



DESIGN
WEST

ADDENDUM NO. 2

DPW Project #2023256

DWA Project # 23054

April 30, 2024

To the Plans and Specifications for:

**DPW/UI – Ag Science Building HVAC Phase Two
University of Idaho
Moscow, Idaho**

TO ALL CONTRACTORS SUBMITTING BIDS ON THE ABOVE SUBJECT: This Addendum is hereby made a part of the Contract Documents pertaining to the above project and shall be binding upon each contractor submitting bids. Bids submitted shall be for the full and complete cost of incorporating these changes into the contract, no further claims shall be allowed for work associated with this addendum. It shall further be the responsibility of each Contractor to notify his sub-contractors concerning the contents of this addendum as they specifically apply to them. The following changes hereby become a part of the Contract Documents. Acknowledge receipt of this Addendum in the space provided on the Bid Proposal. Failure to do so may subject Bidder to disqualification.

GENERAL:

GENERAL NOTE: The additions, revisions, clarifications and corrections contained herein shall be made to drawings and specifications for the project and shall be included in scope of work and proposals to be submitted. Reference made below to specification and drawings shall be as a general guide only. Bidder shall determine the work affected by Addendum items.

2.1 ALL DOCUMENTS

INFORMATION: Industrial Hygiene Resources performed sampling and testing in March 2023 for the purpose of determining the presence of lead-based paint within the Agricultural Sciences Building. A summary of the sample locations and laboratory results for lead content is as follows:

PC-1: Room 322 yellow drywall wall—0.36%
PC-2: Hallway brown ceramic baseboard—<0.00039%
PC-3: Room 315 white concrete wall—0.13%
PC-4: Room 307 light grey wall—0.15%
PC-5: Room 305 dark grey wall—0.29%
PC-6: Hallway white structural concrete ceiling—0.0049%
PC-7: Room 313 structural beam concrete ceiling—0.0077%
PC-8: Janitors closet light green concrete wall—0.36%
PC-9: Girls restroom tan ceramic floor—<0.00039%
PC-10: Girls restroom green ceramic floor—0.00040%
PC-11: Room 221 white plaster wall—0.00040%
PC-12: Room 230 white concrete wall—0.0022%

All samples were returned back at less than the EPA threshold to be defined as a lead-based paint: 0.5% by weight. The conclusion by IHR was that lead based paint abatement was thus not required per EPA regulations, based on the sample results.

Contractor shall be responsible to comply with all applicable OSHA regulations in regards to potential worker exposures to lead. The Owner will provide lead in air sampling during demolition activities at the request of the contractor, for the purpose of compliance with OSHA regulations.

2.2 ALL DOCUMENTS

CLARIFICATION: Contractor shall exercise extreme caution during demolition and construction to protect existing telecom and AV systems not otherwise indicated to be demolished. Special attention should be given to the AV systems within rooms 104, 106, and 204. If any damage to existing telecom or AV systems occurs, promptly notify the University of Idaho OIT Network Team and make necessary repairs or replacement to restore the affected system back to its existing functionality. The Contractor is



responsible for testing both the new and existing telecom and AV systems located within the entire project work area to demonstrate that the new and existing systems are functional prior to acceptance of the project. It shall be assumed that the existing systems and cabling are functional at the onset of the project unless contractor opts to perform additional testing to document condition of the systems prior to the start of work.

CLARIFICATION: Seal all new penetrations in both new and existing walls, and infill all locations where existing utilities are removed to match the existing adjacent construction. In addition to sealant, provide fabricated sheet metal collar trim to fully conceal cut opening around all new duct penetrations exposed to view. New duct and pipe penetrations through exterior walls shall be flashed and sealed watertight, insulate voids around penetrations. At existing interior masonry walls, an 18 gauge hemmed stiffened sheet metal cover may be installed in lieu of wall infill where existing ducts or grilles are removed; paint metal cover to match adjacent wall finish. All penetrations through fire rated construction shall be fire stopped.

CLARIFICATION: The contractor is advised that new wall penetrations crossing through the existing chase line at Grids 5 & 6 will require coring or cutting of the existing masonry walls at each grid line.

SPECIFICATIONS:

2.3 SPECIFICATIONS

APPROVED SUBSTITUTION: Substitution Requests should be submitted to the office of the architect via email at cholstad@designwestpa.com, or call 509-332-3113. The deadline for submitting substitution requests is April 26, 2024.

The following is a list of accepted manufacturers which may be substituted for those in the specifications. This is an acceptance of general quality only. No attempt has been made to check each material as to special features, capacities, or physical dimensions especially required by this project. It is the responsibility of the supplier, manufacturer, and contractor to check all requirements before submitting for final approval. Final approval of exact features, sizes, capacities, etc., all of which must match materials indicated/specified, will be determined when submitted during the construction period. Certain approvals are subject to conditions as noted:

<i>Section</i>	<i>Type</i>	<i>Manufacturer</i>
232116-2.8	Manual Balancing Valves	Red-White Valve Corp.
232116-2.7	Auto Flow Balancing Valves	Red-White Valve Corp.
230523-2.2	General Valves	Red-White Valve Corp.
230519-2.2	Steam Pressure Gauges	Miljoco
220523-2.1	General Valves	Red-White Valve Corp.

2.4 SECTION 01 78 23 – OPERATION & MAINTENANCE DATA

REVISION: Revise item 1.2B as follows:

B. Format: Submit operation and maintenance manuals in the following format:

1. Submit both draft and final manuals by email to Design Professional in electronic PDF format. Enable reviewer comments on draft submittals.
2. Provide one paper copy of the final manual for Owner.

2.5 SECTION 02 80 00 – ASBESTOS ABATEMENT TECHNICAL SPECIFICATION

CLARIFICATION: In reference to Part 7.0 Asbestos Removal and Disposal Methods, bullet point #5; not all hydronic piping is to be abandoned. Refer to mechanical demolition sheets for extent of hydronic piping to be completely removed, and the extent of hydronic piping to be abandoned in place.



2.6 SECTION 05 51 00 – METAL STAIRS

REVISION: Revise section 2.6 FINISHES to read as follows:

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

D. Steel and Iron:

- 1. Powder Coated Railings and Perforated Sheet Metal Infill Panels (exterior railings):
 - a. Powder-Coat Finish: Prepare, treat, and coat metal to comply with resin manufacturer's written instructions and as follows:
 - b. Prepare galvanized metal by thoroughly removing grease, dirt, oil, flux, and other foreign matter.
 - c. Prepare uncoated ferrous-metal surfaces to comply with SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
 - d. Treat prepared metal with zinc-phosphate pretreatment, rinse, and seal surfaces.
 - e. Apply thermosetting polyester or acrylic urethane powder coating with cured-film thickness not less than 1.5 mils (0.04 mm).
 - f. Color: As selected by Architect from manufacturer's full range.

2.7 SECTION 05 52 00 – METAL RAILINGS

ADDITION: Add 2.1C, item 4 as follows:

- 4. Guardrail Infill Panels: Perforated Steel Sheet, ASTM A1008.
 - a. Perforated Steel Sheet: of gage necessary to withstand loads indicated, minimum 11 gauge
 - b. Pattern: 1/2" diameter round holes spaced at 11/16" staggered centers, 48% open area. Provide with 1 1/2" solid margins at panel edges.

REVISION: Revise 2.6D, item 1 to read as follows:

- 1. Powder Coated Railings and Perforated Sheet Metal Infill Panels (exterior railings):
 - a. Powder-Coat Finish: Prepare, treat, and coat metal to comply with resin manufacturer's written instructions and as follows:
 - b. Prepare galvanized metal by thoroughly removing grease, dirt, oil, flux, and other foreign matter.
 - c. Prepare uncoated ferrous-metal surfaces to comply with SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
 - d. Treat prepared metal with zinc-phosphate pretreatment, rinse, and seal surfaces.
 - e. Apply thermosetting polyester or acrylic urethane powder coating with cured-film thickness not less than 1.5 mils (0.04 mm).
 - f. Color: As selected by Architect from manufacturer's full range.

2.8 SECTION 07 62 00 – SHEET METAL FLASHING & TRIM

ADDITION: Add the attached section 07 62 00.

2.9 SECTION 09 00 00a – FINISH SCHEDULE

REVISION: Revise finishes for Room 016A as follows:

Room Name: Telecom

Floor Finish: Concrete Sealer

Base Material: None

North Wall Material: 3/4" Fire Treated Plywood 8' high

North Wall Finish: PT-1



East Wall Material: 3/4" Fire Treated Plywood 8' high
East Wall Finish: PT-1
South Wall Material: 3/4" Fire Treated Plywood 8' high
South Wall Finish: PT-1
West Wall Material: 3/4" Fire Treated Plywood 8' high
West Wall Finish: PT-1
Ceiling Material: NC
Ceiling Finish: PT-1

CLARIFICATION: Add General Finish Note #2 to read as follows:
2. All new gypsum board soffits and chases shall be painted PT-1, typical.

2.10 SECTION 09 00 00b – MATERIAL LEGEND

REVISION: Add Spec 07 62 00 Sheet Metal Flashing and Trim:

Mfgr./Product: The Garland Company – Parapet Coping; Finish Color: Match color of existing metal parapet copings (color: AEP Span Dark Bronze)

Mfgr./Product: Misc. Flashing; Finish Color: Match adjacent color being flashed, color as selected by Architect from manufacturers full range

2.11 SECTION 09 29 00 – GYPSUM BOARD

REVISION: Revise section 2.5 TRIM ACCESSORIES, item A to read as follows:

A. Aluminum Trim: Extruded accessories of profiles and dimensions indicated, reference drawings for locations.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Basis of Design: Fry Reglet Corp.
 - 1) Wall Reveal: Reveal Molding DRM-625-625
 - 2) Wall or ceiling "F" Reveal: "F" Reveal DRMF-625-150
 - b. Gordon, Inc.; equivalent to above
 - c. Pittcon Industries; equivalent to above
2. Aluminum: Alloy and temper with not less than the strength and durability properties of ASTM B 221, Alloy 6063-T5.
3. Finish: White powder coat

ADDITION: Add item D to section 2.5 TRIM ACCESSORIES as follows:

D. Drywall Ceiling Light Cove Trim: Extruded aluminum profile of dimensions indicated, reference drawings for locations and radius of curves. Installs with drywall ceiling suspension system specified in section 09 22 16.

1. Basis of Design: Armstrong World Industries, Axiom Curved Indirect Light Ledge System
 - a. System: An extruded aluminum light cove system, installs with Armstrong drywall suspension systems. Commercial quality extruded aluminum alloy 6063 trim channel
 - b. Profile: AXILL2DCUR Axiom Curved Indirect Light Ledge – Aluminum extrusions with a taping flange and design for integration with 5/8" drywall. Special bosses are designed to connect to axiom splice plates; to provide positive mechanical lock with no visible fasteners.
 - c. Finish: factory finished in baked polyester paint (white).
 - d. Coordinate installation of lighting fixtures with division 26.

2.12 SECTION 09 91 00 – PAINTING

CLARIFICATION: Revise section 2.1A, item #3 to read as follows:

3. PPG Paints

2.13 SECTION 230500 – COMMON WORK RESULTS FOR HVAC

ADDITION: Add line D to 3.19 as follows:



Contractor provided record documentation prints shall not have references to RFIs from the course of construction. The recorded differences shall be neatly drawn and depicted by the Contractor on the prints, this includes any changes made in any RFIs during the course of construction. Providing record documentation during project closeout that directly references RFIs without showing the constructed differences will not be accepted and will be rejected.

REVISION: Revise 3.11, line F as follows:

The final O&M is required to be prepared both electronically and in hard copy. Refer to specification section 01 78 23 for information on quantity of O&M hard copies required, in addition to the electronic O&M document as described herein.

2.14 SECTION 230505 – ADDITIONS OR REMODELED FACILITIES

ADDITION: Add line G to 1.5 as follows:

The general, mechanical, and abatement contractor shall coordinate and assign trade responsibility for piping demo where asbestos containing materials such as TSI or mudded elbows are present. The general contractor shall coordinate and assign trade responsibility for piping demo where asbestos containing materials such as TSI or mudded elbows are present. All asbestos containing materials shall be abated, refer to 02 80 00 for additional information.

ADDITION: Add line H to 1.5 as follows:

In the following list of locations on the third floor, the Contractor shall demolish all existing pneumatic controls, control tubing, electrical connections, boxes, conduit, and all other accessories to result in the entirety of the previously demolished radiator demolition to be completed. Existing sleeves shall be cut flush with floor substrate. List of rooms: 304F, 304E, 304D, 308, 310, 312, 314, 318, 318A, 322. Patch back all floors, walls, and ceilings to architectural standard. Protect existing radiators and other existing construction during this work.

Contractor shall demolish all hydronic piping stubs and sleeves remaining from the previously demolished radiators throughout all rooms of the 1951 wing 3rd floor. Existing sleeves shall be cut flush with floor substrate. Patch back all floors, walls, and ceilings to architectural standard. Protect existing radiators and other existing construction during this work.

2.15 SECTION 260532 – BOXES

ADDITION: Add paragraph H to 2.1 to read as follows:

Provide Wiremold surface mounted boxes with adapter fittings where receptacles or light control devices are shown to be installed on CMU walls except in electrical and telecom rooms. The flush-type extension adapter fitting shall fully conceal the junction box behind the receptacle or lighting control device when surface mounted to CMU. Boxes with raised cover plates may be utilized for surface mounted boxes in electrical and telecom rooms.

2.16 SECTION 27 15 00 – TELECOMMUNICATIONS AND DATA SYSTEMS

ADDITION: Add the attached section 27 15 00.

DRAWINGS:

2.17 SHEET G1.00 – COVER SHEET

CLARIFICATION: See added note on the attached Sheet G1.00 to indicate the location of Poultry Hill on the Campus Map.



REVISION: See revised Drawing Index for Electrical and Telecom sheets on the attached Sheet G1.00.

2.18 SHEET A3.20C – GROUND FLOOR DEMO PLAN AREA C

REVISION: Revise room name for 016A to “TELECOM”

ADDITION: Add Demolition Keyed Note D31 to the Demolition Keyed Notes All Sheets Legend, Note D31 to read as follows: DEMOLISH ALL EXISTING METAL CONDENSER RACKS WITHIN ROOM, SEE ELECTRICAL FOR ADDITIONAL INFORMATION. DEMOLISH ALL ABANDONED UTILITIES WITHIN THIS ROOM.

ADDITION: Add Demolition Keyed Note D31 to room 016A.

2.19 SHEET A3.22B – SECOND FLOOR DEMO PLAN AREA B

CLARIFICATION: Demolish portion of existing interior chase wall at the southwest corner of Room 204 as required for installation of new mechanical system in chase. Patch and rebuild wall to match existing masonry construction and plaster finish.

2.20 SHEET A3.23B – THIRD FLOOR DEMO PLAN AREA B

REVISION: Delete demolition keyed note D4 from the following rooms: 307A.

2.21 SHEET A3.23C – THIRD FLOOR DEMO PLAN AREA C

REVISION: Delete demolition keyed note D4 from the following rooms: 317, and 325A.

2.22 SHEET A3.30C – GROUND FLOOR PLAN AREA C

REVISION: Revise room 016A as shown on the attached Sheet A3.30C.

2.23 SHEET A3.33B – THIRD FLOOR PLAN AREA B

REVISION: Delete dashed line indicating 3RD FLOOR PATCH AND REPAIR from the following rooms: 307A.

REVISION: Provide CONC – PAINT ON FLOOR SEALER in the area beneath each of the existing fume hoods called for demolition within Lab 306 and Lab 313.

REVISION: Provide rubber transition strip along the existing VCT to CONC flooring transition, full length of the east wall in the following rooms: 309 and 315.

2.24 SHEET A3.33C – THIRD FLOOR PLAN AREA C

REVISION: Delete dashed line indicating 3RD FLOOR PATCH AND REPAIR from the following rooms: 317, and 325A.

2.25 SHEET A3.50B – GROUND FLOOR REFLECTED CEILING PLAN AREA B

CLARIFICATION: Refer to sheet A3.50A for ceiling information for the entry area at the northeast corner of Office 006, located along the Match Line at approximately Grid line B and Grid line 6. The entry area of Office 006 is to receive new suspended 2x4 acoustical tile grid ceiling, ACT-1.

2.26 SHEET A3.50C – GROUND FLOOR REFLECTED CEILING PLAN AREA C

REVISION: Revise room name for 016A to “TELECOM”

ADDITION: Room 016A ceiling shall be open to structure. Patch, repair and paint the ceiling PT-1.

2.27 SHEET A3.52A – SECOND FLOOR REFLECTED CEILING PLAN AREA A

REVISION: Revise Room 205 ceiling as shown on the attached Sheet A3.52A.



2.28 SHEET A3.60 – ROOF OVERALL PLAN

ADDITION: Revise the roof plan as shown on the attached drawing to add new metal coping over the existing building's pre-cast parapet caps. The new metal coping will interface with the building's existing low slope metal roof system, and the coping installation shall maintain the Owner's existing 30 year roofing warranty which began in May of 2014. The new coping metal shall be added to the coverage of the Owner's existing roofing warranty to provide an edge-to-edge warranty. The coping metal and any related accessories shall be supplied by the existing roof system manufacturer, and installed by a manufacturer certified installer. The existing roof system is R-Mer Lite as manufactured by The Garland Company. No substitutions will be allowed due to the requirement to maintain the Owner's existing warranty.

2.29 SHEET A8.00 – DETAILS

CLARIFICATION: Add the following note to detail E7/A8.00: NOTE: POWDER COAT ALL EXPOSED SURFACES OF THE STEEL STRUCTURE, LADDER, GATES AND RAILINGS.

2.30 SHEET S3.32 – 2ND FLOOR PLAN

ADDITION: Wall penetrations added at roof to rooms 204 and 205 for routing of mechanical system. Reference attached updated sheet S3.32.

2.31 M3.20B - GROUND FLOOR AREA B - HVAC – DEMO

REVISION: See attached drawing for revision to general demolition note #2, and to the ductwork demolition scope within corridor to depict ductwork being abandoned inside of chases.

2.32 M3.20C - GROUND FLOOR AREA C - HVAC – DEMO

REVISION: See attached drawing for revision to general demolition note #2, and to the ductwork demolition scope within corridor to depict ductwork being abandoned inside of chases.

2.33 M3.21B - FIRST FLOOR AREA B - HVAC - DEMO

REVISION: See attached drawing for revision to general demolition note #2, and to the ductwork demolition scope within corridor to depict ductwork being abandoned inside of chases.

2.34 M3.21C - FIRST FLOOR AREA C - HVAC – DEMO

REVISION: See attached drawing for revision to general demolition note #2, and to the ductwork demolition scope within corridor to depict ductwork being abandoned inside of chases.

2.35 M3.22B - SECOND FLOOR AREA B - HVAC – DEMO

REVISION: See attached drawing for revision to general demolition note #2, and to the ductwork demolition scope within corridor to depict ductwork being abandoned inside of chases.

2.36 M3.22C - SECOND FLOOR AREA C - HVAC – DEMO

REVISION: See attached drawing for revision to general demolition note #2, and to the ductwork demolition scope within corridor to depict ductwork being abandoned inside of chases.

REVISION: See attached drawing for revision to note to demolish fume hood ductwork on second floor and attic only, and to abandon ductwork through third floor.

2.37 M3.30C – GROUND FLOOR AREA C - HVAC

REVISION: See attached drawing for revised exhaust ductwork routing.



- 2.38 M3.31B – FIRST FLOOR AREA B - HVAC**
CLARIFICATION: See attached drawing for added note indicating that fire damper is not required at rated wall penetration.
- 2.39 M3.32A- SECOND FLOOR AREA A - HVAC**
REVISION: See attached drawing for revised ductwork routing and terminal unit placement for coordination.
- 2.40 M3.32B - SECOND FLOOR AREA B - HVAC**
REVISION: See attached drawing for revised ductwork routing and terminal unit placement for coordination.
- 2.41 M3.40B - GROUND FLOOR AREA B - HYDRONICS - DEMO**
REVISION: See attached drawing for revised (E) supply fan demolition note to clarify additional demolition of supply fan base rail in addition to fan and unit.
- 2.42 M3.42A - SECOND FLOOR AREA A - HYDRONICS - DEMO**
REVISION: See attached drawing for revised (E) supply fan demolition note to clarify additional demolition of supply fan base rail in addition to fan and unit.
- 2.43 M3.52A- SECOND FLOOR AREA A - HYDRONICS**
REVISION: See attached drawing for revised piping routing and terminal unit placement for coordination.
- 2.44 M3.52B - SECOND FLOOR AREA B - HYDRONICS**
REVISION: See attached drawing for revised piping routing and terminal unit placement for coordination.
- 2.45 M4.04 - SECTIONS - MECHANICAL**
REVISION: See attached drawing with revised housekeeping pad note to indicate 6” tall housekeeping pad.
- 2.46 M5.01 - DETAILS – MECHANICAL**
REVISION: Revised detail to indicate unions on detail #4. See attached drawing.

REVISION: Revised detail to indicate unions and clarify drain valve location on detail #5. See attached drawing.

ADDITION: Added flexible pipe connectors on detail #3. See attached drawing.

DELETED: Deleted reference to maximum mounting height for drain valve in detail #7. See attached drawing.
- 2.47 M5.03 - DETAILS – MECHANICAL**
ADDITION: Added flexible pipe connectors and manual balancing valve on detail #4. See attached drawing.

REVISION: Revised general notes on detail #2. See attached drawing.

REVISION: Revised check valve note on detail #2. See attached drawing.
- 2.48 P3.31A - FIRST FLOOR AREA A – PLUMBING**
CLARIFICATION: Added dashed lines to denote all plumbing work on this sheet to be provided under alternate #1. See attached drawing.
- 2.49 P3.32A - SECOND FLOOR AREA A – PLUMBING**
CLARIFICATION: Added dashed lines to denote all plumbing work on this sheet to be provided under alternate #1. See attached drawing.



- 2.50 SHEET E3.22B – SECOND FLOOR AREA B – ELECTRICAL – DEMO**
ADDITION: Add the following note to Sheet E3.22B for Classroom 204: RELOCATE EXISTING PROJECTOR MOUNT, TWO EXISTING SPEAKERS, EXISTING PROJECTION SCREEN AND ALL ASSOCIATED POWER, DATA, AND AV CONNECTIONS TO ACCOMMODATE NEW WORK. REINSTALL AT SAME LOCATION BELOW THE NEW FINISHED CEILING HEIGHT. COORDINATE REMOVAL AND REINSTALLATION OF PROJECTOR WITH OWNER.
- 2.51 SHEET E3.30B – GROUND FLOOR AREA B – ELECTRICAL**
ADDITION: Added Callout for new enlarged plan on sheet E4.02. See attached drawing.
- 2.52 SHEET E3.30C – GROUND FLOOR AREA C – ELECTRICAL**
ADDITION: Added Callout for new enlarged plan on sheet E4.02. See attached drawing.
- 2.53 SHEET E3.32B – SECOND FLOOR AREA B – ELECTRICAL**
ADDITION: Add the following note to Sheet E3.32B for Classroom 204: RELOCATE EXISTING PROJECTOR MOUNT, TWO EXISTING SPEAKERS, EXISTING PROJECTION SCREEN AND ALL ASSOCIATED POWER, DATA, AND AV CONNECTIONS TO ACCOMMODATE NEW WORK. REINSTALL AT SAME LOCATION BELOW THE NEW FINISHED CEILING HEIGHT. COORDINATE REMOVAL AND REINSTALLATION OF PROJECTOR WITH OWNER.
- 2.54 SHEET E3.50A – GROUND FLOOR AREA A – LIGHTING**
ADDITION: Added type F exterior egress light fixture outside room 006 Office. See attached drawing.

ADDITION: Added type F light fixture to circuit E1-37. See attached drawing.
- 2.55 SHEET E3.50B – GROUND FLOOR AREA B – LIGHTING**
ADDITION: Added type C exterior egress light fixture outside room 012 Cold Storage Lab. See attached drawing.

ADDITION: Added type F light fixture to circuit E1-37. See attached drawing.

ADDITION: Added (2) type L light fixtures to room 016A Telecom Room. See attached drawing.

REVISION: Revised type WR light fixture to type B8E fixture in room 003A Women's Restroom. See attached drawing.
- 2.56 SHEET E3.50C – GROUND FLOOR AREA C – LIGHTING**
ADDITION: Added type C exterior egress light fixture outside Corridor 001G. See attached drawing.

ADDITION: Added type F light fixture to circuit E1-37. See attached drawing.

ADDITION: Added (2) type L light fixtures to room 016A Telecom Room. See attached drawing.
- 2.57 SHEET E3.51A – FIRST FLOOR AREA A – LIGHTING**
ADDITION: Added type C exterior egress light fixture outside room 006 Office. See attached drawing.

ADDITION: Added type C light fixture to circuit E1-41. See attached drawing.



- 2.58 SHEET E3.51B – FIRST FLOOR AREA B – LIGHTING**
REVISION: Revised type WR light fixture to type B8E fixture in room 103 Women's Restroom. See attached drawing.
- 2.59 SHEET E3.52A – SECOND FLOOR AREA A – LIGHTING**
REVISION: Revised Auditorium cove lighting type to W-2, W-3, and W-4. See attached drawing.
- REVISION: Revised cove light locations in ceiling to match architectural RCP. See attached drawing.
- 2.60 SHEET E3.52B – SECOND FLOOR AREA B – LIGHTING**
REVISION: Revised type WR light fixture to type B8E fixture in room 203 Women's Restroom. See attached drawing.
- 2.61 SHEET E4.02 – ENLARGED VIEWS – ELECTRICAL**
ADDITION: See attached added Sheet E4.02 showing requirements for the 016A Telecom Room.
- 2.62 SHEET E6.01– EQUIPMENT SCHEDULES – ELECTRICAL**
ADDITION: Added Type B8E fixture for restroom lighting, Type W-2 fixture for Auditorium lighting, Type W-3 fixture for Auditorium lighting, and Type W-4 fixture for Auditorium lighting. See attached drawing.
- 2.63 SHEET E6.07– PANEL SCHEDULES – ELECTRICAL**
ADDITION: Added rack receptacle to circuit #20 on panel (R) LB-2, rack receptacle to circuit #22 on panel (R) LB-2, rack receptacle to circuit #24 on panel (R) LB-2, and rack receptacle to circuit #26 on panel (R) LB-2. See attached drawing.
- 2.64 SHEET T2.0A – GROUND FLOOR AREA A– TELECOM**
ADDITION: Added general note #5 for protecting existing telecom facilities during demolition and making any necessary repairs. General note #5 applies to all existing telecom systems occurring within all project work areas. See attached drawing.
- 2.65 SHEET T2.0B – GROUND FLOOR AREA B – TELECOM**
ADDITION: Added general note #5 for protecting existing telecom facilities during demolition and making any necessary repairs. General note #5 applies to all existing telecom systems occurring within all project work areas. See attached drawing.
- 2.66 SHEET T2.0C – GROUND FLOOR AREA C– TELECOM**
ADDITION: Added general note #5 for protecting existing telecom facilities during demolition and making any necessary repairs. General note #5 applies to all existing telecom systems occurring within all project work areas. See attached drawing.
- ADDITION: Added keynote #4 on protecting existing telecom backbone while demolishing existing cable tray. See attached drawing.
- ADDITION: Added (2) keynote #4 to Corridor 020. See attached drawing.
- ADDITION: Added keynote #5 on intercepting existing backbone cabling to accommodate new backbone fiber to new telecom room prior to demolition of existing backbone. See attached drawing.
- ADDITION: Added keynote #5 to Corridor 020. See attached drawing.
- 2.67 SHEET T3.00 – GROUND FLOOR OVERALL VIEW – TELECOM**
ADDITION: See attached added Sheet T3.00, including note designating approximate location of basement telecom room.



2.68 SHEET T3.0B – GROUND FLOOR AREA B – TELECOM

ADDITION: Added callout for enlarged telecom 016A Telecom room. See attached drawing.

ADDITION: Added Cable tray across corridor to new telecom room 016A. See attached drawing.

2.69 SHEET T3.0C – GROUND FLOOR AREA C – TELECOM

ADDITION: Added callout for enlarged telecom 016A Telecom room. See attached drawing.

ADDITION: Added Cable tray across corridor to new telecom room 016A. See attached drawing.

ADDITION: Added keynote #3 to intercept existing backbone pathway to accommodate new backbone installation. See attached drawing.

2.70 SHEET T4.01 – ENLARGED VIEWS – TELECOM

ADDITION: Added new telecom room layout for 016A Telecom Room. See attached drawing.

ADDITION: Added new elevation view of new racks for 016A Telecom Room. See attached drawing.

ADDITION: Added enlarged view of existing MDF located in the main electrical room B01 in the basement. See attached drawing.

ADDITION: Added (4) new rack elevations of the new telecom room in 016A Telecom Room. See attached drawing.

REVISION: Revised Keynotes to reflect new design of telecom room. See attached drawing.

2.71 SHEET T8.01 – RISER DIAGRAMS – TELECOM

ADDITION: See attached added Sheet T8.01, including added copper and fiber riser diagrams.

2.72 SHEET T8.02 – RISER DIAGRAMS – TELECOM

ADDITION: See attached added Sheet T8.02, including added grounding and pathways riser diagrams.

<u>List of Documents:</u>	<u>Size</u>	<u>No. Of Pages:</u>
Addendum 2	8-1/2" x 11"	11
Section 07 62 00	8-1/2" x 11"	9
Section 27 15 00	8-1/2" x 11"	6
Drawings	30" x 42"	45

END OF ADDENDUM NO. 2.

SECTION 07 62 00 - SHEET METAL FLASHING & TRIM

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Formed Products:
 - a. Formed roof drainage sheet metal fabrications.
 - b. Formed sloped roof sheet metal fabrications.
 - c. Formed wall sheet metal fabrications.
 - d. Formed equipment support flashing.

1.2 PERFORMANCE REQUIREMENTS

- A. General: Sheet metal flashing and trim assemblies as indicated shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.
- B. Thermal Movements: Provide sheet metal flashing and trim that allows for thermal movements from ambient and surface temperature changes.
 - 1. Temperature Change (Range): 120 deg F, ambient; 180 deg F, material surfaces.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each manufactured product and accessory.
- B. Shop Drawings: Show fabrication and installation layouts of sheet metal flashing and trim, including plans, elevations, expansion-joint locations, and keyed details. Distinguish between shop- and field-assembled work. Include the following:
 - 1. Identification of material, thickness, weight, and finish for each item and location in Project.
 - 2. Details for forming sheet metal flashing and trim, including profiles, shapes, seams, and dimensions.
 - 3. Details for joining, supporting, and securing sheet metal flashing and trim, including layout of fasteners, cleats, clips, and other attachments. Include pattern of seams.
 - 4. Details of termination points and assemblies, including fixed points.
 - 5. Details of expansion joints and expansion-joint covers, including showing direction of expansion and contraction.
 - 6. Details of edge conditions, including eaves, ridges, valleys, rakes, crickets, and counterflashing's as applicable.
 - 7. Details of special conditions.
 - 8. Details of connections to adjoining work.
 - 9. Detail formed flashing and trim at a scale of not less than 1-1/2 inches per 12 inches.
- C. Samples: For each type of exposed finish required, prepared on Samples of size indicated below:
 - 1. Sheet Metal Flashing: 12 inches long by actual width of unit, including finished seam and in required profile. Include fasteners, cleats, clips, closures, and other attachments.
 - 2. Trim, Metal Closures, Expansion Joints, Joint Intersections, and Miscellaneous Fabrications: 12 inches long and in required profile. Include fasteners and other exposed accessories.
 - 3. Accessories and Miscellaneous Materials: Full-size Sample.
- D. Qualification Data: For qualified fabricator.
- E. Maintenance Data: For sheet metal flashing, trim, and accessories to include in maintenance manuals.
- F. Warranty: Sample of special warranty.

1.4 QUALITY ASSURANCE

- A. Fabricator Qualifications: Shop that employs skilled workers who custom fabricate sheet metal flashing and trim similar to that required for this Project and whose products have a record of successful in-service performance. Installer of metal copings shall be approved by the manufacturer of the Owner's existing low slope roofing system – the Garland Company.
- B. Sheet Metal Flashing and Trim Standard: Comply with SMACNA's "Architectural Sheet Metal Manual" unless more stringent requirements are specified or shown on Drawings.
- C. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.
 - 1. Build mockup of typical metal parapet coping, approximately 10 feet long, including supporting construction cleats, seams, attachments, underlayment, and accessories.
 - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
 - 3. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- D. Preinstallation Conference: Conduct conference at Project site.
 - 1. Meet with Owner, Architect, Installer, and installers whose work interfaces with or affects sheet metal flashing and trim including installers of roofing materials, roof accessories, unit skylights, and roof-mounted equipment.
 - 2. Review methods and procedures related to sheet metal flashing and trim.
 - 3. Examine substrate conditions for compliance with requirements, including flatness and attachment to structural members.
 - 4. Review special roof details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect sheet metal flashing.
 - 5. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Do not store sheet metal flashing and trim materials in contact with other materials that might cause staining, denting, or other surface damage. Store sheet metal flashing and trim materials away from uncured concrete and masonry.
- B. Protect strippable protective covering on sheet metal flashing and trim from exposure to sunlight and high humidity, except to the extent necessary for the period of sheet metal flashing and trim installation.

1.6 WARRANTY

- A. Provide Owner with a warranty stating that metal flashings and Associated sealants will properly shed water and protect building from physical damage for a minimum period of two years from date of substantial performance of work, as certified by Architect/Engineer, and that damage resulting from failure to provide above stated performances will be repaired to satisfaction of Owner at no additional cost
- B. Special Warranty on Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
 - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
 - 2. Finish Warranty Period: 20 years from date of Substantial Completion.
- C. In addition to the above requirements, the metal parapet coping shall be added to the Owner's existing 30 year low slope metal roofing warranty to provide an edge-to-edge roofing warranty for the remainder of the existing roofing warranty period, as of the date of substantial completion. The Owner's existing roofing warranty is issued by The Garland Company, and commenced in May 2014. Follow all manufacturer requirements to maintain the Owner's existing roofing warranty.

PART 2 - PRODUCTS

2.1 SHEET METALS

- A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying a strippable, temporary protective film before shipping.
- B. Metallic-Coated Steel Sheet: Restricted flatness steel sheet, metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A 755M.
 - 1. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 coating designation; structural quality.
 - 2. Surface: Smooth, flat.
 - 3. Exposed Coil-Coated Finish:
 - a. Two-coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
 - 4. Colors: Shall be approved by Architect, match adjacent material being flashed U.N.O.
 - 5. Concealed Finish: Pretreat with manufacturer's standard white or light-colored acrylic or polyester backer finish, consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil.

2.2 UNDERLAYMENT MATERIALS

- A. Ice Shield Membrane Underlayment: Equal to Ice and Water Shield as manufactured by Grace Construction Products, .040 mil thickness. Provide as underlayment over all areas of sheet metal flashing installation.
- B. Slip Sheet: Building paper, 3-lb/100 sq. ft. minimum, rosin sized.

2.3 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated.
- B. Fasteners: Wood screws, concrete fasteners, annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads and recommended by manufacturer of primary sheet metal or manufactured item.
 - 1. General: Blind fasteners or self-drilling screws, gasketed, with hex-washer head.
 - a. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating.
 - b. Blind Fasteners: High-strength aluminum or stainless-steel rivets suitable for metal being fastened.
 - c. Spikes and Ferrules: Same material as gutter; with spike with ferrule matching internal gutter width.
 - 2. Fasteners for Zinc-Coated (Galvanized) Steel Sheet: Hot-dip galvanized steel according to ASTM A 153/A 153M or ASTM F 2329 or Series 300 stainless steel.
- C. Solder:
 - 1. For Zinc-Coated (Galvanized) Steel: ASTM B 32, Grade Sn50, 50 percent tin and 50 percent lead or Grade Sn60, 60 percent tin and 40 percent lead.
 - 2. For Zinc: ASTM B 32, 40 percent tin and 60 percent lead with low antimony, as recommended by manufacturer.
- D. Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, non-sag, nontoxic, non-staining tape 1/2 inch wide and 1/8 inch thick.
- E. Elastomeric Sealant: ASTM C 920, elastomeric silicone polymer sealant; low modulus; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.

- F. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.
- G. Bituminous Coating: Cold-applied asphalt emulsion complying with ASTM D 1187.
- H. Pre-cast concrete or pre-formed fiberglass splash blocks – provide at all locations where roof scupper drainage discharges onto a lower level roof.

2.4 MANUFACTURED SHEET METAL FLASHING AND TRIM

- A. Reglets: Units of type, material, and profile indicated, formed to provide secure interlocking of separate reglet and counterflashing pieces, and compatible with flashing indicated with factory-mitered and -welded corners and junctions.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Cheney Flashing Company.
 - b. Fry Reglet Corporation.
 - c. Heckmann Building Products Inc.
 - d. Hickman, W. P. Company.
 - e. Hohmann & Barnard, Inc.; STF Sawtooth Flashing.
 - f. Keystone Flashing Company, Inc.
 - g. National Sheet Metal Systems, Inc.
 - h. Sandell Manufacturing Company, Inc.
 - 2. Material: Galvanized steel, 0.022 inch thick.
 - 3. Surface-Mounted Type: Provide with slotted holes for fastening to substrate, with neoprene or other suitable weatherproofing washers, and with channel for sealant at top edge.
 - 4. Concrete Type: Provide temporary closure tape to keep reglet free of concrete materials, special fasteners for attaching reglet to concrete forms, and guides to ensure alignment of reglet section ends.
 - 5. Masonry Type: Provide with offset top flange for embedment in masonry mortar joint.
 - 6. Accessories:
 - a. Flexible-Flashing Retainer: Provide resilient plastic or rubber accessory to secure flexible flashing in reglet where clearance does not permit use of standard metal counterflashing or where Drawings show reglet without metal counterflashing.
 - b. Counterflashing Wind-Restraint Clips: Provide clips to be installed before counterflashing to prevent wind uplift of counterflashing lower edge.
 - 7. Finish: With manufacturer's standard color coating.

2.5 FABRICATION, GENERAL

- A. General: Custom fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, geometry, metal thickness, and other characteristics of item indicated. Fabricate items at the shop to greatest extent possible.
 - 1. Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.
 - 2. Obtain field measurements for accurate fit before shop fabrication.
 - 3. Form sheet metal flashing and trim without excessive oil canning, buckling, and tool marks and true to line and levels indicated, with exposed edges folded back to form hems.
 - 4. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces exposed to view.
- B. Fabrication Tolerances: Fabricate sheet metal flashing and trim that is capable of installation to a tolerance of 1/4 inch in 20 feet on slope and location lines as indicated and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.

- C. Sealed Joints: Form non-expansion but movable joints in metal to accommodate elastomeric sealant.
- D. Expansion Provisions: Where lapped expansion provisions cannot be used, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with butyl sealant concealed within joints.
- E. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.
- F. Fabricate cleats and attachment devices of sizes as recommended by SMACNA's "Architectural Sheet Metal Manual" and by FMG Loss Prevention Data Sheet 1-49 for application, but not less than thickness of metal being secured.
- G. Seams: Fabricate nonmoving seams with flat-lock seams. Tin edges to be seamed, form seams, and solder.
- H. Seams: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with elastomeric sealant unless otherwise recommended by sealant manufacturer for intended use. Rivet joints where necessary for strength.
- I. Do not use graphite pencils to mark metal surfaces.

2.6 ROOF SHEET METAL FABRICATIONS

- A. Roof-Edge Flashing (Gravel Stop) and Fascia Cap: Fabricate in minimum 96-inch- long, but not exceeding 10-foot- long, sections. Furnish with 6-inch- wide, joint cover plates.
 - 1. Joint Style: Lap, 4 inches wide.
 - 2. Fabricate from the following materials:
 - a. Galvanized Steel: 0.028 inch thick.
- B. Copings: Fabricate in minimum 96-inch- (long, but not exceeding 10-foot- long, sections. Fabricate joint plates of same thickness as copings. Furnish with continuous cleats to support edge of external leg and [drill elongated holes for fasteners on] interior leg. Miter corners, seal, and solder or weld watertight.
 - 1. Manufacturers:
 - a. The Garland Company. Comply with all manufacturer requirements for the inclusion of copings within the Owner's existing low slope metal roofing warranty to provide an edge-to-edge warranty.
 - 2. Coping Profile: reference drawings for profile and sizes. Comply with SMACNA requirements.
 - 3. Joint Style: Butt, with 12-inch- wide, concealed backup plate
 - 4. Fabricate from the following materials:
 - a. Galvanized Steel: 0.040 inch thick.
- C. Roof and Roof to Wall Transition, Roof to Roof Edge Flashing Transition and Fascia Cap Transition Expansion-Joint Cover: Fabricate from the following materials:
 - 1. Galvanized Steel: 0.034 inch thick.
- D. Base Flashing: Fabricate from the following materials:
 - 1. Galvanized Steel: 0.028 inch thick.
- E. Counterflashing: Fabricate from the following materials:
 - 1. Galvanized Steel: 0.022 inch thick.
- F. Flashing Receivers: Fabricate from the following materials:
 - 1. Galvanized Steel: .022 inch thick.
- G. Roof-Penetration Flashing: Fabricate from the following materials:
 - 1. Galvanized Steel: 0.028 inch thick.
- H. Roof-Drain Flashing: Fabricate from the following materials:
 - 1. Zinc-Tin Alloy-Coated Stainless Steel: 0.015 inch thick.

2.7 WALL SHEET METAL FABRICATIONS

- A. Through-Wall Flashing: Fabricate continuous flashings in minimum 96-inch- long, but not exceeding 12-foot- long, sections, under copings, at shelf angles, and where indicated. Fabricate discontinuous lintel, sill, and similar flashings to extend 6 inches beyond each side of wall openings. Form with 2-inch- high, end dams where flashing is discontinuous. Fabricate from the following materials:

1. Zinc-Tin Alloy-Coated Stainless Steel: 0.015 inch thick.
 - B. Opening Flashings in Frame Construction: Fabricate head, sill, jamb, and similar flashings to extend 4 inches beyond wall openings. Form head and sill flashing with 2-inch- high, end dams. Fabricate from the following materials:
 - C. Wall Expansion-Joint Cover: Fabricate from the following materials:
 1. Galvanized Steel: 0.028 inch thick.
- 2.8 MISCELLANEOUS SHEET METAL FABRICATIONS
- A. Equipment Support Flashing: Fabricate from the following materials:
 1. Galvanized Steel: 0.028 inch thick.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions and other conditions affecting performance of the Work.
 1. Verify compliance with requirements for installation tolerances of substrates.
 2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 UNDERLAYMENT INSTALLATION

- A. General: Install underlayment as indicated in this specification and as shown on Drawings.
- B. Self-Adhering Sheet Underlayment: Install self-adhering sheet underlayment, wrinkle free. Apply primer if required by underlayment manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation; use primer rather than nails for installing underlayment at low temperatures. Apply in shingle fashion to shed water, with end laps of not less than 6 inches staggered 24 inches between courses. Overlap side edges not less than 3-1/2 inches. Roll laps with roller. Cover underlayment within 14 days. Coordinate work with other roofing trades.

3.3 INSTALLATION, GENERAL

- A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, welding rods, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.
 1. Install sheet metal flashing and trim true to line and levels indicated. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant.
 2. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
 3. Space cleats not more than 12 inches apart. Anchor each cleat with two fasteners. Bend tabs over fasteners.
 4. Install exposed sheet metal flashing and trim without excessive oil canning, buckling, and tool marks.
 5. Install sealant tape where indicated.
 6. Torch cutting of sheet metal flashing and trim is not permitted.
 7. Do not use graphite pencils to mark metal surfaces.
- B. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating or by other permanent separation as recommended by SMACNA.
 1. Coat back side of steel sheet metal flashing and trim with bituminous coating where flashing and trim will contact wood, ferrous metal, or cementitious construction.

2. Underlayment: Where installing metal flashing directly on cementitious or wood substrates, install a course of felt underlayment and cover with a slip sheet or install a course of polyethylene sheet.
- C. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet with no joints allowed within 24 inches of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently watertight, form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with sealant concealed within joints.
 - D. Fastener Sizes: Use fasteners of sizes that will penetrate metal decking not less than recommended by fastener manufacturer to achieve maximum pull-out resistance.
 - E. Seal joints as shown and as required for watertight construction.
 1. Where sealant-filled joints are used, embed hooked flanges of joint members not less than 1 inch into sealant. Form joints to completely conceal sealant. When ambient temperature at time of installation is moderate, between 40 and 70 deg F, set joint members for 50 percent movement each way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant-type joints at temperatures below 40 deg F.
 2. Prepare joints and apply sealants to comply with requirements in Division 07 Section "Joint Sealants."
 - F. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets to be soldered to a width of 1-1/2 inches, except reduce pre-tinning where pre-tinned surface would show in completed Work.
 1. Pre-tinning is not required for zinc-tin alloy-coated stainless steel.
 2. Do not use torches for soldering. Heat surfaces to receive solder and flow solder into joint. Fill joint completely. Completely remove flux and spatter from exposed surfaces.
- 3.4 ROOF DRAINAGE SYSTEM INSTALLATION
- A. General: Install sheet metal roof drainage items to produce complete roof drainage system according to SMACNA recommendations and as indicated. Coordinate installation of roof perimeter flashing with installation of roof drainage system.
 - B. Hanging Gutters: Join sections with riveted and soldered joints or with lapped joints sealed with sealant. Provide for thermal expansion. Set gutters in gutter support brackets (reference Division 05 "Metal Fabrications") aligned at every-other standing metal roof seam. Attach gutters at eave or fascia to firmly anchored concealed straps spaced not more than 24 inches apart. Provide end closures and seal watertight with sealant. Slope to downspouts.
 1. Fasten gutter spacers to front and back of gutter.
 2. Loosely lock straps to front gutter bead and anchor to roof deck.
 3. Anchor and loosely lock back edge of gutter to continuous cleat.
 4. Anchor back of gutter that extends onto roof deck with cleats spaced not more than 24 inches apart.
 5. Install gutter with expansion joints at locations indicated, but not exceeding, 50 feet apart. Install expansion-joint caps.
 - C. Downspouts: Join sections with 1-1/2-inch telescoping joints.
 1. Provide hangers with fasteners designed to hold downspouts securely to walls. Locate hangers at top and bottom and at approximately 48 inches o.c. in between.
 2. Connect downspouts to underground drainage system indicated with base boot connection to tightline.
 - D. Parapet Scuppers: Install scuppers where indicated through parapet. Continuously support scupper, set to correct elevation, and seal flanges to interior wall face, over cants or tapered edge strips, and under roofing membrane.
 1. Anchor scupper closure trim flange to exterior wall and seal with elastomeric sealant to scupper.
 2. Loosely lock front edge of scupper with conductor head.
 - E. Conductor Heads: Anchor securely to wall with elevation of conductor head rim 1 inch below scupper discharge.

- F. Expansion-Joint Covers: Install expansion-joint covers at locations and of configuration indicated. Lap joints a minimum of 4 inches in direction of water flow.

3.5 ROOF FLASHING INSTALLATION

- A. General: Install sheet metal flashing and trim to comply with performance requirements, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, set units true to line, and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.
- B. Roof Edge Flashing: Anchor to resist uplift and outward forces according to recommendations in SMACNA's "Architectural Sheet Metal Manual" and as indicated. Interlock bottom edge of roof edge flashing with continuous cleat anchored to substrate at staggered 3-inch centers.
- C. Roof Edge Flashing: Anchor to resist uplift and outward forces according to recommendations in FMG Loss Prevention Data Sheet 1-49 for specified wind zone and as indicated. Interlock bottom edge of roof edge flashing with continuous cleat anchored to substrate at 24-inch centers.
- D. Copings: Anchor to resist uplift and outward forces according to recommendations in SMACNA's "Architectural Sheet Metal Manual" and as indicated.
 - 1. Interlock exterior bottom edge of coping with continuous cleat anchored to substrate at 24-inch centers.
 - 2. Anchor interior leg of coping with washers and screw fasteners through slotted holes at 24-inch centers.
- E. Insert metal flashings into reglets to form tight fit. Secure in place with plastic wedges at maximum 12 inches on center. Seal flashing into reglets with sealant
- F. Pipe or Post Counterflashing: Install counterflashing umbrella with close-fitting collar with top edge flared for elastomeric sealant, extending a minimum of 4 inches over base flashing. Install stainless-steel draw band and tighten.
- G. Counterflashing: Coordinate installation of counterflashing with installation of base flashing. Insert counterflashing in reglets or receivers and fit tightly to base flashing. Extend counterflashing 4 inches over base flashing. Lap counterflashing joints a minimum of 4 inches and bed with sealant. Secure in a waterproof manner by means of anchor and washer at 36-inch centers.
- H. Roof-Penetration Flashing: Coordinate installation of roof-penetration flashing with installation of roofing and other items penetrating roof. Seal with butyl sealant and clamp flashing to pipes that penetrate roof.
- I. Counterflash mechanical and electrical items projecting through roofing
- J. Provide colored sheetmetal sleeves over mechanical and electrical items projecting through the roof

3.6 WALL FLASHING INSTALLATION

- A. General: Install sheet metal wall flashing to intercept and exclude penetrating moisture according to SMACNA recommendations and as indicated. Coordinate installation of wall flashing with installation of wall-opening components such as windows, doors, and louvers.
- B. Through-Wall Flashing: Installation of through-wall flashing is specified in Division 04 Section "Unit Masonry."
- C. Reglets: Installation of reglets as indicated."
- D. Opening Flashings in Frame Construction: Install continuous head, sill, and similar flashings to extend 4 inches beyond wall openings.

3.7 MISCELLANEOUS FLASHING INSTALLATION

- A. Equipment Support Flashing: Coordinate installation of equipment support flashing with installation of roofing and equipment. Weld or seal flashing with elastomeric sealant to equipment support member.

3.8 ERECTION TOLERANCES

- A. Installation Tolerances: Shim and align sheet metal flashing and trim within installed tolerance of 1/4 inch in 20 feet on slope and location lines as indicated and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.

3.9 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.
- B. Clean and neutralize flux materials. Clean off excess solder.
- C. Clean off excess sealants.
- D. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturers written installation instructions. On completion of installation, remove unused materials and clean finished surfaces. Maintain in a clean condition during construction.
- E. Replace sheet metal flashing and trim that have been damaged or that have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 07 62 00

SECTION 27 15 00 - TELECOMMUNICATIONS AND DATA SYSTEMS

PART 1 - GENERAL

1.1 GENERAL

- A. All work performed on this project will be installed in accordance with the current edition of the National Electric Code, the current edition of the National Electrical Safety Code, the current edition of the BICSI Telecommunications Distribution Methods Manual, the current edition of the BICSI Cabling Installation Manual, the latest edition of the ANSI/TIA/EIA Standards published by Global Engineering Documents as TIA/EIA Telecommunications Building Standards, and all Federal, State, and local codes and ordinances.
- B. The BICSI Telecommunications Distribution Methods Manual, the BICSI Cabling Installation Manual, and the ANSI/TIA/EIA sections 568 and 569 are on file in the Telecommunications Infrastructure Services Office located in room 144 of the Administration Building University of Idaho, Moscow, Idaho.

1.2 RELATED SECTIONS

- A. Section 07 84 00 - Firestopping
- B. Section 26 05 26 - Grounding and Bonding
- C. Section 26 05 36 - Cable Trays
- D. Section 26 27 27 - Supporting Devices
- E. Section 27 05 29 - Hangers and Supports for Communications Systems
- F. Section 27 05 33 - Conduits and Backboxes for Communications Systems
- G. Section 27 05 36 - Cable Trays for Communications Circuits
- H. Section 27 11 00 - Communications Equipment Room Fittings

1.3 BASIS OF DESIGN

- A. The basis of design is a complete system using only items from the Approved Products List in the latest version of the University of Idaho Telecom Standards.

1.4 SCOPE

- A. Work Included
 - 1. Provide a complete information transport system including horizontal, vertical, and riser cable (copper and fiber), cross connect blocks, patch panels racks, voice /data outlet devices required for a complete certified cabling system.
 - 2. The Telecommunications Contractor must be a factory authorized and trained "Value Added Reseller" for the cabling system.
 - 3. The Telecommunications Contractor shall be responsible for all parts, labor, and all other associated apparatus necessary to completely install, test, label, and turnover for acceptance by The University of Idaho the information transport system detailed herein. Items among those required are as follows:
 - a. Installation and placement includes proper termination and protection, including but not limited to lightening suppression, grounding, etc.
 - b. Intrabuilding Backbone Cable and terminations shall consist of one or more of the following:
 - 1) ARMM Sheathed Copper Cable
 - 2) Optical Fiber Cable, Corning Glass
 - c. Bonding and Grounding
 - 1) Equipment racks, cable trays, cable runways, conduits, and metallic shielded cables in the MDF (Main Distribution Frame) and the IDF's (Intermediate Distribution Frames) shall be electrically bonded to the main building ground using current NEC approved connections.
 - 2) The Telecommunications Contractor shall install a common continuous length of GREEN #6 AWG ground from the ground bus bars located in the MDF and IDF's to the telecommunications equipment racks, trays, and cable sheaths. Connection to the main electrical service ground shall be coordinated and completed by the Electrical sub-contractor.

- 3) The Telecommunications Contractor shall install grounding lugs on equipment racks, cable trays, cable runways, and conduits.
 - 4) The Telecommunications Contractor shall install ground wire in accordance with current NEC standards for grounding lugs on equipment racks, cable trays, cable runways, and conduits. The metallic shield of feeder and backbone cables entering or leaving a MDF or IDF shall be electrically connected to a bonding bracket or ground buss bar.
- d. Terminated station drop cable consisting of 3 sheathed (unless otherwise specified) per outlet. One BLUE sheath cable, one WHITE sheath cable, and one YELLOW sheath cable, of unshielded twisted pair (UTP) cabling. Cable shall be CAT6, 4-pair, 23AWG solid, depending on application, either non-plenum or plenum rated cables for voice and data connections. All cabling installed below slab shall be wet rated.
 - 1) All UTP 4-pair cables shall be terminated at the station telecommunications faceplate under EIA/TIA 568A pin/pair assignment using triplex faceplates. Blue cable will be connected to the #1 module, white cable to the #2 module, and yellow cable to the #3 module
 - 2) All UTP 4-pair cables shall be terminated in the MDF/IDF locations on 24 Port patch panel using the EIA/TIA 568-A pin/pair assignment.
 - 3) Any single 4-pair station cables (payphones, courtesy telephones, elevator telephones, or ancillary devices not connected to the normal 3 port faceplate will be terminated on the #1 #4 #7 #10 #13 #16 #19 or #22 position (every third position leaving two blank spaces for an additional two cables later) of the patch panel.
 - e. Installation of horizontal or vertical media shall be done without any splicing or taping.
 - f. Telecommunications Contractor shall do performance testing of all installed media consistent with ANSI/TIA/EIA-568-B standards.
 - g. Telecommunications Contractor shall label the cable group (blue, white, and yellow individual cable to each faceplate) with room number and faceplate number for that group. The label is attached to the cable assembly at a point that is visible at the MDF/IDF location after the cable is terminated. (The label can be a light color tape with the information written with a Sharpie permanent marker.)
 - h. The Telecommunications Contractor shall label the triplex faceplates and patch panels with a black on clear (Brother P-Touch or equivalent) with the labeling scheme provided by the owner, an example is as follows where Line 1 is; Building Number, Closet, Room Number, and Jack number within that room and Line 2 are the three information outlets A, B, and C
 - 1) 664 A 001-01
 - 2) A B C
- B. Related Sections: If not addressed in this Section or the Construction Drawings, the Telecommunications Contractor shall comply with the requirements and specifications Contained in Bidding Requirements, Contract and Bond Forms, Conditions of the Contract.
 - C. Omissions in the proposal of any provision herein described shall not be construed as to relieve the Telecommunications Contractor of any responsibilities or obligation requisite to the complete and satisfactory delivery, operation, and support of all equipment or services.
 - D. Contractor will contact the cabling representative and have the cabling registered for the Structured Connectivity Solution Extended Warranty and Application Assurance Program.

PART 2 - PRODUCTS

2.1 GENERAL

- A. The cable connectors, outlet devices, and other materials constituting the information transport system shall conform to the following specifications. Each product specification is accompanied by a specific product recommendation. The recommended products have been extensively evaluated and constitute a set of products of demonstrated functionality and

compatibility. If substitutions to the recommended products are proposed, the Telecommunications Contractor shall submit complete manufacturer's product literature demonstrating compatibility with other related products, and samples for evaluation and approval, prior to installation.

- B. No "custom" items shall be used, except as specified on the Construction Drawings or as reviewed and approved by both the Architect and the Owners representative, as required to meet unusual physical requirements of the installation site.
- C. All products shall be new and shall be brought to the job site in original manufacturer's packaging. Electrical components shall bear the Underwriter's Laboratories label. All telecommunications cable shall bear the manufacturer's label in accordance with NEC 800 based on flammability testing as follows:
 - 1. CMP Plenum-rated Communications Cable
 - 2. CMR Riser-rated Communications Cable
 - 3. CM Communications Cable
- D. The fiber riser cables shall be a single mode CMR rated, fiber optic cable. All fibers shall be terminated using LC field installable fiber optic connectors and attached to the rack mounted patch panel. Provide 20 feet of slack unused at each end and kept in a service coil. Approximately 10 feet of unsheathed fiber shall be coiled in the termination shelf. Fiber will be placed in individual innerducts of the proper rating for the application.

2.2 VERTICAL RISER BACKBONE CABLING

- A. The cable shall be minimally compliant to the ANSI/TIA/EIA-568B Standard (see specifications in the above listed standards) and shall be CMR rated.
- B. All Backbone/Riser Wiring shall be placed in pathways provided for telecommunications following the design for the building. All conduit and raceways shall be designed as per EIA-569 Standards before starting to fill the conduit or raceway.
- C. No Backbone/Riser Wiring runs shall be spliced or taped
- D. All Backbone/Riser Wiring runs shall be labeled at both ends as specified
- E. Copper Distribution:
 - 1. Backbone/Riser Cable for each IDF location will originate in the MDF
- F. Copper Termination:
 - 1. Use white or gray designation strips held in a clear plastic holder in the MDF, and white or gray designation strips for the same copper riser in the IDF location. The multiple pair riser cables are terminated using the standard telephone color code. Wire pairs stripped out of the cable for punch-down shall maintain the same twist-per-inch to the point of termination as the wire pairs inside the cable. Shielded Copper Riser Cable: Multi conductor cables for voice, video, and data backbone/riser applications are listed below.
- G. Horizontal Copper Station Cable - The twisted pair cable for station drops shall typically be 3 separate sheathed riser cables in non-plenum applications or plenum cables in plenum applications.
- H. Horizontal Copper Telecommunications Cable - Outlets labeled as "W" (Wall Telephone, Courtesy Telephone, Elevator Telephone, Ancillary Device) shall be a single sheathed riser cable in non-plenum applications or plenum cable in plenum applications.
- I. Intra-Building Fiber Distribution:
 - 1. The fiber riser cables shall be single mode CMR rated, fiber optic cable. All fiber shall be Corning glass. All fibers will be terminated using LC fiber optic connectors attached to the appropriate rack mounted fiber shelf.
 - 2. Fiber will be pulled through individual innerduct that is appropriate for the application.
- J. Fiber Optic Patch Panels:
 - 1. Fiber optic shelf shall be a product with a closeable front door and rear cable management space and be 19" rack mountable.

2.3 CROSS-CONNECTS AND ACCESSORIES

- A. All rack terminated station cables shall be terminated on 24-port patch panels with T568A pin/pair assignment.

- 2.4 STANDARD INFORMATION OUTLET DEVICE
 - A. All wire listed as 4-pair UTP shall be terminated at the Telecommunications Outlet using a modular 8-conductor, 8 position device with T568A pin/pair assignment.
- 2.5 NONSTANDARD TELECOMMUNICATIONS OUTLET DEVICES
 - A. Telecommunications Outlets labeled "W" (Wall Telephone) shall be terminated at the faceplate location with an IVORY, single-gang single port wall jack.

PART 3 - EXECUTION

- 3.1 PRODUCT INSPECTIONS
 - A. All cable shall be inspected prior to installation to verify that it shall be of proper gauge, Contains the correct number of pairs, and otherwise meets specifications. Any physical Damage to the cable is unacceptable. Uniform jacket thickness, tightness, or buckling shall be checked. All outlet devices, cross connect blocks, and other components shall also be inspected prior to installation. Damaged cable, or any other components failing to meet specifications shall not be used in the installation. Within one week of inspection the Contractor shall submit a statement certifying that all cable and components meet specifications or were replaced.
- 3.2 CABLE INSTALLATION - GENERAL
 - A. The Contractor shall ensure that the telecommunications cable is installed with care, using Techniques which prevent kinking, sharp bends, scraping. Over tightening of tie wraps, cutting or deforming the cable jacket or other damage. During the inspection by the Owner's Representative, evidence of such damage shall result in the material being declared unacceptable. The Contractor shall replace unacceptable cable at no additional expense to the Owner.
 - B. All telecommunications cable shall be installed in grounded metal conduit or raceway to an accessible location, from this point cable may be distributed using J-hooks (where accessible) to the nearest cable tray. Telecommunications cable shall not share raceway with electrical power wiring as already stated in the National Electric Code (NEC).
 - C. Pull line shall be installed in all raceway, both empty and occupied. Each end of the pull line shall be secured and labeled. Distance measurements from the MDF to IDF rooms shall be recorded and submitted. Pull strings shall be left in all conduits after installation.
 - D. Allowable Cable Bend Radius and Pull Tension (typical)

1.	4-pair UTP	2-inch bend radius	20lb. tension
2.	12-strand Singlemode Fiber	4-inch bend radius	300 lb. tension
3.	24-strand Singlemode Fiber	4-inch bend radius	300 lb. tension
- 3.3 COPPER HORIZONTAL DISTRIBUTION
 - A. For horizontal distribution, copper cables shall be installed between the MDF/ IDF and each end-user work area outlet. The length of each cable shall not exceed 90 meters. Horizontal wiring shall be star-wired from the MDF/IDF to end-user work area with no intermediate connections. Cables shall not be spliced or taped.
 - B. Termination- Copper Horizontal Distribution: All UTP 4-pair cable shall be terminated on 24 port patch panels using the EIA/TIA 568A pin/pair assignment. Wire pairs stripped out of the cable for punch-down shall maintain the same twist-per-foot to the point of termination as the wire inside the cable sheath. At the Telecommunications Outlet end of each cable, the individual pairs shall be terminated on the information outlet. The wires shall be terminated as EIA/TIA 568A pin/pair assignment on the information outlet and triplex faceplate. There shall be sufficient slack left in the wall box for access to the faceplate. No more than 1" of any cable shall be left unsheathed after the information outlet has been terminated. Excess cable shall be neatly coiled separately and placed in the Telecommunications Outlet box before attaching the faceplate. The faceplate shall be mounted securely to the Telecommunications Outlet boxes so that there is no free play, but not so tight as to warp the surface of the faceplate. Screws of appropriate length (check to see that they do not damage cable inside the Telecommunications Outlet box) shall be used to secure the faceplate.

3.4 CABLE LUBRICANTS

- A. Lubricants specifically designed for installing telecommunications cable can be used to reduce the pulling tension as necessary when pulling cable into conduit. After installation, exposed cable and other surfaces shall be cleaned free of the lubricant residue.
 - 1. Acceptable Product: Dyna-Blue, American Polywater, or approved substitute.

3.5 STATION HORIZONTAL CABLING

- A. At the Telecommunications Outlet location, a minimum of 18 inches of cable shall be provided for terminations. In the MDF/IDF closet locations, sufficient cable length shall be provided to allow routing and terminations as described below. This shall require 20 feet of cable or more depending on the specific closet and backboard layouts.

3.6 INSTALLATION TESTING

- A. All testing shall be witnessed and approved by the Owner's Representative. The Owner shall be notified two weeks prior to any testing.
- B. Before requesting a final inspection, the Contractor shall perform a series of end-to-end installation performance tests. The Contractor shall submit for approval a proposal describing the test procedures, test result forms, and timetable.
- C. Acceptance of the simple test procedures discussed is predicated on the Contractor's use of the recommended products. The complete installation shall be evaluated on the context of each of these factors.
- D. At a minimum the Contractor shall test:
 - 1. All riser cable from MDF terminal blocks to each IDF terminal block
 - 2. All station horizontal cable pairs from MDF/IDF closet termination to information outlet at the Telecommunications Outlet.
 - 3. The optical fiber pairs from the MDF fiber distribution connection point to the IDF fiber distribution connection point.
- E. Copper Media Testing:
 - 1. The testing of the copper media shall be as follows, meeting ANSI/TIA/EIA 568-B:
 - a. Wiremap
 - b. Length
 - c. Attenuation
 - d. NEXT (Near End Crosstalk)
 - e. ACR (Attenuation Crosstalk Ratio)
 - f. Power Sum NEXT
 - g. Return Loss
 - h. ELFEXT (Equal Level Far End Crosstalk)
 - i. Power Sum ELFEXT
 - j. Propagation Delay
 - k. Delay Skew
 - 2. These test procedures are based on EIA/TIA 568-B tests Performed using a commercial cable tester (Micro-Test Pentascanner, Fluke DSP4000, Wavetek, or approved equivalent).
- F. Fiber Testing
 - 1. After installation, performance tests of the fiber cable shall be made using the correct connector and adapter for multimode or single mode fibers. Each fiber shall meet the following performance level for the graded parameters of attenuation in bandwidth:
 - a. Using a wavelength of 1300 nm on single mode fiber, the maximum attenuation of 1.5 dB/kilometer shall not be exceeded and the fiber deemed to have a minimum bandwidth of 500 Mhz/kilometer.
 - 2. These tests shall be performed by Contractor with optional presence of Owner.
- G. When errors or defective components are found, the source of each error shall be determined, corrected, and the components re-tested at Contractor's expense, following the testing procedure described in this document.
- H. The Owner reserves the right using Contractor's labor, to require a random test of up to 10% of the total installed cables.

- I. Test records shall be maintained using a format that is included on the tester used. They may be given to the Owner in either electronic (preferred) or paper format.
- 3.7 FIRE STOPS
- A. During the final review and inspection period and following the Owner's Representative's inspection of installed and tested-as-acceptable cabling, but prior to final acceptance, all sleeves passing through floors, roofs, and exterior walls shall be filled with approved fire- stop material in accordance with NEC-300-21. All fire wall penetrations shall be filled with suitable fire-stop material as specified in Section 07 84 00. Unused sleeves shall be capped.

END OF SECTION 27 15 00

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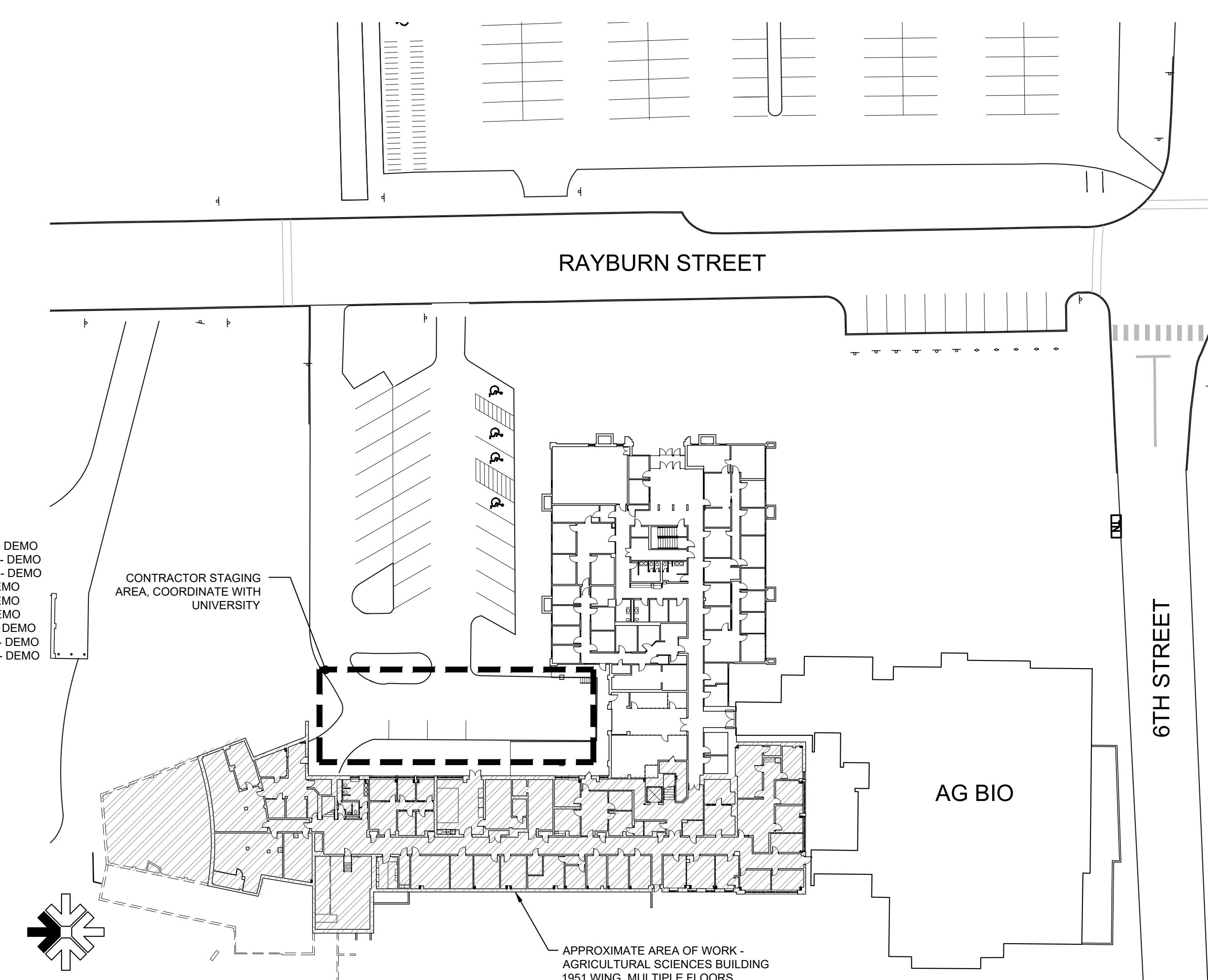
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UNIVERSITY OF IDAHO
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HVAC UPGRADES, PHASE TWO

606 SOUTH RAYBURN STREET
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DPW PROJECT #23256

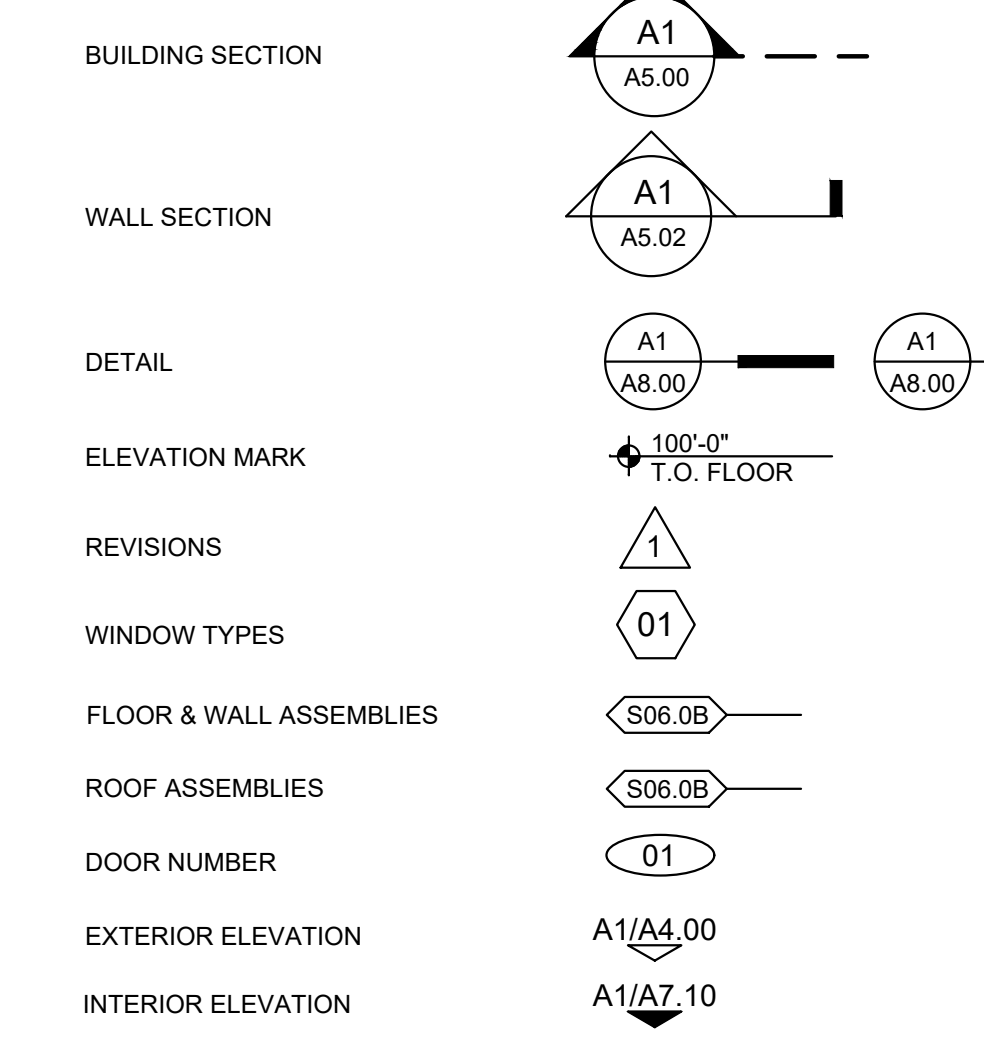
VICINITY MAP & CONTRACTOR STAGING PLAN



GENERAL NOTES

- 1. CONTRACTOR TO VERIFY WITH UTILITIES EXACT LOCATION OF EXISTING UNDERGROUND SERVICES. CONTACT CALL BEFORE YOU DIG AT: (800) 342-1585
2. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THESE DRAWINGS, THE SPECIFICATIONS, AND THE CURRENT EDITIONS OF THE IBC, UMC, UPC, NEC AND THE NW NON-RESIDENTIAL ENERGY CODE, AND ALL GOVERNING REGULATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND PROVIDING ALL REQUIRED DOCUMENTATION FOR ISSUANCE OF PERMITS, INCLUDING ANY AND ALL ENGINEERING, STAMPED AND SIGNED BY REGISTERED PROFESSIONAL ENGINEERS IN THE STATE OF IDAHO APPROPRIATE TO THE DISCIPLINE.
3. PLAN INTENT: THESE DRAWINGS REPRESENT EXISTING CONDITIONS (CONTRACTOR TO VERIFY ALL ACTUAL CONDITIONS), AND THE FINISHED FACILITIES AND UNLESS OTHERWISE INDICATED, THEY DO NOT SHOW THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE FINISHED FACILITIES AND TO PROTECT THE WORK AND PROPERTY, THE SAFETY OF THE WORKERS, AND OTHER PERSONS DURING CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE ABOVE MEASURES AND VISITS TO THE SITE BY THE ARCHITECT SHALL NOT INCLUDE OBSERVATION OF SAFETY MEASURES.
4. FIELD VERIFY ALL BUILDING POINTS OF CONNECTIONS AND FLOOR TO FLOOR HEIGHTS.

SYMBOLS



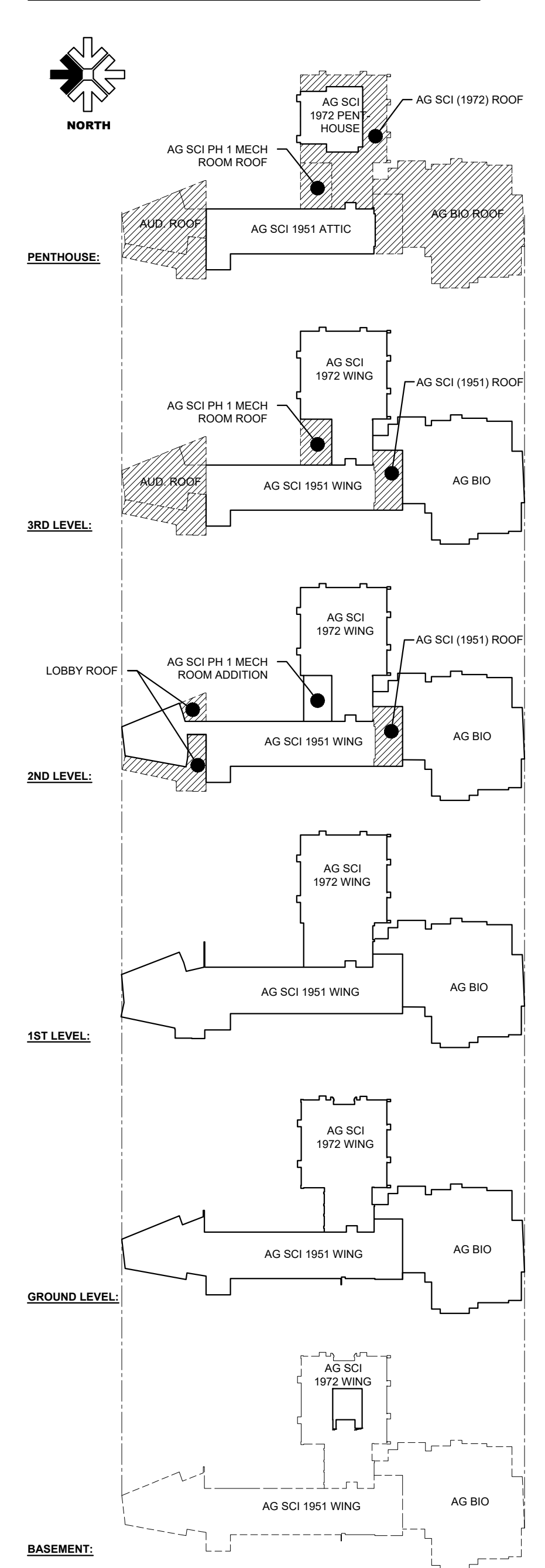
BASE BID PROJECT SUMMARY:

A DESCRIPTION OF THE BASE BID WORK OF THIS PROJECT CAN BE SUMMARIZED TO INCLUDE NEW HVAC EQUIPMENT AND DISTRIBUTION SYSTEMS TO BE INSTALLED WITHIN THE GROUND FLOOR, FIRST FLOOR, AND SECOND FLOOR OF THE AGRICULTURAL SCIENCES BUILDING 1951 WING AS INDICATED. WORK OF THE PROJECT ADDITIONALLY WILL INCLUDE RELATED DEMOLITION, ASBESTOS ABATEMENT, ARCHITECTURAL FINISH IMPROVEMENTS, CEILING REPLACEMENT, NEW LIGHTING, AND OTHER RELATED ELECTRICAL IMPROVEMENTS.

BID ALTERNATE SUMMARY:

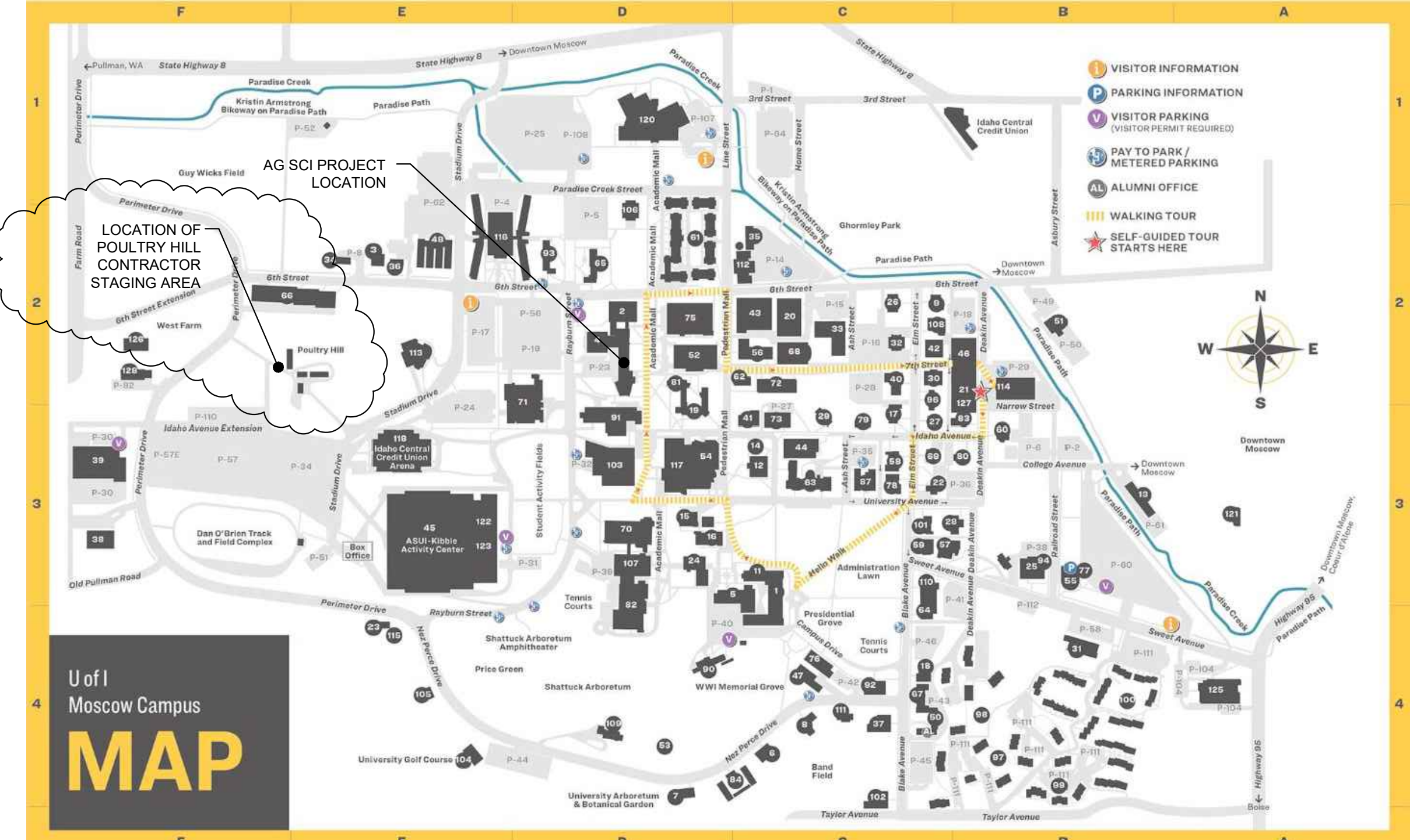
- 1. BID ALTERNATE #1 - AUDITORIUM 106
BASE BID: THE EXISTING HVAC SYSTEM SERVING THE AUDITORIUM, EXISTING ELECTRICAL SYSTEMS, AND EXISTING FINISHES WILL REMAIN IN PLACE WITHIN AUDITORIUM 106. THE BASE BID INCLUDES ALL WORK THAT IS NOT WITHIN OR ASSOCIATED WITH AUDITORIUM 106; REFERENCE DRAWINGS FOR COMPLETE SCOPE OF WORK. A DESCRIPTION OF THE BASE BID WORK OF THIS PROJECT CAN BE SUMMARIZED TO INCLUDE NEW HVAC EQUIPMENT AND DISTRIBUTION SYSTEMS TO BE INSTALLED WITHIN THE GROUND FLOOR, FIRST FLOOR, AND SECOND FLOOR OF THE AGRICULTURAL SCIENCES BUILDING 1951 WING AS INDICATED. WORK OF THE PROJECT ADDITIONALLY WILL INCLUDE RELATED DEMOLITION, ASBESTOS ABATEMENT, ARCHITECTURAL FINISH IMPROVEMENTS, CEILING REPLACEMENT, NEW LIGHTING, AND OTHER RELATED ELECTRICAL IMPROVEMENTS.
BID ALTERNATE #1: PROVIDE NEW HVAC EQUIPMENT AND DISTRIBUTION SERVING AUDITORIUM #106; NEW ACCESS TO EQUIPMENT ROOM AND ALL ASSOCIATED DEMOLITION, ASBESTOS ABATEMENT, ELECTRICAL WORK, NEW LIGHTING, ARCHITECTURAL FINISH WORK, AND SITE WORK. REFERENCE DRAWINGS FOR COMPLETE SCOPE OF WORK TO BE INCLUDED IN BID ALTERNATE #1.

BUILDING KEY PLAN



DRAWING INDEX

Table listing drawing titles and sheet numbers under categories: GENERAL, ARCHITECTURAL, STRUCTURAL, MECHANICAL, and ELECTRICAL. Includes items like COVER SHEET, GROUND FLOOR CODE PLAN, LEGENDS & ABBREVIATIONS, and various schedule and section drawings.



Design West Architects P.A. logo and contact information. Project title: UNIVERSITY OF IDAHO AG SCIENCE BUILDING HVAC UPGRADES, PHASE 2. DPW PROJECT #23256. 606 SOUTH RAYBURN STREET, MOSCOW, IDAHO 83844. Date: 02/05/2024. Sheet Name: COVER SHEET. Sheet Number: G1.00.

FLOOR PLAN LEGEND:

- INTERIOR ELEVATION
- DOOR NUMBER - SEE DOOR SCHEDULE
- NEW WALL TAG. SEE SHEET A8.00 FOR DETAILS
- NEW WALL LOCATION, CHASE, AND WALL INFILL.
- LOUVER TAG - SEE MECHANICAL

FLOORING TYPE LEGEND:

- EXIST - AREA OF EXISTING FLOORING TO REMAIN, PRESERVE AND PROTECT
- CPT-1 - NEW CARPET TILE FLOORING (SEE SPEC 09 68 13). PROVIDE NEW 6" RUBBER BASE ON ALL WALLS OF ROOMS THAT RECEIVE CPT-1, AND 4" RUBBER BASE AT EXISTING CASEWORK (SEE SPEC 09 65 13).
- WALK - NEW CARPET TILE WALK OFF MAT FLOORING (SEE SPEC 09 68 13). PROVIDE NEW 6" RUBBER BASE ON ALL WALLS OF ROOMS THAT RECEIVE WALK (SEE SPEC 09 65 13).
- VCT-1 - NEW VCT FLOORING (SEE SPEC 09 65 19). PROVIDE NEW 6" RUBBER BASE ON ALL WALLS OF ROOMS THAT RECEIVE VCT-1 (SEE SPEC 09 65 13).
- CONC - PAINT ON FLOOR SEALER (SEE SPEC 09 91 00). PROVIDE NEW 6" RUBBER BASE ON ALL WALLS OF ROOMS THAT RECEIVE PAINT ON FLOOR SEALER, AND AND 4" RUBBER BASE AT EXISTING CASEWORK (SEE SPEC 09 65 13). REMOVE EXISTING COATINGS/SEALERS AND PREPARE EXISTING CONCRETE SUBSTRATE PER MANUFACTURER'S REQUIREMENTS.
- FLOOR TRANSITION SPEC 09 65 13

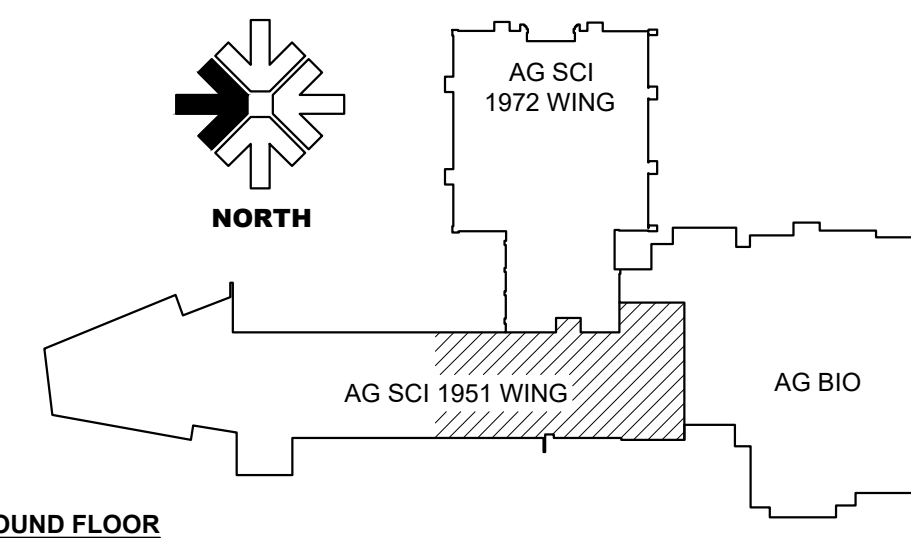
FLOOR PLAN GENERAL NOTES:

1. SEE SHEET G1.00 FOR SYMBOLS.
2. SEE SHEET A8.00 FOR WALL ASSEMBLY AND DETAILS.
3. DIMENSIONS ARE FROM FACE OF STUD OR FACE OF CONCRETE, UNLESS NOTED OTHERWISE.
4. PROVIDE SOLID BLOCKING TO SUPPORT WALL HUNG EQUIPMENT, SHELVING, AND OTHER ACCESSORIES REQUIRING SUPPORT. VERIFY LOCATIONS PRIOR TO INSTALLATION.
5. PATCH, REPAIR AND PAINT ALL AREAS OF WALLS & CEILING DAMAGED FROM DEMOLITION. INFILL WALLS WHERE EXISTING ITEMS ARE REMOVED, AND SEAL ALL PENETRATIONS IN NEW AND EXISTING WALLS. NEW CONSTRUCTION TO MATCH EXISTING CONDITIONS.
6. ALL NEW WALL CONSTRUCTION TO ALIGN WITH EXISTING WALL FINISHES. PATCH AND REPAIR TEXTURE TO MATCH EXISTING. PROVIDE NEW PAINT TO ENTIRE WALL AS SPECIFIED.
7. SEE A8.00 FOR ACOUSTICAL SEALANT REQUIREMENTS FOR ALL WALLS WITH SOUND 'S' INSULATION.
8. NEW WINDOW BLINDS TO BE OWNER FURNISHED AND OWNER INSTALLED.

FINISHES GENERAL NOTES:

1. ALL CHANGES OF FLOORING MATERIAL ARE TO TAKE PLACE AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE.
2. FLOOR FINISHES ARE CONTINUOUS IN THE ENTIRE AREA IN WHICH THEY ARE DESIGNATED. UNDER MOVEABLE EQUIPMENT, MOVEABLE CASEWORK, AND INTO TOE KICK / KNEE SPACES, EXCEPT WHERE NOTED OTHERWISE. FLOOR FINISHES ARE NOT REQUIRED TO EXTEND BENEATH EXISTING FIXED CASEWORK.
3. PROVIDE TRANSITION STRIPS AT ALL INTERSECTIONS OF DISSIMILAR MATERIALS.
4. CONTRACTOR SHALL PERFORM ALL REQUIRED FLOOR PREPARATION, APPLY FLOOR LEVELING COMPOUND AND APPLY FLOOR SEALER AS NEEDED FOR SPECIFIED TOLERANCES, FLOOR FINISHES AND PER MANUFACTURER'S REQUIREMENTS.
5. SEE 02 80 00 FOR ABATEMENT OF EXISTING FLOORING AND BASE CONTAINING HAZARDOUS MATERIAL.

KEY PLAN:



DESIGN WEST
ARCHITECTS, P.A.
• KENNEWICK, WASHINGTON • ONTARIO, ONTARIO •
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DRAWN BY
MB, JR
CHECKED BY
NW
DWA JOB NUMBER
23054

REVISIONS
A ADDENDUM 2 - 4/30/24

UNIVERSITY OF IDAHO
AG SCIENCE BUILDING
HVAC UPGRADES, PHASE 2
DPW PROJECT #23256
606 SOUTH RAYBURN STREET
MOSCOW, IDAHO 83844

DATE
02/05/2024

SHEET NAME

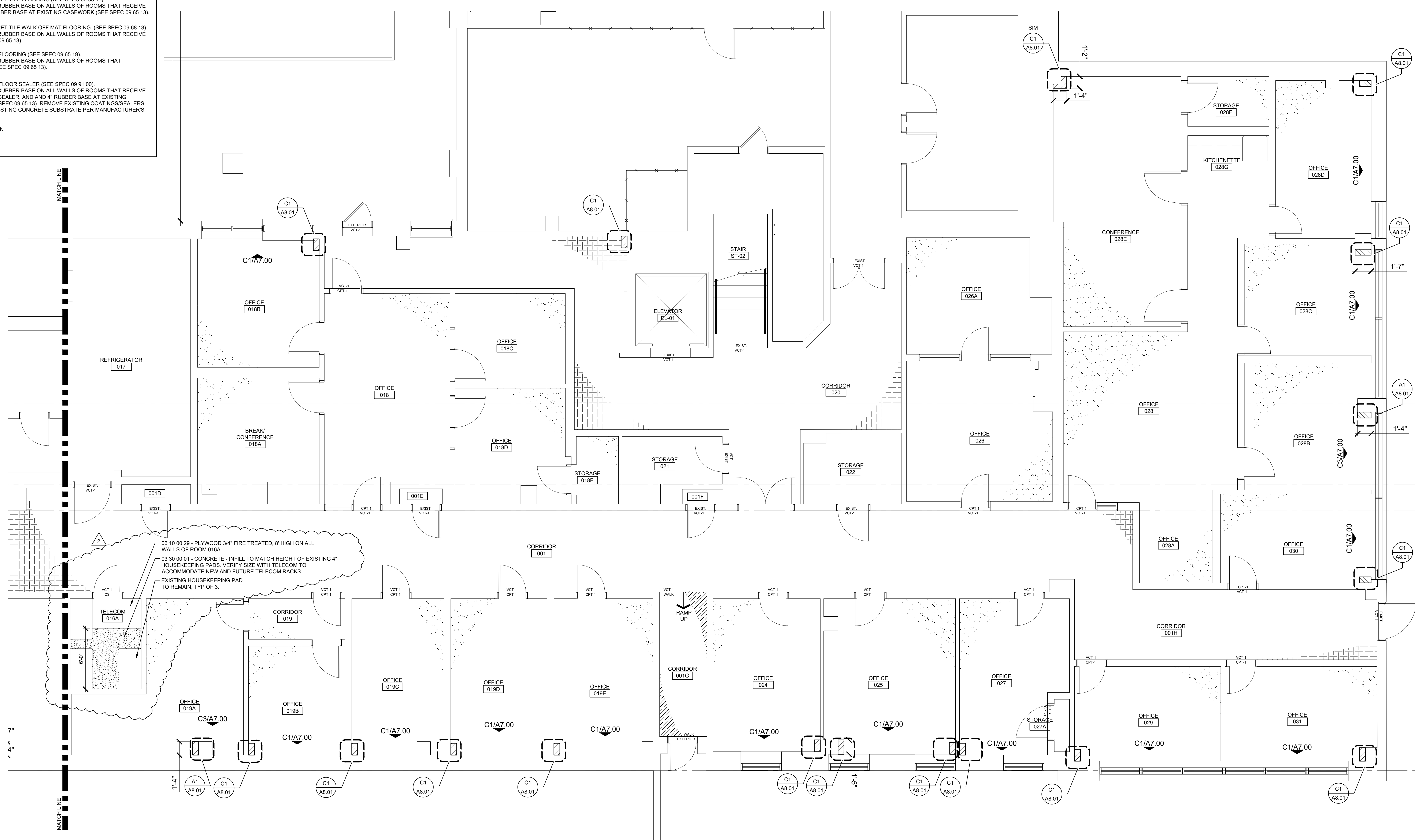
GROUND FLOOR PLAN AREA C

SHEET

A3.30C

A1 FLOOR PLAN - GROUND FLOOR - AREA C

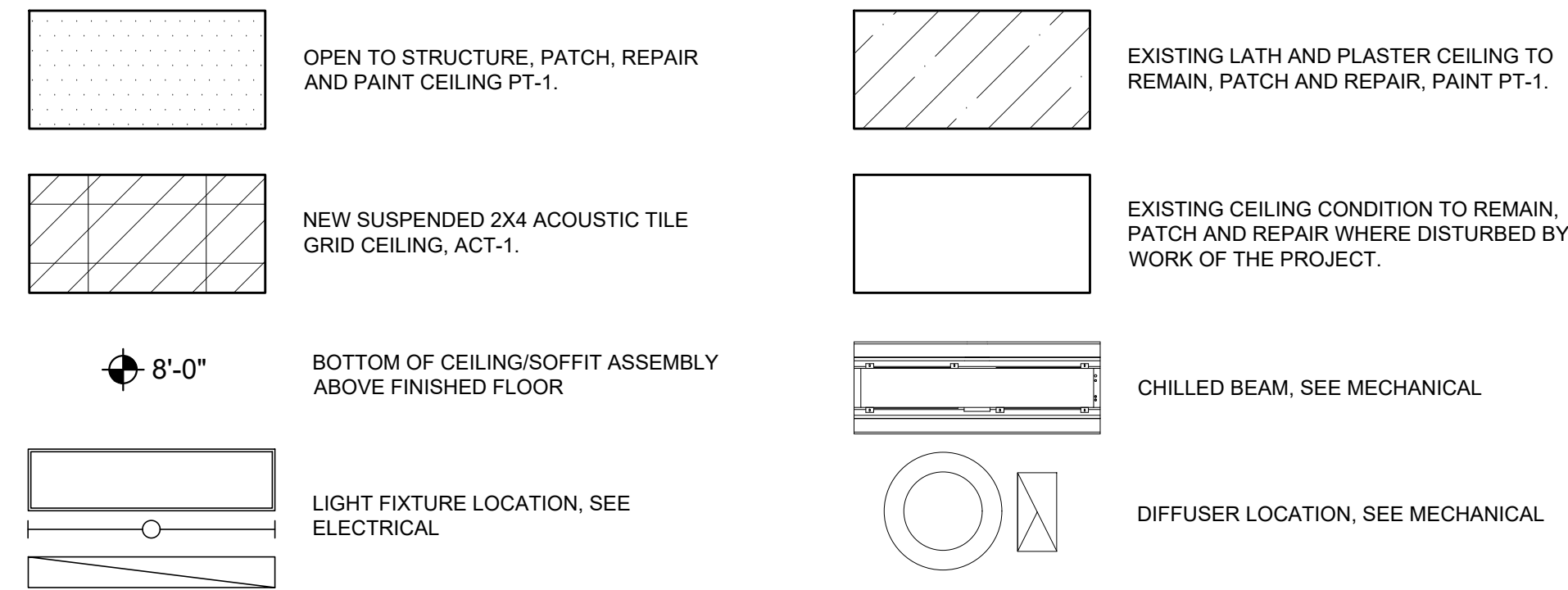
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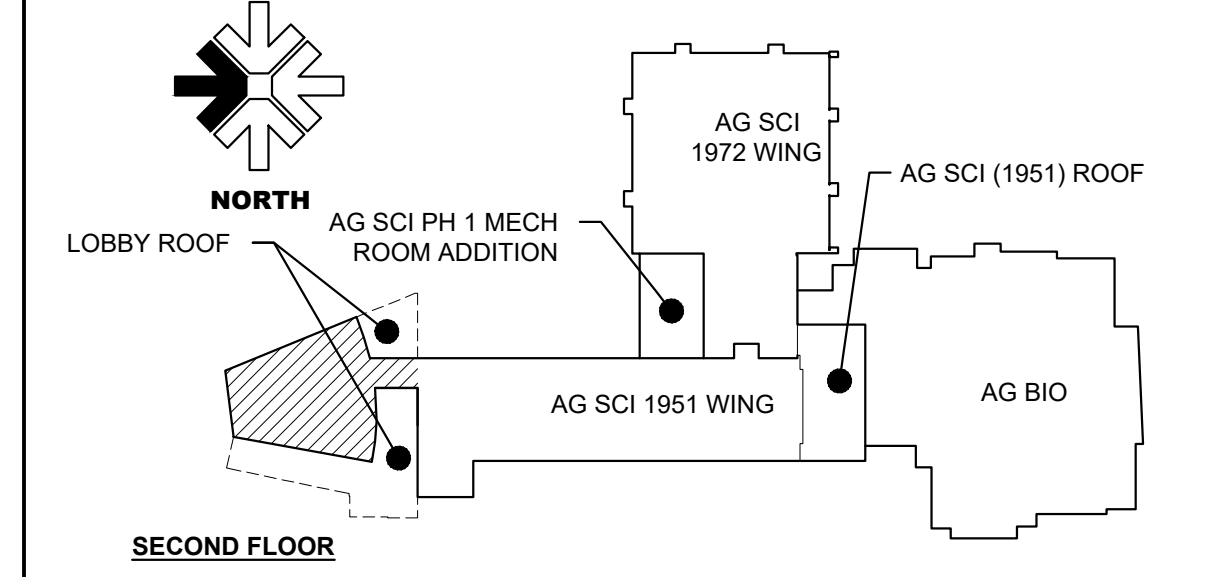
CEILING PLAN NOTES:

- SPOT ELEVATIONS ARE FROM FINISH FLOOR TO FINISH CEILING.
- ELECTRICAL AND MECHANICAL SHOWN FOR REFERENCE ONLY. SEE RELATED ELECTRICAL AND MECHANICAL DRAWINGS.
- SEE FIRE ALARM AND SPRINKLER PLANS/SUBMITTALS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. REROUTE AND MODIFY EXISTING FIRE SPRINKLER SYSTEM TO COORDINATE WITH NEW WORK. ALL NEW AND EXISTING FIRE SPRINKLER PIPING IS TO BE CONCEALED IN ROOMS SCHEDULED TO RECEIVE NEW CEILING FINISHES.
- MAINTAIN REQUIRED FIRE RATINGS AT ALL RATED FLOOR, WALL, CEILING, AND ROOF ASSEMBLIES RECESSED OR PENETRATED BY FIXTURES, PIPING, CONDUIT, DUCTWORK, AND/OR OTHER ELEMENTS.
- SEE SHEET A8.00 FOR GENERAL SUSPENDED CEILING DETAILS.
- ALL NEW WALLS SHALL EXTEND TO THE UNDERSIDE OF THE FLOOR OR ROOF DECK ABOVE UNLESS NOTED OTHERWISE. SEAL ALL PENETRATIONS AND JOINTS WITH ACOUSTICAL SEALANT. REFERENCE SPECIFICATION SECTION 07 92 00 AND DETAILS ON SHEET A8.00.
- ACOUSTICALLY SEAL ALL NEW PENETRATIONS IN BOTH NEW AND EXISTING WALLS, AND INFILL ALL LOCATIONS EXISTING UTILITIES ARE REMOVED. SEE ELECTRICAL AND MECHANICAL FOR ADDITIONAL INFORMATION.

CEILING PLAN LEGEND:



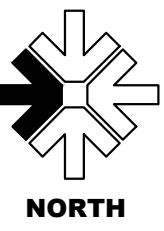
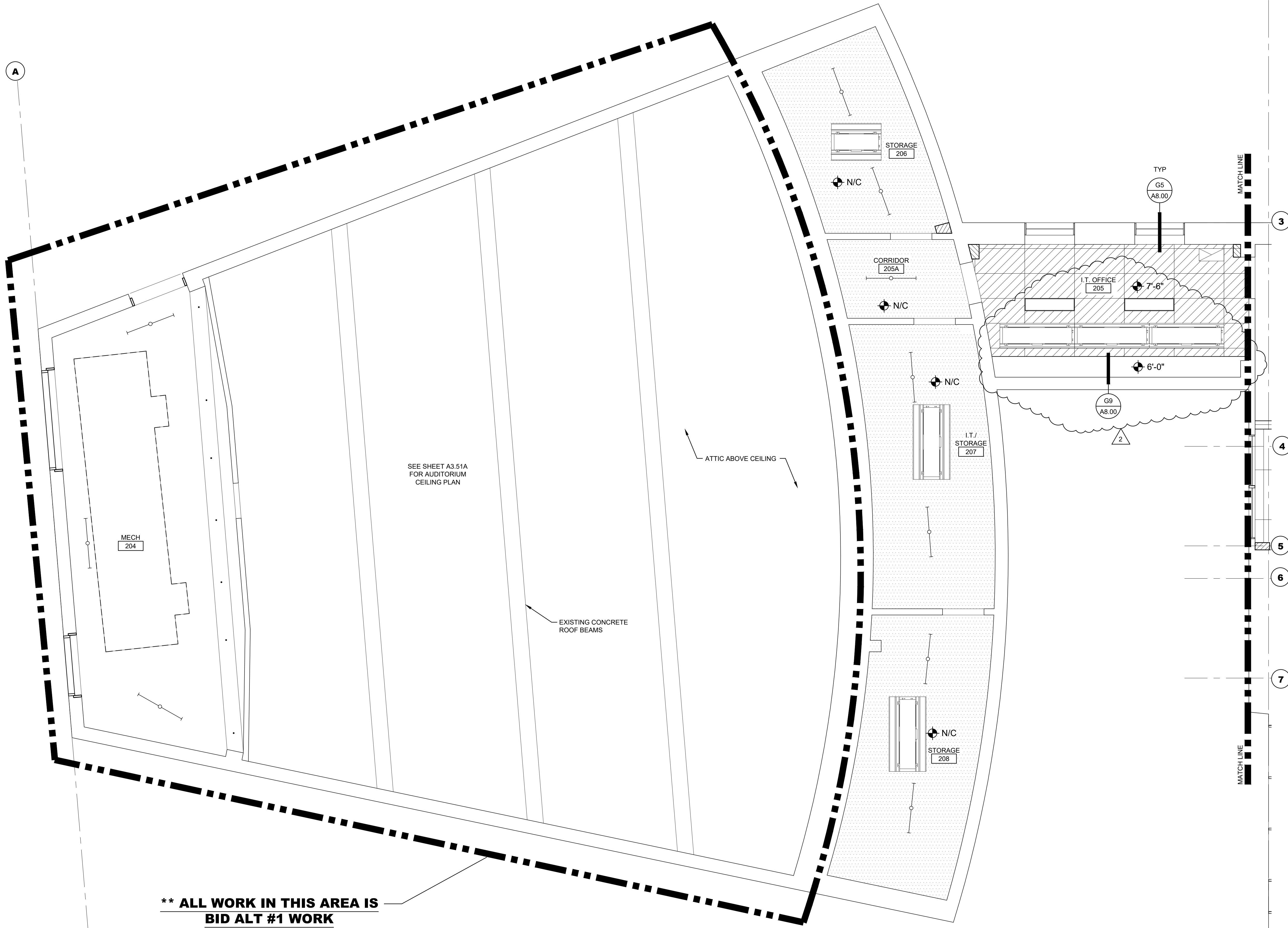
KEY PLAN:



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DRAWN BY
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CHECKED BY
NW
DWA JOB NUMBER
23054
REVISIONS
A ADDENDUM 2 - 4/30/24

H
G
F
E
D
C
B
A



A1 REFLECTED CEILING PLAN - SECOND FLOOR - AREA A

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

UNIVERSITY OF IDAHO
AG SCIENCE BUILDING
HVAC UPGRADES, PHASE 2
DPW PROJECT #23256
606 SOUTH RAYBURN STREET
MOSCOW, IDAHO 83844

DATE
02/05/2024

SHEET NAME
SECOND FLOOR REFLECTED CEILING PLAN AREA A

SHEET

A3.52A

1 2 3 4 5 6 7 8 9 10 11 12

ROOF PLAN GENERAL NOTES:

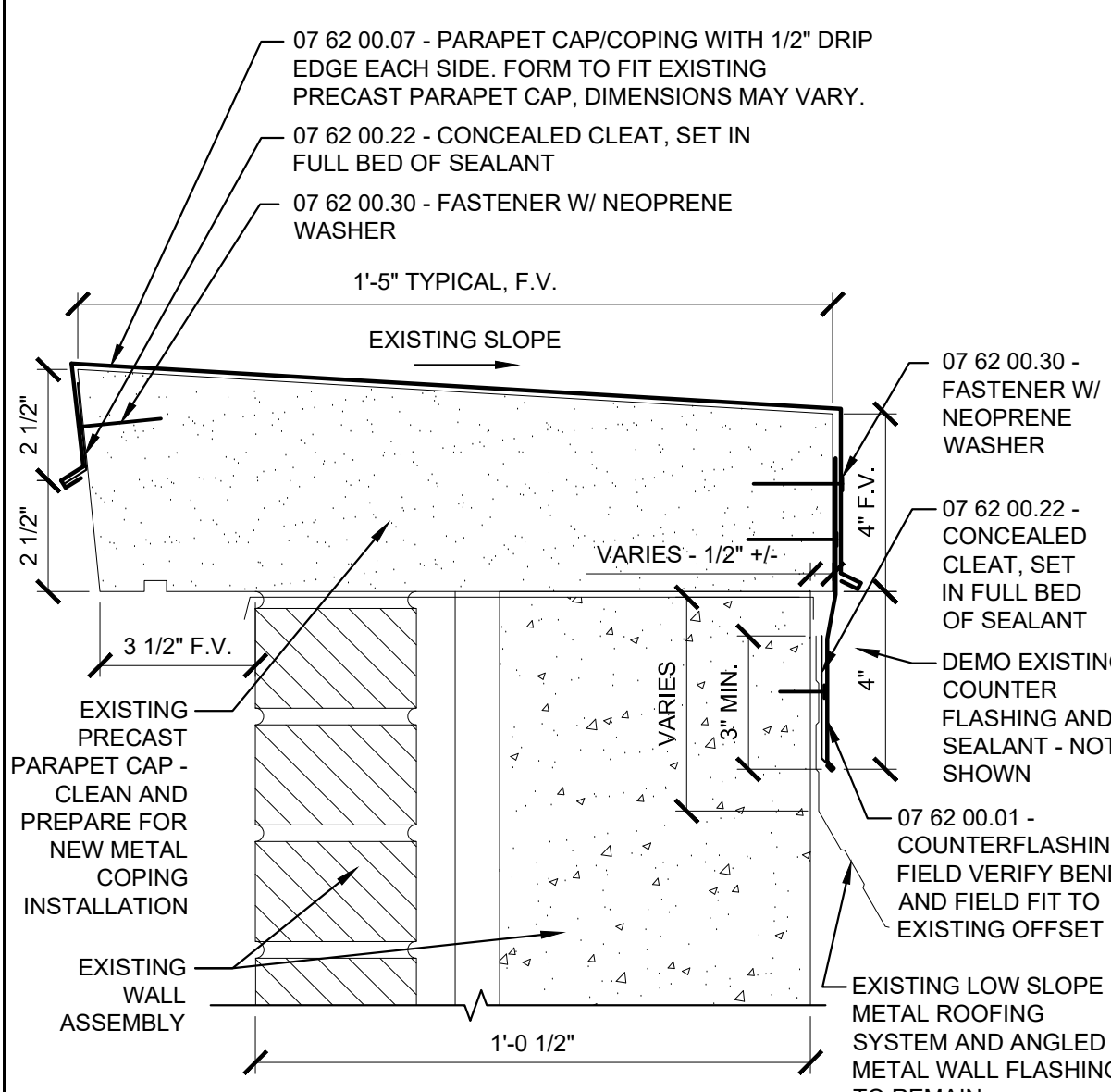
- INFILL AND PATCH EXISTING ROOF ASSEMBLY WATERTIGHT AT ALL LOCATIONS MECHANICAL AND ELECTRICAL ITEMS ARE DEMOLISHED. MATCH EXISTING CONSTRUCTION. INSULATE TO MATCH EXISTING ADJACENT CONSTRUCTION. SEE MECHANICAL AND ELECTRICAL FOR ADDITIONAL INFORMATION.
- MAINTAIN POSITIVE SLOPE TO EXISTING ROOF DRAINS AT ALL LOCATIONS OF ROOF PATCHING.

ROOF PLAN LEGEND:

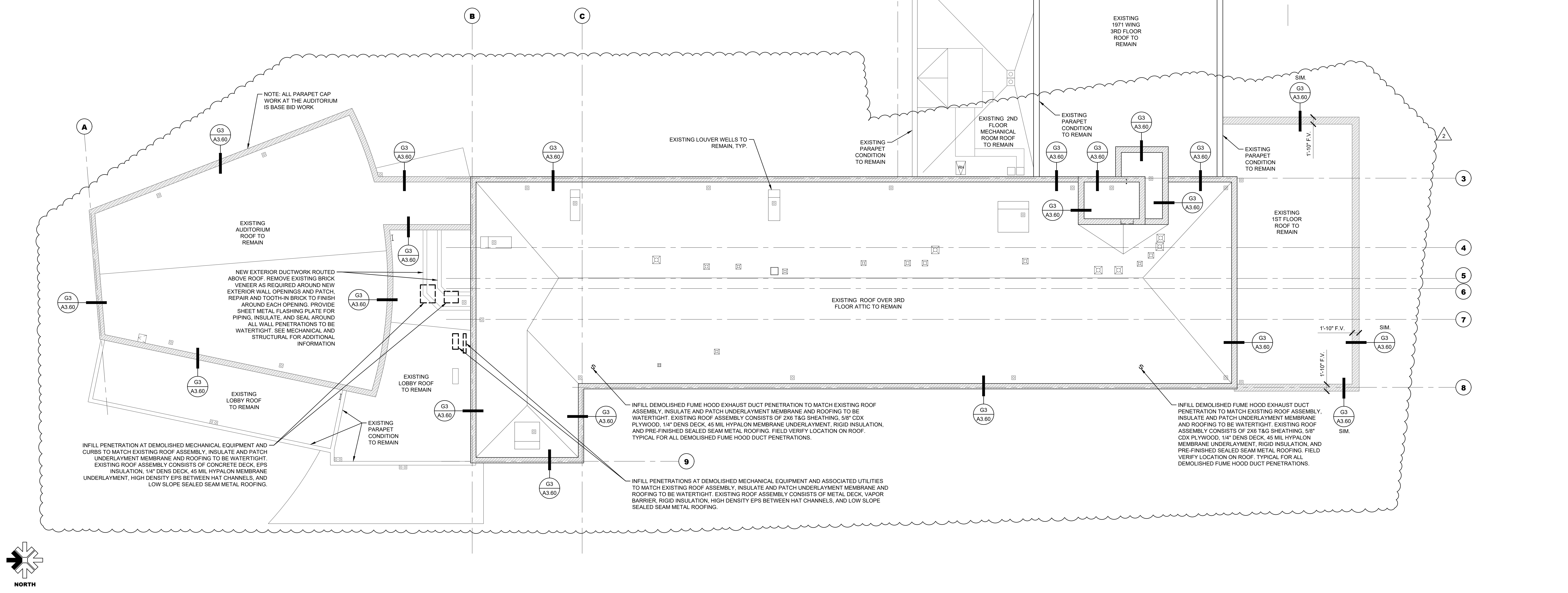
- EXISTING ROOFING CONDITION TO REMAIN. PATCH AND REPAIR WHERE DISTURBED BY WORK OF THE PROJECT.
- INSTALL NEW METAL PARAPET COPING OVER EXISTING PRE-CAST PARAPET CAP. SEE G3/A3.60 FOR TYPICAL DETAIL.

G3 PARAPET CAP AT EXISTING WALLS

SCALE: 3" = 1'-0" PARAPET CAP



EXISTING PARAPET CAP PHOTOS:



A1 ROOF - OVERALL PLAN

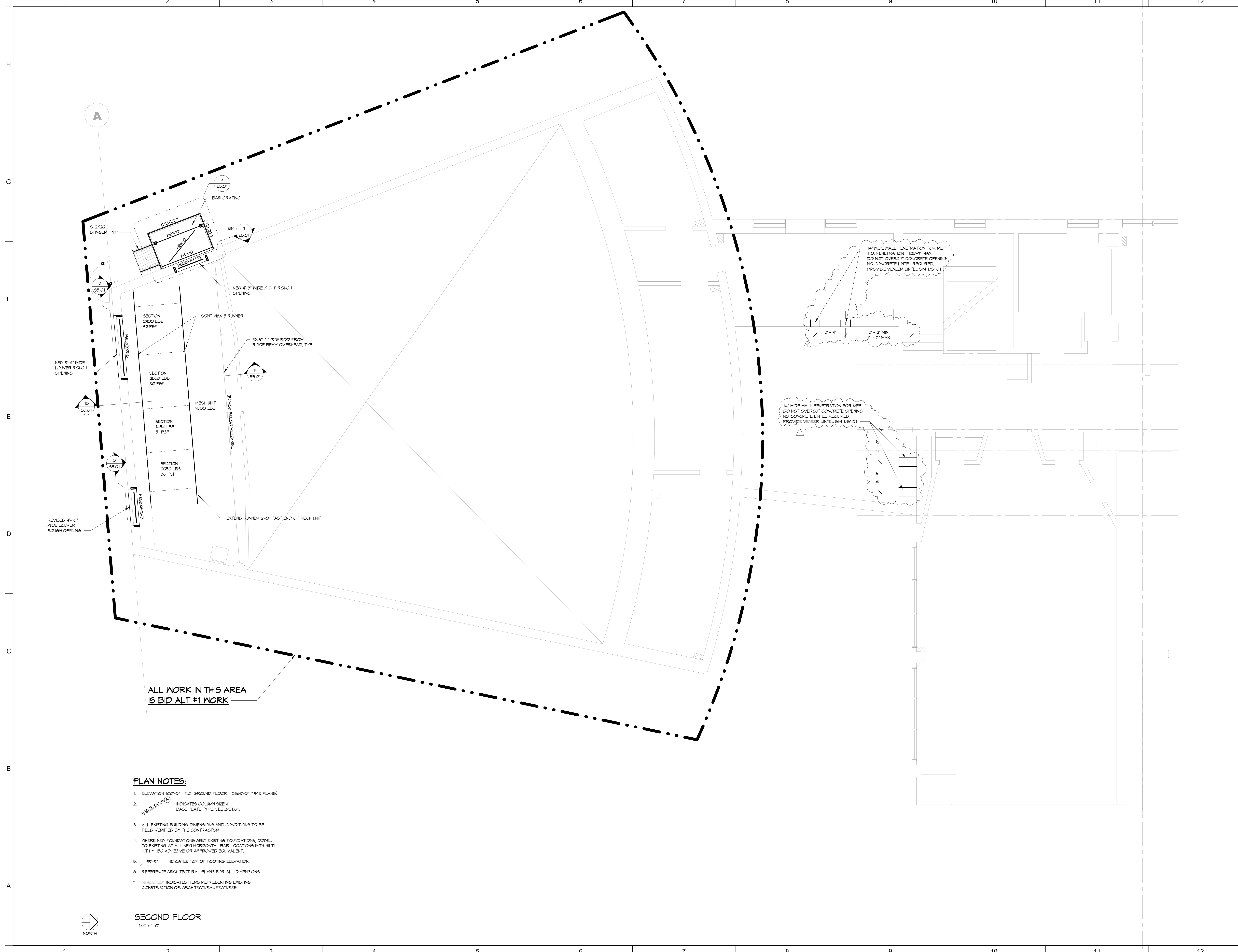
SCALE: 3/32" = 1'-0"

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DPW PROJECT #23256
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MOSCOW, IDAHO 83844

DATE	02/05/2024
SHEET NAME	ROOF OVERALL PLAN
SHEET	A3.60



ALL WORK IN THIS AREA
IS BID ALT #1 WORK

- PLAN NOTES:**
- ELEVATION 100'-0" ± T.O. GROUND FLOOR + 2568'-0" (1948 PLANS).
 - INDICATES COLUMN SIZE & BASE PLATE TYPE, SEE 2/51.01.
 - ALL EXISTING BUILDING DIMENSIONS AND CONDITIONS TO BE FIELD VERIFIED BY THE CONTRACTOR.
 - WHERE NEW FOUNDATIONS ABUT EXISTING FOUNDATIONS, DOWEL TO EXISTING AT ALL NEW HORIZONTAL BAR LOCATIONS WITH HLT HIT HY-150 ADHESIVE OR APPROVED EQUIVALENT.
 - INDICATES TOP OF FOOTING ELEVATION.
 - REFERENCE ARCHITECTURAL PLANS FOR ALL DIMENSIONS.
 - INDICATES ITEMS REPRESENTING EXISTING CONSTRUCTION OR ARCHITECTURAL FEATURES.

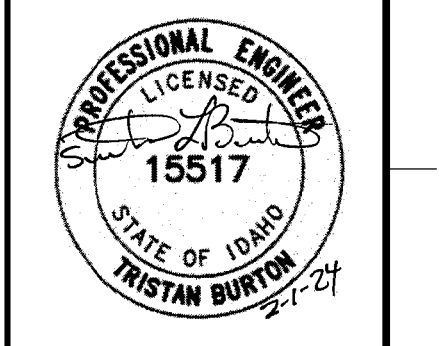
SECOND FLOOR
1/4" = 1'-0"



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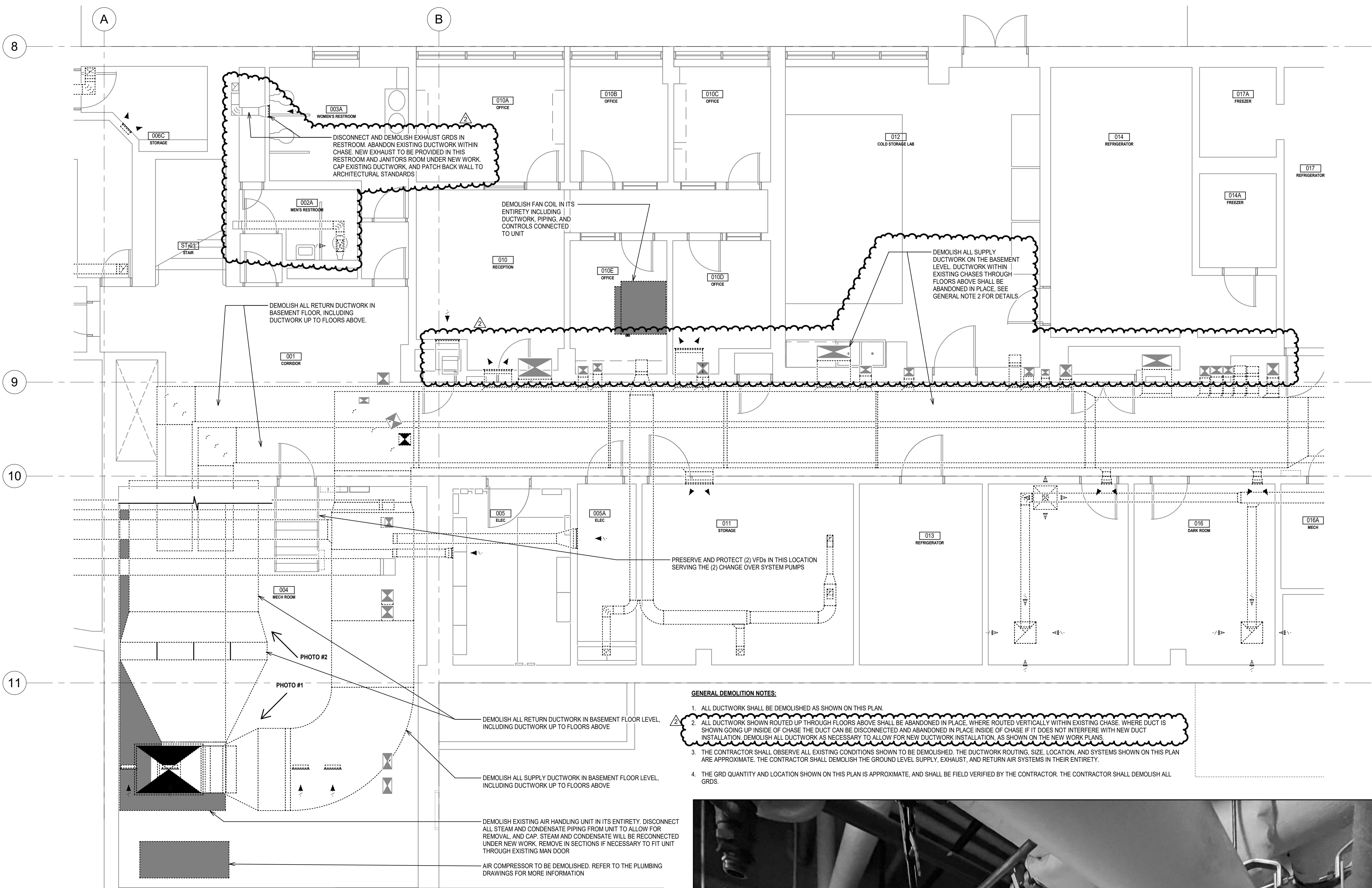
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7307 N. Division St., Suite
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509-624-3224

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SHEET NAME
2ND FLOOR PLAN

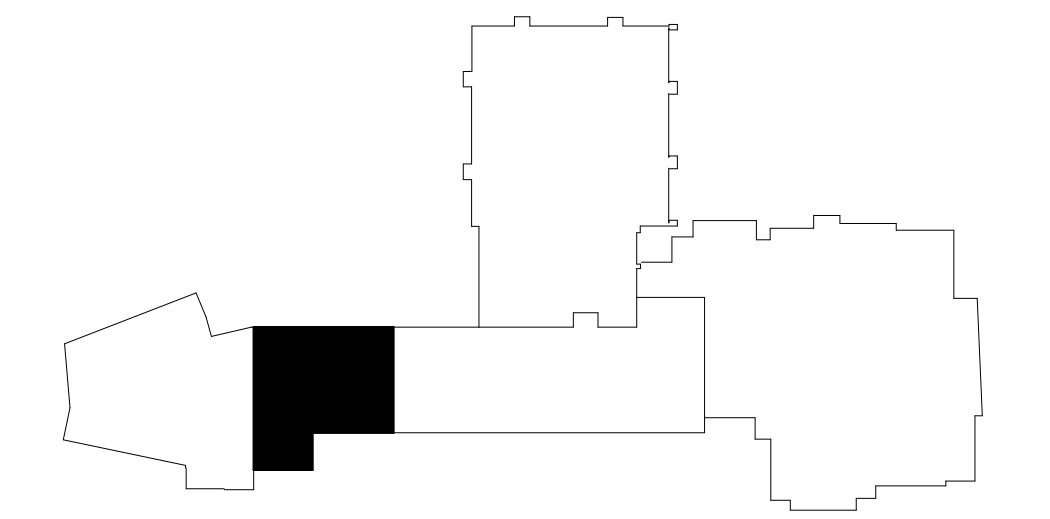
SHEET
S3.32



GENERAL DEMOLITION NOTES:

1. ALL DUCTWORK SHALL BE DEMOLISHED AS SHOWN ON THIS PLAN.
2. ALL DUCTWORK SHOWN ROUTED UP THROUGH FLOORS ABOVE SHALL BE ABANDONED IN PLACE, WHERE ROUTED VERTICALLY WITHIN EXISTING CHASE, WHERE DUCT IS SHOWN GOING UP INSIDE OF CHASE THE DUCT CAN BE DISCONNECTED AND ABANDONED IN PLACE INSIDE OF CHASE IF IT DOES NOT INTERFERE WITH NEW DUCT INSTALLATION. DEMOLISH ALL DUCTWORK AS NECESSARY TO ALLOW FOR NEW DUCTWORK INSTALLATION, AS SHOWN ON THE NEW WORK PLANS.
3. THE CONTRACTOR SHALL OBSERVE ALL EXISTING CONDITIONS SHOWN TO BE DEMOLISHED. THE DUCTWORK ROUTING, SIZE, LOCATION, AND SYSTEMS SHOWN ON THIS PLAN ARE APPROXIMATE. THE CONTRACTOR SHALL DEMOLISH THE GROUND LEVEL SUPPLY, EXHAUST, AND RETURN AIR SYSTEMS IN THEIR ENTIRETY.
4. THE GRD QUANTITY AND LOCATION SHOWN ON THIS PLAN IS APPROXIMATE, AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL DEMOLISH ALL GRDS.

GROUND FLOOR - AREA B - HVAC - DEMO
1/4" = 1'-0"



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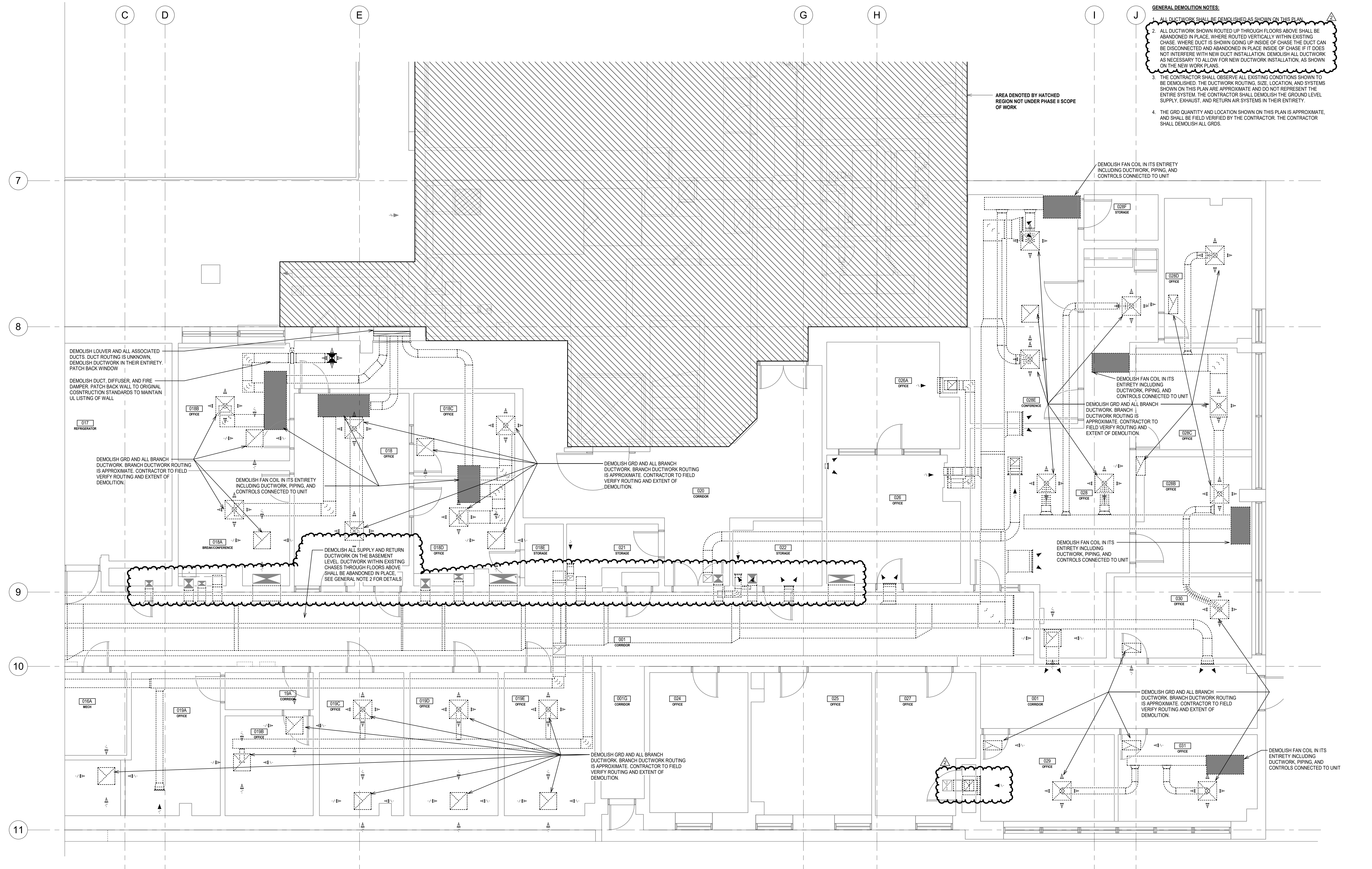
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GROUND FLOOR
AREA B -
HVAC -
DEMO

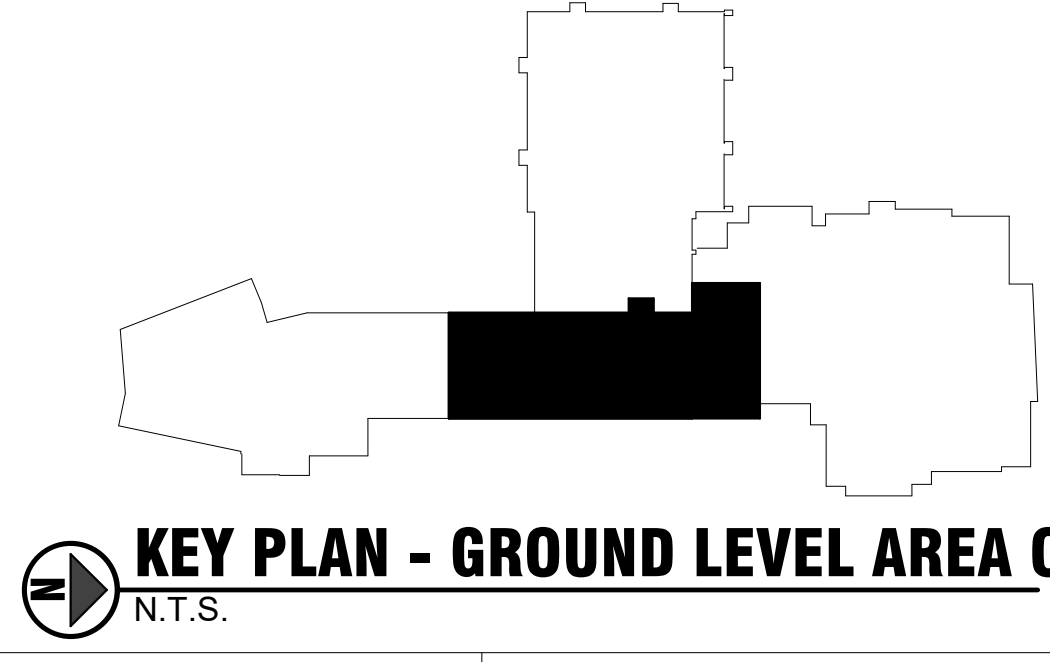
SHEET
M3.20B



GENERAL DEMOLITION NOTES:

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GROUND FLOOR - AREA C - HVAC - DEMO
1/4" = 1'-0"

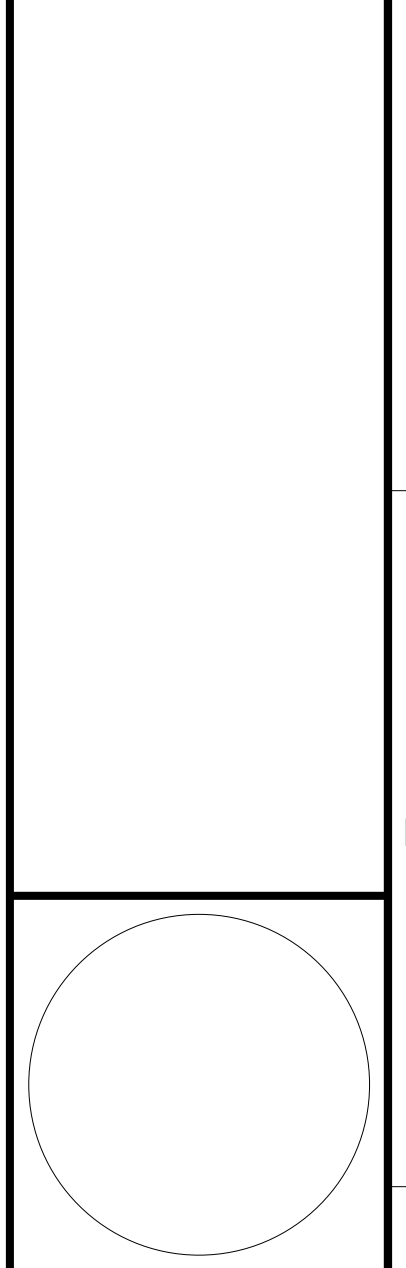


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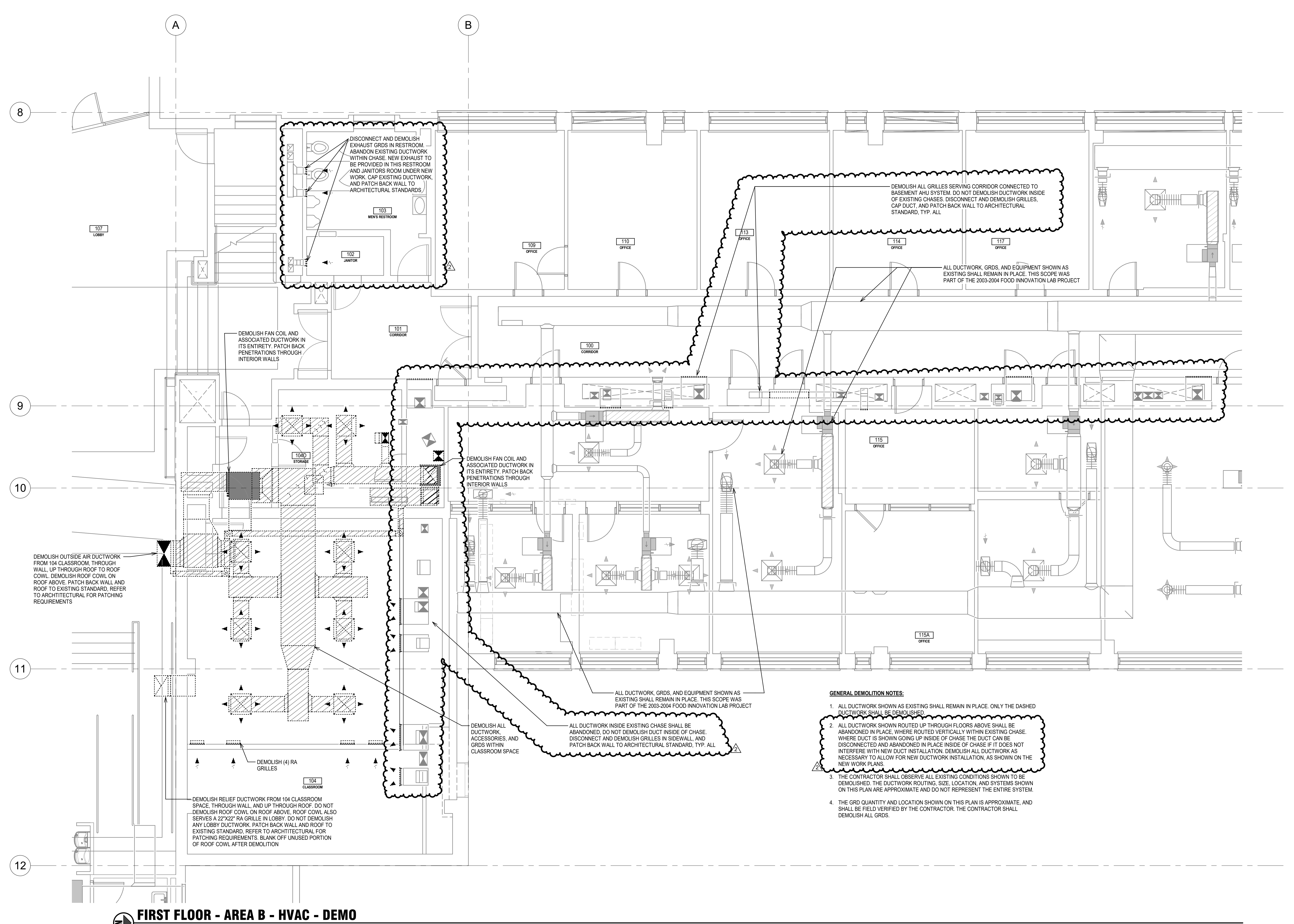


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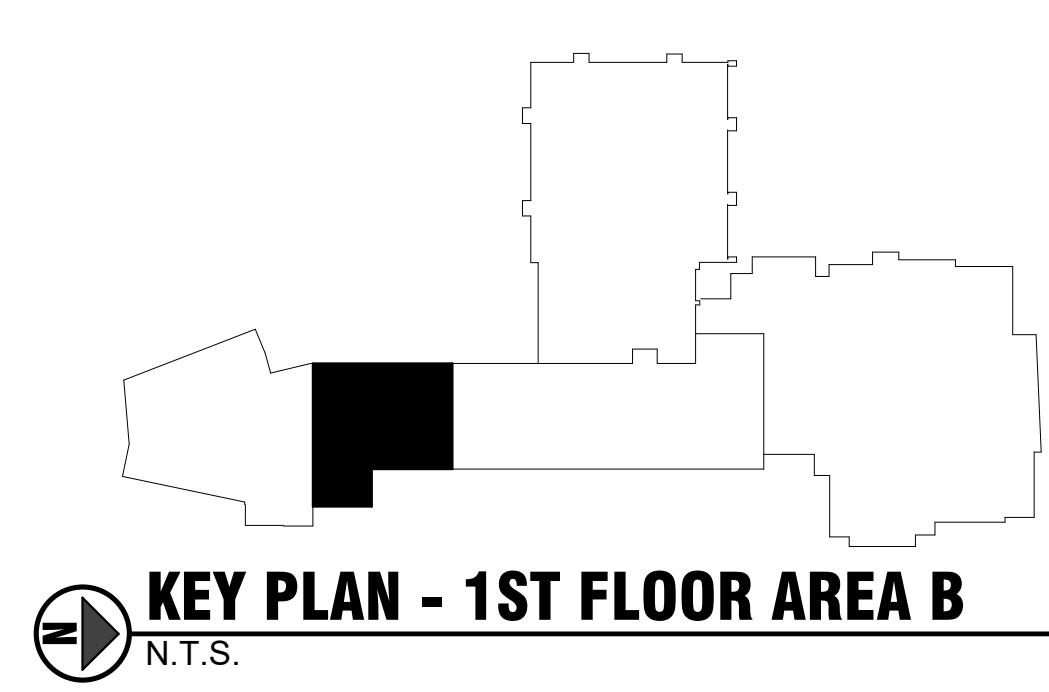
GROUND FLOOR AREA C - HVAC - DEMO

SHEET
M3.20C



FIRST FLOOR - AREA B - HVAC - DEMO
 1/4" = 1'-0"

- GENERAL DEMOLITION NOTES:**
1. ALL DUCTWORK SHOWN AS EXISTING SHALL REMAIN IN PLACE. ONLY THE DASHED DUCTWORK SHALL BE DEMOLISHED.
 2. ALL DUCTWORK SHOWN ROUTED UP THROUGH FLOORS ABOVE SHALL BE ABANDONED IN PLACE, WHERE ROUTED VERTICALLY WITHIN EXISTING CHASE. WHERE DUCT IS SHOWN GOING UP INSIDE OF CHASE THE DUCT CAN BE DISCONNECTED AND ABANDONED IN PLACE INSIDE OF CHASE IF IT DOES NOT INTERFERE WITH NEW DUCT INSTALLATION. DEMOLISH ALL DUCTWORK AS NECESSARY TO ALLOW FOR NEW DUCTWORK INSTALLATION, AS SHOWN ON THE NEW WORK PLANS.
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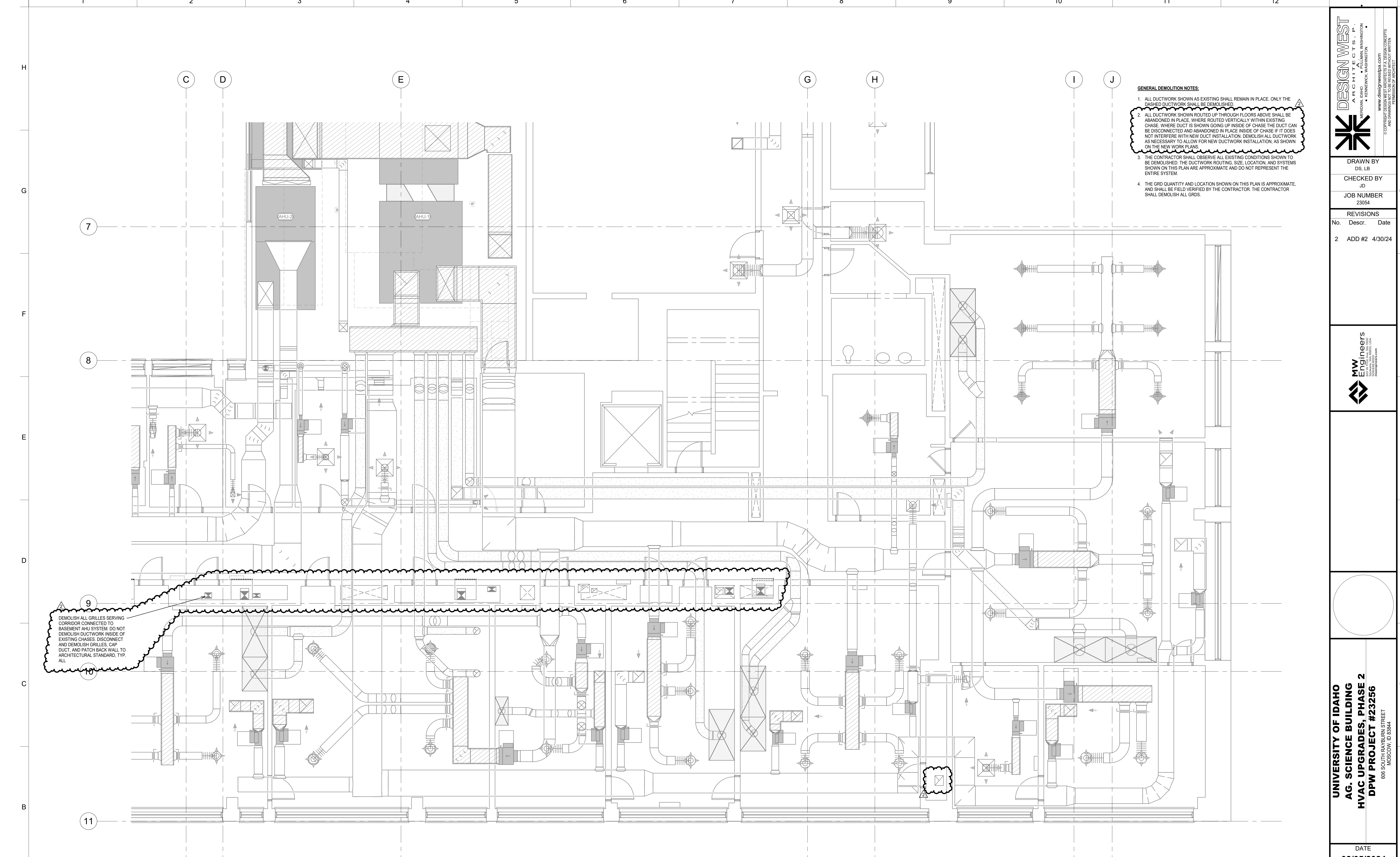
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FIRST FLOOR
 AREA B -
 HVAC -
 DEMO

SHEET

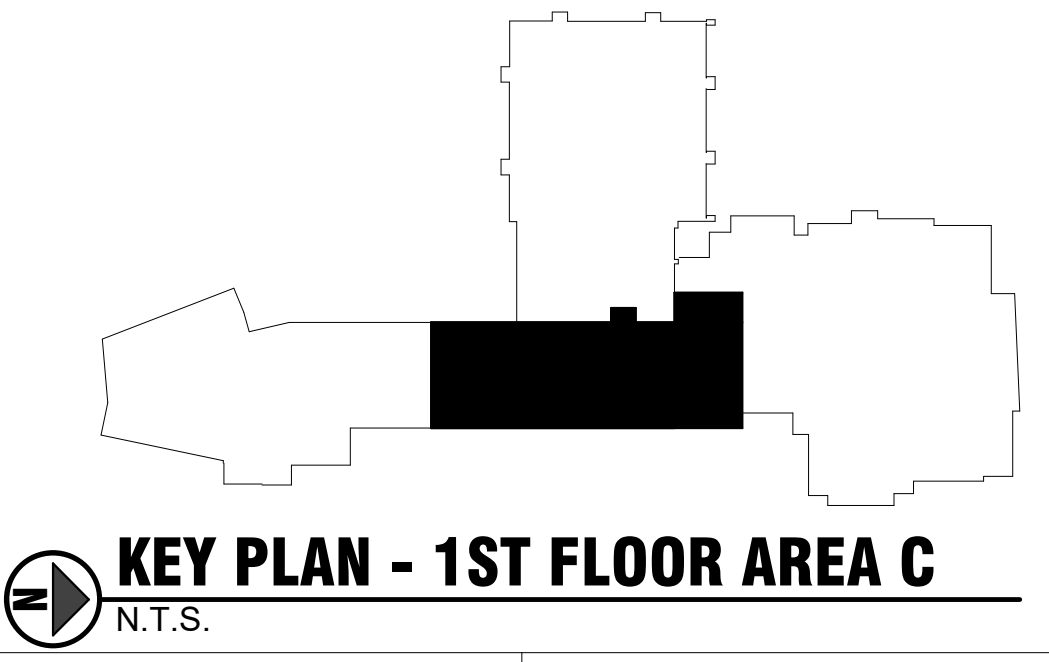
M3.21B



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 4. THE GRD QUANTITY AND LOCATION SHOWN ON THIS PLAN IS APPROXIMATE, AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL DEMOLISH ALL GRDS.

DEMOLISH ALL GRILLES SERVING CORRIDOR CONNECTED TO BASEMENT AHU SYSTEM. DO NOT DEMOLISH DUCTWORK INSIDE OF EXISTING CHASES. DISCONNECT AND DEMOLISH GRILLES. CAP DUCT, AND PATCH BACK WALL TO ARCHITECTURAL STANDARD, TYP. ALL.

FIRST FLOOR - AREA C - HVAC - DEMO
1/4" = 1'-0"



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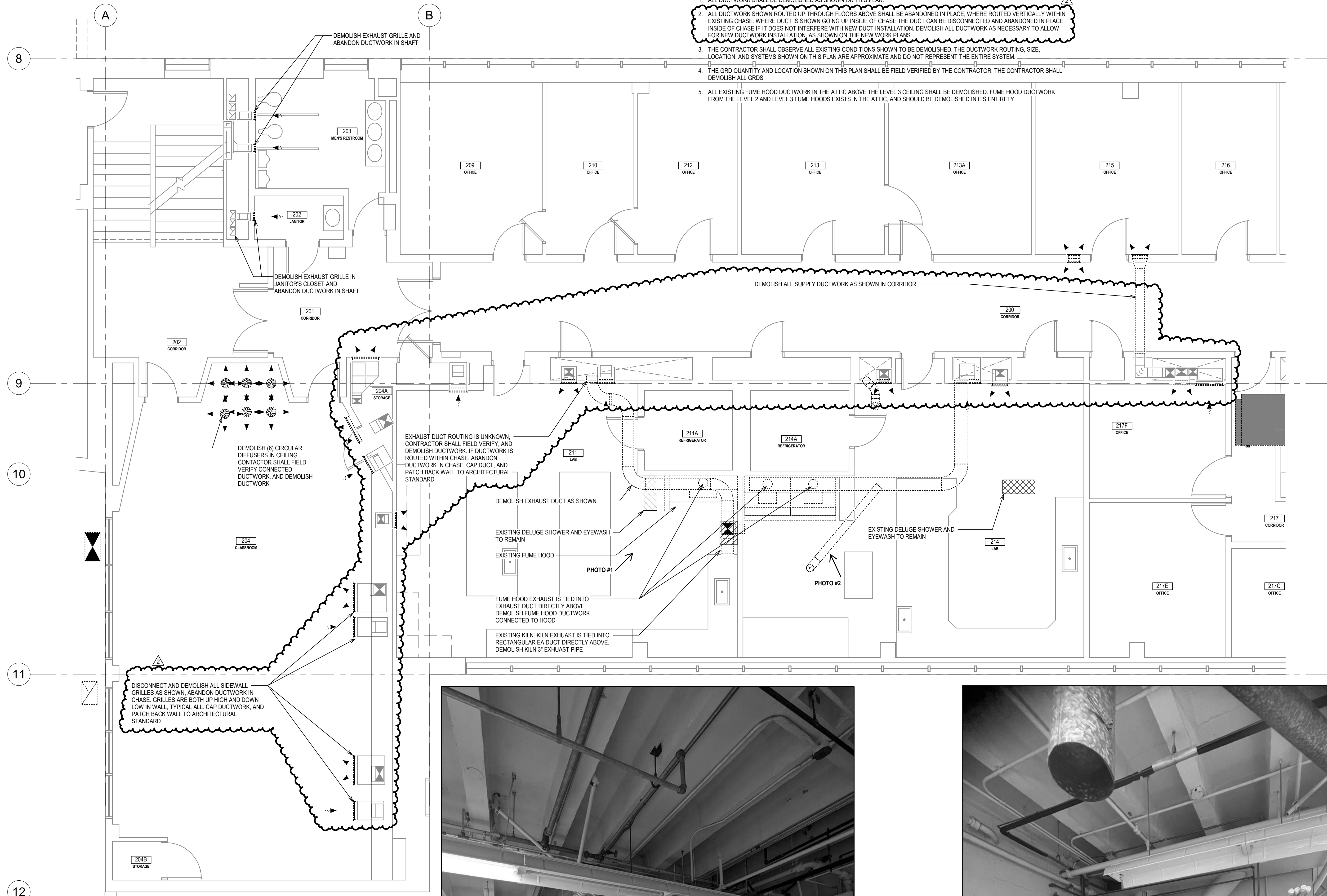
FIRST FLOOR
AREA C -
HVAC -
DEMO

SHEET
M3.21C

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GENERAL DEMOLITION NOTES:

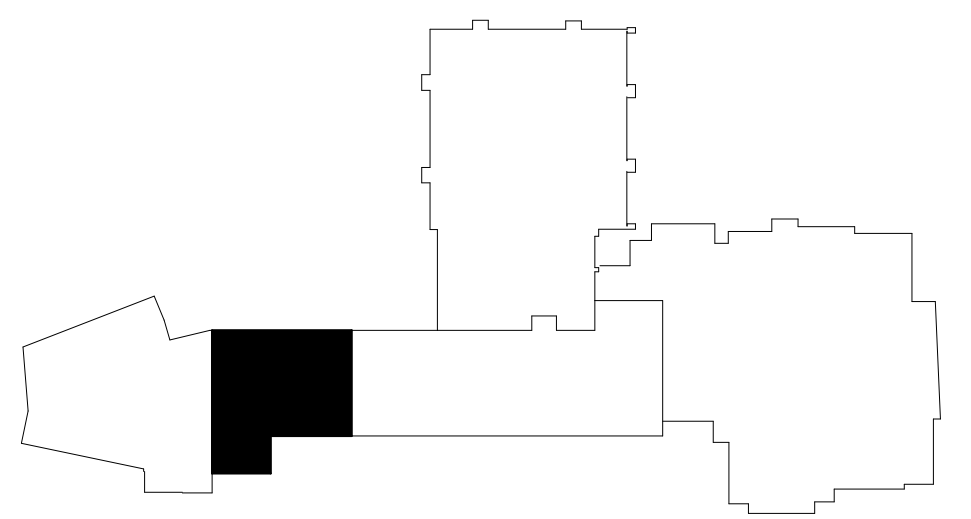
1. ALL DUCTWORK SHALL BE DEMOLISHED AS SHOWN ON THIS PLAN.
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5. ALL EXISTING FUME HOOD DUCTWORK IN THE ATTIC ABOVE THE LEVEL 3 CEILING SHALL BE DEMOLISHED. FUME HOOD DUCTWORK FROM THE LEVEL 2 AND LEVEL 3 FUME HOODS EXISTS IN THE ATTIC, AND SHOULD BE DEMOLISHED IN ITS ENTIRETY.



DISCONNECT AND DEMOLISH ALL SIDEWALL GRILLES AS SHOWN, ABANDON DUCTWORK IN CHASE. GRILLES ARE BOTH UP HIGH AND DOWN LOW IN WALL. TYPICAL ALL CAP DUCTWORK, AND PATCH BACK WALL TO ARCHITECTURAL STANDARD

SECOND FLOOR - AREA B - HVAC - DEMO

1/4" = 1'-0"



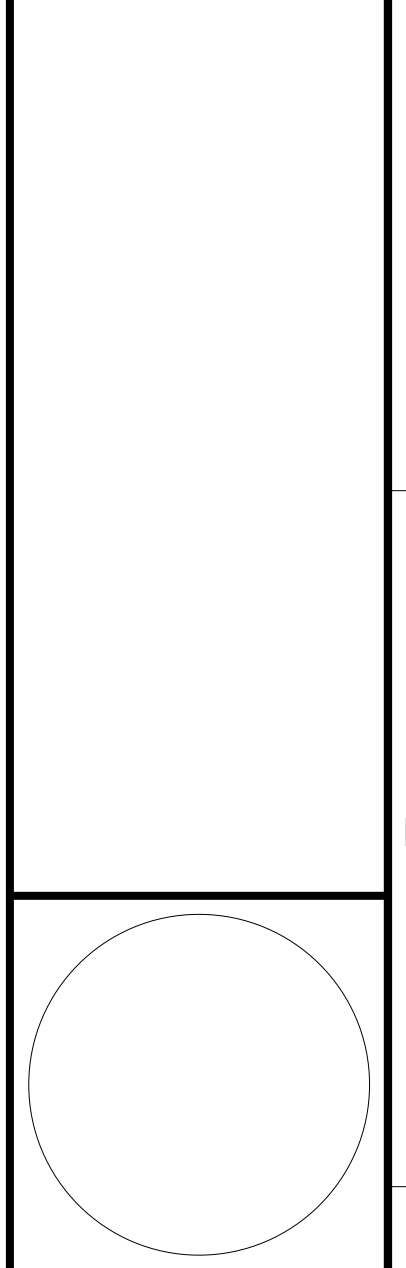
KEY PLAN - 2ND FLOOR AREA B
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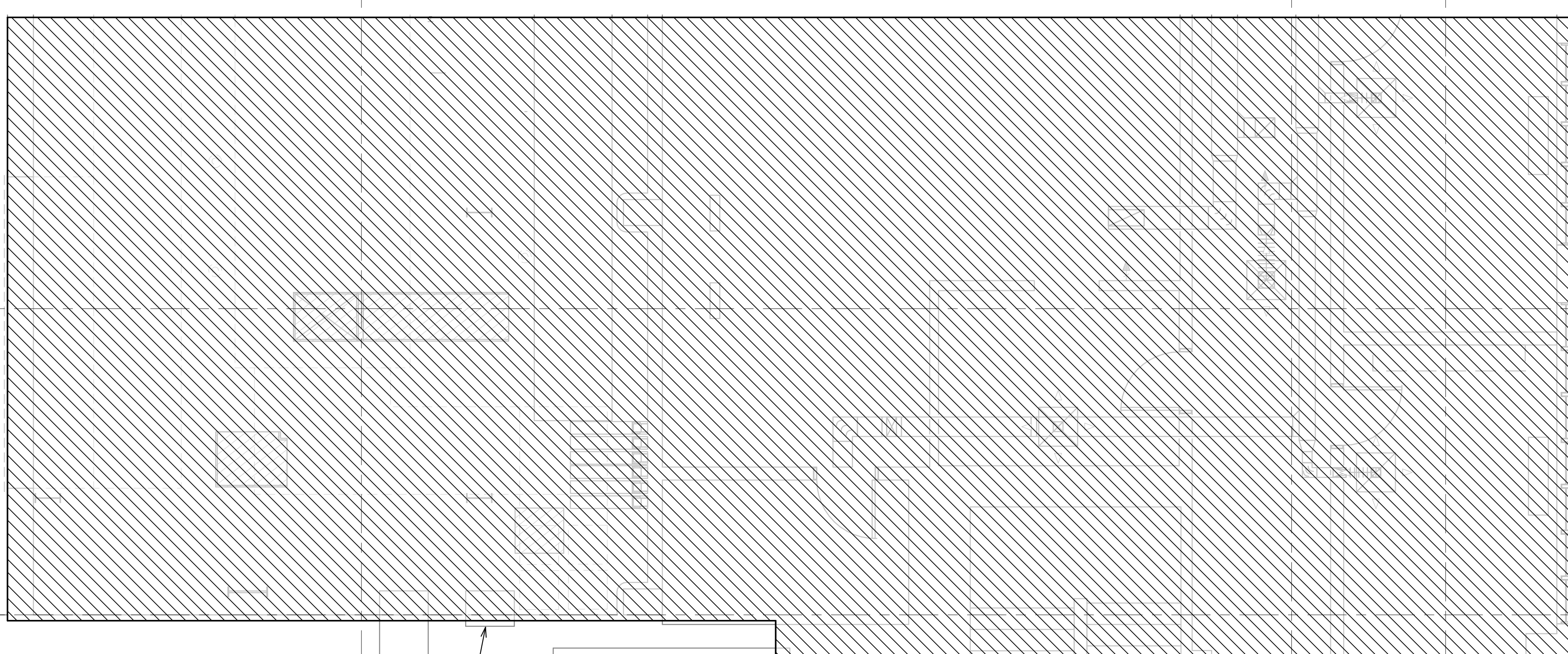
SECOND FLOOR AREA B - HVAC - DEMO

SHEET
M3.22B

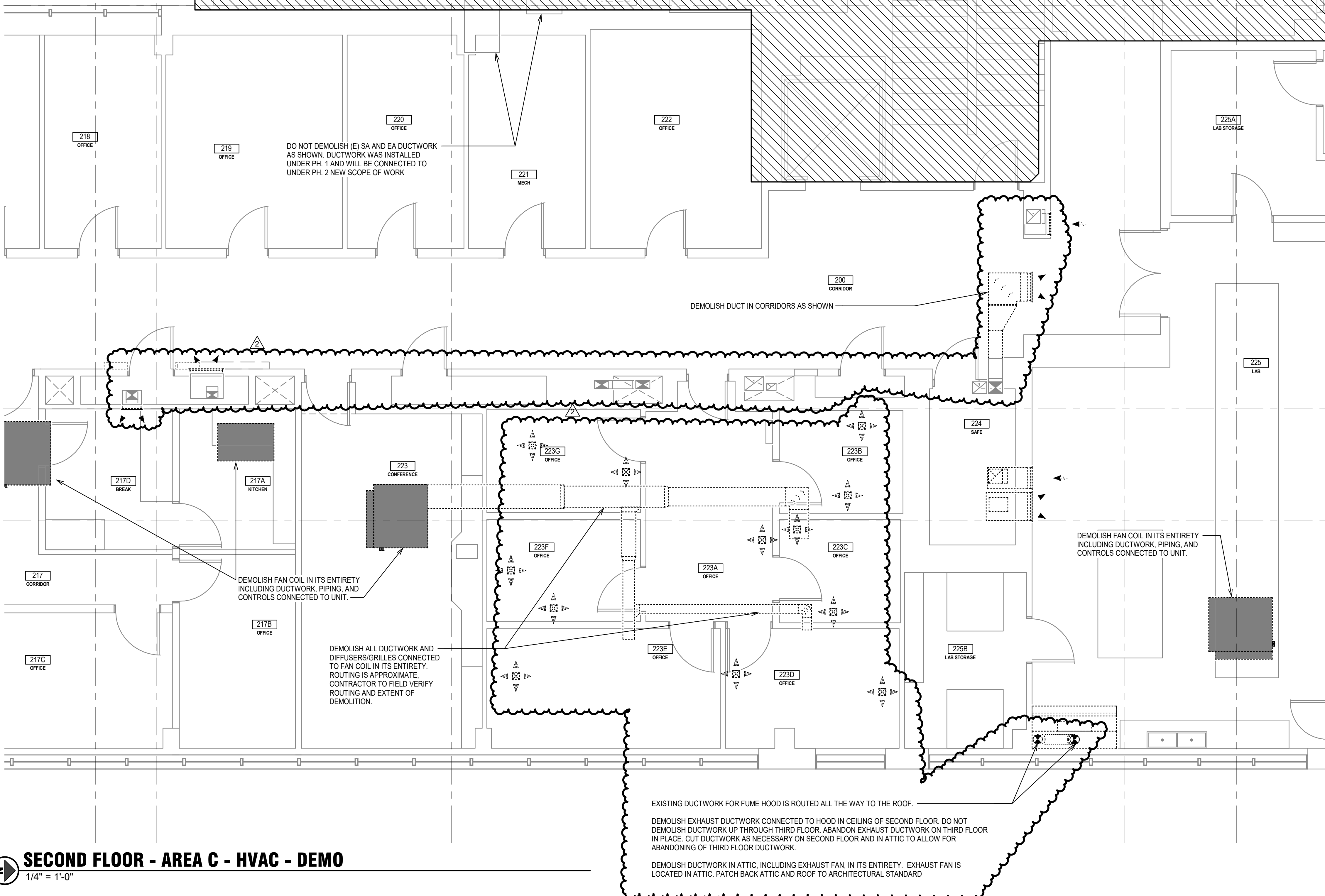
1 2 3 4 5 6 7 8 9 10 11 12

H G F E D C B A

7 8 9 10 11



- GENERAL DEMOLITION NOTES:**
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 3. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SECURING A DEMOLITION BID TO VERIFY AND OBSERVE ALL EXISTING CONDITIONS SHOWN TO BE DEMOLISHED. THE DUCTWORK ROUTING, SIZE, LOCATION, AND SYSTEMS SHOWN ON THIS PLAN ARE APPROXIMATE AND DO NOT REPRESENT THE ENTIRE SYSTEM. THE CONTRACTOR SHALL DEMOLISH THE SUPPLY, EXHAUST, AND RETURN AIR SYSTEMS IN THEIR ENTIRETY, REGARDLESS OF WHETHER THE UTILITIES ARE SHOWN ON THIS PLAN OR NOT.
 4. THE GRD QUANTITY AND LOCATION SHOWN ON THIS PLAN IS APPROXIMATE, AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SECURING A DEMOLITION BID TO OBSERVE ALL GRDS ON THE LEVEL, AND DEMOLISH ALL GRDS.
 5. ALL EXISTING FUME HOOD DUCTWORK IN THE ATTIC ABOVE THE LEVEL 3 CEILING SHALL BE DEMOLISHED. FUME HOOD DUCTWORK FROM THE LEVEL 2 AND LEVEL 3 FUME HOODS EXISTS IN THE ATTIC, AND SHOULD BE DEMOLISHED IN ITS ENTIRETY.



SECOND FLOOR - AREA C - HVAC - DEMO
1/4" = 1'-0"

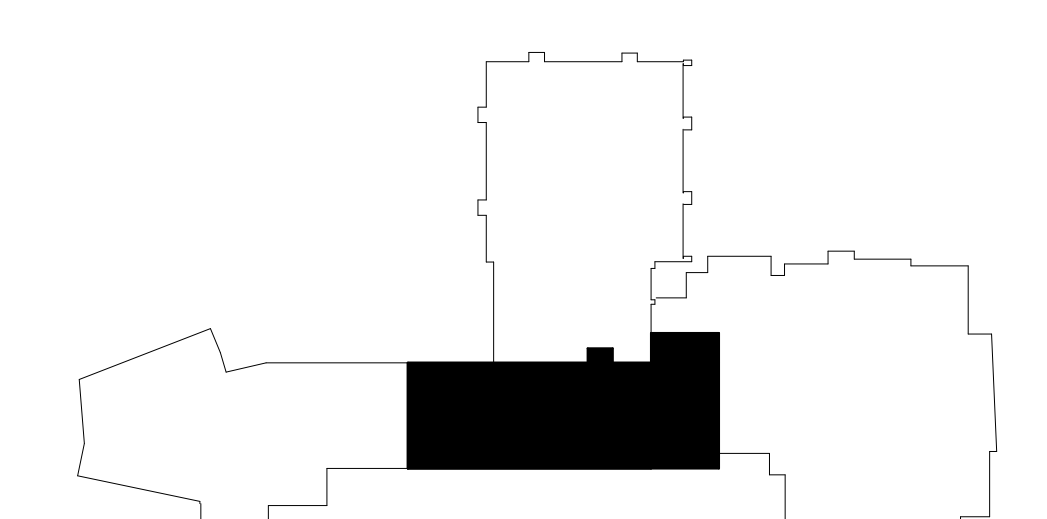
EXISTING DUCTWORK FOR FUME HOOD IS ROUTED ALL THE WAY TO THE ROOF.
DEMOLISH EXHAUST DUCTWORK CONNECTED TO HOOD IN CEILING OF SECOND FLOOR. DO NOT DEMOLISH DUCTWORK UP THROUGH THIRD FLOOR. ABANDON EXHAUST DUCTWORK ON THIRD FLOOR IN PLACE. CUT DUCTWORK AS NECESSARY ON SECOND FLOOR AND IN ATTIC TO ALLOW FOR ABANDONING OF THIRD FLOOR DUCTWORK.
DEMOLISH DUCTWORK IN ATTIC, INCLUDING EXHAUST FAN, IN ITS ENTIRETY. EXHAUST FAN IS LOCATED IN ATTIC. PATCH BACK ATTIC AND ROOF TO ARCHITECTURAL STANDARD.

DO NOT DEMOLISH (E) SA AND EA DUCTWORK AS SHOWN. DUCTWORK WAS INSTALLED UNDER PH. 1 AND WILL BE CONNECTED TO UNDER PH. 2 NEW SCOPE OF WORK

DEMOLISH DUCT IN CORRIDORS AS SHOWN

DEMOLISH FAN COIL IN ITS ENTIRETY INCLUDING DUCTWORK, PIPING, AND CONTROLS CONNECTED TO UNIT.

ABANDON DUCTWORK WITHIN CHASE. DO NOT DAMAGE CHASE. DEMOLISH DUCTWORK BELOW AND ABOVE CHASE



KEY PLAN - 2ND FLOOR AREA C
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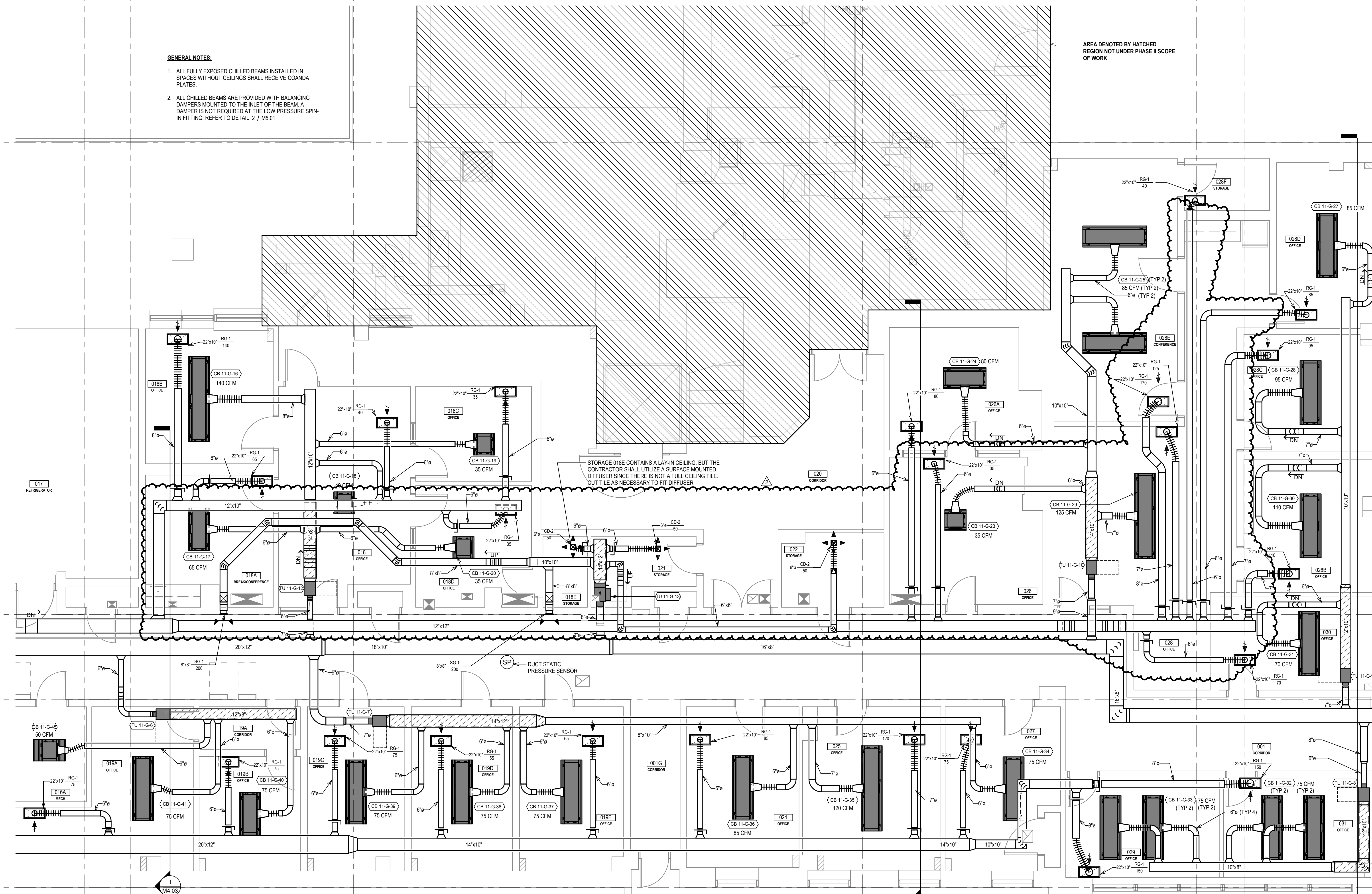
SECOND FLOOR
AREA C -
HVAC -
DEMO

SHEET
M3.22C

GENERAL NOTES:

1. ALL FULLY EXPOSED CHILLED BEAMS INSTALLED IN SPACES WITHOUT CEILINGS SHALL RECEIVE COANDA PLATES.
2. ALL CHILLED BEAMS ARE PROVIDED WITH BALANCING DAMPERS MOUNTED TO THE INLET OF THE BEAM. A DAMPER IS NOT REQUIRED AT THE LOW PRESSURE SPIN-IN FITTING. REFER TO DETAIL 2 / M3.01

AREA DENOTED BY HATCHED REGION NOT UNDER PHASE II SCOPE OF WORK



GROUND FLOOR - AREA C - HVAC
1/4" = 1'-0"

KEY PLAN - GROUND LEVEL AREA C
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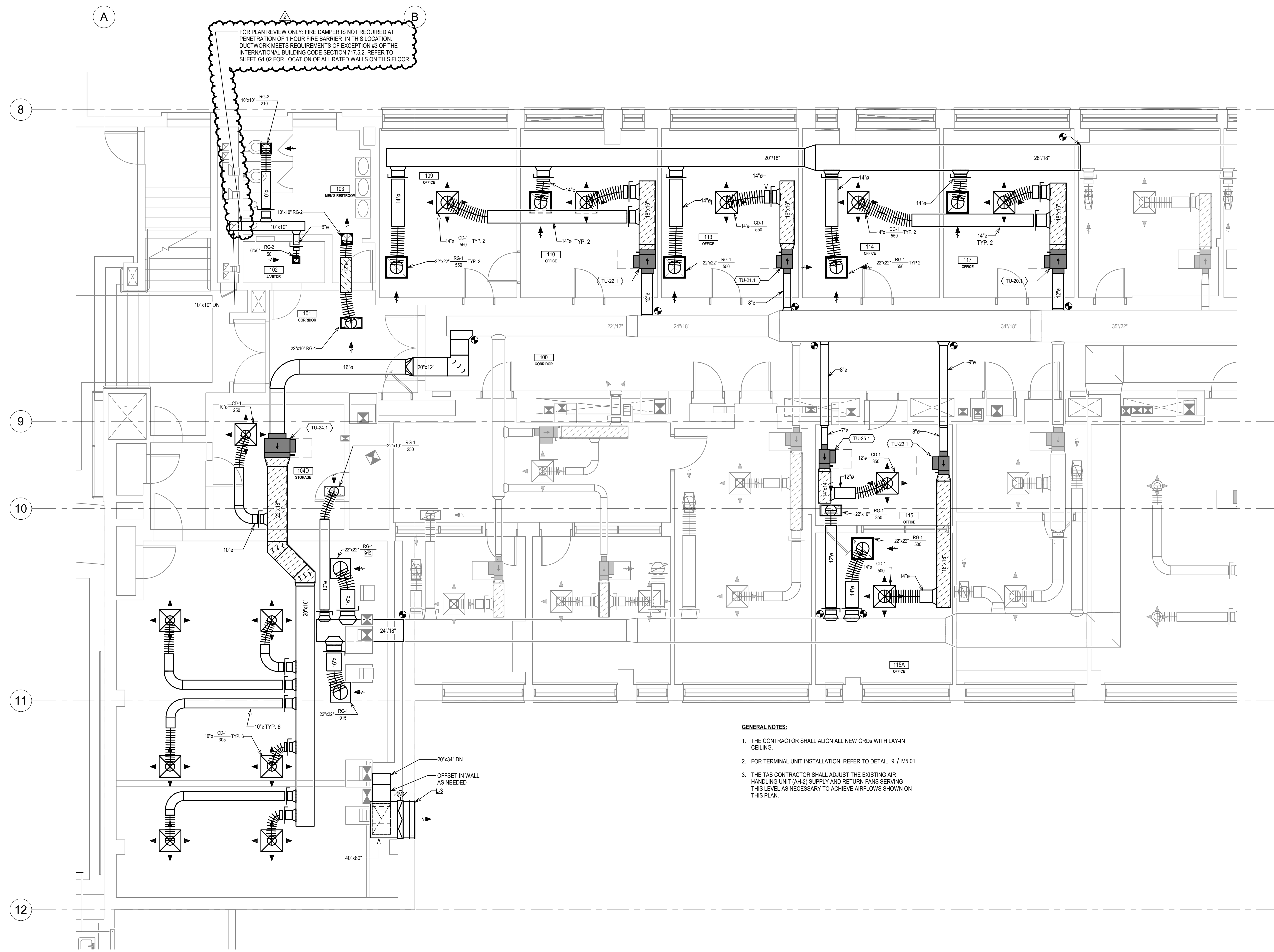


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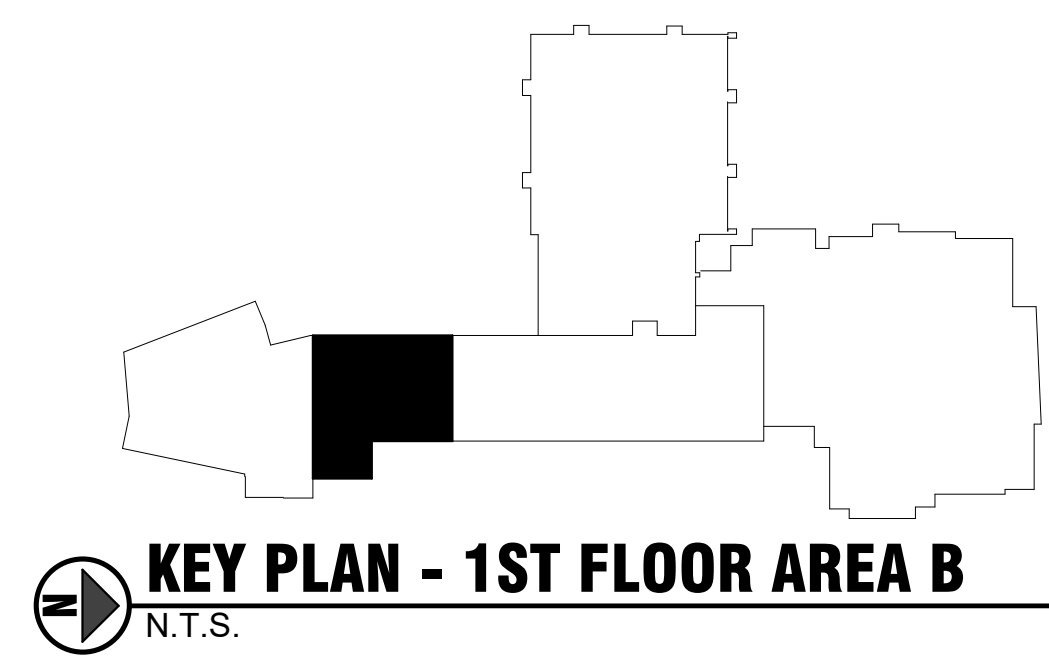
GROUND FLOOR
AREA C -
HVAC

SHEET
M3.30C



- GENERAL NOTES:**
1. THE CONTRACTOR SHALL ALIGN ALL NEW GRDs WITH LAY-IN CEILING.
 2. FOR TERMINAL UNIT INSTALLATION, REFER TO DETAIL 9 / M5.01
 3. THE TAB CONTRACTOR SHALL ADJUST THE EXISTING AIR HANDLING UNIT (AH-2) SUPPLY AND RETURN FANS SERVING THIS LEVEL AS NECESSARY TO ACHIEVE AIRFLOWS SHOWN ON THIS PLAN.

FIRST FLOOR - AREA B - HVAC
 1/4" = 1'-0"



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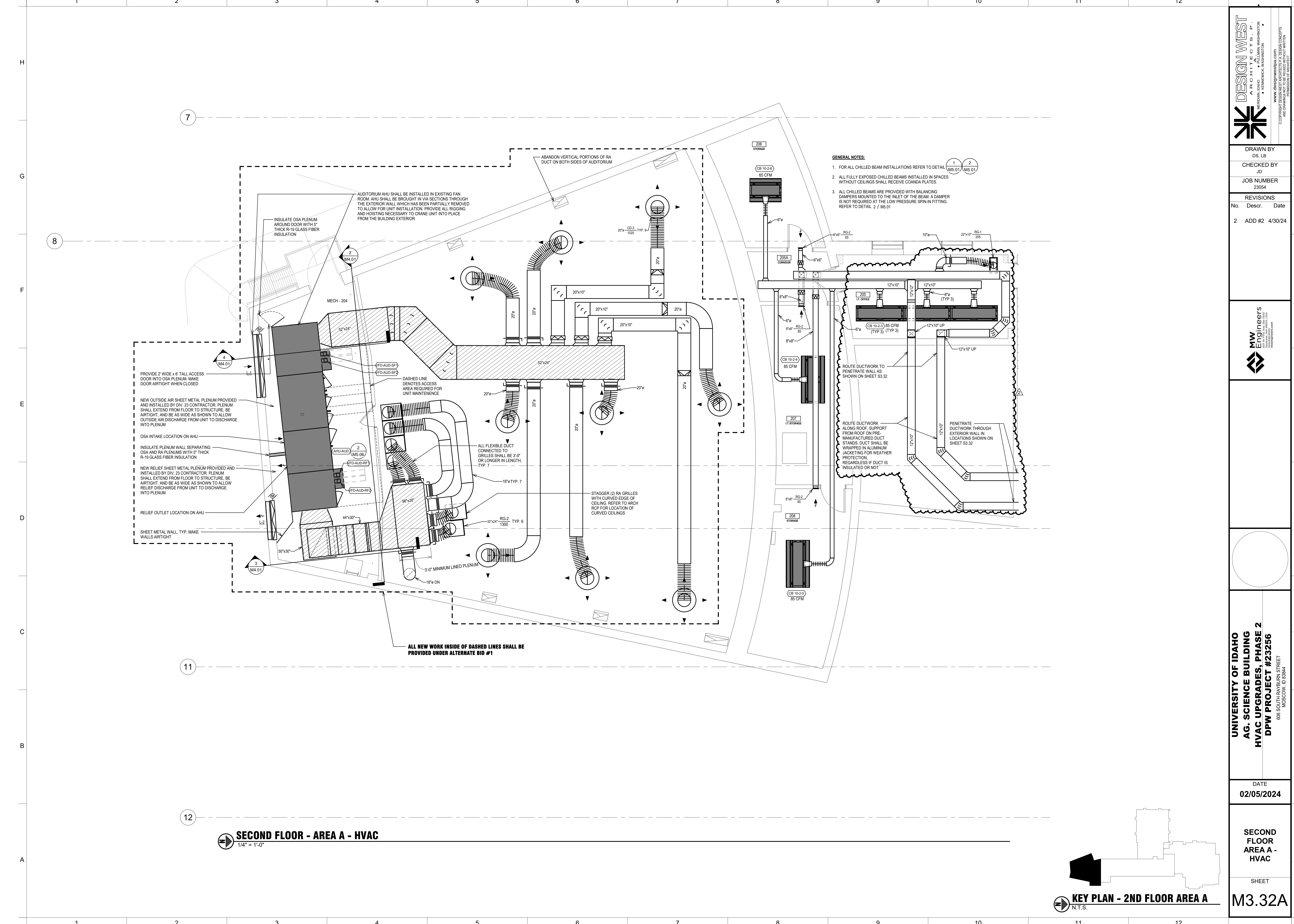
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HVAC UPGRADES, PHASE 2
DPW PROJECT #23256
 606 SOUTH BAYBURN STREET
 MOSCOW, ID 83844

DATE
 02/05/2024

FIRST FLOOR
 AREA B -
 HVAC

SHEET
 M3.31B

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11

12

SECOND FLOOR - AREA A - HVAC
1/4" = 1'-0"

GENERAL NOTES:

- FOR ALL CHILLED BEAM INSTALLATIONS REFER TO DETAIL M5.01
- ALL FULLY EXPOSED CHILLED BEAMS INSTALLED IN SPACES WITHOUT CEILINGS SHALL RECEIVE COANDA PLATES.
- ALL CHILLED BEAMS ARE PROVIDED WITH BALANCING DAMPERS MOUNTED TO THE INLET OF THE BEAM. A DAMPER IS NOT REQUIRED AT THE LOW PRESSURE SPIN-IN FITTING. REFER TO DETAIL 2 / M5.01

PROVIDE 2' WIDE x 6' TALL ACCESS DOOR INTO OSA PLENUM. MAKE DOOR AIRTIGHT WHEN CLOSED.

NEW OUTSIDE AIR SHEET METAL PLENUM PROVIDED AND INSTALLED BY DIV. 23 CONTRACTOR. PLENUM SHALL EXTEND FROM FLOOR TO STRUCTURE, BE AIRTIGHT, AND BE AS WIDE AS SHOWN TO ALLOW OUTSIDE AIR DISCHARGE FROM UNIT TO DISCHARGE INTO PLENUM.

OSA INTAKE LOCATION ON AHU.

INSULATE PLENUM WALL SEPARATING OSA AND RA PLENUMS WITH 5" THICK R-19 GLASS FIBER INSULATION.

NEW RELIEF SHEET METAL PLENUM PROVIDED AND INSTALLED BY DIV. 23 CONTRACTOR. PLENUM SHALL EXTEND FROM FLOOR TO STRUCTURE, BE AIRTIGHT, AND BE AS WIDE AS SHOWN TO ALLOW RELIEF DISCHARGE FROM UNIT TO DISCHARGE INTO PLENUM.

RELIEF OUTLET LOCATION ON AHU.

SHEET METAL WALL, TYP. MAKE WALLS AIRTIGHT.

AUDITORIUM AHU SHALL BE INSTALLED IN EXISTING FAN ROOM. AHU SHALL BE BROUGHT IN VIA SECTIONS THROUGH THE EXTERIOR WALL WHICH HAS BEEN PARTIALLY REMOVED TO ALLOW FOR UNIT INSTALLATION. PROVIDE ALL RIGGING AND HOISTING NECESSARY TO CRANE UNIT INTO PLACE FROM THE BUILDING EXTERIOR.

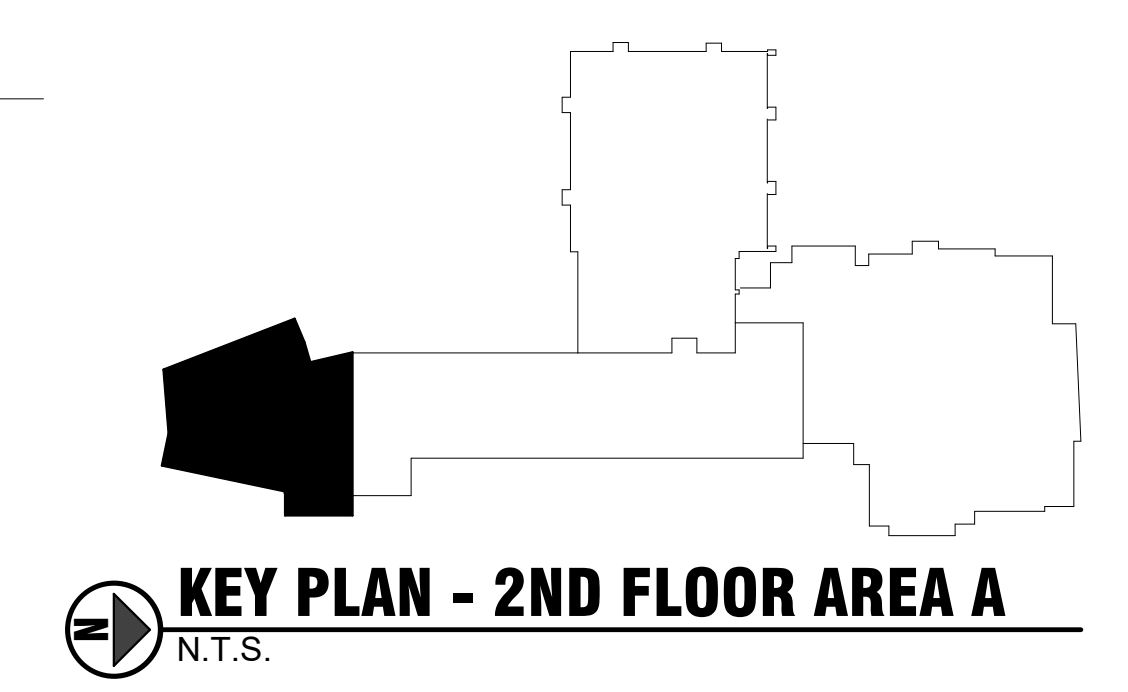
ALL NEW WORK INSIDE OF DASHED LINES SHALL BE PROVIDED UNDER ALTERNATE BID #1

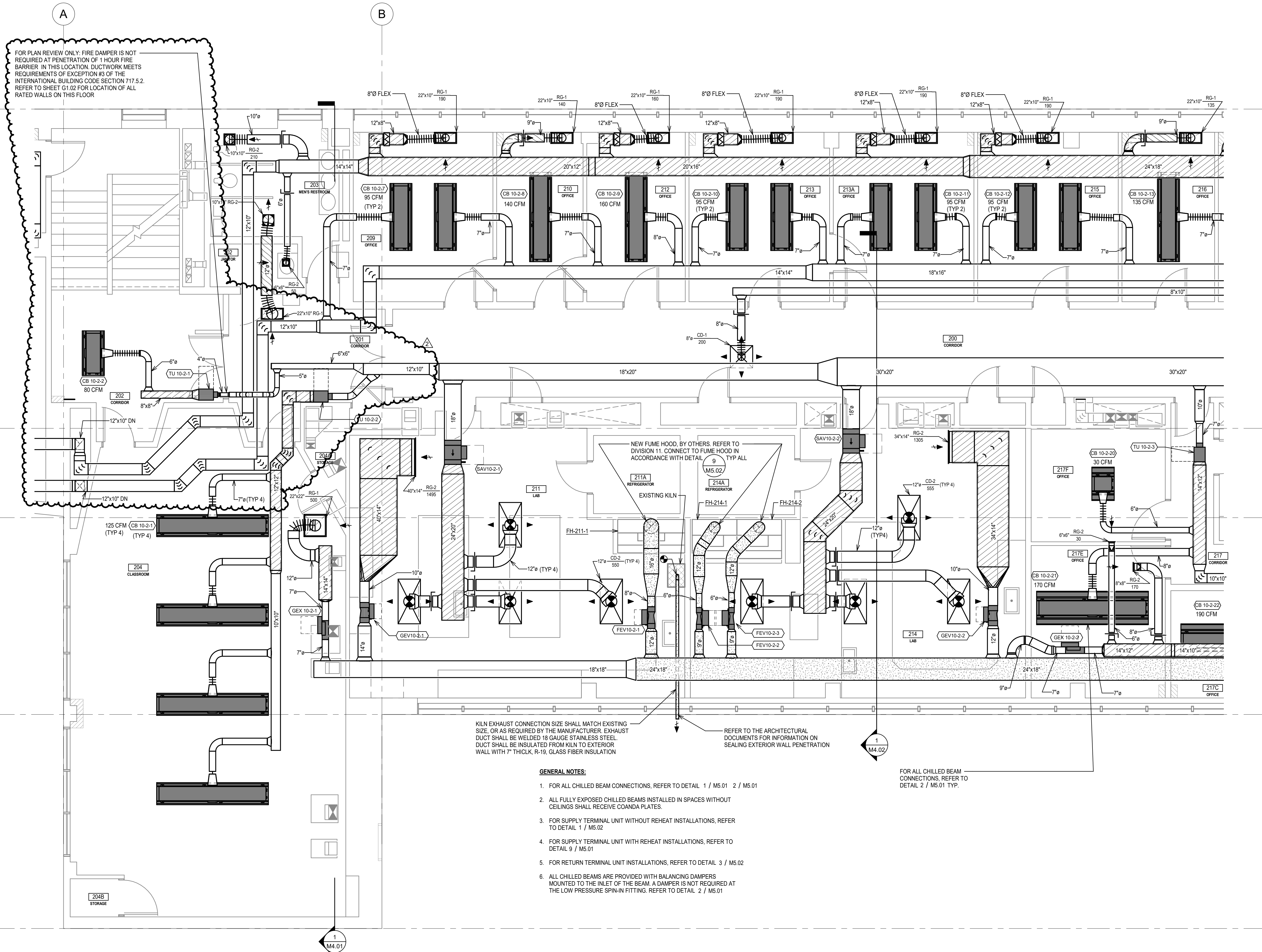
ROUTE DUCTWORK TO PENETRATE WALL AS SHOWN ON SHEET S3.32

ROUTE DUCTWORK ALONG ROOF SUPPORT FROM ROOF TO PRE-MANUFACTURED DUCT STANDS. DUCT SHALL BE WRAPPED IN ALUMINUM JACKETING FOR WEATHER PROTECTION REGARDLESS IF DUCT IS INSULATED OR NOT.

PENETRATE DUCTWORK THROUGH EXTERIOR WALL IN LOCATIONS SHOWN ON SHEET S3.32

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SECOND FLOOR - AREA B - HVAC
1/4" = 1'-0"

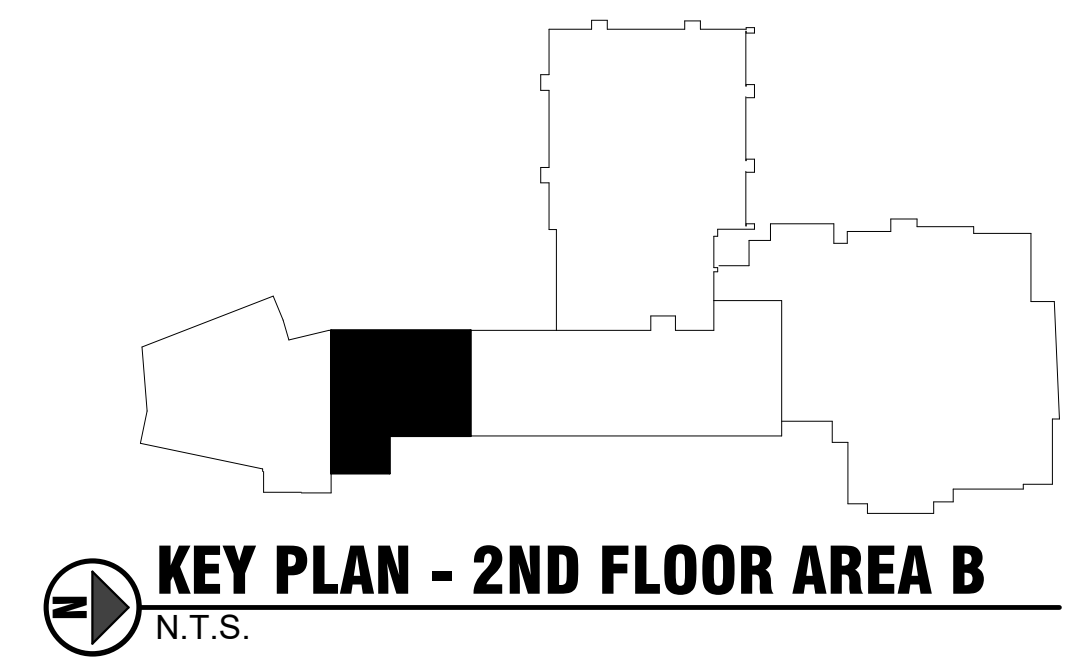
- GENERAL NOTES:**
1. FOR ALL CHILLED BEAM CONNECTIONS, REFER TO DETAIL 1 / M5.01 2 / M5.01
 2. ALL FULLY EXPOSED CHILLED BEAMS INSTALLED IN SPACES WITHOUT CEILINGS SHALL RECEIVE COANDA PLATES.
 3. FOR SUPPLY TERMINAL UNIT WITHOUT REHEAT INSTALLATIONS, REFER TO DETAIL 1 / M5.02
 4. FOR SUPPLY TERMINAL UNIT WITH REHEAT INSTALLATIONS, REFER TO DETAIL 9 / M5.01
 5. FOR RETURN TERMINAL UNIT INSTALLATIONS, REFER TO DETAIL 3 / M5.02
 6. ALL CHILLED BEAMS ARE PROVIDED WITH BALANCING DAMPERS MOUNTED TO THE INLET OF THE BEAM. A DAMPER IS NOT REQUIRED AT THE LOW PRESSURE SPIN-IN FITTING. REFER TO DETAIL 2 / M5.01

FOR ALL CHILLED BEAM CONNECTIONS, REFER TO DETAIL 2 / M5.01 TYP.

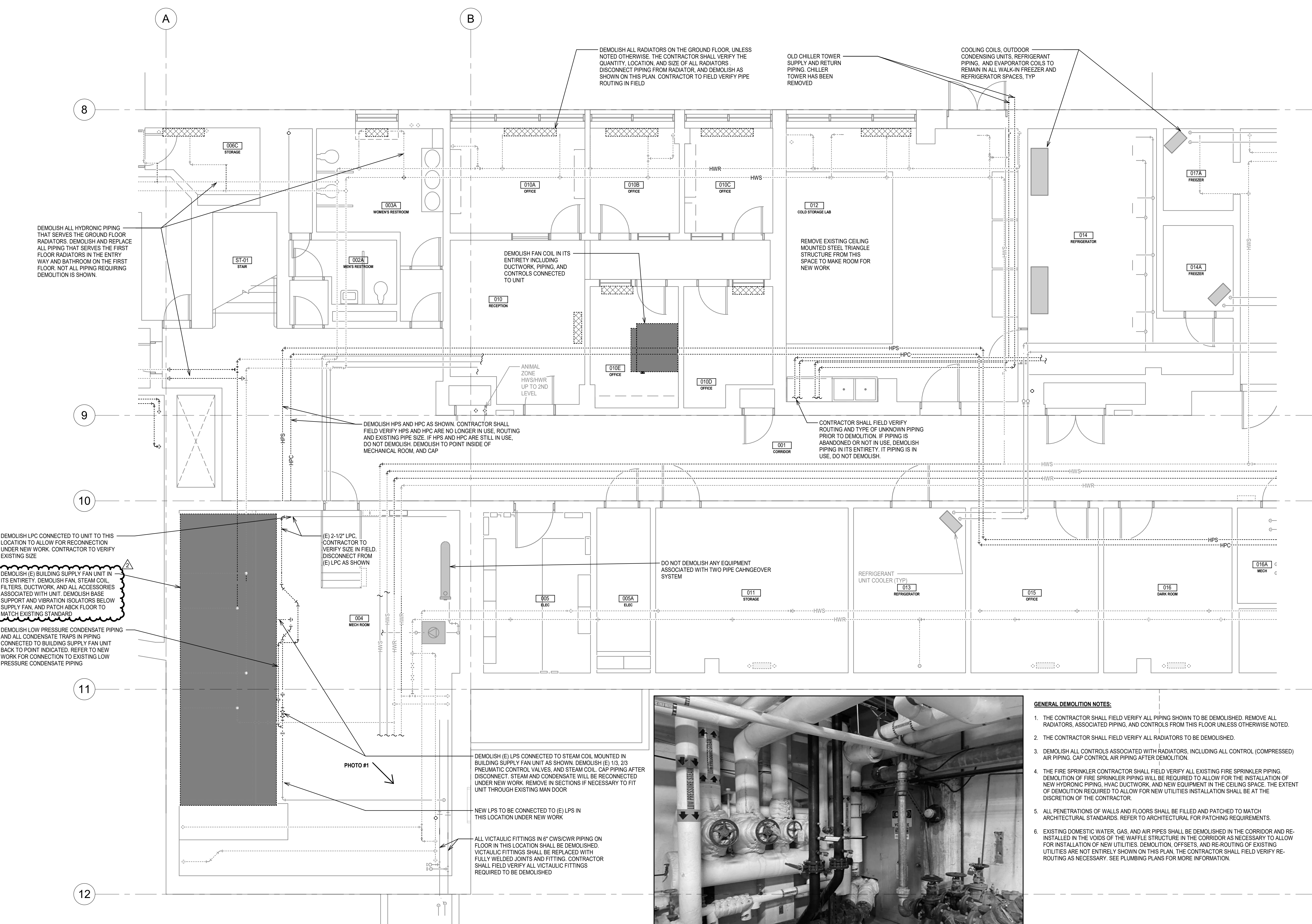
KILN EXHAUST CONNECTION SIZE SHALL MATCH EXISTING SIZE, OR AS REQUIRED BY THE MANUFACTURER. EXHAUST DUCT SHALL BE WELDED 18 GAUGE STAINLESS STEEL. DUCT SHALL BE INSULATED FROM KILN TO EXTERIOR WALL WITH 7" THICK R-18, GLASS FIBER INSULATION

REFER TO THE ARCHITECTURAL DOCUMENTS FOR INFORMATION ON SEALING EXTERIOR WALL PENETRATION

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DEMOLISH ALL HYDRONIC PIPING THAT SERVES THE GROUND FLOOR RADIATORS. DEMOLISH AND REPLACE ALL PIPING THAT SERVES THE FIRST FLOOR RADIATORS IN THE ENTRY WAY AND BATHROOM ON THE FIRST FLOOR. NOT ALL PIPING REQUIRING DEMOLITION IS SHOWN.

DEMOLISH ALL RADIATORS ON THE GROUND FLOOR, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL VERIFY THE QUANTITY, LOCATION, AND SIZE OF ALL RADIATORS. DISCONNECT PIPING FROM RADIATOR, AND DEMOLISH AS SHOWN ON THIS PLAN. CONTRACTOR TO FIELD VERIFY PIPE ROUTING IN FIELD.

OLD CHILLER TOWER SUPPLY AND RETURN PIPING. CHILLER TOWER HAS BEEN REMOVED.

COOLING COILS, OUTDOOR CONDENSING UNITS, REFRIGERANT PIPING, AND EVAPORATOR COILS TO REMAIN IN ALL WALK-IN FREEZER AND REFRIGERATOR SPACES, TYP.

DEMOLISH FAN COIL IN ITS ENTIRETY INCLUDING DUCTWORK, PIPING, AND CONTROLS CONNECTED TO UNIT.

REMOVE EXISTING CEILING MOUNTED STEEL TRIANGLE STRUCTURE FROM THIS SPACE TO MAKE ROOM FOR NEW WORK.

DEMOLISH HPS AND HPC AS SHOWN. CONTRACTOR SHALL FIELD VERIFY HPS AND HPC ARE NO LONGER IN USE, ROUTING AND EXISTING PIPE SIZE. IF HPS AND HPC ARE STILL IN USE, DO NOT DEMOLISH. DEMOLISH TO POINT INSIDE OF MECHANICAL ROOM, AND CAP.

CONTRACTOR SHALL FIELD VERIFY ROUTING AND TYPE OF UNKNOWN PIPING PRIOR TO DEMOLITION. IF PIPING IS ABANDONED OR NOT IN USE, DEMOLISH PIPING IN ITS ENTIRETY. IF PIPING IS IN USE, DO NOT DEMOLISH.

DEMOLISH LPC CONNECTED TO UNIT TO THIS LOCATION TO ALLOW FOR RECONNECTION UNDER NEW WORK. CONTRACTOR TO VERIFY EXISTING SIZE.

DEMOLISH (E) BUILDING SUPPLY FAN UNIT IN ITS ENTIRETY. DEMOLISH FAN, STEAM COIL, FILTERS, DUCTWORK, AND ALL ACCESSORIES ASSOCIATED WITH UNIT. DEMOLISH BASE SUPPORT AND VIBRATION ISOLATORS BELOW SUPPLY FAN, AND PATCH ABOVE FLOOR TO MATCH EXISTING STANDARD.

DEMOLISH LOW PRESSURE CONDENSATE PIPING AND ALL CONDENSATE TRAPS IN PIPING CONNECTED TO BUILDING SUPPLY FAN UNIT BACK TO POINT INDICATED. REFER TO NEW WORK FOR CONNECTION TO EXISTING LOW PRESSURE CONDENSATE PIPING.

(E) 2-1/2" LPC. CONTRACTOR TO VERIFY SIZE IN FIELD. DISCONNECT FROM (E) LPC AS SHOWN.

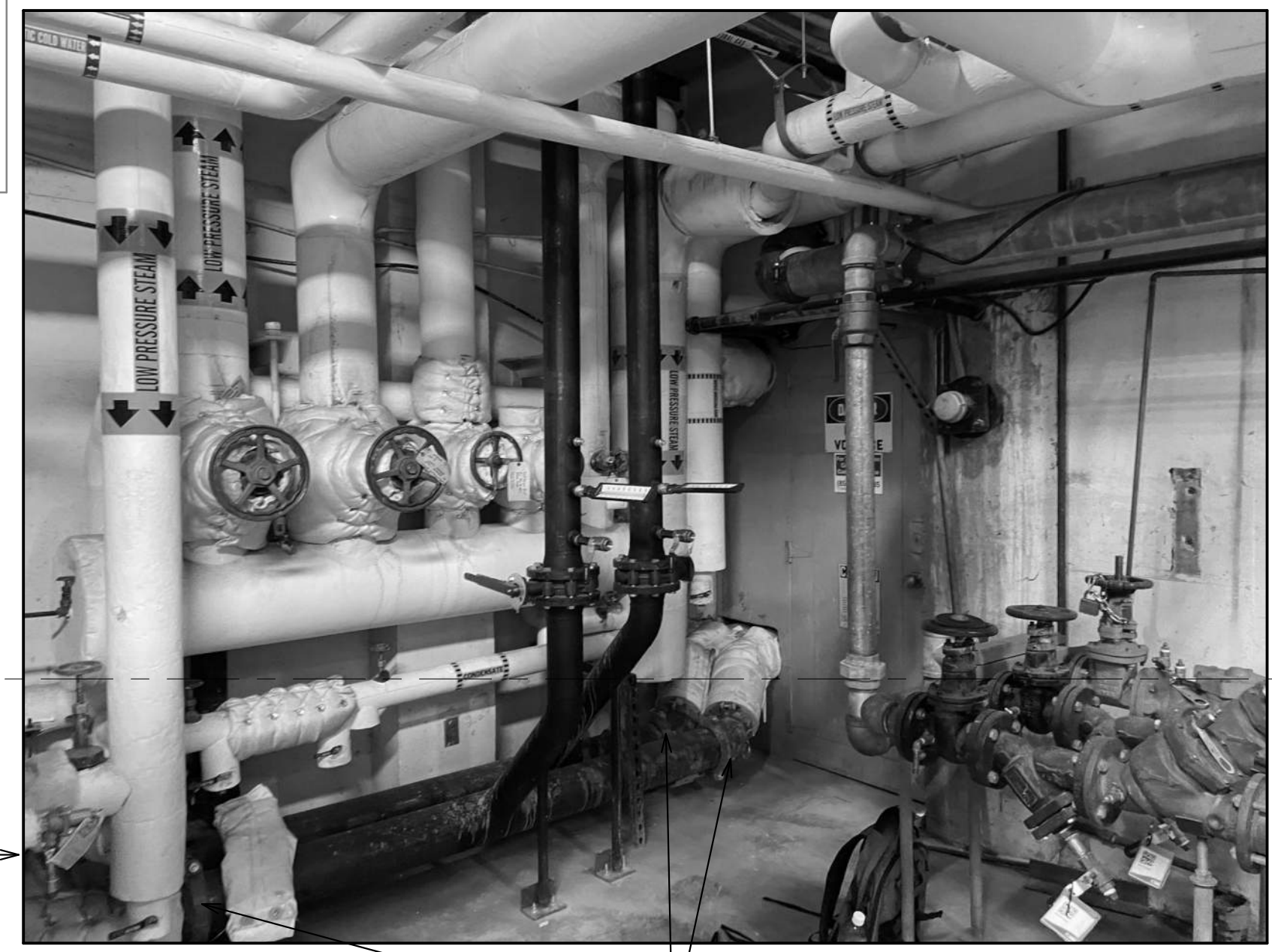
DO NOT DEMOLISH ANY EQUIPMENT ASSOCIATED WITH TWO PIPE CHANGEOVER SYSTEM.

REFRIGERANT UNIT COOLER (TYP.)

DEMOLISH (E) LPS CONNECTED TO STEAM COIL MOUNTED IN BUILDING SUPPLY FAN UNIT AS SHOWN. DEMOLISH (E) 1/3, 2/3 PNEUMATIC CONTROL VALVES, AND STEAM COIL. CAP PIPING AFTER DISCONNECT. STEAM AND CONDENSATE WILL BE RECONNECTED UNDER NEW WORK. REMOVE IN SECTIONS IF NECESSARY TO FIT UNIT THROUGH EXISTING MAN DOOR.

NEW LPS TO BE CONNECTED TO (E) LPS IN THIS LOCATION UNDER NEW WORK.

ALL VICTAULIC FITTINGS IN 6" CWS/CWR PIPING ON FLOOR IN THIS LOCATION SHALL BE DEMOLISHED. VICTAULIC FITTINGS SHALL BE REPLACED WITH FULLY WELDED JOINTS AND FITTING. CONTRACTOR SHALL FIELD VERIFY ALL VICTAULIC FITTINGS REQUIRED TO BE DEMOLISHED.

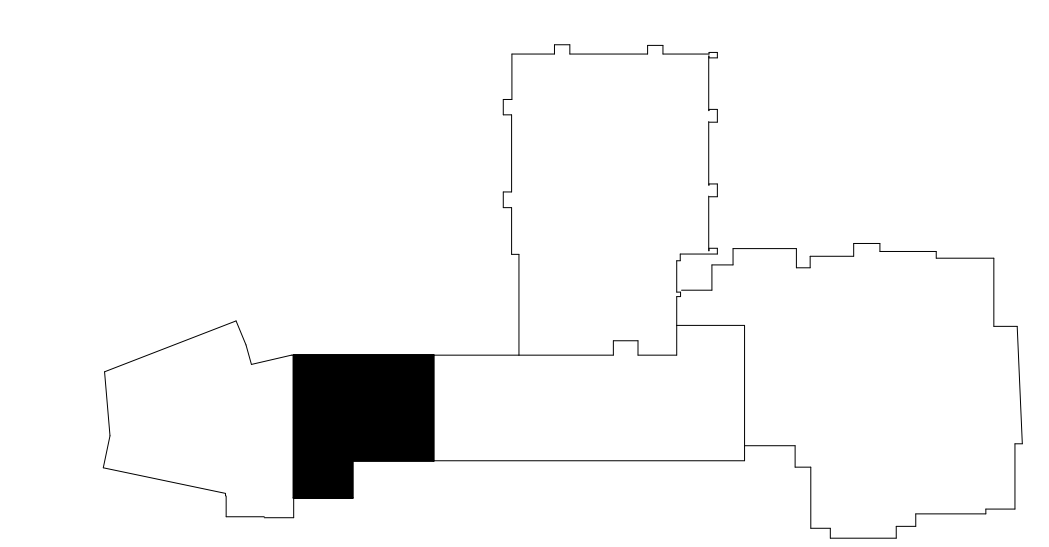


ALL VICTAULIC FITTINGS IN 6" CWS/CWR PIPING ON FLOOR IN THIS LOCATION SHALL BE DEMOLISHED. VICTAULIC FITTINGS SHALL BE REPLACED WITH FULLY WELDED JOINTS AND FITTINGS. CONTRACTOR SHALL FIELD VERIFY ALL VICTAULIC FITTINGS REQUIRED TO BE DEMOLISHED.

- GENERAL DEMOLITION NOTES:**
1. THE CONTRACTOR SHALL FIELD VERIFY ALL PIPING SHOWN TO BE DEMOLISHED. REMOVE ALL RADIATORS, ASSOCIATED PIPING, AND CONTROLS FROM THIS FLOOR UNLESS OTHERWISE NOTED.
 2. THE CONTRACTOR SHALL FIELD VERIFY ALL RADIATORS TO BE DEMOLISHED.
 3. DEMOLISH ALL CONTROLS ASSOCIATED WITH RADIATORS, INCLUDING ALL CONTROL (COMPRESSED) AIR PIPING. CAP CONTROL AIR PIPING AFTER DEMOLITION.
 4. THE FIRE SPRINKLER CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FIRE SPRINKLER PIPING. DEMOLITION OF FIRE SPRINKLER PIPING WILL BE REQUIRED TO ALLOW FOR THE INSTALLATION OF NEW HYDRONIC PIPING, HVAC DUCTWORK, AND NEW EQUIPMENT IN THE CEILING SPACE. THE EXTENT OF DEMOLITION REQUIRED TO ALLOW FOR NEW UTILITIES INSTALLATION SHALL BE AT THE DISCRETION OF THE CONTRACTOR.
 5. ALL PENETRATIONS OF WALLS AND FLOORS SHALL BE FILLED AND PATCHED TO MATCH ARCHITECTURAL STANDARDS. REFER TO ARCHITECTURAL FOR PATCHING REQUIREMENTS.
 6. EXISTING DOMESTIC WATER, GAS, AND AIR PIPES SHALL BE DEMOLISHED IN THE CORRIDOR AND RE-INSTALLED IN THE VOIDS OF THE WAFFLE STRUCTURE IN THE CORRIDOR AS NECESSARY TO ALLOW FOR INSTALLATION OF NEW UTILITIES. DEMOLITION, OFFSETS, AND RE-ROUTING OF EXISTING UTILITIES ARE NOT ENTIRELY SHOWN ON THIS PLAN. THE CONTRACTOR SHALL FIELD VERIFY RE-ROUTING AS NECESSARY. SEE PLUMBING PLANS FOR MORE INFORMATION.

GROUND FLOOR - AREA B - HYDRONICS - DEMO
1/4" = 1'-0"

PHOTO #1



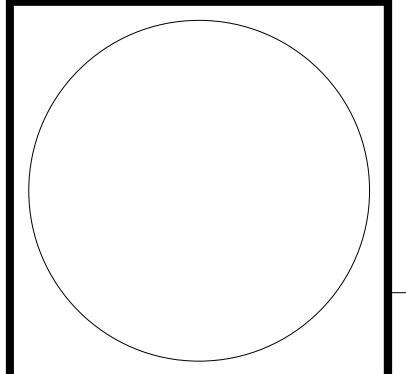
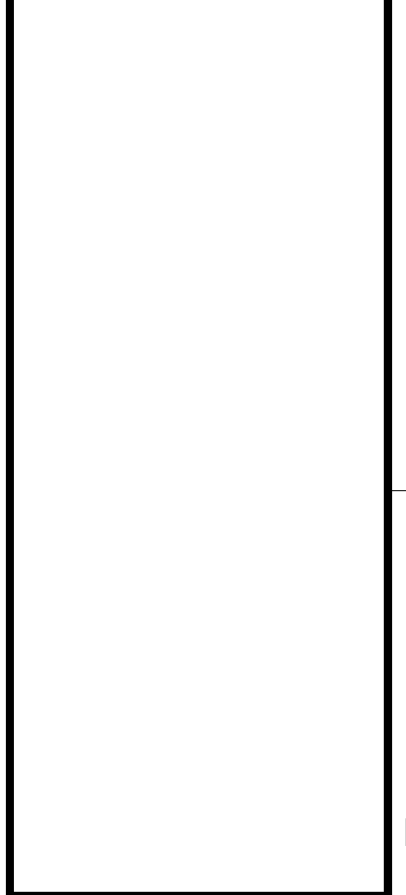
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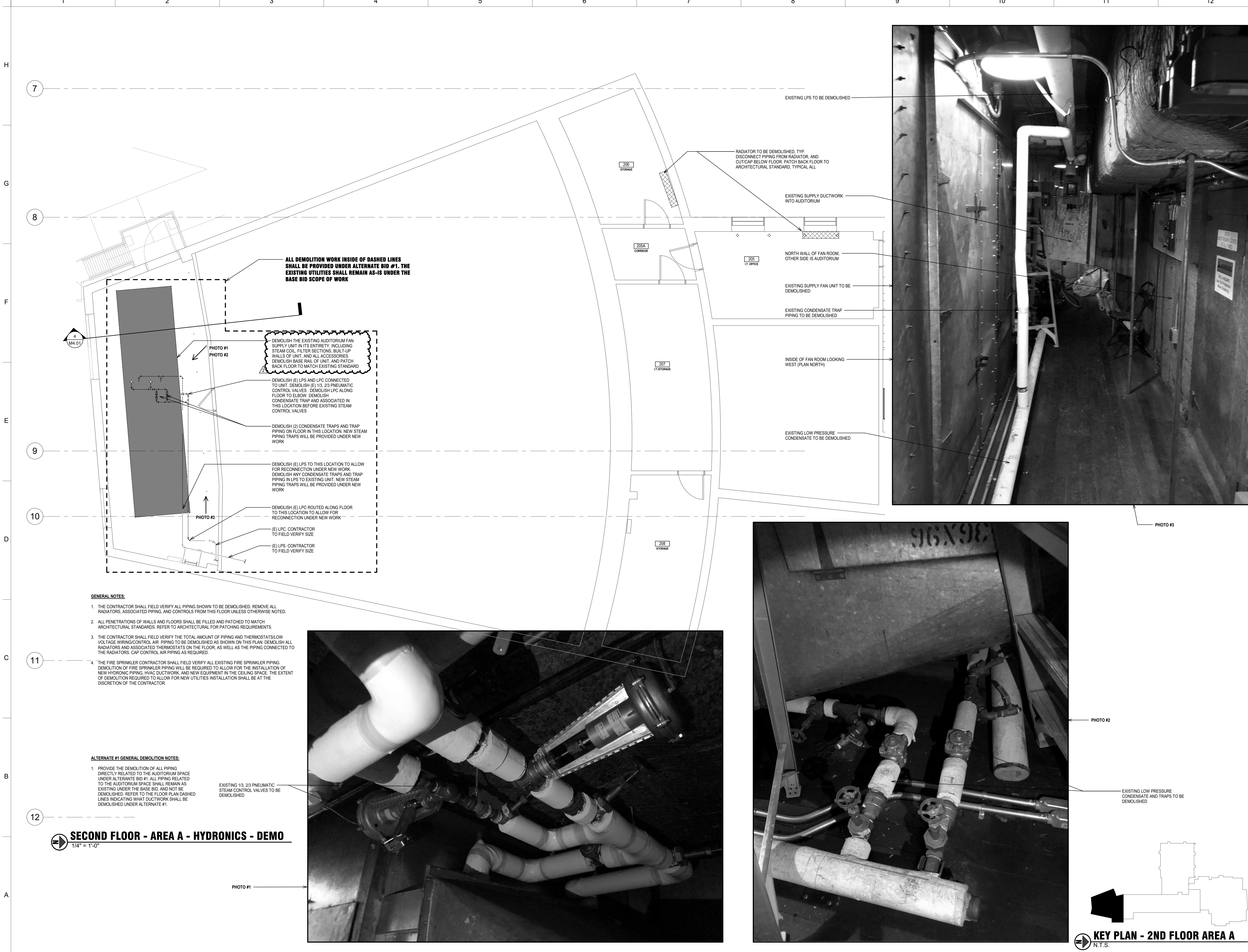


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GROUND FLOOR
AREA B -
HYDRONICS
- DEMO

SHEET
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ALL DEMOLITION WORK INSIDE OF DASHED LINES SHALL BE PROVIDED UNDER ALTERNATE BID #1. THE EXISTING UTILITIES SHALL REMAIN AS-IS UNDER THE BASE BID SCOPE OF WORK

DEMOLISH THE EXISTING AUDITORIUM FAN SUPPLY UNIT IN ITS ENTIRETY, INCLUDING STEAM COIL, FILTER SECTIONS, BUILT-UP WALLS OF UNIT, AND ALL ACCESSORIES. DEMOLISH BASE RAIL OF UNIT, AND PATCH BACK FLOOR TO MATCH EXISTING STANDARD

DEMOLISH (E) LPS AND LPC CONNECTED TO UNIT. DEMOLISH (E) 1/3, 2/3 PNEUMATIC CONTROL VALVES. DEMOLISH LPC ALONG FLOOR TO ELBOW. DEMOLISH CONDENSATE TRAP AND ASSOCIATED IN THIS LOCATION BEFORE EXISTING STEAM CONTROL VALVES

DEMOLISH (2) CONDENSATE TRAPS AND TRAP PIPING ON FLOOR IN THIS LOCATION. NEW STEAM PIPING TRAPS WILL BE PROVIDED UNDER NEW WORK

DEMOLISH (E) LPS TO THIS LOCATION TO ALLOW FOR RECONNECTION UNDER NEW WORK. DEMOLISH ANY CONDENSATE TRAPS AND TRAP PIPING IN LPS TO EXISTING UNIT. NEW STEAM PIPING TRAPS WILL BE PROVIDED UNDER NEW WORK

DEMOLISH (E) LPC ROUTED ALONG FLOOR TO THIS LOCATION TO ALLOW FOR RECONNECTION UNDER NEW WORK

(E) LPC. CONTRACTOR TO FIELD VERIFY SIZE

(E) LPS. CONTRACTOR TO FIELD VERIFY SIZE

GENERAL NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY ALL PIPING SHOWN TO BE DEMOLISHED. REMOVE ALL RADIATORS, ASSOCIATED PIPING, AND CONTROLS FROM THIS FLOOR UNLESS OTHERWISE NOTED.
2. ALL PENETRATIONS OF WALLS AND FLOORS SHALL BE FILLED AND PATCHED TO MATCH ARCHITECTURAL STANDARDS. REFER TO ARCHITECTURAL FOR PATCHING REQUIREMENTS.
3. THE CONTRACTOR SHALL FIELD VERIFY THE TOTAL AMOUNT OF PIPING AND THERMOSTATS/SLOW VOLTAGE WIRING/CONTROL AIR PIPING TO BE DEMOLISHED AS SHOWN ON THIS PLAN. DEMOLISH ALL RADIATORS AND ASSOCIATED THERMOSTATS ON THE FLOOR, AS WELL AS THE PIPING CONNECTED TO THE RADIATORS. CAP CONTROL AIR PIPING AS REQUIRED.
4. THE FIRE SPRINKLER CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FIRE SPRINKLER PIPING. DEMOLITION OF FIRE SPRINKLER PIPING WILL BE REQUIRED TO ALLOW FOR THE INSTALLATION OF NEW HYDRONIC PIPING, HVAC DUCTWORK, AND NEW EQUIPMENT IN THE CEILING SPACE. THE EXTENT OF DEMOLITION REQUIRED TO ALLOW FOR NEW UTILITIES INSTALLATION SHALL BE AT THE DISCRETION OF THE CONTRACTOR.

ALTERNATE #1 GENERAL DEMOLITION NOTES:

1. PROVIDE THE DEMOLITION OF ALL PIPING DIRECTLY RELATED TO THE AUDITORIUM SPACE UNDER ALTERNATE BID #1. ALL PIPING RELATED TO THE AUDITORIUM SPACE SHALL REMAIN AS EXISTING UNDER THE BASE BID, AND NOT BE DEMOLISHED. REFER TO THE FLOOR PLAN DASHED LINES INDICATING WHAT DUCTWORK SHALL BE DEMOLISHED UNDER ALTERNATE #1.

EXISTING 1/3, 2/3 PNEUMATIC STEAM CONTROL VALVES TO BE DEMOLISHED

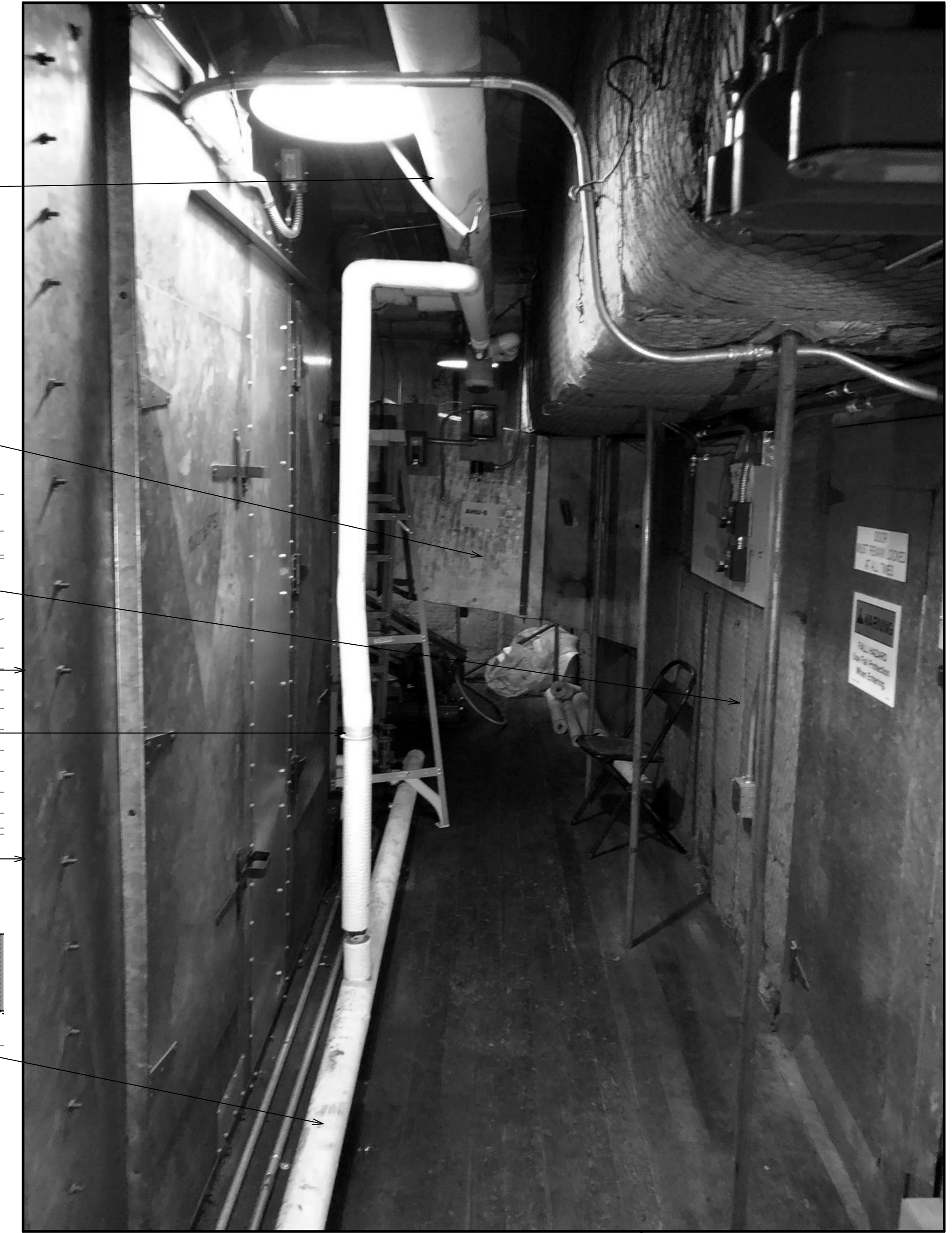
SECOND FLOOR - AREA A - HYDRONICS - DEMO
1/4" = 1'-0"

PHOTO #1

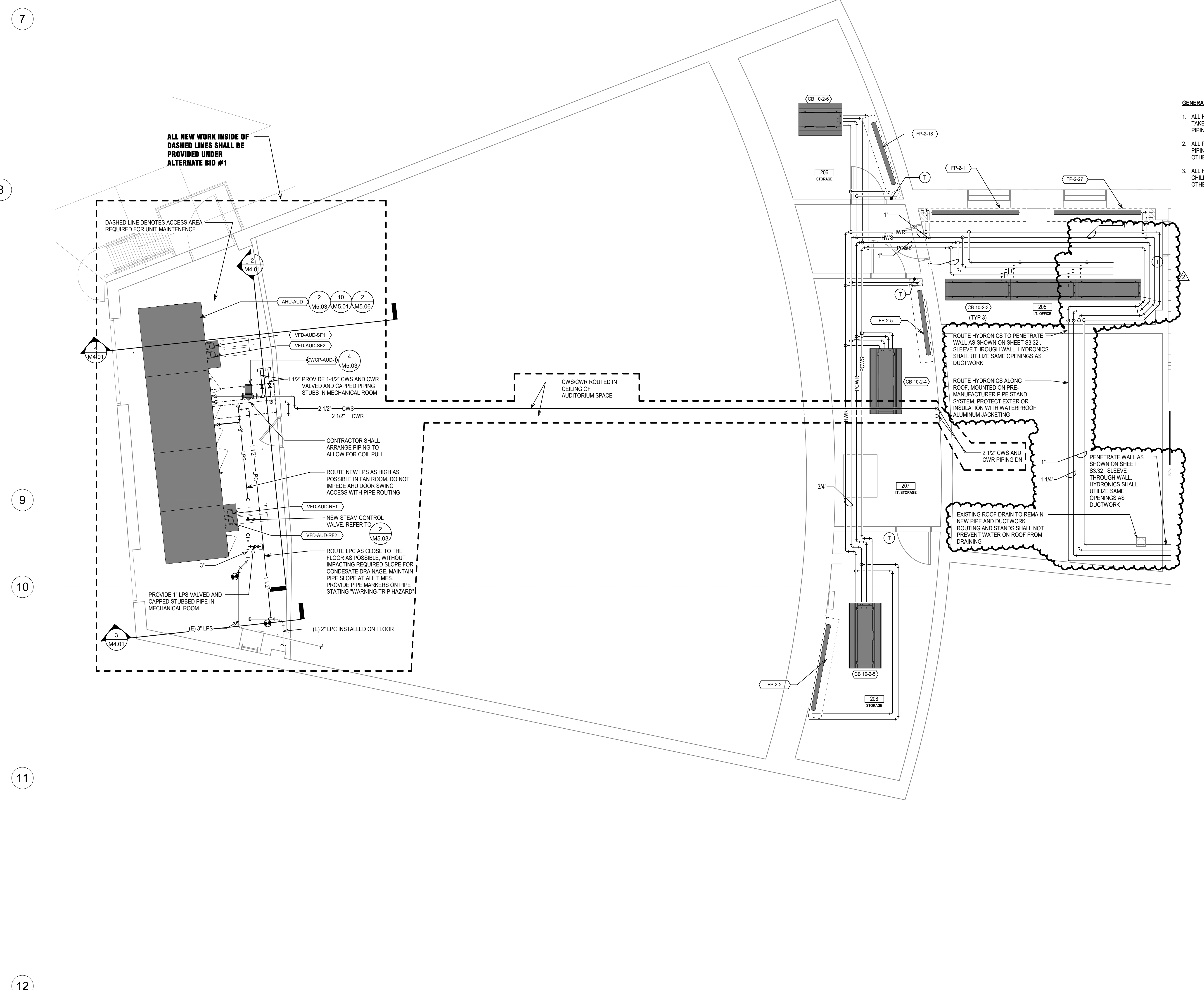
PHOTO #2

EXISTING LOW PRESSURE CONDENSATE AND TRAPS TO BE DEMOLISHED

KEY PLAN - 2ND FLOOR AREA A
N.T.S.



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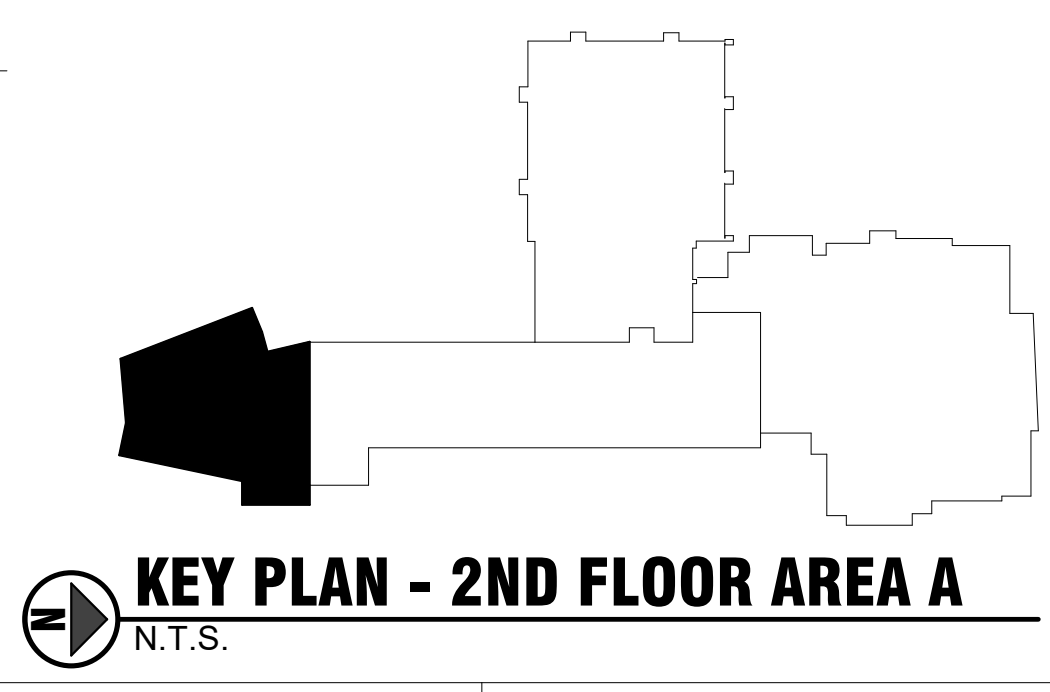


ALL NEW WORK INSIDE OF DASHED LINES SHALL BE PROVIDED UNDER ALTERNATE BID #1

DASHED LINE DENOTES ACCESS AREA REQUIRED FOR UNIT MAINTENANCE

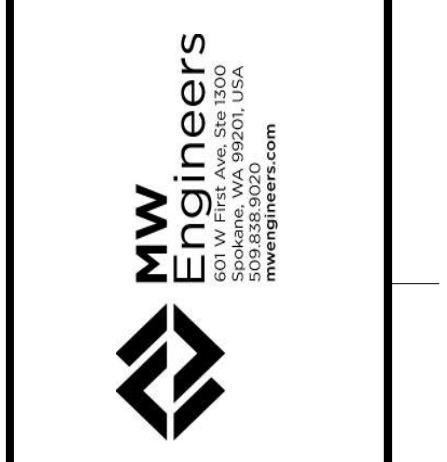
- GENERAL NOTES:**
1. ALL HYDRONIC BRANCH PIPING SHALL HAVE TOP TAKE-OFFS FROM THE MAIN PIPING ONLY. BRANCH PIPING SHALL NOT HAVE BOTTOM TAKE-OFFS.
 2. ALL PROCESS CHILLED WATER HYDRONIC BRANCH PIPING TO CHILLED BEAMS IS 3/4" UNLESS OTHERWISE STATED.
 3. ALL HEATING WATER HYDRONIC BRANCH PIPING TO CHILLED BEAMS AND RADIATORS IS 1/2" UNLESS OTHERWISE STATED.

SECOND FLOOR - AREA A - HYDRONICS
1/4" = 1'-0"



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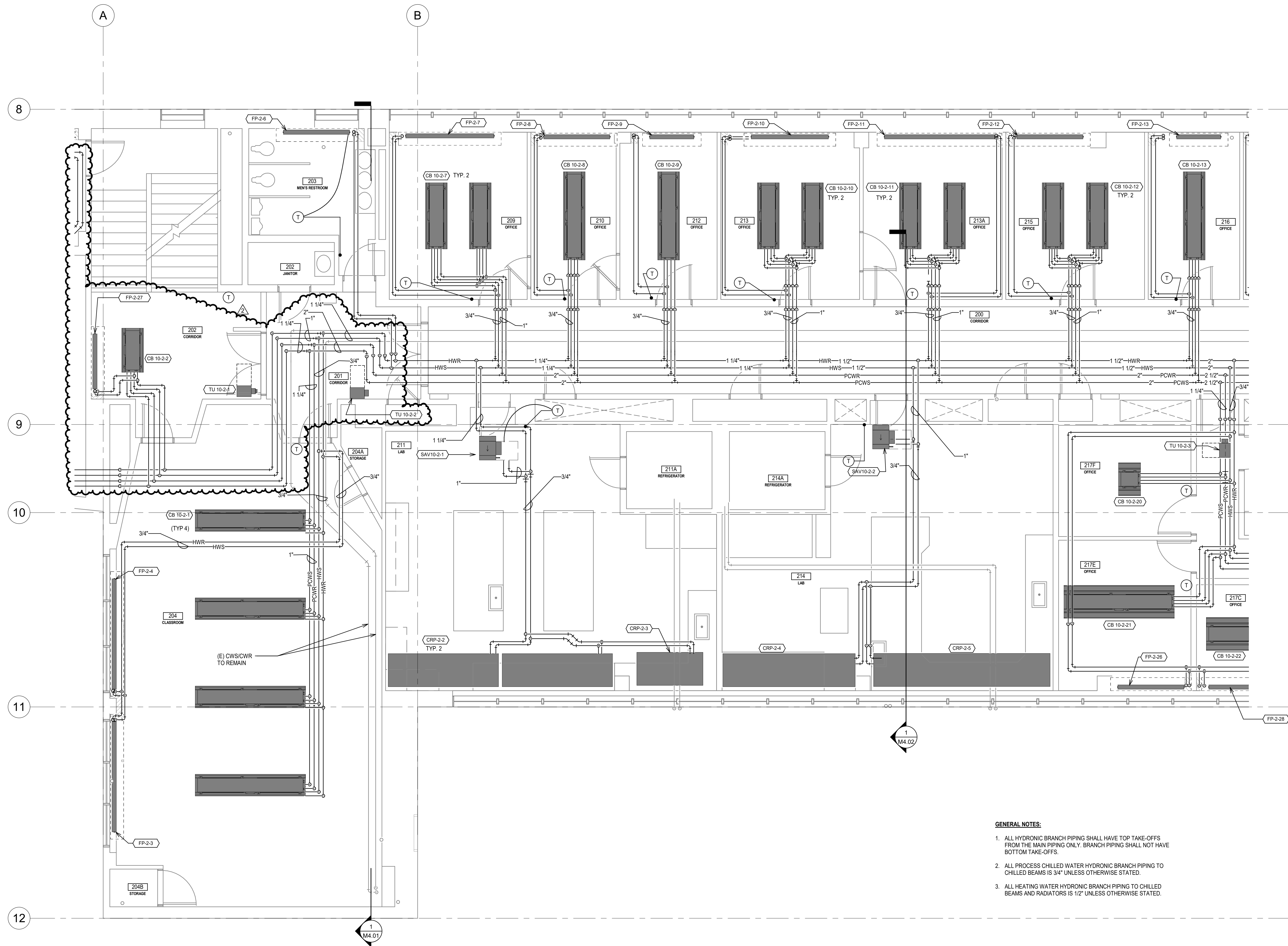
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SECOND FLOOR AREA A - HYDRONICS

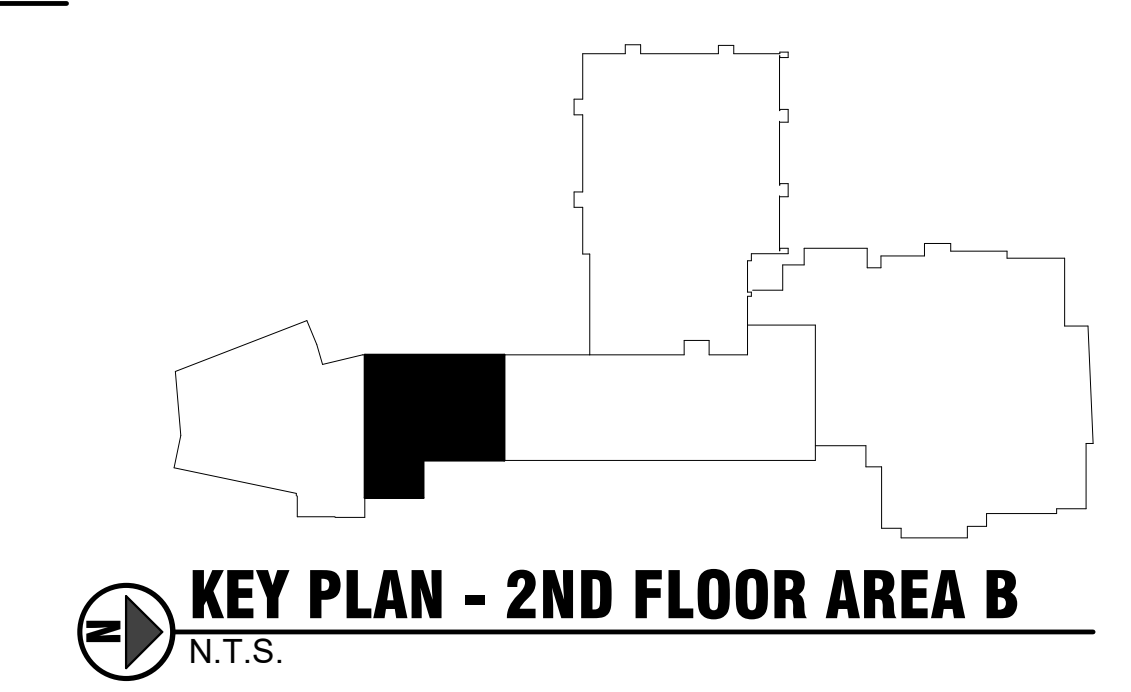
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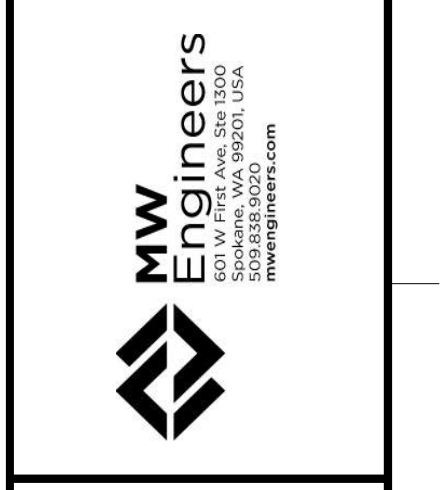
- GENERAL NOTES:**
1. ALL HYDRONIC BRANCH PIPING SHALL HAVE TOP TAKE-OFFS FROM THE MAIN PIPING ONLY. BRANCH PIPING SHALL NOT HAVE BOTTOM TAKE-OFFS.
 2. ALL PROCESS CHILLED WATER HYDRONIC BRANCH PIPING TO CHILLED BEAMS IS 3/4" UNLESS OTHERWISE STATED.
 3. ALL HEATING WATER HYDRONIC BRANCH PIPING TO CHILLED BEAMS AND RADIATORS IS 1/2" UNLESS OTHERWISE STATED.

SECOND FLOOR - AREA B - HYDRONICS
 1/4" = 1'-0"



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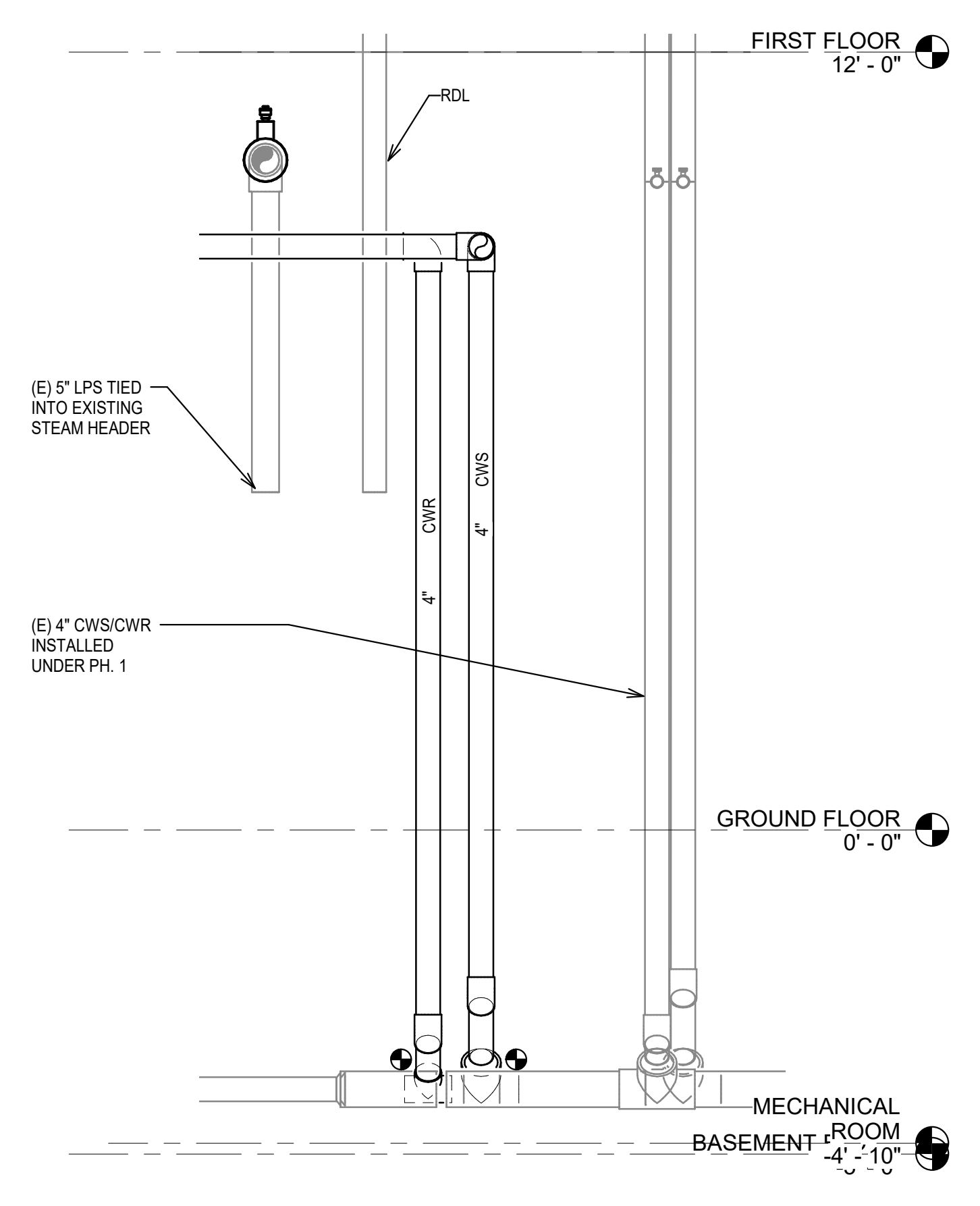
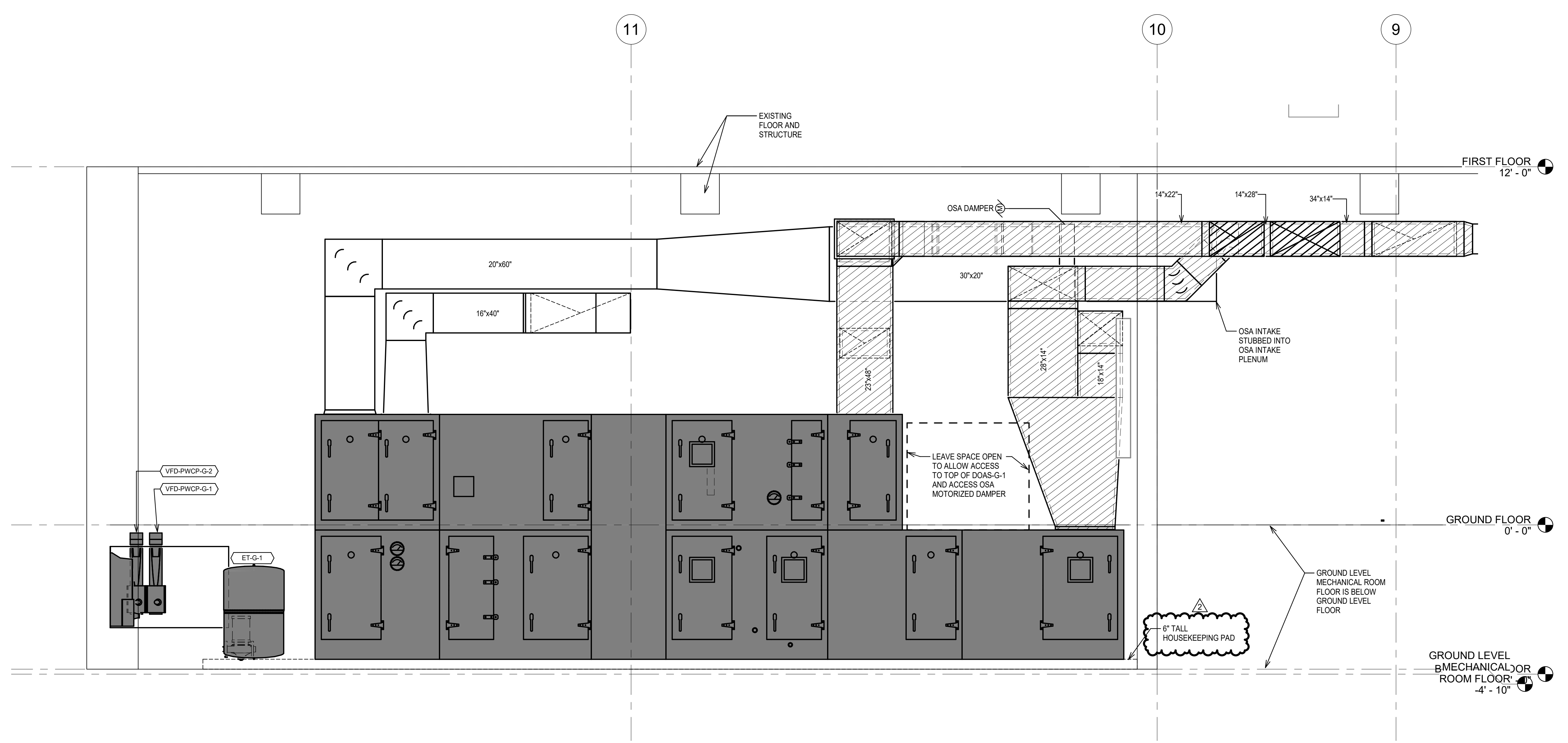
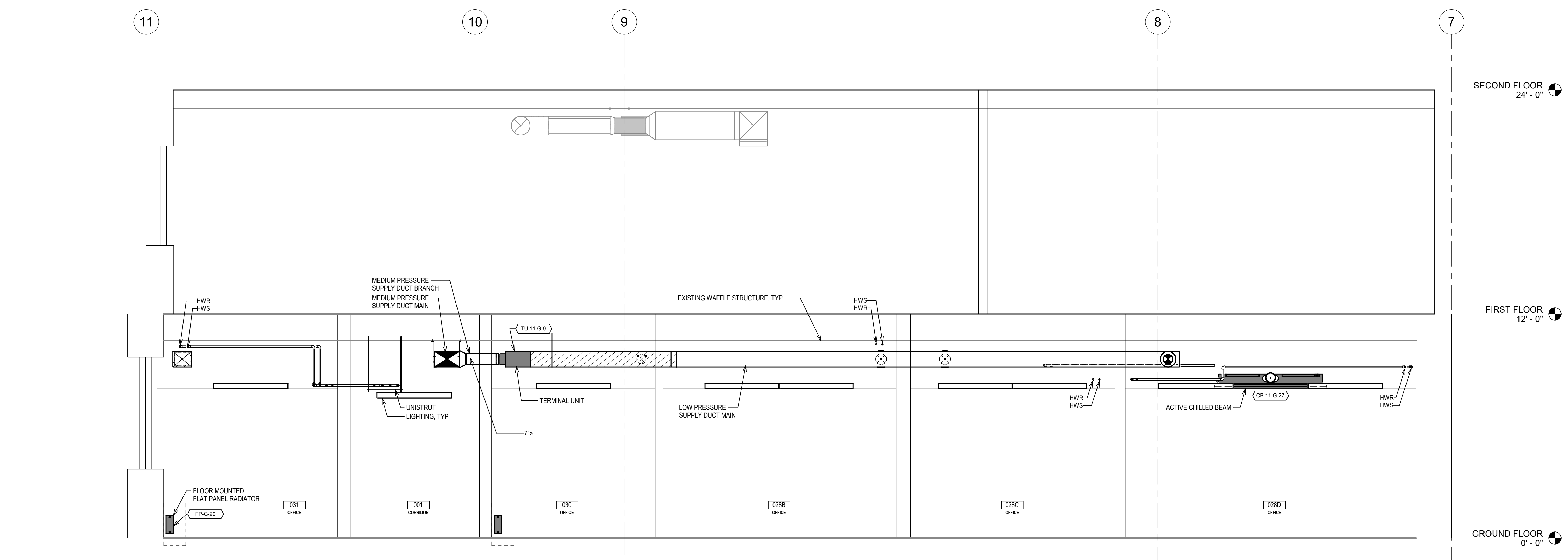


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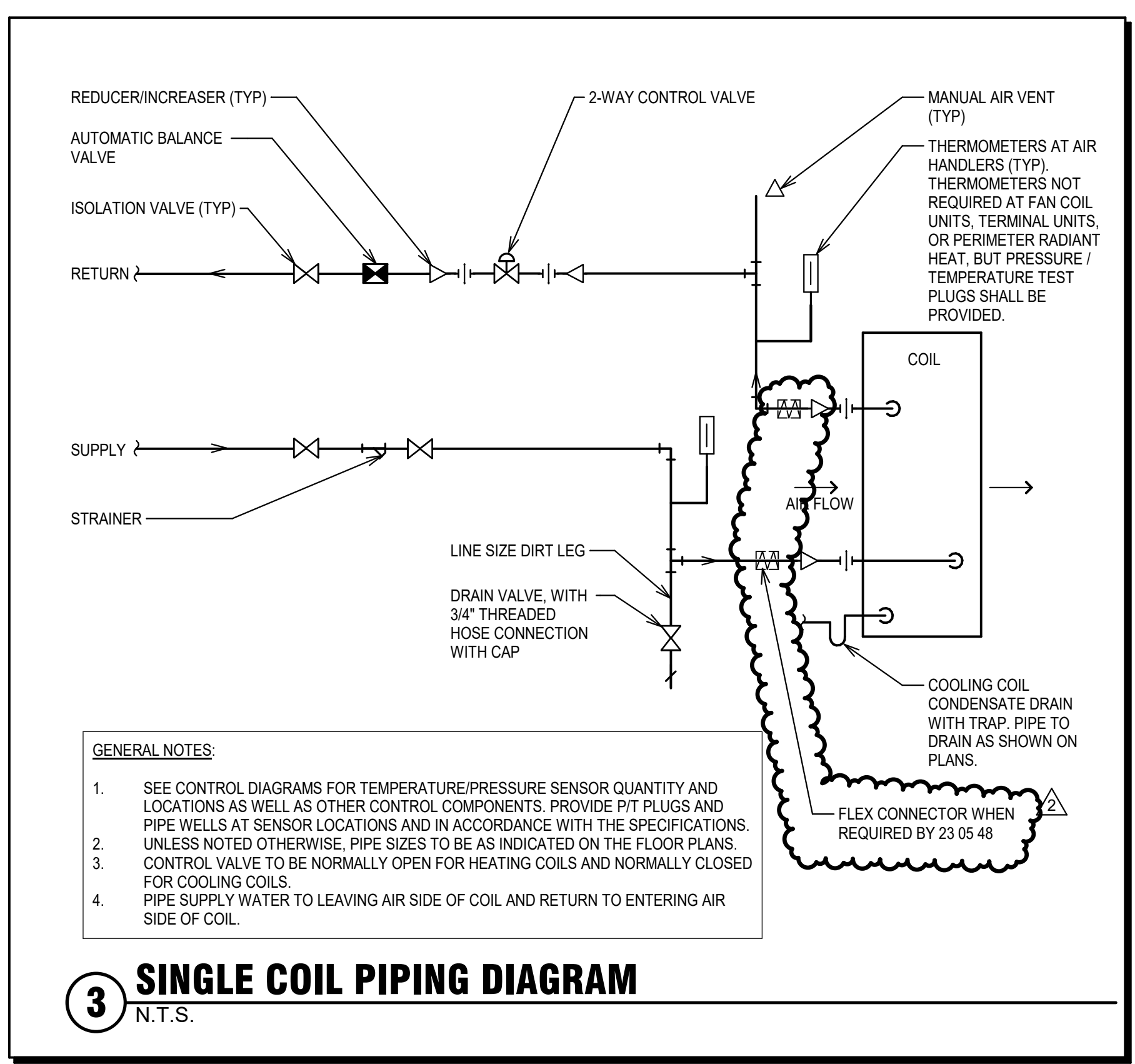
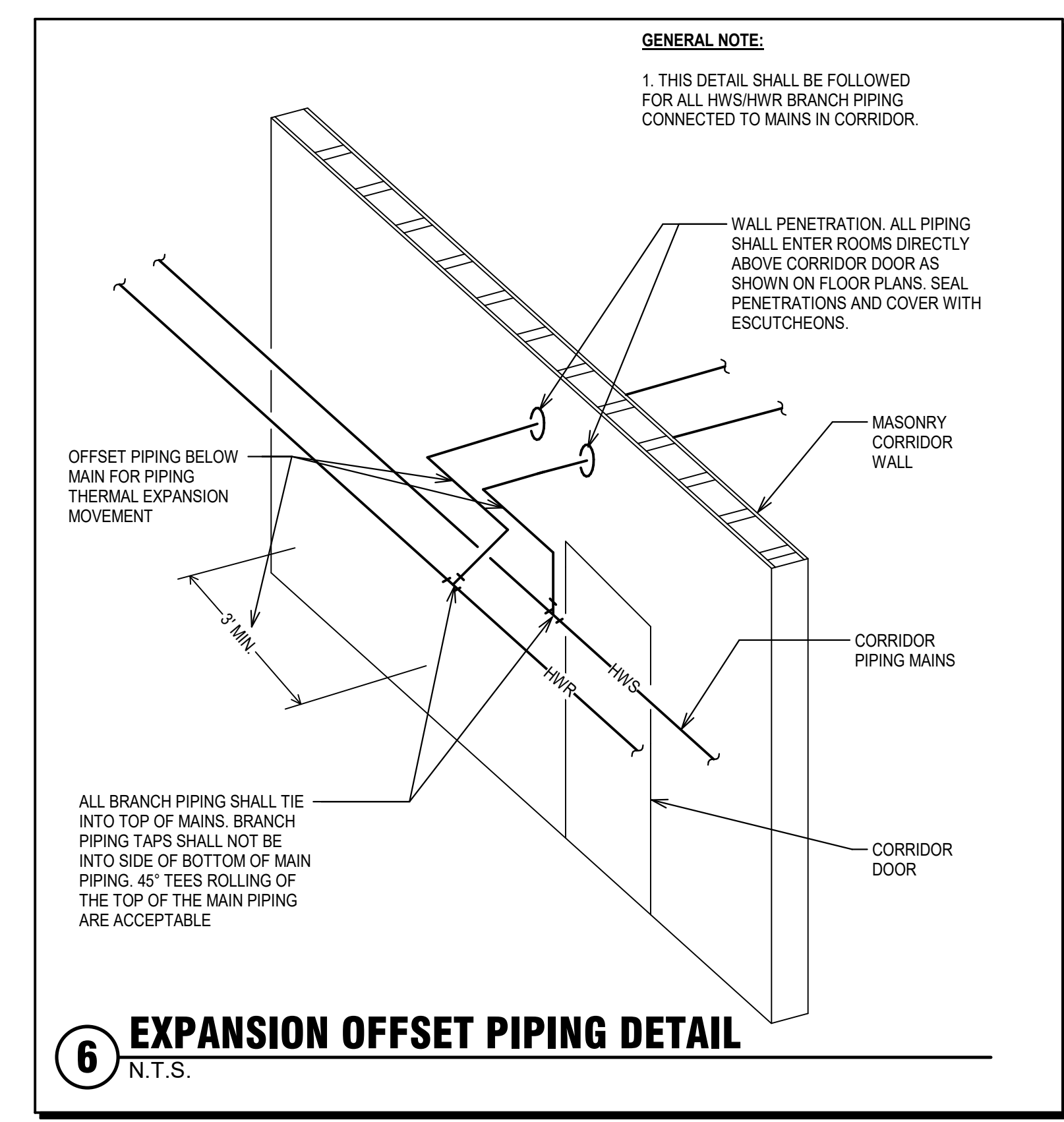
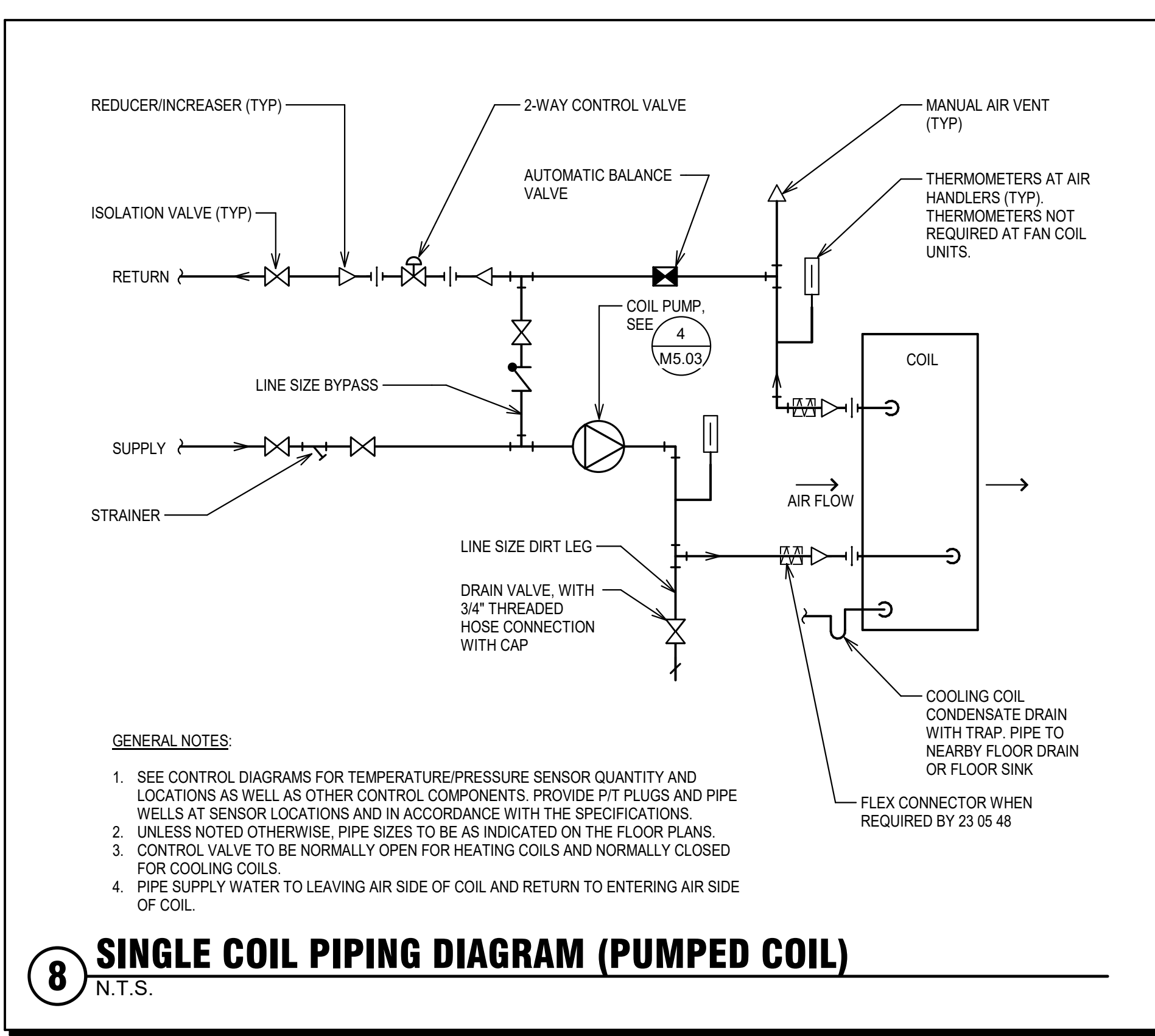
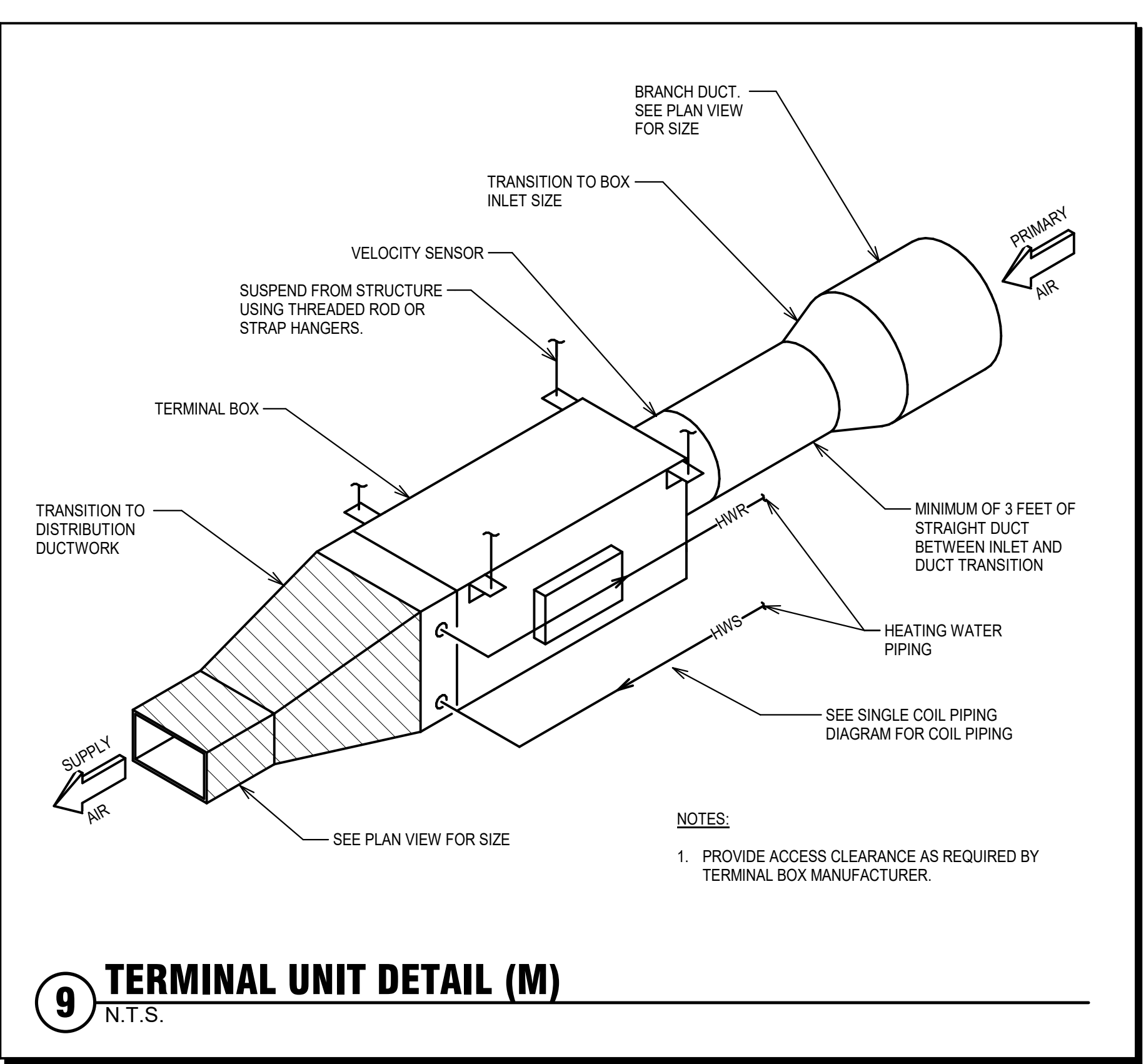
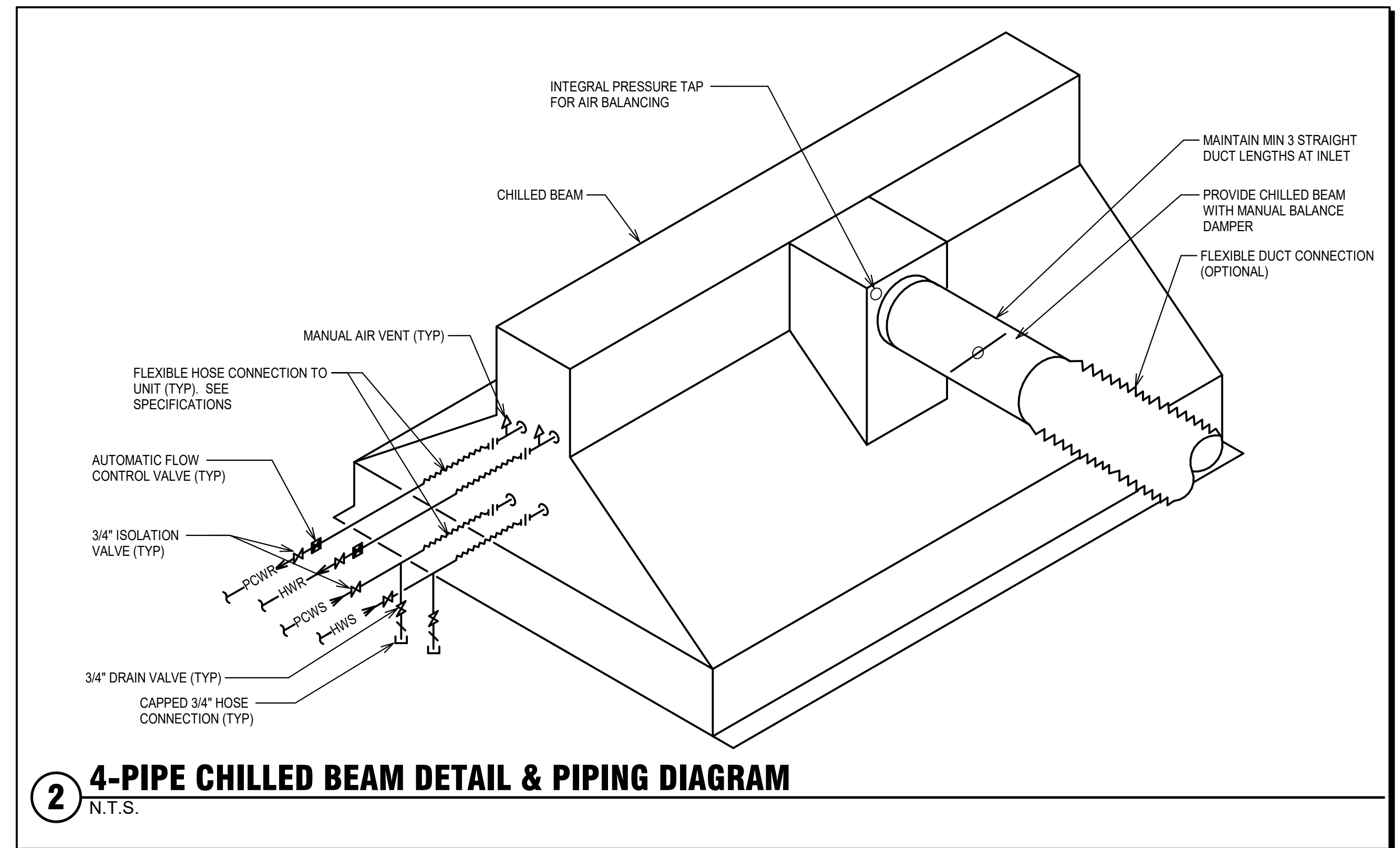
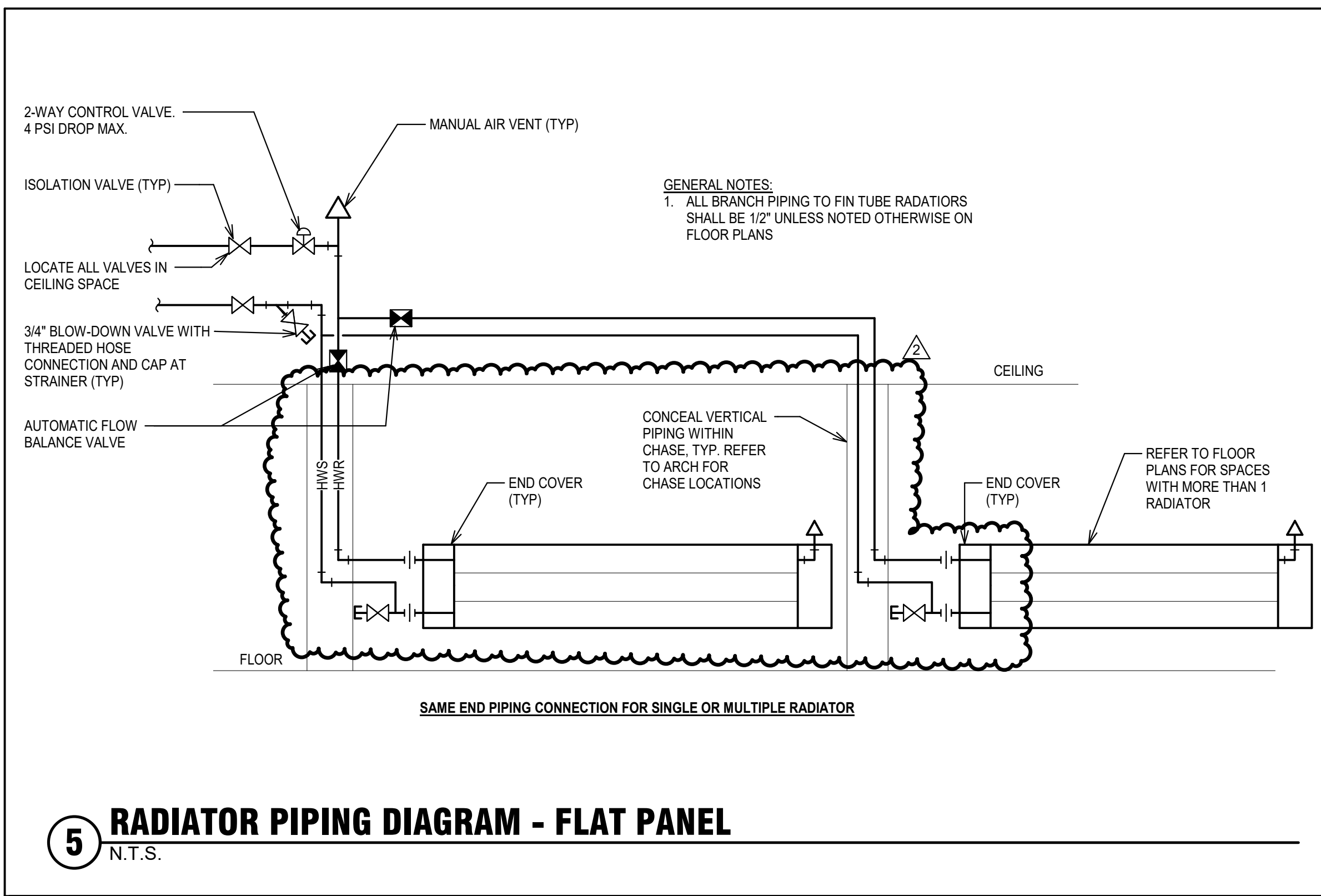
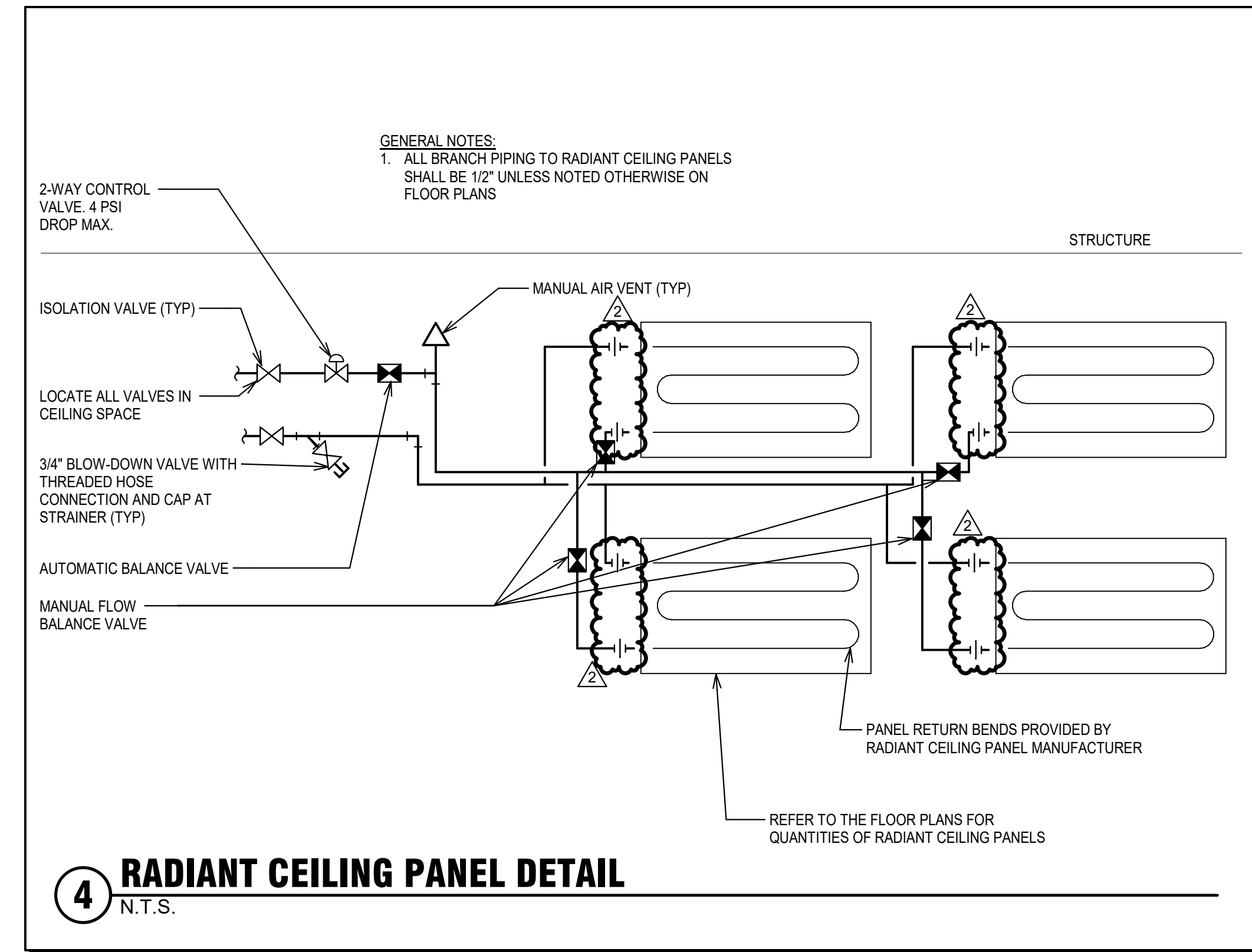
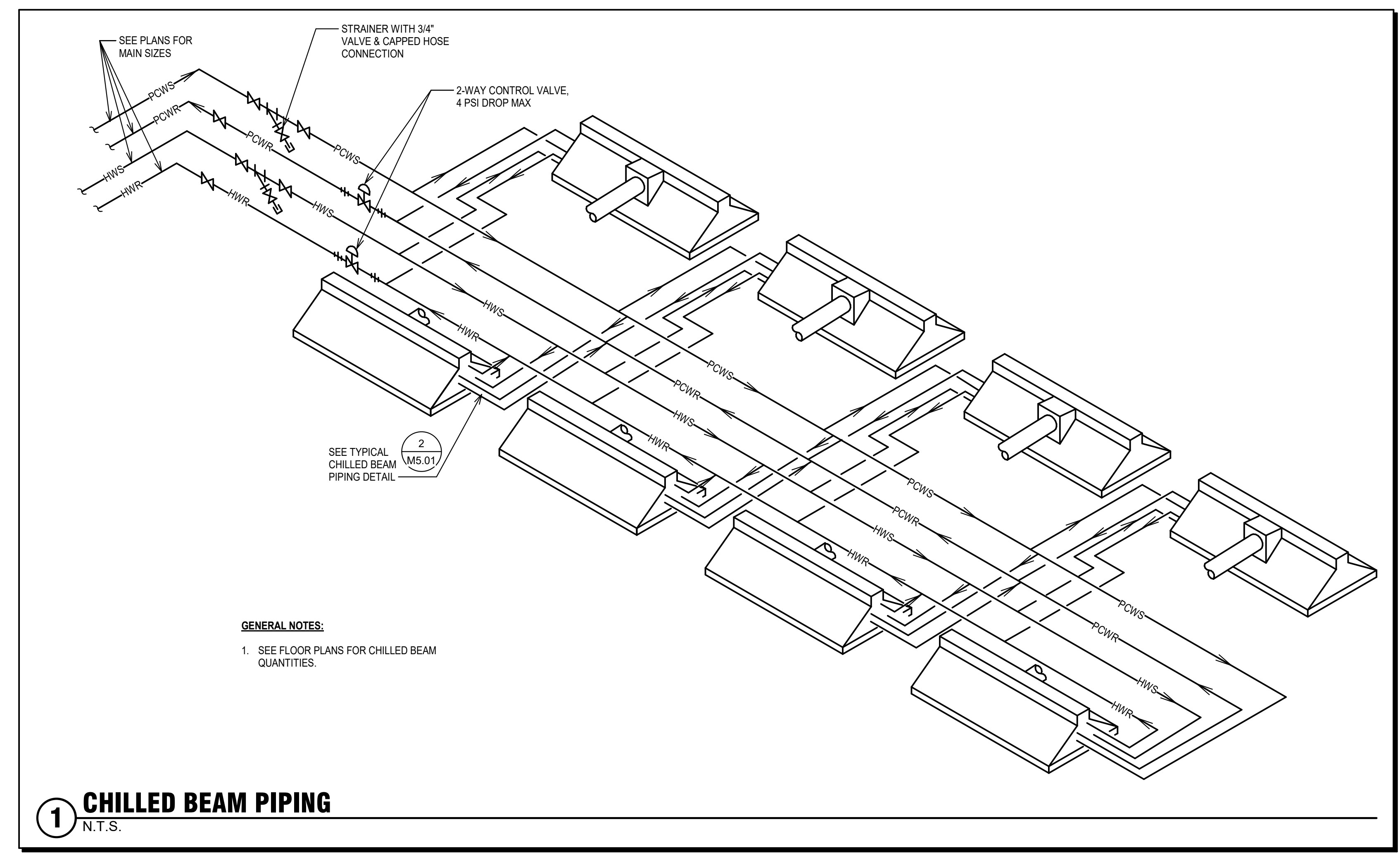
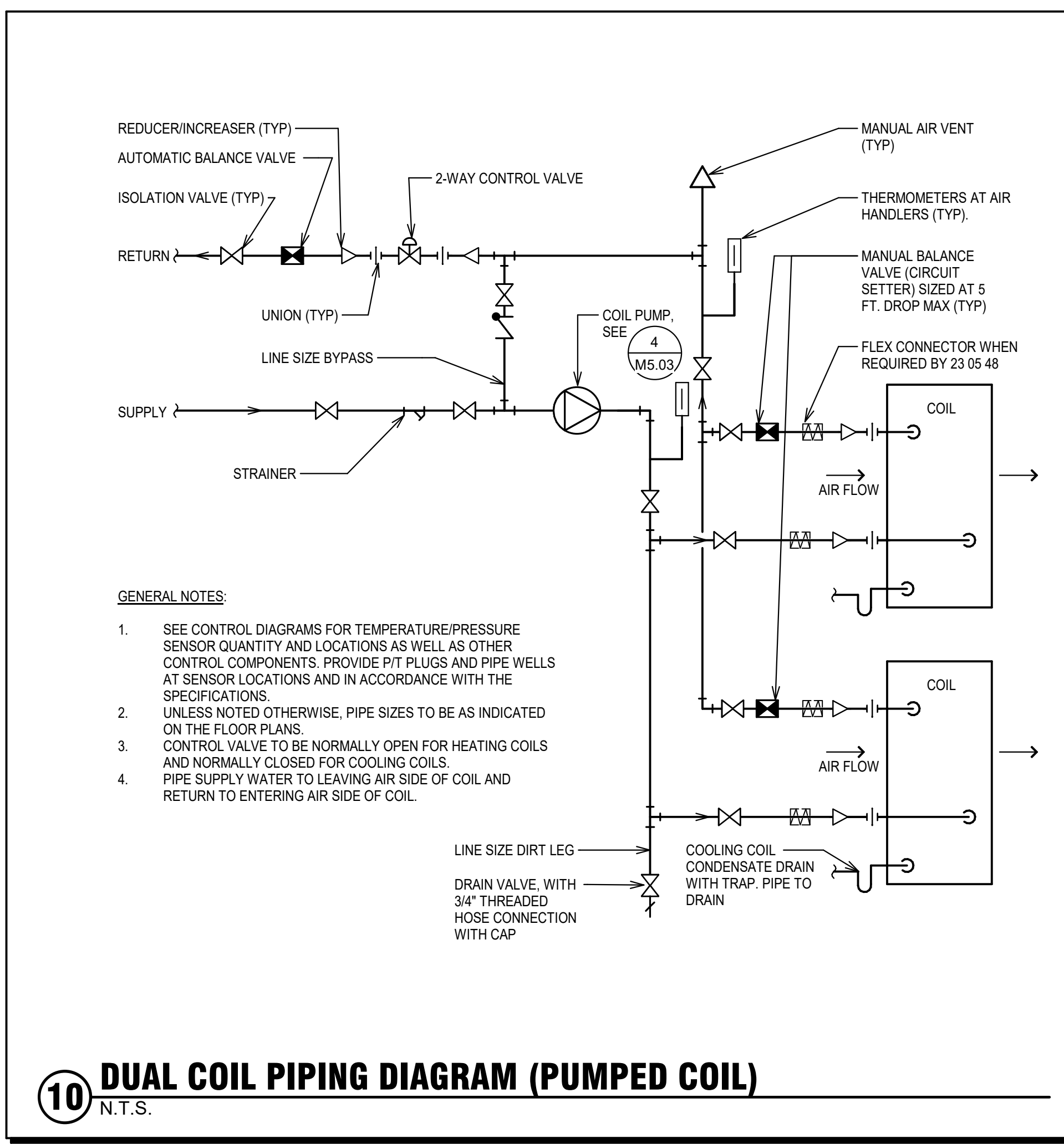
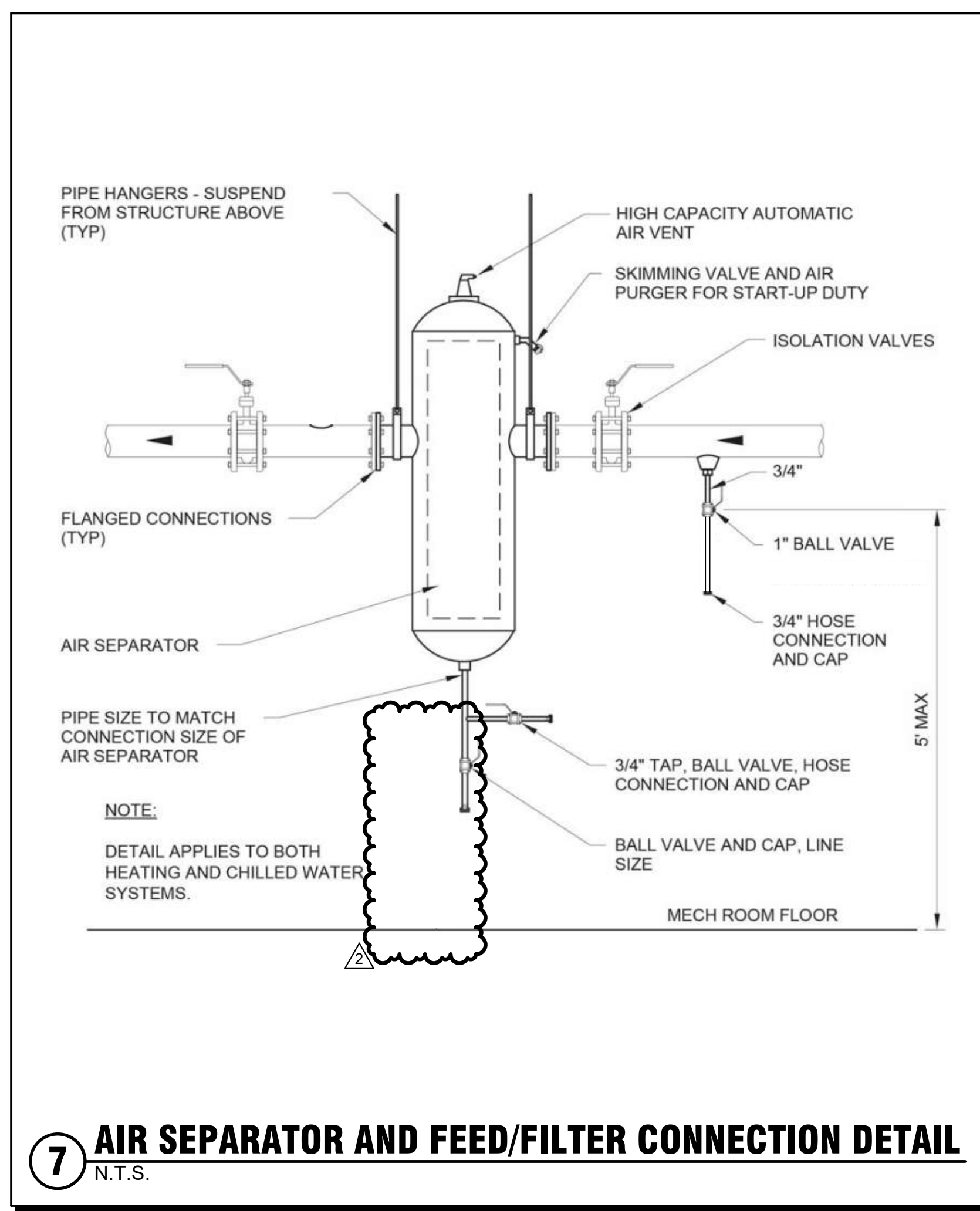
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SECOND FLOOR AREA B - HYDRONICS

SHEET
M3.52B



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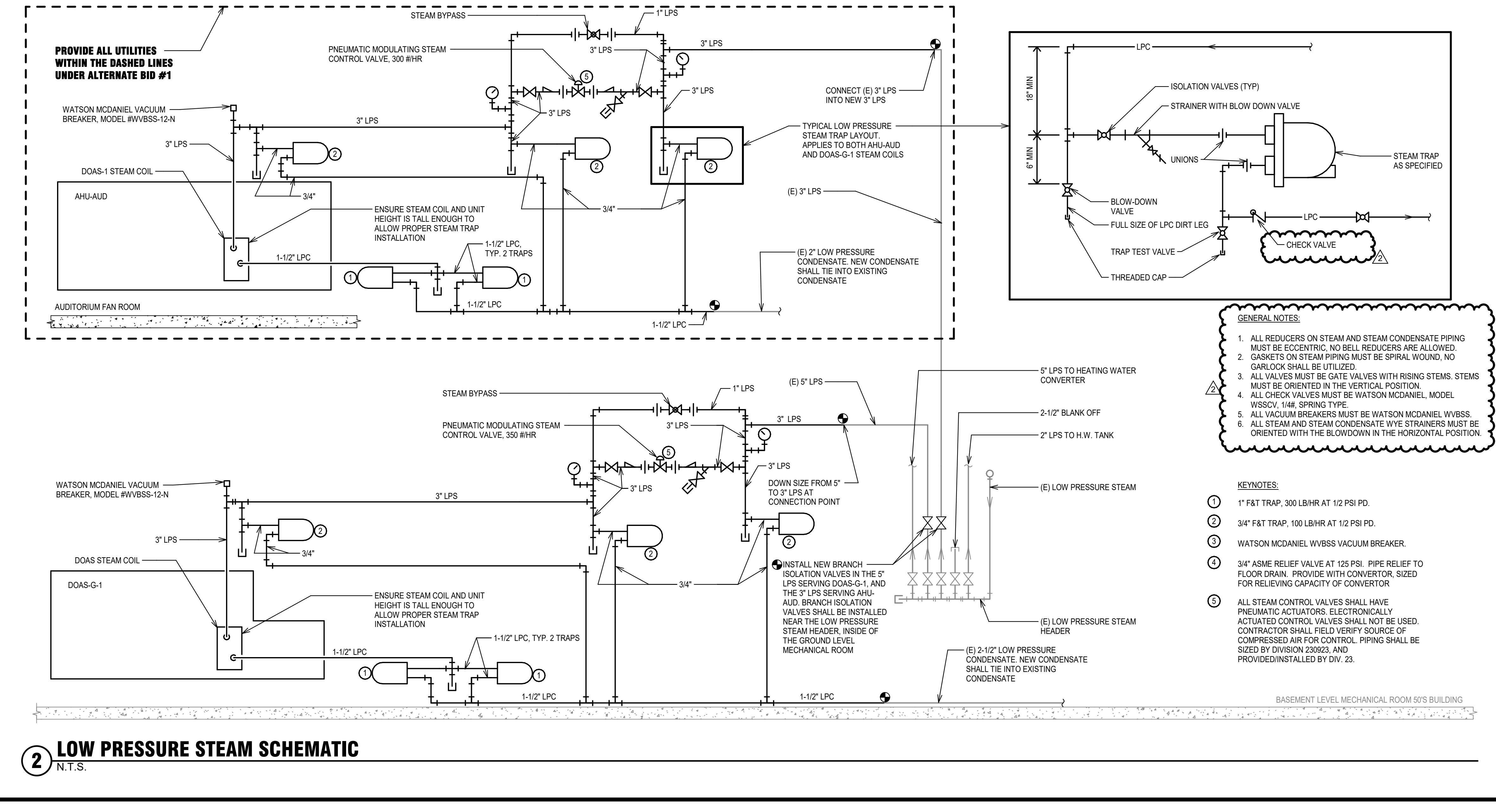
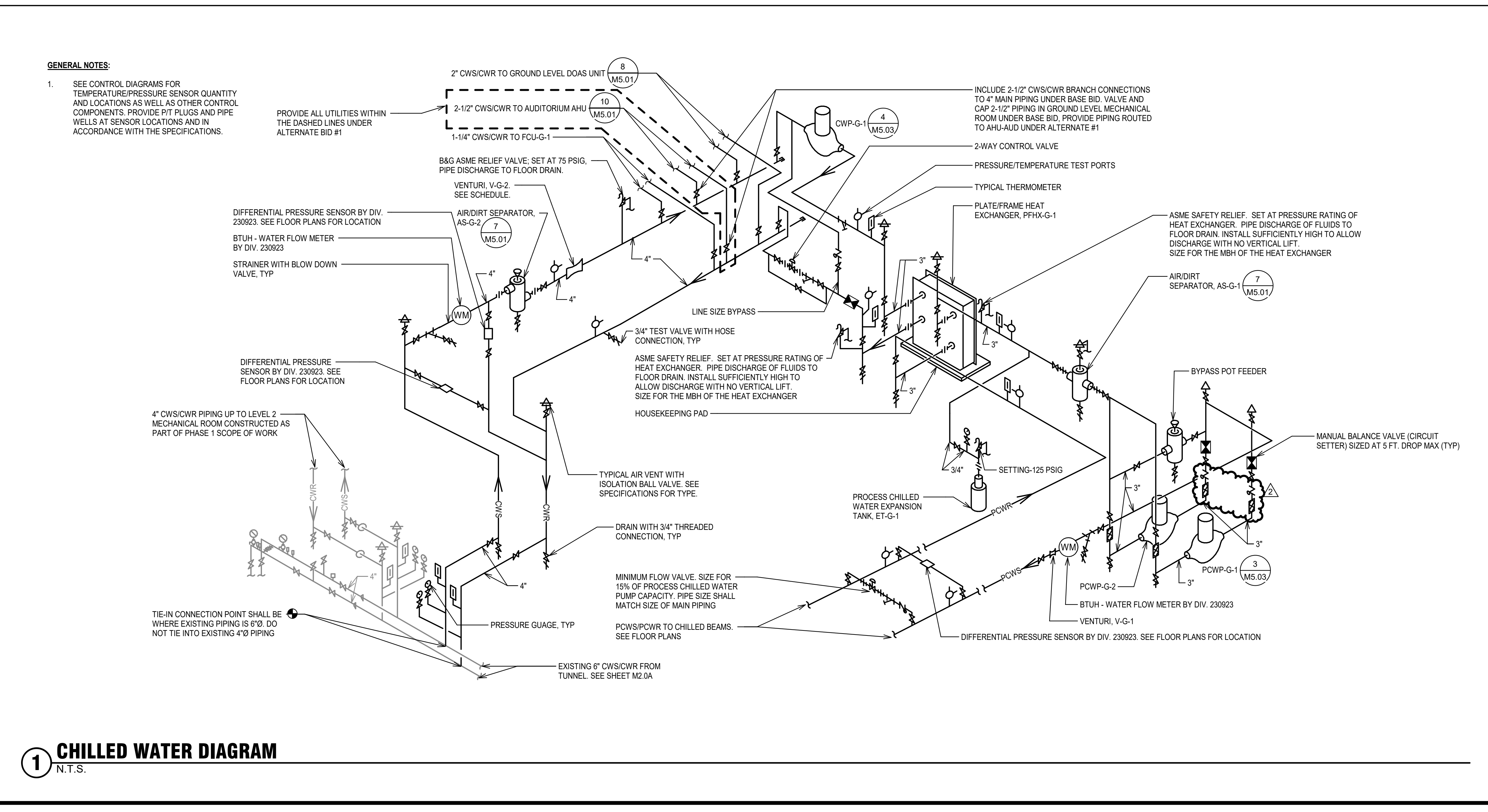
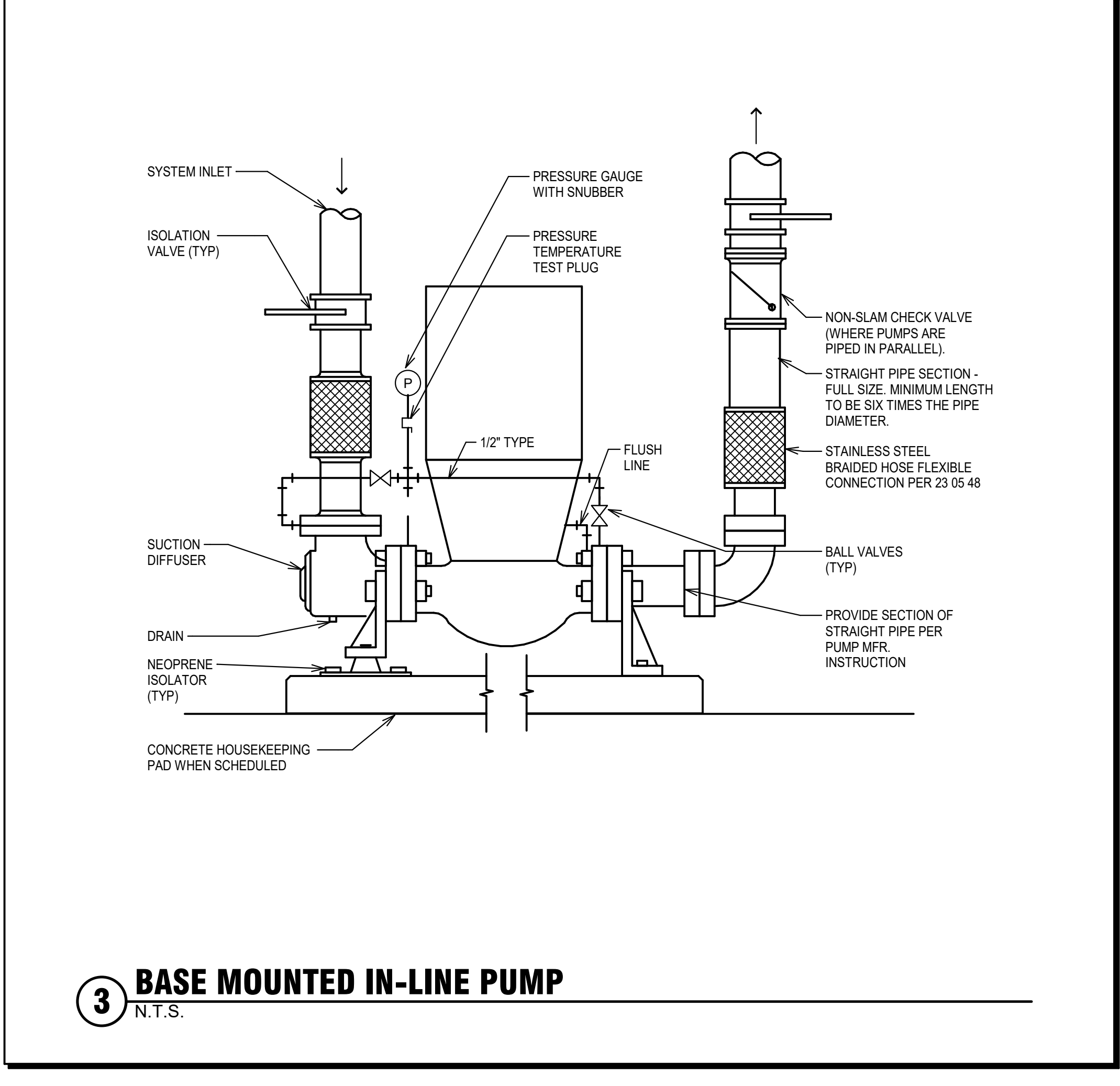
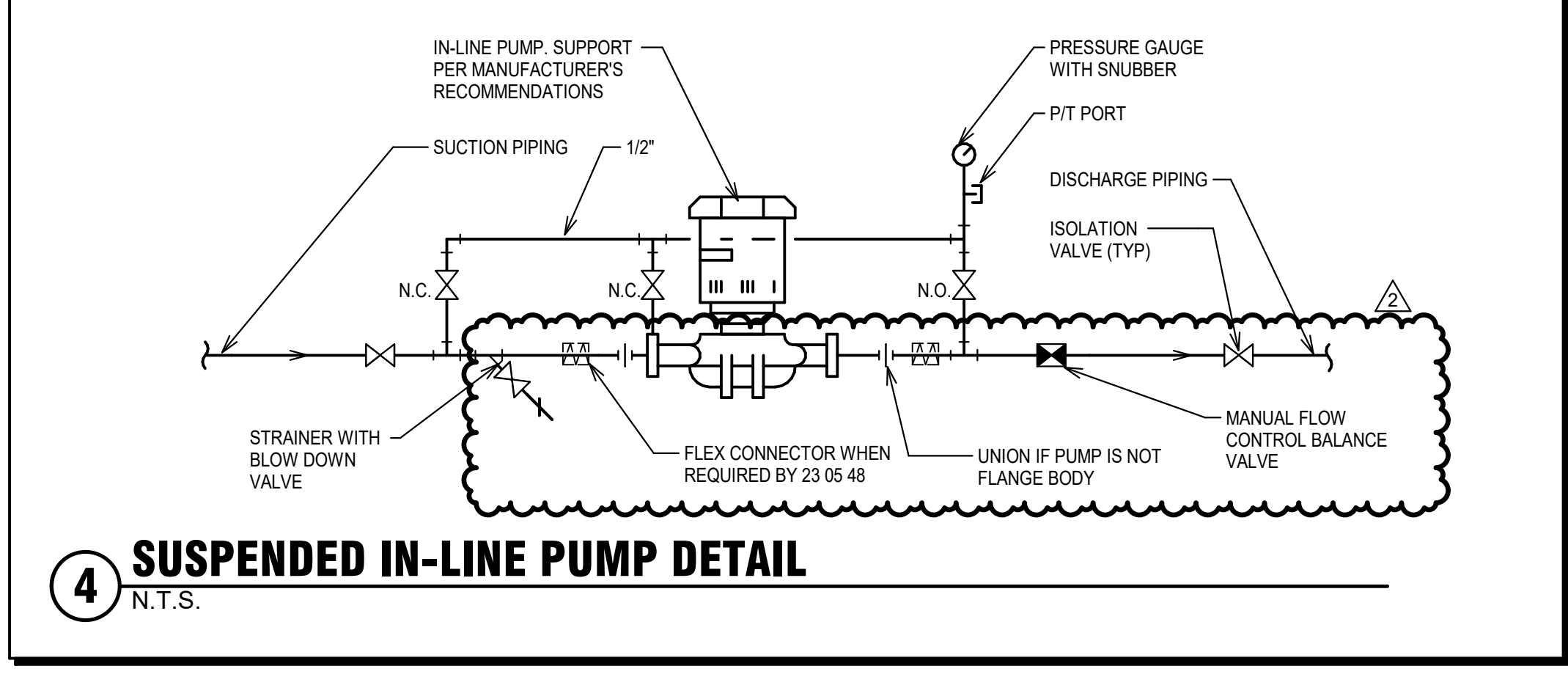
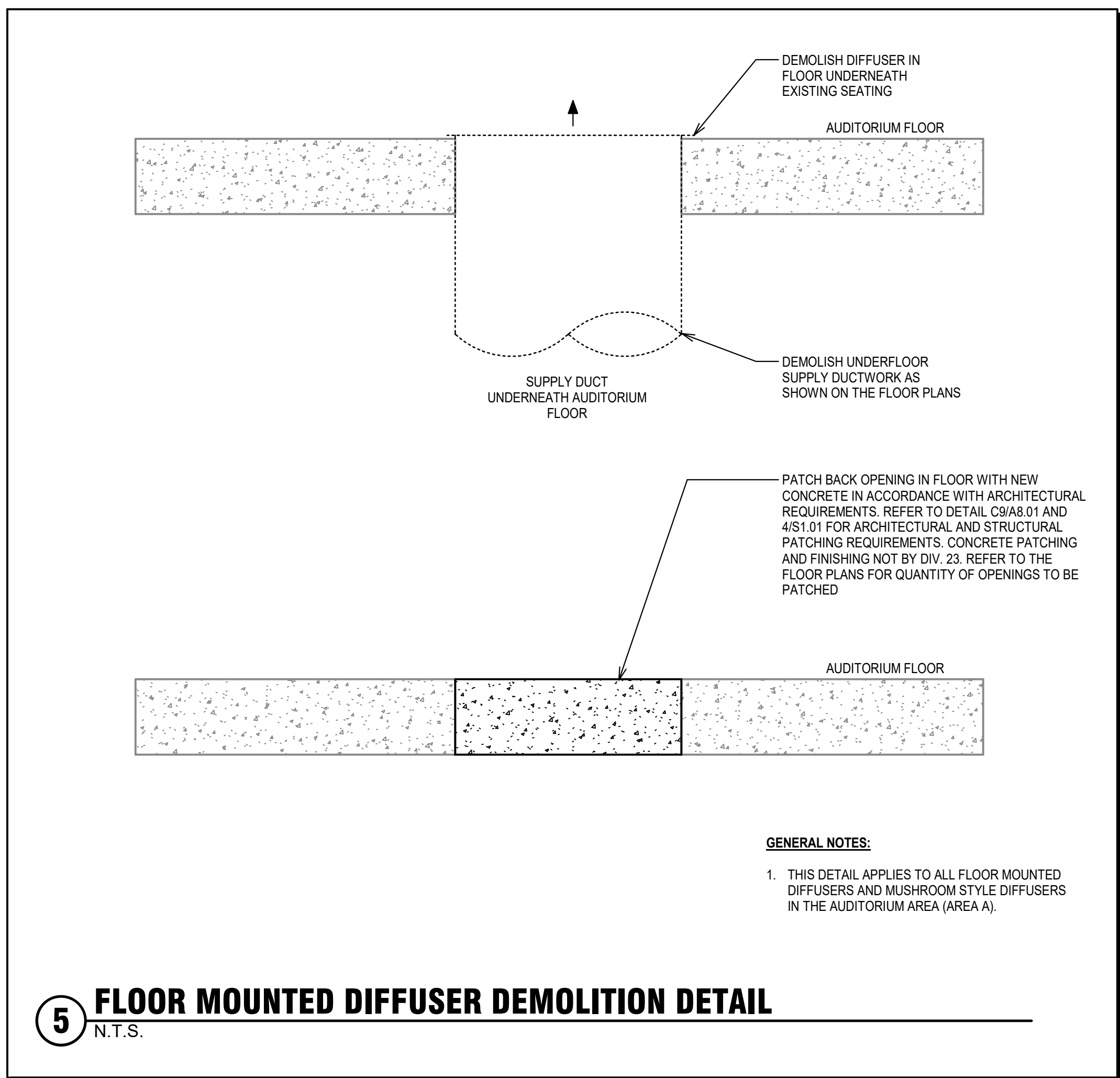
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DETAILS - MECHANICAL

SHEET M5.01



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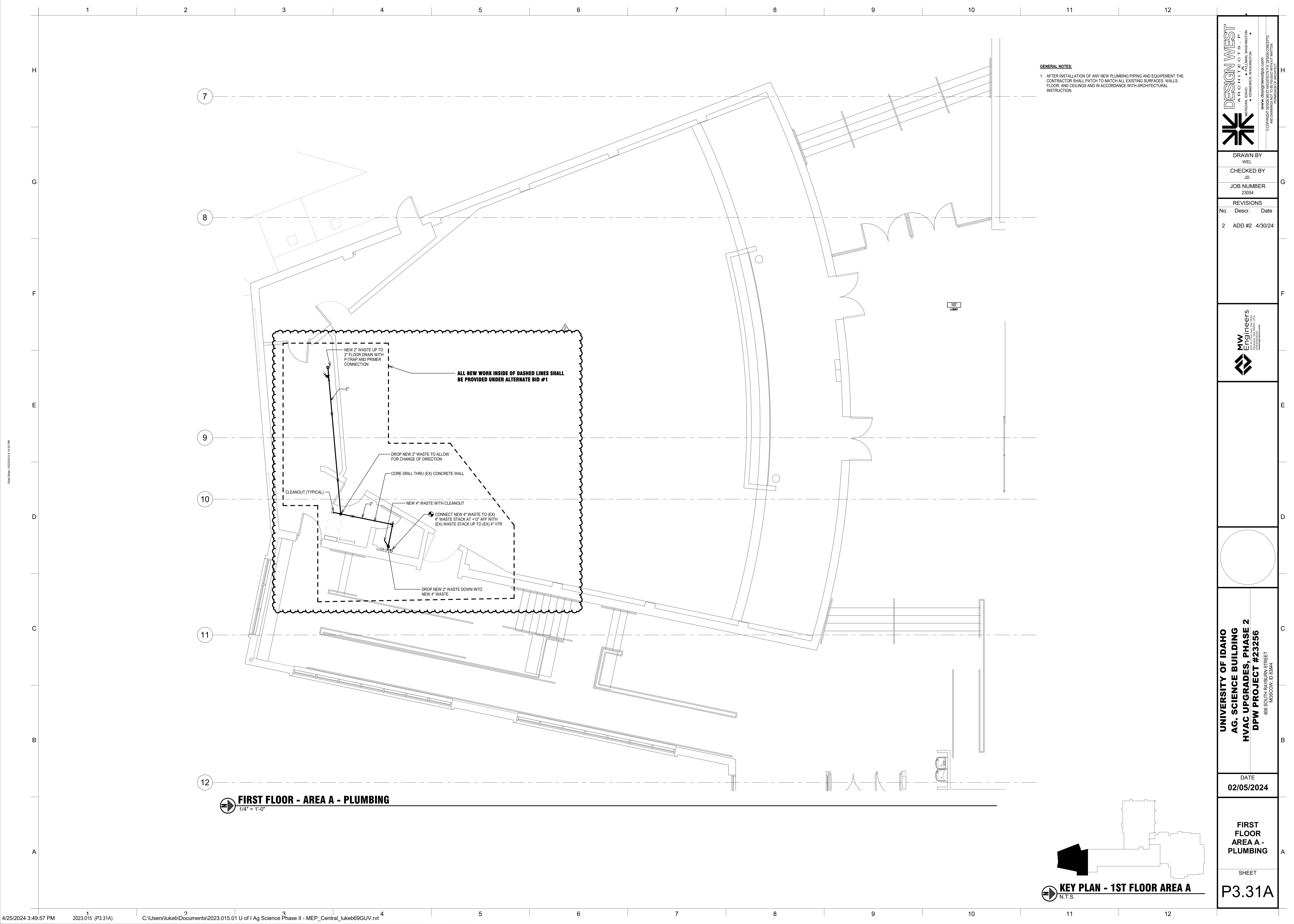
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DETAILS - MECHANICAL

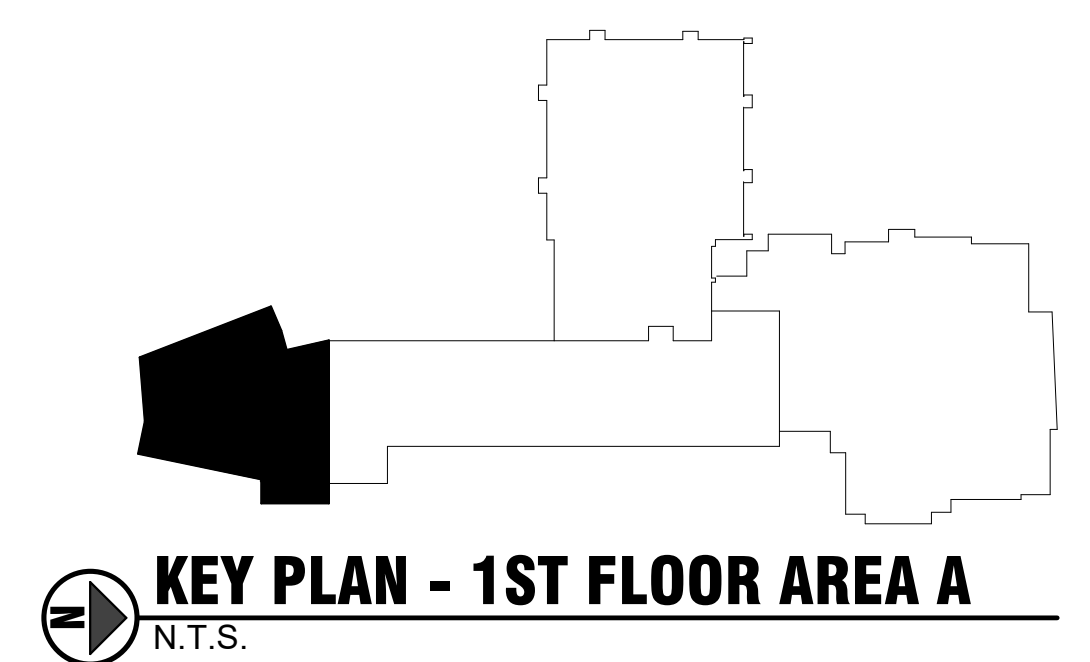
SHEET
 M5.03



GENERAL NOTES:

- AFTER INSTALLATION OF ANY NEW PLUMBING PIPING AND EQUIPMENT THE CONTRACTOR SHALL PATCH TO MATCH ALL EXISTING SURFACES, WALLS, FLOOR, AND CEILINGS AND IN ACCORDANCE WITH ARCHITECTURAL INSTRUCTION.

FIRST FLOOR - AREA A - PLUMBING
1/4" = 1'-0"



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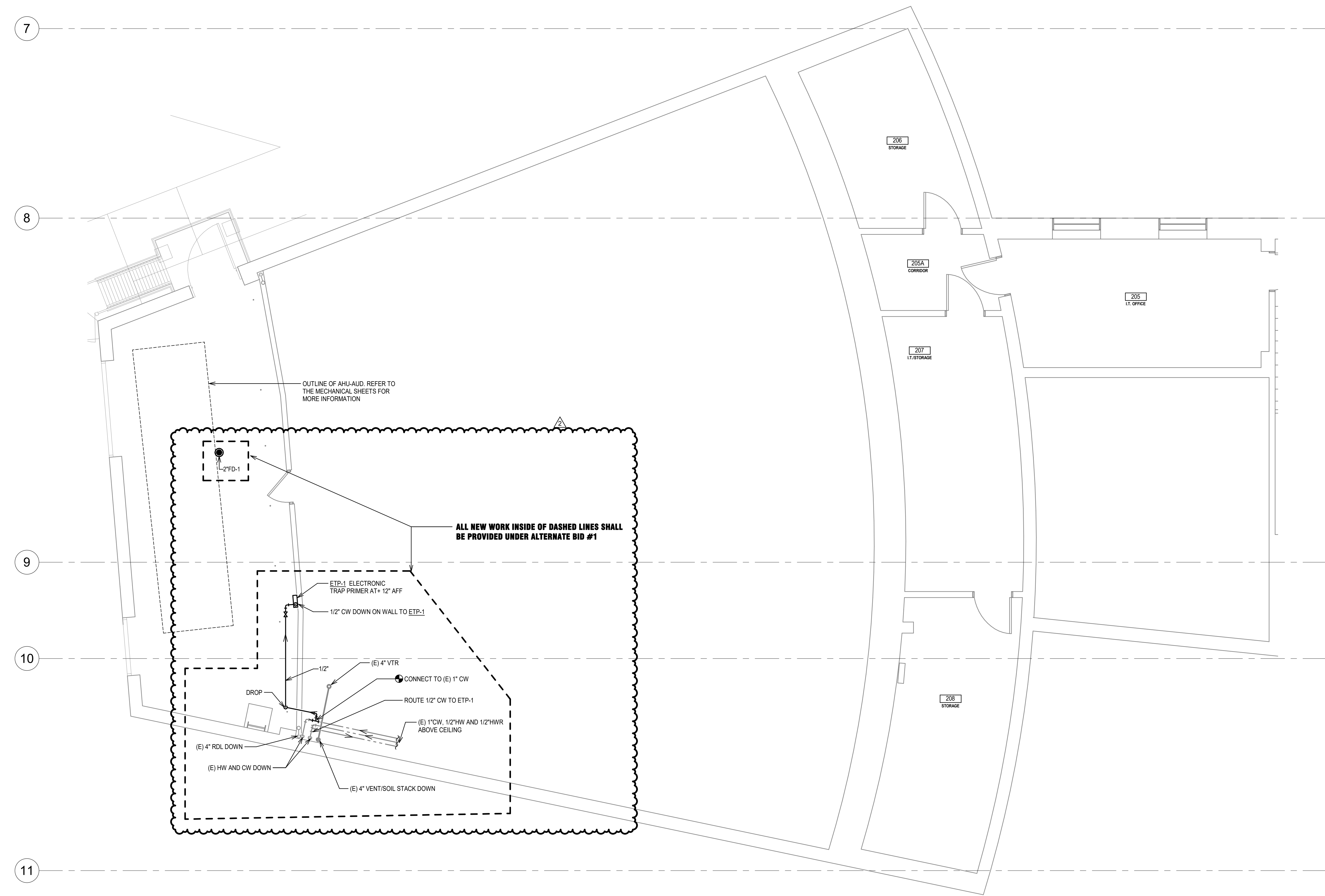
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FIRST FLOOR
AREA A -
PLUMBING

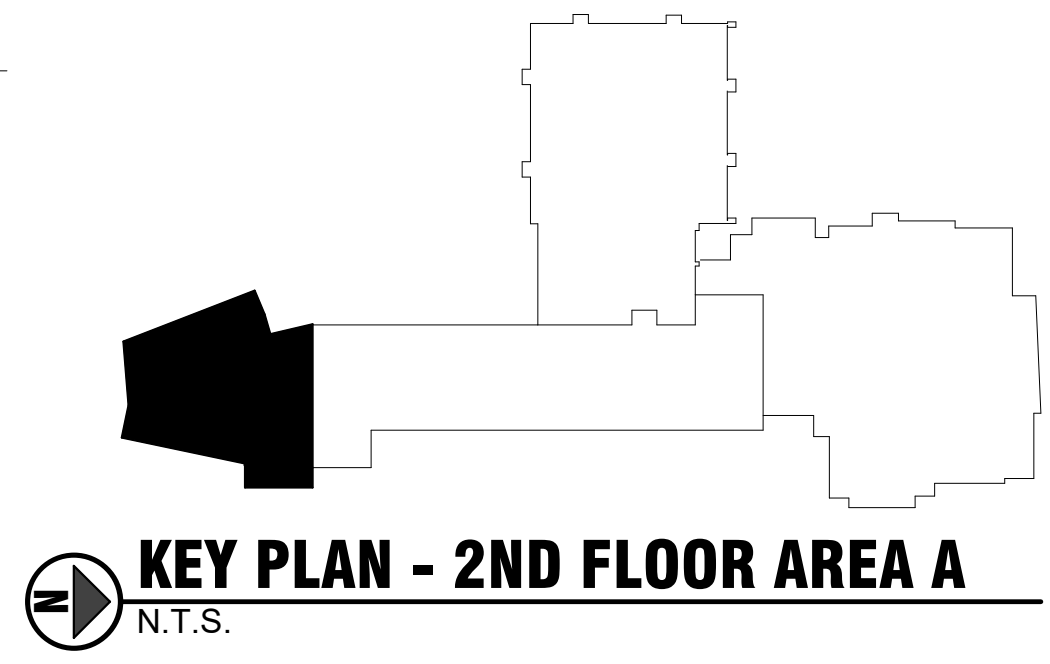
SHEET
P3.31A

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GENERAL NOTES:
 1. AFTER INSTALLATION OF ANY NEW PLUMBING PIPING AND EQUIPMENT THE CONTRACTOR SHALL PATCH TO MATCH ALL EXISTING SURFACES - WALLS, FLOOR, AND CEILINGS AND IN ACCORDANCE WITH ARCHITECTURAL INSTRUCTION.



SECOND FLOOR - AREA A - PLUMBING
 1/4" = 1'-0"

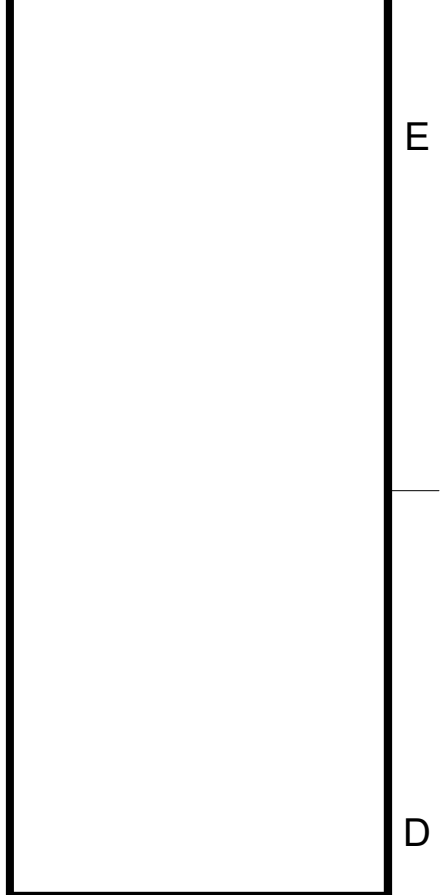


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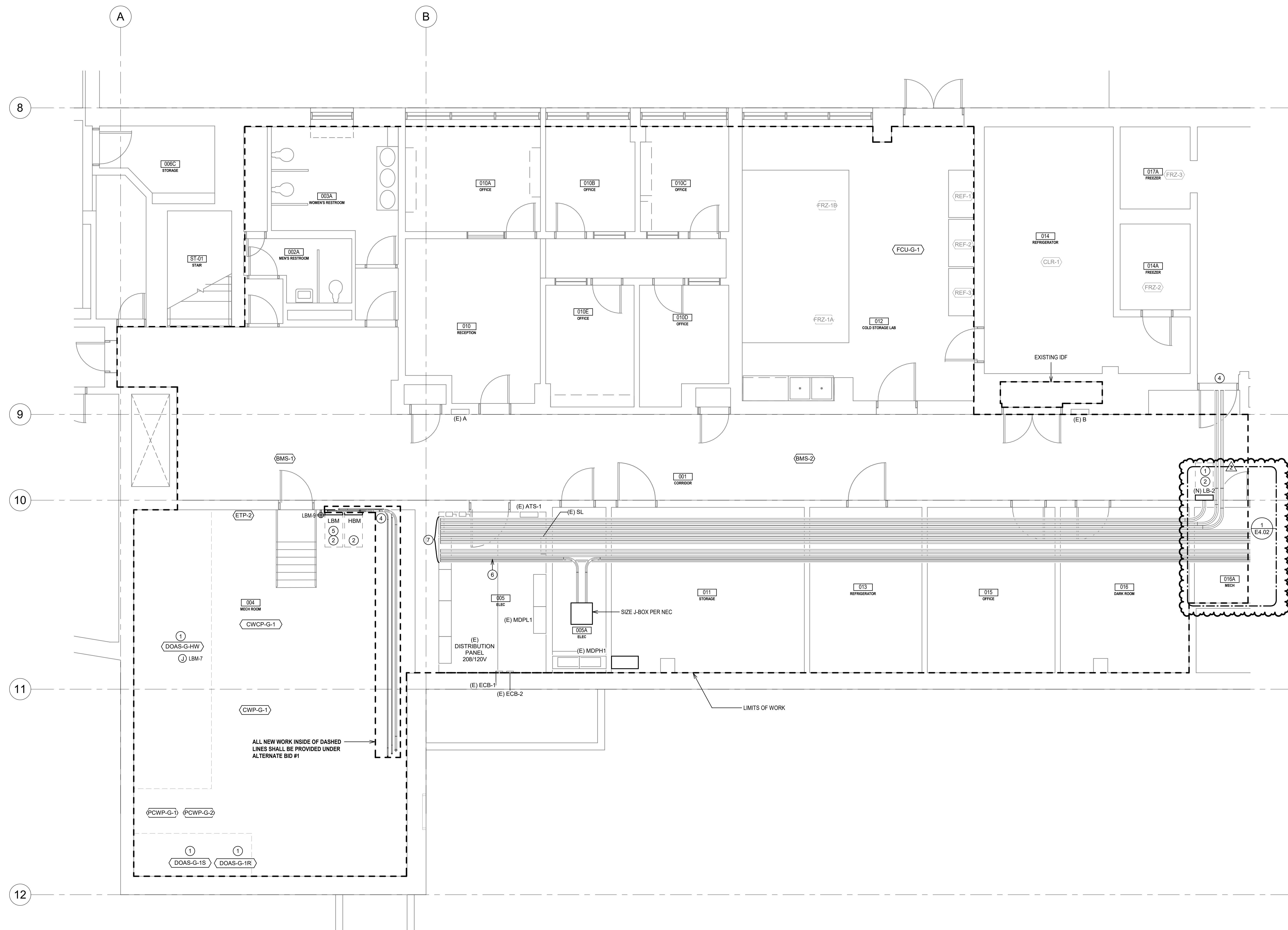
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SECOND FLOOR AREA A - PLUMBING

SHEET
P3.32A

Sheet Name: 10222014_14.023.PM



GROUND FLOOR - AREA B - ELECTRICAL
 1/4" = 1'-0"

- GENERAL NOTES:**
1. MAKE SAFE ELECTRICAL CONNECTIONS TO EXISTING MECHANICAL EQUIPMENT BEING DEMOLISHED. REMOVE EXISTING BRANCH CIRCUIT CONDUCTORS TO NEAREST JUNCTION BOX OR RETAINED STRUCTURE AND PROTECT FOR REUSE. INTERCEPT AND MODIFY EXISTING RACEWAY SYSTEM AS REQUIRED TO ACCOMMODATE DEMOLITION OF EXISTING MECHANICAL EQUIPMENT AND CONNECTION OF NEW MECHANICAL EQUIPMENT. EXTEND BRANCH CIRCUIT CONDUCTORS AND MAKE FINAL CONNECTIONS. COORDINATE WITH DIV. 23 PRIOR TO COMMENCING WORK. SEE MECHANICAL DRAWINGS FOR ADDITIONAL DETAILS.
 2. FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
 3. REFER TO MECHANICAL DRAWINGS FOR ORGANIZATION OF CEILING SPACE.
 4. PROVIDE TEMPORARY ELECTRICAL CONNECTIONS AS INDICATED IN THE PROTECTED EQUIPMENT SCHEDULE ON SHEET E6.02.
- KEYNOTES:**
1. DEMOLISH EXISTING EQUIPMENT AND REPLACE WITH NEW EQUIPMENT SHOWN. REUSE EXISTING CIRCUITS, WIRE AND BREAKERS UNLESS NOTED OTHERWISE.
 2. NEW PANEL. REFER TO ONE-LINE DIAGRAM AND PANEL SCHEDULE FOR ADDITIONAL INFORMATION.
 3. REFEED EXISTING CIRCUITS DEMOLISHED FROM WIREWAY FROM NEW BRANCH PANELS. PROVIDE J-BOXES AS NEEDED.
 4. APPROXIMATE ROUTING FOR NEW BRANCH CIRCUITS AND FEEDER TO AUDITORIUM.
 5. REFEED EXISTING BRANCH CIRCUITS SUPPLIED FROM PANELS MB AND MG FROM NEW PANEL LMB.
 6. COMPLETE NEW INSTALLATION PRIOR TO DEMOLITION OF EXISTING ELEVATOR FEEDER.
 7. NEW FEEDER CONDUITS TO NEW PANELS AND EXISTING ELEVATOR. HOLD TIGHT TO STRUCTURE AND PROVIDE OFFSETS AND PULLING POINTS/CONDUIT BODIES AS NEEDED.

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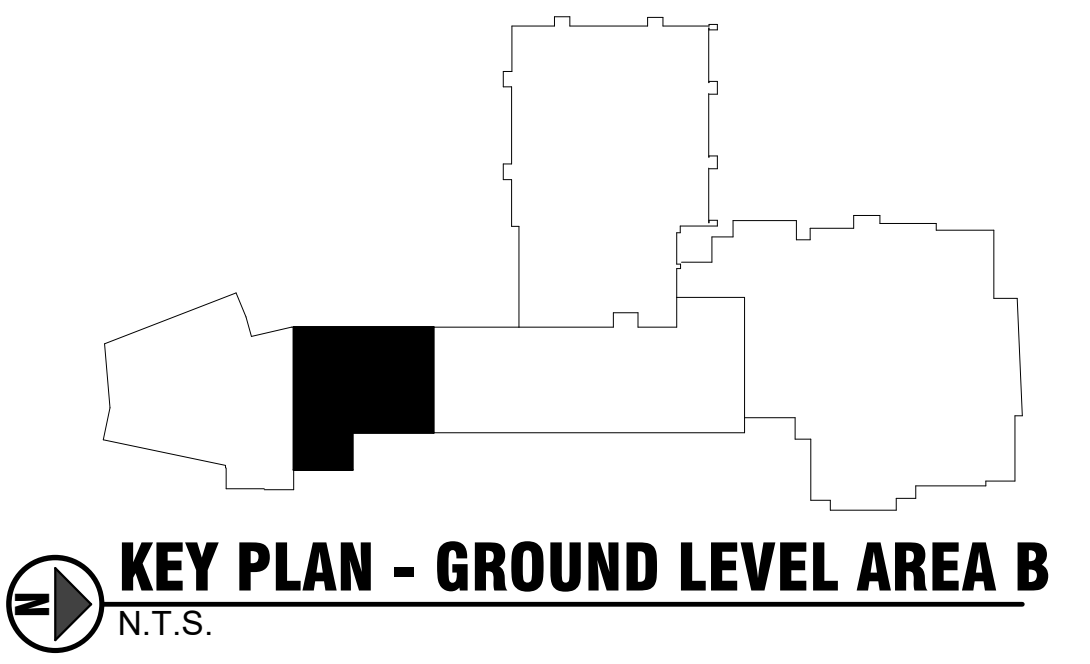
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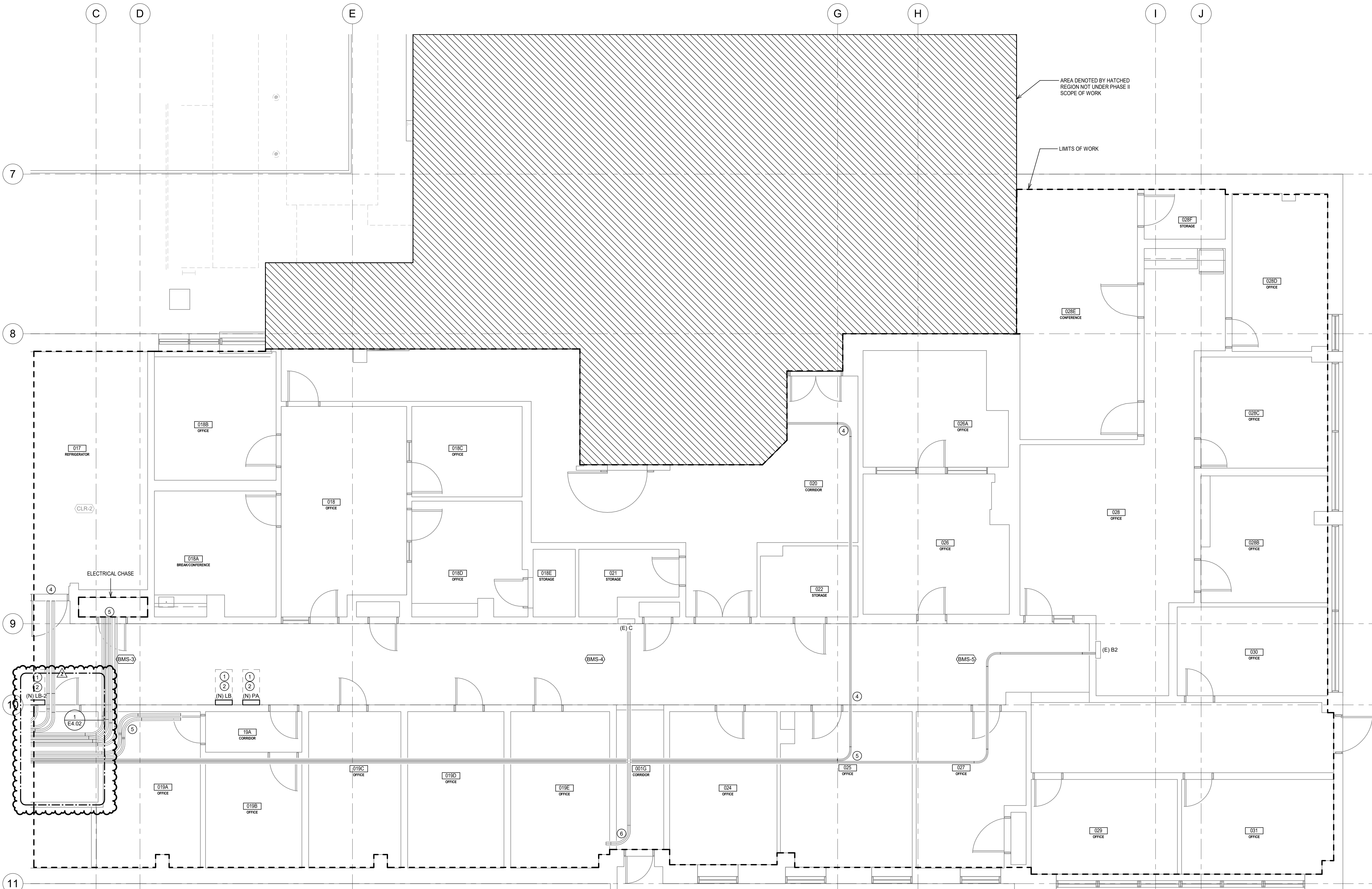
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GROUND FLOOR
AREA B -
ELECTRICAL

SHEET
E3.30B

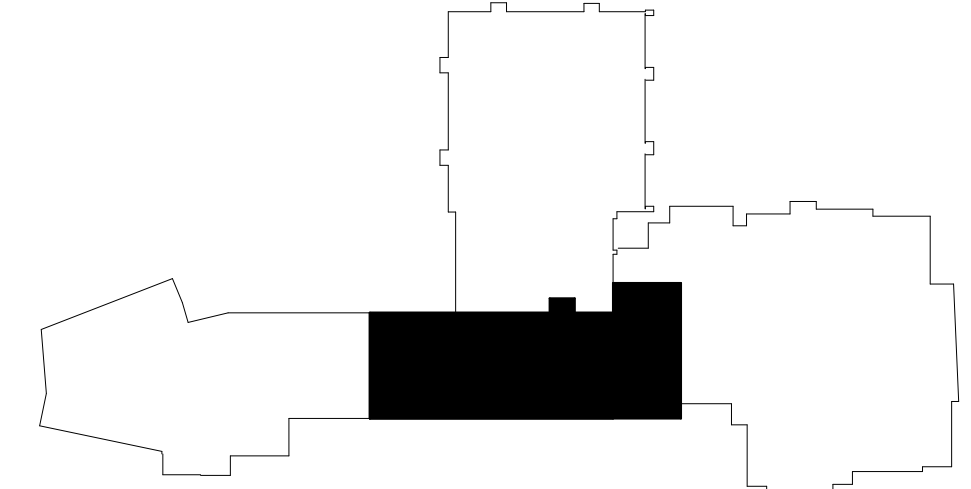


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- GENERAL NOTES:**
1. MAKE SAFE ELECTRICAL CONNECTIONS TO EXISTING MECHANICAL EQUIPMENT BEING DEMOLISHED. REMOVE EXISTING BRANCH CIRCUIT CONDUCTORS TO NEAREST JUNCTION BOX OR RETAINED STRUCTURE AND PROTECT FOR REUSE. INTERCEPT AND MODIFY EXISTING RACEWAY SYSTEM AS REQUIRED TO ACCOMMODATE DEMOLITION OF EXISTING MECHANICAL EQUIPMENT. EXTEND BRANCH CIRCUIT CONDUCTORS AND MAKE FINAL CONNECTIONS. COORDINATE WITH DIV. 23 PRIOR TO COMMENCING WORK. SEE MECHANICAL DRAWINGS FOR ADDITIONAL DETAILS.
 2. FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
 3. REFER TO MECHANICAL DRAWINGS FOR ORGANIZATION OF CEILING SPACE.
 4. PROVIDE TEMPORARY ELECTRICAL CONNECTIONS AS INDICATED IN THE PROTECTED EQUIPMENT SCHEDULE ON SHEET E6.02.
- KEYNOTES:**
1. REFEED EXISTING CIRCUITS DEMOLISHED FROM WIREWAY FROM NEW BRANCH PANELS. PROVIDE J-BOXES AS NEEDED.
 2. NEW PANEL REFER TO ONE-LINE DIAGRAM AND PANEL SCHEDULE FOR ADDITIONAL INFORMATION.
 3. PROTECT AND PRESERVE EXISTING CABLE TRAY. COMPLETE NEW INSTALLATION PRIOR TO DEMOLITION OF EXISTING ELEVATOR FEEDER.
 4. NEW FEEDER CONDUITS TO NEW PANELS AND EXISTING ELEVATOR. HOLD TIGHT TO STRUCTURE AND PROVIDE OFFSETS AND PULLING POINTS.
 5. PROTECT AND PRESERVE EXISTING PANEL C FEEDER.

GROUND FLOOR - AREA C - ELECTRICAL
 1/4" = 1'-0"



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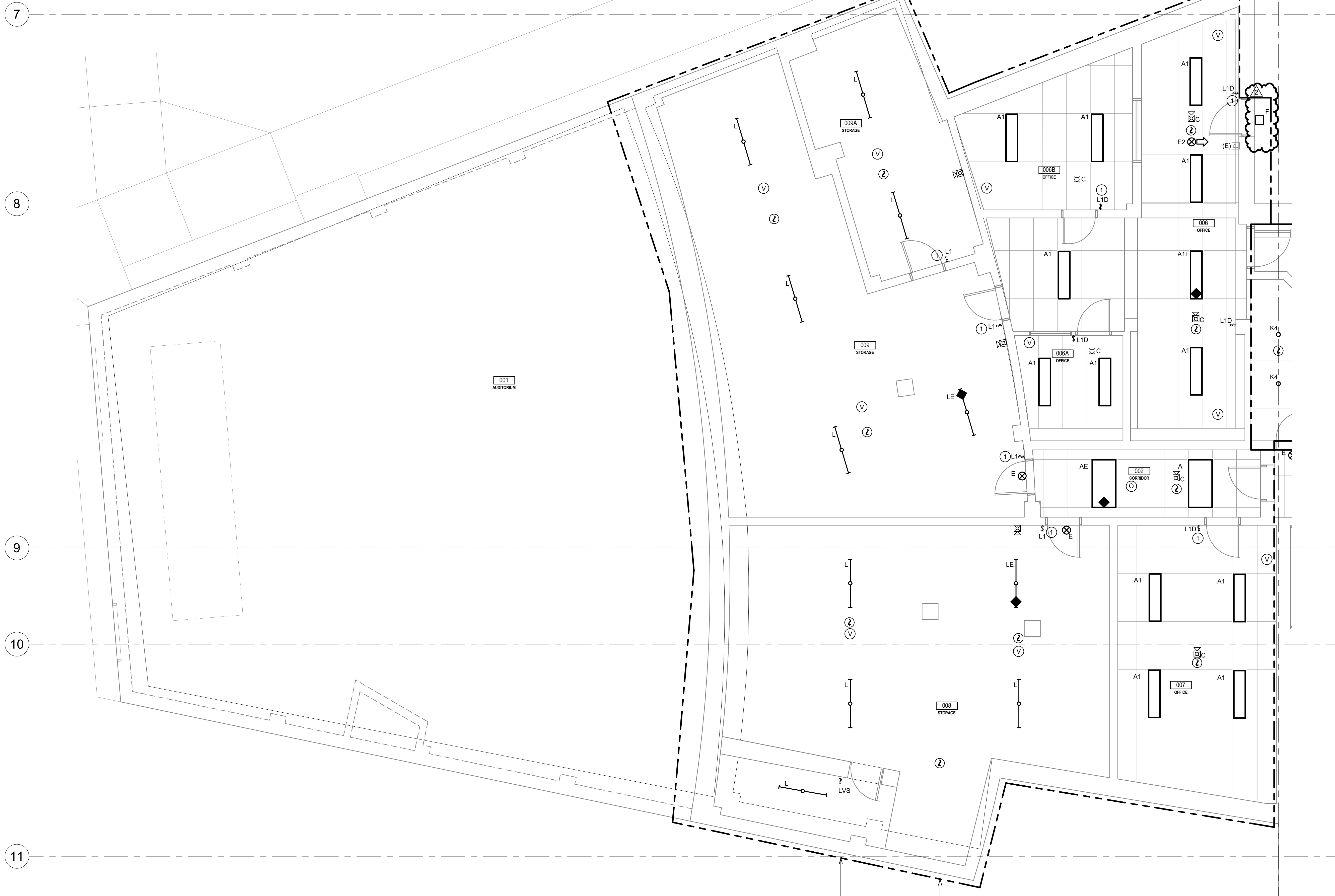
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GROUND FLOOR AREA C - ELECTRICAL

SHEET
E3.30C



- GENERAL NOTES:**
- COORDINATE THE EXACT LOCATION OF DEVICES, FIXTURES, AND EQUIPMENT PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
 - SALVAGE EXISTING NOTIFICATION DEVICES TO OWNER.
 - REUSE EXISTING LIGHTING CONTROLS CONDUIT AND BOXES AS POSSIBLE.
 - PROVIDE INTERFACE MODULE FOR BMS CONTROLS IN EACH OCCUPIED SPACE FOR EVERY VACANCY AND OCCUPANCY SENSOR.
- KEYNOTES:**
- PROVIDE SURFACE METAL RACEWAY FOR SWITCHES AND WALL MOUNTED FIRE ALARM DEVICES INSTALLED IN CONCRETE AND CMU WALLS.

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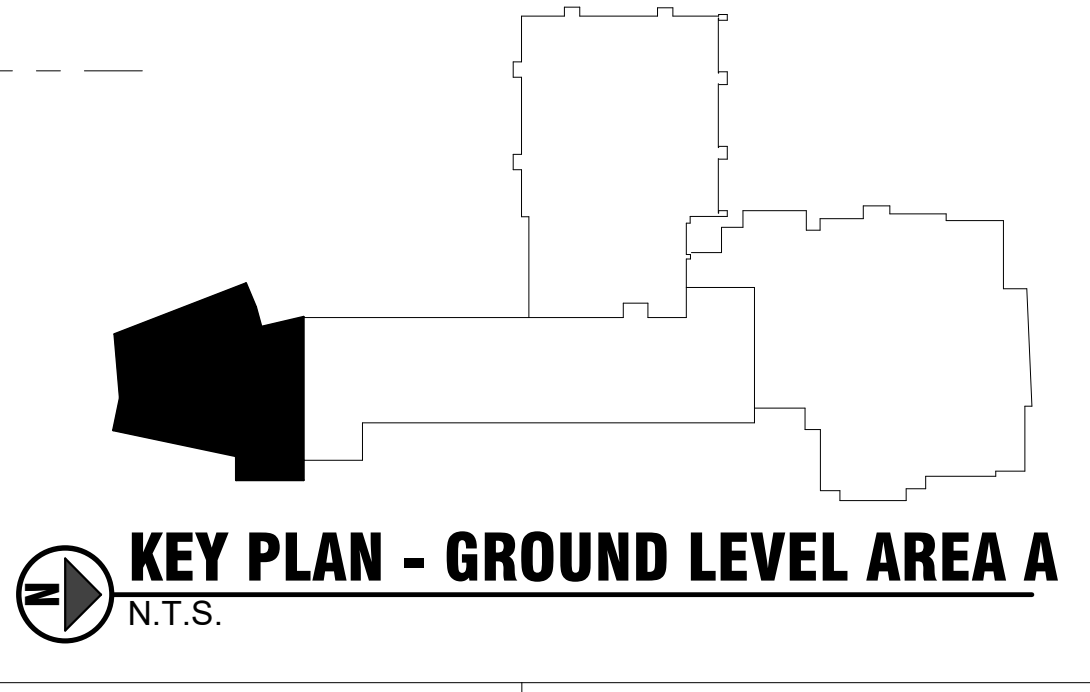
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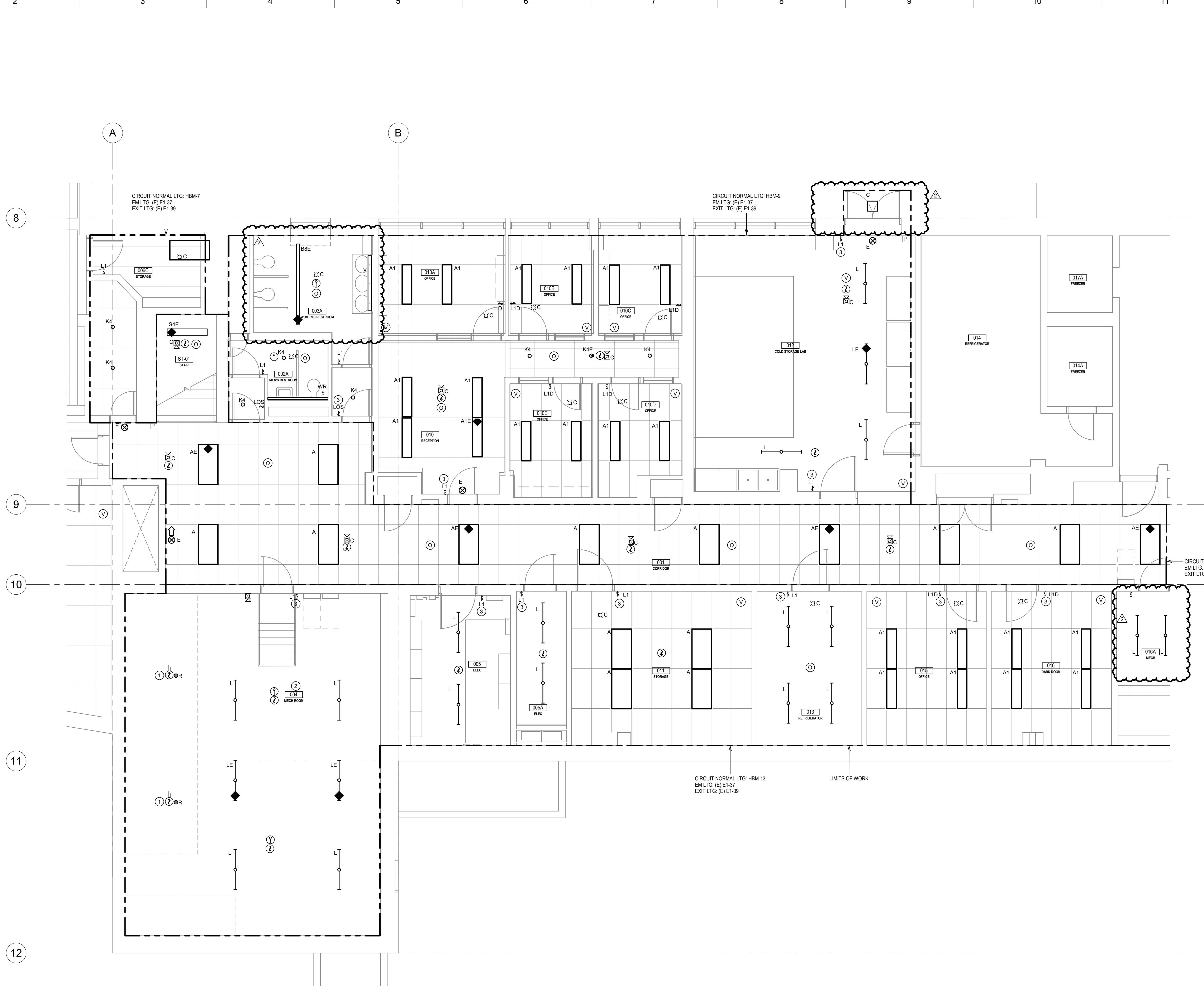
GROUND FLOOR AREA A - LIGHTING & FIRE ALARM

SHEET
E3.50A

GROUND FLOOR - AREA A - LIGHTING & FIRE ALARM
1/4" = 1'-0"



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GROUND FLOOR - AREA B - LIGHTING & FIRE ALARM
 1/4" = 1'-0"

- GENERAL NOTES:**
- COORDINATE THE EXACT LOCATION OF DEVICES, FIXTURES, AND EQUIPMENT PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
 - SALVAGE EXISTING NOTIFICATION DEVICES TO OWNER.
 - REUSE EXISTING LIGHTING CONTROLS CONDUIT AND BOXES AS POSSIBLE.
 - PROVIDE INTERFACE MODULE FOR BMS CONTROLS IN EACH OCCUPIED SPACE FOR EVERY VACANCY AND OCCUPANCY SENSOR.
- KEYNOTES:**
- CONTRACTOR TO PROVIDE REMOTE TEST STATION IN AN ACCESSIBLE LOCATION FOR EACH SMOKE DETECTOR, DUCT SMOKE DETECTORS TO BE OFI.
 - COORDINATE LIGHTING AND FIRE ALARM DEVICES WITH DIVISION 23 DUCTS AND PIPING.
 - PROVIDE SURFACE METAL RACEWAY FOR SWITCHES AND WALL MOUNTED FIRE ALARM DEVICES INSTALLED IN CONCRETE AND CMU WALLS.

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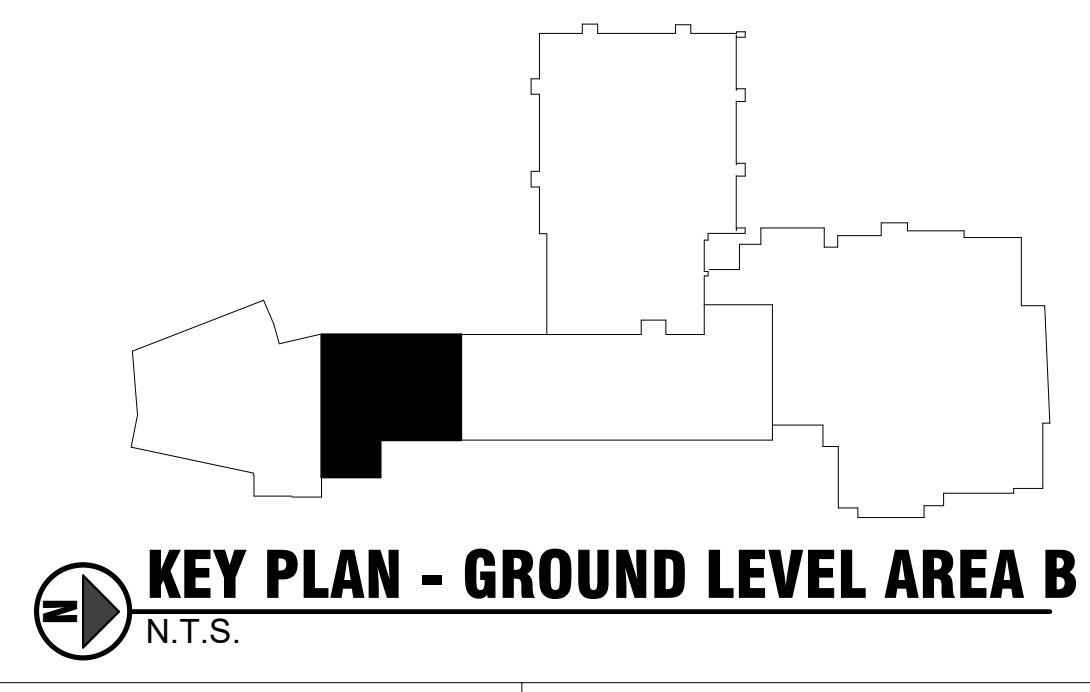
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GROUND FLOOR
AREA B -
LIGHTING &
FIRE ALARM

SHEET
E3.50B



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- GENERAL NOTES:**
- COORDINATE THE EXACT LOCATION OF DEVICES, FIXTURES, AND EQUIPMENT PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
 - SALVAGE EXISTING NOTIFICATION DEVICES TO OWNER.
 - REUSE EXISTING LIGHTING CONTROLS CONDUIT AND BOXES AS POSSIBLE.
 - PROVIDE INTERFACE MODULE FOR BMS CONTROLS IN EACH OCCUPIED SPACE FOR EVERY VACANCY AND OCCUPANCY SENSOR.
- KEYNOTES:**
- PROVIDE SURFACE METAL RACEWAY FOR SWITCHES AND WALL MOUNTED FIRE ALARM DEVICES INSTALLED IN CONCRETE AND CMU WALLS.

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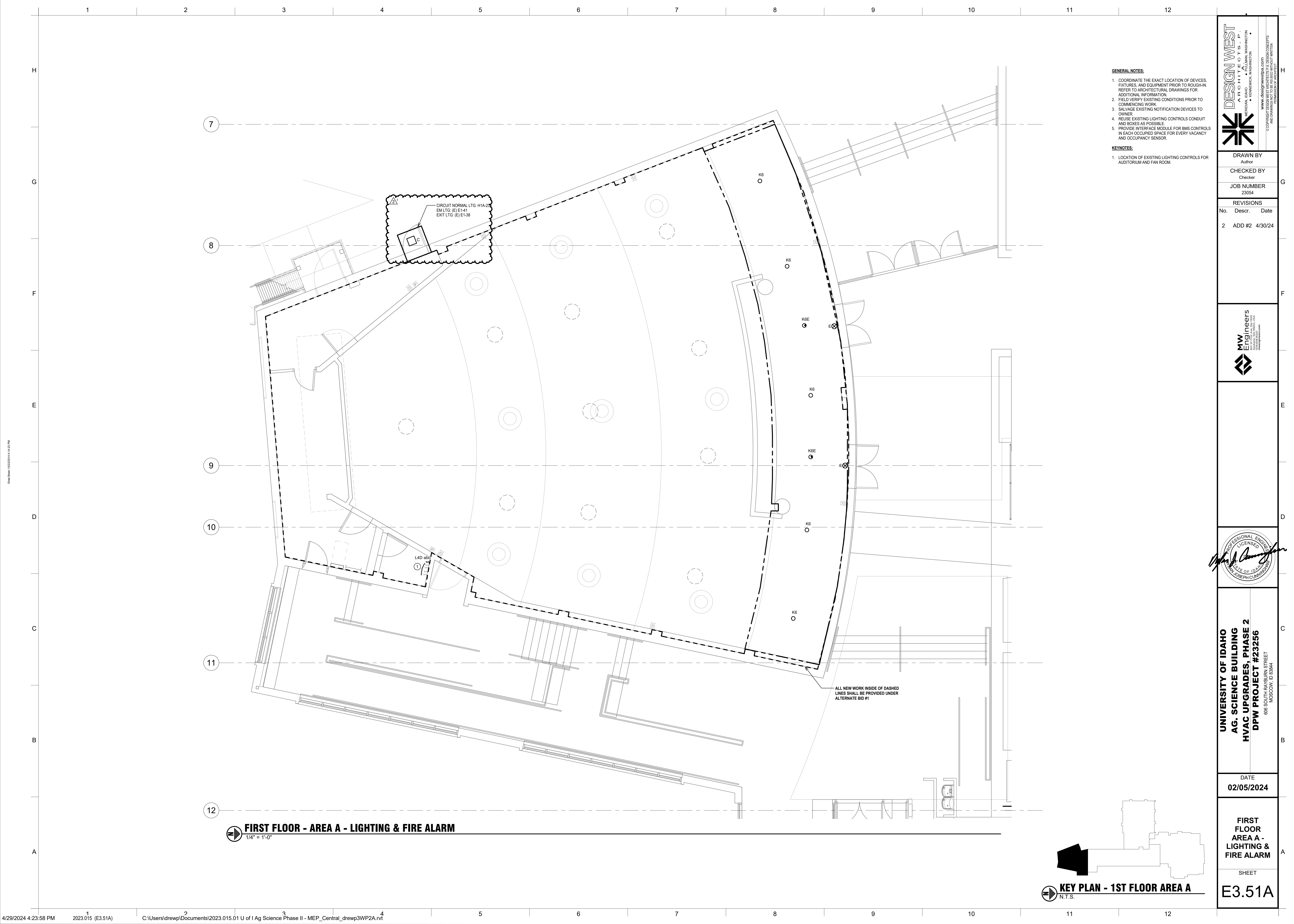
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GROUND FLOOR AREA C - LIGHTING & FIRE ALARM

SHEET
E3.50C

GROUND FLOOR - AREA C - LIGHTING & FIRE ALARM
 1/4" = 1'-0"





- GENERAL NOTES:**
- COORDINATE THE EXACT LOCATION OF DEVICES, FIXTURES, AND EQUIPMENT PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
 - SALVAGE EXISTING NOTIFICATION DEVICES TO OWNER.
 - REUSE EXISTING LIGHTING CONTROLS CONDUIT AND BOXES AS POSSIBLE.
 - PROVIDE INTERFACE MODULE FOR BMS CONTROLS IN EACH OCCUPIED SPACE FOR EVERY VACANCY AND OCCUPANCY SENSOR.
- KEYNOTES:**
- LOCATION OF EXISTING LIGHTING CONTROLS FOR AUDITORIUM AND FAN ROOM.

CIRCUIT NORMAL LTG. H1A-20
 EM LTG. (E) E1-41
 EXIT LTG. (E) E1-38

L4D abc

ALL NEW WORK INSIDE OF DASHED LINES SHALL BE PROVIDED UNDER ALTERNATE BID #1

FIRST FLOOR - AREA A - LIGHTING & FIRE ALARM
 1/4" = 1'-0"

KEY PLAN - 1ST FLOOR AREA A
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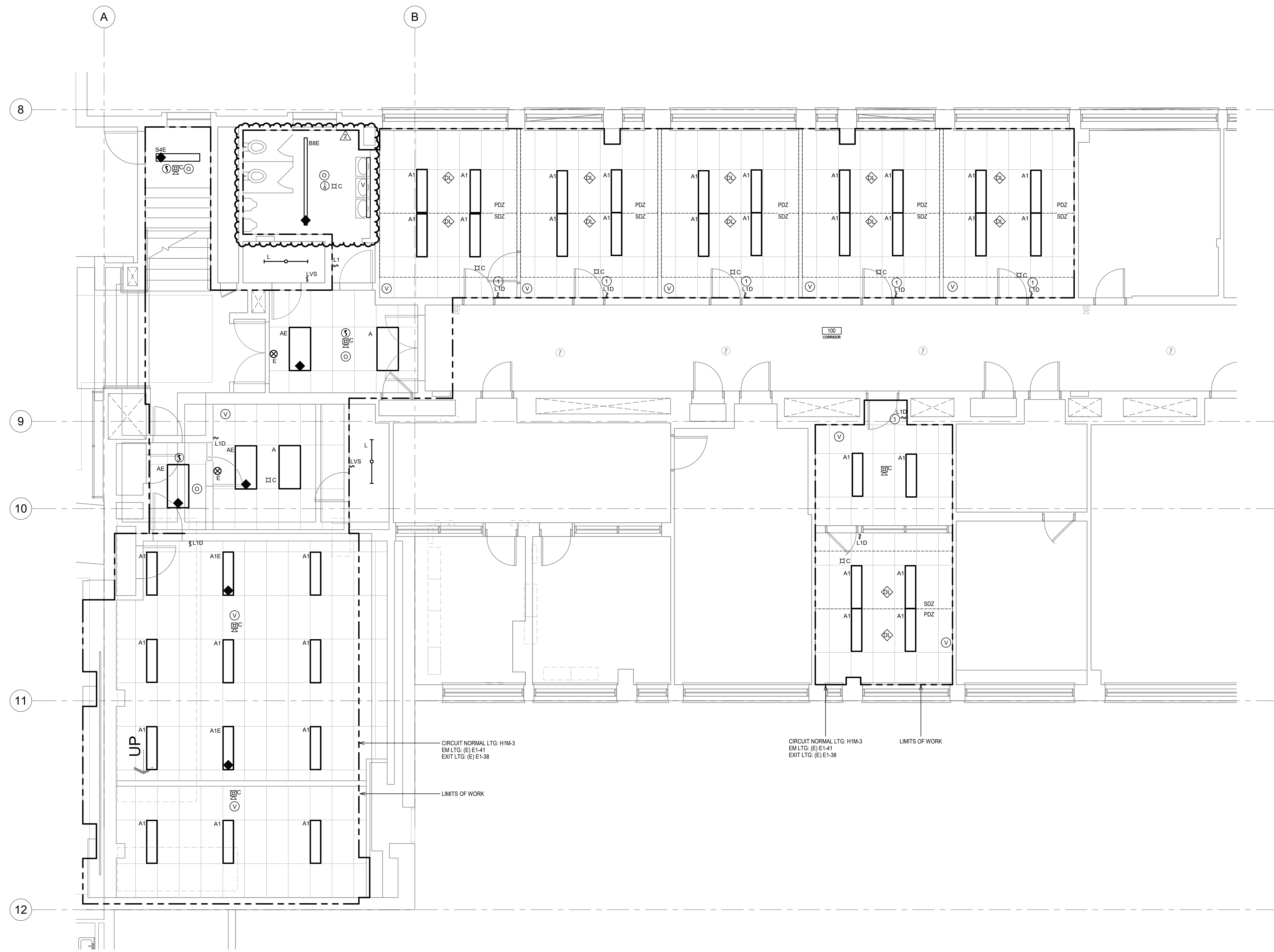
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FIRST FLOOR AREA A - LIGHTING & FIRE ALARM

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E3.51A

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FIRST FLOOR - AREA B - LIGHTING & FIRE ALARM
 1/4" = 1'-0"

- GENERAL NOTES:**
- COORDINATE THE EXACT LOCATION OF DEVICES, FIXTURES, AND EQUIPMENT PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
 - SALVAGE EXISTING NOTIFICATION DEVICES TO OWNER.
 - REUSE EXISTING LIGHTING CONTROLS CONDUIT AND BOXES AS POSSIBLE.
 - PROVIDE INTERFACE MODULE FOR BMS CONTROLS IN EACH OCCUPIED SPACE FOR EVERY VACANCY AND OCCUPANCY SENSOR.
- KEYNOTES:**
- PROVIDE SURFACE METAL RACEWAY FOR SWITCHES AND WALL MOUNTED FIRE ALARM DEVICES INSTALLED IN CONCRETE AND CMU WALLS.

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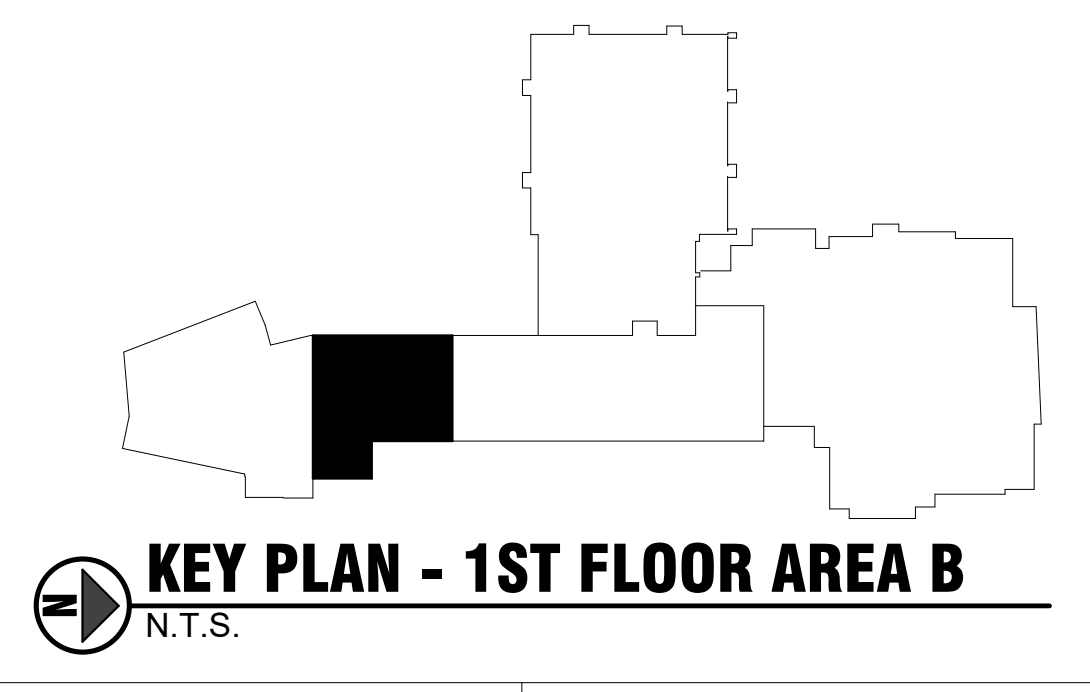
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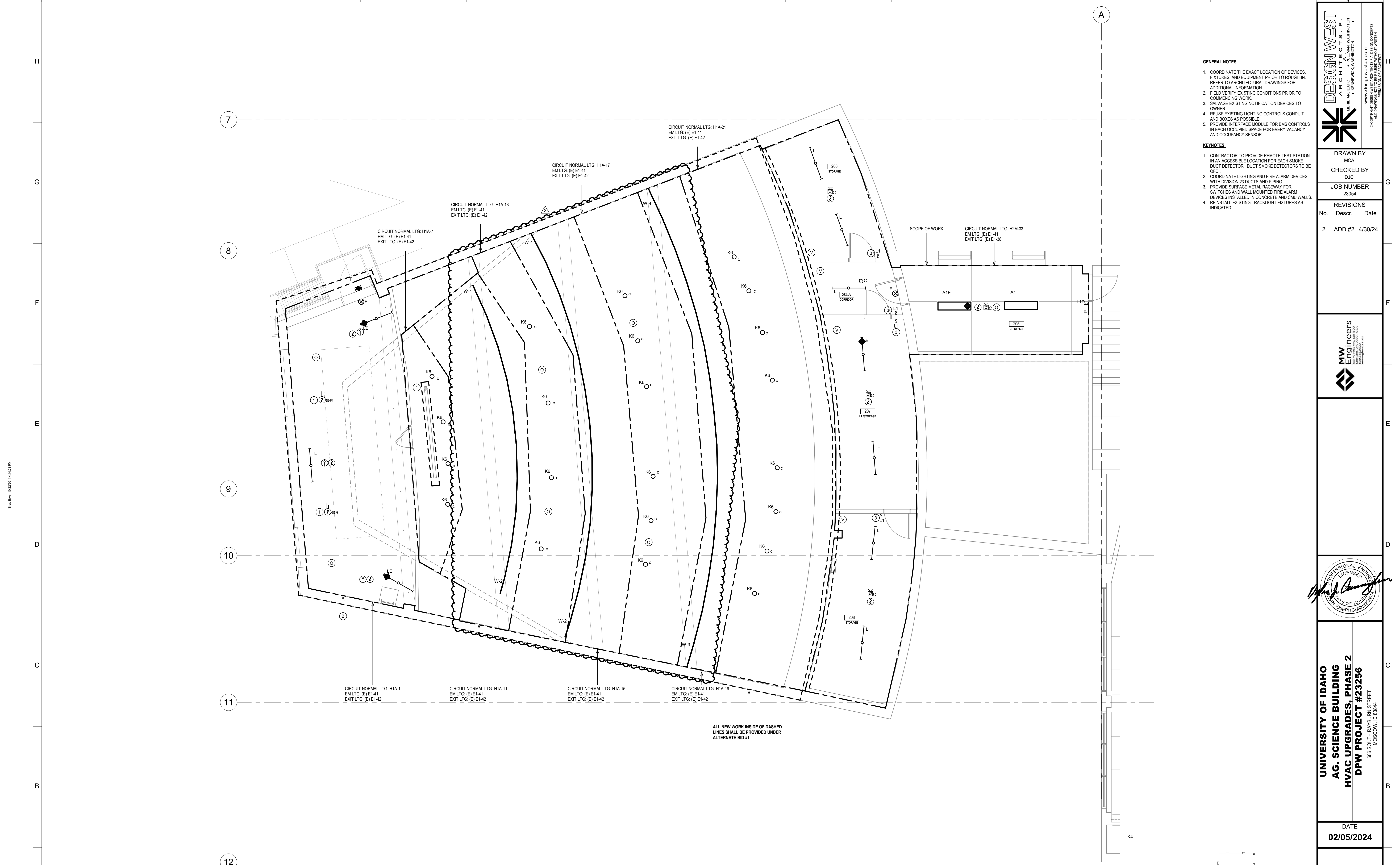
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FIRST FLOOR AREA B - LIGHTING & FIRE ALARM

SHEET
E3.51B





- GENERAL NOTES:**
- COORDINATE THE EXACT LOCATION OF DEVICES, FIXTURES, AND EQUIPMENT PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
 - SALVAGE EXISTING NOTIFICATION DEVICES TO OWNER.
 - REUSE EXISTING LIGHTING CONTROLS CONDUIT AND BOXES AS POSSIBLE.
 - PROVIDE INTERFACE MODULE FOR BMS CONTROLS IN EACH OCCUPIED SPACE FOR EVERY VACANCY AND OCCUPANCY SENSOR.
- KEYNOTES:**
- CONTRACTOR TO PROVIDE REMOTE TEST STATION IN AN ACCESSIBLE LOCATION FOR EACH SMOKE/DUCT DETECTOR. DUCT SMOKE DETECTORS TO BE OFI.
 - COORDINATE LIGHTING AND FIRE ALARM DEVICES WITH DIVISION 23 DUCTS AND PIPING.
 - PROVIDE SURFACE METAL RACEWAY FOR SWITCHES AND WALL MOUNTED FIRE ALARM DEVICES INSTALLED IN CONCRETE AND CMU WALLS.
 - REINSTALL EXISTING TRACKLIGHT FIXTURES AS INDICATED.

SECOND FLOOR - AREA A - LIGHTING & FIRE ALARM
1/4" = 1'-0"

ALL NEW WORK INSIDE OF DASHED LINES SHALL BE PROVIDED UNDER ALTERNATE BID #1

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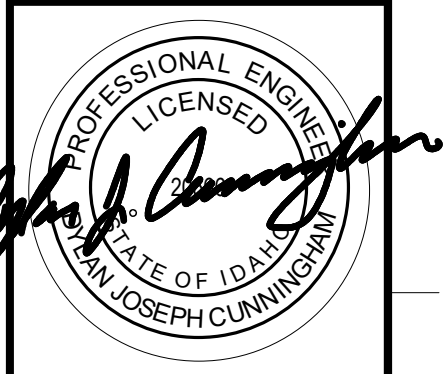
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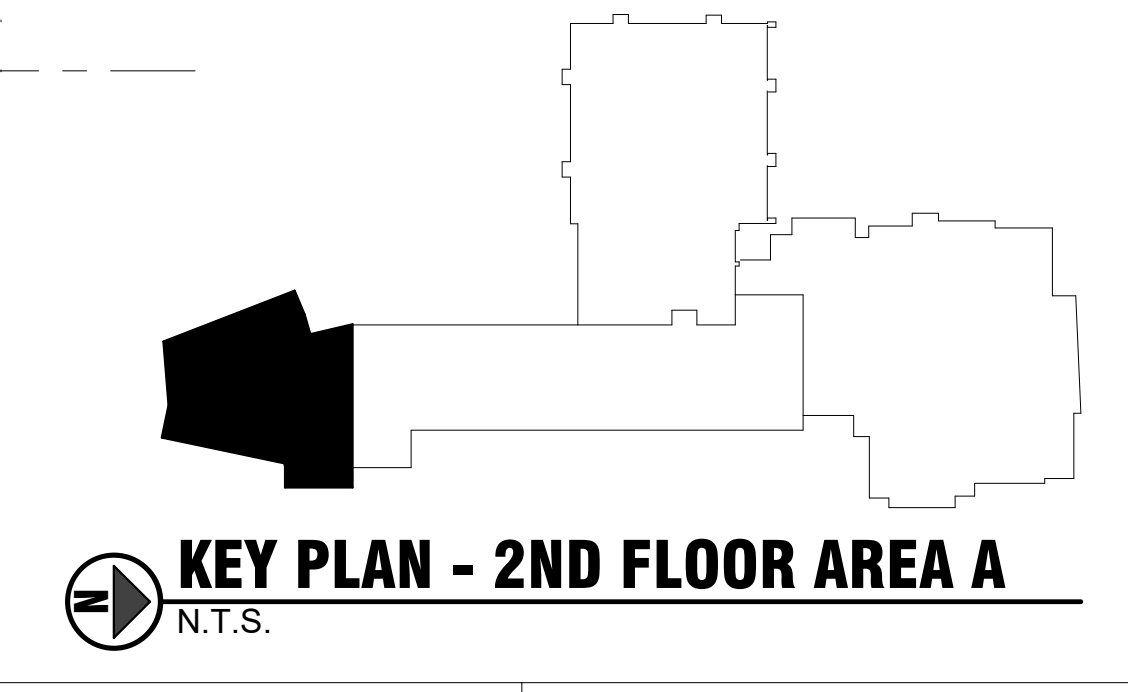


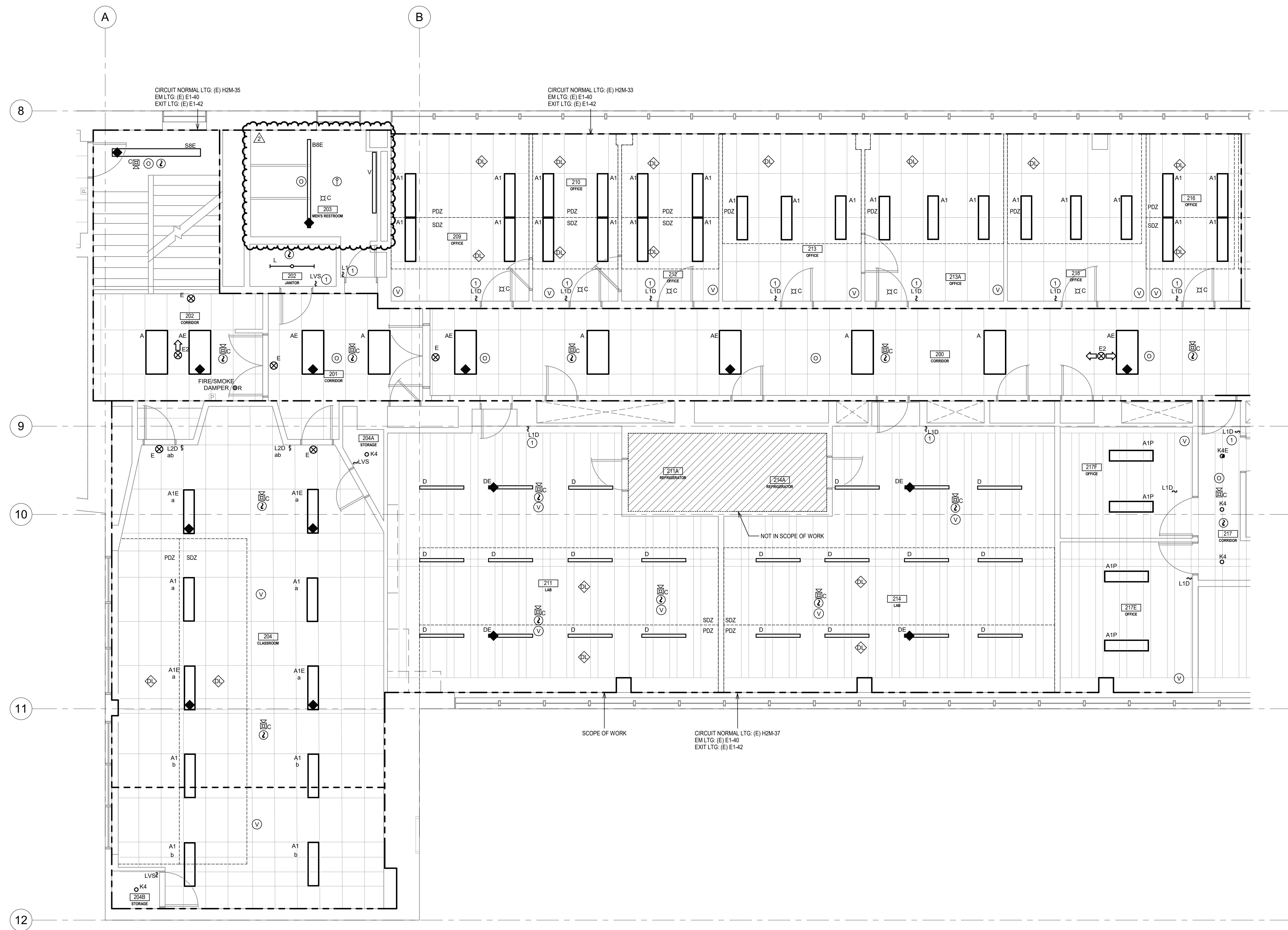
UNIVERSITY OF IDAHO
AG. SCIENCE BUILDING
HVAC UPGRADES, PHASE 2
DPW PROJECT #23256
686 SOUTH HAYBURN STREET
MOSSCOW, ID 83844

DATE
02/05/2024

SECOND FLOOR AREA A - LIGHTING & FIRE ALARM

SHEET
E3.52A





SECOND FLOOR - AREA B - LIGHTING & FIRE ALARM
 1/4" = 1'-0"

- GENERAL NOTES:**
- COORDINATE THE EXACT LOCATION OF DEVICES, FIXTURES, AND EQUIPMENT PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
 - SALVAGE EXISTING NOTIFICATION DEVICES TO OWNER.
 - REUSE EXISTING LIGHTING CONTROLS CONDUIT AND BOXES AS POSSIBLE.
 - PROVIDE INTERFACE MODULE FOR BMS CONTROLS IN EACH OCCUPIED SPACE FOR EVERY VACANCY AND OCCUPANCY SENSOR.
- KEYNOTES:**
- PROVIDE SURFACE METAL RACEWAY FOR SWITCHES AND WALL MOUNTED FIRE ALARM DEVICES INSTALLED IN CONCRETE AND CMU WALLS.

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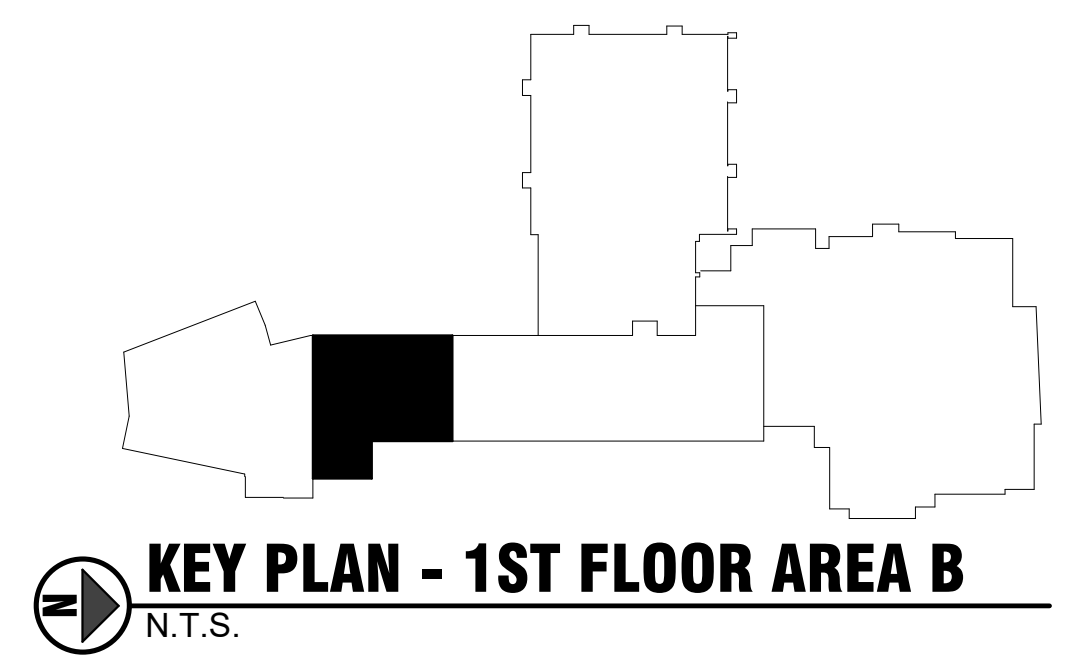
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DPW PROJECT #23256
 606 SOUTH RAVENHURST STREET
 MOSCOW, ID 83844

DATE
02/05/2024

SECOND FLOOR AREA B - LIGHTING & FIRE ALARM

SHEET
E3.52B



PROTECT AND PRESERVE EXISTING PLUMBING PIPING.

DEMOLISH EXISTING CONDENSATE RACKS AND ASSOCIATED DISCONNECTS AND WIRING.



4 016A Photo #1
N.T.S.

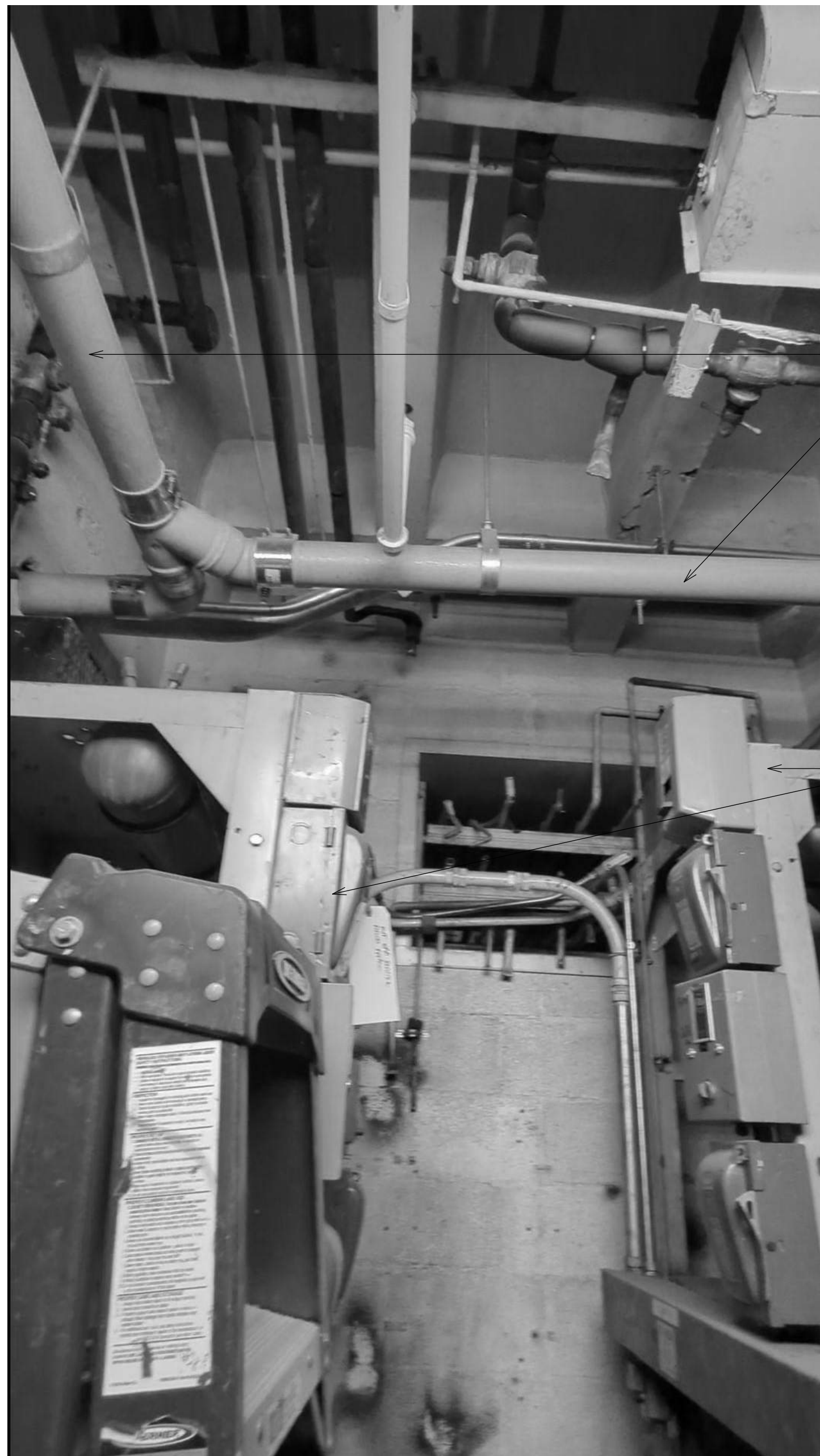
DEMOLISH EXISTING CONDENSATE RACKS AND ASSOCIATED DISCONNECTS AND WIRING.



5 016A Photo #3
N.T.S.

PROTECT AND PRESERVE EXISTING PLUMBING PIPING.

DEMOLISH EXISTING CONDENSATE RACKS AND ASSOCIATED DISCONNECTS AND WIRING.

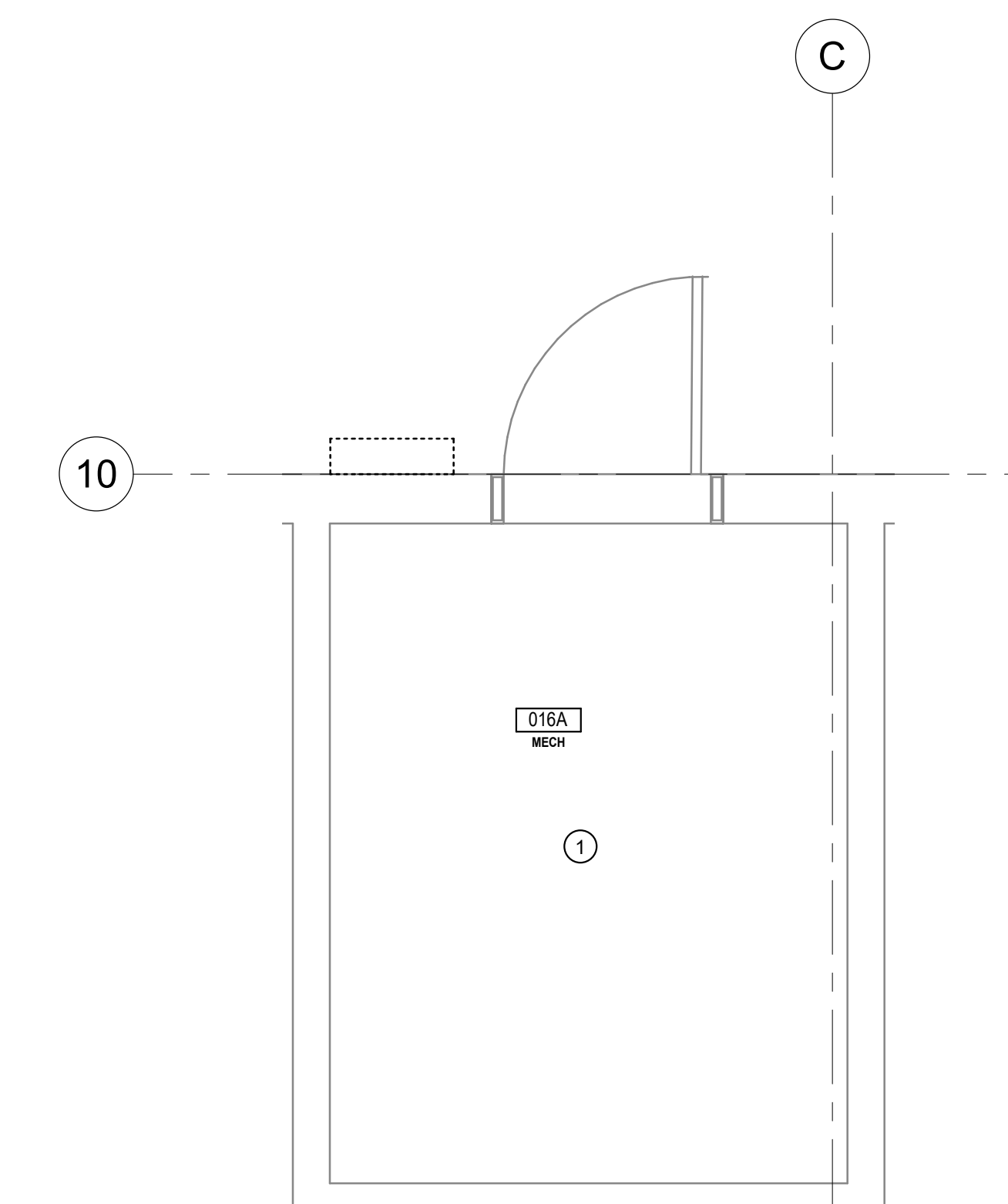


3 016A Photo #2
N.T.S.

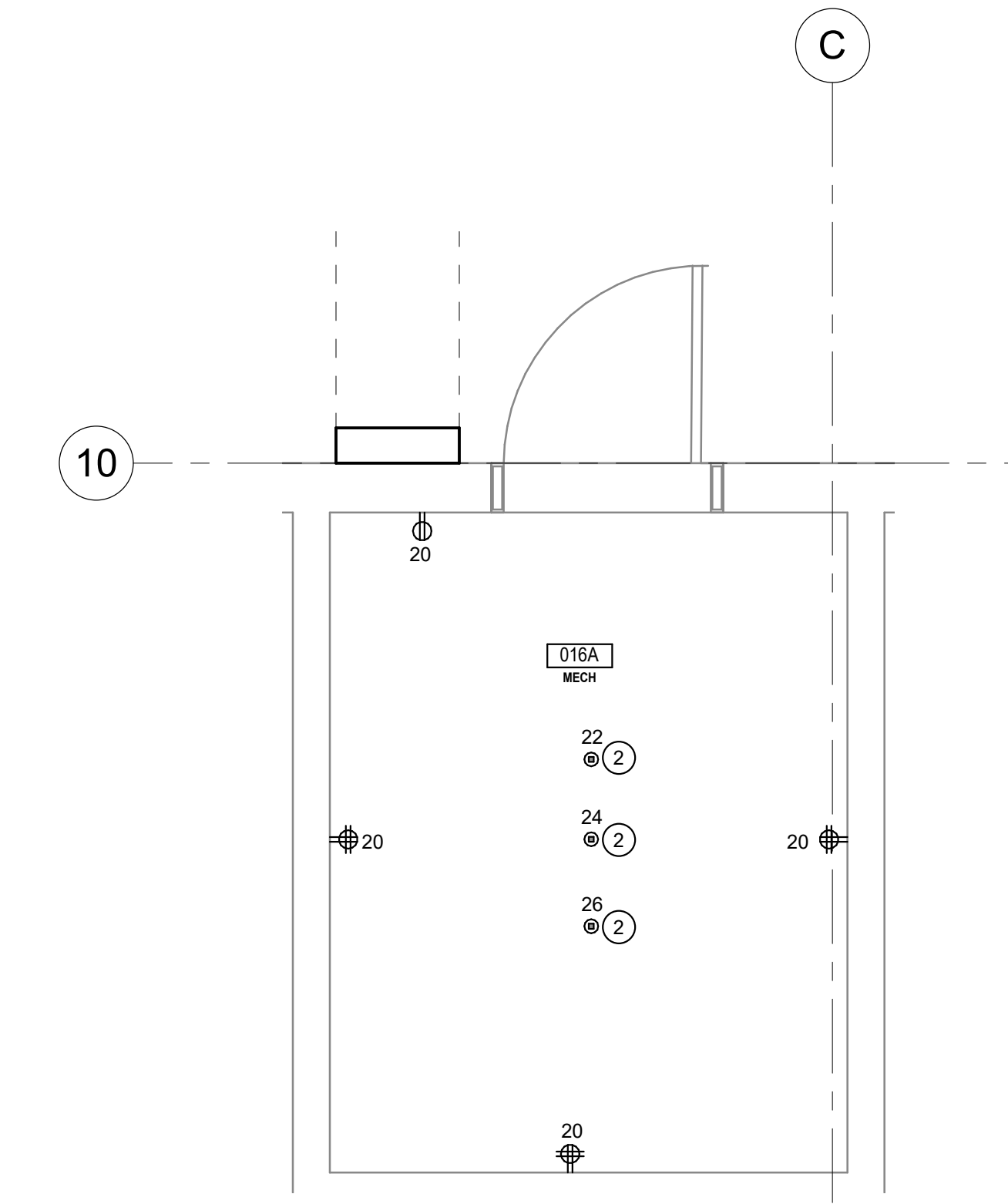
DEMOLISH EXISTING CONDENSATE RACKS AND ASSOCIATED DISCONNECTS AND WIRING.



6 016A Photo #4
N.T.S.



1 GROUND FLOOR - ENLARGED IDF - ELECTRICAL - DEMO
1/2" = 1'-0"



2 GROUND FLOOR - ENLARGED IDF - ELECTRICAL
1/2" = 1'-0"

GENERAL NOTES:

1. FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.

KEYNOTES:

- 1. DEMOLISH ALL EXISTING CONDENSATE RACKS AND DISCONNECTS TO STRUCTURE. PROTECT AND PRESERVE EXISTING BLUE PLUMBING PIPES. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR MORE INFORMATION.
- 2. RACK MOUNTED RECEPTACLE NEMA L5-20, 2#12, 1# 12G. MOUNT AT TOP OF RACK.



DRAWN BY

Author

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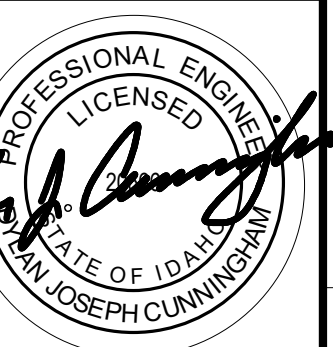
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ENLARGED VIEWS - ELECTRICAL

SHEET

E4.02

Sheet Name: 10222014_4_14_23 PM

MECHANICAL EQUIPMENT SCHEDULE - NEW - ELECTRICAL

- GENERAL NOTES:
 1. NOT USED
 2. THE NUMBER OF CONNECTION POINTS FOR AHU LIGHTING AND ACCESSORY CIRCUITS VARIES WITH MULTIPLE SWITCHES AND MANUFACTURER PROVIDED LIGHTING FIXTURES. EXTEND CIRCUIT AS REQUIRED AND COORDINATE INSTALLATION WITH DIVISION 23. PROVIDE TOGGLE SWITCH FOR AHU LIGHTS WHERE NOT INCLUDED WITH THE UNIT.
 3. COORDINATE CONNECTION DETAILS WITH EQUIPMENT VENDOR PRIOR TO ROUGH-IN.
 4. FOR ALL EQUIPMENT WITH VFD(S) PROVIDE CONTACTS & RELAYS AS REQUIRED TO INTERLOCK DISCONNECTS WITH VFD(S) TO SIGNAL VFD WHEN DISCONNECT IS OPEN.
 5. PROVIDE NEMA 3R RATED EQUIPMENT WHERE INSTALLED OUTDOORS.
 6. COORDINATE ALL FUSE SIZES WITH EQUIPMENT VENDOR, EQUIPMENT NAMEPLATES AND SHOP DRAWINGS PRIOR TO ORDERING FUSES OR DISCONNECTS.
 7. PROVIDE NEMA STARTER WHERE INDICATED ON THE SCHEDULE. PROVIDE AT MINIMUM THE SIZE INDICATED.
 8. WIRE SIZES ARE FOR COPPER CONDUCTORS UNLESS SPECIFICALLY INDICATED OTHERWISE.
 9. VFD'S ARE FURNISHED BY DIV 23 AND INSTALLED BY DIV 26. REFER TO MECHANICAL DRAWINGS FOR DETAILS.
 10. WHERE TOGGLE SWITCHES, MANUAL MOTOR STARTERS (MMS) AND MOTOR RATED SWITCHES (MRS) ARE INDICATED FOR EQUIPMENT INSTALLED IN FINISHED AREAS, THEY SHALL BE MOUNTED IN AN ADJACENT, CONCEALED AND ACCESSIBLE LOCATION.

- EQUIPMENT SPECIFIC NOTES:
 1. LOCATE VFD/STARTER/DISCONNECT ADJACENT TO EQUIPMENT LOCATION. FIELD COORDINATE EXACT LOCATION WITH MECHANICAL.
 2. DEMOLISH EXISTING EQUIPMENT, WIRING, CONDUIT, STARTERS AND DISCONNECTS.
 3. PROVIDE WIRING FROM REMOTE SUPPLY PANELS TO FANS INSIDE OF UNIT.

Equipment Name	Description	Room #	Voltage	Phase	HP	Amps	kVA	Starter	Disconnect	Fuse Size	# of Sets	Conduit Size	Wire Size/Qty (AWG)	Panel	Circuit Number	Notes
AC-1	AIR COMPRESSOR - EXIST	004	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
AHU-R-AUD	AIR HANDLING UNIT IN AUDITORIUM - RETURN		480 V	3	(2)3	35 A	29,098 kVA	VFD	3P-60A	40A	1	3/4"	3#8+1#10G	H1A	2,4,6	1
AHU-S-AUD	AIR HANDLING UNIT IN AUDITORIUM - SUPPLY		480 V	3	(2)7.5	35 A	29,098 kVA	VFD	3P-60A	40A	1	3/4"	3#8+1#10G	H1A	1,3,5	1
BMS-1	BUILDING MANAGMENT SYSTEM	001	120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	LBM	1	
BMS-2	BUILDING MANAGMENT SYSTEM	001	120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	LBM	1	
BMS-3	BUILDING MANAGMENT SYSTEM	001	120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	LBM	3	
BMS-4	BUILDING MANAGMENT SYSTEM	001	120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	LBM	3	
BMS-5	BUILDING MANAGMENT SYSTEM	001	120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	LBM	3	
BMS-6	BUILDING MANAGMENT SYSTEM	100	120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	LBM	5	
BMS-7	BUILDING MANAGMENT SYSTEM	100	120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	LBM	5	
BMS-8	BUILDING MANAGMENT SYSTEM	201	120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	(E) L2M	15	
BMS-9	BUILDING MANAGMENT SYSTEM	200	120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	(E) L2M	15	
BMS-10	BUILDING MANAGMENT SYSTEM	200	120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	(E) L2M	15	
BMS-11	BUILDING MANAGMENT SYSTEM	200	120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	(E) L2M	17	
BMS-12	BUILDING MANAGMENT SYSTEM	200	120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	(E) L2M	17	
BMS-13	BUILDING MANAGMENT SYSTEM		120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	LBM	11	
BMS-14	BUILDING MANAGMENT SYSTEM		120 V	1	--	5 A	0,600 kVA	--	--	--	1	3/4"	2#12+1#12G	LBM	11	
CU-1	CONDENSING UNIT - EXIST		120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
CU-2	CONDENSING UNIT - EXIST		120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
CWCP-AUD-1	CIRCULATING PUMP		480 V	3	1	2.1 A	1,746 kVA	VFD	3P-30A	10A	1	3/4"	3#12+1#12G	H1A	8,10,12	1
CWCP-G-1	CIRCULATING PUMP	004	480 V	3	1	2.1 A	1,746 kVA	VFD	3P-30A	10A	1	3/4"	3#12+1#12G	HBM	25,27,29	1
CWP-G-1	CIRCULATING PUMP	004	480 V	3	1.5	3 A	2,494 kVA	VFD	3P-30A	10A	1	3/4"	3#12+1#12G	HBM	26,28,30	1
DOAS-G-1R	DOAS UNIT IN BASEMENT - RETURN	004	480 V	3	(2)5	9 A	7,482 kVA	VFD	3P-30A	--	1	3/4"	3#12+1#12G	HBM	2,4,6	1,3
DOAS-G-1S	DOAS UNIT IN BASEMENT - SUPPLY	004	480 V	3	(2)2	14 A	11,639 kVA	VFD	3P-30A	--	1	3/4"	3#12+1#12G	HBM	1,3,5	1,3
DOAS-G-HW	DOAS UNIT IN BASEMENT	004	480 V	3	3/4	2 A	1,663 kVA	--	3P-30A	--	1	3/4"	3#12+1#12G	HBM	8,10,12	1
DOAS_AUD_EXIST	EXISTING AHU IN AUDITORIUM (EXISTING)		208 V	3	--	23 A	8,286 kVA	--	--	--	1	3/4"	3#10+1#10G			2
DOAS_BASE_EXIST	EXISTING DOAS IN BASEMENT (EXISTING)	004	480 V	3	--	19 A	15,796 kVA	--	--	--	1	3/4"	3#10+1#10G			2
ETP-1	ELECTRONIC TRAP PRIMER		120 V	1	--	0.28 A	0,034 kVA	--	--	--	1	3/4"	2#12+1#12G	LBM	17	
ETP-2	ELECTRONIC TRAP PRIMER	004	120 V	1	--	0.28 A	0,034 kVA	--	--	--	1	3/4"	2#12+1#12G	LBM	19	
FCU-2	FAN COIL UNIT - EXIST	010E	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-3	FAN COIL UNIT - EXIST	018B	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-4	FAN COIL UNIT - EXIST	028E	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-5	FAN COIL UNIT - EXIST		120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-6	FAN COIL UNIT - EXIST	217	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-7	FAN COIL UNIT - EXIST	223	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-8	FAN COIL UNIT - EXIST	225	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-9	FAN COIL UNIT - EXIST	018	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-10	FAN COIL UNIT - EXIST	018D	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-11	FAN COIL UNIT - EXIST	028	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-12	FAN COIL UNIT - EXIST	028B	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-13	FAN COIL UNIT - EXIST	031	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-14	FAN COIL UNIT - EXIST		120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-15	FAN COIL UNIT - EXIST	217A	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			2
FCU-G-1	FAN COIL UNIT	012	208 V	1	(2) 3/4	11 A	2,288 kVA	NEMA 00	2P-30A	15A	1	3/4"	2#12+1#12G	LBM	13,15	
P-1	CIRCULATING PUMP		480 V	3	7.5	11 A	9,145 kVA	VFD	3P-30A	20A	1	3/4"	3#12+1#12G	H1M	2,4,6	1
P-1_EXIST	CIRCULATING PUMP		208 V	3	7.5	25.3 A	9,115 kVA	--	--	--	1	1"	3#8+1#10G			1
P-2	CIRCULATING PUMP		480 V	3	7.5	11 A	9,145 kVA	VFD	3P-30A	20A	1	3/4"	3#12+1#12G	H1M	8,10,12	1
P-2_EXIST	CIRCULATING PUMP		208 V	3	7.5	25.3 A	9,115 kVA	--	--	--	1	1"	3#8+1#10G			1
PCWP-G-1	CIRCULATING PUMPS	004	480 V	3	7.5	11 A	9,145 kVA	VFD	3P-30A	20A	1	3/4"	3#12+1#12G	HBM	14,16,18	1
PCWP-G-2	CIRCULATING PUMPS	004	480 V	3	7.5	11 A	9,145 kVA	VFD	3P-30A	20A	1	3/4"	3#12+1#12G	HBM	20,22,24	1

PROVIDE EQUIPMENT UNDER ALTERNATE BID #1

PROVIDE EQUIPMENT UNIT UNDER ALTERNATE BID #1

PROVIDE EQUIPMENT UNIT UNDER ALTERNATE BID #1

LIGHTING FIXTURE SCHEDULE

- KEYNOTES:
 1. FIELD COORDINATE JUMPER CABLES AS NEEDED PRIOR TO ORDERING.
 2. FIXTURE TO BE ORIENTED SO THAT ASYMMETRIC THROW IS TOWARD BACK OF COVE.

Type	Description	Ballast Voltage	Lamp	VA	Manufacturer	Model #	Keynote
A	2X4 RECESSED LED PANEL	277 V	LED	31 VA	LITHONIA	EPANL-2X4-3000LM-80CRI-40K-MINI-ZT-MVOLT	
A1	1X4 RECESSED LED PANEL	277 V	LED	27 VA	LITHONIA	EPANL-1X4-3000LM-80CRI-40K-MINI-ZT-MVOLT	
A1E	1X4 RECESSED LED PANEL	120 V	LED	27 VA	LITHONIA	EPANL-1X4-3000LM-80CRI-40K-MINI-ZT-MVOLT	
A1P	1X4 PENDANT LED	277 V	LED	27 VA	LITHONIA	EPANL-1X4-3000LM-80CRI-40K-MINI-ZT-MVOLT-PAC 2DF 72	
A12	1X4 RECESSED LED PANEL	277 V	LED	37 VA	LITHONIA	EPANL-1X4-4000LM-80CRI-40K-MINI-ZT-MVOLT	
AE	2X4 RECESSED LED PANEL	120 V	LED	31 VA	LITHONIA	EPANL-2X4-3000LM-80CRI-40K-MINI-ZT-MVOLT	
BE	SURFACE MOUNTED FIXTURE - 8 FT	120 V	LED	30 VA	STARTEK	BE-8-3000SD-30K-80CRI-40K-CL2	
C	LED CANOPY SPLIT	120 V	LED	28 VA	LITHONIA	SCNY-LED-P-10K-EP-CL-MVOLT-DR-1X4	
D	BEAM DIRECT/INDIRECT	277 V	LED	50 VA	STARTEK LIGHTING	BEAMD1-4FT-1000-350-WD-BW-40K-90-PW-ACW05-U-AC	
DE	BEAM DIRECT/INDIRECT	120 V	LED	50 VA	STARTEK LIGHTING	BEAMD1-4FT-1000-350-WD-BW-40K-90-PW-ACW05-U-AC	
E	LED EXIT FIXTURE - SINGLE FACE	120 V	LED	4 VA	LITHONIA	LE-S-W-1-G-ELN-SD	
E2	LED EXIT FIXTURE - DUAL FACE	120 V	LED	4 VA	LITHONIA	LE-S-W-2-G-ELN-SD	
F	EXTERIOR WALL MOUNTED FIXTURE	120 V	LED	10 VA	LITHONIA	WDGE1-LED-P1-40K-80CRI-VW-MVOLT-SRM-DBLXD	
K4	4" LED RECESSED DOWNLIGHT	277 V	LED	18 VA	LITHONIA	LDN4-40-15-L04-AR-LD-MVOLT-GZ1	
K4E	4" LED RECESSED DOWNLIGHT	120 V	LED	18 VA	LITHONIA	LDN4-40-15-L04-AR-LD-MVOLT-GZ1	
K6	6" LED RECESSED DOWNLIGHT	277 V	LED	18 VA	LITHONIA	LDN6-40-15-L06-AR-LD-MVOLT-GZ1	
K6E	6" LED RECESSED DOWNLIGHT	120 V	LED	18 VA	LITHONIA	LDN6-40-15-L06-AR-LD-MVOLT-GZ1	
L	4" LED INDUSTRIAL STRIP LIGHT	277 V	LED	35 VA	LITHONIA	CLX-L48-5000LM-SEF-FDL-WD-MVOLT-GZ10-40K-80CRI-WH-ZACVH M100	
LE	4" LED INDUSTRIAL STRIP LIGHT	120 V	LED	35 VA	LITHONIA	CLX-L48-5000LM-SEF-FDL-WD-MVOLT-GZ10-40K-80CRI-WH-ZACVH M100	
S4E	SURFACE MOUNT LINEAR	120 V	LED	88 VA	Peerless	BRM9L-S-LCB-MSLB-80CRI-40K-1000LMF-MINI-ZT-MVOLT	
SBE	SURFACE MOUNT LINEAR	120 V	LED	88 VA	Peerless	BRM9L-S-LCB-MSLB-80CRI-40K-1000LMF-MINI-ZT-MVOLT	
W	LINEAR COVE	277 V	LED	16 VA	SCOTT LIGHTING	VERS-09-SW-5.0-40-DRY-ASYM-S1A/P1A-C0N6/C0N6-CL3/C0N6-WH-CL2-MG-WH-2-0'-0	1, 2
W-2	LINEAR COVE	277 V	LED	15 VA	OTL	VERS-09-SW-5.0-40-DRY-ASYM-S1A/P1A-C0N6/C0N6-CL3/C0N6-WH-CL2-MG-WH-3-0'-0	1, 2
W-4	LINEAR COVE	277 V	LED	20 VA	OTL	VERS-09-SW-5.0-40-DRY-ASYM-S1A/P1A-C0N6/C0N6-CL3/C0N6-WH-CL2-MG-WH-4-0'-0	1, 2
WR-6	WALL DIRECT LED	277 V	LED	14 VA	MARK	IS2WD-LP-8F-80CRI-40K-300LMF-WG-SC1-NODIM-FL-MVOLT-SLV1	

GENERAL EQUIPMENT SCHEDULE - NEW - ELECTRICAL

- GENERAL NOTES:
 1. ALL SPECIFIED ELECTRICAL PROVISIONS SHALL BE PROVIDED BY DIVISION 26, UNLESS NOTED OTHERWISE.
 2. ALL WIRE SIZES ARE FOR COPPER CONDUCTORS UNLESS SPECIFICALLY INDICATED OTHERWISE ON SCHEDULE.
- EQUIPMENT SPECIFIC NOTES:
 1. DEMOLISH EXISTING EQUIPMENT AND REPLACE WITH NEW EQUIPMENT AS SHOWN ON FLOOR PLANS. REUSE EXISTING WIRING AND BREAKERS UNLESS NOTED OTHERWISE.
 2. INSTALL NEW EQUIPMENT PER MANUFACTURER SPECIFICATIONS. SEE MECHANICAL DRAWINGS FOR MORE INFORMATION.

z	Description	Room #	Voltage	Phase	HP	Amps	kVA	Starter	Disconnect	Fuse Size	# of Sets	Conduit Size	Wire Size/Qty (AWG)	Panel	Circuit Number	Notes
FH-211-1	FUME HOOD	211	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G	(E) L2M	19	2
FH-211-1_EXIST	FUME HOOD (EXISTING)	211	120 V	1	--	10 A	1,200 kVA	--	--	--	1	3/4"	2#12+1#12G			

Circuit Breaker Panelboard														
Name: (R) 2-J		Main: Lugs		Mounting: SURFACE		Bus: 225A		A.I.C Rating: 10000						
Phase: 3		Wire: 4												
Ckt#	Breaker	Phase	Qty	Notes	Location/Description	Load (VA)	Phase	Breaker	Outlets	Notes	Location/Description	Load (VA)		
1	20	1	4	R	OUTLET RM 217	720	x	2	50	3	1	Z	1700	
3	20	1	4	R	COPIER RM 217	720	x	4					1700	
5	20	1	1	R	OUTLET UNDER PANEL	180		6					1700	
7	30	1	2	R	COPIER RM 217A	360	x	8	20	1	2	R	214 HANGING OL	360
9	20	2	1	R	S. WALL 208V RECEPT	180	x	10	20	1	1	R	SOUTH WALL 208V RECEPT	180
11	180						x	12	20	1	4	R	OUTLET RM 214	720
13	20	2	1	R	211 W. WALL 208V RECEPT	1040	x	14	20	1	4	R	OUTLET LAB 214	720
15	20	1	2	R	211 S. TABLE 120V DROP	1040	x	16	20	1	1	R	211 S. TABLE RECEPT	1200
17	20	1	1	R	211 S. TABLE 120V DROP	360	x	18	30	2	1	Z		1500
19	30	2	1	R	OUTLET CEILING 214	180	x	20						1500
21	180						x	22	20	2	1	R	211 S. TABLE R208V DROP	180
23	30	2	1	Z	211 N. WALL OVEN	2500	x	24						180
25	30	2	1	Z	211 N. WALL OVEN	2500	x	26	20	2	1	R	223L N. WALL 208V DROP	180
27	20	1	4	R	211 N. TABLE RECEPT	720	x	28						180
29	20	1	4	R	211 N. TABLE RECEPT	720	x	30	20	1	1	Z	CONTROL TRANS 217	1000
31	20	3	1	Z	211 N. WALL 3 PHASE 208V	1000	x	32	20	1	3	R	CENTER DROP CORD 211	540
33	30						x	34	20	1	1	M	FAN COIL RM 223	1500
35	1000						x	36	20	1	3	R	IDF	540
37	20	1	5	R	211 N. TABLE RECEPT	900	x	38	20	1	1	M	FAN COIL RM 217 NORTH	1500
39	20	1	5	R	211 N. TABLE RECEPT	900	x	40	20	1	1	M	CONCENTRATOR	1500
41	20	1	3	R	IDF	540	x	42	20	1	1	M	CONCENTRATOR	1500

Totals	Load on Phase A: 13,200 VA	Category	Qty	Load
	Load on Phase B: 11,180 VA	Receptacles (R):	57	10,260 VA
	Load on Phase C: 12,620 VA	Lights (L):		
	Connected Load: 37,000 VA			
	Demand Load: 33,230 VA			
	Total Load (w/heating factors): 33,605 VA			
	Minimum Feeder Size: 93.3 Amps	Motors (M):	4	6,000 VA
	Formula: 33.6 kVA / (1.732 * 0.208 kV)	Miscellaneous (Z):	5	17,100 VA

Notes:
1. PROVIDE FULL BOTTOM SKIRTS AND TOP SKIRT TO +8'-6".

Circuit Breaker Panelboard														
Name: (R) 1-H		Main: Lugs		Mounting: SURFACE		Bus: 225A		A.I.C Rating: 10000						
Phase: 3		Wire: 4												
Ckt#	Breaker	Phase	Qty	Notes	Location/Description	Load (VA)	Phase	Breaker	Outlets	Notes	Location/Description	Load (VA)		
1	20	1	6	R	RECEPT S. WALL 120V	1080	x	2	20	1	4	R	RECEPT S. WALL 120V	720
3	20	1	7	R	RECEPT CNTR N. WALL RM 129	1260	x	4	20	1	1	Z	HOOD RM 129	1000
5	20	1	6	R	RECEPT CNTR N. WALL RM 129	1080	x	6	20	1	1	Z	HOOD RM 129	1000
7	20	1	7	R	RECEPT W. WALL RM 129	1260	x	8	20	1	8	L	LIGHTS RM 129	1200
9	30	2			(SPARE?)		x	10	20	1	8	L	LIGHTS RM 129	1200
11	30	2					x	12	20	1	8	L	LIGHTS RM 129	1200
13	40	2			SPARE		x	14	40	2			1500	
15	30	2			SPARE		x	16	20	1	8	L	LIGHTS RM 129	1500
17	30	2			SPARE		x	18	20	1	8	L	LIGHTS RM 129	1200
19	20	1	2	R	SPARE		x	20	20	1	8	L	LIGHTS RM 129	1200
21	30	2			SPARE		x	22	20	1			1200	
23	20	1	4	R	RECEPT RM 121 S. WALL	720	x	24	20	1	8	L	LIGHTS RM 129	1200
25	20	1	4	R	RECEPT RM 121 S. WALL	720	x	26	20	1	1	M	HEATER FANS	1500
27	30	2			SPARE		x	28	20	1	1	M	HEATER FANS	1500
29	30	2			SPARE		x	30	20	1	1	M	HEATER FANS	1500
31	30	2			SPARE		x	32	20	1	1	M	HEATER FANS	1500
33	30				SPACE		x	34	20	1	1	M	FAN COIL UNIT 113	1500
35	30				SPACE		x	36	20	1	1	M	FAN COIL RM 217 NORTH	1500
37	30	1	7	R	PUFFER-HUBBARD-ENVIRONMENT	1500	x	38	20	1	1	M	HEATER FANS	1500
39	30	2			CONCENTRATOR		x	40	20	1	1	M	HEATER FANS	1500
41	30	1	7	R	HEAT/AC COND. RM 115	2000	x	42	20	1	1	M	HEAT/AC COND. RM 115	2000

Totals	Load on Phase A: 12,180 VA	Category	Qty	Load
	Load on Phase B: 9,460 VA	Receptacles (R):	34	6,120 VA
	Load on Phase C: 9,180 VA	Lights (L):	48	7,200 VA
	Connected Load: 30,820 VA			
	Demand Load: 26,320 VA			
	Total Load (w/heating factors): 28,620 VA			
	Minimum Feeder Size: 79.4 Amps	Motors (M):	7	11,000 VA
	Formula: 28.6 kVA / (1.732 * 0.208 kV)	Miscellaneous (Z):	2	2,000 VA

Notes:
1. PROVIDE FULL BOTTOM SKIRTS AND TOP SKIRT TO +8'-6".

Circuit Breaker Panelboard														
Name: (R) LB-1		Main: Lugs		Mounting: SURFACE		Bus: 225A		A.I.C Rating: 10000						
Phase: 3		Wire: 4												
Ckt#	Breaker	Phase	Qty	Notes	Location/Description	Load (VA)	Phase	Breaker	Outlets	Notes	Location/Description	Load (VA)		
1	20	1	4	R	LAB TABLE RM 29	720	x	2	20	1	5	R	PLUG MOLD RM 14	900
3	20	1	4	R	SPARE		x	4	20	1	4	R	RECEPT RM 14	720
5	20	1	1	M	HEATER FAN ROTOR RM 18	1500	x	6	20	1	4	R	RECEPT COOLER GFCI RM 14	720
7	20	1	1	M	HEATER FAN ROTOR	1500	x	8	20	3	1	M	COMP. FOR COOL RM 306	900
9	20	1	1	M	HEATER FAN ROTOR RM 28	1500	x	10						900
11	30	3	1	M	HEATER FAN COOLING COMP UNIT	749	x	12						900
13							x	14	30	3	1	M	WALK IN FREEZER (RM 12)	1309
15							x	16						1309
17	20	1	4	R	RM 17A 110V RECEPT	720	x	18						1309
19	20	1	1	M	COOLING FANS RM 14	800	x	20	20	1	4	R	POST RECEPT RM 6	720
21	20	1	1	M	SPARE		x	22	20	1	4	R	POST RECEPT RM 6	720
23	20	1	1	M	SPARE		x	24	20	1	5	R	RECEPT EA. WIREMOLD RM 13	900
25	20	1	6	L	LIGHTS RM 18B	1000	x	26	20	1	5	R	RECEPT W. WIREMOLD RM 13	900
27	20	1	6	L	LIGHTS RM 18B	1000	x	28	20	2	1	M	CONDENSING UNIT RM 211	520
29	20				SPARE		x	30						520
31	30	3	1	Z	FREEZER RM 14A	693	x	32	20	2				520
33							x	34	30	2	6	R+L	SPARE (REC/LTG)	
35							x	36	30	2	6	R+L	SPARE (REC/LTG)	
37	20	1	7	R	RECEPT RM 8, LTG RM 9	1260	x	38						180
39	20	1	2	R	IBM COPIER RM 18	360	x	40	20	1	1	R	709 AM CAMERA	180
41	30	1	1	Z	WALK IN FREEZER RM 12	1600	x	42	20	1	6	R	RECEPT RM 29	1080

Totals	Load on Phase A: 11,451 VA	Category	Qty	Load
	Load on Phase B: 8,651 VA	Receptacles (R):	61	10,980 VA
	Load on Phase C: 10,891 VA	Lights (L):	12	2,000 VA
	Connected Load: 30,993 VA			
	Demand Load: 31,583 VA			
	Total Load (w/heating factors): 33,065 VA			
	Minimum Feeder Size: 91.8 Amps	Motors (M):	8	15,214 VA
	Formula: 33.1 kVA / (1.732 * 0.208 kV)	Miscellaneous (Z):	2	3,879 VA

Notes:
1. PROVIDE FULL BOTTOM SKIRTS AND TOP SKIRT TO +8'-6".

Circuit Breaker Panelboard														
Name: (R) 2-K		Main: Lugs		Mounting: SURFACE		Bus: 225A		A.I.C Rating: 10000						
Phase: 3		Wire: 4												
Ckt#	Breaker	Phase	Qty	Notes	Location/Description	Load (VA)	Phase	Breaker	Outlets	Notes	Location/Description	Load (VA)		
1	20	1	1	M	HEATER FANS (EXIT N.)	1500	x	2	30	2			SPARE	
3	20	1	1	M	HEATER FANS	1500	x	4	20	1	1	M	FUME HOOD RM 214	1000
5	20	1	1	M	HEATER FANS	1500	x	6	20	1	1	M	FUME HOOD RM 214	1000
7	20	1	1	M	HEATER FANS	1500	x	8	20	1	1	M	FUME HOOD RM 214	1000
9	20	1	1	M	HEATER FANS	1500	x	10	20	1	1	M	HEATER FANS RM 209	1500
11	20	1	1	R	REF-8, FRZ-10	2400	x	12	20	1	1	M	HEATER FANS RM 210, 213, 212	1500
13	20	1	1	R	REF-10, REF-11	2400	x	14	20	1	4	R	REC RM 215	720
15	20	1	1	R	220V REC RM 225C	180	x	16	20	1	4	R	REC RM 215	720
17	20	1	1	R	220V REC RM 225C	180	x	18	20	1	3	R	REC RM 223 N. WALL	540
19	20	1	1	R	110V REC RM 225C W. WALL	180	x	20	20	2	4	R	FRZ-11	645
21	20	1	1	L	E. ROW LTG RM 225	1000	x	22	20	1	4	R		645
23	20	1	6	L	LTG RM 225A (DISPLAY CASE)	1000	x	24	20	1	4	R	REF-12	1200
25	20	1	1	R	RM 225 E. 220V REC	180	x	26	20	1	3	R	OLD REC IN RM 225	540
27	20	1	1	R	RM 225 E. 220V REC	180	x	28	20	1	3	R	OLD REC IN RM 225	540
29	20	1	1	R	RM 225 E. 110V REC	180	x	30	20	1	6	L	LTG RM 225	1000
31	20	1	1	R	RM 225 E. 110V REC	180	x	32	20	1	6	L	LTG RM 225	1000
33	20	1	2	R	RM 225 REC CENTER COUNTER	360	x	34	20	1	6	L	LTG RM 225	1000
35	20	1	2	R	RM 225 REC CENTER COUNTER	360	x	36	20	1	4	R	RM 225 S. WALL REC	720
37	20	1	2	R	RM 225 REC CENTER COUNTER	360	x	38	20	1	2	R	FREEZER REC	360
39	20	1	2	R	RM 225 REC CENTER COUNTER	360	x	40	20	1	2	R	FREEZER REC	360
41	20	1	1	Z	DISHWASHER 225	1200	x	42	20	1	1	M	AIR COND RM 225	1500

Totals	Load on Phase A: 10,565 VA	Category	Qty	Load
	Load on Phase B: 9,845 VA	Receptacles (R):	54	9,720 VA
	Load on Phase C: 14,280 VA	Lights (L):	25	5,000 VA
	Connected Load: 34,690 VA			
	Demand Load: 29,920 VA			
	Total Load (w/heating factors): 31,545 VA			
	Minimum Feeder Size: 8			



GENERAL NOTES:

- DISCONNECT AND REMOVE EXISTING STRUCTURED CABLING SYSTEM INCLUDING WORK AREA OUTLET FACEPLATES, JACKS, HORIZONTAL STATION CABLES, PATCH PANELS AND WALL MOUNTED RACKS. COORDINATE DEMOLITION WITH UNIVERSITY OF IDAHO OIT NETWORK TEAM INCLUDING COORDINATION OF REMOVAL OF EXISTING NETWORK EQUIPMENT.
- FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
- RETAIN EXISTING PATHWAY WHERE POSSIBLE. WHERE DEMOLITION IS NECESSARY, REMOVE PATHWAY TO STRUCTURE.

KEYNOTES:

- NOT USED.

GROUND FLOOR - AREA A - TELECOM - DEMO
1/4" = 1'-0"

KEY PLAN - GROUND LEVEL AREA A
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MOSCOW, ID 83844

DATE
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GROUND FLOOR
AREA A -
TELECOM -
DEMO

SHEET
T2.0A

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GENERAL NOTES:

- DISCONNECT AND REMOVE EXISTING STRUCTURED CABLING SYSTEM INCLUDING WORK AREA OUTLET FACEPLATES, JACKS, HORIZONTAL STATION CABLES, PATCH PANELS AND WALL MOUNTED RACKS. COORDINATE DEMOLITION WITH UNIVERSITY OF IDAHO OIT NETWORK TEAM INCLUDING COORDINATION OF REMOVAL OF EXISTING NETWORK EQUIPMENT.
- FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
- RETAIN EXISTING PATHWAY WHERE POSSIBLE. WHERE DEMOLITION IS NECESSARY, REMOVE PATHWAY TO STRUCTURE.
- EXERCISE EXTREME CAUTION DURING DEMOLITION TO PROTECT EXISTING FACILITIES. IF DAMAGE OCCURS PROMPTLY NOTIFY UNIVERSITY OF IDAHO OIT NETWORK TEAM AND MAKE NECESSARY REPAIRS.

KEYNOTES:

- DEMOLISH EXISTING COMMUNICATIONS J-BOXES AND ASSOCIATED CONDUIT.
- INTERCEPT AND PROTECT EXISTING COMMUNICATION CONDUIT.
- NEW COMMUNICATIONS CONDUIT TO BE FED THROUGH E2 PATH.
- DEMOLISH EXISTING COMMUNICATIONS CONDUIT TO STRUCTURE. TIE INTO EXISTING CONDUIT USING BUSHINGS.

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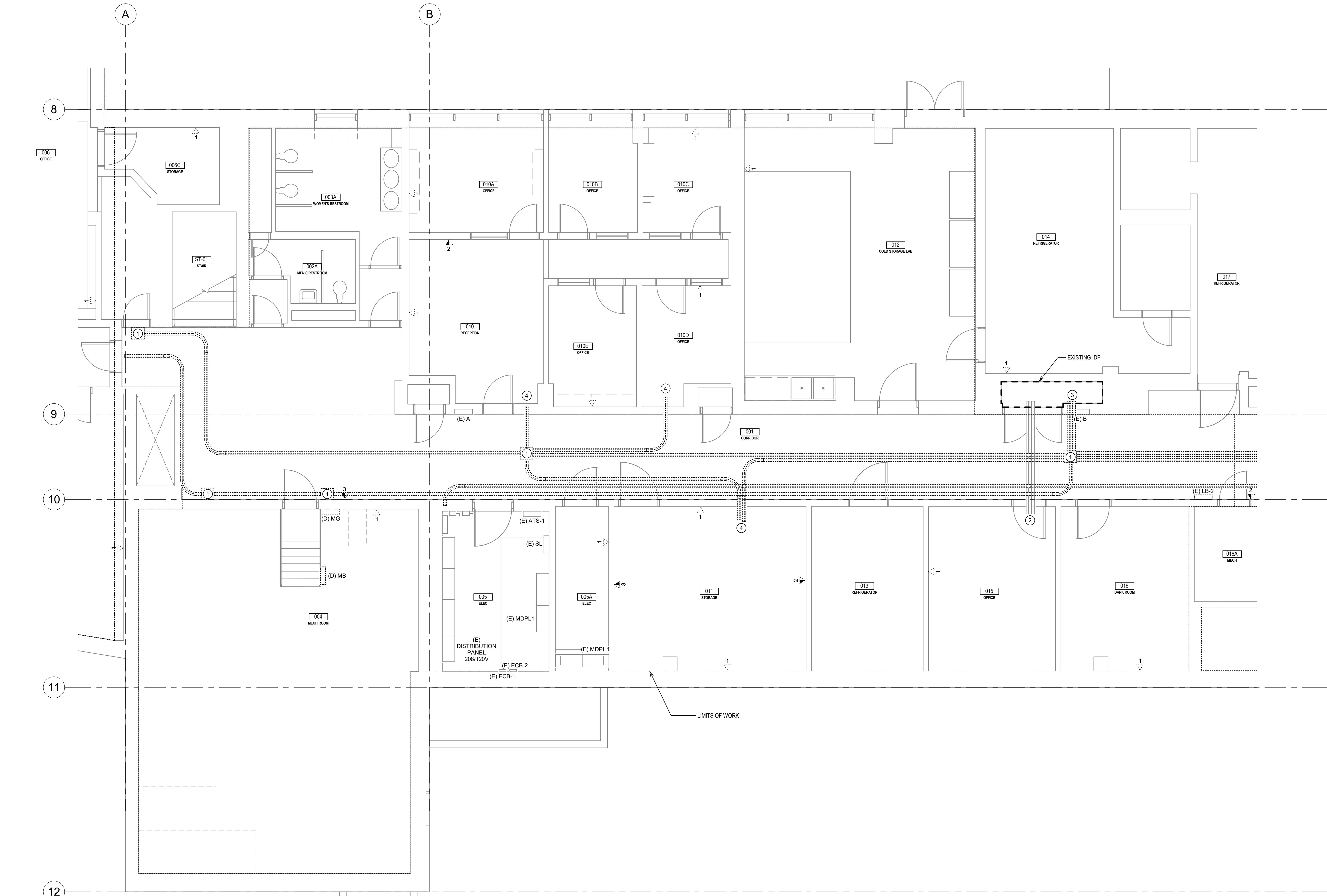
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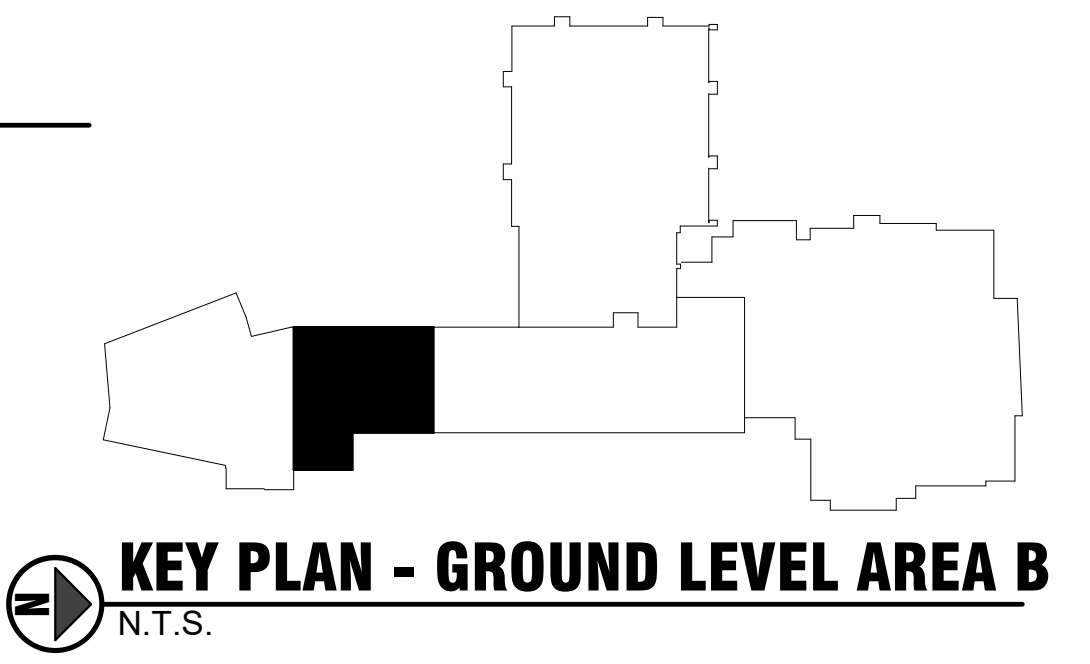
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GROUND FLOOR - AREA B - TELECOM - DEMO

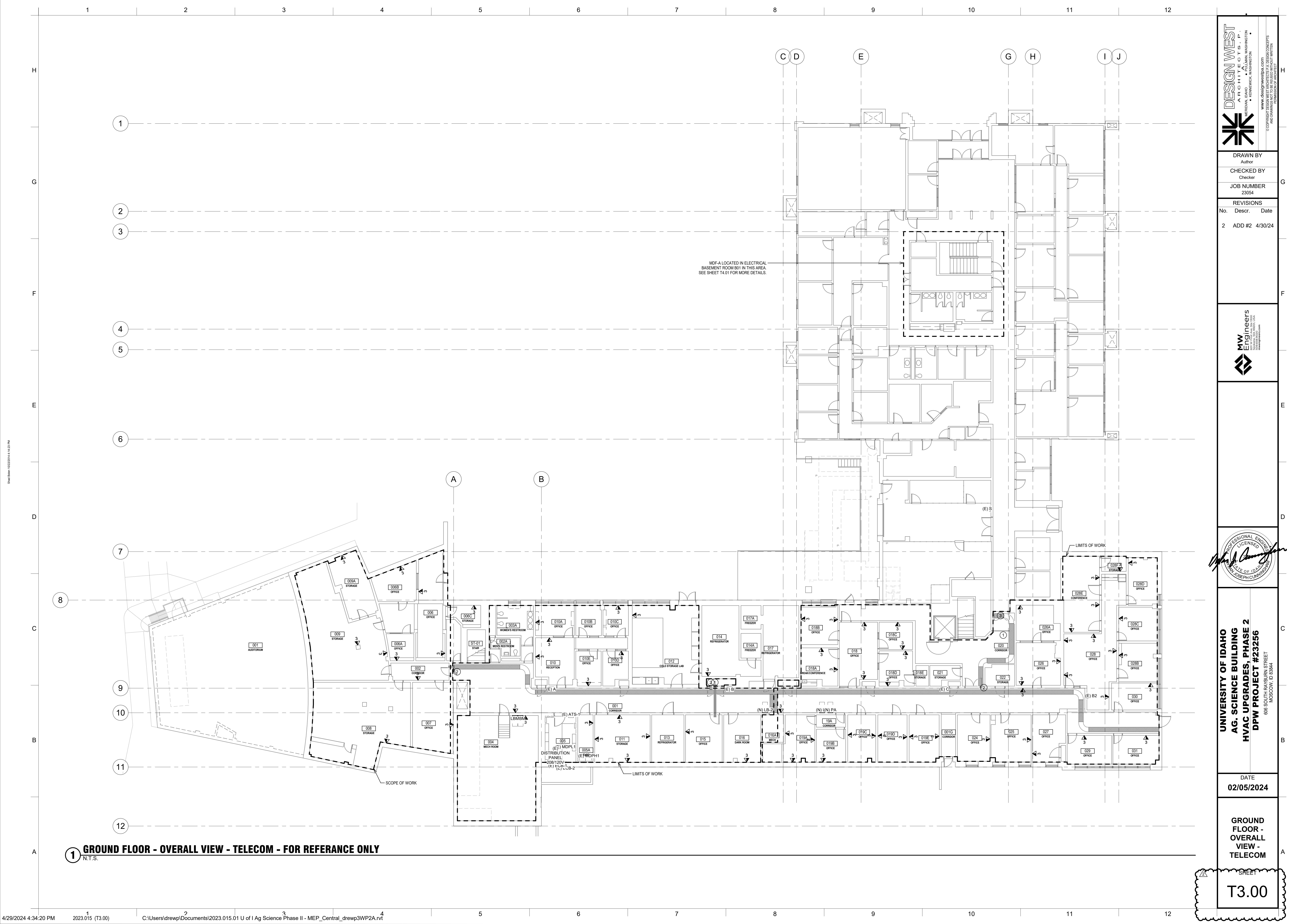
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GROUND FLOOR - AREA B - TELECOM - DEMO
1/4" = 1'-0"



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1 GROUND FLOOR - OVERALL VIEW - TELECOM - FOR REFERENCE ONLY
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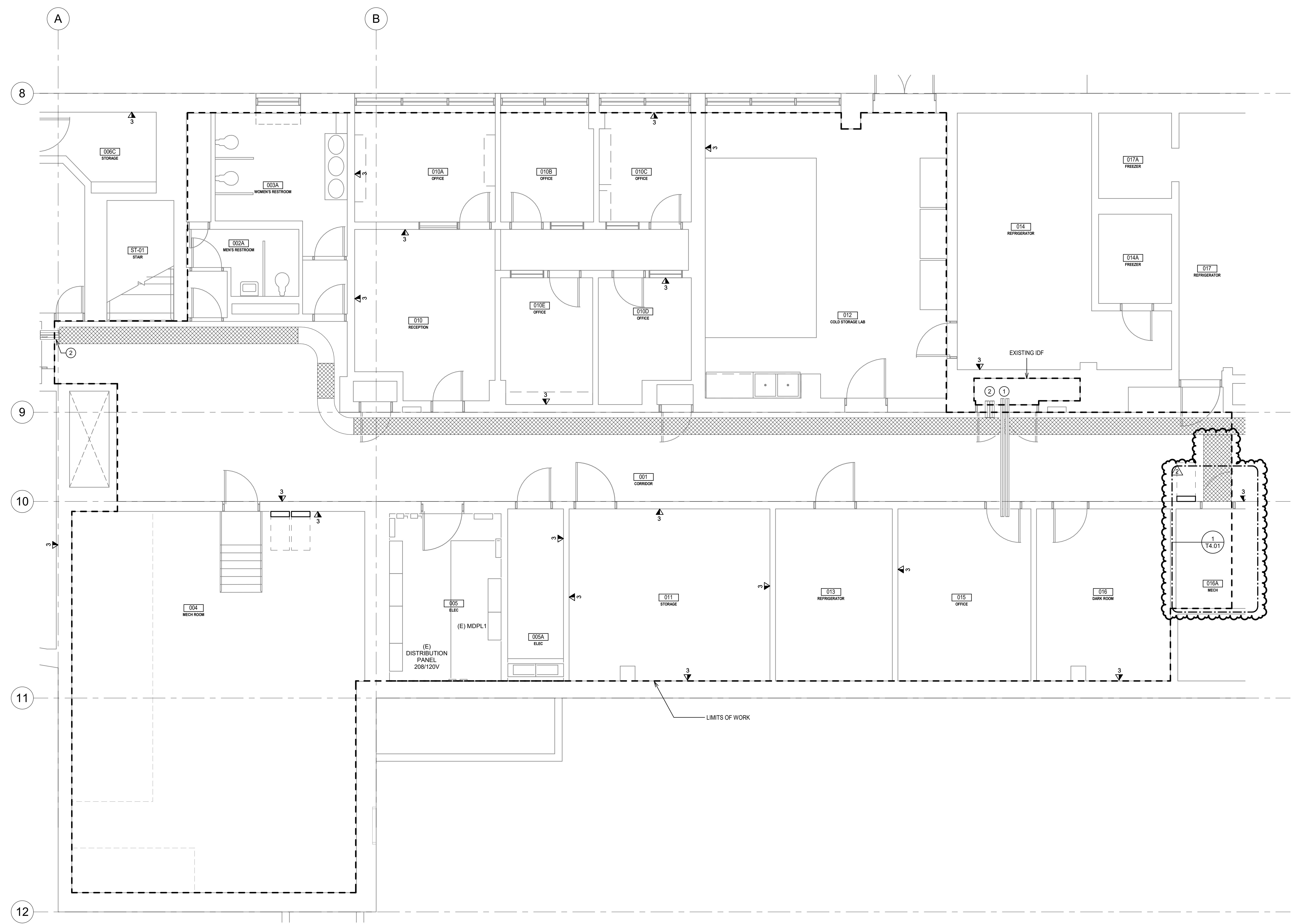
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GROUND FLOOR - OVERALL VIEW - TELECOM

T3.00



GROUND FLOOR - AREA B - TELECOM
 1/4" = 1'-0"

- GENERAL NOTES:**
1. EXTEND RETAINED PATHWAY TO CABLE TRAY OR CORE CABLING PATHWAY.
 2. REPLACE EXISTING STRUCTURED CABLING SYSTEM WITH NEW INSTALLED IN ACCORDANCE WITH UI STRUCTURED CABLING STANDARD.
 3. PROVIDE FIRE-STOPPING FOR ALL CONDUIT AND CABLE TRAY PENETRATIONS THROUGH FIRE-RATED WALLS OR FLOORS USING HILTI CP SERIES OR ST-EZ-PATH (44 SERIES FOR TELECOM ROOMS AND 33 SERIES FOR CORRIDOR FIREWALLS). PROVIDE APPROPRIATE QUANTITY TO MAINTAIN 40% FILL. INSTALL IN ACCORDANCE WITH UI STRUCTURED CABLING STANDARD. REFER TO LIFE SAFETY PLANS FOR LOCATIONS OF FIRE-RATED WALLS OR FLOORS.
- KEYNOTES:**
1. MAINTAIN AND PROTECT EXISTING PATHWAYS.
 2. PROVIDE FIRE-RATED PATHWAY AT WALL PENETRATION.

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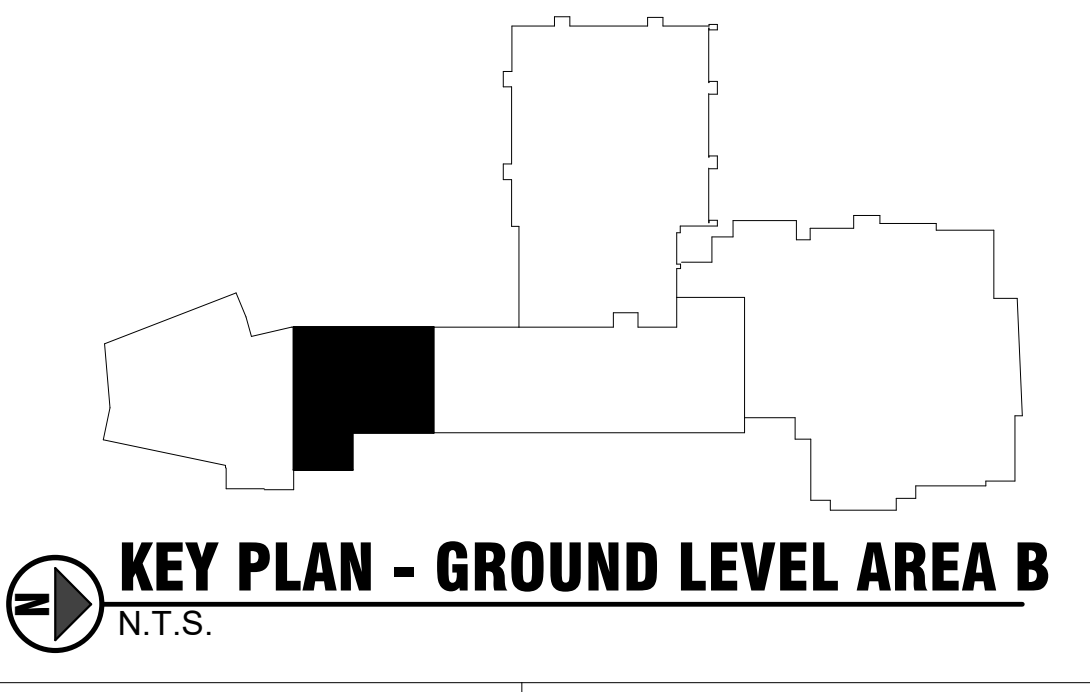
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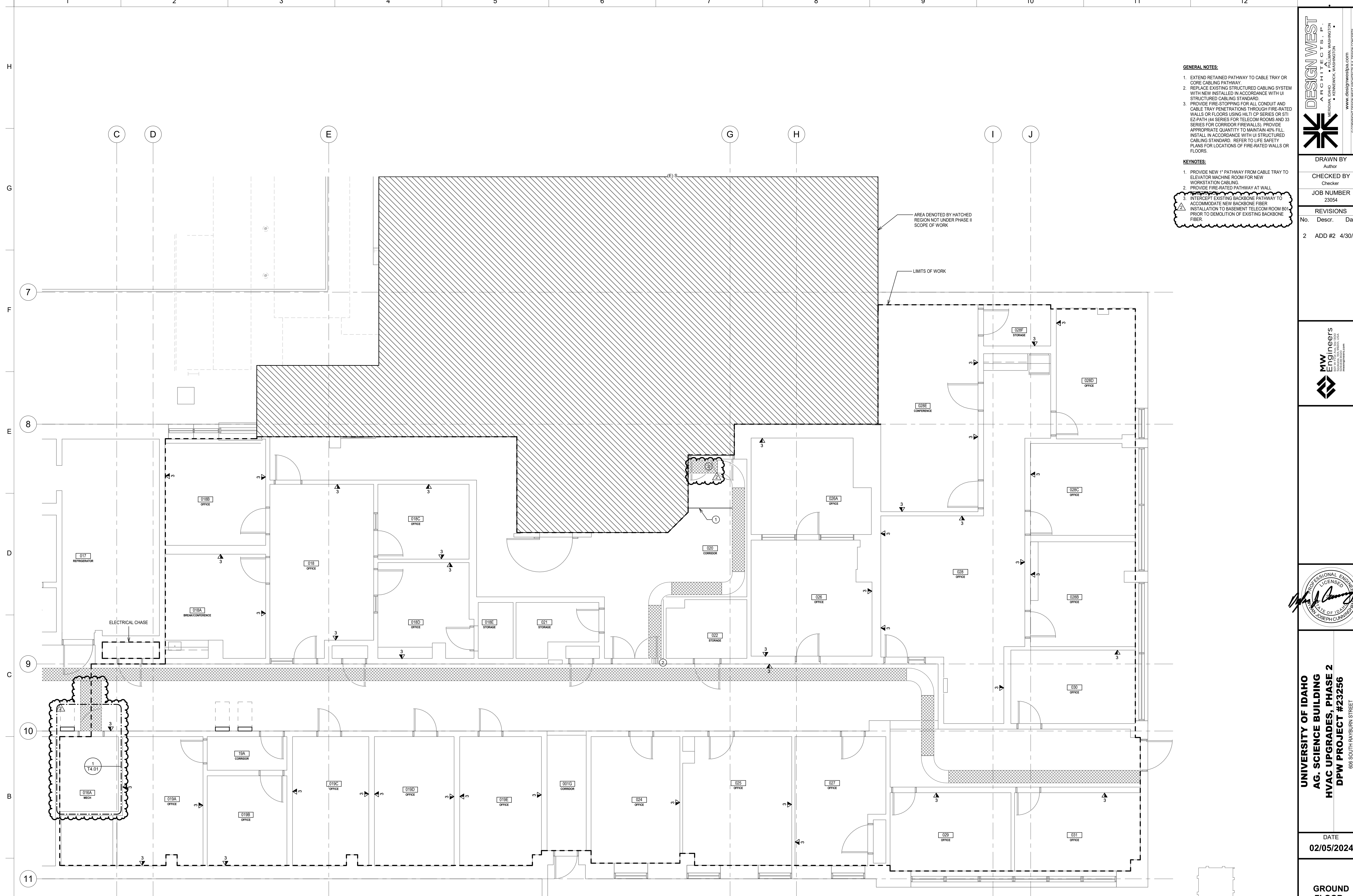
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GROUND FLOOR - AREA B - TELECOM

SHEET
 T3.0B



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- GENERAL NOTES:**
- EXTEND RETAINED PATHWAY TO CABLE TRAY OR CORE CABLING PATHWAY.
 - REPLACE EXISTING STRUCTURED CABLING SYSTEM WITH NEW INSTALLED IN ACCORDANCE WITH UI STRUCTURED CABLING STANDARD.
 - PROVIDE FIRE-STOPPING FOR ALL CONDUIT AND CABLE TRAY PENETRATIONS THROUGH FIRE-RATED WALLS OR FLOORS USING HLTI CP SERIES OR STI EZ-PATH (44 SERIES FOR TELECOM ROOMS AND 33 SERIES FOR CORRIDOR FIREWALLS). PROVIDE APPROPRIATE QUANTITY TO MAINTAIN 40% FILL. INSTALL IN ACCORDANCE WITH UI STRUCTURED CABLING STANDARD. REFER TO LIFE SAFETY PLANS FOR LOCATIONS OF FIRE-RATED WALLS OR FLOORS.
- KEYNOTES:**
- PROVIDE NEW 1" PATHWAY FROM CABLE TRAY TO ELEVATOR MACHINE ROOM FOR NEW WORKSTATION CABLING.
 - PROVIDE FIRE-RATED PATHWAY AT WALL.
 - INTERCEPT EXISTING BACKBONE PATHWAY TO ACCOMMODATE NEW BACKBONE FIBER INSTALLATION TO BASEMENT TELECOM ROOM B01 PRIOR TO DEMOLITION OF EXISTING BACKBONE FIBER.

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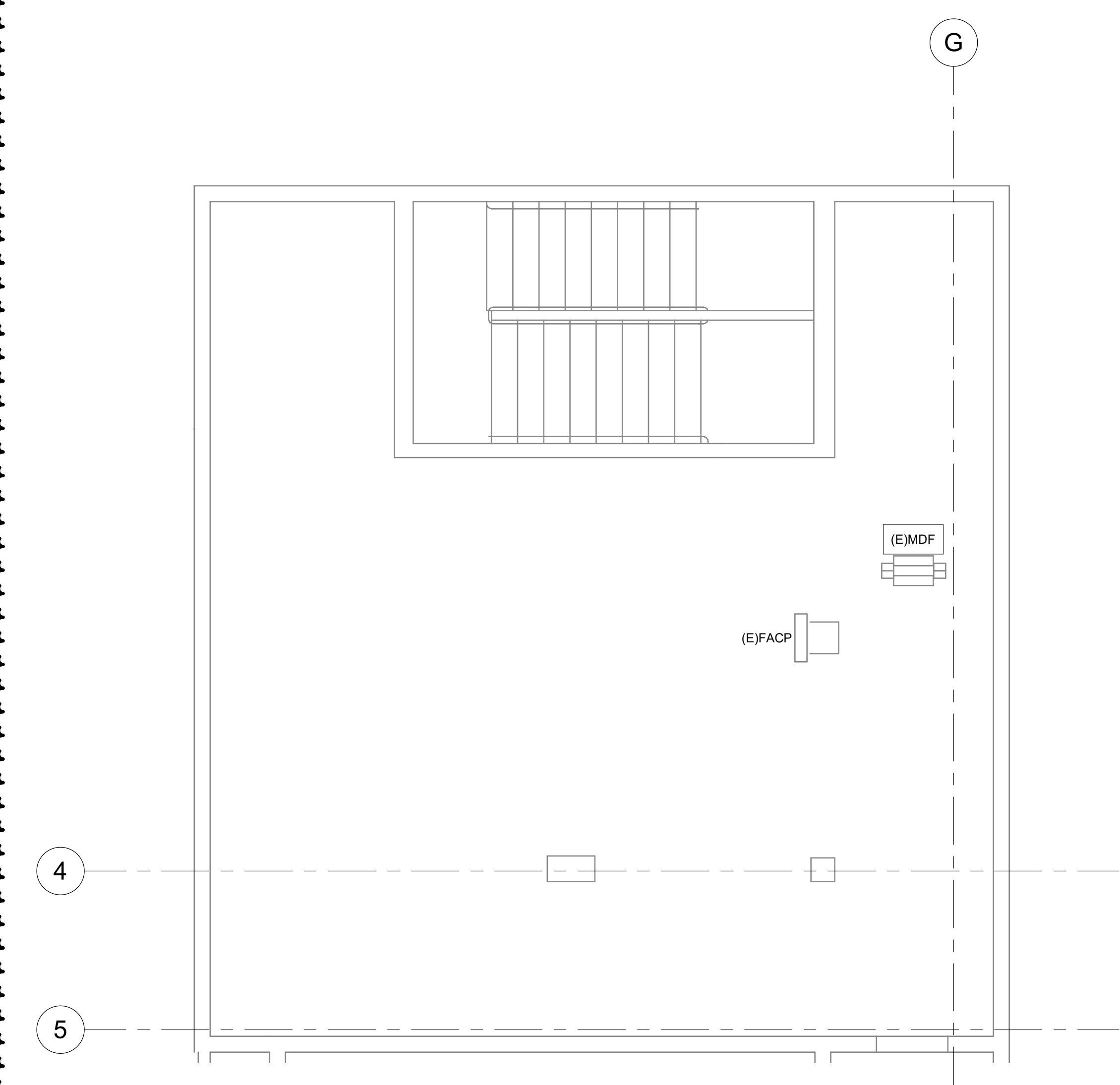
GROUND FLOOR - AREA C - TELECOM

SHEET
 T3.0C

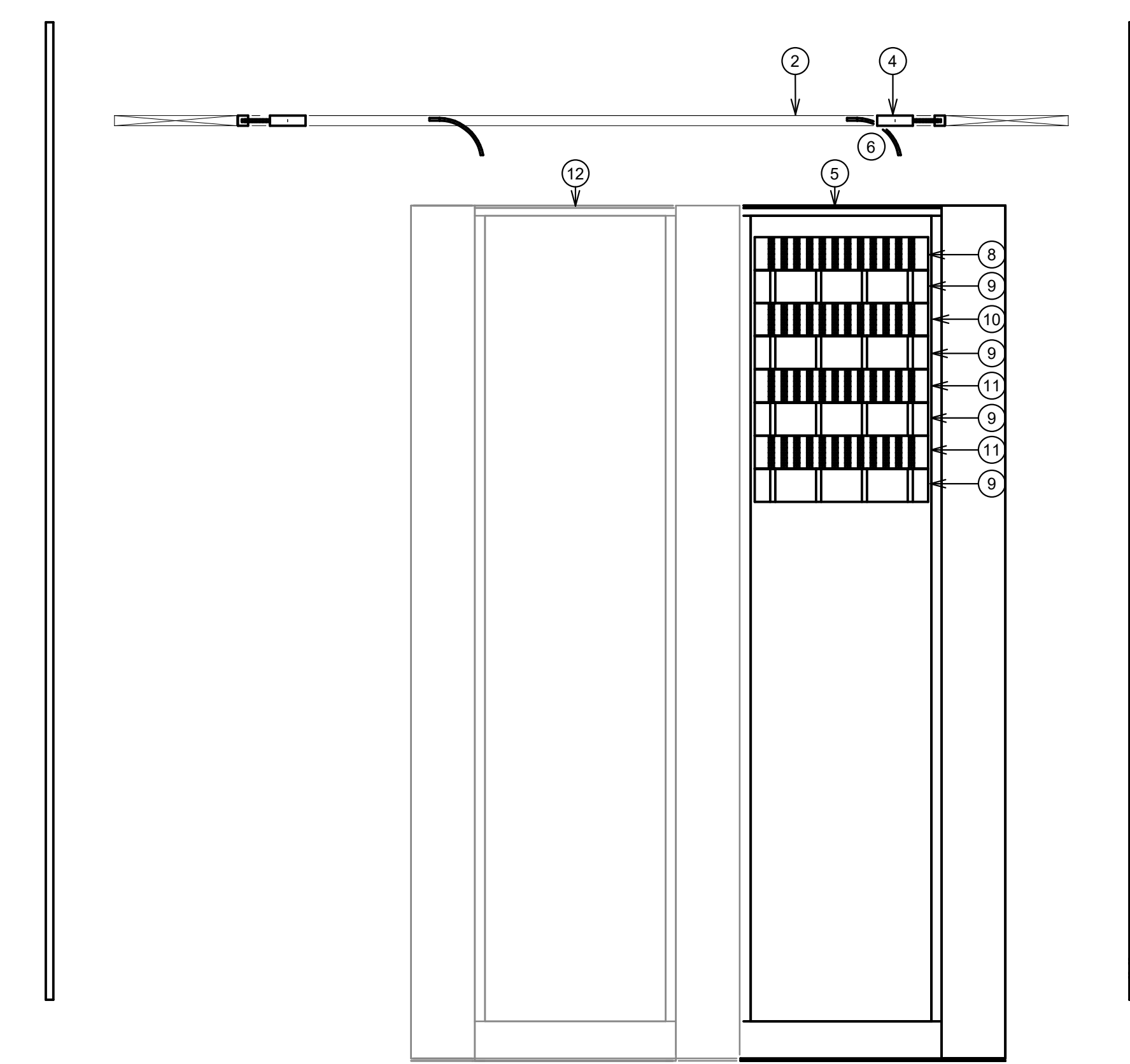
GROUND FLOOR - AREA C - TELECOM
 1/4" = 1'-0"



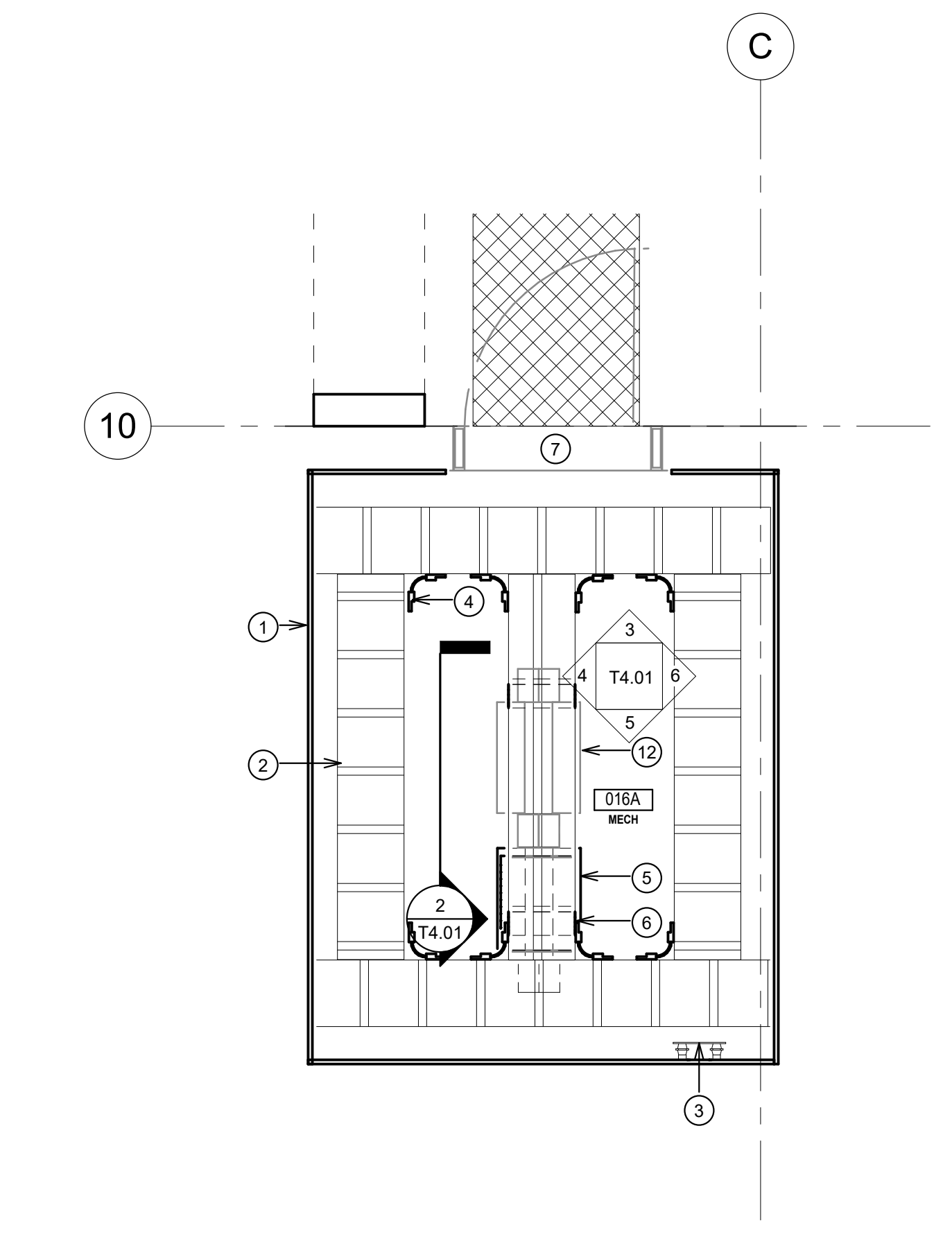
- KEYNOTES:**
- 3/4" FIRE RATED PLYWOOD BY OTHERS.
 - 12" WIDE LADDER RACK (TYPICAL).
 - TELECOMMUNICATIONS GROUND BUSBAR.
 - BONDING JUMPER (TYPICAL).
 - 2-POST COMMUNICATIONS RACK (TYPICAL).
 - LADDER RACK WATERFALL (TYPICAL).
 - NEW COMMUNICATIONS CABLING TO BE FED THROUGH EZ PATH.
 - FIBER OPTIC SHELF (2-RU).
 - HORIZONTAL WIRE MANAGER (1-RU).
 - CAT8 PATCH PANEL (BACKBONE) (1-RU).
 - CAT8 PATCH PANEL (HORIZONTAL) (1-RU).
 - FUTURE 2-POST COMMUNICATIONS RACK.



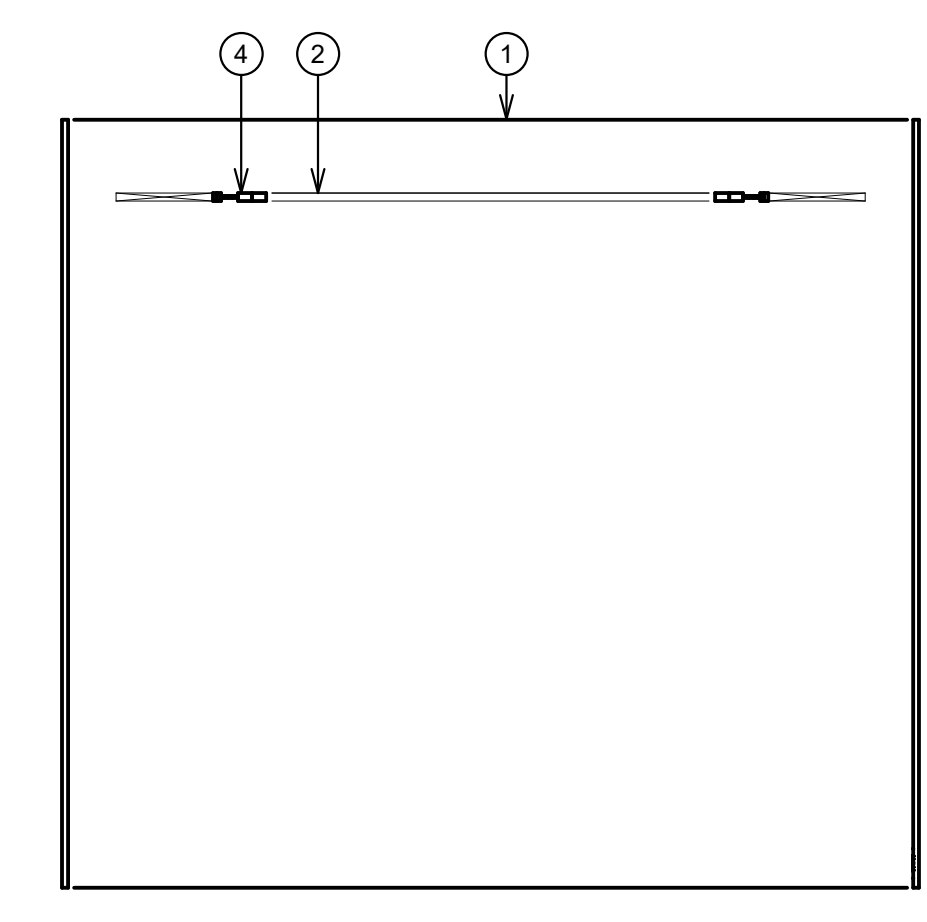
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1/4" = 1'-0"



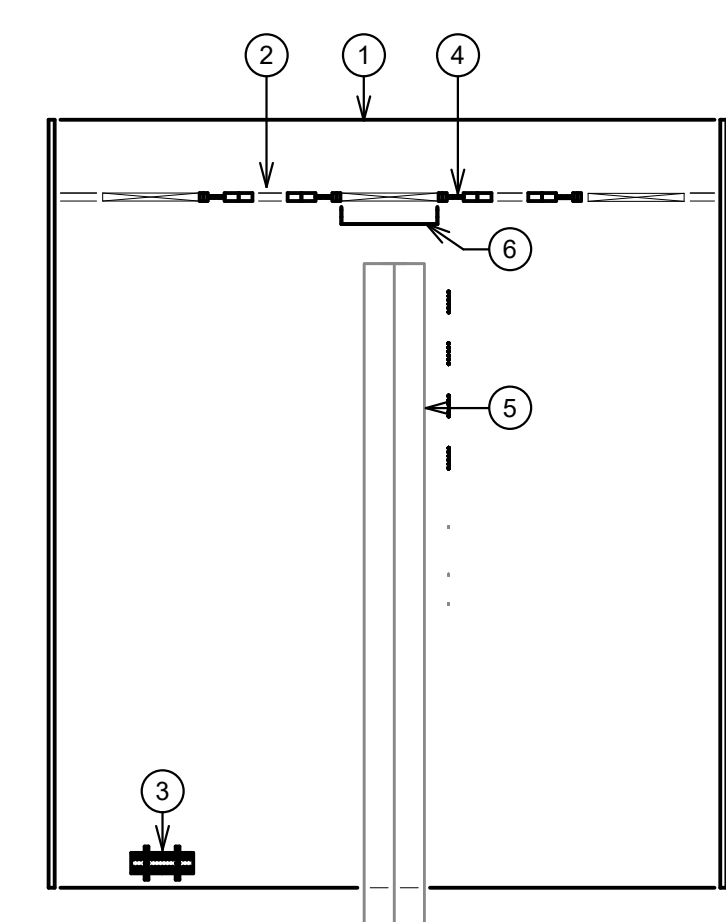
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1" = 1'-0"



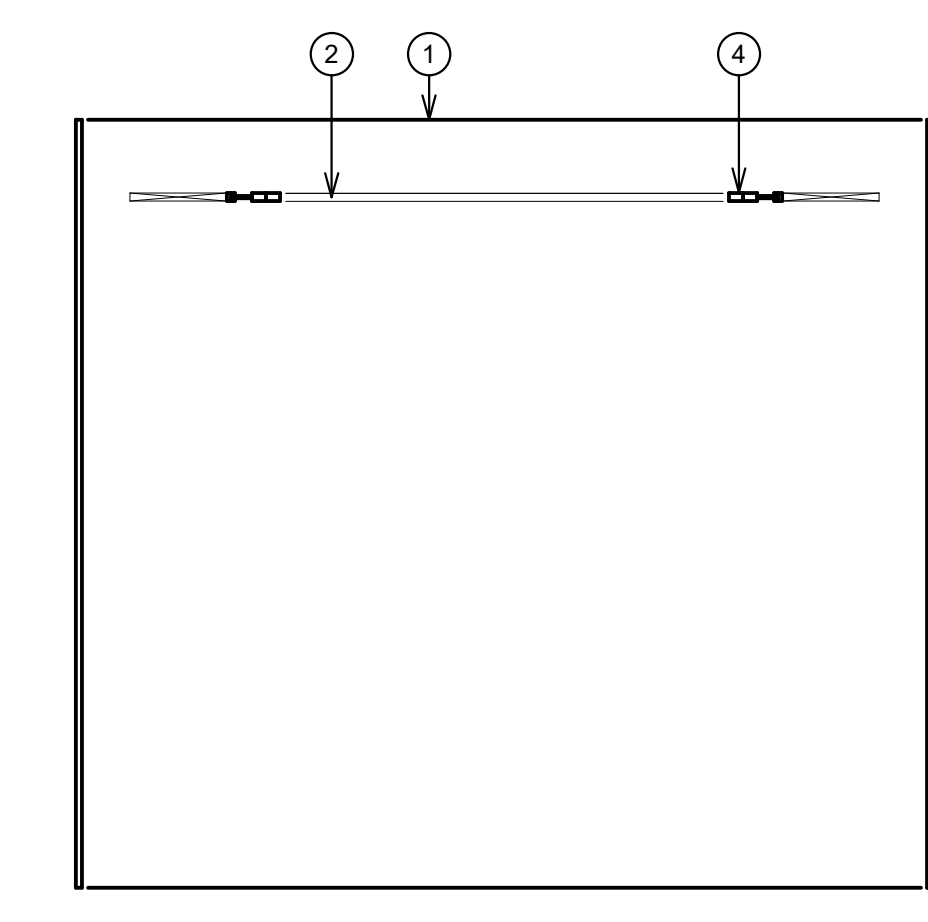
1 ENLARGED IDF 016A - TELECOM
1/2" = 1'-0"



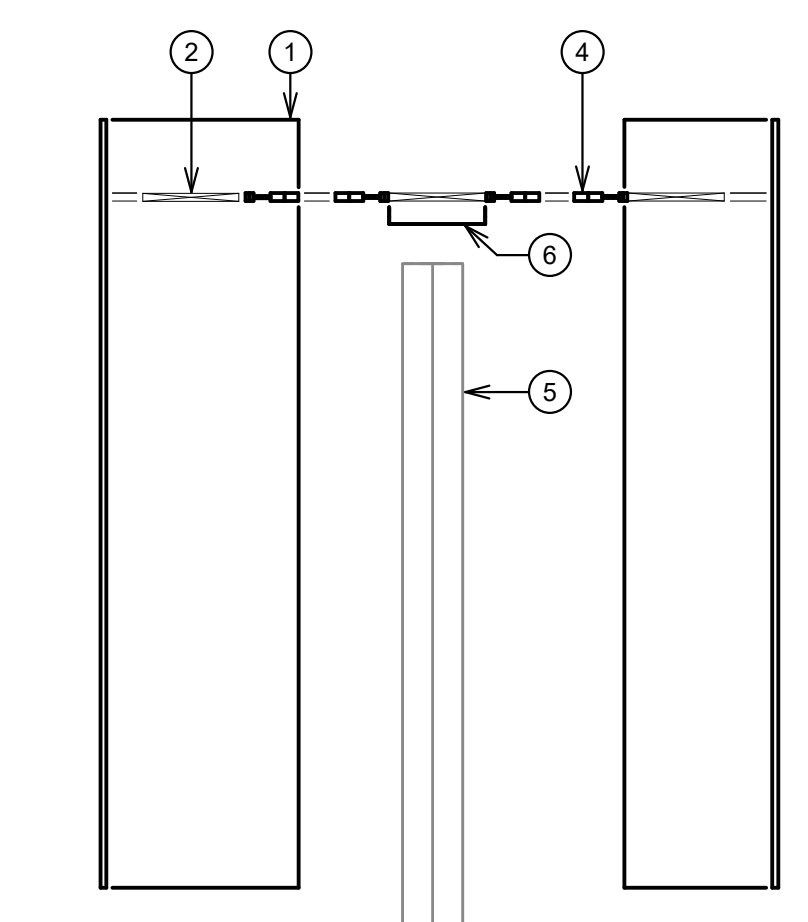
6 EAST ELEVATION IDF 016A
1/2" = 1'-0"



5 SOUTH ELEVATION IDF 016A
1/2" = 1'-0"



4 WEST ELEVATION IDF 016A
1/2" = 1'-0"



3 NORTH ELEVATION IDF 016A
1/2" = 1'-0"

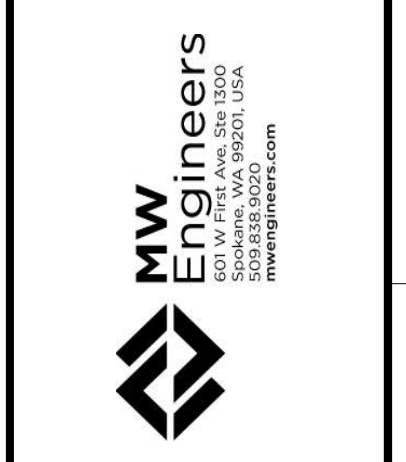


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Author

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JOB NUMBER
23054

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No.	Descr.	Date
2	ADD #2	4/30/24



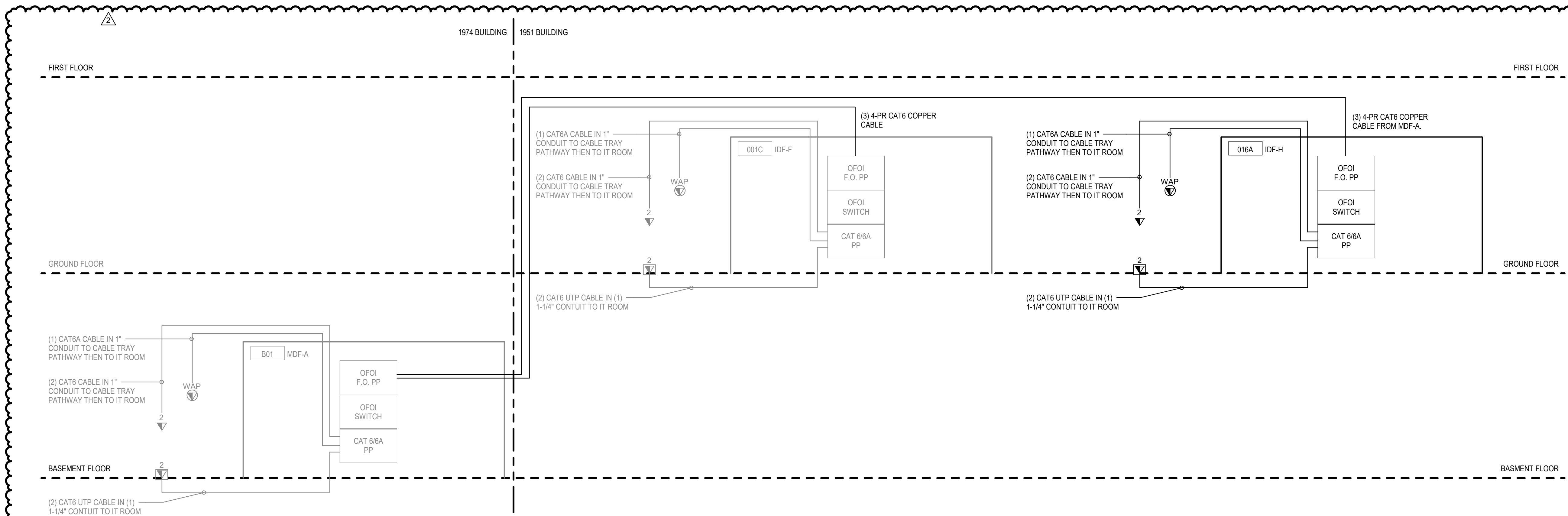
UNIVERSITY OF IDAHO
AG. SCIENCE BUILDING
HVAC UPGRADES, PHASE 2
DPW PROJECT #23256
606 SOUTH BAYBURN STREET
MOSSCO, ID 83844

DATE
02/05/2024

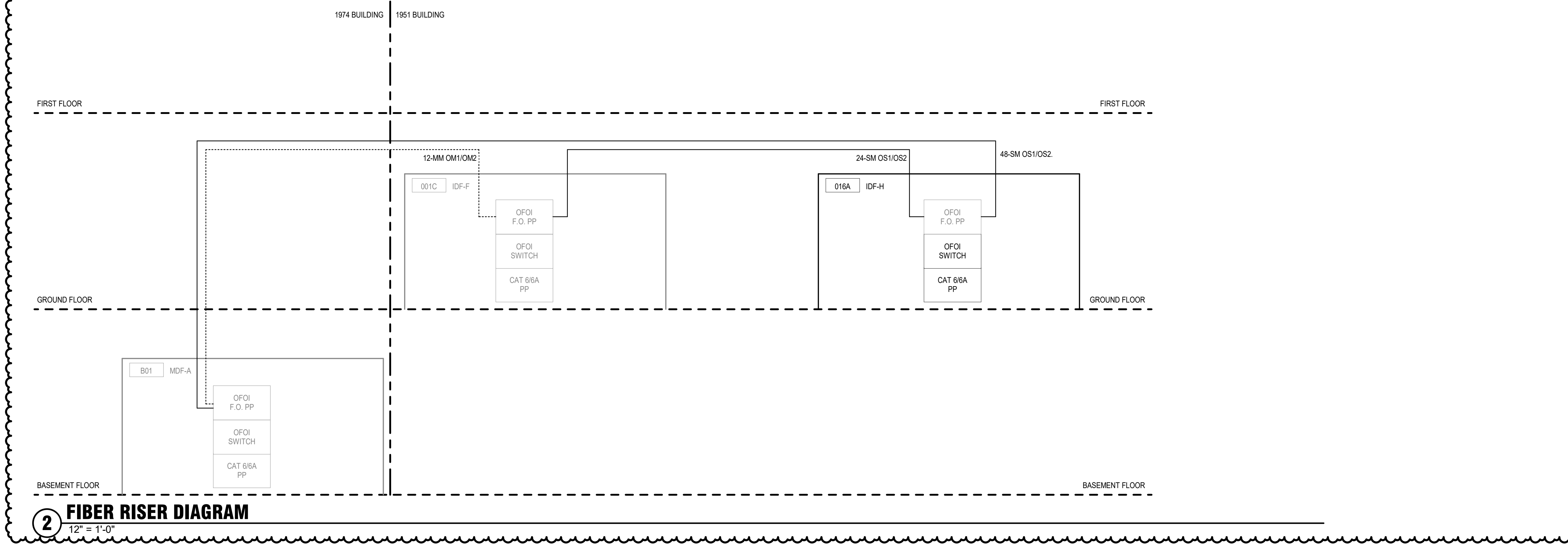
ENLARGED VIEWS - TELECOM

SHEET
T4.01

Sheet Name: 10222014_4_14_23.rvt



1 COPPER RISER DIAGRAM
1/2" = 1'-0"



2 FIBER RISER DIAGRAM
1/2" = 1'-0"

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2	ADD #2	4/30/24



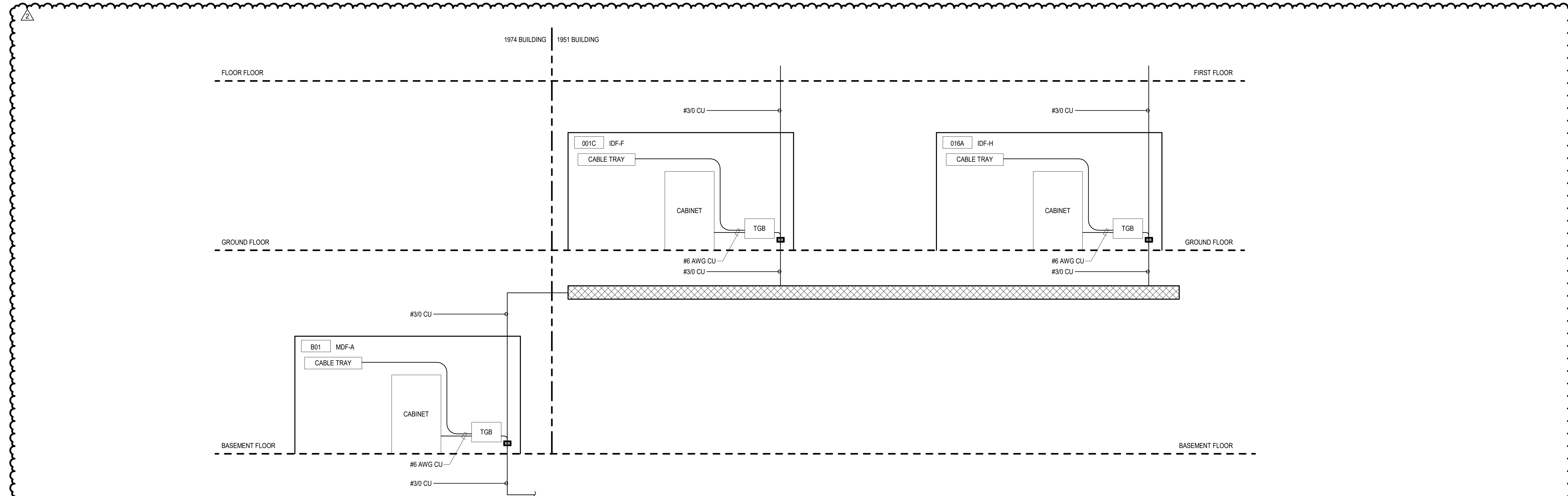
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606 SOUTH BAYBIRD STREET
MOSSCO, ID 83844

DATE
02/05/2024

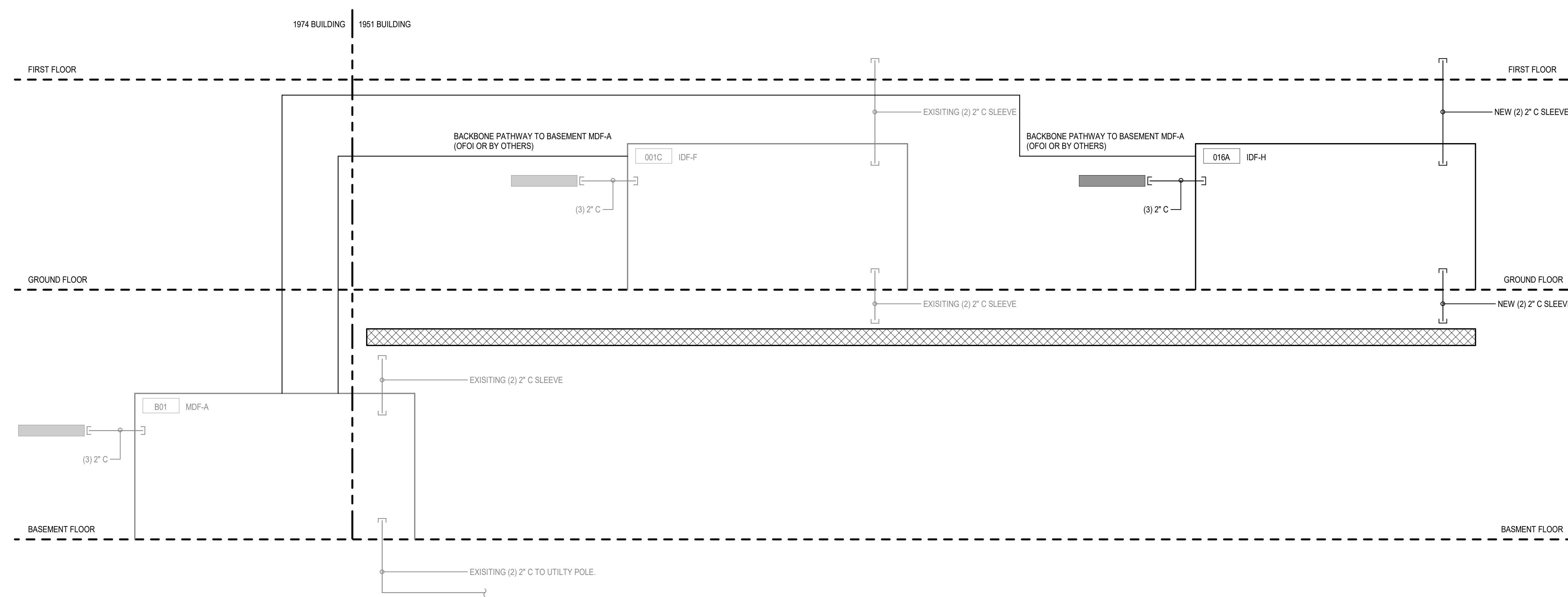
RISER DIAGRAMS - TELECOM

SHEET
T8.01

Sheet Name: 10222014 4 14 22 PM



1 GROUNDING RISER DIAGRAM
12" = 1'-0"



2 PATHWAYS RISER DIAGRAM
12" = 1'-0"

Sheet Name: 10222014_4_14_22 PM