITS. USE COPPER WIRE CONDUCTORS. ALUMINUM CONDUCTORS FOR FEEDERS WILL NEED TO BE APPROVED BY ENGINEER AND OWNER.
14. EQUIPMENT SHALL BE OF MATERIALS SUITABLE FOR AND RATED FOR THE ENVIRONMENT IN WHICH THEY ARE TO BE INSTALLED.
15. WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT SHALL BE IN COMPLIANCE WITH NEC 110. THE EXCLUSIVELY DEDICATED SPACE EXTENDING FROM FLOOR TO STRUCTURAL CEILING WITH A WIDTH AND DEPTH OF THE PANELBOARD OR SWITCHBOARD MUST BE CLEAR OF ALL PIPING, DUCTS, EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES IN ACCORDANCE WITH NEC 408.
16. MAXIMUM COMBINED FEEDER AND BRANCH CIRCUITS SHALL NOT EXCEED 5% VOLTAGE DROP, AND THE MAXIMUM ON THE FEEDER OR BRANCH CIRCUIT SHALL NOT EXCEED 3% VOLTAGE DROP. ELECTRICAL CONTRACTOR TO INCREASE WIRE/CONDUIT SIZE AS NECESSARY TO MAINTAIN VOLTAGE DROP RECOMMENDATIONS.
17. WHERE CONNECTED TO A 20A BRANCH CIRCUIT SUPPLYING AN INDIVIDUAL RECEPTACLE (SIMPLEX OR DUPLEX), THE RECEPTACLE SHALL BE RATED AT 20A.
18. CIRCUIT NUMBERS AT DEVICES CORRESPOND TO PANELBOARD BREAKERS (SEE PANELBOARD SCHEDULE). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING, UNLESS INDICATED OTHERWISE ON THE ELECTRICAL EQUIPMENT SCHEDULE.
19. PROVIDE HOUSEKEEPING PADS FOR ALL FLOOR MOUNTED AND GRADE MOUNTED ELECTRICAL EQUIPMENT. MINIMUM REQUIREMENTS: 4" HIGH, 4% AIR ENTRAINED, POLYFIBER REINFORCED CONCRETE, 4" WIDER AND 4" LONGER THAN EQUIPMENT TO BE PLACED ON IT. REFER TO ELECTRICAL DETAIL DRAWINGS FOR TRANSFORMER, GENERATOR, OR SWITCHGEAR PADS THAT MAY EXCEED



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



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1	ADD #1	5-24-24