

Agenda

Historic District Commission

City of Kalamazoo



Tuesday, May 21, 2024

5:00 PM

City Commission Chambers at City Hall – 241 West South Street

A. CALL TO ORDER/ROLL CALL

1. Kristi Breisach
2. Andrew Grayson
3. James Johnson
4. Dan Kastner - Chair
5. Eric Stucky
6. Dana Underwood - Vice-Chair

B. ADOPTION OF FORMAL AGENDA

C. APPROVAL OF MINUTES

1. Approval of the minutes from the Historic District Commission meeting on 16 April 2024

D. PUBLIC COMMENTS

E. APPLICATION REVIEWS

1. 824 Elmwood - Alteration (replacement of 17 windows, replacement of rear door with salvaged wooden door. Lead abatement project) PPZ24-0014
Year Built: 1906
Style: Queen Anne
Historic District: Stuart
2. 722 Eleanor - Demolition (Carriage barn/garage demolition) PPZ24-0010
Year Built: 1891
Style: Queen Anne
Historic District: Stuart
3. 238 E Michigan - Alteration (Metal balconies on rear of building, new rear windows and doors in the second story)
Year Built: N/A
Style: Commercial

Historic District: Haymarket

4. 802 S Park - Alteration (installation of aluminum over fascia only) PPZ24-0014
Year Built: 1933
Style: Craftsman
Historic District: South Street - Vine Area

F. COORDINATOR'S REPORT

1. Coordinator's Report

G. ADJOURNMENT

DISCLAIMER

Chapter 16, Section 22 of the City of Kalamazoo Code of Ordinance states:

Historical preservation is a public purpose. To serve that purpose, the Historic District Commission is hereby charged with the following responsibilities:

- a) The Kalamazoo Historic District Commission is empowered to regulate Work on the exterior of historic resources and non-historic resources in historic districts in the City of Kalamazoo and shall otherwise have all powers invested in Historic District Commissions pursuant to the Local Historic Districts Act, MCLA § 399.201 et seq. 1970 PA 169, as Amended 1992.
- b) To regulate Work on resources which, by City ordinance, are historic or non-historic resources located within local historic districts, including but not limited to the moving of any structure into or out of, or the building of any structure in, an historic district.

The following documents are available in the Community Planning and Economic Development Department located at 245 North Rose Street. These documents will help assist property owners in understanding the responsibilities of owning property in a local historic district: MCLA § 399.201 et seq. 1970 PA 169 as Amended 1992 (Michigan Local Historic District Act); Code of Ordinances City of Kalamazoo, Michigan (Chapter 16 - Historic District); Secretary of the Interiors Standards for Rehabilitation & Guidelines for Rehabilitating Historic Buildings, 1990; Standards and Guidelines for Kalamazoo Historic Districts, and maps of Kalamazoo Local Historic Districts. These documents and maps are also available on the city of Kalamazoo website at www.kalamazoocity.org/historicpreservation.

GUIDELINES FOR PUBLIC PARTICIPATION AT HDC MEETINGS

The Historic District Commission recognizes that citizens who make the effort to attend a Commission meeting often feel passionately about an issue. The following guidelines are not meant to discourage individual expression; rather, they exist to facilitate the orderly conduct of business and to ensure that all citizens who wish to address the Historic District Commission are able to do so in an atmosphere of civility and respect.

- Out of respect for business being conducted during the meeting, turn off all cell phones and pagers prior to the meeting.
- Citizens have opportunities to address the Historic District Commission at the following times during a meeting:
 - Address Non-agenda items at the beginning of the meeting. If you wish to speak about a specific review, please wait until that review comes to the commission.
 - Consideration of Regular Agenda items. Citizens are permitted to speak to the Commission on project reviews after the applicant has made their presentation and prior to the Historic District Commission discussion. The Chair will call for comments from the public.

A Note on Quorum and Historic District Commission Decisions

City of Kalamazoo Code of Ordinance – Chapter 16 – Historic District Commission – section 19 states: “A majority of the members of the Commission shall constitute a quorum. A majority of the appointed members is required to take action on all matters not of an administrative nature, but a majority of a quorum may deal with administrative matters.” All applicants should be aware that the minimum of four of the commissioners must vote for a motion for a decision to be made in all actions. Applicants may choose to postpone their review to the next regularly scheduled meeting of the commission before the commission begins their deliberations if fewer than seven commissioners are present. The postponement form is available from the coordinator and must be filled out and signed before the applicant leaves the meeting.

KALAMAZOO HISTORIC DISTRICT COMMISSION

Agenda – Tuesday, April 16th, 2024

5:00 pm

241 W. South St. Kalamazoo, MI 49007

I. Call to Order: Mr. Kastner called the meeting to order at 5:05 PM

II. Roll Call & Approval of Absences:

Eric Stucky-Present

Andrew Grayson- Absent

Dana Underwood – Absent

Kristi Breisach- Present

James Johnson-Present

Dan Kastner- Present

Motion made by Mr. Johnson to approve the absence of Mr. Grayson and Ms. Underwood with a 2nd by Mr. Stucky; all commissioners approve.

Mr. Pena read the disclaimer on record at 5:06 PM

III. Approval of Agenda: No changes. Motion made by Ms. Breisach to approve the agenda with a 2nd by Mr. Johnson; all commissioners approve.

IV. Approval of Minutes: March 19th, 2024

Motion made by Mr. Stucky to approve the minutes with a second by Ms. Breisach; all commissioners approve.

V. Public Comment on non-agenda items: No comments or guests

VI. OLD BUSINESS: None

NEW BUSINESS:

A) 808 W South St

5:09 PM

Third-story rear porch

Year Built: 1900

Style: Queen Anne

Historic District: South Street- Vine Area

Mr. Horvat brought pictures along to show the chronological order of the demo and rebuilding of the deck. The old deck was put on over old roofing and the roofing failed so the old deck was removed to rebuild. The deck is now visible from the road due to the building next door burning down. Mr. Horvat brought along different samples of cedar showing the natural cedar, darker stain and one painted to match the blue on the house. The new porch does use Trex but only on the decking portion where the remaining of the deck is cedar which is visible from the road and the Trex is not visible from the road. Has thought about adding lattice to the top to give it a more decorative look. The deck is a form of egress for the 3rd floor. Mr. Horvat will be adding a form of egress from the deck to the ground. The commissions don't normally weigh in on color only the material. Mr. Horvat is open to suggestions for possible vertical slats on top to make the height of the sides taller. Mr. Johnson makes motion to approve

a Certificate of Appropriateness for the work as described in the application, the proposed work complies with the Secretary of the Interior standards 1, 2, 9 and 10 with a second by Ms. Breisach. All commissioners approve.

B)	621 S Park St Year Built: 1980	5:22 PM	Addition on east side of current dwelling Style: Contemporary Historic District: South Street-Vine Area
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Mr. Vandebussche are the current owners and have recently had the property rezoned and has been renovated and is now a functioning residence and is now looking to expand. They are looking to add another bedroom and bathroom with a loft area for kids and overflow. The structure is a non-contributing structure. Once the final addition is complete the home would have 2 bedrooms total. Mr. Vandebussche is hoping to get started on the project in May and have completed by end of summer. Mr. Johnson makes motion to approve a Certificate of Appropriateness for the work as described in the application, the proposed work complies with the Secretary of the Interior standards 1, 9 and 10 with a second by Mr. Stucky. All commissions approve.

C)	507 S Westnedge Year Built: N/A	5:28 PM	Sign Installation Style: Queen Anne Historic District: Stuart
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Mr. Joseph Doe is representing the church and is wanting to put up a sign and believes they have found the best location. The sign would be a wood design and have a possible planter box. The address will be located on the cement behind it. The sign doesn't impact the building and looks pleasing for the property. Ms. Breisach makes motion to approve a Certificate of Appropriateness for the work as described in the application, the proposed work complies with the Secretary of the Interior standards 1, 9 and 10 with a second by Mr. Johnson. All commissioners approve.

VII. Coordinators Report:

- New Business- Historic District Commission Annual Report Review
- Coordinators report

VIII. Adjournment

Motion made to adjourn the meeting by Mr. Johnson with a 2nd by Ms. Breisach. Meeting adjourned at 5:44 PM. All commissioners approve.

Chairperson

Date

Historic Preservation Coordinator

Date

Recording secretary

Date



Historic District Commission Staff Report

City of Kalamazoo

TO: The Kalamazoo Historic District Commission

FROM: Luis Pena, Historic Preservation Coordinator

DATE: May 21, 2024

SUBJECT: 1. 824 Elmwood - Alteration (replacement of 17 windows, replacement of rear door with salvaged wooden door. Lead abatement project) PPZ24-0014

PROPOSED WORK:

From the Description of Work Supplied by the Applicant: □□□□□□□□□□□□□□□□

Exterior siding, window trim, fascia, soffit, etc. will be properly scraped of loose paint down to bare wood. Washed and HEPA vacuumed to remove loose dust and paint chips. Then, repaired as needed with like material wood. Afterwards, everything will be properly prime painted and then seal coat painted with premium quality acrylic latex paint.

WINDOWS –

Two options are presented for windows:

1. Remove and Replace w/ similar style and stock.
 - a. JELD WEN Sitaline® Clad-Wood Window: Double-Hung Sash Pack (images of product in use) - <https://www.jeld-wen.com/en-us/products/windows/sitaline-cladwood/double-hung-sash-pack>
 - b. SoW / Costs for project APPROVED by City/HUD
2. Restore existing windows
 - a. Additional cost min. \$18,900
 - i. Skillset outside current capacity / interest of Lead Abatement Contractor market
 - b. NOT APPROVED by City/HUD

EXTERIOR DOOR (REAR FACING)–

One Exterior door will be replaced.

This door is a rear facing door painted with lead-based paint on the back porch. This door is currently unsalvageable and is slated to be removed and replaced with a similar style door (wood, pattern similar, half window). This similar style door would be purchased from

Heritage

Architectural Salvage in Kalamazoo, MI. An example of this sort of door has been photographed and presented in this packet. This door after purchase will be restored offsite, made lead-safe offsite, then installed with matching locksets to what is already in use on the home.

EVALUATION:

Project Details

The applicant is proposing the removal and replacement of 17 windows (8 on the first floor, 9 on the second floor) and the replacement of a rear entry door.

Applicable Criteria

Secretary of the Interior's Standards for Rehabilitation

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

Windows: The removal of 17 windows from the property would constitute the removal of historic materials from the property. Windows are slated to be removed from each face of the building. While the windows are not highly ornamental, they are likely original.

Rear door: The removal of the rear door and replacement would also constitute the removal and replacement of historic materials.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

Windows: While some windows have deteriorated (as evidenced by the application), the main reason for removal is the presence of lead paint. None of the windows slated for replacement exhibit a high level of character defining features (the windows are all one over one double hung windows). Replacement windows could reasonably match the old windows in design, color, texture and other visual qualities.

Rear Door: The rear door has substantial damage, especially along the lock stile. The replacement door proposed in the packet reasonably matches the old in design, texture and material. Additionally, the door could be painted to match the old.

Local Historic District Standards and Guidelines

Windows-

If replacing the entire window becomes necessary, the following conditions shall be applied:

- The dimension of the original window must be retained.

It is unclear whether or not the new windows will fit the existing openings from the application.

- Muntins, sash, frames, exterior casing and brick molds must be of material and dimensions to match other windows in the house.

The proposal states that the windows will have matching muntin patterns (the existing windows have no muntins).

Discussion

The proposed window and door replacement on the property does constitute the removal of historic features, but they are not *highly* character defining features that could not be reasonably matched through the installation of new components. It is unclear from the application, however, whether or not the new components will fit the existing openings.

POTENTIAL ACTIONS:

1. The proposed work complies with the Secretary of the Interior standards 2 and 6. **Action: Motion to approve a Certificate of Appropriateness for the work as described in the application.**
2. More information is needed. **Action: Motion to postpone until the HDC meeting on 18 June 2024 and direct the applicant to provide the requested materials and information to the Historic Preservation Coordinator by noon on 11 June 2024.**
3. Denial of the application. **Action: Motion to deny the application based on Secretary of the Interior Standards 2 and 6.**



Community Planning and Economic Development
Historic District Commission
245 N. Rose Street
Kalamazoo, MI 49007
Telephone: (269) 337-8804; FAX (269) 337-8513
PenaL@kalamazoo-city.org

APPLICATION FOR PROJECT REVIEW – Historic District Commission Hearing

COMPLETE Applications for review at the Historic District Commission meeting including payment of the \$85 hearing fee must be received by NOON on the 2nd Tuesday of the month- the meeting is on the 3rd Tuesday of the month.

(PLEASE PRINT CLEARLY - See instructions on reverse side)

Property Address: 824 Elmwood Ave.

Historic District: ☐ South/Vine ☒ Stuart ☐ West Main Hill ☐ Rose Place ☐ Haymarket

Applicant: KNHS Home Ownership Services LBPHRP

Owner: Heidi Curry

Mailing Add: 1219 S. Park St.

Mailing Add: 824 Elmwood Ave.

City State & Zip: Kalamazoo, MI 49001

City, State Zip: Kalamazoo, MI 49007

Phone: 269-385-2916

Phone: 269-808-9556

Email: TCollins @ KNHS.org

Email: Heidi.Curry6 @ Gmail.com

Contractor KNHS Construction - Matt Milcarek CONTRACTOR - Malachi Arnold FOREMAN (LEAD ABATEMENT FIRM)

☐ **Work to be done by owner**

Proposed Work: Use additional sheets to describe work if necessary

APPLICATION CHECKLIST:

Include all these items are in your submission. Incomplete applications will be held until the next review hearing.

- ☒ Drawings 11x17 or smaller with dimensions
- ☒ Materials list
- ☒ Site plan including north arrow
- ☒ Other: Photos / SPEC
- ☐ \$85 for HDC hearing & review fee – must be paid in advance to be placed on agenda – include WITH application – Check payable to: City of Kalamazoo

SEE ATTACHED SCOPE OF WORK/SPECS

HC) This property has at least one working smoke detector for each dwelling unit.
 (Owner or applicant's initials) (Required) * see back

Applicant's Signature: Takunia Collins Date: 4/29/2024 | 1:53 PM PDT

Owner's Signature: Heidi Curry Date: 4/29/2024 | 1:51 PM PDT
 (if different)

-For Historic Preservation Coordinator's Use Only-

Case Number: PPZ- 24-0014 **Date Received*:** 04/29/2024
Zoning RD-19 **Year built** 1906 **Complete application** Yes
Owned since 11/18/2019

COMMISSION

Meeting Date 05/21/2024

Hearing fee paid \$85 _____

Check # _____

COMMENTS _____

Approve in Concept Date _____ Letter mailed _____

FINAL ACTION

☐ Approve ☐ Site Visit ☐ Approve w/Conditions ☐ Deny ☐ Postpone ☐ Withdrawn

ACTION DATE _____

Certificate of Appropriateness Issued _____

Notice of Denial with appeals information _____

Notice to Proceed _____ Comments _____

Revised November 22, 2019

APPLICATION FOR PROJECT REVIEW – Historic District Commission Hearing

COMPLETE Applications for review at the Historic District Commission meeting including payment of the \$85 hearing fee must be received by NOON on the 2nd Tuesday of the month- the meeting is on the 3rd Tuesday of the month. Incomplete applications will be postponed until the next meeting.

Filling out the application – instructions and tips – PLEASE PRINT.

Property address: street address of the property where the work will be done

Applicant: Owner or the owner's contractor.

Mailing Address: Applicant's address

City, State & Zip:

Phone: Specify home or work

Email

Historic district: Stuart, South Street/Vine Area, Haymarket, West Main Hill or Rose Place

Owner: Legal owner of property

Mailing Address: Owner's address

City, State & Zip:

Phone: Specify home or work

Email

Name of the contractor if this project requires a building permit Or indicate ☐ work done by owner

Proposed Work: What work do you plan to do? Please be as specific as possible including a complete description of the part of the structure where work will be done.

Example #1: Rather than "Build new garage"

Say "Build new two car garage near northeast corner of lot, wooden frame with clapboard siding, paneled metal overhead door, service door on the north side and one window at the rear. "

Example #2: Instead of "New front door"

Say "Install a new wooden front door to fit original opening in width and height, to replace the existing metal paneled door. See drawing/photo for appearance" Specify the measurements of the width and height of the original opening. Include a storm door if that is part of the project

For more complex projects, please include as many **continuation or illustration sheets** as you need to present a clear picture to the commission of your proposed work.

- Drawings – black or blue black ink on white paper. Electronic submissions are encouraged. Drawings should include dimensions of the existing part of the building and the proposed work.
- You need submit only one set of drawings; city staff will make the necessary copies.
- Use the checklist to be sure you have supplied all the important information.
- For new construction) exterior stairs, new garage, reconstructing a porch, etc) a site plan WITH a north arrow is

^{DS} hired.

* ) This property has at least one working smoke detector for each dwelling unit. Please initial to verify at least one working smoke detector in each dwelling unit. This is REQUIRED by state law or the application will be considered incomplete.

PHOTOS: The historic preservation coordinator is responsible for taking photographs of the proposed work and the structure. If you wish to take additional photos, one set is usually adequate for the commissioners to examine. You may also bring photos on a USB drive to share with the commission.

Emergency repairs: If damage occurs to a structure in a historic district, which requires emergency repairs, steps may be taken to secure the structure without the approval of the commission or the coordinator. Cover damaged windows or holes in a roof with tarps or wood to prevent further damage. Support dangling or loose elements or remove and store them. Notify the Coordinator of the damage to the structure on the first weekday available after the damage occurs and the coordinator will visit the structure as well as arranging a site visit by commission members to approve repairs if necessary. **THIS WILL BE DONE AS QUICKLY AS POSSIBLE IN ORDER TO FACILITATE REPAIRS OF THE STRUCTURE IN A TIMELY MANNER.**

If you have questions about completing this application for project review, please call the Historic Preservation Coordinator at: (269) 337-8804 or by email at PenaL@kalamazoo-city.org

Objective:

Achieve paint related “lead – safe” status for Stuart Historic District property while maintaining Historic District standards to model best practices in lead-abatement and historic preservation in Kalamazoo, MI.

Summary:EXTERIOR SIDING –

Exterior siding, window trim, fascia, soffit, etc. will be properly scraped of loose paint down to bare wood. Washed and HEPA vacuumed to remove loose dust and paint chips. Then, repaired as needed with like material wood. Afterwards, everything will be properly prime painted and then seal coat painted with premium quality acrylic latex paint.

WINDOWS –

Two options are presented for windows:

1. Remove and Replace w/ similar style and stock.
 - a. JELD WEN Siteline® Clad-Wood Window: Double-Hung Sash Pack (images of product in use) - <https://www.jeld-wen.com/en-us/products/windows/siteline-clad-wood/double-hung-sash-pack>
 - b. SoW / Costs for project APPROVED by City/HUD
2. Restore existing windows
 - a. Additional cost min. \$18,900
 - i. Skillset outside current capacity / interest of Leaf Abatement Contractor market
 - b. NOT APPROVED by City/HUD

EXTERIOR DOOR (REAR FACING) –

One Exterior door will be replaced.

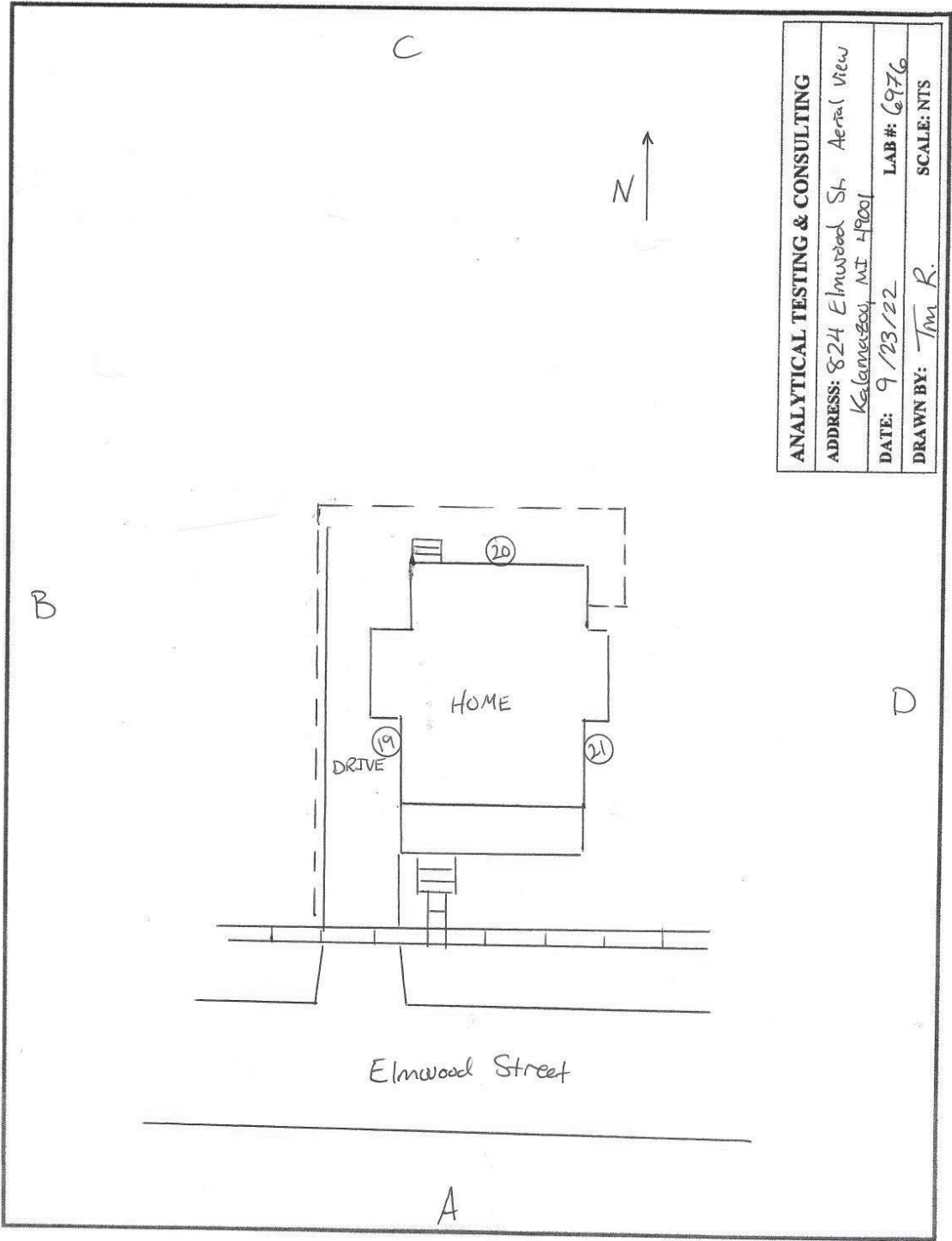
This door is a rear facing door painted with lead-based paint on the back porch. This door is currently unsalvageable and is slated to be removed and replaced with a similar style door (wood, pattern similar, half window). This similar style door would be purchased from Heritage Architectural Salvage in Kalamazoo, MI. An example of this sort of door has been photographed and presented in this packet. This door after purchase will be restored offsite, made lead-safe offsite, then installed with matching locksets to what is already in use on the home.



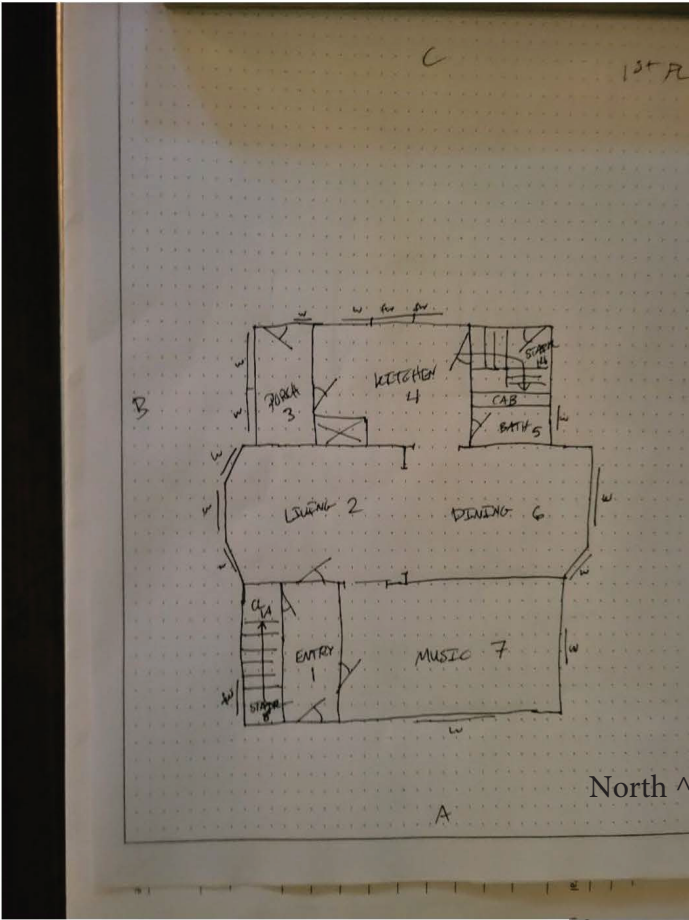
824 Elmwood Ave.
Kalamazoo, MI 49001

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Heidi Curry
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4/29/2024 | 1:51 PM PDT

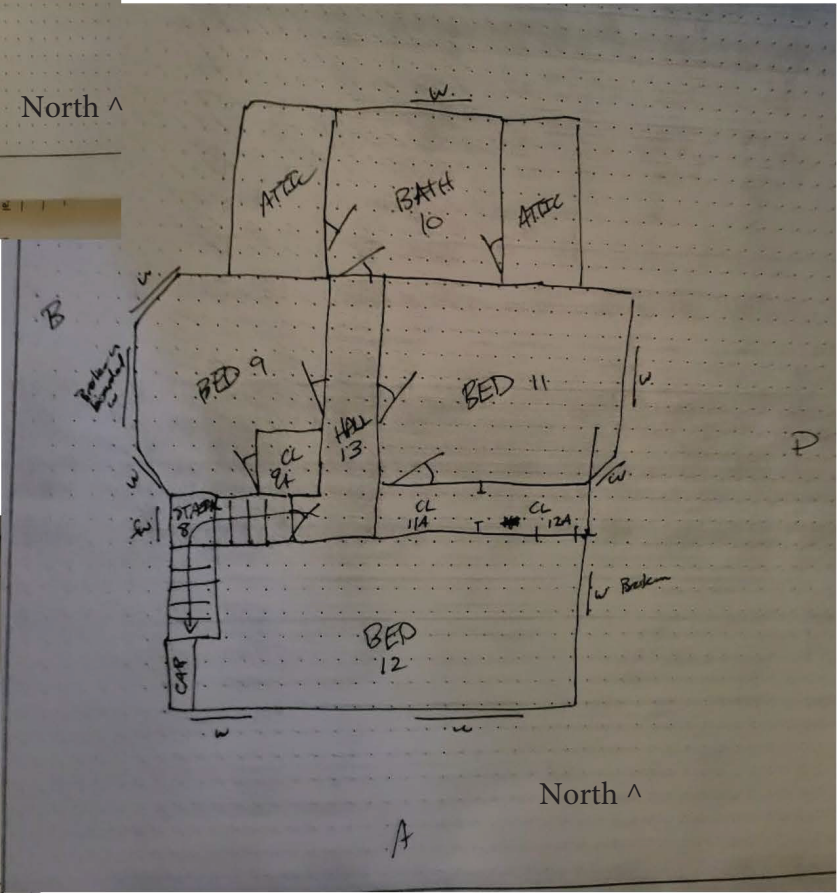
B-3: Floor Plans



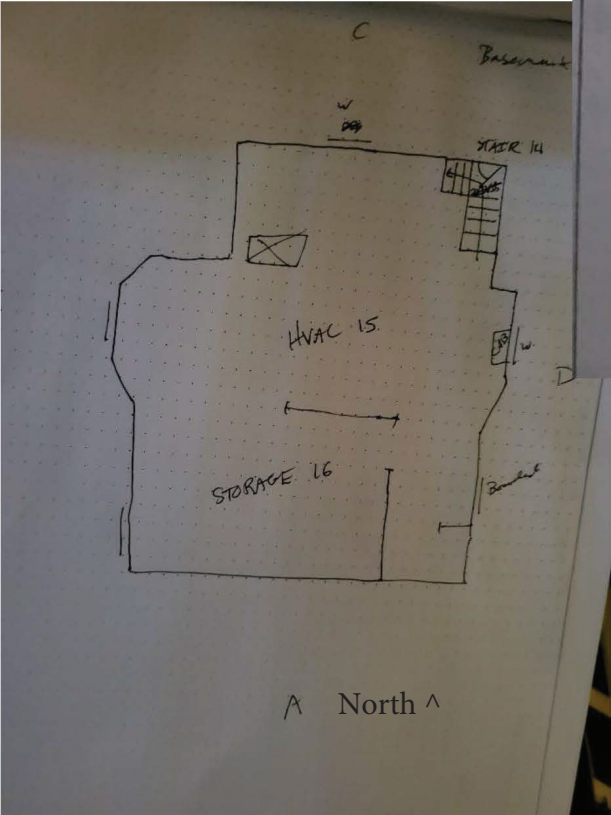
<-----First Floor



Second Floor----->

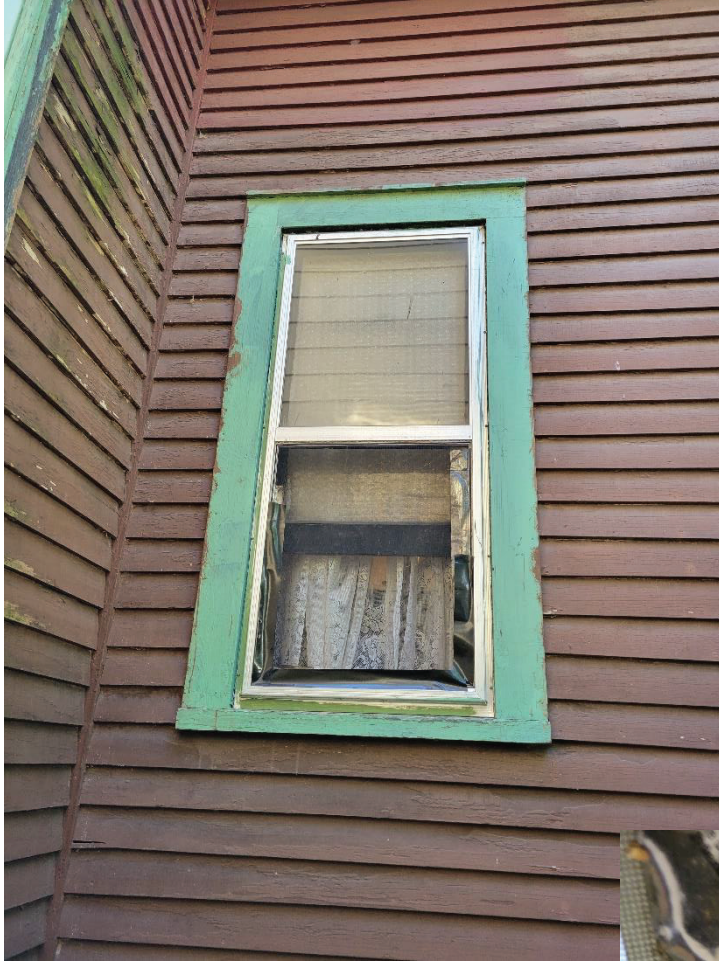


<-----Basement





Street view of property showing siding, windows, and trim. Exterior painted with lead-based paint.

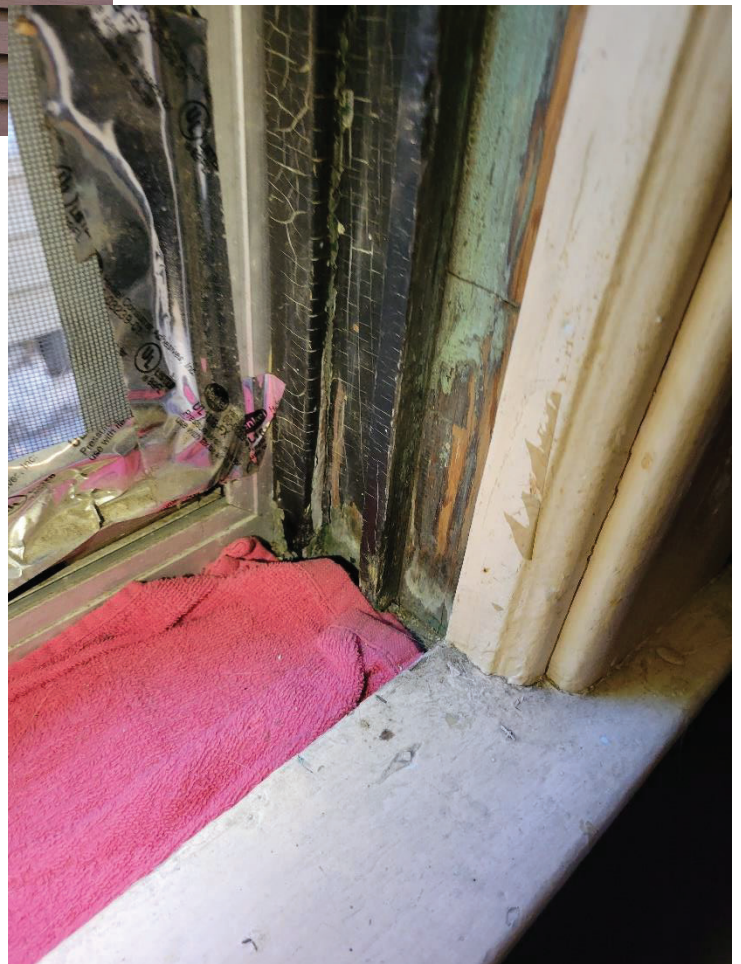


Window exterior example

Window interior jamb example

Deteriorated condition of lead-based paint and substrate

Repair options: See SPECS/ Scope of Work and Change Order





Exterior wood siding, window casings, window sills, soffit and fascia painted with lead-based paint, however substrate in good condition.

- Minus a few rotten, broken, or missing boards.

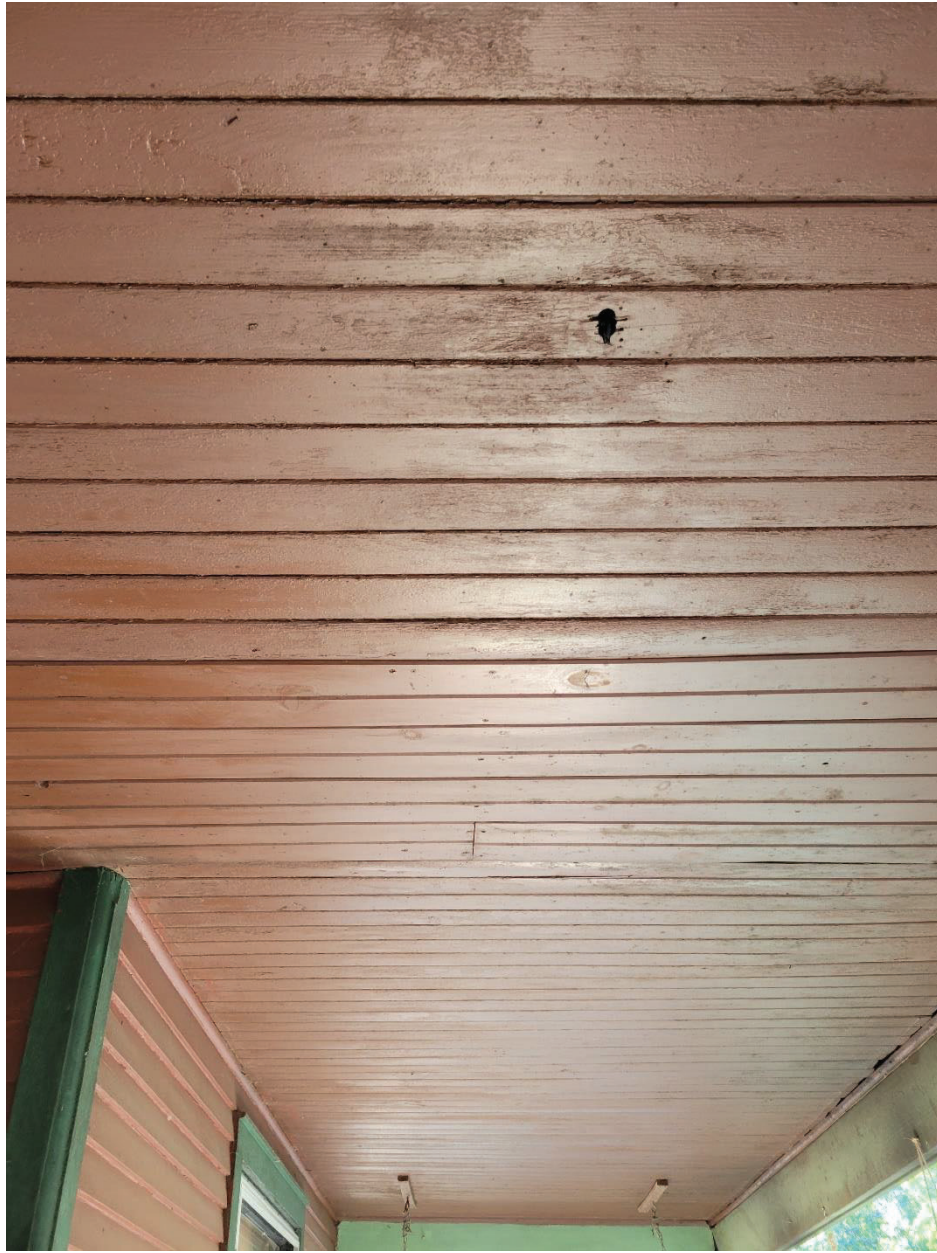
Repair by scraping loose, flaking, chipping paint to substrate, replace broken, missing, or damaged siding with matching material, prime, and repaint.



Floor, porch walls, railing, and columns painted with lead-based paint, however substrate in good condition.

Repair by scraping loose, flaking, chipping paint to substrate, prime, repaint.





Ceiling painted with lead-based paint, however substrate in good condition.

Repair by scraping loose, flaking, chipping paint to substrate, prime, repaint.

Window exterior example



Deteriorated
condition of lead-
based paint and
substrate

Repair options:
See SPECS/Scope
of Work and
Change Order



Window interior jamb example

Due to poor window condition, most windows throughout the home are double and triple layered with blinds, curtains, blankets.



Window sash, stop, sill, and casing in deteriorated condition.

Repair: See SPECS/Change Order



Rear of house - Kitchen window w/ broken storm

Bathroom upstairs w/ broken pane atop lead-based paint hazard.



Kitchen window: Broken screen w/ tape holding pane together. Sash lead-based paint.

Bath UPSTAIRS: - lead-based paint hazard w/ broken pane



Bedroom windows: covered in multiple blankets.
One broken pane. Lead - based paint hazards.



Bedroom windows: Blankets to keep cold out. Window weight cord cut. Lead - based paint hazard.



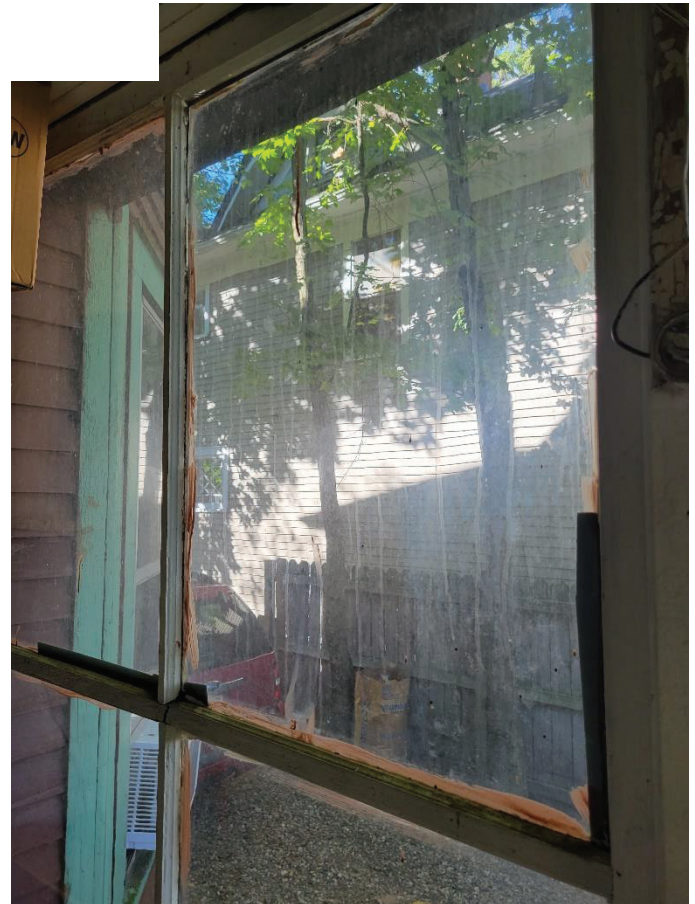


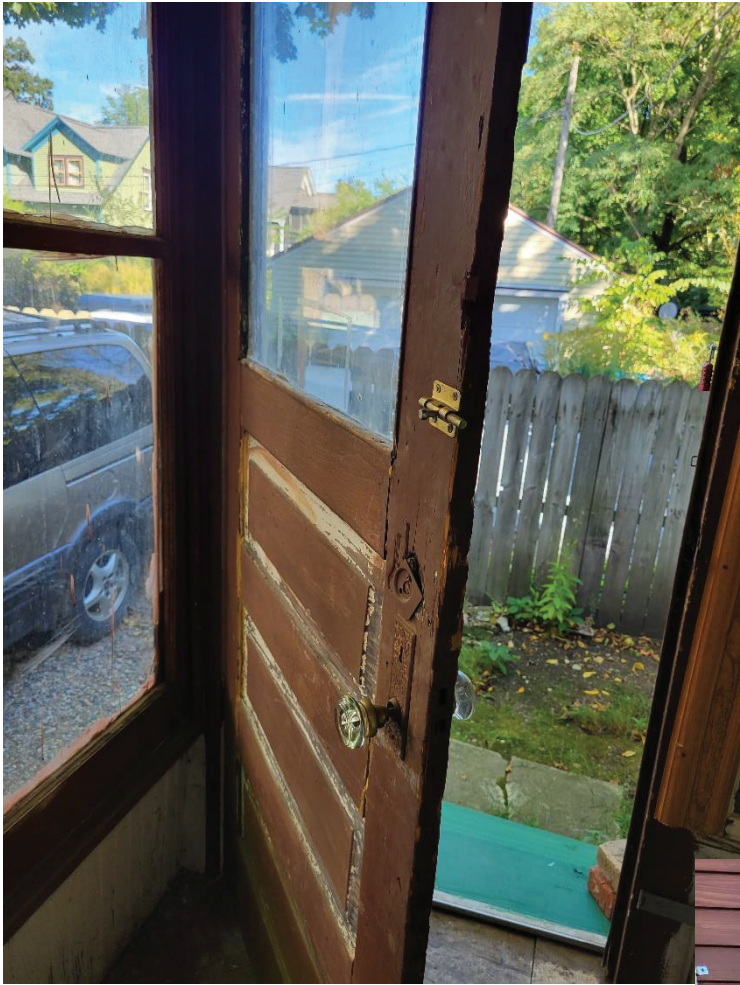
Rear porch storm window and siding. Deteriorated paint, lead-based.

Repair by scraping deteriorated paint to wood substrate, prime, repaint.

Storm window rear porch
Broken muntin.

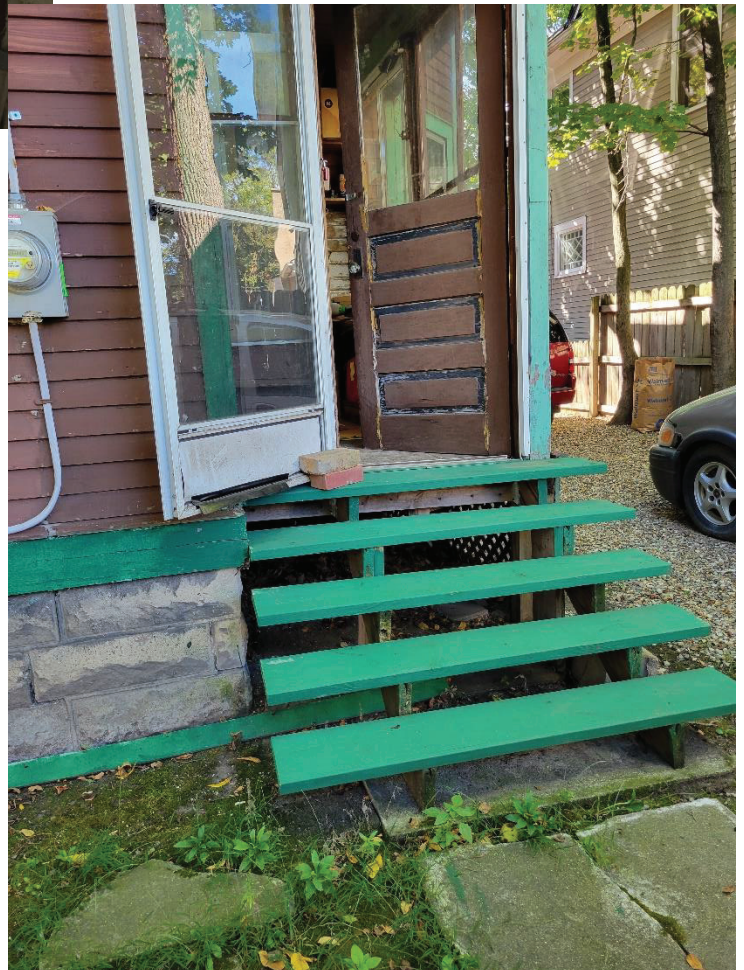
Repair by re-glazing window, replacing broken muntin, scraping all deteriorated paint to wood substrate, prime, repaint.





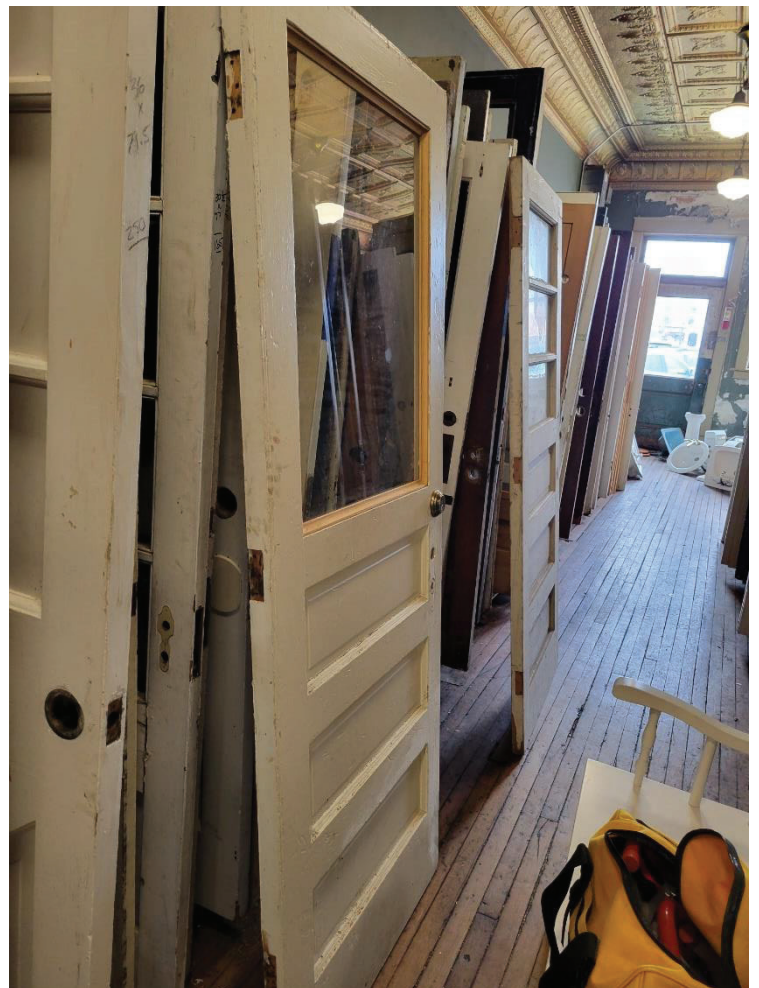
Rear door in notable deterioration. Paint and substrate deteriorated and unrepairable. Lead-based paint and years of re-gluing a broken door.

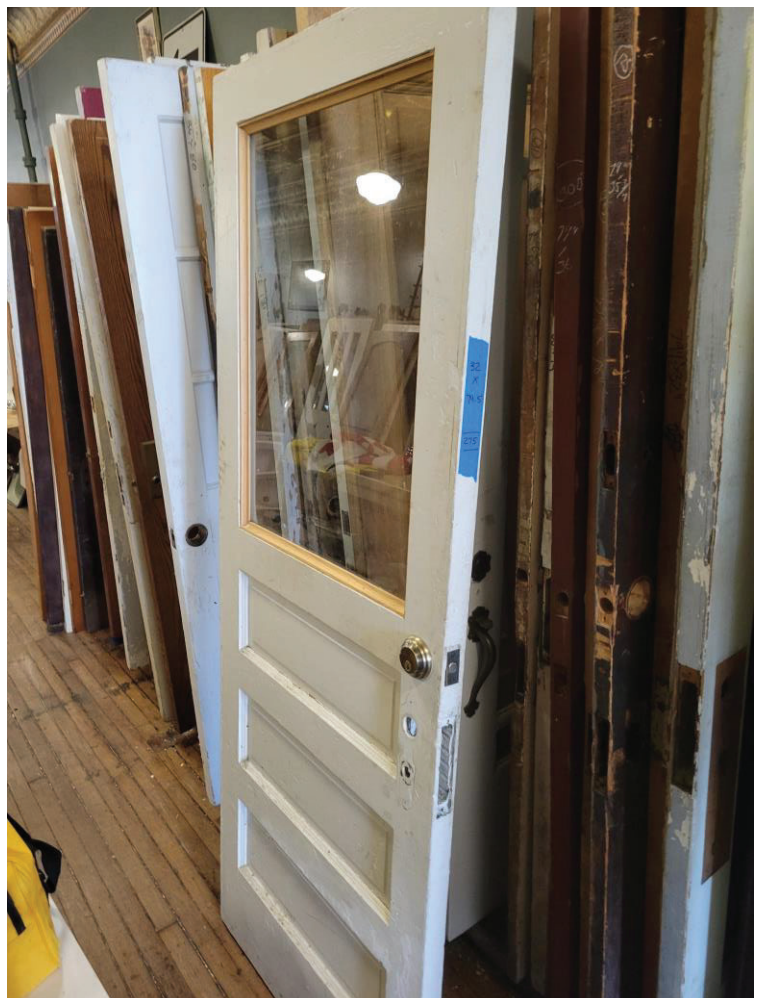
Repair by removing and replacing door w/ like style and pattern. Include window/half-light.





Door option example for replacement found at Heritage Architectural Salvage of Kalamazoo by Program Manager on 04/18/2024. Door to be purchased from Heritage, restored off-site from home, made lead-safe off site from home, and installed with new hardware and lock set to match current lock set on home.







Rear door entrance to house has been weather sealed through another program. As such door that was installed in of solid condition, though painted with lead-based paint. This being the case, the door will be kept but made lead-safe.

Repair by removing door from hinges, scraping jamb, stop, and strike rails and friction point to substrate, prime, repaint. Reinstall on hinges ensuring no friction points and install door bumper pads within jamb and corners to further prevent friction.



Matt Milcarek
802 S. Westnedge AveKalamazoo, Michigan 49008
269.385.2916

Specs By Location (Wide)

10/14/2022

Owner's Name
Owner's Phone #

DocuSigned by:
Heidi Curry
0CA2CA9F43D7459...

4/29/2024 | 1:51 PM PDT

Address: 824 Elmwood Street	Unit: Unit 01
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Location: 1 - Generic Requirements	Approx. Wall SF: 0	Ceiling/Floor SF: 0
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Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 1	General Requirements				
1	L00001 CONTRACTOR ACCEPTS SCOPE OF WORK - KNHS LEAD The undersigned contractor certifies that he/she has carefully reviewed & agrees to perform the work described in this Work Write Up (WWU) with the "Date Inspected" date of _____ & referred to as Exhibit 1. The contractor shall initial & date each page of the WWU. x _____ Contractor Date	1.00	DU	_____	_____
2	L00002 COMPLETION DATE - KNHS LEAD A written Proceed to Work order shall be issued upon the date of acceptance of the Contractors bid and proposal and signing of Contract between Contractor and the Homeowner. NO WORK SHALL BE COMMENCED BY THE CONTRACTOR UNTIL THEY HAVE RECEIVED A WRITTEN PROCEED TO WORK ORDER SIGNED BY HOMEOWNER. The services of the Contractor are to commence on _____, 20____ and shall be completed by _____. 3 L00003 LIQUIDATED DAMAGES - KNHS LEAD Liquidated Damages: As time is of the essence, in the event the Contractor does not complete the work within the period designated above, the Contractor shall pay the sum of TWO - HUNDRED FIFTY DOLLARS (\$250) a day as liquidated damages, and not as a penalty, for each and every day of delay until the Contract work is completed. Excepting, however, those days granted by the Owner/Construction Manager to the Contractor. 4 L00004 EXTENSION OF TIME - KNHS LEAD It is agreed that if the Contractor shall be unavoidably delayed in the beginning or fulfilling this Contract by reasons of excessive storms, floods, acts of providence, by reasons of extra work ordered by the Homeowner, or by any act, neglect, or delay or default of the Homeowner, the Contractor shall have no valid claim for damages on account of any such cause or delay. The Contractor shall in such case be entitled an extension or advancement of the time period specified above as the Construction Manager shall adjudge to be just and reasonable provided. The formal claim for such extension shall be made in writing by the Contractor within one (1) week after the date upon which such alleged cause of delay has occurred. 5 L00005 10% RETAINAGE ON DRAWS - KNHS LEAD Ten percent (10%) will be retained from each draw until job is completed and ALL punch list items have been completed and inspected. 6 L00006 MANUFACTURERS SPECS PREVAIL - KNHS LEAD All materials shall be installed in full accordance with the manufacturer's specifications for working conditions, surface preparation, methods, protection and testing. 7 L00007 WALL NAMING PROTOCOLS - KNHS LEAD Walls and attached components shall be identified with the letters A, B, C, D and so forth. Wall A is always the wall that is closest to the address elevation or the "street side" of the house. Moving clockwise, the walls are then B, C, D, etc. To name components, for example, a window as a subset of 4 windows on the D wall, the first would window is Window 1D. The last is window 4D. These locational markers may also be combined with the adjectives: left, right, upper, lower. For example: Remove and replace the upper right side window casing at opening D3.	1.00	DU	_____	_____
		1.00	DU	_____	_____
		1.00	AL	_____	_____
		1.00	GR	_____	_____
		1.00	GR	_____	_____
		1.00	EA	_____	_____

Location: 1 - Generic Requirements

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 1	General Requirements				
8	L00008 CONSTRUCTION DEFINITIONS - KNHS LEAD	1.00	GR		
	"Install" means to purchase, set up, test and warrant a new component. When materials are noted as "provided by owner", install means to set up, test, and warrant installation of new component. "Replace" means to remove and dispose of original material, purchase new material, deliver, install, test and warrant. "Repair" means to return a building component to like new condition through replacement, adjustment and recoating of parts. "Reinstall" means to remove, clean, store and install a component.				
9	L00009 VERIFY QUANTITIES/MEASUREMENTS - KNHS LEAD	1.00	GR		
	All Quantities stated in the attached specifications for this address using Units of Measure other than Each (EA), Room (RM), or Dwelling Unit (DU) (e.g. SF of drywall) are for the Contractors convenience, and must be verified by Contractor at a mandatory site inspection prior to Bid submission. All quantities stated in the Units of Measure Each (EA), Room (RM), or Dwelling Unit (DU) are as stated. Discrepancies in Quantities found by the Contractor must be communicated to the Construction Manager prior to the submission of the Bid. Claims for additional funds due to discrepancies in Quantities shall not be honored if submitted after the Bid submission.				
10	L00010 MANDATORY CONTRACTOR PREBID SITE VISIT - KNHS LEAD	1.00	DU		
	MANDATORY CONTRACTOR PREBID SITE VISIT: The Contractor must inspect the property. Submission of a bid is presumptive evidence that the bidder has thoroughly examined the site and is conversant with the requirements of the local jurisdiction.				
11	L00011 18 MONTH GENERAL WARRANTY - KNHS LEAD	1.00	DU		
	Contractor shall remedy any defect due to faulty material or workmanship and pay for all damage to other work resulting therefrom, which appear within 18 MONTHS from final payment. Further, contractor shall furnish owner with all manufacturers' and suppliers' written warranties covering items furnished under this contract prior to release of the final payment.				
12	L00012 CLEAN TO CHIP CLEARANCE - KNHS LEAD	1.00	DU		
	Prior to final acceptance of the lead hazard reduction work and all rehabilitation work, the property shall be visually inspected for any remaining paint chips, dust and debris, and lead dust wipe samples shall be obtained from floors, window sills and troughs. If ANY dust samples exceed CHIP thresholds of 10ug/SF for floors, 100ug/SF for window sills and troughs, and 10ug/SF for exterior porch, Contractor shall be responsible for re-cleaning using HEPA vacuum, wet wipes, and approved cleaning methods. If clearance is not achieved, Contractor will be billed for revisit of clearance test and holdover costs associated with relocation of family. This will only be revised if extenuating circumstances exist.				
13	L00013 PERIODICALLY REMOVE DEBRIS - KNHS LEAD	1.00	DU		
	The contractor shall clean construction debris from the dwelling and site to a dumpster or legal landfill at least once each day, and leave the property in broom clean condition at the end of the day before leaving site. In occupied dwellings, debris shall be removed from living quarters daily. For roof projects, a magnet shall be used each day for cleaning the exterior so that no nails remain on site and a tarp and/ or boards shall be used to protect shrubs and vegetation.				
14	L00014 CONSTRUCTION DEFINITIONS - KNHS LEAD	1.00	GR		
	"Install" means to purchase, set up, test and warrant a new component. When materials are noted as "provided by owner", install means to set up, test, and warrant installation of new component. "Replace" means to remove and dispose of original material, purchase new material, deliver, install, test and warrant. "Repair" means to return a building component to like new condition through replacement, adjustment and recoating of parts. "Reinstall" means to remove, clean, store and install a component. "Paint" means to apply as many coats as necessary to ensure a solid and smooth coverage of the paint color selected, so as not to show any signs of undercoat color or general under coverage of paint. "Caulk" means to apply as much caulk as necessary to ensure specific void is full at the visible surface and no crevices exist and caulk is wiped smooth.				
15	L00015 OWNERS CHOICE - KNHS LEAD	1.00	AL		
	All materials and colors listed as "owner's choice" shall be preapproved by owner in writing before contractor purchase or				

Location: 1 - Generic Requirements

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 1	General Requirements				
	installation. Owner shall not be responsible for the expenses associated with the purchase, installation, or removal of unapproved materials.				
	Color will be matched to what is already in use or white				
16	L00016 DRUG FREE ENVIRONMENT - KNHS LEAD	1.00	AL		
	In order to ensure a safe and healthy environment for residents, construction site shall be a smoke free and drug free environment. No smoking of any kind shall be permitted in any building by any person doing work under this contract. No illegal drugs (federal, state, or county) of any kind shall be allowed on site by any person doing work under this contract. Smoking tobacco outside of the property work zone shall be solely at the discretion of the property owner and smokers shall be responsible for cleaning up after themselves.				
17	L00017 Draw Requests - KNHS LEAD	1.00	AL		
	Contractor accepts that draw requests will take a minimum of two weeks to process. Line item draw requests submitted to KNHS by Friday will be verified on site the following week by KNHS staff. Checks will be available two weeks from the Friday in which the request was submitted. KNHS can only pay draws on work done. If a line item will take an extended amount of time to complete, the contractor may submit a draw for the % of the line item that is complete.				
18	L00018 APPLICABLE LEAD-SPECIFIC DEFINITIONS - KNHS LEAD	1.00	DU		
	The measures used to control lead-based paint with a design life of at least 20 years whose primary intent is to control lead-based paint hazards.				
	Adhesion: The ability of an encapsulant to attach to or remain fixed on a surface without blistering, flaking, cracking or being removed by tape.				
	CRF - The Code of Federal Regulations: The basic component of the Federal Register publication system. The CRF is a codification of the regulations of various Federal Agencies.				
	De minimus - Safe work practices and clearance are not required when no more than:				
	- 20 SF on exterior				
	- 2 SF per interior room				
	- 10% of small component				
	is deteriorated or will be disturbed by renovation.				
	HEPA - High Efficiency Particulate Air: A filter capable of removing 99.97% of all particles of 0.3 microns.				
	Interim Controls: A set of measures designed to temporarily control lead-based paint hazards.				
	ug - Micrograms: A microgram is 1/1,000,000 of a gram.				
	Work Area: The area where lead hazard reduction work is performed which is defined by containment to prevent the spread of lead dust and entry by unauthorized personnel.				
19	L00019 LEAD-SPECIFIC LAWS, RULES, REGULATIONS & GUIDELINES - KNHS LEAD	1.00	DU		
	The execution of this work shall comply with all applicable federal, state and local laws, rules, regulations and guidelines for lead dust environments. Some of these include: OSHA 29 CFR 1926 - Construction Industry Standards; 29 CFR 1926.62 - Construction Industry Lead Standard, 29 CFR 1910.1200 - Hazard Communication Standard; 40 CFR Part 745 - EPA Regulations; 24 CFR Part 35 - HUD Regulation on Lead-Based Paint Hazards in Federally Owned Housing and Housing Receiving Federal Assistance; and HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.				
20	L00020 PROHIBITED PAINT REMOVAL METHODS - KNHS LEAD	1.00	EA		
	The following paint removal methods are prohibited on all HUD-funded projects:				
	- Open flame burning or torching;				
	- Machine sanding or grinding without a HEPA local exhaust control;				
	- Abrasive blasting or sandblasting without a HEPA local exhaust control;				
	- Heat guns operating above 1,100 degrees Fahrenheit or charring the paint;				
	- Dry sanding or dry scraping except: dry scraping in conjunction with heat guns within one (1) foot of electrical outlets, or below the deminimus; and				
	- On site chemical paint removal in a poorly ventilated space using a volatile stripper that is a hazardous substance in accordance with regulations of the Consumer Product Safety Commission and/or a hazards chemical in accordance with the Occupational Safety and Health Administration.				
21	L00021 REQUIRED SUBMITTALS - KNHS LEAD	1.00	AL		
	The contractor shall provide the following Contractor Submittals prior to the Preconstruction Conference:				

Location: 1 - Generic Requirements

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 1	General Requirements				
	1. Copies of individual approved lead training certifications for workers and supervisors (both EPA required training and OSHA required training); 2. Copies of the State Lead Hazard Remediation Program Registration for individuals and company; 3. Copy of the written Occupant Protection Plan as required by 40 CFR Part 745; 4. Employee medical surveillance information; 5. List of subcontractors; 6. Site specific General Liability and, if applicable and required, Lead Liability insurance certificates with the property owners listed as the certificate holder and other appropriate individuals or organizations listed as Additionally Insured ; 7. Worker's Compensation insurance certificate' 8. 100% Labor and Materials Payment Bond and Performance Bond (optional dependent on size of project); 9. Any applicable permits (including construction permits for window/door replacements), licenses, etc; 10. Any product data for materials or equipment to be used on the project; and 11. Copy of valid Builder's License.				
22	L00022 LEAD RELATED FINES & PENALTIES - KNHS LEAD	1.00	EA		
	The Contractor agrees to pay within 30 days the cost of all fines and penalties resulting from regulatory non-compliance lead-related standards and requirements as issued by federal, state, and local agencies.				
23	L00023 LEAD ABATEMENT CERTIFICATION - KNHS LEAD	1.00	AL		
	All contractors performing lead abatement shall provide a copy of their EPA certification and state licenses for the designated lead abatement supervisors and all lead abatement workers working on the project prior to commencement of work.				
24	L00024 OCCUPANT PROTECTION PLAN REQUIRED - KNHS LEAD	1.00	AL		
	General Contractor shall provide the occupants an occupant protection plan in accordance with Subpart J of the HUD regulation (see 24 CFR 35.1350(b) and 24 CFR 35.1345) prior to any lead hazard stabilization or abatement work being conducted. Contractor shall provide signed copies of occupant protection plan to KNHS staff .				
25	L00025 PROHIBITED WORKER ACTIVITIES - KNHS LEAD	1.00	AL		
	The following activities are prohibited in any lead hazard reduction work area: - Eating - Drinking - Chewing gum or tobacco - Smoking - Applying cosmetics Post an OSHA compliance notice to workers as follows:" WARNING - LEAD WORK AREA - POISON - NO SMOKING OR EATING".				
26	L00026 LEAD WORKER -- PROTECTION - KNHS LEAD	1.00	DU		
	Persons carrying out lead hazard control activities must comply with all applicable federal, state, local laws and regulations related to safety in the workplace, including the respiratory protection program, found in the OSHA Construction Standard (29 CFR 1926. 62).				
27	L00027 HAZMAT OR LEAD LIABILITY INSURANCE - KNHS LEAD	1.00	M		
	Purchase contractors general liability insurance for lead hazard reduction that covers lead-related claims and suits in an amount of at least \$1 million per occurrence, and \$2 million annual aggregate, and provide the property owner and/or agency with an insurance certificate listing the owner and/or agency and other appropriate individuals or organization, as the certificate holder and as "Additionally Insured."				
28	L00028 SECTION 3 PROJECT - KNHS LEAD	1.00	AL		
	This is a Section 3 Project. The Section 3 preference bid policy, as outlined in the KNHS Section 3 Handbook, shall apply. Section 3 Businesses awarded contracts shall comply with Section 3 reporting requirements as outlined in the KNHS Section 3 Handbook, including but not limited to: Section 3 Resident Certification, Section 3 Business Certification, Project Workforce Need, General Contractor New Hires, and Time Sheets. For more information on KNHS's Section 3 policies, visit www.knhs.org/contractors				

Location Total:

Address: 824 Elmwood Street

Unit: Unit 01

Location:	2 - General Interior	Approx. Wall SF: 0	Ceiling/Floor SF: 0
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Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 1	General Requirements				
29	L00012 CLEAN TO CHIP CLEARANCE - KNHS LEAD	1.00	DU		
	Prior to final acceptance of the lead hazard reduction work and all rehabilitation work, the property shall be visually inspected for any remaining paint chips, dust and debris, and lead dust wipe samples shall be obtained from floors, window sills and troughs. If ANY dust samples exceed CHIP thresholds of 10ug/SF for floors, 100ug/SF for window sills and troughs, and 10ug/SF for exterior porch, Contractor shall be responsible for re-cleaning using HEPA vacuum, wet wipes, and approved cleaning methods. If clearance is not achieved, Contractor will be billed for revisit of clearance test and holdover costs associated with relocation of family. This will only be revised if extenuating circumstances exist. WHOLE INTERIOR / BASEMENT VISUAL/ PORCH WIPE				
30	L00029 TENANT DUMPSTER - SUPPLIED BY CONTRACTOR - KNHS LEAD	1.00	AL		
	Contractor shall supply a 20 yard dumpster for client debris. This is NOT for Contractor use. TO BE DELIVERED THURSDAY PRIOR TO PROJECT BEGINNING				
31	L00030 STORAGE POD SUPPLIED BY CONTRACTOR - KNHS LEAD	1.00	AL		
	Contractor shall provide clean, 20 foot long, storage POD. This will include delivery and removal. Price quote will be for ONE month duration. TO BE DELIVERED THURSDAY PRIOR TO PROJECT BEGINNING				

Trade: 9 Environmental Rehab

32	9005 HISTORIC STRUCTURE	1.00	AL		
	This structure must be addressed in strict conformance to the "Guidelines for Rehabilitating Historic Buildings." Lead hazard reduction techniques that damage, replace or enclose historic features are not permitted, unless the appropriate historic preservation office or commission has granted a specific waiver or other approval. WHOLE EXTERIOR / INTERIOR - REMINDER FOR PRICE OF CHIP CLEARANCE PRICING				

Location Total: _____

Location:	3 - Exterior Soil	Approx. Wall SF: 0	Ceiling/Floor SF: 0
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Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				
33	9769 BARE SOIL-- INSTALL DECOMPOSED GRANITE	1.00	SF		
	Remove vegetation and till soil to 6" depth. Grade surface smooth and drain away from house. Wet down and compact soil. Install decomposed granite, 1/4" or less, 3 layers of approx. 1-1/2" thickness each layer. Wet down and compact after each layer with a 3" final minimum thickness. Fill in dips and cracks 3 to 7 days after installation. (Color of granite is to be selected by owner from standard available colors.) BARE SOIL: SIDE C AND SIDE D DRIPLINE				

Location Total: _____

Location:	4 - Entry 1	Approx. Wall SF: 0	Ceiling/Floor SF: 0
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Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				
34	9513 STOP MOLDING - REPAINT	1.00	OP		
	Scrape DOOR STOP molding to bare substraite. Prime and top coat.				

Address: 824 Elmwood Street

Unit: Unit 01

Location: 4 - Entry 1

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				
	ENTRY 1: SIDE A DOOR STOP				
35	9535 REMOVE THRESHOLD PAINT	1.00	EA		
	Remove paint to wood, clean, prime twice, and paint twice to match existing.				
	ENTRY 1: SIDE A DOOR THRESHOLD				

Location Total:

Location: 5 - Living 2

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				
36	9449 Wood "Sash-Pack" - Historic Preservation Required	3.00	EA		
	After establishing any required floor and / or exterior containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of sashes, parting bead and stops. Wet-scrape any loose paint from jambs and interior stool/sill moldings. Encapsulate jamb, casing, trim and stool. Install custom-made, aluminum wrapped wood replacement sashes with matching muntin pattern, double glazing, parting bead / jamb liner & interior stops. Adjust window & hardware for smooth operation. Prime and paint sashes with premium acrylic latex and clean glass.				

RE-INSTALL NEW 1 INCH MINI-BLINDS FOR EACH WINDOW IF PRESENTING DUST HAZARD.

LIVING 2: SIDE B (3) - (JAMB, WELL, SASH B3)

Trade: 10 Carpentry

37	3010 STORM WINDOW--ALUMINUM	3.00	EA		
	Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.				
	LIVING 2: SIDE B (3)				

Location Total:

Location: 6 - Porch 3

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				
38	9178 ELASTOMERIC ENCAPSULANT	1.00	SF		
	After establishing any required floor containment with polyethylene sheeting, prepare surface by degreasing and deglossing. Apply any recommended primer and roll out a water-based, liquid, polymer, elastomeric encapsulant to create a continuous seal over the surface in accordance with manufacturer's specifications. Use the required number of coats and coverage rate of elastomeric to guarantee a minimum 20-year manufacturer's warranty.				
	FINAL COAT TO MATCH EXISTING COLOR AND SHEEN /OWNER CHOICE				
	PORCH 3: SIDE A, B, C, D WALLS, BASEBOARDS, SIDE D DOOR CASING, SIDE B1 AND B2 WINDOW CASING AND SILL, PORCH BEAMS				
39	9441 STABILIZE WOOD STORM - ALKYD	3.00	EA		
	Wet scrape all interior and exterior components, wet sand to smooth finish. Dry and reglaze as required. HEPA vac. all visible debris. Spot prime and top coat with exterior alkyd. Color owners preference.				
	PORCH 3: SIDE B (2), SIDE C (1)				
	REMOVE AND REPLACE INTERIOR STOPS				

Address: 824 Elmwood Street

Unit: Unit 01

Location: 6 - Porch 3

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9 Environmental Rehab					
40	9527 EXTERIOR DOOR - REPLACE WITH paneled WOOD	1.00	EA		
After establishing any required floor containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of door. Install a 1-5/8" pine or fir, paneled entrance door including vinyl bulb weather striping, peep site, single cylinder dead bolt, and entrance lockset on three 3" x 3" butt hinges. Prep, prime and top coat with premium acrylic latex paint or stain.					
PORCH 3: SIDE C DOOR (JAMB, STOP, DOOR INTERIOR / EXTERIOR) - BUILD TO FIT SPACE WITH INTERIOR TRIM AND FRAMING. DOOR TO HAVE WINDOW / GLASS / LIGHT TO MATCH EXISTING (HALF DOOR)					
41	9611 DISPOSAL OF LEAD-CONTAMINATED CABINET	1.00	EA		
After establishing any required floor containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of lead-containing cabinet. HEPA vacuum any paint chips, dust and debris.					
PORCH 3: SIDE A CABINET (FRAME, DOOR, DOOR EXTERIOR)					
42	9693 ENCLOSE PORCH CEILING--PLYWOOD	1.00	SF		
After establishing any required ground containment with polyethylene sheeting, mist defective paint with water to the point of saturation. Wet scrape and HEPA vacuum any visible paint chips, dust and debris. Mark ceiling "Lead Paint" 4' on center. Apply a 3/8" BCX plywood ceiling with 7d screw shank nails, 8" on center and B side exposed. Trim perimeter with 1/4 round and seams with 2" lattice. Prime and top coat with premium acrylic latex.					
PORCH 3: CEILING (TEXTURED WOOD BEAD BOARD ACCEPTABLE IF PRIMED, PAINTED, AND TRIMMED WITH MOLDING AND CAULK)					
REMOVE CROWN MOLDING WHEN ENCLOSING CEILING					

Trade: 10 Carpentry

43	3010 STORM WINDOW--ALUMINUM	4.00	EA		
Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.					
PORCH 3: SIDE C (1)					
44	3721 Pantry Cabinet	1.00	AL		
Install one 18 inch deep, 54 inch tall, 28 inch wide pantry on north wall.					
PORCH 3: SIDE A CABINET					

Location Total:

Location: 7 - Kitchen 4

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9 Environmental Rehab					
45	9178 ELASTOMERIC ENCAPSULANT	1.00	SF		
After establishing any required floor containment with polyethylene sheeting, prepare surface by degreasing and deglossing. Apply any recommended primer and roll out a water-based, liquid, polymer, elastomeric encapsulant to create a continuous seal over the surface in accordance with manufacturer's specifications. Use the required number of coats and coverage rate of elastomeric to guarantee a minimum 20-year manufacturer's warranty.					
FINAL COAT TO MATCH EXISTING COLOR AND SHEEN /OWNER CHOICE					
KITCHEN 4: SIDE A DOOR CASING, SIDE D DOOR CASING TO STAIR 14, SIDE D DOOR CASING TO BATH 5					
46	9196 LAMINATE WITH 1/4 GYPSUM_DRYWALL	1.00	SF		
After removing any required trim in trim specifications, mark "Lead Paint" at 4' intervals. Hang, tape, and three coat finish 1/4" gypsum over all wall and ceiling surfaces using 1 5/8" minimum screws 8" on center and 1/4" adhesive beads 16" on center. Caulk all penetrations and butt seams at door and window casing and basetrims with paintable siliconized acrylic.					

Address: 824 Elmwood Street

Unit: Unit 01

Location: 7 - Kitchen 4

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
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Trade: 9 Environmental Rehab

HEPA vacuum any visible paint chips, dust and debris.

1/2" or 3/8" drywall may be used on ceilings in place of 1/4" drywall.

FINAL COAT TO MATCH EXISTING COLOR AND SHEEN/ HOME OWNER CHOICE

KITCHEN 4: SIDE A, B, D WALLS, CEILING WITHIN CABINETS

47	9449	Wood "Sash-Pack" - Historic Preservation Required	1.00	EA		
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After establishing any required floor and / or exterior containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of sashes, parting bead and stops. Wet-scrape any loose paint from jambs and interior stool/sill moldings. Encapsulate jamb, casing, trim and stool. Install custom-made, aluminum wrapped wood replacement sashes with matching muntin pattern, double glazing, parting bead / jamb liner & interior stops. Adjust window & hardware for smooth operation. Prime and paint sashes with premium acrylic latex and clean glass.

RE-INSTALL NEW 1 INCH MINI-BLINDS FOR EACH WINDOW IF PRESENTING DUST HAZARD.

KITCHEN 4: SIDE C (1)

48	9520	INTERIO DOOR - REPLACE WITHPREHUNG 6-PANELWOOD	1.00	EA		
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After establishing any required floor containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of door, jamb and casing. Install a pine or fir, 6 panel, 1-5/8" prehung door including a brass finish lockset. Prime and top coat with owner's choice of premium acrylic latex paint or stain.

KITCHEN 4I SIDE D DOOR TO STAIR 14 (DOOR JAMB, DOOR INTERIOR/EXTERIOR, DOOR)

Trade: 10 Carpentry

49	3010	STORM WINDOW--ALUMINUM	1.00	EA		
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Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.

KITCHEN 4: SIDE C (C1)

Location Total:

Location: 8 - Bath 5

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
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Trade: 9 Environmental Rehab

50	9178	ELASTOMERIC ENCAPSULANT	1.00	SF		
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After establishing any required floor containment with polyethylene sheeting, prepare surface by degreasing and deglossing. Apply any recommended primer and roll out a water-based, liquid, polymer, elastomeric encapsulant to create a continuous seal over the surface in accordance with manufacturer's specifications. Use the required number of coats and coverage rate of elastomeric to guarantee a minimum 20-year manufacturer's warranty.

FINAL COAT TO MATCH EXISTING COLOR AND SHEEN /OWNER CHOICE

BATH 5: BASEBOARD, SIDE B DOOR CASING, SIDE D WINDOW CASING AND SILL

51	9449	Wood "Sash-Pack" - Historic Preservation Required	1.00	EA		
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After establishing any required floor and / or exterior containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of sashes, parting bead and stops. Wet-scrape any loose paint from jambs and interior stool/sill moldings. Encapsulate jamb, casing, trim and stool. Install custom-made, aluminum wrapped wood replacement sashes with matching muntin pattern, double glazing, parting bead / jamb liner & interior stops. Adjust window & hardware for smooth operation. Prime and paint sashes with premium acrylic latex and clean glass.

Address: 824 Elmwood Street

Unit: Unit 01

Location: 8 - Bath 5

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				

OBSCURED GLASS

RE-INSTALL NEW 1 INCH MINI-BLINDS FOR EACH WINDOW IF PRESENTING DUST HAZARD.

BATH 5: SIDE D (REMOVE AND REPLACE WINDOW STOP), SIDE D WINDOW WELL

52	9496 STRIP-PAINT-STRIKE RAIL & JAMB	1.00	EA		
	Strip paint by wet scraping full height of strike side rail, back 4" on each side. Wet wipe, HEPA vacuum, prime and paint one coat.				

BATH 5: SIDE B DOOR JAMB (INTERIOR/EXTERIOR)

53	9513 STOP MOLDING - REPLACE	1.00	OP		
	Package, dispose of and replace DOOR STOP molding. Prime and top coat.				

BATH 5: SIDE B DOOR STOP

54	9588 STABILIZE CABINET	1.00	LF		
	After establishing any required floor containment with polyethylene sheeting, mist defective paint with water to the point of saturation. Remove deteriorated paint by wet scraping. Feather edges with a wet, 100-grit foam sanding block. Rework doors and/or drawers and adjust hardware as necessary to reduce friction. Detergent wash, rinse, allow to dry and HEPA vacuum any paint chips, dust and debris. Spot prime bare wood with alkyd-based primer. Apply a minimum of 1 coat of enamel finish coat.				

BATH 7: SIDE C CABINET AND WAINSCOT - CABINET DRAWERS AND DOORS TO FUNCTION WITHOUT FRICTION

Trade: 10 Carpentry

55	3010 STORM WINDOW--ALUMINUM	1.00	EA		
	Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.				

BATH 5: SIDE D (1)

Location Total: _____

Location: 9 - Dining 6

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				

56	9449 Wood "Sash-Pack" - Historic Preservation Required	2.00	EA		
	After establishing any required floor and / or exterior containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of sashes, parting bead and stops. Wet-scrape any loose paint from jambs and interior stool/sill moldings. Encapsulate jamb, casing, trim and stool. Install custom-made, aluminum wrapped wood replacement sashes with matching muntin pattern, double glazing, parting bead / jamb liner & interior stops. Adjust window & hardware for smooth operation. Prime and paint sashes with premium acrylic latex and clean glass.				

RE-INSTALL NEW 1 INCH MINI-BLINDS FOR EACH WINDOW IF PRESENTING DUST HAZARD.

DINING 6: SIDE D (2) (WELLS) - LARGE WINDOW

Trade: 10 Carpentry

57	3010 STORM WINDOW--ALUMINUM	2.00	EA		
	Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.				

DINING 6: SIDE D (2)

Address: 824 Elmwood Street

Unit: Unit 01

Location: 9 - Dining 6

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Location Total:					

Location: 10 - Music 7

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9 Environmental Rehab					

58 9449 Wood "Sash-Pack" - Historic Preservation Required

1.00

EA

After establishing any required floor and / or exterior containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of sashes, parting bead and stops. Wet-scrape any loose paint from jambs and interior stool/sill moldings. Encapsulate jamb, casing, trim and stool. Install custom-made, aluminum wrapped wood replacement sashes with matching muntin pattern, double glazing, parting bead / jamb liner & interior stops. Adjust window & hardware for smooth operation. Prime and paint sashes with premium acrylic latex and clean glass.

RE-INSTALL NEW 1 INCH MINI-BLINDS FOR EACH WINDOW IF PRESENTING DUST HAZARD.

MUSIC 7: SIDE D (1)

WINDOW WELL SIDE D

Trade: 10 Carpentry

59 3010 STORM WINDOW--ALUMINUM

2.00

EA

Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.

MUSIC 7: SIDE D (1), SIDE A (1)

Location Total:

Location: 12 - Bed 9

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9 Environmental Rehab					

60 9178 ELASTOMERIC ENCAPSULANT

1.00

SF

After establishing any required floor containment with polyethylene sheeting, prepare surface by degreasing and deglossing. Apply any recommended primer and roll out a water-based, liquid, polymer, elastomeric encapsulant to create a continuous seal over the surface in accordance with manufacturer's specifications. Use the required number of coats and coverage rate of elastomeric to guarantee a minimum 20-year manufacturer's warranty.

FINAL COAT TO MATCH EXISTING COLOR AND SHEEN /OWNER CHOICE

BED 9A: CLOSET SHELF

61 9196 LAMINATE WITH 1/4 GYPSUM_DRYWALL

1.00

SF

After removing any required trim in trim specifications, mark "Lead Paint" at 4' intervals. Hang, tape, and three coat finish 1/4" gypsum over all wall and ceiling surfaces using 1 5/8" minimum screws 8" on center and 1/4" adhesive beads 16" on center. Caulk all penetrations and butt seams at door and window casing and basetrims with paintable siliconized acrylic. HEPA vacuum any visible paint chips, dust and debris.

1/2" or 3/8" drywall may be used on ceilings in place of 1/4" drywall.

FINAL COAT TO MATCH EXISTING COLOR AND SHEEN /OWNER CHOICE

BED 9: SIDE A, B, C, D WALLS, AND CEILING

62 9449 Wood "Sash-Pack" - Historic Preservation Required

3.00

EA

After establishing any required floor and / or exterior containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of sashes, parting bead and stops. Wet-scrape any loose paint from jambs and interior

Address: 824 Elmwood Street

Unit: Unit 01

Location: 12 - Bed 9

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
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Trade: 9 Environmental Rehab

stool/sill moldings. Encapsulate jamb, casing, trim and stool. Install custom-made, aluminum wrapped wood replacement sashes with matching muntin pattern, double glazing, parting bead / jamb liner & interior stops. Adjust window & hardware for smooth operation. Prime and paint sashes with premium acrylic latex and clean glass.

RE-INSTALL NEW 1 INCH MINI-BLINDS FOR EACH WINDOW IF PRESENTING DUST HAZARD.

BED 9: SIDE B (3)

Trade: 10 Carpentry

63 3010 STORM WINDOW--ALUMINUM

3.00

EA

Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.

BED 9: SIDE B (3)

Location Total:

Location: 13 - Bath 10

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
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Trade: 9 Environmental Rehab

64 9178 ELASTOMERIC ENCAPSULANT

1.00

SF

After establishing any required floor containment with polyethylene sheeting, prepare surface by degreasing and deglossing. Apply any recommended primer and roll out a water-based, liquid, polymer, elastomeric encapsulant to create a continuous seal over the surface in accordance with manufacturer's specifications. Use the required number of coats and coverage rate of elastomeric to guarantee a minimum 20-year manufacturer's warranty.

FINAL COAT TO MATCH EXISTING COLOR AND SHEEN /OWNER CHOICE

BATH 10: BASEBOARDS. SIDE A DOOR CASING, SIDE B DOOR CASING, SIDE D DOOR CASING, CHAIR RAIL, SIDE C WINDOW CASING, SILL, STOP, AND APRON, SIDE C/D CABINET FRAME

65 9196 LAMINATE WITH 1/4 GYPSUM_DRYWALL

1.00

SF

After removing any required trim in trim specifications, mark "Lead Paint" at 4' intervals. Hang, tape, and three coat finish 1/4" gypsum over all wall and ceiling surfaces using 1 5/8" minimum screws 8" on center and 1/4" adhesive beads 16" on center. Caulk all penetrations and butt seams at door and window casing and basetrims with paintable siliconized acrylic. HEPA vacuum any visible paint chips, dust and debris.

1/2" or 3/8" drywall may be used on ceilings in place of 1/4" drywall.

FINAL COAT TO MATCH EXISTING COLOR AND SHEEN/ HOME OWNER CHOICE

BATH 10: SIDE B, C, D WALLS, CEILING, AND INTERIOR OF CABINET WALLS

66 9449 Wood "Sash-Pack" - Historic Preservation Required

1.00

EA

After establishing any required floor and / or exterior containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of sashes, parting bead and stops. Wet-scrape any loose paint from jambs and interior stool/sill moldings. Encapsulate jamb, casing, trim and stool. Install custom-made, aluminum wrapped wood replacement sashes with matching muntin pattern, double glazing, parting bead / jamb liner & interior stops. Adjust window & hardware for smooth operation. Prime and paint sashes with premium acrylic latex and clean glass.

OBSCURED AND TEMPERED

RE-INSTALL NEW 1 INCH MINI-BLINDS FOR EACH WINDOW IF PRESENTING DUST HAZARD.

BATH 10: SIDE C (1) (WELL)

Address: 824 Elmwood Street

Unit: Unit 01

Location: 13 - Bath 10

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				
67 9520	INTERIO DOOR - REPLACE WITHPREHUNG 6-PANELWOOD	3.00	EA		
After establishing any required floor containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of door, jamb and casing. Install a pine or fir, 6 panel, 1-5/8" prehung door including a brass finish lockset. Prime and top coat with owner's choice of premium acrylic latex paint or stain.					
BATH 10: SIDE B DOOR (DOOR JAMB AND DOOR) , SIDE A DOOR (DOOR JAMB AND DOOR), SIDE D DOOR (DOOR JAMB AND DOOR)					

Trade: 10 Carpentry

68 3010	STORM WINDOW--ALUMINUM	1.00	EA		
Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.					
BATH 10: SIDE C (1) REMOVE AND REPLACE WINDOW STOP (SIDE C WINDOW WELL POSITIVE)					

Location Total:

Location: 14 - Bed 11

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				
69 9178	ELASTOMERIC ENCAPSULANT	1.00	SF		
After establishing any required floor containment with polyethylene sheeting, prepare surface by degreasing and deglossing. Apply any recommended primer and roll out a water-based, liquid, polymer, elastomeric encapsulant to create a continuous seal over the surface in accordance with manufacturer's specifications. Use the required number of coats and coverage rate of elastomeric to guarantee a minimum 20-year manufacturer's warranty.					
FINAL COAT TO MATCH EXISTING COLOR AND SHEEN /OWNER CHOICE					
BED 11: BASEBOARD, SIDE A DOOR CASING, SIDE B DOOR CASING, SIDE D WINDOW CASING AND SILL					
BED 11A: CLOSET SHELF SUPPORTS, CLOSET INTERIOR DOOR CASING, CLOSET BASEBOARDS					
70 9196	LAMINATE WITH 1/4 GYPSUM_DRYWALL	1.00	SF		
After removing any required trim in trim specifications, mark "Lead Paint" at 4' intervals. Hang, tape, and three coat finish 1/4" gypsum over all wall and ceiling survaces using 1 5/8" minimum screws 8" on center and 1/4" adhesive beads 16" on center. Caulk all penetrations and butt seams at door and window casing and basetrim with paintable siliconized acrylic. HEPA vacuum any visible paint chips, dust and debris.					
1/2" or 3/8" drywall may be used on ceilings in place of 1/4" drywall.					
FINAL COAT TO MATCH EXISTING COLOR AND SHEEN/ HOME OWNER CHOICE					
BED 11A: CLOSET WALLS AND CEILING (NOTABLE DETERIORATION FROM WALL BEING PARTIALLY DEMOLISHED.)					
- REFRAME PARTIALLY DESTROYED WALL AND ENCLOSE W/ DRYWALL					
- THIS WILL RETURN THE SPACE TO TWO SEPERATE CLOSETS					
71 9449	Wood "Sash-Pack" - Historic Preservation Required	2.00	EA		
After establishing any required floor and / or exterior containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of sashes, parting bead and stops. Wet-scrape any loose paint from jambs and interior stool/sill moldings. Encapsulate jamb, casing, trim and stool. Install custom-made, aluminum wrapped wood replacement sashes with matching muntin pattern, double glazing, parting bead / jamb liner & interior stops. Adjust window & hardware for smooth operation. Prime and paint sashes with premium acrylic latex and clean glass.					

INSTALL 1 INCH MINI-BLIND ID PRESENTING DUST HAZARD CORDLESS

Address: 824 Elmwood Street

Unit: Unit 01

Location: 14 - Bed 11

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				
	BED 11: SIDE D (2) REMOVE AND REPLACE WINDOW STOP (WELLS)				
72	9496 STRIP-PAINT-STRIKE RAIL & JAMB	1.00	EA		
	Strip paint by wet scraping full height of strike side rail, back 4" on each side. Wet wipe, HEPA vacuum, prime and paint one coat.				
	BED 11: SIDE A DOOR JAMB (INTERIOR/EXTERIOR)				
73	9513 STOP MOLDING - REPLACE	1.00	OP		
	Package, dispose of and replace DOOR STOP molding. Prime and top coat.				
	BED 11: SIDE A DOOR STOP				

Trade: 10 Carpentry

74	3010 STORM WINDOW--ALUMINUM	2.00	EA		
	Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.				
	BED 11: SIDE D (2)				

Location Total: _____

Location: 15 - Bed 12

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				
75	9178 ELASTOMERIC ENCAPSULANT	1.00	SF		
	After establishing any required floor containment with polyethylene sheeting, prepare surface by degreasing and deglossing. Apply any recommended primer and roll out a water-based, liquid, polymer, elastomeric encapsulant to create a continuous seal over the surface in accordance with manufacturer's specifications. Use the required number of coats and coverage rate of elastomeric to guarantee a minimum 20-year manufacturer's warranty.				
	FINAL COAT TO MATCH EXISTING COLOR AND SHEEN/ HOME OWNER CHOICE				
	BED 12: BASEBOARD, SIDE A WINDOW CASING AND SILL				
76	9449 Wood "Sash-Pack" - Historic Preservation Required	3.00	EA		
	After establishing any required floor and / or exterior containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of sashes, parting bead and stops. Wet-scrape any loose paint from jambs and interior stool/sill moldings. Encapsulate jamb, casing, trim and stool. Install custom-made, aluminum wrapped wood replacement sashes with matching muntin pattern, double glazing, parting bead / jamb liner & interior stops. Adjust window & hardware for smooth operation. Prime and paint sashes with premium acrylic latex and clean glass.				
	RE-INSTALL NEW 1 INCH MINI-BLINDS FOR EACH WINDOW IF PRESENTING DUST HAZARD.				
	BED 12: SIDE A (2) LARGE WINDOW, SIDE D (1)				
77	9588 STABILIZE CABINET	1.00	LF		
	After establishing any required floor containment with polyethylene sheeting, mist defective paint with water to the point of saturation. Remove deteriorated paint by wet scraping. Feather edges with a wet, 100-grit foam sanding block. Rework doors and/or drawers and adjust hardware as necessary to reduce friction. Detergent wash, rinse, allow to dry and HEPA vacuum any paint chips, dust and debris. Spot prime bare wood with alkyd-based primer. Apply a minimum of 1 coat of enamel finish coat.				
	BED 12: SIDE B CABINET - DOORS AND DRAWERS ARE TO FUNCTION WITHOUT FRICTION				

Trade: 10 Carpentry

Address: 824 Elmwood Street

Unit: Unit 01

Location: 15 - Bed 12

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
78	3010 STORM WINDOW--ALUMINUM	3.00	EA		
Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.					
BED 12: SIDE A (1), SIDE D (1)					

Location Total: _____

Location: 17 - Stair 14

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				
79	9178 ELASTOMERIC ENCAPSULANT	1.00	SF		
After establishing any required floor containment with polyethylene sheeting, prepare surface by degreasing and deglossing. Apply any recommended primer and roll out a water-based, liquid, polymer, elastomeric encapsulant to create a continuous seal over the surface in accordance with manufacturer's specifications. Use the required number of coats and coverage rate of elastomeric to guarantee a minimum 20-year manufacturer's warranty.					

FINAL COAT TO MATCH EXISTING COLOR AND SHEEN/ HOME OWNER CHOICE

STAIR 14: SIDE C BASEBOARD, SIDE B DOOR CASING, SIDE C CONCRETE STAIR LEDGE, SIDE B WOOD STAIR LEDGE

80	9196 LAMINATE WITH 1/4 GYPSUM_DRYWALL	1.00	SF		
After removing any required trim in trim specifications, mark "Lead Paint" at 4' intervals. Hang, tape, and three coat finish 1/4" gypsum over all wall and ceiling surfaces using 1 5/8" minimum screws 8" on center and 1/4" adhesive beads 16" on center. Caulk all penetrations and butt seams at door and window casing and basetrims with paintable siliconized acrylic. HEPA vacuum any visible paint chips, dust and debris.					

1/2" or 3/8" drywall may be used on ceilings in place of 1/4" drywall.

FINAL COAT TO MATCH EXISTING COLOR AND SHEEN/ HOME OWNER CHOICE

STAIR 14: SIDE B, SIDE A, SIDE A STAIR CEILING ABOVE STAIRS AND PLUMBING AND AT THE PEAK OF STAIRWELL

81	9522 EXTERIOR DOOR - STABILIZE & ADJUST	1.00	EA		
After establishing any required floor containment with polyethylene sheeting, mist defective paint with water to the point of saturation. Plane exterior door edges and adjust hasp and strike plate to minimize door/jamb friction. Wet scrape door jambs and trim. Clean and degloss with detergent solution. Rinse to neutral and allow to dry. HEPA vacuum any paint chips, dust and debris. Spot prime and top coat with premium acrylic latex.					
STAIR 14: SIDE C DOOR					

82	9595 REPLACE SHELF	1.00	LF		
Replace shelf with 1" wide pine stock to match original.					
STAIR 14: SIDE A SHELF					

Location Total: _____

Location: 18 - HVAC 15

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
Trade: 9	Environmental Rehab				
83	9178 ELASTOMERIC ENCAPSULANT	1.00	SF		
After establishing any required floor containment with polyethylene sheeting, prepare surface by degreasing and deglossing. Apply any recommended primer and roll out a water-based, liquid, polymer, elastomeric encapsulant to create					

Address: 824 Elmwood Street

Unit: Unit 01

Location: 18 - HVAC 15

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
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Trade: 9 Environmental Rehab

a continuous seal over the surface in accordance with manufacturer's specifications. Use the required number of coats and coverage rate of elastomeric to guarantee a minimum 20-year manufacturer's warranty.

FINAL COAT TO MATCH EXISTING COLOR AND SHEEN/ HOME OWNER CHOICE

HVAC 15: SIDE D CONCRETE WALL BY STAIRS, JOIST BEAM

Trade: 10 Carpentry

84	2890	WINDOW--WOOD BASEMENT UNIT	3.00	EA		
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Dispose of basement window unit. Install a single lite window, plumb and level, back primed, caulked. Repair masonry as necessary to complete installation. Provide screen and storm insert.

FOLLOW PROPER LEAD SAFE GUIDELINES AND RULES FOR DISPOSAL AND REPLACEMENT

RE-INSTALL NEW 1 INCH MINI-BLINDS FOR EACH WINDOW IF PRESENTING DUST HAZARD.

HVAC: SIDE B (1), SIDE C (1), SIDE D (1)

85	3010	STORM WINDOW--ALUMINUM	3.00	EA		
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Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.

HVAC: SIDE B (1), SIDE C (1), SIDE D (1)

Location Total: _____

Location: 19 - Storage 16

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
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Trade: 10 Carpentry

86	2890	WINDOW--WOOD BASEMENT UNIT	1.00	EA		
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Dispose of basement window unit. Install a single lite window, plumb and level, back primed, caulked. Repair masonry as necessary to complete installation. Provide screen and storm insert.

FOLLOW PROPER LEAD SAFE GUIDELINES FOR REMOVAL AND REPLACEMENT OF WINDOW.

RE-INSTALL NEW 1 INCH MINI-BLINDS FOR EACH WINDOW IF PRESENTING DUST HAZARD.

STORAGE 16: SIDE B (1) - BOARD UP SIDE D WITHIN SMALL ROOM

87	3010	STORM WINDOW--ALUMINUM	1.00	EA		
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Field measure, fabricate, caulk and install an enameled, white aluminum, double hung, triple track storm window with fiberglass screen. Storm window meeting rails must align with meeting rails on prime window and weep holes must drain.

HVAC: SIDE B (1)

Location Total: _____

Location: 20 - Home Exterior

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
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Trade: 9 Environmental Rehab

88	9627	EXTERIOR-- STABILIZE AND PAINT ACRYLIC	1.00	SF		
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After establishing any required ground containment with polyethylene sheeting, mist defective paint area with water to the

Address: 824 Elmwood Street

Unit: Unit 01

Location: 20 - Home Exterior

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
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Trade: 9 Environmental Rehab

point of saturation. Aggressively wet scrape all loose paint, caulking and glazing with curved and flat draw scrapers . Feather edges with a wet 100-grit sponge sanding block. Wash with detergent solution, rinse, allow to dry and HEPA vacuum all paint chips, dust and debris. Prime, caulk with 25 year silconized acrylic and top coat with premium acrylic latex.

FINAL COAT TO MATCH EXISTING COLOR AND SHEEN/ HOME OWNER CHOICE

HOME EXTERIOR: SIDE A, B, C, D SIDING, CORNER BOARDS, AND SKIRT BOARDS

HOME EXTERIOR: SOFFIT AND FASCIA

HOME EXTERIOR: SIDE A, B, C, D EXTERIOR WINDOW CASING, SILL, JAMB, BASEMENT WINDOW CASING SIDE C, SIDE D BASEMENT WINDOW CASING, ATTIC WINDOWS AND CASING

HOME EXTERIOR: SIDE A DOOR CASING, SIDE C DOOR CASING

Location Total: _____

Location: 21 - HE Side A Porch

Approx. Wall SF: 0

Ceiling/Floor SF: 0

Spec #	Spec	Quantity	Units	Unit Price	Total Price
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Trade: 9 Environmental Rehab

89 9627 EXTERIOR-- STABILIZE AND PAINT ACRYLIC

1.00 SF _____

After establishing any required ground containment with polyethylene sheeting, mist defective paint area with water to the point of saturation. Aggressively wet scrape all loose paint, caulking and glazing with curved and flat draw scrapers . Feather edges with a wet 100-grit sponge sanding block. Wash with detergent solution, rinse, allow to dry and HEPA vacuum all paint chips, dust and debris. Prime, caulk with 25 year silconized acrylic and top coat with premium acrylic latex.

FINAL COAT TO MATCH EXISTING COLOR AND SHEEN/ HOME OWNER CHOICE

HE SIDE A PORCH: WALLS, RAILING, COLUMNS, BEAMS, CEILING

90 9684 PORCH-- STABILIZE & PAINT

1.00 SF _____

After establishing any required ground containment with polyethylene sheeting, mist defective paint with water to the point of saturation. Wet scrape all loose paint with curved and flat draw scrapers . Wash with detergent solution, rinse, allow to dry and HEPA vacuum all surfaces for paint chips, dust and debris. Spot prime and caulk with a 25 year silconized acrylic and top coat with floor and deck enamel.

HE Side A Porch: FLOOR

Location Total: _____

Unit Total for 824 Elmwood Street, Unit Unit 01: _____

Address Grand Total for 824 Elmwood Street: _____

Bidder: _____



Window work to be done w/ removal of windows



CHANGE ORDER

Address: 824 Elmwood Ave. Kalamazoo, MI 49001

Change Order Rational:

- On-Site Review at Walk through - Field Change Order - FOR EVERY WINDOW PRICE USING THIS SPEC/ANTICIPATED WORK

- On-Site Review at Walk through - Field Change Order - FOR EVERY WINDOW PRICE USING THIS SPEC/ANTICIPATED WORK

Change Order Specifics:

Wood "Sash Pack" - Historic Preservation Required

After establishing any required floor and / or exterior containment with polyethylene sheeting, wet mist, remove, wrap in polyethylene sheeting and dispose of sashes, parting bead and stops.

Wet-scrape any loose paint from jambs and interior stool/sill moldings. Encapsulate jamb, casing, trim and stool.

Install custom-made, aluminum wrapped wood replacement sashes,

with matching muntin pattern, double glazing, parting bead / jamb liner & interior stops.

Adjust window & hardware for smooth operation. Prime and paint sashes with premium acrylic latex and clean glass.

Additional Cost to Contract Price: \$ 0.00

Signature of Contractor

Signature of Program Manager

Signature of Construction Director

DATE

Window work with windows being kept.
(Additional \$18,900k and requires additional HUD review and approval.)



CHANGE ORDER

Address: 824 Elmwood Ave. Kalamazoo, MI 49001

Change Order Rational:
HISTORIC PRESERVATION - PER HISTORIC PRESERVATION COORDINATOR
To be applied to all windows

Change Order Specifics:
WINDOWS w/ WORK BEING DONE VIA LBPHCP (see attached SPECS for room by room):
TOP SASH: AFFIX TO MAKE PERMENANT AND NO FRICTION CONCERN/HAZARD
BOTTOM SASH: REMOVE ALL PAINT FROM FRICTION SURFACES DOWN TO SUBSTRATE, PRIME, REPAINT (LEAD SAFE METHODS - (Recommendation: SPEEDHEATER)
INTERIOR JAMB: REBUILD AND REPAIR WEIGHT AND PULLEY SYSTEM FOR WINDOW w/ "Samson Red Spot Sash Cord", INSTALL JAMB LINER
EXTERIOR JAMB: REMOVE ALL PAINT FROM FRICTION SURFACES DOWN TO SUBSTRATE, PRIME, REPAINT (per SPECS w/ EXTERIOR CASINGS AND SILLS) (LEAD SAFE METHODS - (Recommendation: SPEEDHEATER)
WINDOW WELL: REMOVE ALL PAINT FROM FRICTION SURFACES DOWN TO SUBSTRATE, PRIME, REPAINT (LEAD SAFE METHODS - (Recommendation: SPEEDHEATER)
WINDOW STOP: REMOVE ALL PAINT FROM FRICTION SURFACES DOWN TO SUBSTRATE, PRIME, REPAINT (LEAD SAFE METHODS - (Recommendation: SPEEDHEATER)

Additional Cost to Contract Price: \$ +\$18,900

Signature of Contractor

Signature of Program Manager

Signature of Construction Director

DATE



Historic District Commission Staff Report

City of Kalamazoo

TO: The Kalamazoo Historic District Commission

FROM: Luis Pena, Historic Preservation Coordinator

DATE: May 21, 2024

SUBJECT: 2. 722 Eleanor (demolition of carriage house/garage) PPZ24-0013

PROPOSED WORK:

From the Description of Work Supplied by the Applicant: Garage is unstable and needs to be torn down.

EVALUATION:

Project Details

Demolition of the carriage barn/ garage behind their property.

Applicable Criteria

Secretary of the Interior's Standards for Rehabilitation

Demolition does not comply with any of the Secretary of the Interior's Standards for Rehabilitation.

Local Historic District Standards and Guidelines:

Work within an historic district shall be permitted through the issuance of a notice to proceed by the Historic District Commission if any of the following conditions prevail and if the proposed work can be demonstrated by a finding of the Historic District Commission to be necessary to substantially improve or correct any of the following conditions:

(1)

The resource constitutes a hazard to the safety of the public or to the occupants.

N/A

(2)

The resource is a deterrent to a major improvement program which will be of substantial benefit to the community and the applicant proposing the work has obtained all necessary planning and zoning approvals, financing and environmental clearances.

N/A

(3)

Retention of the resource would cause undue financial hardship to the owner when a governmental action, an act of God, or other events beyond the owner's control created the hardship, and all feasible alternatives to eliminate the financial hardship, which may include offering the resource for sale at its fair market value or moving the resource to a vacant site within the historic district, have been attempted and exhausted by the owner.

N/A

(4)

Retaining the resource is not in the interest of the majority of the community.

As the carriage house/garage is located in the rear of the property behind the main property, and is not highly visible from the street, a majority of the community may not be interested in retaining the resource.

Discussion

As noted above, the garage is located behind the main structure and may not be known to many in the community. While the garage is beginning to lean, there has not been permitted work to address the structure since 2012 when an addition on the garage was removed and some sister joints were added to structural members.

POTENTIAL ACTIONS:

1. The proposed work meets Notice To Proceed Criteria 4. **Action: Motion to approve a Notice to Proceed for the work as described in the application.**
2. More information is needed. **Action: Motion to postpone until the HDC meeting on 18 June 2024 and direct the applicant to provide the requested materials and information to the Historic Preservation Coordinator by noon on 11 June 2024.**
3. Denial of the application. **Action: Motion to deny the application based Failure to meet Notice to proceed criteria 4.**



Community Planning and Economic Development
Historic District Commission
245 N. Rose Street
Kalamazoo, MI 49007
Telephone: (269) 337-8804; FAX (269) 337-8513
Penal@kalamazoocity.org

APPLICATION FOR PROJECT REVIEW – Historic District Commission Hearing

COMPLETE Applications for review at the Historic District Commission meeting including payment of the \$85 hearing fee must be received by NOON on the 2nd Tuesday of the month- the meeting is on the 3rd Tuesday of the month.

(PLEASE PRINT CLEARLY - See instructions on reverse side)

Property Address: 722 Eleanor St

Historic District: ☐ South/Vine ☒ Stuart ☐ West Main Hill ☐ Rose Place ☐ Haymarket

Applicant: Robert Roglic

Owner: Robert Roglic

Mailing Add: PO Box 19304

Mailing Add: PO Box 19304

City State & Zip: Kalamazoo MI 49019

City, State Zip: Kalamazoo MI 49019

Phone: 269 271-5296

Phone: 269 271-5296

Email: propertycase@live.com

Email: propertycase@live.com

Contractor Not Yet

☐ Work to be done by owner

Proposed Work: Use additional sheets to describe work if necessary

Garage is unstable needs to be torn Down.

(RR) This property has at least one working smoke detector for each dwelling unit.
(Owner or applicant's initials) (Required) * see back

Applicant's Signature: Robert Roglic

Date: 4/30/24

Owner's Signature: Robert Roglic

Date: 4/30/24

(if different)

APPLICATION CHECKLIST:

Include all these items are in your submission. Incomplete applications will be held until the next review hearing.

- ☐ Drawings 11x17 or smaller with dimensions
- ☐ Materials list
- ☐ Site plan including north arrow
- ☐ Other:
- ☐ \$85 for HDC hearing & review fee – must be paid in advance to be placed on agenda – include WITH application – Check payable to: City of Kalamazoo

-For Historic Preservation Coordinator's Use Only-

Case Number: PPZ- 24-0013

Date Received*: 04-30-2024

Zoning RS-19 Year built 1891

Complete application yes

Owned since 09/21/2016

COMMISSION

Meeting Date 05/21/2024

Hearing fee paid \$85 _____

Check # _____

COMMENTS _____

Approve in Concept Date _____

Letter mailed _____

FINAL ACTION

☐ Approve ☐ Site Visit ☐ Approve w/Conditions ☐ Deny ☐ Postpone ☐ Withdrawn

ACTION DATE _____

Certificate of Appropriateness Issued _____

Notice of Denial with appeals information _____

Notice to Proceed _____ Comments _____

Revised November 22, 2019













Historic District Commission Staff Report

City of Kalamazoo

TO: The Kalamazoo Historic District Commission

FROM: Luis Pena, Historic Preservation Coordinator

DATE: May 21, 2024

SUBJECT: 3. 238 E Michigan - Alteration (Metal balconies on rear of building, new rear windows and doors in the second story)

PROPOSED WORK:

From the Description of Work Supplied by the Applicant: There are two proposed metal balconies on the rear facing bates alley, new rear windows and doors on the second floor in existing openings, currently boarded up, stucco repairs on the rear, and a new water main which will require digging through the front sidewalk.

EVALUATION:

Project Details

The applicant is proposing the installation of 4 windows and two doors in existing openings in the second story on the rear of the building. The windows will match the historic profile of the existing openings (similar to the neighboring property to the east). Windows will use Andersen A Architectural series as the basis of design. Additionally, the applicant is proposing the installation of a balcony on the second story of the rear of the building. The proposed balcony will have a black steel frame, plexiglass panels set in between the framing (serving as the guardrail) and trex decking.

Applicable Criteria

Secretary of the Interior's Standards for Rehabilitation

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment. *While the building did not originally have residences on the upper stories, the proposed changes will not substantially alter any defining characteristics of the building. The proposed windows and doors will not change character defining features because they will be installed into existing openings (that have been filled with brick). The addition of the balcony will not obscure any character defining features.*

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

None of the proposed alterations will destroy historic materials. The windows and doors will be installed in previously filled openings, and the balcony will not obscure character defining features. The new work will be differentiated from the old through the use of new materials (especially in the balcony), but will still be compatible with the massing, size, scale and architectural features of the property.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

All of the proposed elements could be removed in the future and the form and integrity of the historic property would be unimpaired. The windows and doors could be returned to their current infilled state, and the balcony could be removed from the rear wall.

Local Historic District Standards and Guidelines

The Local Historic District Standards and Guidelines do not specifically address the installation of windows into existing openings without windows or the installation of balconies.

Discussion

The installation of the doors, windows and balcony will not have an adverse effect on the historic property, and could be reversed in the future.

POTENTIAL ACTIONS:

1. The proposed work complies with the Secretary of the Interior standards 1, 9 and 10. **Action: Motion to approve a Certificate of Appropriateness for the work as described in the application.**

2. More information is needed. **Action: Motion to postpone until the HDC meeting on 18 June 2024 and direct the applicant to provide the requested materials and information to the Historic Preservation Coordinator by noon on 11 June 2024.**

3. Denial of the application. **Action: Motion to deny the application based on Secretary of the Interior Standards 1, 9 and 10.**



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Penal@kalamazoo-city.org

APPLICATION FOR PROJECT REVIEW – Administrative review

(PLEASE PRINT CLEARLY - See instructions on reverse side)

Property Address: 238 E Michigan Avenue

Historic District: ☐ South/Vine ☐ Stuart ☐ West Main Hill ☐ Rose Place ☒ Haymarket

Applicant: Cody Newman, Architect

Owner: Carmen and Brian Harris

Mailing Add: 117 W. Michigan Avenue

Mailing Add: 6314 Redfern Cir

City State & Zip: Battle Creek, MI 49017

City, State Zip: Portage, MI, 49024

Phone: (269)753-8040

Phone: 225-278-4556

Email: cody @ drivendesignstudio.com

Email: brian @ binaryc.com

Contractor:

☐ Work to be done by owner

☒ Contractors name: Not yet selected.

Proposed Work: (Use additional sheets to describe work if necessary)

There are two proposed metal balconies on the rear facing Bates alley,
new rear windows and doors on the 2nd floor in existing openings (currently boarded up),
stucco repairs on the rear, and a new water main which will require digging through the front sidewalk.

Application Checklist:

- ☒ Drawings 11x17 or smaller with dimensions
- ☒ Materials list
- ☒ Site plan including north arrow
- ☐ Other

☐ \$35 - HDC review fee – charged with building permit

EH This property has at least one working smoke detector for each dwelling unit.
(Owner or applicant's initials, required) * see back

Applicant's Signature: Cody Newman Date: 5/4/2024

Owner's Signature: Brian Harris Date: 5/9/2024
(if different)

-For Historic Preservation Coordinator's Use Only-

Case Number PB24-0016 Date Received 05-09-2024

Zoning CCBD YEAR BUILT N/A Complete application Yes

Owned since 09/25/2023 Fee Paid \$35

- ☐ This project will require a building permit with a \$35 administrative review fee.
 - ☐ This project will not require a building permit. There are no fees for this project
 - ☒ Referred to the Historic District Commission for review at a monthly hearing - \$85 hearing fee.
- Meeting date 05/21/2024

ADMINISTRATIVE

Staff Review Date _____ ☐ Approve ☐ Site Visit ☐ Approve w/Conditions
COMMENTS

Certificate of Appropriateness Issued _____
Notice to Proceed _____

Referred to Historic District Commission for hearing* _____ \$85
fee Hearing date _____

238 E MICHIGAN

238 E. MICHIGAN AVE., KALAMAZOO MI, 49007

RENDERING - FOR REFERENCE ONLY



EXISTING PHOTOS - FOR REFERENCE ONLY



PROJECT NOTES

1. CONSTRUCTION MUST COMPLY WITH ALL NATIONAL, STATE, AND LOCAL BUILDING CODES, AS WELL AS ALL LOCAL ORDINANCES.
2. DO NOT SCALE DRAWINGS. NOMINAL DIMENSIONS ARE SHOWN. REFER TO DETAILS, NOTES, SPECIFICATIONS AND PARTITION KEY FOR INFORMATION. CONTACT ARCHITECT IF ADDITIONAL INFORMATION IS REQUIRED.
3. EXISTING BUILDING AND SITE INFORMATION WAS OBTAINED FROM THE OWNER AND ADDITIONAL FIELD MEASUREMENTS BY THE ARCHITECT. THE CONTRACTOR SHALL VERIFY ALL EXISTING FIELD CONDITIONS PRIOR TO COMMENCEMENT OF WORK. DRAWINGS MAY CONTAIN DISCREPANCIES DUE TO CONCEALED CONDITIONS, INACCURACIES IN THE ORIGINAL DRAWINGS, INACCESSIBLE LOCATIONS, UNRECORDED BUILDING ALTERATIONS AND OTHER CONFLICTING INFORMATION. INFORMATION OUTSIDE OF CONTRACT AREA IS RELATIVE AND FOR REFERENCE ONLY. ALWAYS VERIFY FIELD CONDITIONS BEFORE COMMENCING WORK. NOTIFY ARCHITECT IF FIELD CONDITIONS CONFLICT SUBSTANTIALLY WITH PROPOSED WORK.
4. INSTRUCTIONS FOR BUILDING CONSTRUCTION MAY BE LOCATED IN ANY PART OF THE CONSTRUCTION DRAWINGS. FAILURE OF THE GENERAL CONTRACTOR OR HIS SUB CONTRACTORS AND SUPPLIERS TO SEE INFORMATION IN ANY PART OF THE CONTRACT DOCUMENTS WILL NOT BE A VALID REASON FOR ISSUING A CHANGE ORDER.
5. ALL HOLES CREATED FROM ABANDONED DUCT, CONDUIT, ELEC. DEVICES, ETC., WHICH ARE IN VIEW AND ARE NOT SCHEDULED TO BE BOARDED OVER, OR ON A WALL TO BE DEMOLISHED, ARE TO BE FILLED AND PATCHED TO MATCH EXISTING.
6. PATCH AND REPAIR ALL EXISTING WALL SURFACES ADJACENT TO NEW WORK AS REQUIRED TO ACHIEVE AN UNINTERRUPTED SURFACE APPEARANCE. PATCH AND REPAIR ALL FLOORING FOR EXISTING BUILDINGS TO ACHIEVE A CONTINUOUS, SMOOTH, AND FLUSH FLOOR SURFACE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING REQUIRED TO EXECUTE WORK. THE CONTRACTOR SHALL COORDINATE ALL TEMPORARY CONSTRUCTION WITH THE ARCHITECT AND OWNER TO ASSURE A MINIMUM AMOUNT OF INTERRUPTION WITH THE OWNER'S ACTIVITIES.
8. IF THE PROJECT IS A REMODEL, THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL SURFACES NOT BEING REMODELED IN THE PROJECT AND IN THE PATH OF THE CONTRACTORS TRAVEL, SETUP AND/ OR PROJECT MATERIAL STORAGE. THE CONTRACTOR MUST RETURN THE AREAS DISTURBED AS REQUIRED FOR ACCESS TO ITS PRE-EXISTING CONDITION.
9. THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL BE RESPONSIBLE TO OBTAIN AND PAY FOR ALL LOCAL/REQUIRED PERMITS AND INSPECTIONS.
10. ALL SAFETY ISSUES RELATED TO CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR AND MUST COMPLY WITH ALL STATE, LOCAL, ENVIRONMENTAL AND LABOR LAWS DURING THE CONSTRUCTION OF THIS PROJECT.
11. ALL WORK TO BE GUARANTEED A MINIMUM OF ONE YEAR FROM THE DATE OF OWNER ACCEPTANCE OF WORK, EXCEPT WHERE MANUFACTURER'S GUARANTEE IS LONGER.
12. IF DISCREPANCIES OCCUR BETWEEN DRAWINGS AND FIELD CONDITIONS CONTACT THE ARCHITECT TO VERIFY HOW TO PROCEED BEFORE DOING SO.
13. SEE T001 FOR ADDITIONAL PROJECT NOTES, MOUNTING HEIGHTS, AND SYMBOLS
14. 3D VIEWS AND RENDERINGS ON THIS PAGE AND THROUGHOUT THE SET ARE FOR REFERENCE ONLY. VERIFY ALL CONSTRUCTION DETAILS THROUGHOUT THE ENTIRE SET OF DOCUMENTS
15. THE PROJECT SHALL CONFORM TO UNDERWRITERS LABORATORY FIRE RESISTANCE DIRECTORY AND BUILDING MATERIALS DIRECTORY.
16. ANY MATERIAL SUBSTITUTIONS TO A LISTED UL DESIGN NUMBER SHALL BE COORDINATED BY THE CONSTRUCTION MANAGER, CONTRACTOR, SUBCONTRACTOR AND/OR MATERIAL SUPPLIER FOR COMPLIANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL APPROVALS - FOR ANY MATERIALS SUBSTITUTION IN THE REQUIRED UL DESIGN ASSEMBLY - BY THE FIRE MARSHAL AND BUILDING INSPECTOR HAVING JURISDICTION PRIOR TO ACCEPTANCE.
17. FOR ANY CHANGE OF UL DESIGN NUMBER, OR ANY CHANGE IN MATERIAL(S) IN A UL DESIGN ASSEMBLY, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL OTHER RELATED MATERIALS OR ASSEMBLIES AFFECTED BY THE CHANGE OF MATERIAL OR UL DESIGN NUMBER ASSEMBLY.
18. PROVIDE COMPLETE UL APPROVED THROUGH-PENETRATION FIRESTOP SYSTEMS AT ALL RATED WALL PENETRATIONS.
19. PROVIDE FIRESTOPPING AS REQUIRED AT ALL OPENINGS FOR PLUMBING, CONDUIT, DUCTWORK, ETC AT FIRE RATED ASSEMBLIES.
20. REFER TO THE FLOOR PLANS FOR IDENTIFICATION OF ALL FIRE AND SMOKE-RATED PARTITIONS.

PROJECT DESCRIPTION

THE SECOND FLOOR OF AN EXISTING BUILDING IS BEING RENOVATED INTO APARTMENTS.

DRAWING LIST

SHEET NUMBER	DRAWING TITLE	11/21/2023 - PERMIT SET			12/13/2023 - ADDENDUM #1		03/14/2024 - ADDENDUM #2	
00 GENERAL								
T000	TITLE SHEET		X	X	X			
T001	RENDERINGS		X	X	X			
T002	MOUNTING HEIGHTS + ABBREVIATIONS		X	X	X			
T003	MOUNTING HEIGHTS CONTINUED		X	X	X			
T004	CODE COMPLIANCE		X	X	X			
T005	CODE COMPLIANCE		X	X	X			
T006	AREA PLANS		X	X	X			
01 CIVIL								
C100	ARCHITECTURAL SITE PLAN		X	X	X			
02 ARCHITECTURAL								
A000	EXISTING FLOOR PLANS		X	X	X			
A100	DEMOLITION PLANS		X	X	X			
A110	NEW FLOOR PLANS		X	X	X			
A120	FINISH PLAN & SCHEDULE		X	X	X			
A200	REFLECTED CEILING PLANS		X	X	X			
A210	CEILING DETAILS		X	X	X			
A220	ROOF PLAN		X	X	X			
A221	RUBBER ROOF DETAILS		X	X	X			
A300	INTERIOR ELEVATIONS		X	X	X			
A301	INTERIOR ELEVATIONS CONTINUED		X	X	X			
A310	INTERIOR DETAILS		X	X	X			
A311	APPLIANCES - BASIS OF DESIGN		X	X	X			
A400	DOOR SCHEDULE AND DETAILS		X	X	X			
A410	WINDOW SCHEDULE AND DETAILS		X	X	X			
A500	EXTERIOR ELEVATIONS		X	X	X			
A600	BALCONY DETAILS		X	X	X			
A700	BUILDING SECTION		X	X	X			
03 MECHANICAL								
M000	MECHANICAL SYMBOLS AND GENERAL NOTES		X	X	X			
M001	MECHANICAL SPECIFICATIONS		X	X	X			
M110	BASEMENT & FIRST FLOOR FIRE SUPPRESSION PLAN		X	X	X			
M120	SECOND FLOOR FIRE SUPPRESSION PLAN		X	X	X			
M210	BASEMENT & FIRST FLOOR PLUMBING PLAN		X	X	X			
M220	SECOND FLOOR PLUMBING PLAN		X	X	X			
M320	SECOND FLOOR & ROOF MECHANICAL PLANS		X	X	X			
M701	MECHANICAL SCHEDULES		X	X	X			
M710	MECHANICAL DETAILS		X	X	X			
M711	MECHANICAL DETAILS		X	X	X			
MD110	BASEMENT & FIRST FLOOR MECHANICAL DEMOLITION PLAN		X	X	X			
MD120	SECOND FLOOR MECHANICAL DEMOLITION PLAN		X	X	X			
04 ELECTRICAL								
E000	ELECTRICAL SYMBOLS AND SPECIFICATION		X	X	X			
E110	FIRST AND SECOND FLOOR POWER PLAN		X	X	X			
E120	ROOF POWER PLAN		X	X	X			
E210	FIRST AND SECOND FLOOR LIGHTING PLAN		X	X	X			
E401	ELECTRICAL ONE LINE DIAGRAM AND DETAILS		X	X	X			
E402	ELECTRICAL ELEVATIONS AND DETAILS		X	X	X			
E501	ELECTRICAL PANEL LOAD SCHEDULES		X	X	X			
E502	ELECTRICAL PANEL LOAD SCHEDULES		X	X	X			
ED110	FIRST AND SECOND FLOOR ELECTRICAL DEMOLITION PLAN		X	X	X			
Grand total: 46								



ARCHITECT
Driven Design Studio PLLC
117 West Michigan Avenue
Battle Creek, MI 49017
(269) 753-8040
cody@drivendesignstudio.com

OWNER
Brian and Carmen Harris
238 E. Michigan Ave.
Kalamazoo, MI

CONSTRUCTION MANAGER/GC

ENGINEER
Ignyte Design
123 Devisser Alley
Kalamazoo, MI

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PROJECT NAME
238 E MICHIGAN

PROJECT ADDRESS
238 E. MICHIGAN AVE., KALAMAZOO MI, 49007
BRIAN & CARMEN HARRIS

ISSUE
CONSTRUCTION DOCUMENTS

REVISION

DRAWN BY CMN

DATE 3/14/2024 2:34:06 PM

SCALE

STAMP

PROJECT NUMBER
2023.135

TITLE SHEET
T000

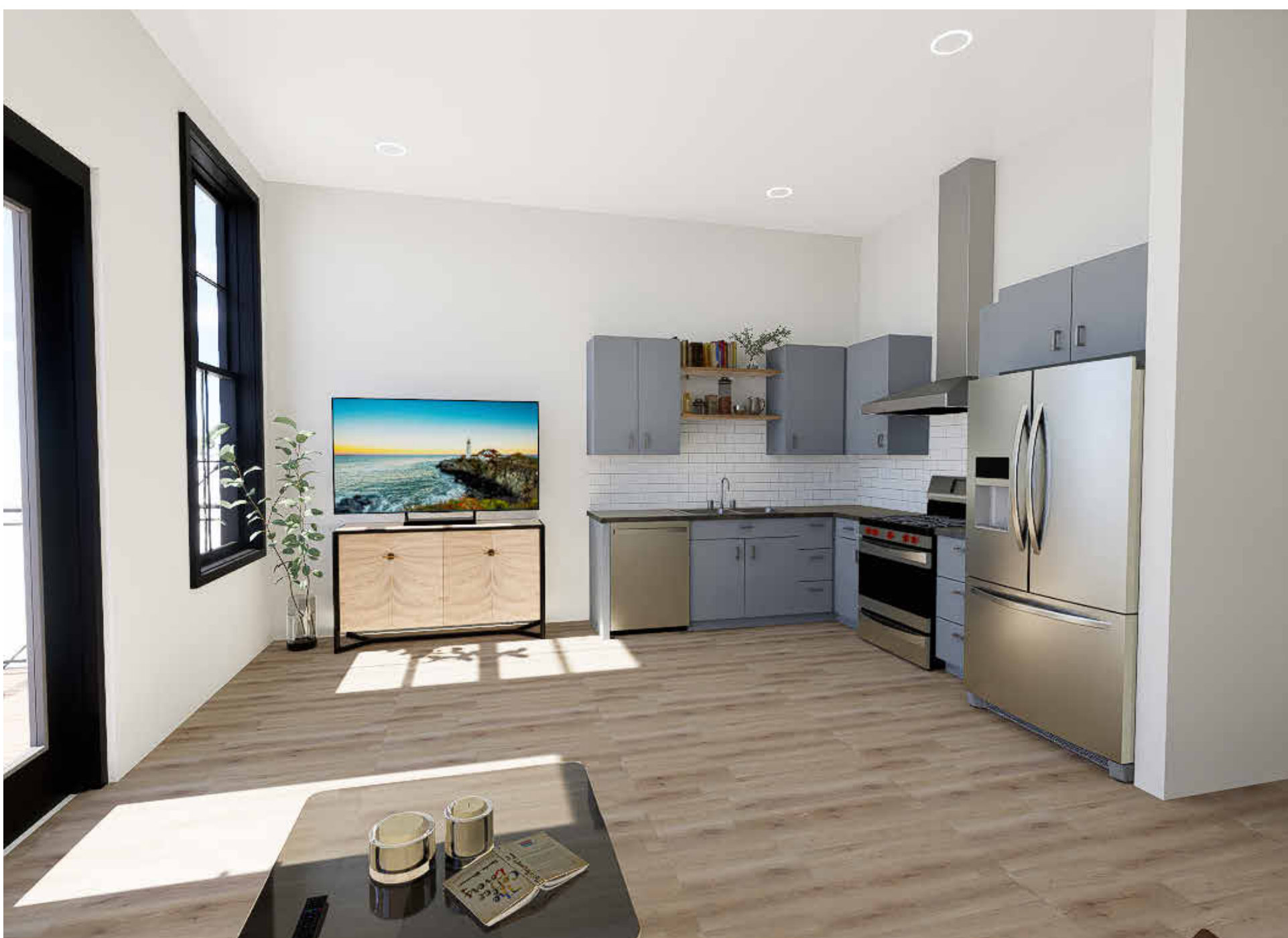
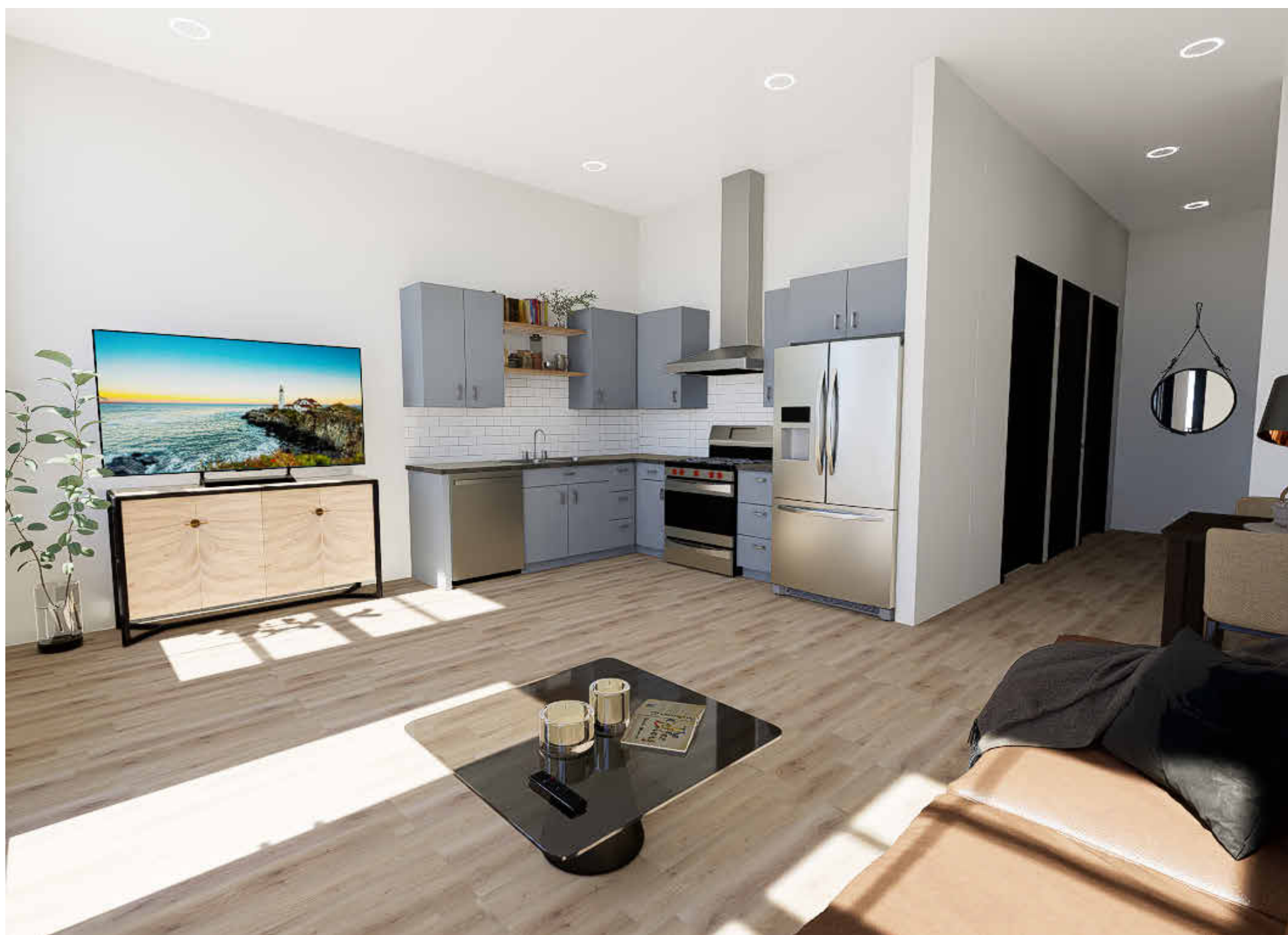
ZONING MAP

ZONING - D-1 - DOWNTOWN I



AREA MAP





RENDERINGS - FOR REFERENCE ONLY



RENDERINGS - FOR REFERENCE ONLY

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238 E MICHIGAN
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CONSTRUCTION DOCUMENTS

REVISION

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STAMP

PROJECT NUMBER
2023.135

RENDERINGS
T001

ABBREVIATION LIST

A/C

AIR CONDITIONING

A/V

AUDIO/VISUAL

ACP

ACOUSTICAL CEILING PANEL

AD

AREA DRAIN

ADA

AMERICANS WITH DISABILITIES ACT

ADJ

ADJUSTABLE

AFF

ABOVE FINISHED FLOOR

ALT

ALTERNATE

ALUM

ALUMINIUM

APPROX

APPROXIMATELY

ARCH

ARCHITECT(URAL, URE)

ASSOC

ASSOCIATED

AUTO

AUTOMATIC

AWP

ACOUSTICAL WALL PANEL

BD

BOARD

BF

BARRIER FREE

BIT

BITUMINOUS, BITUMEN

BLDG

BUILDING

BLKG

BLOCKING

BM

BEAM

BOT

BOTTOM

CAB

CABINET

CJ

CONTROL JOINT

CLG

CEILING

CLR

CLEAR(ANCE)

CMU

CONCRETE MASONRY UNIT

COL

COLUMN

COM

COMMUNICATIONS

CONC

CONCRETE

CONFIG

CONFIGURATION

CONST

CONSTRUCTION

CONT

CONTINUOUS

COORD

COORDINATE

CORR

CORRIDOR

CPT

CARPET

CT

CERAMIC TILE

CTR

CENTER

DEG

DEGREE

DF

DRINKING FOUNTAIN

DIA

DIAMETER

DIAG

DIAGONAL

DIM

DIMENSION

DIV

DIVISION

DN

DOWN

DR

DOOR

DS

DOWNSPOUT

DTL

DETAIL

DWG(S)

DRAWING(S)

E

EAST

EA

EACH

EJ

EXPANSION JOINT

EL

ELEVATION

ELEC

ELECTRICAL

ELEV

ELEVATION

EMER

EMERGENCY

ENCL

ENCLOS(E)URE

EQ

EQUAL

EQUIP

EQUIPMENT

EST

ESTIMATE(D)

EXIST

EXISTING

EXP

EXPANSION

EXT

EXTERIOR

FA

FIRE ALARM

FD

FLOOR DRAIN

FDN

FOUNDATION

FE

FIRE EXTINGUISHER

FEC

FIRE EXTINGUISHER CABINET

FF

FINISHED FACE

FGL

FIBERGLASS

FHC

FIRE HOSE CABINET

FIXT

FIXTURE

FL

FLOOR(ING)

FLUOR

FLUORESCENT

FOC

FACE OF CONCRETE

FOS

FACE OF STUDS

FP

FIREPROOF(ING)

FT

FEET

FTG

FOOTING

FUR

FURR(ED)ING

GA

GAUGE

GALV

GALVANIZED

GB

GRAB BAR

GC

GENERAL CONTRACT(OR)

GL

GLASS, GLAZING

GOVT

GOVERNMENT

GT

GROUT

GYP BD

GYPSUM WALLBOARD

HC

HOLLOW CORE

HDR

HEADER

HDWD

HARDWOOD

HDWR

HARDWARE

HGT

HEIGHT

HM

HOLLOW METAL

HORIZ

HORIZONTAL

HP

HIGH POINT

HR

HOUR

HT

HEIGHT

HVAC

HEATING, VENTILATION & AIR CONDITIONING

ID

INSIDE DIAMETER

IN

INCH(ES)

INCAN

INCANDESCENT

INCL

INCLUDE(D)ING

INSUL

INSULATION, INSULATED

INT

INTERIOR

JAN

JANITOR

JT(S)

JOINT(S)

KIT

KITCHEN

ABBREVIATION LIST

LAM

LAMINATE(D)

LAV

LAVATORY

LBL

LABEL

LH

LEFT HAND

LL

LIVE LOAD

LP

LOW POINT

LTG

LIGHTING

LTL

LINTEL

MANF

MANUFACTURE(R)

MAS

MASONRY

MATL

MATERIAL(S)

MAX

MAXIMUM

MECH

MECHANICAL

MEMB

MEMBRANE

MIN

MINIMUM

MISC

MISCELLANEOUS

MO

MASONRY OPENING

MTD

MOUNTED

MTG

MOUNTING

MTL

METAL

N

NORTH

N/A

NOT APPLICABLE

NAT

NATURAL

NIC

NOT IN CONTRACT

NO

NUMBER

NOM

NOMINAL

NTS

NOT TO SCALE

OC

ON CENTER

OD

OUTSIDE DIAMETER

OH

OVERHEAD

OPNG

OPENING

OPP

OPPOSITE

OPP HD

OPPOSITE HAND

PART

PARTITION

PC

PRECAST

PERF

PERFORATE(D)

PL

PLATE

PLAM

PLASTIC LAMINATE

PLAS

PLASTER

PLWD

PLYWOOD

PNL

PANEL(ED)

PR

PAIR

PREP

PREPARE (SURFACE)

PROV

PROVIDE

PSF

POUNDS PER SQUARE FOOT

PSI

POUNDS PER SQUARE INCH

PT

PAINT

PVMT

PAVEMENT

QTY

QUANTITY

R

RISER

RAD

RADIUS

RB

RUBBER BASE

REF

REFRIDGERATOR

REINF

REINFORCED

REQD / REQ'D

REQUIRED

RES

RESILIENT

RET

RETAINING

REV

REVISION(S) / REVISE(D)

RFG

ROOFING

RH

RIGHT HAND

RM

ROOM

RO

ROUGH OPENING

S

SOUTH

SC

SOLID CORE

SCHED

SCHEDULE

SECT

SECTION

SF

SQUARE FEET

SHT

SHEET

SIM

SIMILAR

SPEC(S)

SPECIFICATION(S)

SQ

SQUARE

SS

STAINLESS STEEL

STD

STANDARD

STL

STEEL

STN

STAIN

STO

STORAGE

STRUC

STRUCTURAL

SUSP

SUSPENDED

SYM

SYMMETRICAL

SYS

SYSTEM

T

TREAD

T&G

TONGUE AND GROOVE

T.O.

TOP OF

TECH

TECHNOLOGY

TEL

TELEPHONE

TEMP

TEMPERED

THK

THICK(NESS)

THRESH

THRESHOLD

TOC

TOP OF CURB

TOM

TOP OF MASONRY

TOS

TOP OF STEEL

TOW

TOP OF WALL

TRANS

TRANSPARENT

TV

TELEVISION

TYP

TYPICAL

UL

UNDERWRITER'S LABORATORY

UNFIN

UNFINISHED

UNO

UNLESS OTHERWISE NOTED

VAR

VARIES

VCT

VINYL COMPOSITION TILE

VERT

VERTICAL

VEST

VESTIBULE

VIF

VERIFY IN FIELD

VU

VENTILATION UNIT

VWC

VINYL WALLCOVERING

ABBREVIATION LIST

W

WATER RESISTANT

W/

WITH

W/O

WITHOUT

WC

WATER CLOSET

WD

WOOD

WDW

WINDOW

WH

WALL HUNG

WP

WORK POINT

WR

PAINT(ED)

WT

WEIGHT

WWF

WELDED WIRE FABRIC

#

NUMBER

&

AND

+/-

EXIST (OR APPROX) DIM - VIF

CL

CENTER LINE

L

ANGLE

STEEL STUD FRAMING SECTION 092216

GA.

25

20

18

16

14

12

COLD-FORMED MT'L FRAMING SECTION 054000

18

16

14

12

* DEFLECTION = L/360

* SPACING = 16" O.C.

INTERIOR STEEL STUD FRAMING

THE INTERIOR STUD FRAMING GUIDE DESIGNATES THE DESIGN INTENT OF THE ARCHITECT. THE GUIDE IS FOR THE CONTRACTORS REFERENCE WHEN INSTALLING INTERIOR STUD FRAMED WALLS. IT IS THE CONTRACTORS RESPONSIBILITY TO FOLLOW ALL INFORMATION PORTRAYED WITHIN THIS GUIDE AND THE CONTRACT DOCUMENTS.

NOTE: VERIFY MIN. STEEL STUD FRAMING GAUGE REQUIREMENTS /MAXIMUM ALLOWABLE HEIGHTS WITH STEEL STUD FRAMING SUPPLIER.

*FIRE BLOCKING TO BE PROVIDED HORIZONTALLY AT 10'-0" O.C. MAX, FIRE CAULK AROUND BLOCKING, IF METAL STUDS ARE USED A MINIMUM OF 20 GA. STUDS MUST BE UTILIZED.

MAXIMUM ALLOWABLE HEIGHTS (NON-LOAD BEARING - METAL STUDS)

STEEL STUD FRAMING SECTION 092216

COLD-FORMED MT'L FRAMING SECTION 054000

* DEFLECTION = L/360

* SPACING = 16" O.C.

MATERIAL DESIGNATIONS & SYMBOLS

EXISTING WALL TO REMAIN

NEW WALL

1 HOUR PARTITION

2 HOUR PARTITION

3 HOUR PARTITION

ELEMENTS TO BE REMOVED

EXTENT OF WORK

CMU

CONCRETE

WOOD BLOCKING

STEEL (LARGE SCALE)

PLASTER

RIGID INSULATION

PLYWOOD

MILLWORK

Room name

101

ROOM NUMBER

FINISH TYPE

11

DOOR NUMBER

11

WALL TYPES

11

WINDOW NUMBER

EXISTING ELEVATION

NEW ELEVATION

BATT INSULATION

1

COLUMN CENTER LINE / IDENTIFIER

REVISION INDICATION

DETAIL / PLAN / ELEVATION

DRAWING REFERENCE

1

A101

SIM

SHEET REFERENCE

BLDG SECTION CUT

DRAWING REFERENCE

1

A101

SIM

SHEET REFERENCE

WALL SECTION

DRAWING REFERENCE

1

A101

SIM

SHEET REFERENCE

REQUIRED CLEARANCES

CLEAR FLOOR SPACE

FORWARD APPROACH

PARALLEL APPROACH

ALCOVE, FORWARD APPROACH

ALCOVE, SIDE APPROACH

60" TURNING DIAMETER

T-SHAPED TURNING SPACE

REQUIRED PUSH/PULL CLEARANCES

FRONT APPROACH - PULL SIDE

FRONT APPROACH - PUSH SIDE

FRONT APPROACH - PUSH SIDE

HINGE APPROACH - PULL SIDE

HINGE APPROACH - PUSH SIDE

TYPICAL MOUNTING HEIGHTS

1. MOUNTING HEIGHTS SHOWN ARE BASED UPON RECOGNIZED DESIGN STANDARDS AND/OR BARRIER FREE CODE REQUIREMENTS. IT IS INTENDED THAT LIKE DEVICES ALL BE MOUNTED AT THE SAME HEIGHT THROUGHOUT THE ENTIRE PROJECT. RECESSED DEVICES IN MASONRY WALLS MAY DICTATE A DEVIATION (+/- 2") FROM THESE HEIGHTS (WHEN PERMITTED BY CODE) SO AS TO ALLOW THE BOTTOM OR THE TOP OF THE DEVICE RECESS TO ALIGN WITH MASONRY COURSING. COORDINATE THESE DEVIATIONS WITH THE ARCHITECTS/OWNER'S REPRESENTATIVE. MOUNTING HEIGHTS ARE TYPICAL UNLESS NOTED OTHERWISE ON DRAWINGS.

DIMENSIONING

1. DIMENSIONS ARE FROM FINISHED FACE TO FINISHED FACE, UNLESS NOTED OTHERWISE. SEE DIMENSIONING KEY ON THIS PAGE FOR REFERENCE

FRAMING LEGEND

PROVIDE FULL HEIGHT STUDS AT ALL CORNERS AS SHOWN TO ALLOW FOR PROPER GYP. BD. INSTALLATION

16" OR 24" O.C. AS NOTED

COMMON STUD

KING STUD

JACK STUD

TOP PLATE

TOP CRIPPLE

HEADER

KING STUD

JACK STUD

COMMON STUD

BOTTOM PLATE

*PROVIDE TREATED WOOD OR METAL TRACK AGAINST ANY CONC. OR MASONRY SURFACE

DIMENSIONING KEY

PARTITION AT RIGHT ANGLE

4"

*IF THE DOOR IS NOT AGAINST A RIGHT ANGLE PARTITION OR EXISTING, IT IS TO BE CENTERED IN THE ROOM, U.N.O.

DIMENSIONING SYSTEM (UNLESS NOTED OTHERWISE)

FINISH FACE OF NEW CONSTRUCTION

2'-6"

COLUMN LINE

FINISH FACE OF NEW CONSTRUCTION

2'-0"

FINISH FACE OF EXISTING CONSTRUCTION

FINISH FACE OF NEW CONSTRUCTION

ALIGN

FINISH FACE OF EXISTING CONSTRUCTION

PROJECT NAME

238 E MICHIGAN

PROJECT ADDRESS

238 E. MICHIGAN AVE., KALAMAZOO MI, 49007

BRIAN & CARMEN HARRIS

ISSUE

CONSTRUCTION DOCUMENTS

REVISION

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As indicated

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PROJECT NUMBER

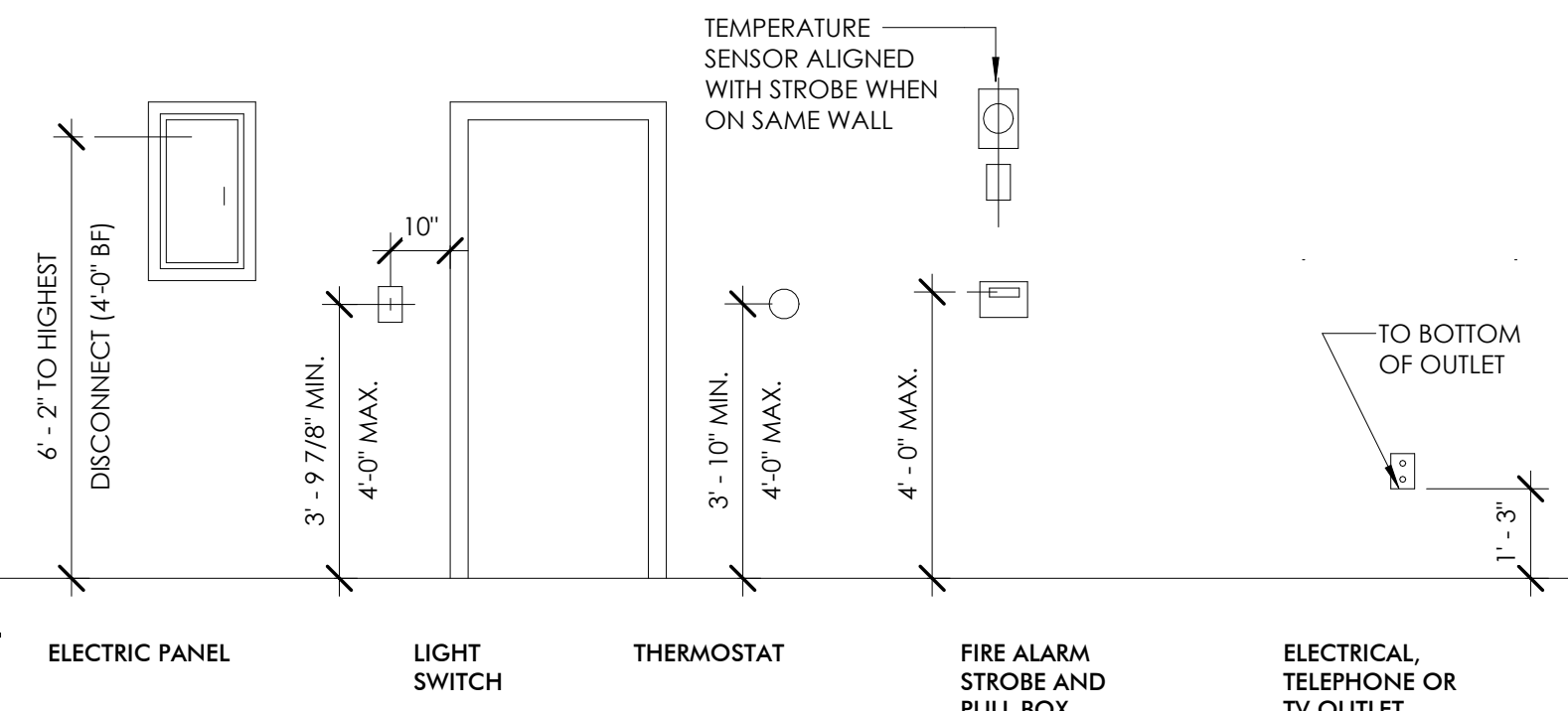
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MOUNTING HEIGHTS + ABBREVIATIONS

T002

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ACCESSORIES SCHEDULE				
TYPE MARK	DESCRIPTION	MANUFACTURER	MODEL	COMMENTS
BSK-1	BATH AND SHOWER TRIM KIT	KOHLER	TONE- K-TS27421-4G-2MB	BRUSHED MODERNE BRASS
M-1	MIRROR	KOHLER	ESSENTIAL- K-31364-CPL	MODERNE BRUSHED GOLD
HK-1	HOOK	KOHLER	TONE- K-27427-2MB	BRUSHED MODERNE BRASS
SGD-1	SHOWER GLASS DOOR	KOHLER	RELY - K-709081-10L-SHP	BRUSHED MODERNE BRASS
SF-1	SINK FAUCET	KOHLER	TONE- K-27416-4-2MB	BRUSHED MODERNE BRASS - BATHROOMS
TB-1	TOWEL BAR	KOHLER	TONE- 24" K-27426-2MB	BRUSHED MODERNE BRASS
TPH-1	TOILET PAPER HOLDER	KOHLER	TONE- K-27429-2MB	BRUSHED MODERNE BRASS
TR-1	TOWEL RING	KOHLER	TONE- K-27428-2MB	BRUSHED MODERNE BRASS

[illegible]

*NOTE: PROVIDE BLOCKING AS
REQUIRED FOR ALL GRAB BARS AND
FIXTURE MOUNTING PER
MANUFACTURER'S RECOMMENDATION

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PROJECT NAME
238 E MICHIGAN

PROJECT ADDRESS
238 E. MICHIGAN AVE., KALAMAZOO MI 49007

CLIENT
BRIAN & CARMEN HARRIS

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MOUNTING HEIGHTS CONTINUED

T003

2015 MICHIGAN REHABILITATION CODE

CHAPTER 5: CLASSIFICATION OF WORK
SECTION 504 LEVEL 2 ALTERATION

AREA OF RENOVATION = 2,410 SF SQUARE FEET, WHICH IS 33% OF THE TOTAL BUILDING AREA. SINCE THE WORK AREA IS UNDER 50% OF THE BUILDING AREA, THE WORK IS NOT CONSIDERED A LEVEL 3 ALTERATION.

SECTION 508.2 EXCEPT AS SPECIFICALLY PROVIDED FOR IN CHAPTER 12, HISTORIC BUILDINGS SHALL COMPLY WITH APPLICABLE PROVISIONS OF THIS CODE FOR THE TYPE OF WORK BEING PERFORMED. THE BUILDING IS CURRENTLY LISTED ON THE STATE REGISTRY OF HISTORIC PROPERTIES.

CHAPTER 8: ALTERATIONS - LEVEL 2
SECTION 801.3 ALL NEW CONSTRUCTION ELEMENTS, COMPONENTS, SYSTEMS, AND SPACES SHALL COMPLY WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.

SECTION 803.2.1 ALL EXISTING INTERIOR VERTICAL OPENINGS CONNECTING TWO OR MORE FLOORS SHALL BE ENCLOSED WITH APPROVED ASSEMBLIES HAVING A FIRE-RESISTANCE RATING OF NOT LESS THAN 1 HOUR WITH APPROVED OPENING PROTECTIVES. **EXCEPTION 11:** IN GROUP R-2 OCCUPANCIES, A MINIMUM 30-MINUTE ENCLOSURE SHALL BE PROVIDED TO PROTECT ALL VERTICAL OPENINGS NOT EXCEEDING THREE STORIES. THIS ENCLOSURE, OR THE ENCLOSURE SPECIFIED IN SECTION 803.2.1, SHALL NOT BE REQUIRED IN BUILDINGS PROTECTED THROUGHOUT BY AN APPROVED AUTOMATIC SPRINKLER SYSTEM. THE BUILDING IS PROTECTED THROUGHOUT BY AN AUTOMATIC SPRINKLER SYSTEM.

SECTION 804.2.2 IN BUILDINGS WITH OCCUPANCIES IN GROUP R-2, WORK AREAS THAT HAVE EXITS OR CORRIDORS SHARED BY MORE THAN ONE TENANT OR THAT HAVE EXITS OR CORRIDORS SERVING AN OCCUPANT LOAD GREATER THAN 30 SHALL BE PROVIDED WITH AUTOMATIC SPRINKLER PROTECTION WHERE THE WORK AREA IS REQUIRED TO BE PROVIDED WITH AUTOMATIC SPRINKLER PROTECTION IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE AS APPLICABLE TO NEW CONSTRUCTION AND THE WORK AREA EXCEEDS 50 PERCENT OF THE FLOOR AREA.

SECTION 804.4.1.6 A FIRE ALARM SYSTEM SHALL BE INSTALLED IN WORK AREAS OF GROUP R-2 APARTMENT BUILDINGS AS REQUIRED BY THE INTERNATIONAL FIRE CODE FOR EXISTING GROUP R-2 OCCUPANCIES.

SECTION 804.4.3 INDIVIDUAL SLEEPING UNITS AND INDIVIDUAL DWELLING UNITS IN ANY WORK AREA IN GROUP R OCCUPANCIES SHALL BE PROVIDED WITH SMOKE ALARMS IN ACCORDANCE WITH THE MICHIGAN BUILDING CODE.

SECTION 805.3.1 EVERY STORY UTILIZED FOR HUMAN OCCUPANCY ON WHICH THERE IS A WORK AREA THAT INCLUDES EXIT OR CORRIDORS SHARED BY MORE THAN ONE TENANT WITHIN THE WORK AREA SHALL BE PROVIDED WITH THE MINIMUM NUMBER OF EXITS BASED ON THE OCCUPANCY AND THE OCCUPANT LOAD IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE.

SECTION 805.4.1.1 IN ANY WORK AREA, ALL ROOMS AND SPACES IN WHICH THE TRAVEL DISTANCE TO AN EXIT EXCEEDS 75 FEET SHALL HAVE A MINIMUM OF TWO EGRESS DOORWAYS.

SECTION 805.4.3 IN ANY WORK AREA, ALL DOORS OPENING ONTO AN EXIT PASSAGEWAY AT GRADE OR AN EXIT STAIRWAY SHALL BE SELF-CLOSING OR AUTOMATIC-CLOSING BY LISTED CLOSING DEVICES.

SECTION 805.5.1 ALL DWELLING UNIT OR SLEEPING UNIT CORRIDOR DOORS IN WORK AREAS IN BUILDINGS OF GROUPS R-2 SHALL BE AT LEAST 1 3/8" SOLID CORE WOOD OR APPROVED EQUIVALENT AND SHALL BE EQUIPPED WITH APPROVED DOOR CLOSERS. **EXCEPTION 5:** DOOR ASSEMBLIES HAVING A FIRE PROTECTION RATING OF AT LEAST 20 MINUTES.

SECTION 805.6 DEAD-END CORRIDORS IN ANY WORK AREA SHALL NOT EXCEED 35 FEET.

SECTION 805.8.1 MEANS OF EGRESS IN ALL WORK AREAS SHALL BE PROVIDED WITH EXIT SIGNS IN ACCORDANCE WITH THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.

SECTION 807.2 NEW STRUCTURAL ELEMENTS IN ALTERATIONS SHALL COMPLY WITH THE INTERNATIONAL BUILDING CODE.

SECTION 807.4 ALTERATIONS SHALL NOT REDUCE THE CAPACITY OF EXISTING GRAVITY LOAD-CARRYING STRUCTURAL ELEMENTS UNLESS IT IS DEMONSTRATED THAT THE ELEMENTS HAVE THE CAPACITY TO CARRY THE APPLICABLE DESIGN GRAVITY LOADS REQUIRED BY THE INTERNATIONAL BUILDING CODE.

SECTION 808.1 ALL NEWLY INSTALLED ELECTRICAL EQUIPMENT AND WIRING RELATING TO WORK DONE IN ANY WORK AREA SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF NFPA 70.

SECTION 809.1 ALL RECONFIGURED SPACES INTENDED FOR OCCUPANCY AND ALL SPACES CONVERTED TO HABITABLE SPACE IN ANY WORK AREA SHALL BE PROVIDED WITH NATURAL OR MECHANICAL VENTILATION IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE.

SECTION 811.1 LEVEL 2 ALTERATIONS TO EXISTING BUILDINGS SHALL CONFORM TO THE ENERGY REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE AS THEY RELATE TO NEW CONSTRUCTION ONLY.

CHAPTER 10: CHANGE OF OCCUPANCY
SECTION 1008.3 WHERE THE OCCUPANCY OF PART OF AN EXISTING BUILDING IS CHANGED, ELECTRICAL SERVICE SHALL BE UPGRADED TO MEET THE REQUIREMENTS OF NFPA 70 FOR THE NEW OCCUPANCY.

SECTION 1012.1.1.2 WHERE A PORTION OF AN EXISTING BUILDING IS CHANGED TO A NEW OCCUPANCY CLASSIFICATION, AND THAT PORTION IS SEPARATED FROM THE REMAINDER OF THE BUILDING WITH FIRE BARRIERS HAVING A FIRE-RESISTANCE RATING AS REQUIRED IN THE INTERNATIONAL BUILDING CODE FOR THE SEPARATE OCCUPANCY, THAT PORTION SHALL COMPLY WITH ALL OF THE REQUIREMENTS OF CHAPTER 9 FOR THE NEW OCCUPANCY CLASSIFICATION.

TABLE 1012.4 OCCUPANCY CLASSIFICATIONS R-1 AND R-2 ARE BOTH CONSIDERED RELATIVE HAZARD LEVEL 3.

SECTION 1012.4.2 WHEN THE CHANGE OF OCCUPANCY CLASSIFICATION IS MADE TO AN EQUAL OR LESSER HAZARD CATEGORY AS SHOWN IN TABLE 1012.4, EXISTING ELEMENTS OF THE MEANS OF EGRESS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 905 FOR THE NEW OCCUPANCY CLASSIFICATION. NEWLY CONSTRUCTED OR CONFIGURED MEANS OF EGRESS SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 10 OF THE INTERNATIONAL BUILDING CODE. THE ORIGINAL USE OF THE SECOND AND THIRD FLOORS WAS R-1. THE PROPOSED USE IS R-2.

TABLE 1012.5 OCCUPANCY CLASSIFICATIONS R-1 AND R-2 ARE BOTH CONSIDERED RELATIVE HAZARD LEVEL 2.

SECTION 1012.5.2 WHEN A CHANGE OF OCCUPANCY CLASSIFICATION IS MADE TO AN EQUAL OR LESSER HAZARD CATEGORY AS SHOWN IN TABLE 1012.5, THE HEIGHT AND AREA OF THE EXISTING BUILDING SHALL BE DEEMED ACCEPTABLE.

TABLE 1012.6 OCCUPANCY CLASSIFICATIONS R-1 AND R-2 ARE BOTH CONSIDERED RELATIVE HAZARD LEVEL 3.

SECTION 1012.6.2 WHEN A CHANGE OF OCCUPANCY CLASSIFICATION IS MADE TO AN EQUAL OR LESSER HAZARD CATEGORY AS SHOWN IN TABLE 1012.6, EXISTING EXTERIOR WALLS, INCLUDING OPENINGS SHALL BE ACCEPTED.

SECTION 1012.6.3 OPENINGS IN EXTERIOR WALLS SHALL BE PROTECTED AS REQUIRED BY THE INTERNATIONAL BUILDING CODE. **EXCEPTION 4:** EXTERIOR OPENING PROTECTIVES ARE NOT REQUIRED WHEN THE CHANGE OF OCCUPANCY GROUP IS TO AN EQUAL OR LOWER HAZARD CLASSIFICATION IN ACCORDANCE WITH TABLE 1012.6.

CHAPTER 11: ADDITIONS
SECTION 1102.1 NO ADDITION SHALL INCREASE THE HEIGHT OF AN EXISTING BUILDING BEYOND THAT PERMITTED UNDER THE APPLICABLE PROVISIONS OF CHAPTER 5 OF THE INTERNATIONAL BUILDING CODE FOR NEW BUILDINGS.

SECTION 1102.2 NO ADDITION SHALL INCREASE THE AREA OF AN EXISTING BUILDING BEYOND THAT PERMITTED UNDER THE APPLICABLE PROVISIONS OF CHAPTER 5 OF THE INTERNATIONAL BUILDING CODE FOR NEW BUILDINGS UNLESS FIRE SEPARATION AS REQUIRED BY THE INTERNATIONAL BUILDING CODE IS PROVIDED.

SECTION 1103.4 ANY STRUCTURAL ELEMENT OF AN EXISTING BUILDING SUBJECTED TO ADDITIONAL LOADS FROM THE EFFECTS OF SNOW DRIFT AS A RESULT OF AN ADDITION SHALL COMPLY WITH THE INTERNATIONAL BUILDING CODE.

SECTION 1106.1 ADDITIONS TO EXISTING BUILDINGS SHALL CONFORM TO THE ENERGY REQUIREMENTS OF THE INTERNATIONAL ENERGY CONSERVATION CODE AS THEY RELATE TO NEW CONSTRUCTION.

CHAPTER 12: HISTORIC BUILDINGS
SECTION 1204.1 EXCEPTION: TYPE B DWELLING OR SLEEPING UNITS REQUIRED BY SECTION 1107 OF THE INTERNATIONAL BUILDING CODE ARE NOT REQUIRED TO BE PROVIDED IN HISTORICAL BUILDINGS.

SECTION 1205.2 THE ALLOWABLE FLOOR AREA FOR HISTORIC BUILDINGS UNDERGOING A CHANGE OF OCCUPANCY SHALL BE PERMITTED TO EXCEED BY 20 PERCENT THE ALLOWABLE AREAS SPECIFIED IN CHAPTER 5 OF THE INTERNATIONAL BUILDING CODE

SECTION 1205.4 REQUIRED OCCUPANCY SEPARATIONS OF 1 HOUR MAY BE OMITTED WHEN THE BUILDING IS PROVIDED WITH AN APPROVED AUTOMATIC SPRINKLER SYSTEM THROUGHOUT.

SECTION 1205.10 WHERE 1-HOUR FIRE-RESISTANCE-RATED CONSTRUCTION IS REQUIRED BY THESE PROVISIONS, IT NEED NOT BE PROVIDED, REGARDLESS OF CONSTRUCTION OR OCCUPANCY, WHERE THE EXISTING WALL AND CEILING FINISH IS WOOD LATH AND PLASTER.

SECTION 1203.6 IN BUILDINGS OF THREE STORIES OR LESS, EXIT ENCLOSURE CONSTRUCTION SHALL LIMIT THE SPREAD OF SMOKE BY THE USE OF TIGHT-FITTING DOORS AND SOLID ELEMENTS. SUCH ELEMENTS ARE NOT REQUIRED TO HAVE A FIRE-RESISTANCE RATING.

SECTION 1205.6 EXISTING DOOR OPENINGS AND CORRIDOR AND STAIRWAY WIDTHS LESS THAN THOSE THAT WOULD BE ACCEPTABLE FOR NONHISTORIC BUILDINGS UNDER THESE PROVISIONS SHALL BE APPROVED. PROVIDED THAT, IN THE OPINION OF THE CODE OFFICIAL, THERE IS SUFFICIENT WIDTH AND HEIGHT FOR A PERSON TO PASS THROUGH THE OPENING OR TRAVERSE THE EXIT AND THAT THE CAPACITY OF THE EXIT SYSTEM IS ADEQUATE FOR THE OCCUPANT LOAD, OR WHERE OTHER OPERATIONAL CONTROLS TO LIMIT OCCUPANCY ARE APPROVED BY THE CODE OFFICIAL.

SECTION 1205.11 EXISTING STAIRWAYS SHALL COMPLY WITH THE REQUIREMENTS OF THESE PROVISIONS. THE CODE OFFICIAL SHALL GRANT ALTERNATIVES FOR STAIRWAYS AND GUARDS IF ALTERNATIVE STAIRWAYS ARE FOUND TO BE ACCEPTABLE OR ARE JUDGED TO MEET THE INTENT OF THESE PROVISIONS. EXISTING STAIRWAYS SHALL COMPLY WITH SECTION 1203.

2015 MICHIGAN BUILDING CODE

CHAPTER 3: USE AND OCCUPANCY CLASSIFICATION
SECTION 304.1B (BUSINESS) + 310.4 (RESIDENTIAL)

CHAPTER 4: SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY
SECTION 420.2 WALLS SEPARATING DWELLING UNITS SHALL BE CONSTRUCTED AS FIRE PARTITIONS IN ACCORDANCE WITH SECTION 708

SECTION 420.3 FLOOR ASSEMBLIES SEPARATING DWELLING UNITS IN THE SAME BUILDING AND SEPARATING DWELLING UNITS FROM OTHER OCCUPANCIES SHALL BE CONSTRUCTED AS HORIZONTAL ASSEMBLIES IN ACCORDANCE WITH SECTION 711

SECTION 420.5 GROUP R OCCUPANCIES SHALL BE EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.2.8. QUICK RESPONSE OR RESIDENTIAL AUTOMATIC SPRINKLER SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 903.3.2

SECTION 420.6 FIRE ALARM SYSTEMS AND SMOKE ALARMS SHALL BE PROVIDED IN GROUP R-2 OCCUPANCIES IN ACCORDANCE WITH SECTION 907.2.9 SINGLE OR MULTIPLE STATION SMOKE ALARMS SHALL BE PROVIDED IN GROUPS R-2 IN ACCORDANCE WITH SECTION 907.2.11.

CHAPTER 5: GENERAL BUILDING HEIGHTS AND AREAS
SEE CODE COMPLIANCE TABLE TO BUILDING HEIGHTS/AREAS/SEPARATION REQUIREMENTS
PER THE 2015 MICHIGAN REHABILITATION CODE SECTIONS 1205.4 AND 1205.10 THERE ARE NO REQUIRED SEPARATIONS BETWEEN THE STORAGE IN THE BASEMENT AND THE RESTAURANT AS WELL AS BETWEEN THE RESTAURANT AND THE RESIDENTIAL UNITS. THE BUILDING WILL BE COMPLETELY FIRE SUPPRESSED THROUGHOUT.

CHAPTER 6: TYPES OF CONSTRUCTION
SECTION 602 CONSTRUCTION CLASSIFICATION TYPE XX. SEE CODE COMPLIANCE TABLE FOR ADDITIONAL INFORMATION

CHAPTER 7: FIRE AND SMOKE PROTECTION
SECTION 708.3 EXCEPTION 1: CORRIDOR WALLS PERMITTED TO HAVE A 1/2 HOUR FIRE RESISTANCE RATING BY TABLE 1020.1.

SECTION 711.2.3 THE SUPPORTING CONSTRUCTION SHALL BE PROTECTED TO AFFORD THE REQUIRED FIRE RESISTANCE RATING OF THE HORIZONTAL ASSEMBLY SUPPORTED. EXCEPTION: IN TYPE III-B BUILDINGS THE CONSTRUCTION SUPPORTING HORIZONTAL ASSEMBLIES AT THE SEPARATIONS OF THE DWELLING UNITS IS NOT REQUIRED TO BE FIRE RESISTANCE RATED.

SECTION 711.2.4.1 WHERE THE HORIZONTAL ASSEMBLY SEPARATED MIXED OCCUPANCIES, THE ASSEMBLY SHALL HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN THAT REQUIRED BY SECTION 508.4. HALF HOUR FIRE RESISTANCE IS REQUIRED IN TYPE III-B BUILDINGS CORRIDORS

SECTION 713.13.4 SHAFT ENCLOSURES SHALL HAVE A FIRE RESISTANCE RATING OF NOT LESS THAN ONE HOUR WHERE CONNECTING THREE STORIES OR LESS

SECTION 713.14.1 EXCEPTION 4: ENCLOSED ELEVATOR LOBBIES ARE NOT REQUIRED WHERE THE BUILDING IS PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3.1.2.

TABLE 716.5 OPENINGS IN ONE HOUR FIRE BARRIERS FOR SHAFTS, EXIT ACCESS STAIRWAYS, AND INTERIOR EXIT STAIRWAYS ARE TO HAVE ONE HOUR FIRE DOORS

CHAPTER 8: INTERIOR FINISHES
TABLE 803.1.1 INTERIOR WALL AND CEILING FINISH REQUIREMENTS
INTERIOR WALL & CEILING FINISHES
EXIT ENCLOSURE AND PASSAGEWAY CLASS B / SMOKE-DEVELOPED INDEX 0-450 / FLAME SPREAD 26-75
CORRIDORS CLASS C / SMOKE-DEVELOPED INDEX 0-450 / FLAME SPREAD 76-200
ROOMS AND ENCLOSED SPACES C / SMOKE-DEVELOPED INDEX 0-450 / FLAME SPREAD 76-200

INTERIOR FINISH FLOOR REQUIREMENTS
INTERIOR WALL & CEILING FINISHES
EXIT ENCLOSURE AND PASSAGEWAY CLASS II / WATTS / CM2 .22 OR GREATER
CORRIDORS CLASS II / WATTS / CM2 .22 OR GREATER
ROOMS AND ENCLOSED SPACES CLASS II / WATTS / CM2 .22 OR GREATER

CHAPTER 9: FIRE PROTECTION SYSTEMS
SECTION 903.2.1.2 AN AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED THROUGHOUT ALL BUILDINGS CONTAINING A GROUP A-2 OCCUPANCY WHERE A FIRE AREA EXCEEDS 5,000 SQUARE FEET. AN NFPA 13 COMPLIANT AUTOMATIC SPRINKLER SYSTEM EXISTS IN THE EXISTING A-2 RESTAURANT ON THE FIRST FLOOR

SECTION 903.2.8 AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH SECTION 903.3 SHALL BE PROVIDED THROUGHOUT ALL BUILDINGS WITH A GROUP R FIRE AREA.

SECTION 906.1.1 EXCEPTION: IN GROUP R-2 OCCUPANCIES, PORTABLE FIRE EXTINGUISHERS SHALL BE REQUIRED ONLY IN LOCATIONS SPECIFIED IN ITEMS 2 THROUGH 6 WHERE EACH DWELLING UNIT IS PROVIDED WITH A PORTABLE FIRE EXTINGUISHER HAVING A MINIMUM RATING OF 1-A:10-B:C.

CHAPTER 10: MEAN OF EGRESS
SEE CODE COMPLIANCE TABLE FOR SIZING BREAKDOWN

SECTION 1005 MEANS OF EGRESS SIZING
SECTION 1005.3.1 STAIRWAYS .3" PER OCCUPANT; MINIMUM WIDTH 44" (36" IF < 50 OCCUPANTS (SECTION 1011.2))
SECTION 1005.3.2 OTHER ELEMENTS .2" PER OCCUPANT
SECTION 1010.1.1 DOORS 32" MINIMUM CLEAR WIDTH, CORRIDORS 44" MINIMUM CLEAR WIDTH
SECTION 1011.11 EXCEPTION 4: CHANGES IN ROOM ELEVATIONS OF THREE OR FEWER RISERS WITHIN DWELLING UNITS IN GROUP R-2 DO NOT REQUIRE HANDRAILS

TABLE 1017.2 MAXIMUM EXIT ACCESS TRAVEL DISTANCE
R USE GROUP AREAS 250'-0" WITH FIRE SUPPRESSION THROUGHOUT

SECTION 1020.4 EXCEPTION 2: IN OCCUPANCIES IN GROUP R-2, WHERE THE BUILDING IS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM, THE LENGTH OF THE DEAD-END CORRIDORS SHALL NOT EXCEED 50'.

SECTION 1023.1 INTERIOR EXIT STAIRWAYS SHALL BE ENCLOSED AND LEAD DIRECTLY TO THE EXTERIOR OF THE BUILDING OR SHALL BE EXTENDED TO THE EXTERIOR OF THE BUILDING WITH AN EXIT PASSAGEWAY CONFORMING TO THE REQUIREMENTS OF SECTION 1024.

SECTION 1023.2 ENCLOSURES FOR INTERIOR EXIT STAIRWAYS SHALL BE CONSTRUCTION AS FIRE BARRIERS IN ACCORDANCE WITH SECTION 707. INTERIOR EXIT STAIRWAY ENCLOSURES SHALL HAVE A FIRE-RESISTANCE RATING OF NOT LESS THAN 1 HOURS WHERE CONNECTING THREE STORIES OR LESS.

SECTION 1024.2 EXIT PASSAGEWAY ENCLOSURES SHALL HAVE WALLS, FLOORS, AND CEILINGS OF NOT LESS THAN A 1-HOUR FIRE-RESISTANCE RATING, AND NOT LESS THAN THAT REQUIRED FOR ANY CONNECTING INTERIOR EXIT STAIRWAY. EXIT PASSAGEWAYS SHALL BE CONSTRUCTED AS FIRE BARRIERS IN ACCORDANCE WITH SECTION 707.

CHAPTER 11: ACCESSIBILITY
SECTION 1107.6.2.2.1 IN GROUP R-2 OCCUPANCIES CONTAINING MORE THAN 20 DWELLING UNITS, AT LEAST 2 PERCENT BUT NOT LESS THAN ONE OF THE UNITS SHALL BE A TYPE A UNIT. THIS PROJECT CONTAINS 7 DWELLING UNITS, AND THEREFORE IS NOT REQUIRED TO HAVE ANY TYPE A UNITS.

SECTION 1107.6.2.2.2 WHERE THERE ARE FOUR OR MORE DWELLING UNITS INTENDED TO BE OCCUPIED AS A RESIDENCE IN A SINGLE STRUCTURE, EVERY DWELLING UNIT INTENDED TO BE OCCUPIED AS A RESIDENCE SHALL BE A TYPE B UNIT. NOTE THAT THE 2015 MICHIGAN REHABILITATION CODE 1204.1 STATES THAT TYPE B UNITS ARE NOT REQUIRED IN HISTORICAL BUILDINGS.

CHAPTER 12: INTERIOR ENVIRONMENT
SECTION 1207.2 WALLS, PARTITIONS, AND FLOOR/CEILING ASSEMBLIES SEPARATING DWELLING UNITS FROM EACH OTHER OR FROM PUBLIC OR SERVICE AREAS SHALL HAVE A SOUND TRANSMISSION CLASS OF NOT LESS THAN 50 FOR AIR-BORNE NOISE WHEN TESTED IN ACCORDANCE WITH ASTM E90. **PROVIDED STC = 50.**

SECTION 1207.3 FLOOR/CEILING ASSEMBLIES BETWEEN DWELLING UNITS OR BETWEEN A DWELLING UNIT AND A PUBLIC OR SERVICE AREA WITHIN THE STRUCTURE SHALL HAVE AN IMPACT INSULATION CLASS RATING OF NOT LESS THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E492. **PROVIDED IIC = 57.**

SECTION 1208.2 OCCUPIABLE SPACES, HABITABLE SPACES, AND CORRIDORS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-6". BATHROOMS, TOILET ROOMS, KITCHENS, STORAGE ROOMS, AND LAUNDRY ROOMS SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-0".
EXCEPTION 4: CORRIDORS CONTAINED WITHIN A DWELLING UNIT OR SLEEPING UNIT IN A GROUP R OCCUPANCY SHALL HAVE A CEILING HEIGHT OF NOT LESS THAN 7'-0".

CHAPTER 30: ELEVATORS AND CONVEYING SYSTEMS
SECTION 3002.1 ELEVATOR HOISTWAY ENCLOSURES SHALL BE SHAFT ENCLOSURES COMPLYING WITH SECTION 713.

CODE COMPLIANCE			
TOPIC	SECTION	ALLOWED/REQUIRED	ACTUAL
APPLICABLE CODES	get with igynte on new mep		
2015 INTERNATIONAL FIRE CODE			
2015 MICHIGAN BUILDING CODE			
2015 MICHIGAN MECHANICAL CODE			
2015 MICHIGAN REHABILITATION CODE	504	LEVEL 2 ALTERATION	INTERIOR RENOVATION LESS THAN 50%
2017 NATIONAL ELECTRICAL CODE			
2018 MICHIGAN PLUMBING CODE			
ANSI/ASHRAE 90.1-2013			
ICC/ANSI 117.1-2009			
NFPA 13 (2013) + NFPA 72 (2013)			
ZONING			
ZONING	CITY OF KALAMAZOO		D-1 - DOWNTOWN 1
1 - SCOPE AND ADMIN			
DEFERRED SUBMITTALS	107.3.4.1		THERE ARE NO DEFERRED SUBMITTALS FOR THIS PROJECT
DESIGN PROFESSIONAL IN CHARGE	107.3.4		CODY NEWMAN IS TO BE THE DESIGN PROFESSIONAL IN CHARGE
SPECIAL INSPECTIONS	110		THERE ARE NO SPECIAL INSPECTIONS FOR THIS PROJECT
3 - USE			
BUILDING USE	304.1 & 310.2	BEFORE - B (BUSINESS) + VACANT	AFTER - B (BUSINESS) + R-2 RESIDENTIAL
3 - AREA BY USE			
BUSINESS			2,464 SF
RESIDENTIAL			2,410 SF
3 - GROSS BUILDING AREA			
0 - BASEMENT			2,464 SF (UNOCCUPIED)
1 - FIRST FLOOR			2,464 SF
2 - SECOND FLOOR			2,410 SF
TOTAL			7,338 SF
5 - GENERAL BUILDING HEIGHTS AND AREAS			
ALLOWABLE BUILDING HEIGHT	TABLE 504.3	55 FEET	35 FEET
BASE STORIES ALLOWED	TABLE 504.4	4 STORIES	2 STORIES
REQUIRED SEPARATION OF OCCUPANCIES	TABLE 508.4	1 HOUR	PROVIDED
TABULAR AREA	TABLE 506.2	48,000 SF	7,338 SF
6 - TYPE OF CONSTRUCTION			
TYPE OF CONSTRUCTION	TABLE 601		III-B
7 - FIRE AND SMOKE PROTECTION			
			SMOKE AND CARBON MONOXIDE DETECTORS REQUIRED IN EACH UNIT
9 - FIRE PROTECTION SYSTEMS			
AUTOMATIC SPRINKLER SYSTEM	903.2.1.3	REQUIRED	PROVIDED THROUGHOUT
FIRE ALARM AND DETECTION SYSTEMS	907	LESS THAN 16 UNITS, NOT PROVIDED	NOT PROVIDED
10 - MEANS OF EGRESS			
DOOR EGRESS WIDTH	1005.3.2	36" PER UNIT	PROVIDED
EXIT ACCESS TRAVEL DISTANCE	TABLE 1017.2	250 FEET	83 FEET
NUMBER OF EXITS	TABLE 1006.3.1	1 EXIT	1 EXIT
STAIR EGRESS WIDTH	1005.3.1	36"	45"
10 - OCCUPANCY			
OCCUPANCY	TABLE 1004.1.2	2,464 SF / 100	25 PEOPLE
OCCUPANCY	TABLE 1004.1.2	2,410 SF / 200	13 PEOPLE
TOTAL OCCUPANT LOAD			38 PEOPLE
15 - ROOF ASSEMBLY			
	1501.1		NEW 60 MIL WHITE TPO ROOF
27 - ELECTRICAL			
EMERGENCY LIGHTING	1008.1	WILL COMPLY	ON COMPLIANCE DRAWINGS
EMERGENCY POWER	1008.3.2; 1008.3.3	WILL COMPLY	ON COMPLIANCE DRAWINGS
EXIT SIGNS	1011.1	WILL COMPLY	ON COMPLIANCE DRAWINGS



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PROJECT NAME
238 E MICHIGAN
PROJECT ADDRESS
238 E. MICHIGAN AVE., KALAMAZOO MI, 49007
BRIAN & CARMEN HARRIS

ISSUE
CONSTRUCTION DOCUMENTS

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CODE COMPLIANCE

T004



CODE COMPLIANCE GENERAL NOTES

- 1. ENSURE EXIT SIGNS ARE MOUNTED ABOVE THE DOORS AND VISIBLE FROM 75 FEET AWAY. ALL EGRESS LIGHTING IS TO POINT DOWN TO ILLUMINATE THE EGRESS PATH OF TRAVEL.
- 2. ALL FIRE EXTINGUISHERS ARE TO BE ABC EXTINGUISHERS, UNLESS NOTED OTHERWISE. ALL EXTINGUISHERS ARE TO BE TAGGED WITH THE CURRENT YEAR'S INSPECTION ON IT. ANNUAL INSPECTIONS ARE TO OCCUR FOR ALL FIRE EXTINGUISHERS.
- 3. PROVIDE ADA RESTROOM SIGNS AT ALL RESTROOMS, CORRESPONDING TO THE CORRECT SEX.
- 4. SEE T002 FOR MOUNTING HEIGHTS AND LOCATIONS
- 5. SEE T003 FOR ADDITIONAL CODE COMPLIANCE INFORMATION
- 6. FURNITURE AND EQUIPMENT SHOWN ON COMPLIANCE DRAWINGS ARE FOR REFERENCE ONLY

COMPLIANCE LEGEND

SYMBOL	ITEM
	FIRE EXTINGUISHER
	EXIT SIGN W/ EGRESS LIGHTS
	EGRESS LIGHTING
	TRAVEL DISTANCE
	1 HOUR WALL
	2 HOUR WALL
SD	SMOKE DETECTOR
CO	CARBON MONOXIDE DETECTOR

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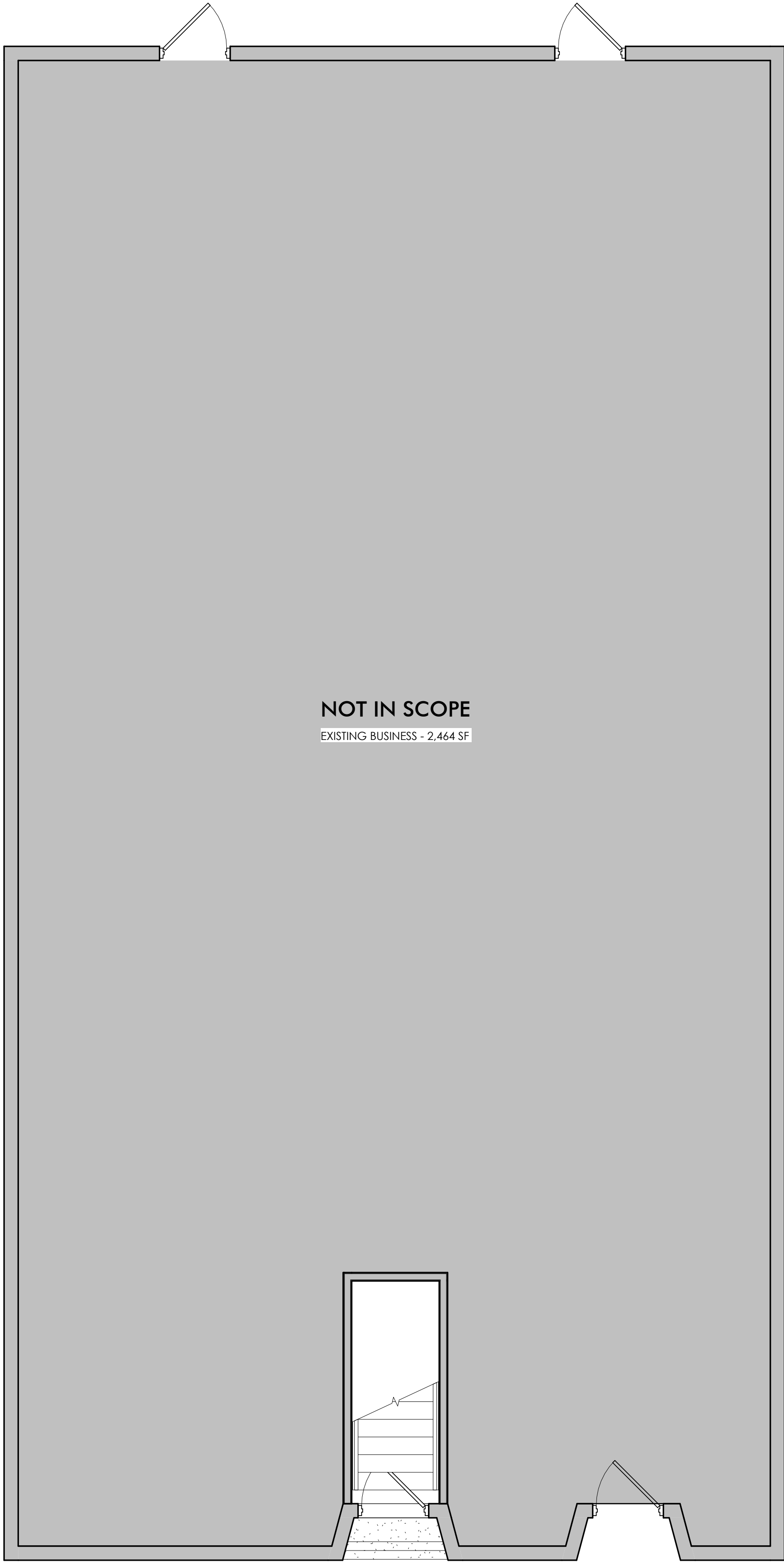
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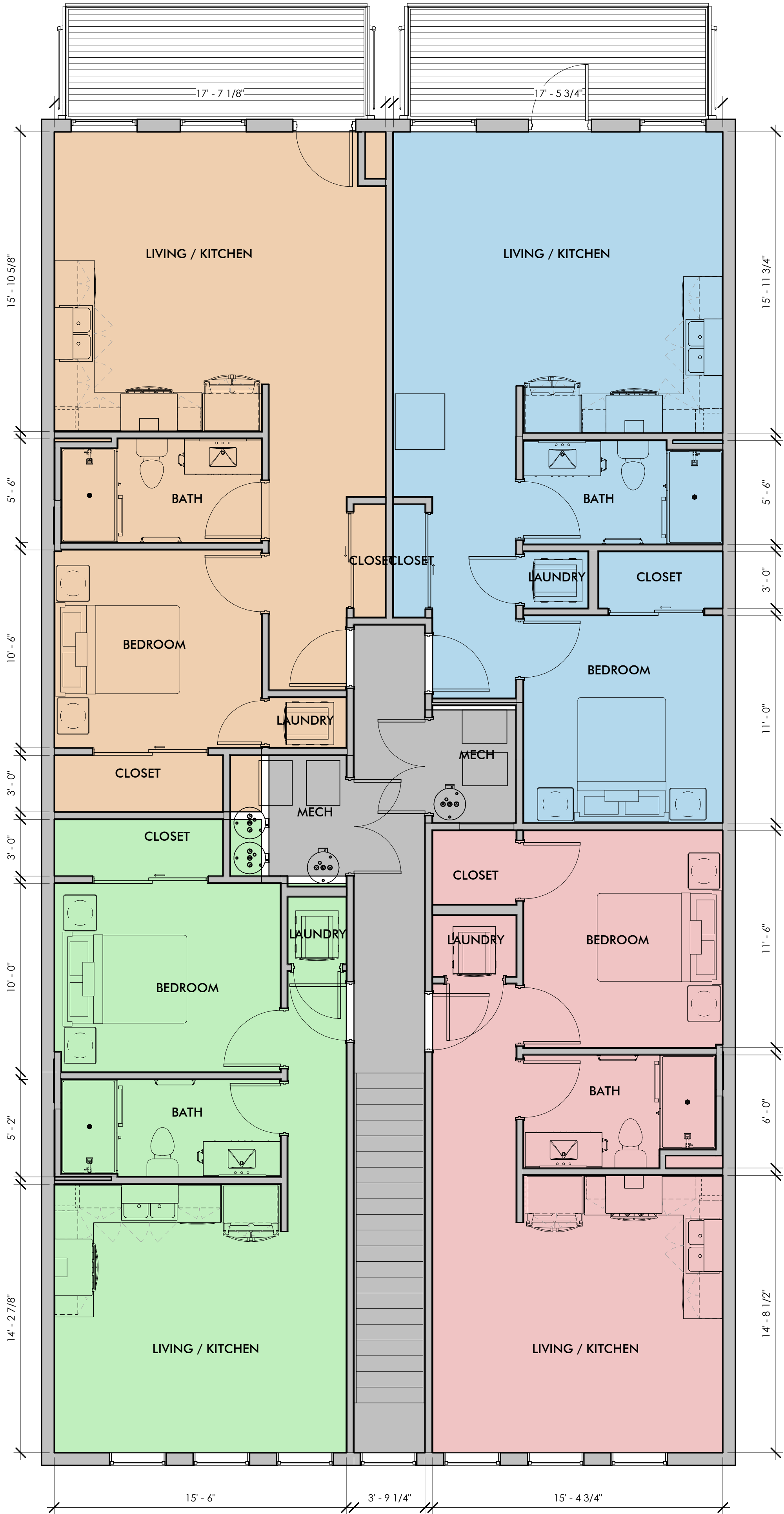
AREA PLANS

T006



1 FIRST FLOOR PROPOSED PLAN
1/4" = 1'-0"

APARTMENT 2:
1 BED, 1 BATH
598 SF



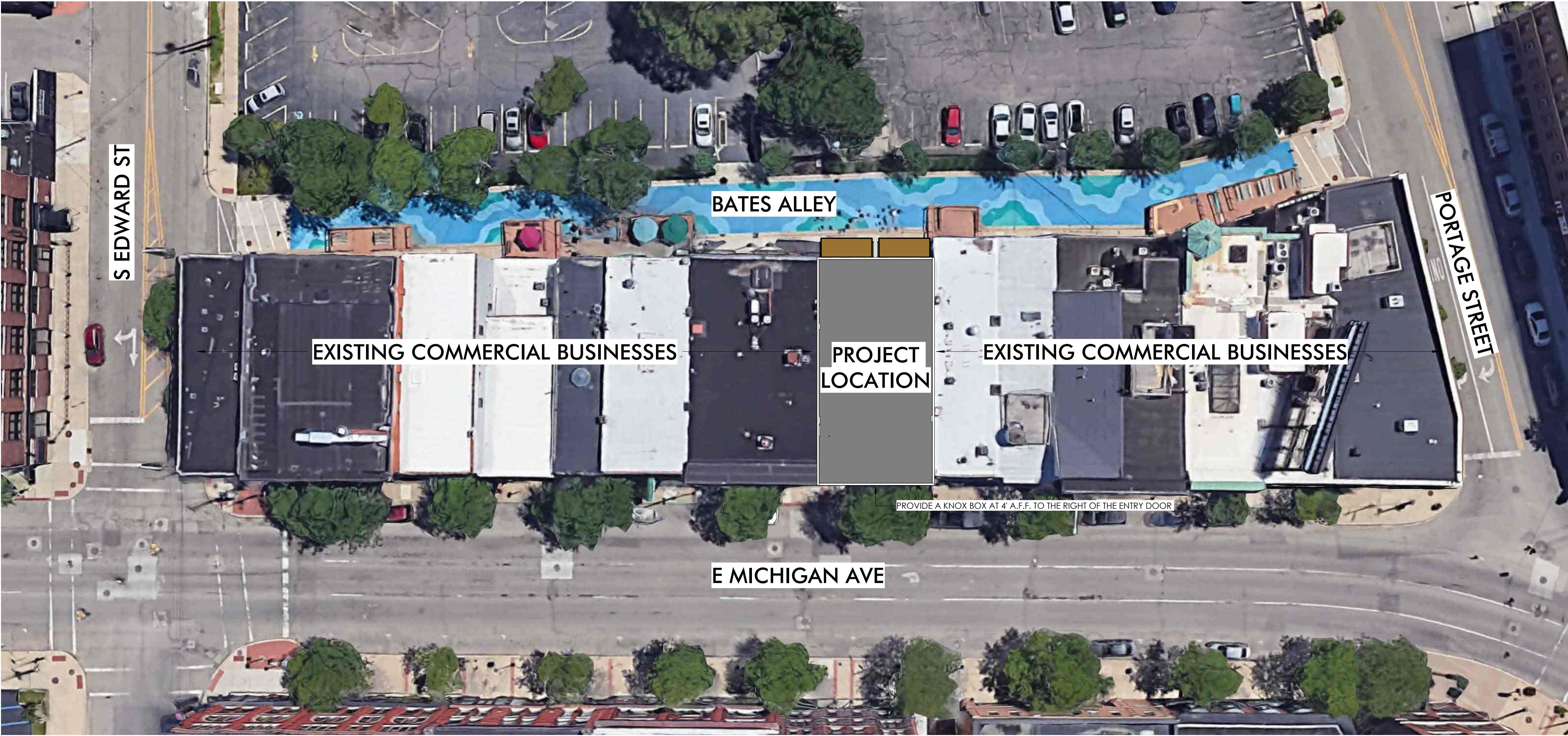
APARTMENT 1:
1 BED, 1 BATH
506 SF

APARTMENT 3:
1 BED, 1 BATH
587 SF

APARTMENT 4:
1 BED, 1 BATH
508 SF

COMMON AREA:
223 SF

2 SECOND FLOOR PROPOSED PLAN
1/4" = 1'-0"



GENERAL NOTES

- 1. EXISTING BUILDING TO REMAIN ON THE EXISTING SITE
- 2. THE UTILITIES THAT ARE CURRENTLY CONNECTED TO THE BUILDING ARE TO REMAIN
- 3. CONTACT MISS DIG TO LOCATE ALL EXISTING UTILITIES BEFORE DOING ANY SITE WORK
- 4. PATCH EXISTING ASPHALT PARKING LOT AS REQUIRED, RESTRIPE PARKING LOT IF REQUIRED
- 5. EXISTING VEGETATION TO REMAIN ON THE SITE, TRIM AS REQUIRED
- 6. PROVIDE A KNOX BOX AT THE MAIN ENTRY TO THE BUILDING. COORDINATE WITH LOCAL FIRE DEPARTMENT ON KEYING AND INSTALLATION
- 7. WORK WITHIN THE STREET TO BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION.
- 8. PERMITS, TESTING, BONDS & INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. CITY INSPECTION FEES SHALL BE PAID FOR BY THE OWNER.
- 9. TRASH IS TO BE SHARED WITH THE REST OF THE BUSINESSES ON BATES ALLEY.

PARKING REQUIREMENTS

THERE ARE NO PARKING REQUIREMENTS IN THE D-1 DOWNTOWN ZONING DISTRICT. IT IS ANTICIPATED THAT RESIDENTS WILL PURCHASE PARKING PASSES IN NEARBY LOTS AND FIRST FLOOR PATRONS WILL USE NEARBY STREET PARKING.

LANDSCAPE REQUIREMENTS

THERE ARE NO LANDSCAPE REQUIREMENTS IN THE D-1 DOWNTOWN ZONING DISTRICT

LEGAL DESCRIPTION

304 ORIGINAL PLAT OF THE TOWN (NOW CITY) OF KALAMAZOO, LIBER 6 OF PLATS PAGE 8; THAT PART OF THE NORTHEASTERLY 18.25FT OF THE SOUTHWESTERLY 35.6FT OF LOT 101 LYING NORTH OF BATES ALLEY.



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ARCHITECTURAL SITE PLAN

C100

GENERAL NOTES

EXISTING PLANS AND DIMENSIONS ARE SHOWN FOR REFERENCE ONLY

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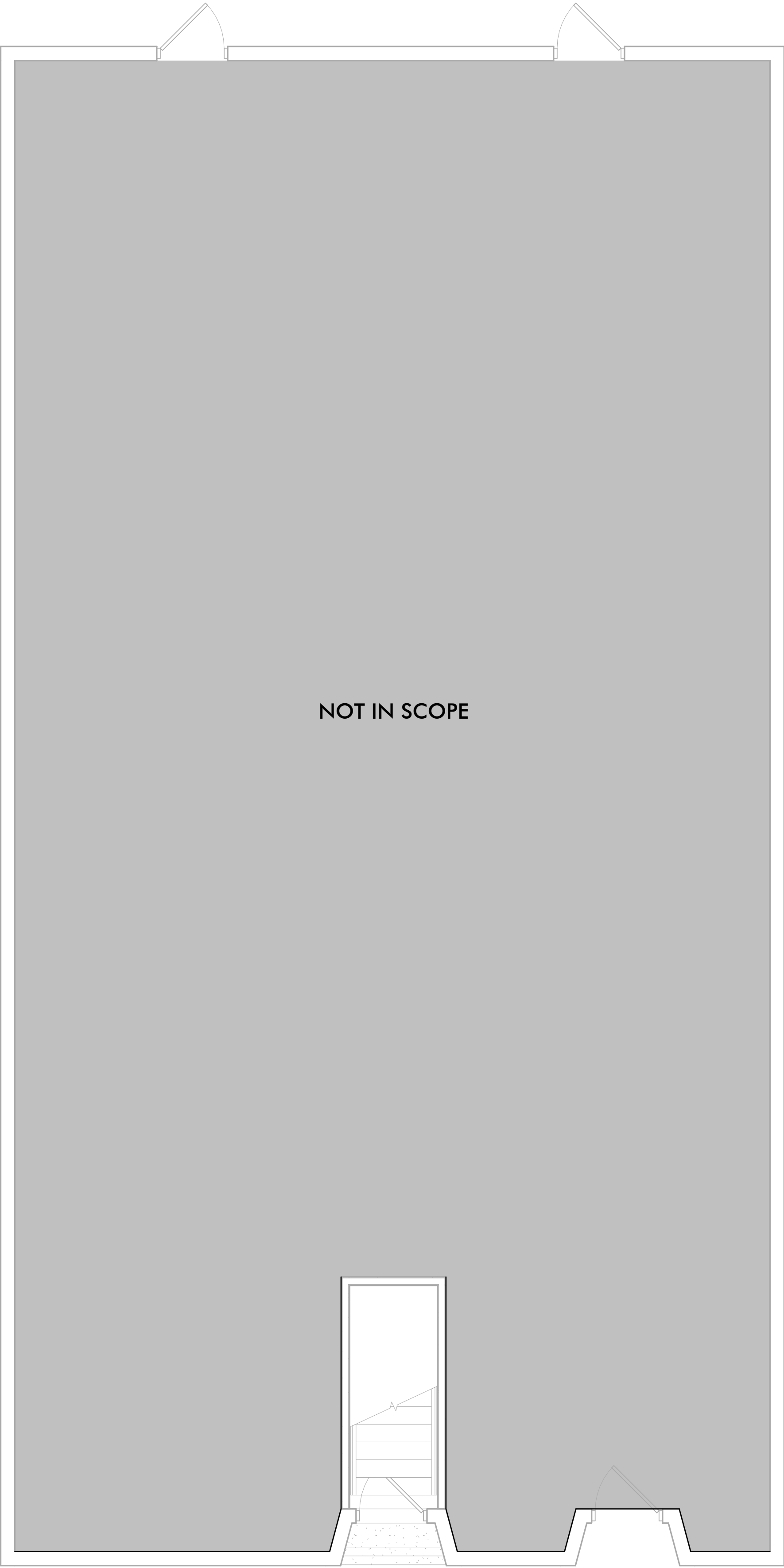
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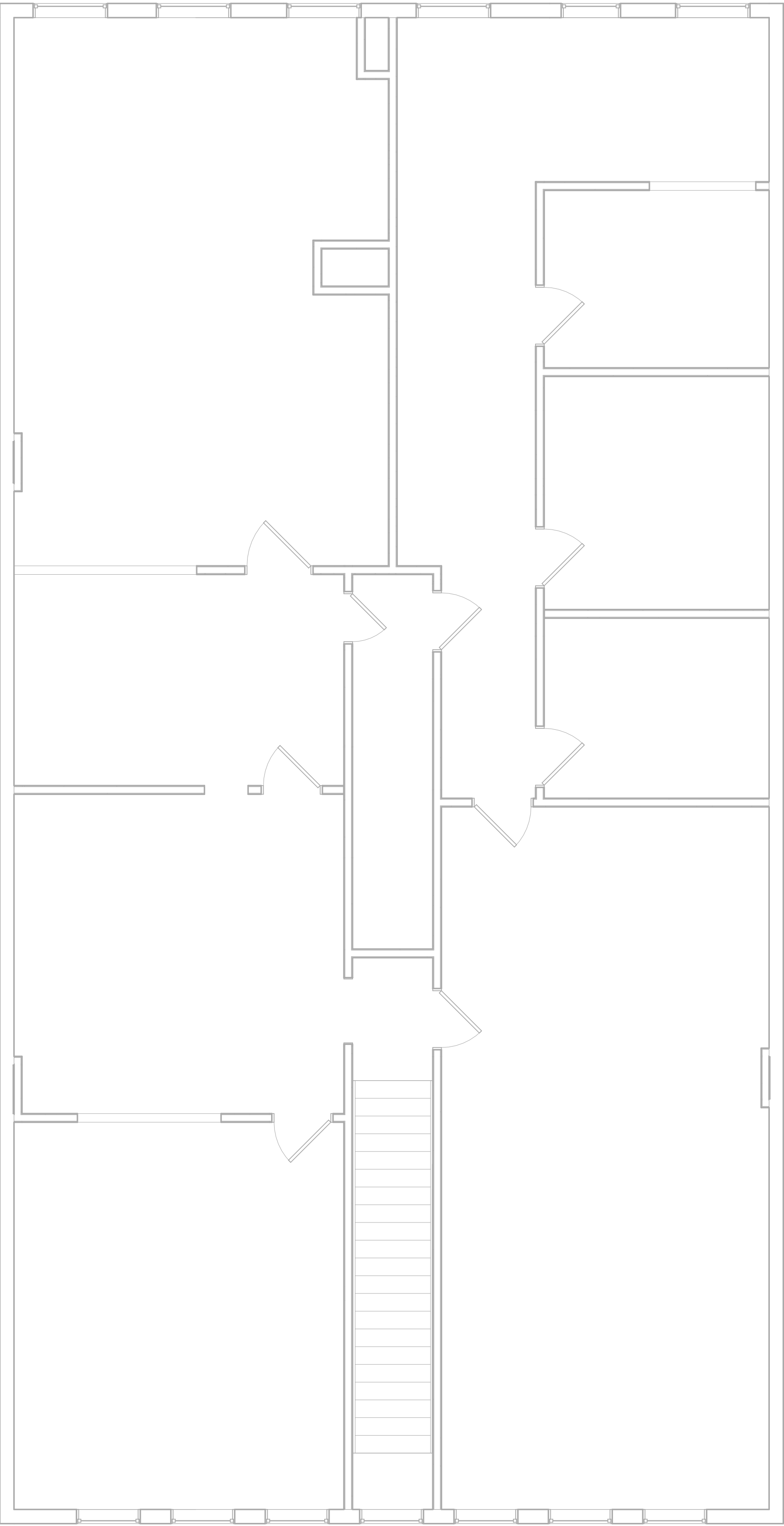
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PROJECT NUMBER
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EXISTING FLOOR PLANS

A000



1 FIRST FLOOR EXISTING PLAN
A000 1/4" = 1'-0"



2 SECOND FLOOR EXISTING PLAN
A000 1/4" = 1'-0"

DEMOLITION NOTES

1. REMOVE ALL DASHED WALLS, WINDOWS, AND DOORS COMPLETELY.
2. OWNER TO REMOVE ALL FURNISHINGS/ EQUIPMENT THAT THEY WISH TO RETAIN FROM THE AREAS OF DEMOLITION/ CONSTRUCTION PRIOR TO THE START OF CONSTRUCTION WORK IN EACH AREA. OWNER TO COORDINATE WITH CONTRACTOR REGARDING THE TIME SCHEDULE FOR THIS TO BE COMPLETED.
3. PATCH AND FILL ANY HOLES IN THE WALL CAUSED BY THE REMOVAL OF DOORS, WINDOWS, OR WALLS TO MATCH SURROUNDINGS.
4. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL SURFACES NOT BEING REMODELED IN THE PROJECT AND IN THE PATH OF THE CONTRACTORS TRAVEL, SETUP AND/ OR PROJECT MATERIAL STORAGE. THE CONTRACTOR MUST RETURN THE AREAS DISTURBED AS REQUIRED FOR ACCESS TO ITS PRE-EXISTING CONDITION.
5. ANY HAZARDOUS MATERIALS ARE TO BE REMOVED BY A LICENSED PROFESSIONAL IN THE STATE OF MICHIGAN.
6. ALL SAFETY ISSUES RELATED TO DEMOLITION ARE THE RESPONSIBILITY OF THE CONTRACTOR AND MUST COMPLY WITH ALL STATE, LOCAL, ENVIRONMENTAL AND LABOR LAWS DURING THE CONSTRUCTION OF THIS PROJECT.
7. SEQUENCE DEMOLITION WITH STRUCTURAL WORK TO ASSURE SAFETY. PROVIDE SHORING AS REQ'D TO ENSURE SAFE CONDITIONS EXIST. SHORING IS NOT SHOWN ON PLANS. STRUCTURAL ELEMENTS ARE TO REMAIN, UNLESS NOTED OTHERWISE. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
8. ALL TRADES TO COORDINATE BETWEEN ONE ANOTHER TO AVOID CONFLICTS.
9. NOTATIONS ARE MADE IN VARIOUS PLACES ON THE DRAWINGS TO CALL ATTENTION TO DEMOLITION WHICH IS REQUIRED. THESE DRAWINGS ARE NOT INTENDED TO SHOW EACH AND EVERY ITEM TO BE REMOVED. CONTRACTOR SHALL REMOVE ALL MATERIALS RELATED TO THEIR RESPECTIVE TRADES AS REQUIRED TO PERMIT THE CONSTRUCTION OF THE NEW WORK AS SHOWN.
10. THE CONTRACTOR SHOULD TAKE CARE DURING THE PROJECT TO NOT INTERRUPT THE USE IN AREAS NOT IN SCOPE.
11. PRIOR TO ANY DIGGING ON OR AROUND THE SITE UTILITIES ARE TO BE LOCATED USING MISS DIG.
12. ALL RUBBISH AND DEBRIS FROM DEMOLITION IS TO BE REMOVED IMMEDIATELY FROM THE SITE AFTER DEMOLITION. COORDINATE ALL DEMOLITION, DUMPSTER LOCATIONS, BARRICADING, PEDESTRIAN PROTECTION MEASURES, ETC. WITH THE OWNER AND LOCAL MUNICIPALITY PRIOR TO COMMENCEMENT.
13. REMOVE ALL LIGHTING, WIRING, FIRE ALARM DEVICES, RECEPTACLES, AND SPEAKERS FROM WALLS AND CEILINGS BEING REMOVED. COORDINATE WITH ARCHITECT AS REQUIRED. REMOVE ALL ABANDONED EXPOSED CONDUIT AND WIRING BACK TO SOURCE. REMOVE WIRING BACK TO PANEL OR NEAREST JUNCTION BOX. RE-LABEL CIRCUIT BREAKER AS SPARE, IN SCOPE OF WORK.
14. PROVIDE BLANK COVERPLATE OVER EMPTY OUTLET BOXES IF DEVICE IS REMOVED AND NOT REPLACED.
15. REMOVE ALL EXISTING HVAC, FIRE PROTECTION AND PLUMBING EQUIPMENT, PIPING BACK TO MAIN AND ALL ASSOCIATED ACCESSORIES. SANITARY, STORM, AND VENT STACKS TO REMAIN. CAP ANY UNUSED AREAS.
16. SALVAGE MATERIALS AS REQUIRED IF PART OF THE SCOPE IS MATCHING MATERIALS OR INFILL MATERIALS AS PART OF A RENOVATION PROJECT.
17. REMOVE ALL CEILINGS AND FLOOR FINISHES IN AREAS OF DEMOLITION U.N.O.
18. ALL EXISTING COLUMNS AND STRUCTURAL ELEMENTS TO REMAIN. ANY DISCREPANCIES THAT OCCUR IN THE FIELD DURING DEMOLITION SHOULD BE BROUGHT TO THE ARCHITECT'S ATTENTION.
19. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE TO BROOM CLEAN AT ALL TIMES.
20. THE OWNER WILL MAINTAIN OCCUPANCY OF SPACES ADJACENT TO AREAS OF DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL POTENTIALLY DISRUPTIVE ACTIVITIES WITH THE OWNER.
21. PRESERVE HISTORIC FLOORING WHERE NEW BATHROOMS WILL BE LOCATED. REFER TO SHEET A120.

WALL LEGEND

- EXISTING WALL TO REMAIN
- ELEMENTS TO BE REMOVED
- 1 HOUR PARTITION
- 2 HOUR PARTITION
- EXTENT OF WORK

- CMU
- CONCRETE
- WOOD BLOCKING
- STEEL (LARGE SCALE)
- PLASTER
- RIGID INSULATION
- PLYWOOD
- MILLWORK

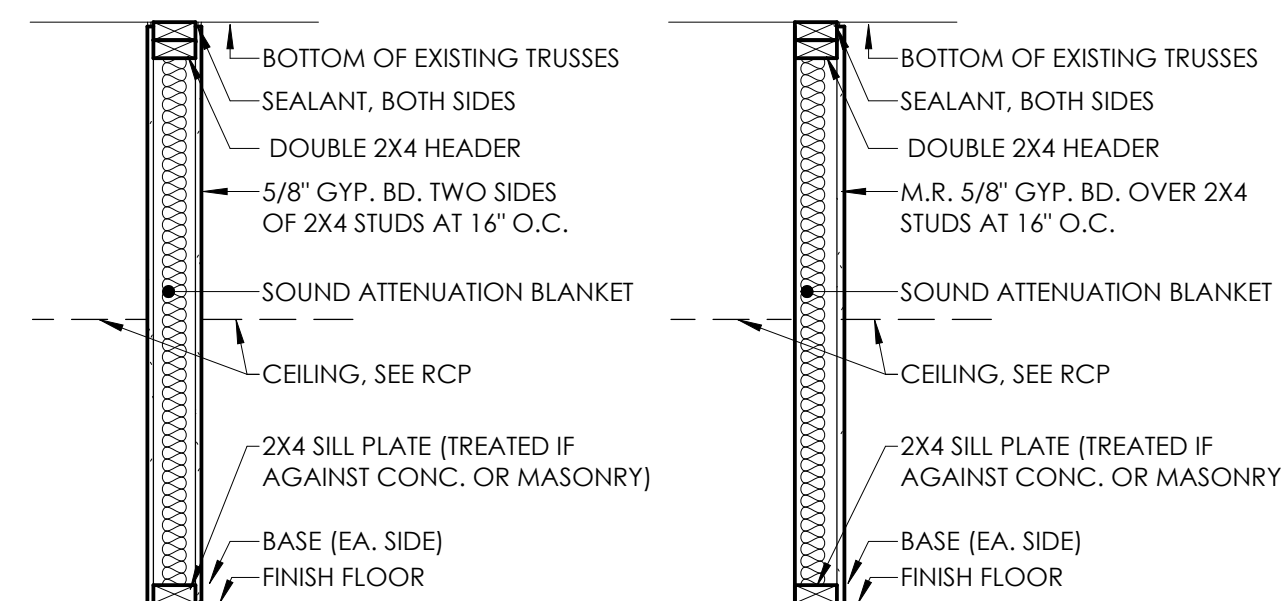
MATERIAL LEGEND

1 FIRST FLOOR DEMOLITION PLAN
1/4" = 1'-0"

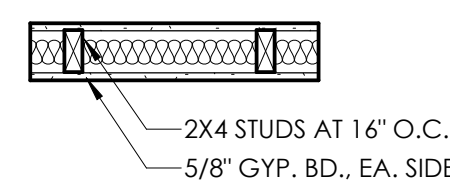
2 SECOND FLOOR DEMOLITION PLAN
1/4" = 1'-0"

GENERAL NOTES

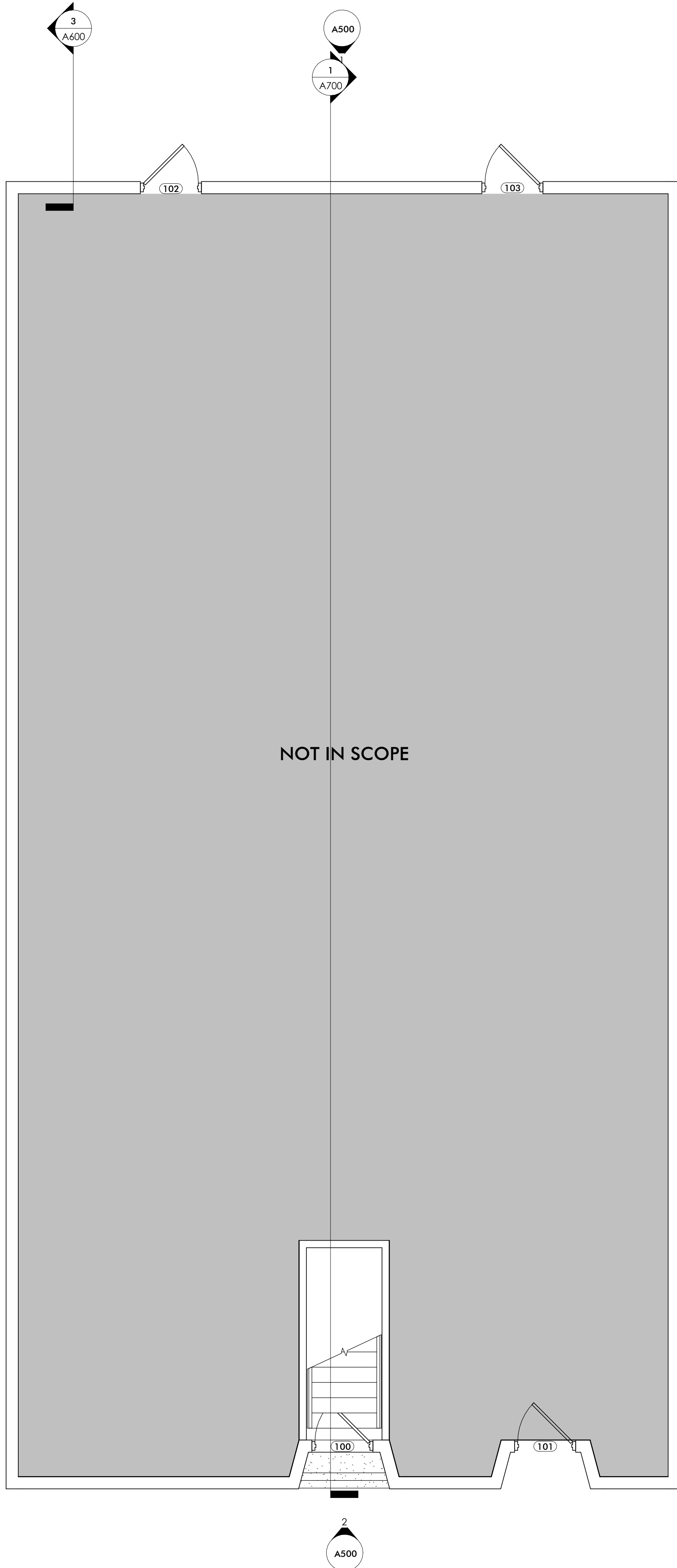
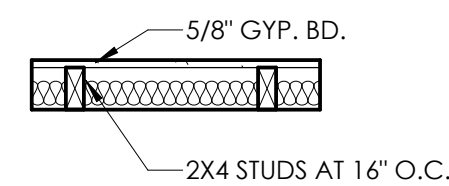
- ALL GYPSUM BOARD THROUGHOUT IS TO BE 5/8" TYPE-X AS A MINIMUM.
- ALL EXISTING INTERIOR WALLS THAT ARE TO REMAIN ARE TO BE PATCHED AS REQUIRED FROM NEW UTILITIES OR GENERAL CONSTRUCTION.
- INFILL OF EXISTING WALL OPENINGS IS TO RESULT IN FLUSH FINISHES ON BOTH SIDES OF THE WALL. UNLESS OTHERWISE NOTED, USE APPROPRIATE STUD FRAMING TO ACHIEVE DESIRED FINISH.
- INSTALL WOOD BLOCKING IN WALLS AS NECESSARY FOR INSTALLATION OF ALL CASEWORK, MIRRORS, TOWEL BARS, SHOWER CURTAIN RODS, TOILET PAPER DISPENSERS, PAPER TOWEL HOLDERS, TOILET PARTITIONS, RAILINGS, AND ANY OTHER ACCESSORIES.
- PROVIDE CEMENT BOARD IN LIEU OF GYPSUM BOARD AT ALL BATHTUB, SHOWER, AND KITCHEN LOCATIONS TO RECEIVE WALL TILE. COORDINATE WITH INTERIORS.
- DRAWINGS ESTABLISH THE DESIGN INTENT OF WORK TO BE PERFORMED. ALL PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. ALL TRADES SHALL CAREFULLY COORDINATE WORK OF ALL OTHER TRADES. CONTRACTORS SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS AND FOR VERIFYING THEM WITH THE CONTRACT DOCUMENTS. ANY DISCREPANCIES OR CONFLICTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND THE OWNER PRIOR TO FABRICATION OR INSTALLATION.
- COORDINATE SIZE AND LOCATION OF ALL EQUIPMENT SUPPORTS INCLUDING BUT NOT RESTRICTED TO CONCRETE HOUSEKEEPING PADS WITH APPROPRIATE EQUIPMENT MANUFACTURER.
- VERIFY QUANTITY, SIZE, AND LOCATION OF ALL FLOOR, ROOF, AND WALL OPENINGS FOR ALL DISCIPLINES INCLUDING BUT NOT RESTRICTED TO MECHANICAL AND ELECTRICAL WORK WITH THE APPROPRIATE TRADE. PROVIDE ALL OPENINGS SHOWN OR REQUIRED FOR THE COMPLETION OF THE WORK. PROVIDE ALL LINTELS REQUIRED FOR THESE OPENINGS PER SPECIFICATIONS.
- VERIFY QUANTITY, SIZE, AND LOCATION OF ALL FLOOR, ROOF, AND WALL OPENINGS FOR ALL DISCIPLINES INCLUDING BUT NOT RESTRICTED TO MECHANICAL AND ELECTRICAL WORK WITH THE APPROPRIATE TRADE.
- DIMENSIONS PRECEDED BY +/- SHOULD BE REVIEWED AND ALL NECESSARY ADJUSTMENTS MADE PRIOR TO FABRICATION AND/OR INSTALLATION OF AFFECTED WORK. NOTIFY ARCHITECT'S REPRESENTATIVE IF DISCREPANCIES ARISE BEFORE PROCEEDING WITH THE WORK.
- BATHROOM MIRRORS AND LIGHT FIXTURES ABOVE VANITIES SHALL BE CENTERED ON THE SINKS.
- REMOVE PLASTER AND LATHE ON EXISTING CEILINGS AND ANY INTERIOR WALLS THAT ARE TO REMAIN FOR NEW UTILITIES TO BE RUN.



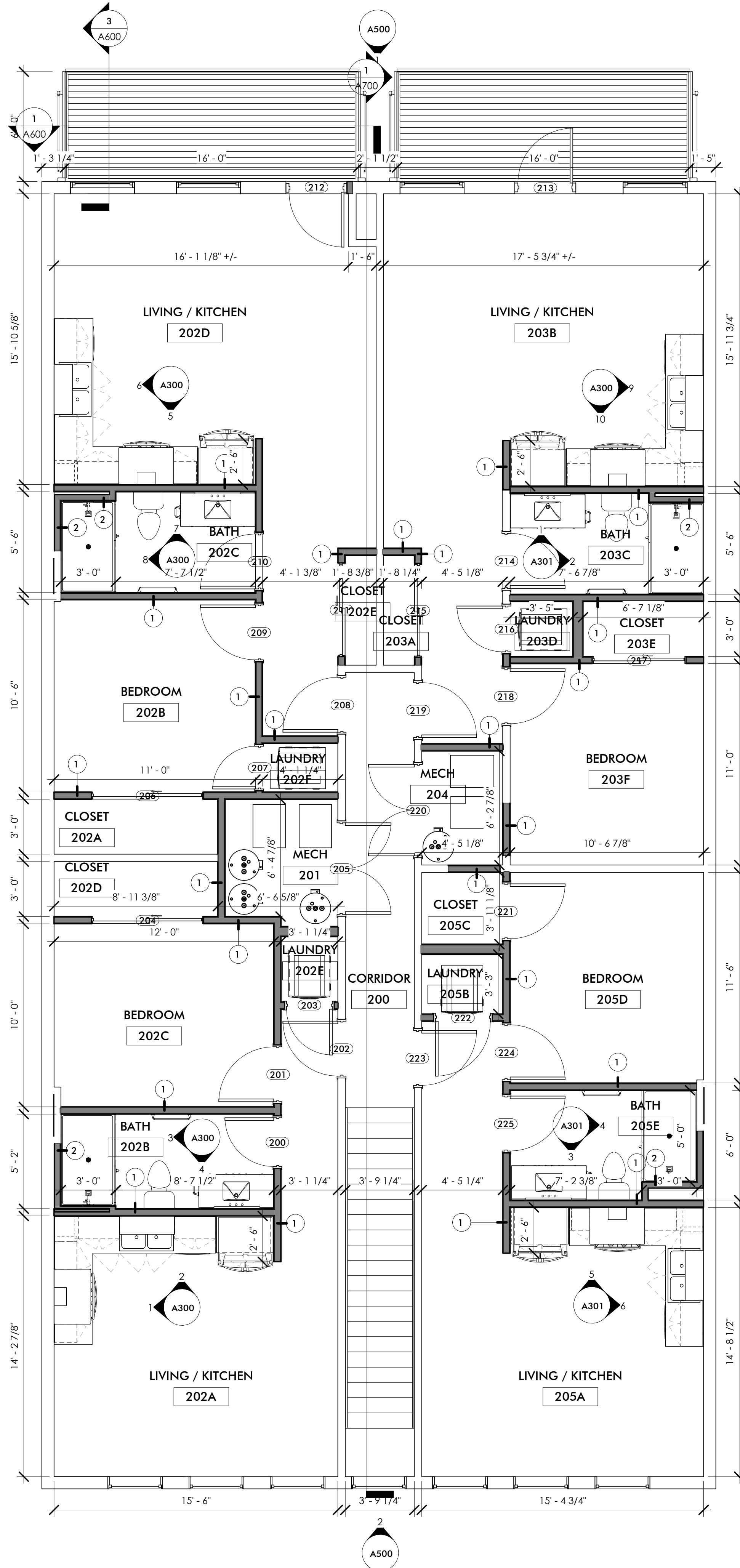
PARTITION TYPE - 1



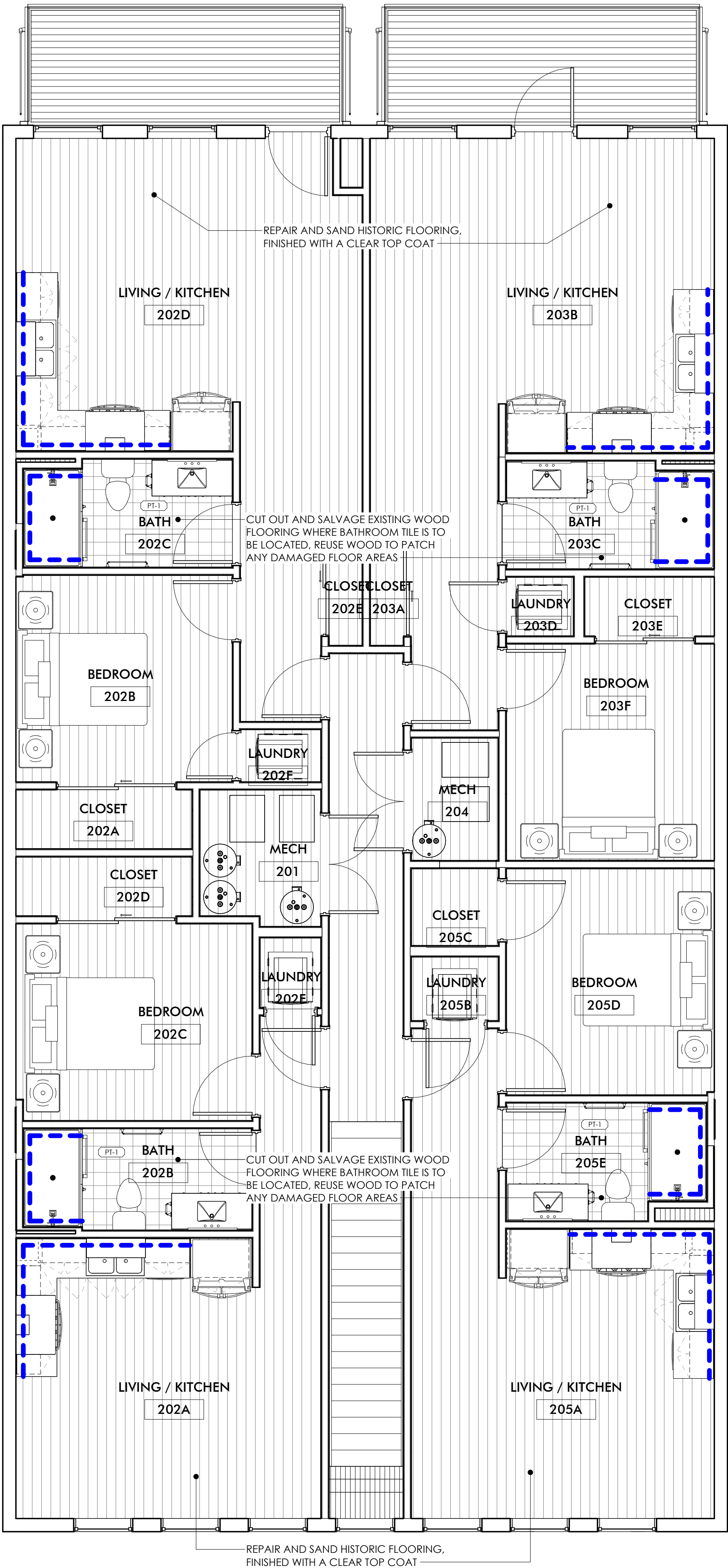
PARTITION TYPE - 2



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



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



FINISH SCHEDULE KEY							
CODE	MATERIAL	MANUFACTURER	STYLE	SIZE	COLOR	CONTACT INFO	NOTES
CAB-1	CABINET	KOHLER	MAJIN-BY STUDIO / MCGEE	48"	WHITE OAK		BATHROOM VANITIES
CT-1	CERAMIC TILE	VIRGINIA TILE	AMERICAN OLEAN - COLOR STORY	3" X 6"	ICE WHITE	Lisa.McLean@virginiatile.com	GLOSSY FINISH, KITCHEN BACKSPLASH, SHOWER WALLS
IPS-1	PAINT (TO MATCH)	SHERWIN WILLIAMS	EGGSHELL FINISH		SW7004 SNOWBOUND	Dawn.M.Cenowa@sherwin.com	
IPS-2	PAINT (TO MATCH)	SHERWIN WILLIAMS	SEMI-GLOSS FINISH		SW2819 DOWNING SLATE	Dawn.M.Cenowa@sherwin.com	KITCHEN CABINET PAINT
IPS-3	PAINT (TO MATCH)	SHERWIN WILLIAMS	SEMI-GLOSS FINISH		SW6991 BLACK MAGIC	Dawn.M.Cenowa@sherwin.com	DOORS/ TRIM PAINT
IPS-4	PAINT (TO MATCH)	SHERWIN WILLIAMS	FLAT FINISH		SW7757 HIGH REFLECTIVE WHITE	Dawn.M.Cenowa@sherwin.com	CEILINGS
LVT-1	LUXURY VINYL TILE	SHAW CONTRACT	INLETT II 4372V	9" X 48"	72103 VALLEY	ashley.hazel@shawcontract.com	
PT-1	PORCELAIN TILE	TILEBAR	LENOX	8" X 8"	NERA		BATHROOM FLOORING
SS-1	SOLID SURFACE	CORIAN			LAVA ROCK		KITCHEN COUNTERTOP
WDB-1	WOOD BASEBOARD	TO MATCH EXISTING	TO MATCH EXISTING	1" x 6"	TO MATCH EXISTING		TO BE PAINTED IPS-1
WDT-1	WOOD TRIM						TO BE PAINTED IPS-3

FINISH SCHEDULE											
ROOM NUMBER	ROOM NAME	FLOOR	BASE	WALL				CEILING	MILLWORK		NOTES
				NORTH	EAST	SOUTH	WEST		CABINET	TOP	
200	CORRIDOR	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
201	MECH	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
202A	CLOSET	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
202A	LIVING / KITCHEN	EXISTING	WDB-1	IPS-1, CT-1	IPS-1	IPS-1	IPS-1, CT-1	IPS-4	IPS-2	SS-1	
202B	BEDROOM	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
202B	BATH	PT-1	WDB-1	IPS-1, CT-1	IPS-1	IPS-1, CT-1	IPS-1, CT-1	IPS-4	CAB-1	CAB-1	
202C	BEDROOM	EXISTING	WDB-1	IPS-1, CT-1	IPS-1	IPS-1, CT-1	IPS-1, CT-1	IPS-4	CAB-1	CAB-1	
202C	BEDROOM	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
202D	LIVING / KITCHEN	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1, CT-1	IPS-1, CT-1	IPS-4	PS-2	SS-1	
202D	CLOSET	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
202E	LAUNDRY	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
202E	CLOSET	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
202F	LAUNDRY	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
203A	CLOSET	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
203B	LIVING / KITCHEN	EXISTING	WDB-1	IPS-1	IPS-1, CT-1	IPS-1, CT-1	IPS-1	IPS-4	IPS-2	SS-1	
203C	BATH	PT-1	WDB-1	IPS-1, CT-1	IPS-1, CT-1	IPS-1, CT-1	IPS-1	IPS-4	-	-	
203D	LAUNDRY	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
203E	CLOSET	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
203F	BEDROOM	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
204	MECH	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
205A	LIVING / KITCHEN	EXISTING	WDB-1	IPS-1, CT-1	IPS-1, CT-1	IPS-1	IPS-1	IPS-4	IPS-2	SS-1	
205B	LAUNDRY	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
205C	CLOSET	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
205D	BEDROOM	EXISTING	WDB-1	IPS-1	IPS-1	IPS-1	IPS-1	IPS-4	-	-	
205E	BATH	PT-1	WDB-1	IPS-1, CT-1	IPS-1, CT-1	IPS-1, CT-1	IPS-1	IPS-4	CAB-1	CAB-1	

ON ALL FINISH PLANS, NORTH IS TO BE ASSUMED DIRECTLY STRAIGHT UP ON THE FLOOR PLAN TO CORRELATE WITH WALL FINISH LOCATIONS

GENERAL NOTES

- ALL FURNITURE IS SHOWN FOR REFERENCE AND SCALE ONLY. ALL FINAL FURNITURE SELECTION IS TO BE BY OWNER
- PRIME AND PAINT ALL SURFACES WITH A MINIMUM (2) FINISH COATS.
- AFTER REMOVING EXISTING FLOORING, GRIND CONCRETE OR REPLACE SUBFLOOR AS REQUIRED TO PROVIDE A LEVEL SURFACE FOR THE NEW FLOORING
- SEE EXTERIOR ELEVATIONS FOR EXTERIOR MATERIALS
- TRANSITIONS TO BE MANUFACTURED FROM SCHLUTER SYSTEMS U.N.O. IN S.S. FINISH IN THE APPROPRIATE THICKNESS FOR THE ADJACENT MATERIALS
- CENTER ALL FLOORING TRANSITIONS UNDER DOORS OR AT THE CENTER OF OPENINGS U.N.O.
- USE LEVELING COMPOUND TO FEATHER FLOOR UP TO APPROPRIATE HEIGHT TO ENSURE THAT TRANSITION STRIP IS FLUSH WITH ADJACENT FLOORING MATERIAL
- GROUT FOR CT-1, PT-1 TO BE TEC 908 DOVE GRAY
- PROVIDE AND INSTALL ALL NECESSARY TRIM PIECES FOR WALL PROTECTION
- CABINET PULLS TO BE RICHELIEU - MODERN METAL PULL-7345 - CHROME - BASIS OF DESIGN. ALL PULLS TO BE VERTICAL FOR DIRECTIONAL PLACEMENT MOUNTED TO THE LATCH SIDE OF CABINET DOORS AND CENTER OF DRAWERS (U.N.O.) ALL DRAWER PULLS ARE SHOWN FOR REFERENCE ONLY AND NOT INDICATION OF MOUNTING LOCATION
- ALL EXPOSED METAL ELEC./MECH. ITEMS IN OCCUPIED SPACES TO BE FIELD-PAINTED TO MATCH SURROUNDING WALL FINISH
- BULKHEADS TO BE PAINTED TO MATCH SURROUNDING WALLS ON FACE AND UNDERSIDE U.N.O
- ALL PLASTIC LAMINATE COUNTERS TO HAVE MITERED SQUARE EDGES WITH MATCHING P.LAM EDGE BANDING (OR PVC EDGE BANDING)
- ALL SOLID SURFACE COUNTERTOPS AND BACKSPLASHES TO HAVE MITERED, FINISHED EASED EDGES
- ALL CONCEALED SUPPORT BRACKETS TO BE A&M HARDWARE C/EC FLAT CONCEALED BRACKETS IN APPROPRIATE SIZE - BASIS OF DESIGN
- WINDOW SILLS TO BE WDT-1
- PAINT CONDUIT, PIPING, JUNCTION BOXES, DUCTWORK AND OTHER EXPOSED UTILITIES TO MATCH CEILING PAINT, OTHER THAN IN MECHANICAL AND ELECTRICAL ROOMS U.N.O.
- SUBMIT 9"X9" SAMPLES FOR APPROVAL ON ALL FINISHES PRIOR TO ORDERING
- REFER TO FINISH PLANS AND ELEVATIONS FOR ACCENT WALL LOCATIONS AND MULTIPLE FINISH LOCATIONS
- REFER TO ALL INTERIOR FINISH NOTES AND INTERIOR DRAWINGS INCLUDING PLANS, ELEVATIONS AND DETAILS FOR COMPLETE INTERIORS INFORMATION
- CONDUCT MOISTURE TESTS ON ALL CONCRETE SLABS WHERE FINISH MATERIALS ARE SCHEDULED. RECORD PASSING MOISTURE LEVELS PRIOR TO START OF INSTALLATION. REFERENCE MANUFACTURERS INSTALLATION SPECIFICATIONS FOR EACH FLOOR FINISH TYPE TO VERIFY REQUIREMENTS
- PROVIDE A SMOOTH LEVEL 4 DRYWALL FINISH ON ALL GYPSUM WALLS U.N.O.
- REPAIR AND SAND HISTORIC FLOORING, FINISHED WITH A TOP COAT, TO BE SELECTED BY OWNER.
- IF HISTORIC FLOORING IN NOT ABLE TO BE REPAIRED, USE LVT-1 AS AN ALTERNATIVE FLOORING FINISH, EXCLUDING BATHROOM LOCATIONS.
- FOR ALL WALLS THAT ARE TO RECEIVE CT-1 PROVIDE A MOISTURE RESISTANT GYPSUM BOARD BACKING

FINISH PLAN LEGEND

----- CT-1



1
A120

SECOND FLOOR FINISH PLAN

1/4" = 1'-0" ON ALL FINISH PLANS, NORTH IS TO BE ASSUMED DIRECTLY STRAIGHT UP ON THE FLOOR PLAN TO CORRELATE WITH WALL FINISH LOCATIONS



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BRIAN & CARMEN HARRIS

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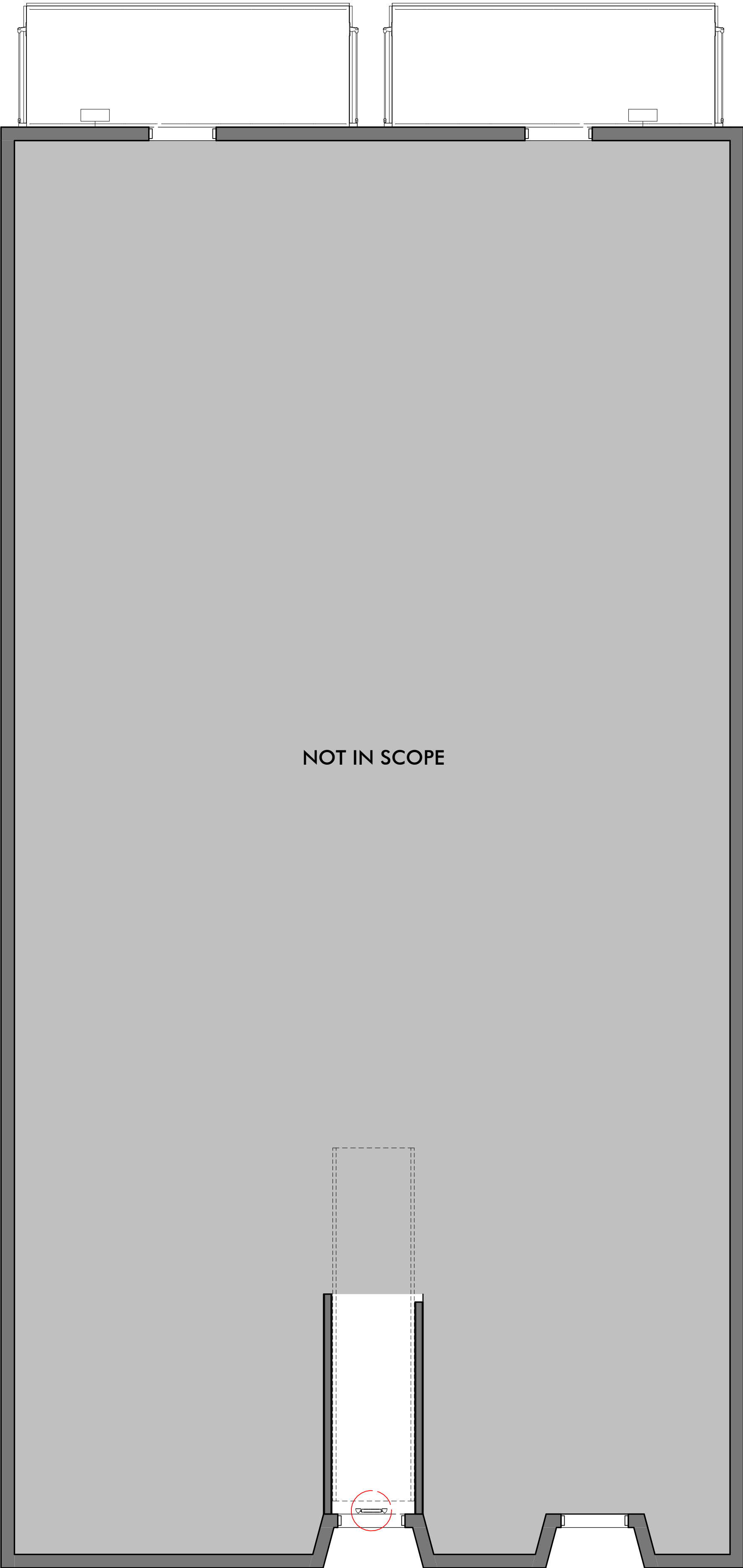
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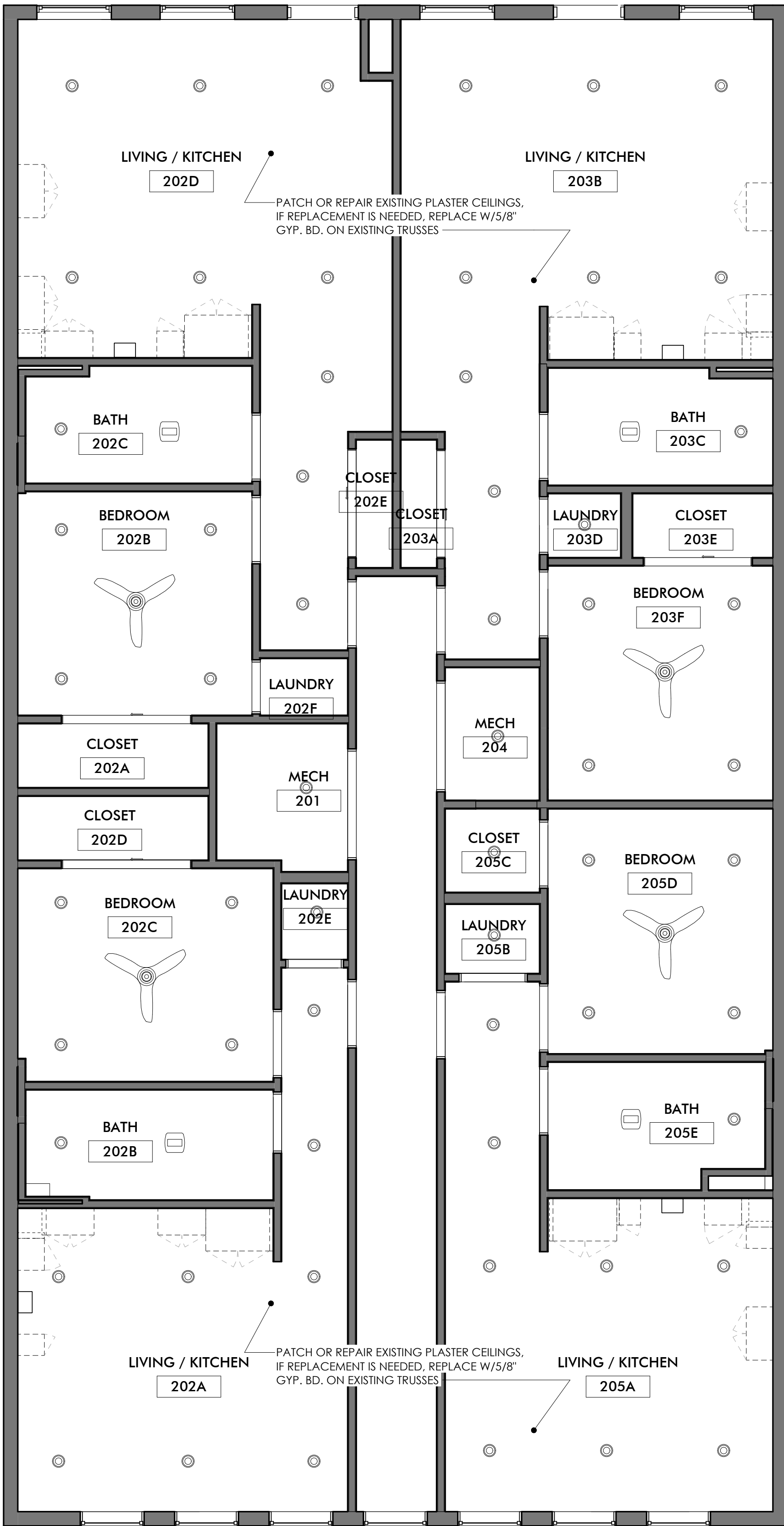
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FINISH PLAN & SCHEDULE

A120



1
A200
FIRST FLOOR REFLECTED CEILING PLAN
1/4" = 1'-0"

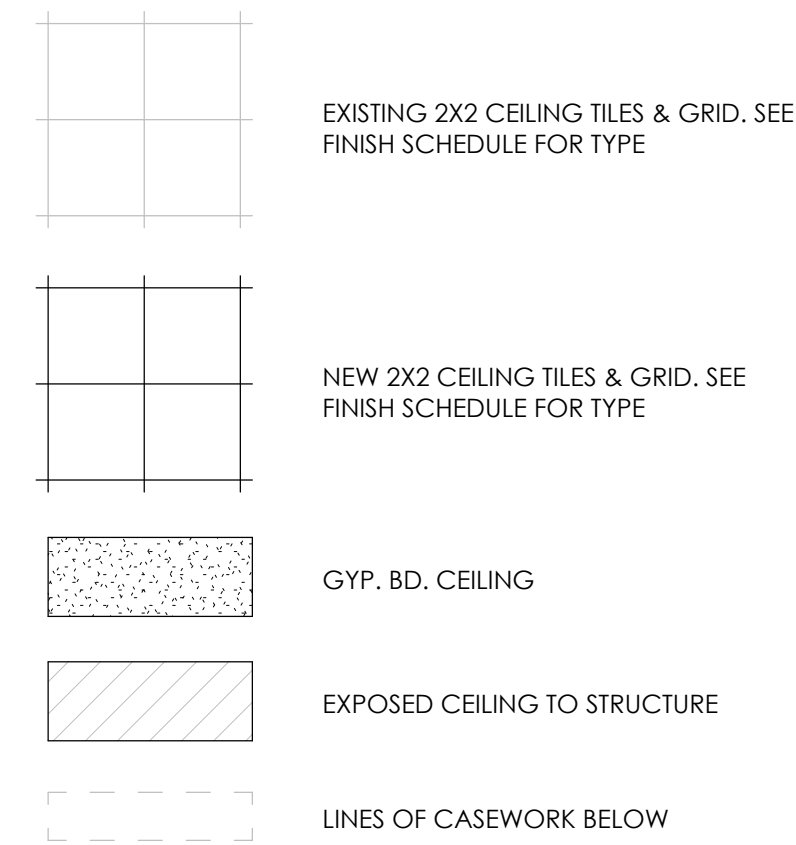


2
A200
SECOND FLOOR REFLECTED CEILING PLAN
1/4" = 1'-0"

REFLECTED CEILING GENERAL NOTES

1. ALL LIGHT SWITCHES SHALL BE SILENT TYPE, 20 AMP, WHITE COLOR WITH WHITE COVER PLATES.
2. ALL NEW LIGHT FIXTURES TO BE LED. FIXTURES AND LAYOUT ARE SHOWN SCHEMATICALLY.
3. IF CEILING HEIGHTS ARE NOT CALLED OUT, THEN THE CEILING IS EXISTING OR SHALL BE EXPOSED TO THE EXISTING STRUCTURE ABOVE. CONFIRM WITH ARCHITECT
4. COORDINATE LIGHT FIXTURE, MECHANICAL, PLUMBING, ALONG WITH ANY OTHER SYSTEMS AS REQUIRED TO NOT INTERFERE WITH ONE ANOTHER.
5. ALL LIGHT FIXTURES AND HVAC SHALL BE CENTERED IN ALL ROOMS, 2x2 CEILING GRIDS, CLOUDS OR BETWEEN OTHER ELEMENTS OR EQUALLY SPACED UNLESS NOTED OTHERWISE.
6. ALL 2X2 CEILING GRIDS TO BE CENTERED IN ROOM UNLESS NOTED OTHERWISE. NO PANEL SHALL BE LESS THAN 4" WIDE
7. SEE MEP PLANS FOR ADDITIONAL MECHANICAL, ELECTRICAL, AND PLUMBING NOTES.
8. REPLACE ANY CEILING TILES IN CEILINGS THAT ARE TO REMAIN.
9. ALL BULKHEAD HEIGHTS AT NON-CABINERY LOCATIONS TO BE PAINTED TO MATCH UNLESS NOTED OTHERWISE. REFER TO INTERIOR ELEVATIONS FOR ADDITIONAL BULKHEAD HEIGHTS
10. REFER TO INTERIOR ELEVATIONS AND RCP FOR UNDER CABINET LIGHTING LOCATIONS.
11. REFER TO ROOM FINISH KEY AND SCHEDULE FOR ACP DESIGNATIONS
12. ALL DIMENSIONS ARE FROM CENTER LINE OF FIXTURE TO FINISHED FACE OF WALL
13. PATCH AND REPAIR EXISTING CEILING AS REQUIRED THAT WAS DISTURBED DURING DEMOLITION AND/OR NEW CONSTRUCTION ACTIVITIES. PATCH AND REPAIR TO MATCH EXISTING ADJACENT CONSTRUCTION, SUPPORT SYSTEM, CEILING FINISH, PATTERN AND ELEVATION.

REFLECTED CEILING LEGEND



LIGHT FIXTURE LEGEND

SEE ELECTRICAL DRAWINGS FOR ELECTRICAL FIXTURES

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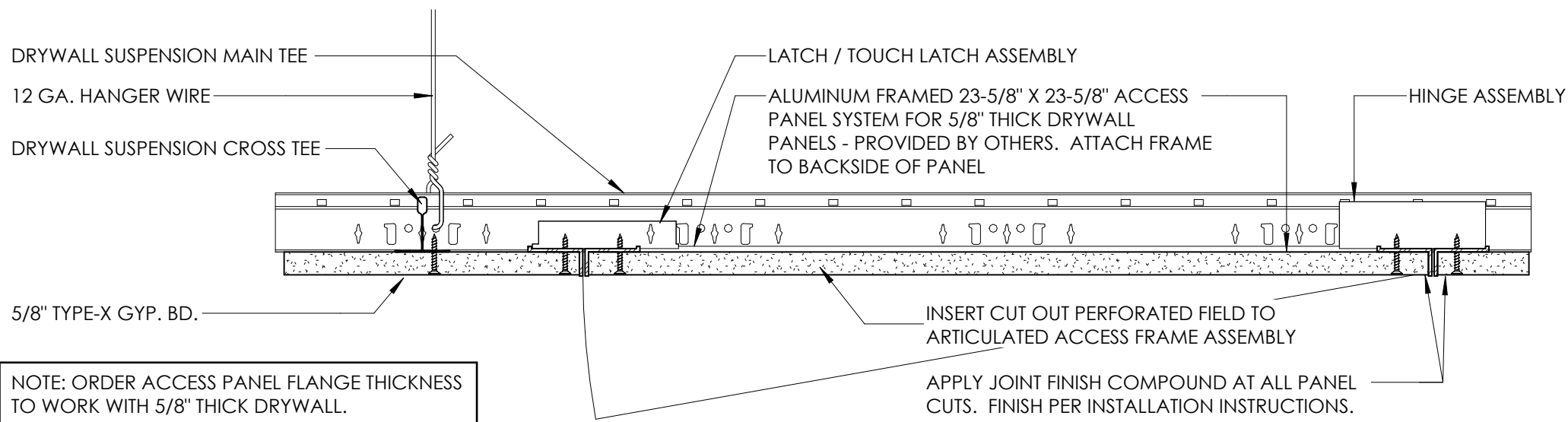
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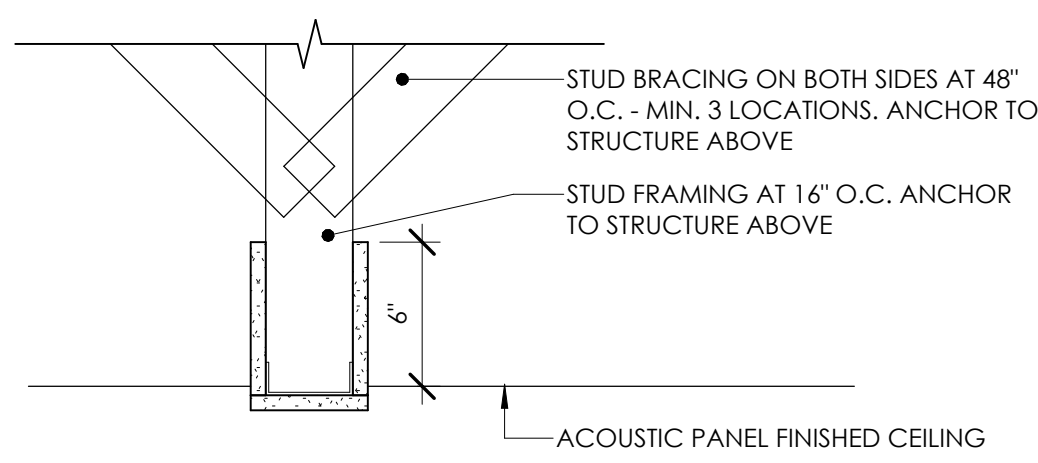
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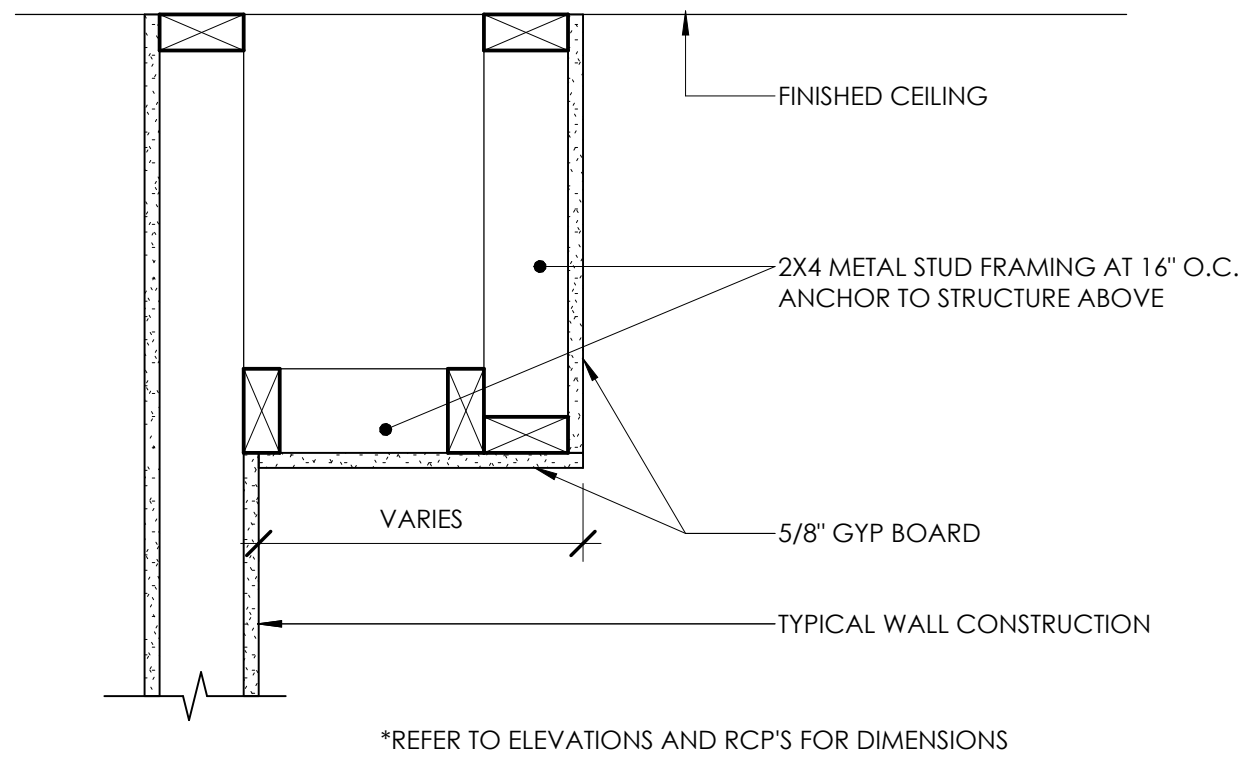
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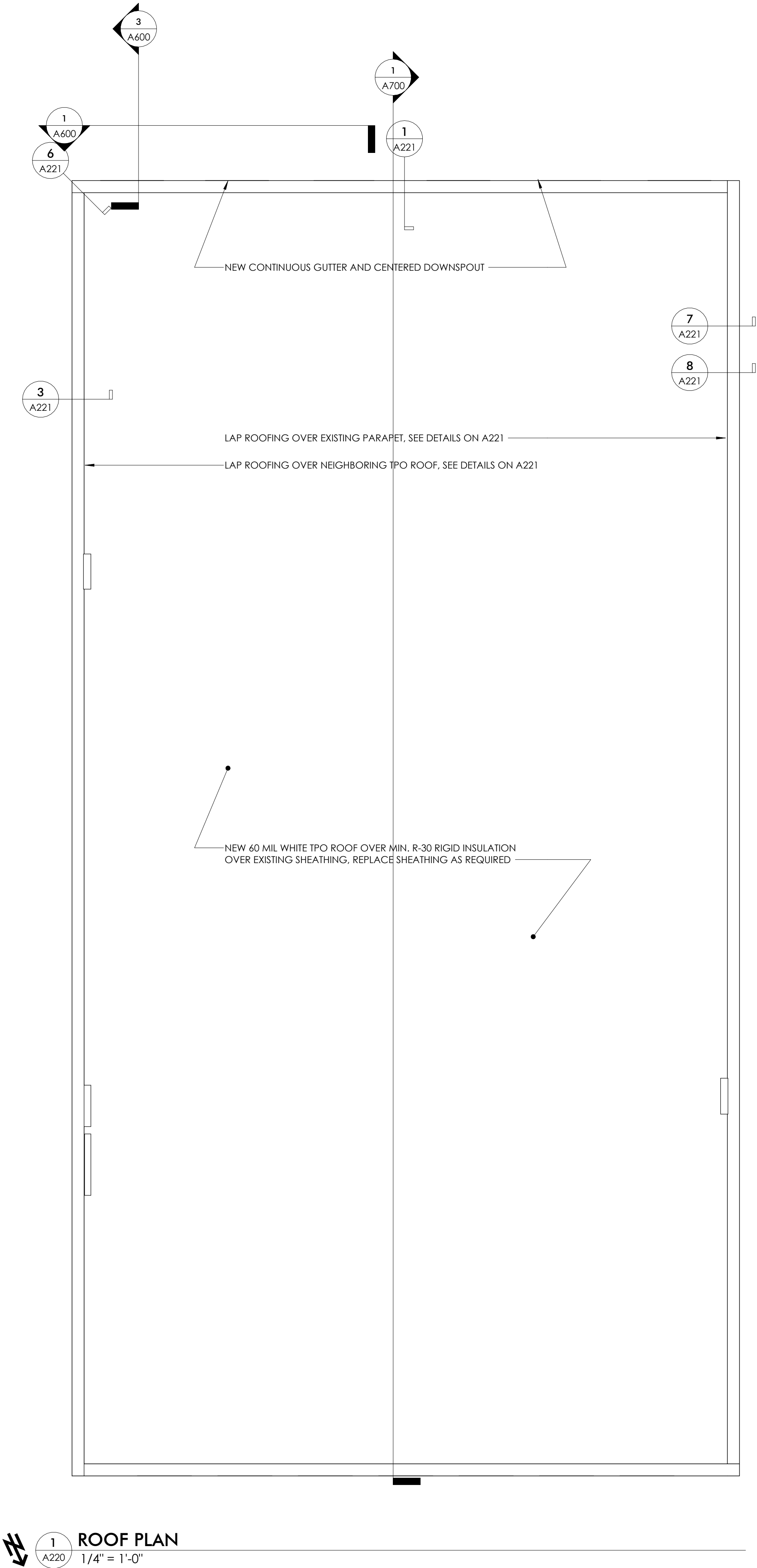
1 ACCESS PANEL DETAIL
A210 / 3" = 1'-0"



2 BULKHEAD
A210 / 1 1/2" = 1'-0"



3 BULKHEAD - WOOD STUD
A210 / 1 1/2" = 1'-0"



1 ROOF PLAN
1/4" = 1'-0"

GENERAL NOTES

1. SEE A221 FOR ROOF DETAILS



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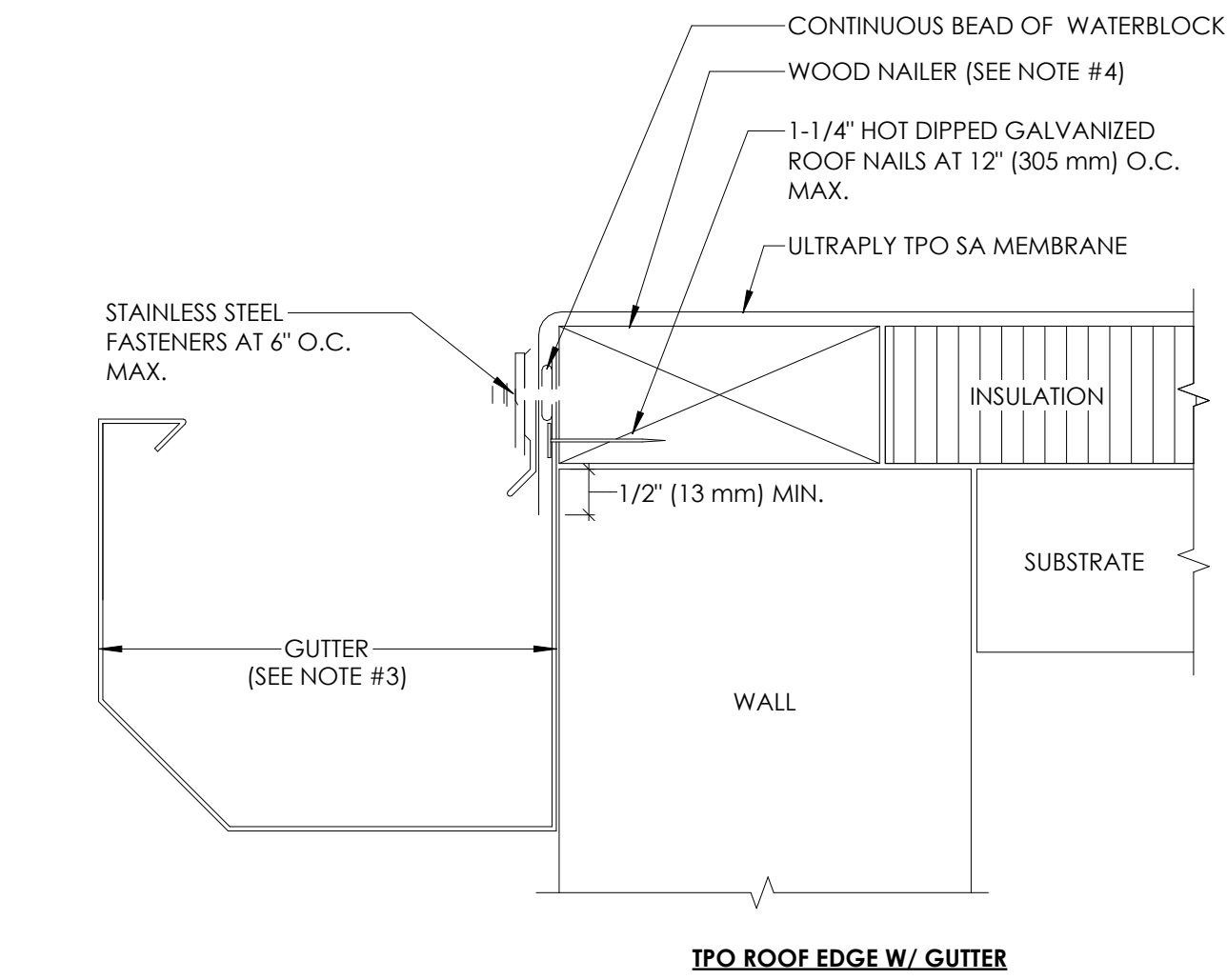
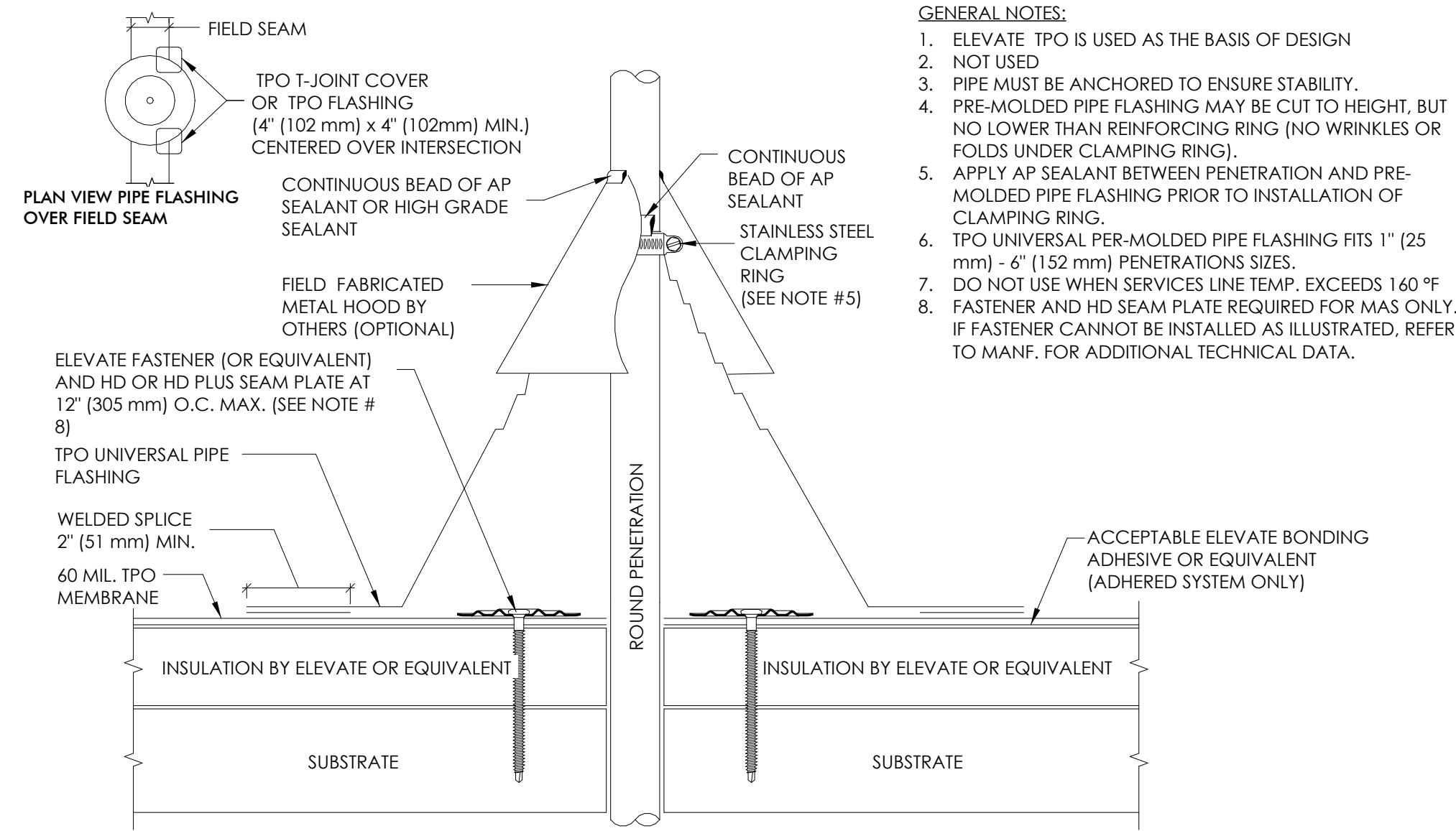
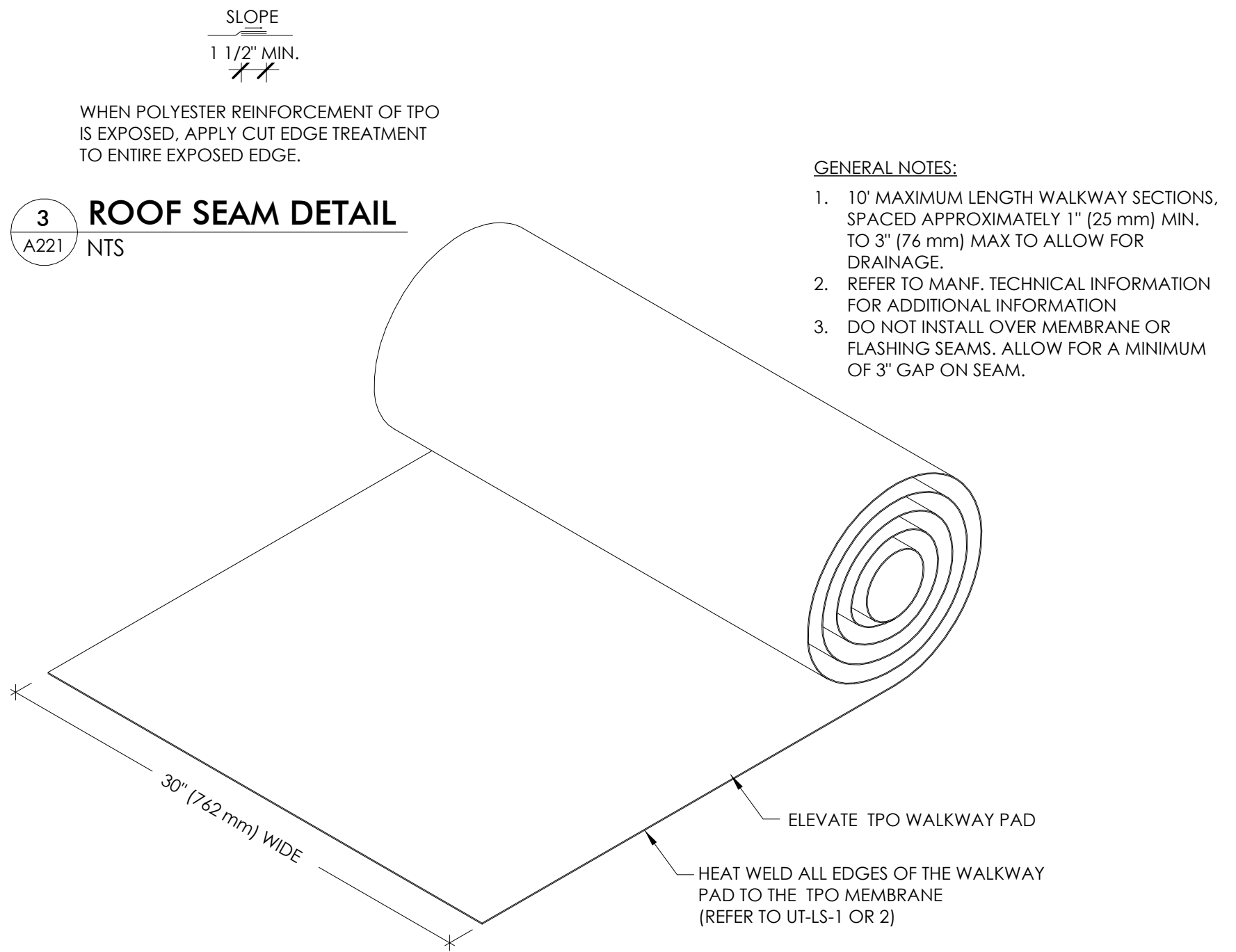
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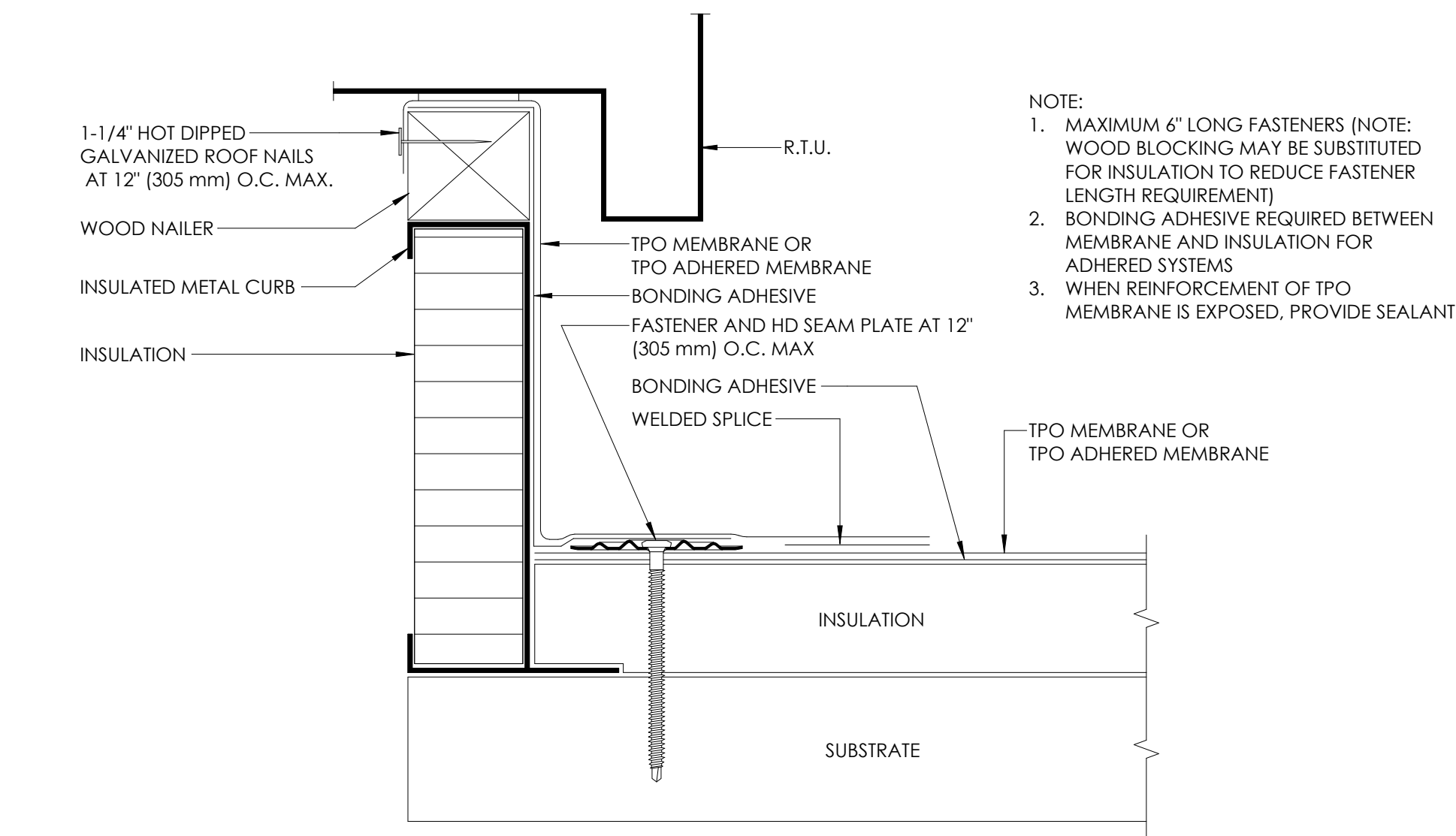
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ROOF PLAN
A220



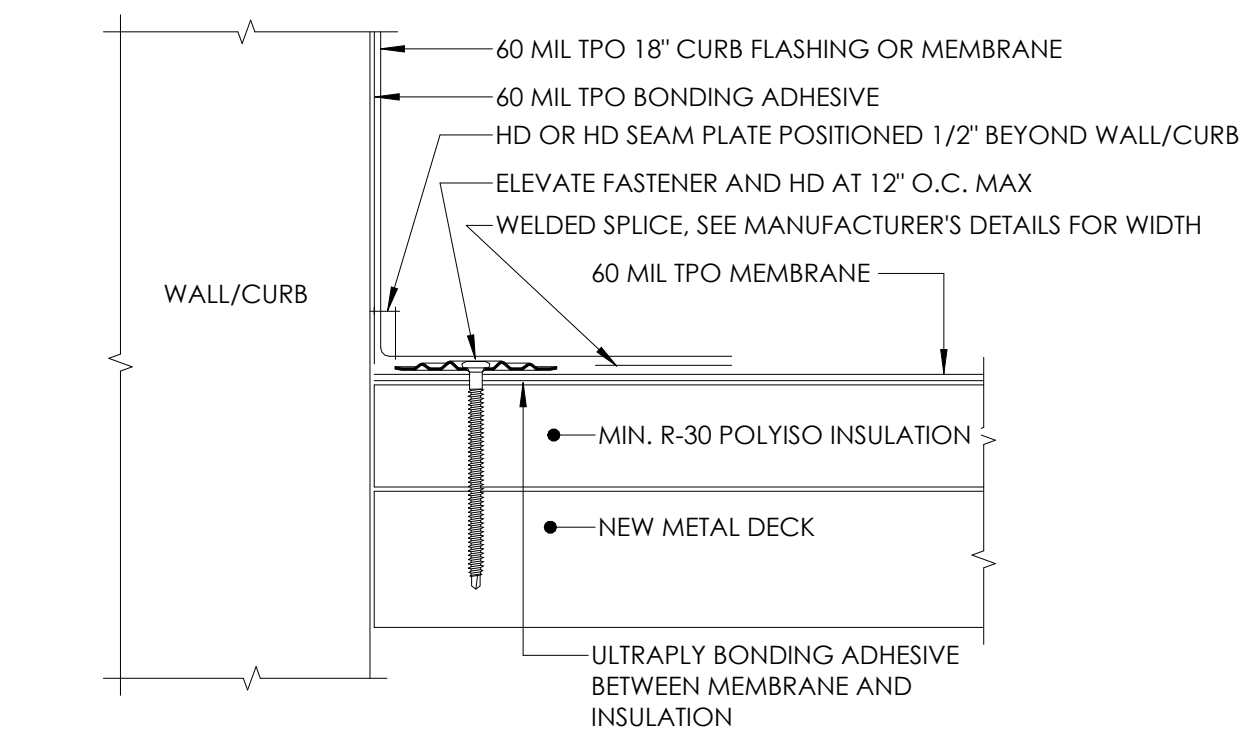
1
A221 / NTS

TPO ROOF EDGE W/GUTTER



5
A221 / NTS

RUBBER ROOF CURB DETAIL

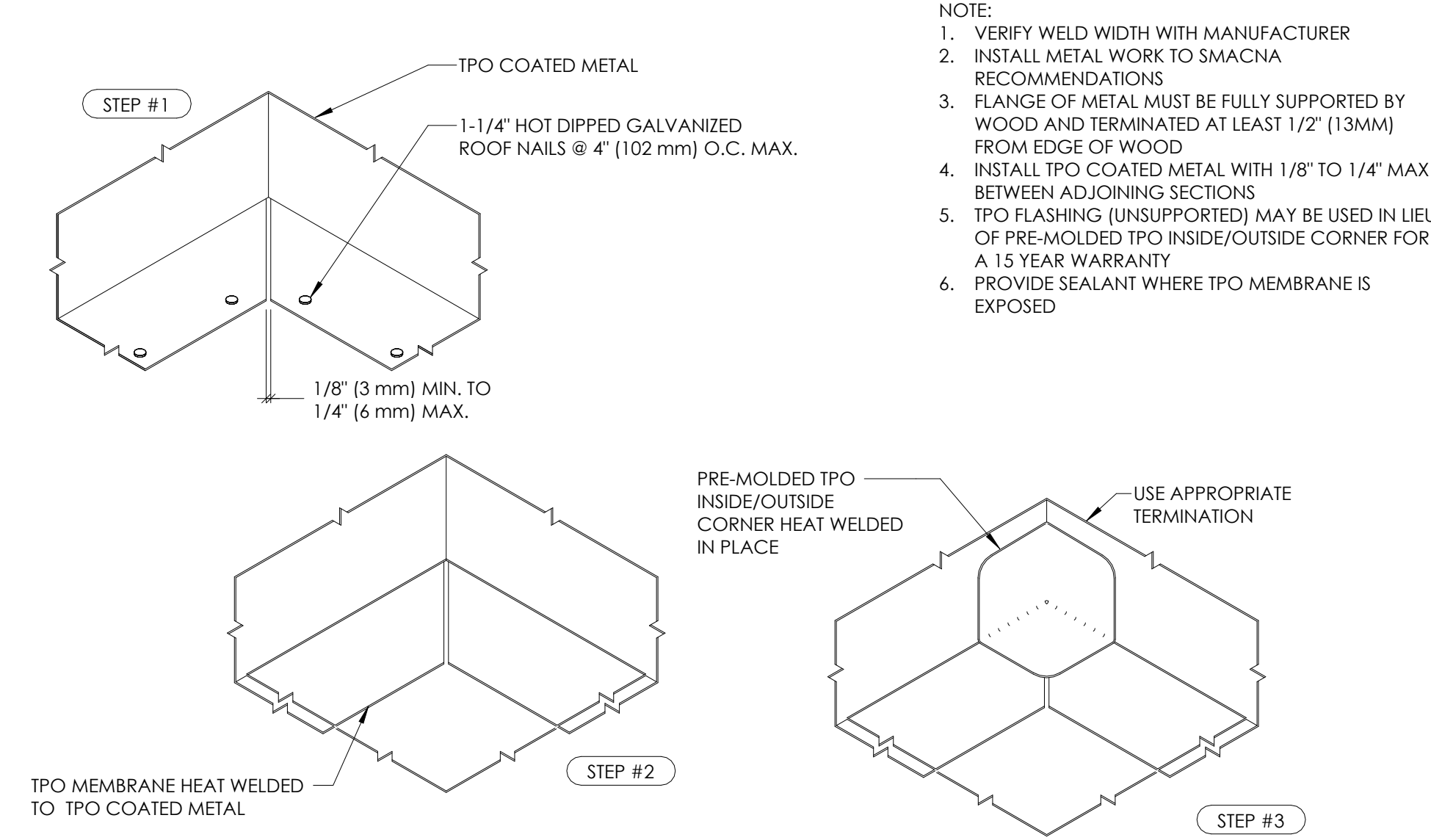


8
A221 / NTS

ROOF BASE DETAIL

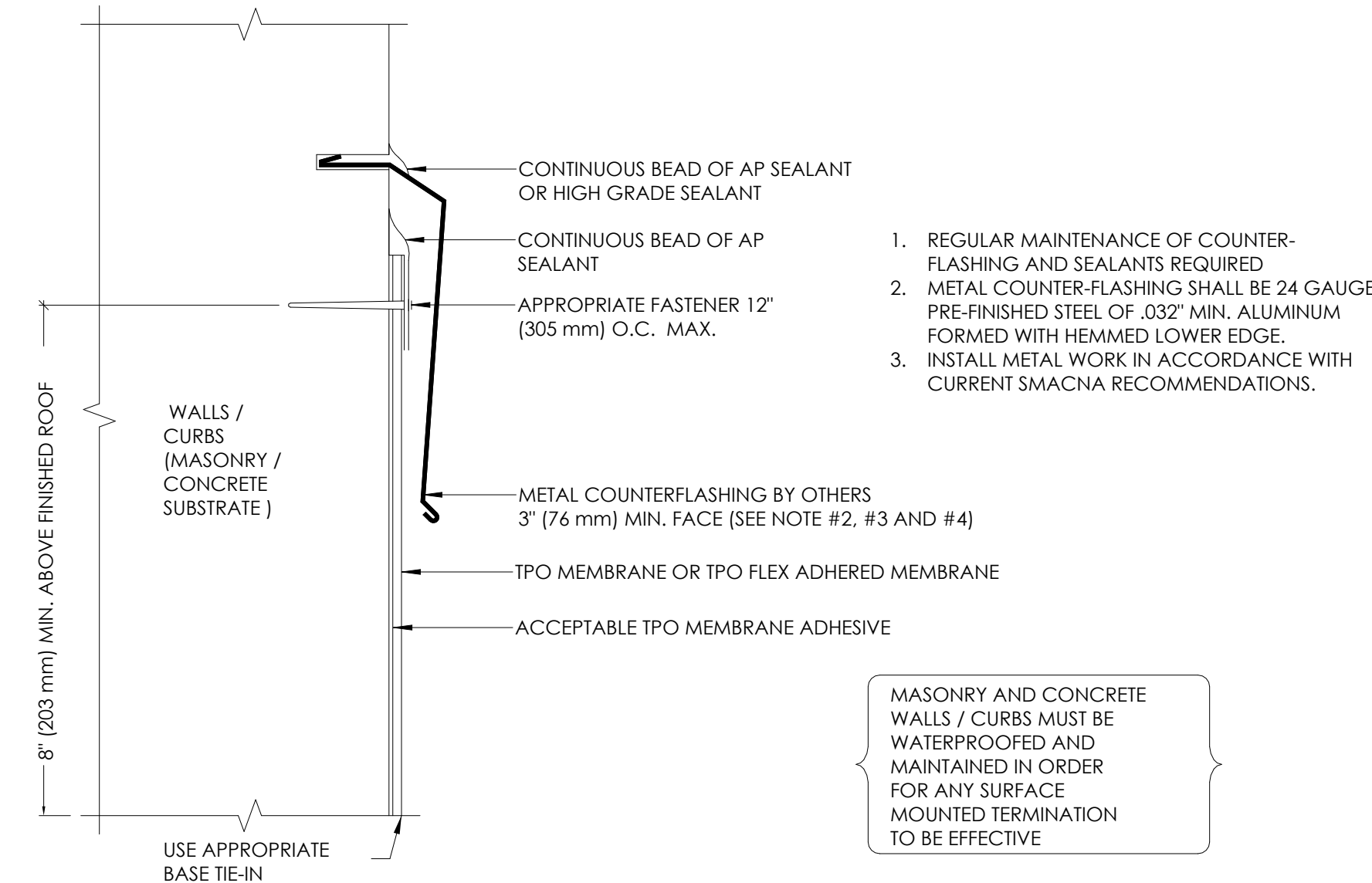
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WALKWAY PAD



6
A221 / NTS

TPO CORNER

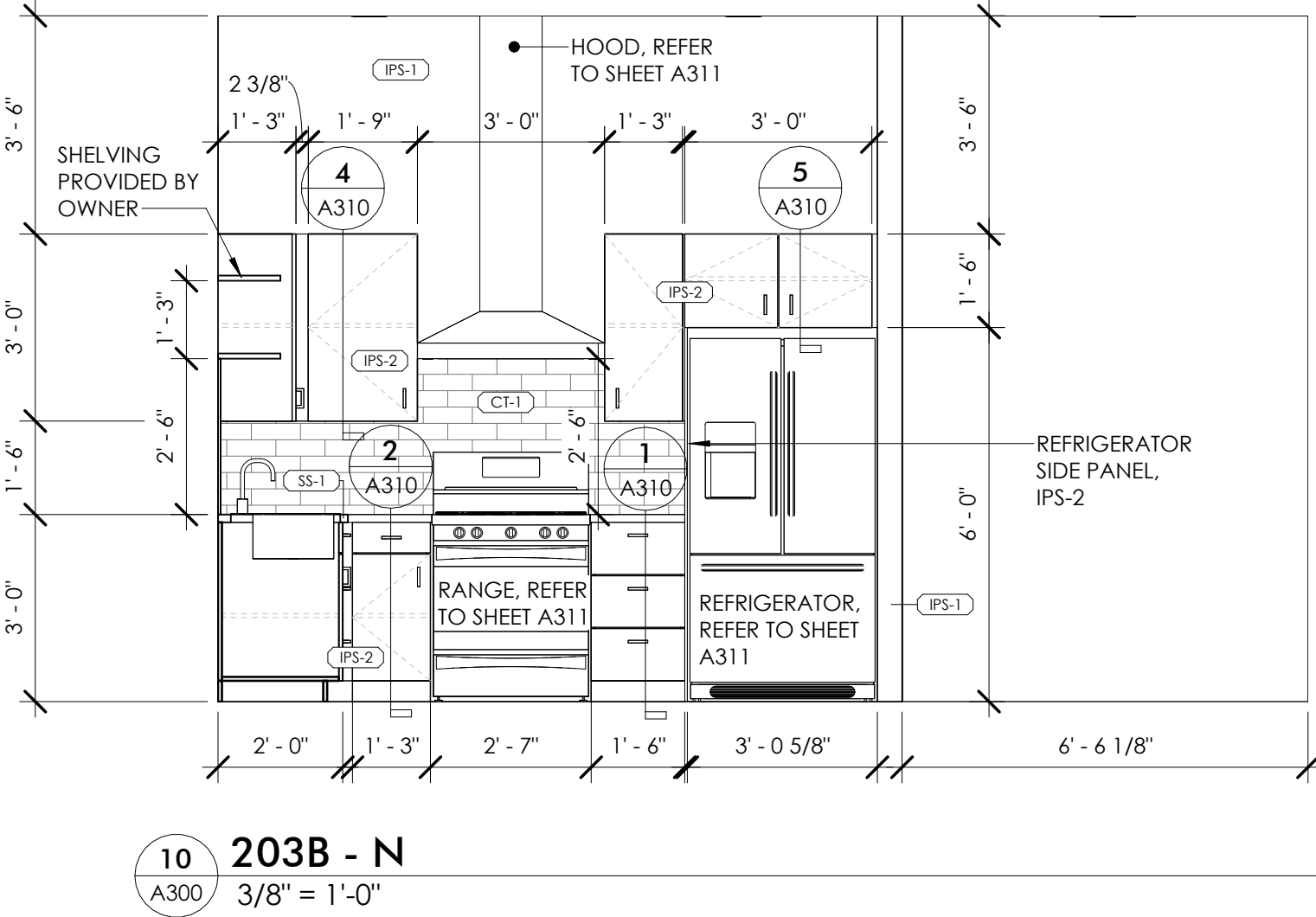
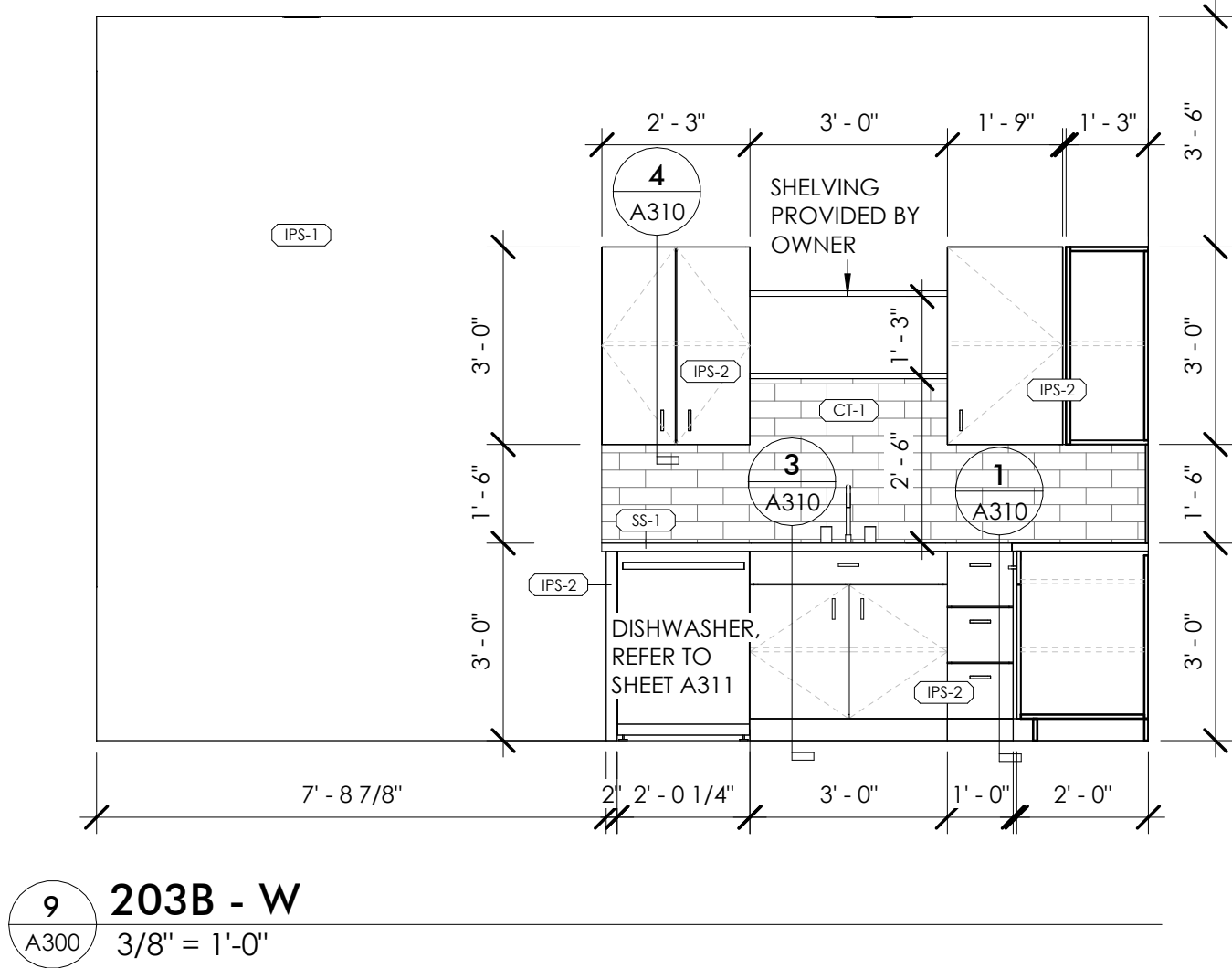
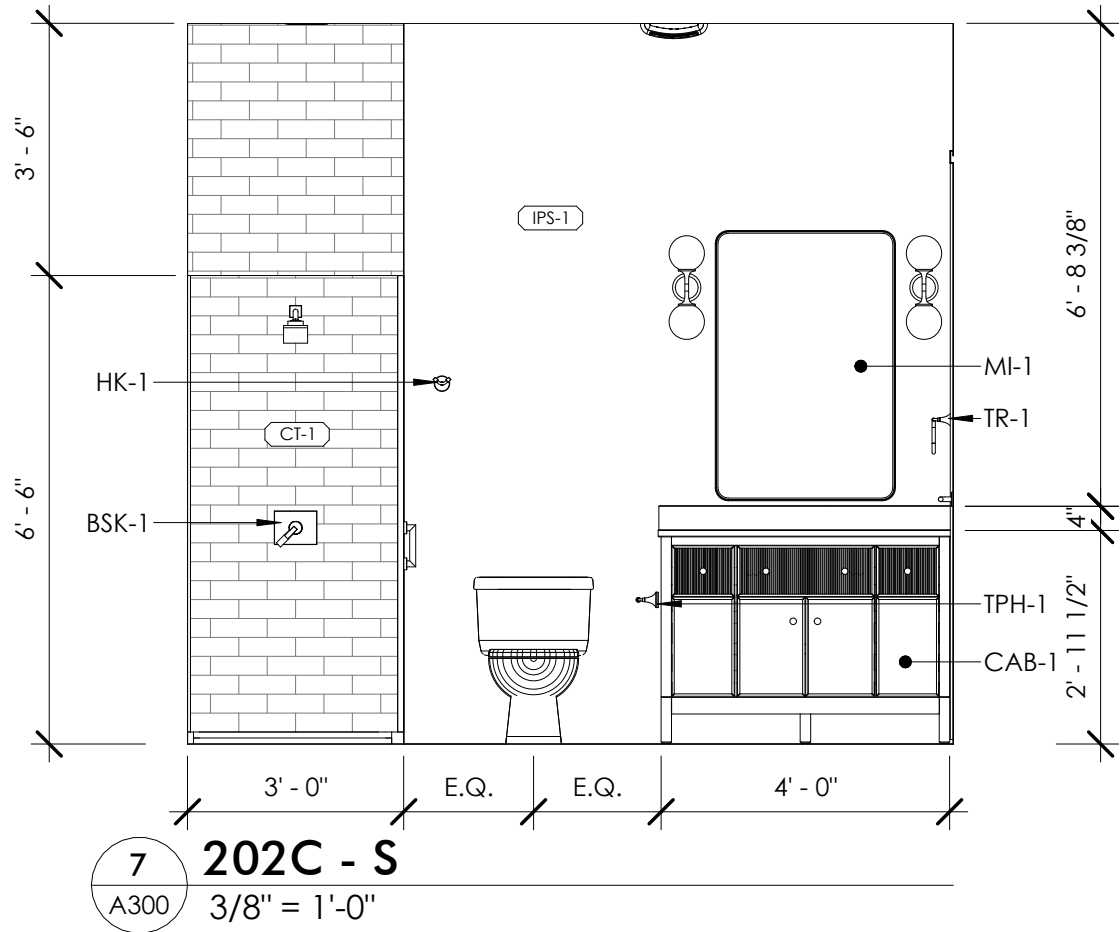
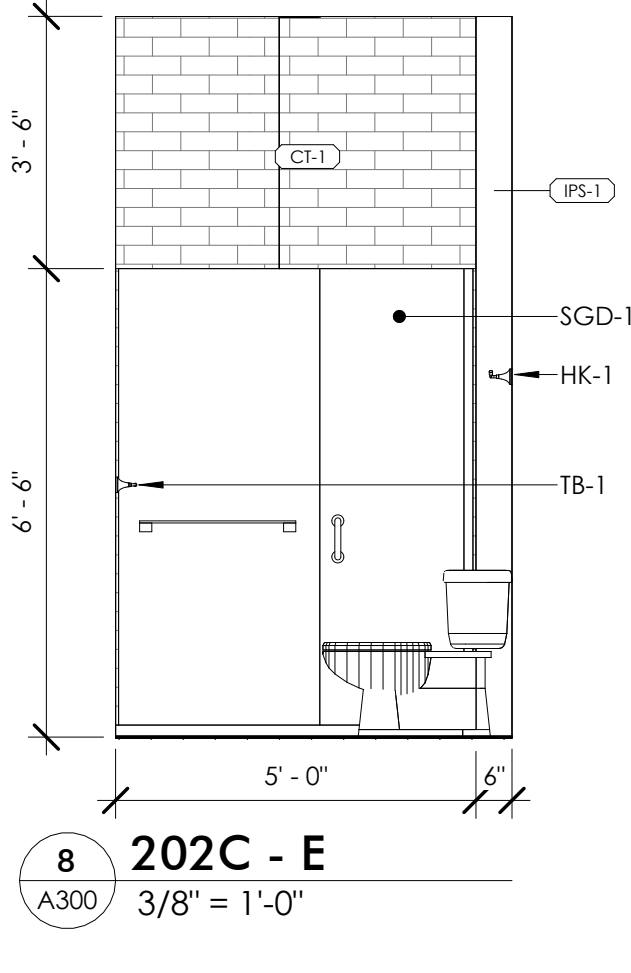
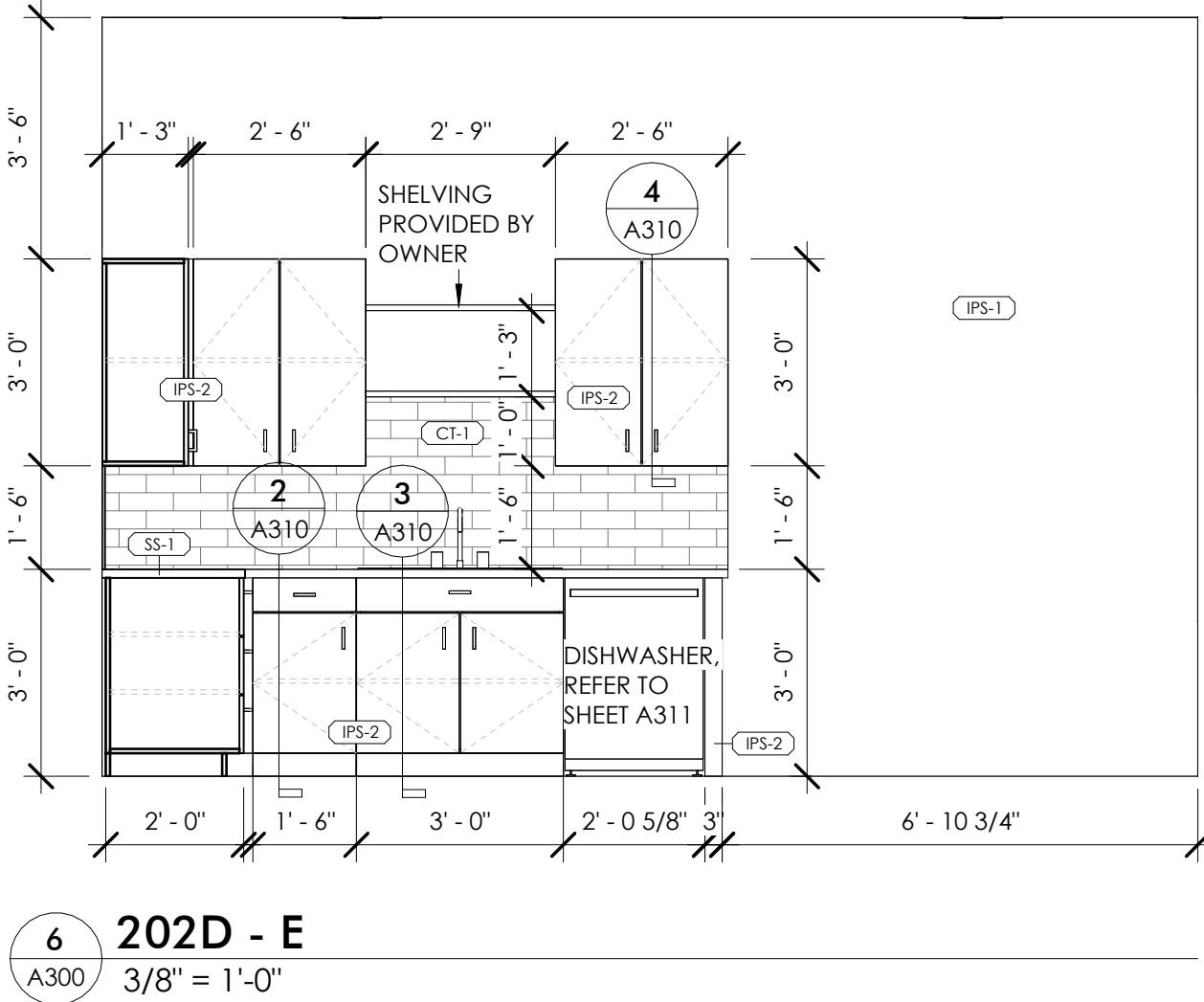
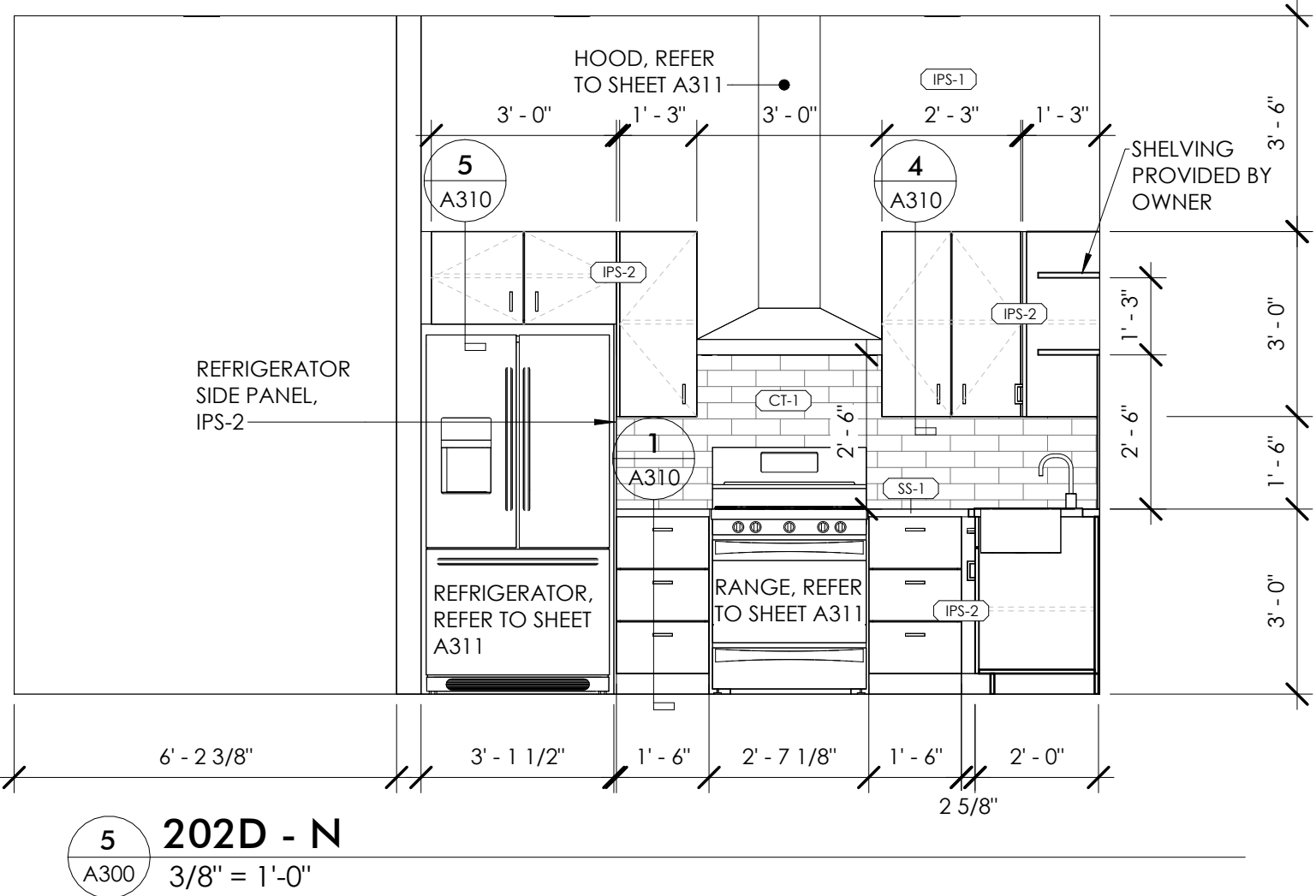
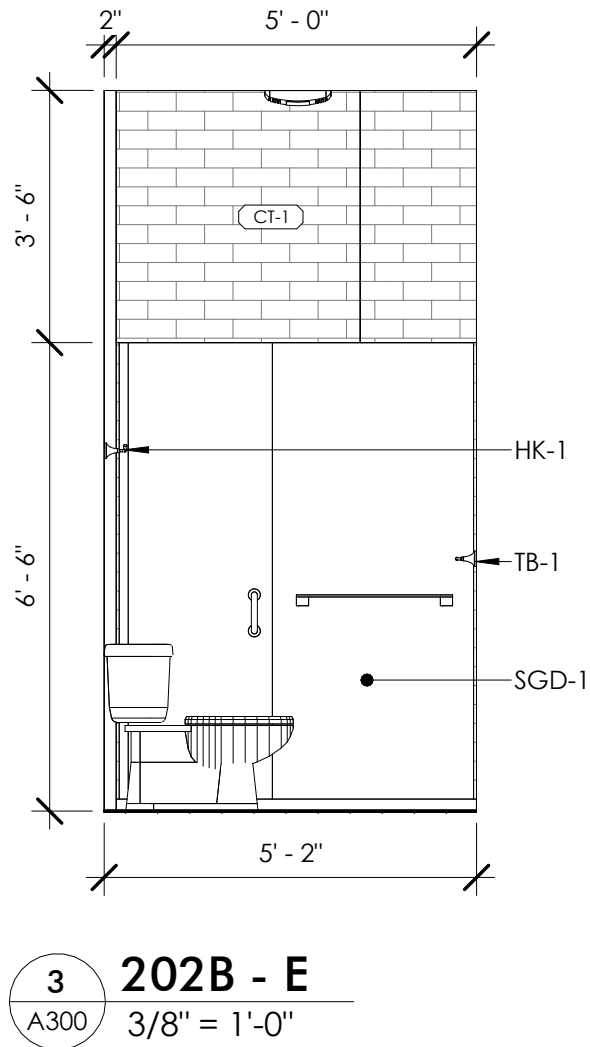
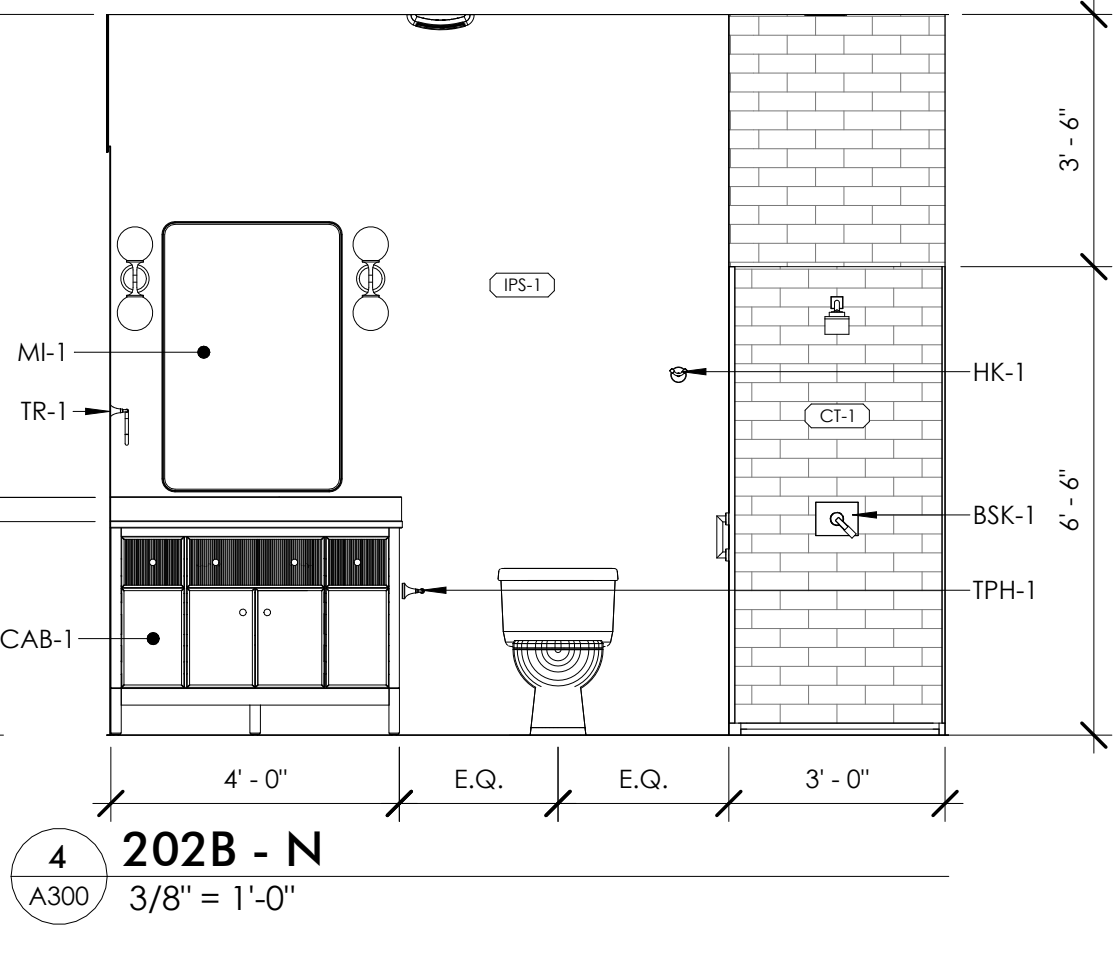
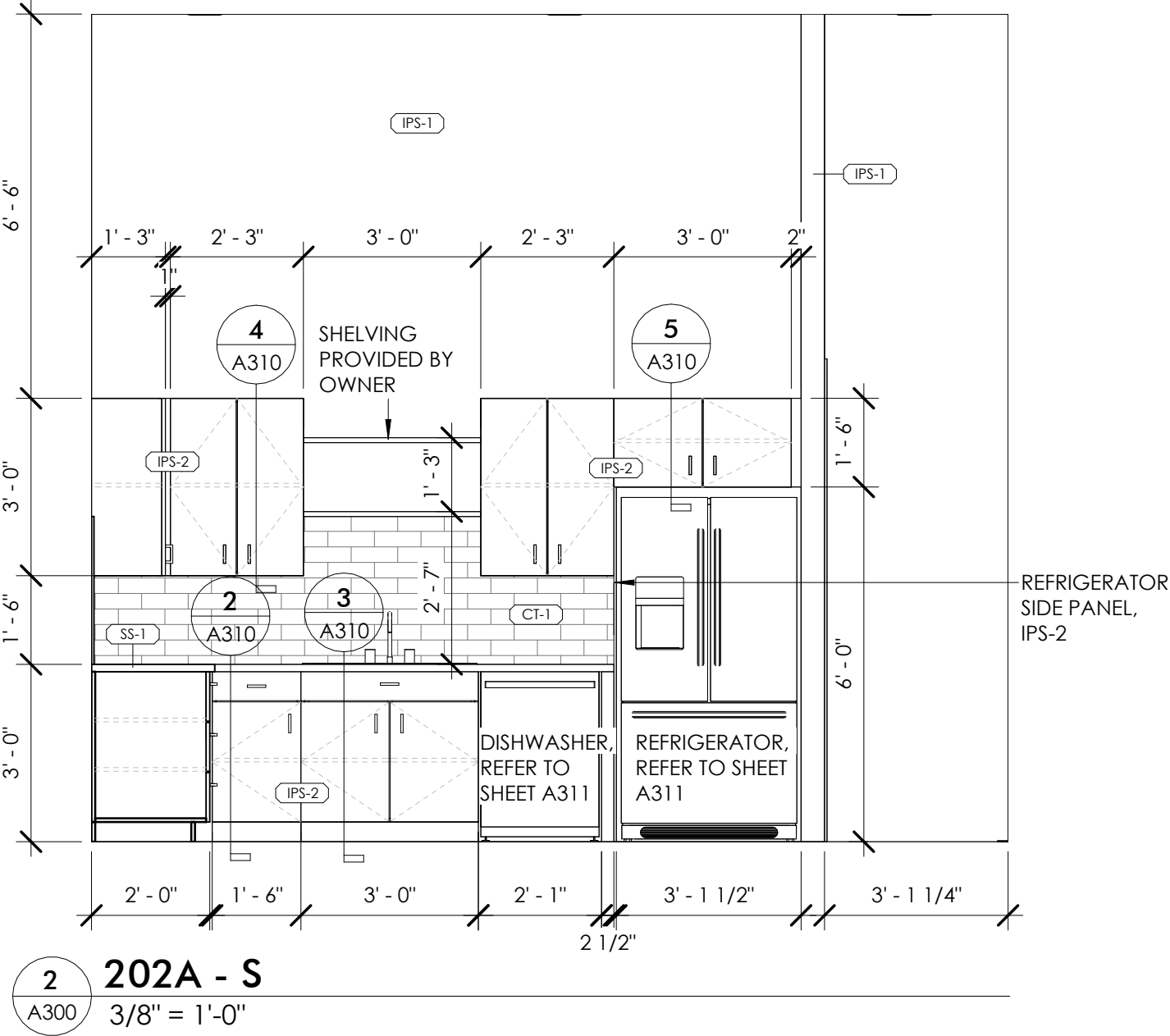
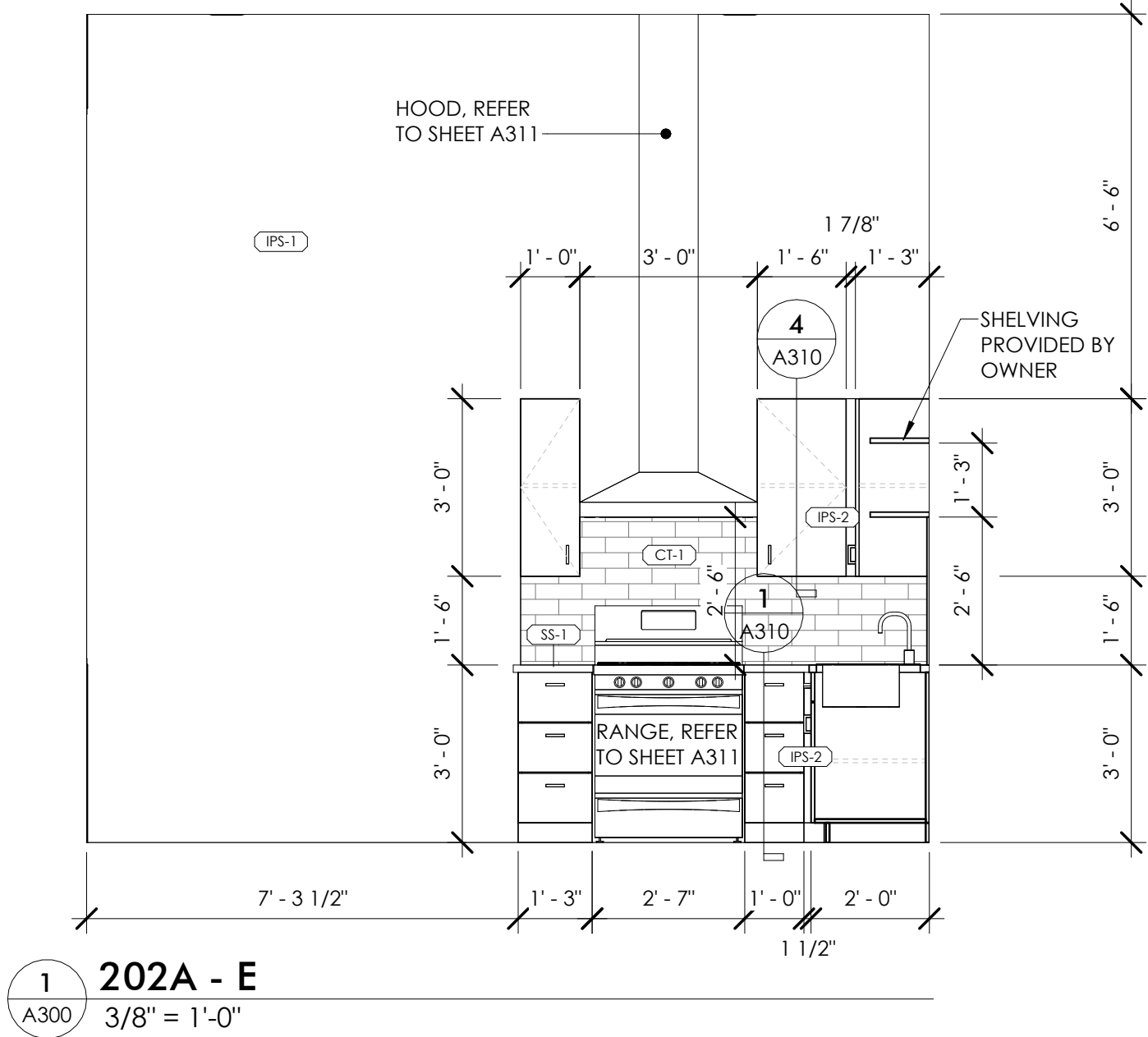


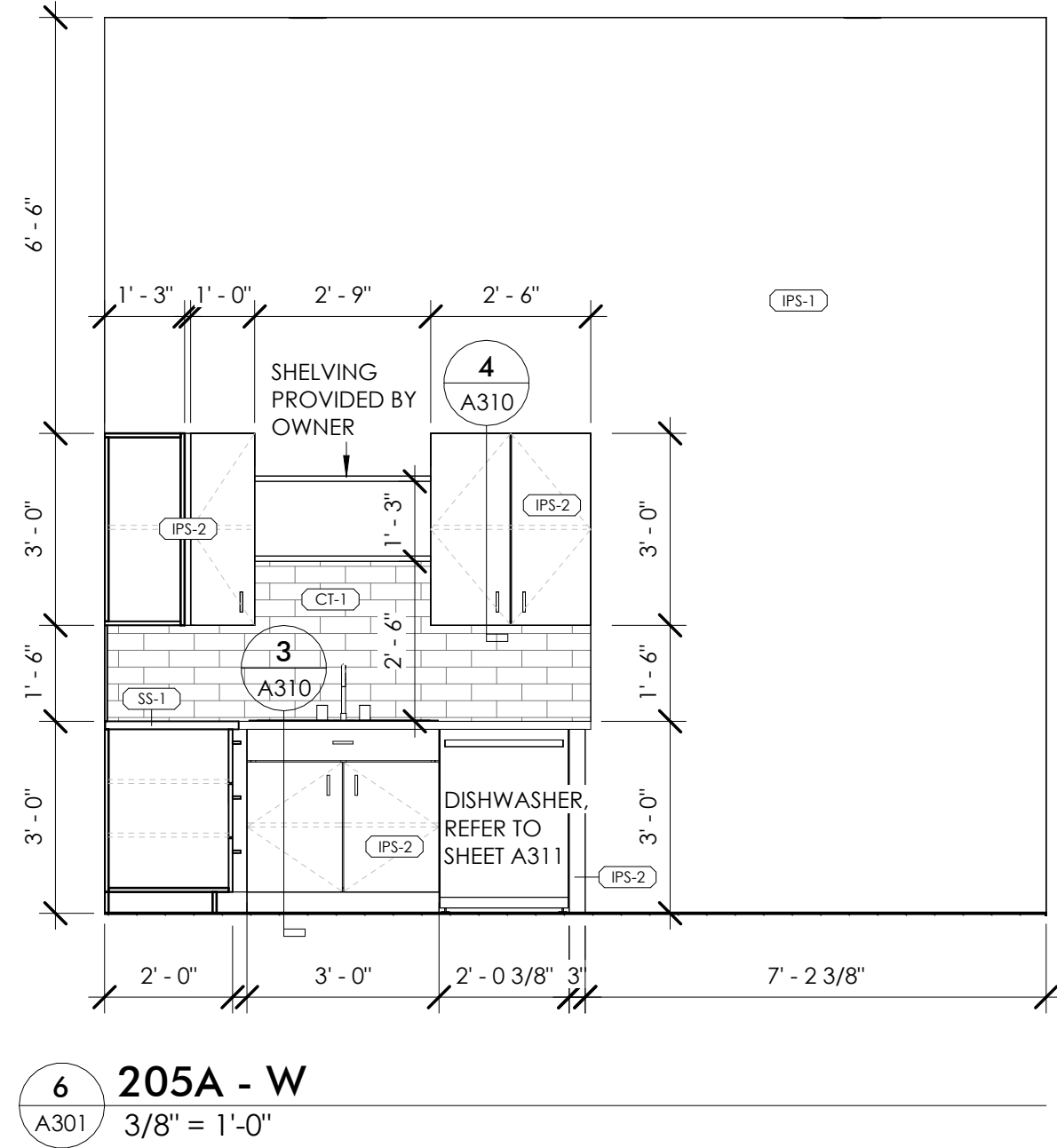
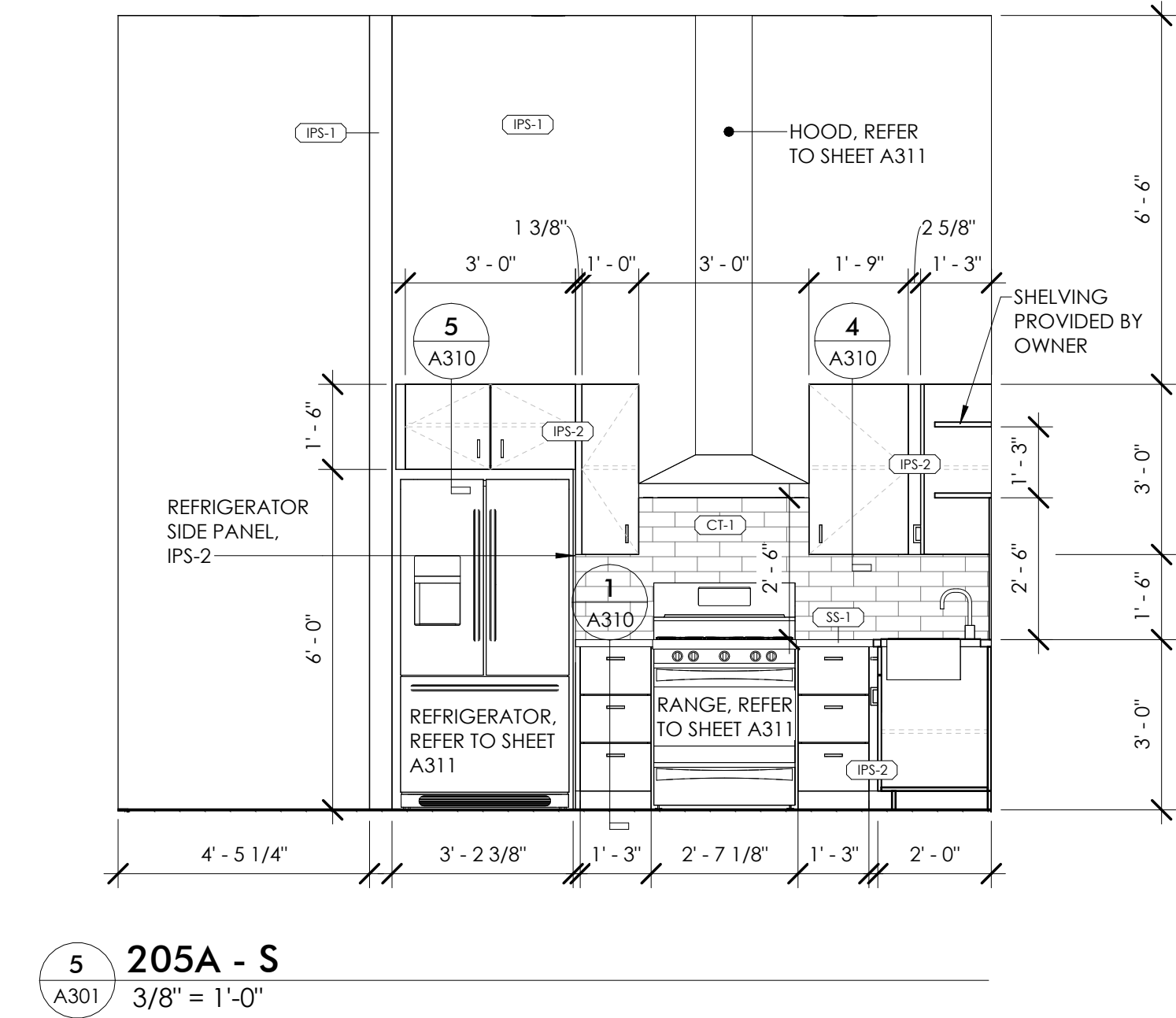
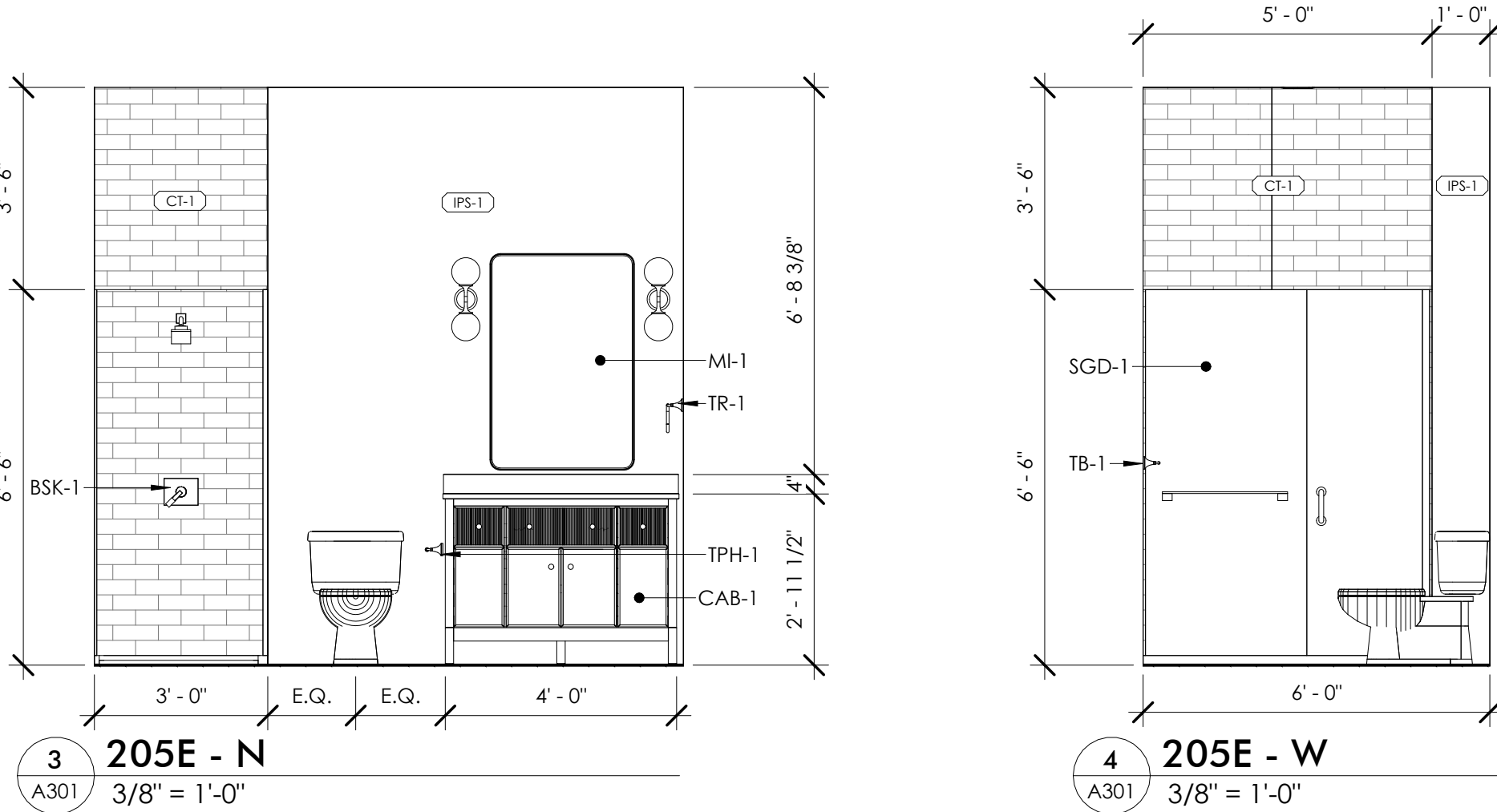
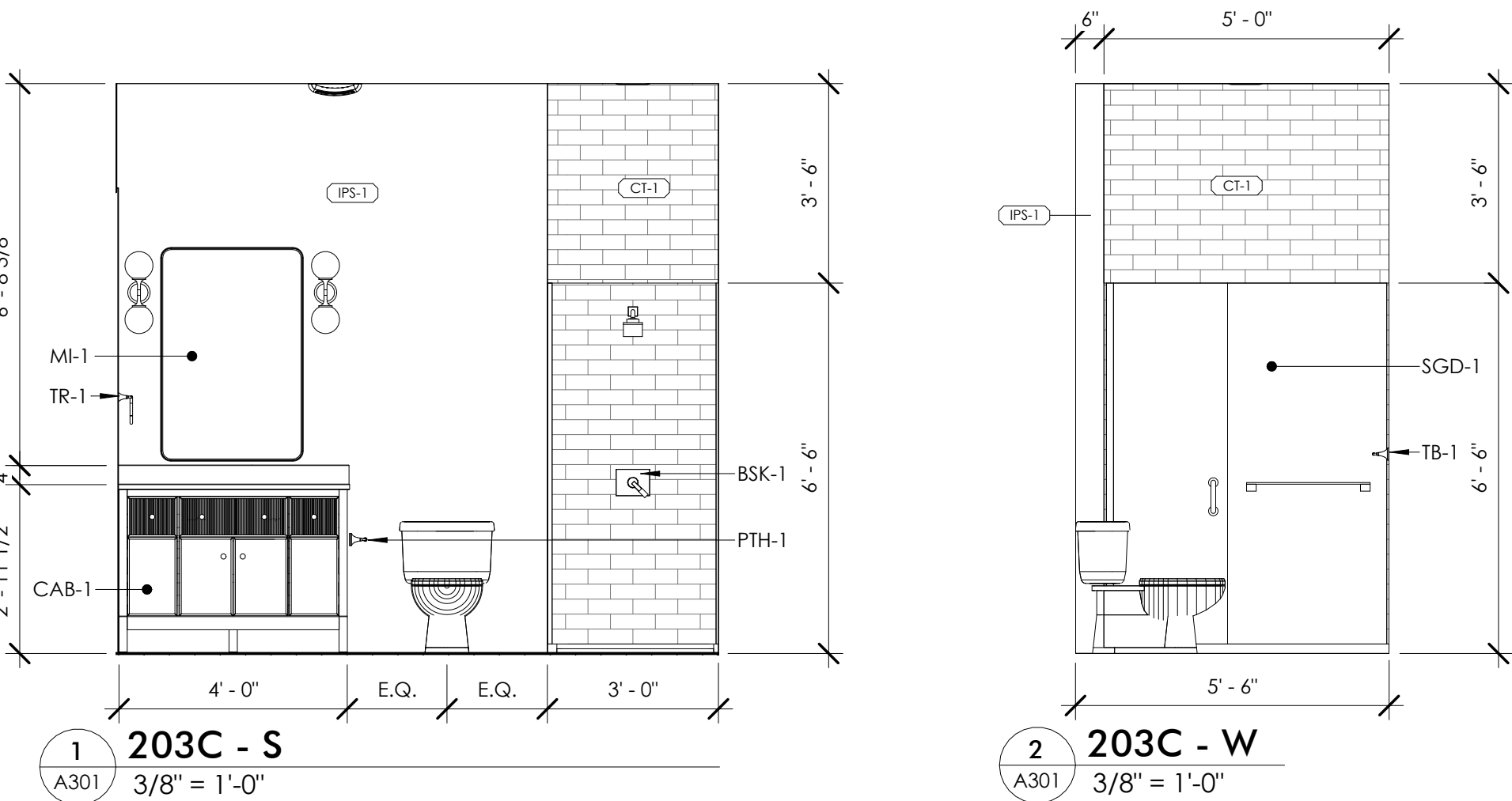
9
A221 / NTS

ROOF BASE REGLET

GENERAL NOTES

1. REFER TO ROOM FINISH SCHEDULE FOR BASE DESIGNATIONS
2. ACTUAL GROMMET LOCATIONS TO BE DETERMINED BY OWNER, SEE ROOM FINISH SCHEDULE FOR GROMMET COLORS, PROVIDE GROMMETS AT ALL KNEE SPACE LOCATIONS
3. PROVIDE FILLER PIECES AT CASEWORK AS REQUIRED
4. LAMINATE ALL VISIBLE SURFACES OF CASEWORK TYP.
5. DRAWERS LABELED "FILES" ARE TO HAVE STEEL RAILS FOR HANGING FILES, (2) PER DRAWER. FILES SHOULD HANG PERPENDICULAR TO DRAWER FACE IF LESS THAN 15" WIDE AND PARALLEL TO DRAWER IF GREATER THAN 15" WIDE
6. ALL UPPER CABINETS TO BE 15" DEEP UNLESS NOTED OTHERWISE
7. PROVIDE INSULATED PIPE WRAP ON ALL EXPOSED PIPING.
8. SEE SHEET T002 FOR ACCESSORY MOUNTING HEIGHTS UNLESS SHOWN OTHERWISE
9. REFER TO ENLARGED PLANS FOR ADDITIONAL DIMENSIONS
10. WHERE A SPECIFIED BRACKET IS NOT INDICATED PROVIDE METAL BRACKETS AS REQUIRED TO SUPPORT COUNTERS AND SHELVES. BRACKETS SHOULD BE LOCATED AT ANY UNSUPPORTED LENGTH GREATER THAN 36". PAINT BRACKETS TO MATCH ADJACENT WALL
11. REFER TO SHEET T00-3 MOUNTING HEIGHTS CONTINUED FOR TOILET ROOM ACCESSORIES AND THEIR DESIGNATIONS
12. PROVIDE BLOCKING IN WALLS WHERE NECESSARY. THESE LOCATIONS CONSIST OF, BUT ARE NOT LIMITED TO THE FOLLOWING: TOILET ACCESSORIES, TACKBOARDS, HANDRAILS, WALL MOUNTED EQUIPMENT AND OWNER DESIGNATED EQUIPMENT LOCATIONS.
13. ALL EXPOSED EXTERIOR SURFACES OF CASEWORK TO BE FINISHED TO MATCH THE CASEWORK
14. PAINT GRILLES AND DIFFUSERS TO MATCH ADJACENT WALL
15. COORDINATE ALL CABINETRY SIZES WITH APPLIANCES
16. ALL DIMENSIONS ARE FROM FINISHED FACE TO FINISHED FACE UNLESS INDICATED OTHERWISE





GENERAL NOTES

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2. ACTUAL GROMMET LOCATIONS TO BE DETERMINED BY OWNER, SEE ROOM FINISH SCHEDULE FOR GROMMET COLORS. PROVIDE GROMMETS AT ALL KNEE SPACE LOCATIONS
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10. WHERE A SPECIFIED BRACKET IS NOT INDICATED PROVIDE METAL BRACKETS AS REQUIRED TO SUPPORT COUNTERS AND SHELVES. BRACKETS SHOULD BE LOCATED AT ANY UNSUPPORTED LENGTH GREATER THAN 36". PAINT BRACKETS TO MATCH ADJACENT WALL
11. REFER TO SHEET T00-3 MOUNTING HEIGHTS CONTINUED FOR TOILET ROOM ACCESSORIES AND THEIR DESIGNATIONS
12. PROVIDE BLOCKING IN WALLS WHERE NECESSARY. THESE LOCATIONS CONSIST OF, BUT ARE NOT LIMITED TO THE FOLLOWING: TOILET ACCESSORIES, TACKBOARDS, HANDRAILS, WALL MOUNTED EQUIPMENT AND OWNER DESIGNATED EQUIPMENT LOCATIONS.
13. ALL EXPOSED EXTERIOR SURFACES OF CASEWORK TO BE FINISHED TO MATCH THE CASEWORK
14. PAINT GRILLES AND DIFUSERS TO MATCH ADJACENT WALL
15. COORDINATE ALL CABINERY SIZES WITH APPLIANCES
16. ALL DIMENSIONS ARE FROM FINISHED FACE TO FINISHED FACE UNLESS INDICATED OTHERWISE

GENERAL NOTES

1. ALL BASE CABINET DEPTHS TO BE 2'-0" (WALL TO OUTSIDE DOOR FACE) UNLESS NOTED OTHERWISE.
2. ALL WALL CABINET DEPTHS TO BE 1'-3" (WALL TO DOOR FACE) UNLESS NOTED OTHERWISE
3. ALL COUNTERTOP DEPTHS TO BE 2'-1" UNLESS NOTED OTHERWISE. COUNTERS TO EXTEND 1" BEYOND OPEN END EDGE OF MILLWORK UNLESS NOTED OTHERWISE
4. REFER TO INTERIOR ELEVATIONS FOR DIMENSIONS OF ALL CABINETRY
5. REFER TO FINISH SCHEDULES FOR MILLWORK FINISH
6. REFER TO FINISH SCHEDULES FOR COUNTERTOP MATERIAL AND FINISH
7. ALL BASE CABINETS TO HAVE A SINGLE SHELF UNLESS NOTED OTHERWISE
8. ALL WALL/VALANCE CABINETS LESS THAN 2'-0" IN HEIGHT TO HAVE A SINGLE SHELF, AND GREATER THAN 2'-0" IN HEIGHT TO HAVE TWO SHELVES, UNLESS NOTED OTHERWISE
9. ALL SHELVES TO BE ADJUSTABLE UNLESS NOTED OTHERWISE
10. REFER TO INTERIOR ELEVATION FOR INDICATION OF LOCKABLE CABINETS
11. REFER TO INTERIOR ELEVATIONS FOR DOOR SWINGS
12. ALL WALL CABINETS TO BE MOUNTED 7'-6" AFF TO TOP OF CABINET UNLESS NOTED OTHERWISE
13. DOOR HANDLE PULLS ARE SHOWN FOR GRAPHICAL REFERENCE ONLY. REFER TO ROOM FINISH SCHEDULE
14. ALL BASE DRAWERS/ APRONS ARE 6" UNLESS NOTED OTHERWISE
15. ALL SPLASHES ARE 4" UNLESS NOTED OTHERWISE
16. ALL EXPOSED EXTERIOR SURFACES OF CASEWORK TO BE FINISHED TO MATCH THE CASEWORK

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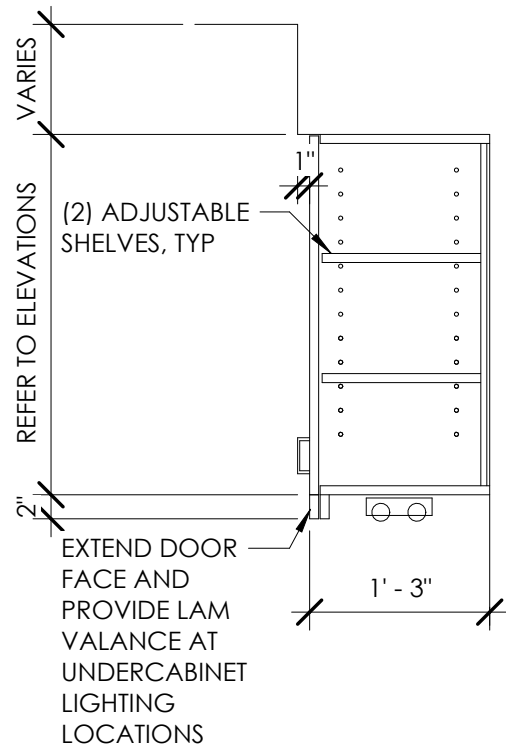
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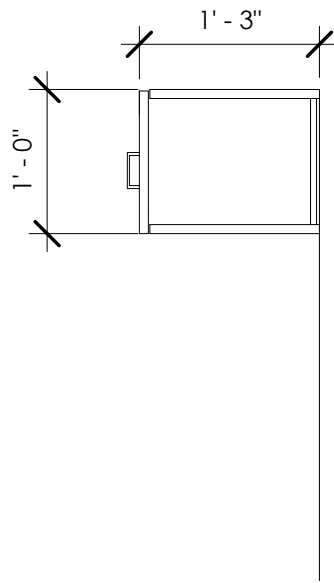
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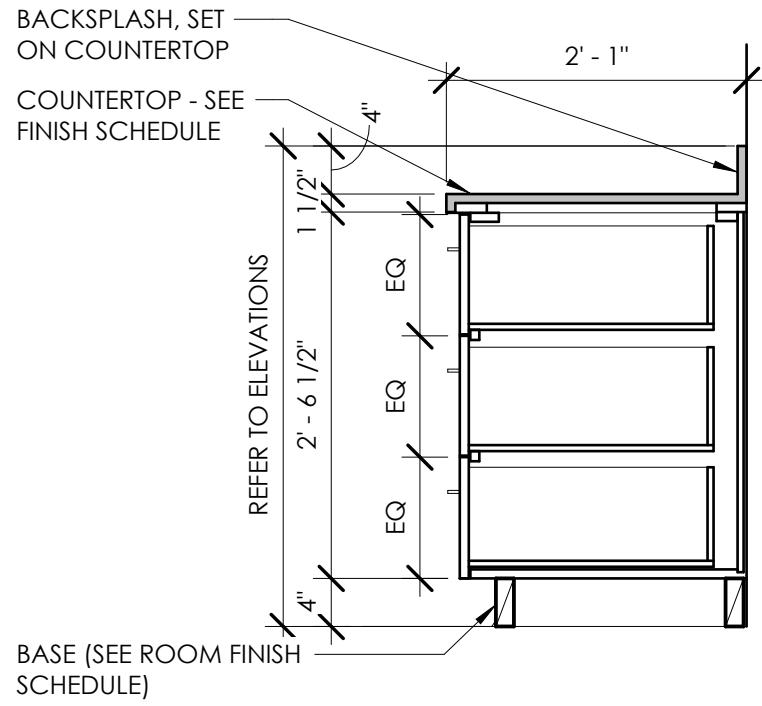
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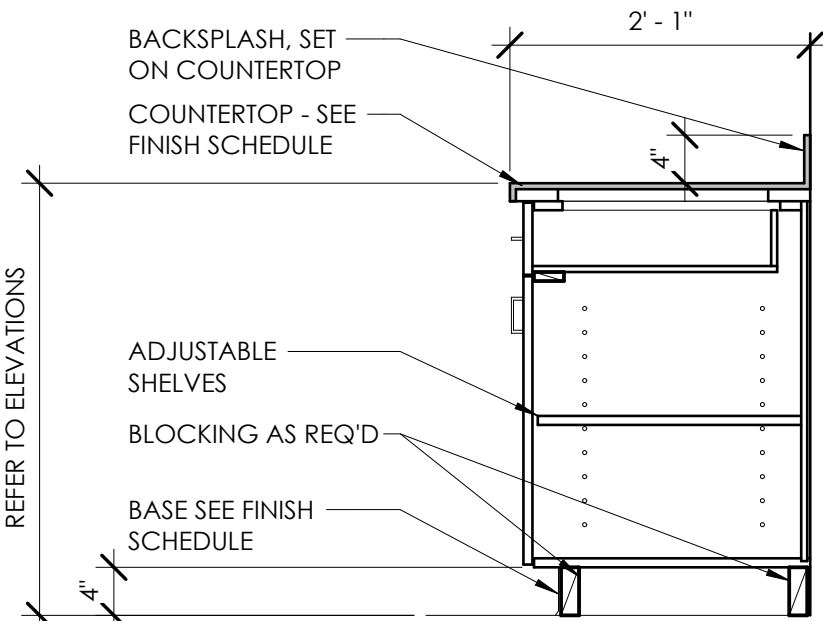
4 UPPER CABINET
3/4" = 1'-0"



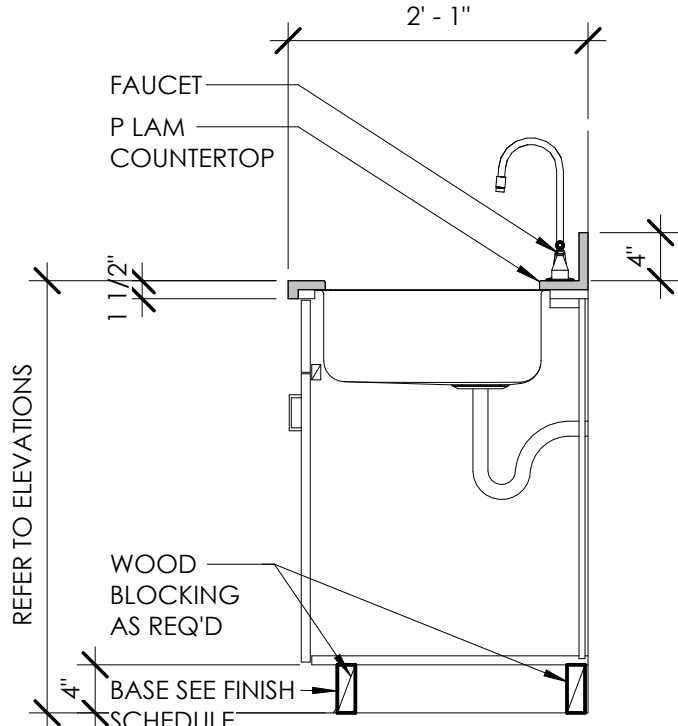
5 UPPER CABINET
3/4" = 1'-0"



1 BASE - 3 EQ DRAWER
3/4" = 1'-0"



2 BASE - DOOR/DRAWER
3/4" = 1'-0"



3 SINK - BASE
3/4" = 1'-0"



30" GAS RANGE - STAINLESS STEEL - RED KNOBS
MODEL #GR304
<https://www.subzero-wolf.com/wolf/ranges/gas-range/30-inch-gas-range>



GOLDEN VANTAGE 30 in. 217 CFM Convertible Kitchen Wall Mount Range Hood in Stainless Steel with Push Control, LEDs and Carbon Filters
MODEL #RH0472
<https://www.homedepot.com/p/Golden-Vantage-30-in-217-CFM-Convertible-Kitchen-Wall-Mount-Range-Hood-in-Stainless-Steel-with-Push-Control-LEDs-and-Carbon-Filters-RH0472/307566025?>



BOSCH 100 Series Premium 24 in. Stainless Steel Top Control Tall Tub Dishwasher with Hybrid Stainless Steel Tub, 46 dBA
MODEL #SHX5AEM5N
<https://www.homedepot.com/p/Bosch-500-Series-24-in-Stainess-Steel-Top-Control-Tall-Tub-Pocket-Handle-Dishwasher-with-Stainless-Steel-Tub-44-dBA-SHP65CM5N/325602597>



BOSCH 500 Series 36 in. 26 cu ft Smart Standard Depth French Door Bottom Freezer Refrigerator in Stainless Steel w/ Ice, Water
MODEL #B36FD50SNS
<https://www.homedepot.com/p/Bosch-500-Series-36-in-26-cu-ft-Smart-Standard-Depth-French-Door-Bottom-Freezer-Refrigerator-in-Stainless-Steel-w-Ice-Water-B36FD50SNS/317143904>

DOOR SCHEDULE																			
DOOR NUMBER	ROOM		NEW OR EXIST	DOOR TYPE	FIRE RATING	DOOR					DOOR FRAME			DOOR FRAME DETAILS			CARD READER	COMMENTS	
	ROOM NUMBER	ROOM NAME				WIDTH	HEIGHT	THICKNESS	DOOR MATL	DOOR FINISH	TYPE	FRAME MATL	FRAME FINISH	HEAD	JAMB	SILL			
SECOND FLOOR																			
200	202B	BATH	NEW	F		2'-8"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
201	202C	BEDROOM	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
202	202A	LIVING / KITCHEN	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
203	202A	LIVING / KITCHEN	NEW	F		2'-6"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
204	202C	BEDROOM	NEW	BYF		6'-0"	8'-0"	1 3/4"	WD	IPS-3	3	WD	IPS-3				-		
205	200	CORRIDOR	NEW	F		5'-0"	8'-0"	1 3/4"	WD	IPS-3	3	H.M.	IPS-3	1/A400	2/A400		-		
206	202A	CLOSET	NEW	BYF		6'-0"	8'-0"	1 3/4"	WD	IPS-3	3	WD	IPS-3				-		
207	202B	BEDROOM	NEW	F		2'-4"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
208	202D	LIVING / KITCHEN	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
209	202B	BEDROOM	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
210	202C	BATH	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
211	202E	CLOSET	NEW	BYF		5'-0"	8'-0"	1 3/4"	WD	IPS-3	3	WD	IPS-3	1/A400	2/A400		-		
212	202D	LIVING / KITCHEN	NEW	FG		3'-0"	8'-0"	1 3/4"	WD	IPS-3	2	H.M.	IPS-3	4/A400	5/A400	3/A400	-		
213	203B	LIVING / KITCHEN	NEW	FG		3'-0"	8'-0"	1 3/4"	WD	IPS-3	2	H.M.	IPS-3	4/A400	5/A400	3/A400	-		
214	203C	BATH	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
215	203A	CLOSET	NEW	BYF		5'-0"	8'-0"	1 3/4"	WD	IPS-3	3	WD	IPS-3	1/A400	2/A400		-		
216	203B	LIVING / KITCHEN	NEW	F		2'-6"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
217	203F	BEDROOM	NEW	BYF		5'-0"	8'-0"	1 3/4"	WD	IPS-3	3	WD	IPS-3				-		
218	203F	BEDROOM	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
219	203B	LIVING / KITCHEN	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
220	200	CORRIDOR	NEW	F		5'-0"	8'-0"	1 3/4"	WD	IPS-3	3	H.M.	IPS-3	1/A400	2/A400		-		
221	205D	BEDROOM	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
222	205A	LIVING / KITCHEN	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
223	205A	LIVING / KITCHEN	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
224	205D	BEDROOM	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		
225	205E	BATH	NEW	F		3'-0"	8'-0"	1 3/4"	WD	IPS-3	1	H.M.	IPS-3	1/A400	2/A400		-		

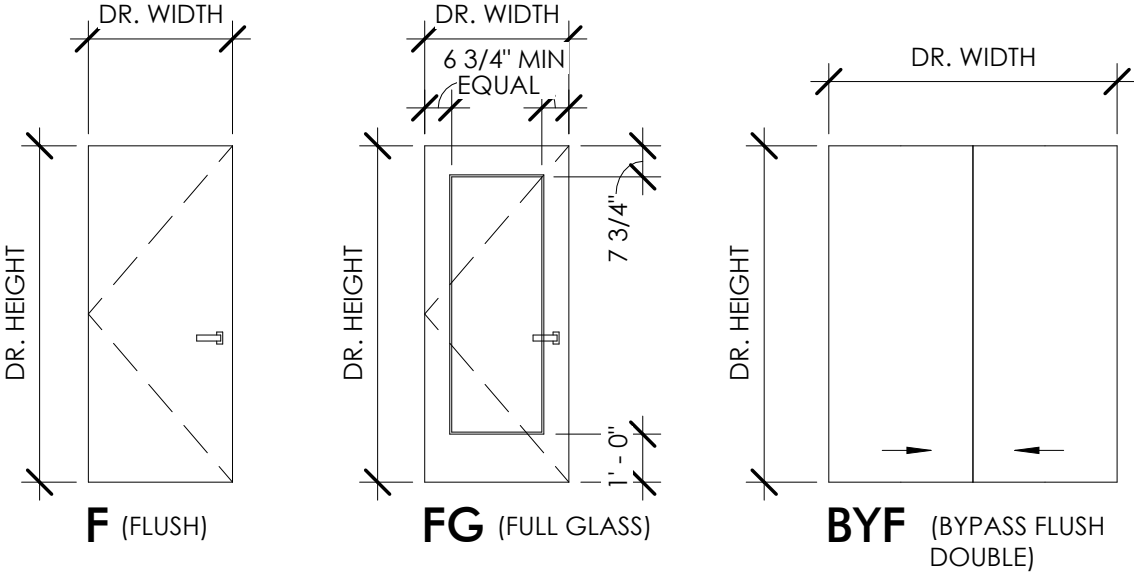
ALL DOOR HARDWARE IS TO BE CORBIN RUSSWIN CLX3300 SERIES OR EQUIVALENT.
-LEVER = ARMSTRONG AZ
-FINISH COLOR = 626

ABBREVIATIONS

WOOD - WOOD VENEER ON SOLID CORE WOOD DOOR
H.M. - HOLLOW METAL
PT - INTERIOR PAINT SYSTEM
EXIST - EXISTING
ALUM - ALUMINUM
FS - ROLLING FIRE SHUTTER
SCD - SOLID CORE DOOR
AE - AUTOMATIC ENTRY DOORS
WD - WOOD VENEER

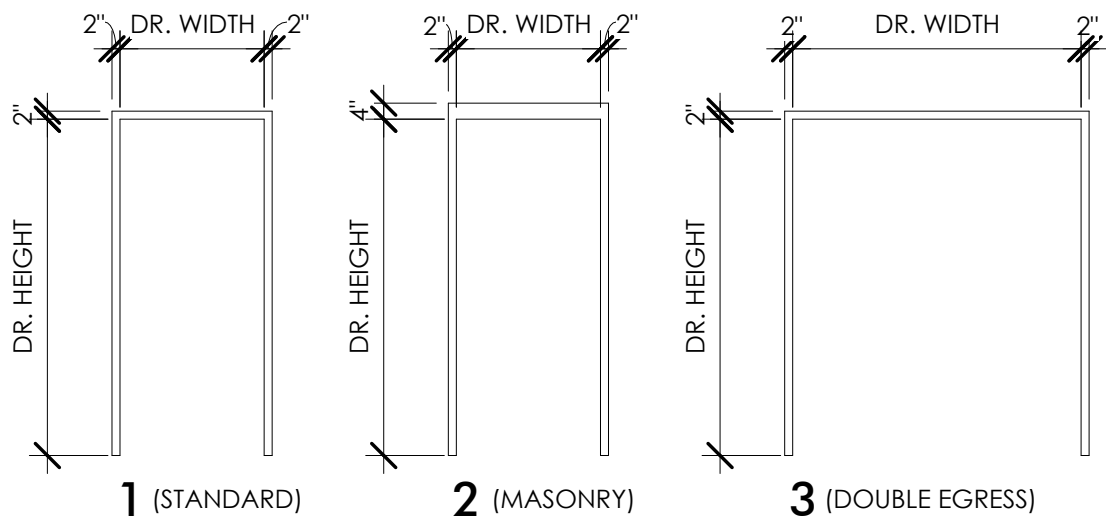
GENERAL NOTES

- REFER TO DOOR SCHEDULE FOR HEIGHTS, WIDTHS AND GLAZING TYPES.
- ALL HARDWARE TO BE ADA COMPLIANT LEVER HARDWARE.
- ALL EXTERIOR AND RATED DOORS ARE TO HAVE ADA COMPLIANT SILLS WITH MAX THRESHOLDS OF 1/2"



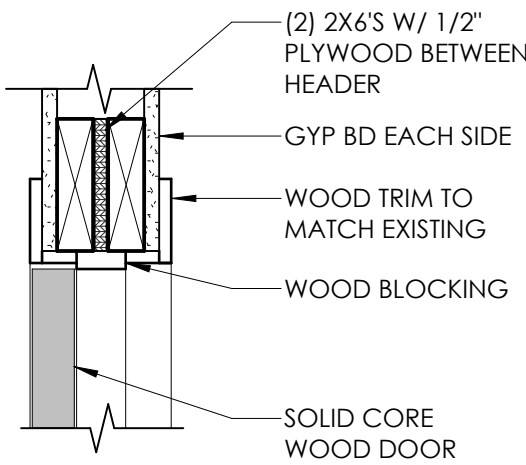
DOOR TYPES

NOTE: REFER TO DOOR SCHEDULE FOR HEIGHTS / WIDTHS AND GLAZING TYPE

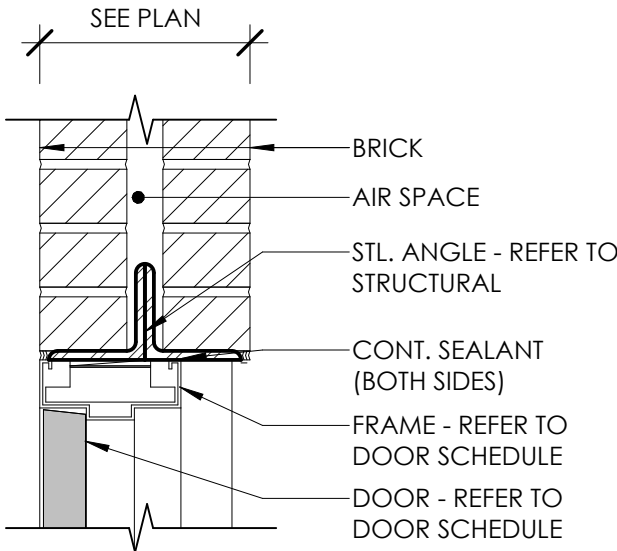


FRAME TYPES

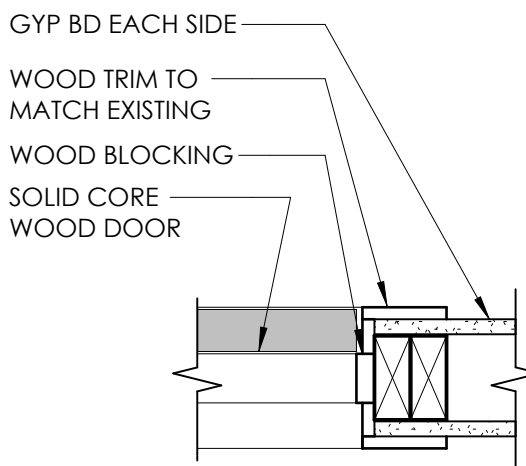
NOTE: REFER TO DOOR SCHEDULE FOR HEAD, JAMB, AND SILL DETAILS



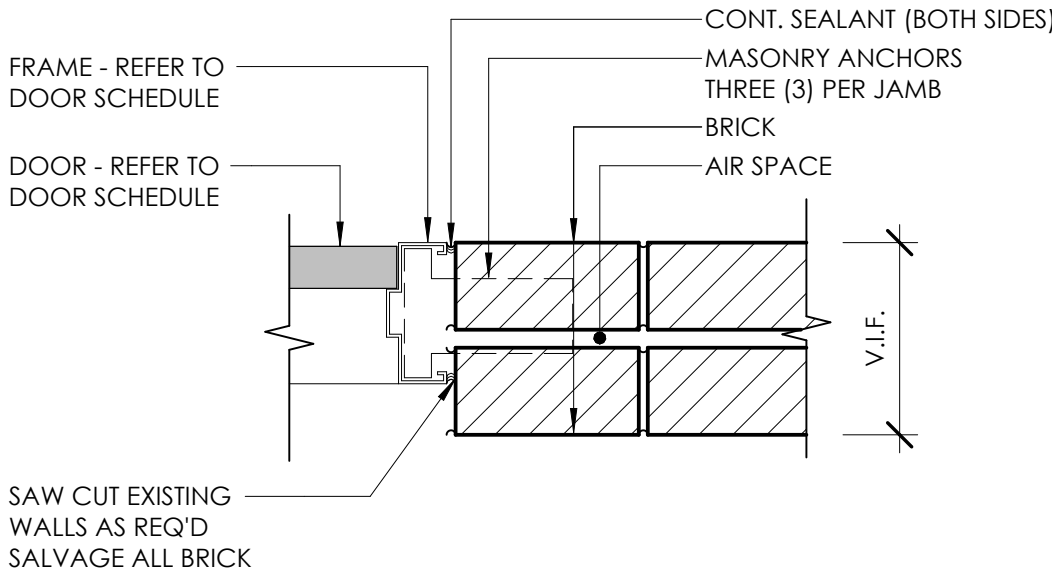
1 HEAD DETAIL - WD GYP BD
A400 1 1/2" = 1'-0"



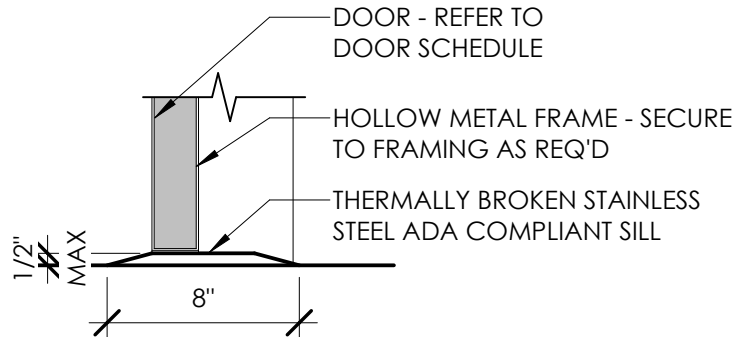
4 HEAD DETAIL - BRICK WALL
A400 1 1/2" = 1'-0"



2 JAMB DETAIL - WD GYP. BD.
A400 1 1/2" = 1'-0"

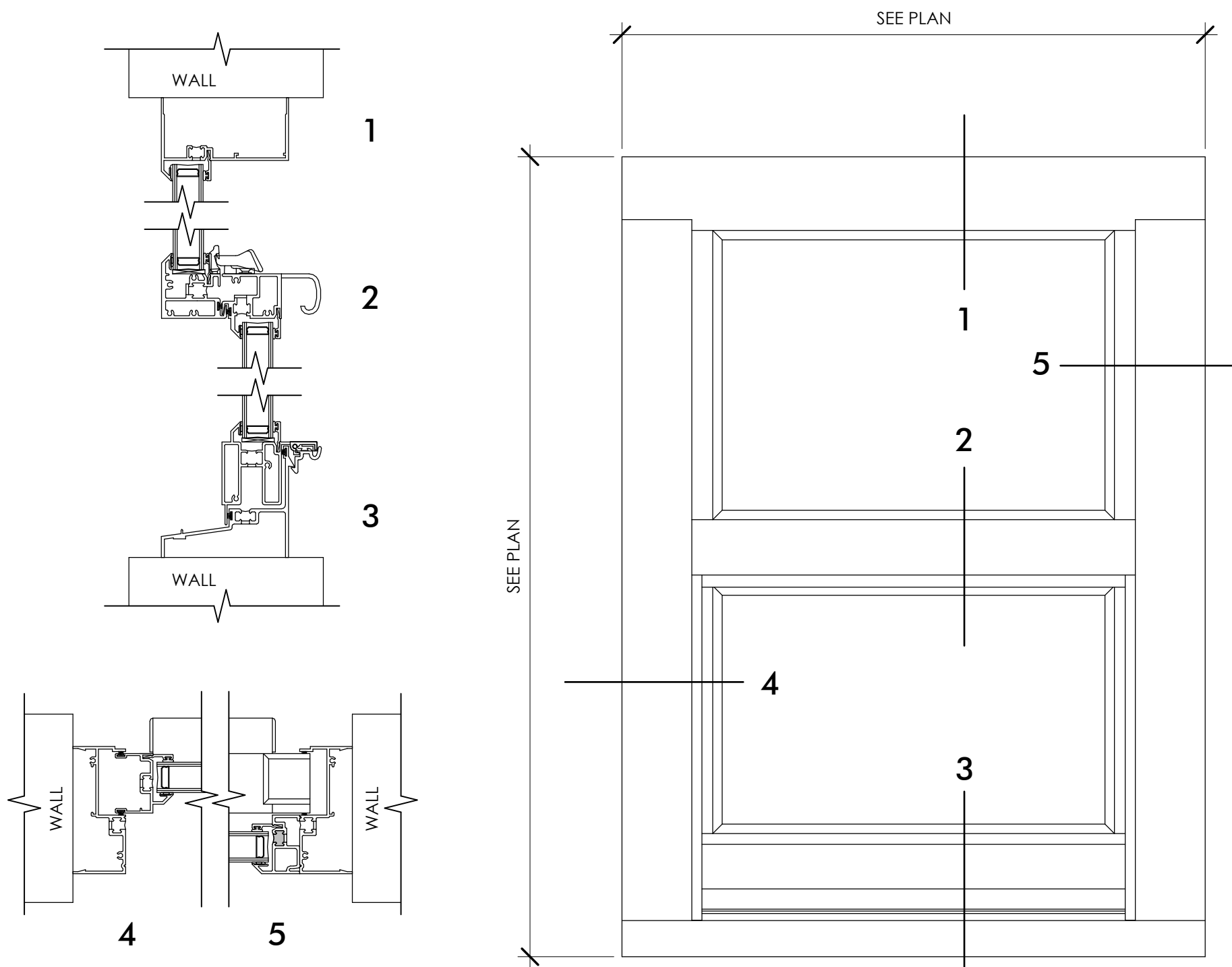


5 JAMB DETAIL - BRICK
A400 1 1/2" = 1'-0"



3 SILL DETAIL - H.M. FRAME
A400 1 1/2" = 1'-0"

WINDOW SCHEDULE						
MARK	ROOM NUMBER	SIZE		MAT'L	GLAZING	COMMENTS
		WIDTH	HEIGHT			
SECOND FLOOR						
A	205A	3' - 0"	9' - 5"	EXISTING	INT. STORM	EXISTING
A	205A	3' - 0"	9' - 5"	EXISTING	INT. STORM	EXISTING
A	205A	3' - 0"	9' - 5"	EXISTING	INT. STORM	EXISTING
A	200	3' - 0"	9' - 5"	EXISTING	INT. STORM	EXISTING
A	202A	3' - 0"	9' - 5"	EXISTING	INT. STORM	EXISTING
A	202A	3' - 0"	9' - 5"	EXISTING	INT. STORM	EXISTING
A	202A	3' - 0"	9' - 5"	EXISTING	INT. STORM	EXISTING
B	203B	3' - 6"	7' - 10"	EXISTING		DEMO FOR NEW
B	203B	3' - 6"	7' - 10"	EXISTING		DEMO FOR NEW
B	202D	3' - 6"	7' - 10"	EXISTING		DEMO FOR NEW
B	202D	3' - 6"	7' - 10"	EXISTING		DEMO FOR NEW
B	202D	3' - 6"	7' - 10"	EXISTING		DEMO FOR NEW
C	203B	2' - 9 1/2"	6' - 0"	EXISTING		DEMO FOR NEW
D	202D	3' - 6"	7' - 10"	FIBREX	LOW-E	ANDERSEN A SERIES
D	202D	3' - 6"	7' - 10"	FIBREX	LOW-E	ANDERSEN A SERIES
D	203B	3' - 6"	7' - 10"	FIBREX	LOW-E	ANDERSEN A SERIES
D	203B	3' - 6"	7' - 10"	FIBREX	LOW-E	ANDERSEN A SERIES



SINGLE HUNG DETAILS

SINGLE HUNG ELEVATION

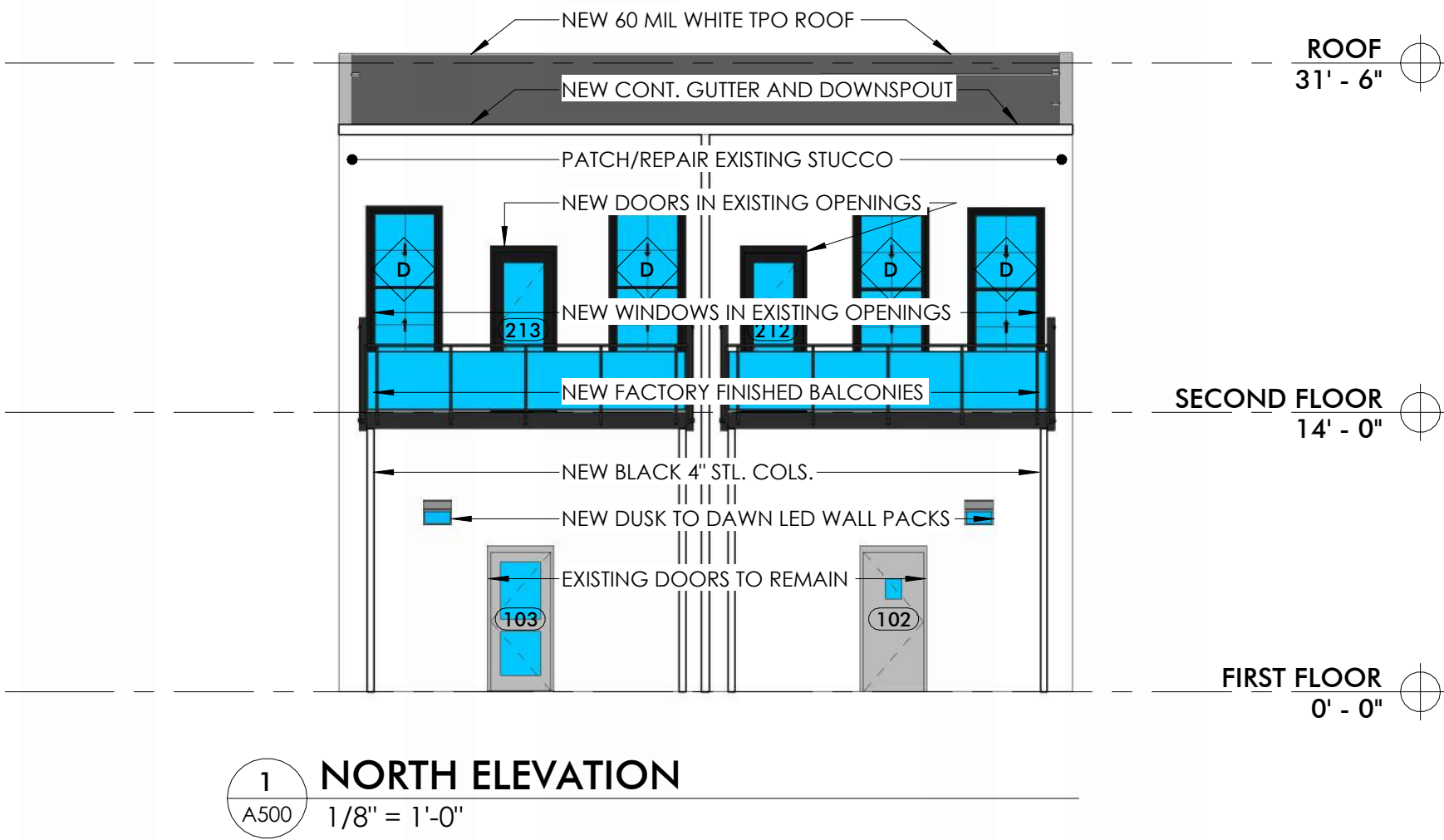
ANDERSEN A - ARCHITECTURAL SERIES ARE TO BE THE BASIS OF DESIGN
ALL WOOD INTERIOR TRIM IS TO REMAIN, NEW REPLICA PROFILES ARE TO BE DEVELOPED ON THE EXTERIOR



EXISTING FRONT FACADE - FOR REFERENCE ONLY



EXISTING REAR FACADE - FOR REFERENCE ONLY



GENERAL NOTES

1. REFER TO MATERIAL LEGEND FOR EXTERIOR FINISH PANEL TYPES AND COLOR.
2. REFER TO MATERIAL LEGEND FOR ROOF TYPES AND COLOR.
3. ALL GLAZING SHALL BE LOW-E GLASS. TINT TO BE RECOMMENDED BY MANUFACTURER.
4. ALL FINISH MATERIALS TO BE VERIFIED WITH OWNER AND ARCHITECT PRIOR TO CONSTRUCTION. ALL SUBSTITUTIONS NEED TO BE APPROVED IN WRITING.

THIS DOCUMENT IS THE EXCLUSIVE PROPERTY OF DRIVEN DESIGN. THE DOCUMENT & THE INFORMATION IT CONTAINS MAY NOT BE REPRODUCED OR USED FOR OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED WITHOUT THE EXPLICIT CONSENT OF DRIVEN DESIGN.

PROJECT NAME
238 E MICHIGAN
PROJECT ADDRESS
238 E. MICHIGAN AVE., KALAMAZOO MI, 49007
BRIAN & CARMEN HARRIS

ISSUE
CONSTRUCTION DOCUMENTS

REVISION

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

PROJECT NUMBER
2023.135

EXTERIOR ELEVATIONS

A500



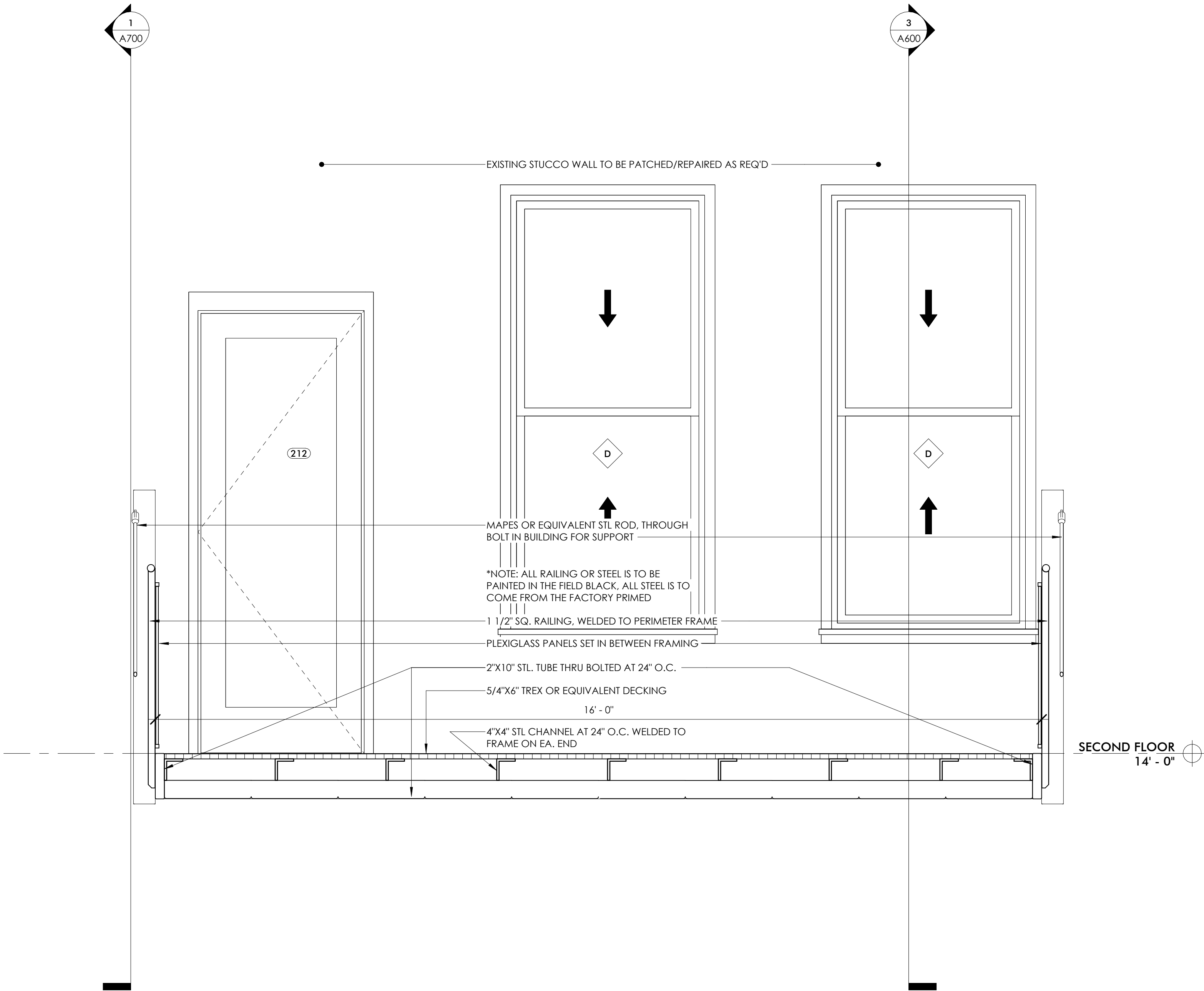
EXISTING FRONT FACADE - FOR REFERENCE ONLY



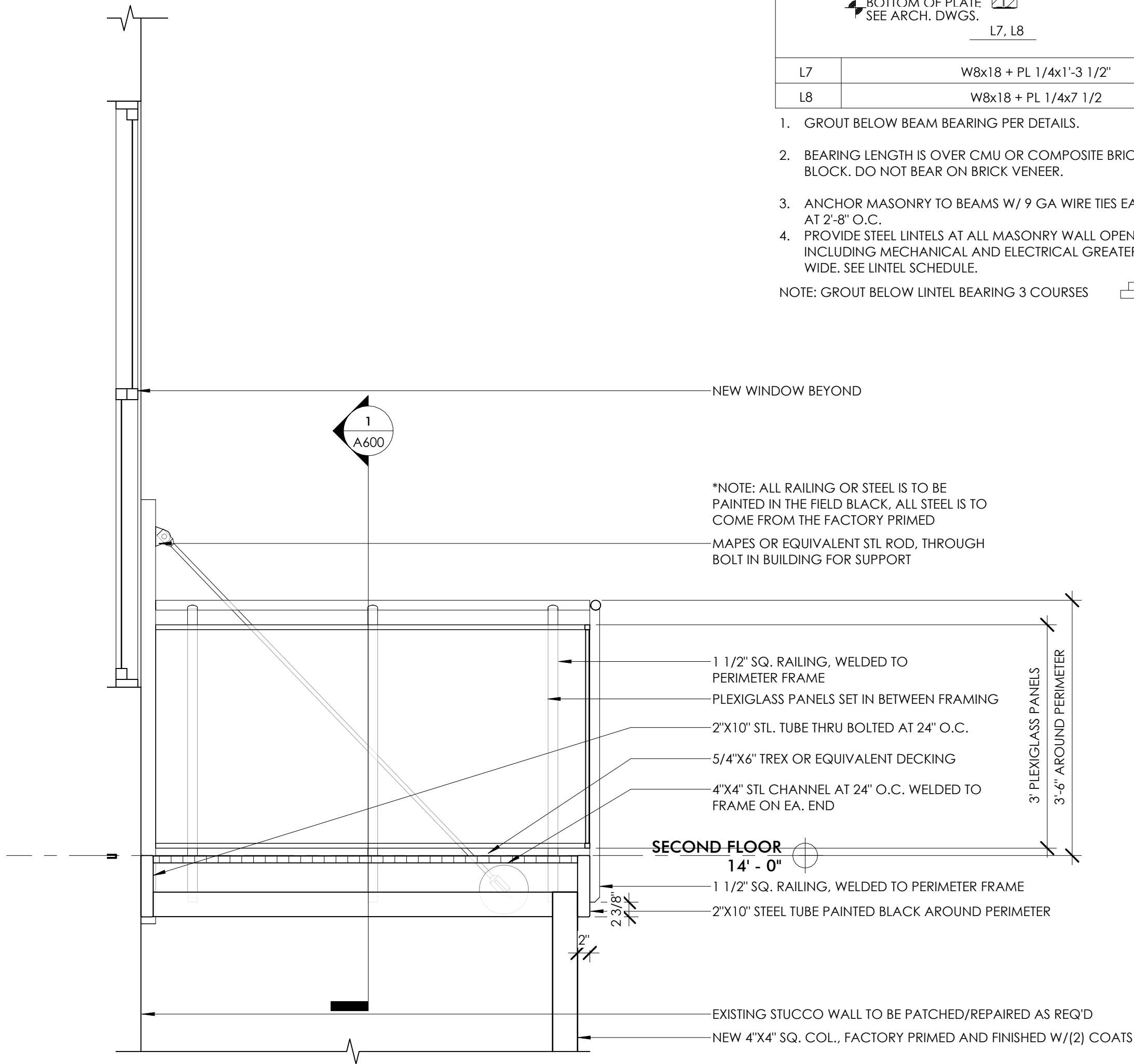
EXISTING REAR FACADE - FOR REFERENCE ONLY

STEEL LINTEL SCHEDULE				Fy=36 KSI
MARK	CLEAR SPAN	SIZE	BEARING EACH END	
L1	4'-0"	L3 1/2x2 1/2x1/4 SLV	4"	
L2	5'-0"	L3 1/2x3x1/4 SLV	6"	
L3	6'-0"	L3 1/2x3 1/2x1/4	6"	
L4	7'-0"	L4x3 1/2x1/4 LLV	6"	
L5	8'-0"	L5x3 1/2x1/4 LLV	8"	
L6	9'-0"	L6x3 1/2x 3/8 LLV	8"	
BOTTOM OF PLATE SEE ARCH. DWGS.		L7, L8	LINTELS SCHEDULED FOR SINGLE 4" OF WALL THICKNESS. PROVIDE 2 FOR 8" WALL, 3 FOR 10" WALL W/3" HORIZONTAL LEGS AND 3 FOR 12" WALL	
L7	W8x18 + PL 1/4x1'-3 1/2"		8"	
L8	W8x18 + PL 1/4x7 1/2		8"	

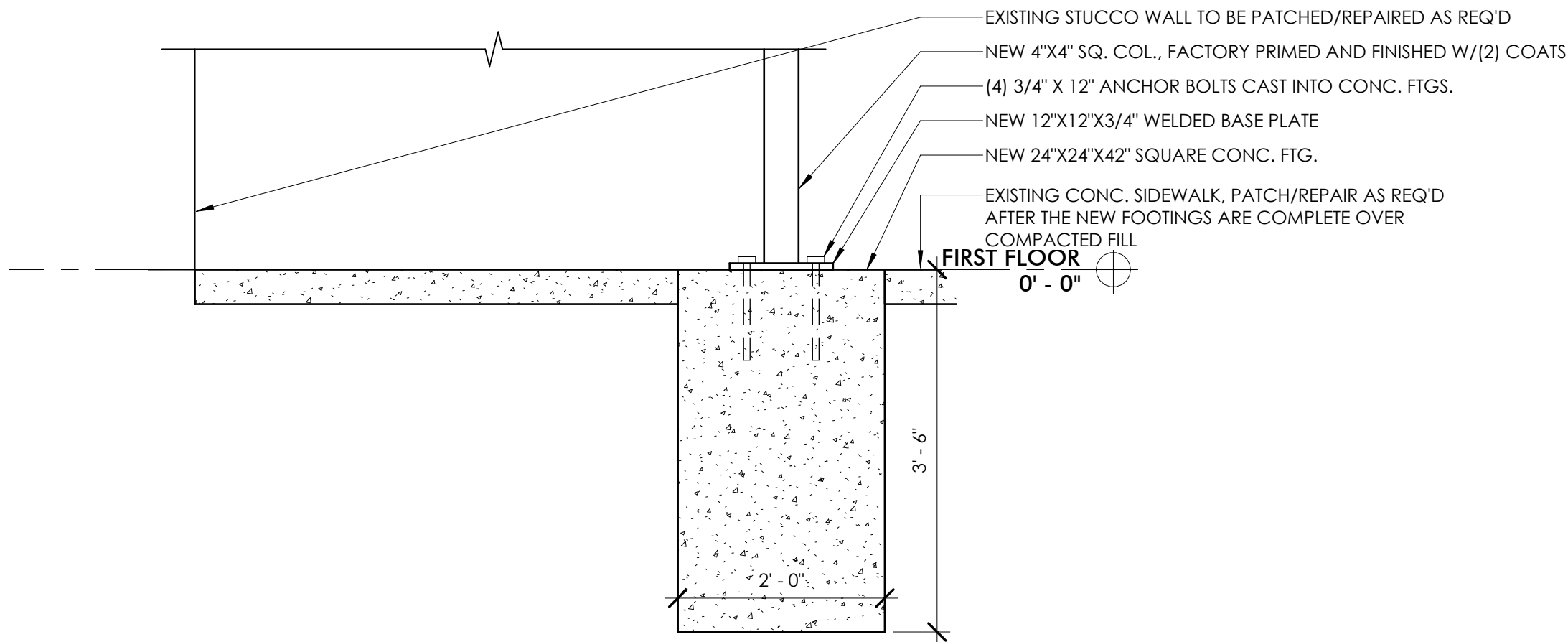
- GROUT BELOW BEAM BEARING PER DETAILS.
 - BEARING LENGTH IS OVER CMU OR COMPOSITE BRICK / BLOCK. DO NOT BEAR ON BRICK VENEER.
 - ANCHOR MASONRY TO BEAMS W/ 9 GA WIRE TIES EACH SIDE AT 2'-8" O.C.
 - PROVIDE STEEL LINTELS AT ALL MASONRY WALL OPENINGS, INCLUDING MECHANICAL AND ELECTRICAL GREATER THAN 8" WIDE. SEE LINTEL SCHEDULE.
- NOTE: GROUT BELOW LINTEL BEARING 3 COURSES

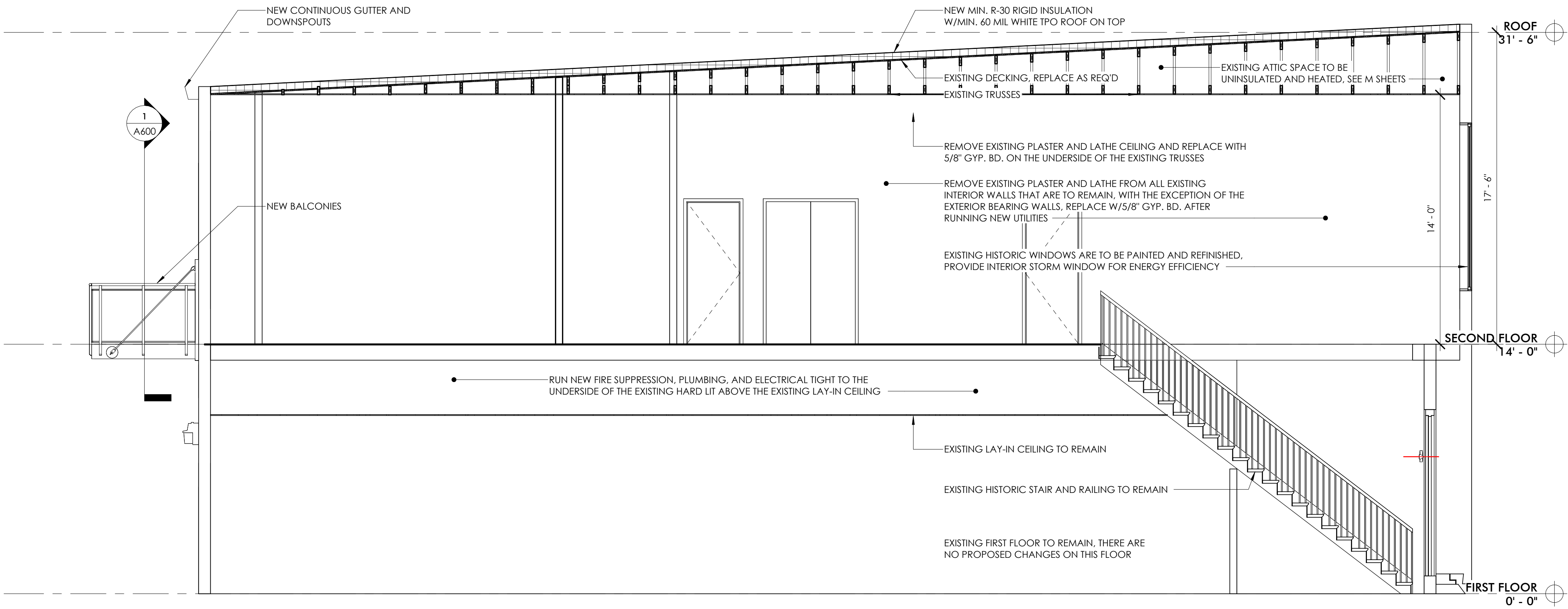


1 A600
E-W BALCONY SECTION
3/4" = 1'-0"



3 A600
N-S BALCONY SECTION
3/4" = 1'-0"





1 BUILDING SECTION
A700 1/4" = 1'-0"

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
AAV	AUTOMATIC AIR VENT	FD	FLOOR DRAIN	O	OXYGEN
ACC	AIR COOLED CONDENSER	FFD	FUNNEL FLOOR DRAIN	OA	OUTSIDE AIR
ACCU	AIR COOLED CONDENSER UNIT	FH	FIRE HYDRANT	OAT	OUTSIDE AIR TEMPERATURE
AD	ACCESS DOOR	FHC	FIRE HOSE CABINET	OBD	OPPOSED BLADE DAMPER
AF	ABOVE FINISHED FLOOR	FHR	FIRE HOSE RACK	OC	ON CENTER/CENTER TO CENTER
AFMS	AIRFLOW MEASURING STATION	FHV	FIRE HOSE VALVE	OD	OUTSIDE DIAMETER
AG	ABOVE GRADE	FLA	FULL LOAD AMPS	OED	OPEN ENDED DUCT
AHU	AIR HANDLING UNIT	FLR	FLOOR	OCFI	OWNER FURNISHED, CONTRACTOR INSTALLED
ALT	ALTERNATE	FM	FLOW METER	OFOI	OWNER FURNISHED, OWNER INSTALLED
AMP	AMPERE	FMS	FLOW MEASURING STATION	OL	OVERLOAD
APD	AIR PRESSURE DROP	FPM	FEET PER MINUTE	ORC	OVERFLOW RAIN CONDUCTOR
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION AND AIR-CONDITIONING ENGINEERS	FP	FIRE PUMP	ORD	OVERFLOW ROOF DRAIN
AUX	AUXILIARY	FS	FLOOR SINK	OS&V	OUTSIDE SCREW AND YOKE
BAS	BUILDING AUTOMATION SYSTEM	FSE	FOOD SERVICE EQUIPMENT	OV	OUTLET VELOCITY
BCU	BLOWER COIL UNIT	FT	FEET	OWS	OPERATOR WORKSTATION
BDD	BACK DRAFT DAMPER	FTF	FINNED TUBE RADIATION		
BFF	BELOW FINISHED FLOOR	FW	FOOT WASH	PACU	PACKAGED AIR CONDITIONING UNIT
BFP	BACKFLOW PREVENTER	FV	FACE VELOCITY	PBD	PARALLEL BLADE DAMPER
BHP	BRAKE HORSEPOWER	G	NATURAL GAS	PC	PUMPED CONDENSATE
BOD	BOTTOM OF DUCT	GA	GAUGE	PD	PRESSURE DROP (FEET OF WATER)
BOP	BOTTOM OF PIPE	GAL	GALLON	PNL	PANEL
BTU	BRITISH THERMAL UNIT	GH	GROUND HYDRANT	PPM	PARTS PER MILLION
BTUH	BRITISH THERMAL UNIT PER HOUR	GRH	GRAVITY RELIEF HOOD	PRESS	PRESSURE
		GPH	GALLONS PER HOUR	PRV	PRESSURE REDUCING VALVE
		GPM	GALLONS PER MINUTE	PSAN	PUMPED SANITARY
C	COMMON			PSI	POUNDS PER SQUARE INCH
CAP	CAPACITY	H	HYDROGEN	PSIA	POUNDS PER SQUARE INCH - ABSOLUTE
CAV	CONSTANT AIR VOLUME	HB	HOSE BIBB	PSIG	POUNDS PER SQUARE INCH - GAUGE
CB	CATCH BASIN	HC	HEATING COIL	(R)	RELOCATED
CC	COOLING COIL	HD	HOT DECK	R	RETURN GRILLE OR REGISTER
CD	COLD DECK	HEPA	HIGH EFFICIENCY PARTICULATE ARRESTANCE	RA	RETURN AIR
CD	CONDENSATE DRAIN	HL	HIGH LIMIT	RAT	RETURN AIR TEMPERATURE
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	HOA	HAND/OFF/AUTO	RCP	RADIANT CEILING PANEL
CFH	CUBIC FEET PER HOUR	HO	HUB OUTLET	ROD	ROOF DRAIN
CFM	CUBIC FEET PER MINUTE	HP	HEAT PUMP	REQD	REQUIRED
CH	CHILLER	HP	HORSEPOWER	REF	ROOF EXHAUST FAN
CHW	CHILLED WATER	HPL	HEAT PUMP LOOP	RF	RETURN FAN
CHWR	CHILLED WATER RETURN	HR	HOUR	RH	RELATIVE HUMIDITY
CHWS	CHILLED WATER SUPPLY	HTG	HEATING	RL	REFRIGERANT LIQUID
CLS	COOLING	HV	HEATING VENTILATING	RLFA	REFRIGERANT LEAKAGE
CNDS	CONDENSATE	HVAC	HEATING, VENTILATING, AIR CONDITIONING	RPM	REVOLUTIONS PER MINUTE
CO	CLEAN OUT	HW	DOMESTIC HOT WATER	RS	REFRIGERANT SUCTION
CO2	CARBON DIOXIDE	HW(L)	DOMESTIC HOT WATER (SPECIFIC TEMP °F)	RTU	ROOFTOP UNIT
CONT	CONTINUATION OR CONTINUED	HWR	DOMESTIC HOT WATER RETURN		
CONTR	CONTRACTOR	HX	HEAT EXCHANGER	SA	SUPPLY AIR DIFFUSER OR GRILLE
CONV	CONVECTOR	HZ	HERTZ	SA	SOUND ATTENUATOR
COP	COEFFICIENT OF PERFORMANCE	IAQ	INDOOR AIR QUALITY	SA	SUPPLY AIR
CP	CIRCULATING PUMP	IAQ	INDOOR AIR QUALITY	SAN	SANITARY WASTE
CRU	CONDENSATE RETURN UNIT	IE	INVERT ELEVATION	SAN (GREASE)	SANITARY WASTE - GREASE
CSS	CLINICAL SERVICE SINK	IH	INTAKE HOOD	SAT	SUPPLY AIR TEMPERATURE
CT	COOLING TOWER	IN	INCHES	SECT	SECTION
CUH	CABINET UNIT HEATER	IR	INFRARED HEATER	SF	SUPPLY FAN
CW	DOMESTIC COLD WATER	IW	INDIRECT WASTE	SH	SHOWER
CWF	DOMESTIC COLD WATER FILTERED			SK	SINK
		JC	JANITOR'S CLOSET	SMR	SNOW MELT RETURN
DA	DISCHARGE AIR	JP	JOCKEY PUMP	SMS	SNOW MELT SUPPLY
DAT	DISCHARGE AIR TEMPERATURE			SP	STATIC PRESSURE
DB	DRY BULB	KW	KILOWATT	SPEC	SPECIFICATION
DDC	DIRECT DIGITAL CONTROL	KWH	KILOWATT-HOUR	SPKLR	SPRINKLER
DEG	DEGREE			SOFT	SQUARE FOOT/SQUARE FEET
DFU	DRAINAGE FIXTURE UNITS	LAT	LEAVING AIR TEMPERATURE	S/S	START/STOP
DIA	DIAMETER	LAB	LABORATORY	SS	SERVICE SINK
DMPR	DAMPER	LAV	LAVATORY	ST	STORM
D/N	DAY/NIGHT	LBS	POUNDS	STD	STANDARD
DN	DOWN	LDB	LEAVING DRY BULB	STK	STACK
DNZ	DROPSPOUT NOZZLE	LDO	LEAVING DRAIN	ST	STORM
DS	DUCT SILENCER	LL	LOW LIMIT	ST (OF)	STORM (OVERFLOW)
OT	DRAIN TILE	LPC	LOW PRESSURE CONDENSATE	S/W	SUMMER/WINTER
OTC	DRAIN TILE CONNECTION	LPS	LOW PRESSURE STEAM	SW	SWITCH
DWH	DOMESTIC WATER HEATER	LPS(LB#)	LOW PRESSURE STEAM (SPECIFIC PSIG)	TA	TRANSFER AIR GRILLE
DWG	DRAWING	LRA	LOCKED ROTOR AMPS	TC	TEMPERATURE CONTROL
		LWB	LEAVING WET BULB	TC	TEMPERING COIL
		LWT	LEAVING WATER TEMPERATURE	TOP	TEMPERATURE CONTROL PANEL
[E]	EXISTING			TD	TRENCH DRAIN
EXIST	EXISTING	MA	MIXED AIR	TEMP	TEMPERATURE
EA	EXHAUST GRILLE OR REGISTER	MAT	MIXED AIR TEMPERATURE	TEMP	TEMPORARY
EA	EACH	MAU	MAKE-UP AIR UNIT	TH	TERMINAL HEATING
EAT	ENTERING AIR TEMPERATURE	MAX	MAXIMUM	THA	TOTAL HEAT ABSORBED
ECUH	ELECTRIC CABINET UNIT HEATER	MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR	THR	TERMINAL HEATING RETURN
EDB	ENTERING DRY BULB	MCA			

PIPING SYMBOLS		DUCTWORK SYMBOLS	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	AIR VENT - AUTOMATIC		AIR TERMINAL UNIT
	AIR VENT - MANUAL		AIR TERMINAL UNIT WITH HEATING COIL
	BACKFLOW PREVENTER		DAMPER - HORIZONTAL FIRE (EXISTING, NEW)
	CATCH BASIN		DAMPER - HORIZONTAL FIRE / SMOKE (EXISTING, NEW)
	CIRCULATING PUMP		DAMPER - SMOKE (EXISTING, NEW)
	CLEAN OUT - IN FLOOR		DAMPER - VERTICAL FIRE (EXISTING, NEW)
	CLEAN OUT - FLANGE		DAMPER - VERTICAL FIRE / SMOKE (EXISTING, NEW)
	DIRECTION OF FLOW		DAMPER - BACK DRAFT
	DIRECTION OF PITCH - DOWN		DAMPER - MOTORIZED
	FINNED TUBE RADIATION		DAMPER - VOLUME (MANUALLY ADJUSTABLE)
	FIRE PROTECTION - SIAMESE CONNECTION - FREE STANDING		DIFFUSER - BLANK OFF
	FIRE PROTECTION - SIAMESE CONNECTION - WALL MOUNTED		DIFFUSER - LINEAR SLOT
	FIRE PROTECTION - SPRINKLER HEAD, CONCEALED		DIFFUSER - SQUARE OR RECTANGULAR
	FIRE PROTECTION - SPRINKLER HEAD, PENDANT		DUCT CROSS SECTION - SUPPLY
	FIRE PROTECTION - SPRINKLER HEAD, UPRIGHT		DUCT CROSS SECTION - RETURN
	FIRE PROTECTION - SPRINKLER HEAD, SIDEWALL		DUCT CROSS SECTION - EXHAUST
	FLOOR DRAIN		DUCT - FLEXIBLE CONNECTION
	FLOOR DRAIN - ELEVATION		DUCT - FLEXIBLE DUCT
	FLOOR DRAIN - FUNNEL		DUCT TAKE-OFF - ROUND CONICAL
	FLOOR DRAIN - FUNNEL, ELEVATION		DUCT TAKE-OFF - RECTANGULAR WITH SHOE TAP
	FLOW MEASURING DEVICE (FOR TEST AND BALANCING)		ELBOW - RECTANGULAR WITH TURNING VANES
	FLOW SWITCH		ELBOW - RECTANGULAR / ROUND SMOOTH RADIUS
	FLOW METER		ELBOW DOWN - RECTANGULAR
	HOSE BIBB		ELBOW DOWN - ROUND
	MANHOLE		ELBOW UP - RECTANGULAR
	OPEN SITE DRAIN		ELBOW UP - ROUND
	PIPE - ANCHOR		HEATING COIL
	PIPE - CAP OR PLUG		INCLINED DROP IN DIRECTION OF AIRFLOW
	PIPE - ELBOW DOWN		INCLINED RISE IN DIRECTION OF AIRFLOW
	PIPE - ELBOW UP		INTAKE OR RELIEF HOOD
	PIPE - EXPANSION JOINT OR COMPENSATOR		REGISTER - RETURN OR EXHAUST
	PIPE - FLANGE		REGISTER - RETURN WITH BOOT
	PIPE - HOSE AND BRAID FLEXIBLE CONNECTION		REGISTER - TRANSFER GRILLE
	PIPE - RUBBER FLEXIBLE CONNECTION		ROOF EXHAUST FAN
	PIPE - GUIDE		
	PIPE - TEE DOWN		
	PIPE - TEE UP		
	PIPE - UNION		
	PRESSURE AND TEMPERATURE TEST PLUG		
	PRESSURE GAUGE AND COCK		
	REDUCER - CONCENTRIC		
	REDUCER - ECCENTRIC		
	ROOF/OVERFLOW DRAIN		
	STEAM TRAP - FLOAT AND THERMOSTATIC		
	STRAINER		
	STRAINER WITH VALVE AND BLOW-OFF		
	THERMOMETER		
	TRAP		
	VALVE - ANGLE		
	VALVE - BALL		
	VALVE - BALANCE (i.e. BALANCE VALVE TO 0.5 GPM)		
	VALVE - COMINATION BALANCE & FLOW MEASURING (i.e. BALANCE VALVE TO 0.5 GPM)		
	VALVE - BUTTERFLY		
	VALVE - CHECK		
	VALVE - SPRING CHECK		
	VALVE - GAS (MANUAL)		
	VALVE - GLOBE		

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PROJECT
238 E MICHIGAN

PROJECT
238 E. MICHIGAN AVE., KALAMAZOO MI

CLIENT
BRIAN & CARMEN HARRIS

REVISION

STAMP



A circular professional engineer seal for the State of Michigan. The outer ring contains the text "STATE OF MICHIGAN" at the top and "LICENSED PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The inner circle contains the text "JONATHAN RUMOHR ENGINEER No. 6201060604".

MECHANICAL SYMBOLS AND
GENERAL NOTES
M000

MECHANICAL SPECIFICATIONS

1.

IT IS UNDERSTOOD AND AGREED BY THE INSTALLER THAT WORK HEREIN DESCRIBED SHALL BE COMPLETE IN EVERY DETAIL, EVEN THOUGH EVERY ITEM INVOLVED IS NOT PARTICULARLY MENTIONED. INSTALLER SHALL BE HELD TO PROVIDE ALL LABOR AND MATERIALS NECESSARY FOR THE WORK INTENDED AND DESCRIBED FOR A COMPLETE AND OPERATIONAL SYSTEM. SUCH MATERIALS SHALL INCLUDE PIPING, VALVES, TRAPS, GAUGES, CONTROLS, ETC. THIS ALSO INCLUDES EQUIPMENT REQUIRED BY STATE AND LOCAL CODES.
2.

ALL WORK AND EQUIPMENT PROVIDED AND PERFORMED ON THIS PROJECT SHALL COMPLY WITH ALL APPLICABLE LAWS, CODES, ETC OF ANY AND ALL AUTHORITIES HAVING JURISDICTION INCLUDING, BUT NOT LIMITED TO: MICHIGAN MECHANICAL CODE - 2015, MICHIGAN PLUMBING CODE - 2015, MICHIGAN BUILDING CODE - 2015, MICHIGAN UNIFORM ENERGY CODE (ASHRAE 90.1-2013). THE LOCAL FIRE MARSHAL, UNDERWRITERS LABORATORIES, IRI, FM, NATIONAL ELECTRICAL CODE, LOCAL HEALTH DEPARTMENT, OSHA, MIOSHA. ANY MODIFICATIONS REQUIRED BY ANY OF THE ABOVE SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER. WHERE THE CONTRACT DOCUMENTS EXCEED THE CODE REQUIREMENTS, THE CONTRACT DOCUMENTS SHALL BE FOLLOWED. DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW BEFORE INSTALLATION.
3.

CONTRACTOR SHALL OBTAIN ALL PERMITS AND PAY ALL FEES AS REQUIRED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
4.

JOBSITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL HAVE ON SITE A QUALIFIED FOREMAN OVERSEEING ALL ASPECTS OF THE CONSTRUCTION. THE ARCHITECT AND ENGINEER ARE NOT RESPONSIBLE FOR JOBSITE SAFETY.
5.

ANY HOISTS, LIFTS, OR SPECIAL EQUIPMENT REQUIRED TO SAFELY COMPLETE THE PROJECT SHALL BE PROVIDED BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.
6.

THE BID SHALL INCLUDE ALL LABOR AND MATERIALS ESSENTIAL TO PROVIDE A COMPLETE AND FUNCTIONING SYSTEM AS DESCRIBED IN THE CONTRACT DOCUMENTS, EVEN THOUGH EVERY ITEM INVOLVED IS NOT PARTICULARLY MENTIONED. SUCH MATERIALS SHALL INCLUDE PIPING, VALVES, TRAPS, GAUGES, CONTROLS, ETC. THIS ALSO INCLUDES EQUIPMENT REQUIRED BY STATE AND LOCAL CODES. IN CASES OF DOUBT AS TO WORK INTENDED THE CONTRACTOR SHALL REQUEST SUPPLEMENTARY INFORMATION AT LEAST SEVEN DAYS PRIOR TO BIDDING. ONCE CONTRACT IS AWARDED ANY DISPUTES AS TO THE INTENT OF THE DESIGN SHALL BE RESOLVED AS DIRECTED BY THE ENGINEER AND NO ADDITIONAL COST TO THE OWNER.
7.

CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL EQUIPMENT AND MATERIALS WITH ALL OTHER TRADES.
8.

CONTRACTOR SHALL NOT PROCEED WITH ANY WORK FOR WHICH ADDITIONAL COMPENSATION IS EXPECTED WITHOUT A WRITTEN CHANGE-ORDER SIGNED BY THE ENGINEER. ADDITIONAL COMPENSATION WILL NOT BE GIVEN WITHOUT A SIGNED, WRITTEN, CHANGE-ORDER FORMS MAY BE REQUESTED FROM THE ENGINEER OR CONTRACTOR MAY USE THEIR OWN FORM. CHANGE-ORDER MUST INCLUDE DESCRIPTION OF CHANGE, REASON FOR CHANGE, AND COST BREAKDOWN SHOWING ITEMIZED MATERIAL COSTS, LABOR TIME AND RATE AND SEPARATELY LISTED OH&P. OH&P FOR CHANGE ORDERS SHALL NOT EXCEED 10%.
9.

A SET OF AS-BUILT DOCUMENTS SHALL BE KEPT ON THE JOB SITE, ACCESSIBLE TO ALL TRADES. CONTRACTOR SHALL MAINTAIN THE AS-BUILT DRAWINGS DAILY INDICATING ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS. CONTRACTOR SHALL MAINTAIN COMMUNICATION WITH ALL OTHER TRADES AND REVIEW AS-BUILT DOCUMENTS OF ALL TRADES ON A REGULAR BASIS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL TRADES DURING CONSTRUCTION AND FOR NOTIFYING THE ENGINEER OF ANY CHANGES THAT WILL NEED TO BE MADE AS SOON AS THEY ARE IDENTIFIED.
10.

ALL PRODUCTS AND MATERIALS USED SHALL BE NEW AND "BEST OF ITS KIND." PRODUCTS AND MATERIALS SHALL BE PROTECTED FROM CONSTRUCTION AND WEATHER DAMAGE. CONTRACTOR SHALL NOT INSTALL ANY COMPONENT THAT IS DAMAGED, DIRTY, OR SHOWS ANY SIGNS OF CORROSION.
11.

THE CONTRACTOR IS RESPONSIBLE, AT HIS OWN COST, FOR WAREHOUSING OF MATERIAL AND EQUIPMENT TO BE INSTALLED ON THIS PROJECT. COORDINATE WITH THE BUILDING OWNER AND/OR GENERAL CONTRACTOR FOR SPACE AVAILABLE ON THE JOB SITE FOR MATERIAL STORAGE.
12.

SHOP DRAWINGS SHALL BE SUBMITTED FOR THE ITEMS LISTED BELOW WITHIN 2 WEEKS OF AWARD OF CONTRACT AND A MINIMUM OF 2 WEEKS PRIOR TO INSTALLATION. CONTRACTOR SHALL NOT ORDER EQUIPMENT UNTIL SHOP DRAWINGS HAVE BEEN PROCESSED BY THE ENGINEER. SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR AND GENERAL CONTRACTOR PRIOR TO BEING SUBMITTED TO THE ENGINEER. INCLUSION IN SHOP DRAWINGS DOES NOT AUTHORIZE A DEVIATION FROM THE REQUIREMENTS OF THE SPECIFICATIONS. ALL SHOP DRAWINGS SHALL HAVE LISTED ON THE COVER SHEET ANY AND ALL PRODUCTS OR MATERIALS THAT DEVIATE FROM SPECIFICATIONS. DETERMINATION OF "EQUAL" SHALL BE MADE BY ENGINEER. AT A MINIMUM SHOP DRAWINGS SHALL BE SUBMITTED FOR: ALL AIR HANDLING EQUIPMENT, DUCT SEALANTS, MOTORIZED DAMPERS, GRILLES / LOUVERS / DIFFUSERS.
13.

AT PROJECT COMPLETION PROVIDE TO THE BUILDING OWNER THREE(3) BOUND SETS TO INCLUDE ALL O&M MANUALS FOR EQUIPMENT INSTALLED, BALANCE REPORTS AND COPIES OF ALL MANUFACTURER WARRANTIES. CONTRACTOR SHALL COMPLETE ANY WARRANTY REGISTRATION CARDS NECESSARY FOR MANUFACTURER WARRANTIES.
14.

CONTRACTOR SHALL PROVIDE A ONE (1) YEAR WARRANTY FOR ALL WORK PERFORMED. THIS INSTALLERS WARRANTY SHALL COVER ALL MATERIAL AND EQUIPMENT NOT COVERED BY A MANUFACTURER WARRANTY AND ALL LABOR. THIS WARRANTY SHALL ALSO COVER INSTALLER ERROR OR DAMAGE.
15.

ALL WORK ON THIS PROJECT SHALL BE EXECUTED IN A GOOD, WORKMAN LIKE MANNER USING MECHANICS SKILLED IN THEIR RESPECTIVE TRADES. NO ALLOWANCE WILL BE GIVEN FOR POOR WORKMANSHIP. ANY INSTALLATION THAT IS OF INSUFFICIENT QUALITY SHALL BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.
16.

WORK SITE IS TO BE LEFT IN A NEAT AND ORDERLY CONDITION AT THE END OF EACH WORK SHIFT.
17.

CONTRACTOR SHALL COORDINATE WITH THE OWNER ANY OWNER FURNISHED EQUIPMENT. CONTRACTOR SHALL RECEIVE ANY OWNER FURNISHED ITEMS WHEN DELIVERED TO THE JOB SITE AND SHALL BE RESPONSIBLE FOR THE ITEMS ONCE RECEIVED.
18.

CONTRACTOR SHALL REVIEW ARCHITECTURAL DRAWINGS FOR LOCATIONS OF SLAB-TO-SLAB PARTITIONS, FIRE RATED PARTITIONS AND FIRE RATED FLOORS. ALL PENETRATION OF SLAB-TO-SLAB PARTITIONS SHALL BE SEALED AIR TIGHT. ALL PENETRATIONS OF FIRE RATED PARTITIONS OR FLOORS SHALL BE PROVIDED WITH A FIRE RATED DAMPER AND ACCESS DOOR. DAMPER SHALL HAVE A RATING APPROPRIATE FOR THE ASSEMBLY PENETRATED.
19.

PENETRATIONS OF FIRE RATED ASSEMBLIES SHALL BE SEALED USING CODE APPROVED, LABORATORY TESTED AND LABELED SEALANTS FOR A FIRE RESISTANCE RATING EQUAL TO OR GREATER THAN THE ASSEMBLY PENETRATED.
20.

CONTRACTOR SHALL VERIFY LOCATION OF CEILING MOUNTED DIFFUSERS AND GRILLES WITH ARCHITECTURAL CEILING PLAN PRIOR TO INSTALLATION.
21.

ALL DUCT SIZES SHOWN ON THE DRAWINGS ARE TO ESTABLISH TOTAL DUCT AREA REQUIRED. IF DUCT SIZES NEED TO BE CHANGED OR DUCTS BE REROUTED TO INSTALL THE DUCTS THROUGH JOISTS, ABOVE CEILINGS, BELOW STEEL, ETC., CHANGES SHALL BE DONE AT NO EXTRA COST TO THE OWNER. THE CONTRACTOR SHALL CHECK WITH THE ARCHITECT/ENGINEER BEFORE CHANGING ANY SIZES.
22.

NEW DUCTWORK, PIPING, AND CONDUIT SHALL BE INSTALLED AS HIGH AS POSSIBLE. CONTRACTOR SHALL COORDINATE DUCTWORK, PIPING AND CONDUITS WITH LIGHTING FIXTURES, CEILING CONSTRUCTION, STRUCTURE AIR DISTRIBUTION EQUIPMENT, ETC., AND SHALL BE OFF-SET AS REQUIRED.
23.

ALL NEW RECTANGULAR DUCTWORK SHALL BE 1" W.G. CONSTRUCTION OF LOCK FORMING GALVANIZED STEEL IN ACCORDANCE WITH FIGURES 3-1 THRU 3-56 AND TABLE 3-2 OF THE SMACNA GUIDELINES ("DUCT MANUAL AND SHEET METAL CONSTRUCTION FOR VENTILATION AND AIR CONDITIONING SYSTEMS" MOST RECENT EDITION.) SNAP LOCK LONGITUDINAL SEAMS AND DRAWBAND JOINT CONNECTIONS ARE NOT ACCEPTABLE. (LOW PRESSURE ROUND RUN-OUT DUCTS MAY BE SNAP LOCK LONGITUDINAL SEAM WITH SCREW/RIVET JOINT CONNECTIONS).
24.

DUCTWORK SHALL BE HUNG AS HIGH AS POSSIBLE FROM BUILDING STRUCTURE. CONDUITS, PIPES, CEILINGS OR ANY OTHER ITEMS SHALL NOT BE HUNG FROM DUCTWORK. PROVIDE ALL FITTINGS ELBOWS, DAMPERS, OFF-SETS, ETC. FOR COMPLETE DUCTWORK INSTALLATION. ALL ELBOWS SHALL BE GORED RADIUS ELBOWS (PLEATED NOT ALLOWED) UNLESS SQUARE ELBOWS ARE SHOWN ON PLANS. ALL SQUARE ELBOWS SHALL HAVE TURNING VANES.
25.

VOLUME DAMPERS SHALL BE INSTALLED AS SHOWN ON PLANS, AND AT ALL BRANCH TAKE-OFFS.
26.

ALL DUCTWORK SHALL BE SEALED USING IRON GRIP (NO SUBSTITUTIONS) AND SHALL MEET THE MICHIGAN UNIFORM ENERGY CODE (ASHRAE 90.1-2007) DUCT SEAL LEVEL "A" (TABLE 6.4.2.4A). SEAL LEVEL "A" SHALL BE USED FOR ALL DUCT TYPES AND PRESSURE CLASSES.
27.

ALL DUCTWORK SHALL BE INSULATED PER ASHRAE 90.1-2013 TABLE 6.8.2B. FOR CONCEALED DUCTWORK, AT A MINIMUM PROVIDE 1½" THICK FLEXIBLE FIBERGLASS BLANKET WITH FIRE/SMOKE SPREAD RATING OF 25/50 OR BETTER, SECURED TO DUCTWORK WITH BENJAMIN FOSTER NO. 85 20 ADHESIVE AND PUSH PINS EVERY 12" ON-CENTER. FOR DUCTWORK IN MECHANICAL ROOMS USE RIGID, FOIL-FACED, FIBERGLASS INSULATION, 1" THICK, 2LB. EXTERIOR DUCTWORK SHALL BE INSULATED AND HAVE A PVC WRAP.
28.

USE PVC COATED GALVANIZED STEEL FOR UNDERGROUND DUCTS AND INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. REPAIR DAMAGE TO PVC COATINGS WITH MANUFACTURER'S RECOMMENDED MATERIALS. DUCTS IN CONCRETE SLABS SHALL BE ROUND AND ENCASED IN AT LEAST 2" OF CONCRETE. USE A VIBRATOR TO FILL VOIDS IN CONCRETE. SLOPE ALL UNDERGROUND DUCT BACK TOWARD UNIT. PROVIDE DUCT ACCESS DOOR.
29.

FLEXIBLE DUCT CONNECTIONS SHALL BE MADE BY APPLYING DUCT SEALER TO INSIDE OF FLEXIBLE DUCT AND OUTSIDE OF HARD DUCT COLLAR. ADHESIVE SHALL BE CHEMICALLY COMPATIBLE WITH MATERIALS IN CONTACT WITH IT. THE ENDS OF DUCTS SHALL BE TRIMMED SQUARELY PRIOR TO INSTALLATION. COLLARS AND SLEEVES SHALL BE INSERTED INTO FLEXIBLE DUCT A MINIMUM OF 1" BEFORE FASTENING. SLIDE FLEX DUCT OVER COLLAR AND TAPE WITH THREE WRAPS OF DUCT TAPE AROUND JOINT AND SEAL WITH STAINLESS STEEL CLAMPS OVER OUTSIDE OF TAPE.

A.

HIGH PRESSURE: INSTALL AT INLET CONNECTIONS OF TERMINAL UNITS. MAXIMUM DEVELOPED LENGTH OF FLEX DUCT SHALL BE 3'-0". USE METAL DUCTS AND FITTINGS TO REACH WITHIN 3'-0" OF TERMINAL UNIT.

B.

LOW PRESSURE: INSTALL WHERE INDICATED ON DRAWINGS AND BE A MAXIMUM OF 5'-0" IN LENGTH. USE METAL DUCT AND FITTINGS TO REACH WITHIN 5'-0" OF DIFFUSER.
30.

FLEXIBLE DUCTS SHALL BE USED FOR ALIGNMENT PURPOSES ONLY. MAXIMUM OFFSET 1" PER FOOT LENGTH. NO ELBOWS USING FLEXIBLE DUCTS WILL BE ALLOWED. DUCTS SHOULD NOT BE COMPRESSED. THE SPECIFICATIONS HEREIN, SHALL NOT SUPERSEDE THE APPLICATION CONTINGENCIES DICTATED BY THE FLEXIBLE DUCT MANUFACTURER IF THOSE ARE MORE STRINGENT.
31.

ALL PIPING TO BE INSTALLED PERPENDICULAR TO STRUCTURE LINES UNLESS OTHERWISE NOTED ON DRAWINGS. ALL PIPING TO BE NEATLY SPACED WITH RISERS AND DROPS PLUMB AND TRUE. MINIMUM SPACING SHALL HAVE 1" CLEAR BETWEEN PIPING (INCLUDING FITTINGS) AFTER INSULATION. PIPING SHALL NOT OBSTRUCT ACCESS TO EQUIPMENT, VALVES, FILTERS, ETC.
32.

ALL PIPING TO BE INSTALLED CONCEALED EXCEPT WHERE NOTED ON PLANS. DO NOT INSTALL PIPING BELOW SLABS EXCEPT WHERE NOTED ON PLANS. DO NOT CONCEAL PIPING UNTIL INSPECTED AND TESTED. PNEUMATIC TESTING OF ALL PIPING IS REQUIRED.
33.

ALL PIPING THAT PENETRATES CONCRETE SLABS OR MASONRY WALLS SHALL BE PROVIDED WITH A PIPE SLEEVE WITH AN I.D. MINIMUM 1" LARGER THAN O.D. OF PIPE. SLEEVES SHALL PROTRUDE 2" AFF AND FLUSH WITH WALL SURFACE. IF PIPE SLEEVES ARE NOT POURED-IN-PLACE, GROUT SECURELY TO WALL OR SLAB. SEAL SPACE BETWEEN PIPE AND SLEEVE. USE FIRE RATED SEALANT WHERE REQUIRED.
34.

PROVIDE ALL PIPING OFF-SETS AS REQUIRED FOR COORDINATION WITH STRUCTURE, DUCTWORK, CONDUITS, ETC.
35.

INSTALL PIPE ANCHORS WHERE REQUIRED OR AS SHOWN ON PLANS. INSTALL PIPE ROLLERS WHERE REQUIRED OR SHOWN ON PLANS. INSTALL GUIDES AT ALL EXPANSION JOINTS, EXPANSION LOOPS OR WHERE REQUIRED.
36.

FLEXIBLE CONNECTORS, EXPANSION AND VIBRATION CONTROL DEVICES AND FITTING SHALL BE OF AN APPROVED TYPE.
37.

ALL PIPING, VALVES AND HYDRONIC EQUIPMENT SHALL BE LABELED WITH ENGRAVED TAGS OR PLACARDS WITH LETTERING ONE INCH(1") TALL (MINIMUM).
38.

CLOSE NIPPLES SHALL NOT BE PERMITTED. USE ONLY SHOULDER NIPPLES.
39.

REDUCERS FOR PUMPS OR CONTROL VALVES SHALL BE INSTALLED ABUTTING THE INLET/OUTLET OF THE VALVE OR PUMP.
40.

USE ECCENTRIC REDUCING FITTINGS OR COUPLINGS WHERE REQUIRED TO PREVENT THE POCKETING OF LIQUIDS.
41.

PROVIDE UNION OR FLANGE AT PIPE CONNECTIONS TO COILS, EQUIPMENT, ETC. AND AT LOCATIONS SHOWN ON PLANS OR IN DETAILS. PROVIDE UNION OR FLANGE BETWEEN EQUIPMENT AND CONTROL VALVES.
42.

PROVIDE PEETS' PLUGS (PT PLUGS) AT THE INLET AND OUTLET OF ALL HYDRONIC EQUIPMENT WHERE THERMOMETERS ARE NOT SHOWN.
43.

PROVIDE DIELECTRIC UNIONS BETWEEN FERROUS AND NON FERROUS PIPE AND FITTINGS.
44.

PIPE INSULATION SHALL BE PER ASHRAE 90.1-2013. MINIMUM 1" FIBERGLASS INSULATION (2LB. FIRE/SMOKE 25/50) ON ALL HYDRONIC PIPING. STEAM HEATING PIPING SYSTEMS WITH 1½" THICK FIBERGLASS INSULATION (1½" DIAMETER AND UNDER) OR 2" THICK (OVER 1½" DIAMETER). 251'-350' FLUID TEMPERATURE: INSULATE STEAM HEATING PIPING SYSTEM SYSTEMS WITH 2½" THICK FIBERGLASS INSULATION (1½" DIAMETER AND UNDER) OR 3" THICK (OVER 1½" DIAMETER). 140'-200' FLUID TEMPERATURE: INSULATE CONDENSATE HEATING PIPING SYSTEMS WITH 1" THICK FIBERGLASS INSULATION (4" DIAMETER AND UNDER). 201'-250' FLUID TEMPERATURE: INSULATE CONDENSATE HEATING PIPING SYSTEM WITH 1½" THICK FIBERGLASS INSULATION (1½" DIAMETER AND UNDER) OR 2" THICK (OVER 1½" DIAMETER).
45.

THERMOSTATS SHALL BE INSTALLED AS SHOWN ON PLANS. TYPICAL HEIGHT FOR MOUNTING SHALL BE 48" AFF TO BOTTOM OF T-STAT, UNLESS OTHERWISE NOTED. DO NOT INSTALL T-STAT WITHIN TWO(2) FEET OF DIMMING LIGHT SWITCH. INDICATED SHALL BE MEASURED AND BALANCED TO WITHIN 10% OF THE FLOW VALUES INDICATED ON THE DRAWINGS. FAN RPMs, AND VOLUME DAMPERS SHALL BE ADJUSTED AS REQUIRED TO ACHIEVE FLOW BALANCE. NEBB OR AABC CERTIFIED BALANCE REPORTS SHALL BE SUBMITTED TO THE ENGINEER AT THE COMPLETION OF THE PROJECT. THE COST OF THE BALANCING SHALL BE INCLUDED IN THE MECHANICAL CONTRACTOR BID.
46.

ALL AUTOMATIC TEMPERATURE CONTROLS ARE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.
47.

CONTRACTOR SHALL NOT CUT, DRILL, OR POWDER NAIL INTO ANY EXISTING OR NEW STRUCTURAL MEMBER OR ASSEMBLY WITHOUT PRIOR WRITTEN AUTHORIZATION FROM A LICENSED STRUCTURAL ENGINEER AND THE BUILDING OWNER. THIS INCLUDES CORE DRILLING ANY CONCRETE WALL OR FLOOR SLAB.
48.

ALL MECHANICAL EQUIPMENT SHALL BE HUNG OR SUPPORTED WITH VIBRATION ISOLATING HANGERS OR PADS. NO VIBRATION SHALL BE TRANSMITTED TO THE STRUCTURE.
49.

COMBUSTION AIR INTAKE AND EXHAUST FLUES SHALL HAVE 10'-0" HORIZONTAL OR 3'-0" VERTICAL SEPARATION.
50.

PROVIDE UL LISTED FIRE DAMPERS AT PENETRATIONS OF FIRE RATED WALLS AND CEILINGS.
51.

A MANUFACTURER'S AUTHORIZED REPRESENTATIVE SHALL PROVIDE START-UP SUPERVISION AND TRAINING OF OWNER'S PERSONNEL IN THE PROPER OPERATION AND MAINTENANCE OF ALL EQUIPMENT.
52.

GAS PIPING SYSTEM SHALL CONFORM TO THE REQUIREMENTS OF NFPA 54 - NATIONAL FUEL GAS CODE AND INTERNATIONAL FUEL GAS CODE.
53.

GAS PIPING ABOVE GRADE AND OUTSIDE THE BUILDING GAS PIPING IS TO BE PAINTED BLACK.
54.

COORDINATE VOLTAGE AND PHASE OF EACH PIECE OF EQUIPMENT WITH ELECTRICAL CONTRACTOR BEFORE ORDERING.
55.

PROVIDE DELEGATED DESIGN FOR FIRE SUPPRESSION SYSTEM, CONFORMING TO NFPA 13, AND ALL APPLICABLE CODES AND STANDARDS. SYSTEM SHALL INCLUDE BOTH DRY-PIPE AND WET-PIPE SYSTEM, AS INDICATED ON DRAWINGS.

PLUMBING SPECIFICATIONS

1.

ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, AND LAWS.
2.

ARRANGE AND PAY FOR ALL PERMITS AND INSPECTIONS AS REQUIRED.
3.

ALL WORK SHALL BE PERFORMED TO FACILITATE EXPEDITIOUS PROGRESS ON THE WHOLE PROJECT. COORDINATE WORK WITH OTHER TRADES TO MINIMIZE AND RESOLVE POTENTIAL CONFLICTS.
4.

COMPLETED SYSTEMS SHALL BE TESTED, BALANCED, AND GUARANTEED. PROVIDE REPORT TO A/E.
5.

THE DRAWINGS ARE DIAGRAMMATIC IN NATURE. THE CONTRACTOR SHALL PROVIDE FITTINGS, OFFSETS, ETC., AS NECESSARY TO PROVIDE COMPLETE SYSTEMS.
6.

FURNISH AND INSTALL ALL VALVING FOR THE PROPER SECTIONALIZING AND OPERATION OF PIPING SYSTEMS. PROVIDE ACCESS PANELS AS REQUIRED FOR ACCESS TO VALVES.
7.

ALL PIPES PASSING THROUGH FINISHED WALLS, PARTITIONS, AND FLOORS SHALL BE FITTED WITH ADJUSTABLE ESCUTCHEONS, AND APPROPRIATE FIRE STOPPING WHERE REQUIRED.
8.

ATTACH ALL FIXTURES TO SUPPORTING SURFACES PLUMB AND LEVEL. WALL HUNG UNITS SHALL BE SECURELY FASTENED TO WALL BACKING. PROVIDE CHAIR CARRIERS FOR ALL LAVATORIES
9.

WHERE FIXTURES ARE MOUNTED TO WALLS AND FLOORS, SEAL ALL INTERSECTIONS WITH DOW WHITE SILICONE CAULK.
10.

IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY DETAIL OF CONSTRUCTION. CONTRACTOR SHALL FURNISH AND INSTALL ALL ITEMS NECESSARY FOR A COMPLETE CODE COMPLYING SYSTEM.
11.

FINAL LOCATION OF ALL CEILING FEATURES NEEDS TO BE COORDINATED WITH ALL TRADES.
12.

PROVIDE APPROPRIATE FIRE STOPPING MATERIALS WHERE FIRE RATED ASSEMBLIES ARE PENETRATED.
13.

ALL WORK AND MATERIALS SHALL BE GUARANTEED IN WRITING FOR ONE YEAR FROM PROJECT COMPLETION.
14.

PROVIDE SHOP DRAWINGS FOR APPROVAL OF PLUMBING FIXTURES, ROOF TOP UNITS, GRILLES AND REGISTERS, FANS, WATER HEATERS, AND THERMOSTATS.
15.

MECHANICAL CONTRACTOR TO FIELD VERIFY ALL SITE LOCATIONS.
16.

SLOPE ALL NEW SANITARY PIPING A MIN. OF 1/8" PER FOOT.
17.

SANITIZE ALL NEW HOT & COLD WATER LINES PER LOCAL WATER DEPARTMENT REQUIREMENTS. FLUSH AND TEST SYSTEM FOR LEAKS. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROPER LEAK-FREE OPERATION OF SYSTEM. SOLDER JOINTS WITH NON-LEAD SOLDER.
18.

PROVIDE DI-ELECTRIC FITTINGS WHERE DISSIMILAR METALS ARE CONNECTED.
19.

SUPPLY ALL NECESSARY TRIM, P-TRAPS, AND ANGLE STOPS AT EACH PLUMBING FIXTURE.
20.

DISTRIBUTE HOT & COLD WATER PIPING IN TYPE "L" HARD DRAWN COPPER TUBING, ASTM B 88, TO MEET MINIMUM CONNECTION SIZE REQUIREMENTS AS SHOWN ON THE PLUMBING FIXTURE CONNECTION SCHEDULE.
21.

INSULATE ALL COLD WATER LINES WITH 1" MINERAL FIBER INSULATION WITH VAPOR BARRIER. INSULATE ALL HOT WATER LINES WITH 1" FIBERGLASS.
22.

DRAIN, VENT AND WASTE PIPING SHALL BE SCHEDULE DWV PVC. CLEAN OUTS IN FINISHED AREAS SHALL BE RECESSED AND HAVE CHROME OR BRASS COVER PLATES FLUSH WITH THE FINISHED FLOOR.
23.

PROVIDE SHUTOFF VALVES ON HOT & COLD WATER BRANCH PIPING TO ISOLATE BRANCH.
24.

PROVIDE CLEAN OUTS INSIDE AND OUTSIDE THE BUILDING 100 FEET APART, AND AT LOCATIONS WHERE A CHANGE IN DIRECTION GREATER THAN 45 DEGREES OCCURS.
25.

INSTALL EACH FIXTURE WITH TRAP, EASILY REMOVABLE FOR SERVICE AND CLEANING.
26.

AT EACH BARRIER FREE WATER CLOSET WITH FLUSH VALVE, INSTALL THE HANDLE TOWARD THE "OPEN" SIDE OF THE WATER CLOSET STALL.
27.

INSTALL POTABLE WATER PROTECTION DEVICES ON PLUMBING LINES WHERE CONTAMINATION OF DOMESTIC WATER MAY OCCUR, ON JANITOR ROOMS, FIRE SPRINKLER SYSTEMS, AND FLUSH VALVES.
28.

INSTALL PIPING TO ALLOW FOR EXPANSION AND CONTRACTION WITHOUT STRESSING PIPE, JOINTS, OR CONNECTED EQUIPMENT.
29.

FURNISH AND INSTALL WATER HAMMER ARRESTERS IN ACCORDANCE WITH PDI WH201.
30.

LAY OUT PLUMBING WORK TO AVOID CONFLICTS WITH OTHER BUILDING COMPONENTS. ESTABLISH ELEVATION OF PUBLIC SEWER SYSTEM.

- FITTINGS, TRIM, AND ACCESSORIES

A.

TOILET SEATS: ELONGATED, SOLID WHITE PLASTIC WITH MOLDED-IN BUMPERS, CLOSED BACK/OPEN FRONT, LESS COVER, AND HAVING BRASS CHECK HINGE.

B.

SUPPLIES AND STOPS FOR LAVATORIES AND SINKS: POLISHED CHROME-PLATED, LOOSE-KEYED ANGLE STOP HAVING ½" INLET AND 3/8" O.D. X 12" LONG CHROME-PLATED BRASS TUBING OUTLET, AND WALL FLANGE AND ESCUTCHEON.

C.

TRAPS: BRASS, CHROME PLATED ADJUSTABLE "P" TRAP WITH CLEANOUT AND WASTE TO WALL WITH ESCUTCHEON.

D.

THERMOSTATIC MIXING VALVE FOR INDIVIDUAL LAVS OR SINKS: CONFORM TO ASSE STANDARD 1070 WITH HIGH LIMIT SET AT 110°F WITH CHECKSTOPS ON INLETS. WATTS SERIES USS-B UNDER SINK GUARDIAN OR EQUAL.

E.

BARRIER-FREE LAVATORY TRAP WRAP: PROVIDE ADA-CONFORMING, WHEELCHAIR ACCESSIBLE LAVATORY P-TRAP AND ANGLE VALVE ASSEMBLY PROTECTIVE PIPE COVER. COVER SHALL BE SECURED WITH SNAP-CLIP FLUSH REUSABLE FASTENERS, ANGLE STOP SHALL HAVE LOCK-LID LOCKING ACCESS COVERS. TRUE-BRO LAV GUARD OR EQUAL.

F.

IN LOCATIONS WHERE ARCHITECT IS PROVIDING A BELOW COUNTER BARRIER-FREE COUNTERTOP BASIN SHIELD, PROVIDE OFFSET TAILPIECE TO ALLOW FOR INSTALLATION OF ARCHITECTURAL SHIELD / AVOID CONFLICT WITH SINK TAILPIECE. ELKAY LK4D/LKAD1B OR EQUAL.

- INSTALLATION

A.

INSTALL PLUMBING FIXTURES LEVEL AND PLUMB, IN ACCORDANCE WITH FIXTURE MANUFACTURER'S WRITTEN INSTRUCTIONS, ROUGH-IN DRAWINGS, AND PERTINENT CODES AND REGULATIONS, THE ORIGINAL DESIGN, AND THE REFERENCED STANDARDS.

B.

COMPLY WITH THE INSTALLATION REQUIREMENTS OF REQUIRED CODES AND STANDARDS WITH RESPECT TO BARRIER-FREE PLUMBING FIXTURES. COORDINATE WITH GRAB BAR INSTALLATIONS.

C.

INSTALL COUNTER TOP MOUNTED SINKS AS FAR FORWARD AS POSSIBLE WITHIN COUNTER TOP.

D.

FASTEN PLUMBING FIXTURES SECURELY TO SUPPORTS OR BUILDING STRUCTURE. SECURE SUPPLIES BEHIND OR WITHIN WALL CONSTRUCTION TO PROVIDE RIGID INSTALLATION.

E.

INSTALL A STOP VALVE IN AN ACCESSIBLE LOCATION IN THE WATER CONNECTION TO EACH FIXTURE.

F.

INSTALL ESCUTCHEONS AT EACH WALL, FLOOR, AND CEILING PENETRATION IN EXPOSED FINISHED LOCATIONS AND WITHIN CABINETS AND MILLWORK.

G.

SEAL FIXTURES TO WALLS AND FLOORS USING SILICONE SEALANT. MATCH SEALANT COLOR TO FIXTURE COLOR.

H.

INSTALL FLUSH VALVES FOR WATER CLOSETS IN OFF-SET TYPE BARRIER-FREE STALLS WITH HANDLES ON WIDE SIDE OF STALL.

I.

INSTALL THERMOSTATIC MIXING VALVE FOR INDIVIDUAL LAVS OR SINKS BENEATH FIXTURE, IN A VISUALLY CONCEALED LOCATION

PLUMBING FIXTURE SCHEDULE

WATER CLOSET (TANK TYPE) WC-1
WATER CLOSET (FLOOR-MOUNT, BARRIER FREE): FLOOR-MOUNTED, ELONGATED BOWL, VITREOUS CHINA, 128 GPF, TWO-PIECE, WHITE IN COLOR, KOHLER MODEL "WELLWORTH CLASSIC" K-3575. CONTRACTOR TO SUPPLY OPEN FRONT SEAT WITH LID, TO MATCH. THE TOILET IS ASME A112.19.2/CSA B45.1 AND ADA COMPLIANT.

LAV-1
PROVIDED BY OTHERS. REFER TO ARCHITECTURE.

SK-1
UNDERMOUNT TWO COMPARTMENT STAINLESS STEEL SINK, 32"x19". BASED ON KOHLER MODEL "VAULT" K-3820-NA. PROVIDE WITH THREE FUNCTION PULL-DOWN SPRAYHEAD, SINGLE-HOLE FAUCET BASED ON KOHLER MODEL "SIMPLICE" K-596-VS. DRILL COUNTER FOR SINGLE-HOLE FAUCET. PROVIDE GARBAGE DISPOSAL. GARBAGE DISPOSAL BASED ON BADGER MODEL SXP 3/4 HP, 120V, WITH SINK-TOP AIR SWITCH.

SH-1
ALCOVE ACRYLIC SHOWER BASE, BARRIER FREE, CENTER DRAIN, WHITE IN COLOR, 60"x34". BASED ON KOHLER MODEL "REL" K-8649-0. PROVIDE MANUAL, SINGLE HANDLE FAUCET AND SHOWER HEAD BASED ON KOHLER MODEL "PURIST" K-TS14422-4-CP, PROVIDE WITH POLISHED CHROME GRID STRAINER AND MIXING VALVE.

FD-1
ASME A112.21.1; LACQUERED CAST IRON TWO PIECE BODY WITH DOUBLE DRAINAGE FLANGE, WEEP HOLES, REVERSIBLE CLAMPING COLLAR, AND CIRCULAR, ADJUSTABLE CHROME PLATED STRAINER. PROVIDE TRAP PRIMER CONNECTION AT ALL LOCATIONS SHOWN ON PLANS, AND AS REQUIRED BY CODE. BASED ON J.R. SMITH MODEL "FLOOR DRAINS WITH ADJUSTABLE STRAINER HEADS" 2010-A-CP.

MOUNTING HEIGHTS SCHEDULE
MOUNT PLUMBING FIXTURES AS SCHEDULED BELOW.

FIXTURE	MOUNTING HEIGHT
LAVATORY	31" FLOOR TO RIM
SINK	36" FLOOR TO RIM
BARRIER-FREE LAVATORIES AND SINK	REFER TO ARCH. DRAWINGS FOR EXACT LOCATION AND HEIGHTS (MAX 34" A.F.F. TO RIM)
BARRIER FREE WATER CLOSET	17" FLOOR TO TOP OF SEAT
	27" FLOOR TO BOTTOM EDGE OF FRONT APRON
BARRIER FREE FLUSH VALVES	44" MAX HANDLE TO FLOOR
SHOWER HEAD	72" FLOOR TO HEAD
BARRIER FREE SHOWER CONTROLS	MIN. 38" ABOVE FLOOR, MAX 48" ABOVE FLOOR
BARRIER FREE SHOWER SPRAY UNIT	BOTTOM MAX 48" ABOVE FLOOR
SLIDE BAR	TOP MIN. 72" ABOVE FLOOR

***SEE MOUNTING HEIGHTS + ABBREVIATIONS SHEET FOR VISUALS**

ROUGH-IN SCHEDULE
LINE SIZES INDICATED BELOW ARE RUN-OUT SIZES, REDUCE SIZE AS REQUIRED AT CONNECTION TO FIXTURE. MAIN LINES SHALL BE INSTALLED AS INDICATED ON DRAWINGS.

FIXTURE	HOT WATER	COLD WATER	WASTE	VENT
LAVATORY	1/2"	1/2"	2"	2"
SINK	1/2"	1/2"	2"	2"
WATER CLOSET - TANK		1/2"	4"	2"
WATER CLOSET - FLUSH VALVE		1"	4"	2"
MOP BASIN	3/4"	3/4"	3"	1 1/2"
NON-FREEZE HYDRANT		3/4"		
HOSE BIBB		3/4"		

- PLUMBING SPECIALTIES

A.

CALIBRATED BALANCING VALVES: PROVIDE AS INDICATED, CALIBRATED BALANCE VALVES EQUIPPED WITH VALVES ON READOUT PORTS TO FACILITATE CONNECTING OF DIFFERENTIAL PRESSURE METER TO BALANCE VALVES. READOUT VALVES SHALL HAVE 1/4" NPT CONNECTION FOR METERS. PROVIDE CALIBRATED NAMEPLATE TO INDICATED DEGREE OF CLOSURE OF ORIFICE. CONSTRUCT BALANCING VALVE WITH INTERNAL SEALS TO PREVENT LEAKAGE AROUND ROTATING ELEMENT. VALVES TO HAVE MEMORY STOP FEATURE TO ALLOW VALVE TO BE CLOSED AND THEN REOPENED TO SET POINT WITHOUT DISTURBING BALANCING POSITION. PROVIDE BALANCE VALVES WITH PERFORMED POLYURETHANE INSULATION SUITABLE FOR USE ON DOMESTIC HOT WATER SYSTEMS, AND TO PROTECT BALANCE VALVES DURING EQUIPMENT. BELL & GOSSETT "CIRCUIT SETTER" APOLLO VALVES OR EQUAL.

B.

RECESSED NONFREEZE WALL HYDRANTS: CAST-BRONZE BOX, WITH TEE HANDLE KEY, VACUUM BREAKER, HINGED LOCKING COVER, 3/4" IN INLET, AND HOSE OUTLET. PROVIDE BRONZE CASING OF SUITABLE LENGTH TO HAVE VALVE BODY INSIDE BUILDING, NOT WITHIN EXTERIOR WALL. "WOODFORD" MODEL B67, "CONBRACO" OR EQUAL.

C.

BACKFLOW PREVENTER: REDUCED-PRESSURE-PRINCIPLE ASSEMBLY CONSISTING OF SHUTOFF VALVES ON INLET AND OUTLET AND STRAINER ON INLET. ASSEMBLIES SHALL INCLUDE TEST COCKS, AIR GAP DRAIN FITTING AND PRESSURE DIFFERENTIAL RELIEF VALVE LOCATED BETWEEN 2 POSITIVE SEATING CHECK VALVES AND COMPLY WITH REQUIREMENTS OF ASSE STANDARD 1013. PRESSURE DROP THROUGH ASSEMBLY SHALL NOT EXCEED 12 PSIG. "WATTS" NO. 909 SERIES, FEBCO, APOLLO VALVES.



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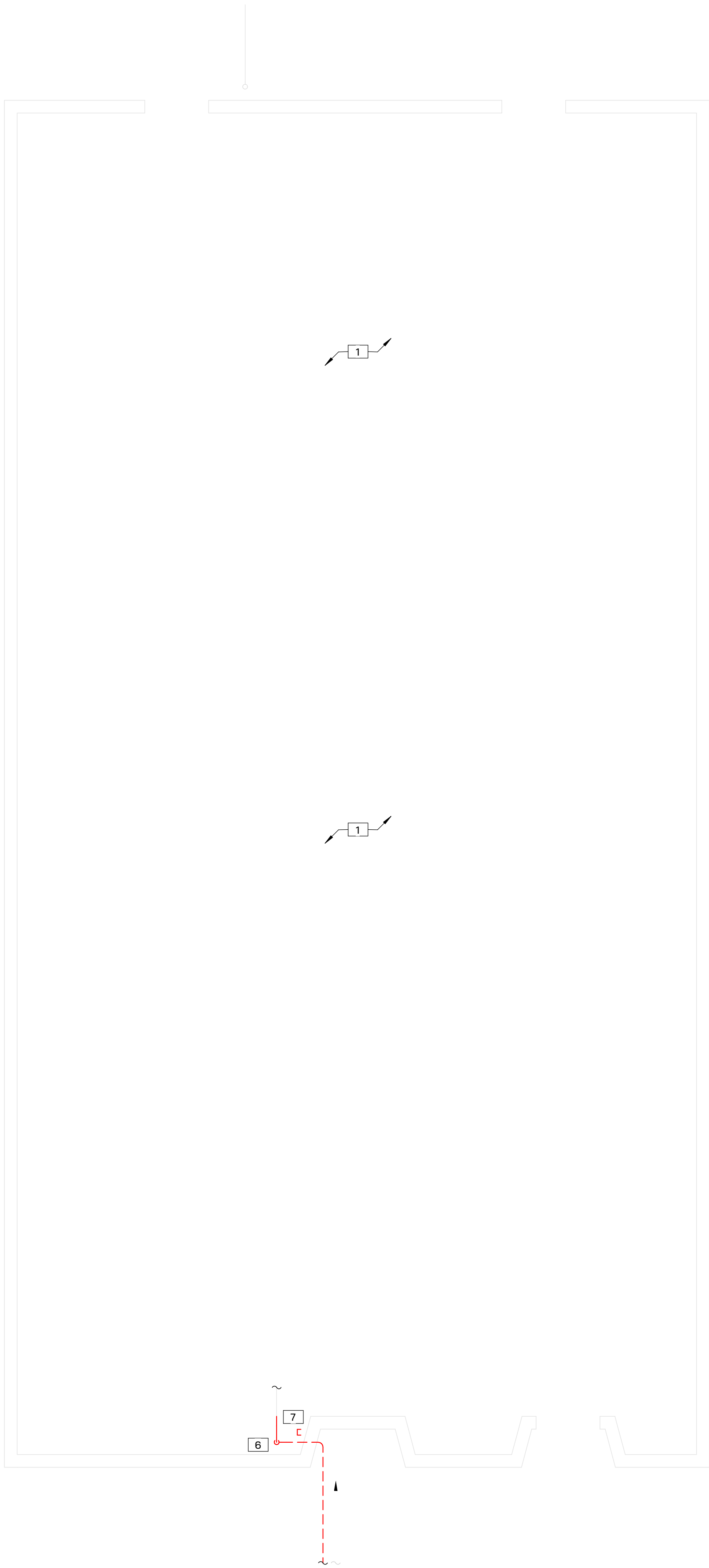
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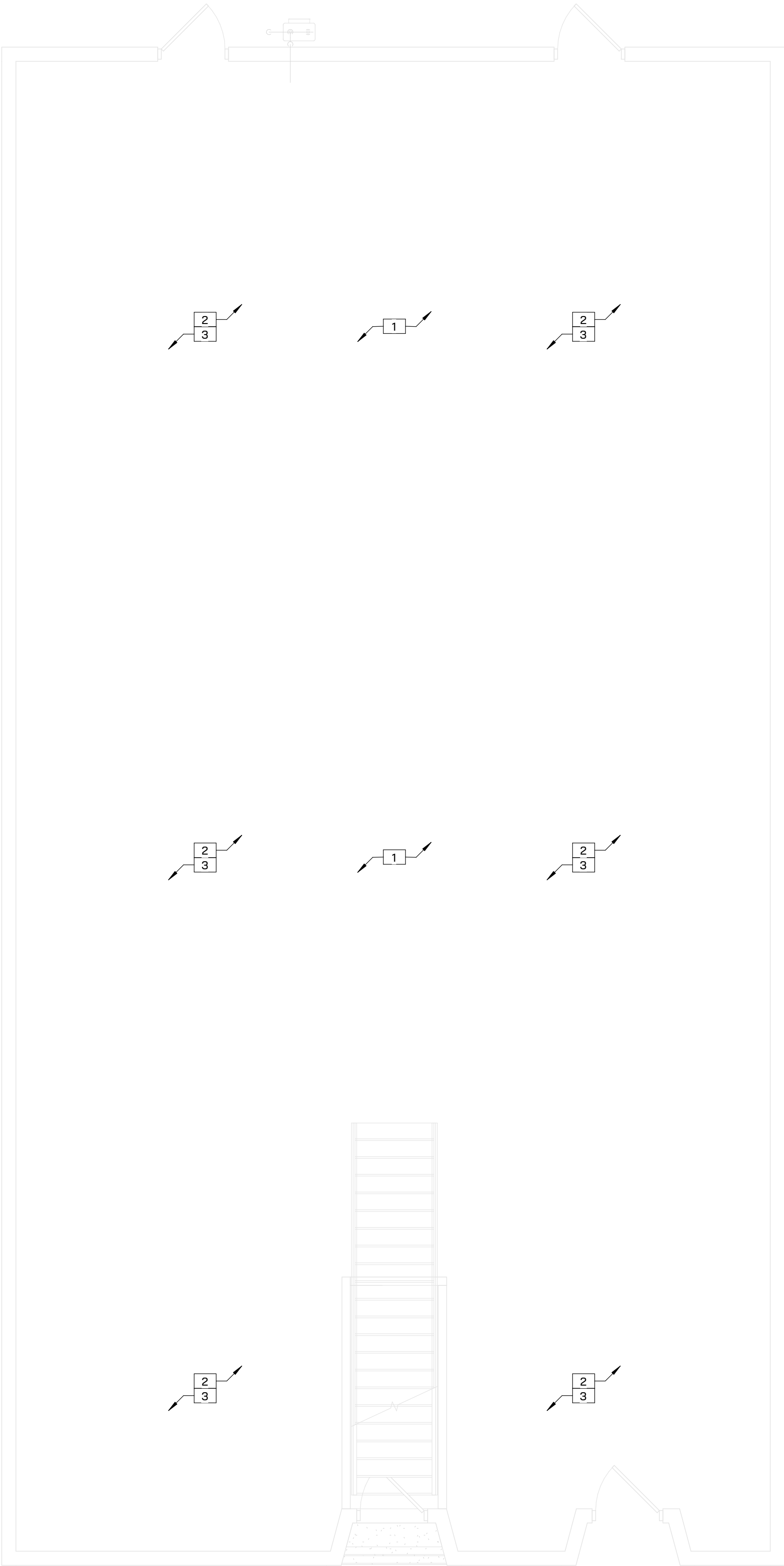


PROJECT
23.119

MECHANICAL SPECIFICATIONS
M001



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



FIRST FLOOR DEMOLITION PLAN
1/4" = 1'-0"

MECHANICAL DEMOLITION KEYED NOTES

- 1 ALL WORK IN OCCUPYING TENANTS SPACE TO BE COORDINATED AND APPROVED WITH TENANT PRIOR TO START OF WORK. RETURN SPACE TO TENANT IN EXISTING OR BETTER CONDITION.
- 2 REMOVE EXISTING HVAC SERVING SECOND FLOOR. PREPARE FOR NEW WORK.
- 3 REMOVE EXISTING PLUMBING SERVING SECOND FLOOR BACK TO MAIN. PREPARE FOR NEW WORK.
- 4 REMOVE EXISTING HVAC IN ENTIRETY. PREPARE FOR NEW WORK.
- 5 REMOVE EXISTING PLUMBING IN ENTIRETY BACK TO MAIN. PREPARE FOR NEW WORK.
- 6 REMOVE EXISTING WATER METER & DCW PIPING BACK TO MAIN. COORDINATE SHUT DOWN SCHEDULE WITH OCCUPYING TENANT. PREPARE FOR NEW WORK.
- 7 REMOVE EXISTING G CAP. PREPARE FOR NEW WORK.



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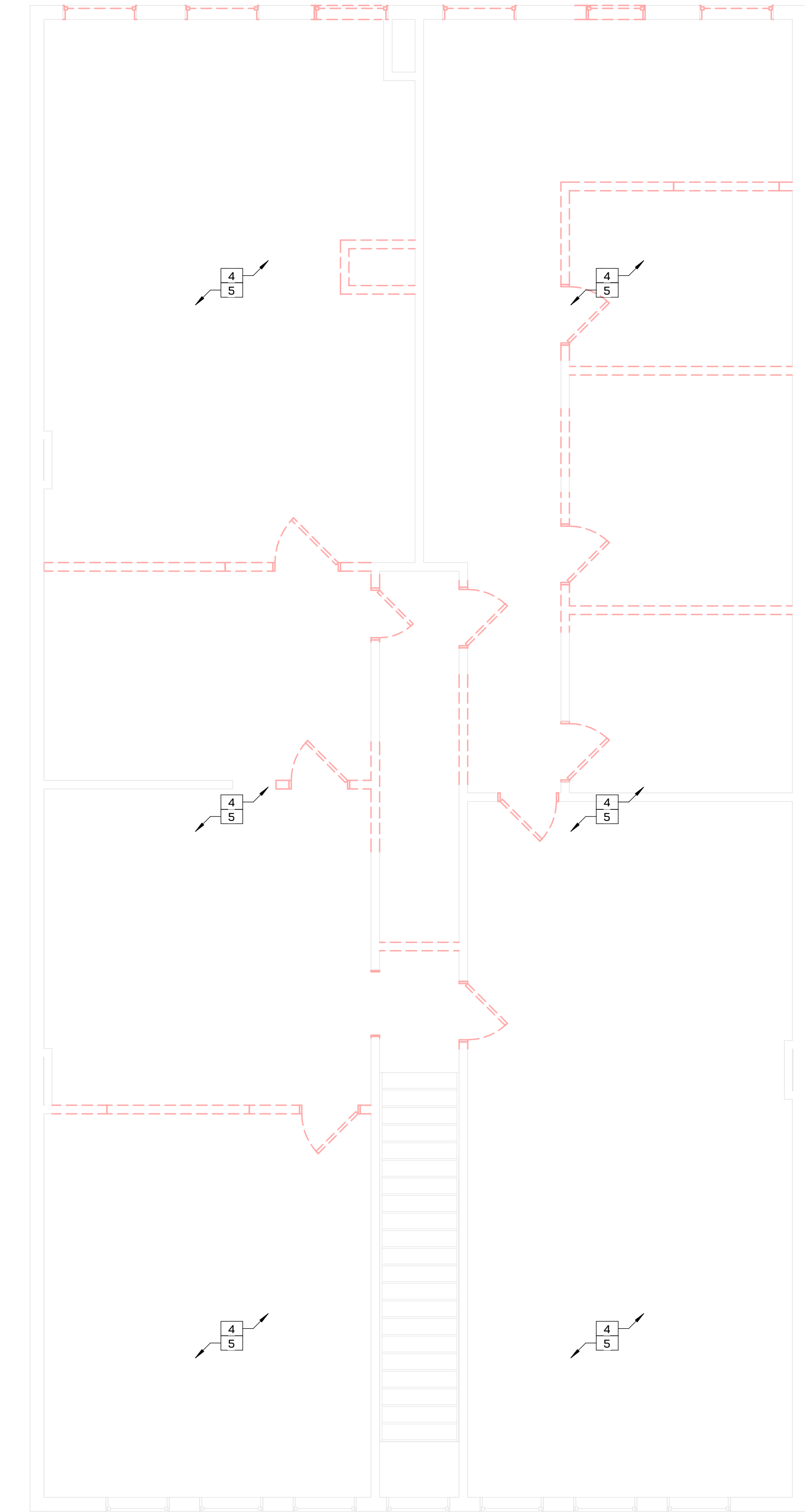
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**BASEMENT & FIRST FLOOR
MECHANICAL DEMOLITION PLAN**
MD110



SECOND FLOOR MECHANICAL DEMOLITION PLAN
1/4" = 1'-0"

MECHANICAL DEMOLITION KEYED NOTES

- 1 ALL WORK IN OCCUPYING TENANTS SPACE TO BE COORDINATED AND APPROVED WITH TENANT PRIOR TO START OF WORK. RETURN SPACE TO TENANT IN EXISTING OR BETTER CONDITION.
- 2 REMOVE EXISTING HVAC SERVING SECOND FLOOR. PREPARE FOR NEW WORK.
- 3 REMOVE EXISTING PLUMBING SERVING SECOND FLOOR BACK TO MAIN. PREPARE FOR NEW WORK.
- 4 REMOVE EXISTING HVAC IN ENTIRETY. PREPARE FOR NEW WORK.
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- 6 REMOVE EXISTING WATER METER & DCW PIPING BACK TO MAIN. COORDINATE SHUT DOWN SCHEDULE WITH OCCUPYING TENANT. PREPARE FOR NEW WORK.
- 7 REMOVE EXISTING G CAP. PREPARE FOR NEW WORK.



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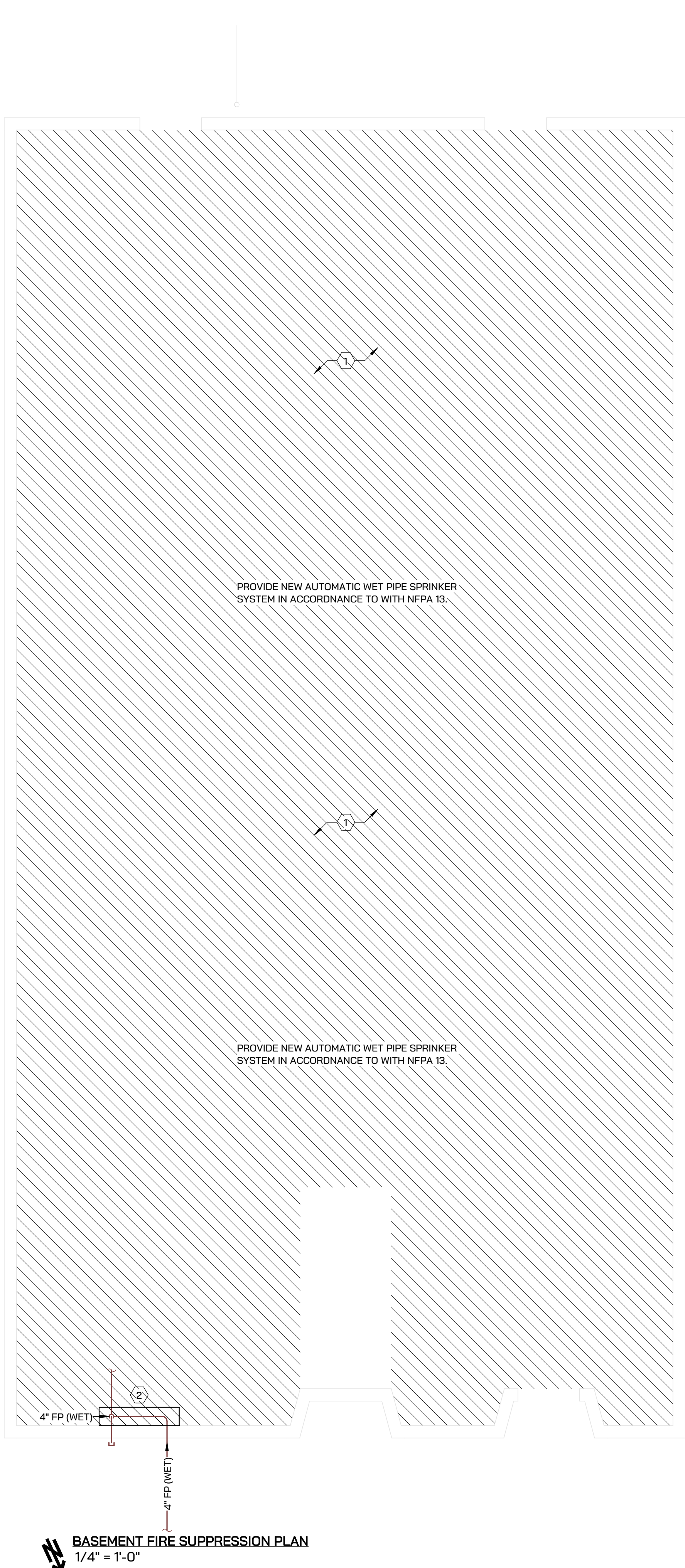
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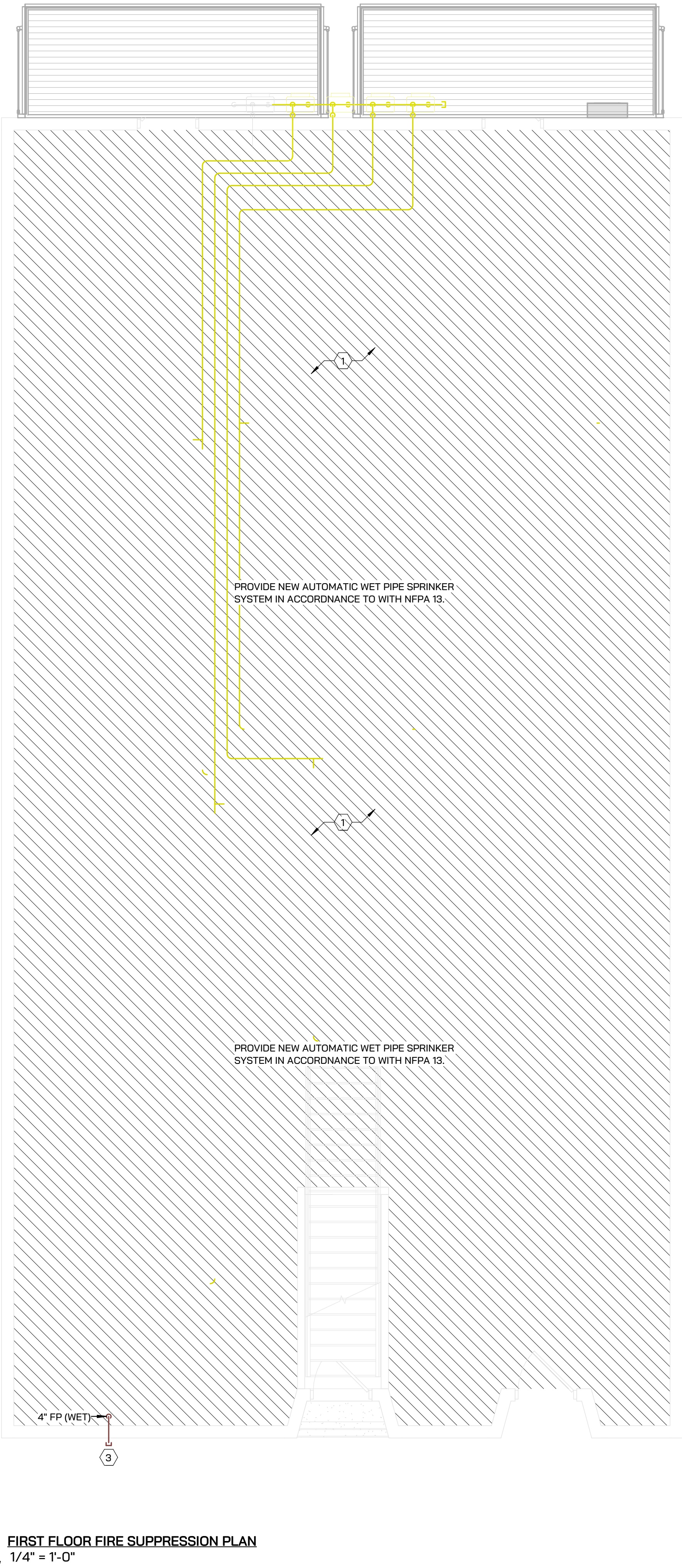


PROJECT
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**SECOND FLOOR MECHANICAL
DEMOLITION PLAN**
MD120



BASEMENT FIRE SUPPRESSION PLAN
1/4" = 1'-0"



FIRST FLOOR FIRE SUPPRESSION PLAN
1/4" = 1'-0"

FIRE PROTECTION KEYED NOTES

- 1 ALL WORK IN OCCUPYING TENANTS SPACE TO BE COORDINATED AND APPROVED WITH TENANT PRIOR TO START OF WORK. RETURN SPACE TO TENANT IN EXISTING OR BETTER CONDITION.
- 2 REFER FIRE PROTECTION PIPING DETAILS.
- 3 4" FDC. COORDINATE FINAL LOCATION WITH AUTHORITY HAVING JURISDICTION.



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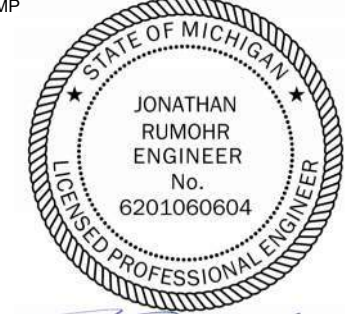
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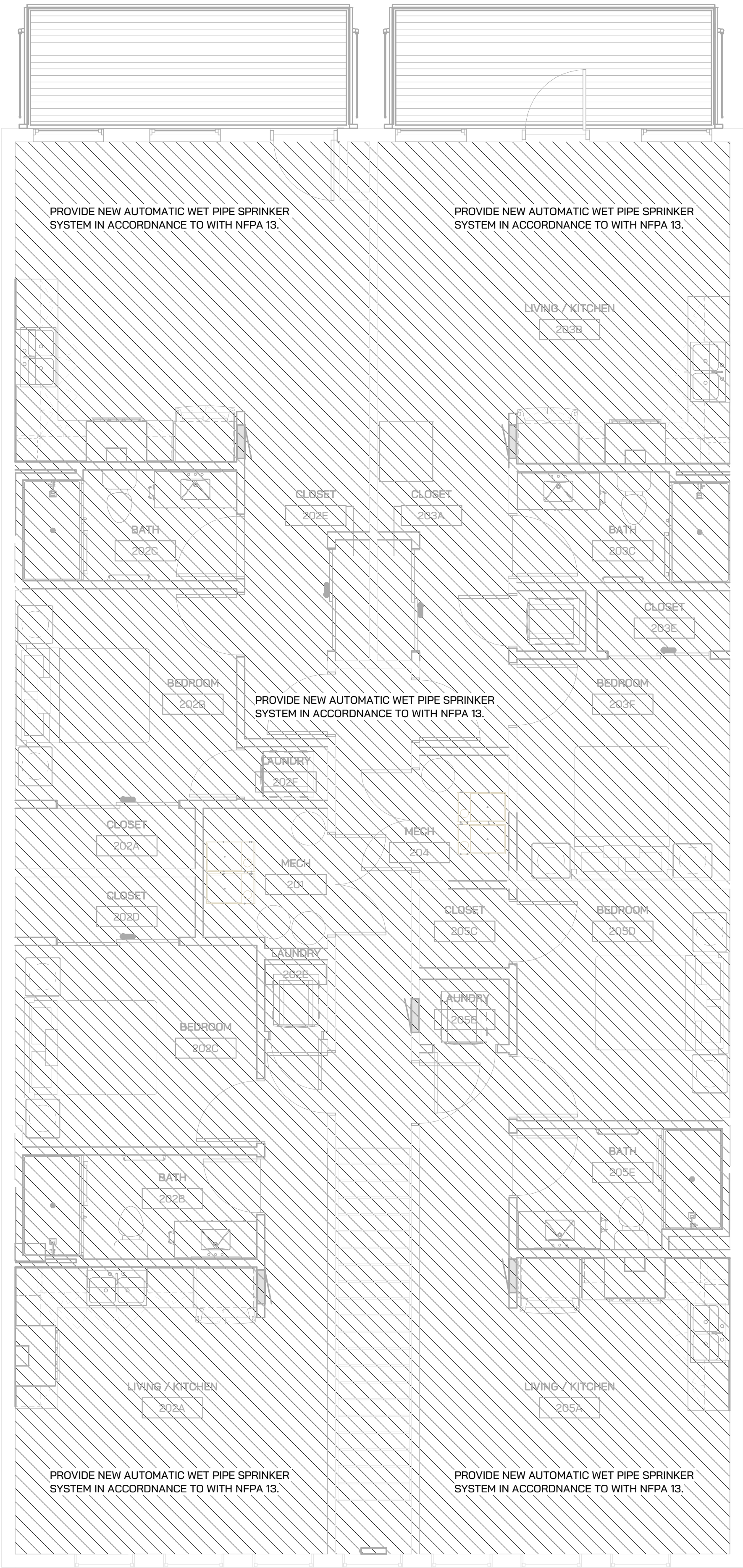
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PROJECT
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BASEMENT & FIRST FLOOR FIRE SUPPRESSION PLAN
M110



 **SECOND FLOOR FIRE SUPPRESSION PLAN**
1/4" = 1'-0"

FIRE PROTECTION KEYED NOTES

- 1 ALL WORK IN OCCUPYING TENANTS SPACE TO BE COORDINATED AND APPROVED WITH TENANT PRIOR TO START OF WORK. RETURN SPACE TO TENANT IN EXISTING OR BETTER CONDITION.
- 2 REFER FIRE PROTECTION PIPING DETAILS.
- 3 4" FDC. COORDINATE FINAL LOCATION WITH AUTHORITY HAVING JURISDICTION.



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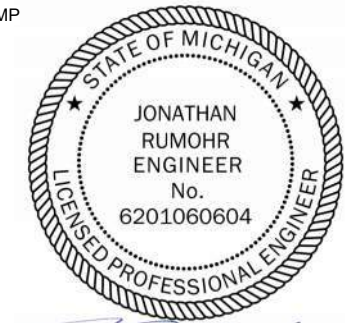
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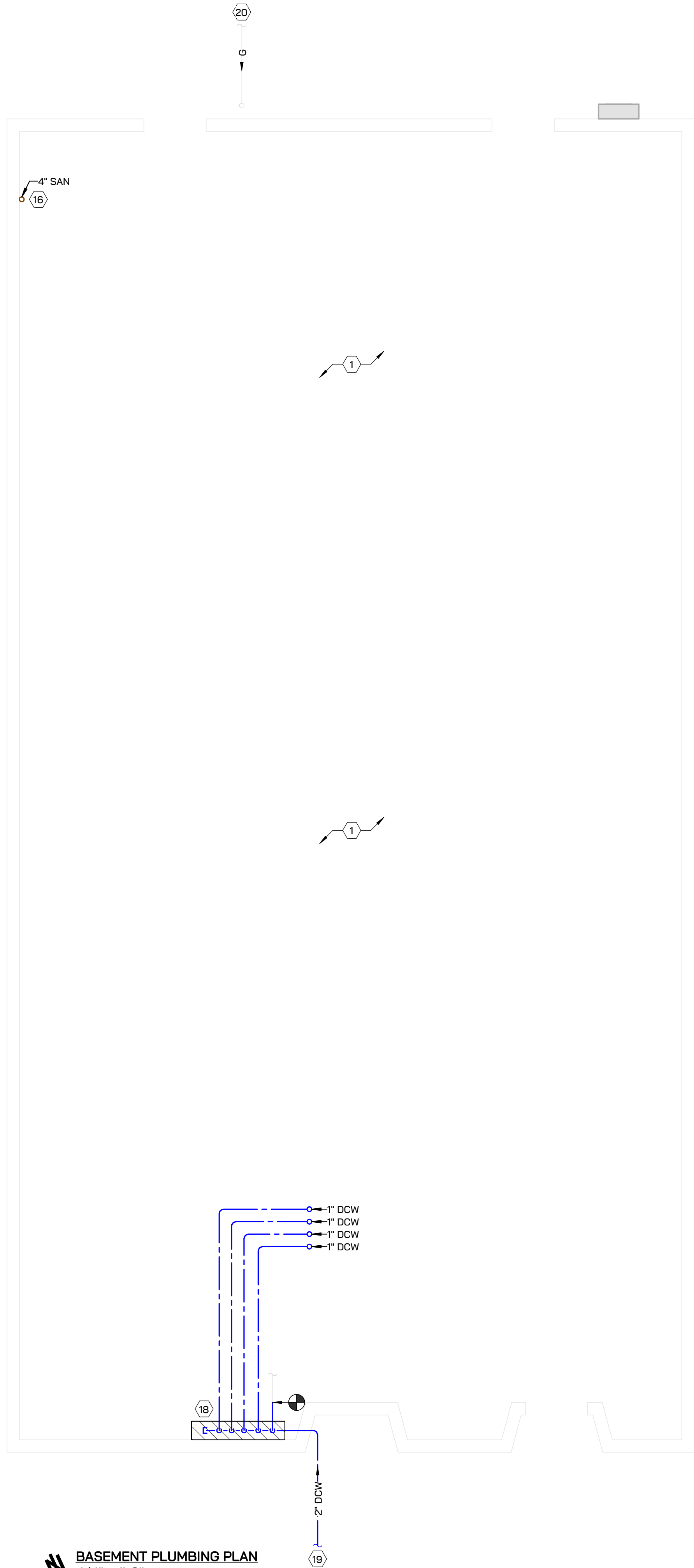
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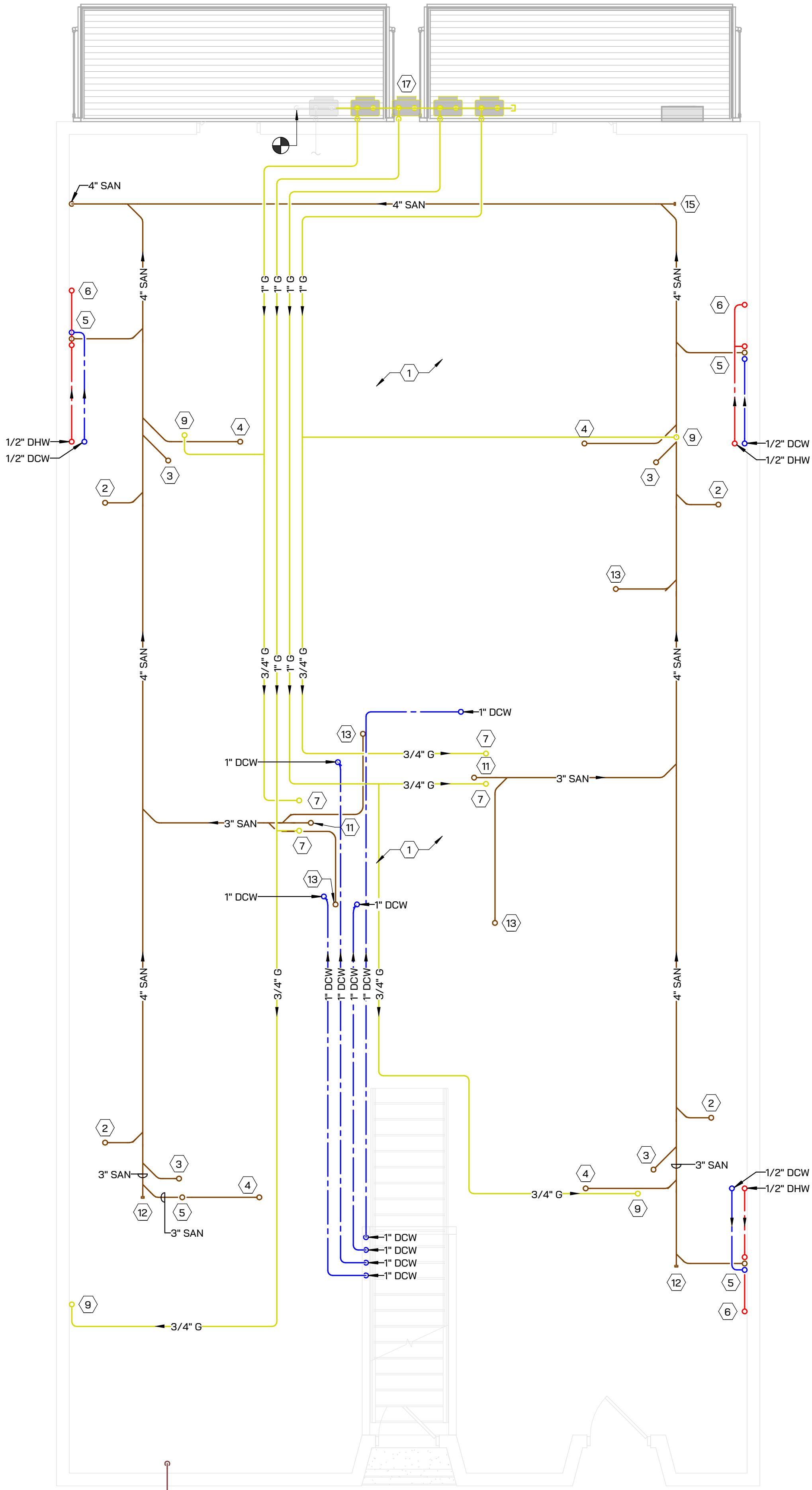


PROJECT
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SECOND FLOOR FIRE SUPPRESSION PLAN
M120



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



FIRST FLOOR PLUMBING PLAN
1/4" = 1'-0"

PLUMBING KEYED NOTES

- 1 ALL WORK IN OCCUPYING TENANTS SPACE TO BE COORDINATED AND APPROVED WITH TENANT PRIOR TO START OF WORK. RETURN SPACE TO TENANT IN EXISTING OR BETTER CONDITION.
- 2 1/2" DCW, 1/2" DHW, & 2" SAN TO SH.
- 3 3/4" DCW & 4" SAN TO WC.
- 4 1/2" DCW, 1/2" DHW, & 1 1/2" SAN TO LAV.
- 5 1/2" DCW, 1/2" DHW, & 2" SAN TO SK.
- 6 1/2" DHW TO DISHWASHER SUPPLIED BY OTHERS. CONNECT DISHWASHER DRAIN PIPING TO ADJACENT SK SAN DRAIN.
- 7 3/4" G TO FURNACE.
- 8 3/4" DCW TO & 3/4" DHW FROM WH.
- 9 3/4" G TO OVEN SUPPLIED BY OTHERS.
- 10 1/2" DCW TO REFRIGERATOR SUPPLIED BY OTHERS.
- 11 3" SAN TO FD.
- 12 3" CO.
- 13 1/2" DCW, 1/2" DHW, & 1 1/2" SAN TO LAUNDRY WALL BOX.
- 14 1 1/2" AAV UNDER COUNTER.
- 15 4" CO.
- 16 CONNECT TO EXISTING 4" SANITARY STACK.
- 17 GAS METER BANK. REFER TO DETAIL.
- 18 WATER METER BANK. REFER TO WATER METER SERVICE PIPING DETAIL.
- 19 NEW 2" WATER MAIN. COORDINATE WITH CITY.
- 20 EXIST. GAS MAIN. CONFRIM EXIST. SIZE & CAPACITY WITH UTILITY COMPANY.



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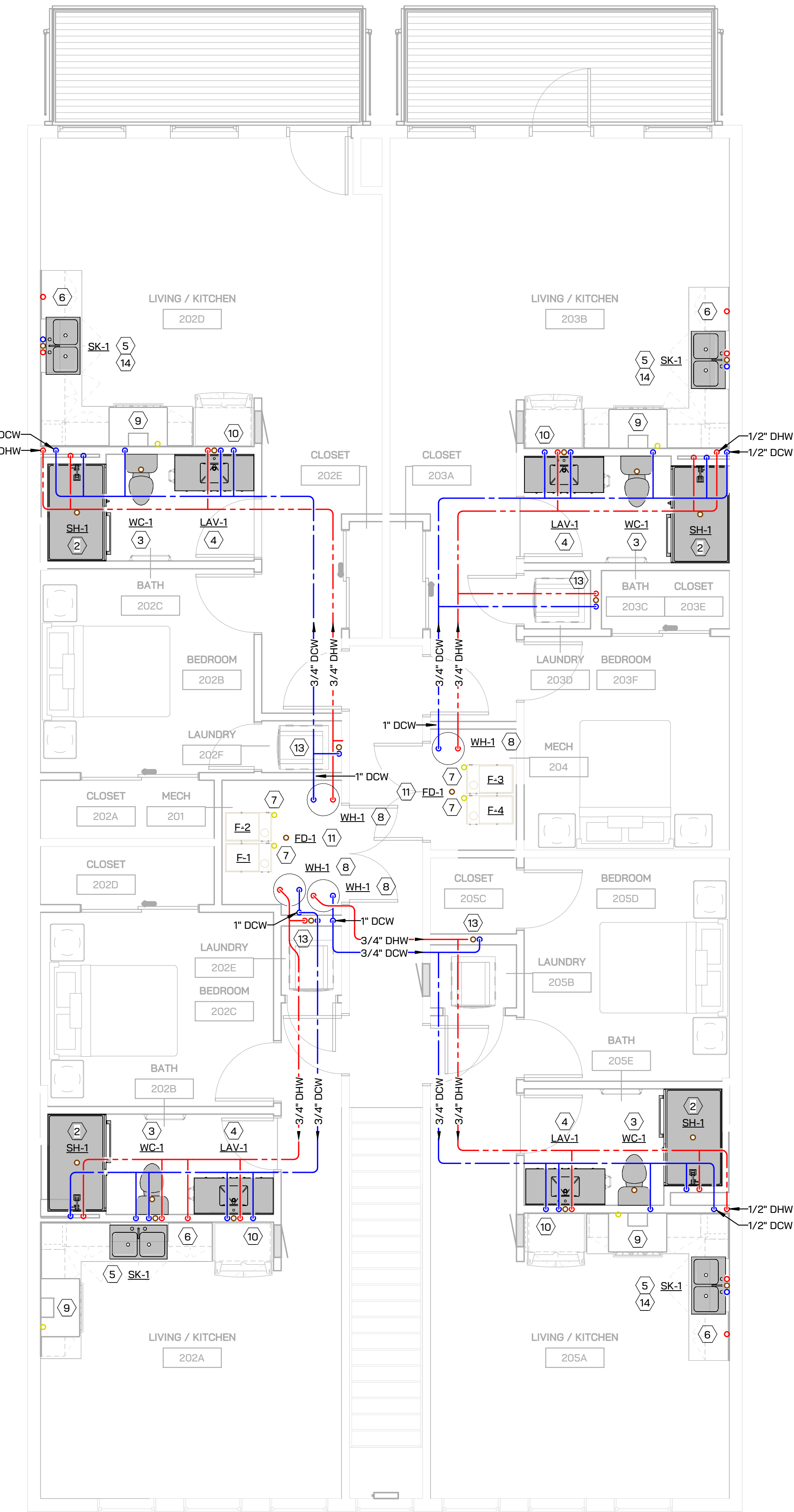
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**BASEMENT & FIRST FLOOR
PLUMBING PLAN**
M210



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

PLUMBING KEYED NOTES

- 1 ALL WORK IN OCCUPYING TENANTS SPACE TO BE COORDINATED AND APPROVED WITH TENANT PRIOR TO START OF WORK. RETURN SPACE TO TENANT IN EXISTING OR BETTER CONDITION.
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- 4 1/2" DCW, 1/2" DHW, & 1 1/2" SAN TO LAV.
- 5 1/2" DCW, 1/2" DHW, & 2" SAN TO SK.
- 6 1/2" DHW TO DISHWASHER SUPPLIED BY OTHERS. CONNECT DISHWASHER DRAIN PIPING TO ADJACENT SK SAN DRAIN.
- 7 3/4" G TO FURNACE.
- 8 3/4" DCW TO & 3/4" DHW FROM WH.
- 9 3/4" G TO OVEN SUPPLIED BY OTHERS.
- 10 1/2" DCW TO REFRIGERATOR SUPPLIED BY OTHERS.
- 11 3" SAN TO FD.
- 12 3" CO.
- 13 1/2" DCW, 1/2" DHW, & 1 1/2" SAN TO LAUNDRY WALL BOX.
- 14 1 1/2" AAV UNDER COUNTER.
- 15 4" CO.
- 16 CONNECT TO EXISTING 4" SANITARY STACK.
- 17 GAS METER BANK. REFER TO DETAIL.
- 18 WATER METER BANK. REFER TO WATER METER SERVICE PIPING DETAIL.
- 19 NEW 2" WATER MAIN. COORDINATE WITH CITY.
- 20 EXIST. GAS MAIN. CONFRIM EXIST. SIZE & CAPACITY WITH UTILITY COMPANY.



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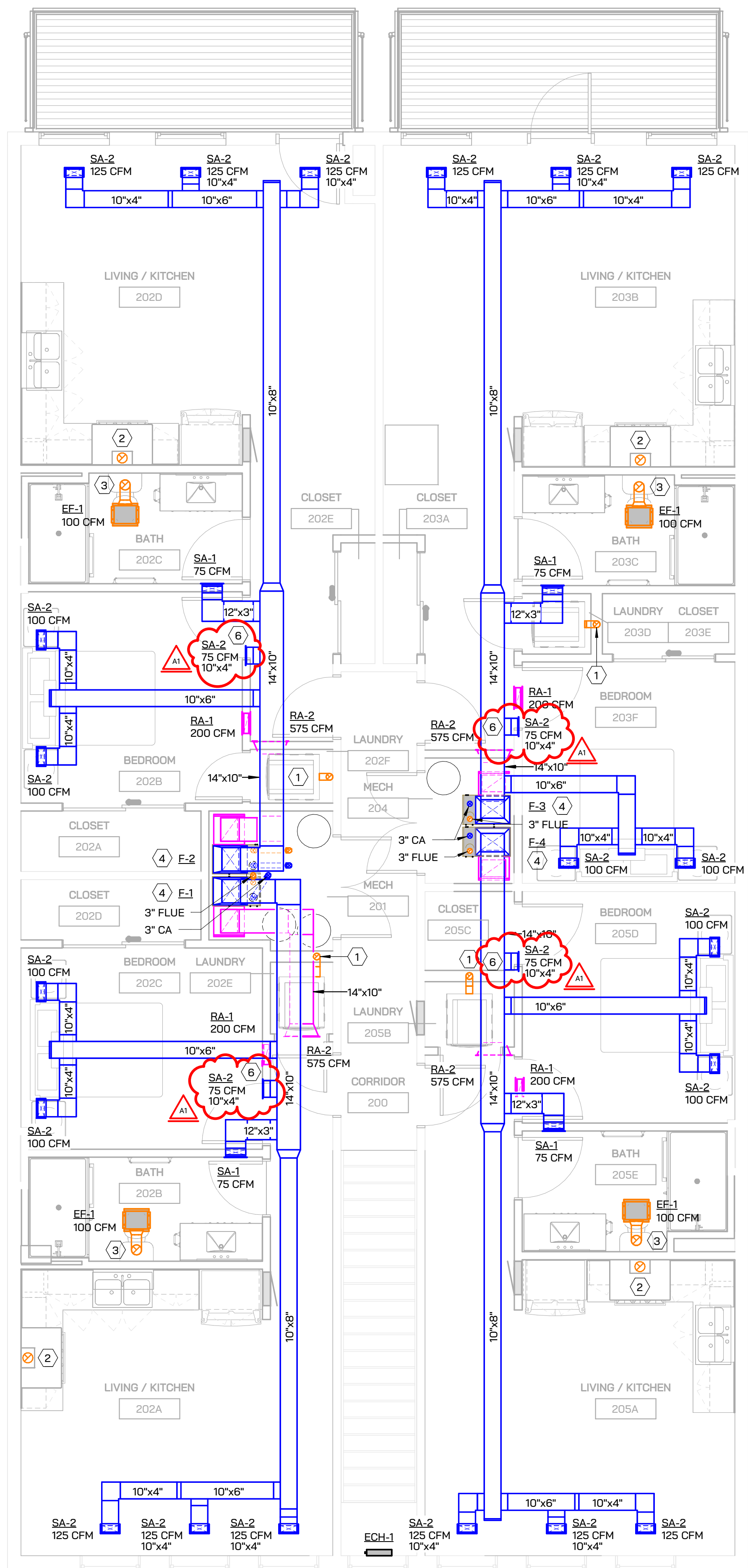
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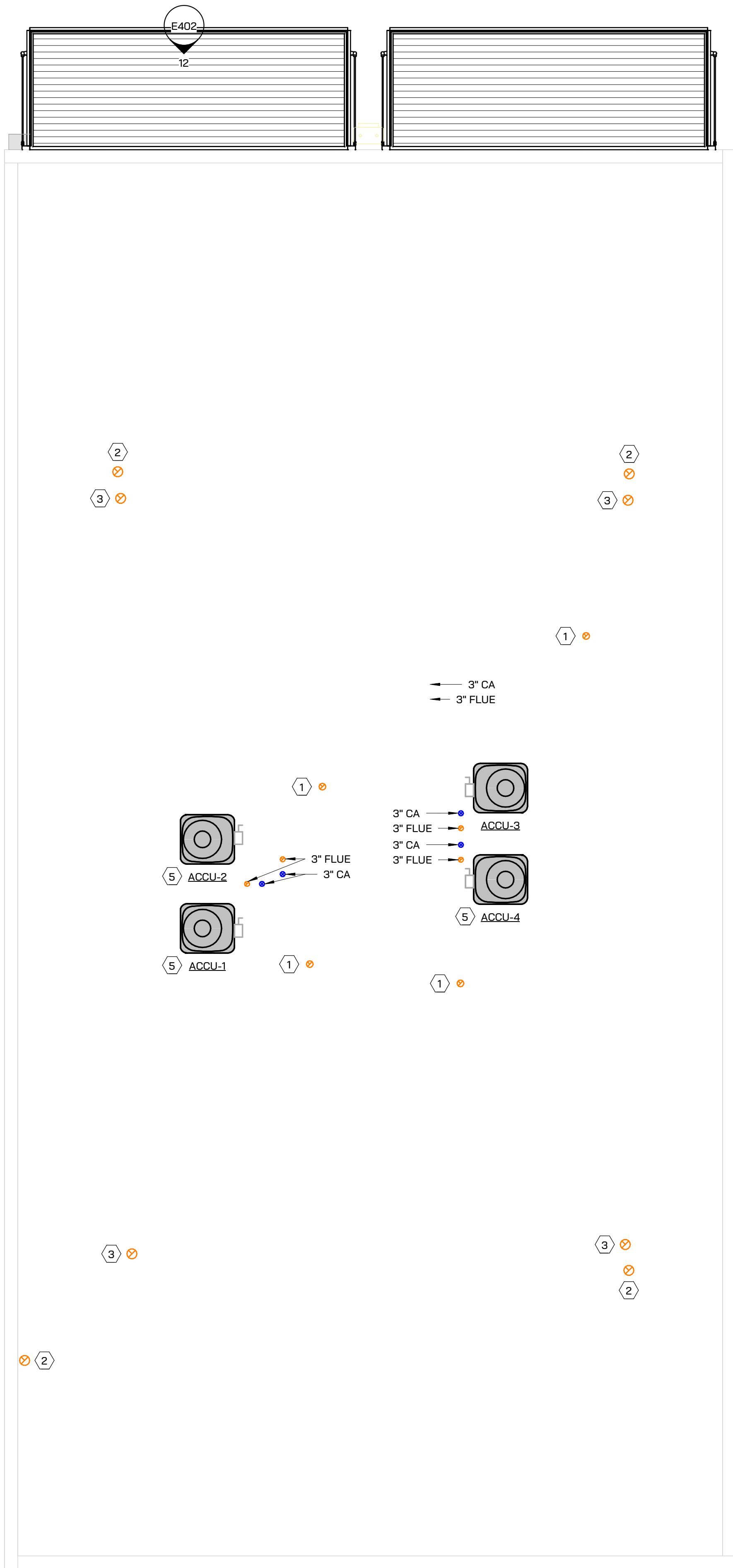


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23.119
SECOND FLOOR PLUMBING PLAN

M220



XSECOND FLOOR SHEET METAL PLAN
1/4" = 1'-0"



MECHANICAL ROOF PLAN
1/4" = 1'-0"

SHEET METAL KEYED NOTES

- 1 4" EA THRU ROOF. COORDINATE WITH APPLIANCES SUPPLIED BY OTHERS.
- 2 6" EA THRU ROOF. COORDINATE WITH APPLIANCES SUPPLIED BY OTHERS.
- 3 6" EA THRU ROOF. COORDINATE WITH APPLIANCES SUPPLIED BY OTHERS.
- 4 REFER TO FURNACE DETAIL.
- 5 ROUTE REFRIGERANT LINESET DOWN TO FURNACE PER MANUFACTURER'S RECOMMENDATIONS.
- 6 SUPPLEMENTAL SUPPLY AIR GRILLE LOCATED IN ATTIC SPACE.



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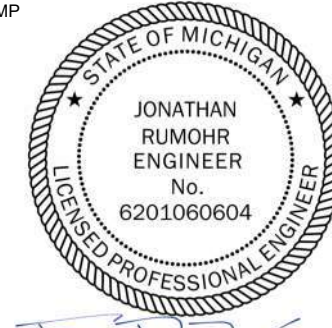
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**SECOND FLOOR & ROOF
MECHANICAL PLANS
M320**

VENTILATION SCHEDULE												
NUMBER	NAME	SPACE TYPE	SYSTEM NUMBER	PEOPLE VENTILATION			AREA VENTILATION			MINIMUM OUTDOOR AIRFLOW (CFM)	EXHASUT AIRFLOW	ADJUSTED OUTDOOR AIRFLOW (CFM)
				NO. OF PEOPLE	OUTDOOR AIR PER PERSON (CFM/PERSON)	PERSON OUTDOOR AIRFLOW (CFM)	OUTDOOR AIR PER AREA (CFM/SF)	AREA (SF)	AREA OUTDOOR AIRFLOW (CFM)			
200	CORRIDOR	GENERAL - CORRIDOR	ECH-1	0	0	0	0.06	166	10	10	0 CFM	
201	MECH	GENERAL - MECH. CLOSET	ECH-1	0	0	0	0.00	41	0	0	0 CFM	
204	MECH	GENERAL - MECH. CLOSET	ECH-1	0	0	0	0.00	28	0	0	0 CFM	
ECH-1: 3				0				234		10		0
202A	LIVING / KITCHEN	RESIDENTIAL - DWELLING UNIT	F-1	1	5	3	0.06	255	15	18	0 CFM	
202C	BEDROOM	RESIDENTIAL - BEDROOM	F-1	1	5	6	0.06	120	7	13	0 CFM	
202B	BATH	TOILET - PRIVATE (SINGLE USER)	F-1	0	0	0	0.00	60	0	0	0 CFM	
202D	CLOSET	GENERAL - CLOSET	F-1	0	0	0	0.00	27	0	0	0 CFM	
202E	LAUNDRY	GENERAL - CLOSET	F-1	0	0	0	0.00	11	0	0	0 CFM	
F-1: 5				2				472		31		0
202B	BEDROOM	RESIDENTIAL - BEDROOM	F-2	1	5	6	0.06	115	7	13	0 CFM	
202D	LIVING / KITCHEN	RESIDENTIAL - DWELLING UNIT	F-2	1	5	3	0.06	338	20	24	0 CFM	
202C	BATH	TOILET - PRIVATE (SINGLE USER)	F-2	0	0	0	0.00	57	0	0	0 CFM	
202A	CLOSET	GENERAL - CLOSET	F-2	0	0	0	0.00	27	0	0	0 CFM	
202F	LAUNDRY	GENERAL - CLOSET	F-2	0	0	0	0.00	11	0	0	0 CFM	
202E	CLOSET	GENERAL - CLOSET	F-2	0	0	0	0.00	10	0	0	0 CFM	
F-2: 6				2				558		36		0
203F	BEDROOM	RESIDENTIAL - BEDROOM	F-3	1	5	6	0.06	116	7	13	0 CFM	
203B	LIVING / KITCHEN	RESIDENTIAL - DWELLING UNIT	F-3	1	5	3	0.06	348	21	24	0 CFM	
203C	BATH	TOILET - PRIVATE (SINGLE USER)	F-3	0	0	0	0.00	57	0	0	0 CFM	
203E	CLOSET	GENERAL - CLOSET	F-3	0	0	0	0.00	20	0	0	0 CFM	
203A	CLOSET	GENERAL - CLOSET	F-3	0	0	0	0.00	10	0	0	0 CFM	
203D	LAUNDRY	GENERAL - CLOSET	F-3	0	0	0	0.00	10	0	0	0 CFM	
F-3: 6				2				561		37		0
205A	LIVING / KITCHEN	RESIDENTIAL - DWELLING UNIT	F-4	1	5	3	0.06	271	16	19	0 CFM	
205D	BEDROOM	RESIDENTIAL - BEDROOM	F-4	1	5	6	0.06	122	7	13	0 CFM	
205E	BATH	TOILET - PRIVATE (SINGLE USER)	F-4	0	0	0	0.00	58	0	0	0 CFM	
205C	CLOSET	GENERAL - CLOSET	F-4	0	0	0	0.00	17	0	0	0 CFM	
205B	LAUNDRY	GENERAL - CLOSET	F-4	0	0	0	0.00	14	0	0	0 CFM	
F-4: 5				2				482		32		0

GRILLE, REGISTER, DIFFUSER SCHEDULE												
MARK	MANUFACTURER	MODEL	FACE SIZE	NECK SIZE	MIN FLOW	MAX FLOW	GRD THROW	ACCESSORY	MATERIAL	COLOR	MOUNTING	REMARKS
SA-1	PRICE	620	10"x4"	10"x4"	65 CFM	175 CFM	4-7-12	VCD	ALUMINUM	PER ARCH.	WALL	
SA-2	PRICE	620	10"x4"	10"x4"	65 CFM	175 CFM	7-12-17	VCD	ALUMINUM	PER ARCH.	CEILING	
RA-1	PRICE	630	12"x8"	12"x8"	0 CFM	300 CFM	-	VCD	ALUMINUM	PER ARCH.	WALL	
RA-2	PRICE	630	20"x14"	20"x14"	360 CFM	1250 CFM	-	VCD	ALUMINUM	PER ARCH.	WALL	

EXHAUST FAN SCHEDULE										
MARK	MANUFACTURER	MODEL	LOCATION	MOUNTING	MAX (CFM)	ESP (IN)	SPEED (RPM) - FAN	SONES	VOLTAGE	
EF-1	GREENHECK	SP-A110	BATHROOM	CEILING	100	0.19	950	0.5	120 V	

NOTES: 1.) FAN OPERATION INTERLOCKED WITH SPACE LIGHT SWITCH.

FURNACE SCHEDULE											
INDOOR EQUIPMENT											
TAG	TYPE	MANUFACTURER	MODEL	BTU	EFFICIENCY	STAGE	WEIGHT	MAX (CFM)	VOLT/PH	MCA	NOTES
F-1	UPFLOW	TRANE	S9X2B040	38,800	96.00%	2	122	650	120/1	15	1
F-2	UPFLOW	TRANE	S9X2B040	38,800	96.00%	2	122	650	120/1	15	1
F-3	UPFLOW	TRANE	S9X2B040	38,800	96.00%	2	122	650	120/1	15	1
F-4	UPFLOW	TRANE	S9X2B040	38,800	96.00%	2	122	650	120/1	15	1
NOTES:	1) PROVIDE W/ 2" FILTER IN RETURN AIR CONNECTION.										
OUTDOOR EQUIPMENT											
TAG	TYPE	MANUFACTURER	MODEL	LOCATION	SERVING	SIZE (TONS)	REFRIGERANT	WEIGHT	VOLT/PH	MCA	NOTES
ACCU-1	OUTDOOR COND	TRANE	4TTR7024A1	ROOF	F-1	2	410A	276	240/1	15	1
ACCU-2	OUTDOOR COND	TRANE	4TTR7024A1	ROOF	F-2	2	410A	276	240/1	15	1
ACCU-3	OUTDOOR COND	TRANE	4TTR7024A1	ROOF	F-3	2	410A	276	240/1	15	1
ACCU-4	OUTDOOR COND	TRANE	4TTR7024A1	ROOF	F-4	2	410A	276	240/1	15	1
NOTES:	1) PROVIDE W/ COMPOSITE EQUIPMENT PAD.										

WATER HEATER SCHEDULE												
TAG	TYPE	MANUFACTURER	MODEL	CAPACITY	EFFICIENCY	GAL	GPH @ 100F RISE	WEIGHT	VOLT/PH	MCA	NOTES	
WH-1	ELEC. STORAGE	LOCHINVAR	KTJ040KD	4500 W	0.92	40	19	125	240/1	20		

ELECTRIC CABINET HEATER SCHEDULE											
TAG	TYPE	MANUFACTURER	MODEL	LOCATION	SERVING	MAX (CFM)	CAPACITY (WATTS)	VOLT/PH	AMPS	NOTES	
ECH-1	ELECTRIC	QMARK	CWH3404F	CORRIDOR	CORRIDOR - 301	100	4,000	240/1/60	15	1	
NOTES:	1.) INSTALL 18" ABOVE DOOR.										

NATURAL GAS SCHEDULE		
EQUIPMENT	LOAD (CFH)	PRESSURE (IN WG)
F-1	40	4 - 14
OVEN/RANGE	95	4 - 14
M-1	135	
F-2	40	4 - 14
OVEN/RANGE	95	4 - 14
M-2	135	
F-3	40	4 - 14
OVEN/RANGE	95	4 - 14
M-3	135	
F-4	40	4 - 14
OVEN/RANGE	95	4 - 14
M-4	135	
TOTAL	540	



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PROJECT
238 E MICHIGAN
PROJECT
238 E. MICHIGAN AVE., KALAMAZOO MI
CLIENT
BRIAN & CARMEN HARRIS

ISSUE
CONSTRUCTION DOCUMENTS

REVISION

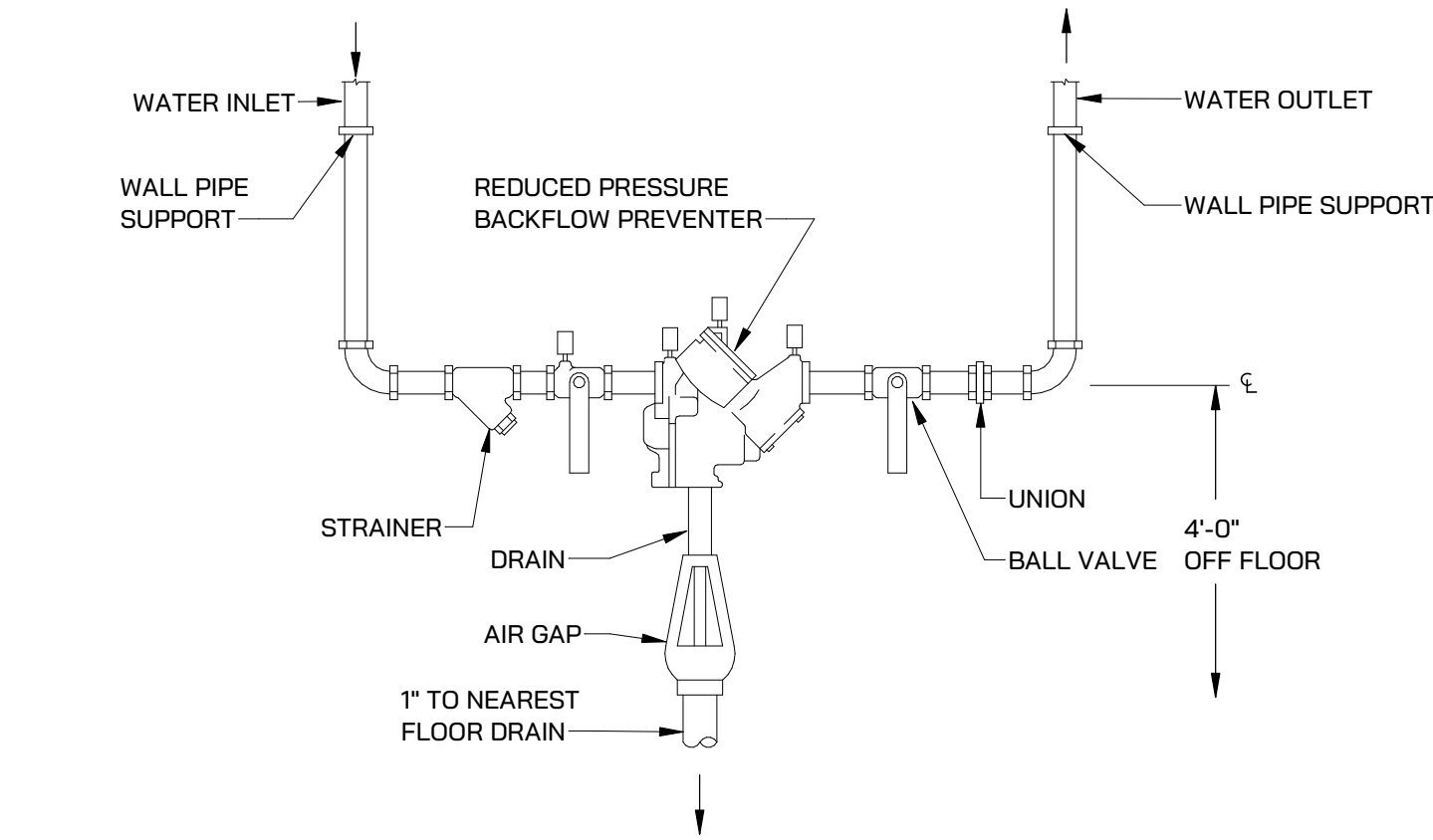
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DATE 11/20/2023 10:21:17 AM
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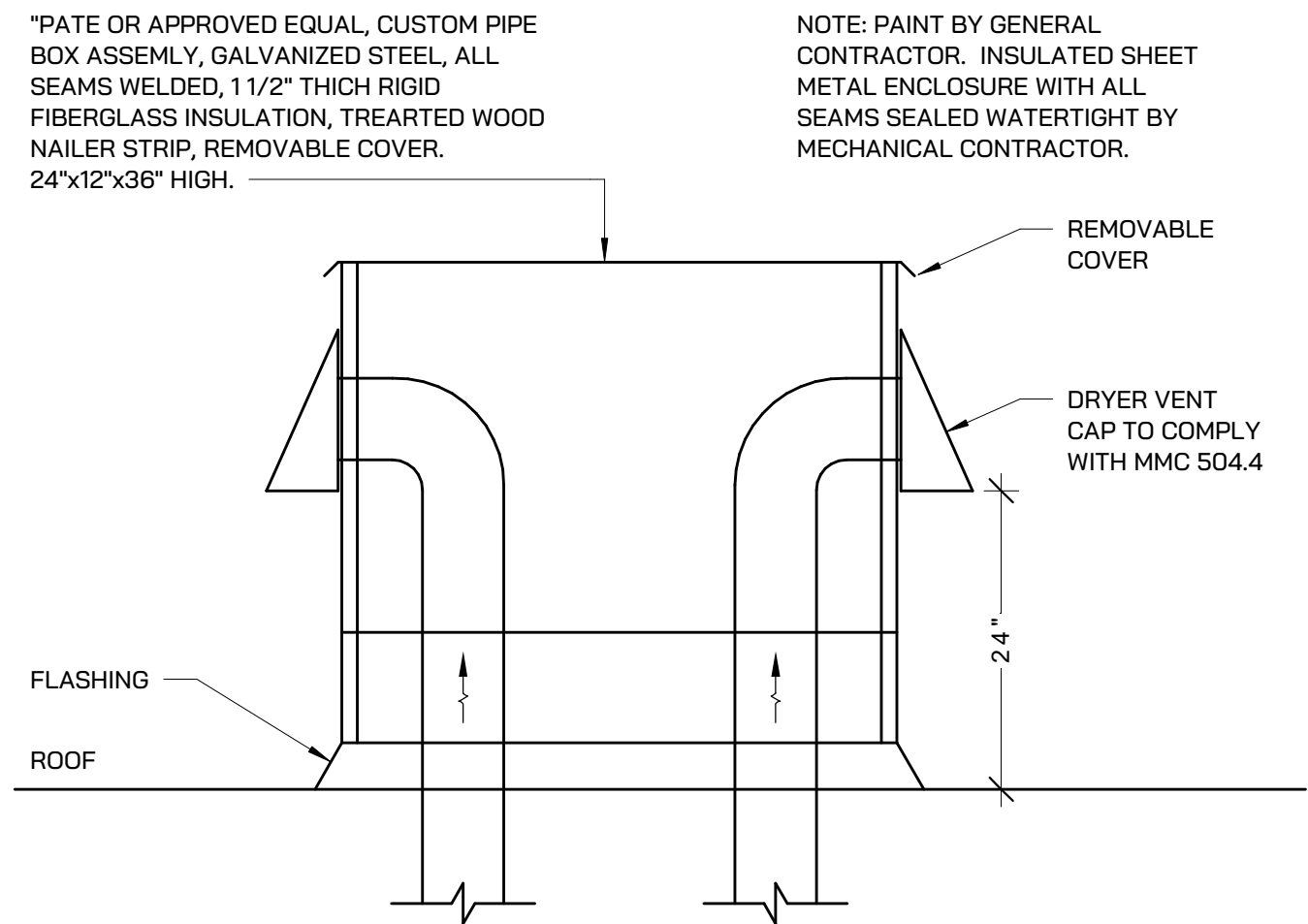
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MECHANICAL SCHEDULES

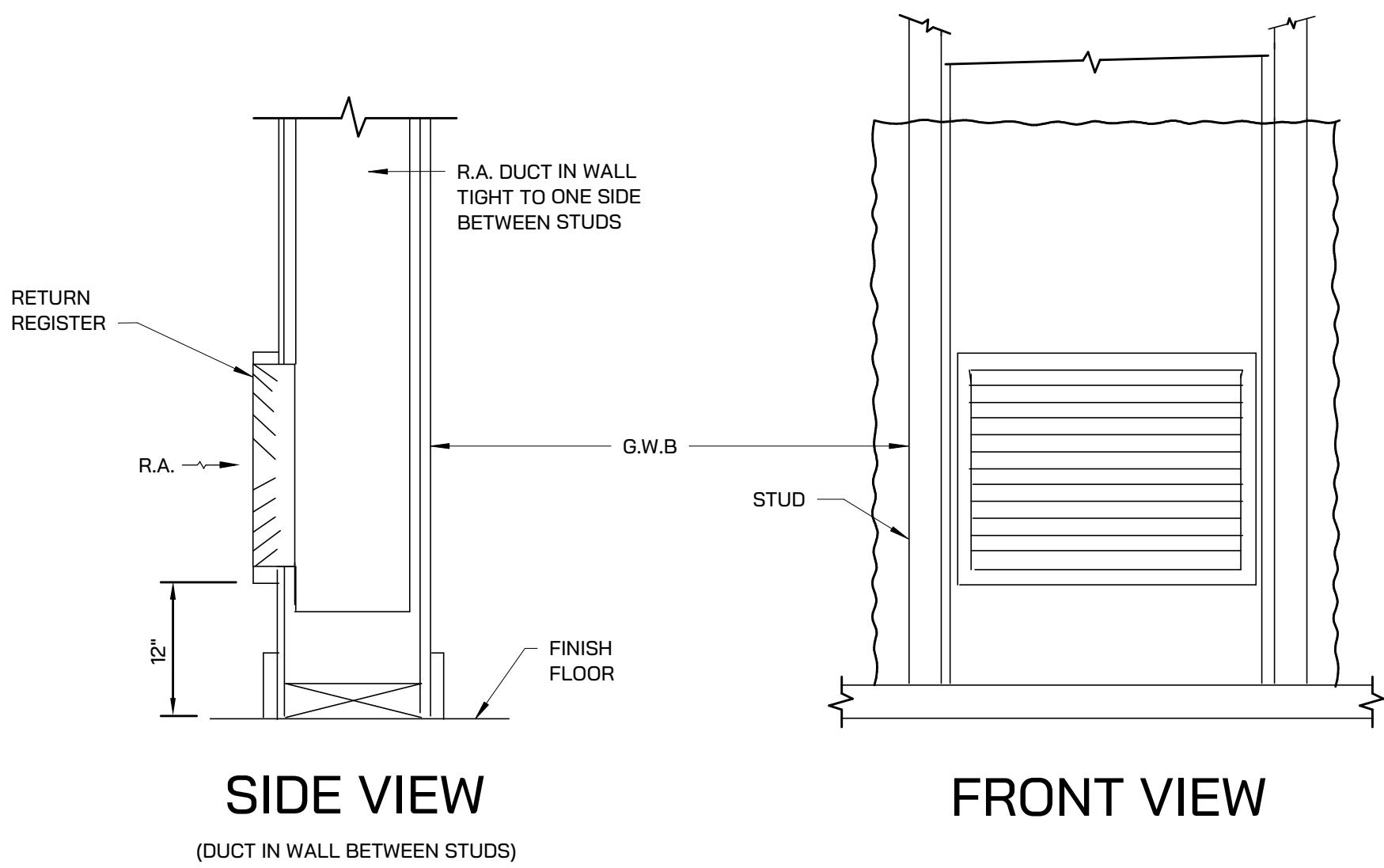
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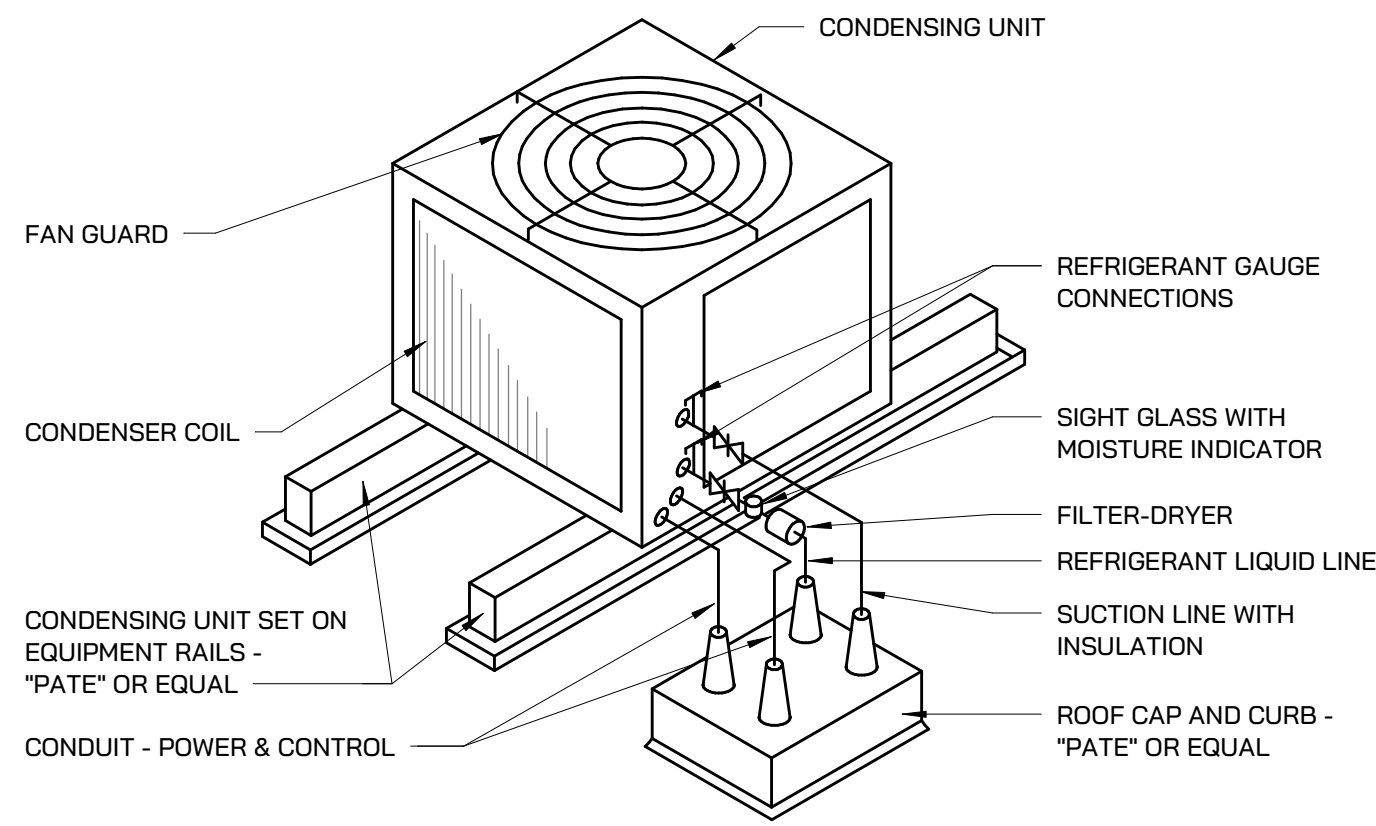
① BACKFLOW PREVENTOR DETAIL
1/8" = 1'-0"



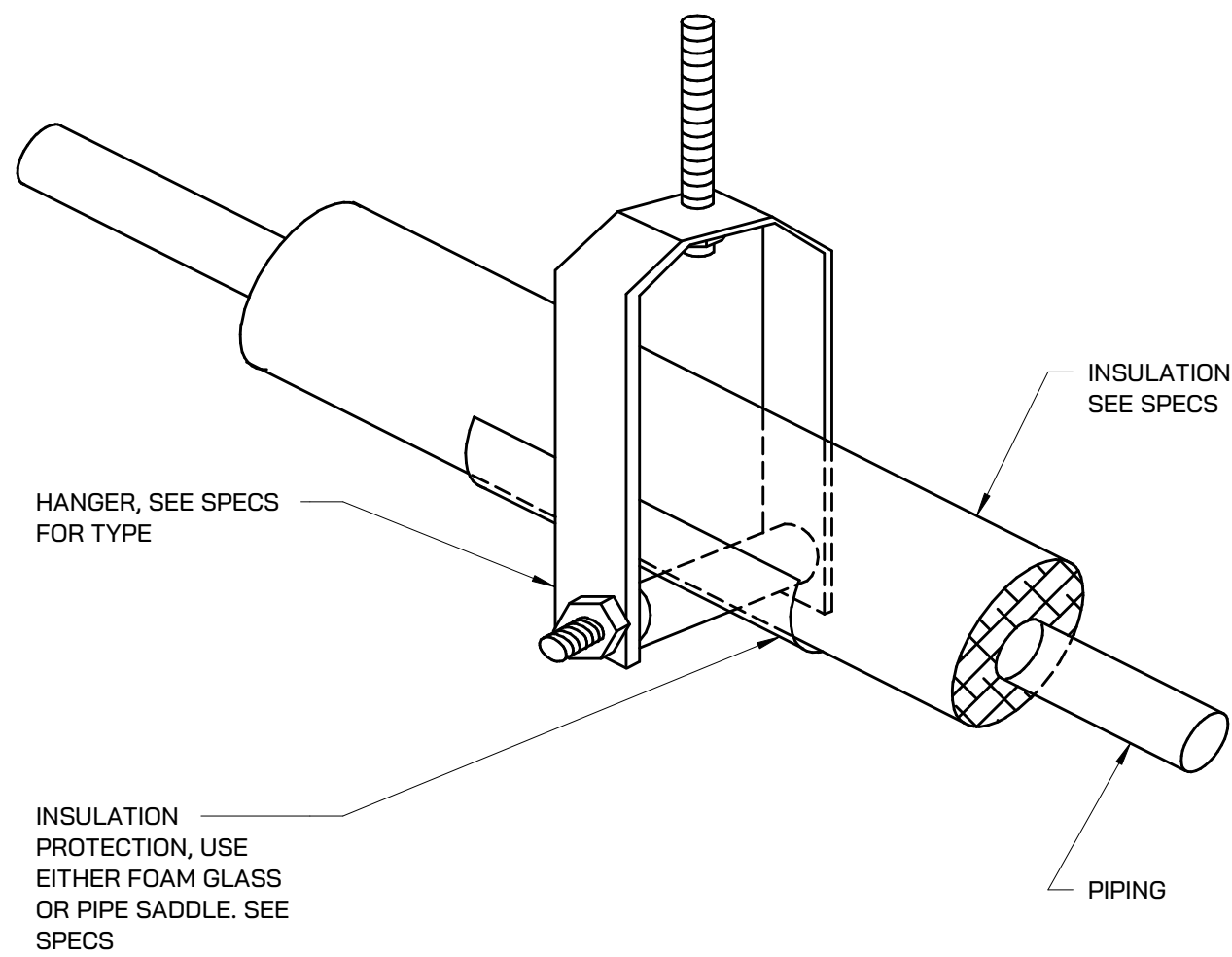
⑤ DRYER VENT DETAIL
1/8" = 1'-0"



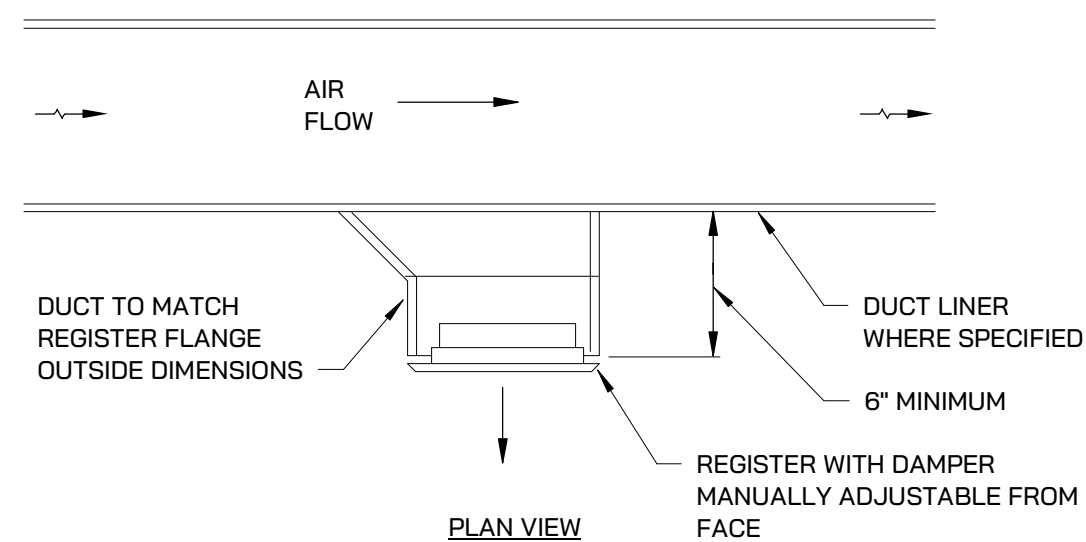
⑨ WALL MOUNTED RETURN AIR GRILLE DETAIL
1/8" = 1'-0"



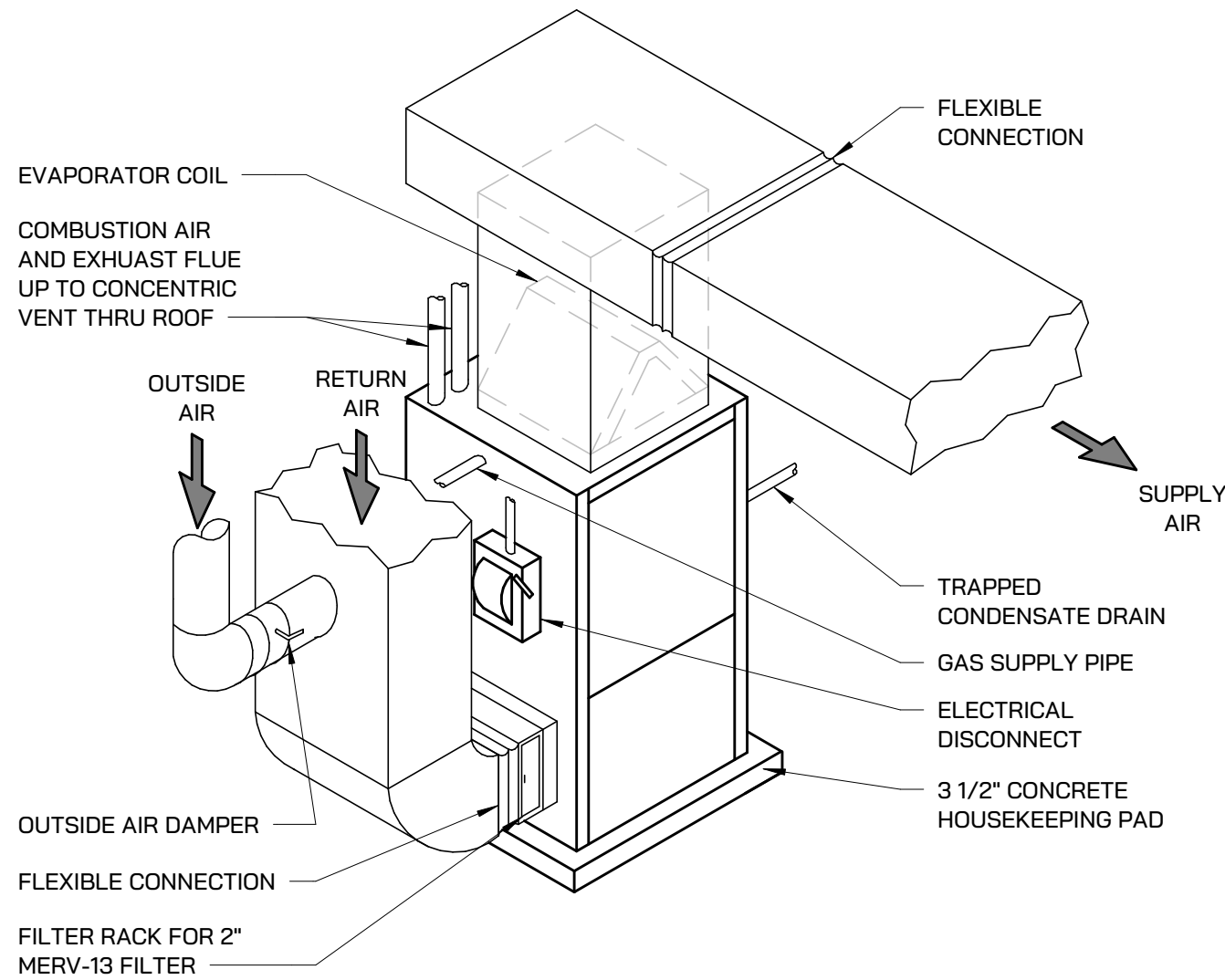
② AIR COOLED CONDENSING UNIT - ROOF MOUNTED
1/8" = 1'-0"



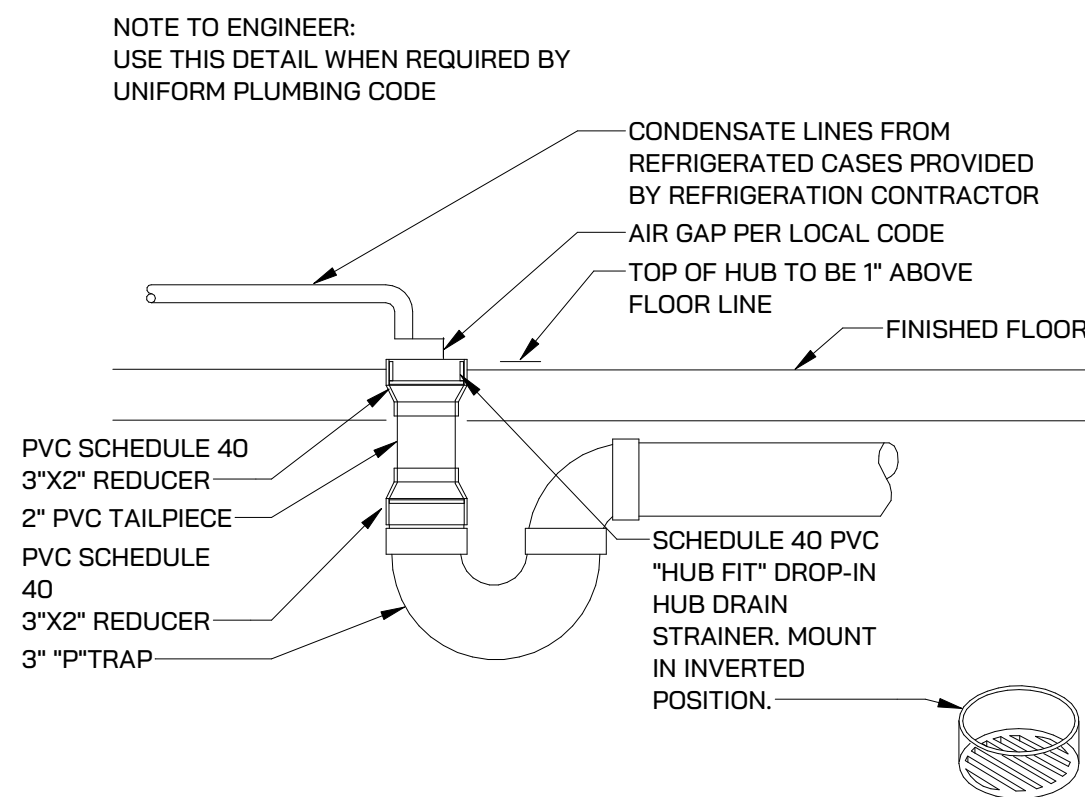
⑥ PIPE HANGER DETAIL
1/8" = 1'-0"



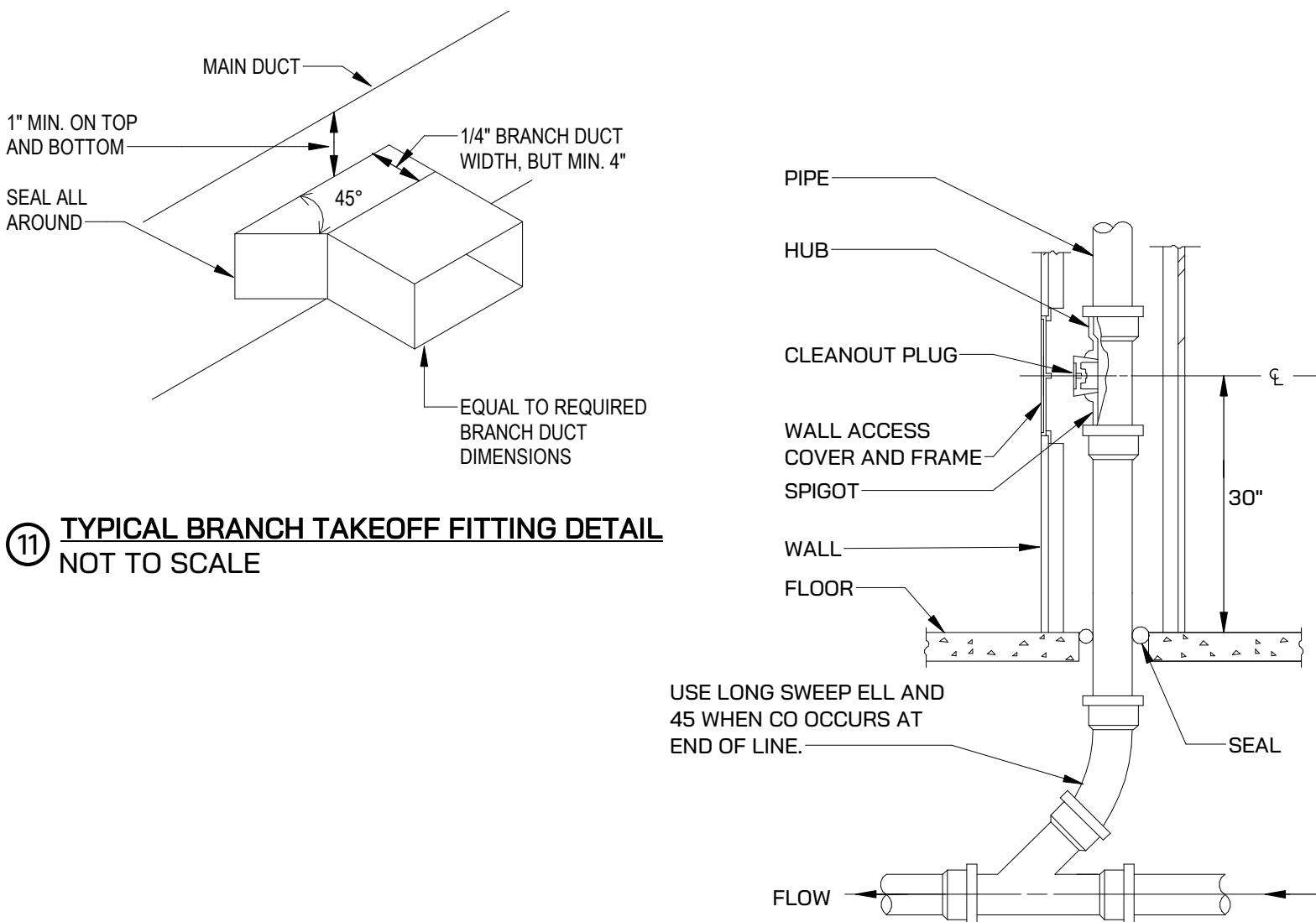
⑩ TYPICAL DUCT MOUNTED REGISTER
1/4" = 1'-0"



③ UPFLOW GAS FIRED FURNACE DETAIL
1/8" = 1'-0"

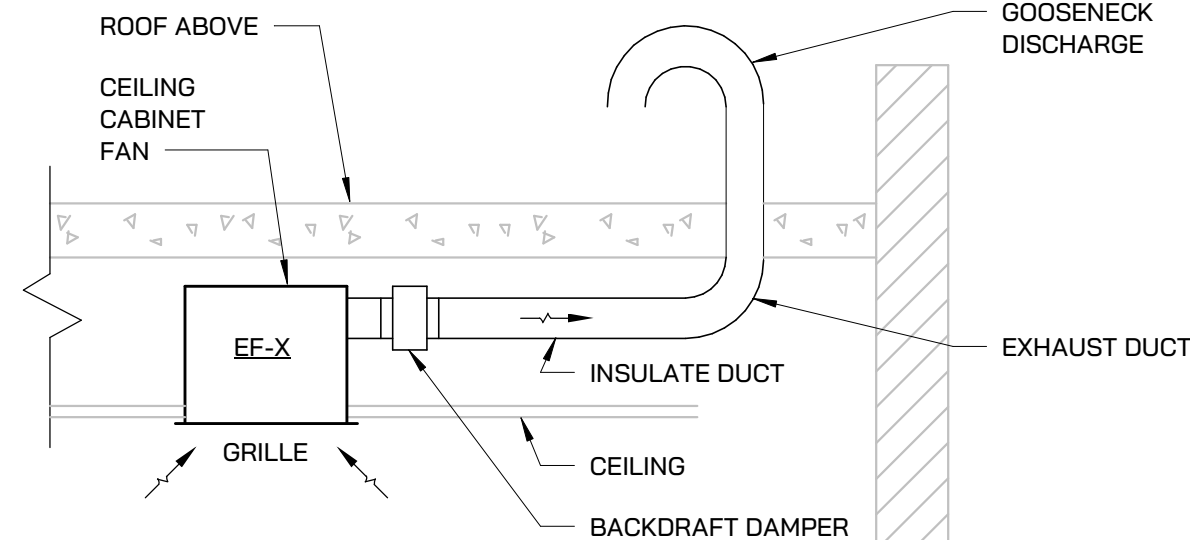


⑦ COMBINATION WASTE & VENT CONDENSATE DRAIN
1/8" = 1'-0"

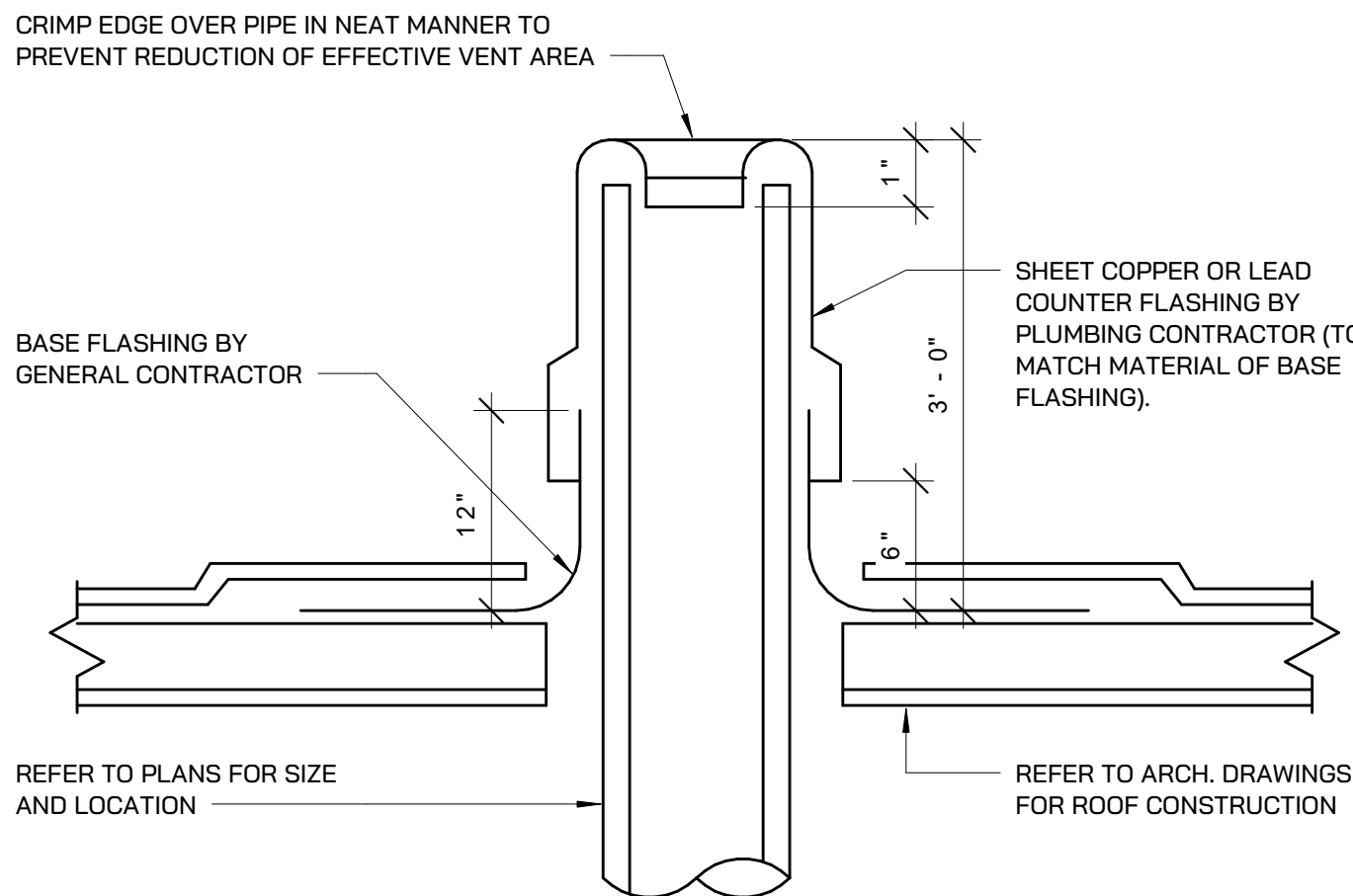


⑪ TYPICAL BRANCH TAKEOFF FITTING DETAIL
NOT TO SCALE

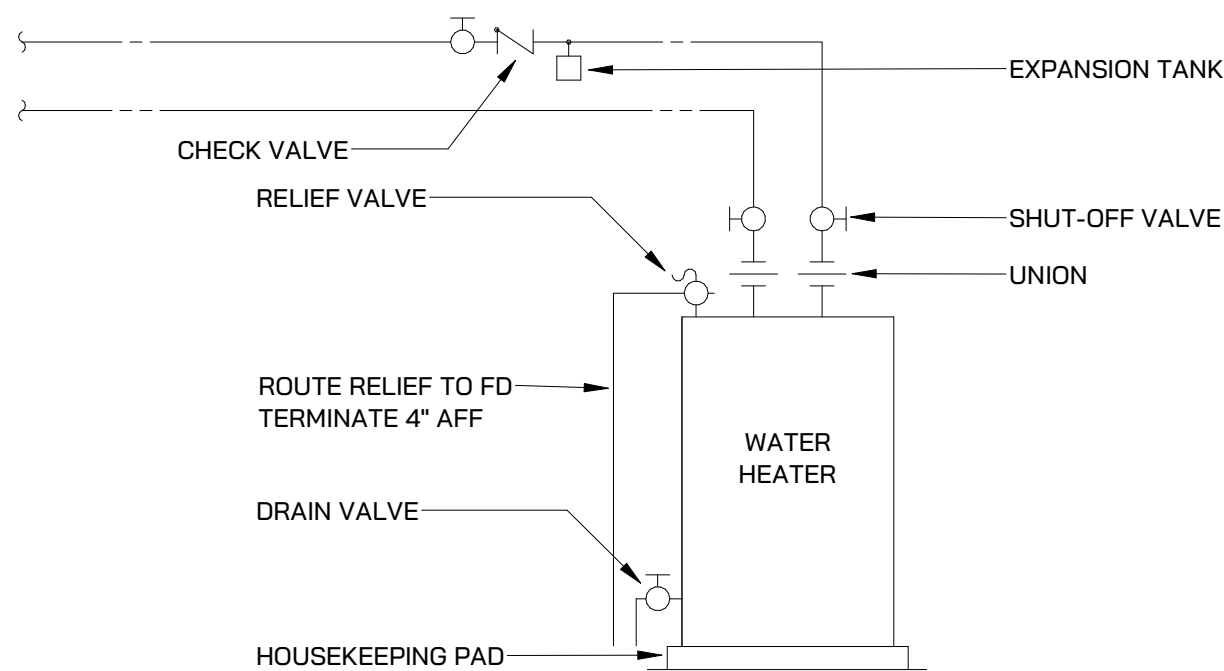
⑫ WALL CLEAN OUT DETAIL
1/8" = 1'-0"



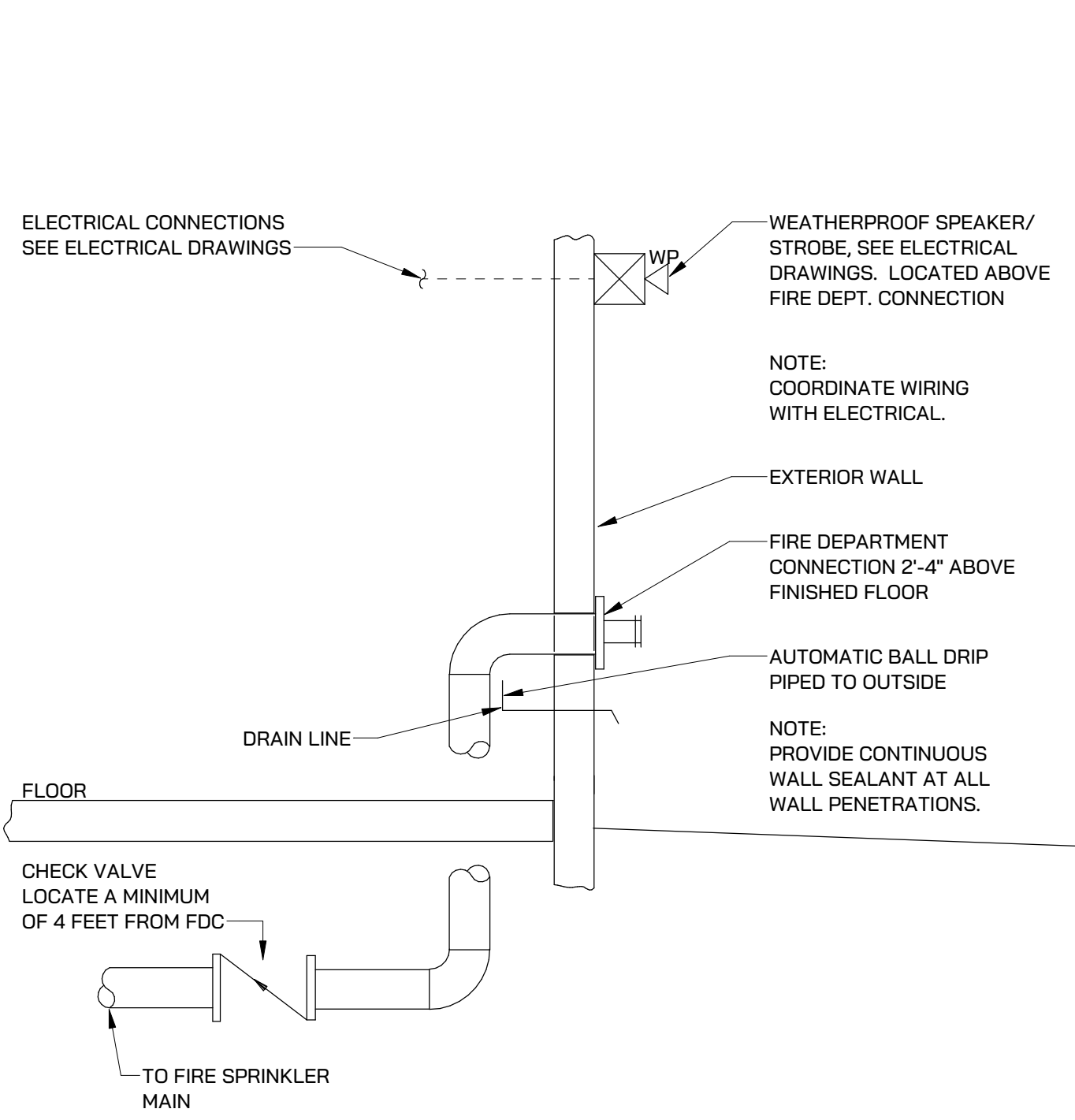
④ CABINET EXHAUST FAN - ROOF DISCHARGE
1/8" = 1'-0"



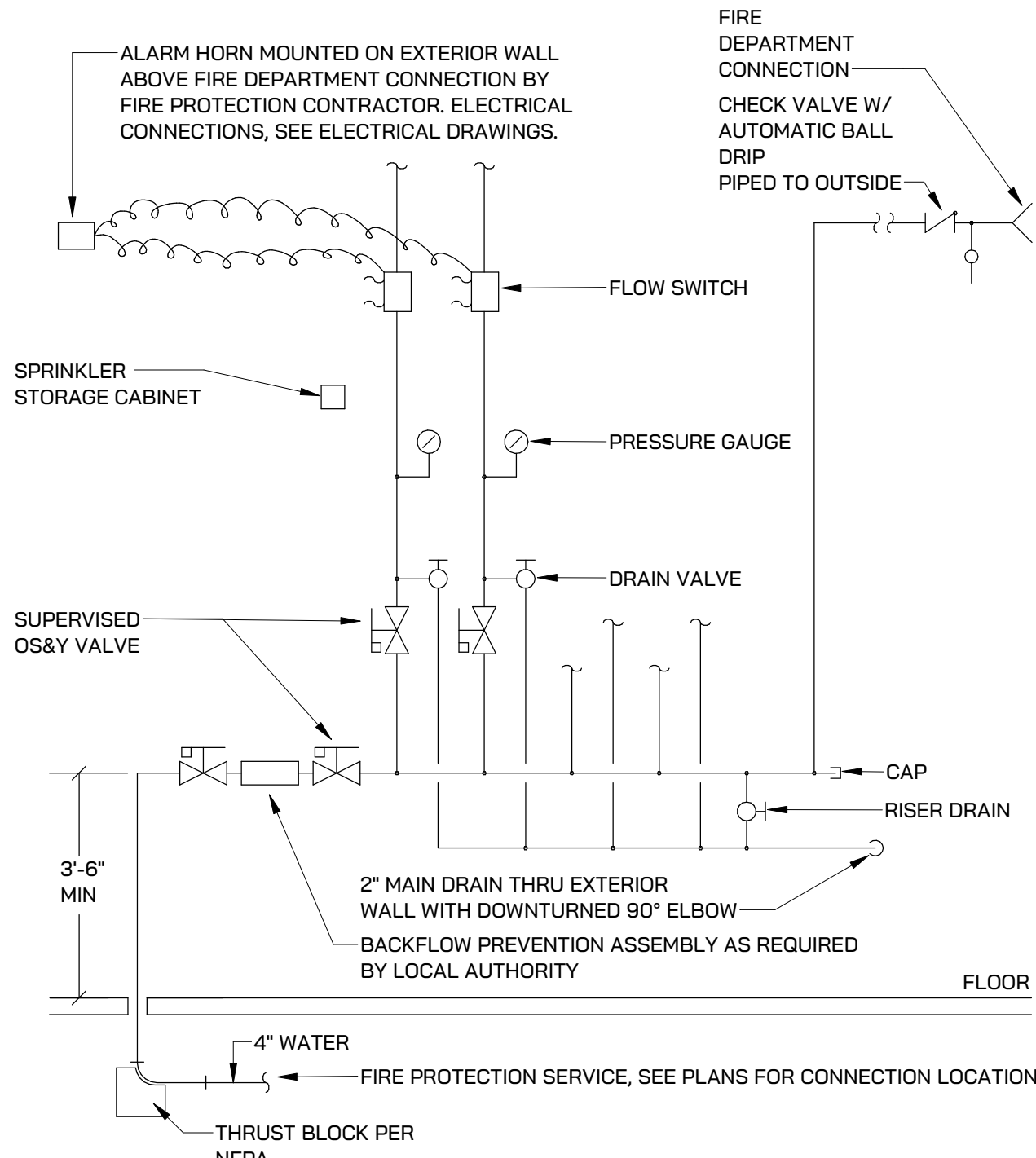
⑧ PLUMBING VENT THROUGH FLAT ROOF DETAIL
1/8" = 1'-0"



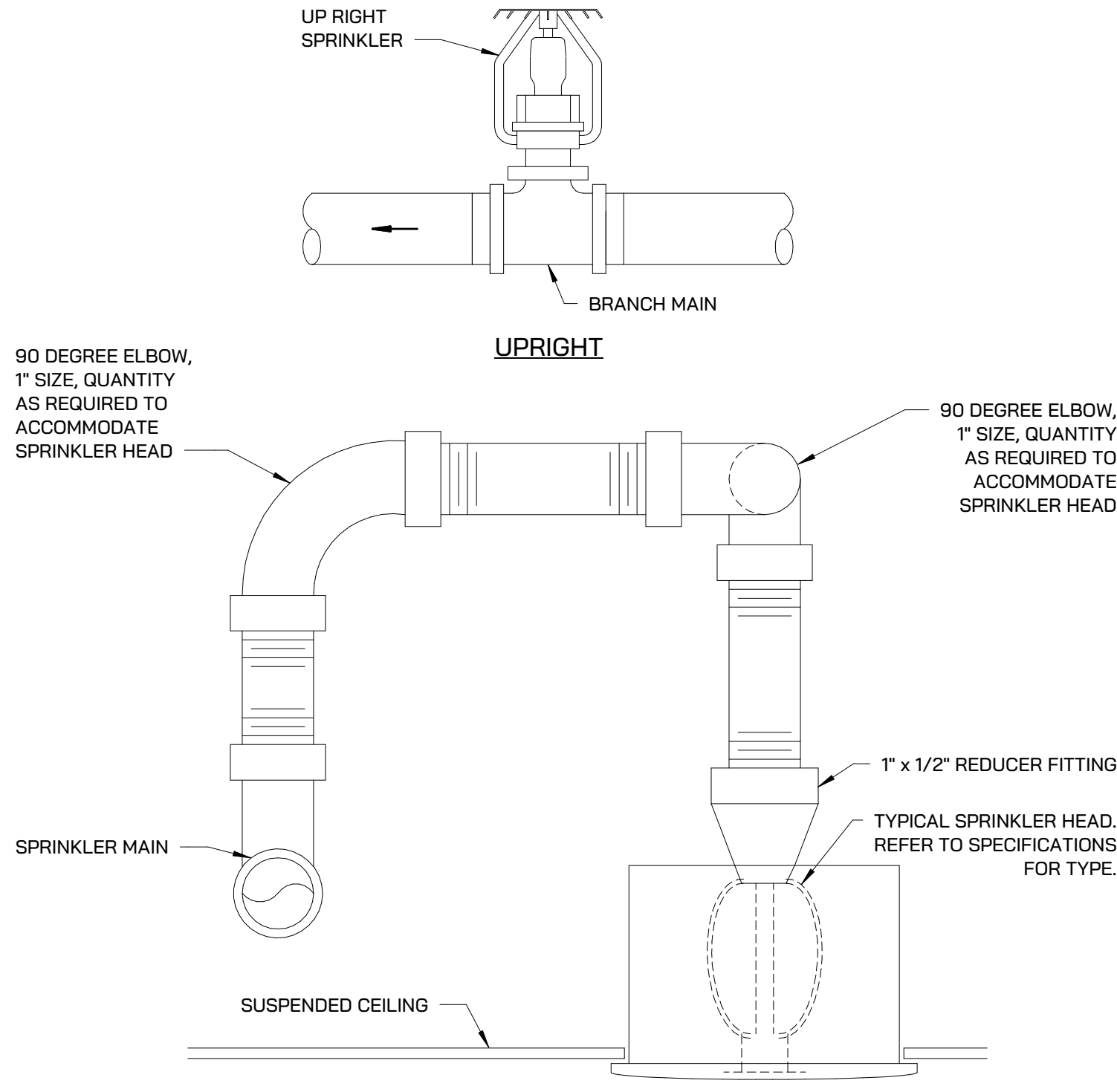
⑬ WATER HEATER PIPING DETAIL - SINGLE
1/8" = 1'-0"



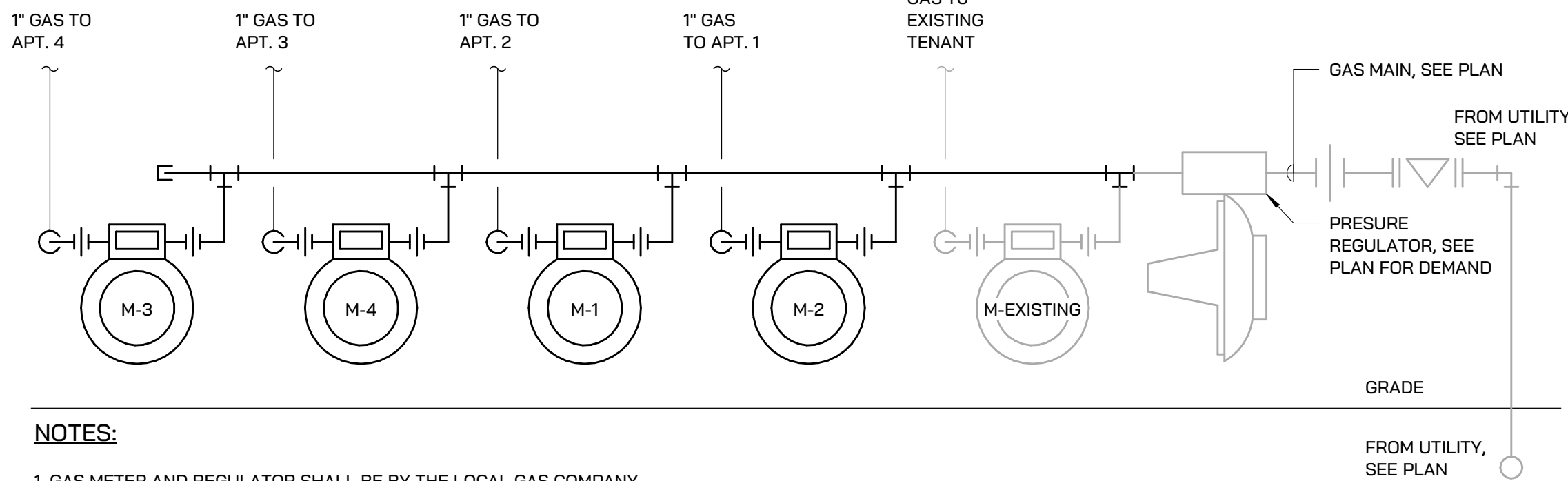
① FIRE DEPARTMENT CONNECTION DETAIL
1/8" = 1'-0"



② FIRE PROTECTION ASSEMBLY DETAIL
1/8" = 1'-0"



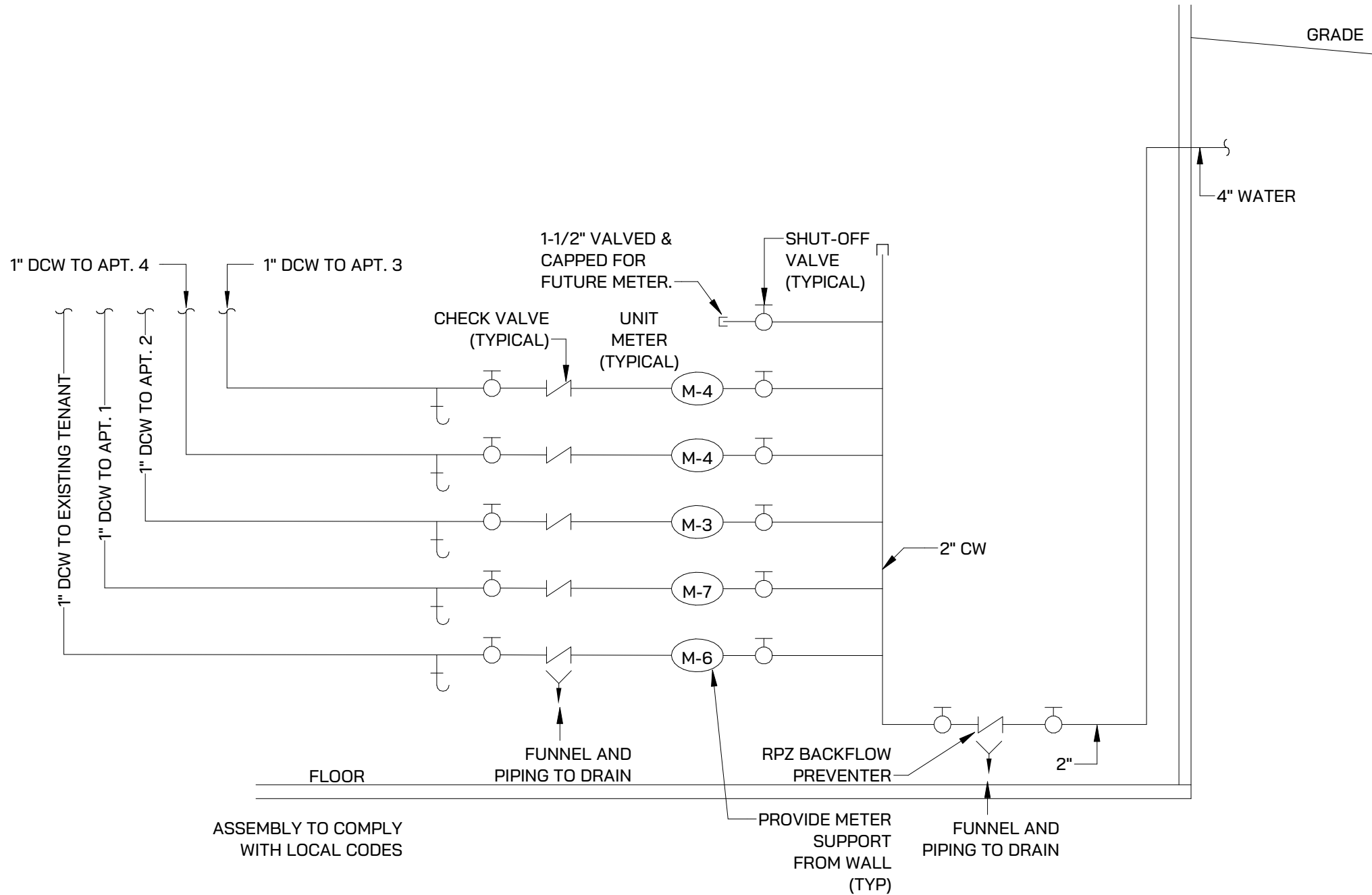
③ TYPICAL SPRINKLER HEAD DETAIL
1/8" = 1'-0"



NOTES:

1. GAS METER AND REGULATOR SHALL BE BY THE LOCAL GAS COMPANY.
ALL COSTS WILL BE INCURRED BY THE PLUMBING CONTRACTOR.

④ GAS METER BANK DETAIL
1/8" = 1'-0"



⑤ WATER METER BANK DETAIL
1/8" = 1'-0"

ELECTRICAL ABBREVIATION LIST

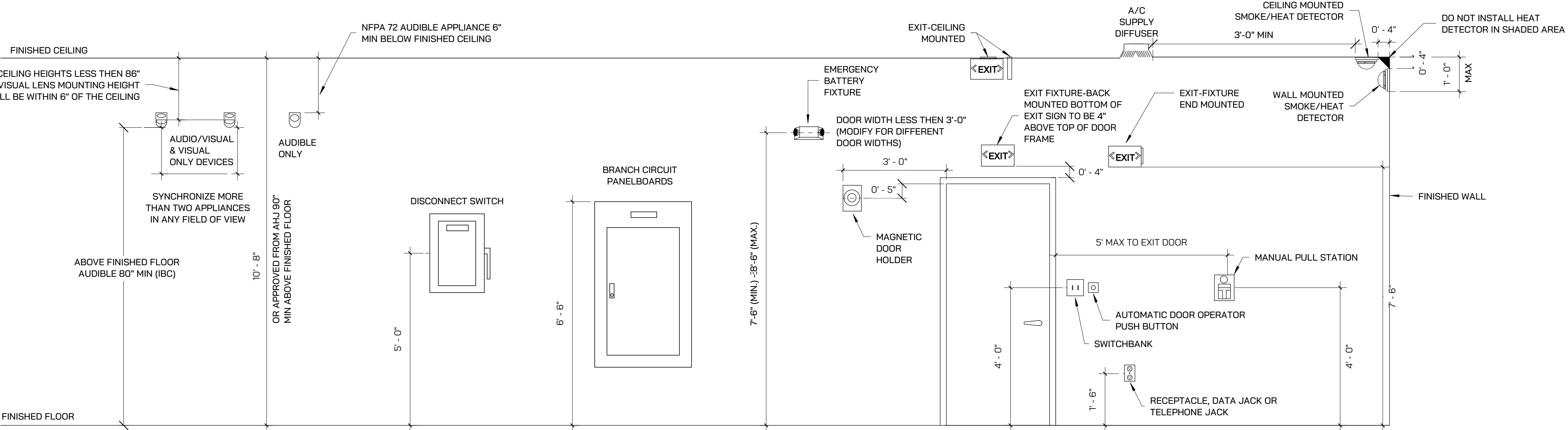
ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A	AMPERES	MAX	MAXIMUM
AF	AMPERES FRAME (BREAKER RATING)	MCB	MAIN CIRCUIT BREAKER
AFCI	ARC FAULT CIRCUIT INTERRUPTER	MCC	MOTOR CONTROL CENTER
A.F.F.	ABOVE FINISH FLOOR	MDP	MAIN DISTRIBUTION PANEL
AIC	AMPS INTERRUPTING CAPACITY	MECH	MECHANICAL
AL	AUDIENCE LEFT	MIN	MINIMUM
AR	AUDIENCE RIGHT	MISC.	MISCELLANEOUS
AT	AMPS TRIP (BREAKER SETTING)	NLO	MAIN LUGS ONLY
ATS	AUTOMATIC TRANSFER SWITCH	MTD	MOUNTED
AUX	AUXILIARY	MTG	MOUNTING
		MTR	MOTOR
BKR	BREAKER	N	NEUTRAL
BPS	BOLTED PRESSURE SWITCH	NC	NORMALLY CLOSED
		NEC	NATIONAL ELECTRICAL CODE
C	CONDUIT	NF	NON-FUSIBLE
CB	CIRCUIT BREAKER	NIC	NOT IN CONTRACT
CKT	CIRCUIT	NL	NIGHT LIGHT
CT	CURRENT TRANSFORMER	NO	NORMALLY OPEN
		NTS	NOT TO SCALE
DEMO	DEMOLITION	OC	ON CENTER
DIM	DIMENSION	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
DISC	DISCONNECT	OFI	OWNER FURNISHED, OWNER INSTALLED
DP	DISTRIBUTION PANEL		
DS	DOWNSTAGE		
DWG	DRAWING		
EBU	EMERGENCY BATTERY UNIT	P	POLE
EC	ELECTRICAL CONTRACTOR	PB	PUSHBUTTON STATION
ELEC	ELECTRICAL	PH	PHASE
EM/ EMERG	EMERGENCY	PT	POTENTIAL TRANSFORMER
EMT	ELECTRICAL METALLIC TUBING	PDP	POWER DISTRIBUTION PANEL
EO	ELECTRICALLY OPERATED		
EPO	EMERGENCY POWER OFF	RECEPT.	RECEPTACLE
EW	ELECTRIC WATER COOLER	RCP	RECEPTACLE
EXIST	EXISTING	RDP	RECEPTACLE DISTRIBUTION PANEL
EXT	EXTERIOR	RP	RECEPTACLE PANEL
		RSC	RIGID STEEL CONDUIT
FA	FIRE ALARM		
FLA	FULL LOAD AMPS	SCHED	SCHEDULE
FLR	FLOOR	SW	SWITCH
FOH	FRONT OF HOUSE	SWBD	SWITCHBOARD
FSEC	FOOD SERVICE EQUIPMENT	SWGR	SWITCHGEAR
FU	FUSE		
G/GRD/EG	GROUND	TB	TERMINAL BOX
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	TELECOM	TELECOMMUNICATIONS
GFP	GROUND FAULT PROTECTION	TR	TAMPER RESISTANT
		TTP	TELEPHONE TERMINAL BACKBOARD
		TYP	TYPICAL
HOA	HAND-OFF-AUTO		
HP	HORSEPOWER	UNO	UNLESS OTHERWISE NOTED
HV	HIGH VOLTAGE	US	UPSTAGE
HZ	HERTZ		
		V	VOLTS
IG	ISOLATED GROUND		
JB	JUNCTION BOX	W	WIRE OR WATTS
		WG	WIRE GUARD
		WP	WEATHERPROOF
KV	KILOVOLT		
KVA	KILOVOLT - AMPERES	XFMR	TRANSFORMER
KW	KILOWATT	XP	EXPLOSION PROOF
KWH	KILOWATT - HOURS		
		(E)	EXISTING
LA	LIGHTING ARRESTOR	(R)	RELOCATED
LP	LIGHTING PANEL		
LDP	LIGHTING DISTRIBUTION PANEL		

ELECTRICAL SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	LIGHTING FIXTURE - ARCHITECTURAL TROFFER		CONTROL PANEL		SECURITY CAMERA		SIMPLEX / DUPLEX RECEPTACLE
	EMERGENCY LIGHTING FIXTURE		MOTOR		MOTION DETECTOR		SIMPLEX / DUPLEX RECEPTACLE CONTROLLED BY AUTOMATIC CONTROL DEVICE / SYSTEM
	LIGHTING FIXTURE - PENDANT		VARIABLE FREQUENCY DRIVE		SECURITY KEY SWITCH		QUAD RECEPTACLE
	WALL MOUNTED LIGHTING FIXTURE		MANUAL CONTROLLER		DOOR CONTACT		ABOVE COUNTER DUPLEX RECEPTACLE (SIMILAR FOR TAMPER RESISTANT, QUADS, EMERGENCY AND GFI RECEPTACLES)
	LIGHTING FIXTURE		MAGNETIC CONTROLLER		KEY PAD		DUPLEX RECEPTACLE-GROUND FAULT CIRCUIT INTERRUPTER
	LIGHTING TRACK OR ROPE LIGHT		COMBINATION MAGNETIC CONTROLLER		CARD READER		DUPLEX EMERGENCY RECEPTACLE
	TRACK LIGHTING FIXTURE		NON-FUSIBLE DISCONNECT SWITCH		DURESS PUSH BUTTON STATION		USB RECEPTACLE
	POLE MOUNTED LIGHTING FIXTURE		FUSIBLE DISCONNECT SWITCH		DELAYED EGRESS		CEILING MOUNTED DUPLEX RECEPTACLE
	POLE MOUNTED LIGHTING FIXTURE - POST TOP		ENCLOSED CIRCUIT BREAKER		REQUEST TO EXIT STATION		POWER POLE - WIREMOLD TYPE
	BOLLARD LIGHTING FIXTURE		PUSH BUTTON STATION		CIRCUIT BREAKER		SPECIAL RECEPTACLE - REFER TO ELECTRICAL STANDARD SCHEDULES
	EMERGENCY LIGHTING UNIT		EMERGENCY POWER OFF BUTTON		DRAWOUT CIRCUIT BREAKER MANUALLY / OPERATED		MULTI-OUTLET RACEWAY - LEGRAND AL3300 OR EQUAL
	EXIT LIGHTING FIXTURE WITH DIRECTIONAL ARROWS (SHADED AREA INDICATES FACE)		AUTOMATIC DOOR CONTROLLER		SWITCH		FIREFIGHTERS PHONE JACK
	EXIT LIGHTING FIXTURE WITH DIRECTIONAL ARROWS (SHADED AREA INDICATES FACE)		AUTOMATIC DOOR PUSH PAD OPERATOR		AUTOMATIC OR MANUAL TRANSFER SWITCH		FIRE ALARM CONTROL PANEL
	EXIT LIGHTING FIXTURE - WALL MOUNTED		GROUND ROD		FUSE		POKE-THROUGH ASSEMBLY - LEGRAND EVOLUTION SERIES OR EQUAL
	GENERATOR TRANSFER DEVICE		GROUND CONNECTION		TRANSFORMER		FLOOR BOX ASSEMBLY - LEGRAND EVOLUTION SERIES OR EQUAL
	LIGHTING CONTROL DEVICE - REFER TO LIGHTING CONTROL SCHEDULE		CONDUIT SLEEVE WITH BUSHINGS LENGTH AS REQUIRED "X" INDICATES CONDUIT SIZE		CURRENT TRANSFORMER		EQUIPMENT CONNECTION - REFER TO ELECTRICAL FEEDER AND PANEL SCHEDULE FOR BREAKER AND CONDUCTOR SIZE/QUANTITY
	SINGLE POLE TOGGLE SWITCH		CONDUIT STUB - UP/DOWN		POTENTIAL TRANSFORMER		JUNCTION BOX
	TWO POLE TOGGLE SWITCH		EMPTY BOX FOR FUTURE TELECOMMUNICATION OUTLET		LIGHTNING ARRESTOR		BRANCH CIRCUIT PANEL BOARD - 208/120V
	3 WAY TOGGLE SWITCH		EMPTY BOX FOR FUTURE TELECOMMUNICATION OUTLET MOUNTED 4" ABOVE COUNTERTOP		PANELBOARD "X" INDICATES PANELBOARD NAME		DISTRIBUTION PANEL - 208/120V
	4 WAY TOGGLE SWITCH		EMPTY BOX FOR FUTURE CEILING MOUNTED TELECOMMUNICATION OUTLET		GROUND		BRANCH CIRCUIT PANEL BOARD - 480/277V
	KEY OPERATED SWITCH		TELECOMMUNICATION OUTLET "X" INDICATES TYPE		SECURITY KEY INTERLOCK		DISTRIBUTION PANEL - 480/277V
	DIMMER SWITCH		SPEAKER		ENGINE GENERATOR		SWITCHBOARD
	DIMMER OCCUPANCY SENSOR SWITCH		SPEAKER - WALL MOUNTED		UTILITY METER		TRANSFORMER
	LOW VOLTAGE DIMMER SWITCH		MICROPHONE		AMMETER		GROUND BUS
	PILOT SWITCH		VOLUME CONTROL		VOLTMETER		
	TOUCH SCREEN SWITCH		SIGNALING BELL		AMMETER SWITCH		
	OCCUPANCY SENSOR DEVICE - CEILING		SINGLE FACE CLOCK - CEILING MOUNTED		VOLTMETER SWITCH		
	OCCUPANCY SENSOR DEVICE - WALL		DOUBLE FACE CLOCK - CEILING MOUNTED		SURGE PROTECTIVE DEVICE		
	PHOTOCELL DEVICE - REFER TO ZONES SHOWN ON PLANS		DOUBLE FACE CLOCK - WALL MOUNTED		TIME DELAY RELAY		
	REMOTE GENERATOR ANNUNCIATOR PANEL		DOUBLE FACE CLOCK - WALL MOUNTED		THERMAL OVERLOAD RELAY		
	AUTOMATIC TRANSFER SWITCH				NORMALLY OPEN CONTACTS		
					NORMALLY CLOSED CONTACTS		
					N.O. PUSH BUTTON SINGLE CIRCUIT		
					N.C. PUSH BUTTON SINGLE CIRCUIT		

NOTE: SOME SYMBOLS AND ABBREVIATIONS SHOWN MAY NOT APPLY TO THIS PROJECT.

ELECTRICAL DEVICE TYPICAL MOUNTING HEIGHTS



- NOTES:
- INSTALL ELECTRICAL DEVICES AT MOUNTING HEIGHTS NOTED ABOVE UNLESS OTHERWISE NOTED ON PLANS. COORDINATE WITH ALL OTHER DISCIPLINES PRIOR TO INSTALL.
 - VISUAL MOUNTING APPLIANCE MOUNTING HEIGHT IN SLEEPING ROOMS:
 - MINIMUM DISTANCE IN SLEEPING ROOMS IS 24" FROM CEILING TO THE TOP OF LENS FOR 110cd STROBES WITHIN 16' OF PILLOW
 - 177cd STROBES, USED IN SLEEPING ROOMS, CAN BE WITHIN THE 24" MINIMUM DISTANCE FROM THE CEILING, THE HIGHER INTENSITY IS TO COMPENSATE FOR A POSSIBLE SMOKE LAYER

ELECTRICAL SPECIFICATION

- CONTRACTOR TO PROCURE ALL REQUIRED BUILDING PERMITS AND INSPECTIONS TO COMPLETE PROJECT.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE MICHIGAN ELECTRICAL CODE.
- PROVIDE NEW ELECTRICAL SERVICES FROM CONSUMERS ENERGY AS INDICATED. COORDINATE SCOPE OF WORK AND PROVIDE ALL WORK TO PROVIDE A FULLY FUNCTIONAL ELECTRICAL SERVICE.
- REMOVE ALL ELECTRICAL EQUIPMENT, WIRE, CONDUIT, ETC ASSOCIATED WITH DEMOLISHED EQUIPMENT.
- REMOVE ALL ABANDONED ELECTRICAL CONDUIT AND WIRE BACK TO SOURCE.
- PROVIDE SHOP DRAWINGS FOR THE FOLLOWING:
 - CONDUIT.
 - CONDUCTORS.
 - WIRING DEVICES INCLUDING COVERPLATES.
 - DISCONNECT SWITCHES, ENCLOSED CIRCUIT BREAKERS AND FUSED SWITCHES.
 - PANELBOARDS, AND SWITCHBOARDS
 - TRANSFORMERS.
 - SURGE PROTECTION DEVICES
 - POWER METERS.
 - INTERIOR LIGHT FIXTURES.
 - EXTERIOR LIGHT FIXTURES INCLUDING SITE POLES.
 - LIGHTING CONTROL SYSTEM AND DEVICES.
 - FIRE ALARM SYSTEM.
- PATCH, REPAIR, AND PAINT ANY OPENINGS THROUGH ROOF, CEILINGS, WALLS, OR FLOORS TO MATCH EXISTING CONDITION.
- THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL OF ALL DEMOLISHED EQUIPMENT.
- PROVIDE LAMACOID LABELS FOR:
 - PANELBOARDS AND SWITCHBOARDS.
 - TRANSFORMERS.
 - DISCONNECT SWITCHES.
 - VARIABLE FREQUENCY DRIVES.
 - LIGHTING CONTROL PANELS. LABEL SHALL INDICATE ROOMS CONTROLLED.
- MINIMUM CONDUIT SIZE SHALL BE 1/2" TRADE SIZE.
- USE THE CONDUIT TYPE SUITABLE FOR THE ENVIRONMENT IN WHICH IS IS LOCATED:
 - INDOORS: EMT WITH SET SCREW FITTINGS. MC CABLE IS ACCEPTABLE FOR BRANCH CIRCUITS WHERE CONCEALED.
 - OUTDOORS: RIGID GALVANIZED STEEL.
 - UNDERGROUND: RIGID NON METALLIC SCHEDULE 80 PVC.
 - CONDUIT EXITING FROM UNDERGROUND SHALL TRANSITION TO EMT/RGS PRIOR TO BEING EXPOSED.
- PROVIDE CONDUIT SLEEVES FOR LOW VOLTAGE DATA CABLING.
- ALL CABLING SHALL BE IN CONDUIT UNLESS ABOVE AN ACCESSIBLE CEILING WHERE "J" HOOKS ARE ACCEPTABLE.
- USE CONDUIT SWEEPS FOR ALL DATA CABLING CONDUITS.
- DATA BOXES SHALL BE DOUBLE GANG, 3 1/2" DEEP WITH SINGLE GANG MUD RING WITH 1" CONDUIT TO ABOVE ACCESSIBLE CEILING.
- ALL BOXES SHALL BE RECESSED IN WALLS AND CONDUIT CONCEALED WHERE POSSIBLE.
- EMERGENCY CIRCUITS SHALL NOT BE IN CONDUIT WITH OTHER NON-EMERGENCY CIRCUITS.
- MINIMUM CONDUCTOR SIZE FOR POWER SHALL BE #12 AWG. ANY BRANCH CIRCUITS OVER 100' IN LENGTH SHALL BE #10 AWG MINIMUM FOR VOLTAGE DROP.
- PROVIDE THHN-2 COPPER INDORS AND THWN-2 COPPER OUTDOORS, UNLESS NOTED OTHERWISE OR DICTATED OTHERWISE BY THE NEC.
- PROVIDE GROUNDING ELECTRODE SYSTEM AND EQUIPMENT GROUNDING PER THE NATIONAL ELECTRIC CODE.
- PANELBOARDS SHALL BE FULLY RATED, SERIES RATED PANELS ARE NOT ACCEPTABLE. HAVE HINGED SWING DOOR-IN-DOOR. LOAD CENTERS ARE NOT ACCEPTABLE. SQUARE D NQOOD OR EQUAL FOR 208/120V BRANCH PANELBOARDS. SQUARE D NF OR EQUAL FOR 480/277V PANELBOARDS. PROVIDE TYPED PANELBOARD CIRCUIT LABEL CARDS. UPDATE ALL EXISTING LABEL CARDS AS REQUIRED.
- SURGE PROTECTION DEVICES SHALL BE MOUNTED AS CLOSE TO MAIN BUS AS POSSIBLE TO LIMIT FEEDER LENGTH.
- ALL FLOOR MOUNTED EQUIPMENT SHALL BE ON 4" HOUSEKEEPING PAD.
- RECEPTACLES SHALL BE TAMPER-RESISTANT EXTRA HEAVY DUTY GRADE, 20AMP MINIMUM. WHITE IN COLOR UNLESS NOTED OTHERWISE.
- ALL DEVICE COVERS SHALL MATCH DEVICE COLOR UNLESS STAINLESS STEEL COVERS ARE SPECIFIED.
- WEATHERPROOF RECEPTACLE COVERS SHALL BE METAL, WHILE-IN-USE TYPE.
- SWITCHES SHALL BE HEAVY DUTY GRADE, 20 AMP, QUIET TYPE, WHITE UNLESS NOTED OTHERWISE.
- LIGHTING CONTROL DEVICES SHALL BE MANUFACTURED BY N-LIGHT, UNLESS NOTED OTHERWISE.
- ALL LIGHTING CONTROLS SHALL BE MEET ASHRAE 90.1 - 2013 WITH MICHIGAN AMENDMENTS.
- IT IS UNDERSTAND AND AGREED BY THE INSTALLER THAT WORK HEREIN DESCRIBED SHALL BE COMPLETE IN EVERY DETAIL, EVEN THOUGH EVERY ITEM INVOLVED IS NOT PARTICULARLY MENTIONED. INSTALLER SHALL BE HELD TO PROVIDE ALL LABOR AND MATERIALS NECESSARY FOR THE WORK INTENDED AND DESCRIBED FOR A COMPLETE AND OPERATIONAL SYSTEM. SUCH MATERIALS SHALL INCLUDE, BUT ARE NOT LIMITED TO, CONDUIT, FITTINGS, COVERPLATES, WIRING, BREAKERS, CONTROL DEVICES, LIGHTING ACCESSORIES, ETC. THIS ALSO INCLUDES EQUIPMENT REQUIRED BY STATE AND LOCAL CODES.

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PROJECT
238 E. MICHIGAN AVE., KALAMAZOO MI

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BRIAN & CARMEN HARRIS

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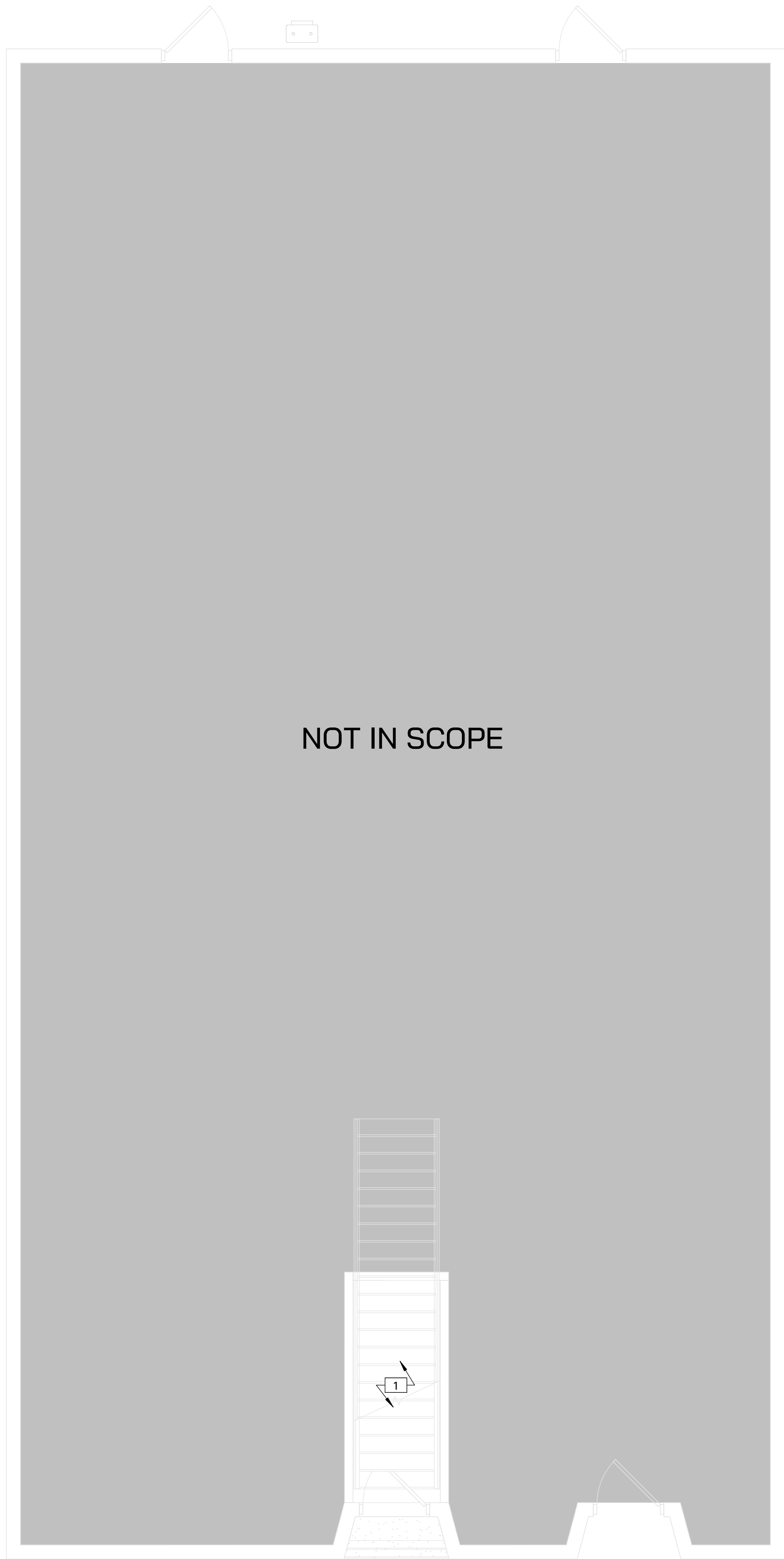
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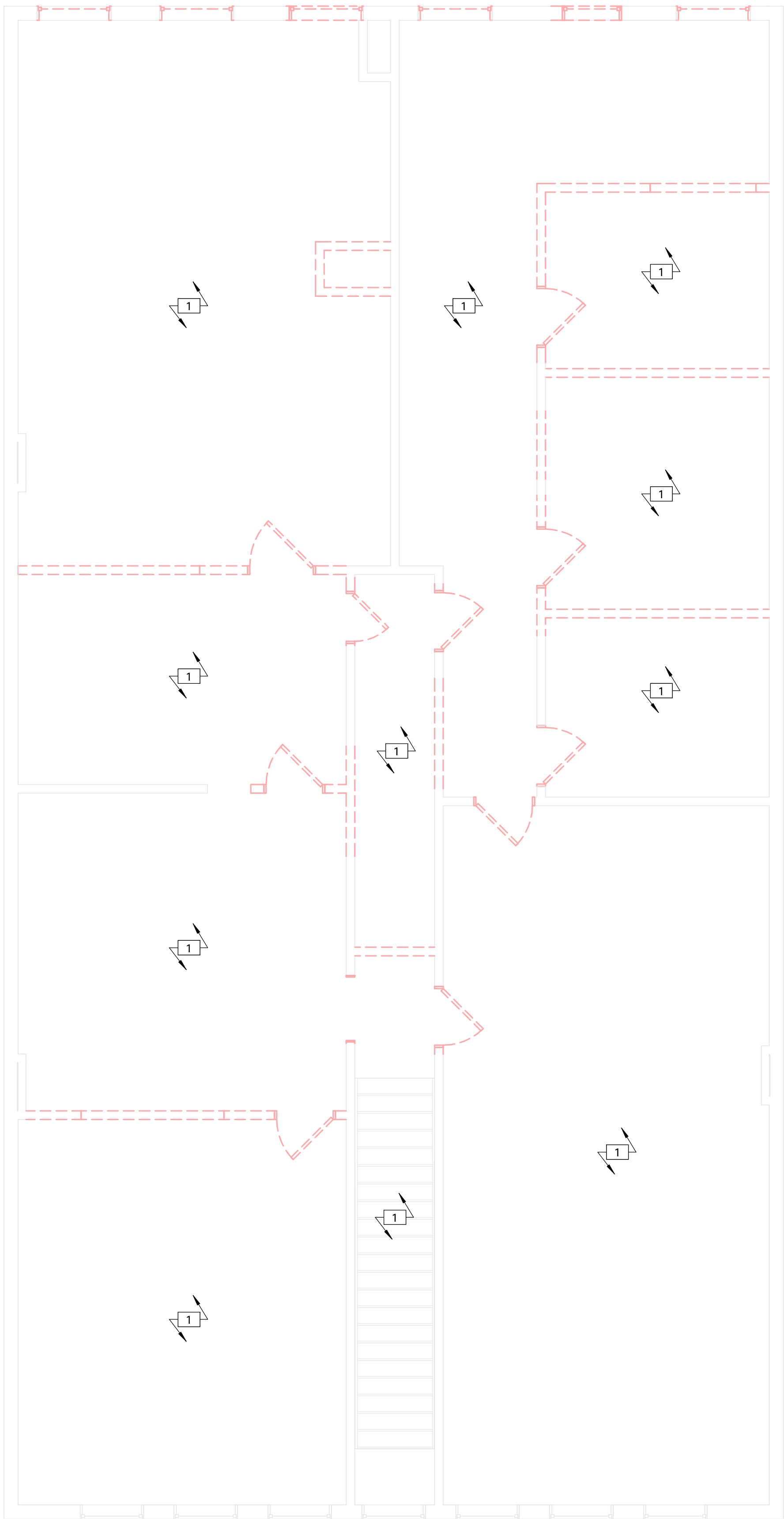


PROJECT
23,119

ELECTRICAL SYMBOLS AND SPECIFICATION
E000



 **FIRST FLOOR ELECTRICAL DEMOLITION PLAN**
1/4" = 1'-0"



 **SECOND FLOOR ELECTRICAL DEMOLITION PLAN**
1/4" = 1'-0"

- ELECTRICAL DEMOLITION KEYED NOTES**
- 1 REMOVE EXISTING ELECTRICAL EQUIPMENT, DEVICES, FIRE ALARM, LIGHT FIXTURES AND ALL ASSOCIATED CONDUIT/WIRING BACK TO SOURCE. PREPARE FOR NEW WORK.



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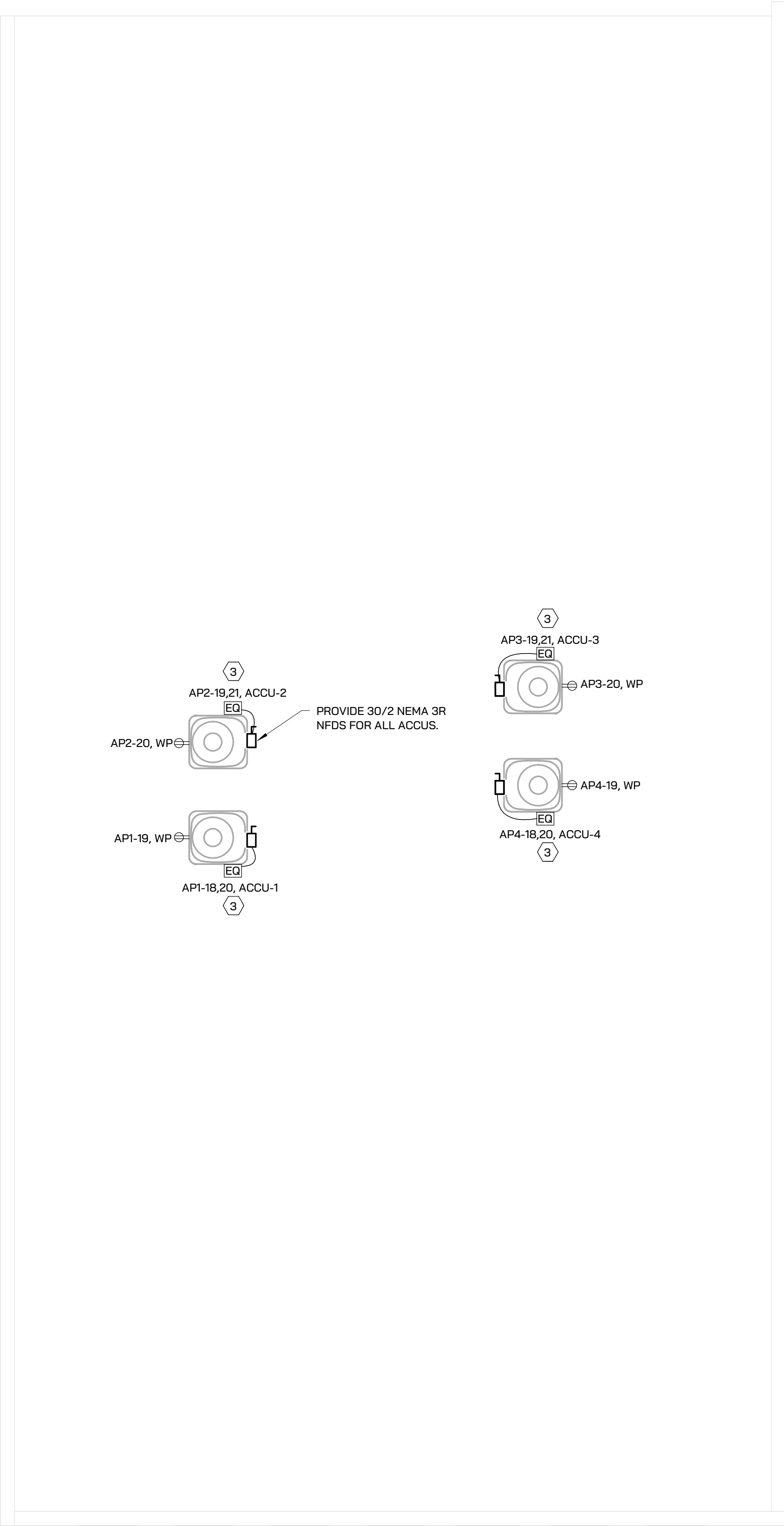
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PROJECT
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FIRST AND SECOND FLOOR
ELECTRICAL DEMOLITION PLAN
ED110



ROOF POWER PLAN
1/4" = 1'-0"

ELECTRICAL POWER KEYED NOTES

- 1 PROVIDE NEW 400A, 120/240V SINGLE-PHASE SERVICE TO SQUARE D EZ METER PAK (OR EQUIVALENT). COORDINATE UTILITY TRANSFORMER LOCATION AND ALL ASSOCIATED SERVICE CONDUITS WITH UTILITY. REFER TO ONE LINE DIAGRAM.
- 2 PROVIDE CONDUIT AND FEEDER FROM MDP TO NEW SINGLE PHASE PANEL. REFER TO ONE LINE DIAGRAM AND PANEL FEEDER SCHEDULE.
- 3 PROVIDE CONDUIT AND FEEDER TO NEW MECHANICAL EQUIPMENT. REFER TO HVAC BRANCH CIRCUITS. COORDINATE FINAL CONNECTION WITH MECHANICAL CONTRACTOR.
- 4 ALL SMOKE DETECTORS WITHIN APARTMENT UNITS SHALL BE SMOKE/CO COMBO TYPE. PROVIDE 120V WIRING FROM LOCAL PANEL AND EXTEND TO EACH DEVICE WITHIN UNIT. DETECTORS WITHIN LIVING AND SLEEPING AREAS SHALL BE LOW FREQUENCY TYPE. (TYPICAL)



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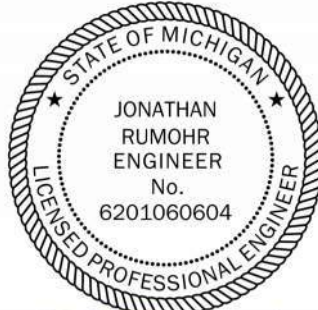
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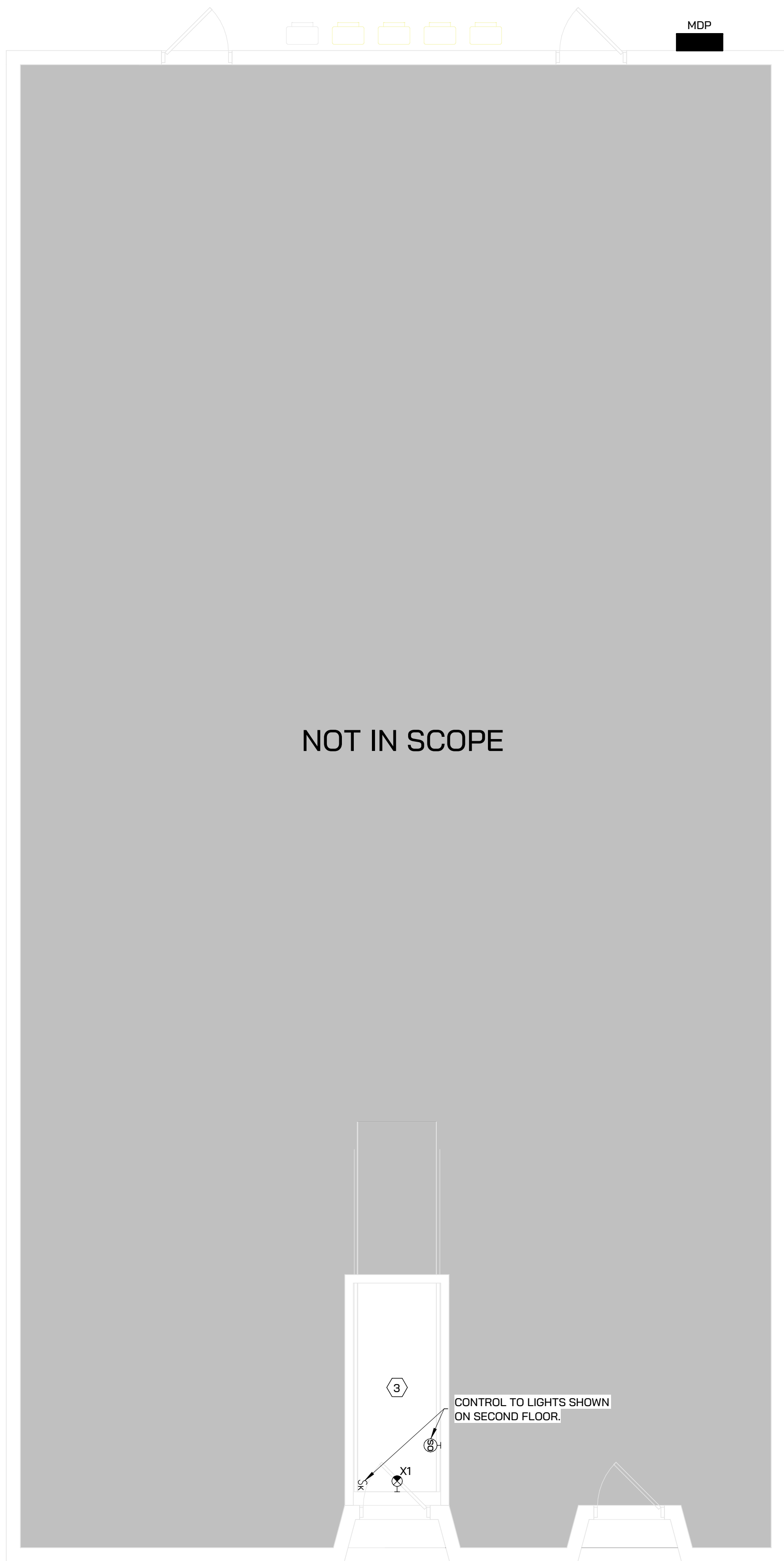
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STAMP



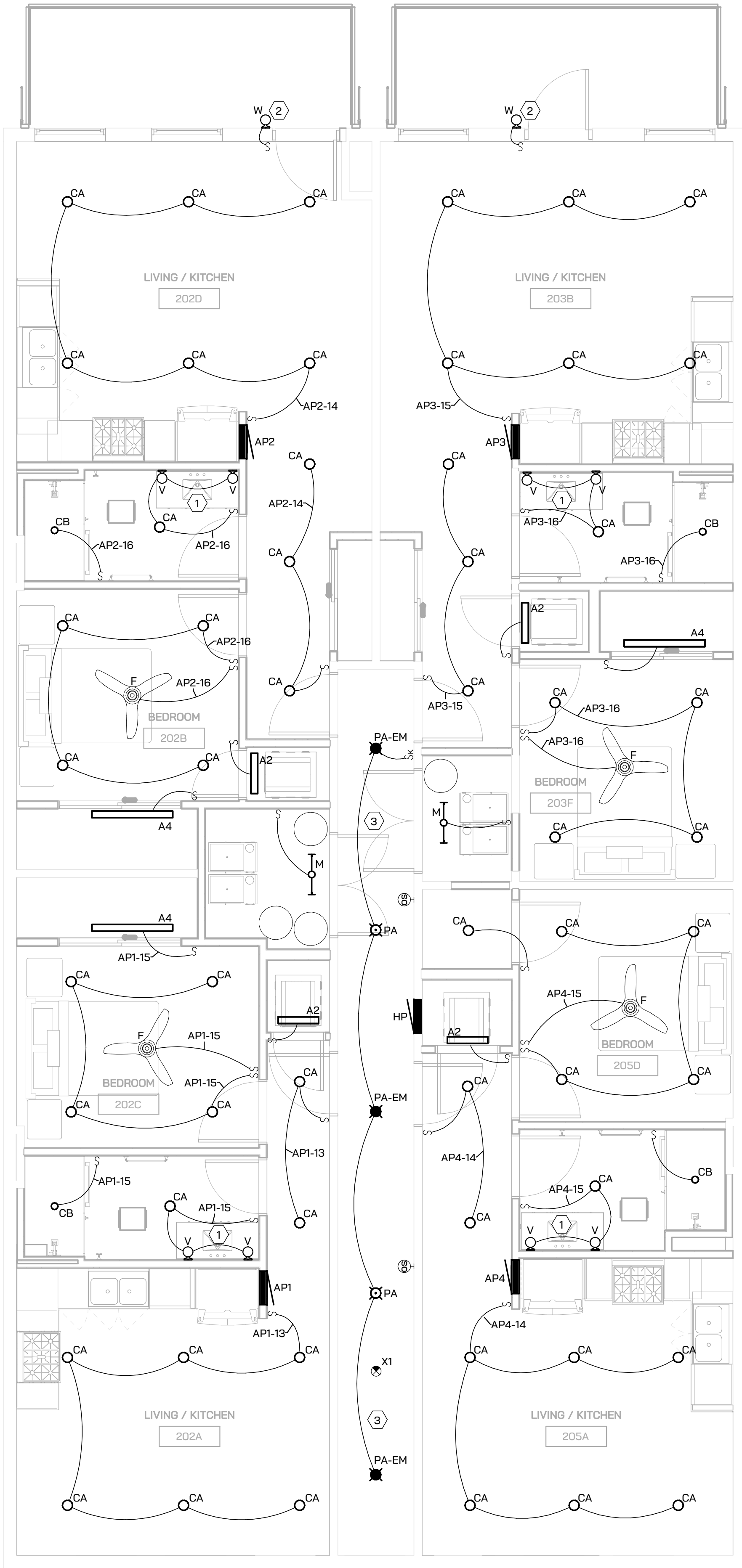
PROJECT
23.119

ROOF POWER PLAN

E120



FIRST FLOOR LIGHTING PLAN
1/4" = 1'-0"



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

- ELECTRICAL LIGHTING KEYED NOTES**
- 1 MOUNT VANITY FIXTURES AT 6'-4" AFF (TO CENTER OF FIXTURE).
 - 2 MOUNT FIXTURE AT 7'-0" AFF.
 - 3 CONTROLS IN MAIN CORRIDOR SHALL BE LOW VOLTAGE 0-10V TYPE (NIGHT OR EQUIVALENT).



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FIRST AND SECOND FLOOR LIGHTING PLAN

E210

ELECTRICAL PANEL FEEDER SCHEDULE								
CIRCUIT DESCRIPTION	FED FROM	LOAD CURRENT	FEEDER INFORMATION					
	PANEL - CIRCUIT		BREAKER / POLES	# OF RUNS	WIRE	NEUTRAL	GROUND	CONDUIT
240 V								
AP1	MDP - 1,3	62 A	100 A / 2	1	#3	#3	#8	1" C
AP2	MDP - 2,4	64 A	100 A / 2	1	#3	#3	#8	1" C
AP3	MDP - 5,7	65 A	100 A / 2	1	#3	#3	#8	1" C
AP4	MDP - 6,8	61 A	100 A / 2	1	#3	#3	#8	1" C
HP	MDP - 9,11	23 A	100 A / 2	1	#3	#3	#8	1" C
PB	MDP - 10,12	100 A	200 A / 2	1	3/0	3/0	#6	2" C

LIGHT FIXTURE SCHEDULE					
TYPE	DESCRIPTION	MOUNTING	DRIVER	LOAD	MANUFACTURER
A2	WRAPAROUND	SURFACE	0-10V	16 VA	LITHONIA: #BLWP2-20L-ADSM-120-GZ10-LP830
A4	WRAPAROUND	SURFACE	0-10V	32 VA	LITHONIA: #BLWP4-40L-ADSM-120-GZ10-LP830
CA	6" ROUND DOWNLIGHT	RECESSED	0-10V	19 VA	LITHONIA: #LDN6-30/10-L06-AR-LSS-120-GZ10
CB	4" ROUND DOWNLIGHT	RECESSED	0-10V	13 VA	LITHONIA: #LDN4-30/07-L06-AR-LSS-120-GZ10
F	CEILING FAN	STEM	N/A	30 VA	VISUAL COMFORT: #3VNR52RZWD-V1
M	INDUSTRIAL PENDANT	CHAIN	0-10V	32 VA	LITHONIA: #CLX-L24-2500LM-SEF-RDL-120-GZ10-35K-80CRI-WH-ZACVH M100
PA	PENDANT CYLINDER	CABLE	0-10V	31 VA	GOTHAM: #EVO6CC-30/25-AR-LSS-WD-120-GZ10-JBX-CCAN-C120-(FINISH)
PA-EM	PENDANT CYLINDER	CABLE	0-10V	31 VA	GOTHAM: #EVO6CC-30/25-AR-LSS-WD-120-GZ10-JBX-CCAN-C120-E10WCP-(FINISH)
V	VANITY LIGHT	SURFACE	N/A	20 VA	KOHLER: #K-31762-SC02-(FINISH) W/ (2) 10W LED E-12 BASE BULBS
W	WALL PACK	SURFACE	0-10V	15 VA	KUZCO: #EW33204-BK-UNV
X1	EXIT SIGN	UNIVERSAL	N/A	5 VA	LITHONIA: #EDG-1-R-EL

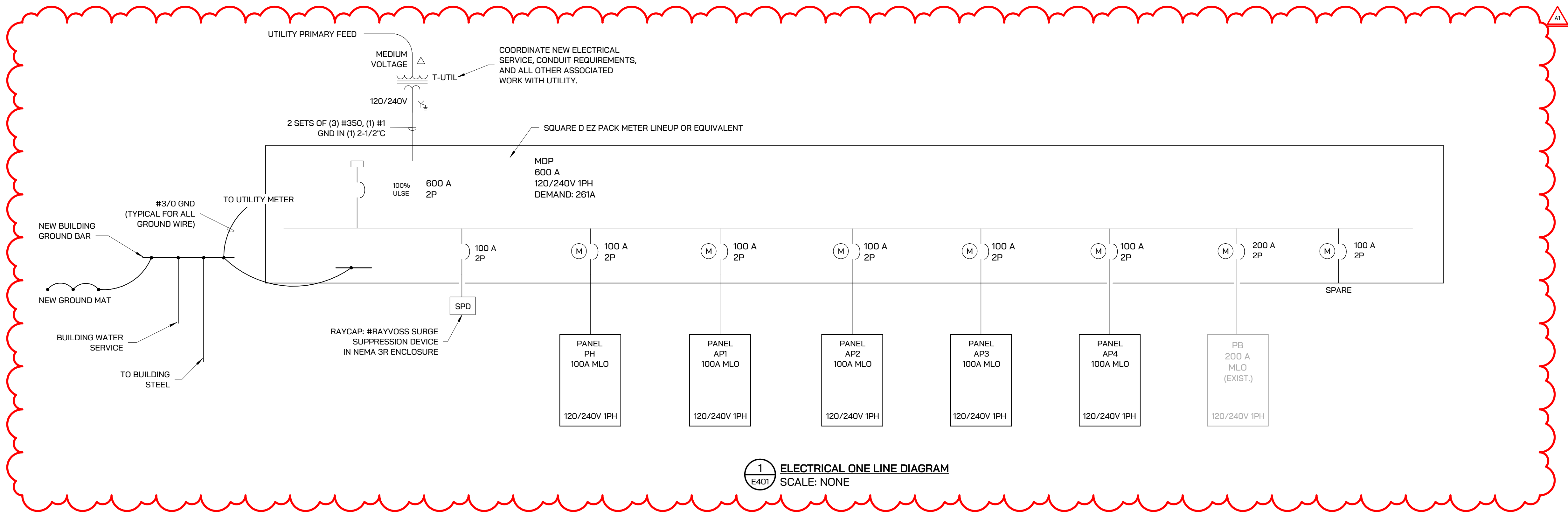
- NOTES:**
1. ALL LIGHTING CONTROLS FOR CORRIDOR SHALL BE 0-10V nLIGHT SERIES WITH nPODMA FAMILY SWITCHES (OR EQUIVALENT) WITH ON/OFF BUTTON AND RAISE/LOWER.
2. EMERGENCY FIXTURES SHALL BE PROVIDED WITH INTEGRAL BATTERY PACKS. FIXTURES TO TURN ON DURING LOSS OF POWER AND MAINTAIN ILLUMINATED FOR A MINIMUM OF 90 MINUTES.

ELECTRICAL HVAC BRANCH CIRCUIT SCHEDULE								
CIRCUIT DESCRIPTION	FED FROM	LOAD CURRENT	BRANCH CIRCUIT INFORMATION					
	PANEL - CIRCUIT		BREAKER / POLES	# OF RUNS	WIRE	NEUTRAL	GROUND	CONDUIT
240 V								
HVAC - ACCU-1	AP1 - 18,20	13 A	30 A / 2	1	#10	#10	#10	1/2" C
HVAC - ACCU-2	AP2 - 19,21	13 A	30 A / 2	1	#10	#10	#10	1/2" C
HVAC - ACCU-3	AP3 - 19,21	13 A	30 A / 2	1	#10	#10	#10	1/2" C
HVAC - ACCU-4	AP4 - 18,20	13 A	30 A / 2	1	#10	#10	#10	1/2" C
HVAC - ECH-1	HP - 8,10	17 A	30 A / 2	1	#10	#10	#10	1/2" C
HVAC - WH-1	AP1 - 12,14	13 A	30 A / 2	1	#10	#10	#10	1/2" C
HVAC - WH-1	AP2 - 13,15	13 A	30 A / 2	1	#10	#10	#10	1/2" C
HVAC - WH-1	AP3 - 12,14	13 A	30 A / 2	1	#10	#10	#10	1/2" C
HVAC - WH-1	AP4 - 11,13	13 A	30 A / 2	1	#10	#10	#10	1/2" C

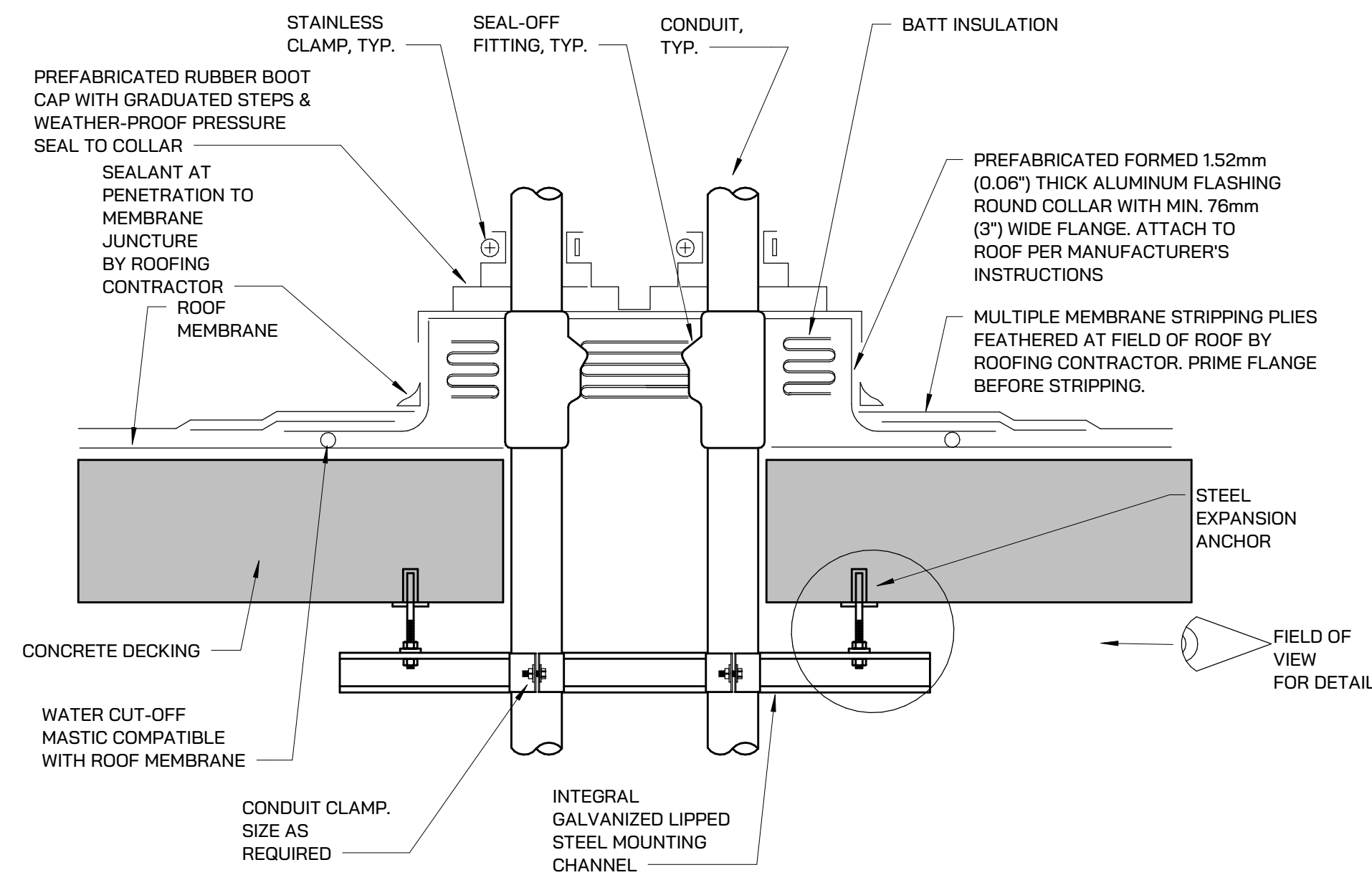
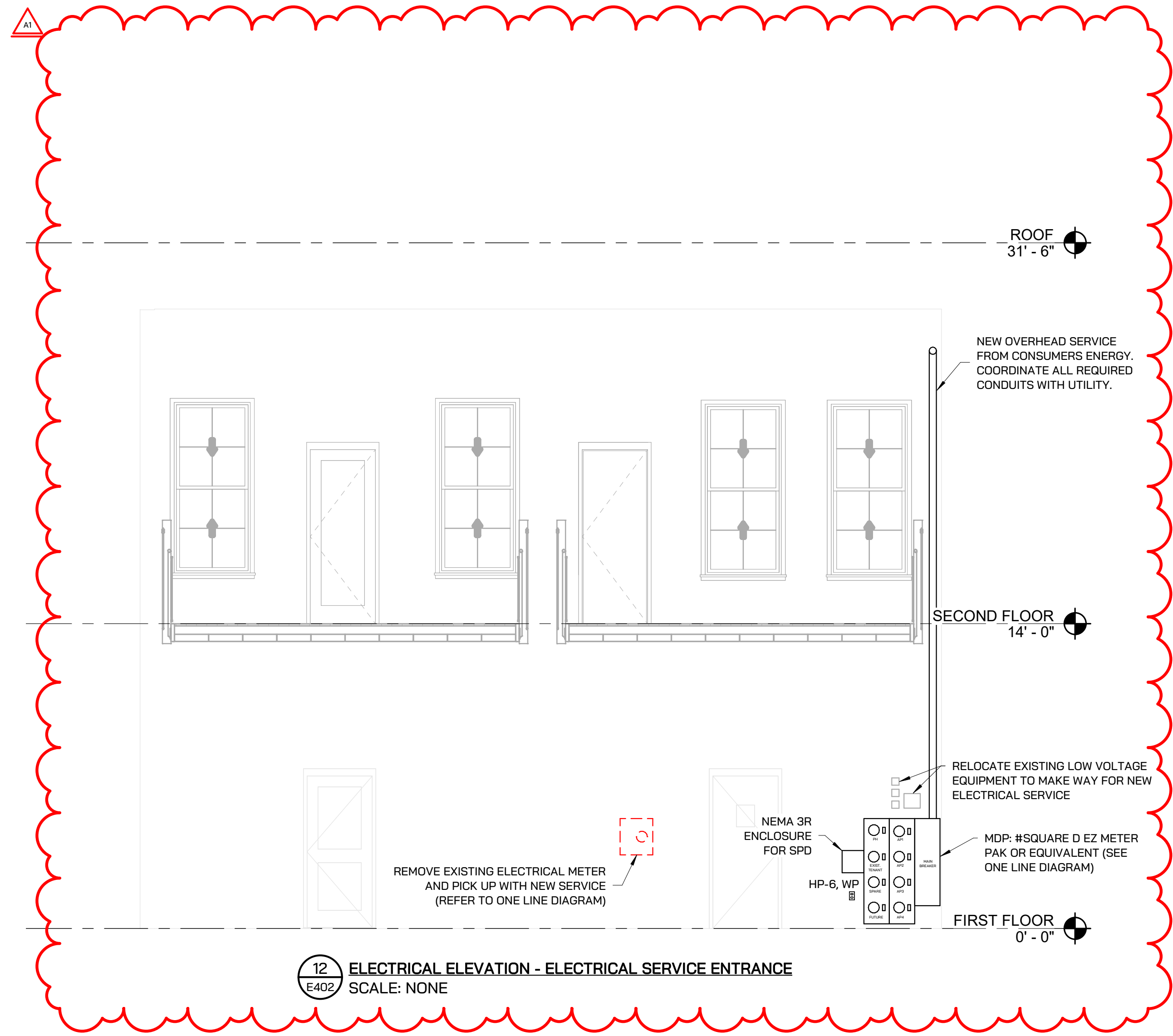
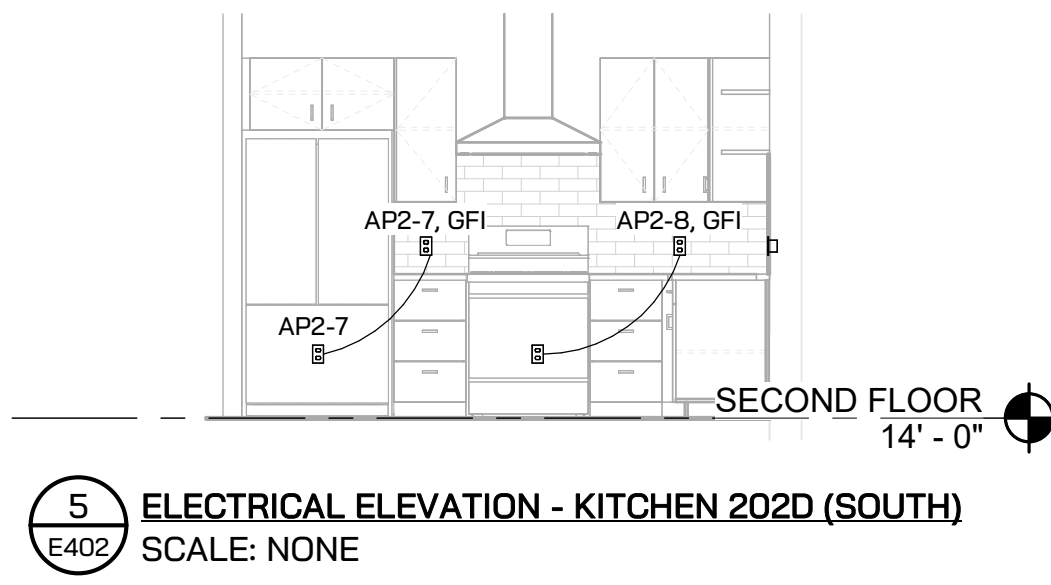
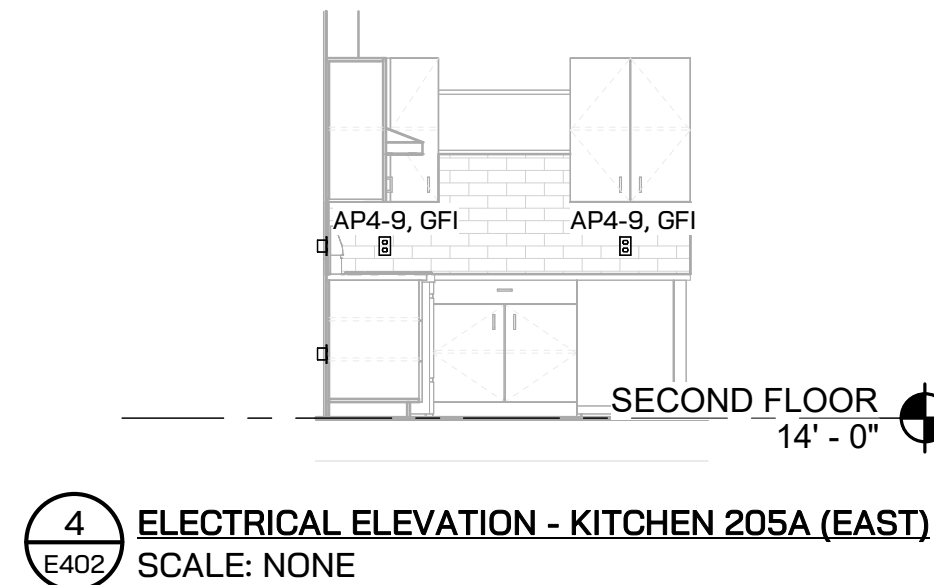
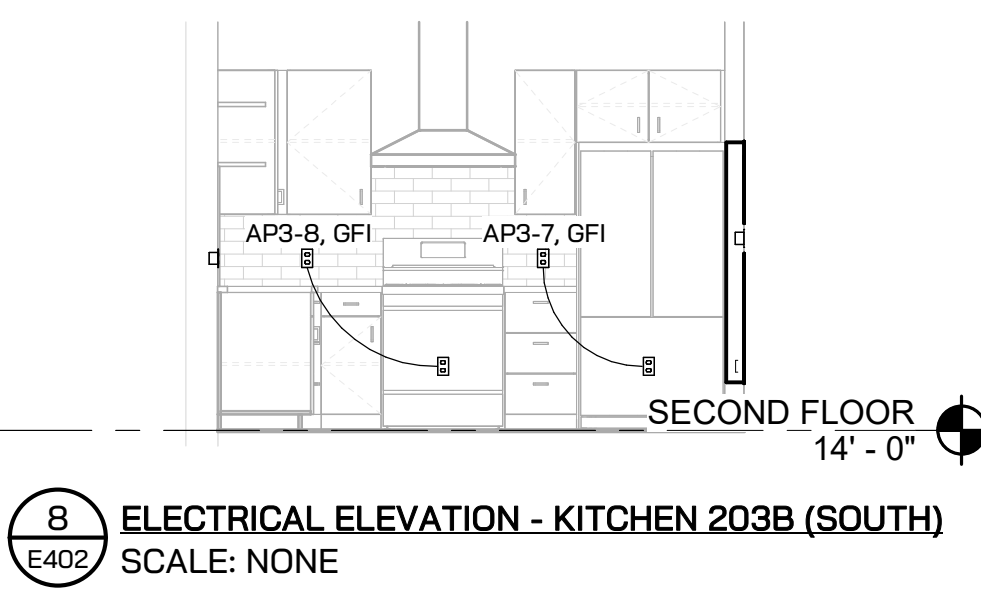
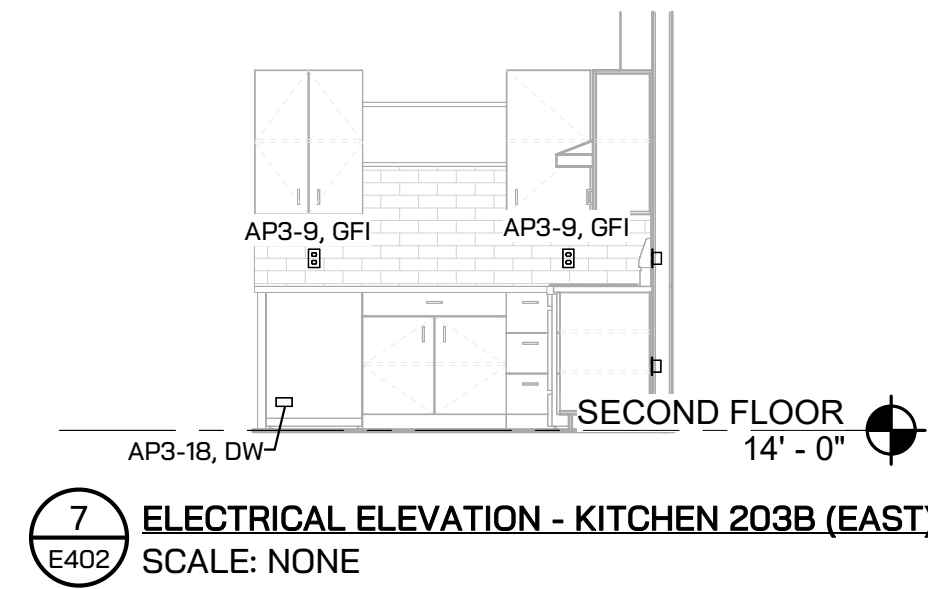
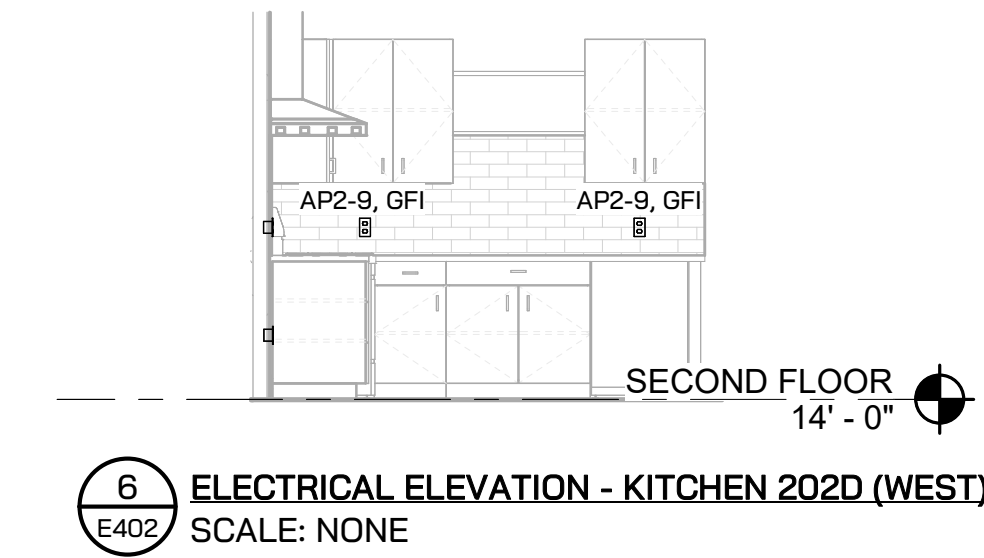
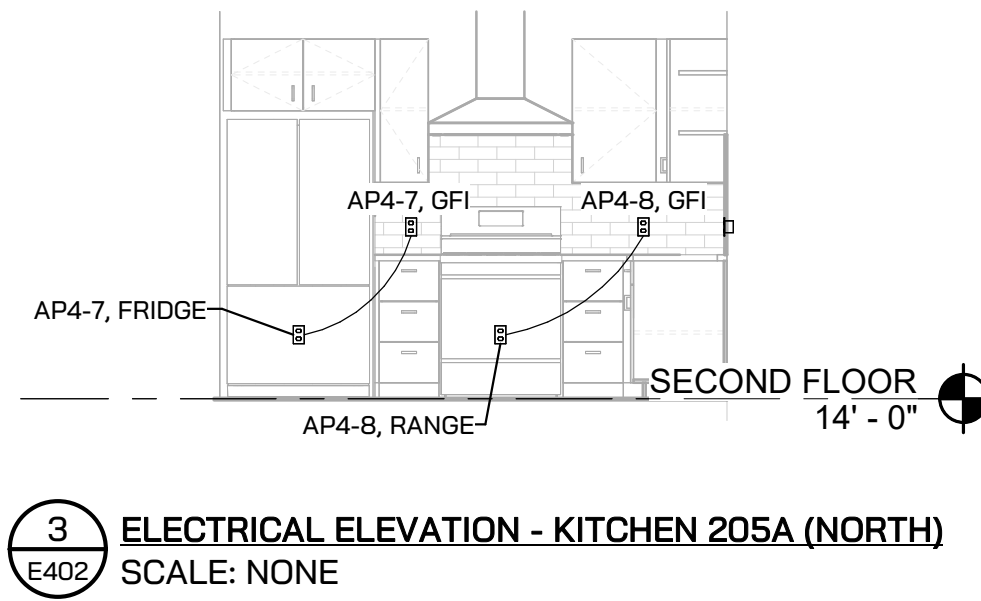
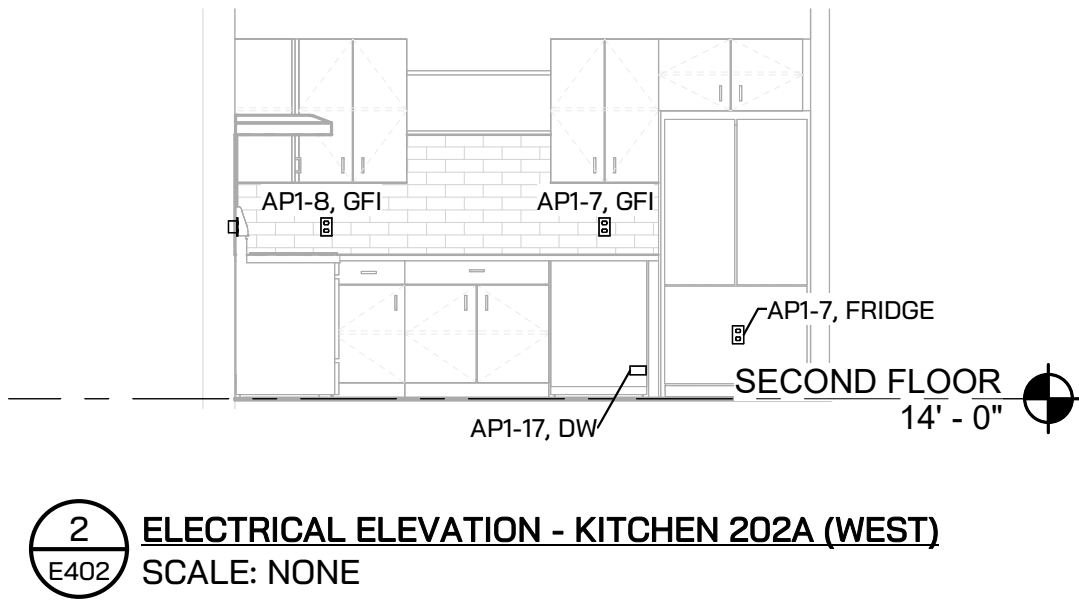
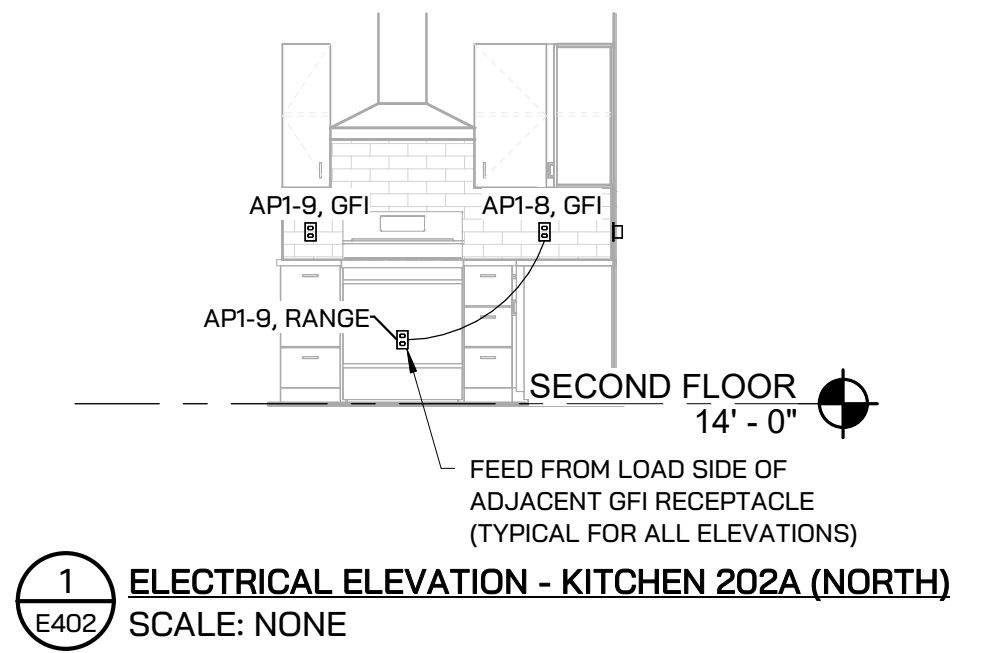
120 V									
HVAC - EF-1	AP1 - 16	2 A	20 A / 1	1	#12	#12	#12	1/2" C	
HVAC - EF-1	AP4 - 16	2 A	20 A / 1	1	#12	#12	#12	1/2" C	
HVAC - EF-1	AP3 - 17	4 A	20 A / 1	1	#12	#12	#12	1/2" C	
HVAC - EF-1	AP2 - 17	2 A	20 A / 1	1	#12	#12	#12	1/2" C	
HVAC - F-1	AP1 - 11	8 A	20 A / 1	1	#12	#12	#12	1/2" C	
HVAC - F-2	AP2 - 12	8 A	20 A / 1	1	#12	#12	#12	1/2" C	
HVAC - F-3	AP3 - 13	8 A	20 A / 1	1	#12	#12	#12	1/2" C	
HVAC - F-4	AP4 - 12	8 A	20 A / 1	1	#12	#12	#12	1/2" C	

ELECTRICAL GENERAL NOTES - DWELLING UNITS

- PROVIDE SURGE PROTECTION DEVICE FOR ELECTRICAL SERVICE TO DWELLING UNITS. SPDs SHALL BE TYPE 1 OR 2 AND HAVE NOMINAL DISCHARGE CURRENT RATING OF AT LEAST 10kA.
- PROVIDE GFCI PROTECTION (CIRCUIT BREAKER OR WIRING DEVICE) FOR BRANCH CIRCUIT(S) IN THE FOLLOW SPACES:
 - BATHROOMS.
 - GARAGES (OR SIMILAR ACCESSORY BUILDINGS).
 - CRAWL SPACES AND BASEMENTS.
 - KITCHENS.
 - LAUNDRY AREAS.
 - SPECIFIC APPLIANCES (RATED 60A OR LESS), INCLUDING: SUMP PUMPS, DISHWASHERS, ELECTRIC RANGES, WALL-MOUNTED OVENS, CLOTHES DRYERS, MICROWAVE OVENS.
- PROVIDE AT LEAST ONE (1) DEDICATED 20A, 120V CIRCUIT AND AT LEAST (1) ONE RECEPTACLE TO THE FOLLOWING SPACES:
 - LAUNDRY AREAS.
 - BATHROOMS.
 - GARAGES.
- PROVIDE AFCI CIRCUIT BREAKERS FOR ALL 20A, 120V BRANCH CIRCUITS. FOR BRANCH CIRCUITS ALSO REQUIRING GFCI PROTECTION, PROVIDE AFCI/GFCI DUAL FUNCTION CIRCUIT BREAKERS.
- PROVIDE RECEPTACLES AT ALL LOCATIONS INDICATED IN RECEPTACLE WALL SPACING DETAIL BELOW. RECEPTACLE REQUIREMENTS DO NOT APPLY TO BATHROOMS CLOSETS, AND HALLWAYS.
- PROVIDE AT LEAST ONE (1) RECEPTACLE IN EACH HALLWAY.
- PROVIDE RECEPTACLES AT ALL KITCHEN LOCATIONS INDICATED IN KITCHEN RECEPTACLE SPACING DETAIL BELOW.
- PROVIDE AT LEAST ONE (1) RECEPTACLE (OR PROVISION FOR FUTURE RECEPTACLE) DEDICATED FOR ISLAND AND PENINSULA COUNTERTOPS.
- PROVIDE AT LEAST ONE (1) RECEPTACLE WITHIN 3'-0" OF OUTSIDE EDGE OF EACH SINK WITHIN BATHROOMS.
- PROVIDE AT LEAST ONE (1) RECEPTACLE ON EACH BALCONY, DECK, OR PORCH. RECEPTACLE SHALL NO BE INSTALLED 6'-1/2" ABOVE SURFACE OF BALCONY, DECK, OR PORCH.
- ALL MECHANICAL EQUIPMENT SHALL BE PROVIDED WITH A LOCAL DISCONNECTING MEANS RATED TO MATCH OCPD OF THE BRANCH CIRCUIT.



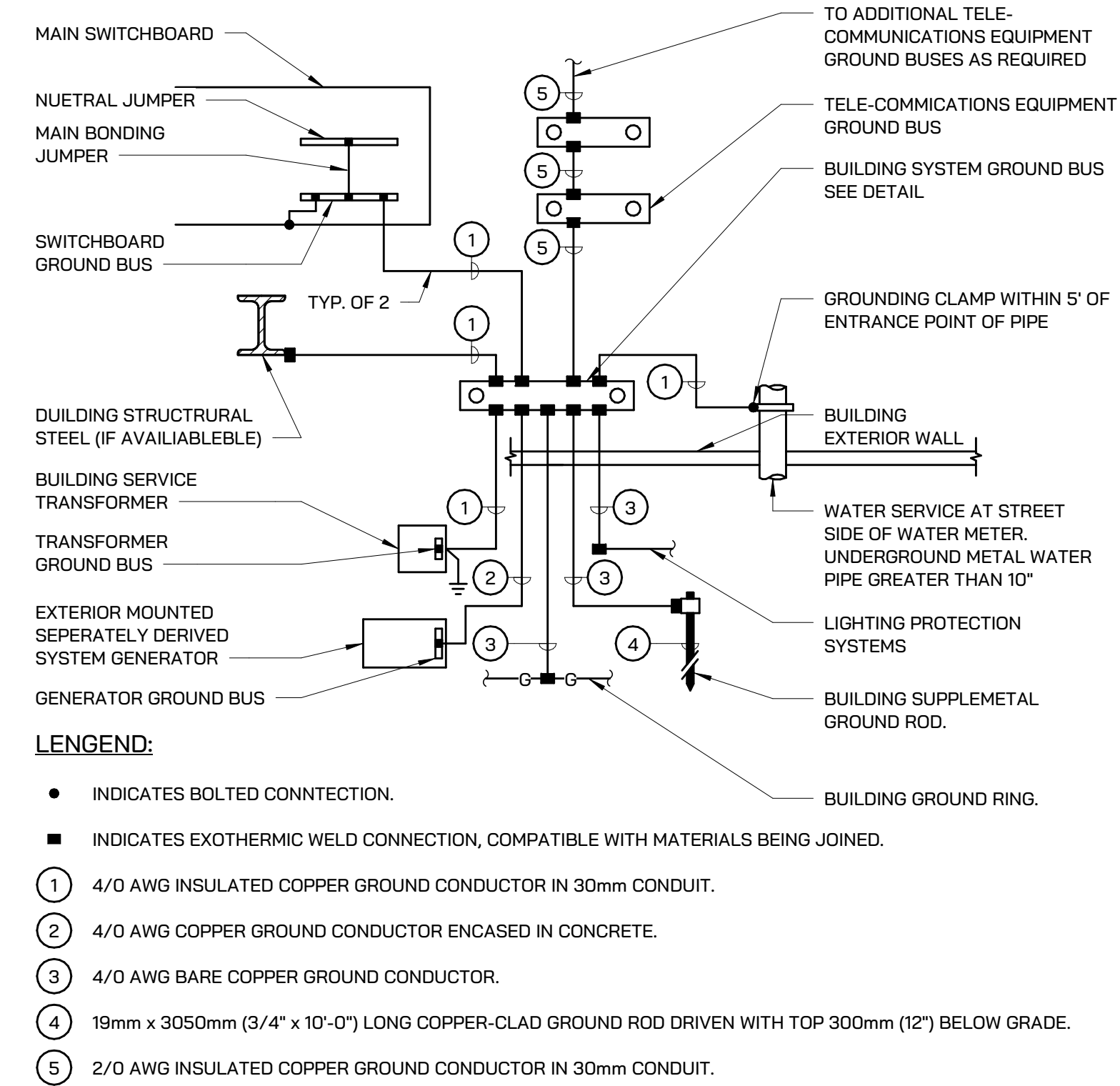
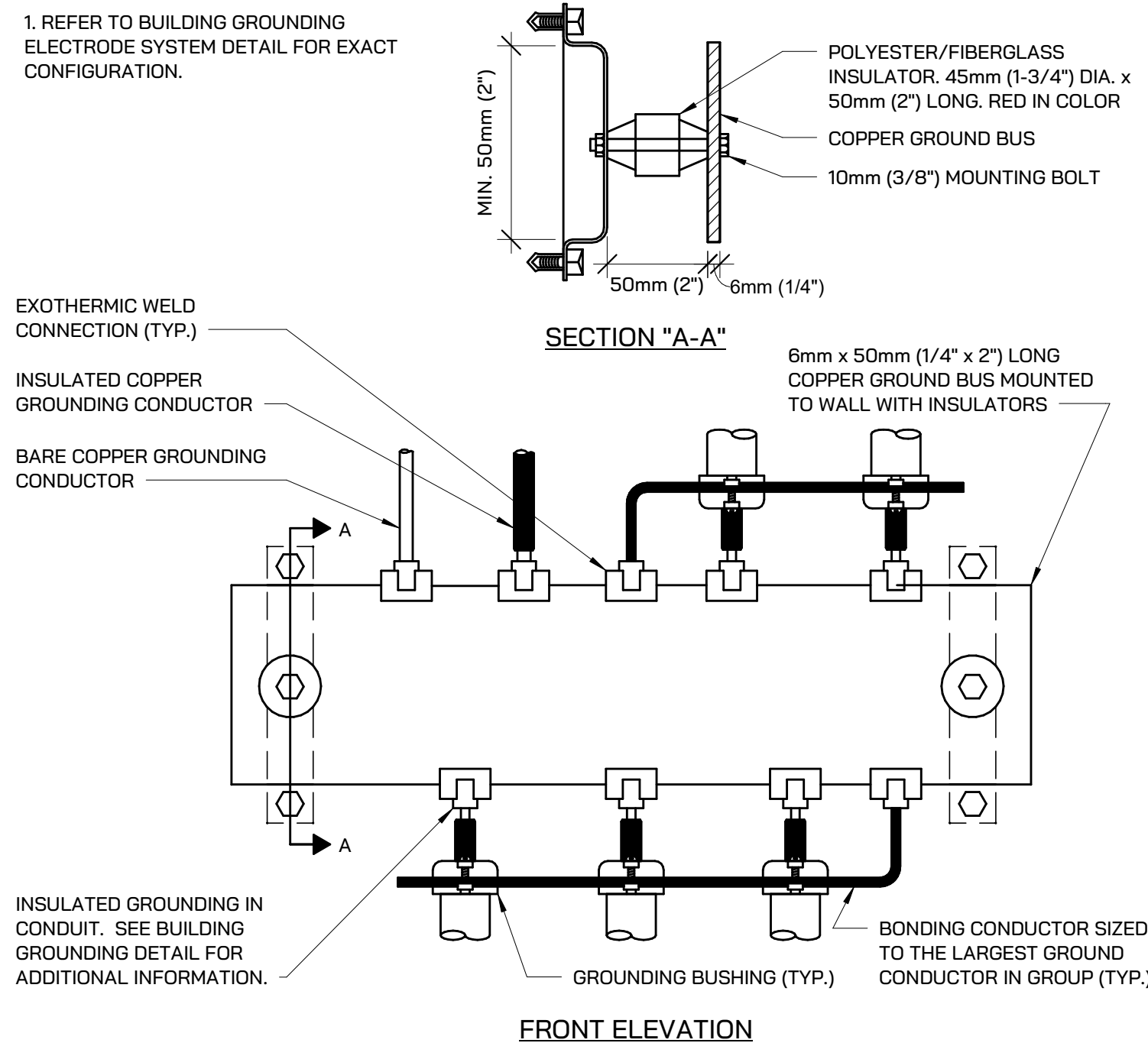
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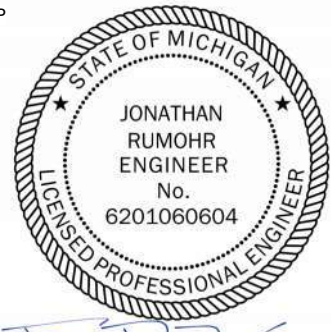


- GENERAL NOTES:
1. MAINTAIN A MINIMUM CLEARANCE OF 305mm (12") ON ALL SIDES OF ROOF PENETRATION FROM WALLS, CURBS, AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING.
 2. FLANGES OF ADJACENT FLASHINGS SHALL NOT BE CUT OR OVERLAPPED.
 3. VERIFY ROOF & STRUCTURAL SYSTEM WITH ARCHITECT.
 4. COORDINATE FLASHING INSTALLATION WITH ROOFING CONTRACTOR TO ENSURE PROPER METHODS & MATERIALS ARE USED TO MAINTAIN ROOF WARRANTY.

NOTES:

1. REFER TO BUILDING GROUNDING
ELECTRODE SYSTEM DETAIL FOR EXACT
CONFIGURATION.





PANEL: AP1												
LOCATION: FED FROM: MDP				VOLTS: 120/240 SINGLE, 1PH, 3W RATING: 100 A, MLO				A.I.C. RATING: 11,005 MOUNTING: RECESSED				
CKT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		POLES	TRIP	CIRCUIT DESCRIPTION	CKT	
1	Receptacle	20 A	1	540	180			1	20 A	Receptacle	2	
3	RECEPTACLE - DRYER	30 A	2			1500	900	1	20 A	Receptacle	4	
5				1500	180			1	20 A	Receptacle	6	
7	Receptacle LIVING / KITCHEN 202A	20 A	1			360	360	1	20 A	Receptacle LIVING / KITCHEN 202A	8	
9	Receptacle LIVING / KITCHEN 202A	20 A	1	360	720			1	20 A	Receptacle	10	
11	HVAC - F-1	20 A	1			1000	1500				12	
13	Lighting - Interior	20 A	1	167	1500				2	30 A	HVAC - WH-1	14
15	Lighting	20 A	1			205	240	1	20 A	HVAC - EF-1	16	
17	Power	20 A	1	500	1500						18	
19	Receptacle	20 A	1			180	1500	2	30 A	HVAC - ACCU-1	20	
21	SPARE	20 A	1	0	0			1	20 A	SPARE	22	
23	SPARE	20 A	1			0	0	1	20 A	SPARE	24	
25	SPARE	20 A	1	0	0			1	20 A	SPARE	26	
27	SPARE	20 A	1			0	0	1	20 A	SPARE	28	
29	SPARE	20 A	1	0	0			1	20 A	SPARE	30	
TOTAL LOAD:				7133 VA		7739 VA						
TOTAL AMPS:				59 A		64 A						
LOAD CLASSIFICATION		CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS				
Electric Clothes Dryer		3000 VA		100.00%		3000 VA		TOTAL CONN. LOAD: 14873 VA TOTAL EST. DEMAND LOAD: 14943 VA TOTAL CONN. LOAD (A): 62 A TOTAL EST. DEMAND (A): 62 A				
HVAC		7240 VA		100.00%		7240 VA						
Other		30 VA		100.00%		30 VA						
Receptacle		3780 VA		100.00%		3780 VA						
Power		500 VA		100.00%		500 VA						
Lighting		40 VA		100.00%		40 VA						
Lighting - Interior		304 VA		125.00%		380 VA						
NOTES: SQUARE D SINGLE PHASE PANEL OR EQUIVALENT. AIC RATING SHALL BE 10% HIGHER THAN VALUE SHOWN AND ROUNDED UP TO NEXT NEAREST STANDARD SIZE. REFER TO DWELLING UNIT GENERAL NOTES FOR SPECIFIC BREAKER TYPES (GFCI, AFCI, ETC.)												

PANEL: AP3											
LOCATION: FED FROM: MDP				VOLTS: 120/240 SINGLE, 1PH, 3W RATING: 100 A, MLO				A.I.C. RATING: 7,701 MOUNTING: RECESSED			
CKT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		POLES	TRIP	CIRCUIT DESCRIPTION	CKT
1	Receptacle	20 A	1	540	900			1	20 A	Receptacle	2
3	Receptacle	20 A	1			180	1500				4
5	Receptacle	20 A	1	180	1500			2	30 A	RECEPTACLE - DRYER	6
7	Receptacle	20 A	1			360	360			Receptacle	8
9	Receptacle	20 A	1	360	900			1	20 A	Receptacle	10
11	Receptacle	20 A	1			180	1500				12
13	HVAC - F-3	20 A	1	1000	1500			2	30 A	HVAC - WH-1	14
15	Lighting - Interior	20 A	1			186	205	1	20 A	Lighting - Interior	16
17	HVAC - EF-1	20 A	1	500	500			1	20 A	Power	18
19						1500	180	1	20 A	Receptacle	20
21	HVAC - ADCU-3	30 A	2					1	20 A	Receptacle	22
23	SPARE	20 A	1		0	0	0	1	20 A	SPARE	24
25	SPARE	20 A	1	0	0			1	20 A	SPARE	26
27	SPARE	20 A	1			0	0	1	20 A	SPARE	28
29	SPARE	20 A	1	0	0			1	20 A	SPARE	30
TOTAL LOAD:				9380 VA		6130 VA					
TOTAL AMPS:				78 A		51 A					
LOAD CLASSIFICATION		CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS			
Electric Clothes Dryer		3000 VA		100.00%		3000 VA		TOTAL CONN. LOAD: 15510 VA TOTAL EST. DEMAND LOAD: 15585 VA TOTAL CONN. LOAD (A): 65 A TOTAL EST. DEMAND (A): 65 A			
HVAC		7500 VA		100.00%		7500 VA					
Other		30 VA		100.00%		30 VA					
Receptacle		4140 VA		100.00%		4140 VA					
Power		500 VA		100.00%		500 VA					
Lighting		40 VA		100.00%		40 VA					
Lighting - Interior		323 VA		125.00%		404 VA					
NOTES: SQUARE D SINGLE PHASE PANEL OR EQUIVALENT. AIC RATING SHALL BE 10% HIGHER THAN VALUE SHOWN AND ROUNDED UP TO NEXT NEAREST STANDARD SIZE. REFER TO DWELLING UNIT GENERAL NOTES FOR SPECIFIC BREAKER TYPES (GFCI, AFCI, ETC.)											

PANEL: AP2											
LOCATION: FED FROM: MDP				VOLTS: 120/240 SINGLE, 1PH, 3W RATING: 100 A, MLO				A.I.C. RATING: 6,803 MOUNTING: RECESSED			
CKT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		POLES	TRIP	CIRCUIT DESCRIPTION	CKT
1	Receptacle	20 A	1	540	1500						2
3	Receptacle	20 A	1			180	1500	2	30 A	RECEPTACLE - DRYER	4
5	Receptacle	20 A	1	900	180			1	20 A	Receptacle	6
7	Receptacle	20 A	1			360	360	1	20 A	Receptacle	8
9	Receptacle	20 A	1	360	900			1	20 A	Receptacle	10
11	Receptacle	20 A	1			180	1000	1	20 A	HVAC - F-2	12
13	HVAC - WH-1	30 A	2	1500	198			1	20 A	Lighting - Interior	14
15						1500	220	1	20 A	Lighting	16
17	HVAC - EF-1	20 A	1	240	500			1	20 A	Power	18
19	HVAC - ACCU-2	30 A	2			1500	180	1	20 A	Receptacle	20
21				1500	0			1	20 A	SPARE	22
23	SPARE	20 A	1			0	0	1	20 A	SPARE	24
25	SPARE	20 A	1	0	0			1	20 A	SPARE	26
27	SPARE	20 A	1			0	0	1	20 A	SPARE	28
29	SPARE	20 A	1	0	0			1	20 A	SPARE	30
TOTAL LOAD:				8304 VA		6975 VA					
TOTAL AMPS:				69 A		58 A					
LOAD CLASSIFICATION		CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS			
Electric Clothes Dryer		3000 VA		100.00%		3000 VA		TOTAL CONN. LOAD: 15280 VA TOTAL EST. DEMAND LOAD: 15355 VA TOTAL CONN. LOAD (A): 64 A TOTAL EST. DEMAND (A): 64 A			
HVAC		7240 VA		100.00%		7240 VA					
Other		30 VA		100.00%		30 VA					
Receptacle		4140 VA		100.00%		4140 VA					
Power		500 VA		100.00%		500 VA					
Lighting		70 VA		100.00%		70 VA					
Lighting - Interior		323 VA		125.00%		404 VA					
NOTES: SQUARE D SINGLE PHASE PANEL OR EQUIVALENT, AIC RATING SHALL BE 10% HIGHER THAN VALUE SHOWN AND ROUNDED UP TO NEXT NEAREST STANDARD SIZE. REFER TO DWELLING UNIT GENERAL NOTES FOR SPECIFIC BREAKER TYPES (GFCI, AFCI, ETC.)											

PANEL: AP4

LOCATION:
FED FROM: MDP

VOLTS: 120/240 SINGLE, 1PH, 3W
RATING: 100 A, MLO

A.I.C. RATING: 13,204
MOUNTING: RECESSED

CKT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		POLES	TRIP	CIRCUIT DESCRIPTION	CKT
1	Receptacle	20 A	1	360	1500						2
3	Receptacle	20 A	1			180	1500	2	30 A	RECEPTACLE - DRYER	4
5	Receptacle	20 A	1	900	180			1	20 A	Receptacle	6
7	Receptacle	20 A	1			360	360	1	20 A	Receptacle	8
9	Receptacle	20 A	1	360	720			1	20 A	Receptacle	10
11											12
13	HVAC - WH-1	30 A	2			1500	1000	1	20 A	HVAC - F-4	14
15	Lighting - Interior	20 A	1	1500	167			1	20 A	Lighting - Interior	16
17	Power	20 A	1	500	1500						18
19	Receptacle	20 A	1			180	1500	2	30 A	HVAC - ACCU-4	20
21	SPARE	20 A	1	0	0			1	20 A	SPARE	22
23	SPARE	20 A	1			0	0	1	20 A	SPARE	24
25	SPARE	20 A	1	0	0			1	20 A	SPARE	26
27	SPARE	20 A	1			0	0	1	20 A	SPARE	28
29	SPARE	20 A	1	0	0			1	20 A	SPARE	30
TOTAL LOAD:				7673 VA		7005 VA					
TOTAL AMPS:				64 A		58 A					

LOAD CLASSIFICATION				CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Electric Clothes Dryer				3000 VA	100.00%	3000 VA	TOTAL CONN. LOAD: 14678 VA TOTAL EST. DEMAND LOAD: 14745 VA TOTAL CONN. LOAD (A): 61 A TOTAL EST. DEMAND (A): 61 A	
HVAC				7240 VA	100.00%	7240 VA		
Other				30 VA	100.00%	30 VA		
Receptacle				3600 VA	100.00%	3600 VA		
Power				500 VA	100.00%	500 VA		
Lighting				40 VA	100.00%	40 VA		
Lighting - Interior				294 VA	125.00%	367 VA		

NOTES:

SQUARE D SINGLE PHASE PANEL OR EQUIVALENT, AIC RATING SHALL BE 10% HIGHER THAN VALUE SHOWN AND ROUNDED UP TO NEXT NEAREST STANDARD SIZE.

REFER TO DWELLING UNIT GENERAL NOTES FOR SPECIFIC BREAKER TYPES (GFCI, AFCI, ETC.)

PANEL: HP											
LOCATION: FED FROM: MDP				VOLTS: 120/240 SINGLE, 1PH, 3W RATING: 400 A, MLO				A.I.C. RATING: 10,107 MOUNTING: RECESSED			
CKT	CIRCUIT DESCRIPTION	TRIP	POLES	A		B		POLES	TRIP	CIRCUIT DESCRIPTION	CKT
1	Receptacle	20 A	1	180	180			1	20 A	Receptacle	2
3	Receptacle	20 A	1			540	219	1	20 A	Lighting - Interior	4
5	Receptacle	20 A	1	180	180			1	20 A	Receptacle	6
7	SPARE	20 A	1			0	2000				8
9	SPARE	20 A	1	0	2000				2	30 A	HVAC - ECH-1
11	SPARE	20 A	1			0	0	1	20 A	SPARE	12
13	SPARE	20 A	1	0	0				1	20 A	SPARE
15	SPARE	20 A	1			0	0	1	20 A	SPARE	16
17	SPARE	20 A	1	0	0			1	20 A	SPARE	18
19	SPARE	20 A	1			0	0		1	20 A	SPARE
21	SPARE	20 A	1	0	0			1	20 A	SPARE	22
23	SPARE	20 A	1			0	0	1	20 A	SPARE	24
25	SPARE	20 A	1	0	0				1	20 A	SPARE
27	SPARE	20 A	1			0	0	1	20 A	SPARE	28
29	SPARE	20 A	1	0	0			1	20 A	SPARE	30
TOTAL LOAD:				2720 VA		2749 VA					
TOTAL AMPS:				23 A		23 A					
LOAD CLASSIFICATION		CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS			
HVAC		4000 VA		100.00%		4000 VA		TOTAL CONN. LOAD: 5468 VA TOTAL EST. DEMAND LOAD: 5505 VA TOTAL CONN. LOAD (A): 23 A TOTAL EST. DEMAND (A): 23 A			
Other		0 VA		0.00%		0 VA					
Receptacle		1260 VA		100.00%		1260 VA					
Lighting		64 VA		100.00%		64 VA					
Lighting - Interior		160 VA		125.00%		200 VA					
NOTES: SQUARE D SINGLE PHASE PANEL OR EQUIVALENT. AIC RATING SHALL BE 10% HIGHER THAN VALUE SHOWN AND ROUNDED UP TO NEXT NEAREST STANDARD SIZE.											



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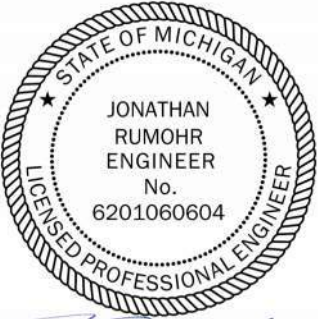
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PROJECT
238 E MICHIGAN
PROJECT
238 E. MICHIGAN AVE., KALAMAZOO MI
CLIENT
BRIAN & CARMEN HARRIS

ISSUE
CONSTRUCTION DOCUMENTS

REVISION

DRAWN Author
DATE 11/20/2023 10:21:25 AM
SCALE
STAMP



PROJECT
23.119
ELECTRICAL PANEL LOAD SCHEDULES
E502



Historic District Commission Staff Report

City of Kalamazoo

TO: The Kalamazoo Historic District Commission

FROM: Luis Pena, Historic Preservation Coordinator

DATE: May 21, 2024

SUBJECT: 4. 802 S Park - Alteration (installation of aluminum over fascia only) PPZ24-0014

PROPOSED WORK:

From the Description of Work Supplied by the Applicant:

Fascia paint peeling. Would like to wrap fascia only with dark brown aluminum rather than paint it.

EVALUATION:

Project Details

Cover the fascia boards of the property with aluminum rather than painting them.

Applicable Criteria

Secretary of the Interior's Standards for Rehabilitation

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

The extended rafters and exposed rafter ends are character defining features of the Craftsman style of home. Covering the wood of the rafters would be an alteration of a character defining feature.

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.

Covering the extended rafters, and wrapping around the exposed rafter tails would obscure the original character defining features and could lead to the advanced deterioration through trapping moisture.

Local Historic District Standards and Guidelines

Community Planning and Economic Development Department | 245 N. Rose Street, Ste 100, Kalamazoo, MI 49007
Voice: (269) 337-8804 | Fax: (269) 337-8513 | www.kalamazoocity.org

Residing and Trim Cladding:

Any installation of residing materials shall simulate the appearance of the original building material that it is intended to cover. This simulation shall take into account the size, shape or profile, texture, color and linear direction of the original building material.

Aluminum siding could be wrapped around fascia (or extended rafters) to reasonably simulate the appearance of sanded wood.

Discussion

While aluminum could be wrapped around the existing fascia (or extended rafters) in a manner that would resemble the existing wood, the aluminum would be covering a significant architectural feature, and could cause an unwanted buildup of moisture that would go unnoticed behind the aluminum.

POTENTIAL ACTIONS:

1. The proposed work complies with the Secretary of the Interior standards 2 and 5. **Action: Motion to approve a Certificate of Appropriateness for the work as described in the application.**
2. More information is needed. **Action: Motion to postpone until the HDC meeting on 18 June 2024 and direct the applicant to provide the requested materials and information to the Historic Preservation Coordinator by noon on 11 June 2024.**
3. Denial of the application. **Action: Motion to deny the application based on Secretary of the Interior Standards 2 and 5.**



Community Planning and Economic Development
Historic District Commission
245 N. Rose Street
Kalamazoo, MI 49007
Telephone: (269) 337-8804; FAX (269) 337-8513
Penal@kalamazoocity.org

APPLICATION FOR PROJECT REVIEW – Historic District Commission Hearing

COMPLETE Applications for review at the Historic District Commission meeting including payment of the \$85 hearing fee must be received by **NOON** on the 2nd Tuesday of the month- the meeting is on the 3rd Tuesday of the month.

(PLEASE PRINT CLEARLY - See instructions on reverse side)

Property Address: 802 S Park St.

Historic District: ☒ South/Vine ☐ Stuart ☐ West Main Hill ☐ Rose Place ☐ Haymarket

Applicant: Lance Greer Owner: Lance Greer

Mailing Add: 8298 Country Lane Mailing Add: 8298 Country Lane

City State & Zip: Kalamazoo MI 49004 City, State Zip: Kalamazoo MI 49004

Phone: 269-720-3134 Phone: 269-720-3134

Email: lancegreer74@gmail.com Email: lancegreer74@gmail.com

Contractor Myself + Ben Raymond

☒ **Work to be done by owner**

Proposed Work: Use additional sheets to describe work if necessary

Facia Paint Peeling. Would like to wrap
Facia ONLY with dark Brown Aluminum
rather than paint it.

(LG) This property has at least one working smoke detector for each dwelling unit.
(Owner or applicant's initials) (Required) * see back

Applicant's Signature: Lance Greer Date: 5/3/2024

Owner's Signature: _____ Date: _____
(if different)

APPLICATION CHECKLIST:

Include all these items are in your submission. Incomplete applications will be held until the next review hearing.

- ☐ Drawings 11x17 or smaller with dimensions
- ☐ Materials list
- ☐ Site plan including north arrow
- ☐ Other:
- ☐ \$85 for HDC hearing & review fee – must be paid in advance to be placed on agenda – include WITH application – Check payable to: City of Kalamazoo

-For Historic Preservation Coordinator's Use Only-

Case Number: PPZ- 24-0014

Date Received*: 05-03-2024

Zoning RM-36 Year built 1933

Complete application Yes

Owned since 04/01/2022

COMMISSION

Meeting Date 05/21/2024

Hearing fee paid \$85 _____

COMMENTS _____

Check # _____

Approve in Concept Date _____ Letter mailed _____

FINAL ACTION

☐ Approve ☐ Site Visit ☐ Approve w/Conditions ☐ Deny ☐ Postpone ☐ Withdrawn

ACTION DATE _____

Certificate of Appropriateness Issued _____

Notice of Denial with appeals information _____

Notice to Proceed _____ Comments _____

Revised November 22, 2019

APPLICATION FOR PROJECT REVIEW – Historic District Commission Hearing

COMPLETE Applications for review at the Historic District Commission meeting including payment of the \$85 hearing fee must be received by NOON on the 2nd Tuesday of the month- the meeting is on the 3rd Tuesday of the month. Incomplete applications will be postponed until the next meeting.

Filling out the application – instructions and tips – PLEASE PRINT.

Property address: street address of the property where the work will be done

Applicant: Owner or the owner's contractor.

Mailing Address: Applicant's address

City, State & Zip:

Phone: Specify home or work

Email

Historic district: Stuart, South Street/Vine Area, Haymarket, West Main Hill or Rose Place

Owner: Legal owner of property

Mailing Address: Owner's address

City, State & Zip:

Phone: Specify home or work

Email

Name of the contractor if this project requires a building permit Or indicate ☐ work done by owner

Proposed Work: What work do you plan to do? Please be as specific as possible including a complete description of the part of the structure where work will be done.

Example #1: Rather than "Build new garage"

Say "Build new two car garage near northeast corner of lot, wooden frame with clapboard siding, paneled metal overhead door, service door on the north side and one window at the rear."

Example #2: Instead of "New front door"

Say "Install a new wooden front door to fit original opening in width and height, to replace the existing metal paneled door. See drawing/photo for appearance" Specify the measurements of the width and height of the original opening. Include a storm door if that is part of the project

For more complex projects, please include as many **continuation or illustration sheets** as you need to present a clear picture to the commission of your proposed work.

- Drawings – black or blue black ink on white paper. Electronic submissions are encouraged. Drawings should include dimensions of the existing part of the building and the proposed work.
- You need submit only one set of drawings; city staff will make the necessary copies.
- Use the checklist to be sure you have supplied all the important information.
- For new construction) exterior stairs, new garage, reconstructing a porch, etc) a site plan WITH a north arrow is required.

*() This property has at least one working smoke detector for each dwelling unit. Please initial to verify at least one working smoke detector in each dwelling unit. This is REQUIRED by state law or the application will be considered incomplete.

PHOTOS: The historic preservation coordinator is responsible for taking photographs of the proposed work and the structure. If you wish to take additional photos, one set is usually adequate for the commissioners to examine. You may also bring photos on a USB drive to share with the commission.

Emergency repairs: If damage occurs to a structure in a historic district, which requires emergency repairs, steps may be taken to secure the structure without the approval of the commission or the coordinator. Cover damaged windows or holes in a roof with tarps or wood to prevent further damage. Support dangling or loose elements or remove and store them. Notify the Coordinator of the damage to the structure on the first weekday available after the damage occurs and the coordinator will visit the structure as well as arranging a site visit by commission members to approve repairs if necessary. **THIS WILL BE DONE AS QUICKLY AS POSSIBLE IN ORDER TO FACILITATE REPAIRS OF THE STRUCTURE IN A TIMELY MANNER.**

If you have questions about completing this application for project review, please call the Historic Preservation Coordinator at: (269) 337-8804 or by email at PenaL@kalamazoo-city.org



Historic District Commission Staff Report

City of Kalamazoo

TO: The Kalamazoo Historic District Commission

FROM: Luis Pena, Historic Preservation Coordinator

DATE: 21 May 2024

SUBJECT: Historic Preservation Coordinator's Report

Historic Preservation Awards of Merit

The Historic Preservation Commission will be presenting the Historic Preservation Awards of Merit on May 29th at 6pm. The ceremony will be held at KNAC (315 W Michigan). All are welcome to attend.

Historic District Reviews

Review Type	Cost	Number of Reviews	Totals
Administrative, no permit	\$35	3	\$0
Administrative, permit	\$35	13	\$455
Hearing	\$85	13	\$1,105
		29	\$1,560

Administrative reviews:

1. 305 W Vine Porch Work
2. 417 Douglas- Roof
3. 1622 Grove - Roof
4. 431 Park Pl - Porch Repairs
5. 501 Elm – Porch repair and replace

Community Planning and Economic Development Department | 245 N. Rose Street, Ste 100, Kalamazoo, MI 49007
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